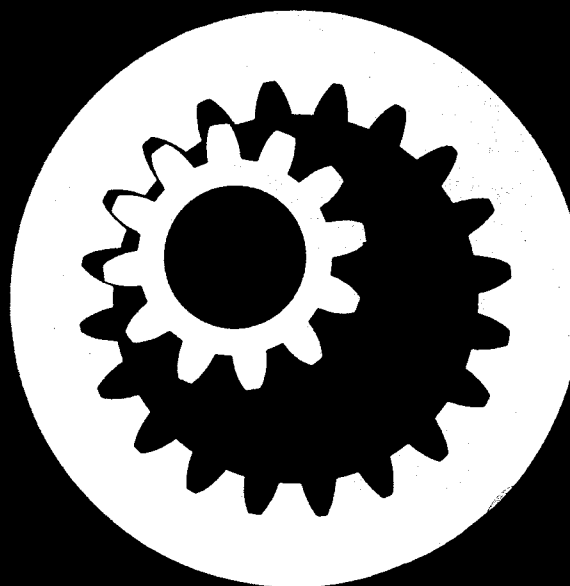




**PARTS  
CATALOG**



## ACCESSORY CODE PLATE (With Turbocharger)

| <b>JOHN DEERE</b> |                     |
|-------------------|---------------------|
| CONTROL:          | XXXXXXXXXXXXXXX     |
| BASIC ENGINE      | XXXXX               |
| OPTION CODES      |                     |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |

T35527

To assist your John Deere dealer in giving you prompt and efficient service, a code plate is attached to your John Deere engine. This code plate will identify parts that are unique to the original equipment manufacturer's application by option code. The basic engine code identifies the engine model.

### Basic Engine Code: 1191F

| Option Codes | Description  | Option Codes | Description   |
|--------------|--|--------------|---|
| 1101         | Rocker Arm Cover, Center Filler                          | 2101         | Thermostat Cover, Horizontal                          |
| 1102         | Rocker Arm Cover, No Filler                              | 2102         | Thermostat Cover, Vertical                            |
| 1200         | Oil Filler Cover   | 2204         | Thermostat, 180°F (82°C)                              |
| 1201         | Oil Filler Inlet, Medium Length                          | 2400         | No Fan Belt   |
| 1202         | Oil Filler Inlet, Long Length                            | 2401         | Fan Belt, Standard Position Water Pump                |
| 1203         | Oil Filler Inlet, Short Length                           | *2500        | No Fan  |
| 1302         | Crankshaft Pulley, Dual Groove                           | 2501         | Fan Blade, Blower                                     |
| 1403         | Flywheel Housing, SAE No. 3                              | 2502         | Fan Blade, Suction                                    |
| 1404         | Flywheel Housing, SAE No. 4                              | *2700        | No Radiator   |
| 1405         | Flywheel Housing, SAE No. 2                              | 2901         | Vent Tube, R.H.                                       |
| *1500        | No Flywheel  | 2902         | Vent System, Flexible                                 |
| 1501         | Flywheel, Engine, Overcenter Clutch, 10" (254 mm)        | 2903         | Vent Tube, L.H.                                       |
| 1502         | Flywheel, Spring Loaded Clutch, 12" (305 mm)             | *3000        | No Starting Motor                                     |
| 1503         | Flywheel, Damper Clutch                                  | 3001         | Starting System, SAE No. 2 and No. 4 Flywheel Housing |
| 1504         | Flywheel, Spring Loaded Clutch, 12" (305 mm)             | 3002         | Starting Motor, SAE No. 2 and No. 3 Flywheel Housing  |
| 1505         | Flywheel, Overcenter Clutch, 11-1/2" (292 mm)            | 3003         | Starting Motor, Sealed                                |
| 1602         | Injection System, Regular Governor                       | *3100        | No Alternator   |
| 1603         | Injection System, 3% - 5% Governor                       | 3102         | Electrical System, 55 Ampere                          |
| 1605         | Injection System Regular Governor (California Certified) | 3103         | Electrical System, 72 Ampere                          |
|              |  | 3104         | Electrical System, 22 Ampere                          |
| *1800        | No Air Cleaner   | *3200        | No Instrument Panel                                   |
| 1904         | Oil Pan, Bottom Drain                                    | *3300        | No Tachometer   |
| 1907         | Oil Pan, Bottom Drain                                    | *3400        | No Hourmeter  |
| 2001         | Water Pump, Standard Position                            | *3800        | No Manuals  |
|              |  | 3801         | Manuals, Operator and Parts                           |
|              |  | *5300        | No Enclosure  |
|              |  | *5800        | No PTO and Clutch                                     |

*\*NOTE: Accessories not sold by John Deere will be indicated on the code plate with the designation "OO." The original equipment manufacturer will be responsible for warranty service on this category of accessory.*

## ACCESSORY CODE PLATE (Without Turbocharger)

| <b>JOHN DEERE</b> |                     |
|-------------------|---------------------|
| CONTROL:          | XXXXXXXXXXXXXXXX    |
| BASIC ENGINE      | XXXXX               |
| OPTION CODES      |                     |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |
| XXXX              | XXXX XXXX XXXX XXXX |

T35527

To assist your John Deere dealer in giving you prompt and efficient service, a code plate is attached to your John Deere engine. This code plate will identify parts that are unique to the original equipment manufacturer's application by option code. The basic engine code identifies the engine model.

