

## Introduction to John Deere® Section

### Diesel Engine models covered by this User's Guide

**300 Series (OEM):** US and EUROPEAN Versions. Naturally Aspirated & Turbo Charged

| NUMBER OF CYLINDERS | BORE-3.86"/ 98 mm<br>STROKE-4.33"/ 110 mm | BORE-4.02"/ 102 mm<br>STROKE-4.33"/ 110 mm | BORE-4.19"/ 106.5 mm<br>STROKE-4.33"/ 110 mm | BORE-4.19"/ 106.5 mm<br>STROKE-5.00"/ 127 mm |
|---------------------|-------------------------------------------|--------------------------------------------|----------------------------------------------|----------------------------------------------|
| 3 cyl               | 3.152                                     | 3.164                                      | 3.179 / 3029*                                |                                              |
| 4 cyl               | 4.202                                     | 4.219                                      | 4.239 / 4039*                                | 4.276 / 4045*                                |
| 6 cyl               | 6.303                                     | 6.329                                      | 6.359 / 6059*                                | 6.414 / 6068*                                |

**400 Series:** Naturally Aspirated & Turbo Charged

| NUMBER OF CYLINDERS | BORE-4.25"/ 108 mm<br>STROKE-4.75"/ 121 mm | BORE-4.56"/ 116 mm<br>STROKE-4.75"/ 121 mm |
|---------------------|--------------------------------------------|--------------------------------------------|
| 4 cyl               | 4.270                                      |                                            |
| 6 cyl               | 6.404                                      | 6.466 / 6076*                              |

**500 Series:** Naturally Aspirated & Turbo Charged

| NUMBER OF CYLINDERS | BORE-4.75"/ 121 mm<br>STROKE-5.00"/ 127 mm | BORE-5.12"/ 130 mm<br>STROKE-5.00"/ 127 mm |
|---------------------|--------------------------------------------|--------------------------------------------|
| 6 cyl               | 6.531                                      | 6.619 / 6101*                              |

**PowerTech Series:** Naturally Aspirated & Turbo Charged

| NUMBER OF CYLINDERS | BORE-4.19"/ 106.5 mm<br>STROKE-4.33"/ 110 mm | BORE-4.19"/ 106.5 mm<br>STROKE-5.00"/ 127 mm | BORE-4.56"/ 116 mm<br>STROKE-5.06"/ 129 mm | BORE-4.664"/ 118.35 mm<br>STROKE-5.40"/ 136 mm |
|---------------------|----------------------------------------------|----------------------------------------------|--------------------------------------------|------------------------------------------------|
| 3 cyl               | 3029 (2.9L)                                  |                                              |                                            |                                                |
| 4 cyl               |                                              | 4045 (4.5L)                                  |                                            |                                                |
| 6 cyl               |                                              | 6068 (6.8L)                                  | 6081 (8.1L)                                | 6090 (9.0L)                                    |

\* Liter designated engines.

### John Deere Data Plate Information

In as much as possible please provide your John Deere data information to your Maxiforce Sales representative.

The John Deere Data Plate is divided into the ESN (Engine Serial Number) and the Engine Application Data. Below are examples:

1) **Engine Serial Number:** TO 4045T 123456  
                                   1     2     3

- 1- Factory Origin
- 2- Engine Model
- 3- Sequential Serial Number

2) **Engine Application Data:** TO 4045T F150. This information is used to identify the OEM relationship or equipment application. Very Important!

### Maxiforce Engine Kit Composition for John Deere® Applications

**Engine Overhaul Kits Include:** Piston-Liner Kits or Piston Kits, Main Bearings, Connecting Rod Bearings, Thrust Bearings, Front Crankshaft Seals, Rear Crankshaft Seals, Overhaul Gasket Set, Cam or Balance Shaft Bushings, Connecting Rod Bushings, Injector Grommets, and Connecting Rod Bolts.

**Engine In Frame Kits Include:** Piston-liner kits or Piston Kits, Main Bearings, Connecting Rod Bearings, Thrust Bearings, Head Gasket Set, Oil Pan Gasket Set and Connecting Rod Bolts.

# Engine & Equipment Application Chart

## 300 Series (OEM)

| MODEL  | COMMENTS                    | PAGE |
|--------|-----------------------------|------|
| 3.152  | O'rings on liner            | T01  |
| 3.152  | O'rings on block            | T02  |
| 3.164  | Small pin, O'rings on liner | T03  |
| 3.164  | Small pin, O'rings on block | T04  |
| 3.164  | Large pin, O'rings on block | T05  |
| 3.179D |                             | T06  |
| 3029D  | Liter designated            | T07  |
| 3.179T |                             | T08  |
| 3029T  | Liter designated            | T09  |
| 4.202  | O'rings on liner            | T10  |
| 4.202  | O'rings on block            | T11  |
| 4.219  | Small pin, O'rings on liner | T12  |
| 4.219  | Small pin, O'rings on block | T13  |
| 4.219  | Large pin, O'rings on block | T14  |
| 4.239D |                             | T15  |
| 4039D  | Liter designated            | T16  |
| 4.239T | See Con.Rod (m)             | T17  |
| 4039T  | Liter designated            | T18  |
| 4.276D | Small pin                   | T19  |
| 4.276D | Large pin                   | T20  |
| 4045D  | Liter designated            | T21  |
| 4.276T |                             | T22  |
| 4045T  | Liter designated            | T23  |
| 6.303  | O'rings on liner            | T24  |
| 6.303  | O'rings on block            | T25  |
| 6.329  | Small pin, O'rings on liner | T26  |
| 6.329  | Small pin, O'rings on block | T27  |
| 6.329  | Large pin, O'rings on block | T28  |
| 6.359D |                             | T29  |
| 6059D  | Liter designated            | T30  |
| 6.359T |                             | T31  |
| 6059T  | Liter designated            | T32  |
| 6.414D | Large pin                   | T33  |
| 6068D  | Liter designated, Large pin | T34  |
| 6.414T |                             | T35  |
| 6068T  | Liter designated            | T36  |

## 400 Series

| MODEL     | COMMENTS            | PAGE |
|-----------|---------------------|------|
| 4.270     | See block (m)       | T37  |
| 4.270     | See block (m)       | T38  |
| 4.270     | Early power booster | T39  |
| 4.270     | See block (m)       | T40  |
| 6.404D    | See block (m)       | T41  |
| 6.404D    | See block (m)       | T42  |
| 6.404D    | Early power booster | T43  |
| 6.404D    | See block (m)       | T44  |
| 6.404D    | See block (m)       | T45  |
| 6.404T/A  | To 335,845          | T46  |
| 6.404T/A  | From 335,846        | T47  |
| 6.466D    | See Con.Rod (m)     | T48  |
| 6.466A/T  | See Con.Rod (m)     | T49  |
| 6.466A/T  | See Con.Rod (m)     | T50  |
| 6.466A    | See Con.Rod (m)     | T51  |
| 6076T/A/H | Low Ring Piston     | T52  |
| 6076T/A/H | High Ring Piston    | T53  |

## 500 Series

| MODEL    | COMMENTS        | PAGE |
|----------|-----------------|------|
| 6.531D   | See Con.Rod (m) | T54  |
| 6.531T   | See Con.Rod (m) | T55  |
| 6.531A   | See Con.Rod (m) | T56  |
| 6.619A/T | Early           | T57  |
| 6.619A/T | Mid             | T58  |
| 6.619A/T | Late            | T59  |
| 6.101A/T | To 499,999      | T60  |

## John Deere® / Yanmar®

| MODEL   | COMMENTS                    | PAGE |
|---------|-----------------------------|------|
| 3TNE84  | 84mm Bore Non Turbo         | T61  |
| 4TNE84  | 84mm Bore Non Turbo         | T62  |
| 3TNE88  | 88mm Bore Non Turbo         | T63  |
| 4TNE88  | 88mm Bore Non Turbo         | T64  |
| 3TNV84  | 84mm Bore Non Turbo & Turbo | T65  |
| 4TNV84  | 84mm Bore Non Turbo         | T66  |
| 4TNV84T | 84mm Bore Turbo             | T67  |
| 3TNV88  | 88mm Bore Non Turbo         | T68  |
| 4TNV88  | 88mm Bore Non Turbo         | T69  |

## PowerTech

| MODEL         | COMMENTS                    | PAGE |
|---------------|-----------------------------|------|
| 3029 (2.9D)   | Piston (m) RE61467          | T70  |
| 3029D/T       | Piston (m) RE520573         | T71  |
| 3029 (2.9T)   | Piston (m) RE61270          | T72  |
| 3029 (2.9T)   | Piston (m) RE500211         | T73  |
| 4045D (4.5D)  | Piston (m) RE59279/RE505101 | T74  |
| 4045T (4.5T)  | Piston (m) RE59277/RE505100 | T75  |
| 4045 (4.5T/H) | Piston (m) RE55512/RE505102 | T76  |
| 4045 (4.5T/H) | Piston (m) RE527039         | T77  |
| 4045 (4.5T/H) | Piston (m) RE521616         | T78  |
| 4045 (4.5T/H) | Piston (m) RE521616         | T79  |
| 4045 (4.5T/H) | Piston (m) RE521616         | T80  |
| 4045 (4.5T/H) | Piston (m) RE521616         | T81  |
| 6068D (6.8D)  | Piston (m) RE59279/RE505101 | T82  |
| 6068T (6.8T)  | Piston (m) RE59277/RE505100 | T83  |
| 6068 (6.8T/H) | Piston (m) RE55512/RE505102 | T84  |
| 6068 (6.8T/H) | Piston (m) RE527039         | T85  |
| 6068 (6.8T/H) | Piston (m) RE521616         | T86  |
| 6068 (6.8T/H) | Piston (m) RE521616         | T87  |
| 6068 (6.8T/H) | Piston (m) RE521616         | T88  |
| 6068 (6.8T/H) | Piston (m) RE521616         | T89  |
| 6081 (8.1L)   | High Compression Piston     | T90  |
| 6081 (8.1L)   | Low Compression Piston      | T91  |
| 6081 (8.1L)   | High Compression Piston     | T92  |
| 6081 (8.1L)   | Low Compression Piston      | T93  |
| 6090 (9.0L)   | Tier 2 and Tier 3           | T94  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL  | DESCRIPTION            | COMMENTS  | PAGE |
|--------|------------------------|-----------|------|
| 250D   | Bell Dump Trucks       |           | T94  |
| 300D   | Bell Dump Trucks       |           | T94  |
| 380GLC | Excavator              | *         | T94  |
| 350DLC | Excavator              | *         | T94  |
| 350GLC | Excavator              | *         | T94  |
| 499    | Cotton Picker          | 4,219 Eng | T13  |
| 499    | Cotton Picker          | 4,219 Eng | T14  |
| 499    | Cotton Picker          | 6,329 Eng | T27  |
| 499    | Cotton Picker          | 6,329 Eng | T28  |
| 699    | Cotton Picker          |           | T26  |
| 699    | Cotton Picker          |           | T27  |
| 699    | Cotton Picker          | *         | T44  |
| 699    | Cotton Picker          | *         | T45  |
| 703JH  | Tracked Harvester      | *         | T94  |
| 724K   | Loaders                |           | T94  |
| 744K   | Loaders                |           | T94  |
| 753JH  | Tracked Harvester      | *         | T94  |
| 759J   | Tracked Harvester      | *         | T94  |
| 759JH  | Tracked Harvester      | *         | T94  |
| 770G   | Motor Grader           | *         | T94  |
| 770GP  | Motor Grader           | *         | T94  |
| 790    | Utility Tractor        |           | T61  |
| 820    | Farm Tractor           | *         | T01  |
| 820    | Farm Tractor           | *         | T02  |
| 830    | Farm Tractor           |           | T02  |
| 850J   | Crawlers               |           | T94  |
| 870G   | Motor Grader           | *         | T94  |
| 870G   | Motor Graders          | *         | T94  |
| 872G   | Motor Graders          | *         | T94  |
| 872GP  | Motor Graders          | *         | T94  |
| 903K   | Tracked Feller Buncher | *         | T94  |
| 903KH  | Tracked Harvester      | *         | T94  |
| 909KH  | Tracked Harvester      | *         | T94  |
| 940    | Combine                |           | T15  |
| 942    | Combine                |           | T15  |
| 945    | Combine                |           | T17  |
| 950    | Combine                |           | T28  |
| 952    | Combine                |           | T17  |
| 953K   | Tracked Feller Buncher | *         | T94  |
| 955    | Combine                |           | T29  |
| 960    | Combine                |           | T28  |
| 975    | Combine                |           | T29  |
| 985    | Combine                |           | T29  |
| 990    | Utility Tractor        |           | T62  |
| 990    | Utility Tractor        |           | T66  |
| 1020   | Farm Tractor           |           | T01  |
| 1020   | Farm Tractor           |           | T02  |
| 1030   | Farm Tractor           | *         | T01  |
| 1030   | Farm Tractor           | *         | T02  |
| 1035   | Farm Tractor           |           | T14  |
| 1040   | Farm Tractor           |           | T06  |

| MODEL   | DESCRIPTION       | COMMENTS | PAGE |
|---------|-------------------|----------|------|
| 1052    | Combine           |          | T17  |
| 1055    | Combine           |          | T29  |
| 1075    | Combine           |          | T29  |
| 1130    | Farm Tractor      |          | T14  |
| 1140    | Farm Tractor      |          | T06  |
| 1155    | Combine           |          | T17  |
| 1185    | Combine           |          | T53  |
| 1270D   | Harvester         |          | T90  |
| 1270D   | Wheeled Harvester | *        | T94  |
| 1270D   | Harvester         | *        | T94  |
| 1270D   | Harvester         | *        | T94  |
| 1270E   | Harvester         | *        | T94  |
| 1270E   | Wheeled Harvester | *        | T94  |
| 1350    | Farm Tractor      |          | T06  |
| 1420    | Farm Tractor      |          | T04  |
| 1450CWS | Combine           |          | T85  |
| 1450WTS | Combine           |          | T85  |
| 1470    | Combine           |          | T85  |
| 1470D   | Harvester         |          | T90  |
| 1470D   | Wheeled Harvester | *        | T94  |
| 1470E   | Harvester         | *        | T94  |
| 1505    | Prof Mower        |          | T69  |
| 1515    | Prof Mower        |          | T69  |
| 1520    | Farm Tractor      | *        | T03  |
| 1520    | Farm Tractor      | *        | T04  |
| 1530    | Farm Tractor      |          | T04  |
| 1530    | Farm Tractor      |          | T05  |
| 1550    | Farm Tractor      |          | T06  |
| 1550CWS | Combine           |          | T85  |
| 1550WTS | Combine           |          | T85  |
| 1565    | Mower             |          | T63  |
| 1565    | Front Mower       |          | T68  |
| 1600    | Mower             |          | T64  |
| 1600    | Series II Mower   |          | T67  |
| 1620    | Mower             |          | T64  |
| 1630    | Farm Tractor      |          | T06  |
| 1635    | Farm Tractor      |          | T14  |
| 1640    | Farm Tractor      |          | T15  |
| 1654    | Tractor           |          | T85  |
| 1750    | Farm Tractor      |          | T06  |
| 1840    | Farm Tractor      |          | T15  |
| 1850    | Farm Tractor      |          | T06  |
| 1854    | Tractor           |          | T85  |
| 1905    | Reel Mower        |          | T69  |
| 2020    | Farm Tractor      | *        | T10  |
| 2020    | Farm Tractor      | *        | T11  |
| 2030    | Farm Tractor      | *        | T13  |
| 2030    | Farm Tractor      | *        | T14  |
| 2035    | Farm Tractor      |          | T14  |
| 2040    | Farm Tractor      | *        | T05  |
| 2040    | Farm Tractor      | *        | T06  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL     | DESCRIPTION     | COMMENTS        | PAGE |
|-----------|-----------------|-----------------|------|
| 2054      | Tractor         |                 | T85  |
| 2066      | Combine         |                 | T53  |
| 2120      | Farm Tractor    | *               | T11  |
| 2120      | Farm Tractor    | *               | T13  |
| 2120      | Farm Tractor    | *               | T14  |
| 2130      | Farm Tractor    |                 | T15  |
| 2135      | Farm Tractor    |                 | T15  |
| 2140      | Farm Tractor    |                 | T17  |
| 2150      | Farm Tractor    |                 | T06  |
| 2155      | Farm Tractor    |                 | T06  |
| 2240      | Farm Tractor    |                 | T06  |
| 2250      | Farm Tractor    |                 | T15  |
| 2256      | Combine         |                 | T90  |
| 2258      | Combine         |                 | T90  |
| 2264      | Combine         | (S.N. 068584- ) | T90  |
| 2266      | Combine         | (S.N. -068583)  | T90  |
| 2266      | Combine         |                 | T91  |
| 2270      | Windrower       | *               | T13  |
| 2270      | Windrower       | *               | T14  |
| 2280      | Windrower       |                 | T14  |
| 2320      | Windrower       | *               | T13  |
| 2320      | Windrower       | *               | T14  |
| 2330      | Farm Tractor    |                 | T05  |
| 2350      | Farm Tractor    |                 | T15  |
| 2355      | Farm Tractor    |                 | T15  |
| 2355CS    | Farm Tractor    | *               | T15  |
| 2355 NCS  | Farm Tractor    |                 | T08  |
| 2355 NTSS | Farm Tractor    |                 | T08  |
| 2360      | Windrower       |                 | T15  |
| 2420      | Windrower       |                 | T13  |
| 2440      | Farm Tractor    |                 | T14  |
| 2450      | Farm Tractor    |                 | T15  |
| 2450      | Farm Tractor    |                 | T17  |
| 2510      | Farm Tractor    | *               | T10  |
| 2510      | Farm Tractor    | *               | T11  |
| 2520      | Farm Tractor    |                 | T12  |
| 2530      | Farm Tractor    |                 | T14  |
| 2535      | Farm Tractor    | Mexico          | T15  |
| 2550      | Farm Tractor    |                 | T15  |
| 2555      | Farm Tractor    |                 | T17  |
| 2555CS    | Farm Tractor    |                 | T15  |
| 2555 TSS  | Farm Tractor    |                 | T17  |
| 2630      | Farm Tractor    |                 | T19  |
| 2640      | Farm Tractor    |                 | T19  |
| 2650      | Farm Tractor    |                 | T15  |
| 2650      | Farm Tractor    |                 | T17  |
| 2720      | Utility Tractor |                 | T69  |
| 2730      | Farm Tractor    | Argentina       | T15  |
| 2735      | Farm Tractor    | Mexico          | T15  |
| 2750      | Farm Tractor    |                 | T17  |
| 2755      | Farm Tractor    |                 | T17  |

| MODEL    | DESCRIPTION         | COMMENTS  | PAGE |
|----------|---------------------|-----------|------|
| 2755 CS  | Farm Tractor        |           | T17  |
| 2755 TSS | Farm Tractor        |           | T17  |
| 2840     | Farm Tractor        |           | T28  |
| 2850     | Farm Tractor        |           | T17  |
| 2854     | Tractor             | *         | T94  |
| 2855     | Farm Tractor        |           | T17  |
| 2855N    | Farm Tractor        |           | T17  |
| 2940     | Farm Tractor        |           | T29  |
| 2950     | Farm Tractor        |           | T29  |
| 2954D    | Forestry Sw Machine |           | T86  |
| 2955     | Farm Tractor        | *         | T29  |
| 2955     | Farm Tractor        | *         | T30  |
| 3010     | Farm Tractor        |           | T38  |
| 3010     | Farm Tractor        |           | T39  |
| 3020     | Farm Tractor        | *         | T37  |
| 3020     | Farm Tractor        | *         | T38  |
| 3020     | Farm Tractor        | *         | T39  |
| 3020     | Farm Tractor        | *         | T40  |
| 3032E    | Utility Tractor     |           | T68  |
| 3036E    | Utility Tractor     |           | T65  |
| 3038E    | Utility Tractor     |           | T65  |
| 3040     | Farm Tractor        |           | T29  |
| 3050     | Farm Tractor        |           | T29  |
| 3100     | Farm Tractor        |           | T70  |
| 3120     | Farm Tractor        | *         | T26  |
| 3120     | Farm Tractor        | *         | T27  |
| 3120     | Utility Tractor     |           | T65  |
| 3130     | Farm Tractor        |           | T28  |
| 3140     | Farm Tractor        | Spain     | T29  |
| 3140C    | Farm Tractor        | *         | T31  |
| 3140C    | Farm Tractor        | *         | T32  |
| 3150     | Farm Tractor        |           | T29  |
| 3155     | Farm Tractor        | *         | T29  |
| 3155     | Farm Tractor        | *         | T30  |
| 3155TSS  | Farm Tractor        | *         | T29  |
| 3155TSS  | Farm Tractor        | *         | T30  |
| 3203     | Utility Tractor     |           | T65  |
| 3225B    | Mower               |           | T61  |
| 3225C    | Fairway Mowers      |           | T65  |
| 3235     | Mower               |           | T61  |
| 3235A    | Mower               |           | T61  |
| 3235B    | Mower               |           | T61  |
| 3235C    | Fairway Mowers      |           | T65  |
| 3245C    | Rotary Deck Mower   |           | T65  |
| 3255     | Farm Tractor        | *         | T29  |
| 3255     | Farm Tractor        | *         | T30  |
| 3300     | Combine             |           | T14  |
| 3320     | Utility Tractor     |           | T68  |
| 3330     | Farm Tractor        | Argentina | T15  |
| 3350     | Farm Tractor        |           | T29  |
| 3410     | Farm Tractor        |           | T75  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL | DESCRIPTION          | COMMENTS          | PAGE |
|-------|----------------------|-------------------|------|
| 3410X | Farm Tractor         |                   | T75  |
| 3420  | Farm Tractor         |                   | T25  |
| 3430  | Windrower            | Early             | T15  |
| 3430  | Windrower            | Late              | T17  |
| 3510  | Cane Harvester       | (NW S.N > 060036) | T91  |
| 3510  | Cane Harvester       | (NW S.N 060037>)  | T91  |
| 3510  | Cane Harvester       | SN 070301-070460  | T91  |
| 3510  | Cane Harvester       | SN 080401-080626  | T91  |
| 3520  | Utility Tractor      |                   | T65  |
| 3520  | Sugar Cane Harvester | *                 | T94  |
| 3522  | Sugar Cane Harvester | *                 | T94  |
| 3530  | Farm Tractor         |                   | T28  |
| 3540  | Farm Tractor         |                   | T31  |
| 3550  | Farm Tractor         |                   | T31  |
| 3640  | Farm Tractor         | *                 | T29  |
| 3640  | Farm Tractor         | *                 | T30  |
| 3650  | Farm Tractor         |                   | T30  |
| 3720  | Utility Tractor      |                   | T65  |
| 3754D | Forestry SW machine  | *                 | T94  |
| 3830  | Windrower            |                   | T17  |
| 4000  | Farm Tractor         |                   | T44  |
| 4010  | Farm Tractor         | *                 | T41  |
| 4010  | Farm Tractor         | *                 | T42  |
| 4010  | Farm Tractor         | *                 | T43  |
| 4010  | Farm Tractor         | *                 | T44  |
| 4020  | Farm Tractor         | *                 | T41  |
| 4020  | Farm Tractor         | *                 | T42  |
| 4020  | Farm Tractor         | *                 | T43  |
| 4020  | Farm Tractor         | *                 | T44  |
| 4030  | Farm Tractor         | 6.329 Eng         | T27  |
| 4030  | Farm Tractor         | 6.329 Eng         | T28  |
| 4040  | Farm Tractor         |                   | T45  |
| 4050  | Farm Tractor         |                   | T31  |
| 4050  | Farm Tractor         |                   | T48  |
| 4055  | Farm Tractor         |                   | T53  |
| 4105  | Utility Tractor      |                   | T65  |
| 4230  | Farm Tractor         |                   | T45  |
| 4240  | Farm Tractor         |                   | T48  |
| 4250  | Farm Tractor         |                   | T50  |
| 4255  | Farm Tractor         |                   | T53  |
| 4300  | Utility Tractor      |                   | T61  |
| 4310  | Utility Tractor      |                   | T61  |
| 4320  | Combine              | *                 | T46  |
| 4320  | Combine              | *                 | T47  |
| 4400  | Combine              |                   | T28  |
| 4400  | Utility Tractor      |                   | T63  |
| 4405  | Utility Tractor      |                   | T69  |
| 4410  | Utility Tractor      |                   | T63  |
| 4420  | Farm Tractor         | *                 | T27  |
| 4420  | Farm Tractor         | *                 | T29  |
| 4425  | Farm Tractor         |                   | T28  |

| MODEL | DESCRIPTION            | COMMENTS | PAGE |
|-------|------------------------|----------|------|
| 4430  | Farm Tractor           |          | T47  |
| 4440  | Farm Tractor           | *        | T49  |
| 4440  | Farm Tractor           | *        | T50  |
| 4450  | Farm Tractor           |          | T50  |
| 4455  | Farm Tractor           |          | T53  |
| 4475  | Skid Steer             |          | T61  |
| 4500  | Utility Tractor        |          | T62  |
| 4510  | Utility Tractor        |          | T62  |
| 4520  | Farm Tractor           |          | T46  |
| 4530  | Farm Tractor           |          | T29  |
| 4555  | Farm Tractor           |          | T53  |
| 4560  | Farm Tractor           |          | T53  |
| 4600  | Utility Tractor        |          | T62  |
| 4610  | Utility Tractor        |          | T62  |
| 4620  | Farm Tractor           |          | T46  |
| 4630  | Farm Tractor           |          | T47  |
| 4640  | Farm Tractor           | *        | T49  |
| 4640  | Farm Tractor           | *        | T50  |
| 4650  | Farm Tractor           |          | T50  |
| 4700  | Utility Tractor        |          | T64  |
| 4700  | Sprayer                |          | T84  |
| 4710  | Utility Tractor        |          | T64  |
| 4730  | Self Propelled Sprayer |          | T86  |
| 4755  | Farm Tractor           | *        | T53  |
| 4760  | Farm Tractor           | *        | T53  |
| 4830  | Self Propelled Sprayer |          | T86  |
| 4840  | Farm Tractor           | *        | T49  |
| 4840  | Farm Tractor           | *        | T51  |
| 4850  | Farm Tractor           |          | T51  |
| 4890  | Farm Tractor           |          | T75  |
| 4895  | Windrower              |          | T75  |
| 4920  | Sprayer                |          | T91  |
| 4930  | Self-Propelled Sprayer | *        | T94  |
| 4940  | Self-Propelled Sprayer | *        | T94  |
| 4955  | Farm Tractor           |          | T52  |
| 4960  | Farm Tractor           |          | T52  |
| 5000  | Farm Tractor           |          | T06  |
| 5020  | Farm Tractor           |          | T54  |
| 5036C | Farm Tractor           |          | T71  |
| 5038D | Farm Tractor           |          | T71  |
| 5039C | Farm Tractor           |          | T71  |
| 5039D | Farm Tractor           |          | T71  |
| 5041C | Farm Tractor           |          | T71  |
| 5042C | Farm Tractor           |          | T71  |
| 5042D | Farm Tractor           |          | T71  |
| 5045D | Farm Tractor           |          | T71  |
| 5045E | Farm Tractor           |          | T71  |
| 5047D | Farm Tractor           |          | T71  |
| 5050D | Farm Tractor           |          | T71  |
| 5050E | Farm Tractor           |          | T71  |
| 5055E | Farm Tractor           |          | T71  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL  | DESCRIPTION  | COMMENTS | PAGE |
|--------|--------------|----------|------|
| 5060E  | Farm Tractor |          | T71  |
| 5065E  | Farm Tractor |          | T71  |
| 5075E  | Farm Tractor |          | T71  |
| 5075EF | Farm Tractor |          | T71  |
| 5075M  | Farm Tractor |          | T71  |
| 5080R  | Tractor      |          | T77  |
| 5080RN | Tractor      |          | T77  |
| 5090R  | Tractor      |          | T77  |
| 5090RN | Tractor      |          | T77  |
| 5100R  | Tractor      |          | T77  |
| 5100RN | Tractor      |          | T77  |
| 5103   | Farm Tractor |          | T71  |
| 5105   | Farm Tractor |          | T70  |
| 5105M  | Tractor      |          | T77  |
| 5105ML | Tractor      |          | T77  |
| 5200   | Farm Tractor |          | T07  |
| 5200   | Farm Tractor |          | T70  |
| 5203   | Farm Tractor |          | T71  |
| 5205   | Farm Tractor |          | T70  |
| 5210   | Farm Tractor | *        | T70  |
| 5220   | Farm Tractor |          | T70  |
| 5300   | Farm Tractor |          | T07  |
| 5300   | Farm Tractor |          | T70  |
| 5303   | Farm Tractor |          | T71  |
| 5310   | Farm Tractor | *        | T70  |
| 5310   | Farm Tractor |          | T71  |
| 5310N  | Farm Tractor | *        | T70  |
| 5400   | Farm Tractor |          | T07  |
| 5400   | Farm Tractor |          | T72  |
| 5400N  | Farm Tractor |          | T72  |
| 5403   | Farm Tractor |          | T71  |
| 5410   | Farm Tractor |          | T71  |
| 5410   | Farm Tractor | *        | T74  |
| 5415   | Farm Tractor | *        | T74  |
| 5415   | Farm Tractor | *        | T75  |
| 5420   | Farm Tractor |          | T74  |
| 5420N  | Farm Tractor |          | T74  |
| 5425   | Farm Tractor |          | T75  |
| 5425N  | Farm Tractor |          | T75  |
| 5430I  | Sprayer      |          | T86  |
| 5440   | Farm Tractor | *        | T46  |
| 5440   | Farm Tractor | *        | T47  |
| 5460   | Farm Tractor |          | T50  |
| 5500   | Farm Tractor |          | T09  |
| 5500N  | Farm Tractor |          | T18  |
| 5510   | Farm Tractor | *        | T74  |
| 5510   | Farm Tractor | *        | T75  |
| 5510N  | Farm Tractor |          | T75  |
| 5520   | Farm Tractor |          | T75  |
| 5520N  | Farm Tractor |          | T75  |
| 5525   | Farm Tractor |          | T75  |

| MODEL | DESCRIPTION      | COMMENTS | PAGE |
|-------|------------------|----------|------|
| 5525N | Farm Tractor     |          | T75  |
| 5575  | Skid Steer       |          | T63  |
| 5600  | Farm Tractor     |          | T16  |
| 5610  | Farm Tractor     |          | T71  |
| 5615  | Farm Tractor     | *        | T74  |
| 5615  | Farm Tractor     | *        | T75  |
| 5625  | Farm Tractor     |          | T75  |
| 5625N | Farm Tractor     |          | T75  |
| 5700  | Farm Tractor     |          | T18  |
| 5715  | Farm Tractor     | *        | T74  |
| 5715  | Farm Tractor     | *        | T75  |
| 5720  | Forage Harvester | *        | T49  |
| 5720  | Forage Harvester | *        | T50  |
| 5720  | Forage Harvester | *        | T51  |
| 5725  | Farm Tractor     | *        | T75  |
| 5730  | Forage Harvester | *        | T50  |
| 5730  | Forage Harvester | *        | T51  |
| 6010  | Farm Tractor     | *        | T74  |
| 6010  | Farm Tractor     | *        | T76  |
| 6030  | Farm Tractor     | *        | T54  |
| 6030  | Farm Tractor     | *        | T56  |
| 6100  | Farm Tractor     |          | T21  |
| 6100D | Tractor          |          | T77  |
| 6110  | Farm Tractor     |          | T74  |
| 6110  | Farm Tractor     |          | T76  |
| 6110D | Tractor          |          | T77  |
| 6110L | Farm Tractor     |          | T76  |
| 6115D | Tractor          |          | T77  |
| 6125D | Tractor          |          | T77  |
| 6130  | Tractor          |          | T77  |
| 6130D | Tractor          |          | T77  |
| 6140D | Tractor          |          | T77  |
| 6200  | Farm Tractor     |          | T18  |
| 6200L | Farm Tractor     |          | T18  |
| 6205  | Farm Tractor     | *        | T82  |
| 6210  | Farm Tractor     | *        | T76  |
| 6210L | Farm Tractor     |          | T76  |
| 6225  | Tractor          |          | T85  |
| 6230  | Tractor          |          | T77  |
| 6300  | Farm Tractor     |          | T18  |
| 6300L | Farm Tractor     |          | T18  |
| 6310L | Farm Tractor     |          | T76  |
| 6310S | Farm Tractor     |          | T76  |
| 6325  | Tractor          |          | T77  |
| 6330  | Tractor          |          | T77  |
| 6400  | Farm Tractor     |          | T23  |
| 6400L | Farm Tractor     |          | T23  |
| 6405  | Farm Tractor     |          | T76  |
| 6410  | Farm Tractor     | *        | T76  |
| 6410L | Farm Tractor     | *        | T76  |
| 6410S | Farm Tractor     | *        | T76  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL | DESCRIPTION                | COMMENTS | PAGE |
|-------|----------------------------|----------|------|
| 6425  | Tractor                    |          | T77  |
| 6430  | Tractor                    |          | T77  |
| 6430  | Tractor                    |          | T78  |
| 6500  | Farm Tractor               |          | T23  |
| 6500L | Farm Tractor               |          | T23  |
| 6505  | Farm Tractor               | *        | T82  |
| 6506  | Farm Tractor               |          | T34  |
| 6510  | Farm Tractor               | *        | T82  |
| 6510L | Farm Tractor               | *        | T76  |
| 6515  | Farm Tractor               | *        | T82  |
| 6520  | Farm Tractor               | *        | T82  |
| 6525  | Tractor                    |          | T85  |
| 6530  | Tractor                    |          | T85  |
| 6534  | Tractor                    |          | T77  |
| 6534  | Tractor                    |          | T78  |
| 6600  | Farm Tractor               | *        | T32  |
| 6600  | Combine                    |          | T45  |
| 6600  | Combine                    |          | T47  |
| 6602  | Combine                    |          | T15  |
| 6602  | Combine                    |          | T50  |
| 6603  | Farm Tractor               |          | T83  |
| 6605  | Farm Tractor               |          | T76  |
| 6605  | Farm Tractor               |          | T84  |
| 6610  | Farm Tractor               | *        | T74  |
| 6610  | Farm Tractor               | *        | T76  |
| 6610  | Forage Harvester           | *        | T91  |
| 6610S | Farm Tractor               | *        | T76  |
| 6615  | Farm Tractor               |          | T84  |
| 6620  | Combine                    | *        | T48  |
| 6620  | Combine                    | *        | T49  |
| 6620  | Combine                    | *        | T50  |
| 6622  | Farm Tractor               | *        | T49  |
| 6622  | Farm Tractor               | *        | T50  |
| 6630  | Tractor                    |          | T85  |
| 6650  | Forage Harvester           |          | T91  |
| 6675  | Skid Steer                 |          | T62  |
| 6700  | Sprayer                    | *        | T23  |
| 6700  | Sprayer                    | *        | T75  |
| 6715  | Farm Tractor               | *        | T84  |
| 6800  | Farm Tractor               |          | T36  |
| 6830  | Tractor                    |          | T85  |
| 6900  | Farm Tractor               |          | T36  |
| 6930  | Tractor                    |          | T85  |
| 7130  | Tractor                    |          | T78  |
| 7130  | Tractor                    |          | T85  |
| 7180  | Self-Propelled Forage Harv | *        | T94  |
| 7195J | Tractor                    |          | T86  |
| 7200  | Farm Tractor               | *        | T31  |
| 7200  | Farm Tractor               | *        | T32  |
| 7200  | Forage Harvester           | *        | T91  |
| 7200  | SPFH (EUROPE)              | *        | T94  |

| MODEL | DESCRIPTION                | COMMENTS | PAGE |
|-------|----------------------------|----------|------|
| 7210  | Farm Tractor               | *        | T84  |
| 7210J | Tractor                    |          | T86  |
| 7225J | Tractor                    |          | T86  |
| 7230  | Tractor                    |          | T85  |
| 7250  | Self-Propelled Forage Harv | *        | T94  |
| 7330  | Tractor                    |          | T85  |
| 7400  | Farm Tractor               |          | T36  |
| 7400  | Mower                      |          | T65  |
| 7405  | Farm Tractor               |          | T84  |
| 7410  | Farm Tractor               | *        | T36  |
| 7410  | Farm Tractor               | *        | T84  |
| 7430  | Tractor                    |          | T85  |
| 7430E | Tractor                    |          | T86  |
| 7440  | Cotton Picker              |          | T29  |
| 7445  | Cotton Picker              | *        | T29  |
| 7445  | Cotton Picker              | *        | T31  |
| 7445  | Cotton Picker              | *        | T32  |
| 7455  | Cotton Picker              |          | T83  |
| 7460  | Cotton Picker              |          | T83  |
| 7484  | Cotton Picker              | *        | T31  |
| 7484  | Cotton Picker              | *        | T32  |
| 7500  | Forage Harvester           |          | T36  |
| 7500  | Mower                      |          | T65  |
| 7510  | Farm Tractor               |          | T84  |
| 7520  | Farm Tractor               |          | T56  |
| 7530  | Tractor                    |          | T86  |
| 7530  | Tractor                    |          | T87  |
| 7600  | Farm Tractor               |          | T36  |
| 7610  | Farm Tractor               |          | T84  |
| 7630  | Tractor                    |          | T86  |
| 7660  | Cotton Picker              | *        | T94  |
| 7700  | Combine                    | *        | T45  |
| 7700  | Combine                    | *        | T47  |
| 7700  | Farm Tractor               |          | T53  |
| 7700  | Mower                      |          | T65  |
| 7710  | Combine                    |          | T90  |
| 7720  | Combine                    | *        | T49  |
| 7720  | Combine                    | *        | T50  |
| 7730  | Tractor                    |          | T86  |
| 7775  | Skid Steer                 |          | T64  |
| 7800  | Farm Tractor               |          | T53  |
| 7810  | Farm Tractor               |          | T90  |
| 7820  | Farm Tractor               |          | T90  |
| 7830  | Tractor                    |          | T86  |
| 7920  | Farm Tractor               |          | T90  |
| 7930  | Tractor                    |          | T86  |
| 8000  | Mower                      |          | T65  |
| 8030  | HDMFWD Tractor Atlas       | *        | T94  |
| 8030  | ILS Tractor Atlas          | *        | T94  |
| 8030  | Tractor Atlas              | *        | T94  |
| 8100  | Farm Tractor               |          | T53  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL  | DESCRIPTION         | COMMENTS | PAGE |
|--------|---------------------|----------|------|
| 8100   | Farm Tractor        |          | T90  |
| 8100T  | Farm Tractor        |          | T90  |
| 8110   | Farm Tractor        |          | T90  |
| 8110T  | Farm Tractor        |          | T90  |
| 8120   | Farm Tractor        |          | T90  |
| 8120T  | Farm Tractor        |          | T90  |
| 8130   | AT2 ILS Tractor     | *        | T94  |
| 8130   | AT2 MFWD Tractor    | *        | T94  |
| 8130   | HDMFWD Tractor      | *        | T94  |
| 8130   | ILS Tractor         | *        | T94  |
| 8130   | MFWD Tractor        | *        | T94  |
| 8130   | Tractor             | *        | T94  |
| 8200   | Farm Tractor        |          | T53  |
| 8200   | Farm Tractor        |          | T90  |
| 8200T  | Farm Tractor        |          | T90  |
| 8210   | Farm Tractor        |          | T90  |
| 8210T  | Farm Tractor        |          | T90  |
| 8220   | Farm Tractor        |          | T90  |
| 8220T  | Farm Tractor        |          | T90  |
| 8225R  | ILS Tractor         | *        | T94  |
| 8225R  | MFWD Tractor        | *        | T94  |
| 8225R  | Tractor             | *        | T94  |
| 8230   | ILS Tractor         | *        | T94  |
| 8230   | HDMFWD Tractor      | *        | T94  |
| 8230   | MFWD Tractor        | *        | T94  |
| 8230   | ILSMFWD Tractor     | *        | T94  |
| 8230T  | Tractor             | *        | T94  |
| 8235R  | Tractor (Worldwide) | *        | T94  |
| 8245R  | HDMFWD Tractor      | *        | T94  |
| 8245R  | Tractor             | *        | T94  |
| 8245R  | ILS Tractor         | *        | T94  |
| 8245R  | HDMFWD Tractor      | *        | T94  |
| 8260R  | Tractor (Worldwide) | *        | T94  |
| 8270R  | HDMFWD Tractor      | *        | T94  |
| 8270R  | ILS Tractor         | *        | T94  |
| 8270R  | HDMFWD Tractor      | *        | T94  |
| 8270R  | Tractor             | *        | T94  |
| 8285R  | Tractor (Worldwide) | *        | T94  |
| 8295R  | HDMFWD Tractor      | *        | T94  |
| 8295R  | ILS Tractor         | *        | T94  |
| 8295R  | MFWD Tractor        | *        | T94  |
| 8295RT | Tractor             | *        | T94  |
| 8300   | Farm Tractor        |          | T53  |
| 8300   | Farm Tractor        |          | T90  |
| 8300T  | Farm Tractor        |          | T90  |
| 8310   | Farm Tractor        |          | T90  |
| 8310R  | Tractor (Worldwide) | *        | T94  |
| 8310RT | Tractor (Worldwide) | *        | T94  |
| 8310T  | Farm Tractor        |          | T90  |
| 8320   | Farm Tractor        |          | T90  |
| 8320R  | MFWD Tractor        | *        | T94  |

| MODEL  | DESCRIPTION         | COMMENTS          | PAGE |
|--------|---------------------|-------------------|------|
| 8320R  | Tractor             | *                 | T94  |
| 8320RT | Tractor             | *                 | T94  |
| 8320T  | Farm Tractor        |                   | T90  |
| 8330   | ILS Tractor         | *                 | T94  |
| 8330   | Tractor             | *                 | T94  |
| 8330   | HD MFWD Tractor     | *                 | T94  |
| 8330   | ILSMFWD Tractor     | *                 | T94  |
| 8330T  | Tractor             | *                 | T94  |
| 8335R  | Tractor (Worldwide) | *                 | T94  |
| 8335RT | Tractor (Worldwide) | *                 | T94  |
| 8345R  | ILS Tractor         | *                 | T94  |
| 8345R  | MFWD Tractor        | *                 | T94  |
| 8345R  | Tractor             | *                 | T94  |
| 8345RT | Tractor             | *                 | T94  |
| 8400   | Mower               |                   | T65  |
| 8400   | Farm Tractor        |                   | T90  |
| 8400   | Farm Tractor        |                   | T91  |
| 8400T  | Farm Tractor        |                   | T90  |
| 8410   | Farm Tractor        |                   | T91  |
| 8410T  | Farm Tractor        |                   | T91  |
| 8420   | Farm Tractor        |                   | T91  |
| 8420T  | Farm Tractor        |                   | T91  |
| 8430   | Farm Tractor        | *                 | T49  |
| 8430   | Farm Tractor        | *                 | T51  |
| 8430   | MFWD Tractor        | *                 | T94  |
| 8430   | HDMFWD Tractor      | *                 | T94  |
| 8430   | ILS Tractor         | *                 | T94  |
| 8430T  | Tractor             | *                 | T94  |
| 8440   | Farm Tractor        | *                 | T49  |
| 8440   | Farm Tractor        | *                 | T51  |
| 8450   | Farm Tractor        | *                 | T49  |
| 8450   | Farm Tractor        | *                 | T51  |
| 8500   | Mower               |                   | T65  |
| 8520   | Farm Tractor        |                   | T91  |
| 8520T  | Farm Tractor        |                   | T91  |
| 8530   | MFWD Tractor        | *                 | T94  |
| 8530   | HDMFWD Tractor      | *                 | T94  |
| 8530   | ILS Tractor         | *                 | T94  |
| 8560   | Farm Tractor        | *                 | T52  |
| 8570   | Farm Tractor        | *                 | T52  |
| 8630   | Farm Tractor        | ESN > 033814      | T57  |
| 8630   | Farm Tractor        | ESN 033815-049059 | T58  |
| 8630   | Farm Tractor        | ESN 049060 >      | T59  |
| 8640   | Farm Tractor        | ESN 033815-049059 | T58  |
| 8640   | Farm Tractor        | ESN 049060 >      | T59  |
| 8650   | Farm Tractor        | ESN 033815-049059 | T58  |
| 8650   | Farm Tractor        | ESN 049060 >      | T59  |
| 8700   | Mower               |                   | T65  |
| 8760   | Combine             |                   | T60  |
| 8800   | Mower               |                   | T65  |
| 8820   | Combine             | *                 | T49  |

## Equipment Application Chart

### Agricultural Equipment

| MODEL     | DESCRIPTION          | COMMENTS       | PAGE |
|-----------|----------------------|----------------|------|
| 8820      | Combine              | *              | T51  |
| 8870      | Farm Tractor         |                | T60  |
| 9100      | Farm Tractor         |                | T90  |
| 9100      | Farm Tractor         |                | T91  |
| 9120      | Farm Tractor         |                | T91  |
| 9230      | Tractor              | *              | T94  |
| 9400      | Combine              | *              | T31  |
| 9400      | Combine              | *              | T32  |
| 9400      | Combine              | *              | T36  |
| 9410      | Combine              |                | T84  |
| 9500      | Combine              |                | T53  |
| 9510      | Combine              |                | T90  |
| 9510 SH   | Combine              |                | T90  |
| 9540i WTS | Combine              |                | T86  |
| 9550      | Combine              |                | T90  |
| 9550 SH   | Combine              |                | T90  |
| 9560 STS  | Sf Propelled Combine |                | T86  |
| 9560 STS  | Combine              |                | T87  |
| 9560 STS  | Combine              | *              | T88  |
| 9560 STS  | Combine              | *              | T94  |
| 9560i STS | Combine              | *              | T94  |
| 9560i WTS | Combine              | (S.N > 080015) | T90  |
| 9570 STS  | Sf Propelled Combine |                | T86  |
| 9580      | Combine              | *              | T91  |
| 9580      | Combine              |                | T94  |
| 9580 WTS  | Combine              | (S.N > 080015) | T90  |
| 9580 WTS  | Combine              | (S.N > 080015) | T91  |
| 9580i WTS | Combine              |                | T86  |
| 9580i WTS | Combine              | (S.N > 080015) | T90  |
| 9600      | Combine              |                | T53  |
| 9610      | Combine              |                | T91  |
| 9640      | Combine              | *              | T85  |
| 9640      | Combine              |                | T94  |
| 9640 WTS  | Combine              |                | T90  |
| 9640 WTS  | Combine              |                | T91  |
| 9640i WTS | Combine              |                | T90  |
| 9640i WTS | Combine              |                | T91  |
| 9650      | Combine              |                | T91  |
| 9650 CTS  | Combine              |                | T91  |
| 9650 STS  | Combine              |                | T91  |
| 9660      | Combine              |                | T91  |
| 9660      | Combine              | *              | T94  |
| 9660 CTS  | Combine              |                | T91  |
| 9660 STS  | Combine              |                | T91  |
| 9660 STS  | Combine              |                | T94  |
| 9660 WTS  | Combine              |                | T91  |
| 9660i WTS | Combine              |                | T91  |
| 9670 STS  | Combine              |                | T94  |
| 9680      | Combine              | *              | T94  |
| 9680 WTS  | Combine              |                | T91  |
| 9680i WTS | Combine              |                | T91  |

| MODEL     | DESCRIPTION          | COMMENTS           | PAGE |
|-----------|----------------------|--------------------|------|
| 9750 STS  | Combine              |                    | T91  |
| 9760 STS  | Combine              |                    | T91  |
| 9760 STS  | Combine              |                    | T94  |
| 9770 STS  | Combine              |                    | T94  |
| 9780 CTS  | Combine              | (SN 071443-072697) | T91  |
| 9780 CTS  | Combine              | (S.N 072800 >)     | T91  |
| 9780i CTS | Combine              | (S.N 072800 >)     | T91  |
| 9850i WTS | Combine              | (S.N > 080015)     | T91  |
| 9900      | Cotton Picker        | *                  | T29  |
| 9900      | Cotton Picker        | *                  | T30  |
| 9910      | Cotton Picker        | *                  | T29  |
| 9910      | Cotton Picker        | *                  | T30  |
| 9920      | Cotton Picker        | *                  | T29  |
| 9920      | Cotton Picker        | *                  | T30  |
| 9930      | Cotton Picker        | *                  | T31  |
| 9930      | Cotton Picker        | *                  | T32  |
| 9935      | Cotton Picker        |                    | T83  |
| 9940      | Cotton Picker        | *                  | T49  |
| 9940      | Cotton Picker        | *                  | T50  |
| 9940      | Cotton Picker        | *                  | T51  |
| 9950      | Cotton Picker        | *                  | T50  |
| 9950      | Cotton Picker        | *                  | T51  |
| 9960      | Cotton Picker        |                    | T53  |
| 9965      | Combine              |                    | T53  |
| 9970      | Cotton Picker        |                    | T90  |
| 9976      | Cotton Picker        |                    | T91  |
| 9986      | Cotton Picker        |                    | T91  |
| 9996      | Cotton Picker        |                    | T91  |
| C670      | Combine              | *                  | T94  |
| CH3510    | Cane Harvester       |                    | T91  |
| CTS       | Combine              |                    | T91  |
| CTS II    | Combine              |                    | T91  |
| CTS II    | Combine              | (S.N 675000 >)     | T91  |
| S550 STS  | Sf Propelled Combine |                    | T86  |
| S560      | Combine              |                    | T94  |
| S660 STS  | Combine              |                    | T94  |
| S670 STS  | Combine              |                    | T94  |
| SE6100    | Tractor              |                    | T21  |
| SE6200    | Tractor              |                    | T18  |
| SE6300    | Tractor              |                    | T18  |
| SE6400    | Tractor              |                    | T23  |
| SE6510    | Tractor              |                    | T82  |
| SE6520    | Tractor              |                    | T82  |
| T550      | Combine              |                    | T86  |
| T560      | Combine              |                    | T94  |
| T660      | Combine              |                    | T94  |
| T670      | Combine              |                    | T94  |
| W330      | Combine              |                    | T85  |
| W540      | Combine              |                    | T86  |
| W650      | Combine              |                    | T94  |
| W660      | Combine              |                    | T94  |

## Equipment Application Chart

### Construction Equipment

| MODEL  | DESCRIPTION       | COMMENTS | PAGE |
|--------|-------------------|----------|------|
| 27D    | Compact Excavator |          | T68  |
| 35D    | Compact Excavator |          | T68  |
| 35G    | Compact Excavator |          | T68  |
| 50D    | Compact Excavator |          | T69  |
| 70     | Excavator         |          | T15  |
| 70D    | Excavator         | *        | T15  |
| 70D    | Excavator         | *        | T16  |
| 110    | Loader Backhoe    |          | T62  |
| 110    | Loader Backhoe    |          | T69  |
| 120    | Loader Backhoe    |          | T76  |
| 200LC  | Excavator         |          | T84  |
| 200LL  | Excavator         |          | T84  |
| 210C   | Loader Backhoe    |          | T15  |
| 210D   | Loader Backhoe    |          | T16  |
| 210LE  | Loader Backhoe    |          | T74  |
| 230LC  | Excavator         |          | T84  |
| 230LCR | Excavator         |          | T75  |
| 240DLC | Excavator         |          | T86  |
| 244E   | Wheel Loader      |          | T15  |
| 250GLC | Excavator         |          | T86  |
| 270DLC | Excavator         |          | T86  |
| 270LC  | Excavator         |          | T84  |
| 290D   | Excavator         | *        | T15  |
| 290D   | Excavator         | *        | T16  |
| 290GLC | Excavator         |          | T86  |
| 300    | Loader Backhoe    | *        | T01  |
| 300    | Loader Backhoe    | *        | T02  |
| 300A   | Loader Backhoe    | *        | T01  |
| 300A   | Loader Backhoe    | *        | T02  |
| 300B   | Loader Backhoe    |          | T02  |
| 300D   | Loader Backhoe    |          | T18  |
| 301    | Loader Backhoe    |          | T02  |
| 301A   | Loader Backhoe    | *        | T02  |
| 301A   | Loader Backhoe    | *        | T05  |
| 302    | Loader Backhoe    | *        | T03  |
| 302    | Loader Backhoe    | *        | T05  |
| 302A   | Loader Backhoe    | *        | T03  |
| 302A   | Loader Backhoe    | *        | T05  |
| 310    | Loader Backhoe    |          | T05  |
| 310    | Loader Backhoe    |          | T14  |
| 310B   | Loader Backhoe    |          | T14  |
| 310C   | Loader Backhoe    | *        | T15  |
| 310C   | Loader Backhoe    | *        | T16  |
| 310C   | Loader Backhoe    | *        | T17  |
| 310C   | Loader Backhoe    | *        | T18  |
| 310D   | Loader Backhoe    | *        | T15  |
| 310D   | Loader Backhoe    | *        | T16  |
| 310D   | Loader Backhoe    | *        | T17  |
| 310E   | Loader Backhoe    | *        | T74  |
| 310E   | Loader Backhoe    | *        | T75  |

| MODEL   | DESCRIPTION            | COMMENTS | PAGE |
|---------|------------------------|----------|------|
| 310G    | Loader Backhoe         |          | T75  |
| 310SE   | Loader Backhoe         | *        | T75  |
| 310SG   | Loader Backhoe         | *        | T75  |
| 315C    | Loader Backhoe         | *        | T15  |
| 315C    | Loader Backhoe         | *        | T16  |
| 315C    | Loader Backhoe         | *        | T17  |
| 315C    | Loader Backhoe         | *        | T18  |
| 315D    | Loader Backhoe         | *        | T16  |
| 315D    | Loader Backhoe         | *        | T17  |
| 315D    | Loader Backhoe         | *        | T18  |
| 315SE   | Loader Backhoe         |          | T75  |
| 315SG   | Loader Backhoe         |          | T75  |
| 330 LC  | Excavator              |          | T90  |
| 330 LCR | Excavator              |          | T90  |
| 330C LC | Excavator              |          | T90  |
| 335D    | Knuckleboom Log Loader |          | T77  |
| 344E    | Wheel Loader           | *        | T20  |
| 344E    | Wheel Loader           | *        | T21  |
| 344G    | Wheel Loader           | *        | T22  |
| 344G    | Wheel Loader           | *        | T23  |
| 344H    | Wheel Loader           |          | T75  |
| 344J    | Loader                 |          | T77  |
| 350A    | Crawler Dozer          | *        | T01  |
| 350A    | Crawler Dozer          | *        | T02  |
| 350B    | Crawler Dozer          | *        | T01  |
| 350B    | Crawler Dozer          | *        | T02  |
| 350B    | Crawler Dozer          | *        | T04  |
| 350B    | Crawler Dozer          | *        | T05  |
| 350C    | Crawler Dozer          |          | T05  |
| 350D    | Crawler Dozer          |          | T05  |
| 350D    | Crawler Dozer          |          | T06  |
| 355D    | Crawler Dozer          |          | T06  |
| 370     | Excavator              |          | T90  |
| 370 C   | Excavator              |          | T90  |
| 400     | Loader Backhoe         | *        | T10  |
| 400     | Loader Backhoe         | *        | T11  |
| 400G    | Crawler Dozer          | *        | T15  |
| 400G    | Crawler Dozer          | *        | T16  |
| 401     | Loader Backhoe         |          | T13  |
| 401A    | Loader Backhoe         |          | T13  |
| 401B    | Loader Backhoe         |          | T14  |
| 401C    | Loader Backhoe         |          | T14  |
| 401D    | Loader Backhoe         |          | T14  |
| 410     | Loader Backhoe         |          | T14  |
| 410B    | Loader Backhoe         |          | T14  |
| 410C    | Loader Backhoe         | *        | T19  |
| 410C    | Loader Backhoe         | *        | T20  |
| 410C    | Loader Backhoe         | *        | T21  |
| 410C    | Loader Backhoe         | *        | T22  |
| 410C    | Loader Backhoe         | *        | T23  |

## Equipment Application Chart

### Construction Equipment

| MODEL  | DESCRIPTION            | COMMENTS | PAGE |
|--------|------------------------|----------|------|
| 410D   | Loader Backhoe         | *        | T20  |
| 410D   | Loader Backhoe         | *        | T21  |
| 410D   | Loader Backhoe         | *        | T22  |
| 410D   | Loader Backhoe         | *        | T23  |
| 410E   | Loader Backhoe         |          | T75  |
| 410G   | Loader Backhoe         |          | T75  |
| 410J   | Loader Backhoe         |          | T75  |
| 415B   | Loader Backhoe         |          | T15  |
| 415C   | Loader Backhoe         |          | T15  |
| 437D   | Knuckleboom Log Loader |          | T77  |
| 444C   | Wheel Loader           |          | T28  |
| 444CH  | Wheel Loader           |          | T28  |
| 444D   | Wheel Loader           | *        | T28  |
| 444D   | Wheel Loader           | *        | T29  |
| 444D   | Wheel Loader           |          | T30  |
| 444D   | Wheel Loader           |          | T31  |
| 444D   | Wheel Loader           |          | T32  |
| 444E   | Wheel Loader           | *        | T22  |
| 444E   | Wheel Loader           | *        | T23  |
| 444G   | Wheel Loader           | *        | T22  |
| 444G   | Wheel Loader           | *        | T23  |
| 444H   | Wheel Loader           |          | T76  |
| 444HCL | Wheel Loader           |          | T76  |
| 450    | Crawler Dozer          |          | T10  |
| 450A   | Crawler Dozer          |          | T13  |
| 450B   | Crawler Dozer          |          | T13  |
| 450C   | Crawler Dozer          |          | T14  |
| 450D   | Crawler Dozer          |          | T14  |
| 450E   | Crawler Dozer          | *        | T20  |
| 450E   | Crawler Dozer          | *        | T21  |
| 450E   | Crawler Dozer          | *        | T22  |
| 450E   | Crawler Dozer          | *        | T23  |
| 450G   | Crawler Dozer          | *        | T20  |
| 450G   | Crawler Dozer          | *        | T21  |
| 450G   | Crawler Dozer          | *        | T22  |
| 450G   | Crawler Dozer          | *        | T23  |
| 450G   | Crawler Dozer          | *        | T76  |
| 450H   | Crawler Dozer          | *        | T74  |
| 450H   | Crawler Dozer          | *        | T75  |
| 455D   | Crawler Dozer          |          | T14  |
| 455E   | Crawler Dozer          | *        | T20  |
| 455E   | Crawler Dozer          | *        | T21  |
| 455E   | Crawler Dozer          | *        | T22  |
| 455E   | Crawler Dozer          | *        | T23  |
| 455G   | Crawler Dozer          | *        | T20  |
| 455G   | Crawler Dozer          | *        | T22  |
| 455G   | Crawler Dozer          | *        | T23  |
| 455G   | Crawler Dozer          | *        | T76  |
| 490    | Excavator              |          | T15  |
| 490D   | Excavator              | *        | T20  |

| MODEL | DESCRIPTION    | COMMENTS | PAGE |
|-------|----------------|----------|------|
| 490D  | Excavator      | *        | T21  |
| 490E  | Excavator      | *        | T22  |
| 490E  | Excavator      | *        | T23  |
| 493D  | Excavator      | *        | T20  |
| 493D  | Excavator      | *        | T21  |
| 495D  | Excavator      | *        | T22  |
| 495D  | Excavator      | *        | T23  |
| 500   | Loader Backhoe | *        | T37  |
| 500   | Loader Backhoe | *        | T38  |
| 500   | Loader Backhoe | *        | T39  |
| 500A  | Loader Backhoe | *        | T37  |
| 500A  | Loader Backhoe | *        | T38  |
| 500A  | Loader Backhoe | *        | T39  |
| 500A  | Loader Backhoe | *        | T40  |
| 500B  | Loader Backhoe |          | T38  |
| 500B  | Loader Backhoe |          | T39  |
| 500B  | Loader Backhoe |          | T40  |
| 500C  | Loader Backhoe |          | T38  |
| 500C  | Loader Backhoe |          | T39  |
| 500C  | Loader Backhoe |          | T40  |
| 510   | Loader Backhoe |          | T38  |
| 510   | Loader Backhoe |          | T39  |
| 510   | Loader Backhoe |          | T40  |
| 510B  | Loader Backhoe | *        | T20  |
| 510B  | Loader Backhoe | *        | T21  |
| 510C  | Loader Backhoe | *        | T22  |
| 510C  | Loader Backhoe | *        | T23  |
| 510D  | Loader Backhoe | *        | T23  |
| 515B  | Loader Backhoe | *        | T15  |
| 515B  | Loader Backhoe | *        | T16  |
| 515B  | Loader Backhoe | *        | T17  |
| 515B  | Loader Backhoe | *        | T18  |
| 530 B | Log Loader     |          | T90  |
| 535   | Log Loader     |          | T90  |
| 544   | Wheel Loader   | *        | T24  |
| 544   | Wheel Loader   | *        | T25  |
| 544A  | Wheel Loader   | *        | T27  |
| 544A  | Wheel Loader   | *        | T28  |
| 544B  | Wheel Loader   | *        | T35  |
| 544B  | Wheel Loader   | *        | T36  |
| 544C  | Wheel Loader   | *        | T33  |
| 544C  | Wheel Loader   | *        | T35  |
| 544C  | Wheel Loader   | *        | T36  |
| 544D  | Wheel Loader   | *        | T35  |
| 544D  | Wheel Loader   | *        | T36  |
| 544E  | Wheel Loader   | *        | T31  |
| 544E  | Wheel Loader   | *        | T32  |
| 544EH | Wheel Loader   | *        | T31  |
| 544EH | Wheel Loader   | *        | T32  |
| 544G  | Wheel Loader   | *        | T31  |

## Equipment Application Chart

### Construction Equipment

| MODEL  | DESCRIPTION    | COMMENTS | PAGE |
|--------|----------------|----------|------|
| 544G   | Wheel Loader   | *        | T32  |
| 544H   | Wheel Loader   |          | T84  |
| 544HLL | Wheel Loader   |          | T84  |
| 550    | Crawler Dozer  | *        | T22  |
| 550    | Crawler Dozer  | *        | T23  |
| 550A   | Crawler Dozer  | *        | T22  |
| 550A   | Crawler Dozer  | *        | T23  |
| 550B   | Crawler Dozer  | *        | T22  |
| 550B   | Crawler Dozer  | *        | T23  |
| 550G   | Crawler Dozer  | *        | T22  |
| 550G   | Crawler Dozer  | *        | T23  |
| 550G   | Crawler Dozer  | *        | T76  |
| 550H   | Crawler Dozer  | *        | T74  |
| 550H   | Crawler Dozer  | *        | T75  |
| 550H   | Crawler Dozer  | *        | T76  |
| 555    | Crawler Dozer  | *        | T22  |
| 555    | Crawler Dozer  | *        | T23  |
| 555A   | Crawler Dozer  | *        | T22  |
| 555A   | Crawler Dozer  | *        | T23  |
| 555B   | Crawler Dozer  | *        | T22  |
| 555B   | Crawler Dozer  | *        | T23  |
| 555G   | Crawler Dozer  | *        | T22  |
| 555G   | Crawler Dozer  | *        | T23  |
| 555G   | Crawler Dozer  | *        | T76  |
| 570A   | Motor Grader   | *        | T27  |
| 570A   | Motor Grader   | *        | T28  |
| 570B   | Motor Grader   | *        | T29  |
| 570B   | Motor Grader   | *        | T30  |
| 590D   | Excavator      | *        | T22  |
| 590D   | Excavator      | *        | T23  |
| 595    | Excavator      | *        | T22  |
| 595D   | Excavator      | *        | T22  |
| 595D   | Excavator      | *        | T23  |
| 600    | Loader Backhoe | *        | T44  |
| 610B   | Loader Backhoe | *        | T22  |
| 610B   | Loader Backhoe | *        | T23  |
| 610C   | Loader Backhoe | *        | T22  |
| 610C   | Loader Backhoe | *        | T23  |
| 624E   | Wheel Loader   | *        | T35  |
| 624E   | Wheel Loader   | *        | T36  |
| 624EH  | Wheel Loader   | *        | T35  |
| 624EH  | Wheel Loader   | *        | T36  |
| 624G   | Wheel Loader   | *        | T35  |
| 624G   | Wheel Loader   | *        | T36  |
| 624H   | Wheel Loader   |          | T84  |
| 624HLL | Wheel Loader   |          | T84  |
| 624K   | Loader         |          | T86  |
| 624KR  | Loader         |          | T86  |
| 644    | Wheel Loader   |          | T46  |
| 644A   | Wheel Loader   |          | T46  |

| MODEL | DESCRIPTION   | COMMENTS       | PAGE |
|-------|---------------|----------------|------|
| 644B  | Wheel Loader  |                | T55  |
| 644C  | Wheel Loader  | *              | T50  |
| 644C  | Wheel Loader  | *              | T51  |
| 644D  | Wheel Loader  |                | T49  |
| 644E  | Wheel Loader  | *              | T53  |
| 644ER | Wheel Loader  | *              | T53  |
| 644G  | Wheel Loader  | *              | T53  |
| 644 G | Loader        |                | T90  |
| 644GH | Wheel Loader  | *              | T53  |
| 644 H | Loader        |                | T90  |
| 644J  | Loader        |                | T86  |
| 644 J | Loader        | (S.N. -611231) | T90  |
| 644K  | Loader        |                | T86  |
| 650G  | Crawler Dozer | *              | T22  |
| 650G  | Crawler Dozer | *              | T23  |
| 650G  | Crawler Dozer | *              | T76  |
| 650H  | Crawler Dozer | *              | T74  |
| 650H  | Crawler Dozer | *              | T75  |
| 650J  | Crawler       |                | T77  |
| 655A  | Crawler Dozer | *              | T35  |
| 655A  | Crawler Dozer | *              | T36  |
| 655B  | Crawler Dozer | *              | T35  |
| 655B  | Crawler Dozer | *              | T36  |
| 670A  | Motor Grader  | *              | T35  |
| 670A  | Motor Grader  | *              | T36  |
| 670B  | Motor Grader  | *              | T35  |
| 670B  | Motor Grader  | *              | T36  |
| 670C  | Motor Grader  | *              | T83  |
| 670C  | Motor Grader  | *              | T84  |
| 670CH | Motor Grader  | *              | T83  |
| 670CH | Motor Grader  | *              | T84  |
| 670G  | Motor Grader  |                | T86  |
| 670G  | Motor Grader  | *              | T94  |
| 670GP | Motor Grader  |                | T86  |
| 670GP | Motor Grader  | *              | T94  |
| 670GP | Motor Grader  | *              | T94  |
| 672A  | Motor Grader  | *              | T35  |
| 672A  | Motor Grader  | *              | T36  |
| 672B  | Motor Grader  | *              | T35  |
| 672B  | Motor Grader  | *              | T36  |
| 672CH | Motor Grader  | *              | T83  |
| 672CH | Motor Grader  | *              | T84  |
| 672G  | Motor Grader  |                | T86  |
| 672G  | Motor Grader  | *              | T94  |
| 672GP | Motor Grader  |                | T86  |
| 672GP | Motor Grader  | *              | T94  |
| 690   | Excavator     |                | T46  |
| 690A  | Excavator     |                | T46  |
| 690B  | Excavator     |                | T47  |
| 690C  | Excavator     | *              | T50  |

## Equipment Application Chart

### Construction Equipment

| MODEL   | DESCRIPTION       | COMMENTS | PAGE |
|---------|-------------------|----------|------|
| 690C    | Excavator         | *        | T51  |
| 690D    | Excavator         | *        | T35  |
| 690D    | Excavator         | *        | T36  |
| 690E    | Excavator         | *        | T35  |
| 690E    | Excavator         | *        | T36  |
| 698G    | Excavator         |          | T84  |
| 700     | Loader Backhoe    |          | T54  |
| 700A    | Loader Backhoe    |          | T54  |
| 700H    | Crawler Dozer     |          | T83  |
| 700J    | Crawler Dozer     |          | T83  |
| 710B    | Loader Backhoe    | *        | T28  |
| 710B    | Loader Backhoe    | *        | T31  |
| 710B    | Loader Backhoe    | *        | T32  |
| 710C    | Loader Backhoe    | *        | T31  |
| 710C    | Loader Backhoe    | *        | T32  |
| 710D    | Loader Backhoe    |          | T84  |
| 710J    | Backhoe Loader    |          | T77  |
| 710K    | Backhoe Loader    |          | T85  |
| 724 J   | Loader            |          | T90  |
| 744E    | Wheel Loader      |          | T59  |
| 750     | Crawler Dozer     | *        | T35  |
| 750     | Crawler Dozer     | *        | T36  |
| 750B    | Crawler Dozer     | *        | T35  |
| 750B    | Crawler Dozer     | *        | T36  |
| 753 GL  | Track Harvester   |          | T90  |
| 755     | Crawler Dozer     | *        | T35  |
| 755     | Crawler Dozer     | *        | T36  |
| 755A    | Crawler Dozer     | *        | T35  |
| 755A    | Crawler Dozer     | *        | T36  |
| 755B    | Crawler Dozer     | *        | T35  |
| 755B    | Crawler Dozer     | *        | T36  |
| 755BMIL | Crawler Dozer     | *        | T35  |
| 755BMIL | Crawler Dozer     | *        | T36  |
| 755D    | Crawler           |          | T86  |
| 760     | Scraper           |          | T54  |
| 760A    | Scraper           |          | T54  |
| 762     | Scraper           | *        | T58  |
| 762     | Scraper           | *        | T59  |
| 762A    | Scraper           | *        | T49  |
| 762A    | Scraper           | *        | T50  |
| 762A    | Scraper           | *        | T51  |
| 762B    | Scraper           | *        | T50  |
| 762B    | Scraper           | *        | T51  |
| 762 B   | Elevating Scraper |          | T90  |
| 764     | High Speed Dozer  |          | T86  |
| 770     | Motor Grader      |          | T55  |
| 770A    | Motor Grader      | *        | T50  |
| 770A    | Motor Grader      | *        | T51  |
| 770A    | Motor Grader      | *        | T55  |
| 770B    | Motor Grader      | *        | T50  |

| MODEL            | DESCRIPTION   | COMMENTS         | PAGE |
|------------------|---------------|------------------|------|
| 770B             | Motor Grader  | *                | T51  |
| 770B             | Motor Grader  | *                | T53  |
| 770BH            | Motor Grader  |                  | T53  |
| 770 C            | Motor Grader  | (S.N. -582129)   | T90  |
| 770 C Series II  | Motor Grader  | (S.N. 582130-)   | T90  |
| 770 CH           | Motor Grader  | (S.N. -582129)   | T90  |
| 770 CH Series II | Motor Grader  | (S.N. 582130-)   | T90  |
| 770 D            | Motor Grader  |                  | T90  |
| 772A             | Motor Grader  |                  | T55  |
| 772B             | Motor Grader  |                  | T53  |
| 772BH            | Motor Grader  |                  | T53  |
| 772 CH           | Motor Grader  | (S.N. -582129)   | T90  |
| 772 CH Series II | Motor Grader  | (S.N. 582130-)   | T90  |
| 772 D            | Motor Grader  |                  | T90  |
| 790D             | Excavator     |                  | T50  |
| 790E             | Excavator     | *                | T35  |
| 790E             | Excavator     | *                | T36  |
| 792D             | Excavator     |                  | T53  |
| 792LC            | Excavator     |                  | T53  |
| 810D             | Forwarder     |                  | T78  |
| 810E             | Forwarder     |                  | T78  |
| 850              | Crawler Dozer | *                | T58  |
| 850              | Crawler Dozer | *                | T59  |
| 850B             | Crawler Dozer | *                | T50  |
| 850B             | Crawler Dozer | *                | T51  |
| 850C             | Crawler Dozer |                  | T53  |
| 850C             | Crawler Dozer | (S.N. -883331)   | T90  |
| 850C-II          | Crawler Dozer | (S.N. 883332 - ) | T90  |
| 850G             | Crawler Dozer |                  | T84  |
| 850J             | Crawler Dozer |                  | T78  |
| 850J             | Crawler Dozer |                  | T79  |
| 850J             | Crawler Dozer |                  | T90  |
| 850J             | Crawler Dozer |                  | T94  |
| 850JR            | Crawler Dozer |                  | T94  |
| 855              | Crawler Dozer | *                | T58  |
| 855              | Crawler Dozer | *                | T59  |
| 860B             | Scraper       | *                | T58  |
| 860B             | Scraper       | *                | T59  |
| 862              | Scraper       | *                | T58  |
| 862              | Scraper       | *                | T59  |
| 870 D            | Motor Grader  |                  | T90  |
| 870G             | Motor Grader  |                  | T90  |
| 870GP            | Motor Grader  |                  | T90  |
| 872 D            | Motor Grader  |                  | T90  |
| 872G             | Motor Grader  |                  | T90  |
| 872GP            | Motor Grader  |                  | T90  |
| 890              | Excavator     | *                | T58  |
| 890              | Excavator     | *                | T59  |
| 890A             | Excavator     | *                | T58  |
| 890A             | Excavator     | *                | T59  |