**Basic Engine Code: 1051F**

| Option Codes | Description                                       | Option Codes | Description                            |
|--------------|---|--------------|--|
| 1101         | Rocker Arm Cover, Center Filler                   | I*2200       | No Thermostat                          |
| 1102         | Rocker Arm Cover, No Filler,                      | 2204         | Thermostat, 180°F (82°C)               |
| 1200         | Oil Filler Cover                                  | *2400        | No Fan Belt                            |
| 1201         | Oil Filler Inlet, Medium Length                   | 2401         | Fan Belt, Standard Position Water Pump |
| 1202         | Oil Filler Inlet, Long Length                     | *2500        | No Fan                                 |
| 1203         | Oil Filler Inlet, Short Length                    | 2501         | Fan Blade, Blower                      |
| 1301         | Crankshaft Pulley, Single Groove                  | 2502         | Fan Blade, Suction                     |
| 1403         | Flywheel Housing, SAE No. 3                       | *2700        | No Radiator                            |
| 1404         | Flywheel Housing, SAE No. 4                       | *2800        | No Exhaust Manifold                    |
| 1405         | Flywheel Housing, SAE No. 2                       | 2801         | Exhaust System, Rear Down              |
| *1500        | No Flywheel                                       | 2802         | Exhaust System, Rear Vertical          |
| 1501         | Flywheel, Engine, Overcenter Clutch, 10" (254 mm) | 2803         | Exhaust System, Front Vertical         |
| 1502         | Flywheel, Spring Loaded Clutch, 12" (305 mm)      | 2807         | Exhaust System, Rear Vertical          |
| 1503         | Flywheel, Damper Clutch                           | 2808         | Exhaust System, Front Vertical         |
| 1504         | Flywheel, Spring Loaded Clutch, 12" (305 mm)      | *2900        | No Vent System                         |
| 1505         | Flywheel, Overcenter Clutch, 11-1/2" (292 mm)     | 2901         | Vent Tube, R.H.                        |
| 1602         | Injection System, Regular Governor                | 2902         | Vent System, Flexible                  |
| 1603         | Injection System, 3% - 5% Governor                | 2903         | Vent Tube, L.H.                        |
| *1700        | No Air Inlet                                      | *3000        | No Starting Motor                      |
| 1701         | Air Intake, Medium Length                         | 3001         | Starting System, SAE No. 2 and No. 4   |
| 1702         | Air Intake, 10" (254 mm) Long                     | 3002         | Flywheel Housing                       |
| 1703         | Air Intake, Short Length                          |              | Starting Motor, SAE No. 2 and No. 3    |
| 1704         | Air Intake, 12" (305 mm) Long                     |              | Flywheel Housing                       |
| *1800        | No Air Cleaner                                    | 3003         | Starting Motor, Sealed                 |
| 1901         | Oil Pan, Bottom or Rear Drain                     | *3100        | No Alternator                          |
| 1902         | Oil Pan, Rear Drain                               | 3101         | Electrical System, 35 Ampere           |
| 1903         | Oil Pan, Bottom Drain                             | 3102         | Electrical System, 55 Ampere           |
| 2001         | Water Pump, Standard Position                     | *3200        | No Instrument Panel                    |
| *2100        | No Thermostat Cover                               | *3300        | No Tachometer                          |
| 2101         | Thermostat Cover, Horizontal                      | *3400        | No Hourmeter                           |
| 2102         | Thermostat Cover, Vertical                        | *3800        | No Manuals                             |
|              |   | 3801         | Manuals, Operator and Parts            |
|              |   | *5300        | No Enclosure                           |
|              |   | *5800        | No PTO and Clutch                      |

**\*NOTE:** Accessories not sold by John Deere will be indicated on the code plate with the designation "OO." The original equipment manufacturer will be responsible for warranty service on this category of accessory.

**EXPLANATION OF OPTION CODES**

Your engine is equipped with optional equipment. Each option is cataloged under an option code number which is listed at the top of the page between the page heading and the exploded view. Parts used with all codes are listed as parts common (see example, key 1). Parts that are used only with a specific code (see example, code 2901; keys 2, 3, 4 and 5) have been listed separately under the heading "Additional Parts For Code 2901." Parts that are used only with code 2902 (see example; keys 6, 7 and 8) have been listed separately under the heading "Additional Parts For Code 2902."

**EXAMPLE**

| Key | Part No. | Serial No. | Description |
|-----|----------|------------|-------------|
|-----|----------|------------|-------------|

**Parts Common to Code 2901, 2902 and 2903**

|   |   |       |              |
|---|---|-------|--------------|
| 1 | R | 495 R | ( - ) O-ring |
|---|---|-------|--------------|

**Additional Parts Used with Code 2901**

|   |     |       |                                     |
|---|-----|-------|-------------------------------------|
| 2 | T   | 28207 | ( - ) Tube, vent                    |
| 3 | 19H | 1813  | ( - ) Screw, cap, 5/16" x 5/8"      |
| 4 | 24H | 1685  | ( - ) Washer, 11/32" x 3/4" x .075" |
| 5 | R   | 40791 | ( - ) Clamp                         |

**Additional Parts Used with Code 2902**

|   |    |       |   |
|---|----|-------|---|
| 6 | AT | 25192 | ( - ) Elbow, 90°                        |
| 7 | AR | 21837 | ( - ) Clamp                             |
| 8 | H  | 36031 | ( - ) Hose, 3/4" x 36" (19 mm x 914 mm) |

**Additional Parts Used with Code 2903**

|   |     |       |                                     |
|---|-----|-------|-------------------------------------|
| 3 | 19H | 1813  | ( - ) Screw, cap, 5/16" x 5/8"      |
| 4 | 24H | 1685  | ( - ) Washer, 11/32" x 3/4" x .075" |
| 5 | R   | 40791 | ( - ) Clamp                         |
| 9 | T   | 20074 | ( - ) Tube, vent                    |

**OPTION CODE PAGE REFERENCE**

| Functional<br>Code Group No. | Description                             | Page No.          |
|------------------------------|---|-------------------|
| 11                           | Rocker Arm Cover                        | 10-26,10-27       |
| 12                           | Engine Oil Filler Inlet and Inlet Cover | 10-21,10-29       |
| 13                           | Crankshaft Pulley                       | 10-12,10-13       |
| 14                           | Flywheel Housing                        | 10-24,10-25       |
| 15                           | Engine Flywheel                         | 10-23             |
| 16                           | Fuel Injection System                   | 25-5,25-6         |
|                              | Fuel Injection Pump                     | 30-1 thru 30-31   |
| 17                           | Air Inlet                               | 15-1,15-2         |
| 19                           | Engine Oil Pan                          | 10-18,10-19,10-20 |
| 20                           | Water Pump Assembly                     | 20-5,20-6         |
| 21                           | Thermostat Housing and Cover            | 20-1,20-2         |
| 22                           | Engine Thermostat                       | 20-3              |
| 24                           | Fan Belt                                | 20-8              |
| 25                           | Fan Blade Assembly                      | 20-7              |
| 28                           | Exhaust Manifold                        | 15-3,15-4         |
| 29                           | Engine Ventilating System               | 10-28             |
| 30                           | Starting Motor                          | 35-2 thru 35-12   |
| 31                           | Alternator                              | 40-1 thru 40-9    |

## TO THE CUSTOMER

The part numbers in this catalog were correct at the time your engine was manufactured. It is our policy to constantly improve our engines and, therefore, part numbers may change. When ordering parts, verify part numbers through your dealer's catalog which is up to date.

## AN EXPLANATION OF CHANGE INDICATOR LINE

New and revised information is identified by vertical lines marked in the left-hand margin of revised pages. These lines indicate changes affecting the ordering of parts.

## AN EXPLANATION OF SERIAL NUMBER INFORMATION

One serial number range is used on the 4276D and 4276T Engine. An individual serial number is assigned to each engine.

Serial number information is listed parenthetically to show on which engines each part can be used. These listings are explained by the following examples.

- (       -       ) The part can be used on all engines.
- (000000-       ) The part can be used on all engines beginning with the serial listed.
- (       -000000 ) The part can be used on all engines up to and including serial number listed.
- (000000-000000) The part can be used on all engines between and including the serial numbers listed.

Where XXXXXX's are listed in place of a serial number it indicates a serial number change was made but the exact serial number had not been established when the catalog went to press.

## BOLT AND CAP SCREW STRENGTH IDENTIFICATION

Bolts and cap screws required to have high-strength qualities equivalent to SAE Grade 8 are identified throughout this catalog by the description HS SAE 8. Unless identified by this description, all standard bolts and cap screws are SAE Grade 5 or lower.

## SI UNITS OF MEASURE

This parts catalog contains SI metric equivalents which follow in parentheses immediately after the U.S. customary unit of measure.

## COMPLETE GOODS LISTINGS

Complete goods are listed in bold face type. Order separately. Do not include on replacement part order.

## SECTIONAL INDEX

Section 5 - General Information  
 Section 10 - Engine  
 Section 15 - Intake and Exhaust System  
 Section 20 - Cooling System  
 Section 25 - Fuel System  
 Section 30 - Fuel Injection Pump

Section 35 - Starting Motors  
 Section 40 - Alternator and Regulator  
 Section 45 - Decals, Labels, and Kits  
 Section 50 - Numerical Index