### *Skidders, Feller Bunchers, Forklifts and Compactors*

| <i>MODEL</i>  | <i>DESCRIPTION</i> | <i>COMMENTS</i> | <i>PAGE</i> |
|---------------|--------------------|-----------------|-------------|
| 240           | Skid Steer         |                 | T07         |
| 240 Series II | Skid Steer         |                 | T07         |
| 250           | Skid Steer         |                 | T09         |
| 250 Series II | Skid Steer         |                 | T09         |
| 260           | Skid Steer         |                 | T09         |
| 260 Series II | Skid Steer         |                 | T09         |
| 270           | Skid Steer         |                 | T21         |
| 270           | Skid Steer         |                 | T74         |
| 270 Series II | Skid Steer         |                 | T21         |
| 270 Series II | Skid Steer         |                 | T74         |
| 280           | Skid Steer         |                 | T23         |
| 280           | Skid Steer         |                 | T75         |
| 280           | Skid Steer         |                 | T76         |
| 280           | Skid Steer         |                 | T77         |
| 280           | Skid Steer         |                 | T78         |
| 280 Series II | Skid Steer         |                 | T23         |
| 280 Series II | Skid Steer         |                 | T75         |
| 280 Series II | Skid Steer         |                 | T76         |
| 280 Series II | Skid Steer         |                 | T77         |
| 280 Series II | Skid Steer         |                 | T78         |
| 340D          | Skidder            | *               | T20         |
| 340D          | Skidder            | *               | T21         |
| 340D          | Skidder            | *               | T22         |
| 340D          | Skidder            | *               | T23         |
| 380           | Forklift           | *               | T01         |
| 380           | Forklift           | *               | T02         |
| 440           | Skidder            | *               | T10         |
| 440           | Skidder            | *               | T11         |
| 440           | Skidder            | *               | T13         |
| 440A          | Skidder            |                 | T12         |
| 440B          | Skidder            | *               | T13         |
| 440B          | Skidder            | *               | T14         |
| 440C          | Skidder            | *               | T20         |
| 440C          | Skidder            | *               | T21         |
| 440C          | Skidder            | *               | T22         |
| 440C          | Skidder            | *               | T23         |
| 448D          | Skidder            | *               | T22         |
| 448D          | Skidder            | *               | T23         |
| 480           | Forklift           | *               | T10         |
| 480           | Forklift           | *               | T11         |
| 480A          | Forklift           |                 | T13         |
| 480B          | Forklift           |                 | T14         |
| 480C          | Forklift           |                 | T14         |
| 482C          | Forklift           |                 | T16         |
| 485E          | Forklift           |                 | T74         |
| 486E          | Forklift           |                 | T74         |
| 488E          | Forklift           |                 | T74         |
| 540           | Skidder            |                 | T25         |
| 540A          | Skidder            | *               | T26         |
| 540A          | Skidder            | *               | T27         |

## Equipment Application Chart

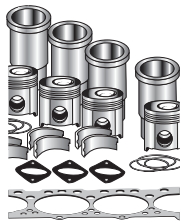
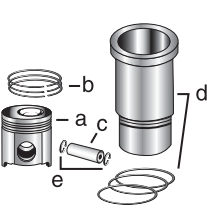
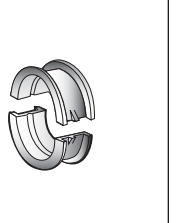
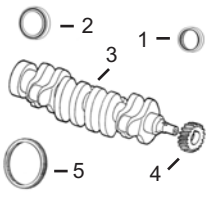
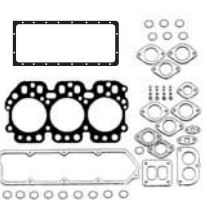
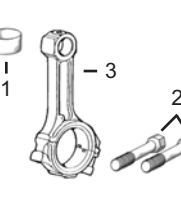
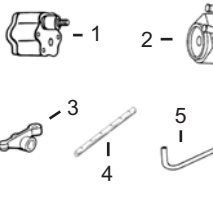
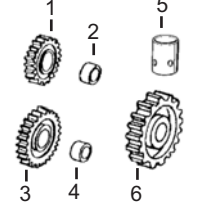
*Skidders, Feller Bunchers, Forklifts and Compactors*

| MODEL   | DESCRIPTION      | COMMENTS               | PAGE |
|---------|------------------|------------------------|------|
| 540B    | Skidder          |                        | T14  |
| 540D    | Skidder          |                        | T22  |
| 540D    | Skidder          |                        | T23  |
| 540G    | Skidder          |                        | T84  |
| 540GLL  | Skidder          |                        | T84  |
| 548D    | Skidder          |                        | T22  |
| 548D    | Skidder          |                        | T23  |
| 548G    | Skidder          |                        | T84  |
| 548GII  | Skidder          |                        | T84  |
| 548GIII | Skidder          |                        | T84  |
| 560 D   | Skidder          |                        | T90  |
| 608 L   | Feller Buncher   | (S.N. 006020-)         | T90  |
| 608 S   | Feller Buncher   | (S.N. 10BA1045-007075) | T90  |
| 640     | Skidder          |                        | T35  |
| 640D    | Skidder          | *                      | T35  |
| 640D    | Skidder          | *                      | T36  |
| 640G    | Skidder          |                        | T84  |
| 640GII  | Skidder          |                        | T84  |
| 640GIII | Skidder          |                        | T84  |
| 640GIII | Cable Skidders   |                        | T86  |
| 643     | Feller Buncher   | *                      | T35  |
| 643     | Feller Buncher   | *                      | T36  |
| 643D    | Feller Buncher   | *                      | T35  |
| 643D    | Feller Buncher   | *                      | T36  |
| 643G    | Feller Buncher   |                        | T84  |
| 646     | Compactor        |                        | T46  |
| 646B    | Compactor        | *                      | T46  |
| 646B    | Compactor        | *                      | T55  |
| 646C    | Compactor        |                        | T49  |
| 648D    | Skidder          | *                      | T35  |
| 648D    | Skidder          | *                      | T36  |
| 648E    | Skidder          |                        | T36  |
| 648G    | Skidder          |                        | T84  |
| 648GII  | Skidder          |                        | T84  |
| 648GIII | Skidder          |                        | T84  |
| 648GIII | Grapple Skidder  |                        | T86  |
| 648H    | Grapple Skidders |                        | T86  |
| 648HTJ  | Grapple Skidder  |                        | T86  |
| 653     | Feller Buncher   |                        | T36  |
| 660 D   | Skidder          |                        | T90  |
| 693C    | Feller Buncher   |                        | T47  |
| 693D    | Feller Buncher   | *                      | T35  |
| 693D    | Feller Buncher   | *                      | T36  |
| 740     | Skidder          |                        | T47  |
| 740A    | Skidder          | *                      | T49  |
| 740A    | Skidder          | *                      | T51  |
| 740E    | Skidder          | *                      | T53  |
| 740G    | Skidder          | *                      | T53  |
| 740G    | Skidder          | (S.N. -565684)         | T90  |
| 748E    | Skidder          | *                      | T53  |

| MODEL     | DESCRIPTION      | COMMENTS             | PAGE |
|-----------|------------------|----------------------|------|
| 748G      | Skidder          | *                    | T53  |
| 748 G     | Skidder          | (S.N. -565684)       | T90  |
| 748 G-II  | Skidder          | (S.N. 565685-576602) | T90  |
| 748 G-III | Skidder          | (S.N. 576603-)       | T90  |
| 748H      | Grapple Skidders |                      | T86  |
| 748HTJ    | Grapple Skidders |                      | T86  |
| 753 G     | Feller Buncher   | (S.N. 002001-002063) | T90  |
| 753 J     | Feller Buncher   |                      | T90  |
| 753 JH    | Feller Buncher   |                      | T90  |
| 759 G     | Feller Buncher   |                      | T90  |
| 759 J     | Feller Buncher   |                      | T90  |
| 759 JH    | Feller Buncher   |                      | T90  |
| 843G      | Feller Buncher   |                      | T84  |
| 848 G     | Skidder          |                      | T90  |
| 848H      | Grapple Skidders |                      | T86  |
| 848HTJ    | Grapple Skidder  |                      | T86  |
| 850       | Feller Buncher   | (S.N. 008019-)       | T90  |
| 853 G     | Feller Buncher   | (S.N. 003084-)       | T90  |
| 853J      | Feller Buncher   |                      | T93  |
| 853JH     | Harvester        |                      | T93  |
| 900       | Feller Buncher   | (S.N. 001001-)       | T90  |
| 903 G     | Feller Buncher   | (S.N. 002001-)       | T90  |
| 903J      | Feller Buncher   |                      | T93  |
| 903JH     | Harvester        |                      | T93  |
| 909J      | Feller Buncher   |                      | T93  |
| 909JH     | Harvester        |                      | T93  |
| 950       | Feller Buncher   | (S.N. 009004-)       | T90  |
| 953 G     | Feller Buncher   | (S.N. 004005-)       | T90  |
| 953J      | Feller Buncher   |                      | T93  |
| 959J      | Feller Buncher   |                      | T93  |
| 3554      | Logger           |                      | T90  |
| 3554      | Logger           |                      | T92  |
| 4475      | Skid Steer       |                      | T61  |
| 5575      | Skid Steer       |                      | T63  |
| 6675      | Skid Steer       |                      | T62  |
| 7775      | Skid Steer       |                      | T64  |
| 8875      | Skid Steer       |                      | T09  |





|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                   |  |                                                                                                        |  |                                                                                    |                           |                                                                                        |  |                                                                                                            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>3.152</b><br><b>To 154,765</b><br><br><b>O'rings on liner</b><br><br><b>3 Cyl.</b><br><br>Bore: 3.86 in<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Block (m):</b><br>T24963, T26935<br><br><b>Con Rod (m):</b><br>T20007, R81410<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>820<br>1020<br>1030<br><br><b>CONSTRUCTION</b><br>300<br>300A<br>350A<br>350B<br>380 |  |  |                       |  |  |                           |     |  |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) Engine O/H Kit</b>                                                          |  | <b>Piston-Liner Kit</b>                                                                                |  | <b>Main Bearing</b>                                                                |                           | <b>Thrust Bearing</b>                                                                  |  | <b>Con Rod Bearing</b>                                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>2) Engine I/F Kit</b>                                                          |  | <b>TPLK481</b><br>Consists of:<br>a) TT23481<br>b) TAR70633<br>c) TT23482<br>d) TAR51902<br>e) TR51112 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                   |                           | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                       |  | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) TOK3481</b>                                                                 |  |                                                                                                        |  |                                                                                    |                           |                                                                                        |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>2) TIK3481</b>                                                                 |  |                                                                                                        |  |                                                                                    |                           |                                                                                        |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                   |  |                                                                                                        |  | <b>Use 3</b>                                                                       |                           | <b>Use 1</b>                                                                           |  | <b>Use 3</b>                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                       |  |  |                           |     |  |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                       |  | <b>1) O/H Gasket Set</b>                                                                               |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                 |                           | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                              |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                       |  | 3) Con Rod                                                                         |                           |                                                                                        |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TAR67942<br>2) TRE44574 (1)<br>3) TAT18031<br>4) TT20094<br>5) TR114282 (142T) |  | 1) TRE38570<br>2) TRE38848<br>3) TR98460<br>4) TR97341<br>5) TR75729                                   |  | 1) TT23471 x3<br>2) TR74194 x6 (4)<br>3) TAT18005                                  |                           | 1) TRE55343<br>2) TRE31929 (3)<br>3) TRE31973<br>4) TR54985<br>5) TR113752             |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070                      |  |
|                                                                                                                                                                                                                                                                                                                                                                               | Valve, Intake                                                                     |  | Valve, Exhaust                                                                                         |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                           |                           | 1) Cap, Valve<br>2) Lock, Valve                                                        |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                      |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                           |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                 |                           | 1) TT20129<br>2) TT20077                                                               |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) Thermostat<br>2) Thermostat Cover                                              |  | Fuel Transfer Pump                                                                                     |  | Water Pump Repair Kit                                                              |                           | Injector, Pencil                                                                       |  | Seal, Injector                                                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRE33705 180° F (2)<br>2) TT23620                                              |  | TRE42211                                                                                               |  | Without Impeller<br>TRE19507                                                       | With Impeller<br>TRE62658 | TAR89564                                                                               |  | TR60746<br>TR48000                                                                                         |  |

(1) Do not use with Flywheel Housing (m) T20300, T22991.

(2) Do not use with Housing (m) R54096, R70741, R74549.

(3) Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

(4) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

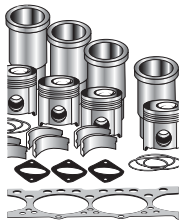
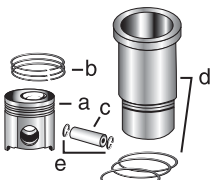
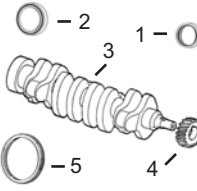
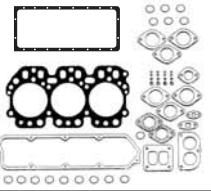
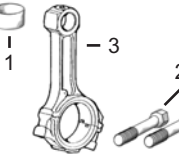
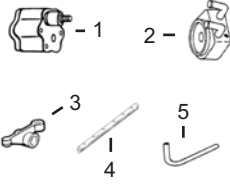
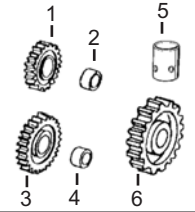
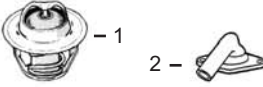
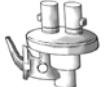
| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                              |  |                                                                                                                       |  |                                                                                                                           |  |                                                                                                                                                      |  |                                                                                |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------|--|
| <b>3.152</b><br>From 154,766<br><br>O'rings on Block<br>3 Cyl<br><br>Bore: 3.86 in<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br>Block (m):<br>R53240, R55100,<br>R72967, T32339<br><br>Con Rod (m):<br>T20007, R81410<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL<br>820<br>830<br>1020<br>1030<br><br>CONSTRUCTION<br>300<br>300A<br>300B<br>301<br>301A<br>350A/B<br>380 |  | <b>1) Engine O/H Kit</b>                                                                                     |  | <b>Piston-Liner Kit</b>                                                                                               |  | <b>Main Bearing</b>                                                                                                       |  | <b>Thrust Bearing</b>                                                                                                                                |  | <b>Con Rod Bearing</b>                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  | <b>2) Engine I/F Kit</b>                                                                                     |  | <b>TAR71591</b><br>Consists of:<br>a) TT23481<br>b) TAR70633<br>c) TT23482<br>d) TT32340<br>e) TAR71617<br>f) TR51112 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                                          |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                                                                     |  | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030               |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  | <b>1) TOK3591</b>                                                                                            |  |                                                                                                                       |  |                                                                                                                           |  |                                                                                                                                                      |  |                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  | <b>2) TIK3591</b>                                                                                            |  |                                                                                                                       |  | <b>Use 3</b>                                                                                                              |  | <b>Use 1</b>                                                                                                                                         |  | <b>Use 3</b>                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                              |  |                                                                                                                       |  |                                                                                                                           |  |                                                                                                                                                      |  |                                                                                |  |
| <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                   |  | <b>1) O/H Gasket Set</b>                                                                                     |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                                                    |  | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b> |  | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |  |                                                                                |  |
| <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>                                                                                                                                                                                                                                                                                                     |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b> |  | <b>3) Con Rod</b>                                                                                                     |  |                                                                                                                           |  |                                                                                                                                                      |  |                                                                                |  |
| <b>1) TAR67942</b><br><b>2) TRE44574 (1)</b><br><b>3) TAT18031</b><br><b>4) TT20094</b><br><b>5) TR114282 (142T)</b>                                                                                                                                                                                                                                                          |  | <b>1) TRE38570</b><br><b>2) TRE38848</b><br><b>3) TR98460</b><br><b>4) TR97341</b><br><b>5) TR75729</b>      |  | <b>1) TT23471 x3</b><br><b>2) TR74194 x6 (4)</b><br><b>3) TAT18005</b>                                                |  | <b>1) TRE55343</b><br><b>2) TRE31929 (3)</b><br><b>3) TRE31973</b><br><b>4) TR54985</b><br><b>5) TR113752</b>             |  | <b>1) TAT24252</b><br><b>2) TT26321</b><br><b>3) TAT18009</b><br><b>4) TT20034</b><br><b>5) TT20073 x6</b><br><b>6) TT20070</b>                      |  |                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  | <b>Valve, Intake</b>                                                                                         |  | <b>Valve, Exhaust</b>                                                                                                 |  | <b>Insert, Valve</b><br><b>1) Intake</b><br><b>2) Exhaust</b>                                                             |  | <b>1) Cap, Valve</b><br><b>2) Lock, Valve</b>                                                                                                        |  | <b>1) Spring, Valve</b><br><b>2) Rotator, Valve</b><br><b>3) O'ring, Valve</b> |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                 |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                          |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                        |  | 1) TT20129<br>2) TT20077                                                                                                                             |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                              |  |                                                                                                                       |  |                                                                                                                           |  |                                                                                                                                                      |  |                                                                                |  |
| <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                                                                                                                                                                                                                                                                                                            |  | <b>Fuel Transfer Pump</b>                                                                                    |  | <b>Water Pump Repair Kit</b>                                                                                          |  | <b>Injector, Pencil</b>                                                                                                   |  |                                                                                                                                                      |  |                                                                                |  |
| <b>1) TRE33705 180° F (2)</b><br><b>2) TT23620</b>                                                                                                                                                                                                                                                                                                                            |  | TRE42211                                                                                                     |  | Without Impeller<br>TRE19507<br>With Impeller<br>TRE62658                                                             |  | TAR89564                                                                                                                  |  | TR60746<br>TR48000                                                                                                                                   |  |                                                                                |  |

(1) Do not use with Flywheel Housing (m) T20300, T22991.

(2) Do not use with Housing (m) R54096, R70741, R74549.

(3) Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

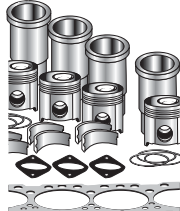
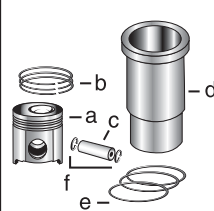
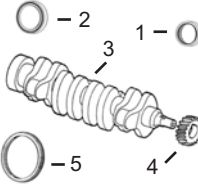
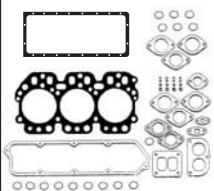
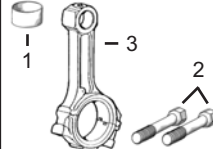
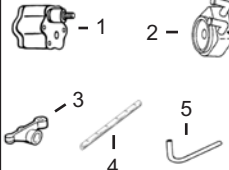
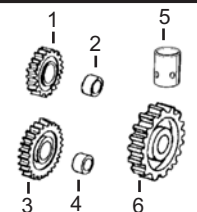
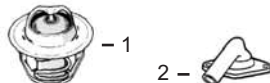
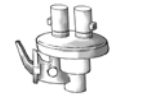
(4) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

|                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     |                                                                                                  |                                                                                     |                                                                                        |                                                                                                            |                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>3.164</div> <div>To 179,601</div> <div>O’rings on Liner Small Pin</div> <div>3 Cyl</div> <div>Bore: 4.02 in<br/>102 mm</div> <div>Pin Ø: 1.185 in<br/>30 mm</div> <div>Con Rod (m):<br/>T20007, R81410</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>1520</div> <div>CONSTRUCTION<br/>302<br/>302A</div> |    |                 |   |     |                         |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 1) Engine O/H Kit                                                                   | Piston-Liner Kit                                                                                 | Main Bearing                                                                        | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 2) Engine I/F Kit                                                                   | TPLK310<br>Consists of:<br>a) TAR78310<br>b) TAR55759<br>c) TT26149<br>d) TAR51903<br>e) TR51112 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br>Use 3   | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br>Use 1      | TRE27348 Std.<br><br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030<br><br>Use 3                          |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 1) TOK3310                                                                          |                                                                                                  |                                                                                     |                                                                                        |                                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 2) TIK3310                                                                          |                                                                                                  |                                                                                     |                                                                                        |                                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    |    |                 |   |     |                         |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 1) Front Seal<br>2) Rear Seal                                                       | 1) O/H Gasket Set                                                                                | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                                | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                 | 3) Con Rod                                                                          |                                                                                        |                                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    | 1) TAR67942<br>2) TRE44574<br>3) TAT18031<br>4) TT20094<br>5) TR114282 (142T)       | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR75729                            | 1) TT23471 x3<br>2) TR74194 x6 (3)<br>3) TAT18005                                   | 1) TRE55343<br>2) TRE31929 (2)<br>3) TRE31973<br>4) TR54985<br>5) TR113752             | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070                      |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    |  | Valve, Intake                                                                                    | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                               | 1) Cap, Valve<br>2) Lock, Valve                                                                            | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O’ring, Valve                             |
|                                                                                                                                                                                                                                                                                                                                                                                    | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                     | 1) TR73064 Std.<br>2) TR51734 Std.                                                  | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                    |  |               |  |    |                       |  |
| 1) Thermostat<br>2) Thermostat Cover                                                                                                                                                                                                                                                                                                                                               | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                    | Water Pump<br>TAT27018 (m) R48997, (m) R51039                                       | Injector, Pencil                                                                       | Seal, Injector                                                                                             |                                                                                       |
| 1) TRE33705 180° F (1)<br>2) TT23620                                                                                                                                                                                                                                                                                                                                               | TRE42211                                                                            | a) TRE19507<br>b) TRE62658                                                                       |                                                                                     | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |                                                                                       |

(1) Do not use with Housing (m) R54096, R70741, R74549.

(2) Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

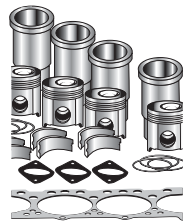
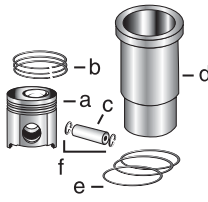
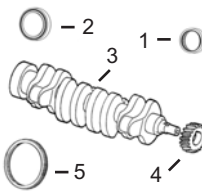
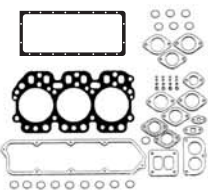
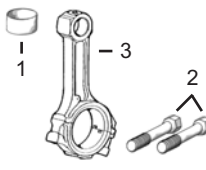
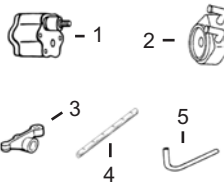
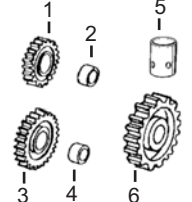
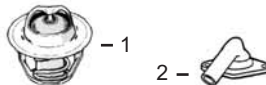
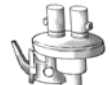
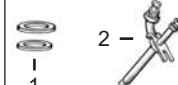
(3) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                               |  |    |  |                                        |  |     |  |                                        |  |                                                                   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>3.164</b><br>To 179,601<br>O'rings on Block<br>Small Pin<br>3 Cyl<br><br>Bore: 4.02 in<br>102 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Con Rod (m):</b><br>T20007, R81410<br><br><b>APPLICATIONS:</b><br><br>AGRICULTURAL<br>1420<br>1520<br>1530<br><br><b>CONSTRUCTION</b><br>350B |  | <b>1) Engine O/H Kit</b>                                                            |  | <b>Piston-Liner Kit</b>                                                                                                 |  | <b>Main Bearing</b>                                                                  |  | <b>Thrust Bearing</b>                                                                                                     |  | <b>Con Rod Bearing</b>                                                                                                                               |  |
|                                                                                                                                                                                                                                                                                         |  | <b>2) Engine I/F Kit</b>                                                            |  | <b>TAR71593</b><br>Consists of:<br>a) TAR78310<br>b) TAR55759<br>c) TT26149<br>d) TR116463<br>e) TAR71618<br>f) TR51112 |  | TRE27352 Std.                                                                        |  | TAT21139 Std.                                                                                                             |  | TRE27348 Std.                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  | <b>1) TOK3593</b>                                                                   |  |                                                                                                                         |  | TRE27353 .010                                                                        |  | TAT21132 .010                                                                                                             |  | TRE27349 .010                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  | <b>2) TIK3593</b>                                                                   |  |                                                                                                                         |  | TRE27360 .020                                                                        |  | TAT21134 .020                                                                                                             |  | TRE27358 .020                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  |                                                                                     |  |                                                                                                                         |  | TRE27368 .030                                                                        |  | TAT21136 .030                                                                                                             |  | TRE27364 .030                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  |    |  |                                        |  |    |  |                                        |  |                                                                   |  |
|                                                                                                                                                                                                                                                                                         |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                         |  | <b>1) O/H Gasket Set</b>                                                                                                |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                   |  | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b> |  | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |  |
|                                                                                                                                                                                                                                                                                         |  | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>           |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>            |  | <b>3) Con Rod</b>                                                                    |  |                                                                                                                           |  |                                                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                         |  | 1) TAR67942<br>2) TRE44574<br>3) TAT18031<br>4) TT20094<br>5) TR114282 (142T)       |  | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR75729                                                   |  | 1) TT23471 x3<br>2) TR74194 x6 (3)<br>3) TAT18005                                    |  | 1) TRE55343<br>2) TRE31929 (2)<br>3) TRE31973<br>4) TR54985<br>5) TR113752                                                |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070                                                                |  |
|                                                                                                                                                                                                      |  | Valve, Intake                                                                       |  | Valve, Exhaust                                                                                                          |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |  | 1) Cap, Valve<br>2) Lock, Valve                                                                                           |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                                                            |  |
|                                                                                                                                                                                                                                                                                         |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                            |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                   |  | 1) TT20129<br>2) TT20077                                                                                                  |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |                                                                                     |  |                                                                                                                         |  |                                                                                      |  |                                                                                                                           |  |                                                                                                                                                      |  |
|                                                                                                                                                                                                       |  |  |  |                                      |  |  |  |                                      |  |                                                                 |  |
| <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                                                                                                                                                                                                                      |  | <b>Fuel Transfer Pump</b>                                                           |  | <b>Water Pump Rep Kit</b><br>a) Without Impeller<br>b) With Impeller                                                    |  | <b>Water Pump</b>                                                                    |  | <b>Injector, Pencil</b>                                                                                                   |  | <b>Seal, Injector</b>                                                                                                                                |  |
| 1) TRE33705 180° F (1)<br>2) TT23620                                                                                                                                                                                                                                                    |  | TRE42211                                                                            |  | a) TRE19507<br>b) TRE62658                                                                                              |  | TAT27018 (m) R48997, (m) R51039                                                      |  | TAR89564                                                                                                                  |  | TR60746<br>TR48000                                                                                                                                   |  |

(1) Do not use with Housing (m) R54096, R70741, R74549.

(2) Conversion Kit TMX386: Available Consists of: TT31306 x1 Nipple TR99802 x2 Hose.

(3) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

|                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                                                                                   |                                                                                      |                                                                                        |                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>3.164</div> <div>From 179,602</div> <div>O'Rings on Block</div> <div>Large Pin</div> <div>3 Cyl</div> <div>Bore: 4.02 in<br/>102 mm</div> <div>Pin Ø: 1.375 in<br/>35 mm</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>1530<br/>2040<br/>2330</div> <div>CONSTRUCTION</div> <div>301A<br/>302<br/>302A<br/>310<br/>350B<br/>350C<br/>350D</div> |    |                                  |    |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Engine O/H Kit                                                                   | Piston-Liner Kit                                                                                                  | Main Bearing                                                                         | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) Engine I/F Kit                                                                   | TAR78041<br>Consists of:<br>a) TAR77762<br>b) TAR55759<br>c) TR125754<br>d) TR116463<br>e) TAR71618<br>f) TM41029 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br>Use 3    | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br>Use 1      | TRE27348 Std.<br><br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030<br><br>Use 3                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TOK3041                                                                          |                                                                                                                   |                                                                                      |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) TIK3041                                                                          |                                                                                                                   |                                                                                      |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                                  |    |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Front Seal<br>2) Rear Seal                                                       | 1) O/H Gasket Set                                                                                                 | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                                 | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                  | 3) Con Rod                                                                           |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TAR67942<br>2) TRE44574<br>3) TAT18031<br>4) TT20094<br>5) TR114282 (142T)       | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR75729                                             | 1) TR55647 x3<br>2) TR74194 x6<br>3) TRE16495 (3)                                    | 1) TRE55343<br>2) TRE31929 (2)<br>3) TRE31973<br>4) TR54985<br>5) TR113752             | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Valve, Intake                                                                                                     | Valve, Exhaust                                                                       | Insert, Valve<br>1) Intake<br>2) Exhaust                                               | 1) Cap, Valve<br>2) Lock, Valve                                                                            |
| TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                                                                                                                                                                                                                                                                                                                                     | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                        | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                | 1) TT20129<br>2) TT20077                                                             | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                               |  |                                |  |   |                       |
| 1) Thermostat<br>2) Thermostat Cover                                                                                                                                                                                                                                                                                                                                                                                             | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                     | Water Pump                                                                           | Transmission Oil Pump                                                                  | 1) Seal, Injector<br>2) Injector, Pencil                                                                   |
| 1) TRE33705 180° F (1)<br>2) TT23620                                                                                                                                                                                                                                                                                                                                                                                             | TRE42211                                                                            | a) TRE19507<br>b) TRE62658                                                                                        | TAT27018<br>(m) R48997, (m) R51039                                                   | TAL120106<br><br>Verify P/N for your application                                       | 1) TR60746<br>TR48000<br>2) TAR89564                                                                       |

(1) Do not use with Housing (m) R54096, R70741, R74549.

(2) Conversion Kit TMX386 Consists of TT31306 x1 Nipple TR99802 x2 Hose.

(3) For Connecting Rods RE16495 and RE21076 Use Connecting Rod Bolt TR80033.

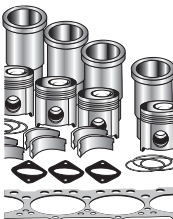
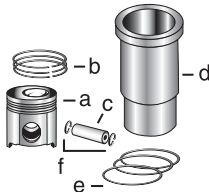
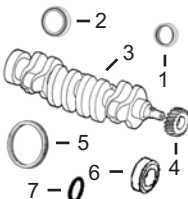
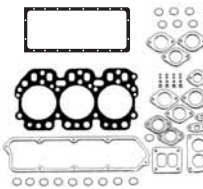
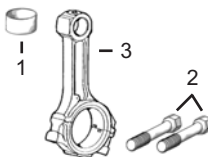
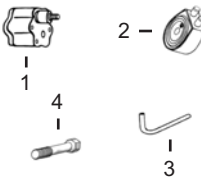
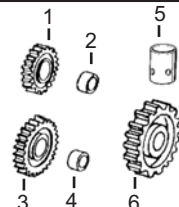
| 300 Series<br>Engine & Equipment<br>Model                                  |  |                                                                                                               |  |                                                                                       |  |                                                    |  |                                                                                                               |  |                                                                                                            |  |
|----------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|----------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>3.179D</b>                                                              |  | <b>1) Engine O/H Kit</b>                                                                                      |  | <b>Piston-Liner Kit</b>                                                               |  | <b>Main Bearing</b>                                |  | <b>Thrust Bearing</b>                                                                                         |  | <b>Con Rod Bearing</b>                                                                                     |  |
| <b>3 Cyl</b>                                                               |  | <b>2) Engine I/F Kit</b>                                                                                      |  | <b>TRE30250</b>                                                                       |  | TRE27352 Std.                                      |  | TAT21139 Std.                                                                                                 |  | TRE27348 Std.                                                                                              |  |
| Bore: 4.19 in<br>106 mm                                                    |  | <b>1) TRE47653</b>                                                                                            |  | Consists of:                                                                          |  | TRE27353 .010                                      |  | TAT21132 .010                                                                                                 |  | TRE27349 .010                                                                                              |  |
| Pin Ø: 1.375 in<br>35 mm                                                   |  | <b>2) TIK47653</b>                                                                                            |  | a) TRE19282<br>b) TRE66820<br>c) TR125754<br>d) TR116281<br>e) TAR65507<br>f) TM41029 |  | TRE27360 .020                                      |  | TAT21134 .020                                                                                                 |  | TRE27358 .020                                                                                              |  |
|                                                                            |  |                                                                                                               |  |                                                                                       |  | TRE27368 .030                                      |  | TAT21136 .030                                                                                                 |  | TRE27364 .030                                                                                              |  |
|                                                                            |  |                                                                                                               |  |                                                                                       |  | <b>Use 3</b>                                       |  | <b>Use 1</b>                                                                                                  |  | <b>Use 3</b>                                                                                               |  |
| <b>APPLICATIONS:</b>                                                       |  |                                                                                                               |  |                                                                                       |  |                                                    |  |                                                                                                               |  |                                                                                                            |  |
| <b>AGRICULTURAL</b>                                                        |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                   |  | <b>1) O/H Gasket Set</b>                                                              |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b> |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube<br>6) Cyl Hd Cap Screw |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
| 1040 1850<br>1140 2040<br>1350 2150<br>1550 2155<br>1630 2240<br>1750 5000 |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk      |  | 3) Con Rod                                         |  |                                                                                                               |  |                                                                                                            |  |
| <b>CONSTRUCTION</b>                                                        |  | 1) TAR67942<br>2) TRE44574<br>3) TAT18031 (1)<br>4) TT20094<br>5) TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR75729                 |  | 1) TR55647 x3<br>2) TR80033 x6<br>3) TRE16495      |  | 1) TRE55343<br>2) TRE31929 (4)<br>3) TRE31973<br>4) TR54985<br>5) TR113752<br>6) TR85363 x14 (3)              |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070                      |  |
|                                                                            |  | Valve, Intake                                                                                                 |  | Valve, Exhaust                                                                        |  | Insert, Valve<br>1) Intake<br>2) Exhaust           |  | 1) Cap, Valve<br>2) Lock, Valve                                                                               |  | 1) Spring, Valve<br>2) Guide, Valve<br>3) O'ring, Valve                                                    |  |
|                                                                            |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                  |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                          |  | 1) TR73064 Std.<br>2) TR51734 Std.                 |  | 1) TT20129<br>2) TT20077                                                                                      |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                                                            |  |                                                                                                               |  |                                                                                       |  |                                                    |  |                                                                                                               |  |                                                                                                            |  |
| 1) Thermostat<br>2) Thermostat Cover                                       |  | Fuel Transfer Pump                                                                                            |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                         |  | Water Pump                                         |  | Transmission Oil Pump                                                                                         |  | 1) Seal, Injector<br>2) Injector, Pencil                                                                   |  |
| 1) TRE33705 180° F (2)<br>2) TT23620                                       |  | TRE42211                                                                                                      |  | a) TRE19507<br>b) TRE62658                                                            |  | TAR97708 (m) R73604<br>TRE60489<br>TAR92641        |  | TAL120106 TAL68094<br>Verify P/N for your application                                                         |  | 1) TR60746<br>TR48000<br>2) TAR89564                                                                       |  |

(1) Crankshaft (m) T23516 (36 mm / 1.37" Snout.) This engine may use **TRE50979** (60 mm / 2.36" Snout) (m) R91834.

(2) Do not use with Housing (m) R54096, R70741, R74549. For Saran Repower Engines use TRE64354.

(3) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4) Use on engines ESN 794193, after this ESN use TRE61767.

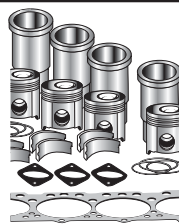
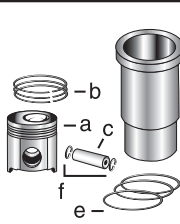
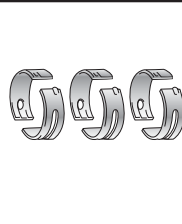
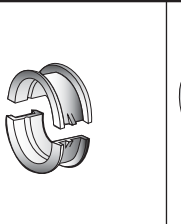
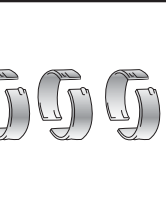
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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>3029D</div> <div>Liter Designated</div> <div>3 Cyl</div> <div>Bore: 4.19 in<br/>106.5 mm</div> <div>Pin Ø: 1.375 in<br/>35 mm</div> <div>Con Rod (m):<br/>R51727, R80034</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>5200<br/>5300<br/>5400</div> <div>SKID STEER<br/>240<br/>240 Series II</div> |                                   |                                  |  |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) Engine O/H Kit                                                                                                  | Piston-Liner Kit                                                                                                  | Main Bearing                                                                       | Thrust Bearing                                                                                      | Con Rod Bearing                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                               | 2) Engine I/F Kit                                                                                                  | TRE30250<br>Consists of:<br>a) TRE19282<br>b) TRE66820<br>c) TR125754<br>d) TR116281<br>e) TAR65507<br>f) TM41029 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br>Use 3  | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br>Use 1                   | TRE27348 Std.<br><br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030<br><br>Use 3                          |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) TRE47653                                                                                                        |                                                                                                                   |                                                                                    |                                                                                                     |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                               | 2) TIK47653                                                                                                        |                                                                                                                   |                                                                                    |                                                                                                     |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                               |                                   |                                  |  |                  |                         |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) Front Seal<br>2) Rear Seal                                                                                      | 1) O/H Gasket Set                                                                                                 | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                               | 1) Pump, Oil<br>2) Oil Cooler<br>3) Pump, Oil Tube<br>4) Cyl Hd Cap Screw                           | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                                                                                               | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                     | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                  | 3) Con Rod                                                                         |                                                                                                     |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) TAR67942<br>2) TRE44574<br>3) TRE521348 (5)<br>4) TT20094 (3)<br>5) TR114282 (142T)<br>6) TR81989<br>7) TH35244 | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796 (1)<br>TR75729 (2)                         | 1) TR55647 x3<br>2) TR80033 x6<br>3) TRE16495                                      | 1) TRE55343<br>2) TRE61767<br>3) TR113752<br>4) TR85363 x14 (4)                                     | 1) TAT24252 (3)<br>2) TT26321<br>3) TAT18009 (3)<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070 (3)          |
|                                                                                                                                                                                                                                                                                                                                                                               |                                 | Valve, Intake                                                                                                     | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                                            | 1) Seal, Valve<br>2) Lock, Valve                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                               | TR98062 Std.<br>TR97490 .015                                                                                       | TR90692 Std.<br>TR97492 .015                                                                                      | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR51734 Std.<br>TR93910 O/S                   | 1) TRE31617<br>2) TR91889                                                                           | 1) Spring, Valve<br>2) Rotator, Valve                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                               |                                 | Fuel Transfer Pump                                                                                                | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                      | Water Pump                                                                                          | Injector, Pencil                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) Thermostat<br>2) Thermostat Cover                                                                               | TRE42211                                                                                                          | a) TRE19507<br>b) TRE62658                                                         | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337<br>(m) R127918, (m) R55164<br>TAR92641 (6) | Seal, Injector                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                               | 1) TRE64354 180° F<br>2) TT23620                                                                                   |                                                                                                                   |                                                                                    |                                                                                                     | TR60746<br>TR48000                                                                                         |

(2) Reusable.

### (3) Helicoidal Gears.

(6) Check your

(c) Check your application for proper usage:

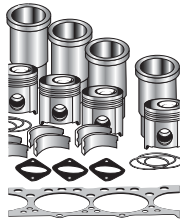
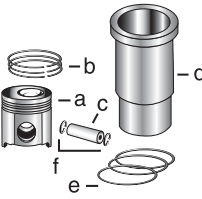
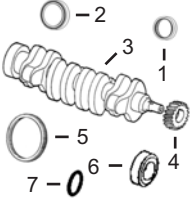
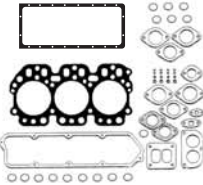
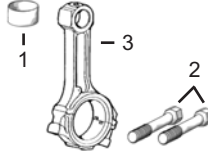
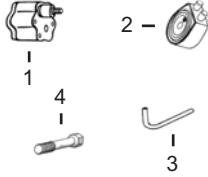
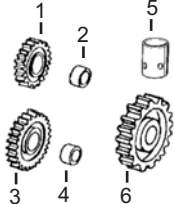
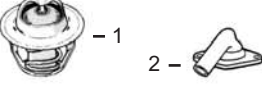
| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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-----------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <b>3.179T</b><br><br>3 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.625 in<br>41 mm<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><b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|  |                                                                                   |  |                                                                                   |  |                                                                                   |  |                                                                                     |  |                                                                                     |  |

(1) Do not use with Housing (m) R54096, R70741, R74549. For Saran Repower Engines use TRE64354.

(2) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(3) Crankshaft (m) T23516 (36 mm / 1.37" Snout.) This engine may use TRE50979 (60 mm / 2.36" Snout) (m) R91834.

(4) Use on engines ESN 794193, after this ESN use TRE61767.

| 300 Series<br>Engine & Equipment<br>Model                                           |  |                               |  |          |  |                   |  |    |  |                         |  |
|-------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>3029T</b>                                                                        |  | <b>1) Engine O/H Kit</b>                                                                                       |  | <b>Piston-Liner Kit</b>                                                                   |  | <b>Main Bearing</b>                                                                                 |  | <b>Thrust Bearing</b>                                                                 |  | <b>Con Rod Bearing</b>                                                                                     |  |
| <b>Liter Designated</b>                                                             |  | <b>2) Engine I/F Kit</b>                                                                                       |  | <b>TRE33115</b>                                                                           |  | TRE27352 Std.                                                                                       |  | TAT21139 Std.                                                                         |  | TRE27348 Std.                                                                                              |  |
| <b>3 Cyl</b>                                                                        |  | <b>1) TOK3115</b>                                                                                              |  | Consists of:                                                                              |  | TRE27353 .010                                                                                       |  | TAT21132 .010                                                                         |  | TRE27349 .010                                                                                              |  |
| Bore: 4.19 in<br>106.5 mm                                                           |  | <b>2) TIK3115</b>                                                                                              |  | a) TRE19278<br>b) TRE66820<br>c) TR124230<br>d) TR116281<br>e) TAR65507<br>f) TR54114     |  | TRE27360 .020                                                                                       |  | TAT21134 .020                                                                         |  | TRE27358 .020                                                                                              |  |
| Pin 0 1.625 in<br>41 mm                                                             |  |                                                                                                                |  |                                                                                           |  | TRE27368 .030                                                                                       |  | TAT21136 .030                                                                         |  | TRE27364 .030                                                                                              |  |
| <b>Con Rod (m):</b><br>R80032, R58979,<br>R113612                                   |  |                                                                                                                |  |                                                                                           |  | <b>Use 3</b>                                                                                        |  | <b>Use 1</b>                                                                          |  | <b>Use 3</b>                                                                                               |  |
| <b>APPLICATIONS:</b>                                                                |  |                               |  |          |  |                   |  |    |  |                         |  |
| <b>AGRICULTURAL</b><br>5500                                                         |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                    |  | <b>1) O/H Gasket Set</b>                                                                  |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                                  |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Pump, Oil Tube<br>4) Cyl Hd Cap Screw             |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
| <b>SKID STEER</b><br>250<br>250 Series II<br>260<br>260 Series II                   |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                 |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk          |  | 3) Con Rod                                                                                          |  |                                                                                       |  |                                                                                                            |  |
|                                                                                     |  | 1) TAR67942<br>2) TRE44574<br>3) TRE521348 (5)<br>4) TT20094<br>5) TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796 (1)<br>TR75729 (2) |  | 1) TR57451 x3<br>2) TR80033 x6<br>3) TRE58347                                                       |  | 1) TRE55343<br>2) TRE61767<br>3) TR113752<br>4) TR85363 x14 (4)                       |  | 1) TAT24252 (3)<br>2) TT26321<br>3) TAT18009 (3)<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070 (3)          |  |
|  |  | Valve, Intake                                                                                                  |  | Valve, Exhaust                                                                            |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                            |  | 1) Seal, Valve<br>2) Lock, Valve                                                      |  | 1) Spring, Valve<br>2) Rotator, Valve                                                                      |  |
|                                                                                     |  | TR98062 Std.<br>TR97490 .015                                                                                   |  | TR90692 Std.<br>TR97492 .015                                                              |  | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR51734 Std.<br>TR93910 O/S                                    |  | 1) TRE31617<br>2) TR91889                                                             |  | 1) TR26125<br>2) TRE60005                                                                                  |  |
|  |  |                             |  |        |  |                 |  |  |  |                       |  |
| 1) Thermostat<br>2) Thermostat Cover                                                |  | Fuel Transfer Pump                                                                                             |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                             |  | Water Pump                                                                                          |  | Injector, Pencil                                                                      |  | Seal, Injector                                                                                             |  |
| 1) TRE64354 180° F<br>2) TT23620                                                    |  | TRE42211                                                                                                       |  | a) TRE19507<br>b) TRE62658                                                                |  | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337<br>(m) R127918, (m) R55164<br>TAR92641 (6) |  | TRE38087                                                                              |  | TR60746<br>TR48000                                                                                         |  |

(1) Not included in Gasket Set. Used in Saran Engines (Order separately).

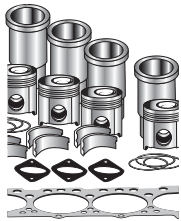
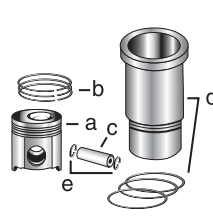
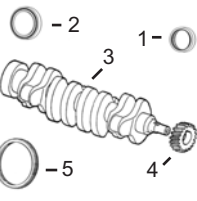
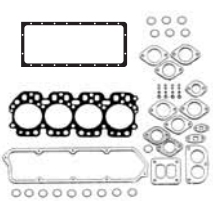
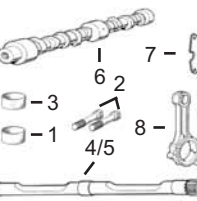
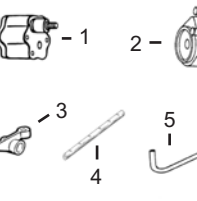
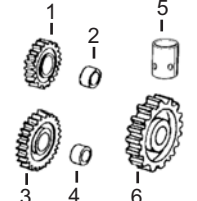
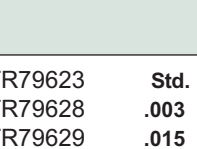
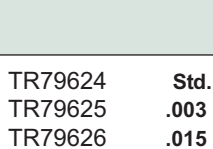
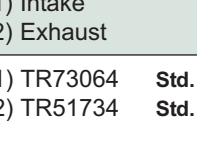
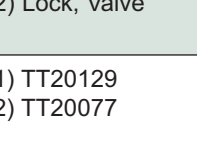
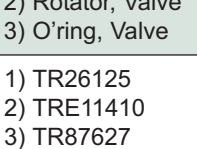
(2) Reusable.

(3) Helicoidal Gears.

(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5) Kit contains **TT20094** helical gear to convert to a TRE50979 Crankshaft.

(6) Check your application for proper usage.

|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4.202</b><br>To 158,257<br><br><b>O'rings on liner</b><br><br><b>4 Cyl</b><br><br>Bore: 3.86 in (2)<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Block (m):</b><br>T23406, T24961,<br>T26933<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>2020<br>2510<br><br><b>CONSTRUCTION</b><br>400<br>440<br>450<br>480 |    |                             |                                            |                                        |                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1) Engine O/H Kit</b>                                                            | <b>Piston-Liner Kit</b>                                                                                      | <b>Main Bearing</b>                                                                                                          | <b>Thrust Bearing</b>                                                                                                     | <b>Con Rod Bearing</b>                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) Engine I/F Kit</b>                                                            | <b>TPLK481</b><br>Consists of:                                                                               | TRE27352 Std.                                                                                                                | TAT21139 Std.                                                                                                             | TRE27348 Std.                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1) TOK4481</b>                                                                   | a) TT23481                                                                                                   | TRE27353 .010                                                                                                                | TAT21132 .010                                                                                                             | TRE27349 .010                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) TIK4481</b>                                                                   | b) TAR70633                                                                                                  | TRE27360 .020                                                                                                                | TAT21134 .020                                                                                                             | TRE27358 .020                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     | c) TT23482                                                                                                   | TRE27368 .030                                                                                                                | TAT21136 .030                                                                                                             | TRE27364 .030                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     | d) TAR51902                                                                                                  |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     | e) TR51112                                                                                                   |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              | <b>Use 4</b>                                                                                                                 | <b>Use 1</b>                                                                                                              | <b>Use 4</b>                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                           |    |                             |                                            |                                        |                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                         | <b>1) O/H Gasket Set</b>                                                                                     | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                             | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b> | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>           | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b> | <b>4) Bal. Shaft R/H</b><br><b>5) Bal. Shaft L/H</b><br><b>6) Camshaft</b><br><b>7) Bal. Shaft Stop</b><br><b>8) Con Rod</b> |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |  |                           |                                          |                                      |                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                           | Valve, Intake                                                                       | Valve, Exhaust                                                                                               | Insert, Valve                                                                                                                | 1) Cap, Valve                                                                                                             | 1) Spring, Valve                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              | 1) Intake                                                                                                                    | 2) Lock, Valve                                                                                                            | 2) Rotator, Valve                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              | 2) Exhaust                                                                                                                   |                                                                                                                           | 3) O'ring, Valve                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                           |  |                           |                                          |                                      |                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                  | <b>Fuel Transfer Pump</b>                                                                                    | <b>Water Pump Repair Kit</b>                                                                                                 | <b>Injector, Pencil</b>                                                                                                   | <b>Seal, Injector</b>                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              | Without Impeller                                                                                                             |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              | With Impeller                                                                                                                |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           | <b>1) TRE33705 180° F (4)</b><br><b>2) TT23620</b>                                  | <b>TRE42211</b>                                                                                              | <b>TRE19507</b>                                                                                                              | <b>TAR89564</b>                                                                                                           | <b>TR60746</b><br><b>TR48000</b>                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                              |                                                                                                                              |                                                                                                                           |                                                                                                                                                      |

(1) Do not use with Flywheel Housing (m) T20300, T22991.

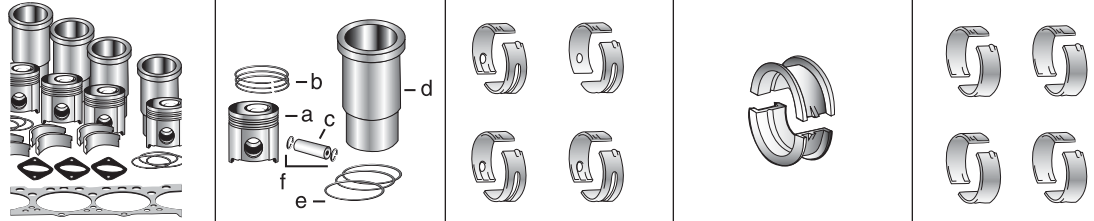
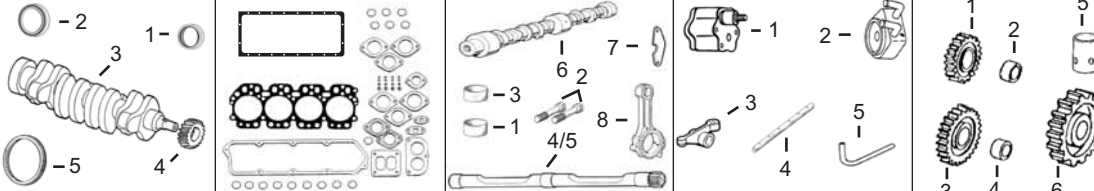
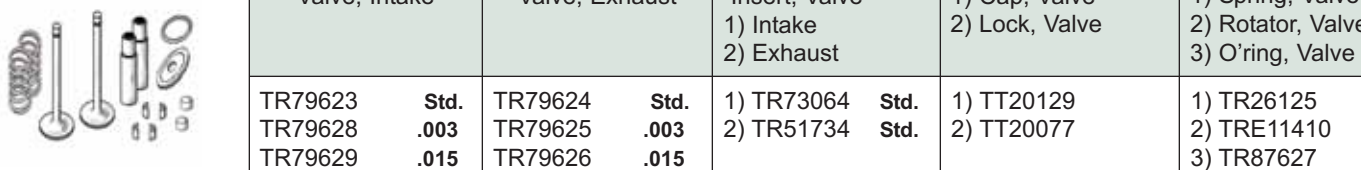
(2) Always verify Bore diameter, on Block Replacement is 4.016"/102mm.

(3) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(4) Do not use with Housing (m) R54096, R70741, R74549.

(5) Threaded Type.

(6) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

|                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      |                                                                                  |                                                                                                                                              |                                                                                        |                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4.202</b><br><br><b>From 158,258</b><br><br><b>O'rings on block</b><br><br><b>4 Cyl</b><br><br>Bore: 3.86 in (2)<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Block (m):</b><br>R53230, R53250, R55034<br>R72973, T32342<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>2020<br>2120<br>2510<br><br><b>CONSTRUCTION</b><br>400<br>440<br>480 |    |                                                                                  |                                                                                                                                              |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Engine O/H Kit                                                                    | Piston-Liner Kit                                                                 | Main Bearing                                                                                                                                 | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2) Engine I/F Kit                                                                    | TAR71591<br>Consists of:                                                         | TRE27352 Std.                                                                                                                                | TAT21139 Std.                                                                          | TRE27348 Std.                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) TOK4591                                                                           | a) TT23481                                                                       | TRE27353 .010                                                                                                                                | TAT21132 .010                                                                          | TRE27349 .010                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2) TIK4591                                                                           | b) TAR70633                                                                      | TRE27360 .020                                                                                                                                | TAT21134 .020                                                                          | TRE27358 .020                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      | c) TT23482                                                                       | TRE27368 .030                                                                                                                                | TAT21136 .030                                                                          | TRE27364 .030                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      | d) TT32340                                                                       |                                                                                                                                              |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      | e) TAR71617                                                                      |                                                                                                                                              |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                      | f) TR51112                                                                       | Use 4                                                                                                                                        | Use 1                                                                                  | Use 4                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |    | 1) O/H Gasket Set                                                                | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft                                                                                  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Front Seal<br>2) Rear Seal                                                        | 1) TRE38558<br>2) TRE38847<br>3) TR98461<br>4) TR97342<br>5) TR73521             | 1) TT23471 x4<br>2) TR74194 x8 (3)<br>3) TR57160 x6 (6)<br>4) TRE26282 R/H<br>5) TRE26283 L/H<br>6) TR82820 (5)<br>7) TR88112<br>8) TAT18005 | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54987<br>5) TR113752                 | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x8<br>6) TT20070                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                 | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft<br>7) Bal. Shaft Stop<br>8) Con Rod                                                    |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) TAR67942<br>2) TRE44574 (1)<br>3) TAT18030<br>4) TT20094<br>5) TR114282 (142T)    |                                                                                  |                                                                                                                                              |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                  |                                                                                                                                              |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | Valve, Intake                                                                        | Valve, Exhaust                                                                   | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                     | 1) Cap, Valve<br>2) Lock, Valve                                                        | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                         | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                     | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                                           | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Fuel Transfer Pump                                                               | Water Pump Repair Kit                                                                                                                        | Injector, Pencil                                                                       | Seal, Injector                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Thermostat<br>2) Thermostat Cover                                                 | TRE42211                                                                         | Without Impeller<br>TRE19507                                                                                                                 | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) TRE33705 180°F (4)<br>2) TT23620                                                  |                                                                                  | With Impeller<br>TRE62658                                                                                                                    |                                                                                        |                                                                                                            |

(1) Do not use with Flywheel Housing (m) T20300, T22991.

(2) Always verify Bore diameter, on Block Replacement is 4.016"/102mm.

(3) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(4) Do not use with Housing (m) R54096, R70741, R74549.

(5) Threaded Type.

(6) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

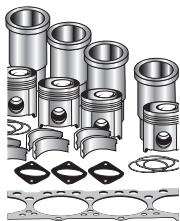
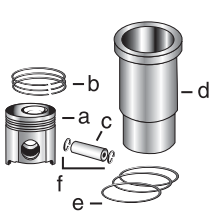
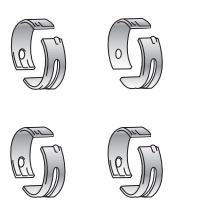
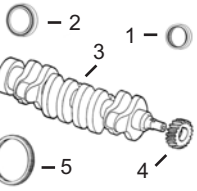
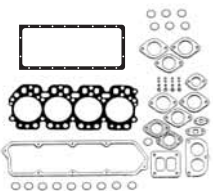
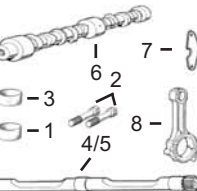
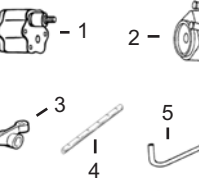
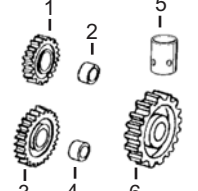
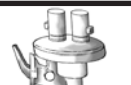
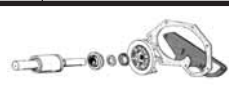
| 300 Series<br>Engine & Equipment<br>Model                                                                                               |  |                                                                               |  |                                                                                                         |  |                                                                                                                                                                          |  |                                                                                        |  |                                                                                                            |  |
|-----------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>4.219</b><br>To 275,483<br><br>O'Rings on liner<br>Small Pin<br><br>4 Cyl<br><br>Bore: 4.02 in<br>102 mm<br>Pin Ø: 1.185 in<br>30 mm |  | <b>1) Engine O/H Kit</b>                                                      |  | <b>Piston-Liner Kit</b>                                                                                 |  | <b>Main Bearing</b>                                                                                                                                                      |  | <b>Thrust Bearing</b>                                                                  |  | <b>Con Rod Bearing</b>                                                                                     |  |
|                                                                                                                                         |  | <b>2) Engine I/F Kit</b>                                                      |  | <b>TPLK310</b><br>Consists of:<br>a) TAR78310<br>b) TAR55759<br>c) TT26149<br>d) TAR51903<br>e) TR51112 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                                                                                         |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                       |  | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                           |  |
|                                                                                                                                         |  | <b>1) TOK4310</b>                                                             |  |                                                                                                         |  |                                                                                                                                                                          |  |                                                                                        |  |                                                                                                            |  |
|                                                                                                                                         |  | <b>2) TIK4310</b>                                                             |  |                                                                                                         |  | <b>Use 4</b>                                                                                                                                                             |  | <b>Use 1</b>                                                                           |  | <b>Use 4</b>                                                                                               |  |
| <b>Block (m):</b><br>T26933<br><br><b>Con Rod (m):</b><br>T20007, R81410                                                                |  |                                                                               |  |                                                                                                         |  |                                                                                                                                                                          |  |                                                                                        |  |                                                                                                            |  |
|                                                                                                                                         |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                   |  | <b>1) O/H Gasket Set</b>                                                                                |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                                                                         |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
| <b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>2520                                                                                 |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                          |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                        |  | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft<br>7) Bal. Shaft Stop<br>8) Con Rod                                                                                |  |                                                                                        |  |                                                                                                            |  |
| <b>CONSTRUCTION</b><br>440A                                                                                                             |  | 1) TAR67942<br>2) TRE44574<br>3) TAT18030<br>4) TT20094<br>5) TR114282 (142T) |  | 1) TRE501579<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521                                  |  | 1) TT23471 <b>x4</b><br>2) TR74194 <b>x8 (1)</b><br>3) TR57160 <b>x6 (4)</b><br>4) TRE26282 R/H<br>5) TRE26283 L/H<br>6) TR82820 <b>(3)</b><br>7) TR88112<br>8) TAT18005 |  | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54987<br>5) TR113752                 |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 <b>x8</b><br>6) TT20070               |  |
|                                                                                                                                         |  | Valve, Intake                                                                 |  | Valve, Exhaust                                                                                          |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                 |  | 1) Cap, Valve<br>2) Lock, Valve                                                        |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |  |
|                                                                                                                                         |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                  |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                            |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                                                                       |  | 1) TT20129<br>2) TT20077                                                               |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                                                                                                                         |  |                                                                               |  |                                                                                                         |  |                                                                                                                                                                          |  |                                                                                        |  |                                                                                                            |  |
| 1) Thermostat<br>2) Thermostat Cover                                                                                                    |  | Fuel Transfer Pump                                                            |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                           |  | Water Pump                                                                                                                                                               |  | Injector, Pencil                                                                       |  | Seal, Injector                                                                                             |  |
| 1) TRE33705 180° F <b>(2)</b><br>2) TT23620                                                                                             |  | TRE42211                                                                      |  | a) TRE19507<br>b) TRE62658                                                                              |  | TAT27018 (m) R48997, (m) R551039                                                                                                                                         |  | TAR89564                                                                               |  | TR60746<br>TR48000                                                                                         |  |

(1) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(2) Do not use with Housing (m) R54096, R70741, R74549.

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(4) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

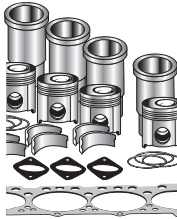
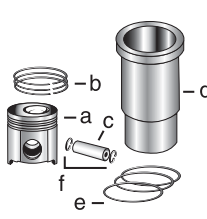
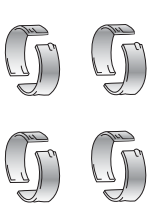
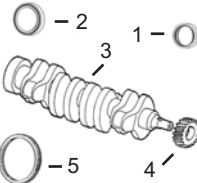
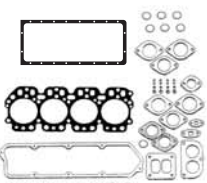
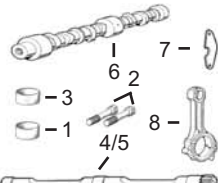
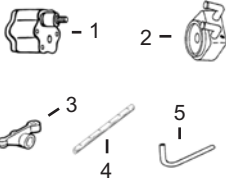
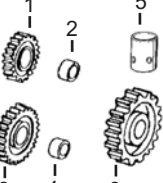
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                      |                                                                                                                                              |                                                                                        |                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>4.219</div> <div>To 275,483</div> <div>O'Rings on block</div> <div>Small Pin</div> <div>4 Cyl</div> <div>Bore: 4.02 in<br/>102 mm</div> <div>Pin Ø: 1.185 in<br/>30 mm</div> <div>Block (m):<br/>T32342</div> <div>Con Rod (m):<br/>T20007, R81410</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>499<br/>2030<br/>2120<br/>2270<br/>2320<br/>2420</div> <div>CONSTRUCTION</div> <div>401<br/>401A<br/>440<br/>440B<br/>450A<br/>450B<br/>480A</div> |    |     |                                                            |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) Engine O/H Kit                                                                   | Piston-Liner Kit                                                                     | Main Bearing                                                                                                                                 | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2) Engine I/F Kit                                                                   | TAR71593<br>Consists of:                                                             | TRE27352 Std.                                                                                                                                | TAT21139 Std.                                                                          | TRE27348 Std.                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) TOK4593                                                                          | a) TAR78310<br>b) TAR55759<br>c) TT26149<br>d) TR116463<br>e) TAR71618<br>f) TR51112 | TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                                                                              | TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                        | TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2) TIK4593                                                                          |                                                                                      | Use 4                                                                                                                                        | Use 1                                                                                  | Use 4                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |     |                                                            |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) Front Seal<br>2) Rear Seal                                                       | 1) O/H Gasket Set                                                                    | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft                                                                                  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk     | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft<br>7) Bal. Shaft Stop<br>8) Con Rod                                                    |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) TAR67942<br>2) TRE44574<br>3) TAT18030<br>4) TT20094<br>5) TR114282 (142T)       | 1) TRE501579<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521               | 1) TT23471 x4<br>2) TR74194 x8 (1)<br>3) TR57160 x6 (4)<br>4) TRE26282 R/H<br>5) TRE26283 L/H<br>6) TR82820 (3)<br>7) TR88112<br>8) TAT18005 | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54987<br>5) TR113752                 | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x8<br>6) TT20070                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Valve, Intake                                                                        | Valve, Exhaust                                                                                                                               | Insert, Valve<br>1) Intake<br>2) Exhaust                                               | 1) Cap, Valve<br>2) Lock, Valve                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                         | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                                           | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |   |                                                          |   |                       |
| 1) Thermostat<br>2) Thermostat Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                        | Water Pump                                                                                                                                   | Injector, Pencil                                                                       | Seal, Injector                                                                                             |
| 1) TRE33705 180° F (2)<br>2) TT23620                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE42211                                                                            | a) TRE19507<br>b) TRE62658                                                           | TAT27018 (m) R48997, (m) R51039                                                                                                              | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |

(1) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(2) Do not use with Housing (m) R54096, R70741, R74549.

(3) Threaded Type.

(4) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                   |                                                                                                                                              |                                                                                           |                                                                                        |                                                                                                            |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>4.219 (1)</div> <div>From 275,484</div> <div>O'Rings on block</div> <div>Large Pin</div> <div>4 Cyl</div> <div>Bore: 4.02 in<br/>102 mm</div> <div>Pin Ø: 1.375 in<br/>35 mm</div> <div>Con Rod (m):<br/>R51727, R80034</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>499 2270<br/>1035 2280<br/>1130 2320<br/>1635 2440<br/>2030 2530<br/>2035 3300<br/>2120</div> <div>CONSTRUCTION</div> <div>310/B 450C/D<br/>401B/C/D 455D<br/>410/B 480B/C<br/>440B 540B</div> |  |                                                             |          |     |                         |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) Engine O/H Kit                                                                 | Piston-Liner Kit                                                                                                                             | Main Bearing                                                                              | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2) Engine I/F Kit                                                                 | TAR78041                                                                                                                                     | TRE27352 Std.                                                                             | TAT21139 Std.                                                                          | TRE27348 Std.                                                                                              |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) TAT86984                                                                       | Consists of:<br>a) TAR77762<br>b) TAR55759<br>c) TR125754<br>d) TR116463<br>e) TAR71618<br>f) TM41029                                        | TRE27353 .010                                                                             | TAT21132 .010                                                                          | TRE27349 .010                                                                                              |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2) TIK86984                                                                       |                                                                                                                                              | TRE27360 .020                                                                             | TAT21134 .020                                                                          | TRE27358 .020                                                                                              |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                   |                                                                                                                                              | TRE27368 .030                                                                             | TAT21136 .030                                                                          | TRE27364 .030                                                                                              |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                   |                                                                                                                                              | Use 4                                                                                     | Use 1                                                                                  | Use 4                                                                                                      |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                             |         |     |                         |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) Front Seal<br>2) Rear Seal                                                     | 1) O/H Gasket Set                                                                                                                            | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft                               | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                              | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                                             | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft<br>7) Bal. Shaft Stop<br>8) Con Rod |                                                                                        |                                                                                                            |                |
| 1) TAR67942<br>2) TRE44574<br>3) TAT18030<br>4) TT20094<br>5) TR114282 (142T)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) TRE501579<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521            | 1) TR55647 x4<br>2) TR74194 x8 (2)<br>3) TR57160 x6 (5)<br>4) TRE26282 R/H<br>5) TRE26283 L/H (4)<br>6) TR82820<br>7) TR88112<br>8) TRE16495 | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54987<br>5) TR113752                    | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x8<br>6) TT20070  |                                                                                                            |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Valve, Intake                                                                     | Valve, Exhaust                                                                                                                               | Insert, Valve<br>1) Intake<br>2) Exhaust                                                  | 1) Cap, Valve<br>2) Lock, Valve                                                        | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                      | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                                                 | 1) TR73064 Std.<br>2) TR51734 Std.                                                        | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) Thermostat<br>2) Thermostat Cover                                              | Fuel Transfer Pump                                                                                                                           | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                             | Water Pump                                                                             | Injector, Pencil                                                                                           | Seal, Injector |
| 1) TRE33705 180° F (3)<br>2) TT23620                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TRE42211                                                                          | a) TRE19507<br>b) TRE62658                                                                                                                   | TAT27018 (m) R48997, (m) R51039                                                           | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |                |

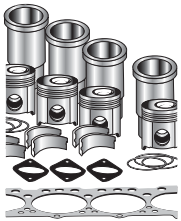
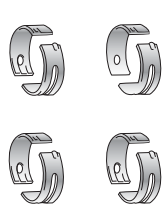
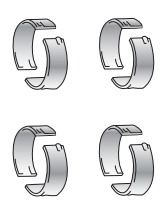
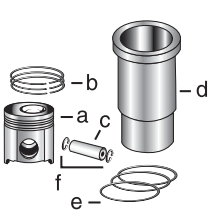
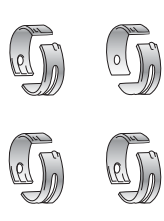
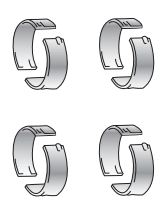
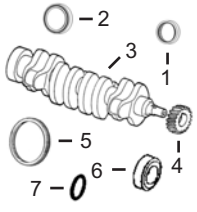
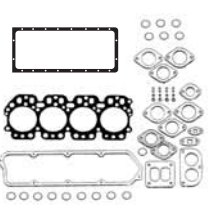
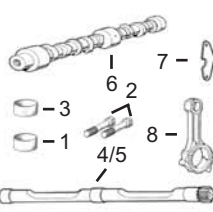
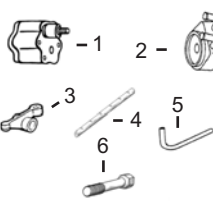
(1) Some of these engines maybe turbocharged.