## ALPHABETICAL INDEX

| GRID     |  | PAGE  | GRID     |  | PAGE  |
|----------|--|-------|----------|--|-------|
| <b>A</b> |  |       |          |  |       |
| B21      | ADAPTER, OIL FILTER .....                    | 10-21 | B21      | COVER, ENGINE OIL FILLER .....               | 10-21 |
| C9       | AIR INLET .....                              | 15-1  | D22      | COVER, GOVERNOR HOUSING .....                | 30-14 |
| C10      | AIR INLET .....                              | 15-2  | E7       | COVER, GOVERNOR HOUSING .....                | 30-23 |
| F5       | ALTERNATOR .....                             | 40-1  | B22      | COVER, OIL COOLER .....                      | 10-22 |
| F6       | ALTERNATOR .....                             | 40-2  | C3       | COVER, ROCKER ARM .....                      | 10-26 |
| F7       | ALTERNATOR .....                             | 40-3  | C4       | COVER, ROCKER ARM .....                      | 10-27 |
| F8       | ALTERNATOR .....                             | 40-4  | C16      | COVER, THERMOSTAT .....                      | 20-1  |
| F9       | ALTERNATOR .....                             | 40-5  | C17      | COVER, THERMOSTAT .....                      | 20-2  |
| F10      | ALTERNATOR .....                             | 40-6  | C7       | COVER, TIMING GEAR .....                     | 10-30 |
| F11      | ALTERNATOR .....                             | 40-7  | B12      | CRANKSHAFT ENGINE .....                      | 10-12 |
| F12      | ALTERNATOR .....                             | 40-8  | B13      | CRANKSHAFT ENGINE .....                      | 10-13 |
| F13      | ALTERNATOR .....                             | 40-9  | B12      | CRANKSHAFT IDLER GEAR .....                  | 10-12 |
| F7       | ALTERNATOR BRACKET .....                     | 40-3  | B13      | CRANKSHAFT IDLER GEAR .....                  | 10-13 |
| F8       | ALTERNATOR BRACKET .....                     | 40-4  | B12      | CRANKSHAFT PULLEY .....                      | 10-12 |
| F9       | ALTERNATOR HOUSINGS .....                    | 40-5  | B13      | CRANKSHAFT PULLEY .....                      | 10-13 |
| F9       | ALTERNATOR PULLEY .....                      | 40-5  | B3       | CYLINDER BLOCK .....                         | 10-1  |
| F10      | ALTERNATOR PULLEY .....                      | 40-6  | B4       | CYLINDER BLOCK .....                         | 10-2  |
| F11      | ALTERNATOR PULLEY .....                      | 40-7  | B10      | CYLINDER HEAD .....                          | 10-9  |
| F12      | ALTERNATOR PULLEY .....                      | 40-8  | B11      | CYLINDER HEAD .....                          | 10-10 |
| F13      | ALTERNATOR PULLEY .....                      | 40-9  | B10      | CYLINDER HEAD GASKET .....                   | 10-9  |
| B14      | ARMS, ROCKER .....                           | 10-14 | B11      | CYLINDER HEAD GASKET .....                   | 10-10 |
| B15      | ARMS, ROCKER .....                           | 10-15 | B7       | CYLINDER LINER KIT .....                     | 10-5  |
| B3       | ASSEMBLY, SHORT BLOCK .....                  | 10-1  | B8       | CYLINDER LINER KIT .....                     | 10-7  |
| B4       | ASSEMBLY, SHORT BLOCK .....                  | 10-2  | B9       | CYLINDER LINER KIT .....                     | 10-8  |
| E17      | ASSEMBLY, SWITCH .....                       | 35-3  | B7       | CYLINDER LINER LUBRICANT .....               | 10-5  |
| D12      | AUTOMATIC ADVANCE, FUEL INJECTION PUMP ..... | 30-4  | B7       | CYLINDER LINERS .....                        | 10-5  |
| D19      | AUTOMATIC ADVANCE, FUEL INJECTION PUMP ..... | 30-11 | <b>D</b> |  |       |
| E6       | AUTOMATIC ADVANCE, FUEL INJECTION PUMP ..... | 30-22 | B6       | DIPSTICK, ENGINE OIL .....                   | 10-4  |
| E11      | AUTOMATIC ADVANCE, FUEL INJECTION PUMP ..... | 30-27 | B6       | DIPSTICK, ENGINE OIL .....                   | 10-4  |
| <b>B</b> |  |       | E17      | DRIVE HOUSING, STARTING MOTOR .....          | 35-3  |
| B5       | BALANCER SHAFT, ENGINE .....                 | 10-3  | E20      | DRIVE HOUSING, STARTING MOTOR .....          | 35-6  |
| B8       | BEARING, CONNECTING ROD .....                | 10-7  | F2       | DRIVE HOUSING, STARTING MOTOR .....          | 35-11 |
| B9       | BEARING, CONNECTING ROD .....                | 10-8  | <b>E</b> |  |       |
| B16      | BEARING, MAIN .....                          | 10-16 | C11      | ELBOW, EXHAUST .....                         | 15-3  |
| C22      | BELT, FAN .....                              | 20-8  | D15      | ELECTRIC SHUT-OFF, FUEL INJECTION PUMP ..... | 30-7  |
| F7       | BELT, FAN AND ALTERNATOR .....               | 40-3  | D22      | ELECTRIC SHUT-OFF, FUEL INJECTION PUMP ..... | 30-14 |
| C21      | BLADE, FAN .....                             | 20-7  | E7       | ELECTRIC SHUT-OFF, FUEL INJECTION PUMP ..... | 30-23 |
| B3       | BLOCK, CYLINDER .....                        | 10-1  | E14      | ELECTRIC SHUT-OFF, FUEL INJECTION PUMP ..... | 30-30 |
| B4       | BLOCK, CYLINDER .....                        | 10-2  | B5       | ENGINE BALANCER SHAFT .....                  | 10-3  |
| F7       | BRACKET, ALTERNATOR .....                    | 40-3  | B23      | ENGINE FLYWHEEL .....                        | 10-23 |
| F8       | BRACKET, ALTERNATOR .....                    | 40-4  | B5       | ENGINE FRONT PLATE .....                     | 10-3  |
| E18      | BRUSHES, STARTING MOTOR .....                | 35-4  | B22      | ENGINE OIL COOLER .....                      | 10-22 |
| F1       | BRUSHES, STARTING MOTOR .....                | 35-10 | B6       | ENGINE OIL DIPSTICK .....                    | 10-4  |
| <b>C</b> |  |       | B6       | ENGINE OIL DIPSTICK .....                    | 10-4  |
| B14      | CAMSHAFT ENGINE .....                        | 10-14 | B21      | ENGINE OIL FILLER COVER .....                | 10-21 |
| B15      | CAMSHAFT ENGINE .....                        | 10-15 | C6       | ENGINE OIL FILLER INLET .....                | 10-29 |
| B16      | CAP, MAIN BEARING .....                      | 10-16 | B21      | ENGINE OIL FILTER .....                      | 10-21 |
| C3       | CAP, OIL FILLER .....                        | 10-26 | B18      | ENGINE OIL PAN .....                         | 10-18 |
| C4       | CAP, OIL FILLER .....                        | 10-27 | B19      | ENGINE OIL PAN .....                         | 10-19 |
| C6       | CAP, OIL FILLER .....                        | 10-29 | B20      | ENGINE OIL PAN .....                         | 10-20 |
| E18      | COIL, STARTING MOTOR .....                   | 35-4  | B17      | ENGINE OIL PUMP .....                        | 10-17 |
| E21      | COIL, STARTING MOTOR .....                   | 35-7  | F18      | ENGINE OIL, TORQ-GARD SUPREME .....          | 45-5  |
| F1       | COIL, STARTING MOTOR .....                   | 35-10 | F16      | ENGINE OVERHAUL GASKET SET .....             | 45-3  |
| E22      | COMMUTATOR END FRAME, STARTING MOTOR .....   | 35-8  | F17      | ENGINE STORAGE KIT .....                     | 45-4  |
| B8       | CONNECTING ROD .....                         | 10-7  | C16      | ENGINE THERMOSTAT .....                      | 20-1  |
| B9       | CONNECTING ROD .....                         | 10-8  | C18      | ENGINE THERMOSTAT .....                      | 20-3  |
| B8       | CONNECTING ROD BEARING .....                 | 10-7  | F15      | ENGINE TUNE-UP GASKET SET .....              | 45-2  |
| B9       | CONNECTING ROD BEARING .....                 | 10-8  | F17      | ENGINE VALVE STEM LUBRICANT .....            | 45-4  |
| F17      | COOLANT STOP LEAK .....                      | 45-4  | C5       | ENGINE VENT TUBE .....                       | 10-28 |
|          |  |       | C5       | ENGINE VENTILATING SYSTEM .....              | 10-28 |
|          |  |       | B14      | ENGINE, CAMSHAFT .....                       | 10-14 |

## ALPHABETICAL INDEX - CONTINUED

| GRID |   | PAGE  | GRID |   | PAGE  |
|------|---|-------|------|---|-------|
| B15  | ENGINE, CAMSHAFT .....                        | 10-15 | D17  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-9  |
| B12  | ENGINE, CRANKSHAFT .....                      | 10-12 | D18  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-10 |
| B13  | ENGINE, CRANKSHAFT .....                      | 10-13 | D19  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-11 |
| B8   | ENGINE, PISTON .....                          | 10-7  | D20  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-12 |
| B9   | ENGINE, PISTON .....                          | 10-8  | D21  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-13 |
| C11  | EXHAUST ELBOW .....                           | 15-3  | D22  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-14 |
| C11  | EXHAUST MANIFOLD .....                        | 15-3  | D23  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-15 |
| C12  | EXHAUST MANIFOLD .....                        | 15-4  | E1   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-16 |
| B14  | EXHAUST VALVES .....                          | 10-14 | E2   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-17 |
| B15  | EXHAUST VALVES .....                          | 10-15 | E3   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-18 |
| F    |   |       | E4   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-19 |
| F7   | FAN AND ALTERNATOR BELT .....                 | 40-3  | E5   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-21 |
| C22  | FAN BELT .....                                | 20-8  | E6   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-22 |
| C21  | FAN BLADE .....                               | 20-7  | E7   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-23 |
| C19  | FAN PULLEY .....                              | 20-5  | E8   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-24 |
| C20  | FAN PULLEY .....                              | 20-6  | E9   | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-25 |
| D3   | FILTER, FUEL .....                            | 25-3  | E10  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-26 |
| C1   | FLYWHEEL HOUSING .....                        | 10-24 | E11  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-27 |
| C2   | FLYWHEEL HOUSING .....                        | 10-25 | E12  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-28 |
| C1   | FLYWHEEL HOUSING GASKET .....                 | 10-24 | E13  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-29 |
| C2   | FLYWHEEL HOUSING GASKET .....                 | 10-25 | E14  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-30 |
| B23  | FLYWHEEL RING GEAR .....                      | 10-23 | E5   | FUEL INJECTION PUMP SHUT-OFF LINKAGE .....    | 30-21 |
| B23  | FLYWHEEL, ENGINE .....                        | 10-23 | D10  | FUEL INJECTION TRANSFER PUMP .....            | 30-2  |
| B5   | FRONT PLATE, ENGINE .....                     | 10-3  | D17  | FUEL INJECTION TRANSFER PUMP .....            | 30-9  |
| D3   | FUEL FILTER .....                             | 25-3  | E2   | FUEL INJECTION TRANSFER PUMP .....            | 30-17 |
| D18  | FUEL INJECTION HEAD AND ROTOR .....           | 30-10 | E9   | FUEL INJECTION TRANSFER PUMP .....            | 30-25 |
| E1   | FUEL INJECTION HEAD AND ROTOR .....           | 30-16 | D3   | FUEL LINES .....                              | 25-3  |
| E10  | FUEL INJECTION HEAD AND ROTOR .....           | 30-26 | D2   | FUEL TRANSFER PUMP .....                      | 25-2  |
| D5   | FUEL INJECTION LINES .....                    | 25-5  | G    |   |       |
| D6   | FUEL INJECTION LINES .....                    | 25-6  | D9   | GASKET OVERHAUL KIT .....                     | 30-1  |
| D4   | FUEL INJECTION NOZZLE .....                   | 25-4  | F16  | GASKET SET, ENGINE OVERHAUL .....             | 45-3  |
| D5   | FUEL INJECTION PUMP .....                     | 25-5  | F15  | GASKET SET, ENGINE TUNE-UP .....              | 45-2  |
| D6   | FUEL INJECTION PUMP .....                     | 25-6  | B10  | GASKET, CYLINDER HEAD .....                   | 10-9  |
| D12  | FUEL INJECTION PUMP AUTOMATIC ADVANCE .....   | 30-4  | B11  | GASKET, CYLINDER HEAD .....                   | 10-10 |
| D19  | FUEL INJECTION PUMP AUTOMATIC ADVANCE .....   | 30-11 | C1   | GASKET, FLYWHEEL HOUSING .....                | 10-24 |
| E6   | FUEL INJECTION PUMP AUTOMATIC ADVANCE .....   | 30-22 | C2   | GASKET, FLYWHEEL HOUSING .....                | 10-25 |
| E11  | FUEL INJECTION PUMP AUTOMATIC ADVANCE .....   | 30-27 | B18  | GASKET, OIL PAN .....                         | 10-18 |
| D15  | FUEL INJECTION PUMP ELECTRIC SHUT-OFF .....   | 30-7  | B19  | GASKET, OIL PAN .....                         | 10-19 |
| D22  | FUEL INJECTION PUMP ELECTRIC SHUT-OFF .....   | 30-14 | C3   | GASKET, ROCKER ARM COVER .....                | 10-26 |
| E7   | FUEL INJECTION PUMP ELECTRIC SHUT-OFF .....   | 30-23 | C4   | GASKET, ROCKER ARM COVER .....                | 10-27 |
| E14  | FUEL INJECTION PUMP ELECTRIC SHUT-OFF .....   | 30-30 | C7   | GASKET, TIMING GEAR .....                     | 10-30 |
| D13  | FUEL INJECTION PUMP GOVERNOR .....            | 30-5  | B12  | GEAR, CRANKSHAFT IDLER .....                  | 10-12 |
| D20  | FUEL INJECTION PUMP GOVERNOR .....            | 30-12 | B13  | GEAR, CRANKSHAFT IDLER .....                  | 10-13 |
| E3   | FUEL INJECTION PUMP GOVERNOR .....            | 30-18 | B17  | GEARS, OIL PUMP .....                         | 10-17 |
| E4   | FUEL INJECTION PUMP GOVERNOR .....            | 30-19 | D22  | GOVERNOR HOUSING COVER .....                  | 30-14 |
| E12  | FUEL INJECTION PUMP GOVERNOR .....            | 30-28 | E7   | GOVERNOR HOUSING COVER .....                  | 30-23 |
| D11  | FUEL INJECTION PUMP HEAD AND ROTOR .....      | 30-3  | D13  | GOVERNOR, FUEL INJECTION PUMP .....           | 30-5  |
| D9   | FUEL INJECTION PUMP HOUSING .....             | 30-1  | D20  | GOVERNOR, FUEL INJECTION PUMP .....           | 30-12 |
| D23  | FUEL INJECTION PUMP HOUSING .....             | 30-15 | E3   | GOVERNOR, FUEL INJECTION PUMP .....           | 30-18 |
| E6   | FUEL INJECTION PUMP HOUSING .....             | 30-22 | E4   | GOVERNOR, FUEL INJECTION PUMP .....           | 30-19 |
| E8   | FUEL INJECTION PUMP HOUSING .....             | 30-24 | E12  | GOVERNOR, FUEL INJECTION PUMP .....           | 30-28 |
| D16  | FUEL INJECTION PUMP HOUSING AND DRIVE .....   | 30-8  | H    |   |       |
| D23  | FUEL INJECTION PUMP HOUSING AND DRIVE .....   | 30-15 | D18  | HEAD AND ROTOR, FUEL INJECTION .....          | 30-10 |
| E8   | FUEL INJECTION PUMP HOUSING AND DRIVE .....   | 30-24 | E1   | HEAD AND ROTOR, FUEL INJECTION .....          | 30-16 |
| D14  | FUEL INJECTION PUMP LINKAGE .....             | 30-6  | E10  | HEAD AND ROTOR, FUEL INJECTION .....          | 30-26 |
| D21  | FUEL INJECTION PUMP LINKAGE .....             | 30-13 | D11  | HEAD AND ROTOR, FUEL INJECTION PUMP .....     | 30-3  |
| E13  | FUEL INJECTION PUMP LINKAGE .....             | 30-29 | B10  | HEAD, CYLINDER .....                          | 10-9  |
| D10  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-2  | B11  | HEAD, CYLINDER .....                          | 10-10 |
| D11  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-3  | C1   | HOUSING, FLYWHEEL .....                       | 10-24 |
| D12  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-4  | C2   | HOUSING, FLYWHEEL .....                       | 10-25 |
| D13  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-5  | B22  | HOUSING, OIL COOLER .....                     | 10-22 |
| D14  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-6  |      |   |       |
| D15  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-7  |      |   |       |
| D16  | FUEL INJECTION PUMP OVERHAUL GASKET KIT ..... | 30-8  |      |   |       |