(2) For Connecting Rods RE16495 and RE21076 Use Connecting Rod Bolt R80033.

(3) Do not use with Housing (m) R54096, R70741, R74549.

(4) Threaded Type.

(5) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

| 300 Series<br>Engine & Equipment<br>Model                                           |  |    |                         |   |      |   |      |                                                                      |      |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>4.239D</b>                                                                       |  |    |                         |   |      |   |      |                                                                      |      |
| <b>4 Cyl</b>                                                                        |  | <b>1) Engine O/H Kit</b>                                                            | <b>Piston-Liner Kit</b> | <b>Main Bearing</b>                                                                 |      | <b>Thrust Bearing</b>                                                                |      | <b>Con Rod Bearing</b>                                                                                                                                  |      |
| <b>2) Engine I/F Kit</b>                                                            |  | <b>TRE30250</b><br>Consists of:                                                     |                         | TRE27352                                                                            | Std. | TAT21139                                                                             | Std. | TRE27348                                                                                                                                                | Std. |
| <b>1) TAT86992</b>                                                                  |  | a) TRE19282                                                                         |                         | TRE27353                                                                            | .010 | TAT21132                                                                             | .010 | TRE27349                                                                                                                                                | .010 |
| <b>2) TIK86992</b>                                                                  |  | b) TRE66820                                                                         |                         | TRE27360                                                                            | .020 | TAT21134                                                                             | .020 | TRE27358                                                                                                                                                | .020 |
|                                                                                     |  | c) TR125754                                                                         |                         | TRE27368                                                                            | .030 | TAT21136                                                                             | .030 | TRE27364                                                                                                                                                | .030 |
|                                                                                     |  | d) TR116281                                                                         |                         | <b>Use 4</b>                                                                        |      | <b>Use 1</b>                                                                         |      | <b>Use 4</b>                                                                                                                                            |      |
|                                                                                     |  | e) TAR65507                                                                         |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
|                                                                                     |  | f) TM41029                                                                          |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| <b>APPLICATIONS:</b>                                                                |  |    |                         |    |      |    |      |                                                                      |      |
| <b>AGRICULTURAL</b>                                                                 |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                         |                         | <b>1) O/H Gasket Set</b>                                                            |      | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>     |      | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b><br><b>6) Cyl Hd Cap Screw</b> |      |
| 940 2450                                                                            |  | 3) Crankshaft                                                                       |                         | 2) Head Gasket Set                                                                  |      | 4) Bal. Shaft R/H                                                                    |      | 1) Lower Gear                                                                                                                                           |      |
| 942 2535                                                                            |  | 4) Crankshaft, Gear                                                                 |                         | 3) Head Gasket                                                                      |      | 5) Bal. Shaft L/H                                                                    |      | 2) Lower Bushing                                                                                                                                        |      |
| 1640 2550                                                                           |  | 5) Ring Gear                                                                        |                         | 4) Oil Pan Gasket                                                                   |      | 6) Camshaft                                                                          |      | 3) Upper Gear                                                                                                                                           |      |
| 1840 2555CS                                                                         |  | 6) Sleeve, Front                                                                    |                         | 5) Rocker Cover Gsk                                                                 |      | 7) Bal. Shaft Stop                                                                   |      | 4) Upper Bushing                                                                                                                                        |      |
| 2130 2650                                                                           |  | 7) Packing, Sleeve                                                                  |                         |                                                                                     |      | 8) Con Rod                                                                           |      | 5) Cam. Follower                                                                                                                                        |      |
| 2135 2730                                                                           |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      | 6) Cam. Gear                                                                                                                                            |      |
| 2250 2735                                                                           |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| 2350 3330                                                                           |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| 2355 3430                                                                           |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| 2355CS 6602                                                                         |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| 2360                                                                                |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| <b>CONSTRUCTION</b>                                                                 |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      |                                                                                                                                                         |      |
| 70 400G                                                                             |  | 1) TAR67942                                                                         |                         | 1) TRE501579                                                                        |      | 1) TR55647 <b>x4</b>                                                                 |      | 1) TRE55343                                                                                                                                             |      |
| 70D 415B                                                                            |  | 2) TRE44574                                                                         |                         | 2) TRE38851                                                                         |      | 2) TR80033 <b>x8 (3)</b>                                                             |      | 2) TRE31929                                                                                                                                             |      |
| 210C 415C                                                                           |  | 3) TAT18030 <b>(1)</b>                                                              |                         | 3) TR125863                                                                         |      | 3) TR57160 <b>x6 (5)</b>                                                             |      | 3) TRE31973                                                                                                                                             |      |
| 244E 490                                                                            |  | TRE20585 <b>(2)</b>                                                                 |                         | 4) TR97342                                                                          |      | 4) TRE26282 R/H <b>(*)</b>                                                           |      | 4) TR54987                                                                                                                                              |      |
| 290D 515B                                                                           |  | 4) TT20094                                                                          |                         | 5) TR73521                                                                          |      | 5) TRE26283 L/H <b>(*)</b>                                                           |      | 5) TR113752                                                                                                                                             |      |
| 310C/D                                                                              |  | 5) TR114282 (142T)                                                                  |                         |                                                                                     |      | 6) TR82820 <b>(4)</b>                                                                |      | 6) TR85363 <b>x18 (6)</b>                                                                                                                               |      |
| 315C                                                                                |  | 6) TR81989                                                                          |                         |                                                                                     |      | 7) TR88112                                                                           |      | 5) TT20073 <b>x8</b>                                                                                                                                    |      |
|                                                                                     |  | 7) TH35244                                                                          |                         |                                                                                     |      | 8) TRE16495                                                                          |      | 6) TT20070                                                                                                                                              |      |
|  |  | Valve, Intake                                                                       |                         | Valve, Exhaust                                                                      |      | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |      | 1) Cap, Valve<br>2) Lock, Valve                                                                                                                         |      |
|                                                                                     |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        |                         | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                        |      | 1) TR73064 Std.<br>2) TR51734 Std.                                                   |      | 1) TT20129<br>2) TT20077                                                                                                                                |      |
|  |  |  |                         |  |      |  |      |                                                                    |      |
| 1) Thermostat<br>2) Thermostat Cover                                                |  | Fuel Transfer Pump                                                                  |                         | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                       |      | Water Pump                                                                           |      | Transmission Oil Pump                                                                                                                                   |      |
| 1) TRE33705 180° F<br>2) TT23620                                                    |  | TRE42211                                                                            |                         | a) TRE19507<br>b) TRE62658                                                          |      | TAR97708 (m) R73604<br>TAR92641                                                      |      | TAL120106 TAL68094                                                                                                                                      |      |
|                                                                                     |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      | Verify P/N for your application                                                                                                                         |      |
|                                                                                     |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      | 1) Seal, Injector<br>2) Injector, Pencil                                                                                                                |      |
|                                                                                     |  |                                                                                     |                         |                                                                                     |      |                                                                                      |      | 1) TR60746<br>TR48000<br>2) TAR89564                                                                                                                    |      |

(\*) If these engines use bolt on weights shafts use TAR69710 RH and TAR69711 LH.

(1) TAT18030 Crankshaft 36mm (short) snout, (m) T23517.

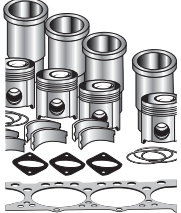
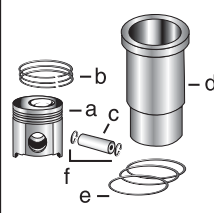
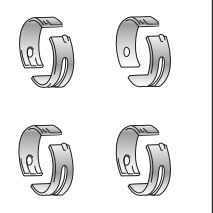
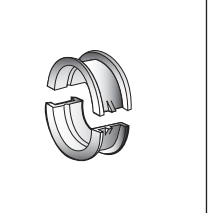
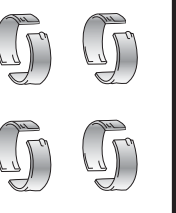
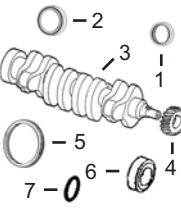
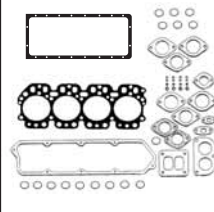
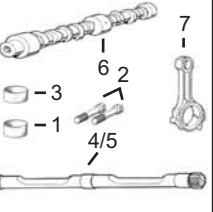
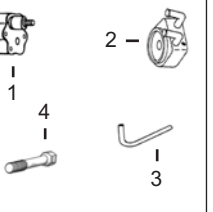
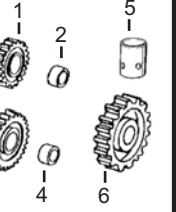
(2) TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.

(3) For Connecting Rod (m) R58979, use TR74194 Connecting Rod Bolt available upon request.

(4) Threaded Type.

(5) TR91708 (Outer Diam. 2.00 mm / 0.078 in )  
Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(6) Replace all R78558 Cap Screws with  
Flanged Head Cap Screw TR85363.

| 300 Series                                                                          |  |                                                                                     |  |                                                                                                       |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
| Engine & Equipment Model                                                            |  |    |  |                      |  |    |  |    |  |    |  |
| 4039D                                                                               |  | 1) Engine O/H Kit                                                                   |  | Piston-Liner Kit                                                                                      |  | Main Bearing                                                                         |  | Thrust Bearing                                                                        |  | Con Rod Bearing                                                                       |  |
| Liter Designated                                                                    |  | 2) Engine I/F Kit                                                                   |  | TRE30250                                                                                              |  | TRE27352 Std.                                                                        |  | TAT21139 Std.                                                                         |  | TRE27348 Std.                                                                         |  |
| 4 Cyl                                                                               |  | 1) TAT86992                                                                         |  | Consists of:<br>a) TRE19282<br>b) TRE66820<br>c) TR125754<br>d) TR116281<br>e) TAR65507<br>f) TM41029 |  | TRE27353 .010                                                                        |  | TAT21132 .010                                                                         |  | TRE27349 .010                                                                         |  |
| Bore: 4.19 in<br>106.5 mm                                                           |  | 2) TIK86992                                                                         |  |                                                                                                       |  | TRE27360 .020                                                                        |  | TAT21134 .020                                                                         |  | TRE27358 .020                                                                         |  |
| Pin Ø: 1.375 in<br>35 mm                                                            |  |                                                                                     |  |                                                                                                       |  | TRE27368 .030                                                                        |  | TAT21136 .030                                                                         |  | TRE27364 .030                                                                         |  |
|                                                                                     |  |                                                                                     |  |                                                                                                       |  | Use 4                                                                                |  | Use 1                                                                                 |  | Use 4                                                                                 |  |
| <u>APPLICATIONS:</u>                                                                |  |    |  |                      |  |    |  |    |  |    |  |
| AGRICULTURAL                                                                        |  | 1) Front Seal                                                                       |  | 1) O/H Gasket Set                                                                                     |  | 1) Bush, Con Rod                                                                     |  | 1) Pump, Oil                                                                          |  | 1) Lower Gear                                                                         |  |
| 5600                                                                                |  | 2) Rear Seal                                                                        |  |                                                                                                       |  | 2) Bolt, Con Rod                                                                     |  | 2) Oil Cooler                                                                         |  | 2) Lower Bushing                                                                      |  |
| (Mercosur)                                                                          |  |                                                                                     |  |                                                                                                       |  | 3) Bush, Bal. Shaft                                                                  |  | 3) Pump, Oil Tube                                                                     |  | 3) Upper Gear                                                                         |  |
| CONSTRUCTION                                                                        |  | 3) Crankshaft                                                                       |  | 2) Head Gasket Set                                                                                    |  | 4) Bal. Shaft R/H                                                                    |  | 4) Cyl Hd Cap Screw                                                                   |  | 4) Upper Bushing                                                                      |  |
| 70D 315C/D                                                                          |  | 4) Crankshaft, Gear                                                                 |  | 3) Head Gasket                                                                                        |  | 5) Bal. Shaft L/H                                                                    |  |                                                                                       |  | 5) Cam. Follower                                                                      |  |
| 210D 400G                                                                           |  | 5) Ring Gear                                                                        |  | 4) Oil Pan Gasket                                                                                     |  | 6) Camshaft                                                                          |  |                                                                                       |  | 6) Cam. Gear                                                                          |  |
| 290D 482C                                                                           |  | 6) Sleeve, Front                                                                    |  | 5) Rocker Cover Gsk                                                                                   |  | 7) Con Rod                                                                           |  |                                                                                       |  |                                                                                       |  |
| 310C/D 515B                                                                         |  | 7) Packing, Sleeve                                                                  |  |                                                                                                       |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  | 1) TAR67942                                                                         |  | 1) TRE501579                                                                                          |  | 1) TR55647 x4                                                                        |  | 1) TRE55343 (2)                                                                       |  | 1) TAT24252 (6)                                                                       |  |
|                                                                                     |  | 2) TRE44574                                                                         |  | 2) TRE38851                                                                                           |  | 2) TR80033 x8                                                                        |  | 2) TRE31929                                                                           |  | 2) TT26321                                                                            |  |
|                                                                                     |  | 3) TAT18030                                                                         |  | 3) TR125863                                                                                           |  | 3) TR57160 x6 (4)                                                                    |  | 3) TR113752                                                                           |  | 3) TAT18009 (6)                                                                       |  |
|                                                                                     |  | TRE20585                                                                            |  | 4) TR97342                                                                                            |  | 4) TRE26282 R/H (*)                                                                  |  | 4) TR85363 x18 (1)                                                                    |  | 4) TT20034                                                                            |  |
|                                                                                     |  | 4) TT20094                                                                          |  | 5) TR73521                                                                                            |  | 5) TRE26283 L/H (*)                                                                  |  |                                                                                       |  | 5) TT20073 x8                                                                         |  |
|                                                                                     |  | 5) TR114282 (142T)                                                                  |  | TR106796 (3)                                                                                          |  | 6) TR82820 (8)                                                                       |  |                                                                                       |  | 6) TT20070 (6)                                                                        |  |
|                                                                                     |  | 6) TR81989                                                                          |  |                                                                                                       |  | 7) TRE16495                                                                          |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  | 7) TH35244                                                                          |  |                                                                                                       |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |
|  |  | Valve, Intake                                                                       |  | Valve, Exhaust                                                                                        |  | Insert, Valve                                                                        |  | 1) Seal, Valve                                                                        |  | 1) Spring, Valve                                                                      |  |
|                                                                                     |  |                                                                                     |  |                                                                                                       |  | 1) Intake                                                                            |  | 2) Lock, Valve                                                                        |  | 2) Rotator, Valve                                                                     |  |
|                                                                                     |  | TR98062 Std.                                                                        |  | TR90692 Std.                                                                                          |  | 1) TR98063 Std.                                                                      |  | 1) TRE31617                                                                           |  | 1) TR26125                                                                            |  |
|                                                                                     |  | TR97490 .015                                                                        |  | TR97492 .015                                                                                          |  | TR98335 O/S.                                                                         |  | 2) TR91889                                                                            |  | 2) TRE60005                                                                           |  |
|                                                                                     |  |                                                                                     |  |                                                                                                       |  | 2) TR85687 Std.                                                                      |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  |                                                                                     |  |                                                                                                       |  | TR93910 O/S.                                                                         |  |                                                                                       |  |                                                                                       |  |
|   |  |  |  |                    |  |  |  |  |  |  |  |
| 1) Thermostat                                                                       |  | Fuel Transfer Pump                                                                  |  | Water Pump Rep Kit                                                                                    |  | Water Pump                                                                           |  | Water Pump                                                                            |  | 1) Seal, Injector                                                                     |  |
| 2) Thermostat Cover                                                                 |  |                                                                                     |  | a) Without Impeller                                                                                   |  | TAR97708 (m) R73604                                                                  |  |                                                                                       |  | 2) Injector, Pencil                                                                   |  |
| 1) TAR48675 180° F (5)                                                              |  | TRE42211                                                                            |  | a) TRE19507                                                                                           |  | TRE60489 (m) R100812, (m) R127337,                                                   |  | TRE16666 (9)                                                                          |  | 1) TR60746                                                                            |  |
| 2) TT23620                                                                          |  | TRE38009 (7)                                                                        |  | b) TRE62658                                                                                           |  | (m) R127918, (m) R55164                                                              |  |                                                                                       |  | TR48000                                                                               |  |
|                                                                                     |  |                                                                                     |  |                                                                                                       |  | TAR92641 (9)                                                                         |  |                                                                                       |  | 2) TRE36936                                                                           |  |

(\*) If these engines use bolt on weights shafts use TAR69710 RH and TAR69711 LH.

(1) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(2) May use High cap. Pump, Oil TRE65580.

(3) O'ring not included in Gasket Set. Used in Saran Engines. Order separately.

(4) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R

(Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(5) Saran engines may use TRE64354.

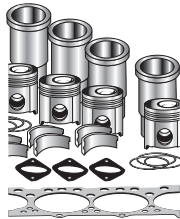
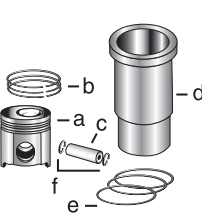
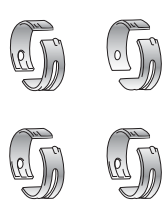
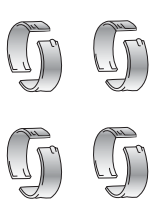
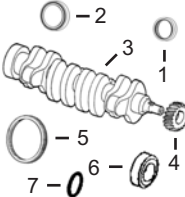
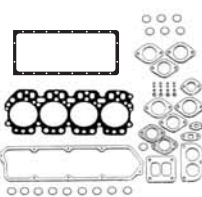
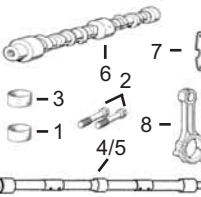
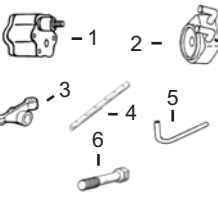
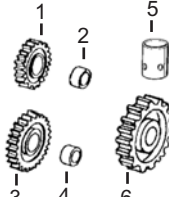
(6) Helicoidal Gears.

(7) Saran Engines.

(8) Threaded Type. For Late 4039 models TRE55901

Kit (Camshaft, and Tappets) is available.

(9) Check application for proper usage.

| 300 Series<br>Engine & Equipment<br>Model                                                                              |  |                                              |  |      |  |                                                                |  |                            |  |                         |  |
|------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>4.239T</b>                                                                                                          |  | <b>1) Engine O/H Kit</b>                                                                                                      |  | <b>Piston-Liner Kit</b>                                                               |  | <b>Main Bearing</b>                                                                                                                              |  | <b>Thrust Bearing</b>                                                                                         |  | <b>Con Rod Bearing</b>                                                                                     |  |
| <b>4 Cyl</b>                                                                                                           |  | <b>2) Engine I/F Kit</b>                                                                                                      |  | <b>TRE33115</b>                                                                       |  | TRE27352 Std.                                                                                                                                    |  | TAT21139 Std.                                                                                                 |  | TRE27348 Std.                                                                                              |  |
| Bore: 4.19 in<br>106.5 mm                                                                                              |  | <b>1) TRE54709</b>                                                                                                            |  | Consists of:                                                                          |  | TRE27353 .010                                                                                                                                    |  | TAT21132 .010                                                                                                 |  | TRE27349 .010                                                                                              |  |
| Pin Ø: 1.625 in<br>41 mm                                                                                               |  | <b>2) TIK54709</b>                                                                                                            |  | a) TRE19278<br>b) TRE66820<br>c) TR124230<br>d) TR116281<br>e) TAR65507<br>f) TR54114 |  | TRE27360 .020                                                                                                                                    |  | TAT21134 .020                                                                                                 |  | TRE27358 .020                                                                                              |  |
| <b>Con Rod (m):</b><br>R80032, R113612,<br>R122191                                                                     |  |                                                                                                                               |  |                                                                                       |  | TRE27368 .030                                                                                                                                    |  | TAT21136 .030                                                                                                 |  | TRE27364 .030                                                                                              |  |
|                                                                                                                        |  |                                                                                                                               |  |                                                                                       |  | <b>Use 4</b>                                                                                                                                     |  | <b>Use 1</b>                                                                                                  |  | <b>Use 4</b>                                                                                               |  |
| <b>APPLICATIONS:</b>                                                                                                   |  |                                              |  |      |  |                                                                |  |                            |  |                         |  |
| <b>AGRICULTURAL</b>                                                                                                    |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                   |  | <b>1) O/H Gasket Set</b>                                                              |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                                                 |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube<br>6) Cyl Hd Cap Screw |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
| 945 2750<br>952 2755<br>1052 2755 CS/TSS<br>1155 2850<br>2140 2855<br>2450 2855N<br>2555 3430<br>2555 TSS 3830<br>2650 |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk      |  | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft<br>7) Bal. Shaft Stop<br>8) Con Rod                                                        |  |                                                                                                               |  |                                                                                                            |  |
| <b>CONSTRUCTION</b>                                                                                                    |  | 1) TAR67942<br>2) TRE44574<br>3) TAT18030 (1)<br>TRE20585 (4)<br>4) TT20094<br>5) TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501579<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521                |  | 1) TR57451 x4<br>2) TR80033 x8<br>3) TR57160 x6 (3)<br>4) TRE26282 R/H (*)<br>5) TRE26283 L/H (*)<br>6) TR82820 (5)<br>7) TR88112<br>8) TRE58347 |  | 1) TRE55343 (2)<br>2) TRE31929<br>3) TRE31973<br>4) TR54987<br>5) TR113752<br>6) TR85363 x18 (6)              |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x8<br>6) TT20070                      |  |
|                                     |  | Valve, Intake                                                                                                                 |  | Valve, Exhaust                                                                        |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                         |  | 1) Cap, Valve<br>2) Lock, Valve                                                                               |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |  |
|                                                                                                                        |  | TR83071 Std.<br>TR89223 .003<br>TR89224 .015                                                                                  |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                          |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                                               |  | 1) TT20129<br>2) TT20077                                                                                      |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                     |  |                                            |  |    |  |                                                              |  |                          |  |                       |  |
| 1) Thermostat<br>2) Thermostat Cover                                                                                   |  | Fuel Transfer Pump                                                                                                            |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                         |  | Water Pump                                                                                                                                       |  | Transmission Oil Pump                                                                                         |  | 1) Seal, Injector<br>2) Injector, Pencil                                                                   |  |
| 1) TAR48675 180° F<br>2) TT23620                                                                                       |  | TRE42211                                                                                                                      |  | See Chart on<br>Page IT18                                                             |  | TAR97708 (m) R73604<br>TAR92641                                                                                                                  |  | TAL120106 TAL68094<br>Verify P/N for your application                                                         |  | 1) TR60746<br>TR48000<br>2) TRE37503                                                                       |  |

(\*) If these engines use bolt on weights shafts use TAR69710 RH and TAR69711 LH.  
 (1) TAT18030 Crankshaft 36mm (short) snout, (m) T23517.  
 (2) May use High Capacity Pump, Oil TRE65580.  
 (3) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.  
 (4) TRE20585 Crankshaft 60mm (long) snout, (m) R81959 or R121018.  
 (5) Threaded Type.  
 (6) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                        |                                                                                                                                  |                                                                                                                         |                                                                                                                                                         |                                                                                                                                                      |                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>4039T</b><br><br><b>Liter Designated</b><br><br><b>4 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.625 in<br>41 mm<br><br><b>Con Rod (m):</b><br>R80032, R122191,<br>R113612<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>5500N      6300<br>5700      6300L<br>6200      SE6200<br>6200L      SE6300<br><br><b>CONSTRUCTION</b><br>300D      (Turbo)<br>310C      (Turbo)<br>315C/D    (Turbo)<br>515B |                                                                                                                                                                        | <b>1) Engine O/H Kit</b>                                                                                                         | <b>Piston-Liner Kit</b>                                                                                                 | <b>Main Bearing</b>                                                                                                                                     | <b>Thrust Bearing</b>                                                                                                                                | <b>Con Rod Bearing</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        | <b>2) Engine I/F Kit</b>                                                                                                         | <b>TRE33115</b><br>Consists of:                                                                                         | TRE27352 <b>Std.</b>                                                                                                                                    | TAT21139 <b>Std.</b>                                                                                                                                 | TRE27348 <b>Std.</b>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        | <b>1) TRE54709</b>                                                                                                               | a) TRE19278                                                                                                             | TRE27353 <b>.010</b>                                                                                                                                    | TAT21132 <b>.010</b>                                                                                                                                 | TRE27349 <b>.010</b>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        | <b>2) TIK54709</b>                                                                                                               | b) TRE66820                                                                                                             | TRE27360 <b>.020</b>                                                                                                                                    | TAT21134 <b>.020</b>                                                                                                                                 | TRE27358 <b>.020</b>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  | c) TR124230                                                                                                             | TRE27368 <b>.030</b>                                                                                                                                    | TAT21136 <b>.030</b>                                                                                                                                 | TRE27364 <b>.030</b>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  | d) TR116281                                                                                                             |                                                                                                                                                         |                                                                                                                                                      |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  | e) TAR65507                                                                                                             | <b>Use 4</b>                                                                                                                                            | <b>Use 1</b>                                                                                                                                         | <b>Use 4</b>           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  | f) TR54114                                                                                                              |                                                                                                                                                         |                                                                                                                                                      |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  |                                                                                                                         |                                                                                                                                                         |                                                                                                                                                      |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                            | <b>1) O/H Gasket Set</b>                                                                                                         | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                        | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b><br><b>6) Cyl Hd Cap Screw</b> | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b><br><b>6) Sleeve, Front</b><br><b>7) Packing, Sleeve</b>                                      | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                     | <b>4) Camshaft</b><br><b>5) Con Rod</b>                                                                                 |                                                                                                                                                         |                                                                                                                                                      |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>1) TAR67942</b><br><b>2) TRE44574</b><br><b>3) TAT18030</b><br>TRE20585<br><b>4) TT20094</b><br><b>5) TR114282 (142T)</b><br><b>6) TR81989</b><br><b>7) TH35244</b> | <b>1) TRE501579</b><br><b>2) TRE38851</b><br><b>3) TR125863</b><br><b>4) TR97342</b><br><b>5) TR73521</b><br>TR106796 <b>(2)</b> | <b>1) TR57451 x4</b><br><b>2) TR80033 x8</b><br><b>3) TR57160 x6 (4)</b><br><b>4) TR82820 (8)</b><br><b>5) TRE58347</b> | <b>1) TRE55343 (3)</b><br><b>2) TRE31929</b><br><b>3) TRE31973</b><br><b>4) TR54987</b><br><b>5) TR113752</b><br><b>6) TR85363 x18 (1)</b>              | <b>1) TAT24252 (6)</b><br><b>2) TT26321</b><br><b>3) TAT18009</b><br><b>4) TT20034 (6)</b><br><b>5) TT20073 x8</b><br><b>6) TT20070 (6)</b>          |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                | Valve, Intake                                                                                                                                                          | Valve, Exhaust                                                                                                                   | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                        | 1) Spring, Valve<br>2) Rotator, Valve                                                                                                                |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                | TR98062 <b>Std.</b><br>TR97490 <b>.015</b>                                                                                                                             | TR90692 <b>Std.</b><br>TR97492 <b>.015</b>                                                                                       | 1) TR98063 <b>Std.</b><br>TR98335 <b>O/S</b><br>2) TR85687 <b>Std.</b><br>TR93910 <b>O/S</b>                            | 1) TRE31617<br>2) TR91889                                                                                                                               | 1) TR26125<br>2) TRE60005                                                                                                                            |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                  |                                                                                                                         |                                                                                                                                                         |                                                                                                                                                      |                        |
| <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                                                                                                                                                                                                                                                                                                                                                             | <b>Fuel Transfer Pump</b>                                                                                                                                              | <b>Water Pump Rep Kit</b><br>a) Without Impeller<br>b) With Impeller                                                             | <b>Water Pump</b>                                                                                                       | <b>Water Pump</b>                                                                                                                                       | <b>1) Seal, Injector</b><br><b>2) Injector, Pencil</b>                                                                                               |                        |
| 1) TAR48675 180° F <b>(5)</b><br>2) TT23620                                                                                                                                                                                                                                                                                                                                                                                    | TRE42211<br>TRE38009 <b>(7)</b>                                                                                                                                        | See Chart on<br>Page IT18                                                                                                        | TAR97708 (m) R73604<br>TRE60489<br>TRE16666<br>TAR92641                                                                 | TRE41157                                                                                                                                                | 1) TR60746<br>TR48000<br>2) TRE38087                                                                                                                 |                        |

(1) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(2) Saran engines, O'ring not included in Gasket Set. Order separately.

(3) May use High Capacity Pump, Oil TRE65580.

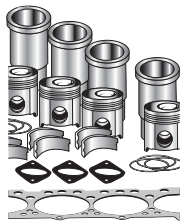
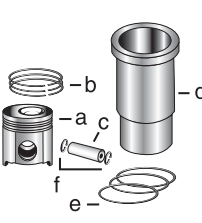
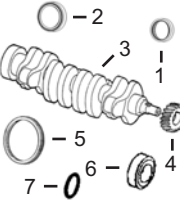
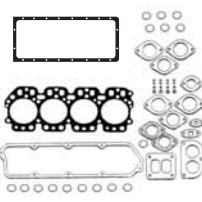
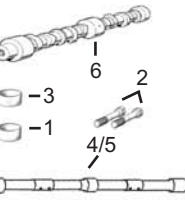
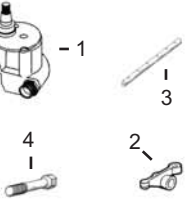
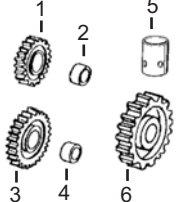
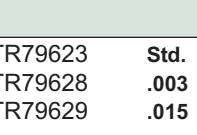
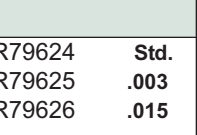
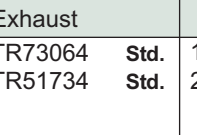
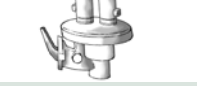
(4) TR91708 (Outer Diam. 2.00 mm / 0.078 in ) Larger and TR57160R (Inner Diam 0.5 mm / 0.020 in ) Smaller, are also available.

(5) Saran Engines may use TRE64354.

(6) Helicoidal Gears.

(7) Saran Engines.

(8) Threaded Type. For Late 4039 models TRE55901 Kit (Camshaft, and TR119874 Bushing) is available.

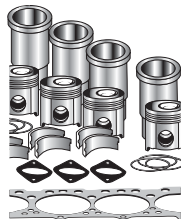
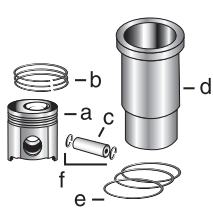
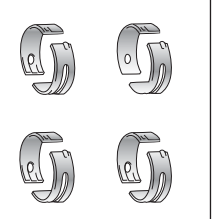
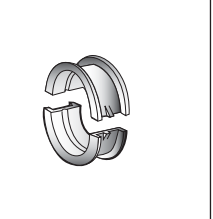
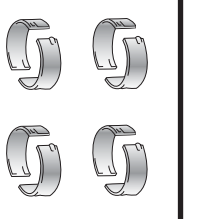
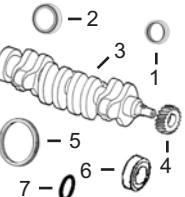
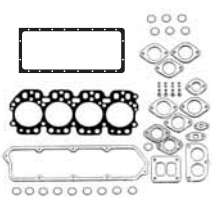
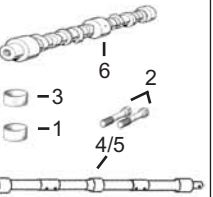
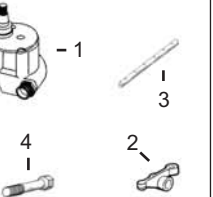
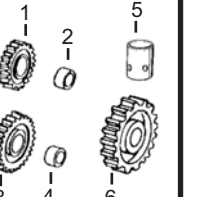
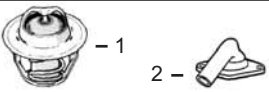
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4.276D</b><br><br><b>Small Pin</b><br><br><b>4 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.375 in<br>35 mm<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>2630<br>2640<br><br><b>CONSTRUCTION</b><br>410C |                                            |  |    |  |                                                |                           |   |  |                         |  |
|                                                                                                                                                                                                                                                                                                            | <b>1) Engine O/H Kit</b>                                                                                                    |  | <b>Piston-Liner Kit</b>                                                             |  | <b>Main Bearing</b>                                                                                                              |                           | <b>Thrust Bearing</b>                                                                |  | <b>Con Rod Bearing</b>                                                                                     |  |
|                                                                                                                                                                                                                                                                                                            | <b>2) Engine I/F Kit</b>                                                                                                    |  | <b>TRE19831</b><br>Consists of:                                                     |  | TRE27352 Std.                                                                                                                    |                           | TAT21139 Std.                                                                        |  | TAR97517 Std.                                                                                              |  |
|                                                                                                                                                                                                                                                                                                            | <b>1) TAT86990</b>                                                                                                          |  | a) TAR63342                                                                         |  | TRE27353 .010                                                                                                                    |                           | TAT21132 .010                                                                        |  | TAR97653 .010                                                                                              |  |
|                                                                                                                                                                                                                                                                                                            | <b>2) TIK86990</b>                                                                                                          |  | b) TRE66820                                                                         |  | TRE27360 .020                                                                                                                    |                           | TAT21134 .020                                                                        |  | TAR97654 .020                                                                                              |  |
|                                                                                                                                                                                                                                                                                                            |                                                                                                                             |  | c) TR125754                                                                         |  | TRE27368 .030                                                                                                                    |                           | TAT21136 .030                                                                        |  | TAR97655 .030                                                                                              |  |
|                                                                                                                                                                                                                                                                                                            |                                                                                                                             |  | d) TR80500                                                                          |  |                                                                                                                                  |                           |                                                                                      |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                            |                                                                                                                             |  | e) TAR65507                                                                         |  | <b>Use 4</b>                                                                                                                     |                           | <b>Use 1</b>                                                                         |  | <b>Use 4</b>                                                                                               |  |
|                                                                                                                                                                                                                                                                                                            |                                                                                                                             |  | f) TM41029                                                                          |  |                                                                                                                                  |                           |                                                                                      |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                            |                                            |  |    |  |                                                |                           |   |  |                         |  |
|                                                                                                                                                                                                                                                                                                            | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                 |  | <b>1) O/H Gasket Set</b>                                                            |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                                 |                           | 1) Pump, Oil<br>2) Rocker Arm<br>3) Rocker Shaft<br>4) Cyl Hd Cap Screw              |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
|                                                                                                                                                                                                                                                                                                            | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                              |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk    |  | 4) Bal. Shaft R/H<br>5) Bal. Shaft L/H<br>6) Camshaft                                                                            |                           |                                                                                      |  |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                            | 1) TAR67942<br>2) TRE44574<br>3) TRE56792<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501568<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521              |  | 1) TR57450 <b>x4</b><br>2) TR74195 <b>x8</b> (4)<br>3) TR57160 <b>x6</b><br>4) TAR69710 R/H<br>5) TAR69711 L/H<br>6) TR82820 (2) |                           | 1) TRE65580 (1)<br>2) TRE31973<br>3) TR54987<br>4) TR85363 <b>x18</b> (3)            |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 <b>x8</b><br>6) TT20070               |  |
|                                                                                                                                                                                                                                                                                                            |                                          |  |  |  |                                               |                           |  |  |                       |  |
|                                                                                                                                                                                                                                                                                                            | Valve, Intake                                                                                                               |  | Valve, Exhaust                                                                      |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                         |                           | 1) Cap, Valve<br>2) Lock, Valve                                                      |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |  |
|                                                                                                                                                                                                                                                                                                            | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                                |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                        |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                               |                           | 1) TT20129<br>2) TT20077                                                             |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                                                                                                                                                                                                                                                                                            |                                          |  |  |  |                                               |                           |  |  |                       |  |
|                                                                                                                                                                                                                                                                                                            | 1) Thermostat<br>2) Thermostat Cover                                                                                        |  | Fuel Transfer Pump                                                                  |  | Water Pump Repair Kit                                                                                                            |                           | Injector, Pencil                                                                     |  | Seal, Injector                                                                                             |  |
|                                                                                                                                                                                                                                                                                                            | 1) TAR48675 180° F<br>2) TT23620                                                                                            |  | TRE42211                                                                            |  | Without Impeller<br>TRE19507                                                                                                     | With Impeller<br>TRE62658 | TRE37503                                                                             |  | TR60746<br>TR48000                                                                                         |  |

(1) This engine may use standard flow Pump, Oil TRE55343.

(2) Threaded Type.

(3) From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4) When used on connecting rods marked R54617, torque bolts to 95 ft.lbs. Only.

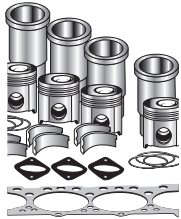
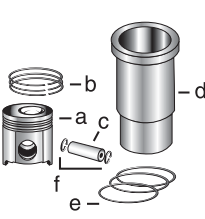
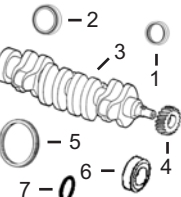
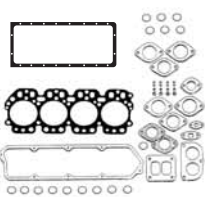
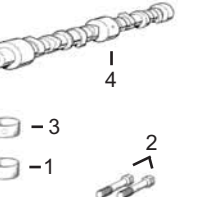
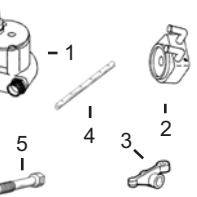
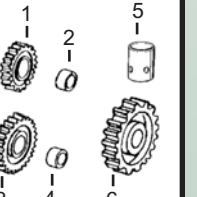
| 300 Series<br>Engine & Equipment<br>Model                                                        |  |                                                  |  |                                        |               |                                                |  |                  |  |                                                                   |  |
|--------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>4.276D</b><br>Large Pin<br>4 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.625 in<br>41 mm |  | <b>1) Engine O/H Kit</b>                                                                                                          |  | <b>Piston-Liner Kit</b>                                                                                                 |               | <b>Main Bearing</b>                                                                                                              |  | <b>Thrust Bearing</b>                                                                               |  | <b>Con Rod Bearing</b>                                                                                                                               |  |
|                                                                                                  |  | <b>2) Engine I/F Kit</b>                                                                                                          |  | <b>TRE28966</b><br>Consists of:<br>a) TRE28919<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |               | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                                             |  | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                |  | TAR97517 Std.<br><br>TAR97653 .010<br>TAR97654 .020<br>TAR97655 .030                                                                                 |  |
|                                                                                                  |  | <b>1) TRE63694</b>                                                                                                                |  |                                                                                                                         |               | <b>Use 4</b>                                                                                                                     |  | <b>Use 1</b>                                                                                        |  | <b>Use 4</b>                                                                                                                                         |  |
|                                                                                                  |  | <b>2) TIK63694</b>                                                                                                                |  |                                                                                                                         |               |                                                                                                                                  |  |                                                                                                     |  |                                                                                                                                                      |  |
| <b>APPLICATIONS:</b>                                                                             |  |                                                  |  |                                        |               |                                                |  |                  |  |                                                                   |  |
|                                                                                                  |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                       |  | <b>1) O/H Gasket Set</b>                                                                                                |               | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                                 |  | <b>1) Pump, Oil</b><br><b>2) Rocker Arm</b><br><b>3) Rocker Shaft</b><br><b>4) Cyl Hd Cap Screw</b> |  | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |  |
| <b>CONSTRUCTION</b>                                                                              |  | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b><br><b>6) Sleeve, Front</b><br><b>7) Packing, Sleeve</b> |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>            |               | <b>4) Bal. Shaft R/H</b><br><b>5) Bal. Shaft L/H</b><br><b>6) Camshaft</b>                                                       |  |                                                                                                     |  |                                                                                                                                                      |  |
| 340D 455E/G<br>344E 490D<br>410C/D 493D<br>440C 510B<br>450E/G                                   |  | 1) TAR67942<br>2) TRE44574<br>3) TRE56792<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244       |  | 1) TRE501568<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521                                                  |               | 1) TR57451 <b>x4</b><br>2) TR74195 <b>x8</b> (4)<br>3) TR57160 <b>x6</b><br>4) TAR69710 R/H<br>5) TAR69711 L/H<br>6) TR82820 (2) |  | 1) TRE65580 (1)<br>2) TRE31973<br>3) TR54987<br>4) TR85363 <b>x18</b> (3)                           |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 <b>x8</b><br>6) TT20070                                                         |  |
|                |  | Valve, Intake                                                                                                                     |  | Valve, Exhaust                                                                                                          |               | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                         |  | 1) Cap, Valve<br>2) Lock, Valve                                                                     |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                                                            |  |
|                                                                                                  |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                                      |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                            |               | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                               |  | 1) TT20129<br>2) TT20077                                                                            |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                              |  |
|                |  |                                                |  |                                      |               |                                             |  |                |  |                                                                                                                                                      |  |
| 1) Thermostat<br>2) Thermostat Cover                                                             |  | Fuel Transfer Pump                                                                                                                |  | Water Pump Repair Kit                                                                                                   |               | Injector, Pencil                                                                                                                 |  | Seal, Injector                                                                                      |  |                                                                                                                                                      |  |
| 1) TAR48675 180° F<br>2) TT23620                                                                 |  | TRE42211                                                                                                                          |  | Without Impeller                                                                                                        | With Impeller | TRE37503                                                                                                                         |  | TR60746<br>TR48000                                                                                  |  |                                                                                                                                                      |  |
|                                                                                                  |  |                                                                                                                                   |  | TRE19507                                                                                                                | TRE62658      |                                                                                                                                  |  |                                                                                                     |  |                                                                                                                                                      |  |

(1) This engine may use standard flow Pump, Oil TRE55343.

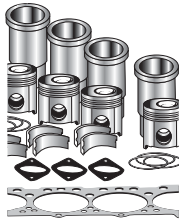
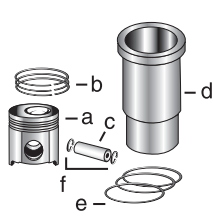
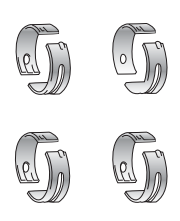
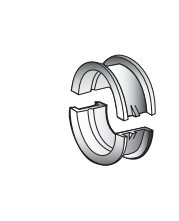
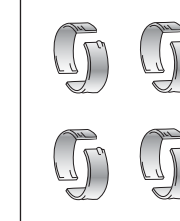
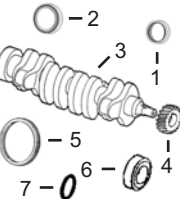
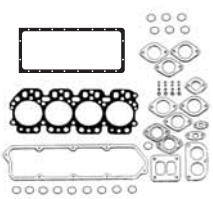
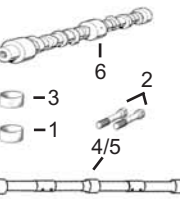
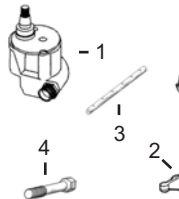
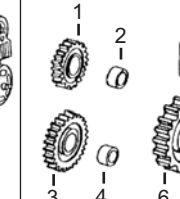
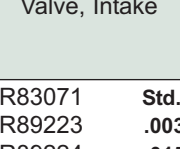
(2) Threaded Type.

(3) From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

|                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                   |  |                                                                                                                         |  |                                                                                                                           |  |                                                                                                                             |  |                                                                                                                                                      |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4045D</b><br><br><b>Liter Designated</b><br><br><b>4 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.625 in<br>41 mm<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>6100<br>SE6100<br><br><b>CONSTRUCTION</b><br>340D 455E<br>344E 490D<br>410C/D 493D<br>440C 510B<br>450E/G<br><br><b>SKID STEER</b><br>270<br>270 Series II |                                                  |  |                                        |  |                                         |  |                                          |  |                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>1) Engine O/H Kit</b>                                                                                                          |  | <b>Piston-Liner Kit</b>                                                                                                 |  | <b>Main Bearing</b>                                                                                                       |  | <b>Thrust Bearing</b>                                                                                                       |  | <b>Con Rod Bearing</b>                                                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>2) Engine I/F Kit</b>                                                                                                          |  | <b>TRE28966</b><br>Consists of:<br>a) TRE28919<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br><b>Use 4</b>                                      |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br><b>Use 1</b>                                        |  | TAR97517 Std.<br>TAR97653 .010<br>TAR97654 .020<br>TAR97655 .030<br><br><b>Use 4</b>                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>1) TRE63694</b><br><br><b>2) TIK63694</b>                                                                                      |  |                                                                                                                         |  |                                                                                                                           |  |                                                                                                                             |  |                                                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                  |  |                                        |  |                                         |  |                                          |  |                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                       |  | <b>1) O/H Gasket Set</b>                                                                                                |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                          |  | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Cyl Hd Cap Screw</b> |  | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b><br><b>6) Sleeve, Front</b><br><b>7) Packing, Sleeve</b> |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>            |  | <b>4) Camshaft</b>                                                                                                        |  |                                                                                                                             |  |                                                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | 1) TAR67942<br>2) TRE44574<br>3) TRE56792 (*)<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244   |  | 1) TRE501568<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521                                                  |  | 1) TR57451 <b>x4</b><br>2) TR74195 <b>x8</b> (7)<br>3) TR57160 <b>x6</b><br>4) TR82820 (4)                                |  | 1) TRE65580 (1)<br>2) TRE31929 (6)<br>3) TRE31973<br>4) TR54987<br>5) TR85363 <b>x18</b> (5)                                |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 <b>x8</b><br>6) TT20070                                                         |  |
|                                                                                                                                                                                                                                                                                                                                          | Valve, Intake                                                                                                                     |  | Valve, Exhaust                                                                                                          |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                  |  | 1) Seal, Valve<br>2) Lock, Valve                                                                                            |  | 1) Spring, Valve<br>2) Rotator, Valve                                                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | TR98062 Std.<br>TR97490 .015                                                                                                      |  | TR90692 Std.<br>TR97492 .015                                                                                            |  | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                                                          |  | 1) TRE31617<br>2) TR91889                                                                                                   |  | 1) TR26125<br>2) TRE60005                                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                          | <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                                                                |  |                                      |  |                                        |  |                                         |  |                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>1) TAR48675 180° F (2)</b><br><b>2) TT23620</b>                                                                                |  | <b>Fuel Transfer Pump</b><br><br><b>Water Pump Rep Kit</b><br>a) Without Impeller<br>b) With Impeller                   |  | <b>Water Pump</b><br><br>TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337,<br>(m) R127918, (m) R55164<br>TRE16666 |  | <b>Water Pump</b><br><br>TRE41157                                                                                           |  | <b>1) Seal, Injector</b><br><b>2) Injector, Pencil</b><br><br>1) TR60746<br>TR48000<br>2) TRE38087                                                   |  |

(\*) Crankshaft (m) R54501. This Engines model may also use crankshaft TRE54883 60mm Snout; (m) R90825, R120009. PLEASE VERIFY.  
(1) Saran engines use TRE55343 Standard flow.  
(2) Saran engines may use TRE64354.  
(3) Saran Engines.  
(4) Threaded Type. For Late 4039 models TRE55901 Kit (Camshaft, Tappets and TR119874 Bushing) is available.  
(5) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
(6) Always verify Oil Cooler Type.  
(7) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs.

| 300 Series<br>Engine & Equipment<br>Model                                                                                         |  |                             |  |                                                 |                           |                                                |  |                                                                   |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <b>4.276T</b>                                                                                                                     |  | <b>1) Engine O/H Kit</b>                                                                                     |  | <b>Piston-Liner Kit</b>                                                                                                          |                           | <b>Main Bearing</b>                                                                                                              |  | <b>Thrust Bearing</b>                                                                                                                                |  | <b>Con Rod Bearing</b>                                                              |  |
| <b>4 Cyl</b>                                                                                                                      |  | <b>2) Engine I/F Kit</b>                                                                                     |  | <b>TRE53073</b><br>Consists of:<br>a) TRE48469<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114          |                           | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                                                 |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                                                                     |  | TAR97517 Std.<br>TAR97653 .010<br>TAR97654 .020<br>TAR97655 .030                    |  |
| Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.625 in<br>41 mm                                                                             |  | <b>1) TRE61612</b>                                                                                           |  |                                                                                                                                  |                           | <b>Use 4</b>                                                                                                                     |  | <b>Use 1</b>                                                                                                                                         |  | <b>Use 4</b>                                                                        |  |
| <b>2) TIK61612</b>                                                                                                                |  |                                                                                                              |  |                                                                                                                                  |                           |                                                                                                                                  |  |                                                                                                                                                      |  |                                                                                     |  |
|                                                  |  |                             |  |                                                |                           |                                               |  |                                                                   |  |  |  |
| <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                       |  | <b>1) O/H Gasket Set</b>                                                                                     |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b>                                                 |                           | <b>1) Pump, Oil</b><br><b>2) Rocker Arm</b><br><b>3) Rocker Shaft</b><br><b>4) Cyl Hd Cap Screw</b><br><b>5) Tensioner, Belt</b> |  | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |  |                                                                                     |  |
| <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b><br><b>6) Sleeve, Front</b><br><b>7) Packing, Sleeve</b> |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b> |  | <b>4) Bal. Shaft R/H</b><br><b>5) Bal. Shaft L/H</b><br><b>6) Camshaft</b>                                                       |                           |                                                                                                                                  |  |                                                                                                                                                      |  |                                                                                     |  |
| 1) TAR67942<br>2) TRE44574<br>3) TRE56792<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244       |  | 1) TRE501568<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521                                       |  | 1) TR57451 <b>x4</b><br>2) TR74195 <b>x8</b> (5)<br>3) TR57160 <b>x6</b><br>4) TAR69710 R/H<br>5) TAR69711 L/H<br>6) TR82820 (3) |                           | 1) TRE65580 (1)<br>2) TRE31973<br>3) TR54987<br>4) TR85363 <b>x18</b> (4)<br>5) TAL110621                                        |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 <b>x8</b><br>6) TT20070                                                         |  |                                                                                     |  |
|                                                |  | Valve, Intake                                                                                                |  | Valve, Exhaust (2)                                                                                                               |                           | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                         |  | 1) Cap, Valve<br>2) Lock, Valve                                                                                                                      |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                           |  |
| TR83071 Std.<br>TR89223 .003<br>TR89224 .015                                                                                      |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                 |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                                                               |                           | 1) TT20129<br>2) TT20077                                                                                                         |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                              |  |                                                                                     |  |
|                                                |  |                           |  |                                              |                           |                                             |  |                                                                 |  |                                                                                     |  |
| <b>1) Thermostat</b><br><b>2) Thermostat Cover</b>                                                                                |  | <b>Fuel Transfer Pump</b>                                                                                    |  | <b>Water Pump Repair Kit</b>                                                                                                     |                           | <b>Injector, Pencil</b>                                                                                                          |  | <b>Seal, Injector</b>                                                                                                                                |  |                                                                                     |  |
| 1) TAR48675 180° F<br>2) TT23620                                                                                                  |  | TRE42211                                                                                                     |  | Without Impeller<br>TRE19510                                                                                                     | With Impeller<br>TRE11348 | TRE37503                                                                                                                         |  | TR60746<br>TR48000                                                                                                                                   |  |                                                                                     |  |

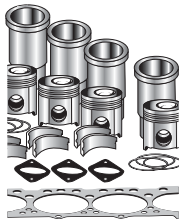
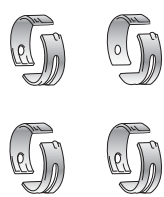
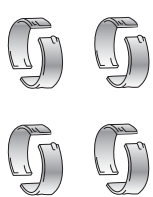
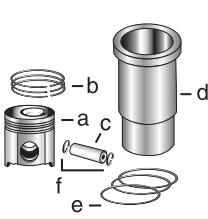
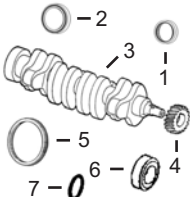
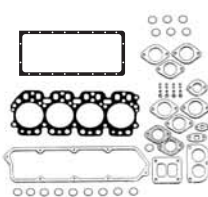
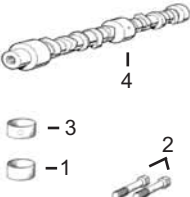
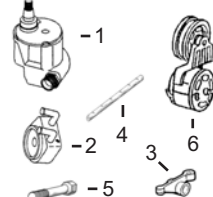
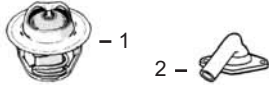
(1) This engine may use Standard Flow Pump, Oil TRE55343.

(2) Do not use 45° Valves with RE56545 Head.

(3) Threaded Type.

(4) From ESN 137128 Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

| 300 Series<br>Engine & Equipment<br>Model                                           |  |                                                |  |    |  |               |  |                             |  |
|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|--|
| <b>4045T</b>                                                                        |  |                                                |  |                                                                                      |  |                                                                                                  |  |                                                                                                                |  |
| Liter Designated                                                                    |  | 1) Engine O/H Kit                                                                                                               |  | Piston-Liner Kit                                                                     |  | Main Bearing                                                                                     |  | Thrust Bearing                                                                                                 |  |
| 4 Cyl                                                                               |  | 2) Engine I/F Kit                                                                                                               |  | TRE53073                                                                             |  | TRE27352 Std.                                                                                    |  | TAT21139 Std.                                                                                                  |  |
| Bore: 4.19 in<br>106.5 mm                                                           |  | 1) TRE61612                                                                                                                     |  | Consists of:                                                                         |  | TRE27353 .010                                                                                    |  | TAT21132 .010                                                                                                  |  |
| Pin Ø: 1.625 in<br>41 mm                                                            |  | 2) TIK61612                                                                                                                     |  | a) TRE48469<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |  | TRE27360 .020                                                                                    |  | TAT21134 .020                                                                                                  |  |
|                                                                                     |  |                                                                                                                                 |  |                                                                                      |  | TRE27368 .030                                                                                    |  | TAT21136 .030                                                                                                  |  |
|                                                                                     |  |                                                                                                                                 |  |                                                                                      |  | Use 4                                                                                            |  | Use 1                                                                                                          |  |
|                                                                                     |  |                                                                                                                                 |  |                                                                                      |  |                                                                                                  |  | Use 4                                                                                                          |  |
| <b>APPLICATIONS:</b>                                                                |  |                                                |  |     |  |                |  |                             |  |
| <b>AGRICULTURAL</b>                                                                 |  | 1) Front Seal<br>2) Rear Seal                                                                                                   |  | 1) O/H Gasket Set                                                                    |  | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft                                      |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Cyl Hd Cap Screw<br>6) Tensioner, Belt |  |
| 6400 6500L<br>6400L 6700<br>6500 SE6400                                             |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                  |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk     |  | 4) Camshaft                                                                                      |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear     |  |
| <b>CONSTRUCTION</b>                                                                 |  | 1) TAR67942<br>2) TRE44574<br>3) TRE56792 (*)<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501568<br>2) TRE38851<br>3) TR125863<br>4) TR97342<br>5) TR73521               |  | 1) TR57451 x4<br>2) TR74195 x8 (7)<br>3) TR57160 x6<br>4) TR82820 (4)                            |  | 1) TRE65580 (1)<br>2) TRE31929 (6)<br>3) TRE31973<br>4) TR54987<br>5) TR85363 x18 (5)<br>6) TAL110621          |  |
| <b>SKID STEER</b>                                                                   |  |                                                                                                                                 |  |                                                                                      |  |                                                                                                  |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x8<br>6) TT20070                          |  |
|  |  | Valve, Intake                                                                                                                   |  | Valve, Exhaust                                                                       |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                         |  | 1) Seal, Valve<br>2) Lock, Valve                                                                               |  |
|                                                                                     |  | TR98062 Std.<br>TR97490 .015                                                                                                    |  | TR90692 Std.<br>TR97492 .015                                                         |  | 1) TR98063 Std.<br>TR98335 O/S.<br>2) TR85687 Std.<br>TR93910 O/S.                               |  | 1) TRE31617<br>2) TR91889                                                                                      |  |
|  |  | 1) Thermostat<br>2) Thermostat Cover                                                                                            |  | Fuel Transfer Pump                                                                   |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                    |  | Water Pump                                                                                                     |  |
| 1) TAR48675 180°F (2)<br>2) TT23260                                                 |  | TRE42211<br>TRE38009 (3)                                                                                                        |  | See Chart on<br>Page IT18                                                            |  | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337,<br>(m) R127918, (m) R55164<br>TRE16666 |  | TRE41157                                                                                                       |  |
|                                                                                     |  |                                                                                                                                 |  |                                                                                      |  |                                                                                                  |  | 1) Seal, Injector<br>2) Injector, Pencil                                                                       |  |
|                                                                                     |  |                                                                                                                                 |  |                                                                                      |  |                                                                                                  |  | 1) TR60746<br>TR48000<br>2) TRE38087                                                                           |  |

(\*) Crankshaft (m) R54501. This Engines model may also use crankshaft TRE54883 60mm Snout; (m) R90825, R120009. PLEASE VERIFY.

(1) Saran engines use TRE55343 Standard flow.

(2) Saran engines may use TRE64354.

(3) Saran Engines.

(4) Threaded Type. For Late 4039 models TRE55901 Kit (Camshaft, Tappets and TR119874 Bushing) is available.

(5) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(6) Always verify Oil Cooler Type.

(7) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs.

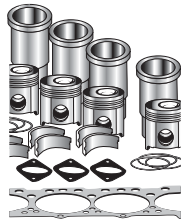
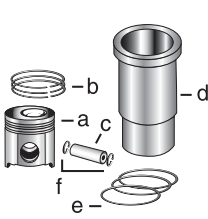
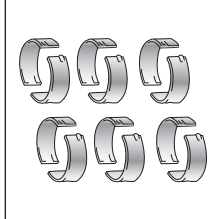
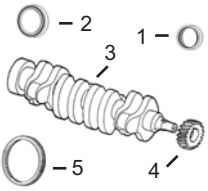
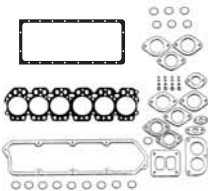
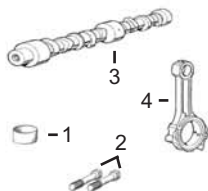
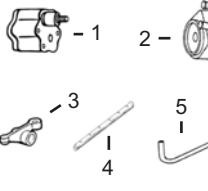
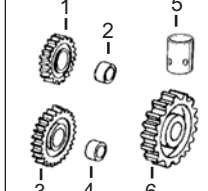
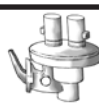
| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                       |  |                                                                                   |                                                                                                        |                                                                                      |                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>6.303</b><br>To 158,975<br><br>O'rings on Liner<br><br>6 Cyl<br><br>Bore: 3.86 in<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Block (m):</b><br>T24967, T24968<br><br><b>Con Rod (m):</b><br>T20007, R81410<br><br><b>APPLICATIONS:</b><br><br><b>CONSTRUCTION</b><br>544 |  |                                                                                   |                                                                                                        |                                                                                      |                                                                                                            |
|                                                                                                                                                                                                                                                                                 |  | <b>1) Engine O/H Kit</b>                                                          | <b>Piston-Liner Kit</b>                                                                                | <b>Main Bearing</b>                                                                  | <b>Thrust Bearing</b>                                                                                      |
|                                                                                                                                                                                                                                                                                 |  | <b>2) Engine I/F Kit</b>                                                          | <b>TPLK481</b><br>Consists of:<br>a) TT23481<br>b) TAR70633<br>c) TT23482<br>d) TAR51902<br>e) TR51112 | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br><b>Use 6</b> | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br><b>Use 1</b>                       |
|                                                                                                                                                                                                                                                                                 |  | <b>1) TOK6481</b><br><br><b>2) TIK6481</b>                                        |                                                                                                        |                                                                                      | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030<br><br><b>Use 6</b>                       |
|                                                                                                                                                                                                                                                                                 |  |                                                                                   |                                                                                                        |                                                                                      |                                                                                                            |
|                                                                                                                                                                                                                                                                                 |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                       | <b>1) O/H Gasket Set</b>                                                                               | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                   | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube                     |
|                                                                                                                                                                                                                                                                                 |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                              | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                       | 3) Camshaft<br>4) Con Rod                                                            | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                 |  | 1) TAR67942<br>2) TRE44574 (1)<br>3) TAT22562<br>4) TT20094<br>5) TR114282 (142T) | 1) TRE38568<br>2) TRE38571<br>3) TR98462<br>4) TR97344<br>5) TR75728                                   | 1) TT23471 x6<br>2) TR74194 x12 (2)<br>3) TR82821 (3)<br>4) TAT18005                 | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54986<br>5) TR113752                                     |
|                                                                                                                                                                                                                                                                                 |  |                                                                                   |                                                                                                        |                                                                                      | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070                     |
|                                                                                                                                                                                                                                                                                 |  | Valve, Intake                                                                     | Valve, Exhaust                                                                                         | Insert, Valve<br>1) Intake<br>2) Exhaust                                             | 1) Cap, Valve<br>2) Lock, Valve                                                                            |
|                                                                                                                                                                                                                                                                                 |  | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                      | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                           | 1) TR73064 Std.<br>2) TR51734 Std.                                                   | 1) TT20129<br>2) TT20077                                                                                   |
|                                                                                                                                                                                                                                                                                 |  | Thermostats                                                                       | Fuel Transfer Pump                                                                                     | Water Pump Repair Kit                                                                | Injector, Pencil                                                                                           |
|                                                                                                                                                                                                                                                                                 |  | TAR70601 180° F (*)<br>TAR77411 195° F (*)                                        | TRE42211                                                                                               | Without Impeller<br>TRE19510<br>With Impeller<br>TMX132                              | Seal, Injector<br>TR60746<br>TR48000                                                                       |

(\*) Verify JD parts manual.

(1) Do not use with flywheel housing (m) T20300,T22991.

(2) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(3) Threaded Type.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  |                                                                                     |  |                                                                                     |                         |                                                                                       |  |                                                                                        |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>6.303</b><br><br><b>From 158,976</b><br><br><b>O'rings on Block</b><br><br><b>6 Cyl</b><br><br>Bore: 3.86 in<br>98 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Block (m):</b><br>R53260, R55035,<br>R55351 R72970,<br>R79280, T32346<br><br><b>Con Rod (m):</b><br>T20007, R81410<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>3420<br><br><b>CONSTRUCTION</b><br>540<br>544 |    |  |    |  |   |                         |    |  |     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1) Engine O/H Kit</b>                                                            |  | <b>Piston-Liner Kit</b>                                                             |  | <b>Main Bearing</b>                                                                 |                         | <b>Thrust Bearing</b>                                                                 |  | <b>Con Rod Bearing</b>                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>2) Engine I/F Kit</b>                                                            |  | <b>TAR71591</b><br>Consists of:                                                     |  | TRE27352 Std.                                                                       |                         | TAT21139 Std.                                                                         |  | TRE27348 Std.                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1) TOK6591</b>                                                                   |  | a) TT23481                                                                          |  | TRE27353 .010                                                                       |                         | TAT21132 .010                                                                         |  | TRE27349 .010                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  | b) TAR70633                                                                         |  | TRE27360 .020                                                                       |                         | TAT21134 .020                                                                         |  | TRE27358 .020                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>2) TIK6591</b>                                                                   |  | c) TT23482                                                                          |  | TRE27368 .030                                                                       |                         | TAT21136 .030                                                                         |  | TRE27364 .030                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  | d) TT32340                                                                          |  |                                                                                     |                         |                                                                                       |  |                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  | e) TAR71617                                                                         |  |                                                                                     |                         |                                                                                       |  |                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  | f) TR51112                                                                          |  | <b>Use 6</b>                                                                        |                         | <b>Use 1</b>                                                                          |  | <b>Use 6</b>                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |  |    |  |   |                         |    |  |     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                         |  | <b>1) O/H Gasket Set</b>                                                            |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                  |                         | 1) Pump, Oil<br>2) Oil Cooler                                                         |  | 1) Lower Gear<br>2) Lower Bushing                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk    |  | 3) Camshaft<br>4) Con Rod                                                           |                         | 3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube                                 |  | 3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) TAR67942<br>2) TRE44574 (1)<br>3) TAT22562<br>4) TT20094<br>5) TR114282 (142T)   |  | 1) TRE38568<br>2) TRE38571<br>3) TR98462<br>4) TR97344<br>5) TR75728                |  | 1) TT23471 x6<br>2) TR74194 x12 (2)<br>3) TR82821 (3)<br>4) TAT18005                |                         | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54986<br>5) TR113752                |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  | Valve, Intake                                                                       |  | Valve, Exhaust                                                                      |                         | Insert, Valve<br>1) Intake<br>2) Exhaust                                              |  | 1) Cap, Valve<br>2) Lock, Valve                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                        |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                  |                         | 1) TT20129<br>2) TT20077                                                              |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |                         |  |  |   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Thermostats</b>                                                                  |  | <b>Fuel Transfer Pump</b>                                                           |  | <b>Water Pump Repair Kit</b>                                                        |                         | <b>Injector, Pencil</b>                                                               |  | <b>Seal, Injector</b>                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TAR70601 180°F (*)<br>TAR77411 195°F (*)                                            |  | TRE42211                                                                            |  | Without Impeller<br>TRE19510                                                        | With Impeller<br>TMX132 | TAR89564                                                                              |  | TR60746<br>TR48000                                                                     |  |

(\*) Verify JD parts manual.

(1) Do not use with fly wheel housing (m) T20300, T22991.

(2) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

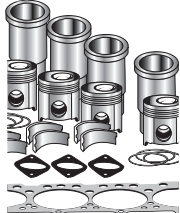
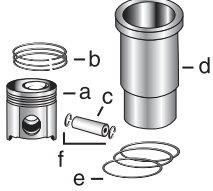
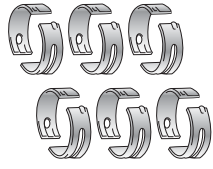
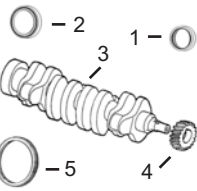
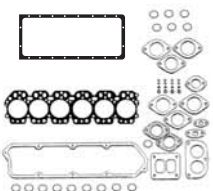
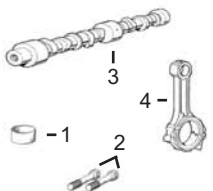
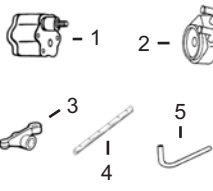
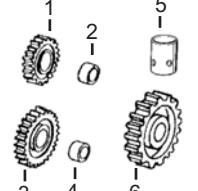
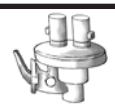
(3) Threaded Type.

| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                         |                                                                                             |                                                                                  |                                                                            |                                                                                        |                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>6.329</b><br>To 277,548<br><br>O'rings on liner<br><br>Small Pin<br><br>6 Cyl<br><br>Bore: 4.02 in<br>102 mm<br>Pin Ø: 1.185 in<br>30 mm<br><br><b>Con Rod (m):</b><br>T20007, R81410<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>699<br>3120<br><br><b>CONSTRUCTION</b><br>540A |                                                                                             |                                                                                  |                                                                            |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   | <b>1) Engine O/H Kit</b>                                                                    | <b>Piston-Liner Kit</b>                                                          | <b>Main Bearing</b>                                                        | <b>Thrust Bearing</b>                                                                  | <b>Con Rod Bearing</b>                                                                                     |
|                                                                                                                                                                                                                                                                                                   | <b>2) Engine I/F Kit</b>                                                                    | <b>TPLK310</b><br>Consists of:                                                   | TRE27352   Std.                                                            | TAT21139   Std.                                                                        | TRE27348   Std.                                                                                            |
|                                                                                                                                                                                                                                                                                                   | <b>1) TOK6310</b>                                                                           | a) TAR78310                                                                      | TRE27353   .010                                                            | TAT21132   .010                                                                        | TRE27349   .010                                                                                            |
|                                                                                                                                                                                                                                                                                                   | <b>2) TIK6310</b>                                                                           | b) TAR55759                                                                      | TRE27360   .020                                                            | TAT21134   .020                                                                        | TRE27358   .020                                                                                            |
|                                                                                                                                                                                                                                                                                                   |                                                                                             | c) TT26149                                                                       | TRE27368   .030                                                            | TAT21136   .030                                                                        | TRE27364   .030                                                                                            |
|                                                                                                                                                                                                                                                                                                   |                                                                                             | d) TAR51903                                                                      |                                                                            |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   |                                                                                             | e) TR51112                                                                       |                                                                            |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   |                                                                                             |                                                                                  | <b>Use 6</b>                                                               | <b>Use 1</b>                                                                           | <b>Use 6</b>                                                                                               |
|                                                                                                                                                                                                                                                                                                   |                                                                                             |                                                                                  |                                                                            |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                 | <b>1) O/H Gasket Set</b>                                                         | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                         | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                   | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk | 3) Camshaft<br>4) Con Rod                                                  |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   | 1) TAR67942<br>2) TRE44574<br>3) TAT22562<br>4) TT20094<br>5) TR114282 (142T)<br>6) TR81989 | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728           | 1) TT23471   x6<br>2) TR74194   x12 (1)<br>3) TR82821   (2)<br>4) TAT18005 | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54986<br>5) TR113752                 | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073   x12<br>6) TT20070                   |
|                                                                                                                                                                                                                                                                                                   | Valve, Intake                                                                               | Valve, Exhaust                                                                   | Insert, Valve<br>1) Intake<br>2) Exhaust                                   | 1) Cap, Valve<br>2) Lock, Valve                                                        | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |
|                                                                                                                                                                                                                                                                                                   | TR79623   Std.<br>TR79628   .003<br>TR79629   .015                                          | TR79624   Std.<br>TR79625   .003<br>TR79626   .015                               | 1) TR73064   Std.<br>2) TR51734   Std.                                     | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |
|                                                                                                                                                                                                                                                                                                   | Thermostats                                                                                 |                                                                                  |                                                                            |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                   |                                                                                             | Fuel Transfer Pump                                                               | Water Pump Repair Kit                                                      |                                                                                        | Seal, Injector                                                                                             |
|                                                                                                                                                                                                                                                                                                   |                                                                                             |                                                                                  | Without Impeller                                                           | With Impeller                                                                          |                                                                                                            |
| TAR70601 180 °F (*)<br>TAR77411 195 °F (*)                                                                                                                                                                                                                                                        | TRE42211                                                                                    | TMX9398                                                                          | TMX131                                                                     | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |

(\*) Verify JD parts manual.