## ALPHABETICAL INDEX - CONTINUED

| GRID |  | PAGE  | GRID |                                    | PAGE  |
|------|--|-------|------|------------------------------------|-------|
| C16  | HOUSING, THERMOSTAT .....                      | 20-1  |      | <b>M</b>                           |       |
| C17  | HOUSING, THERMOSTAT .....                      | 20-2  | B16  | MAIN BEARING .....                 | 10-16 |
| F9   | HOUSINGS, ALTERNATOR .....                     | 40-5  | B16  | MAIN BEARING CAP .....             | 10-16 |
|      | <b>I</b>                                       |       | E21  | MAIN FRAME, STARTING MOTOR .....   | 35-7  |
| C9   | INLET, AIR .....                               | 15-1  | C11  | MANIFOLD, EXHAUST .....            | 15-3  |
| C10  | INLET, AIR .....                               | 15-2  | C12  | MANIFOLD, EXHAUST .....            | 15-4  |
| B14  | INTAKE VALVES .....                            | 10-14 | E16  | MOTOR, STARTING .....              | 35-2  |
| B15  | INTAKE VALVES .....                            | 10-15 | E16  | MOTOR, STARTING .....              | 35-2  |
|      | <b>K</b>                                       |       | E17  | MOTOR, STARTING .....              | 35-3  |
| B7   | KIT, CYLINDER LINER .....                      | 10-5  | E18  | MOTOR, STARTING .....              | 35-4  |
| B8   | KIT, CYLINDER LINER .....                      | 10-7  | E19  | MOTOR, STARTING .....              | 35-5  |
| B9   | KIT, CYLINDER LINER .....                      | 10-8  | E20  | MOTOR, STARTING .....              | 35-6  |
| F17  | KIT, ENGINE STORAGE .....                      | 45-4  | E21  | MOTOR, STARTING .....              | 35-7  |
| D10  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-2  | E22  | MOTOR, STARTING .....              | 35-8  |
| D11  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-3  | E23  | MOTOR, STARTING .....              | 35-9  |
| D12  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-4  | F1   | MOTOR, STARTING .....              | 35-10 |
| D13  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-5  | F2   | MOTOR, STARTING .....              | 35-11 |
| D14  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-6  | F3   | MOTOR, STARTING .....              | 35-12 |
| D15  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-7  |      | <b>N</b>                           |       |
| D16  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-8  | D4   | NOZZLE, FUEL INJECTION .....       | 25-4  |
| D17  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-9  |      | <b>O</b>                           |       |
| D18  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-10 | B22  | OIL COOLER COVER .....             | 10-22 |
| D19  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-11 | B22  | OIL COOLER HOUSING .....           | 10-22 |
| D20  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-12 | B22  | OIL COOLER, ENGINE .....           | 10-22 |
| D21  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-13 | C3   | OIL FILLER CAP .....               | 10-26 |
| D22  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-14 | C4   | OIL FILLER CAP .....               | 10-27 |
| D23  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-15 | C6   | OIL FILLER CAP .....               | 10-29 |
| E1   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-16 | C6   | OIL FILLER INLET, ENGINE .....     | 10-29 |
| E2   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-17 | B21  | OIL FILTER ADAPTER .....           | 10-21 |
| E3   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-18 | B21  | OIL FILTER, ENGINE .....           | 10-21 |
| E4   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-19 | C13  | OIL LINES, TURBOCHARGER .....      | 15-5  |
| E5   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-21 | B18  | OIL PAN GASKET .....               | 10-18 |
| E6   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-22 | B19  | OIL PAN GASKET .....               | 10-19 |
| E7   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-23 | B18  | OIL PAN, ENGINE .....              | 10-18 |
| E8   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-24 | B19  | OIL PAN, ENGINE .....              | 10-19 |
| E9   | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-25 | B20  | OIL PAN, ENGINE .....              | 10-20 |
| E10  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-26 | B17  | OIL PUMP GEARS .....               | 10-17 |
| E11  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-27 | B17  | OIL PUMP, ENGINE .....             | 10-17 |
| E12  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-28 |      | <b>P</b>                           |       |
| E13  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-29 | B8   | PISTON ENGINE .....                | 10-7  |
| E14  | KIT, FUEL INJECTION PUMP OVERHAUL GASKET ..... | 30-30 | B9   | PISTON ENGINE .....                | 10-8  |
| D9   | KIT, GASKET OVERHAUL .....                     | 30-1  | B8   | PISTON RINGS .....                 | 10-7  |
| C20  | KIT, REPAIR .....                              | 20-6  | B9   | PISTON RINGS .....                 | 10-8  |
|      | <b>L</b>                                       |       | F9   | PULLEY, ALTERNATOR .....           | 40-5  |
| B7   | LINERS, CYLINDER .....                         | 10-5  | F10  | PULLEY, ALTERNATOR .....           | 40-6  |
| D3   | LINES, FUEL .....                              | 25-3  | F11  | PULLEY, ALTERNATOR .....           | 40-7  |
| D5   | LINES, FUEL INJECTION .....                    | 25-5  | F12  | PULLEY, ALTERNATOR .....           | 40-8  |
| D6   | LINES, FUEL INJECTION .....                    | 25-6  | F13  | PULLEY, ALTERNATOR .....           | 40-9  |
| D14  | LINKAGE, FUEL INJECTION PUMP .....             | 30-6  | B12  | PULLEY, CRANKSHAFT .....           | 10-12 |
| D21  | LINKAGE, FUEL INJECTION PUMP .....             | 30-13 | B13  | PULLEY, CRANKSHAFT .....           | 10-13 |
| E13  | LINKAGE, FUEL INJECTION PUMP .....             | 30-29 | C19  | PULLEY, FAN .....                  | 20-5  |
| E5   | LINKAGE, FUEL INJECTION PUMP SHUT-OFF .....    | 30-21 | C20  | PULLEY, FAN .....                  | 20-6  |
| B7   | LUBRICANT, CYLINDER LINER .....                | 10-5  | D9   | PUMP HOUSING, FUEL INJECTION ..... | 30-1  |
| F17  | LUBRICANT, ENGINE VALVE STEM .....             | 45-4  | D16  | PUMP HOUSING, FUEL INJECTION ..... | 30-8  |
|      |  |       | D23  | PUMP HOUSING, FUEL INJECTION ..... | 30-15 |
|      |  |       | E6   | PUMP HOUSING, FUEL INJECTION ..... | 30-22 |
|      |  |       | E8   | PUMP HOUSING, FUEL INJECTION ..... | 30-24 |