(1) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(2) Threaded Type.

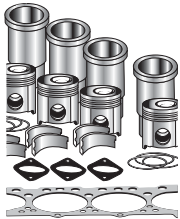
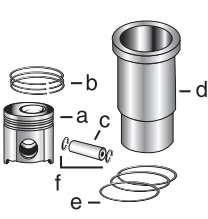
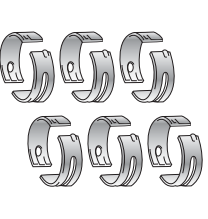
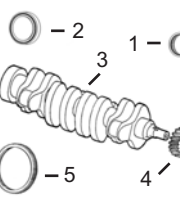
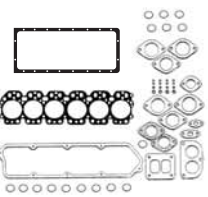
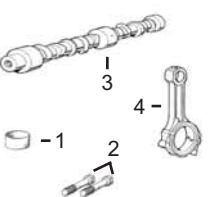
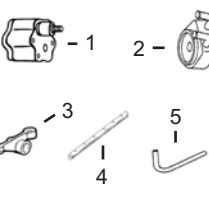
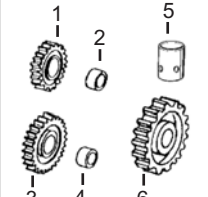
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.329</div> <div>To 277,548</div> <div>O'rings on block</div> <div>Small Pin</div> <div>6 Cyl</div> <div>Bore: 4.02 in<br/>102 mm</div> <div>Pin Ø: 1.185 in<br/>30 mm</div> <div>Con Rod (m):<br/>T20007, R81410</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>499<br/>699<br/>3120<br/>4030<br/>4420</div> <div>CONSTRUCTION</div> <div>540A<br/>544A<br/>570A</div> |    |                                 |  |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) Engine O/H Kit                                                                   | Piston-Liner Kit                                                                                                 | Main Bearing                                                                       | Thrust Bearing                                                                         | Con Rod Bearing                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2) Engine I/F Kit                                                                   | TAR71593<br>Consists of:<br>a) TAR78310<br>b) TAR55759<br>c) TT26149<br>d) TR116463<br>e) TAR71618<br>f) TR51112 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030               | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                   | TRE27348 Std.<br><br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) TOK6593                                                                          |                                                                                                                  |                                                                                    |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2) TIK6593                                                                          |                                                                                                                  | Use 6                                                                              | Use 1                                                                                  | Use 6                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |                                 |  |     |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) Front Seal<br>2) Rear Seal                                                       | 1) O/H Gasket Set                                                                                                | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                               | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                 | 3) Camshaft<br>4) Con Rod                                                          |                                                                                        |                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) TAR67942<br>2) TRE44574<br>3) TAT22562<br>4) TT20094<br>5) TR114282 (142T)       | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344 (1)<br>5) TR75728                                       | 1) TT23471 x6<br>2) TR74194 x12 (2)<br>3) TR82821 (3)<br>4) TAT18005               | 1) TRE55343<br>2) TRE31929<br>3) TRE31973<br>4) TR54986<br>5) TR113752                 | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Valve, Intake                                                                                                    | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                               | 1) Cap, Valve<br>2) Lock, Valve                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                        | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                     | 1) TR73064 Std.<br>2) TR51734 Std.                                                 | 1) TT20129<br>2) TT20077                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                      |  |                               |                                                                                    |   |                       |
| Thermostats                                                                                                                                                                                                                                                                                                                                                                                                                                             | Fuel Transfer Pump                                                                  | Water Pump Repair Kit                                                                                            |                                                                                    | Injector, Pencil                                                                       | Seal, Injector                                                                                             |
| TAR70601 180 °F (*)<br>TAR77411 195 °F (*)                                                                                                                                                                                                                                                                                                                                                                                                              | TRE42211                                                                            | Without Impeller                                                                                                 | With Impeller                                                                      | TAR89564                                                                               | TR60746<br>TR48000                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                     | TMX9398                                                                                                          | TMX131                                                                             |                                                                                        |                                                                                                            |

(\*) Verify JD parts manual.

(1) For Tractor Model 4030 order TR97345.

(2) Use TR74194 with C.Rod (m) T20007; use TR80033 with C.Rod (m) R81410.

(3) Threaded Type.

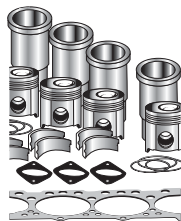
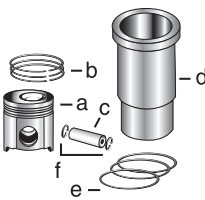
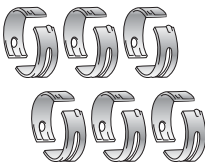
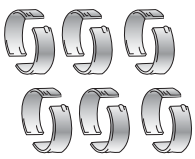
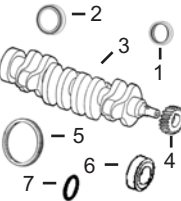
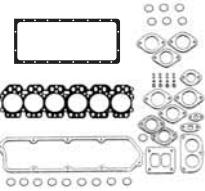
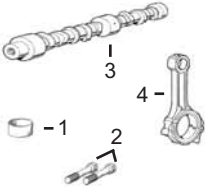
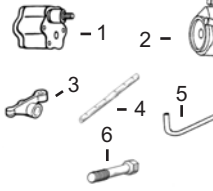
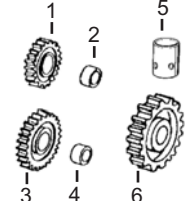
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                                                                                                  |                                                                                                                           |                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>300 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>6.329</b><br>From 277,549<br><br><b>O'rings on block</b><br><br><b>Large Pin</b><br><br><b>6 Cyl</b><br><br>Bore: 4.02 in<br>102 mm<br>Pin Ø: 1.375 in<br>35 mm<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>499 3530<br>950 4030<br>960 4400<br>2840 4425<br>3130<br><br><b>CONSTRUCTION</b><br>444<br>444C<br>444D<br>444CH<br>544A<br>570A<br>710B |      |                                                                                                                          |                                                                                                  |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Piston-Liner Kit</b>                                                                                                  | <b>Main Bearing</b>                                                                              | <b>Thrust Bearing</b>                                                                                                     | <b>Con Rod Bearing</b>                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TAR78041</b><br>Consists of:<br>a) TAR77762<br>b) TAR55759<br>c) TR125754<br>d) TR116463<br>e) TAR71618<br>f) TM41029 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                             | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                                      | TRE27348 Std.<br><br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) TAT86986</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                                                                                                  |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) TIK86986</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                                                                                                  |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          | <b>Use 6</b>                                                                                     | <b>Use 1</b>                                                                                                              | <b>Use 6</b>                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                                                                          |                                                                                                  |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                                                                 | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                               | <b>1) Pump, Oil</b><br><b>2) Oil Cooler</b><br><b>3) Rocker Arm</b><br><b>4) Rocker Shaft</b><br><b>5) Pump, Oil Tube</b> | <b>1) Lower Gear</b><br><b>2) Lower Bushing</b><br><b>3) Upper Gear</b><br><b>4) Upper Bushing</b><br><b>5) Cam. Follower</b><br><b>6) Cam. Gear</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>                                                                                                                                                                                                                                                                                                                                                      | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>             | <b>3) Camshaft</b><br><b>4) Con Rod</b>                                                          |                                                                                                                           |                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) TAR67942</b><br><b>2) TRE44574</b><br><b>3) TAT22562</b><br><b>4) TT20094</b><br><b>5) TR114282 (142T)</b>                                                                                                                                                                                                                                                                                                               | <b>1) TRE501580</b><br><b>2) TRE38852</b><br><b>3) TR114157</b><br><b>4) TR97344 (1)</b><br><b>5) TR75728</b>            | <b>1) TR55647 x6</b><br><b>2) TR74194 x12</b><br><b>3) TR82821 (2)</b><br><b>4) TRE16495 (3)</b> | <b>1) TRE55343</b><br><b>2) TRE31929</b><br><b>3) TRE31973</b><br><b>4) TR54986</b><br><b>5) TR113752</b>                 | <b>1) TAT24252</b><br><b>2) TT26321</b><br><b>3) TAT18009</b><br><b>4) TT20034</b><br><b>5) TT20073 x12</b><br><b>6) TT20070</b>                     |
|                                                                                                                                                                                                                                                                                                                                                              | Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                  | Valve, Exhaust                                                                                                           | Insert, Valve<br>1) Intake<br>2) Exhaust                                                         | 1) Cap, Valve<br>2) Lock, Valve                                                                                           | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                                                                                                                                                                                                                                                                                                                                   | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                             | 1) TR73064 Std.<br>2) TR51734 Std.                                                               | 1) TT20129<br>2) TT20077                                                                                                  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                              | Thermostats                                                                                                                                                                                                                                                                                                                                                                                                                    | Fuel Transfer Pump                                                                                                       | Water Pump Repair Kit                                                                            | Injector, Pencil                                                                                                          | Seal, Injector                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TAR70601 180 °F (*)<br>TAR77411 195 °F (*)<br>TRE33705 180 °F (*)                                                                                                                                                                                                                                                                                                                                                              | TRE42211                                                                                                                 | Without Impeller<br>TMX9398<br>With Impeller<br>TMX131                                           | TAR89564                                                                                                                  | TR60746<br>TR48000                                                                                                                                   |

(\*) Verify JD manual.

(1) For Tractor Model 4030 order TR97345.

(2) Threaded Type.

(3) For Connecting Rods RE16495 and RE21076 Use Connecting Rod Bolt TR80033.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                     |                                                                                                               |                                                                                                            |                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <div>300 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.359D</div> <div>6 Cyl</div> <div>Bore: 4.19 in<br/>106.5 mm</div> <div>Pin Ø: 1.375 in<br/>35 mm</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>955 3040 3640</div> <div>975 3050 4420</div> <div>985 3140 4530</div> <div>1055 3150 7440</div> <div>1075 3155 7445</div> <div>2940 3155TSS 9900</div> <div>2950 3255 9910</div> <div>2955 3350 9920</div> <div>CONSTRUCTION</div> <div>444D</div> <div>570B</div> |    |    |                             |                         |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) Engine O/H Kit                                                                   | Piston-Liner Kit                                                                    | Main Bearing                                                                                                  | Thrust Bearing                                                                                             | Con Rod Bearing                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2) Engine I/F Kit                                                                   | TRE30250<br>Consists of:                                                            | TRE27352 Std.                                                                                                 | TAT21139 Std.                                                                                              | TRE27348 Std.                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) TRE50784                                                                         | a) TRE19282                                                                         | TRE27353 .010                                                                                                 | TAT21132 .010                                                                                              | TRE27349 .010                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2) TIK50784                                                                         | b) TRE66820                                                                         | TRE27360 .020                                                                                                 | TAT21134 .020                                                                                              | TRE27358 .020                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | c) TR125754                                                                         | TRE27368 .030                                                                                                 | TAT21136 .030                                                                                              | TRE27364 .030                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | d) TR116281                                                                         | Use 6                                                                                                         | Use 1                                                                                                      | Use 6                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | e) TAR65507                                                                         |                                                                                                               |                                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | f) TM41029                                                                          |                                                                                                               |                                                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |    |                             |                         |    |
| 1) Front Seal<br>2) Rear Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) O/H Gasket Set                                                                   | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                                | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube<br>6) Cyl Hd Cap Screw | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |                                                                                       |
| 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                                                                                                                                                                                                                                                                                                                                                                                       | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk    | 3) Camshaft<br>4) Con Rod                                                           |                                                                                                               |                                                                                                            |                                                                                       |
| 1) TAR67942<br>2) TRE44574<br>3) TAT22562<br>4) TT20094<br>5) TR28811 (129T)<br>6) TR81989<br>7) TH35244                                                                                                                                                                                                                                                                                                                                                                                             | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728              | 1) TR55647 x6<br>2) TR80033 x12<br>3) TR82821 (3)<br>4) TRE16495                    | 1) TRE55343 (2)<br>2) TRE31929<br>3) TRE31973<br>4) TR54986<br>5) TR113752<br>6) TR85363 x26 (4)              | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070                     |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                   | Valve, Intake                                                                       | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                      | 1) Cap, Valve<br>2) Lock, Valve                                                                            | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                             |
| TR79623 Std.<br>TR79628 .003<br>TR79629 .015                                                                                                                                                                                                                                                                                                                                                                                                                                                         | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                        | 1) TR73064 Std.<br>2) TR51734 Std.                                                  | 1) TT20129<br>2) TT20077                                                                                      | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                           |                       |  |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                       | Water Pump                                                                                                    | Transmission Oil Pump                                                                                      |                                                                                       |
| TAR48675 180° F (1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TRE42211                                                                            | See Chart on Page IT18                                                              | TRE31600 (5)                                                                                                  | TAL120106                                                                                                  | TAL68094                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                     |                                                                                                               | Verify P/N for your application                                                                            |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                     |                                                                                                               | 1) Seal, Injector<br>2) Injector, Pencil<br>1) TR60746<br>TR48000<br>2) TAR89564                           |                                                                                       |

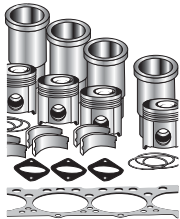
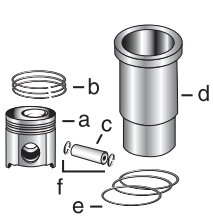
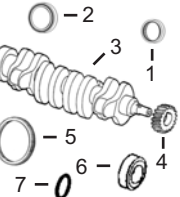
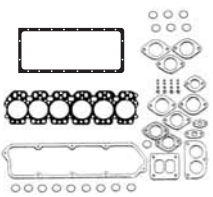
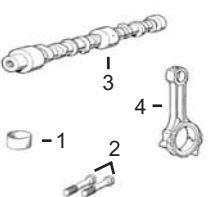
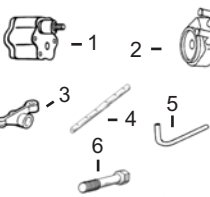
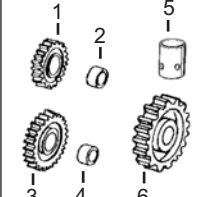
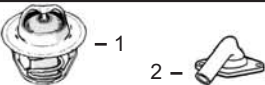
(1) Saran engines may use TRE64354.

(2) Some Engines Models may use High Capacity Pump, Oil TRE65580.

(3) Threaded Type.

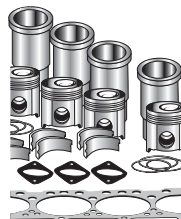
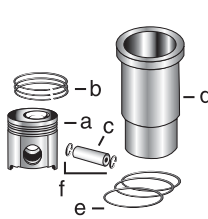
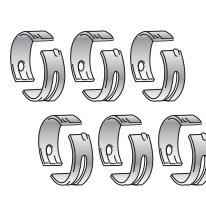
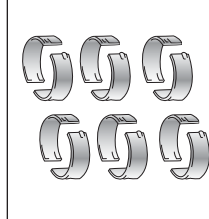
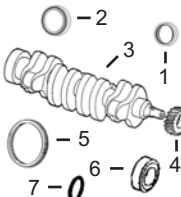
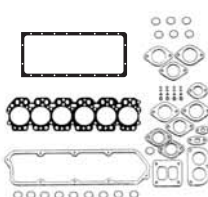
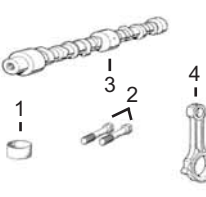
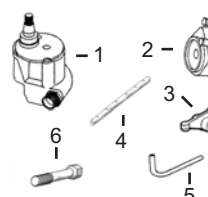
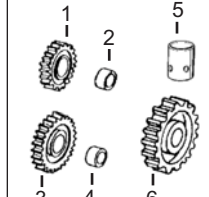
(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5) Check application for proper usage.

| 300 Series<br>Engine & Equipment<br>Model                                           |  |    |  |    |  |   |  |    |  |    |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
| <b>6059D</b>                                                                        |  | <b>1) Engine O/H Kit</b>                                                            |  | <b>Piston-Liner Kit</b>                                                             |  | <b>Main Bearing</b>                                                                 |  | <b>Thrust Bearing</b>                                                                 |  | <b>Con Rod Bearing</b>                                                                |  |
| <b>Liter Designated</b>                                                             |  | <b>2) Engine I/F Kit</b>                                                            |  | <b>TRE30250</b><br>Consists of:                                                     |  | TRE27352 Std.                                                                       |  | TAT21139 Std.                                                                         |  | TRE27348 Std.                                                                         |  |
| <b>6 Cyl</b>                                                                        |  | <b>1) TRE50784</b>                                                                  |  | a) TRE19282                                                                         |  | TRE27353 .010                                                                       |  | TAT21132 .010                                                                         |  | TRE27349 .010                                                                         |  |
| Bore: 4.19 in<br>106.5 mm                                                           |  | <b>2) TIK50784</b>                                                                  |  | b) TRE66820                                                                         |  | TRE27360 .020                                                                       |  | TAT21134 .020                                                                         |  | TRE27358 .020                                                                         |  |
| Pin Ø: 1.375 in<br>35 mm                                                            |  |                                                                                     |  | c) TR125754                                                                         |  | TRE27368 .030                                                                       |  | TAT21136 .030                                                                         |  | TRE27364 .030                                                                         |  |
|                                                                                     |  |                                                                                     |  | d) TR116281                                                                         |  | <b>Use 6</b>                                                                        |  | <b>Use 1</b>                                                                          |  | <b>Use 6</b>                                                                          |  |
|                                                                                     |  |                                                                                     |  | e) TAR65507                                                                         |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  |                                                                                     |  | f) TM41029                                                                          |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
| <b>APPLICATIONS:</b>                                                                |  |    |  |    |  |   |  |    |  |    |  |
| <b>AGRICULTURAL</b>                                                                 |  | <b>1) Front Seal</b>                                                                |  | <b>1) O/H Gasket Set</b>                                                            |  | <b>1) Bush, Con Rod</b>                                                             |  | <b>1) Pump, Oil</b>                                                                   |  | <b>1) Lower Gear</b>                                                                  |  |
| 2955 3650                                                                           |  | <b>2) Rear Seal</b>                                                                 |  | <b>2) Head Gasket Set</b>                                                           |  | <b>2) Bolt, Con Rod</b>                                                             |  | <b>2) Oil Cooler</b>                                                                  |  | <b>2) Lower Bushing</b>                                                               |  |
| 3155 9900                                                                           |  | 3) Crankshaft                                                                       |  | 3) Head Gasket                                                                      |  | 3) Camshaft                                                                         |  | 3) Rocker Arm                                                                         |  | 3) Upper Gear                                                                         |  |
| 3155TSS 9910                                                                        |  | 4) Crankshaft, Gear                                                                 |  | 4) Oil Pan Gasket                                                                   |  | 4) Con Rod                                                                          |  | 4) Rocker Shaft                                                                       |  | 4) Upper Bushing                                                                      |  |
| 3255 9920                                                                           |  | 5) Ring Gear                                                                        |  | 5) Rocker Cover Gsk                                                                 |  |                                                                                     |  | 5) Pump, Oil Tube                                                                     |  | 5) Cam. Follower                                                                      |  |
| 3640                                                                                |  | 6) Sleeve, Front                                                                    |  |                                                                                     |  |                                                                                     |  | 6) Cyl Hd Cap Screw                                                                   |  | 6) Cam. Gear                                                                          |  |
| <b>CONSTRUCTION</b>                                                                 |  | 1) TAR67942                                                                         |  | 1) TRE501580                                                                        |  | 1) TR55647 <b>x6</b>                                                                |  | 1) TRE55343 <b>(2)</b>                                                                |  | 1) TAT24252 <b>(4)</b>                                                                |  |
| 444D                                                                                |  | 2) TRE44574                                                                         |  | 2) TRE38852                                                                         |  | 2) TR80033 <b>x12</b>                                                               |  | 2) TRE31929                                                                           |  | 2) TT26321                                                                            |  |
| 570B                                                                                |  | 3) TAT22562                                                                         |  | 3) TR114157                                                                         |  | 3) TR82821 <b>(7)</b>                                                               |  | 3) TRE31973 <b>(5)</b>                                                                |  | 3) TAT18009 <b>(4)</b>                                                                |  |
|                                                                                     |  | 4) TT20094                                                                          |  | 4) TR97344                                                                          |  | 4) TRE16495                                                                         |  | 4) TR54986                                                                            |  | 4) TT20034                                                                            |  |
|                                                                                     |  | 5) TR28811 (129T)                                                                   |  | 5) TR75728                                                                          |  |                                                                                     |  | 5) TR113752                                                                           |  | 5) TT20073 <b>x12</b>                                                                 |  |
|                                                                                     |  | 6) TR114282 (142T)                                                                  |  |                                                                                     |  |                                                                                     |  | 6) TR85363 <b>x26 (1)</b>                                                             |  | 6) TT20070 <b>(4)</b>                                                                 |  |
|                                                                                     |  | 7) TR81989                                                                          |  |                                                                                     |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  | 7) TH35244                                                                          |  |                                                                                     |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
|  |  | Valve, Intake                                                                       |  | Valve, Exhaust                                                                      |  | Insert, Valve                                                                       |  | 1) Seal, Valve                                                                        |  | 1) Spring, Valve                                                                      |  |
|                                                                                     |  | TR98062 Std.                                                                        |  | TR90692 Std.                                                                        |  | 1) Intake                                                                           |  | 2) Lock, Valve                                                                        |  | 2) Rotator, Valve                                                                     |  |
|                                                                                     |  | TR97490 .015                                                                        |  | TR97492 .015                                                                        |  | 1) TR98063 Std.                                                                     |  | 1) TRE31617                                                                           |  | 1) TR26125                                                                            |  |
|                                                                                     |  |                                                                                     |  |                                                                                     |  | 2) TR98335 O/S                                                                      |  | 2) TR91889                                                                            |  | 2) TRE60005                                                                           |  |
|                                                                                     |  |                                                                                     |  |                                                                                     |  | 2) TR85687 Std.                                                                     |  |                                                                                       |  |                                                                                       |  |
|                                                                                     |  |                                                                                     |  |                                                                                     |  | 2) TR93910 O/S                                                                      |  |                                                                                       |  |                                                                                       |  |
|   |  |  |  |  |  |  |  |  |  |  |  |
| 1) Thermostat                                                                       |  | Fuel Transfer Pump                                                                  |  | Water Pump Rep Kit                                                                  |  | Water Pump                                                                          |  | Transmission Oil Pump                                                                 |  | 1) Seal, Injector                                                                     |  |
| 2) Thermostat Cover                                                                 |  |                                                                                     |  | a) Without Impeller                                                                 |  | TAR97708 (m) R73604                                                                 |  | TAL120106 TAL68094                                                                    |  | 2) Injector, Pencil                                                                   |  |
| TAR48675 180° F <b>(3)</b>                                                          |  | TRE42211                                                                            |  | See Chart on                                                                        |  | TRE16666 <b>(8)</b>                                                                 |  |                                                                                       |  | 1) TR60746                                                                            |  |
|                                                                                     |  | TRE38009 <b>(6)</b>                                                                 |  | Page IT18                                                                           |  | TAR92641 <b>(8)</b>                                                                 |  |                                                                                       |  | TR48000                                                                               |  |
|                                                                                     |  |                                                                                     |  |                                                                                     |  | TRE31600 <b>(8)</b>                                                                 |  | Verify P/N for your application                                                       |  | 2) TRE36936                                                                           |  |

- (1) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (2) Some of these engine models may use High Capacity Pump, Oil TRE65580.  
 (3) Saran engines may use TRE64354.  
 (4) Helicoidal Gears.

- (5) To ESN 379968.  
 (6) Saran Engines.  
 (7) Threaded Type.  
 (8) Check application for proper usage.

|                                                                                                                                                           |  |                                                                                                                             |  |                                                                                                                   |  |                                                                                    |  |                                                                                                               |  |                                                                                                            |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| 300 Series<br>Engine & Equipment<br>Model                                                                                                                 |  |                                            |  |                                  |  |  |  |                            |  |                         |  |
| 6 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm                                                                                         |  | 1) Engine O/H Kit                                                                                                           |  | Piston-Liner Kit                                                                                                  |  | Main Bearing                                                                       |  | Thrust Bearing                                                                                                |  | Con Rod Bearing                                                                                            |  |
|                                                                                                                                                           |  | 2) Engine I/F Kit                                                                                                           |  | TRE33115<br>Consists of:<br>a) TRE19278<br>b) TRE66820<br>c) TR124230<br>d) TR116281<br>e) TAR65507<br>f) TR54114 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                   |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                              |  | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                           |  |
|                                                                                                                                                           |  | 1) TRE50783                                                                                                                 |  |                                                                                                                   |  |                                                                                    |  |                                                                                                               |  |                                                                                                            |  |
|                                                                                                                                                           |  | 2) TIK50783                                                                                                                 |  |                                                                                                                   |  |                                                                                    |  |                                                                                                               |  |                                                                                                            |  |
|                                                                                                                                                           |  |                                            |  |                                  |  |  |  |                            |  |                         |  |
| APPLICATIONS:<br><br>AGRICULTURAL<br>3140C 7445<br>3540 7484<br>3550 9400<br>4050 9930<br>7200<br><br>CONSTRUCTION<br>444D<br>544E/EH/G<br>570B<br>710B/C |  | 1) Front Seal<br>2) Rear Seal                                                                                               |  | 1) O/H Gasket Set                                                                                                 |  | 1) Bush, Con Rod<br>2) Bolt, Con Rod                                               |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm<br>4) Rocker Shaft<br>5) Pump, Oil Tube<br>6) Cyl Hd Cap Screw |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
|                                                                                                                                                           |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                              |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                  |  | 3) Camshaft<br>4) Con Rod                                                          |  |                                                                                                               |  |                                                                                                            |  |
|                                                                                                                                                           |  | 1) TAR67942<br>2) TRE44574<br>3) TAT22562<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728                                            |  | 1) TR57451 x6<br>2) TR80033 x12<br>3) TR82821 (6)<br>4) TRE58347                   |  | 1) TRE65580 (3)<br>2) TRE31929<br>3) TRE31973 (5)<br>4) TR54986<br>5) TR113752<br>6) TR85363 x26 (1)          |  | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070                     |  |
|                                                                                                                                                           |  |                                                                                                                             |  |                                                                                                                   |  |                                                                                    |  |                                                                                                               |  |                                                                                                            |  |
|                                                                        |  | Valve, Intake                                                                                                               |  | Valve, Exhaust (4)                                                                                                |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                           |  | 1) Cap, Valve<br>2) Lock, Valve                                                                               |  | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve                                                  |  |
|                                                                                                                                                           |  | TR83071 Std.<br>TR89223 .003<br>TR89224 .015                                                                                |  | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                      |  | 1) TR73064 Std.<br>2) TR51734 Std.                                                 |  | 1) TT20129<br>2) TT20077                                                                                      |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |  |
|                                                                        |  |                                          |  |                                |  |                                                                                    |  |                          |  |                       |  |
| Thermostat                                                                                                                                                |  | Fuel Transfer Pump                                                                                                          |  | Water Pump Repair Kit                                                                                             |  |                                                                                    |  | Transmission Oil Pump                                                                                         |  | 1) Seal, Injector<br>2) Injector, Pencil                                                                   |  |
| TAR48675 180° F (2)                                                                                                                                       |  | TRE42211                                                                                                                    |  | Without Impeller                                                                                                  |  | With Impeller                                                                      |  | TAL120106                                                                                                     |  | 1) TR60746<br>TR48000<br>2) TRE37503                                                                       |  |
|                                                                                                                                                           |  |                                                                                                                             |  | See Chart on Page IT18                                                                                            |  |                                                                                    |  |                                                                                                               |  |                                                                                                            |  |
|                                                                                                                                                           |  |                                                                                                                             |  |                                                                                                                   |  |                                                                                    |  | Verify P/N for your application                                                                               |  |                                                                                                            |  |

(1) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

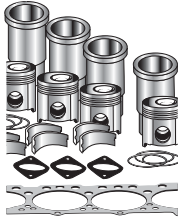
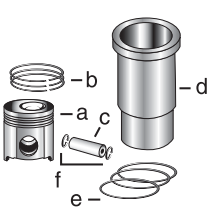
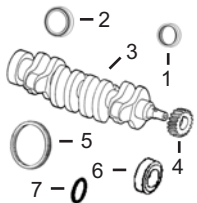
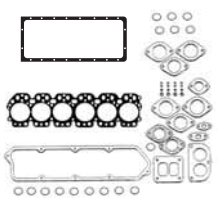
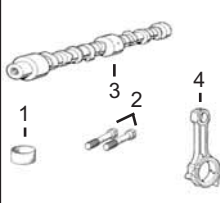
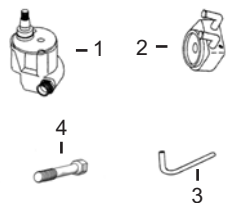
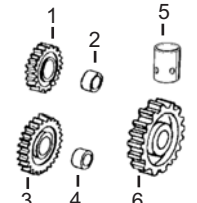
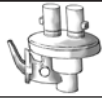
(2) Saran engines may use TRE64354.

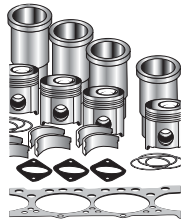
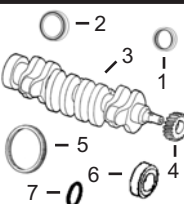
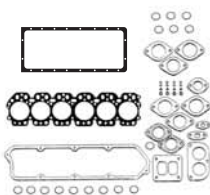
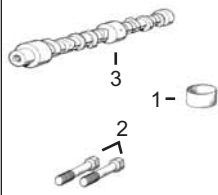
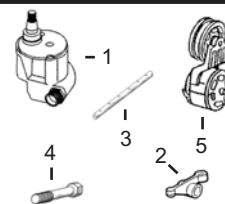
(3) Some Engine Models may use Standard Capacity Pump, Oil TRE55343.

(4) Do not use 45° Valves with RE56545 Head.

(5) To ESN 379968.

(6) Threaded Type.

| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                            |                                                                                                                             |                                             |      |    |                                             |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>6059T</b><br><br>Liter Designated<br><br>6 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL<br>3140C<br>6600<br>7200<br>7445<br>7484<br>9400<br>9930<br><br><br><br><br><b>CONSTRUCTION</b><br>444D<br>544G/E/EH<br>570B<br>710B/C | <b>1) Engine O/H Kit</b>                                                                                                    | <b>Piston-Liner Kit</b>                                                                                                      | <b>Main Bearing</b>                                                                   | <b>Thrust Bearing</b>                                                                | <b>Con Rod Bearing</b>                                                                                                         |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | <b>2) Engine I/F Kit</b>                                                                                                    | <b>TRE33115</b><br><br>Consists of:<br>a) TRE19278<br>b) TRE66820<br>c) TR124230<br>d) TR116281<br>e) TAR65507<br>f) TR54114 | TRE27352     Std.                                                                     | TAT21139     Std.                                                                    | TRE27348     Std.                                                                                                              |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | <b>1) TRE50783</b>                                                                                                          |                                                                                                                              | TRE27353     .010<br>TRE27360     .020<br>TRE27368     .030                           | TAT21132     .010<br>TAT21134     .020<br>TAT21136     .030                          | TRE27349     .010<br>TRE27358     .020<br>TRE27364     .030                                                                    |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | <b>2) TIK50783</b>                                                                                                          |                                                                                                                              | <b>Use 6</b>                                                                          | <b>Use 1</b>                                                                         | <b>Use 6</b>                                                                                                                   |                                                                                       |
|                                                                                                                                                                                                                                                                                                      |                                            |                                             |     |   |                                             |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                 | <b>1) O/H Gasket Set</b>                                                                                                     | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                    | 1) Pump, Oil<br>2) Oil Cooler<br>3) Pump, Oil Tube<br>4) Cyl Hd Cap Screw            | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear                     |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                              | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                             | 3) Camshaft<br>4) Con Rod                                                             |                                                                                      |                                                                                                                                |                                                                                       |
|                                                                                                                                                                                                                                                                                                      | 1) TAR67942<br>2) TRE44574<br>3) TAT22562<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728                                                       | 1) TR57451 <b>x6</b><br>2) TR80033 <b>x12</b><br>3) TR82821 <b>(6)</b><br>4) TRE58347 | 1) TRE65580 <b>(3)</b><br>2) TRE31929<br>3) TR113752<br>4) TR85363 <b>x26 (1)</b>    | 1) TAT24252 <b>(4)</b><br>2) TT26321<br>3) TAT18009 <b>(4)</b><br>4) TT20034<br>5) TT20073 <b>x12</b><br>6) TT20070 <b>(4)</b> |                                                                                       |
|                                                                                                                                                                                                                                                                                                      |                                          | Valve, Intake                                                                                                                | Valve, Exhaust                                                                        | Insert, Valve<br>1) Intake<br>2) Exhaust                                             | 1) Seal, Valve<br>2) Lock, Valve                                                                                               | 1) Spring, Valve<br>2) Rotator, Valve                                                 |
|                                                                                                                                                                                                                                                                                                      |                                                                                                                             | TR98062     Std.<br>TR97490     .015                                                                                         | TR90692     Std.<br>TR97492     .015                                                  | 1) TR98063     Std.<br>TR98335     Std.<br>2) TR85687     Std.<br>TR93910     O/S    | 1) TRE31617<br>2) TR91889                                                                                                      | 1) TR26125<br>2) TRE60005                                                             |
|                                                                                                                                                                                                                   |                                          |                                           |    |  |                                           |  |
| Thermostat                                                                                                                                                                                                                                                                                           | Fuel Transfer Pump                                                                                                          | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                                | Water Pump                                                                            | Water Pump                                                                           | Transmission Oil Pump                                                                                                          | 1) Seal, Injector<br>2) Injector, Pencil                                              |
| TAR48675 180° F <b>(2)</b>                                                                                                                                                                                                                                                                           | TRE42211<br>TRE38009 <b>(5)</b>                                                                                             | See Chart on<br>Page IT18                                                                                                    | TAR97708 (m) R73604<br><br>TRE16666 <b>(7)</b><br>TAR92641 <b>(7)</b>                 | TRE41157                                                                             | TAL120106<br><br>Verify P/N for<br>your application                                                                            | 1) TR60746<br>TR48000<br>2) TRE38087                                                  |

| 300 Series<br>Engine & Equipment<br>Model                                                       |  | Piston-Liner Kit                                                                     |  | Main Bearing                                                                        |  | Thrust Bearing                                                                        |  | Con Rod Bearing                                                                       |  |
|-------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
| <b>6.414D</b><br>Large Pin<br>6 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm |  |     |  |   |  |    |  |    |  |
| 1) Engine O/H Kit                                                                               |  | Piston-Liner Kit                                                                     |  | Main Bearing                                                                        |  | Thrust Bearing                                                                        |  | Con Rod Bearing                                                                       |  |
| 2) Engine I/F Kit                                                                               |  | TRE28966                                                                             |  | TRE27352 Std.                                                                       |  | TAT21139 Std.                                                                         |  | TAR97517 Std.                                                                         |  |
| 1) TOK3694                                                                                      |  | Consists of:                                                                         |  | TRE27353 .010                                                                       |  | TAT21132 .010                                                                         |  | TAR97653 .010                                                                         |  |
| 2) TIK3694                                                                                      |  | a) TRE28919<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |  | TRE27360 .020                                                                       |  | TAT21134 .020                                                                         |  | TAR97654 .020                                                                         |  |
|                                                                                                 |  |                                                                                      |  | TRE27368 .030                                                                       |  | TAT21136 .030                                                                         |  | TAR97655 .030                                                                         |  |
|                                                                                                 |  |                                                                                      |  | Use 6                                                                               |  | Use 1                                                                                 |  | Use 6                                                                                 |  |
| <b>APPLICATIONS:</b><br><br><b>OEM</b><br>Marine<br>Ag                                          |  |     |  |    |  |     |  |    |  |
| 1) Front Seal                                                                                   |  | 1) O/H Gasket Set                                                                    |  | 1) Bush, Con Rod                                                                    |  | 1) Pump, Oil                                                                          |  | 1) Lower Gear                                                                         |  |
| 2) Rear Seal                                                                                    |  |                                                                                      |  | 2) Bolt, Con Rod                                                                    |  | 2) Rocker Arm                                                                         |  | 2) Lower Bushing                                                                      |  |
| 3) Crankshaft                                                                                   |  | 2) Head Gasket Set                                                                   |  | 3) Camshaft                                                                         |  | 3) Rocker Shaft                                                                       |  | 3) Upper Gear                                                                         |  |
| 4) Crankshaft, Gear                                                                             |  | 3) Head Gasket                                                                       |  |                                                                                     |  | 4) Cyl Hd Cap Screw                                                                   |  | 4) Upper Bushing                                                                      |  |
| 5) Ring Gear                                                                                    |  | 4) Oil Pan Gasket                                                                    |  |                                                                                     |  | 5) Tensioner, Belt                                                                    |  | 5) Cam. Follower                                                                      |  |
| 6) Sleeve, Front                                                                                |  | 5) Rocker Cover Gsk                                                                  |  |                                                                                     |  |                                                                                       |  | 6) Cam. Gear                                                                          |  |
| 7) Packing, Sleeve                                                                              |  |                                                                                      |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
| 1) TAR67942                                                                                     |  | 1) TRE501580                                                                         |  | 1) TR57451 x6                                                                       |  | 1) TRE65580                                                                           |  | 1) TAT24252                                                                           |  |
| 2) TRE44574                                                                                     |  | 2) TRE38852                                                                          |  | 2) TR74195 x12 (4)                                                                  |  | 2) TRE31973                                                                           |  | 2) TT26321                                                                            |  |
| 3) TRE45517 (1)                                                                                 |  | 3) TR114157                                                                          |  | 3) TR82821 (2)                                                                      |  | 3) TR54986                                                                            |  | 3) TAT18009                                                                           |  |
| 4) TT20094                                                                                      |  | 4) TR97344                                                                           |  |                                                                                     |  | 4) TR85363 x26 (3)                                                                    |  | 4) TT20034                                                                            |  |
| 5) TR28811 (129T)                                                                               |  | 5) TR75728                                                                           |  |                                                                                     |  | 5) TAL110621                                                                          |  | 5) TT20073 x12                                                                        |  |
| TR114282 (142T)                                                                                 |  |                                                                                      |  |                                                                                     |  |                                                                                       |  | 6) TT20070                                                                            |  |
| 6) TR81989                                                                                      |  |                                                                                      |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
| 7) TH35244                                                                                      |  |                                                                                      |  |                                                                                     |  |                                                                                       |  |                                                                                       |  |
|              |  | Valve, Intake                                                                        |  | Valve, Exhaust                                                                      |  | Insert, Valve                                                                         |  | 1) Spring, Valve                                                                      |  |
|                                                                                                 |  |                                                                                      |  |                                                                                     |  | 1) Intake                                                                             |  | 2) Rotator, Valve                                                                     |  |
|                                                                                                 |  |                                                                                      |  |                                                                                     |  | 2) Exhaust                                                                            |  | 3) O'ring, Valve                                                                      |  |
| TR79623 Std.                                                                                    |  | TR79624 Std.                                                                         |  | 1) TR73064 Std.                                                                     |  | 1) TT20129                                                                            |  | 1) TR26125                                                                            |  |
| TR79628 .003                                                                                    |  | TR79625 .003                                                                         |  | 2) TR51734 Std.                                                                     |  | 2) TT20077                                                                            |  | 2) TRE11410                                                                           |  |
| TR79629 .015                                                                                    |  | TR79626 .015                                                                         |  |                                                                                     |  |                                                                                       |  | 3) TR87627                                                                            |  |
|              |  |   |  |  |  |  |  |  |  |
| Thermostat                                                                                      |  | Fuel Transfer Pump                                                                   |  | Water Pump Repair Kit                                                               |  | Injector, Pencil                                                                      |  | Seal, Injector                                                                        |  |
|                                                                                                 |  |                                                                                      |  | Without Impeller                                                                    |  |                                                                                       |  |                                                                                       |  |
|                                                                                                 |  |                                                                                      |  | With Impeller                                                                       |  |                                                                                       |  |                                                                                       |  |
| TAR48675 180° F                                                                                 |  | TRE42211                                                                             |  | TRE19510                                                                            |  | TRE11348                                                                              |  | TRE37503                                                                              |  |
|                                                                                                 |  |                                                                                      |  |                                                                                     |  |                                                                                       |  | TR60746                                                                               |  |
|                                                                                                 |  |                                                                                      |  |                                                                                     |  |                                                                                       |  | TR48000                                                                               |  |

(1) Crankshaft (m) R104523.

(2) Threaded Type.

**(3) From ESN 137165 The Cylinder Head Cap Screw is 4.5 in (114 mm) in Length.**

(4) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

| 300 Series<br>Engine & Equipment<br>Model |  | 1) Engine O/H Kit                                                                                                               |  | Piston-Liner Kit                                                                     |  | Main Bearing                                                     |  | Thrust Bearing                                            |  | Con Rod Bearing                                                                                            |  |
|-------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|------------------------------------------------------------------|--|-----------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <b>6068D</b>                              |  |                                                                                                                                 |  |                                                                                      |  |                                                                  |  |                                                           |  |                                                                                                            |  |
| Liter Designated Large Pin                |  | 2) Engine I/F Kit                                                                                                               |  | TRE28966                                                                             |  | TRE27352 Std.                                                    |  | TAT21139 Std.                                             |  | TAR97517 Std.                                                                                              |  |
| 6 Cyl                                     |  | 1) TOK3694                                                                                                                      |  | Consists of:                                                                         |  | TRE27353 .010                                                    |  | TAT21132 .010                                             |  | TAR97653 .010                                                                                              |  |
| Bore: 4.19 in<br>106.5 mm                 |  | 2) TIK3694                                                                                                                      |  | a) TRE28919<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |  | TRE27360 .020                                                    |  | TAT21134 .020                                             |  | TAR97654 .020                                                                                              |  |
| Pin Ø: 1.62 in<br>41 mm                   |  |                                                                                                                                 |  |                                                                                      |  | TRE27368 .030                                                    |  | TAT21136 .030                                             |  | TAR97655 .030                                                                                              |  |
|                                           |  |                                                                                                                                 |  |                                                                                      |  | Use 6                                                            |  | Use 1                                                     |  | Use 6                                                                                                      |  |
| <b>APPLICATIONS:</b>                      |  |                                                                                                                                 |  |                                                                                      |  |                                                                  |  |                                                           |  |                                                                                                            |  |
| AGRICULTURAL                              |  | 1) Front Seal<br>2) Rear Seal                                                                                                   |  | 1) O/H Gasket Set                                                                    |  | 1) Bush, Con Rod<br>2) Bolt, Con Rod                             |  | 1) Pump, Oil<br>2) Cyl Hd Cap Screw<br>3) Tensioner, Belt |  | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |  |
| 6506                                      |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                  |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk     |  | 3) Camshaft                                                      |  |                                                           |  |                                                                                                            |  |
| OEM                                       |  | 1) TAR67942<br>2) TRE44574<br>3) TRE45517 (3)<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728               |  | 1) TR57451 x6<br>2) TR74195 x12 (5)<br>3) TR82821 (2)            |  | 1) TRE65580<br>2) TR85363 x26 (4)<br>3) TAL110621         |  | 1) TAT24252 (1)<br>2) TT26321<br>3) TAT18009 (1)<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070 (1)         |  |
| Marine                                    |  |                                                                                                                                 |  |                                                                                      |  |                                                                  |  |                                                           |  |                                                                                                            |  |
| Ag                                        |  |                                                                                                                                 |  |                                                                                      |  |                                                                  |  |                                                           |  |                                                                                                            |  |
| Construction                              |  |                                                                                                                                 |  |                                                                                      |  |                                                                  |  |                                                           |  |                                                                                                            |  |
|                                           |  | Valve, Intake                                                                                                                   |  | Valve, Exhaust                                                                       |  | Insert, Valve<br>1) Intake<br>2) Exhaust                         |  | 1) Seal, Valve<br>2) Lock, Valve                          |  | 1) Spring, Valve<br>2) Rotator, Valve                                                                      |  |
|                                           |  | TR98062 Std.<br>TR97490 .015                                                                                                    |  | TR90692 Std.<br>TR97492 .015                                                         |  | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S |  | 1) TRE31617<br>2) TR91889                                 |  | 1) TR26125<br>2) TRE60005                                                                                  |  |
|                                           |  | Thermostat                                                                                                                      |  | Fuel Transfer Pump                                                                   |  | Water Pump Repair Kit                                            |  | Water Pump                                                |  | 1) Seal, Injector<br>2) Injector, Pencil                                                                   |  |
| TRE64354 180° F                           |  | TRE42211                                                                                                                        |  | Without Impeller<br>TRE19510                                                         |  | With Impeller<br>TRE11348                                        |  | TRE41157<br>TRE16666 (6)                                  |  | 1) TR60746<br>TR48000<br>2) TRE38087                                                                       |  |

(1) Helicoidal Gears.

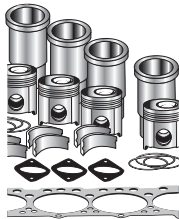
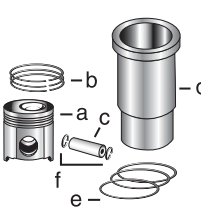
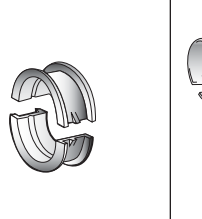
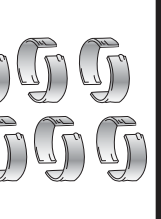
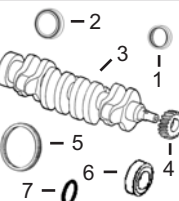
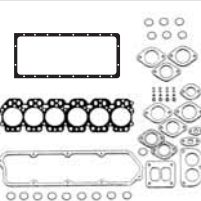
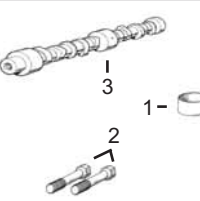
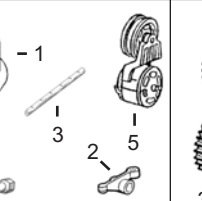
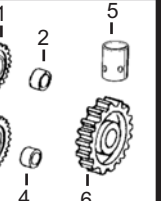
(2) Threaded Type.

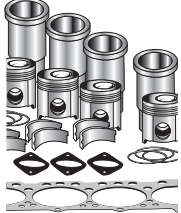
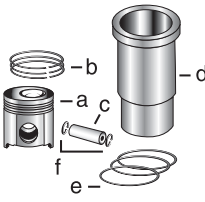
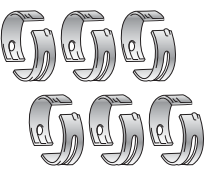
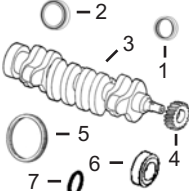
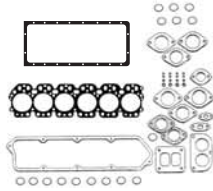
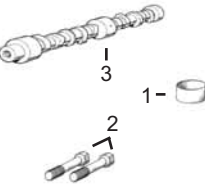
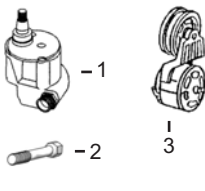
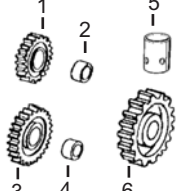
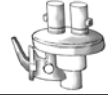
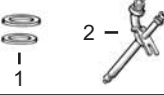
(3) Crankshaft (m) R104523.

(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

(6) Check application for proper usage.

| 300 Series<br>Engine & Equipment<br>Model                                                                                                                                                           |  |                                                |                                        |        |            |                         |                                                           |                                                                                       |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>6.414T</b><br><br>6 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm                                                                                                              |  | <b>1) Engine O/H Kit</b>                                                                                                        | <b>Piston-Liner Kit</b>                                                                                                 | <b>Main Bearing</b>                                                                      | <b>Thrust Bearing</b>                                                                         | <b>Con Rod Bearing</b>                                                                                     |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | <b>2) Engine I/F Kit</b>                                                                                                        | <b>TRE53073</b><br>Consists of:<br>a) TRE48469<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 | TRE27352 Std.<br><br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030<br><br><b>Use 6</b> | TAT21139 Std.<br><br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030<br><br><b>Use 1</b>      | TAR97517 Std.<br><br>TAR97653 .010<br>TAR97654 .020<br>TAR97655 .030<br><br><b>Use 6</b>                   |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | <b>1) TOK61614</b>                                                                                                              |                                                                                                                         |                                                                                          |                                                                                               |                                                                                                            |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | <b>2) TIK61614</b>                                                                                                              |                                                                                                                         |                                                                                          |                                                                                               |                                                                                                            |                                                           |                                                                                       |                                                                                       |
| <b>APPLICATIONS:</b><br><br><b>CONSTRUCTION</b><br><br>544B/C/D 690D<br>624E/EH/G 690E<br>640 693D<br>640D 750<br>643/D 750B<br>648D 755<br>655A/B 755A<br>670A/B 755B<br>672A 755BMIL<br>672B 790E |  |                                                |                                        |        |            |                         |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                     | <b>1) O/H Gasket Set</b>                                                                                                | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                       | 1) Pump, Oil<br>2) Rocker Arm<br>3) Rocker Shaft<br>4) Cyl Hd Cap Screw<br>5) Tensioner, Belt | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam. Gear |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                        | 3) Camshaft                                                                              |                                                                                               |                                                                                                            |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | 1) TAR67942<br>2) TRE44574<br>3) TRE45517 (3)<br>4) TT20094<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 | 1) TRE501580<br>2) TRE38852<br>3) TR114157<br>4) TR97344<br>5) TR75728                                                  | 1) TR57451 x6<br>2) TR74195 x12 (5)<br>3) TR82821 (2)                                    | 1) TRE65580<br>2) TRE31973<br>3) TR54986<br>4) TR85363 x26 (4)<br>5) TAL110621                | 1) TAT24252<br>2) TT26321<br>3) TAT18009<br>4) TT20034<br>5) TT20073 x12<br>6) TT20070                     |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  |                                              | Valve, Intake                                                                                                           | Valve, Exhaust (1)                                                                       | Insert, Valve<br>1) Intake<br>2) Exhaust                                                      | 1) Cap, Valve<br>2) Lock, Valve                                                                            | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  | TR83071 Std.<br>TR89223 .003<br>TR89224 .015                                                                                    | TR79624 Std.<br>TR79625 .003<br>TR79626 .015                                                                            | 1) TR73064 Std.<br>2) TR51734 Std.                                                       | 1) TT20129<br>2) TT20077                                                                      | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                    |                                                           |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  |                                              | Thermostat                                                                                                              | Fuel Transfer Pump                                                                       |                                                                                               | Water Pump Repair Kit                                                                                      |                                                           |  |  |
|                                                                                                                                                                                                     |  | TAR48675 180° F                                                                                                                 | TRE42211                                                                                                                | Without Impeller With Impeller                                                           |                                                                                               | TRE37503                                                                                                   | TR60746<br>TR48000                                        |                                                                                       |                                                                                       |
|                                                                                                                                                                                                     |  |                                                                                                                                 |                                                                                                                         |                                                                                          |                                                                                               | See Chart on Page IT18                                                                                     |                                                           |                                                                                       |                                                                                       |

| 300 Series<br>Engine & Equipment<br>Model                                           |  |    |  |     |  |     |  |    |  |  |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <b>6068T</b>                                                                        |  | <b>1) Engine O/H Kit</b>                                                            |  | <b>Piston-Liner Kit</b>                                                              |  | <b>Main Bearing</b>                                                                   |  | <b>Thrust Bearing</b>                                                                 |  | <b>Con Rod Bearing</b>                                                              |  |
| <b>Liter Designated</b>                                                             |  | <b>2) Engine I/F Kit</b>                                                            |  | <b>TRE53073</b>                                                                      |  | TRE27352 Std.                                                                         |  | TAT21139 Std.                                                                         |  | TAR97517 Std.                                                                       |  |
| <b>6 Cyl</b>                                                                        |  | <b>1) TOK61614</b>                                                                  |  | Consists of:                                                                         |  | TRE27353 .010                                                                         |  | TAT21132 .010                                                                         |  | TAR97653 .010                                                                       |  |
| Bore: 4.19 in<br>106.5 mm                                                           |  | <b>2) TIK61614</b>                                                                  |  | a) TRE48469<br>b) TRE66820<br>c) TR124230<br>d) TR80500<br>e) TAR65507<br>f) TR54114 |  | TRE27360 .020                                                                         |  | TAT21134 .020                                                                         |  | TAR97654 .020                                                                       |  |
| Pin Ø: 1.62 in<br>41 mm                                                             |  |                                                                                     |  |                                                                                      |  | TRE27368 .030                                                                         |  | TAT21136 .030                                                                         |  | TAR97655 .030                                                                       |  |
|                                                                                     |  |                                                                                     |  |                                                                                      |  | <b>Use 6</b>                                                                          |  | <b>Use 1</b>                                                                          |  | <b>Use 6</b>                                                                        |  |
| <b>APPLICATIONS:</b>                                                                |  |    |  |     |  |     |  |    |  |  |  |
| <b>AGRICULTURAL</b>                                                                 |  | <b>1) Front Seal</b>                                                                |  | <b>1) O/H Gasket Set</b>                                                             |  | <b>1) Bush, Con Rod</b>                                                               |  | <b>1) Pump, Oil</b>                                                                   |  | <b>1) Lower Gear</b>                                                                |  |
| 6800 7500                                                                           |  | <b>2) Rear Seal</b>                                                                 |  | 2) Head Gasket Set                                                                   |  | <b>2) Bolt, Con Rod</b>                                                               |  | 2) Cyl Hd Cap Screw                                                                   |  | 2) Lower Bushing                                                                    |  |
| 6900 7600                                                                           |  | 3) Crankshaft                                                                       |  | 3) Head Gasket                                                                       |  | 3) Camshaft                                                                           |  | 3) Tensioner, Belt                                                                    |  | 3) Upper Gear                                                                       |  |
| 7400 9400                                                                           |  | 4) Crankshaft, Gear                                                                 |  | 4) Oil Pan Gasket                                                                    |  |                                                                                       |  |                                                                                       |  | 4) Upper Bushing                                                                    |  |
| 7410                                                                                |  | 5) Ring Gear                                                                        |  | 5) Rocker Cover Gsk                                                                  |  |                                                                                       |  |                                                                                       |  | 5) Cam. Follower                                                                    |  |
|                                                                                     |  | 6) Sleeve, Front                                                                    |  |                                                                                      |  |                                                                                       |  |                                                                                       |  | 6) Cam. Gear                                                                        |  |
|                                                                                     |  | 7) Packing, Sleeve                                                                  |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |
| <b>CONSTRUCTION</b>                                                                 |  | 1) TAR67942                                                                         |  | 1) TRE501580                                                                         |  | 1) TR57451 <b>x6</b>                                                                  |  | 1) TRE65580                                                                           |  | 1) TAT24252 <b>(1)</b>                                                              |  |
| 544B/C/D 672A/B                                                                     |  | 2) TRE44574                                                                         |  | 2) TRE38852                                                                          |  | 2) TR74195 <b>x12 (5)</b>                                                             |  | 2) TR85363 <b>x26 (4)</b>                                                             |  | 2) TT26321                                                                          |  |
| 624E/EH/G 690D/E                                                                    |  | 3) TRE45517 <b>(3)</b>                                                              |  | 3) TR114157                                                                          |  | 3) TR82821 <b>(2)</b>                                                                 |  | 3) TAL110621                                                                          |  | 3) TAT18009 <b>(1)</b>                                                              |  |
| 640D 693D                                                                           |  | 4) TT20094                                                                          |  | 4) TR97344                                                                           |  |                                                                                       |  |                                                                                       |  | 4) TT20034                                                                          |  |
| 643/D 750/B                                                                         |  | 5) TR28811 (129T)                                                                   |  | 5) TR75728                                                                           |  |                                                                                       |  |                                                                                       |  | 5) TT20073 <b>x12</b>                                                               |  |
| 648D 755                                                                            |  | TR114282 (142T)                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                       |  | 6) TT20070 <b>(1)</b>                                                               |  |
| 648E 755A/B                                                                         |  | 6) TR81989                                                                          |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |
| 653 755BMIL                                                                         |  | 7) TH35244                                                                          |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |
| 655A/B 790E                                                                         |  |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |
| 670A/B                                                                              |  |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |
|  |  | Valve, Intake                                                                       |  | Valve, Exhaust                                                                       |  | Insert, Valve                                                                         |  | 1) Seal, Valve                                                                        |  | 1) Spring, Valve                                                                    |  |
|                                                                                     |  | TR98062 Std.                                                                        |  | TR90692 Std.                                                                         |  | 1) Intake                                                                             |  | 2) Lock, Valve                                                                        |  | 2) Rotator, Valve                                                                   |  |
|                                                                                     |  | TR97490 .015                                                                        |  | TR97492 .015                                                                         |  | 1) TR98063 Std.                                                                       |  | 1) TRE31617                                                                           |  | 1) TR26125                                                                          |  |
|                                                                                     |  |                                                                                     |  |                                                                                      |  | TR98335 O/S                                                                           |  | 2) TR91889                                                                            |  | 2) TRE60005                                                                         |  |
|                                                                                     |  |                                                                                     |  |                                                                                      |  | 2) TR85687 Std.                                                                       |  |                                                                                       |  |                                                                                     |  |
|                                                                                     |  |                                                                                     |  |                                                                                      |  | TR93910 O/S                                                                           |  |                                                                                       |  |                                                                                     |  |
|  |  |  |  |   |  |  |  |  |  | 1) Seal, Injector                                                                   |  |
| Thermostat                                                                          |  | Fuel Transfer Pump                                                                  |  | Water Pump Repair Kit                                                                |  | Water Pump                                                                            |  | 2) Injector, Pencil                                                                   |  |                                                                                     |  |
| TRE33705 180° F                                                                     |  | TRE42211                                                                            |  | Without Impeller                                                                     |  | TRE41157                                                                              |  | 1) TR60746                                                                            |  | 1) TR60746                                                                          |  |
|                                                                                     |  |                                                                                     |  | With Impeller                                                                        |  | TRE16666 <b>(6)</b>                                                                   |  | TR48000                                                                               |  | 2) TRE38087                                                                         |  |
|                                                                                     |  |                                                                                     |  | See Chart on Page IT18                                                               |  |                                                                                       |  |                                                                                       |  |                                                                                     |  |

(1) Helicoidal Gears.

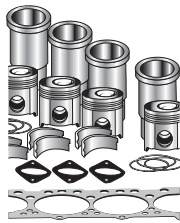
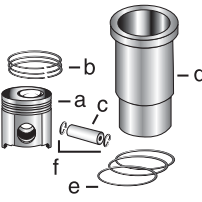
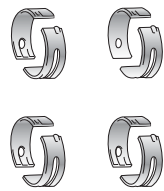
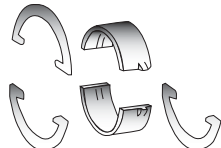
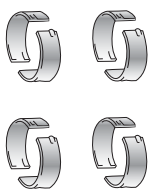
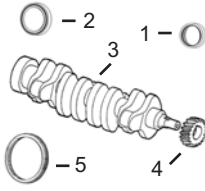
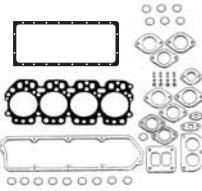
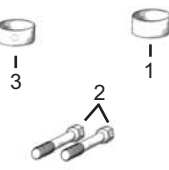
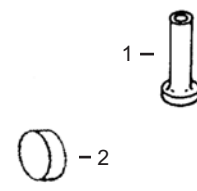
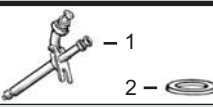
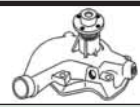
(2) Threaded Type.

(3) Crankshaft (m) R104523.

(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(5) When used on connecting rods marked R56187, torque bolts to 95 ft.lbs. Only.

(6) Check application for proper usage.

|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |                                                                              |                                                                        |                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>400 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4.270</b><br><b>To 280,000</b><br><br><b>4 Cyl</b><br><br>Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm<br><br><b>Block (m):</b><br>R46350, R46430,<br>R40910<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>3020<br><br><b>CONSTRUCTION</b><br>500<br>500A                                                                                |      |                                                                                     |                                                                              |                                                                        |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>1) Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Piston-Liner Kit</b>                                                             | <b>Main Bearing</b>                                                          | <b>Thrust Bearing</b>                                                  | <b>Con Rod Bearing</b>                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TRE23170</b><br>Consists of:                                                     | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030             | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030       | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>1) TRG17898</b>                                                                                                                                                                                                                                                                                                                                                                                                             | a) TRE23172<br>b) TAR55630<br>c) TR44161<br>d) TR40615<br>e) TAR65507<br>f) TH80753 | <b>Use 4</b>                                                                 | <b>Use 1</b><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007 | <b>Use 4</b>                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>2) TIK17898</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                              | <b>Use 3, Order Qty 1</b>                                              |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                         |                                                                                     |                                                                              |                                                                        |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b> | <b>1) Cam Follower</b><br><b>2) Plug, Camshaft</b>                     |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>                                                                                                                                                                                                                                                                                                                                                      | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>      |                                                                              |                                                                        |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1) TAR49025<br>2) TRE520036<br>3) TAR40485 (1)<br>c/s (m) R40570<br>4) TR26049 (23T)<br>5) TR28811 (129T)                                                                                                                                                                                                                                                                                                                      | 1) TAR53033<br>2) TAR53032<br>3) TR45616<br>4) TR71917                              | 1) TR30939 x4<br>2) TR66452 x8<br>3) TR46903 x3                              | 1) TR52773 x8<br>2) TR26115                                            |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                              |                                                                        |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                  | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                     | 1) Lock Valve                                                          | 1) Spring, Valve<br>2) Guide, Valve<br>3) O'ring, Valve          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | TR26124 Std.<br>To ESN 157,001<br>TR44174 Std.<br>ESN 157,002-280,000                                                                                                                                                                                                                                                                                                                                                          | TR26123 Std.<br>To ESN 157,001<br>TR44175 Std.<br>ESN 157,002-280,000               | 1) TR43680 Std.<br>2) TR43681 Std.                                           | 1) TB367R x16                                                          | 1) TR26125<br>2) TR28654<br>3) TR87627                           |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |                                                                              |                                                                        |                                                                  |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                              | Fuel Transfer Pump                                                                                                                                                                                                                                                                                                                                                                                                             | Water Pump Repair Kit                                                               |                                                                              | 1) Injector, Pencil<br>2) Seal, Injector                               | Water Pump                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                | Without Impeller                                                                    | With Impeller                                                                | 1) TAR50781<br>2) TR60746<br>TR48000                                   |                                                                  |
| TR36846 180° F                                                                                                                                                                                                                                                                                                                                                                                                                          | TAR53567                                                                                                                                                                                                                                                                                                                                                                                                                       | See Chart on Page IT18                                                              |                                                                              |                                                                        | TAR45332                                                         |

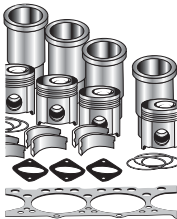
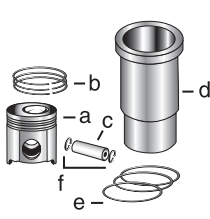
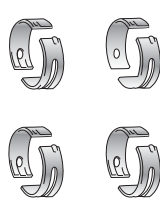
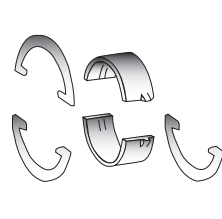
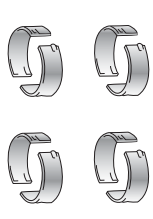
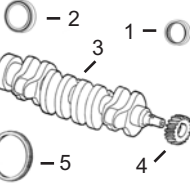
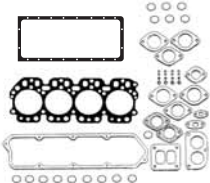
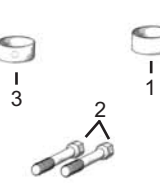
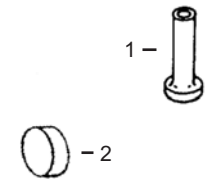
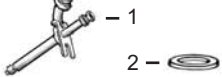
(1) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm).

| 400 Series<br>Engine & Equipment<br>Model                                                                                                        |  |                                                                                                           |                                                                                                                                                                         |                                                                                          |                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>4.270</b><br>To 280,000<br><br>4 Cyl<br><br>Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm<br><br>Block (m):<br>R26160, R32020,<br>R40850 |  |                                                                                                           |                                                                                                                                                                         |                                                                                          |                                                                                          |
|                                                                                                                                                  |  | <b>1) Eng O/H Kit</b>                                                                                     | <b>Piston-Liner Kit</b>                                                                                                                                                 | <b>Main Bearing</b>                                                                      | <b>Thrust Bearing</b>                                                                    |
|                                                                                                                                                  |  | <b>2) Eng I/F Kit</b>                                                                                     | <b>TRE23173<br/>TRE23173HC</b><br>Consists of:<br>a) TRE23172<br>TRE23172HC (2)<br>b) TAR55630<br>TAR65502 (3)<br>c) TR44161<br>d) TR32050<br>e) TAR40155<br>f) TH80753 | TAR49243 Std.<br><br>TAR49245 .010<br>TAR49246 .020<br>TAR49247 .030<br><br><b>Use 4</b> | TAR49242 Std.<br><br>TAR49238 .010<br>TAR49239 .020<br>TAR49240 .030<br><br><b>Use 1</b> |
|                                                                                                                                                  |  | <b>1) TRG17899<br/>TRG17899HC</b>                                                                         |                                                                                                                                                                         |                                                                                          | TAR45723 Std.<br><br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br><br><b>Use 4</b> |
|                                                                                                                                                  |  | <b>2) TIK17899<br/>TIK17899HC</b>                                                                         |                                                                                                                                                                         |                                                                                          |                                                                                          |
| <b>APPLICATIONS:</b><br><br>AGRICULTURAL<br>3010<br>3020<br><br><br><br><br><b>CONSTRUCTION</b><br>500<br>500A<br>500B<br>500C<br>510            |  |                                                                                                           |                                                                                                                                                                         |                                                                                          |                                                                                          |
|                                                                                                                                                  |  | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                     | <b>1) O/H Gasket Set</b>                                                                                                                                                | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bushing, Cam</b>                         | <b>1) Cam Follower<br/>2) Plug, Camshaft</b>                                             |
|                                                                                                                                                  |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                                      | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                                                               |                                                                                          |                                                                                          |
|                                                                                                                                                  |  | 1) TAR49025<br>2) TRE520036<br>3) TAR40485 (1)<br>c/s (m) R40570<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53033<br>2) TAR53032<br>3) TR45616<br>4) TR71917                                                                                                                  | 1) TR30939 x4<br>2) TR66452 x8<br>3) TR46903 x3                                          | 1) TR26342 x8<br>2) TR26115                                                              |
|                                                                                                                                                  |  | Valve, Intake                                                                                             | Valve, Exhaust                                                                                                                                                          | Insert, Valve<br>1) Intake<br>2) Exhaust                                                 | 1) Lock Valve<br><br>1) Spring, Valve<br>2) Guide, Valve<br>3) O'ring, Valve             |
|                                                                                                                                                  |  | TR26124 Std.<br>To ESN 157,001<br>TR44174 Std.<br>ESN 157,002-280,000                                     | TR26123 Std.<br>To ESN 157,001<br>TR44175 Std.<br>ESN 157,002-280,000                                                                                                   | 1) TR43680 Std.<br>2) TR43681 Std.                                                       | 1) TB367R x16<br><br>1) TR26125<br>2) TR28654<br>3) TR87627                              |
|                                                                                                                                                  |  | Thermostat                                                                                                | Fuel Transfer Pump                                                                                                                                                      | Water Pump Repair Kit                                                                    | Water Pump                                                                               |
|                                                                                                                                                  |  | TR36846 180° F                                                                                            | TAR53567<br>TRE42211                                                                                                                                                    | Without Impeller<br>With Impeller<br><br>See Chart on Page IT18                          | 1) Injector, Pencil<br>2) Seal, Injector<br>1) TAR50781<br>2) TR60746<br>TR48000         |

(1) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm).

(2) This piston uses ring set TAR65502.

(3) Used with TRE23172HC Piston.

|                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                           |                                                                                                     |                                                                                    |                                                                                       |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>4.270</div> <div>To 280,000</div> <div>Early Power Booster</div> <div>4 Cyl</div> <div>Bore: 4.25 in<br/>108 mm</div> <div>Pin Ø: 1.50 in<br/>38 mm</div> <div>Block (m):<br/>R26160, R32020, R40850</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>3010<br/>3020</div> <div>CONSTRUCTION<br/>500<br/>500A<br/>500B<br/>500C<br/>510</div> |                          |                    |  |    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) Engine O/H Kit                                                                                         | Piston-Liner Kit                                                                                    | Main Bearing                                                                       | Thrust Bearing                                                                        | Con Rod Bearing                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 2) Engine I/F Kit                                                                                         | TPLK163                                                                                             | TAR49243 Std.                                                                      | TAR49242 Std.                                                                         | TAR45723 Std.                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) TOK4163                                                                                                | Consists of:<br>a) TRE23163<br>b) TAR65502<br>c) TR44161<br>d) TR32050<br>e) TAR40155<br>f) TH80753 | TAR49245 .010<br>TAR49246 .020<br>TAR49247 .030                                    | TAR49238 .010<br>TAR49239 .020<br>TAR49240 .030                                       | TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 2) TIK4163                                                                                                |                                                                                                     | Use 4                                                                              | Use 1                                                                                 | Use 4                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                    |  |    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) Front Seal<br>2) Rear Seal                                                                             | 1) O/H Gasket Set                                                                                   | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                            | 1) Cam Follower<br>2) Plug, Camshaft                                                  | 1) Head Bolt Kit                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                                      | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                           |                                                                                    |                                                                                       |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) TAR49025<br>2) TRE520036<br>3) TAR40485 (1)<br>c/s (m) R40570<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53033<br>2) TAR53032<br>3) TR45616<br>4) TR71917                                              | 1) TR30939 x4<br>2) TR66452 x8<br>3) TR46903 x3                                    | 1) TR26342 x8<br>2) TR26115                                                           | 1) TMX364 (2)                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                     |                        | Valve, Intake                                                                                       | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                              | 1) Lock Valve                                                                         |
| TR26124 Std.<br>To ESN 157,001<br>TR44174 Std.<br>ESN 157,002-280,000                                                                                                                                                                                                                                                                                                                                               | TR26123 Std.<br>To ESN 157,001<br>TR44175 Std.<br>ESN 157,002-280,000                                     | 1) TR43680 Std.<br>2) TR43681 Std.                                                                  | 1) TB367R x16                                                                      | 1) TR26125<br>2) TR28654<br>3) TR87627                                                |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                  |                        |                 |                                                                                    |  |  |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                          | Fuel Transfer Pump                                                                                        | Water Pump Repair Kit                                                                               |                                                                                    | 1) Injector, Pencil<br>2) Seal, Injector                                              | Water Pump                                                                            |
| TR36846 180° F                                                                                                                                                                                                                                                                                                                                                                                                      | TAR53567<br>TRE42211                                                                                      | Without Impeller                                                                                    | With Impeller                                                                      | 1) TAR50781<br>2) TR60746<br>TR48000                                                  | TAR45332                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                           | See Chart on Page IT18                                                                              |                                                                                    |                                                                                       |                                                                                       |

(1) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm).

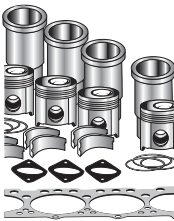
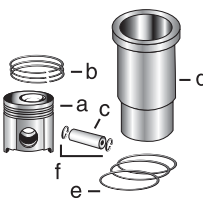
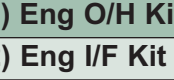
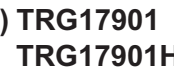
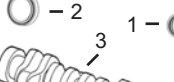
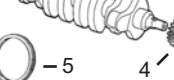
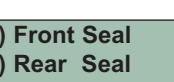
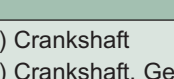
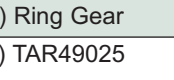
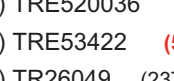
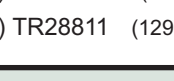
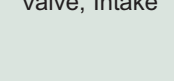
(2) TMX364 Consists of: TR88042 x4, TR88043 x3, TR88044 x6, TR88045 x5.

| 400 Series<br>Engine & Equipment<br>Model                      |  | Piston-Liner Kit                                                                                                    |  | Main Bearing                                                                                                                          |  | Thrust Bearing                                                                      |  | Con Rod Bearing                                                  |  |
|----------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|------------------------------------------------------------------|--|
| <b>4.270</b>                                                   |  | <b>1) Eng O/H Kit</b>                                                                                               |  | <b>Use 4</b>                                                                                                                          |  | <b>Use 1</b>                                                                        |  | <b>Use 4</b>                                                     |  |
| From 280,001                                                   |  | <b>2) Eng I/F Kit</b>                                                                                               |  | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030                                                                      |  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030                    |  | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030 |  |
| 4 Cyl                                                          |  | <b>1) TRG17900<br/>TRG17900HC</b>                                                                                   |  | Consists of:<br>a) TRE23168<br>TRE23163HC (2)<br>b) TAR55630<br>TAR65502 (3)<br>c) TR44161<br>d) TR40615<br>e) TAR65507<br>f) TH80753 |  | <b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> |  |                                                                  |  |
| Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm             |  | <b>2) TIK17900<br/>TIK17900HC</b>                                                                                   |  |                                                                                                                                       |  |                                                                                     |  |                                                                  |  |
| <b>Block (m):</b><br>R40700, R47520, R48430,<br>R50610, R72127 |  |                                                                                                                     |  |                                                                                                                                       |  |                                                                                     |  |                                                                  |  |
| <b>APPLICATIONS:</b><br><br>AGRICULTURAL<br>3020               |  | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                               |  | <b>1) O/H Gasket Set</b>                                                                                                              |  | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bushing, Cam</b>                    |  | <b>1) Cam Follower<br/>2) Plug, Camshaft</b>                     |  |
| <b>CONSTRUCTION</b><br>500A<br>500B<br>500C<br>510             |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Rear Gear                                                |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                             |  |                                                                                     |  | 1) Head Bolt Kit                                                 |  |
|                                                                |  | 1) TAR49025<br>2) TRE520036<br>3) TAR40485<br>c/s (m) R40570<br>4) TR26049 (23T)<br>5) TR28811 (129T)<br>6) TR63326 |  | 1) TAR53035<br>2) TAR53034<br>3) TR48292<br>4) TR71917                                                                                |  | 1) TR30939 x4<br>2) TR66452 x8<br>3) TR46903 x3                                     |  | 1) TR52773 x8<br>2) TR26115                                      |  |
|                                                                |  | 1) TMX364 (1)                                                                                                       |  |                                                                                                                                       |  |                                                                                     |  |                                                                  |  |
|                                                                |  | Valve, Intake                                                                                                       |  | Valve, Exhaust                                                                                                                        |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                            |  | 1) Cap, Valve<br>2) Lock, Valve                                  |  |
|                                                                |  | TR43883 Std.<br>TR45003 .003<br>TR45004 .015                                                                        |  | TR43679 Std.<br>TR43787 .003<br>TR43788 .015                                                                                          |  | 1) TR43680 Std.<br>2) TR43681 Std.                                                  |  | 1) TT20129<br>2) TT20077                                         |  |
|                                                                |  |                                                                                                                     |  |                                                                                                                                       |  |                                                                                     |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                          |  |
|                                                                |  |                                                                                                                     |  |                                                                                                                                       |  |                                                                                     |  |                                                                  |  |
| Thermostat                                                     |  | Fuel Transfer Pump                                                                                                  |  | Water Pump Repair Kit                                                                                                                 |  | 1) Injector, Pencil<br>2) Seal, Injector                                            |  | Water Pump                                                       |  |
| TR36846 180 °F                                                 |  | TRE42211                                                                                                            |  | Without Impeller      With Impeller                                                                                                   |  | 1) TAR50781<br>2) TR60746<br>TR48000                                                |  | TAR45332                                                         |  |
|                                                                |  |                                                                                                                     |  | See Chart on Page IT18                                                                                                                |  |                                                                                     |  |                                                                  |  |

(1) TMX364 Consists of: TR88042 x4, TR88043 x3, TR88044 x6, TR88045 x5.

(2) This piston uses ring set TAR65502.

(3) Used with TRE23163HC Piston.

| 400 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                        |                                                                                     |        |                                                                                    |        |       |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>6.404D</b><br><br>To 214, 999<br><br>6 Cyl<br><br><br>Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm<br><br><b>Block (m): (1)</b><br>R26070, R33180, R34340,<br>R40890, R40900<br><br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>4010<br>4020 |    | <b>1) Eng O/H Kit</b>                                                                   | <b>Piston-Liner Kit</b>                                                                                                                                             | <b>Main Bearing</b>                                                                      | <b>Thrust Bearing</b>                                                                    | <b>Con Rod Bearing</b>                                                                   |
|                                                                                                                                                                                                                                                                  |    | <b>2) Eng I/F Kit</b>                                                                   | <b>TRE23173<br/>TRE23173HC</b><br>Consists of:<br>a) TRE23172<br>TRE23172HC (6)<br>b) TAR55630<br>TAR65502<br>c) TR44161<br>d) TR32050<br>e) TAR40155<br>f) TH80753 | TAR49243 Std.<br><br>TAR49245 .010<br>TAR49246 .020<br>TAR49247 .030<br><br><b>Use 6</b> | TAR49242 Std.<br><br>TAR49238 .010<br>TAR49239 .020<br>TAR49240 .030<br><br><b>Use 1</b> | TAR45723 Std.<br><br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br><br><b>Use 6</b> |
|                                                                                                                                                                                                                                                                  |    | <b>1) TRG17901<br/>TRG17901HC</b><br><br><b>2) TIK17901<br/>TIK17901HC</b>              |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |    |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |    |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |    |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |    |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |   |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |  |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |  |                                                                                         |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |  | <b>1) Front Seal<br/>2) Rear Seal</b>                                                   | <b>1) O/H Gasket Set</b>                                                                                                                                            | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bushing, Cam</b>                         | <b>1) Cam Follower<br/>2) Plug, Camshaft<br/>3) O'ring, Oil Cooler</b>                   | <b>Thermostat</b>                                                                        |
|                                                                                                                                                                                                                                                                  |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                                                           |                                                                                          |                                                                                          |                                                                                          |
|                                                                                                                                                                                                                                                                  |  | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (5)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53626<br>2) TAR53625<br>3) TR45615<br>4) TR71918                                                                                                              | 1) TR30939 x6<br>2) TR66452 x12<br>3) TR46903 x4                                         | 1) TR26342 x12<br>2) TR26115<br>3) TR47153                                               | TR36846 180° F                                                                           |
|                                                                                                                                                                               | Valve, Intake                                                                       | Valve, Exhaust                                                                          | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                            | 1) Lock Valve                                                                            | 1) Spring, Valve<br>2) Guide, Valve<br>3) O'ring, Valve                                  |                                                                                          |
|                                                                                                                                                                                                                                                                  | TR26124 Std.<br>To ESN 82,801<br>TR44174 Std.<br>ESN 82,802-214,999                 | TR26123 Std.<br>To ESN 82,801<br>TR44175 Std.<br>ESN 82,802-214,999                     | 1) TR43680 Std.<br>2) TR43681 Std.                                                                                                                                  | 1) TB367R x24                                                                            | 1) TR26125<br>2) TR28654<br>3) TR87627                                                   |                                                                                          |
|                                                                                                                                                                               |  |      |                                                                                                                                                                     |     |     |                                                                                          |
| Fuel Transfer Pump                                                                                                                                                                                                                                               | Water Pump                                                                          | Water Pump Repair Kit                                                                   |                                                                                                                                                                     | 1) Injector, Pencil<br>2) Seal, Injector                                                 | Pump, Oil, Quad<br>Transmission                                                          |                                                                                          |
| TAR53567 (2)<br>TRE42211 (3)<br>TAR49771 (4)                                                                                                                                                                                                                     | TAR45332                                                                            | Without Impeller      With Impeller                                                     |                                                                                                                                                                     | 1) TAR50781<br>2) TR60746<br>TR48000                                                     | TAR41949<br>For Tractors<br>4010,4020                                                    |                                                                                          |
|                                                                                                                                                                                                                                                                  |                                                                                     | See Chart on Page IT18                                                                  |                                                                                                                                                                     |                                                                                          |                                                                                          |                                                                                          |

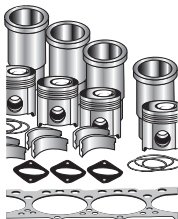
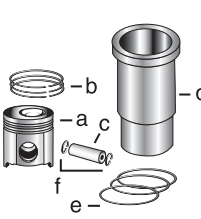
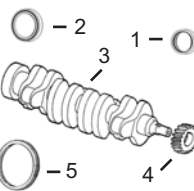
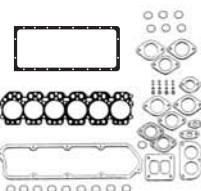
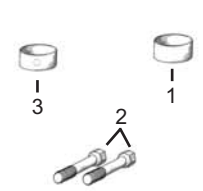
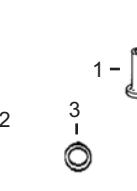
(1) Original Block.  
(2) To ESN 82,801.  
(3) ESN 82,802-422,365.  
(4) From ESN 422,366.

(5) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.  
(6) This piston uses ring set TAR65502.

| 400 Series<br>Engine & Equipment<br>Model                                                                                                                                                  |  |                                                                                         |                                                                                     |                                                                                  |                                                                                                                                                                         |                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>6.404D</b><br>To 214,999<br>6 Cyl<br><br>Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm<br><br>Block (m): (1)<br>R40930<br><br><b>APPLICATIONS:</b><br>AGRICULTURAL<br>4010<br>4020 |  |                                                                                         |                                                                                     |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  | <b>1) Engine O/H Kit</b>                                                                | <b>Piston-Liner Kit</b>                                                             | <b>Main Bearing</b>                                                              | <b>Thrust Bearing</b>                                                                                                                                                   | <b>Con Rod Bearing</b>                                                           |
|                                                                                                                                                                                            |  | <b>2) Engine I/F Kit</b>                                                                | <b>TRE23170</b><br>Consists of:                                                     | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br><b>Use 6</b> | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br><b>Use 6</b> |
|                                                                                                                                                                                            |  | <b>1) TRG17902</b>                                                                      | a) TRE23172<br>b) TAR55630<br>c) TR44161<br>d) TR40615<br>e) TAR65507<br>f) TH80753 |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  | <b>2) TIK17902</b>                                                                      |                                                                                     |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                             | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>     | <b>1) Cam Follower</b><br><b>2) Plug, Camshaft</b><br><b>3) O'ring, Oil Cooler</b>                                                                                      | <b>Thermostat</b>                                                                |
|                                                                                                                                                                                            |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                           |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (5)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53626<br>2) TAR53625<br>3) TR45615<br>4) TR71918                              | 1) TR30939 x6<br>2) TR66452 x12<br>3) TR46903 x4                                 | 1) TR52773 x12<br>2) TR26115<br>3) TR47153                                                                                                                              | TR36846 180° F                                                                   |
|                                                                                                                                                                                            |  |                                                                                         |                                                                                     |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  |                                                                                         |                                                                                     |                                                                                  |                                                                                                                                                                         |                                                                                  |
|                                                                                                                                                                                            |  | Valve, Intake                                                                           | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                         | 1) Lock Valve                                                                                                                                                           | 1) Spring, Valve<br>2) Guide, Valve<br>3) O'ring, Valve                          |
|                                                                                                                                                                                            |  | TR26124 Std.<br>To ESN 157,001<br>TR44174 Std.<br>ESN 157,002-280,000                   | TR26123 Std.<br>To ESN 82,801<br>TR44175 Std.<br>ESN 82,802-214,999                 | 1) TR43680 Std.<br>2) TR43681 Std.                                               | 1) TB367R x24                                                                                                                                                           | 1) TR26125<br>2) TR28654<br>3) TR87627                                           |
|                                                                                                                                                                                            |  | Fuel Transfer Pump                                                                      | Water Pump                                                                          | Water Pump Repair Kit                                                            | 1) Injector, Pencil<br>2) Seal, Injector                                                                                                                                | Pump, Oil, Quad<br>Transmission                                                  |
|                                                                                                                                                                                            |  | TAR53567 (2)<br>TRE42211 (3)<br>TAR49771 (4)                                            | TAR45332                                                                            | Without Impeller      With Impeller<br><br>See Chart on Page IT18                | 1) TAR50781<br>2) TR60746<br>TR48000                                                                                                                                    | TAR41949<br>For Tractors<br>4010,4020                                            |

(1) Original Block.  
(2) To ESN 82,801.  
(3) ESN 82,802-422,365.  
(4) From ESN 422,366.

(5) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.

|                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         |                                                                                                                |                                                                                    |                                                                                       |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.404D</div> <div>To 214,999</div> <div>Early Power Booster</div> <div>6 Cyl</div> <div>Bore: 4.25 in<br/>108 mm</div> <div>Pin Ø: 1.50 in<br/>38 mm</div> <div>Block (m):<br/>R26070, R33180, R34340,<br/>R40890, 40900</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>4010<br/>4020</div> |        |                               |  |    |    |
|                                                                                                                                                                                                                                                                                                                                                                      | 1) Engine O/H Kit                                                                       | Piston-Liner Kit                                                                                               | Main Bearing                                                                       | Thrust Bearing                                                                        | Con Rod Bearing                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                      | 2) Engine I/F Kit                                                                       | TPLK163<br>Consists of:<br>a) TRE23163<br>b) TAR65502<br>c) TR44161<br>d) TR32050<br>e) TAR40155<br>f) TH80753 | TAR49243 Std.<br><br>TAR49245 .010<br>TAR49246 .020<br>TAR49247 .030               | TAR49242 Std.<br><br>TAR49238 .010<br>TAR49239 .020<br>TAR49240 .030                  | TAR45723 Std.<br><br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030                  |
|                                                                                                                                                                                                                                                                                                                                                                      | 1) TOK6163                                                                              |                                                                                                                |                                                                                    |                                                                                       |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                      | 2) TIK6163                                                                              |                                                                                                                | Use 6                                                                              | Use 1                                                                                 | Use 6                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                      |        |                               |  |    |    |
|                                                                                                                                                                                                                                                                                                                                                                      | 1) Front Seal<br>2) Rear Seal                                                           | 1) O/H Gasket Set                                                                                              | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                            | 1) Cam Follower<br>2) Plug, Camshaft<br>3) O'ring, Oil Cooler                         | Thermostat                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                      | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                      |                                                                                    |                                                                                       |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                      | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (4)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53626<br>2) TAR53625<br>3) TR45615<br>4) TR71918                                                         | 1) TR30939 x6<br>2) TR66452 x12<br>3) TR46903 x4                                   | 1) TR26342 x12<br>2) TR26115<br>3) TR47153                                            | TR36846 180° F                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                      |      | Valve, Intake                                                                                                  | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                              | 1) Lock Valve                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                      | TR26124 Std.<br>To ESN 82,801<br>TR44174 Std.<br>ESN 82,802-214,999                     | TR26123 Std.<br>To ESN 82,801<br>TR44175 Std.<br>ESN 82,802-214,999                                            | 1) TR43680 Std.<br>2) TR43681 Std.                                                 | 1) TB367R x24                                                                         | 1) TR26125<br>2) TR28654<br>3) TR87627                                                |
|                                                                                                                                                                                                                                                                                   |      |                             |                                                                                    |  |  |
| Fuel Transfer Pump                                                                                                                                                                                                                                                                                                                                                   | Water Pump                                                                              | Water Pump Repair Kit                                                                                          |                                                                                    | 1) Injector, Pencil<br>2) Seal, Injector                                              | Pump, Oil, Quad Transmission                                                          |
| TAR53567 (1)<br>TRE42211 (2)<br>TAR49771 (3)                                                                                                                                                                                                                                                                                                                         | TAR45332                                                                                | Without Impeller                                                                                               | With Impeller                                                                      | 1) TAR50781<br>2) TR60746<br>TR48000                                                  | TAR41949<br>For Tractors<br>4010,4020                                                 |
|                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         | See Chart on Page IT18                                                                                         |                                                                                    |                                                                                       |                                                                                       |

(1) To ESN 82,801.  
 (2) ESN 82,802-422,365.  
 (3) From ESN 422,366.

(4) New style crankshaft. To adapt to old style, the center hole in the flywheel needs to be enlarged to 2.835 in. (72.0009 mm). Extra bolt holes in the rear palm of the crankshaft need to be plugged with allen head screws and tread sealer / locker. TRE53422 will require front key TR116311 for the front damper.

| 400 Series<br>Engine & Equipment<br>Model                                                                                                                                     |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|
| <b>6.404D</b><br>215,000-335,845<br><br>6 Cyl<br><br>Bore: 4.25 in<br>108 mm<br>Pin Ø: 1.50 in<br>38 mm<br><br><b>Block (m):</b><br>R40610, R40620, R45950,<br>R47170, R48440 |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| <b>1) Eng O/H Kit</b>                                                                                                                                                         |  | <b>Piston-Liner Kit</b>                                                                                                                                                 |  | <b>Main Bearing</b>                                                              |  | <b>Thrust Bearing</b>                                                                                                                                                       |  | <b>Con Rod Bearing</b>                                                           |  |
| <b>2) Eng I/F Kit</b>                                                                                                                                                         |  | <b>TRE23165<br/>TRE23165HC</b><br>Consists of:<br>a) TRE23168<br>TRE23163HC (6)<br>b) TAR55630<br>TAR65502 (7)<br>c) TR44161<br>d) TR40615<br>e) TAR65507<br>f) TH80753 |  | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br><b>Use 6</b> |  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br><b>Use 1</b><br><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> |  | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br><b>Use 6</b> |  |
| <b>1) TRG17903<br/>TRG17903HC</b>                                                                                                                                             |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| <b>2) TIK17903<br/>TIK17903HC</b>                                                                                                                                             |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                   |  | <b>1) O/H Gasket Set</b>                                                                                                                                                |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>     |  | <b>1) Cam Follower</b><br><b>2) Camshaft Kit</b><br><b>3) Plug, Camshaft</b><br><b>4) O'ring, Oil Cooler</b>                                                                |  | <b>1) Head Bolt Kit</b><br><b>2) Thermostat</b>                                  |  |
| <b>3) Crankshaft</b><br><b>4) Crankshaft, Gear</b><br><b>5) Ring Gear</b>                                                                                                     |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>                                                                                          |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (5)<br>4) TR26049 (23T)<br>5) TR28811 (129T)                                                                                       |  | 1) TAR53631<br>2) TAR53630<br>3) TR48291<br>4) TR71918                                                                                                                  |  | 1) TR30939 x6<br>2) TR66452 x12<br>3) TR46903 x4                                 |  | 1) TR52773 x12<br>2) TAR100386<br>3) TR26115<br>4) TR47153                                                                                                                  |  | 1) TMX365 (1)<br>2) TR36846 180° F                                               |  |
|                                                                                                                                                                               |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| TR43883 Std.<br>TR45003 .003<br>TR45004 .015                                                                                                                                  |  | TR43679 Std.<br>TR43787 .003<br>TR43788 .015                                                                                                                            |  | 1) TR43680 Std.<br>2) TR43681 Std.                                               |  | 1) TT20129<br>2) TT20077                                                                                                                                                    |  | 1) TR26125<br>2) TRE11410<br>3) TR87627                                          |  |
|                                                                                                                                                                               |  |                                                                                                                                                                         |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |
| <b>Fuel Transfer Pump</b>                                                                                                                                                     |  | <b>Water Pump</b>                                                                                                                                                       |  | <b>Water Pump Repair Kit</b>                                                     |  | <b>1) Injector, Pencil</b><br><b>2) Seal, Injector</b>                                                                                                                      |  | <b>Pump, Oil, Quad<br/>Transmission</b>                                          |  |
| TAR53567 (2)<br>TRE42211 (3)<br>TAR49771 (4)                                                                                                                                  |  | TAR45332                                                                                                                                                                |  | Without Impeller      With Impeller                                              |  | 1) TAR50781<br>2) TR60746<br>TR48000                                                                                                                                        |  | TAR41949<br>For Tractors<br>4000,4020                                            |  |
|                                                                                                                                                                               |  | See Chart on Page IT18                                                                                                                                                  |  |                                                                                  |  |                                                                                                                                                                             |  |                                                                                  |  |

(1) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.

(2) To ESN 82,801.

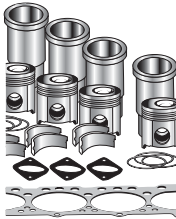
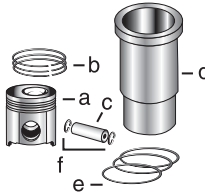
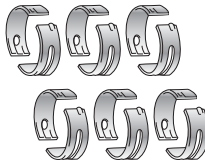
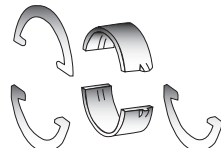
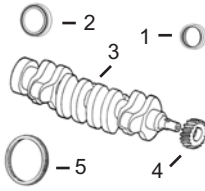
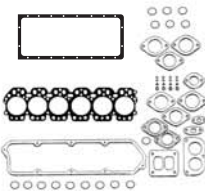
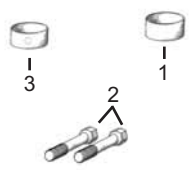
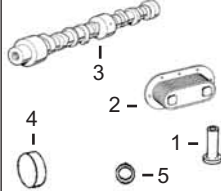
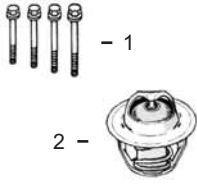
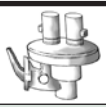
(3) ESN 82,802-422,365.

(4) From ESN 422,366.

(5) TRE53422 will require front key **TR116311** for the front damper.

(6) This piston uses ring set **TAR65502**.

(7) Used with **TRE23163HC** Piston.

|                                                                                                                                                                                                                                                                                                                                                                    |                                                                                         |                                                                                                                                             |                                                                                            |                                                                                                                                                        |                                                                                      |                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.404D</div> <div>From 335,846</div> <div>6 Cyl</div> <div>Bore: 4.25 in<br/>108 mm<br/>Pin Ø: 1.50 in<br/>38 mm</div> <div>Block (m):<br/>R49470, R49650, R59850,<br/>R72128, R87558</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>699<br/>4040<br/>4230<br/>6600<br/>7700</div> |        |                                                            |          |                                                                     |   |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 1) Eng O/H Kit                                                                          | Piston-Liner Kit                                                                                                                            | Main Bearing                                                                               | Thrust Bearing                                                                                                                                         | Con Rod Bearing                                                                      |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 2) Eng I/F Kit                                                                          | TRE23160<br>TRE23160HC<br>Consists of:<br>a) TRE23163<br>TRE23163HC<br>b) TAR65502<br>c) TR44161<br>d) TR40615<br>e) TAR65507<br>f) TH80753 | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br>Use 6                  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br>Use 1<br><br>Thrust Washer<br>TAR77747 Std.<br>TAR77753 .007<br>Use 3, Order Qty 1 | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br>Use 6            |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 1) TRG17897<br>TRG17897HC                                                               |                                                                                                                                             |                                                                                            |                                                                                                                                                        |                                                                                      |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 2) TIK17897<br>TIK17897HC                                                               |                                                                                                                                             |                                                                                            |                                                                                                                                                        |                                                                                      |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    |        |                                                            |          |                                                                     |   |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 1) Front Seal<br>2) Rear Seal                                                           | 1) O/H Gasket Set                                                                                                                           | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                                    | 1) Cam Follower<br>2) Oil Cooler<br>3) Camshaft Kit<br>4) Plug, Camshaft<br>5) O'ring, Oil Cooler                                                      | 1) Head Bolt Kit<br>2) Thermostat                                                    |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                                   |                                                                                            |                                                                                                                                                        |                                                                                      |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (5)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR63938<br>2) TAR63940<br>3) TR48291<br>4) TR71918                                                                                      | 1) TR30939 x6<br>2) TR66452 x12<br>3) TR46903 x4                                           | 1) TR52773 x12<br>2) TAR55394<br>3) TAR100386<br>4) TR26115<br>5) TR47153                                                                              | 1) TMX365 (1)<br>2) TR36846 180° F                                                   |                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                    |      | Valve, Intake<br><br>TR43883 Std.<br>TR45003 .003<br>TR45004 .015                                                                           | Valve, Exhaust<br><br>TR43679 Std.<br>TR43787 .003<br>TR43788 .015                         | Insert, Valve<br>1) Intake<br>2) Exhaust<br><br>1) TR43680 Std.<br>2) TR43681 Std.                                                                     | 1) Cap, Valve<br>2) Lock, Valve<br><br>1) TT20129<br>2) TT20077                      | 1) Spring, Valve<br>2) Rotator, Valve<br>3) O'ring, Valve<br><br>1) TR26125<br>2) TRE11410<br>3) TR87627 |
|                                                                                                                                                                                                                                                                                 | Fuel Transfer Pump<br><br>TAR53567 (2)<br>TRE42211 (3)<br>TAR49771 (4)                  | Water Pump<br><br>TAR45332                                                                                                                  | Water Pump Repair Kit<br>Without Impeller      With Impeller<br><br>See Chart on Page IT18 |                                                                                                                                                        | 1) Injector, Pencil<br>2) Seal, Injector<br><br>1) TAR50781<br>2) TR60746<br>TR48000 | Pump, Oil, Quad Transmission<br><br>TRE20918<br>For Tractors<br>4230,4040                                |

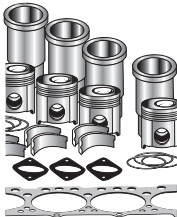
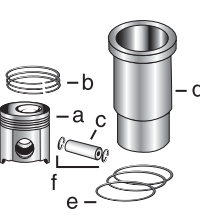
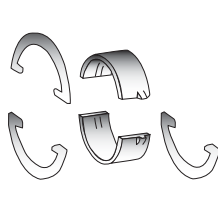
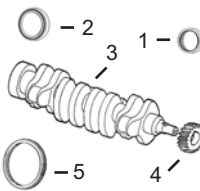
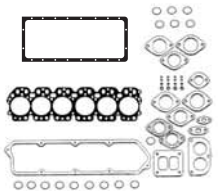
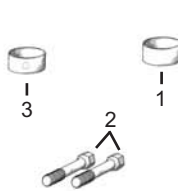
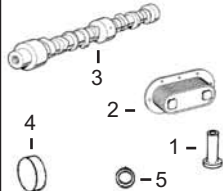
(1) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.

(2) To ESN 82,801.

(3) ESN 82,802-422,365.

(4) From ESN 422,366.

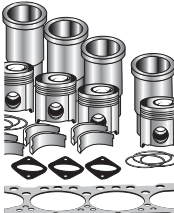
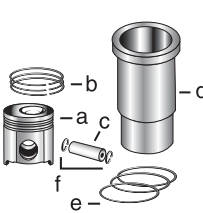
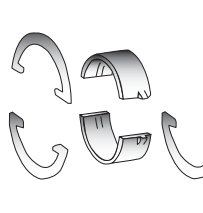
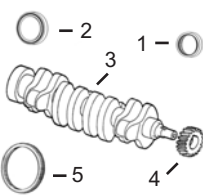
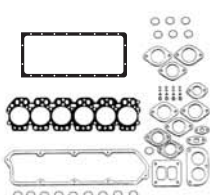
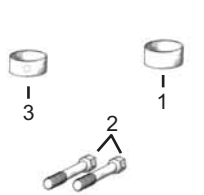
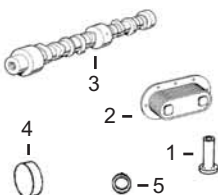
(5) TRE53422 will require front key **TR116311** for the front damper.

|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                         |                                                                                                                 |                                                                                    |                                                                                                                                                    |                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.404T/A</div> <div>To 335,845</div> <div>6 Cyl</div> <div>Bore: 4.25 in<br/>108 mm</div> <div>Pin Ø: 1.61 in<br/>41 mm</div> <div>Block (m):<br/>R43310, R45980, R47020<br/>R47110</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>4320<br/>4520<br/>4620<br/>5440</div> <div>CONSTRUCTION<br/>644<br/>644A<br/>646<br/>646B<br/>690<br/>690A</div> |        |                                |  |                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) Engine O/H Kit                                                                       | Piston-Liner Kit                                                                                                | Main Bearing                                                                       | Thrust Bearing                                                                                                                                     | Con Rod Bearing                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 2) Engine I/F Kit                                                                       | TAR51798<br>Consists of:<br>a) TAR50624<br>b) TAR51741<br>c) TR41425<br>d) TR40615<br>e) TAR65507<br>f) TR54114 | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br>Use 6          | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br>Use 1<br>Thrust Washer<br>TAR77747 Std.<br>TAR77753 .007<br>Use 3, Order Qty 1 | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br>Use 6           |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) TRG21340                                                                             |                                                                                                                 |                                                                                    |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 2) TIK21340                                                                             |                                                                                                                 |                                                                                    |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                                |   |                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) Front Seal<br>2) Rear Seal                                                           | 1) O/H Gasket Set                                                                                               | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                            | 1) Cam Follower<br>2) Oil Cooler<br>3) Camshaft Kit<br>4) Plug, Camshaft<br>5) O'ring, Oil Cooler                                                  | 1) Head Bolt Kit                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                       |                                                                                    |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (3)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR53094<br>2) TAR63270<br>3) TR48291<br>4) TR71918                                                          | 1) TR42173 x6<br>2) TR66452 x12<br>3) TR46903 x4                                   | 1) TR52773 x12<br>2) TAR55394<br>For T Engines<br>TAT25038<br>For A Engines<br>3) TAR100385<br>4) TR26115<br>5) TR47153                            | 1) TMX365 (1)                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |      | Valve, Intake                                                                                                   | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                           | 1) Cap, Valve<br>2) Lock, Valve                                                     |
| TR43883 Std. (2)<br>TR45003 .003<br>TR45004 .015                                                                                                                                                                                                                                                                                                                                                                             | TR43679 Std.<br>TR43787 .003<br>TR43788 .015                                            | 1) TR43680 Std.<br>2) TR43681 Std.                                                                              | 1) TT20129<br>2) TT20077                                                           | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                            |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                           |      |                              |                                                                                    |                                                               |                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                   | Fuel Transfer Pump                                                                      | Water Pump Repair Kit                                                                                           |                                                                                    | Pump, Oil, Quad Transmission                                                                                                                       |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                         | Without Impeller                                                                                                | With Impeller                                                                      |                                                                                                                                                    |                                                                                     |
| TR36846 180 °F                                                                                                                                                                                                                                                                                                                                                                                                               | TAR49771                                                                                | See Chart on Page IT18                                                                                          |                                                                                    | TRE20918<br>For Tractors<br>4320,4520, 4620                                                                                                        |                                                                                     |

(1) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.

(2) Use TR43914 Std (30° Angle) on ESN 245,547-335,845.

(3) TRE53422 will require front key TR116311 for the front damper.

|                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         |                                                                                                                                             |                                                                                    |                                                                                                                                                        |                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.404T/A</div> <div>From 335,846</div> <div>6 Cyl</div> <div>Bore: 4.25 in<br/>108 mm</div> <div>Pin Ø: 1.61 in<br/>41 mm</div> <div>Block (m):<br/>R49470, R49650, R59850,<br/>R72128, R87558</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL<br/>4320 5440<br/>4430 6600<br/>4630 7700</div> <div>CONSTRUCTION<br/>690B<br/>693C<br/>740</div> |        |                                                            |  |                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) Eng O/H Kit                                                                          | Piston-Liner Kit                                                                                                                            | Main Bearing                                                                       | Thrust Bearing                                                                                                                                         | Con Rod Bearing                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 2) Eng I/F Kit                                                                          | TAR63272<br>TAR63272HC<br>Consists of:<br>a) TAR54552<br>TAR54552HC<br>b) TAR51741<br>c) TR41425<br>d) TR40615<br>e) TAR65507<br>f) TR54114 | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br>Use 6          | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br>Use 1<br><br>Thrust Washer<br>TAR77747 Std.<br>TAR77753 .007<br>Use 3, Order Qty 1 | TAR45723 Std.<br>TAR46396 .010<br>TAR46397 .020<br>TAR46398 .030<br>Use 6           |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) TRG17892<br>TRG17892HC                                                               | 2) TIK17892<br>TIK17892HC                                                                                                                   |                                                                                    |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         |                                                                                                                                             |                                                                                    |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                      |        |                                                            |  |                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) Front Seal<br>2) Rear Seal                                                           | 1) O/H Gasket Set                                                                                                                           | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                            | 1) Cam Follower<br>2) Oil Cooler<br>3) Camshaft Kit<br>4) Plug, Camshaft<br>5) O'ring, Oil Cooler                                                      | 1) Head Bolt Kit                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                    | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                                   |                                                                                    |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (2)<br>4) TR26049 (23T)<br>5) TR28811 (129T) | 1) TAR63269<br>2) TAR63270<br>3) TR48291<br>4) TR71918                                                                                      | 1) TR42173 x6<br>2) TR66452 x12<br>3) TR46903 x4                                   | 1) TR52773 x12<br>2) TAR55394<br>For T Engines<br>TAT25038<br>For A Engines<br>3) TAR100385<br>4) TR26115<br>5) TR47153                                | 1) TMX365 (1)                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                      |      | Valve, Intake                                                                                                                               | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                               | 1) Cap, Valve<br>2) Lock, Valve                                                     |
| TR50358 Std.<br>TR55055 .003<br>TR55057 .015                                                                                                                                                                                                                                                                                                                                                                         | TR50357 Std.<br>TR55056 .003<br>TR55058 .015                                            | 1) TR78702 Std.<br>2) TR50356 Std.                                                                                                          | 1) TT20129<br>2) TT20077                                                           | 1) TR26125<br>2) TRE11410<br>3) TR87627                                                                                                                |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                   |      |                                                          |                                                                                    |                                                                   |                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                           | Fuel Transfer Pump                                                                      | Water Pump Repair Kit                                                                                                                       |                                                                                    | Pump, Oil, Quad Transmission                                                                                                                           |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         | Without Impeller                                                                                                                            | With Impeller                                                                      |                                                                                                                                                        |                                                                                     |
| TAR48675 180° F                                                                                                                                                                                                                                                                                                                                                                                                      | TAR57264                                                                                | See Chart on Page IT18                                                                                                                      |                                                                                    | TRE20918<br>For Tractors<br>4430,4630, 5440                                                                                                            |                                                                                     |

(1) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.

(2) TRE53422 will require front key TR116311 for the front damper.

| 400 Series<br>Engine & Equipment<br>Model     |  | Piston-Liner Kit              |  | Main Bearing               |  | Thrust Bearing                             |  | Con Rod Bearing                     |  |
|-----------------------------------------------|--|-------------------------------|--|----------------------------|--|--------------------------------------------|--|-------------------------------------|--|
| <b>6.466D</b>                                 |  | <b>1) Engine O/H Kit</b>      |  | <b>Use 6</b>               |  | <b>Use 1</b>                               |  | <b>Use 6</b>                        |  |
| <b>6 Cyl</b>                                  |  | <b>2) Engine I/F Kit</b>      |  | <b>TAR74814 Std.</b>       |  | <b>TAR77748 Std.</b>                       |  | <b>TAR45723 Std.</b>                |  |
| Bore: 4.56 in<br>116 mm                       |  | <b>1) TRG18846</b>            |  | <b>TAR74816 .010</b>       |  | <b>TAR77750 .010</b>                       |  | <b>TAR46396 .010</b>                |  |
| Pin Ø: 1.61 in<br>41 mm                       |  | <b>2) TIK18846</b>            |  | <b>TAR74817 .020</b>       |  | <b>TAR77751 .020</b>                       |  | <b>TAR46397 .020</b>                |  |
| <b>Con Rod (m):</b><br>R66922, R58882, R41423 |  | <b>Consists of:</b>           |  | <b>TAR74818 .030</b>       |  | <b>TAR77752 .030</b>                       |  | <b>TAR46398 .030</b>                |  |
| <b>APPLICATIONS:</b>                          |  | <b>1) O/H Gasket Set</b>      |  | <b>1) Bush, Con Rod</b>    |  | <b>1) Cam Follower</b>                     |  | <b>1) Head Bolt Kit</b>             |  |
| <b>AGRICULTURAL</b>                           |  | <b>2) Head Gasket Set</b>     |  | <b>2) Bolt, Con Rod</b>    |  | <b>2) Oil Cooler</b>                       |  | <b>2) TMX365 (2)*</b>               |  |
| 4050                                          |  | <b>3) Head Gasket</b>         |  | <b>3) Bushing, Cam</b>     |  | <b>3) Camshaft Kit</b>                     |  | <b>TMX366 (3)**</b>                 |  |
| 4240                                          |  | <b>4) Oil Pan Gasket</b>      |  | <b>1) TR42173 x6</b>       |  | <b>4) Plug, Camshaft</b>                   |  | <b>5) O'ring, Oil Cooler</b>        |  |
| 6620                                          |  | <b>1) TAR49025</b>            |  | <b>2) TR66452 x12</b>      |  | <b>1) TR52773 x12</b>                      |  | <b>1) TR26125</b>                   |  |
|                                               |  | <b>2) TRE520036</b>           |  | <b>3) TR46903 x4</b>       |  | <b>2) TAR55394</b>                         |  | <b>2) TRE11410</b>                  |  |
|                                               |  | <b>3) TRE53422 (4)</b>        |  | <b>(1)</b>                 |  | <b>3) TAR100386</b>                        |  | <b>3) TR87627</b>                   |  |
|                                               |  | <b>4) TR26049 (23T)</b>       |  |                            |  | <b>4) TR26115</b>                          |  |                                     |  |
|                                               |  | <b>5) TR28811 (129T)</b>      |  |                            |  | <b>5) TR47153</b>                          |  |                                     |  |
|                                               |  | <b>6) TR63326</b>             |  |                            |  |                                            |  |                                     |  |
| <b>Valve, Intake</b>                          |  | <b>Valve, Exhaust</b>         |  | <b>Insert, Valve</b>       |  | <b>1) Cap, Valve</b>                       |  | <b>1) Spring, Valve</b>             |  |
| <b>1) Intake</b>                              |  | <b>1) Exhaust</b>             |  | <b>2) Exhaust</b>          |  | <b>2) Lock, Valve</b>                      |  | <b>2) Rotator, Valve</b>            |  |
| <b>TR43883 Std.</b>                           |  | <b>TR43679 Std.</b>           |  | <b>1) TR43680 Std.</b>     |  | <b>1) TT20129</b>                          |  | <b>1) TR26125</b>                   |  |
| <b>TR45003 .003</b>                           |  | <b>TR43787 .003</b>           |  | <b>2) TR43681 Std.</b>     |  | <b>2) TT20077</b>                          |  | <b>2) TRE11410</b>                  |  |
| <b>TR45004 .015</b>                           |  | <b>TR43788 .015</b>           |  |                            |  |                                            |  | <b>3) TR87627</b>                   |  |
| <b>Thermostat</b>                             |  | <b>Fuel Transfer Pump</b>     |  | <b>Water Pump Rep Kit</b>  |  | <b>Water Pump</b>                          |  | <b>Pump, Oil, Quad Transmission</b> |  |
| <b>TR48675 180° F</b>                         |  | <b>TAR57264</b>               |  | <b>a) Without Impeller</b> |  | <b>TRE55985 (m) R71224, (m) R83561 (5)</b> |  | <b>TRE20918</b>                     |  |
|                                               |  | <b>TRE38009</b>               |  | <b>b) With Impeller</b>    |  | <b>TRE55986 (m) R71224, (m) R83561 (5)</b> |  | <b>For Tractors 4240,4050</b>       |  |
|                                               |  | <b>See Chart on Page IT18</b> |  |                            |  |                                            |  |                                     |  |

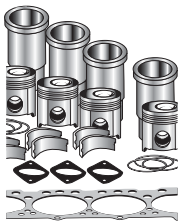
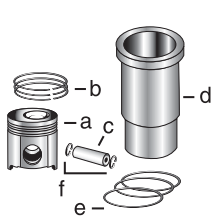
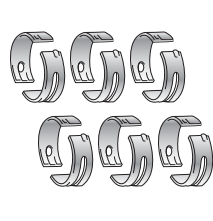
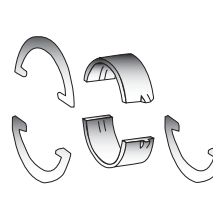
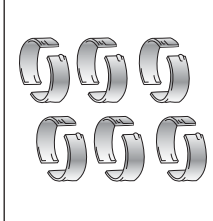
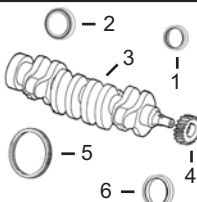
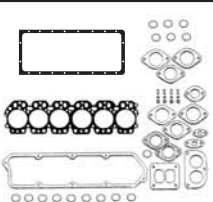
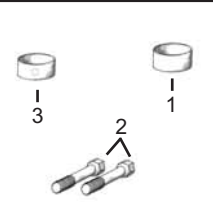
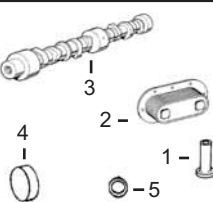
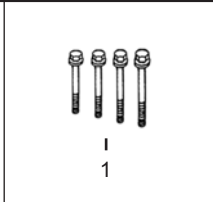
(1) Shape, Conrod Bushing.

(2) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7. \* With To ESN 318403.

(3) TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x7. \*\* With From ESN 318404.

(4) TRE53422 will require front key TR116311 for the front damper.

(5) Must check proper application.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                       |                                                                                                                                               |                                                                                                                                              |                                                                                                                                                        |                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6.466T</div> <div>To 253,372</div> <div>6.466A</div> <div>To 233,592</div> <div>6 Cyl</div> <div>Bore: 4.56 in<br/>116 mm</div> <div>Pin Ø: 1.85 in<br/>47 mm</div> <div>Con Rod (m):<br/>R57303, R67320</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>4440 7720<br/>4640 8430<br/>4840 8440<br/>5720 8450<br/>6620 8820<br/>6622 9940</div> <div>CONSTRUCTION</div> <div>644D<br/>646C<br/>740A<br/>762A</div> |                      |                                                              |                                                            |                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Eng O/H Kit                                                                                        | Piston-Liner Kit                                                                                                                              | Main Bearing                                                                                                                                 | Thrust Bearing                                                                                                                                         | Con Rod Bearing                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) Eng I/F Kit                                                                                        | TAR72079<br>TAR72079HC<br>Consists of:<br>a) TAR93629<br>TAR93629HC<br>b) TRE48380<br>c) TR57771<br>d) TAR63060<br>e) TAR98850<br>f) TE1343FN | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br>Use 6                                                                    | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br>Use 1<br><br>Thrust Washer<br>TAR77747 Std.<br>TAR77753 .007<br>Use 3, Order Qty 1 | TAR73277 Std.<br>TAR73279 .010<br>TAR73280 .020<br>TAR73281 .030<br>Use 6           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRG18845<br>TRG18845HC                                                                             |                                                                                                                                               |                                                                                                                                              |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) TIK18845<br>TIK18845HC                                                                             |                                                                                                                                               |                                                                                                                                              |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                                                              |                                                            |                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Front Seal<br>2) Rear Seal                                                                         | 1) O/H Gasket Set                                                                                                                             | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                                                                                      | 1) Cam Follower<br>2) Oil Cooler<br>3) Camshaft Kit<br>4) Plug, Camshaft<br>5) O'ring, Oil Cooler                                                      | 1) Head Bolt Kit                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Rear Gear                                  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                                                     |                                                                                                                                              |                                                                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (4)<br>4) TR26049 (23T)<br>5) TR28811 (129T)<br>6) TR63326 | 1) TAR98845<br>2) TAR98851<br>3) TRE47336<br>4) TR71918                                                                                       | 1) TR60724 x6<br>2) TR66452 x12<br>3) TR46903 x4<br> (1) | 1) TR52773 x12<br>2) TAT25038 (3)<br>3) TAR100385<br>4) TR26115<br>5) TR47153                                                                          | 1) TMX365 (2)                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    | Valve, Intake                                                                                                                                 | Valve, Exhaust                                                                                                                               | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                               | 1) Cap, Valve<br>2) Lock, Valve                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TR50358 Std.<br>TR55055 .003<br>TR55057 .015                                                          | TR50357 Std.<br>TR55056 .003<br>TR55058 .015                                                                                                  | 1) TR78702 Std.<br>2) TR50356 Std.                                                                                                           | 1) TT20129<br>2) TT20077                                                                                                                               | 1) TR26125<br>2) TRE11410<br>3) TR87627                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                               |                    |                                                            |                                                         |                                                                   |                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Fuel Transfer Pump                                                                                    | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                                                 | Water Pump                                                                                                                                   | Pump, Oil, Quad Transmission                                                                                                                           |                                                                                     |
| TAR48675 180° F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not Used                                                                                              | See Chart on Page IT18                                                                                                                        | 1) TRE55985 (m) R71224, (m) R83561 (5)<br>TRE55986 (m) R71224, (m) R83561 (5)<br>2) TRE20022 (OEM From ESN 067685)                           | TRE20918<br>For Tractors<br>4440, 4640, 4840                                                                                                           |                                                                                     |

(1) Shape, Conrod Bushing.

(2) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7.

(3) Some applications use **TAR55394**.

(4) TRE53422 will require front key **TR116311** for the front damper.

(5) Must check proper application.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| <b>400 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>6.466T</b><br>From 253,373<br><br><b>6.466A</b><br>From 317,859<br><br><b>6 Cyl</b><br><br>Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm<br><br><b>Con Rod (m):</b><br>R71074 (P/N AR93341)<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>4250 5730<br>4440 6602<br>4450 6620<br>4640 6622<br>4650 7720<br>5460 9940<br>5720 9950<br><br><b>CONSTRUCTION</b><br>644C 790D<br>690C 850B<br>762A/B 892D<br>770A/B |                                         |  |                                                                                                                                                                 |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>1) Eng O/H Kit</b>                   |  | <b>Piston-Liner Kit</b>                                                                                                                                         |  | <b>Main Bearing</b>                                                                            |  | <b>Thrust Bearing</b>                                                                                                                                                           |  | <b>Con Rod Bearing</b>                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>2) Eng I/F Kit</b>                   |  | <b>TAR100646</b><br><b>TAR100646HC</b><br>Consists of:<br>a) TAR100616<br>TAR100616HC<br>b) TRE48380<br>c) TR57771<br>d) TAR63060<br>e) TAR98850<br>f) TE1343FN |  | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br><br><b>Use 6</b>           |  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br><br><b>Use 1</b><br><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> |  | TAR73277 Std.<br>TAR73279 .010<br>TAR73280 .020<br>TAR73281 .030<br><br><b>Use 6</b> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>1) TRG18847</b><br><b>TRG18847HC</b> |  | <b>2) TIK18847</b><br><b>TIK18847HC</b>                                                                                                                         |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>1) Front Seal</b>                    |  | <b>1) O/H Gasket Set</b>                                                                                                                                        |  | <b>1) Bush, Con Rod</b>                                                                        |  | <b>1) Cam Follower</b>                                                                                                                                                          |  | <b>1) Pump, Oil</b>                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>2) Rear Seal</b>                     |  |                                                                                                                                                                 |  | <b>2) Bolt, Con Rod</b>                                                                        |  | <b>2) Oil Cooler</b>                                                                                                                                                            |  | <b>2) Repair Kit</b>                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>3) Crankshaft</b>                    |  | <b>2) Head Gasket Set</b>                                                                                                                                       |  | <b>3) Bushing, Cam</b>                                                                         |  | <b>3) Camshaft Kit</b>                                                                                                                                                          |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>4) Crankshaft, Gear</b>              |  | <b>3) Head Gasket</b>                                                                                                                                           |  | <b>4) Con Rod</b>                                                                              |  | <b>4) Plug, Camshaft</b>                                                                                                                                                        |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>5) Ring Gear</b>                     |  | <b>4) Oil Pan Gasket</b>                                                                                                                                        |  |                                                                                                |  | <b>5) O'ring, Oil Cooler</b>                                                                                                                                                    |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>6) Rear Gear</b>                     |  |                                                                                                                                                                 |  |                                                                                                |  | <b>6) Head Bolt Kit</b>                                                                                                                                                         |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>1) TAR49025</b>                      |  | <b>1) TAR98845</b>                                                                                                                                              |  | <b>1) TR74008 x6</b>                                                                           |  | <b>1) TR52773 x12</b>                                                                                                                                                           |  | <b>1) TRE60622</b>                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>2) TRE520036</b>                     |  | <b>2) TAR98851</b>                                                                                                                                              |  | <b>2) TR66452 x12</b>                                                                          |  | <b>2) TAT25038 (4)</b>                                                                                                                                                          |  | <b>2) N/A</b>                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>3) TRE53422 (5)</b>                  |  | <b>3) TRE47336</b>                                                                                                                                              |  | <b>3) TR46903 x4</b>                                                                           |  | <b>3) TAR100385</b>                                                                                                                                                             |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>4) TR26049 (23T)</b>                 |  | <b>4) TR71918</b>                                                                                                                                               |  | <b>4) TAR93341 x1</b>                                                                          |  | <b>4) TR26115</b>                                                                                                                                                               |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>5) TR28811 (129T)</b>                |  |                                                                                                                                                                 |  |  <b>(1)</b> |  | <b>5) TR47153</b>                                                                                                                                                               |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>6) TR63326</b>                       |  |                                                                                                                                                                 |  |                                                                                                |  | <b>6) TMX365 (2)*</b>                                                                                                                                                           |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  | <b>TMX366 (3)**</b>                                                                                                                                                             |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Valve, Intake</b>                    |  | <b>Valve, Exhaust</b>                                                                                                                                           |  | <b>Insert, Valve</b>                                                                           |  | <b>1) Cap, Valve</b>                                                                                                                                                            |  | <b>1) Spring, Valve</b>                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  | <b>1) Intake</b>                                                                               |  | <b>2) Lock, Valve</b>                                                                                                                                                           |  | <b>2) Rotator, Valve</b>                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  | <b>2) Exhaust</b>                                                                              |  |                                                                                                                                                                                 |  | <b>3) O'ring, Valve</b>                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>TR50358 Std.</b>                     |  | <b>TR50357 Std.</b>                                                                                                                                             |  | <b>1) TR78702 Std.</b>                                                                         |  | <b>1) TT20129</b>                                                                                                                                                               |  | <b>1) TR26125</b>                                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>TR55055 .003</b>                     |  | <b>TR55056 .003</b>                                                                                                                                             |  | <b>2) TR50356 Std.</b>                                                                         |  | <b>2) TT20077</b>                                                                                                                                                               |  | <b>2) TRE11410</b>                                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>TR55057 .015</b>                     |  | <b>TR55058 .015</b>                                                                                                                                             |  |                                                                                                |  |                                                                                                                                                                                 |  | <b>3) TR87627</b>                                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Thermostat</b>                       |  | <b>Fuel Transfer Pump</b>                                                                                                                                       |  | <b>Water Pump Rep Kit</b>                                                                      |  | <b>Water Pump</b>                                                                                                                                                               |  | <b>Pump, Oil, Quad Transmission</b>                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  | <b>a) Without Impeller</b>                                                                     |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  | <b>b) With Impeller</b>                                                                        |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>TAR48675 180° F</b>                  |  | <b>Not Used</b>                                                                                                                                                 |  | <b>See Chart on Page IT18</b>                                                                  |  | <b>1) TRE55985 (m) R71224, (m) R83561 (6)</b>                                                                                                                                   |  | <b>TRE20918</b>                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  | <b>TRE55986 (m) R71224, (m) R83561 (6)</b>                                                                                                                                      |  | <b>For Tractors</b>                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  | <b>2) TRE20022 (OEM ESN 067685 &gt;)</b>                                                                                                                                        |  | <b>4250, 4040, 4450, 4640, 4650</b>                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |  |                                                                                                                                                                 |  |                                                                                                |  |                                                                                                                                                                                 |  |                                                                                      |  |

(1) Shape, Conrod Bushing.

(2) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7. \* With ESN To 317676.

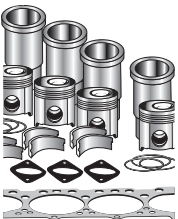
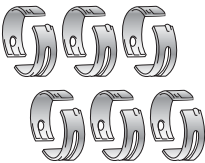
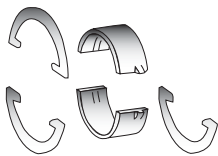
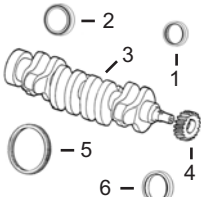
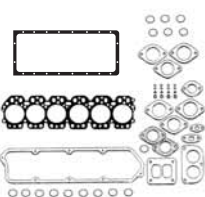
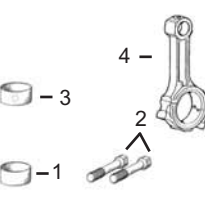
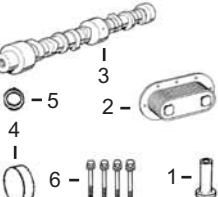
(3) TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x7. \*\* With ESN From 317677.

(4) Some applications use **TAR55394**.

(5) TRE53422 will require front key

**TR116311** for the front damper.

(6) Must check proper application.

| 400 Series<br>Engine & Equipment<br>Model                                            |  |                      |  |      |  |                                                                             |  |                                                                                      |  |
|--------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>6.466A</b><br>233,593-317,858                                                     |  | <b>1) Engine O/H Kit</b>                                                                              |  | <b>Piston-Liner Kit</b>                                                                |  | <b>Main Bearing</b>                                                                                                                                            |  | <b>Thrust Bearing</b>                                                                                                                                                   |  |
| <b>6 Cyl</b>                                                                         |  | <b>2) Engine I/F Kit</b>                                                                              |  | <b>TAR100960</b><br>Consists of:                                                       |  | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br><b>Use 6</b>                                                                               |  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> |  |
| Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm                                   |  | <b>1) TRG20142</b>                                                                                    |  | a) TAR100673<br>b) TRE48380<br>c) TR57771<br>d) TAR63060<br>e) TAR98850<br>f) TE1343FN |  |                                                                                                                                                                |  | <b>Use 6</b>                                                                                                                                                            |  |
| <b>2) TIK20142</b>                                                                   |  |                                                                                                       |  |                                                                                        |  |                                                                                                                                                                |  |                                                                                                                                                                         |  |
| <b>Con Rod (m):</b><br>R71074 (P/N AR93341)                                          |  |                      |  |       |  |                                                                              |  |                                                                                      |  |
| <b>APPLICATIONS:</b>                                                                 |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                           |  | <b>1) O/H Gasket Set</b>                                                               |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>                                                                                   |  | 1) Cam Follower<br>2) Oil Cooler<br>3) Camshaft Kit<br>4) Plug, Camshaft<br>5) O'ring, Oil Cooler<br>6) Head Bolt, Kit                                                  |  |
| <b>AGRICULTURAL</b><br>4840 8440<br>4850 8450<br>5720 8820<br>5730 9940<br>8430 9950 |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Rear Gear                                  |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                              |  | 4) Con Rod                                                                                                                                                     |  | 1) Pump, Oil<br>2) Repair Kit                                                                                                                                           |  |
| <b>CONSTRUCTION</b><br>644C 770A/B<br>690C 850B<br>740A 892D<br>762A/B               |  | 1) TAR49025<br>2) TRE520036<br>3) TRE53422 (5)<br>4) TR26049 (23T)<br>5) TR28811 (129T)<br>6) TR63326 |  | 1) TAR98845<br>2) TAR98851<br>3) TRE47336<br>4) TR71918                                |  | 1) TR74008 x6<br>2) TR66452 x12<br>3) TR46903 x4<br>4) TAR93341 x1<br> (1) |  | 1) TR52773 x12<br>2) TAT25038 (4)<br>3) TAR100385<br>4) TR26115<br>5) TR47153<br>6) TMX365 (2)*<br>TMX366 (3)**                                                         |  |
|   |  | Valve, Intake                                                                                         |  | Valve, Exhaust                                                                         |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                       |  | 1) Cap, Valve<br>2) Lock, Valve                                                                                                                                         |  |
|                                                                                      |  | TR50358 Std.<br>TR55055 .003<br>TR55057 .015                                                          |  | TR50357 Std.<br>TR55056 .003<br>TR55058 .015                                           |  | 1) TR78702 Std.<br>2) TR50356 Std.                                                                                                                             |  | 1) TT20129<br>2) TT20077                                                                                                                                                |  |
|   |  |                    |  |     |  |                                                                           |  |                                                                                                                                                                         |  |
| Thermostat                                                                           |  | Fuel Transfer Pump                                                                                    |  | Water Pump Repair Kit                                                                  |  | Water Pump                                                                                                                                                     |  |                                                                                                                                                                         |  |
| TAR48675 180° F                                                                      |  | Not Used                                                                                              |  | Without Impeller      With Impeller                                                    |  | 1) TRE55985 (m) R71224, (m) R83561 (6)<br>TRE55986 (m) R71224, (m) R83561 (6)<br>2) TRE20022 (OEM ESN 067685 >)                                                |  |                                                                                                                                                                         |  |
|                                                                                      |  |                                                                                                       |  | See Chart on Page IT18                                                                 |  |                                                                                                                                                                |  |                                                                                                                                                                         |  |

(1) Shape, Conrod Bushing.

(2) TMX365 Consists of: TR88042 x6, TR88043 x5, TR88044 x8, TR88045 x7. \* With ESN To 317676.

(3) TMX366 Consists of: TR88043 x11, TR88044 x8, TR88045 x7. \*\* With ESN From 317677.

(4) Some applications use TAR55394.

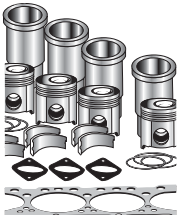
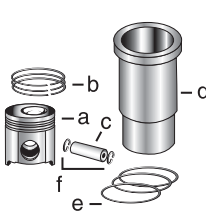
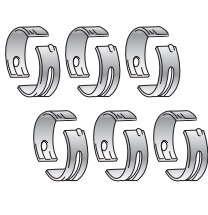
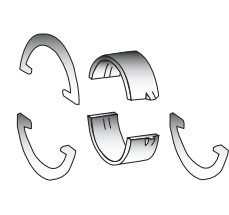
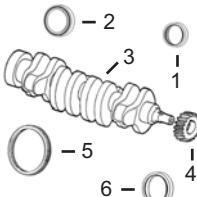
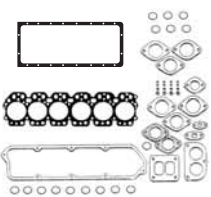
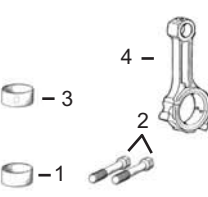
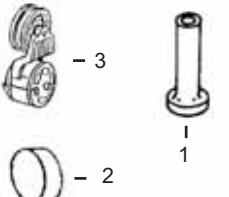
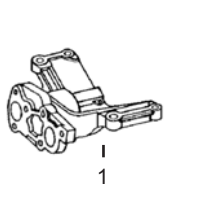
(5) TRE53422 will require front key

TR116311 for the front damper.

(6) Must check proper application.

| 400 Series<br>Engine & Equipment<br>Model          |  | Piston-Liner Kit                                                                                                           |  | Main Bearing                                                                     |  | Thrust Bearing                                                                                                                                                          |  | Con Rod Bearing                                                                                                                                              |  |
|----------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>6076T/A/H</b><br>Low Ring Piston                |  |                                                                                                                            |  |                                                                                  |  |                                                                                                                                                                         |  |                                                                                                                                                              |  |
| <b>6 Cyl</b>                                       |  | <b>1) Engine O/H Kit</b>                                                                                                   |  | <b>1) Engine I/F Kit</b>                                                         |  | <b>1) TRE60299</b>                                                                                                                                                      |  | <b>2) TIK60299</b>                                                                                                                                           |  |
| Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm |  | Consists of:<br>a) TRE57731 (1)<br>b) TRE48380<br>c) TR57771<br>d) TAR63060<br>e) TAR98850<br>f) TE1343FN                  |  | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br><b>Use 6</b> |  | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR77747 Std.<br>TAR77753 .007<br><b>Use 3, Order Qty 1</b> |  | TAR73277 Std.<br>TAR73279 .010<br>TAR73280 .020<br>TAR73281 .030<br><b>Use 6</b>                                                                             |  |
| <b>Con Rod (m):</b><br>R71074 (P/N AR93341)        |  |                                                                                                                            |  |                                                                                  |  |                                                                                                                                                                         |  |                                                                                                                                                              |  |
| <b>APPLICATIONS:</b>                               |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                |  | <b>1) O/H Gasket Set</b>                                                         |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>                                                                                            |  | <b>1) Oil Cooler</b><br><b>2) O'ring, Oil Cooler</b><br><b>3) Plug, Camshaft</b><br><b>4) Head Bolt Kit</b><br><b>5) Tappet</b><br><b>6) Tensioner, Belt</b> |  |
| <b>AGRICULTURAL</b><br>4955 8560<br>4960 8570      |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Rear Gear                                                       |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                        |  | 4) Con Rod                                                                                                                                                              |  | 1) Pump, Oil                                                                                                                                                 |  |
| <b>CONSTRUCTION</b><br>892E (1)                    |  | 1) TAR49025<br>2) TRE520036<br>3) TRE53201 (2)(5)<br>TRE53422 (3)(5)<br>4) TR105488 (4)<br>5) TR28811 (129T)<br>6) TR63326 |  | 1) TRE35647<br>2) TRE29859<br>3) TRE47336<br>4) TR71918                          |  | 1) TR74008 x6<br>2) TR66452 x12<br>3) TR87561 x4<br>4) TAR93341 x1                                                                                                      |  | 1) TAR55394 (7)<br>2) TR47153<br>3) TR82007<br>4) TMX366 (6)<br>5) TR110126 x12 (8)<br>6) TRE57498 (9)<br>TRE68715 (9)                                       |  |
|                                                    |  | Valve, Intake                                                                                                              |  | Valve, Exhaust                                                                   |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                |  | 1) Cap, Valve<br>2) Lock, Valve<br>3) Shield, Valve                                                                                                          |  |
| TR84618 Std.<br>TR93308 .003<br>TR93312 .015       |  | TR84619 Std.<br>TR93311 .003<br>TR93313 .015                                                                               |  | 1) TR84977 Std.<br>2) TR84976 Std.                                               |  | 1) TT20129<br>2) TT20077<br>3) TR102882                                                                                                                                 |  | 1) TR91822<br>2) TRE11410                                                                                                                                    |  |
|                                                    |  |                                                                                                                            |  |                                                                                  |  |                                                                                                                                                                         |  |                                                                                                                                                              |  |
| Thermostat                                         |  | Fuel Transfer Pump                                                                                                         |  | Water Pump Repair Kit                                                            |  | Water Pump                                                                                                                                                              |  |                                                                                                                                                              |  |
| TAR48675 180° F                                    |  | N/A                                                                                                                        |  | Without Impeller      With Impeller                                              |  | TRE55985 (m) R71224, (m) R83561 (9)<br>TRE55986 (m) R71224, (m) R83561 (9)<br>TRE68230 (HIGH FLOW)                                                                      |  |                                                                                                                                                              |  |
|                                                    |  |                                                                                                                            |  | See Chart on Page IT18                                                           |  |                                                                                                                                                                         |  |                                                                                                                                                              |  |

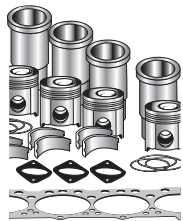
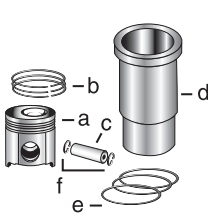
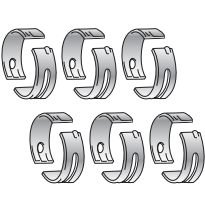
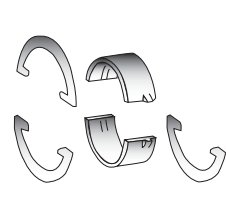
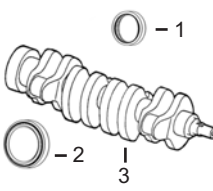
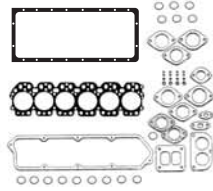
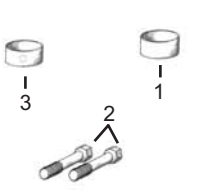
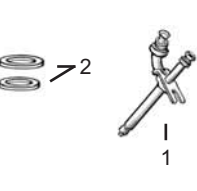
- (1) Low Ring Piston.  
(2) Long snout (3.4in.) C/S (m) R87544, RE53201.  
(3) Short snout (3in) C/S (m) RE53203, R63451, R104855.  
(4) TRE53422 Use Helicoidal front gear.  
(5) Require front key **TR116311** for the front damper.  
(6) Use with blocks marked R109806 and below.  
(7) ESN To 100664 Use: TAT25038. Not for use with ESN From 500,000.  
(8) ESN From 192401.  
(9) Check application for proper usage.  
(10) For engines with ESN 500 000 and above, and housing is marked (m) R124746 or R504071.

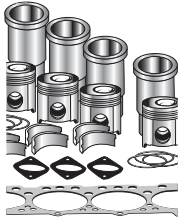
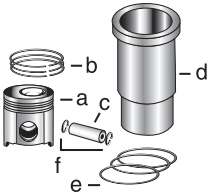
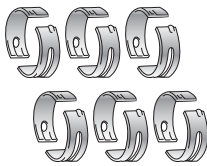
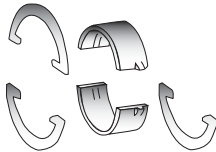
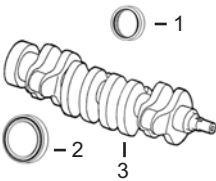
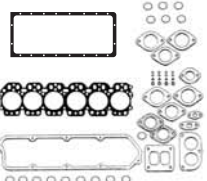
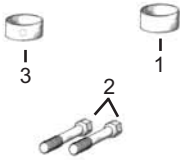
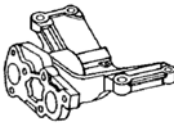
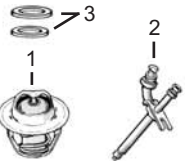
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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>400 Series</div> <div>Engine &amp; Equipment Model</div> <div>6076T/A/H</div> <div>High Ring Piston</div> <div>6 Cyl</div> <div>Bore: 4.56 in<br/>116 mm</div> <div>Pin Ø: 1.85 in<br/>47 mm</div> <div>Con Rod (m):<br/>R71074 (P/N AR93341)</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL</div> <div>1185 7700<br/>2066 7800<br/>4055 8100<br/>4255 8200<br/>4455 8300<br/>4555 9500<br/>4560 9600<br/>4755 9960<br/>4760 9965</div> <div>CONSTRUCTION</div> <div>644E/ER 772B/BH<br/>644G/GH 792D/LC<br/>740E/G 850C<br/>748E/G<br/>770B/BH</div> |                 |      |  |                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) Engine O/H Kit                                                                                | Piston-Liner Kit                                                                      | Main Bearing                                                                       | Thrust Bearing                                                                                                                                     | Con Rod Bearing                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2) Engine I/F Kit                                                                                | TRE60294<br>Consists of:                                                              | TAR74814 Std.<br>TAR74816 .010<br>TAR74817 .020<br>TAR74818 .030<br>Use 6          | TAR77748 Std.<br>TAR77750 .010<br>TAR77751 .020<br>TAR77752 .030<br>Use 1<br>Thrust Washer<br>TAR77747 Std.<br>TAR77753 .007<br>Use 3, Order Qty 1 | TAR73277 Std.<br>TAR73279 .010<br>TAR73280 .020<br>TAR73281 .030<br>Use 6           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) TRE64212                                                                                      | a) TRE57512<br>b) TRE57517<br>c) TR57771<br>d) TAR63060<br>e) TAR98850<br>f) TE1343FN |                                                                                    |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2) TIK64212                                                                                      |                                                                                       |                                                                                    |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |      |  |                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) Front Seal<br>2) Rear Seal                                                                    | 1) O/H Gasket Set                                                                     | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                            | 1) Tappet<br>2) Plug, Camshaft<br>3) Tensioner, Belt                                                                                               | 1) Pump, Oil                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Rear Gear                             | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                             | 4) Con Rod                                                                         |                                                                                                                                                    |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1) TAR49025<br>2) TRE520036<br>3) TRG23551 (1)<br>4) TR104587<br>5) TR28811 (129T)<br>6) TR63326 | 1) TRE35647<br>2) TRE29859<br>3) TRE47336<br>4) TR71918                               | 1) TR74008 x6<br>2) TR66452 x12<br>3) TR87561 x4<br>4) TAR93341 x1                 | 1) TR110126 x12<br>2) TR82007<br>3) TRE57498 (3)<br>TRE68715 (3)                                                                                   | 1) TRE60622<br>TRE507074 (2)                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               | Valve, Intake                                                                         | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                           | 1) Cap, Valve<br>2) Lock, Valve<br>3) Shield, Valve                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |   |                                                                                    |                                                               |                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Fuel Transfer Pump                                                                               | Water Pump Repair Kit                                                                 |                                                                                    | Water Pump                                                                                                                                         |                                                                                     |
| TAR48675 180° F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N/A                                                                                              | Without Impeller                                                                      | With Impeller                                                                      | TRE55985 (m) R71224, (m) R83561 (3)<br>TRE55986 (m) R71224, (m) R83561 (3)<br>TRE68230 (HIGH FLOW)                                                 |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                  | See Chart on Page IT18                                                                |                                                                                    |                                                                                                                                                    |                                                                                     |

(1) C/S (m) RE53199, with straight front gear TR104587. Helical gear should be discarded. TRG23551 will require front key TR116311 for the front damper.