## ALPHABETICAL INDEX - CONTINUED

| GRID |   | PAGE  | GRID |                                     | PAGE  |
|------|---|-------|------|-------------------------------------|-------|
| D5   | PUMP, FUEL INJECTION .....                | 25-5  | E17  | STARTING MOTOR SOLENOID .....       | 35-3  |
| D6   | PUMP, FUEL INJECTION .....                | 25-6  | E19  | STARTING MOTOR SOLENOID .....       | 35-5  |
| D10  | PUMP, FUEL INJECTION TRANSFER .....       | 30-2  | F2   | STARTING MOTOR SOLENOID .....       | 35-11 |
| D2   | PUMP, FUEL TRANSFER .....                 | 25-2  | F3   | STARTING MOTOR SOLENOID .....       | 35-12 |
| C19  | PUMP, WATER .....                         | 20-5  | F17  | STOP LEAK, COOLANT .....            | 45-4  |
| C20  | PUMP, WATER .....                         | 20-6  | E17  | SWITCH ASSEMBLY .....               | 35-3  |
| B14  | PUSH RODS .....                           | 10-14 | E23  | SWITCH, SOLENOID .....              | 35-9  |
| B15  | PUSH RODS .....                           | 10-15 |      |                                     |       |
| R    |   |       |      |                                     |       |
| F5   | REGULATOR, VOLTAGE .....                  | 40-1  | C16  | THERMOSTAT COVER .....              | 20-1  |
| F6   | REGULATOR, VOLTAGE .....                  | 40-2  | C17  | THERMOSTAT COVER .....              | 20-2  |
| F7   | REGULATOR, VOLTAGE .....                  | 40-3  | C16  | THERMOSTAT HOUSING .....            | 20-1  |
| F8   | REGULATOR, VOLTAGE .....                  | 40-4  | C17  | THERMOSTAT HOUSING .....            | 20-2  |
| C20  | REPAIR KIT .....                          | 20-6  | C16  | THERMOSTAT, ENGINE .....            | 20-1  |
| B23  | RING GEAR, FLYWHEEL .....                 | 10-23 | C18  | THERMOSTAT, ENGINE .....            | 20-3  |
| B8   | RINGS, PISTON .....                       | 10-7  | C7   | TIMING GEAR COVER .....             | 10-30 |
| B9   | RINGS, PISTON .....                       | 10-8  | C7   | TIMING GEAR GASKET .....            | 10-30 |
| C3   | ROCKER ARM COVER .....                    | 10-26 | F18  | TORQ-GARD SUPREME ENGINE OIL .....  | 45-5  |
| C4   | ROCKER ARM COVER .....                    | 10-27 | D17  | TRANSFER PUMP, FUEL INJECTION ..... | 30-9  |
| C3   | ROCKER ARM COVER GASKET .....             | 10-26 | E2   | TRANSFER PUMP, FUEL INJECTION ..... | 30-17 |
| C4   | ROCKER ARM COVER GASKET .....             | 10-27 | E9   | TRANSFER PUMP, FUEL INJECTION ..... | 30-25 |
| B14  | ROCKER ARM SHAFT .....                    | 10-14 | C5   | TUBE, ENGINE VENT .....             | 10-28 |
| B15  | ROCKER ARM SHAFT .....                    | 10-15 | C14  | TURBOCHARGER .....                  | 15-6  |
| B14  | ROCKER ARMS .....                         | 10-14 | C13  | TURBOCHARGER OIL LINES .....        | 15-5  |
| B15  | ROCKER ARMS .....                         | 10-15 |      |                                     |       |
| B8   | ROD, CONNECTING .....                     | 10-7  | V    |                                     |       |
| B9   | ROD, CONNECTING .....                     | 10-8  | B14  | VALVES, EXHAUST .....               | 10-14 |
| B14  | RODS, PUSH .....                          | 10-14 | B15  | VALVES, EXHAUST .....               | 10-15 |
| B15  | RODS, PUSH .....                          | 10-15 | B14  | VALVES, INTAKE .....                | 10-14 |
| S    |   |       |      |                                     |       |
| B14  | SHAFT, ROCKER ARM .....                   | 10-14 | B15  | VALVES, INTAKE .....                | 10-15 |
| B15  | SHAFT, ROCKER ARM .....                   | 10-15 | F5   | VOLTAGE REGULATOR .....             | 40-1  |
| B3   | SHORT BLOCK ASSEMBLY .....                | 10-1  | F6   | VOLTAGE REGULATOR .....             | 40-2  |
| B4   | SHORT BLOCK ASSEMBLY .....                | 10-2  | F7   | VOLTAGE REGULATOR .....             | 40-3  |
| E23  | SOLENOID SWITCH .....                     | 35-9  | F8   | VOLTAGE REGULATOR .....             | 40-4  |
| E17  | SOLENOID, STARTING MOTOR .....            | 35-3  |      |                                     |       |
| E19  | SOLENOID, STARTING MOTOR .....            | 35-5  | W    |                                     |       |
| F2   | SOLENOID, STARTING MOTOR .....            | 35-11 | C19  | WATER PUMP .....                    | 20-5  |
| F3   | SOLENOID, STARTING MOTOR .....            | 35-12 | C20  | WATER PUMP .....                    | 20-6  |
| E16  | STARTING MOTOR .....                      | 35-2  |      |                                     |       |
| E16  | STARTING MOTOR .....                      | 35-2  |      |                                     |       |
| E17  | STARTING MOTOR .....                      | 35-3  |      |                                     |       |
| E18  | STARTING MOTOR .....                      | 35-4  |      |                                     |       |
| E19  | STARTING MOTOR .....                      | 35-5  |      |                                     |       |
| E20  | STARTING MOTOR .....                      | 35-6  |      |                                     |       |
| E21  | STARTING MOTOR .....                      | 35-7  |      |                                     |       |
| E22  | STARTING MOTOR .....                      | 35-8  |      |                                     |       |
| E23  | STARTING MOTOR .....                      | 35-9  |      |                                     |       |
| F1   | STARTING MOTOR .....                      | 35-10 |      |                                     |       |
| F2   | STARTING MOTOR .....                      | 35-11 |      |                                     |       |
| F3   | STARTING MOTOR .....                      | 35-12 |      |                                     |       |
| E18  | STARTING MOTOR BRUSHES .....              | 35-4  |      |                                     |       |
| F1   | STARTING MOTOR BRUSHES .....              | 35-10 |      |                                     |       |
| E18  | STARTING MOTOR COIL .....                 | 35-4  |      |                                     |       |
| E21  | STARTING MOTOR COIL .....                 | 35-7  |      |                                     |       |
| F1   | STARTING MOTOR COIL .....                 | 35-10 |      |                                     |       |
| E22  | STARTING MOTOR COMMUTATOR END FRAME ..... | 35-8  |      |                                     |       |
| E17  | STARTING MOTOR DRIVE HOUSING .....        | 35-3  |      |                                     |       |
| E20  | STARTING MOTOR DRIVE HOUSING .....        | 35-6  |      |                                     |       |
| F2   | STARTING MOTOR DRIVE HOUSING .....        | 35-11 |      |                                     |       |
| E21  | STARTING MOTOR MAIN FRAME .....           | 35-7  |      |                                     |       |