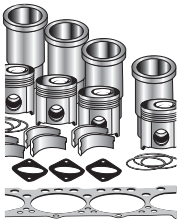
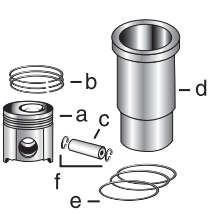
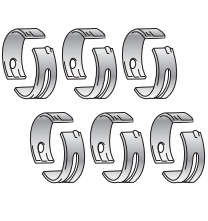
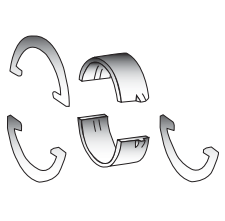
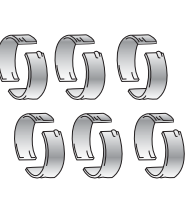
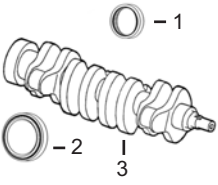
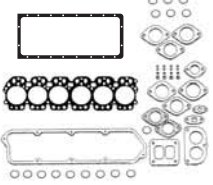
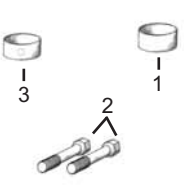
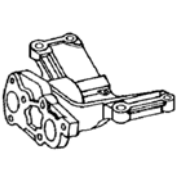
(2) For engines with ESN 500 000 and above, and housing is marked (m) R124746 or R504071.

(3) Check application for proper usage.

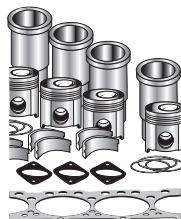
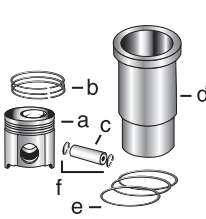
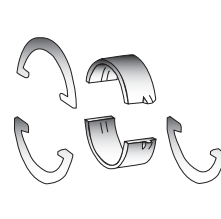
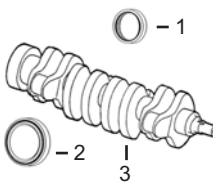
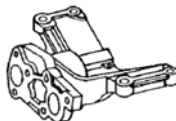
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>500 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><h1>6.531D</h1> <p>(Do Not Use this Kit for Early Engines with Block Casting No: R35130.)</p> <p><b>6 Cyl</b></p> <p>Bore: 4.75 in<br/>121 mm</p> <p>Pin Ø: 1.75 in<br/>44.4 mm</p> <p><b>Con Rod (m):</b><br/>R35048, R58881, R40238<br/>R66927, R53286</p> <p><b>Block (m):</b><br/>R40270, R42370, R45300<br/>R47510</p> <p><b>APPLICATIONS:</b></p> <p><b>AGRICULTURAL</b><br/>5020<br/>6030</p> <p><b>CONSTRUCTION</b><br/>700 760<br/>700A 760A</p> |      |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Piston-Liner Kit</b>                                                             | <b>Main Bearing</b>                                                                  | <b>Thrust Bearing</b>                                                                                                                                                       | <b>Con Rod Bearing</b>                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TPLK549</b><br>Consists of:                                                      | TAR101266 Std.<br>TAR104568 .010<br>TAR104569 .020<br>TAR104570 .030<br><b>Use 6</b> | TAR101267 Std.<br>TAR104564 .010<br>TAR104565 .020<br>TAR104566 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622 Std.<br>TAR89971 .007<br><b>Use 3, Order Qty 1</b> | TAR53020 Std.<br>TAR57208 .010<br>TAR57209 .020<br>TAR57210 .030<br><b>Use 6</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) TOK6549</b>                                                                                                                                                                                                                                                                                                                                                                                                              | a) TRE16548<br>b) TAR41295<br>c) TR35053<br>d) TR42366<br>e) TAR55951<br>f) TD2824R |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) TIK6549</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>         | <b>Thermostat</b>                                                                                                                                                           | <b>1) Injector, Pencil</b><br><b>2) Seal</b>                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>3) Crankshaft</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>      |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1) TAR49025<br>2) TRE13310<br>3) TAR92533                                                                                                                                                                                                                                                                                                                                                                                      | 1) TAR53614<br>2) TAR53613<br>3) TR78513<br>4) TR71919                              | 1) TR36328 <b>x6</b><br>2) TR66453 <b>x12</b><br>3) TR46903 <b>x4</b>                | TR36846 180°F                                                                                                                                                               | 1) TAR50782<br>2) TR60746<br>TR48000                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                  | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                             | 1) Guide, Valve<br>2) Lock, Valve<br>3) Cap, Valve                                                                                                                          | Spring, Valve                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TR42182                                                                                                                                                                                                                                                                                                                                                                                                                        | TR45823                                                                             | 1) TR41868<br>2) TR41869                                                             | 1) TR53192<br>2) TR35431<br>3) TR40366                                                                                                                                      | N/A                                                                              |

| 500 Series<br>Engine & Equipment<br>Model                                           |  |  |  |    |  |    |  |                                                                                          |  |  |  |
|-------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <b>6.531T</b>                                                                       |  | <b>1) Engine O/H Kit</b>                                                          |  | <b>Piston-Liner Kit</b>                                                             |  | <b>Main Bearing</b>                                                                  |  | <b>Thrust Bearing</b>                                                                                                                                                       |  | <b>Con Rod Bearing</b>                                                              |  |
| <b>6 Cyl</b>                                                                        |  | <b>2) Engine I/F Kit</b>                                                          |  | <b>TPLK512</b><br>Consists of:                                                      |  | TAR101266 Std.<br>TAR104568 .010<br>TAR104569 .020<br>TAR104570 .030<br><b>Use 6</b> |  | TAR101267 Std.<br>TAR104564 .010<br>TAR104565 .020<br>TAR104566 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622 Std.<br>TAR89971 .007<br><b>Use 3, Order Qty 1</b> |  | TAR53020 Std.<br>TAR57208 .010<br>TAR57209 .020<br>TAR57210 .030<br><b>Use 6</b>    |  |
| Bore: 4.75 in<br>121 mm<br>Pin Ø: 1.875 in<br>47.6 mm                               |  | <b>1) TOK6512</b>                                                                 |  | a) TAR67512<br>b) TAR53226<br>c) TR49418<br>d) TR48350<br>e) TR49423<br>f) TE1343FN |  |                                                                                      |  |                                                                                                                                                                             |  |                                                                                     |  |
| <b>Con Rod (m):</b><br>R48315, R53287, R58883,<br>R66926                            |  | <b>2) TIK6512</b>                                                                 |  |                                                                                     |  |                                                                                      |  |                                                                                                                                                                             |  |                                                                                     |  |
| <b>Block (m):</b><br>R48260, R72129, R80401                                         |  |  |  |    |  |    |  |                                                                                          |  |  |  |
| <b>APPLICATIONS:</b>                                                                |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                       |  | <b>1) O/H Gasket Set</b>                                                            |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>         |  | Pump, Oil                                                                                                                                                                   |  | 1) Thermostat<br>2) Injector, Pencil<br>3) Seal                                     |  |
| <b>CONSTRUCTION</b>                                                                 |  | 3) Crankshaft                                                                     |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                           |  |                                                                                      |  |                                                                                                                                                                             |  |                                                                                     |  |
| 644B<br>646B<br>770<br>770A<br>772A                                                 |  | 1) TAR49025<br>2) TRE13310<br>3) TAR92533                                         |  | 1) TRE17050<br>2) TAR67510<br>3) TR78513<br>4) TR71919                              |  | 1) TR76783 <b>x6</b><br>2) TR66453 <b>x12</b><br>3) TR46903 <b>x4</b>                |  | TRE60622 <b>(1)</b>                                                                                                                                                         |  | 1) TAR48675 180°F<br>2) TAR50782<br>3) TR60746<br>TR48000                           |  |
|  |  | Valve, Intake                                                                     |  | Valve, Exhaust                                                                      |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |  | 1) Guide, Valve<br>2) Lock, Valve<br>3) Cap, Valve                                                                                                                          |  | Spring, Valve<br>1) Outer<br>2) Inner<br>3) Rotator, Valve                          |  |
|                                                                                     |  | TR90602 Std.                                                                      |  | TR90601 Std.                                                                        |  | 1) TR41868<br>2) TR41869                                                             |  | 1) TR53192<br>2) TR35431<br>3) TR40366                                                                                                                                      |  | 1) TR49571<br>2) TR49569<br>3) TR81086                                              |  |

(1) Crank Driven Pump.

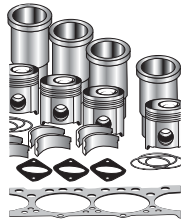
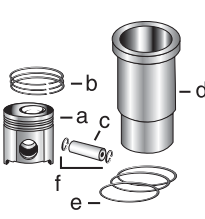
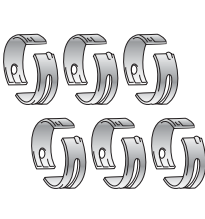
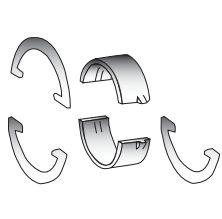
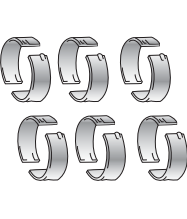
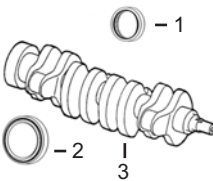
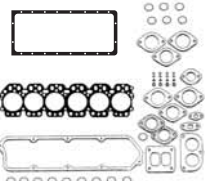
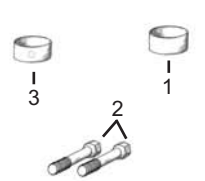
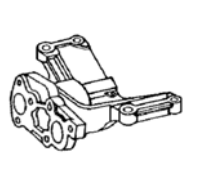
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>500 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>6.531A</b><br><br><b>6 Cyl</b><br><br>Bore: 4.75 in<br>121 mm<br>Pin Ø: 1.875 in<br>47.6 mm<br><br><b>Con Rod (m):</b><br>R48315, R53287, R58883,<br>R66926<br><br><b>Block (m):</b><br>R48260, R72129, R80401<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>6030<br>7520 |      |                                                                                                     |                                                                                    |                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                | <b>1) Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Piston-Liner Kit</b>                                                                             | <b>Main Bearing</b>                                                                | <b>Thrust Bearing</b>                                                                               | <b>Con Rod Bearing</b>                                                              |
|                                                                                                                                                                                                                                                                                                                                                                | <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TPLK225</b>                                                                                      | TAR101266 Std.<br>TAR104568 .010<br>TAR104569 .020<br>TAR104570 .030               | TAR101267 Std.<br>TAR104564 .010<br>TAR104565 .020<br>TAR104566 .030                                | TAR53020 Std.<br>TAR57208 .010<br>TAR57209 .020<br>TAR57210 .030                    |
|                                                                                                                                                                                                                                                                                                                                                                | <b>1) TOK6225</b>                                                                                                                                                                                                                                                                                                                                                                                                              | Consists of:<br>a) TAR53227<br>b) TAR53226<br>c) TR49418<br>d) TR48350<br>e) TR49423<br>f) TE1343FN | <b>Use 6</b>                                                                       | <b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622 Std.<br>TAR89971 .007<br><b>Use 3, Order Qty 1</b> | <b>Use 6</b>                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                | <b>2) TIK6225</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                                                                                    |                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                     |                                                                                    |                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                               |                    |  |                  |  |
|                                                                                                                                                                                                                                                                                                                                                                | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>       | Pump, Oil                                                                                           | Thermostat                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                | <b>3) Crankshaft</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>                      |                                                                                    |                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                | 1) TAR49025<br>2) TRE13310<br>3) TAR92533                                                                                                                                                                                                                                                                                                                                                                                      | 1) TRE17046<br>2) TAR56154<br>3) TR78513<br>4) TR71919                                              | 1) TR76783 <b>x6</b><br>2) TR66453 <b>x12</b><br>3) TR46903 <b>x4</b>              | TRE60622 <b>(1)</b>                                                                                 | TAR48675 180° F                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                             | Valve, Intake                                                                                       | Valve, Exhaust                                                                     | Insert, Valve<br>1) Intake<br>2) Exhaust                                                            | 1) Guide, Valve<br>2) Lock, Valve<br>3) Cap, Valve                                  |
|                                                                                                                                                                                                                                                                                                                                                                | TR90602 Std.                                                                                                                                                                                                                                                                                                                                                                                                                   | TR90601 Std.                                                                                        | N/A                                                                                | 1) TR53192<br>2) TR35431<br>3) TR40366                                                              | Spring, Valve<br>1) Outer<br>2) Inner<br>3) Rotator, Valve                          |

(1) Crank Driven Pump.

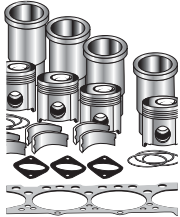
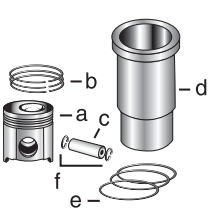
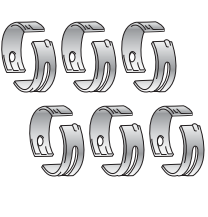
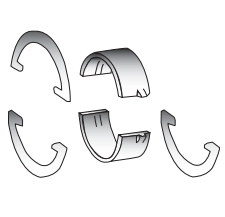
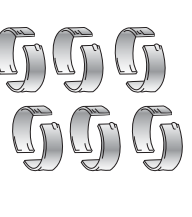
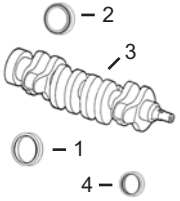
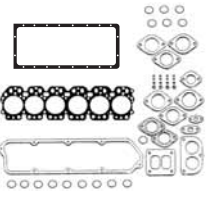
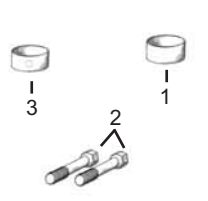
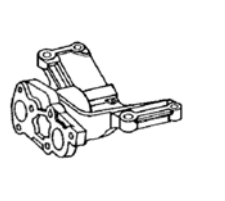
| 500 Series<br>Engine & Equipment<br>Model                                                                                                                                                                                                                           |  |  |  |                                       |  |    |  |                                                                                          |  |   |  |
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| <b>6.619A/T</b><br>To 033814<br><br><b>6 Cyl      Early</b><br><br>Bore: 5.125 in<br>130 mm<br>Pin Ø: 2.00 in<br>50.8 mm<br><br><b>Con Rod (m):</b><br>R66925, R57484<br><br><b>Block (m):</b><br>R57424<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>8630 |  | <b>1) Engine O/H Kit</b>                                                          |  | <b>Piston-Liner Kit</b>                                                                                                |  | <b>Main Bearing</b>                                                                  |  | <b>Thrust Bearing</b>                                                                                                                                                       |  | <b>Con Rod Bearing</b>                                                               |  |
|                                                                                                                                                                                                                                                                     |  | <b>2) Engine I/F Kit</b>                                                          |  | <b>TAR84089</b><br>Consists of:<br>a) TAR69038<br>b) TAR82355<br>c) TR64451<br>d) TR65629<br>e) TAR72351<br>f) TN51168 |  | TAR101268 Std.<br>TAR104122 .010<br>TAR104123 .020<br>TAR104124 .030<br><b>Use 6</b> |  | TAR101269 Std.<br>TAR104126 .010<br>TAR104127 .020<br>TAR104128 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622 Std.<br>TAR89971 .007<br><b>Use 3, Order Qty 1</b> |  | TAR101271 Std.<br>TAR104130 .010<br>TAR104131 .020<br>TAR104132 .030<br><b>Use 6</b> |  |
|                                                                                                                                                                                                                                                                     |  | <b>1) TOK84089</b>                                                                |  |                                                                                                                        |  |                                                                                      |  |                                                                                                                                                                             |  |                                                                                      |  |
|                                                                                                                                                                                                                                                                     |  | <b>2) TIK84089</b>                                                                |  |                                                                                                                        |  |                                                                                      |  |                                                                                                                                                                             |  |                                                                                      |  |
|                                                                                                                                                                                    |  | <b>1) Front Seal<br/>2) Rear Seal</b>                                             |  | <b>1) O/H Gasket Set</b>                                                                                               |  | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bushing, Cam</b>                     |  |                                                                                          |  |   |  |
|                                                                                                                                                                                                                                                                     |  | <b>3) Crankshaft</b>                                                              |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                                              |  |                                                                                      |  | Pump, Oil                                                                                                                                                                   |  | Thermostat                                                                           |  |
|                                                                                                                                                                                                                                                                     |  | 1) TAR49025<br>2) TRE13310<br>3) TAR92533                                         |  | 1) TRE37416<br>2) TRE37417<br>3) TRE34009<br>4) TR71919                                                                |  | 1) TR60197 x6<br>2) TR66453 x12<br>3) TR46903 x4                                     |  | TRE60622 (1)                                                                                                                                                                |  | TAR48675 180° F                                                                      |  |
|                                                                                                                                                                                  |  | Valve, Intake                                                                     |  | Valve, Exhaust                                                                                                         |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |  | 1) Guide, Valve<br>2) Lock, Valve<br>3) Cap, Valve                                                                                                                          |  | Spring, Valve<br>1) Outer<br>2) Inner<br>3) Rotator, Valve                           |  |
|                                                                                                                                                                                                                                                                     |  | TR75690 Std.                                                                      |  | TR63982 Std.                                                                                                           |  | 1) TR59894 Std.<br>2) TR60537 Std.                                                   |  | 1) TR53192<br>2) TR35431<br>3) TR40366                                                                                                                                      |  | 1) TR49571<br>2) TR49569<br>3) TR81086                                               |  |

(1) Crank Driven Pump.

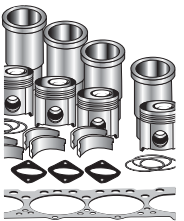
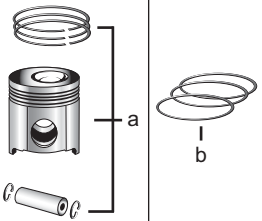
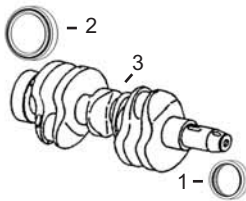
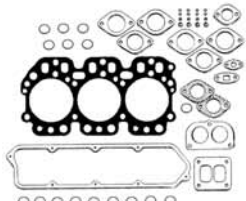
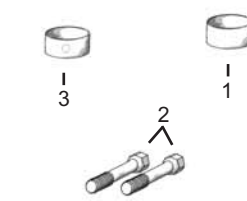
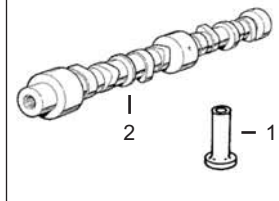
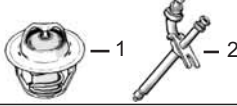


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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>500 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>6.619 A/T</b><br><b>From 049060</b>                                                                                                                                                                                                                                              |  |  |    |                |                                                                                                                  |               |
| <b>6 Cyl                      Late</b><br><br>Bore:    5.125    in<br>130       mm<br>Pin Ø:    2.00    in<br>50.8     mm<br><br><b>Con Rod (m):</b><br>R63959<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>8630<br>8640<br>8650<br><br><b>CONSTRUCTION</b><br>744E        862<br>762        890<br>850        890A<br>855        992D/E<br>860B |  | <b>1) Engine O/H Kit</b>                                                          | <b>Piston-Liner Kit</b>                                                             | <b>Main Bearing</b>                                                                              | <b>Thrust Bearing</b>                                                                                                                                                                               | <b>Con Rod Bearing</b>                                                                           |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>2) Engine I/F Kit</b>                                                          | <b>TRE40476</b><br>Consists of:                                                     | TAR101268    Std.<br>TAR104122    .010<br>TAR104123    .020<br>TAR104124    .030<br><b>Use 6</b> | TAR101269    Std.<br>TAR104126    .010<br>TAR104127    .020<br>TAR104128    .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622       Std.<br>TAR89971       .007<br><b>Use 3, Order Qty 1</b> | TAR101271    Std.<br>TAR104130    .010<br>TAR104131    .020<br>TAR104132    .030<br><b>Use 6</b> |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>1) TOK40476</b>                                                                | a) TRE20275<br>b) TAR82355<br>c) TR64451<br>d) TR77640<br>e) TAR72351<br>f) TN51168 |                                                                                                  |                                                                                                                                                                                                     |                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>2) TIK40476</b>                                                                |                                                                                     |                                                                                                  |                                                                                                                                                                                                     |                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                           |  |  |    |                |                                                                                                                  |               |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                       | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>                     | <b>Pump, Oil</b>                                                                                                                                                                                    | <b>Thermostat</b>                                                                                |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>3) Crankshaft</b>                                                              | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>      |                                                                                                  |                                                                                                                                                                                                     |                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>1) TAR49025</b><br><b>2) TRE13310</b><br><b>3) TAR92533</b>                    | <b>1) TRE37416</b><br><b>2) TRE37417</b><br><b>3) TRE34009</b><br><b>4) TR71919</b> | <b>1) TR69045    x6</b><br><b>2) TR66453    x12</b><br><b>3) TR46903    x4</b>                   | <b>TRE60622    (1)</b>                                                                                                                                                                              | <b>TAR48675 180° F</b>                                                                           |
|                                                                                                                                                                                                                                                                        |  | <b>Valve, Intake</b>                                                              | <b>Valve, Exhaust</b>                                                               | <b>Insert, Valve</b><br><b>1) Intake</b><br><b>2) Exhaust</b>                                    | <b>1) Guide, Valve</b><br><b>2) Lock, Valve</b><br><b>3) Cap, Valve</b>                                                                                                                             | <b>Spring, Valve</b><br><b>1) Outer</b><br><b>2) Inner</b><br><b>3) Rotator, Valve</b>           |
|                                                                                                                                                                                                                                                                                                                                                           |  | <b>TR75690    Std.</b>                                                            | <b>TR63982    Std.</b>                                                              | <b>1) TR59894    Std.</b><br><b>2) TR60537    Std.</b>                                           | <b>1) TR53192</b><br><b>2) TR35431</b><br><b>3) TR40366</b>                                                                                                                                         | <b>1) TR49571</b><br><b>2) TR49569</b><br><b>3) TR81086</b>                                      |

(1) Crank Driven Pump.

|                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>500 Series</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>6.101A/T</b><br><b>To 499,999</b><br><b>6 Cyl</b><br><br>Bore: 5.125 in<br>130 mm<br>Pin Ø: 2.00 in<br>50.8 mm<br><br><b>Block (m):</b><br>R75934, R87552, R88217<br>R98554<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>8760<br>8870 |      |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         | <b>1) Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Piston-Liner Kit</b>                                                             | <b>Main Bearing</b>                                                                  | <b>Thrust Bearing</b>                                                                                                                                                       | <b>Con Rod Bearing</b>                                                               |
|                                                                                                                                                                                                                                                                                                                         | <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                       | <b>TRE40476</b><br>Consists of:                                                     | TAR101268 Std.<br>TAR104122 .010<br>TAR104123 .020<br>TAR104124 .030<br><b>Use 6</b> | TAR101269 Std.<br>TAR104126 .010<br>TAR104127 .020<br>TAR104128 .030<br><b>Use 1</b><br><b>Thrust Washer</b><br>TAR89622 Std.<br>TAR89971 .007<br><b>Use 3, Order Qty 1</b> | TAR101271 Std.<br>TAR104130 .010<br>TAR104131 .020<br>TAR104132 .030<br><b>Use 6</b> |
|                                                                                                                                                                                                                                                                                                                         | <b>1) TOK40476L</b>                                                                                                                                                                                                                                                                                                                                                                                                            | a) TRE20275<br>b) TAR82355<br>c) TR64451<br>d) TR77640<br>e) TAR72351<br>f) TN51168 |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         | <b>2) TIK40476L</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         |      |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>         | Pump, Oil                                                                                                                                                                   | Thermostat                                                                           |
|                                                                                                                                                                                                                                                                                                                         | <b>3) Crankshaft</b><br><b>4) Rear Gear</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b>      |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         | 1) TAR49025<br>2) TRE13310<br>3) TAR92533<br>4) TR63326                                                                                                                                                                                                                                                                                                                                                                        | 1) TRE37416<br>2) TRE37417<br>3) TRE34009<br>4) TR71919                             | 1) TR69045 <b>x6</b><br>2) TR66453 <b>x12</b><br>3) TR87561 <b>x4</b>                | TRE60622 <b>(1)</b>                                                                                                                                                         | TAR48675 180° F                                                                      |
|                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                      |                                                                                                                                                                             |                                                                                      |
|                                                                                                                                                                                                                                                                                                                         | Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                  | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                             | 1) Lock, Valve<br>2) Shield, Valve                                                                                                                                          | 1) Spring, Valve<br>2) Rotator, Valve<br>3) Cap, Valve                               |
|                                                                                                                                                                                                                                                                                                                         | TR101304                                                                                                                                                                                                                                                                                                                                                                                                                       | TR101305                                                                            | N/A                                                                                  | 1) TT20077<br>2) TR102882 <b>x6</b>                                                                                                                                         | 1) TR91822<br>2) TRE11410<br>3) TT20129                                              |

**(1) Crank Driven Pump.**

|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |                                                                                     |                                                                                                           |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>John Deere®/Yanmar®</b><br><b>Engine &amp; Equipment Model</b><br><h1>3TNE84</h1><br><h1>3015</h1><br><p>Bore: 3.30 in<br/>84.00 mm</p> <p>Stroke: 3.54 in<br/>90.00 mm</p> <p><b>APPLICATIONS:</b></p> <p>790 Utility Tractor<br/>3225B Mower<br/>3235 Mower<br/>3235A Mower<br/>3235B Mower<br/>4300 Utility Tractor<br/>4310 Utility Tractor<br/>4475 Skid Steer</p> <p><b>OEM Applications</b><br/>3015</p> |      |                                                                                     |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                          | <b>a) Piston Kit</b>                                                                | <b>Main Bearing</b>                                                                 | <b>Con Rod Bearing</b>                                                                                    | <b>Thrust Washers</b>                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>b) Ring Set</b>                                                                  |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>TOK3015D</b>                                                                                                                                                                                                                                                                                                                                                                                                                | <b>a) TAM878606 Std.</b>                                                            | <b>TMIA880554 Std.</b>                                                              | <b>TMIA880563 Std.</b>                                                                                    | <b>TMIA880555</b>                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>TOK3015D/10</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>TAM878598 0.010</b>                                                              | <b>TMIA880550 .010</b>                                                              | <b>TMIA880568 .010</b>                                                                                    |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Use 3</b>                                                                        |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>b) TAM878555 Std.</b>                                                            |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>TAM878599 .010</b>                                                               |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>See note (1) below</b>                                                           | <b>Use 4</b>                                                                        | <b>Use 3</b>                                                                                              | <b>Set of 4</b>                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                               |    |  |                        |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>        | <b>1) Tappet</b><br><b>2) Camshaft</b>                                                                    |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>3) Crankshaft</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) Head Gasket</b><br><b>3) Liquid Gasket</b><br><b>4) Rocker Cover Gasket</b>   |                                                                                     |                                                                                                           |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) TM800988</b><br><b>2) TM805278</b><br><b>3) TAM880894 (4)</b>                                                                                                                                                                                                                                                                                                                                                            | <b>1) TMGS3015</b><br><b>2) TM806440</b><br><b>3) TM64850</b><br><b>4) TM801741</b> | <b>1) TM801256 x3</b><br><b>2) TCH15483 x6</b><br><b>3) TMIU800573 x1</b>           | <b>1) TM801046 x6</b><br><b>2) TAM876430 (5)</b>                                                          |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                 | <b>Valve, Intake</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Valve, Exhaust</b>                                                               | <b>Guide, Valve</b><br><b>1) Intake</b><br><b>2) Exhaust</b>                        | <b>1) Lock, Valve</b><br><b>2) Stem Seal Int</b><br><b>3) Stem, Seal Exh</b>                              | <b>Spring, Valve</b>                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>TM801220 x3</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>TMIU800494 x3</b>                                                                | <b>1) TM801227 x3</b><br><b>2) TM801228 x3</b>                                      | <b>1) TAM878862 x12</b><br><b>2) TCH10450 x3</b><br><b>3) TT110650 x3</b>                                 | <b>TM801222 x6</b>                                                                    |
|                                                                                                                                                                                                                                                                                                                                 | <b>1) Thermostat</b><br><b>2) Injector</b>                                                                                                                                                                                                                                                                                                                                                                                     |  |  |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) TM811034</b><br><b>2) TAT110293 (2)</b>                                                                                                                                                                                                                                                                                                                                                                                  | <b>TAM878778</b>                                                                    | <b>TAM882462</b>                                                                    | <b>1) TAM882090 (2)</b><br><b>2) TAM880905 (2)</b><br><b>3) TAM881943 (2)</b><br><b>4) TMIA880356 (3)</b> | <b>84RS</b>                                                                           |

(1) We will offer current piston kit until stock is depleted. After that use Ring Set part number **TAM878555A Std.** and **TAM878599A 0.25** for Alfin Pistons.

(2) Check your application for proper usage.

(3) Like **TAM882090**, with Inject Pump cooling connections.

(4) Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(5) Gear not included.

John Deere®/Yanmar®

Engine & Equipment  
Model

**4TNE84**

**4020**

Bore: 3.30 in  
84.00 mm

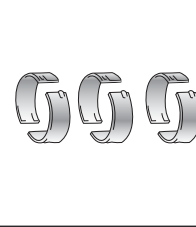
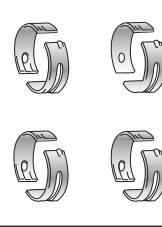
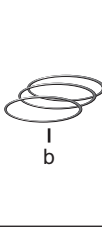
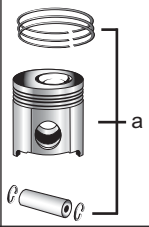
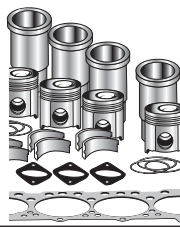
Stroke: 3.54 in  
90.00 mm

**APPLICATIONS:**

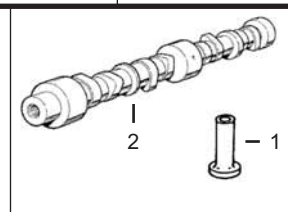
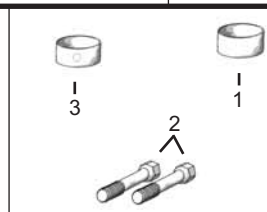
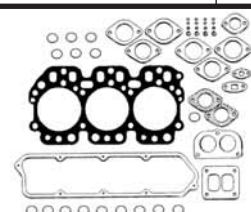
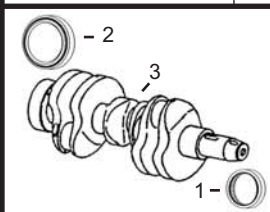
990 Utility Tractor  
110 Loader Backhoe  
4500 Utility Tractor  
4510 Utility Tractor  
4600 Utility Tractor  
4610 Utility Tractor  
6675 Skid Steer

**OEM Applications**

4020



| Engine O/H Kit          | a) Piston Kit<br>b) Ring Set                                                                               | Main Bearing                                | Con Rod Bearing                             | Thrust Washers         |
|-------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|------------------------|
| TOK4020D<br>TOK4020D/10 | a) TAM878606 Std.<br>TAM878598 0.010<br>Use 4<br>b) TAM878555 Std.<br>TAM878599 .010<br>See note (1) below | TMIA880554 Std.<br>TMIA880550 .010<br>Use 5 | TMIA880563 Std.<br>TMIA880568 .010<br>Use 4 | TMIA880555<br>Set of 4 |



|                                                |                                                              |                                                         |                                    |
|------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------|------------------------------------|
| 1) Front Seal<br>2) Rear Seal                  | 1) O/H Gasket Set                                            | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam | 1) Tappet<br>2) Camshaft           |
| 3) Crankshaft                                  | 2) Head Gasket<br>3) Liquid Gasket<br>4) Rocker Cover Gasket |                                                         |                                    |
| 1) TM800988<br>2) TM805278<br>3) TAM878619 (4) | 1) TMGS4020<br>2) TM806505<br>3) TM64850<br>4) TM801230      | 1) TM801256 x4<br>2) TCH15483 x8<br>3) TMIU800573 x1    | 1) TM801046 x8<br>2) TAM875386 (5) |

|  |                                 |                |                                         |                                                                               |               |
|--|---------------------------------|----------------|-----------------------------------------|-------------------------------------------------------------------------------|---------------|
|  | Valve, Intake                   | Valve, Exhaust | Guide, Valve<br>1) Intake<br>2) Exhaust | 1) Lock, Valve<br>2) Stem Seal Int<br>3) Stem, Seal Exh                       | Spring, Valve |
|  | TM801220 x4                     | TMIU800494 x4  | 1) TM801227 x4<br>2) TM801228 x4        | 1) TAM878862 x16<br>2) TCH10450 x4<br>3) TT110650 x4                          | TM801222 x8   |
|  | 1) Thermostat<br>2) Injector    | Oil Pump       | Lift Pump                               | Water Pump                                                                    | Repair Sleeve |
|  | 1) TM811034<br>2) TAT110293 (2) | TAM878778      | TAM882462                               | 1) TAM882090 (2)<br>2) TAM880905 (2)<br>3) TAM881943 (2)<br>4) TMIA880356 (3) | 84RS          |

(1) We will offer current piston kit until stock is depleted. After that use Ring Set part number TAM878555A Std. and TAM878599A 0.25 for Alfin Pistons.

(2) Check your application for proper usage.

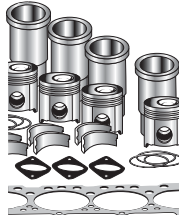
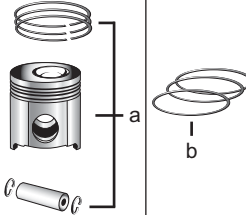
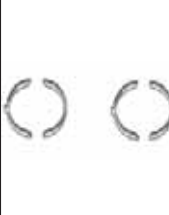
(3) Like TAM882090, with Inject Pump cooling connections.

(4) Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

(5) Gear not included. Do not use in applications that require a crankshaft driven balancer unit.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| <b>John Deere®/Yanmar®</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>3TNE88</b><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><b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- (1) Check your application for proper usage.  
 (2) Like **TAM882090**, with Inject Pump cooling connections.  
 (3) Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.  
 (4) Gear not included.

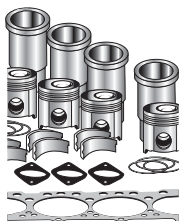
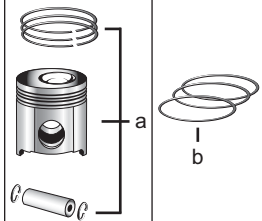
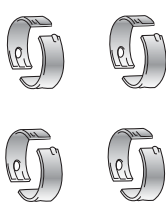
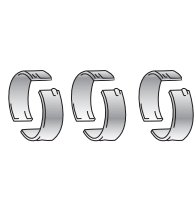
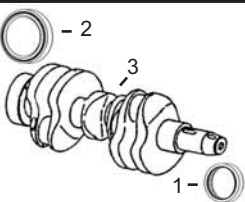
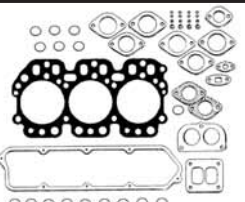
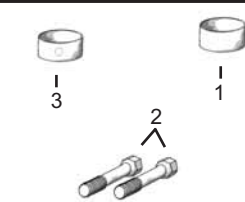
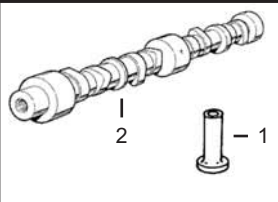
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| <b>Engine &amp; Equipment</b><br><b>Model</b><br><br><b>4TNE88</b><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><b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|  |                                                                                   |  |                                                                                   |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |

(1) Check your application for proper usage.

(2) Like TAM882090, with Inject Pump cooling connections.

(3) Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

(4) Gear not included. Do not use in applications that require a crankshaft driven balancer unit.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                                                     |                                                                                      |                                                                                     |                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <div>John Deere®/Yanmar®</div> <div>Engine &amp; Equipment</div> <div>Model</div> <div>3TNV84</div> <div>Bore: 3.30 in<br/>84.00 mm</div> <div>APPLICATIONS:</div> <div>3036E Utility Tractor<br/>3038E Utility Tractor<br/>3120 Utility Tractor<br/>3203 Utility Tractor<br/>3225C Fairway Mowers<br/>3235C Fairway Mowers<br/>3245C Rotary Deck Mower<br/>3520 Utility Tractor<br/>3720 Utility Tractor<br/>4105 Utility Tractor<br/>7400 Mower<br/>7500 Mower<br/>7700 Mower<br/>8000 Mower<br/>8400 Mower<br/>8500 Mower<br/>8700 Mower<br/>8800 Mower</div> |    |    |    |  |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Engine O/H Kit                                                                      | a) Piston Kit                                                                       | Main Bearing                                                                         | Con Rod Bearing                                                                     | Thrust Washers                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     | b) Ring Set                                                                         |                                                                                      |                                                                                     |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TOK3TNV84                                                                           | a) TAM881978 Std.<br>TAM881939 0.010                                                | TMIA880554 Std.<br>TMIA880550 .010                                                   | TMIA880563 Std.<br>TMIA880568 .010                                                  | TMIA880555                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TOK3TNV84/10                                                                        | Use 3<br>b) TAM881938 Std.<br>TAM881940 0.010                                       | Use 4                                                                                | Use 3                                                                               | Set of 4                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |  |   |                                                                                     |                                                                                       |
| 1) Front Seal<br>2) Rear Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1) O/H Gasket Set                                                                   | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                             | 1) Tappet<br>2) Camshaft                                                             |                                                                                     |                                                                                       |
| 3) Crankshaft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2) Head Gasket<br>3) Liquid Gasket<br>4) Rocker Cover Gasket                        |                                                                                     |                                                                                      |                                                                                     |                                                                                       |
| 1) TM800988<br>2) TM805278<br>3) TAM880894 (3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1) TMGS3015<br>2) TM806440<br>3) TM64850<br>4) TM811429                             | 1) TM801256 x3<br>2) TCH15483 x6<br>3) TMIU800573 x1                                | 1) TM801046 x6<br>2) TAM876430 (4)                                                   |                                                                                     |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Valve, Intake                                                                       | Valve, Exhaust                                                                      | Guide, Valve<br>1) Intake<br>2) Exhaust                                              | 1) Stem Seal Int<br>2) Stem, Seal Exh                                               | Spring, Valve                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TMIU800446 x3                                                                       | TMIU800494 x3                                                                       | 1) TM801227 x3<br>2) TM801228 x3                                                     | 1) TCH10450 x3<br>2) TT110650 x3                                                    | TM801222 x6                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |                                                                                     |  |
| 1) Thermostat<br>2) Injector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Oil Pump                                                                            | Electric Fuel Pump                                                                  | Water Pump                                                                           |                                                                                     | Repair Sleeve                                                                         |
| 1) TM811034<br>2) TAM881953 (1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TAM878778                                                                           | TAM876266                                                                           | 1) TAM882090 (1)<br>2) TAM880905 (1)<br>3) TAM881943 (1)<br>4) TMIA880356 (2)        |                                                                                     | 84RS                                                                                  |

- (1) Check your application for proper usage.  
 (2) Like **TAM882090**, with Inject Pump cooling connections.  
 (3) Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.  
 (4) Gear not included.

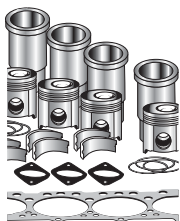
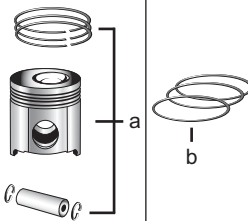
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| <b>John Deere®/Yanmar®</b><br><b>Engine &amp; 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(1) Check your application for proper usage.

(2) Like **TAM882090**, with Inject Pump cooling connections.

(3) Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

(4) Gear not included. Do not use in applications that require a crankshaft driven balancer unit.

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| <b>Engine &amp; Equipment Model</b><br><br><b>4TNV84T</b><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><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|  |                                                                                   |  |                                                                                   |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |

(1) Check your application for proper usage.

(2) Like **TAM882090**, with Inject Pump cooling connections.

(3) Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

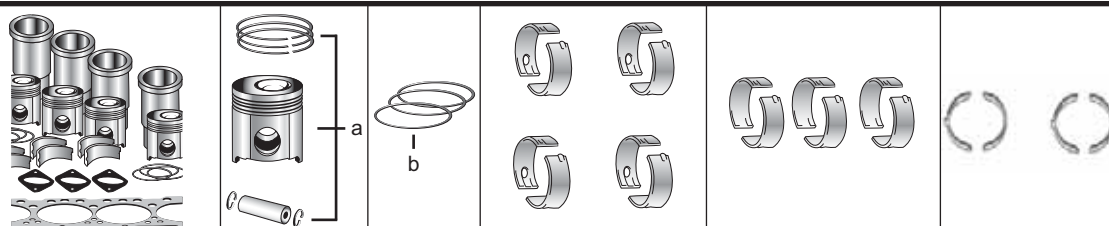
(4) Gear not included. Do not use in applications that require a crankshaft driven balancer unit.

**John Deere®/Yanmar®**
**Engine & Equipment  
Model**
**3TNV88**

 Bore: 3.46 in  
88.00 mm

**APPLICATIONS:**

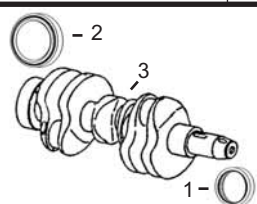
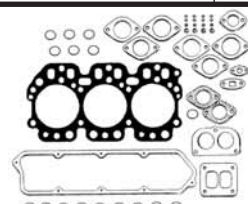
 27D Compact  
Excavator  
35D Compact  
Excavator  
35G Compact  
Excavator  
1565 Front Mower  
3032E Utility Tractor  
3320 Utility Tractor

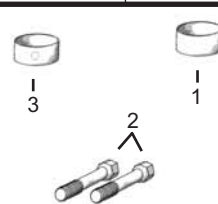
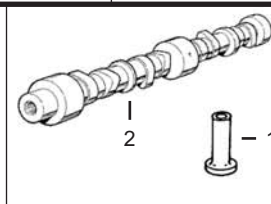
**OEM Applications**  
3016

**Engine O/H  
Kit**
**a) Piston Kit**
**b) Ring Set**
**Main Bearing**
**Con Rod Bearing**
**Thrust  
Washers**
**TOK3TNV88**  
**TOK3TNV88/10**
**a) TAM881814 Std.**  
**TAM881811 0.010**
**Use 3**
**b) TAM881812 Std.**  
**TAM881810 0.010**

 TMIA880554 Std.  
TMIA880550 .010

 TMIA880563 Std.  
TMIA880568 .010

TMIA880555

**Use 4**
**Use 3**
**Set of 4**

**1) Front Seal**  
**2) Rear Seal**

**1) O/H Gasket Set**

 2) Head Gasket  
3) Liquid Gasket  
4) Rocker Cover Gasket

**1) Bush, Con Rod**  
**2) Bolt, Con Rod**  
**3) Bushing, Cam**

**1) Tappet**  
**2) Camshaft**

 1) TM800988  
2) TM805278  
3) TAM880894 (3)

 1) TMGS3TNE88  
2) TM806811  
3) TM64850  
4) TM811429

 1) TM801256 x3  
2) TCH15483 x6  
3) TMIU800573 x1

 1) TM801046 x6  
2) TAM876430 (4)


Valve, Intake

Valve, Exhaust

 Guide, Valve  
1) Intake  
2) Exhaust

 1) Stem Seal Int  
2) Stem, Seal Exh

Spring, Valve

TM811557 x3

TMIU800494 x3

 1) TM801227 x3  
2) TM801228 x3

 1) TCH10450 x3  
2) TT110650 x3

TM801222 x6


**1) Thermostat**  
**2) Injector**


Oil Pump



Electric Fuel Pump



Water Pump



Repair Sleeve

 1) TM811034  
2) TAM881953 (1)

TAM878778

TAM876266

 1) TAM882090 (1)  
2) TAM880905 (1)  
3) TAM881943 (1)  
4) TMIA880356 (2)

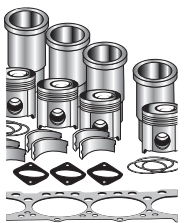
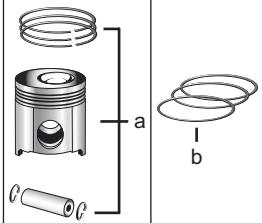
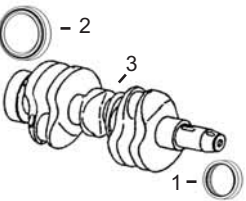
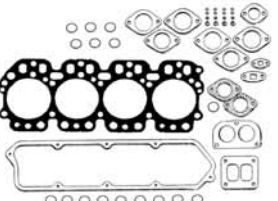
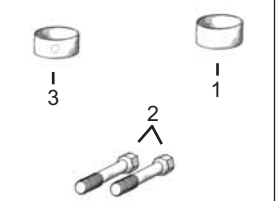
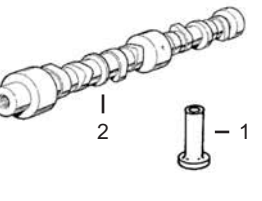
88RS

(1) Check your application for proper usage.

(2) Like TAM882090, with Inject Pump cooling connections.

(3) Gear not included. Suitable for 3TNE84/88 and 3TNV84/88.

(4) Gear not included.

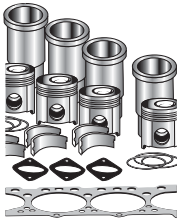
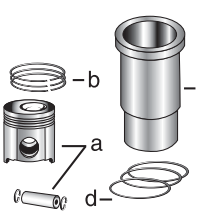
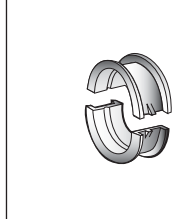
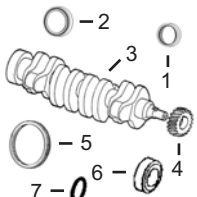
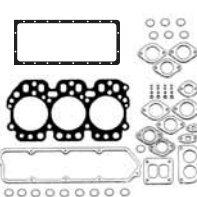
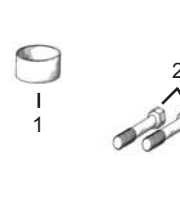
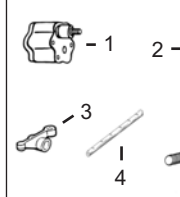
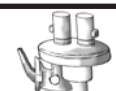
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                              |                                                                                                           |                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------|
| <b>John Deere®/Yanmar®</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>4TNV88</b><br><br>Bore: 3.46 in<br>88.00 mm<br><br><b>APPLICATIONS:</b><br>50D Compact Excavator<br>110 Loader Backhoe<br>1505 Prof Lawnmower<br>1515 Prof Lawnmower<br>1905 Reel Mower<br>2720 Utility Tractors<br>4405 Utility Tractors                 |      |                                                                                       |                                                                              |                                                                                                           |                       |
|                                                                                                                                                                                                                                                                                                                                             | <b>Engine O/H Kit</b>                                                                                                                                                                                                                                                                                                                                                                                                          | <b>a) Piston Kit</b>                                                                  | <b>Main Bearing</b>                                                          | <b>Con Rod Bearing</b>                                                                                    | <b>Thrust Washers</b> |
|                                                                                                                                                                                                                                                                                                                                             | <b>TOK4TNV88</b>                                                                                                                                                                                                                                                                                                                                                                                                               | <b>a) TAM881814 Std.</b>                                                              | <b>TMIA880554 Std.</b>                                                       | <b>TMIA880563 Std.</b>                                                                                    | <b>TMIA880555</b>     |
|                                                                                                                                                                                                                                                                                                                                             | <b>TOK4TNV88/10</b>                                                                                                                                                                                                                                                                                                                                                                                                            | <b>TAM881811 0.010</b>                                                                | <b>TMIA880550 .010</b>                                                       | <b>TMIA880568 .010</b>                                                                                    |                       |
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Use 4</b>                                                                          |                                                                              |                                                                                                           |                       |
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>b) TAM881812 Std.</b>                                                              |                                                                              |                                                                                                           |                       |
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>TAM881810 0.010</b>                                                                | <b>Use 5</b>                                                                 | <b>Use 4</b>                                                                                              | <b>Set of 4</b>       |
|     | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                                                                                                                                                                                                                    | <b>1) O/H Gasket Set</b>                                                              | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b> | <b>1) Tappet</b><br><b>2) Camshaft</b>                                                                    |                       |
|                                                                                                                                                                                                                                                                                                                                             | <b>3) Crankshaft</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>2) Head Gasket</b><br><b>3) Liquid Gasket</b><br><b>4) Rocker Cover Gasket</b>     |                                                                              |                                                                                                           |                       |
|                                                                                                                                                                                                                                                                                                                                             | <b>1) TM800988</b><br><b>2) TM805278</b><br><b>3) TAM878619 (3)</b>                                                                                                                                                                                                                                                                                                                                                            | <b>1) TMGS4TNE88</b><br><b>2) TM806518</b><br><b>3) TM64850</b><br><b>4) TM811123</b> | <b>1) TM801256 x4</b><br><b>2) TCH15483 x8</b><br><b>3) TMIU800573 x1</b>    | <b>1) TM801046 x8</b><br><b>2) TAM875386 (4)</b>                                                          |                       |
|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                                                              |                                                                                                           |                       |
|                                                                                                                                                                                                                                                          | <b>Valve, Intake</b>                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Valve, Exhaust</b>                                                                 | <b>Guide, Valve</b><br><b>1) Intake</b><br><b>2) Exhaust</b>                 | <b>1) Stem Seal Int</b><br><b>2) Stem, Seal Exh</b>                                                       | <b>Spring, Valve</b>  |
|                                                                                                                                                                                                                                                                                                                                             | <b>TM811557 x4</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>TMIU800494 x4</b>                                                                  | <b>1) TM801227 x4</b><br><b>2) TM801228 x4</b>                               | <b>1) TCH10450 x4</b><br><b>2) TT110650 x4</b>                                                            | <b>TM801222 x8</b>    |
|                                                                                                                                                                                                                                                          | <b>1) Thermostat</b><br><b>2) Injector</b>                                                                                                                                                                                                                                                                                                                                                                                     | <b>Oil Pump</b>                                                                       | <b>Electric Fuel Pump</b>                                                    | <b>Water Pump</b>                                                                                         | <b>Repair Sleeve</b>  |
|                                                                                                                                                                                                                                                                                                                                             | <b>1) TM811034</b><br><b>2) TAM881953 (1)</b>                                                                                                                                                                                                                                                                                                                                                                                  | <b>TAM878778</b>                                                                      | <b>TAM876266</b>                                                             | <b>1) TAM882090 (1)</b><br><b>2) TAM880905 (1)</b><br><b>3) TAM881943 (1)</b><br><b>4) TMIA880356 (2)</b> | <b>88RS</b>           |

(1) Check your application for proper usage.

(2) Like **TAM882090**, with Inject Pump cooling connections.

(3) Gear not included. Suitable for 4TNE84/88 and 4TNV84/88.

(4) Gear not included. Do not use in applications that require a crankshaft driven balancer unit.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                                                                      |                                                                                                      |                                                                                   |                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>3029</b><br>2.9D<br><br>From 252,768<br><br>CODE 4809<br><br>3 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.3 in<br>32 mm<br><br>Piston (m):<br>RE61467<br><br>Con Rod (m):<br>R121092, R501072<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL<br>240<br>3100 5210<br>5105 5220<br>5200 5300<br>5205 5310/N<br><br>OEM<br>2.9L<br><br>SDMO GENERATOR<br>J20U J30U<br>J22 J33 |                                                                                     |                                                     |                     |  |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>1) Engine O/H Kit</b>                                                                                                             | <b>Piston-Liner Kit</b>                                                                              | <b>Main Bearing</b>                                                               | <b>Thrust Bearing</b>                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>2) Engine I/F Kit</b>                                                                                                             | <b>TRE66968</b><br>Consists of:                                                                      | TRE27352 Std.                                                                     | TAT21139 Std.                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>1) TOK2.9D9<br/>TOK2.9D9A (6)</b>                                                                                                 | a) TRE61467 (3)<br>b) TRE66271<br>c) TR116281<br>d) TAR65507                                         | TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                   | TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>2) TIK2.9D9<br/>TIK2.9D9A (6)</b>                                                                                                 |                                                                                                      | <b>Use 3</b>                                                                      | <b>Use 1</b>                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                     |                     |  |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                                                | <b>1) O/H Gasket Set</b>                                                                             | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod</b>                                      | <b>1) Pump, Oil<br/>2) Oil Cooler<br/>3) Rocker Arm<br/>(Intake/Exhaust)<br/>4) Rock. Arm Shaft<br/>5) Cyl Hd Cap Screw</b> |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                       | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                     |                                                                                   | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam Gear                   |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | 1) TAR67942<br>2) TRE44574<br>3) TRE521348 (4)<br>4) TT20094 (2)<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796                               | 1) TR504300 x3<br>2) TR80033 x6 (5)<br>TR501124 x6 (5)                            | 1) TRE55343<br>2) TRE61767<br>3) TRE31973<br>4) TR54985<br>5) TR85363 x14 (2)                                               |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                                                                      |                                                                                                      |                                                                                   | 1) TAT24252 (1)<br>2) TT26321<br>3) TAT18009 (1)<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070 (1)                           |
|                                                                                                                                                                                                                                                                                                   |                                                                                     | Valve, Intake                                                                                                                        | Valve, Exhaust                                                                                       | Insert, Valve<br>1) Intake<br>2) Exhaust                                          | 1) Seal, Valve<br>2) Lock, Valve                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | TR98062 Std.<br>TR97490 .015                                                                                                         | TR90692 Std.<br>TR97492 .015                                                                         | 1) TR106831<br>2) TR106829                                                        | 1) TRE31617<br>2) TR91889                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                                                                      |                                                                                                      |                                                                                   | 1) TR26125<br>2) TRE60005                                                                                                   |
|                                                                                                                                                                                                                                                                                                   |  |                                                   |                  |                                                                                   |                                        |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                           | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                                        | Water Pump                                                                                           |                                                                                   | Seal, Injector Kit                                                                                                          |
| TRE64354 180° F                                                                                                                                                                                                                                                                                                                                                                      | TRE38009                                                                            | See Chart on<br>Page IT18                                                                                                            | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337,<br>(m) R127918, (m) R55164<br>TRE67185 (7) |                                                                                   | TRE36936                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                                                                                                                                      |                                                                                                      |                                                                                   | TRE65201                                                                                                                    |

(1) Helicoidal Gears.

(2) Replace all R78558 Cap Screws with Flanged Head Cap Screw **TR85363**.

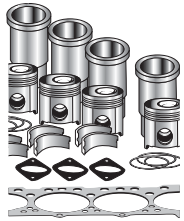
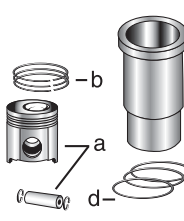
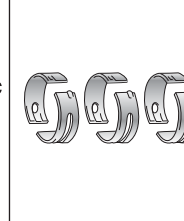
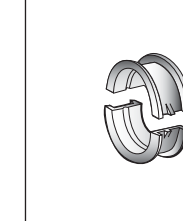
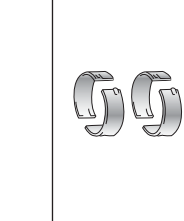
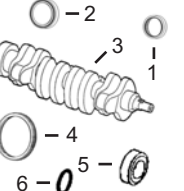
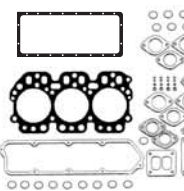
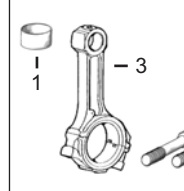
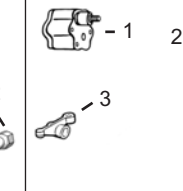
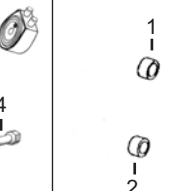
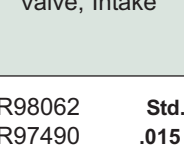
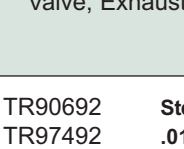
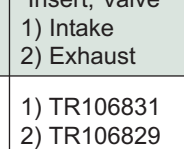
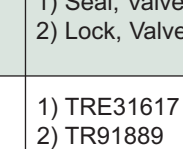
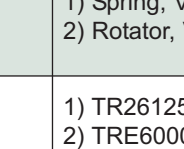
(3) Piston includes Pin and Retainers.

(4) Kit contains **TT20094** helical gear to convert to a **TRE50979** Crankshaft.

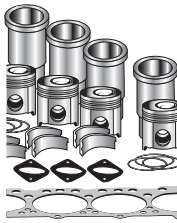
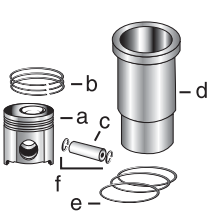
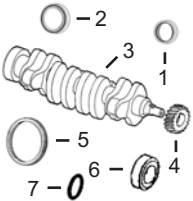
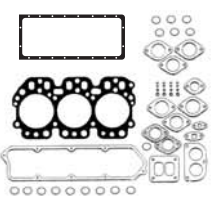
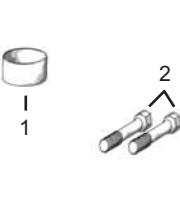
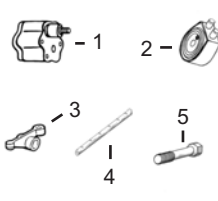
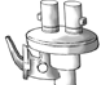
(5) With Machine Split Con Rod use **TR80033** and With Fractured Con Rod use **TR501124**.

(6) For used with Fractured split connecting rod.

(7) Check your application for proper usage.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                |  |                                                                                     |  |                                                                                      |  |                                                                                        |  |                                                                                       |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>3029D/T</b><br><b>2.9D, 2.9T</b><br><b>CODE 4831</b><br><b>3 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br><br>Pin Ø: 1.3 in<br>32 mm<br><br><b>Piston (m):</b><br>RE520573<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>5103 5045D<br>5203 5045E<br>5303 5047D<br>5310 5050D<br>5403 5050E<br>5410 5055D<br>5503 5055E<br>5610 5060E<br>5036C 5065E<br>5038D 5075E<br>5039C 5075EF<br>5039D 5075M<br>5041C R40<br>5042C R40 Plus<br>5042D Genset |                               |  |    |  |    |  |     |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) Engine O/H Kit</b>                                                                                       |  | <b>Piston-Liner Kit</b>                                                             |  | <b>Main Bearing</b>                                                                  |  | <b>Thrust Bearing</b>                                                                  |  | <b>Con Rod Bearing</b>                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>2) Engine I/F Kit</b>                                                                                       |  | <b>TRE520768</b><br>Consists of:                                                    |  | TRE27352 Std.                                                                        |  | TAT21139 Std.                                                                          |  | TRE27348 Std.                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) TOK2.9D/T</b>                                                                                            |  | a) TRE520573 (2)<br>b) TRE66271<br>c) TR116281<br>d) TAR65507                       |  | TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                      |  | TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                        |  | TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>2) TIK2.9D/T</b>                                                                                            |  |                                                                                     |  | <b>Use 3</b>                                                                         |  | <b>Use 1</b>                                                                           |  | <b>Use 3</b>                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                               |  |    |  |    |  |     |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                    |  | <b>1) O/H Gasket Set</b>                                                            |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b>                                   |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm (Intake/Exhaust)<br>4) Cyl Hd Cap Screw |  | 1) Lower Bushing<br>2) Upper Bushing<br>3) Cam. Follower                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3) Crankshaft<br>4) Ring Gear<br>5) Sleeve, Front<br>6) Packing, Sleeve                                        |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk    |  | 3) Con Rod                                                                           |  |                                                                                        |  |                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TAR67942<br>2) TRE44574<br>3) TRE521348<br>4) TR28811 (129T)<br>TR114282 (142T)<br>5) TR81989<br>6) TH35244 |  | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796              |  | 1) TR504300 x3<br>2) TR80033 x6<br>2) TRE507799 (4)                                  |  | 1) TRE55343<br>2) TRE61767<br>3) TRE31973<br>4) TR502511 x14 (1)<br>TR85363 x14 (1)    |  | 1) TT26321<br>2) TT20034<br>3) TT20073 x6                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                             |  |  |  |  |  |   |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Valve, Intake                                                                                                  |  | Valve, Exhaust                                                                      |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |  | 1) Seal, Valve<br>2) Lock, Valve                                                       |  | 1) Spring, Valve<br>2) Rotator, Valve                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TR98062 Std.<br>TR97490 .015                                                                                   |  | TR90692 Std.<br>TR97492 .015                                                        |  | 1) TR106831<br>2) TR106829                                                           |  | 1) TRE31617<br>2) TR91889                                                              |  | 1) TR26125<br>2) TRE60005                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                             |  |  |  |  |  |   |  |                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Thermostat<br>2) Injector                                                                                   |  | Fuel Transfer Pump                                                                  |  | Water Pump Rep Kit<br>a) Without Impeller b) With Impeller                           |  | Water Pump                                                                             |  |                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRE64354 180° F<br>2) TRE36936 (3)<br>TRE48786 (3)<br>TRE60062 (3)                                          |  | TRE38009 (3)                                                                        |  | a) TRE19507<br>b) TRE62658                                                           |  | TAR97708                                                                               |  |                                                                                       |  |

- (1) Check application for proper Cap Screw.  
 (2) Piston includes Pin and Retainers.  
 (3) Check for proper application.  
 (4) Machine Split.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                  |                                                                                     |                                                                                                                                      |                                                                                                                         |                                                                                    |                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>3029</b><br>2.9T<br><br>From 258847<br><br>CODE 4808<br><br>3 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br>Piston (m):<br>RE61270<br><br>Con Rod (m):<br>R105011, R501073<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL<br>5400 From 261581<br>5400N<br>8875 Skid Steer<br><br>OEM<br>2.9L |                                                                                     |                                                     |                                        |  |                                       |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | <b>1) Engine O/H Kit</b>                                                                                                             | <b>Piston-Liner Kit</b>                                                                                                 | <b>Main Bearing</b>                                                                | <b>Thrust Bearing</b>                                                                                                    |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | <b>2) Engine I/F Kit</b>                                                                                                             | <b>TRE67426</b><br>Consists of:<br>a) TRE61270<br>b) TRE66271<br>c) TMX3915<br>d) TR116281<br>e) TAR65507<br>f) TR54114 | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                   | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                                         |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | <b>1) TOK2.9T<br/>TOK2.9TA (6)</b>                                                                                                   |                                                                                                                         |                                                                                    | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                                         |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | <b>2) TIK2.9T<br/>TIK2.9TA (6)</b>                                                                                                   |                                                                                                                         | <b>Use 3</b>                                                                       | <b>Use 1</b>                                                                                                             |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                     |                                        |  |                                       |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                                                | <b>1) O/H Gasket Set</b>                                                                                                | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod</b>                                       | <b>1) Pump, Oil<br/>2) Oil Cooler<br/>3) Rocker Arm (Intake/Exhaust)<br/>4) Rocker Arm Shaft<br/>5) Cyl Hd Cap Screw</b> |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                       | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                        |                                                                                    | 1) Lower Gear<br>2) Lower Bushing<br>3) Upper Gear<br>4) Upper Bushing<br>5) Cam. Follower<br>6) Cam Gear                |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | 1) TAR67942<br>2) TRE44574<br>3) TRE521348 (4)<br>4) TT20094 (1)<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796                                                  | 1) TR57451 x3 (3)<br>2) TR80033 x6 (5)<br>TR501124 x6 (5)                          | 1) TRE55343<br>2) TRE61767<br>3) TRE31973<br>4) TR54985<br>5) TR85363 x14 (2)                                            |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                                                      |                                                                                                                         |                                                                                    | 1) TAT24252 (1)<br>2) TT26321<br>3) TAT18009 (1)<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070 (1)                        |
|                                                                                                                                                                                                                                        |                                                                                     | Valve, Intake                                                                                                                        | Valve, Exhaust                                                                                                          | Insert, Valve<br>1) Intake<br>2) Exhaust                                           | 1) Seal, Valve<br>2) Lock, Valve                                                                                         |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     | TR98062 Std.<br>TR97490 .015                                                                                                         | TR90692 Std.<br>TR97492 .015                                                                                            | 1) TR106831 Std.<br>2) TR106829 Std.                                               | 1) TRE31617<br>2) TR91889                                                                                                |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                                                      |                                                                                                                         |                                                                                    | 1) Spring, Valve<br>2) Rotator, Valve                                                                                    |
|                                                                                                                                                                                                                                                                                                                           |                                                                                     |                                                                                                                                      |                                                                                                                         |                                                                                    |                                                                                                                          |
|                                                                                                                                                                                                                                        |  |                                                   |                                     |                                                                                    |                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                | Fuel Transfer Pump                                                                  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                                        | Water Pump                                                                                                              |                                                                                    | Seal, Injector Kit                                                                                                       |
| TRE64354 180° F                                                                                                                                                                                                                                                                                                           | TRE38009                                                                            | See Chart on<br>Page IT18                                                                                                            | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337,<br>(m) R127918, (m) R55164<br>TRE67185                        |                                                                                    | TRE38087                                                                                                                 |

(1) Helicoidal Gears.

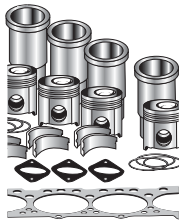
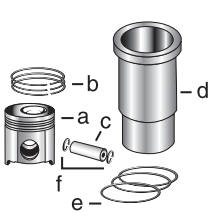
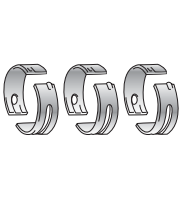
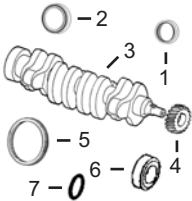
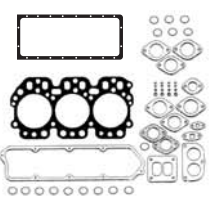
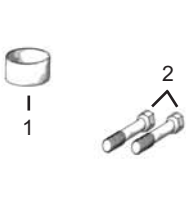
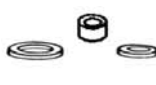
(2) Replace all R78558 Cap Screws with Flanged Head Cap Screw **TR85363**.

(3) After bushing installation, machine bushing to fit the shape of connecting rod before fitting piston pin.

(4) Kit contains **TT20094** helical gear to convert to a TRE50979 Crankshaft.

(5) With Machine Split Con Rod use **TR80033** and With Fractured Con Rod use **TR501124**.

(6) For used with Fractured split connecting rod.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                      |  |                                                                                                                           |  |                                                                                                               |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|
| <b>3029</b><br><b>2.9T</b><br><b>From 258847</b><br><b>CODE 4808</b><br><b>3 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br><b>Piston (m):</b><br>RE500211<br><br><b>Con Rod (m):</b><br>R105011, R501073<br><br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>5400 From 261581<br>5400N<br>8875 Skid Steer<br><br><b>OEM</b><br>2.9L<br><br><b>SDMO GENERATOR</b><br>J44K<br>J40U<br>R45U |  |                                                     |  |                                          |  |                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>1) Engine O/H Kit</b>                                                                                                             |  | <b>Piston-Liner Kit</b>                                                                                                   |  | <b>Main Bearing</b>                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>2) Engine I/F Kit</b>                                                                                                             |  | <b>TRE500673</b><br>Consists of:<br>a) TRE500211<br>b) TRE66271<br>c) TMX3915<br>d) TR116281<br>e) TAR65507<br>f) TR54114 |  | TRE27352 Std.<br>TRE27353 .010<br>TRE27360 .020<br>TRE27368 .030                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>1) TOK2.9T2<br/>TOK2.9T2A (6)</b>                                                                                                 |  |                                                                                                                           |  | TAT21139 Std.<br>TAT21132 .010<br>TAT21134 .020<br>TAT21136 .030                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>2) TIK2.9T2<br/>TIK2.9T2A (6)</b>                                                                                                 |  |                                                                                                                           |  | TRE27348 Std.<br>TRE27349 .010<br>TRE27358 .020<br>TRE27364 .030                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                     |  |                                          |  |                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                                                |  | <b>1) O/H Gasket Set</b>                                                                                                  |  | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod</b>                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear<br>6) Sleeve, Front<br>7) Packing, Sleeve                                       |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                          |  | 1) Pump, Oil<br>2) Oil Cooler<br>3) Rocker Arm (Intake/Exhaust)<br>4) Rocker Arm Shaft<br>5) Cyl Hd Cap Screw |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 1) TAR67942<br>2) TRE44574<br>3) TRE521348 (4)<br>4) TT20094 (1)<br>5) TR28811 (129T)<br>TR114282 (142T)<br>6) TR81989<br>7) TH35244 |  | 1) TRE501578<br>2) TRE38850<br>3) TR97356<br>4) TR97341<br>5) TR106796                                                    |  | 1) TRE55343<br>2) TRE61767<br>3) TRE31973<br>4) TR54985<br>5) TR85363 x14 (2)                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  |                                                                                                                           |  | 1) TAT24252 (1)<br>2) TT26321<br>3) TAT18009 (1)<br>4) TT20034<br>5) TT20073 x6<br>6) TT20070 (1)             |  |
|                                                                                                                                                                                                                                                                                                                                      |  | Valve, Intake                                                                                                                        |  | Valve, Exhaust                                                                                                            |  | 1) Seal, Valve<br>2) Lock, Valve                                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  | TR98062 Std.<br>TR97490 .015                                                                                                         |  | TR90692 Std.<br>TR97492 .015                                                                                              |  | 1) TR106831 Std.<br>2) TR106829 Std.                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                  |  | 1) Spring, Valve<br>2) Rotator, Valve                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  |                                                                                                                           |  | 1) TR26125<br>2) TRE60005                                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                      |  |                                                   |  |                                        |  |                           |  |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                              |  | Fuel Transfer Pump                                                                                                                   |  | Water Pump Rep Kit<br>a) Without Impeller<br>b) With Impeller                                                             |  | Water Pump                                                                                                    |  |
| TRE64354 180° F                                                                                                                                                                                                                                                                                                                                                                                                         |  | TRE38009                                                                                                                             |  | See Chart on<br>Page IT18                                                                                                 |  | TAR97708 (m) R73604<br>TRE60489 (m) R100812, (m) R127337,<br>(m) R127918, (m) R55164<br>TRE67185              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  |                                                                                                                           |  |                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  |                                                                                                                           |  |                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                      |  |                                                                                                                           |  | TRE38087<br>TRE64292                                                                                          |  |

(1) Helicoidal Gears.

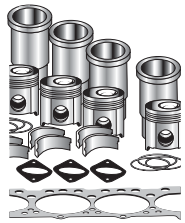
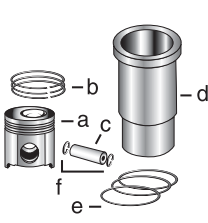
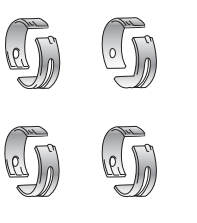
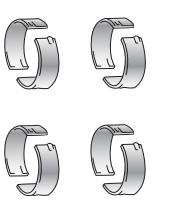
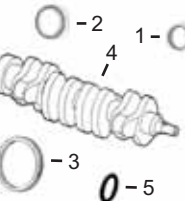
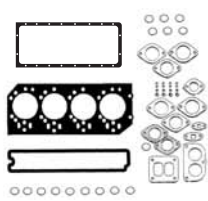
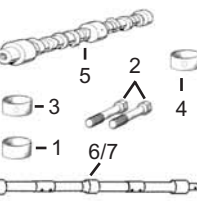
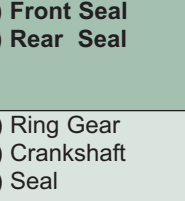
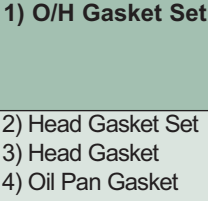
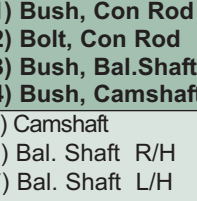
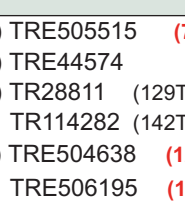
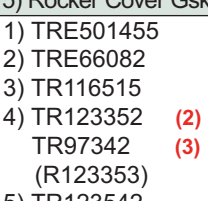
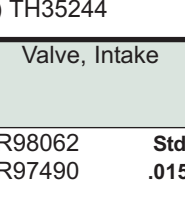
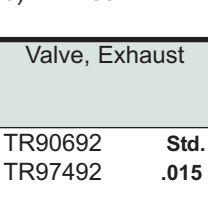
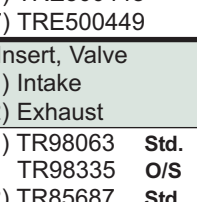
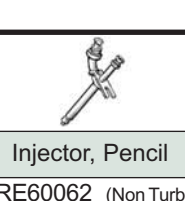
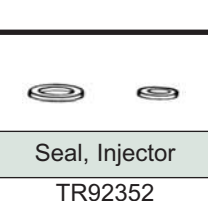
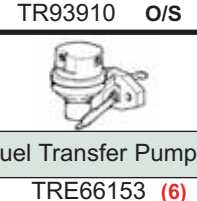
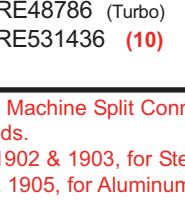
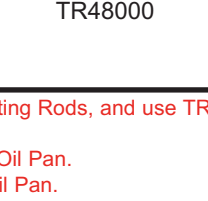
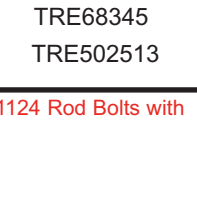
(2) Replace all R78558 Cap Screws with Flanged Head Cap Screw **TR85363**.

(3) After bushing installation, machine bushing to fit the shape of connecting rod before fitting piston pin.

(4) Kit contains **TT20094** helical gear to convert to a TRE50979 Crankshaft.

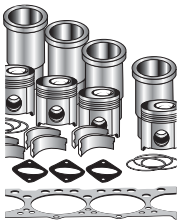
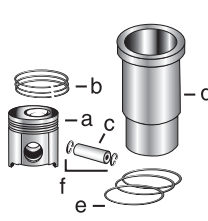
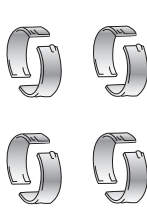
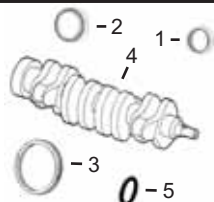
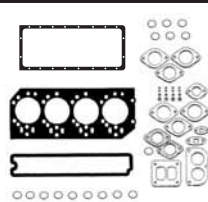
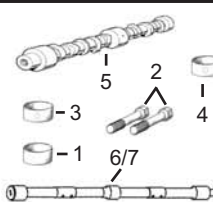
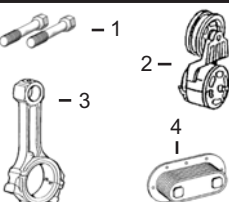
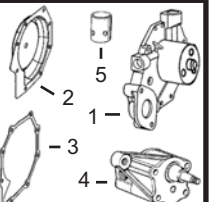
(5) With Machine Split Con Rod use **TR80033** and With Fractured Con Rod use **TR501124**.

(6) For used with Fractured split connecting rod.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                         |  |                                                                                                                                             |  |                                                                                                                                                                                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>4045D</b>                                                                                                                                                                                                                     |  |                                                            |  |                                                                                                                |  |
| 4.5D                                                                                                                                                                                                                             |  |                                                           |  |                                                                                                              |  |
| 4 Cyl                                                                                                                                                                                                                            |  |                                                          |  |                                                                                                                                                                                                 |  |
| Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.375 in<br>35 mm                                                                                                                                                                            |  | <b>1) Engine O/H Kit</b>                                                                                                                    |  | <b>1) Engine I/F Kit</b>                                                                                                                                                                        |  |
| <b>Piston (m):</b><br>RE59279, RE505101                                                                                                                                                                                          |  | <b>Piston-Liner Kit</b>                                                                                                                     |  | <b>TRE65966 (RE505110)</b><br>Consists of:<br>a) TRE59279<br>b) TRE66271<br>c) TR123178<br>d) TR116383<br>e) TAR65507<br>f) TM41029                                                             |  |
| <b>Con Rod (m):</b><br>R123959, R500000                                                                                                                                                                                          |  | <b>1) TRE66092</b><br><b>TRE66092A (*)</b><br>(*) w/C. Rod R500000                                                                          |  | <b>TRE65165 Std.</b><br><b>TRE65911 .010</b><br><b>TRE65165B .020 (8)</b>                                                                                                                       |  |
| <b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>270 5615<br>270 Series II 5715<br>5410 6010<br>5415 6110<br>5420/N 6610<br>5510<br><b>OEM</b><br>4.5L<br><b>CONSTRUCTION</b><br>210LE 486E<br>310E 488E<br>450H 550H<br>485E 650H |  | <b>2) TIK66092</b><br><b>TIK66092A (*)</b><br>(*) w/C. Rod R500000                                                                          |  | <b>TRE65168 Std.</b><br><b>TRE65912 .010</b><br><b>TRE65168B .020 (8)</b>                                                                                                                       |  |
|                                                                                                                                                 |  |                                                            |  |                                                                                                               |  |
| <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                                                                                      |  | <b>1) O/H Gasket Set</b>                                                                                                                    |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b><br><b>4) Bush, Camshaft</b>                                                                                    |  |
|                                                                                                                                                |  |                                                           |  |                                                                                                              |  |
| <b>3) Ring Gear</b><br><b>4) Crankshaft</b><br><b>5) Seal</b>                                                                                                                                                                    |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                                |  | <b>5) Camshaft</b><br><b>6) Bal. Shaft R/H</b><br><b>7) Bal. Shaft L/H</b>                                                                                                                      |  |
|                                                                                                                                               |  |                                                          |  |                                                                                                             |  |
| <b>1) TRE505515 (7)</b><br><b>2) TRE44574</b><br><b>3) TR28811 (129T)</b><br>TR114282 (142T)<br><b>4) TRE504638 (12)</b><br>TRE506195 (11)<br><b>5) TH35244</b>                                                                  |  | <b>1) TRE501455</b><br><b>2) TRE66082</b><br><b>3) TR116515</b><br><b>4) TR123352 (2)</b><br>TR97342 (3)<br>(R123353)<br><b>5) TR123542</b> |  | <b>1) TR123960 x4</b><br><b>2) TR114083 x8 (1)</b><br>TR501124 x8 (1)<br><b>3) TR115299 x6</b><br><b>4) TR119874 x1</b><br><b>5) TRE56375 (5)</b><br><b>6) TRE500448</b><br><b>7) TRE500449</b> |  |
|                                                                                                                                               |  |                                                          |  |                                                                                                             |  |
| <b>Valve, Intake</b>                                                                                                                                                                                                             |  | <b>Valve, Exhaust</b>                                                                                                                       |  | <b>1) Seal, Valve</b><br><b>2) Lock, Valve</b>                                                                                                                                                  |  |
|                                                                                                                                               |  |                                                          |  |                                                                                                             |  |
| <b>TR98062 Std.</b><br><b>TR97490 .015</b>                                                                                                                                                                                       |  | <b>TR90692 Std.</b><br><b>TR97492 .015</b>                                                                                                  |  | <b>1) TRE31617</b><br><b>2) TR91889</b>                                                                                                                                                         |  |
|                                                                                                                                               |  |                                                          |  |                                                                                                             |  |
| <b>Thermostat</b>                                                                                                                                                                                                                |  | <b>Injector, Pencil</b>                                                                                                                     |  | <b>Fuel Transfer Pump</b>                                                                                                                                                                       |  |
| <b>TRE522076 180° F (9)</b><br><b>TRE528652 180° F (9)</b><br><b>TRE540550 180° F (9)</b><br><b>TRE64354 180° F (9)</b>                                                                                                          |  | <b>TRE60062 (Non Turbo)</b><br><b>TRE48786 (Turbo)</b><br><b>TRE531436 (10)</b>                                                             |  | <b>TRE66153 (6)</b><br><b>TRE68345</b><br><b>TRE502513</b>                                                                                                                                      |  |

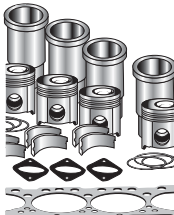
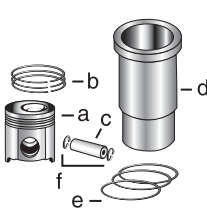
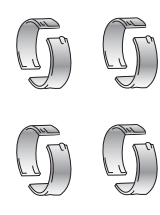
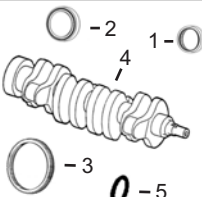
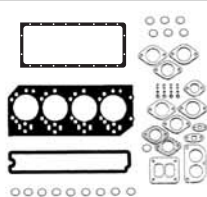
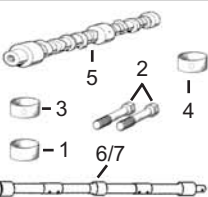
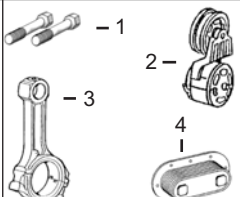
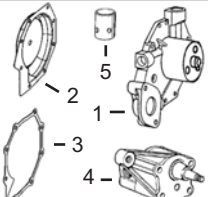
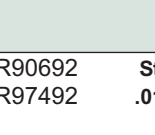
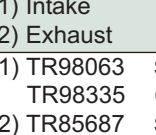
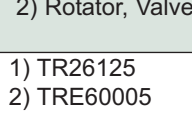
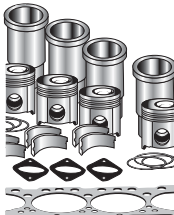
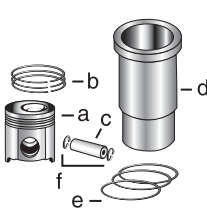
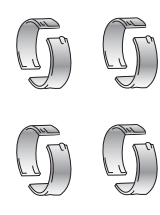
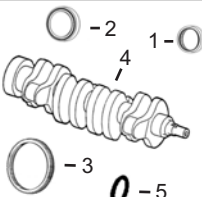
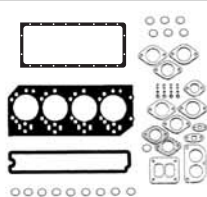
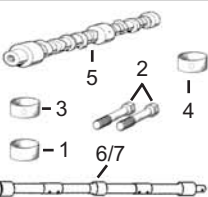
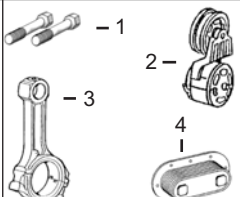
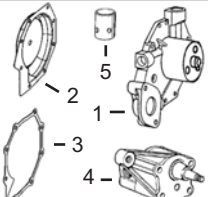
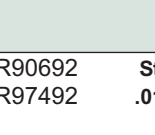
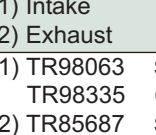
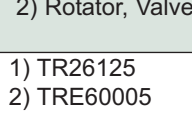
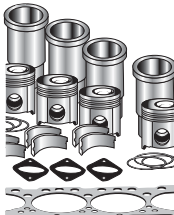
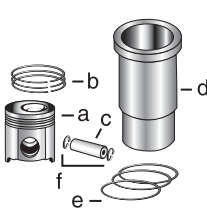
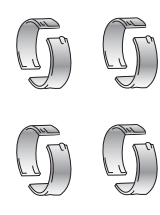
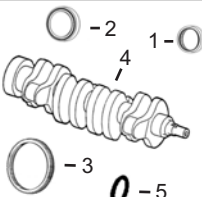
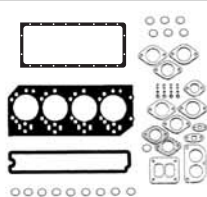
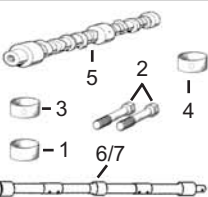
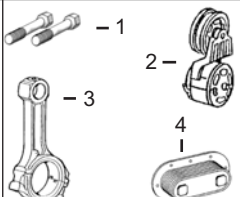
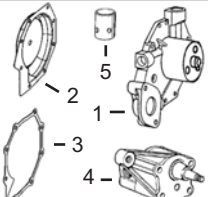
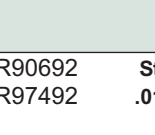
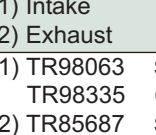
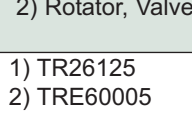
- (1) Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.  
(2) Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.  
(3) Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

- (4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
(5) (m) R135439, R132324, R134213.  
(6) Line Connections are both threaded.  
(7) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.  
(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.  
(9) Check application for proper usage.  
(10) Use with Stanadyne DE10 Injection Pump.  
(11) Tapered Nose.  
(12) Straight Nose.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                             |                                               |                                                              |                                                                                                                                                                                                                                                                           |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>4045T</b><br><br>4.5T<br>4 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.375 in<br>35 mm<br><br><b>Piston (m):</b><br>RE59277, RE505100 (1)<br><br><b>Con Rod (m):</b><br>R123959, R500000<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>3410/X 5510/N 5715<br>4890 5520/N 5725<br>4895 5525/N 6700<br>5415 5615<br>5425/N 5625/N<br><br><b>OEM</b><br>4.5L<br><br><b>CONSTRUCTION</b><br>230 LCR 344H<br>310E (TURBO) 410E<br>310G (TURBO) 410G<br>310SE (TURBO) 410J<br>310SG (TURBO) 450H<br>315SE 550H<br>315SG 650H<br><br><b>SDMO GENERATOR</b><br>J60U J70U<br>J66K J77K |  |                                             |                                               |                                                              |                                                                                                                                                                                                                                                                           |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 1) Engine O/H Kit                                                                                                            | Piston-Liner Kit                                                                                                               | Main Bearing                                                                                                                                   | Thrust Bearing                                                                                                                                                                                                                                                                                                                                               | Con Rod Bearing                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 2) Engine I/F Kit                                                                                                            | TRE507920 (RE515372)<br>Consists of:<br>a) TRE515372<br>b) TRE66820<br>c) TR123178<br>d) TR116383<br>e) TAR65507<br>f) TM41029 | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (8)                                                                                           | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (8)                                                                                                                                                                                                                                                                                                         | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (8)                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 1) TRE66093<br>TRE66093A (*)<br>(*) w/C. Rod R500000<br>2) TIK66093<br>TIK66093A (*)<br>(*) w/C. Rod R500000                 |                                                                                                                                | Use 4                                                                                                                                          | Use 1                                                                                                                                                                                                                                                                                                                                                        | Use 4                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 1) Front Seal<br>2) Rear Seal                                                                                                | 1) O/H Gasket Set                                                                                                              | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft                                                               | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                                                                                                                                                                     | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 3) Ring Gear<br>4) Crankshaft<br>5) Seal                                                                                     | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                               | 5) Camshaft<br>6) Bal. Shaft R/H<br>7) Bal. Shaft L/H                                                                                          |                                                                                                                                                                                                                                                                                                                                                              |                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 1) TRE505515 (9)<br>2) TRE44574<br>3) TR28811 (129T)<br>TR114282 (142T)<br>4) TRE504638 (13)<br>TRE506195 (12)<br>5) TH35244 | 1) TRE501455<br>2) TRE66082<br>3) TR116515<br>4) TR123352 (3)<br>TR97342 (4)<br>(R123353)<br>5) TR123542                       | 1) TR123960 x4<br>2) TR114083 x8 (2)<br>TR501124 x8 (2)<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE56375 (6)<br>6) TRE500448<br>7) TRE500449 | 1) TR85363 x18 (5)<br>2) TRE518097 (10)<br>TRE68715 (10)<br>3) TRE500002<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                                                                                                                             | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x8               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Valve, Intake                                                                                                                | Valve, Exhaust                                                                                                                 | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                       | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                                                                                                                                                                             | 1) Spring, Valve<br>2) Rotator, Valve                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | TR98062 Std.<br>TR97490 .015                                                                                                 | TR90692 Std.<br>TR97492 .015                                                                                                   | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                                                                               | 1) TRE31617<br>2) TR91889                                                                                                                                                                                                                                                                                                                                    | 1) TR26125<br>2) TRE60005                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                           |                                             |                                                             |                                                                                                                                                                                                                                                                          |                                                                                             |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Injector, Pencil                                                                                                             | Seal, Injector                                                                                                                 | Fuel Transfer Pump                                                                                                                             | (5) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.<br>(6) (m) R135439, R132324, R134213.<br>(7) Line Connections are both threaded.<br>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.<br>(9) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097. |                                                                                             |
| TRE522076 180° F (10)<br>TRE528652 180° F (10)<br>TRE540550 180° F (10)<br>TRE64354 180° F (10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (11)                                                                   | TR92352<br>TR48000                                                                                                             | TRE66153 (7)<br>TRE68345<br>TRE502513                                                                                                          |                                                                                                                                                                                                                                                                                                                                                              |                                                                                             |

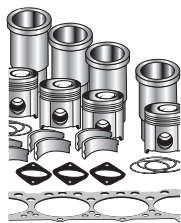
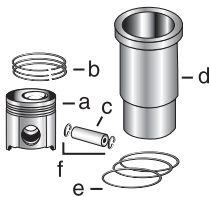
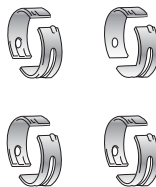
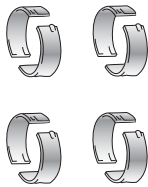
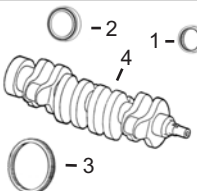
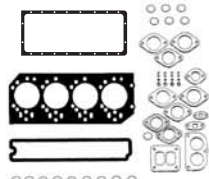
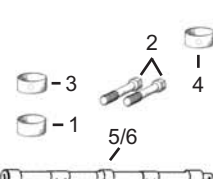
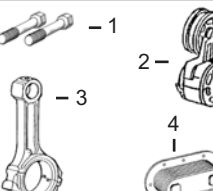
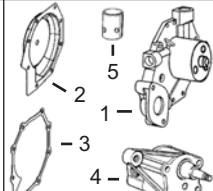
- (1) These marking numbers RE592727, RE505100 require to use Ring Set **TRE66271**.  
 (2) Use TR114083 with Machine Split Con Rods, and use TR501124 with Fractured Split Con Rods.  
 (3) Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.  
 (4) Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

- (5) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
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| <div>PowerTech</div> <div>Engine &amp; Equipment Model</div> <div>4045T/H</div> <div>4.5T/H</div> <div>4 Cyl</div> <div><div>Bore: 4.19 in</div><div>106.5 mm</div><div>Pin Ø: 1.62 in</div><div>41 mm</div></div> <div><div>Piston (m):</div><div>RE55512, RE505102</div><div>Con Rod (m):</div><div>R114081, R500335</div></div> <div><div>APPLICATIONS:</div><div>AGRICULTURAL</div><div><div>6010</div><div>6410/L/S</div><div>6110/L</div><div>6510L</div><div>6210/L</div><div>6610S</div><div>6310/L/S</div><div>6605</div><div>6405</div><div>6610</div></div><div>OEM</div><div>4.5L</div><div>CONSTRUCTION</div><div><div>120</div><div>455G</div><div>444H/HCL</div><div>550H/G</div><div>TC444H</div><div>555G</div><div>450G</div><div>650G</div></div><div>SDMO GENERATOR</div><div><div>J80U</div><div>J110K</div><div>R90U</div><div>J88K</div><div>R66RC</div><div>R90RC</div><div>J100U</div><div>R70U</div><div>R110U</div></div></div> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1) Engine O/H Kit</td><td>Piston-Liner Kit</td><td>Main Bearing</td><td>Thrust Bearing</td><td>Con Rod Bearing</td></tr> <tr><td>2) Engine I/F Kit</td><td>TRE507850 (RE505112)<br/>Consists of:</td><td>TRE65165 Std.</td><td>TRE65168 Std.</td><td>TRE65908 Std.</td></tr> <tr><td>1) TRE66094<br/>TRE66094A (*)<br/>(*) w/C. Rod R500335</td><td>a) TRE55512<br/>b) TRE66820<br/>c) TR123177<br/>d) TR116383<br/>e) TAR65507<br/>f) TR54114</td><td>TRE65911 .010<br/>TRE65165B .020 (8)</td><td>TRE65912 .010<br/>TRE65168B .020 (8)</td><td>TRE65909 .010<br/>TRE65908B .020 (8)</td></tr> <tr><td>2) TIK66094<br/>TIK66094A (*)<br/>(*) w/C. Rod R500335</td><td></td><td>Use 4</td><td>Use 1</td><td>Use 4</td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1) Front Seal<br/>2) Rear Seal</td><td>1) O/H Gasket Set</td><td>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bush, Bal. Shaft<br/>4) Bush, Camshaft</td><td>1) Cyl Hd Cap Screw<br/>2) Tensioner, Belt<br/>3) Con Rod<br/>4) Oil Cooler</td><td>1) Water Pump<br/>2) Water Pump Cov<br/>3) Water Pump Gsk<br/>4) Pump, Oil<br/>5) Cam. Follower</td></tr> <tr><td>3) Ring Gear<br/>4) Crankshaft<br/>5) Seal</td><td>2) Head Gasket Set<br/>3) Head Gasket<br/>4) Oil Pan Gasket<br/>5) Rocker Cover Gsk</td><td>5) Camshaft<br/>6) Bal. Shaft R/H<br/>7) Bal. Shaft L/H</td><td></td><td></td></tr> <tr><td>1) TRE505515 (7)<br/>2) TRE44574<br/>3) TR28811 (129T)<br/>TR114282 (142T)<br/>4) TRE504638 (12)<br/>TRE506195 (11)<br/>5) TH35244</td><td>1) TRE501455<br/>2) TRE66082<br/>3) TR116515<br/>4) TR123352 (2)<br/>TR97342 (3)<br/>(R123353)<br/>5) TR123542</td><td>1) TR114082 x4<br/>2) TR114083 x8 (1)<br/>TR501124 x8 (1)<br/>3) TR115299 x6<br/>4) TR119874 x1<br/>5) TRE56375 (5)<br/>6) TRE500448<br/>7) TRE500449</td><td>1) TR85363 x18 (4)<br/>2) TRE518097 (9)<br/>TRE68715 (9)<br/>3) TRE500608<br/>4) TRE59296 (5 Plates)<br/>TRE56690 (7 Plates)<br/>TRE59298 (9 Plates)</td><td>1) TRE500734<br/>2) TRE508566<br/>3) TR123417<br/>4) TRE504914<br/>5) TR123565 x8</td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Valve, Intake</td><td>Valve, Exhaust</td><td>Insert, Valve<br/>1) Intake<br/>2) Exhaust</td><td>1) Seal, Valve<br/>2) Lock, Valve</td><td>1) Spring, Valve<br/>2) Rotator, Valve</td></tr> <tr><td>TR98062 Std.<br/>TR97490 .015</td><td>TR90692 Std.<br/>TR97492 .015</td><td>1) TR98063 Std.<br/>TR98335 O/S<br/>2) TR85687 Std.<br/>TR93910 O/S</td><td>1) TRE31617<br/>2) TR91889</td><td>1) TR26125<br/>2) TRE60005</td></tr> <tr><td></td><td></td><td></td><td></td><td rowspan="4"><div>(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.</div><div>(5) (m) R135439, R132324, R134213.</div><div>(6) Line Connections are both threaded.</div><div>(7) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.</div><div>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.</div><div>(9) Check application for proper usage.</div><div>(10) Use with Stanadyne DE10 Injection Pump.</div><div>(11) Tapered Nose.</div><div>(12) Straight Nose.</div></td></tr> <tr><td>Thermostat</td><td>Injector, Pencil</td><td>Seal, Injector</td><td>Fuel Transfer Pump</td></tr> <tr><td>TRE522076 180° F (9)<br/>TRE528652 180° F (9)<br/>TRE540550 180° F (9)<br/>TRE64354 180° F (9)</td><td>TRE60062 (Non Turbo)<br/>TRE48786 (Turbo)<br/>TRE531436 (10)</td><td>TR92352<br/>TR48000</td><td>TRE66153 (6)<br/>TRE68345<br/>TRE502513</td></tr> <tr><td></td><td></td><td></td><td></td></tr> |                                             |                         |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          | 1) Engine O/H Kit | Piston-Liner Kit | Main Bearing | Thrust Bearing | Con Rod Bearing | 2) Engine I/F Kit | TRE507850 (RE505112)<br>Consists of: | TRE65165 Std. | TRE65168 Std. | TRE65908 Std. | 1) TRE66094<br>TRE66094A (*)<br>(*) w/C. Rod R500335 | a) TRE55512<br>b) TRE66820<br>c) TR123177<br>d) TR116383<br>e) TAR65507<br>f) TR54114 | TRE65911 .010<br>TRE65165B .020 (8) | TRE65912 .010<br>TRE65168B .020 (8) | TRE65909 .010<br>TRE65908B .020 (8) | 2) TIK66094<br>TIK66094A (*)<br>(*) w/C. Rod R500335 |  | Use 4 | Use 1 | Use 4 |  |  |  |  |  | 1) Front Seal<br>2) Rear Seal | 1) O/H Gasket Set | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower | 3) Ring Gear<br>4) Crankshaft<br>5) Seal | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk | 5) Camshaft<br>6) Bal. Shaft R/H<br>7) Bal. Shaft L/H |  |  | 1) TRE505515 (7)<br>2) TRE44574<br>3) TR28811 (129T)<br>TR114282 (142T)<br>4) TRE504638 (12)<br>TRE506195 (11)<br>5) TH35244 | 1) TRE501455<br>2) TRE66082<br>3) TR116515<br>4) TR123352 (2)<br>TR97342 (3)<br>(R123353)<br>5) TR123542 | 1) TR114082 x4<br>2) TR114083 x8 (1)<br>TR501124 x8 (1)<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE56375 (5)<br>6) TRE500448<br>7) TRE500449 | 1) TR85363 x18 (4)<br>2) TRE518097 (9)<br>TRE68715 (9)<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x8 |  |  |  |  |  | Valve, Intake | Valve, Exhaust | Insert, Valve<br>1) Intake<br>2) Exhaust | 1) Seal, Valve<br>2) Lock, Valve | 1) Spring, Valve<br>2) Rotator, Valve | TR98062 Std.<br>TR97490 .015 | TR90692 Std.<br>TR97492 .015 | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S | 1) TRE31617<br>2) TR91889 | 1) TR26125<br>2) TRE60005 |  |  |  |  | <div>(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.</div> <div>(5) (m) R135439, R132324, R134213.</div> <div>(6) Line Connections are both threaded.</div> <div>(7) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.</div> <div>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.</div> <div>(9) Check application for proper usage.</div> <div>(10) Use with Stanadyne DE10 Injection Pump.</div> <div>(11) Tapered Nose.</div> <div>(12) Straight Nose.</div> | Thermostat | Injector, Pencil | Seal, Injector | Fuel Transfer Pump | TRE522076 180° F (9)<br>TRE528652 180° F (9)<br>TRE540550 180° F (9)<br>TRE64354 180° F (9) | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (10) | TR92352<br>TR48000 | TRE66153 (6)<br>TRE68345<br>TRE502513 |  |  |  |  |
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                                                                             | 1) Engine O/H Kit                                                                                                            | Piston-Liner Kit                                                                                         | Main Bearing                                                                                                                                   | Thrust Bearing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Con Rod Bearing                                                                             |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |               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                                                                             | 2) Engine I/F Kit                                                                                                            | TRE507850 (RE505112)<br>Consists of:                                                                     | TRE65165 Std.                                                                                                                                  | TRE65168 Std.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | TRE65908 Std.                                                                               |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |               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                                                                             | 1) TRE66094<br>TRE66094A (*)<br>(*) w/C. Rod R500335                                                                         | a) TRE55512<br>b) TRE66820<br>c) TR123177<br>d) TR116383<br>e) TAR65507<br>f) TR54114                    | TRE65911 .010<br>TRE65165B .020 (8)                                                                                                            | TRE65912 .010<br>TRE65168B .020 (8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TRE65909 .010<br>TRE65908B .020 (8)                                                         |        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Rod R500335                                                                         |                                                                                                          | Use 4                                                                                                                                          | Use 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Use 4                                                                                       |        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                                                                             | 1) Front Seal<br>2) Rear Seal                                                                                                | 1) O/H Gasket Set                                                                                        | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft                                                               | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                               |                   |                                                                                  |                                                                          |                                                                                             |                                          |                                                                                  |                                                       |  |  |                                                                                                                              |                                                                                                          |                                                                                                                                                |                                                                                                                                                |                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                       |                                                                                       |               |                |                                          |                                  |                                       |                              |                              |                                                                  |                           |                           |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                  |                |                    |                                                                                             |                                                            |                    |                                       |  |  |  |  |
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                                                                             | 3) Ring Gear<br>4) Crankshaft<br>5) Seal                                                                                     | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                         | 5) Camshaft<br>6) Bal. Shaft R/H<br>7) Bal. Shaft L/H                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                             |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                               |                   |                                                                                  |                                                                          |                                                                                             |                                          |                                                                                  |                                                       |  |  |                                                                                                                              |                                                                                                          |                                                                                                                                                |                                                                                                                                                |                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                       |                                                                                       |               |                |                                          |                                  |                                       |                              |                              |                                                                  |                           |                           |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                  |                |                    |                                                                                             |                                                            |                    |                                       |  |  |  |  |
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                                                                             | 1) TRE505515 (7)<br>2) TRE44574<br>3) TR28811 (129T)<br>TR114282 (142T)<br>4) TRE504638 (12)<br>TRE506195 (11)<br>5) TH35244 | 1) TRE501455<br>2) TRE66082<br>3) TR116515<br>4) TR123352 (2)<br>TR97342 (3)<br>(R123353)<br>5) TR123542 | 1) TR114082 x4<br>2) TR114083 x8 (1)<br>TR501124 x8 (1)<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE56375 (5)<br>6) TRE500448<br>7) TRE500449 | 1) TR85363 x18 (4)<br>2) TRE518097 (9)<br>TRE68715 (9)<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x8               |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |               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                                                                             | Valve, Intake                                                                                                                | Valve, Exhaust                                                                                           | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                       | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1) Spring, Valve<br>2) Rotator, Valve                                                       |                   |                  |              |                |                 |                   |                                      |               |               |               |                                                      |                                                                                       |                                     |                                     |                                     |                                                      |  |       |       |       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |               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| TR98062 Std.<br>TR97490 .015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TR90692 Std.<br>TR97492 .015                                                                                                 | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                                         | 1) TRE31617<br>2) TR91889                                                                                                                      | 1) TR26125<br>2) TRE60005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                      |                       |                                                             | <div>(4) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.</div> <div>(5) (m) R135439, R132324, R134213.</div> <div>(6) Line Connections are both threaded.</div> <div>(7) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.</div> <div>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.</div> <div>(9) Check application for proper usage.</div> <div>(10) Use with Stanadyne DE10 Injection Pump.</div> <div>(11) Tapered Nose.</div> <div>(12) Straight Nose.</div> |                                                                                             |                   |                  |              |                |                 |                   |                                      |               |               |               |                        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| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Injector, Pencil                                                                                                             | Seal, Injector                                                                                           | Fuel Transfer Pump                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| TRE522076 180° F (9)<br>TRE528652 180° F (9)<br>TRE540550 180° F (9)<br>TRE64354 180° F (9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (10)                                                                   | TR92352<br>TR48000                                                                                       | TRE66153 (6)<br>TRE68345<br>TRE502513                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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- (1) Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.  
 (2) Use with Oil Pan code 1901, 1902 & 1903, for Steel Oil Pan.  
 (3) Use with Oil Pan code 1904 & 1905, for Aluminum Oil Pan.

- (9) Check application for proper usage.  
 (10) Use with Stanadyne DE10 Injection Pump.  
 (11) Tapered Nose.  
 (12) Straight Nose.

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| <div>PowerTech</div> <div>Engine &amp; Equipment Model</div> <div>4045T/H</div> <div>For Tier 2 &amp; Tier 3 Applications</div> <div>2 Valve per Cylinder</div> <div>4 Cyl</div> <div>Bore: 4.19 in<br/>106.5 mm</div> <div>Pin Ø: 1.62 in<br/>41 mm</div> <div>Piston (m):<br/>RE527039</div> <div>Con Rod (m):<br/>R500335</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL *</div> <div>5080R/RN 6130D</div> <div>5090R/RN 6140D</div> <div>5100R/RN 6230</div> <div>5105M/ML 6325</div> <div>6100D 6330</div> <div>6110D 6425</div> <div>6115D 6430</div> <div>6125D 6534</div> <div>6130</div> <div>CONSTRUCTION *</div> <div>335D 344J 437D</div> <div>650J 710J ML1335</div> <div>* See Index for more Applications</div> |                       |                                              |                                                                                                                              |                                                                                 |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Engine O/H Kit                                                                                      | Piston-Liner Kit                                                                                                              | Main Bearing                                                                                                                                                                                                   | Thrust Bearing                                                                                                                                                     | Con Rod Bearing                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) Engine I/F Kit                                                                                      | TRE536083<br>Consists of:<br>a) TRE527039<br>b) TRE527844<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114          | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)                                                                                                                                                           | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                                                               | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (2)                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRE532715                                                                                           |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2) TIK532715                                                                                           |                                                                                                                               | Use 4                                                                                                                                                                                                          | Use 1                                                                                                                                                              | Use 4                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                                              |                                                                                                                              |                                                                                 |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) Front Seal<br>2) Rear Seal                                                                          | 1) O/H Gasket Set                                                                                                             | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft                                                                                                                               | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                           | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3) Ring Gear<br>4) Crankshaft                                                                          | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                              | 5) Bal. Shaft R/H<br>6) Bal. Shaft L/H                                                                                                                                                                         |                                                                                                                                                                    |                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE504638 (4)<br>TRE506195 (3) | 1) TRE532713<br>2) TRE532842<br>3) TR116515<br>4) TR521493 (5)<br>TR97342 (5)<br>(R123353)<br>5) TR123542 (5)<br>TR524468 (5) | 1) TR114082 x4<br>2) TR501124 x8<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE500448<br>6) TRE500449                                                                                                           | 1) TR502511 x18 (5)<br>TR85363 x18 (5)<br>2) TRE518097 (5)<br>TRE68715 (5)<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>5) TR123565 x8           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Valve, Intake                                                                                                                 | Valve, Exhaust                                                                                                                                                                                                 | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                           | 1) Seal, Valve<br>2) Lock, Valve                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TR98062 Std.<br>TR97490 .015                                                                           | TR90692 Std.<br>TR97492 .015                                                                                                  | 1) TR106831 Std.<br>2) TR106829 Std.                                                                                                                                                                           | 1) TRE31617<br>2) TR91889                                                                                                                                          | 1) TR26125 (5)<br>2) TRE60005 (5)                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                                                                                                                               | (4) Straight Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |                                                                                                                                                                    |                                                                                             |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Fuel Transfer Pump                                                                                     |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |
| TRE522076 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TRE66153 (5) (6)                                                                                       |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |
| TRE528652 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TRE68345 (5) (7)                                                                                       |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |
| TRE540550 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TRE502513 (5) (8)                                                                                      |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |
| TRE64354 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                        |                                                                                                                               |                                                                                                                                                                                                                |                                                                                                                                                                    |                                                                                             |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

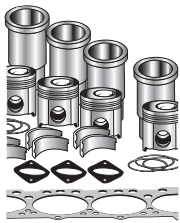
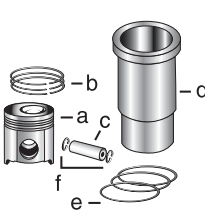
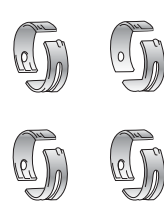
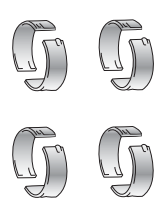
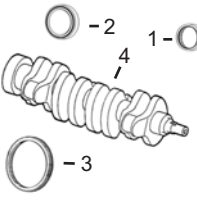
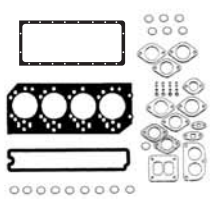
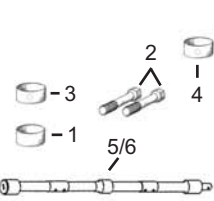
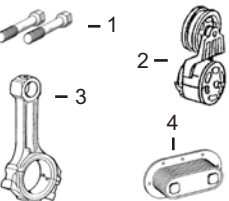
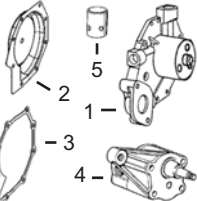
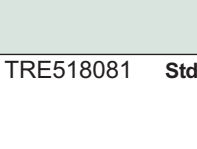
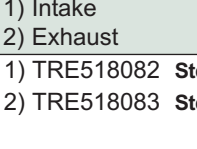
(3) Tapered Nose.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                        |                                                                                                                             |                                                                                                              |                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>4045T/H</b><br>For Tier 2 & Tier 3 Applications<br>4 Valve per Cylinder<br>4 Cyl<br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br>Piston (m):<br>RE521616<br>Con Rod (m):<br>R500335<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL *<br>6430<br>6534<br>7130<br><br>CONSTRUCTION *<br>810D<br>810E<br>850J<br>1010D<br>1010E<br><br>* See Index for more Applications |  |                                                                                                        |                                                                                                                             |                                                                                                              |                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>1) Engine O/H Kit</b>                                                                               | <b>Piston-Liner Kit</b>                                                                                                     | <b>Main Bearing</b>                                                                                          | <b>Thrust Bearing</b>                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>2) Engine I/F Kit</b>                                                                               | <b>TRE524450</b><br>Consists of:<br>a) TRE521616<br>b) TRE524453<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)                                                         | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>1) TRE536969</b>                                                                                    |                                                                                                                             |                                                                                                              | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (2)                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>2) TIK536969</b>                                                                                    |                                                                                                                             | <b>Use 4</b>                                                                                                 | <b>Use 1</b>                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                        |                                                                                                                             |                                                                                                              |                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                            | <b>1) O/H Gasket Set</b>                                                                                                    | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b><br><b>4) Bush, Camshaft</b> | <b>1) Cyl Hd Cap Screw</b><br><b>2) Tensioner, Belt</b><br><b>3) Con Rod</b><br><b>4) Oil Cooler</b>                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>3) Ring Gear</b><br><b>4) Crankshaft</b>                                                            | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                | <b>5) Bal. Shaft R/H</b><br><b>6) Bal. Shaft L/H</b>                                                         | <b>1) Water Pump</b><br><b>2) Water Pump Cov</b><br><b>3) Water Pump Gsk</b><br><b>4) Pump, Oil</b><br><b>5) Cam. Follower</b>                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE504638 (4)<br>TRE506195 (3) | 1) TRE536962<br>2) TRE536967<br>3) TR116515<br>4) TR521493 (5)<br>TR97342 (5)<br>5) TR524498<br>TR524499                    | 1) TR114082 x4<br>2) TR501124 x8<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE500448<br>6) TRE500449         | 1) TR502511 x18<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                        |                                                                                                                             |                                                                                                              | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x8                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | Valve, Intake                                                                                          | Valve, Exhaust                                                                                                              | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                     | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                               | TRE518081 Std.                                                                                                              | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                                       | 1) TRE526519 x16 (5)<br>TRE519115 x16 (5)<br>2) TR502371 x32 (5)                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | Thermostat                                                                                             |                                                                                                                             |                                                                                                              | (4) Straight Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |
|                                                                                                                                                                                                                                                                                                                                                                                              |  | TRE522076 180° F (5)<br>TRE538289 180° F (5)<br>TRE64354 180° F (5)                                    | TRE66153 (5) (6)<br>TRE68345 (5) (7)<br>TRE502513 (5) (8)<br>TRE517230 (5)                                                  |                                                                                                              |                                                                                                                                                                                                                |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

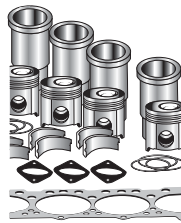
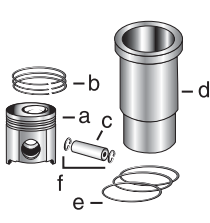
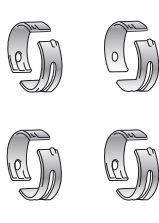
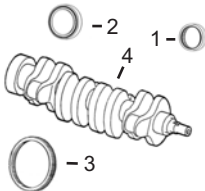
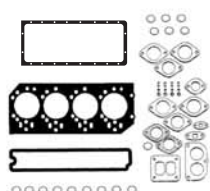
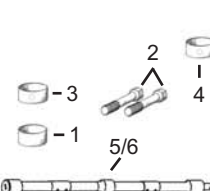
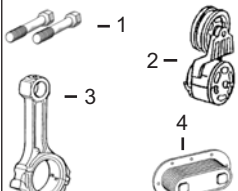
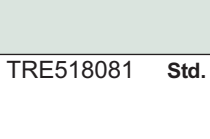
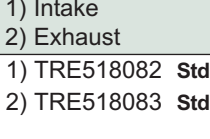
(3) Tapered Nose.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                          |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>4045T/H</b><br><b>For Tier 2 &amp; Tier 3 Applications</b><br><b>4 Valve per Cylinder</b><br><b>4 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br><b>Piston (m):</b><br>RE515037<br><br><b>Con Rod (m):</b><br>R500335<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL *</b><br>6430<br>6534<br>7130<br><br><b>CONSTRUCTION *</b><br>810D<br>810E<br>850J<br>1010D<br>1010E<br><br><b>* See Index for more Applications</b> |                |                                                                                                          |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1) Engine O/H Kit                                                                                                                                                                                                                                                                                                                                                                                                                        | Piston-Liner Kit                                                                                         | Main Bearing                                                                                         | Thrust Bearing                                                                                                                                                                                                 | Con Rod Bearing                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2) Engine I/F Kit                                                                                                                                                                                                                                                                                                                                                                                                                        | TRE516227<br>Consists of:                                                                                | TRE65165 Std.                                                                                        | TRE65168 Std.                                                                                                                                                                                                  | TRE65908 Std.                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1) TRE526972                                                                                                                                                                                                                                                                                                                                                                                                                             | a) TRE515037<br>b) TRE66820<br>c) TR502755<br>d) TR116383<br>e) TAR65507<br>f) TR54114                   | TRE65911 .010<br>TRE65165B .020 (2)                                                                  | TRE65912 .010<br>TRE65168B .020 (2)                                                                                                                                                                            | TRE65909 .010<br>TRE65908B .020 (2)                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2) TIK526972                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                          | Use 4                                                                                                | Use 1                                                                                                                                                                                                          | Use 4                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |                                                                                                          |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1) Front Seal<br>2) Rear Seal                                                                                                                                                                                                                                                                                                                                                                                                            | 1) O/H Gasket Set                                                                                        | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft                     | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                       | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3) Ring Gear<br>4) Crankshaft                                                                                                                                                                                                                                                                                                                                                                                                            | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                         | 5) Bal. Shaft R/H<br>6) Bal. Shaft L/H                                                               |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE504638 (4)<br>TRE506195 (3)                                                                                                                                                                                                                                                                                                                                   | 1) TRE536962<br>2) TRE536967<br>3) TR116515<br>4) TR521493 (5)<br>TR97342 (5)<br>5) TR524498<br>TR524499 | 1) TR114082 x4<br>2) TR501124 x8<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE500448<br>6) TRE500449 | 1) TR502511 x18<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                        | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x8 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |                                                                                                          |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                            | Valve, Exhaust                                                                                           | Insert, Valve<br>1) Intake<br>2) Exhaust                                                             | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                               | 1) Spring, Valve (5)                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                                                                                                                                                                                                                                                                                                                                                                 | TRE518081 Std.                                                                                           | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                               | 1) TRE526519 x16 (5)<br>TRE519115 x16 (5)<br>2) TR502371 x32 (5)                                                                                                                                               | 1) TR518872 x16<br>TRE516486 x16                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                      | (4) Straight Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |                                                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                          | Fuel Transfer Pump                                                                                       |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE522076 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                          | TRE66153 (5) (6)                                                                                         |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE538289 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                          | TRE68345 (5) (7)                                                                                         |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE64354 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                          | TRE502513 (5) (8)                                                                                        |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                          | TRE517230 (5)                                                                                            |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

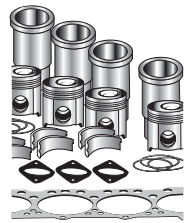
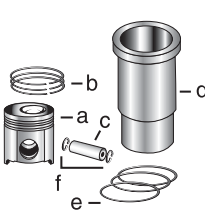
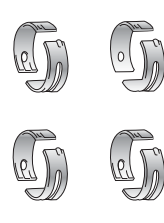
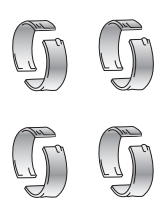
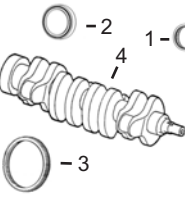
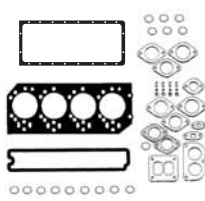
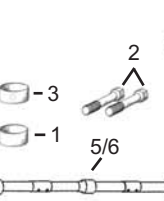
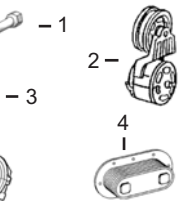
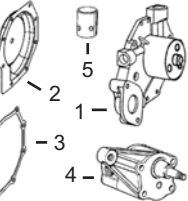
(3) Tapered Nose.

| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b>                                                                                                                                                                                                                                                                                                                                |  |                                                                                                        |                                                                                                                             |                                                                                                                                                                                                                |                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>4045T/H</b><br>For Tier 2 & Tier 3 Applications<br>4 Valve per Cylinder<br>4 Cyl<br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><b>Piston (m):</b><br>RE507758<br><b>Con Rod (m):</b><br>R500335<br><b>APPLICATIONS:</b><br><b>AGRICULTURAL *</b><br>6430<br>6534<br>7130<br><b>CONSTRUCTION *</b><br>810D<br>810E<br>850J<br>1010D<br>1010E<br>* See Index for more Applications |  |                       |                                            |                                                                                                                               |                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>1) Engine O/H Kit</b>                                                                               | <b>Piston-Liner Kit</b>                                                                                                     | <b>Main Bearing</b>                                                                                                                                                                                            | <b>Thrust Bearing</b>                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>2) Engine I/F Kit</b>                                                                               | <b>TRE516228</b><br>Consists of:<br>a) TRE507758<br>b) TRE516268<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)                                                                                                                                                           | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>1) TRE526973</b>                                                                                    |                                                                                                                             |                                                                                                                                                                                                                |                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>2) TIK526973</b>                                                                                    |                                                                                                                             | <b>Use 4</b>                                                                                                                                                                                                   | <b>Use 1</b>                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  |                       |                                            |                                                                                                                              |                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                            | <b>1) O/H Gasket Set</b>                                                                                                    | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bush, Bal. Shaft</b><br><b>4) Bush, Camshaft</b>                                                                                                   | <b>1) Cyl Hd Cap Screw</b><br><b>2) Tensioner, Belt</b><br><b>3) Con Rod</b><br><b>4) Oil Cooler</b>                           |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>3) Ring Gear</b><br><b>4) Crankshaft</b>                                                            | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                | <b>5) Bal. Shaft R/H</b><br><b>6) Bal. Shaft L/H</b>                                                                                                                                                           | <b>1) Water Pump</b><br><b>2) Water Pump Cov</b><br><b>3) Water Pump Gsk</b><br><b>4) Pump, Oil</b><br><b>5) Cam. Follower</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE504638 (4)<br>TRE506195 (3) | 1) TRE536962<br>2) TRE536967<br>3) TR116515<br>4) TR521493 (5)<br>TR97342 (5)<br>5) TR524498<br>TR524499                    | 1) TR114082 x4<br>2) TR501124 x8<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE500448<br>6) TRE500449                                                                                                           | 1) TR502511 x18<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)        |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                        |                                                                                                                             |                                                                                                                                                                                                                | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x8            |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  |                      |                                          |                                                                                                                            |                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | Valve, Intake                                                                                          | Valve, Exhaust                                                                                                              | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                                                       | 1) Seal, Valve<br>2) Lock, Valve                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                               | TRE518081 Std.                                                                                                              | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                                                                                                                                         | 1) TRE526519 x16 (5)<br>TRE519115 x16 (5)<br>2) TR502371 x32 (5)                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  |                     |                                          | (4) Straight Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>Thermostat</b>                                                                                      | <b>Fuel Transfer Pump</b>                                                                                                   |                                                                                                                                                                                                                |                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                  |  | TRE522076 180° F (5)<br>TRE538289 180° F (5)<br>TRE64354 180° F (5)                                    | TRE66153 (5) (6)<br>TRE68345 (5) (7)<br>TRE502513 (5) (8)<br>TRE517230 (5)                                                  |                                                                                                                                                                                                                |                                                                                                                                |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

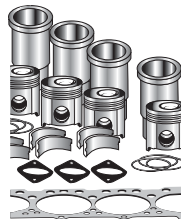
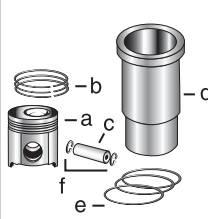
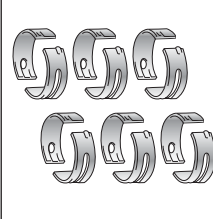
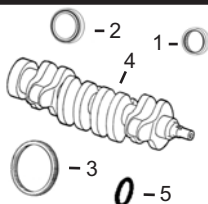
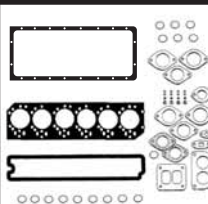
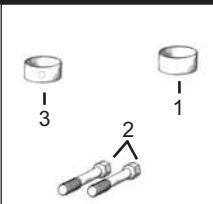
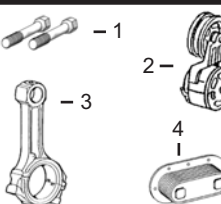
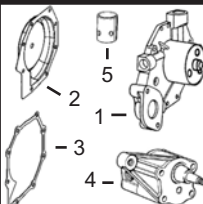
(3) Tapered Nose.

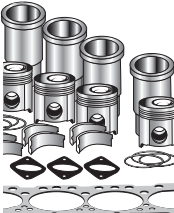
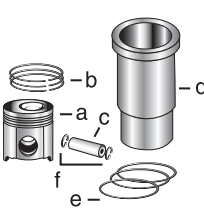
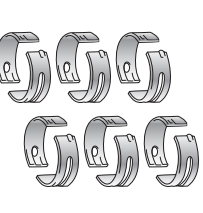
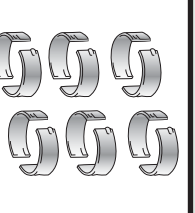
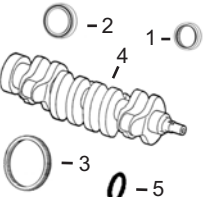
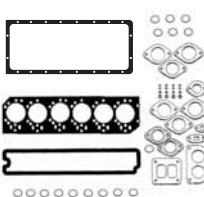
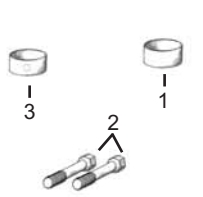
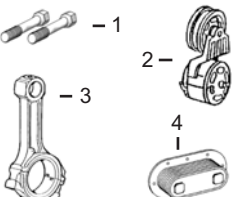
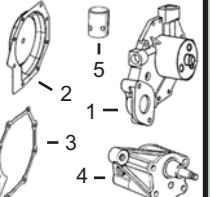
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                             |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>4045T/H</b><br><b>For Tier 2 &amp; Tier 3 Applications</b><br><b>4 Valve per Cylinder</b><br><b>4 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><br><b>Piston (m):</b><br>RE515037<br><b>Con Rod (m):</b><br>R500335<br><br><b>APPLICATIONS:</b><br><br><b>AGRICULTURAL *</b><br>6430<br>6534<br>7130<br><br><b>CONSTRUCTION *</b><br>810D<br>810E<br>850J<br>1010D<br>1010E<br><br>* See Index for more Applications |      |                                                                                                                             |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Engine O/H Kit                                                                                                                                                                                                                                                                                                                                                                                                              | Piston-Liner Kit                                                                                                            | Main Bearing                                                                                         | Thrust Bearing                                                                                                                                                                                                 | Con Rod Bearing                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2) Engine I/F Kit                                                                                                                                                                                                                                                                                                                                                                                                              | <b>TRE530616</b><br>Consists of:<br>a) TRE515037<br>b) TRE530613<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 | TRE65165 Std.                                                                                        | TRE65168 Std.                                                                                                                                                                                                  | TRE65908 Std.                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) TRE546978                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                             | TRE65911 .010                                                                                        | TRE65912 .010                                                                                                                                                                                                  | TRE65909 .010                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2) TIK546978                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                             | TRE65165B .020 (2)                                                                                   | TRE65168B .020 (2)                                                                                                                                                                                             | TRE65908B .020 (2)                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                             | Use 4                                                                                                | Use 1                                                                                                                                                                                                          | Use 4                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                               |                                            |                    |                                                                                                                             |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) Front Seal<br>2) Rear Seal                                                                                                                                                                                                                                                                                                                                                                                                  | 1) O/H Gasket Set                                                                                                           | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bush, Bal. Shaft<br>4) Bush, Camshaft                     | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                       | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3) Ring Gear<br>4) Crankshaft                                                                                                                                                                                                                                                                                                                                                                                                  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                            | 5) Bal. Shaft R/H<br>6) Bal. Shaft L/H                                                               |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE504638 (4)<br>TRE506195 (3)                                                                                                                                                                                                                                                                                                                         | 1) TRE536962<br>2) TRE536967<br>3) TR116515<br>4) TR521493 (5)<br>TR97342 (5)<br>5) TR524498<br>TR524499                    | 1) TR114082 x4<br>2) TR501124 x8<br>3) TR115299 x6<br>4) TR119874 x1<br>5) TRE500448<br>6) TRE500449 | 1) TR502511 x18<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                        | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x8 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                             | Valve, Intake                                                                                                               | Valve, Exhaust                                                                                       | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                                                       | 1) Seal, Valve<br>2) Lock, Valve                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                                                                                                                                                                                                                                                                                                                                                       | TRE518081 Std.                                                                                                              | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                               | 1) TRE526519 x16 (5)<br>TRE519115 x16 (5)<br>2) TR502371 x32 (5)                                                                                                                                               | 1) Spring, Valve (5)<br>1) TR518872 x16<br>TRE516486 x16                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                          |                                                                                                      | (4) Straight Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |                                                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                | Fuel Transfer Pump                                                                                                          |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE522076 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                | TRE66153 (5) (6)                                                                                                            |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE538289 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                | TRE68345 (5) (7)                                                                                                            |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
| TRE64354 180° F (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                | TRE502513 (5) (8)                                                                                                           |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                | TRE517230 (5)                                                                                                               |                                                                                                      |                                                                                                                                                                                                                |                                                                                                                     |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Tapered Nose.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                          |                                                                                                                            |                                                    |    |                                                                                                                                                                                                                                                                                                      |                                               |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>6068D</b><br><br>6.8D<br><br>6 Cyl<br><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.375 in<br>35 mm<br><br>Piston (m):<br>RE59279, RE505101<br><br>Con Rod (m):<br>RE123959, R500000<br><br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL<br>6205 6515<br>6505 6520<br>6510 SE6520<br>SE6510<br><br>OEM<br>6.8L | <b>1) Engine O/H Kit</b>                                                                                                   | <b>Piston-Liner Kit</b>                                                                                                             | <b>Main Bearing</b>                                                                 | <b>Thrust Bearing</b>                                                                                                                                                                                                                                                                                                                                                                  | <b>Con Rod Bearing</b>                                                                                                           |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | <b>2) Engine I/F Kit</b>                                                                                                   | <b>TRE65966 (RE505110)</b><br>Consists of:<br>a) TRE59279<br>b) TRE66271<br>c) TR123178<br>d) TR116383<br>e) TAR65507<br>f) TM41029 | TRE65165 Std.<br><br>TRE65911 .010<br><br>TRE65165B .020 (8)                        | TRE65168 Std.<br><br>TRE65912 .010<br><br>TRE65168B .020 (8)                                                                                                                                                                                                                                                                                                                           | TRE65908 Std.<br><br>TRE65909 .010<br><br>TRE65908B .020 (8)                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | <b>1) TRE66095 TRE66095A (*)</b><br>(*) w/C. Rod R500000<br><br><b>2) TIK66095 TIK66095A (*)</b><br>(*) w/C. Rod R500000   |                                                                                                                                     | <b>Use 6</b>                                                                        | <b>Use 1</b>                                                                                                                                                                                                                                                                                                                                                                           | <b>Use 6</b>                                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   |                                           |                                                    |   |                                                                                                                                                                                                                                                                                                     |                                               |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                | <b>1) O/H Gasket Set</b>                                                                                                            | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>        | <b>1) Cyl Hd Cap Screw</b><br><b>2) Tensioner, Belt</b><br><b>3) Con Rod</b><br><b>4) Oil Cooler</b>                                                                                                                                                                                                                                                                                   | <b>1) Water Pump</b><br><b>2) Water Pump Cover</b><br><b>3) Water Pump Gsk</b><br><b>4) Pump, Oil</b><br><b>5) Cam. Follower</b> |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | <b>3) Ring Gear</b><br><b>4) Crankshaft</b><br><b>5) Seal</b>                                                              | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                        |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                  |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | 1) TRE505515 (5)<br>2) TRE44574<br>3) TR28811 (129T)<br>TR114282 (142T)<br>4) TRE515785 (3)<br>TRE505921 (4)<br>5) TH35244 | 1) TRE501456<br>2) TRE66085<br>3) TR116516<br>4) TR123354<br>5) TR123543                                                            | 1) TR123960 x6<br>2) TR114083 x12 (1)<br>TR501124 x12 (1)<br>3) TR119874 x1         | 1) TR85363 x26 (2)<br>2) TRE518097 (7)<br>TRE68715 (7)<br>3) TRE500002<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                                                                                                                                                         | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x12                                                   |                                                                                     |
|                                                                                                                                                                                                                                | Valve, Intake                                                                                                              | Valve, Exhaust                                                                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                            | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                                                                                                                                                                                                       | 1) Spring, Valve<br>2) Rotator, Valve                                                                                            |                                                                                     |
|                                                                                                                                                                                                                                                                                                                   | TR98062 Std.<br>TR97490 .015                                                                                               | TR90692 Std.<br>TR97492 .015                                                                                                        | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                    | 1) TRE31617<br>2) TR91889                                                                                                                                                                                                                                                                                                                                                              | 1) TR26125<br>2) TRE60005                                                                                                        |                                                                                     |
|                                                                                                                                                                                                                                |                                         |                                                  |  | (4) Crankshaft (m) R503470, Tapered Nose.<br>(5) 1 Piece Unitized Seal and Wearsleeve;<br>Replaces TRE59810, RE538097.<br>(6) Use with Stanadyne DE10 Injection Pump.<br>(7) Check application for proper usage.<br>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.<br>(9) Line Connections are both threaded. |                                                                                                                                  |                                                                                     |
| Thermostat                                                                                                                                                                                                                                                                                                        | Injector, Pencil                                                                                                           | Seal, Injector                                                                                                                      | Fuel Transfer Pump                                                                  |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                  |                                                                                     |
| TRE522076 180° F (7)<br>TRE528652 180° F (7)<br>TRE540550 180° F (7)<br>TRE64354 180° F (7)                                                                                                                                                                                                                       | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (6)                                                                  | TR92352<br>TR48000                                                                                                                  | TRE66153 (9)<br>TRE68345 (10)<br>TRE502513 (11)                                     |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                  |                                                                                     |

|                                                                                                          |  |                                                                                                                                          |  |                                                                                                                                                                  |  |                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                |  |
|----------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------|--|
| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b>                                        |  |                                                         |  |                                                                                 |  |    |  |                                                                                                                                                                                                                                                                                              |  |                                             |  |
| <b>6068T</b><br><b>6.8T</b><br><b>6 Cyl</b><br><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.375 in<br>35 mm |  | <b>1) Engine O/H Kit</b><br><b>2) Engine I/F Kit</b>                                                                                     |  | <b>Piston-Liner Kit</b><br><b>TRE507920 (RE515372)</b><br>Consists of:<br>a) TRE515372<br>b) TRE66820<br>c) TR123178<br>d) TR116383<br>e) TAR65507<br>f) TM41029 |  | <b>Main Bearing</b><br>TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (8)          |  | <b>Thrust Bearing</b><br>TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (8)                                                                                                                                                                                                                                                                                                   |  | <b>Con Rod Bearing</b><br>TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (8)                                                 |  |
| <b>Piston (m):</b><br>RE59277, RE505100 (9)                                                              |  | <b>1) TRE66096</b><br><b>TRE66096A (*)</b><br>(*) w/C. Rod R500000<br><b>2) TIK66096</b><br><b>TIK66096A (*)</b><br>(*) w/C. Rod R500000 |  |                                                                                                                                                                  |  | <b>Use 6</b>                                                                         |  | <b>Use 1</b>                                                                                                                                                                                                                                                                                                                                                                    |  | <b>Use 6</b>                                                                                                                   |  |
| <b>Con Rod (m):</b><br>RE123959, R500000                                                                 |  |                                                         |  |                                                                                 |  |    |  |                                                                                                                                                                                                                                                                                              |  |                                             |  |
| <b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>6603<br>7455<br>7460<br>9935                          |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                              |  | <b>1) O/H Gasket Set</b>                                                                                                                                         |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>         |  | <b>1) Cyl Hd Cap Screw</b><br><b>2) Tensioner, Belt</b><br><b>3) Con Rod</b><br><b>4) Oil Cooler</b>                                                                                                                                                                                                                                                                            |  | <b>1) Water Pump</b><br><b>2) Water Pump Cov</b><br><b>3) Water Pump Gsk</b><br><b>4) Pump, Oil</b><br><b>5) Cam. Follower</b> |  |
| <b>OEM</b><br>6.8L                                                                                       |  | <b>3) Ring Gear</b><br><b>4) Crankshaft</b><br><b>5) Seal</b>                                                                            |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                                                     |  |                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                |  |
| <b>CONSTRUCTION</b><br>670C/CH<br>672CH<br>700H/J                                                        |  | 1) TRE505515 (5)<br>2) TRE44574<br>3) TR28811 (129T)<br>TR114282 (142T)<br>4) TRE515785 (3)<br>TRE505921 (4)<br>5) TH35244               |  | 1) TRE501456<br>2) TRE66085<br>3) TR116516<br>4) TR123354<br>5) TR123543                                                                                         |  | 1) TR123960 x6<br>2) TR114083 x12 (1)<br>TR501124 x12 (1)<br>3) TR119874 x1          |  | 1) TR85363 x26 (2)<br>2) TRE518097 (7)<br>TRE68715 (7)<br>3) TRE500002<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                                                                                                                                                  |  | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x12                                                 |  |
|                       |  | Valve, Intake                                                                                                                            |  | Valve, Exhaust                                                                                                                                                   |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                             |  | 1) Seal, Valve<br>2) Lock, Valve                                                                                                                                                                                                                                                                                                                                                |  | 1) Spring, Valve<br>2) Rotator, Valve                                                                                          |  |
|                                                                                                          |  | TR98062 Std.<br>TR97490 .015                                                                                                             |  | TR90692 Std.<br>TR97492 .015                                                                                                                                     |  | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                     |  | 1) TRE31617<br>2) TR91889                                                                                                                                                                                                                                                                                                                                                       |  | 1) TR26125<br>2) TRE60005                                                                                                      |  |
|                       |  |                                                       |  |                                                                               |  |  |  | (5) 1 Piece Unitized Seal and Wearsleeve;<br>Replaces TRE59810, RE538097.<br>(6) Use with Stanadyne DE10 Injection Pump.<br>(7) Check application for proper usage.<br>(8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.<br>(9) These marking numbers RE592727, RE505100 require to use Ring Set TRE66274 |  |                                                                                                                                |  |
| <b>Thermostat</b>                                                                                        |  | <b>Injector, Pencil</b>                                                                                                                  |  | <b>Seal, Injector</b>                                                                                                                                            |  | <b>Fuel Transfer Pump</b>                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                |  |
| TRE522076 180° F (7)<br>TRE528652 180° F (7)<br>TRE540550 180° F (7)<br>TRE64354 180° F (7)              |  | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (6)                                                                                |  | TR92352<br>TR48000                                                                                                                                               |  | TRE66153 (10)<br>TRE68345 (11)<br>TRE502513 (12)                                     |  |                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                |  |

(2) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.

(4) Crankshaft (m) R503470, Tapered Nose.

(11) Line Connections are one hose barb &

(11) Line Connections are one nose barb & one threaded.

one threaded.

**(12) Line Connections** are two hose barbs.

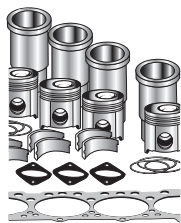
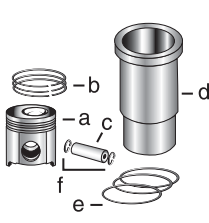
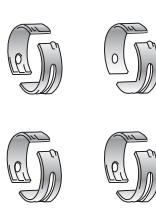
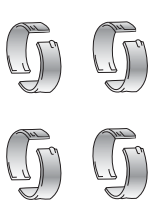
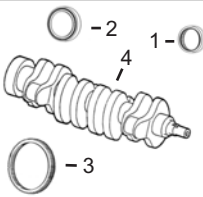
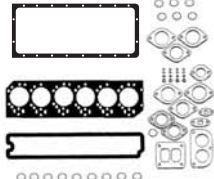
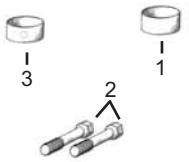
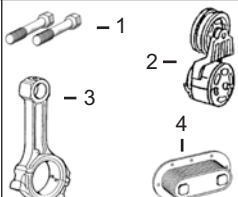
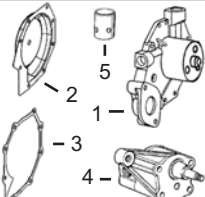
(12) Line connections are two nose bars.

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| PowerTech                                                                                                                                                        |  | Engine & Equipment                                                                                                                   |  | Model                                                                                                                                                                      |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>6068T/H</b>                                                                                                                                                   |  | <b>6.8T/H</b>                                                                                                                        |  | <b>6 Cyl</b>                                                                                                                                                               |  |
| Bore: 4.19 in<br>106.5 mm                                                                                                                                        |  | Pin Ø: 1.62 in<br>41 mm                                                                                                              |  | Piston (m):<br>RE55512, RE505102                                                                                                                                           |  |
| Con Rod (m):<br>R114081, R500335                                                                                                                                 |  | <b>APPLICATIONS:</b>                                                                                                                 |  | <b>AGRICULTURAL</b>                                                                                                                                                        |  |
| 4700 7210 7610<br>6605 7405 9410<br>6615 7410<br>6715 7510                                                                                                       |  | <b>OEM</b><br>6.8L                                                                                                                   |  | <b>CONSTRUCTION</b>                                                                                                                                                        |  |
| 200LL/LC 640G/II/III<br>230LC 643G<br>270LC 648G/II/III<br>540G/GLL 670C/CH<br>544H/HLL 672CH<br>TC544H 698G<br>548G/II/III 710D<br>624H/HLL 843G<br>TC624H 850G |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>1) Engine O/H Kit</b>                                                                                                                                         |  | <b>Piston-Liner Kit</b>                                                                                                              |  | <b>Main Bearing</b>                                                                                                                                                        |  |
| <b>2) Engine I/F Kit</b>                                                                                                                                         |  | <b>TRE507850 (RE505112)</b><br>Consists of:<br>a) TRE55512<br>b) TRE66820<br>c) TR123177<br>d) TR116383<br>e) TAR65507<br>f) TR54114 |  | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (8)                                                                                                                       |  |
| <b>1) TRE66097</b><br><b>TRE66097A (*)</b><br>(*) w/C. Rod R500335                                                                                               |  |                                                                                                                                      |  | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (8)                                                                                                                       |  |
| <b>2) TIK66097</b><br><b>TIK66097A (*)</b><br>(*) w/C. Rod R500335                                                                                               |  |                                                                                                                                      |  | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (8)                                                                                                                       |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                                                      |  | <b>1) O/H Gasket Set</b>                                                                                                             |  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>                                                                                               |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>3) Ring Gear</b><br><b>4) Crankshaft</b><br><b>5) Seal</b>                                                                                                    |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Gsk</b>                         |  | <b>1) Cyl Hd Cap Screw</b><br><b>2) Tensioner, Belt</b><br><b>3) Con Rod</b><br><b>4) Oil Cooler</b>                                                                       |  |
| <b>1) TRE505515 (5)</b><br><b>2) TRE44574</b><br><b>3) TR28811 (129T)</b><br>TR114282 (142T)<br><b>4) TRE515785 (3)</b><br>TRE505921 (4)<br><b>5) TH35244</b>    |  | <b>1) TRE501456</b><br><b>2) TRE66085</b><br><b>3) TR116516</b><br><b>4) TR123354</b><br><b>5) TR123543</b>                          |  | <b>1) TR85363 x26 (2)</b><br><b>2) TRE518097 (7)</b><br>TRE68715 (7)<br><b>3) TRE500608</b><br><b>4) TRE59296 (5 Plates)</b><br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>Valve, Intake</b>                                                                                                                                             |  | <b>Valve, Exhaust</b>                                                                                                                |  | <b>Insert, Valve</b><br><b>1) Intake</b><br><b>2) Exhaust</b>                                                                                                              |  |
| TR98062 Std.<br>TR97490 .015                                                                                                                                     |  | TR90692 Std.<br>TR97492 .015                                                                                                         |  | 1) TR98063 Std.<br>TR98335 O/S<br>2) TR85687 Std.<br>TR93910 O/S                                                                                                           |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>1) Seal, Valve</b><br><b>2) Lock, Valve</b>                                                                                                                   |  | <b>1) Spring, Valve</b><br><b>2) Rotator, Valve</b>                                                                                  |  | 1) TRE31617<br>2) TR91889                                                                                                                                                  |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>Thermostat</b>                                                                                                                                                |  | <b>Injector, Pencil</b>                                                                                                              |  | <b>Seal, Injector</b>                                                                                                                                                      |  |
| TRE522076 180° F (7)<br>TRE528652 180° F (7)<br>TRE540550 180° F (7)<br>TRE64354 180° F (7)                                                                      |  | TRE60062 (Non Turbo)<br>TRE48786 (Turbo)<br>TRE531436 (6)                                                                            |  | TR92352<br>TR48000                                                                                                                                                         |  |
|                                                                                                                                                                  |  |                                                                                                                                      |  |                                                                                                                                                                            |  |
| <b>TRE66153 (9)</b><br><b>TRE68345 (10)</b><br><b>TRE502513 (11)</b>                                                                                             |  | <b>Fuel Transfer Pump</b>                                                                                                            |  |                                                                                                                                                                            |  |

- (1) Use TR114083 Rod Bolts with Machine Split Connecting Rods, and use TR501124 Rod Bolts with Fractured Split Connecting Rods.  
 (2) Replace all R78558 Cap Screws with Flanged Head Cap Screw TR85363.  
 (3) Crankshaft (m) R116076, Straight Nose.

- (4) Crankshaft (m) R503470, Tapered Nose.  
 (5) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.  
 (6) Use with Stanadyne DE10 Injection Pump.  
 (7) Check application for proper usage.  
 (8) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.  
 (9) Line Connections are both threaded.  
 (10) Line Connections are one hose barb & one threaded.  
 (11) Line Connections are two hose barbs.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                        |                                                                                                                      |                                                                                     |                                                                                                                                                                                                                                                                                                                                          |                                                                                             |                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------|
| <div>PowerTech</div> <div>Engine &amp; Equipment Model</div> <div>6068T/H</div> <div>For Tier 2 &amp; Tier 3</div> <div>2 Valve per Cylinder</div> <div>6 Cyl</div> <div>Bore: 4.19 in<br/>106.5 mm</div> <div>Pin Ø: 1.62 in<br/>41 mm</div> <div>Piston (m):<br/>RE527039</div> <div>Con Rod (m):<br/>R500335</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL *</div> <div>1450CWS 6530<br/>1450WTS 6630<br/>1470 6830<br/>1550CWS 6930<br/>1550WTS 7130<br/>1654 7230<br/>1854 7330<br/>2054 7430<br/>6225 W330<br/>6525</div> <div>CONSTRUCTION *</div> <div>710K</div> <div>SDMO GENERATOR</div> <div>R165C3</div> <div>* See Index for more Applications</div> |                       |                                     |   |                                                                                                                                                                                                                                                       |          |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) Engine O/H Kit                                                                                      | Piston-Liner Kit                                                                                                     | Main Bearing                                                                        | Thrust Bearing                                                                                                                                                                                                                                                                                                                           | Con Rod Bearing                                                                             |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2) Engine I/F Kit                                                                                      | TRE536083<br>Consists of:<br>a) TRE527039<br>b) TRE527844<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)                                | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                                                                                                                                                                                                                                     | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (2)                                        |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) TRE532634                                                                                           |                                                                                                                      |                                                                                     |                                                                                                                                                                                                                                                                                                                                          |                                                                                             |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2) TIK532634                                                                                           |                                                                                                                      | Use 6                                                                               | Use 1                                                                                                                                                                                                                                                                                                                                    | Use 6                                                                                       |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                                     |   |                                                                                                                                                                                                                                                       |          |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) Front Seal<br>2) Rear Seal                                                                          | 1) O/H Gasket Set                                                                                                    | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                             | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                                                                                                                                                 | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3) Ring Gear<br>4) Crankshaft                                                                          | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                     |                                                                                     |                                                                                                                                                                                                                                                                                                                                          |                                                                                             |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE515785 (3)<br>TRE505921 (4) | 1) TRE532631<br>2) TRE532841<br>3) TR116516<br>4) TR521498 (5)<br>TR123354 (5)<br>5) TR524469                        | 1) TR114082 x6<br>2) TR501124 x12<br>3) TR119874 x1                                 | 1) TR502511 x26 (5)<br>TR85363 x26 (5)<br>2) TRE518097 (5)<br>TRE68715 (5)<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                                                                                       | 1) TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914<br>5) TR123565 x12              |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     | Valve, Intake                                                                                                        | Valve, Exhaust                                                                      | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                                                                                                                                                                                 | 1) Seal, Valve<br>2) Lock, Valve                                                            | 1) Spring, Valve<br>2) Rotator, Valve |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                        | TR98062 Std.<br>TR97490 .015                                                                                         | TR90692 Std.<br>TR97492 .015                                                        | 1) TR106831 Std.<br>2) TR106829 Std.                                                                                                                                                                                                                                                                                                     | 1) TRE31617<br>2) TR91889                                                                   | 1) TR26125 (5)<br>2) TRE60005 (5)     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     | Thermostat                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                          |                                                                                             |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | TRE522076 180° F (5)<br>TRE528652 180° F (5)<br>TRE540550 180° F (5)<br>TRE64354 180° F (5)            | TRE66153 (5) (6)<br>TRE68345 (5) (7)<br>TRE502513 (5) (8)                                                            |                                                                                     | (4) Crankshaft (m) R503470, Tapered Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs.<br>(9) Standard Flow. Check application for proper usage.<br>(10) High Flow. Check application for |                                                                                             |                                       |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Crankshaft (m) R116076, Straight Nose.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                             |  |                                                                                                        |                                                                                                                      |                                                         |                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>6068T/H</b><br>For Tier 2 & Tier 3<br>Applications<br>4 Valve per Cylinder<br>6 Cyl<br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br>Piston (m):<br>RE521616<br>Con Rod (m):<br>R500335 |  |                                                                                                        |                                                                                                                      |                                                         |                                                                                                                         |
|                                                                                                                                                                                                      |  | 1) Engine O/H Kit                                                                                      | Piston-Liner Kit                                                                                                     | Main Bearing                                            | Thrust Bearing                                                                                                          |
|                                                                                                                                                                                                      |  | 2) Engine I/F Kit                                                                                      | TRE524450<br>Consists of:<br>a) TRE521616<br>b) TRE524453<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)    | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                    |
|                                                                                                                                                                                                      |  | 1) TRE527834                                                                                           |                                                                                                                      |                                                         | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (2)                                                                    |
|                                                                                                                                                                                                      |  | 2) TIK527834                                                                                           |                                                                                                                      | Use 6                                                   | Use 1                                                                                                                   |
|                                                                                                                                                                                                      |  |                                                                                                        |                                                                                                                      |                                                         |                                                                                                                         |
|                                                                                                                                                                                                      |  | 1) Front Seal<br>2) Rear Seal                                                                          | 1) O/H Gasket Set                                                                                                    | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                |
|                                                                                                                                                                                                      |  | 3) Ring Gear<br>4) Crankshaft                                                                          | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                                     |                                                         | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                             |
|                                                                                                                                                                                                      |  | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE515785 (3)<br>TRE505921 (4) | 1) TRE527833<br>2) TRE527832<br>3) TR116516<br>4) TR521498 (5)<br>TR123354 (5)<br>5) TR524496<br>TR524497            | 1) TR114082 x6<br>2) TR501124 x12<br>3) TR119874 x1     | 1) TR502511 x26<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) |
|                                                                                                                                                                                                      |  |                                                                                                        |                                                                                                                      |                                                         | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x12    |
|                                                                                                                                                                                                      |  | Valve, Intake                                                                                          | Valve, Exhaust                                                                                                       | Insert, Valve<br>1) Intake<br>2) Exhaust                | 1) Seal, Valve<br>2) Lock, Valve                                                                                        |
|                                                                                                                                                                                                      |  | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                               | TRE518081 Std.                                                                                                       | 1) TRE518082 Std.<br>2) TRE518083 Std.                  | 1) TRE526519 x24 (5)<br>TRE519115 x24 (5)<br>2) TR502371 x48 (5)                                                        |
|                                                                                                                                                                                                      |  |                                                                                                        |                                                                                                                      |                                                         |                                                                                                                         |
| Thermostat                                                                                                                                                                                           |  | Fuel Transfer Pump                                                                                     |                                                                                                                      |                                                         |                                                                                                                         |
| TRE522076 180° F (5)                                                                                                                                                                                 |  | TRE66153 (5) (6)                                                                                       |                                                                                                                      |                                                         |                                                                                                                         |
| TRE538289 180° F (5)                                                                                                                                                                                 |  | TRE68345 (5) (7)                                                                                       |                                                                                                                      |                                                         |                                                                                                                         |
| TRE64354 180° F (5)                                                                                                                                                                                  |  | TRE502513 (5) (8)                                                                                      |                                                                                                                      |                                                         |                                                                                                                         |
|                                                                                                                                                                                                      |  | TRE517230 (5)                                                                                          |                                                                                                                      |                                                         |                                                                                                                         |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Crankshaft (m) R116076, Straight Nose.

(4) Crankshaft (m) R503470, Tapered Nose.  
(5) Check application for proper usage.  
(6) Line Connections are both threaded.  
(7) Line Connections are one hose barb & one threaded.  
(8) Line Connections are two hose barbs.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
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| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>6068T/H</b><br><b>For Tier 2 &amp; Tier 3</b><br><b>Applications</b><br><b>4 Valve per Cylinder</b><br><b>6 Cyl</b><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><b>Piston (m):</b><br>RE515037<br><b>Con Rod (m):</b><br>R500335<br><b>APPLICATIONS:</b><br><b>AGRICULTURAL *</b><br>640GIII 2954D 7730<br>640H 4730 7830<br>648GIII 4830 7930<br>6830 5430I 9540i WTS<br>648H 7195J 9560 STS<br>648HTJ 7210J 9570 STS<br>748H 7225J 9580i WTS<br>748HTJ 7430E S550 STS<br>848H 7530 T550<br>848HTJ 7630 W540<br><b>CONSTRUCTION *</b><br>240DLC 624K/KR 672G<br>250GLC 644J/K 672GP<br>270DLC 670G 764<br>290GLC 670GP 755D<br>* See Index for more App |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Engine O/H Kit</b>                                                                               | <b>Piston-Liner Kit</b>                                                                                   | <b>Main Bearing</b>                                                          | <b>Thrust Bearing</b>                                                                                                   | <b>Con Rod Bearing</b>                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) Engine I/F Kit</b>                                                                               | <b>TRE516227</b><br>Consists of:                                                                          | TRE65165 Std.                                                                | TRE65168 Std.                                                                                                           | TRE65908 Std.                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) TRE526974</b>                                                                                    | a) TRE515037<br>b) TRE66820<br>c) TR502755<br>d) TR116383<br>e) TAR65507<br>f) TR54114                    | TRE65911 .010<br>TRE65165B .020 (2)                                          | TRE65912 .010<br>TRE65168B .020 (2)                                                                                     | TRE65909 .010<br>TRE65908B .020 (2)                                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) TIK526974</b>                                                                                    |                                                                                                           | <b>Use 6</b>                                                                 | <b>Use 1</b>                                                                                                            | <b>Use 6</b>                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                            | <b>1) O/H Gasket Set</b>                                                                                  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b> | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3) Ring Gear<br>4) Crankshaft                                                                          | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                          |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE515785 (3)<br>TRE505921 (4) | 1) TRE527833<br>2) TRE527832<br>3) TR116516<br>4) TR521498 (5)<br>TR123354 (5)<br>5) TR524496<br>TR524497 | 1) TR114082 x6<br>2) TR501124 x12<br>3) TR119874 x1                          | 1) TR502511 x26<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x12 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Valve, Intake                                                                                          |                                                                                                           | Valve, Exhaust                                                               |                                                                                                                         | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                               |                                                                                                           | TRE518081 Std.                                                               |                                                                                                                         | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         | 1) TRE526519 x24 (5)<br>TRE519115 x24 (5)<br>2) TR502371 x48 (5)                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Thermostat</b>                                                                                      |                                                                                                           | <b>Fuel Transfer Pump</b>                                                    |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE522076                                                                                              | 180° F (5)                                                                                                | TRE66153                                                                     | (5) (6)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE538289                                                                                              | 180° F (5)                                                                                                | TRE68345                                                                     | (5) (7)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE64354                                                                                               | 180° F (5)                                                                                                | TRE502513                                                                    | (5) (8)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           | TRE517230                                                                    | (5)                                                                                                                     |                                                                                                                      |  |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Crankshaft (m) R116076, Straight Nose.

(4) Crankshaft (m) R503470, Tapered Nose.  
 (5) Check application for proper usage.  
 (6) Line Connections are both threaded.  
 (7) Line Connections are one hose barb & one threaded.  
 (8) Line Connections are two hose barbs.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                           |                                    |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
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| <div>6068T/H</div> <div>For Tier 2 &amp; Tier 3 Applications</div> <div>4 Valve per Cylinder</div> <div>6 Cyl</div> <div>Bore: 4.19 in<br/>106.5 mm</div> <div>Pin Ø: 1.62 in<br/>41 mm</div> <div>Piston (m):<br/>RE507758</div> <div>Con Rod (m):<br/>R500335</div> <div>APPLICATIONS:</div> <div>AGRICULTURAL *</div> <div>640GIII 2954D 7730</div> <div>640H 4730 7830</div> <div>648GIII 4830 7930</div> <div>6830 5430I 9540i WTS</div> <div>648H 7195J 9560 STS</div> <div>648HTJ 7210J 9570 STS</div> <div>748H 7225J 9580i WTS</div> <div>748HTJ 7430E S550 STS</div> <div>848H 7530 T550</div> <div>848HTJ 7630 W540</div> <div>CONSTRUCTION *</div> <div>240DLC 624K/KR 672G</div> <div>250GLC 644J/K 672GP</div> <div>270DLC 670G 764</div> <div>290GLC 670GP 755D</div> <div>* See Index for more App</div> |  |                                                                                                           |                                    |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 1) Engine O/H Kit                                                                                         |                                    | Piston-Liner Kit                                                                        |  | Main Bearing                                                                                                                                                                                                                          |  | Thrust Bearing                                                                                                       |  | Con Rod Bearing                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 2) Engine I/F Kit                                                                                         |                                    | TRE516228<br>Consists of:                                                               |  | TRE65165 Std.<br>TRE65911 .010<br>TRE65165B .020 (2)                                                                                                                                                                                  |  | TRE65168 Std.<br>TRE65912 .010<br>TRE65168B .020 (2)                                                                 |  | TRE65908 Std.<br>TRE65909 .010<br>TRE65908B .020 (2) |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 1) TRE526975                                                                                              |                                    | a) TRE507758<br>b) TRE516268<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114 |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 2) TIK526975                                                                                              |                                    |                                                                                         |  | Use 6                                                                                                                                                                                                                                 |  | Use 1                                                                                                                |  | Use 6                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                           |                                    |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
| 1) Front Seal<br>2) Rear Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 1) O/H Gasket Set                                                                                         |                                    | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam                                 |  | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                                                                                                                              |  | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                          |  |                                                      |  |
| 3) Ring Gear<br>4) Crankshaft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                          |                                    |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
| 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE515785 (3)<br>TRE505921 (4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 1) TRE527833<br>2) TRE527832<br>3) TR116516<br>4) TR521498 (5)<br>TR123354 (5)<br>5) TR524496<br>TR524497 |                                    | 1) TR114082 x6<br>2) TR501124 x12<br>3) TR119874 x1                                     |  | 1) TR502511 x26<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates)                                                                                                               |  | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x12 |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Valve, Intake                                                                                             |                                    | Valve, Exhaust                                                                          |  | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                                                                                                              |  | 1) Seal, Valve<br>2) Lock, Valve                                                                                     |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                                  |                                    | TRE518081 Std.                                                                          |  | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                                                                                                                                                                |  | 1) TRE526519 x24 (5)<br>TRE519115 x24 (5)<br>2) TR502371 x48 (5)                                                     |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                           |                                    |                                                                                         |  | (4) Crankshaft (m) R503470, Tapered Nose.<br>(5) Check application for proper usage.<br>(6) Line Connections are both threaded.<br>(7) Line Connections are one hose barb & one threaded.<br>(8) Line Connections are two hose barbs. |  |                                                                                                                      |  |                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Thermostat                                                                                                |                                    | Fuel Transfer Pump                                                                      |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
| TRE522076                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 180° F (5)                                                                                                | TRE66153 (5) (6)                   |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
| TRE538289                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 180° F (5)                                                                                                | TRE68345 (5) (7)                   |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |
| TRE64354                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | 180° F (5)                                                                                                | TRE502513 (5) (8)<br>TRE517230 (5) |                                                                                         |  |                                                                                                                                                                                                                                       |  |                                                                                                                      |  |                                                      |  |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Crankshaft (m) R116076, Straight Nose.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
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| <b>PowerTech</b><br><b>Engine &amp; Equipment</b><br><b>Model</b><br><b>6068T/H</b><br><b>For Tier 2 &amp; Tier 3</b><br><b>Applications</b><br><b>4 Valve per Cylinder</b><br><b>6 Cyl</b><br>Bore: 4.19 in<br>106.5 mm<br>Pin Ø: 1.62 in<br>41 mm<br><b>Piston (m):</b><br>RE515037<br><b>Con Rod (m):</b><br>R500335<br><b>APPLICATIONS:</b><br><b>AGRICULTURAL *</b><br>640GIII 2954D 7730<br>640H 4730 7830<br>648GIII 4830 7930<br>6830 5430I 9540i WTS<br>648H 7195J 9560 STS<br>648HTJ 7210J 9570 STS<br>748H 7225J 9580i WTS<br>748HTJ 7430E S550 STS<br>848H 7530 T550<br>848HTJ 7630 W540<br><b>CONSTRUCTION *</b><br>240DLC 624K/KR 672G<br>250GLC 644J/K 672GP<br>270DLC 670G 764<br>290GLC 670GP 755D<br>* See Index for more App |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Engine O/H Kit</b>                                                                               | <b>Piston-Liner Kit</b>                                                                                   | <b>Main Bearing</b>                                                          | <b>Thrust Bearing</b>                                                                                                   | <b>Con Rod Bearing</b>                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) Engine I/F Kit</b>                                                                               | <b>TRE530616</b><br>Consists of:                                                                          | TRE65165 Std.                                                                | TRE65168 Std.                                                                                                           | TRE65908 Std.                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) TRE540226</b>                                                                                    | a) TRE515037<br>b) TRE530613<br>c) TR502755<br>d) TR116397<br>e) TAR65507<br>f) TR54114                   | TRE65911 .010<br>TRE65165B .020 (2)                                          | TRE65912 .010<br>TRE65168B .020 (2)                                                                                     | TRE65909 .010<br>TRE65908B .020 (2)                                                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>2) TIK540226</b>                                                                                    |                                                                                                           | <b>Use 6</b>                                                                 | <b>Use 1</b>                                                                                                            | <b>Use 6</b>                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                            | <b>1) O/H Gasket Set</b>                                                                                  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b> | 1) Cyl Hd Cap Screw<br>2) Tensioner, Belt<br>3) Con Rod<br>4) Oil Cooler                                                | 1) Water Pump<br>2) Water Pump Cov<br>3) Water Pump Gsk<br>4) Pump, Oil<br>5) Cam. Follower                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3) Ring Gear<br>4) Crankshaft                                                                          | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Rocker Cover Gsk                          |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1) TRE505515 (1)<br>2) TRE44574<br>3) TR28811 (5)<br>TR114282 (5)<br>4) TRE515785 (3)<br>TRE505921 (4) | 1) TRE527833<br>2) TRE527832<br>3) TR116516<br>4) TR521498 (5)<br>TR123354 (5)<br>5) TR524496<br>TR524497 | 1) TR114082 x6<br>2) TR501124 x12<br>3) TR119874 x1                          | 1) TR502511 x26<br>2) TRE518097<br>3) TRE500608<br>4) TRE59296 (5 Plates)<br>TRE56690 (7 Plates)<br>TRE59298 (9 Plates) | 1) TRE546918 (5)<br>TRE500734<br>2) TRE508566<br>3) TR123417<br>4) TRE504914 (5)<br>TRE521756 (5)<br>5) TR123565 x12 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Valve, Intake                                                                                          |                                                                                                           | Valve, Exhaust                                                               |                                                                                                                         | Insert, Valve<br>1) Intake<br>2) Exhaust                                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE531221 Std. (5)<br>TRE518080 Std. (5)                                                               |                                                                                                           | TRE518081 Std.                                                               |                                                                                                                         | 1) TRE518082 Std.<br>2) TRE518083 Std.                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         | 1) TRE526519 x24 (5)<br>TRE519115 x24 (5)<br>2) TR502371 x48 (5)                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           |                                                                              |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Thermostat</b>                                                                                      |                                                                                                           | <b>Fuel Transfer Pump</b>                                                    |                                                                                                                         |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE522076                                                                                              | 180° F (5)                                                                                                | TRE66153                                                                     | (5) (6)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE538289                                                                                              | 180° F (5)                                                                                                | TRE68345                                                                     | (5) (7)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TRE64354                                                                                               | 180° F (5)                                                                                                | TRE502513                                                                    | (5) (8)                                                                                                                 |                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                           | TRE517230                                                                    | (5)                                                                                                                     |                                                                                                                      |  |

(1) 1 Piece Unitized Seal and Wearsleeve; Replaces TRE59810, RE538097.

(2) Proper bearing journal radius must be maintained during the machining of the crankshaft to ensure proper operation.

(3) Crankshaft (m) R116076, Straight Nose.

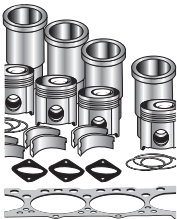
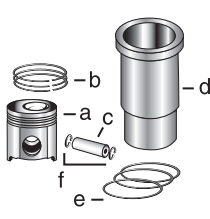
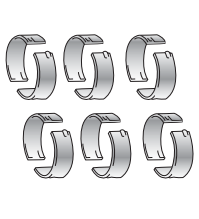
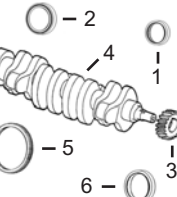
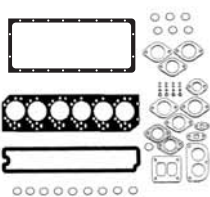
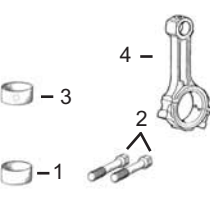
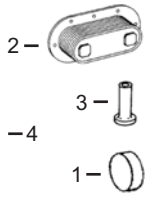
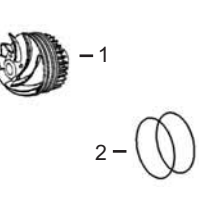
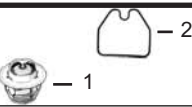
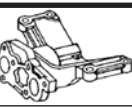
(4) Crankshaft (m) R503470, Tapered Nose.  
 (5) Check application for proper usage.  
 (6) Line Connections are both threaded.  
 (7) Line Connections are one hose barb & one threaded.  
 (8) Line Connections are two hose barbs.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>6081</b><br><br>High Comp. Piston<br>4801 4803<br><br>8.1L<br><br>Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm<br><br>Con Rod (m):<br>R116340 (ESN To 86,536)<br>R501034 (ESN From 86,537)<br><br><u>APPLICATIONS:</u><br><br>AGRICULTURAL *<br>1270D 8300/T<br>1470D 8310/T<br>2256 8320/T<br>2258 8400/T<br>2264 9100<br>7710 9510/SH<br>7810 9550/SH<br>7820 9560i WTS<br>7920 9580 WTS<br>8100/T 9580i WTS<br>8110/T 9640 WTS<br>8120/T 9640i WTS<br>8200/T 9970<br>8210/T<br>8220/T<br><br>* See Index for more Applications |                                                                                                                          |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>1) Engine O/H Kit</b>                                                                                                 | <b>Piston-Liner Kit</b>                                                                                                             | <b>Main Bearing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Thrust Bearing</b>                                                                                                               | <b>Con Rod Bearing</b>                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>2) Engine I/F Kit</b>                                                                                                 | <b>TRE64509 (RE53000)</b><br>Consists of:<br>a) TRE70688<br>b) TRE503528<br>c) TR57771<br>d) TR116236<br>e) TAR98850<br>f) TE1343FN | TRE504195 Std.<br>TRE504196 .0115<br><br><b>Use 6</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | TRE504198 Std.<br>TRE504199 .0115<br><br><b>Use 1</b><br><br><u>Thrust Washer</u><br>TRE61253 Std.<br><br><b>Use 3, Order Qty 1</b> | TR116081 Std.<br>TRE57167 .0115<br><br><b>Use 6</b>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>1) TOK504201<br/>TOK504201A</b>                                                                                       |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>2) TIK504201<br/>TIK504201A</b>                                                                                       |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>1) Front Seal<br/>2) Rear Seal</b>                                                                                    | <b>1) O/H Gasket Set</b>                                                                                                            | <b>1) Bush, Con Rod<br/>2) Bolt, Con Rod<br/>3) Bushing, Cam</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>1) Plug Camshaft<br/>2) Oil Cooler<br/>3) Tappet<br/>4) Tensioner, Belt</b>                                                      | <b>1) Pump, Water<br/>2) O'ring Mount Kit</b>           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>3) Crankshaft Gear<br/>4) Crankshaft<br/>5) Ring Gear<br/>6) Rear Gear</b>                                            | <b>2) Head Gasket Set<br/>3) Head Gasket<br/>4) Oil Pan Gasket</b>                                                                  | <b>4) Con, Rod</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>1) TAR49025<br/>2) TRE520036<br/>3) TR104587<br/>4) TRE535300 (1)<br/>TRE534314 (2)<br/>5) TR28811<br/>6) TR63326</b> | <b>1) TRE506220<br/>2) TRE506222<br/>3) TRE55475<br/>4) TR71918 (3)</b>                                                             | <b>1) TR74008 x6<br/>2) TR66452 x12 (4)<br/>TR501035 x12 (4)<br/>3) TR87561 x4<br/>4) TRE53154 (10)<br/>TRE535555 (11)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1) TR82007<br/>2) TAR55394<br/>3) TR110126 x12<br/>4) TRE518097 (9)<br/>TRE68715 (9)<br/>TRE57498 (9)</b>                        | <b>1) TRE521502<br/>TRE521503 (12)<br/>2) TRE509463</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Valve, Intake</b>                                                                                                     | <b>Valve, Exhaust</b>                                                                                                               | <b>Insert, Valve<br/>1) Intake<br/>2) Exhaust</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>1) Cap, Valve<br/>2) Lock, Valve<br/>3) Shield, Valve</b>                                                                        | <b>1) Spring, Valve</b>                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TR84618 Std.<br>TR93308 .003<br>TR93312 .015                                                                             | TR84619 Std.<br>TR93311 .003<br>TR93313 .015                                                                                        | 1) TR121193<br>2) TR119132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1) TT20129<br>2) TT20077<br>3) TR102882 x6 (5)<br>TR501640 x6 (6)                                                                   | 1) TR91822 (7)<br>TR502187 (8)                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                                                                                                                                     | <b>(4) Use TR66452 Rod Bolts with Machine Split Connecting Rods, and use TR501035 Rod Bolts with Fractured Split Connecting Rods.</b><br><b>(5) For engine ESN 199,999 and below. For Exhaust Valves only.</b><br><b>(6) For engine ESN 200,000 and above. For Exhaust Valves only.</b><br><b>(7) For engine ESN 199,999 and below.</b><br><b>(8) For engine ESN 200,000 and above.</b><br><b>(9) Check application for proper usage.</b><br><b>(10) Machine split connecting rod. Uses Rod Bolt TR66452.</b><br><b>(11) Fractured split connecting rod. Uses Rod Bolt TR501035.</b><br><b>(12) High Flow.</b> |                                                                                                                                     |                                                         |
| <b>1) Thermostat<br/>2) Thermostat Housing Gsk</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Pump, Oil</b>                                                                                                         |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |
| <b>1) TAR48675 180° F<br/>2) TR136063</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>TRE60622</b>                                                                                                          |                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                     |                                                         |

(1) With helical oil pump drive gear. Do not use with HPCR fuel system.

(2) With straight oil pump drive gear.

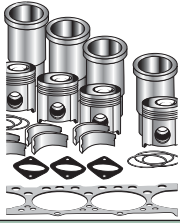
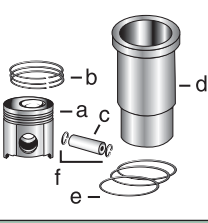
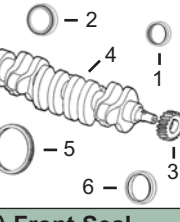
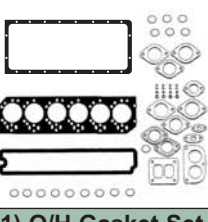
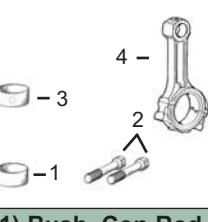
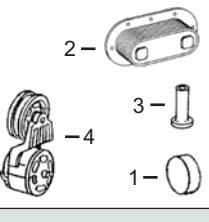
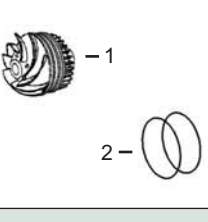
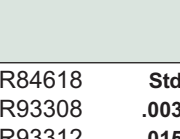
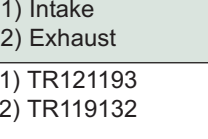
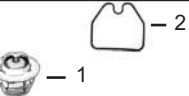
(3) With Aluminum Oil Pan use TR49377 (RE504822).

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                               |  |                                       |                                           |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>6081</b><br><b>Low Comp. Piston</b><br>4802 4806<br><br><b>8.1L</b><br><br>Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm<br><br><b>Con Rod (m):</b><br>R116340 (ESN To 86,536)<br>R501034 (ESN From 86,537)                                                                                                                                                                                    |  | <b>1) Engine O/H Kit</b>                                                                                               | <b>Piston-Liner Kit</b>                                                                                                    | <b>Main Bearing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Thrust Bearing</b>                                                                                                               | <b>Con Rod Bearing</b>                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>2) Engine I/F Kit</b>                                                                                               | <b>TRE508156</b><br>Consists of:<br>a) TRE70689<br>b) TRE503528<br>c) TR57771<br>d) TR116236<br>e) TAR98850<br>f) TE1343FN | TRE504195 Std.<br>TRE504196 .0115<br><br><b>Use 6</b>                                                                                                                                                                                                                                                                                                                                                                                                                              | TRE504198 Std.<br>TRE504199 .0115<br><br><b>Use 1</b><br><br><b>Thrust Washer</b><br>TRE61253 Std.<br><br><b>Use 3, Order Qty 1</b> | TR116081 Std.<br>TRE57167 .0115<br><br><b>Use 6</b>                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>1) TOK504202<br/>TOK504202A</b>                                                                                     |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                     |                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>2) TIK504202<br/>TIK504202A</b>                                                                                     |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                     |                                                                                     |
| <b>APPLICATIONS:</b><br><br><b>AGRICULTURAL *</b><br>2266 9650/CTS<br>3510 9660/CTS<br>4920 9660 WTS<br>6610 9660i WTS<br>6650 9680 WTS<br>7200 9680i WTS<br>8400 9750 STS<br>8410/T 9760 STS<br>8420/T 9780 CTS<br>8520/T 9850i WTS<br>9100 9976<br>9120 9986<br>9560/STS 9996<br>9580/WTS CH3510<br>9610 CTS<br>9640 WTS CTS II<br>9640i WTS CTS III<br><br><b>* See Index for more Applications</b> |  |                                       |                                           |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b><br><br>3) Crankshaft Gear<br>4) Crankshaft<br>5) Ring Gear<br>6) Rear Gear | <b>1) O/H Gasket Set</b><br><br>2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket                                  | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b><br><br>4) Con, Rod                                                                                                                                                                                                                                                                                                                                                                                    | 1) Plug Camshaft<br>2) Oil Cooler<br>3) Tappet<br>4) Tensioner, Belt                                                                | 1) Pump, Water<br>2) O'ring Mount Kit                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                        |  | 1) TAR49025<br>2) TRE520036<br>3) TR104587<br>4) TRE535300 (1)<br>TRE534314 (2)<br>5) TR28811<br>6) TR63326            | 1) TRE506220<br>2) TRE506222<br>3) TRE55475<br>4) TR71918 (3)                                                              | 1) TR74008 x6<br>2) TR66452 x12 (4)<br>TR501035 x12 (4)<br>3) TR87561 x4<br>4) TRE53154 (10)<br>TRE535555 (11)                                                                                                                                                                                                                                                                                                                                                                     | 1) TR82007<br>2) TAR55394<br>3) TR110126 x12<br>4) TRE518097 (9)<br>TRE68715 (9)<br>TRE57498 (9)                                    | 1) TRE521502<br>TRE521503 (12)<br>2) TRE509463                                      |
|                                                                                                                                                                                                                                                                                                                     |  | Valve, Intake<br><br>TR84618 Std.<br>TR93308 .003<br>TR93312 .015                                                      | Valve, Exhaust<br><br>TR84619 Std.<br>TR93311 .003<br>TR93313 .015                                                         | Insert, Valve<br>1) Intake<br>2) Exhaust<br><br>1) TR121193<br>2) TR119132                                                                                                                                                                                                                                                                                                                                                                                                         | 1) Cap, Valve<br>2) Lock, Valve<br>3) Shield, Valve<br><br>1) TT20129<br>2) TT20077<br>3) TR102882 x6 (5)<br>TR501640 x6 (6)        | 1) Spring, Valve<br><br>1) TR91822 (7)<br>TR502187 (8)                              |
|                                                                                                                                                                                                                                                                                                                     |  | 1) Thermostat<br>2) Thermostat Housing Gsk<br><br>1) TAR48675 180° F<br>2) TR136063                                    | <br><br>Pump, Oil<br><br>TRE60622       | (4) Use <b>TR66452</b> Rod Bolts with Machine Split Connecting Rods, and use <b>TR501035</b> Rod Bolts with Fractured Split Connecting Rods.<br>(5) For engine ESN 199,999 and below. For Exhaust Valves only.<br>(6) For engine ESN 200,000 and above. For Exhaust Valves only.<br>(7) For engine ESN 199,999 and below.<br>(8) For engine ESN 200,000 and above.<br>(9) Check application for proper usage.<br>(10) Machine split connecting rod. Uses Rod Bolt <b>TR66452</b> . |                                                                                                                                     |                                                                                     |

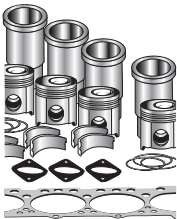
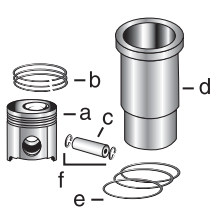
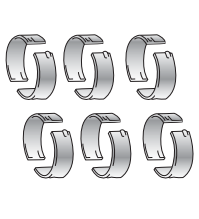
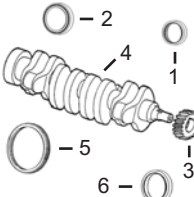
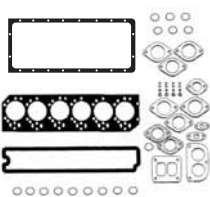
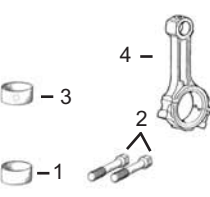
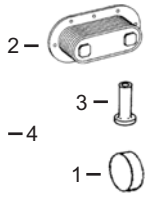
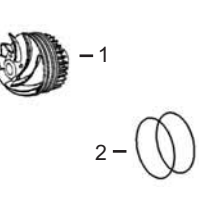
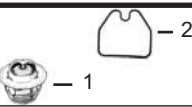
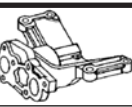
(1) With helical oil pump drive gear. Do not use with HPCR fuel system.

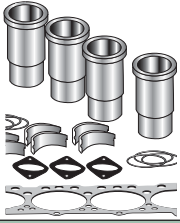
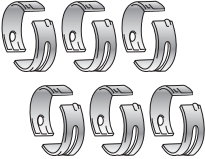
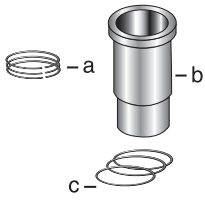
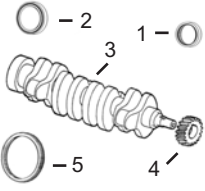
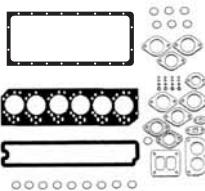
(2) With straight oil pump drive gear.

(3) With Aluminum Oil Pan use **TR49377** (RE504822).

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                         |  |                                                                                                                                                                                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>6081</b><br>High Comp. Piston<br>4801 4803<br>8.1L Tier 2 & Tier 3<br>Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm<br>Con Rod (m):<br>RE535955<br><b>APPLICATIONS:</b><br><b>AGRICULTURAL</b><br>7710 Tractor<br>7810 Tractor<br>7820 Tractor<br>7920 Tractor<br>8120/T Tractor<br>8220/T Tractor<br>8320/T Tractor<br>8420/T Tractor<br>8520/T Tractor<br><b>INDUSTRIAL</b><br>330CLC Excavator<br>370C Excavator<br>608B Feller Buncher<br>608S/L Feller Buncher<br>703G Feller Buncher<br>753G/GL Feller Buncher<br>753J/JH Feller Buncher<br>759G Feller Buncher<br>759J/JH Feller Buncher<br>770D Motor Grader<br>772D Motor Grader<br>870D Motor Grader<br>872D Motor Grader<br>3554 Logger |  | <br><b>1) Engine O/H Kit</b><br><b>2) Engine I/F Kit</b><br><b>1) TRE526727</b><br><b>2) TIK526727</b> |  | <br><b>Piston-Liner Kit</b><br><b>TRE64509</b><br>Consists of:<br>a) TRE70688<br>b) TRE503528<br>c) TR57771<br>d) TR116236<br>e) TAR98850<br>f) TE1343FN |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <br><b>Main Bearing</b><br>TRE504195 Std.<br>TRE504196 .0115<br><b>Use 6</b>                          |  | <br><b>Thrust Bearing</b><br>TRE504198 Std.<br>TRE504199 .0115<br><b>Use 1</b><br><b>Thrust Washer</b><br>TRE61253 Std.<br><b>Use 3, Order Qty 1</b>   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <br><b>Con Rod Bearing</b><br>TR116081 Std.<br>TRE57167 .0115<br><b>Use 6</b>                        |  |                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <br><b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                        |  | <br><b>1) O/H Gasket Set</b><br>3) Crankshaft Gear<br>4) Crankshaft<br>5) Ring Gear<br>6) Rear Gear                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <br><b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b><br>4) Con, Rod       |  | <br>1) Plug Camshaft<br>2) Oil Cooler<br>3) Tappet<br>4) Tensioner, Belt                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <br>1) Pump, Water<br>2) O'ring Mount Kit                                                            |  |                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 1) TAR49025 (5)<br>TRE543639 (5)<br>2) TRE520036<br>3) TR104587<br>4) TRE535300 (1)<br>TRE534314 (2)<br>5) TR28811<br>6) TR63326                                                        |  | 1) TRE527551<br>2) TRE527552<br>3) TRE55475<br>4) TR532464 (3)<br>TR520844 (4)<br>5) TR502598<br>TR502719                                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 1) TR74008 x6<br>2) TR501035 x12<br>3) TR87561 x4<br>4) TRE535555                                                                                                                       |  | 1) TR82007<br>2) TAR55394<br>3) TR110126 x12<br>4) TRE518097 (6)<br>TRE68715 (6)<br>TRE57498 (6)                                                                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 1) TRE521502<br>2) TRE509463                                                                                                                                                            |  |                                                                                                                                                                                                                                           |  |
| <br>Valve, Intake                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | <br>Valve, Exhaust                                                                                   |  | <br>Insert, Valve<br>1) Intake<br>2) Exhaust                                                                                                          |  |
| TR84618 Std.<br>TR93308 .003<br>TR93312 .015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | TR84619 Std.<br>TR93311 .003<br>TR93313 .015                                                                                                                                            |  | 1) TR121193<br>2) TR119132                                                                                                                                                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                         |  | 1) TT20129<br>2) TT20077<br>3) TR501640 x6                                                                                                                                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                         |  | 1) TR91822<br>TR502187                                                                                                                                                                                                                    |  |
| <br>1) Thermostat<br>2) Thermostat Housing Gsk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | <br>Pump, Oil                                                                                        |  |                                                                                                                                                                                                                                           |  |
| 1) TAR48675 180° F<br>2) TR136063                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | TRE60622                                                                                                                                                                                |  |                                                                                                                                                                                                                                           |  |

(1) With helical oil pump drive gear. Do not use with HPCR fuel system.  
(2) With straight oil pump drive gear.  
(3) Paper Gasket.  
(4) Metal/Rubber Gasket.  
(5) Both Front Seal are included in the Kit.  
(6) Check application for proper usage.

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                  |  |                                           |                                                                                                                                                                              |                |                                                  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| <b>6081</b><br>Low Comp. Piston<br><br>4802 4806<br><br><b>8.1L Tier 2 &amp; Tier 3</b><br><br>Bore: 4.56 in<br>116 mm<br>Pin Ø: 1.85 in<br>47 mm                                                                                                         |  | <b>1) Engine O/H Kit</b>                                                                                                   | <b>Piston-Liner Kit</b>                                                                                                                                                                                                                                       | <b>Main Bearing</b>                                                                              | <b>Thrust Bearing</b>                                                                                                               | <b>Con Rod Bearing</b>                                                              |  |
| <b>2) Engine I/F Kit</b>                                                                                                                                                                                                                                  |  | <b>TRE508156</b><br>Consists of:<br>a) TRE70689<br>b) TRE503528<br>c) TR57771<br>d) TR116236<br>e) TAR98850<br>f) TE1343FN |                                                                                                                                                                                                                                                               | TRE504195 Std.<br>TRE504196 .0115<br><br><b>Use 6</b>                                            | TRE504198 Std.<br>TRE504199 .0115<br><br><b>Use 1</b><br><br><b>Thrust Washer</b><br>TRE61253 Std.<br><br><b>Use 3, Order Qty 1</b> | TR116081 Std.<br>TRE57167 .0115<br><br><b>Use 6</b>                                 |  |
| <b>1) TRE526726</b>                                                                                                                                                                                                                                       |  |                                                                                                                            |                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                     |                                                                                     |  |
| <b>2) TIK526726</b>                                                                                                                                                                                                                                       |  |                                                                                                                            |                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                     |                                                                                     |  |
| <b>APPLICATIONS:</b><br><br><b>AGRICULTURAL</b><br>8120/T Tractor<br>8220/T Tractor<br>8320/T Tractor<br>8420/T Tractor<br>8520/T Tractor                                                                                                                 |  |                                           |                                                                                                                                                                              |                |                                                  |  |  |
| <b>INDUSTRIAL</b><br>853J Feller Buncher<br>853JH Tracked Harvester<br>903J Feller Buncher<br>903JH Tracked Harvester<br>909J Feller Buncher<br>909JH Tracked Harvester<br>953J Feller Buncher<br>959J Feller Buncher<br>4920 Sprayer<br>9560 STS Combine |  | <b>1) Front Seal</b><br><b>2) Rear Seal</b>                                                                                | <b>1) O/H Gasket Set</b>                                                                                                                                                                                                                                      | <b>1) Bush, Con Rod</b><br><b>2) Bolt, Con Rod</b><br><b>3) Bushing, Cam</b>                     | 1) Plug Camshaft<br>2) Oil Cooler<br>3) Tappet<br>4) Tensioner, Belt                                                                | 1) Pump, Water<br>2) O'ring Mount Kit                                               |  |
| <b>3) Crankshaft Gear</b><br><b>4) Crankshaft</b><br><b>5) Ring Gear</b><br><b>6) Rear Gear</b>                                                                                                                                                           |  | <b>2) Head Gasket Set</b><br><b>3) Head Gasket</b><br><b>4) Oil Pan Gasket</b><br><b>5) Rocker Cover Seal</b>              | <b>4) Con, Rod</b>                                                                                                                                                                                                                                            |                                                                                                  |                                                                                                                                     |                                                                                     |  |
| 1) TAR49025 (5)<br>TRE543639 (5)<br>2) TRE520036<br>3) TR104587<br>4) TRE535300 (1)<br>TRE534314 (2)<br>5) TR28811<br>6) TR63326                                                                                                                          |  | 1) TRE527551<br>2) TRE527552<br>3) TRE55475<br>4) TR532464 (3)<br>TR520844 (4)<br>5) TR502598<br>TR502719                  | 1) TR74008 x6<br>2) TR501035x12<br>3) TR87561 x4<br>4) TRE535555                                                                                                                                                                                              | 1) TR82007<br>2) TAR55394<br>3) TR110126 x12<br>4) TRE518097 (6)<br>TRE68715 (6)<br>TRE57498 (6) | 1) TRE521502<br>2) TRE509463                                                                                                        |                                                                                     |  |
|                                                                                                                                                                        |  | Valve, Intake                                                                                                              | Valve, Exhaust                                                                                                                                                                                                                                                | Insert, Valve<br>1) Intake<br>2) Exhaust                                                         | 1) Cap, Valve<br>2) Lock, Valve<br>3) Shield, Valve                                                                                 | 1) Spring, Valve                                                                    |  |
| TR84618 Std.<br>TR93308 .003<br>TR93312 .015                                                                                                                                                                                                              |  | TR84619 Std.<br>TR93311 .003<br>TR93313 .015                                                                               | 1) TR121193<br>2) TR119132                                                                                                                                                                                                                                    | 1) TT20129<br>2) TT20077<br>3) TR501640 x6                                                       | 1) TR91822<br>TR502187                                                                                                              |                                                                                     |  |
|                                                                                                                                                                        |  |                                         | (1) With helical oil pump drive gear. Do not use with HPCR fuel system.<br>(2) With straight oil pump drive gear.<br>(3) Paper Gasket.<br>(4) Metal/Rubber Gasket.<br>(5) Both Front Seal are included in the Kit.<br>(6) Check application for proper usage. |                                                                                                  |                                                                                                                                     |                                                                                     |  |
| 1) Thermostat<br>2) Thermostat Housing Gsk                                                                                                                                                                                                                |  | Pump, Oil                                                                                                                  |                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                     |                                                                                     |  |
| 1) TAR48675 180° F<br>2) TR136063                                                                                                                                                                                                                         |  | TRE60622                                                                                                                   |                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                     |                                                                                     |  |

| PowerTech<br>Engine & Equipment<br>Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                            |                                                                                                                                  |                                                                                                                                                                                                               |                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>6090</b><br>For Tier 2 & Tier 3<br>Applications<br><br>9.0L<br><br>Bore: 4.664 in<br>118.35 mm<br><br>Stroke: 5.400 in<br>136 mm<br><br><u>APPLICATIONS:</u><br><br><b>AGRICULTURAL *</b><br>2854 1270D/E 8230<br>3520/22 1470D/E 8235R<br>4930 1710D 8245R<br>4940 1711D 8260R<br>7180 1910E 8270R<br>7200 250D 8285R<br>7250 300D 8295R<br>7660 350DLC 8310R<br>8030 350GLC 8320R<br>8130 3754D 8335R<br>8230 380GLC 8345R<br>8330 670/72G 8430<br>8430 703JH 850J<br>8530 724K 870G<br>9230 744K 903K<br>9580 753J/JH 953K<br>9660 759J/JH 9660<br>9680 770G/GP C670<br><br>* See Index for more<br>Applications |  |           |                                                                                                                                  |                                                                                                                             |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |           |                                                                                                                                  |                                                                                                                            |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |         |                                                                                                                                  |                                                                                                                                                                                                               |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 1) Engine O/H Kit Without Pistons                                                          | a) Ring Set<br>b) Cyl Liner<br>c) Kit O'ring                                                                                     | Main Bearing                                                                                                                                                                                                  | Thrust Bearing                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 1) TOK6090                                                                                 | a) TRE539642<br>b) TR529710 (*)<br>c) TAR98850                                                                                   | TRE529319 Std.<br>TRE529319A .0115                                                                                                                                                                            | TRE529320 Std.<br>TRE529320A .0115                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 2) Engine I/F Kit Without Pistons                                                          | Use 6                                                                                                                            | Use 6                                                                                                                                                                                                         | Use 1                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 2) TIK6090                                                                                 |                                                                                                                                  |                                                                                                                                                                                                               | Use 6                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |           |                                                                                                                                  |                                                                                                                              |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 1) Front Seal<br>2) Rear Seal                                                              | 1) O/H Gasket Set                                                                                                                | 1) Bush, Con Rod<br>2) Bolt, Con Rod<br>3) Bushing, Cam<br>4) Camshaft                                                                                                                                        | 1) Plug Camshaft<br>2) Oil Cooler<br>3) Tappet                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 3) Crankshaft<br>4) Crankshaft, Gear<br>5) Ring Gear                                       | 2) Head Gasket Set<br>3) Head Gasket<br>4) Oil Pan Gasket<br>5) Valve Cover Gsk<br>6) Intake Manifold Gsk                        |                                                                                                                                                                                                               | 1) Pump, Oil<br>2) Tensioner, Belt                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | 1) TRE543639<br>2) TRE520036<br>TRE530121 (6)<br>3) TRE540429<br>4) TR104587<br>5) TR28811 | 1) TRE528400<br>2) TRE528402<br>3) TR525541<br>4) TR532464 (1)<br>TR520844 (2)<br>5) TR527884 (4)<br>TR526607 (5)<br>6) TR518260 | 1) TR74008 x6<br>2) TR501035 x12<br>3) TR527877 x6<br>4) TR522884                                                                                                                                             | 1) TR82007<br>2) TAR55394<br>3) TRE540586 x12                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                            |                                                                                                                                  |                                                                                                                                                                                                               | 1) TRE543187<br>2) TRE518097 (3)<br>TRE68715 (3)<br>TRE57498 (3) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Valve, Intake                                                                              | Valve, Exhaust                                                                                                                   | Insert, Valve                                                                                                                                                                                                 | 1) Guide, Valve<br>2) Lock, Valve                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | TR520223 Std.                                                                              | TR520224 Std.                                                                                                                    | TR527285                                                                                                                                                                                                      | 1) TR527286<br>2) TR520798                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                            |                                                                                                                                  |                                                                                                                                                                                                               | 1) TR504235<br>2) TRE529187                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Thermostat                                                                                 | Water Pump                                                                                                                       | (*) With Shim.<br>(1) Paper Gasket.<br>(2) Metal / Rubber Gasket.<br>(3) Check application for proper usage.<br>(4) Use with RE529972 Valve Cover.<br>(5) Use with RE536705 Valve Cover.<br>(6) Flanged Seal. |                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | TRE528652 180° F (3)<br>TRE540550 180° F (3)                                               | TRE530194                                                                                                                        |                                                                                                                                                                                                               |                                                                  |

## Miscellaneous Parts Available from Maxiforce

| Part Number | Description           | Part Number | Description              |
|-------------|-----------------------|-------------|--------------------------|
| TAH12305    | Clutch Plate          | TR50410     | Gasket, Water Pump       |
| TAL38235    | Disk                  | TR50655     | Collar Shift             |
| TAL38238    | Disk                  | TR51936     | Grommet                  |
| TAL55075    | Clutch                | TR51937     | Nut                      |
| TAL38238    | Disk                  | TR53081     | Gasket, Intake           |
| TAL65872    | Disk, Brake           | TR54641     | Gasket, Thermostat       |
| TAR87999    | Disk Kit              | TR55405     | Gasket, Water Pump       |
| TAR94517    | Disk                  | TR56548     | Plate Clutch             |
| TAR108105   | Disk                  | TR56809     | Gasket, Water Pump       |
| TAR101236   | Seal, Teflon          | TR59690     | Plate Clutch             |
| TAR101238   | Seal, Teflon          | TR61437     | Gasket, Water Pump       |
| TAR108105   | Disk                  | TR61871     | Gasket, Pump, Oil        |
| TAT22034    | Disk, Brake           | TR62686     | Disk                     |
| TAZ27951    | Pump, Fuel            | TR64197     | Plate Clutch             |
| TH35244     | O'ring, Sleeve C/S    | TR66164     | Washer, Thrust           |
| TL29226     | Shaft                 | TR68381     | Filter                   |
| TL33125     | Clutch Plate          | TR68384     | Control Valve            |
| TL33163     | Clutch Plate          | TR77663     | Clutch Plate             |
| TL33910     | Disk, Brake Actuating | TR78202     | Seat                     |
| TL55004     | Break Actuator        | TR79605     | Grommet, Injector        |
| TL78682     | Disk                  | TR79606     | Tee, Fitting (Thread)    |
| TMX504      | Kit, Grommet          | TR90648     | Gasket, Cover            |
| TMX506      | Kit, Grommet          | TR90658     | Gasket, Exhaust          |
| TR106796    | O'ring, Rocker Cover  | TR95211     | Plate                    |
| TR107264    | Clutch Plate          | TR95313     | Clutch Plate             |
| TR114215    | Clutch Plate          | TR95378     | Clutch Plate             |
| TR114282    | Ring Gear (142 Teeth) | TR96791     | Clutch Plate             |
| TR116894    | Clutch Plate          | TR96830     | Clutch Plate             |
| TR135537    | Brake Disk            | TR97351     | Gasket, Flywheel House   |
| TR26058     | Gasket, Rear Cover    | TR97454     | Gasket, Timing Gear      |
| TR26341     | Gasket, Water Pump    | TR97455     | Gasket, Water Pump       |
| TR26343     | Gasket, Water Pump    | TRE28790    | Seal, Hyd Pump           |
| TR26632     | Bushing               | TRE29103    | Kit, Hyd Pump            |
| TR26767     | Brake Disk            | TRE29104    | Kit, Hyd Pump            |
| TR27285     | Gasket, Fuel Pump     | TRE29107    | Kit, Hyd Pump            |
| TR27727     | Plate                 | TRE29109    | Kit, Hyd Pump            |
| TR28794     | Dust Bowl, Plastic    | TRE29815    | Disk                     |
| TR28795     | Dust Bowl, Plastic    | TRE29816    | Disk                     |
| TR28811     | Ring Gear (129 Teeth) | TRE35517    | Disk                     |
| TR34764     | Washer, Injector      | TRE37011    | Disk                     |
| TR39259     | Clutch Plate          | TRE37104    | Disk                     |
| TR39319     | Shaft                 | TRE53823    | Disk                     |
| TR39325     | Clutch Plate          | TRE65324    | Disk                     |
| TR42406     | Gasket, Water Pump    | TT14339     | Disk                     |
| TR42694     | Gasket, Thermostat    | TT20075     | Gasket, Rocker Cover     |
| TR43117     | Gasket, Water Pump    | TT20215     | Gasket, Thermostat       |
| TR43751     | Gasket, Turbo         | TT20219     | Gasket, Thermostat House |
| TR45822     | Bushing               | TT20242     | Gasket, Water Pump       |
| TR46417     | Disk, Brake           | TT20243     | Gasket, Water Pump       |
| TR46984     | Gasket, Gear House    | TT20268     | Gasket, Water Pump       |
| TR47047     | Gasket, Timing Gear   | TT20467     | Gasket, Rocker Cover     |
| TR49865     | Gasket, Rocker Cover  | TT21315     | Disk                     |
| TR49866     | Gasket, Rocker Cover  | TT24932     | Gasket, Thermostat       |
| TR500374    | Gasket, Filter Base   | TT25485     | Gasket, Water Pump       |
| TR50397     | Gasket, Intake        | TT28664     | Clutch Disk              |

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## *John Deere Water Pump Repair Kit Identification Chart*

### *300 Series Engines*

| HOUSING<br>MARKED | KIT WITHOUT<br>IMPELLER | KIT WITH<br>IMPELLER | HOUSING<br>MARKED | KIT WITHOUT<br>IMPELLER | KIT WITH<br>IMPELLER |
|-------------------|-------------------------|----------------------|-------------------|-------------------------|----------------------|
| T23630            | TRE19507                | TRE62658             | R79172 (B)        | TMX9448                 | TRE11347             |
| T23632            | TRE19507                | TRE62658             | R80168            | TRE19511                | N/A                  |
| T29521            | TRE19507                | TRE62658             | R82787            | TRE19511                | N/A                  |
| T29701            | TMX9398                 | TMX131               | R90783            | TRE19510                | TRE11348             |
| R48992            | TRE19507                | TRE62658             | R90784            | TRE19510                | TRE11348             |
| R48994            | TMX9398                 | TMX131               | R91724            | TRE19507                | TRE62658             |
| R48997            | TRE19507                | TRE62658             | R97564            | TRE19510                | TRE11348             |
| R51039 (A)        | TRE19507                | TRE62658             | R99665            | TRE19510                | TRE11348             |
| R51039 (B)        | TMX9448                 | TRE11347             | R100871 (A)       | TRE19507                | TRE62658             |
| R51961            | TRE19510                | TMX132               | R100871 (B)       | TMX9448                 | TRE11347             |
| R52009            | TMX381                  | TMX382               | R104648           | TRE19510                | TRE11348             |
| R54051 (A)        | TRE19507                | TRE62658             | R111028 (A)       | TRE19507                | TRE62658             |
| R55130 (A)        | TRE19507                | TRE62658             | R111028 (B)       | TMX9448                 | TRE11347             |
| R55130 (B)        | TMX9448                 | TRE11347             | R111084           | TRE19507                | TRE62658             |
| R55164 (A)        | TRE19507                | TRE62658             | R127918           |                         | TRE62662             |
| R55164 (B)        | TMX9448                 | TRE11347             | R100812           |                         | TRE62662             |
| R55758 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R55758 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R55971            | TRE19510                | TRE11348             |                   |                         |                      |
| R56787            | TRE19507                | TMX133               |                   |                         |                      |
| R56813            | TRE19510                | TRE11348             |                   |                         |                      |
| R59049            | TRE19507                | TRE62658             |                   |                         |                      |
| R62902            | TRE19507                | TMX133               |                   |                         |                      |
| R65880 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R65880 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R66420            | TMX285                  | N/A                  |                   |                         |                      |
| R67188 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R67188 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R67741            | TRE19511                | N/A                  |                   |                         |                      |
| R68733            | TMX285                  | N/A                  |                   |                         |                      |
| R70437 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R70437 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R70612            | TRE19510                | TRE11348             |                   |                         |                      |
| R73604 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R73604 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R73606            | TRE19510                | TMX132               |                   |                         |                      |
| R73724            | TRE19510                | TMX132               |                   |                         |                      |
| R73801 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R73801 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R77012 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R77012 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R78286 (A)        | TRE19507                | TRE62658             |                   |                         |                      |
| R78286 (B)        | TMX9448                 | TRE11347             |                   |                         |                      |
| R78287            | TRE19510                | TRE11348             |                   |                         |                      |
| R79171            | TRE19510                | TMX132               |                   |                         |                      |
| R79172 (A)        | TRE19507                | TRE62658             |                   |                         |                      |

(A) Pulley is made of stamped steel

(B) Pulley is made of cast iron.

### *400 Series Engines*

| HOUSING<br>MARKED | KIT WITHOUT<br>IMPELLER | KIT WITH<br>IMPELLER |
|-------------------|-------------------------|----------------------|
| R26337            | TMX9212                 | TAR55617             |
| R27547            | TMX9212                 | TAR55617             |
| R34964            | TMX9257                 | TAR9834              |
| R34974            | TMX9257                 | TAR9834              |
| R34977            | TMX9212                 | TAR55617             |
| R34982            | TMX9212                 | TAR55617             |
| R41315            | TMX9355                 | TAR55619             |
| R41316            | TMX9257                 | TAR9834              |
| R41318            | TMX9355                 | TAR55619             |
| R43114            | TMX404                  | N/A                  |
| R44122            | TMX9355                 | TAR55619             |
| R46561            | TMX404                  | N/A                  |
| R50408            | TMX404                  | TMX137               |
| R50409            | TMX404                  | TMX135               |
| R51683            | TMX404                  | TMX135               |
| R54955            | TMX139                  | TMX140               |
| R58713            | TMX404                  | N/A                  |
| R61439            | TMX150                  | TRE10967             |

## *John Deere 300 Series Water Pump Repair Kit Components*

### KITS WITHOUT IMPELLERS

| <b>KIT REF.</b> | <b>COMPONENTS</b> |          |
|-----------------|-------------------|----------|
| <b>TRE19507</b> | TJD9257           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TT20242           | GASKET   |
|                 | TT20243           | GASKET   |
|                 | TT20268           | GASKET   |
|                 | TR25485           | GASKET   |
|                 | TR55405           | GASKET   |
|                 | TR97455           | GASKET   |
| <b>TRE19510</b> | TJD8643           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TT25485           | GASKET   |
|                 | TR56809           | GASKET   |
|                 | TT20243           | GASKET   |
| <b>TRE19511</b> | TJD7686           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TRE20767          | SEAL     |
|                 | TRE20768          | SEAL     |
|                 | TR82052           | SHAFT    |
|                 | TT20243           | GASKET   |
|                 | TR56809           | GASKET   |
| <b>TMX9398</b>  | TJD9398           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TT20243           | GASKET   |
|                 | TT25485           | GASKET   |
| <b>TMX9448</b>  | TJD9448           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TT20243           | GASKET   |
|                 | TR55405           | GASKET   |
| <b>TMX285</b>   | TJD9257           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TT20243           | GASKET   |
| <b>TMX381</b>   | TJD9448           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TR25485           | GASKET   |
|                 | TT20243           | GASKET   |

### KITS WITH IMPELLERS

| <b>KIT REF.</b> | <b>COMPONENTS</b> |          |
|-----------------|-------------------|----------|
| <b>TRE62658</b> | TRE19507          | KIT      |
|                 | TT30897           | IMPELLER |
| <b>TRE11348</b> | TRE19510          | KIT      |
|                 | TR56812           | IMPELLER |
| <b>TMX132</b>   | TRE19510          | KIT      |
|                 | TR40979           | IMPELLER |
| <b>TRE62662</b> | TJD9448           | BEARING  |
|                 | TAR101549         | SEAL KIT |
|                 | TR104583          | GASKET   |
|                 | TR40979           | IMPELLER |
|                 | TT20243           | GASKET   |
| <b>TMX131</b>   | TMX9398           | KIT      |
|                 | TR40979           | IMPELLER |
| <b>TRE11347</b> | TMX9448           | KIT      |
|                 | TT30897           | IMPELLER |
| <b>TMX133</b>   | TMX285            | KIT      |
|                 | TR40979           | IMPELLER |
| <b>TMX382</b>   | TMX381            | KIT      |
|                 | TR40979           | IMPELLER |

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## *John Deere 400 Series Water Pump Repair Kit Components*

### KITS WITHOUT IMPELLERS

| KIT REF.       | COMPONENTS                                                       |                                                             |
|----------------|------------------------------------------------------------------|-------------------------------------------------------------|
| <b>TMX9257</b> | TJD9257<br>TAR62933<br>TT13119<br>TR26341<br>TR26343             | BEARING<br>SEAL KIT<br>O'RING<br>GASKET<br>GASKET           |
| <b>TMX9212</b> | TJD9212<br>TAR62933<br>TR26341<br>TR26343                        | BEARING<br>SEAL KIT<br>GASKET<br>GASKET                     |
| <b>TMX9355</b> | TJD9355<br>TAR62933<br>TR26341<br>TR26343                        | BEARING<br>SEAL KIT<br>GASKET<br>GASKET                     |
| <b>TMX404</b>  | TJD9257<br>TAR101549<br>TR42406<br>TR43117<br>TR50410<br>TR61437 | BEARING<br>SEAL KIT<br>GASKET<br>GASKET<br>GASKET<br>GASKET |
| <b>TMX139</b>  | TJD9355<br>TAR62933<br>TR42406<br>TR50410                        | BEARING<br>SEAL KIT<br>GASKET<br>GASKET                     |
| <b>TMX150</b>  | TJD9257<br>TAR101549<br>TR42406<br>TR61437                       | BEARING<br>SEAL KIT<br>GASKET<br>GASKET                     |

### KITS WITH IMPELLERS

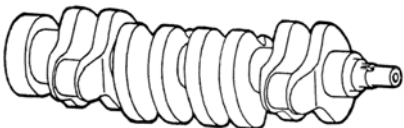
| KIT REF.        | COMPONENTS         |                 |
|-----------------|--------------------|-----------------|
| <b>TAR9834</b>  | TMX9257<br>TR40979 | KIT<br>IMPELLER |
| <b>TAR55617</b> | TMX9212<br>TR40979 | KIT<br>IMPELLER |
| <b>TAR55619</b> | TMX9355<br>TR40979 | KIT<br>IMPELLER |
| <b>TMX135</b>   | TMX404<br>TR51682  | KIT<br>IMPELLER |
| <b>TMX137</b>   | TMX404<br>TR50411  | KIT<br>IMPELLER |
| <b>TMX140</b>   | TMX139<br>TR50411  | KIT<br>IMPELLER |
| <b>TRE10967</b> | TMX150<br>TR77388  | KIT<br>IMPELLER |

**500 SERIES WATER PUMP KITS ARE NOT AVAILABLE**

### *Individual Water Pump Components Available from Maxiforce (Other than Gaskets)*

|           |                               |         |                    |
|-----------|-------------------------------|---------|--------------------|
| TAR101549 | SEAL KIT ( WITH FITTING TOOL) | TR40979 | IMPELLER           |
| TAR62933  | SEAL KIT                      | TR47191 | IMPELLER           |
| TJD7686   | BEARING                       | TR50411 | IMPELLER           |
| TJD8643   | BEARING                       | TR51682 | IMPELLER           |
| TJD9212   | BEARING                       | TR56812 | IMPELLER           |
| TJD9257   | BEARING                       | TR77388 | IMPELLER           |
| TJD9355   | BEARING                       | TR94419 | IMPELLER (PLASTIC) |
| TJD9398   | BEARING                       | TT30897 | IMPELLER (CAST)    |
| TJD9448   | BEARING                       |         |                    |

## Engine Torque Specifications

|  |                                                                                                                                         |  |                                              |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| ENGINE MODEL                                                                      | CRANKSHAFT MAIN BEARING CAP BOLTS                                                                                                                                                                                        | CONROD BOLTS                                                                       | CYLINDER HEAD BOLTS                                                                                                             |
| 3152, 3164, 3179, 4202, 4219, 4239, 6303, 6329, 6359                              | 85 Lb.-ft.                                                                                                                                                                                                               | 55 Lb.-ft.                                                                         | See John Deere service manual for your application                                                                              |
| 4276, 6414                                                                        | 85 Lb.-ft.                                                                                                                                                                                                               | 95 Lb.-ft.                                                                         | See John Deere service manual for your application                                                                              |
| 3029, 4039, 6059                                                                  | Dubuque (T0) built engines<br>serial # up to 419999 / 85 Lb.-ft.<br>serial # 420000 and after / 110 Lb.-ft.<br>Saran (CD) built engines<br>serial # up to 135640 / 85 Lb.-ft.<br>serial # 135641 and after / 110 Lb.-ft. | 40 Lb.-ft. plus an additional 90°                                                  | step 1 - 75 Lb.-ft.<br>step 2 - 110 Lb.-ft.<br>step 3 - verify 110 Lb.-ft. after 5 minutes.<br>step 4 - turn an additional 60°. |
| 4045, 6068                                                                        | Dubuque (T0) built engines<br>serial # up to 419999 / 85 Lb.-ft.<br>serial # 420000 and after / 110 Lb.-ft.<br>Saran (CD) built engines<br>serial # up to 135640 / 85 Lb.-ft.<br>serial # 135641 and after / 110 Lb.-ft. | 50 Lb.-ft. plus an additional 90°                                                  | step 1 - 75 Lb.-ft.<br>step 2 - 110 Lb.-ft.<br>step 3 - verify 110 Lb.-ft. after 5 minutes<br>step 4 - turn an additional 60°   |
| 4270, 6404, 6466, 6076                                                            | 150 Lb.-ft.                                                                                                                                                                                                              | 55 Lb.-ft. plus an additional 90°                                                  | See John Deere service manual for your application                                                                              |
| 6531                                                                              | 210 Lb.-ft.                                                                                                                                                                                                              | 55 Lb.-ft. plus an additional 90°                                                  | 185 Lb.-ft.                                                                                                                     |
| 6619, 6101                                                                        | 210 Lb.-ft.                                                                                                                                                                                                              | 55 Lb.-ft. plus an additional 90°                                                  | 150 Lb.-ft. plus an additional 90°                                                                                              |
| Power Tech 3029                                                                   | 100 Lb.-ft.                                                                                                                                                                                                              | 40 Lb.-ft. plus an additional 90°                                                  | step 1 - 75 Lb.-ft.<br>step 2 - 110 Lb.-ft.<br>step 3 - verify 110 Lb.-ft. after 5 minutes<br>step 4 - turn an additional 60°   |
| Power Tech 4045, 6068                                                             | 100 Lb.-ft.                                                                                                                                                                                                              | 43 Lb.-ft. plus an additional 90°                                                  | step 1 - 75 Lb.-ft.<br>step 2 - 110 Lb.-ft.<br>step 3 - verify 110 Lb.-ft. after 5 minutes<br>step 4 - turn an additional 60°   |
| Power Tech 6081                                                                   | 170 Lb.-ft.                                                                                                                                                                                                              | Tongue and Groove Style Connecting Rods<br>55 Lb.-ft. plus an additional 90°       | See John Deere service manual for your application                                                                              |
|                                                                                   |                                                                                                                                                                                                                          | Fractured Split Style Connecting Rods<br>71 Lb.-ft. plus an additional 90°         |                                                                                                                                 |

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