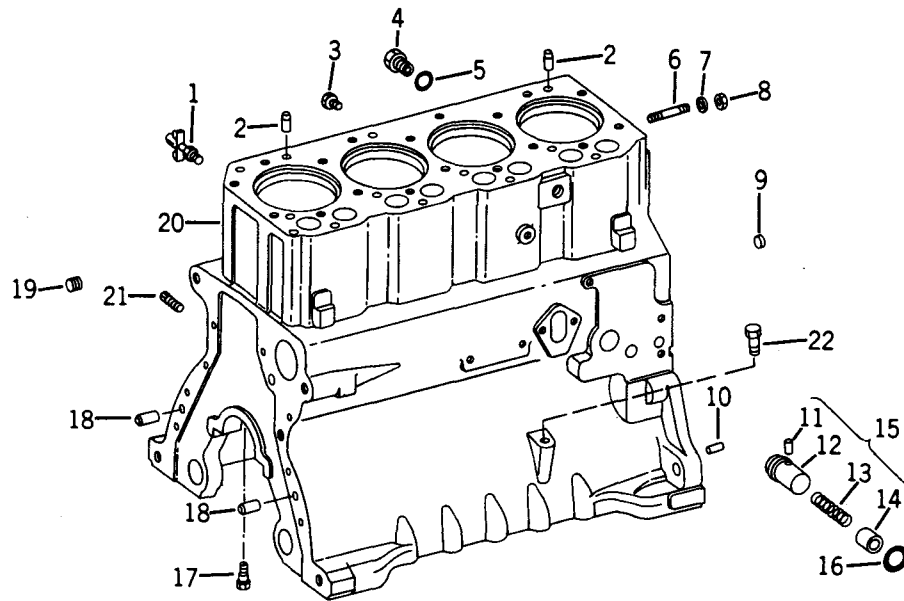
## PAGE LIST

The following list contains all page numbers with latest date lines for this parts catalog. If a page does not have the date line indicated, the page is obsolete.

| Page        | Date Line   | Page        | Date Line   | Page        | Date Line   |
|-------------|-------------|-------------|-------------|-------------|-------------|
| 5-1,5-2     | (15-FEB-78) | 15-3,15-4   | (15-FEB-78) | 30-25,30-26 | (15-FEB-78) |
| 5-3,5-4     | (15-FEB-78) | 15-5,15-6   | (15-FEB-78) | 30-27,30-28 | (15-FEB-78) |
| 5-5,5-6     | (15-FEB-78) | 20-1,20-2   | (15-FEB-78) | 30-29,30-30 | (15-FEB-78) |
| 5-7,5-8     | (15-FEB-78) | 20-3,20-4   | (15-FEB-78) | 30-31,35-2  | (15-FEB-78) |
| 5-9,5-10    | (15-FEB-78) | 20-5,20-6   | (15-FEB-78) | 35-3,35-4   | (15-FEB-78) |
| 10-1,10-2   | (15-FEB-78) | 20-7,20-8   | (15-FEB-78) | 35-5,35-6   | (15-FEB-78) |
| 10-3,10-4   | (15-FEB-78) | 20-9,25-2   | (15-FEB-78) | 35-7,35-8   | (15-FEB-78) |
| 10-5,10-6   | (15-FEB-78) | 25-3,25-4   | (15-FEB-78) | 35-9,35-10  | (15-FEB-78) |
| 10-7,10-8   | (15-FEB-78) | 25-5,25-6   | (15-FEB-78) | 35-11,35-12 | (15-FEB-78) |
| 10-9,10-10  | (15-FEB-78) | 30-1,30-2   | (15-FEB-78) | 40-1,40-2   | (15-FEB-78) |
| 10-11,10-12 | (15-FEB-78) | 30-3,30-4   | (15-FEB-78) | 40-3,40-4   | (15-FEB-78) |
| 10-13,10-14 | (15-FEB-78) | 30-5,30-6   | (15-FEB-78) | 40-5,40-6   | (15-FEB-78) |
| 10-15,10-16 | (15-FEB-78) | 30-7,30-8   | (15-FEB-78) | 40-7,40-8   | (15-FEB-78) |
| 10-17,10-18 | (15-FEB-78) | 30-9,30-10  | (15-FEB-78) | 40-9,45-2   | (15-FEB-78) |
| 10-19,10-20 | (15-FEB-78) | 30-11,30-12 | (15-FEB-78) | 45-3,45-4   | (15-FEB-78) |
| 10-21,10-22 | (15-FEB-78) | 30-13,30-14 | (15-FEB-78) | 45-5,45-6   | (15-FEB-78) |
| 10-23,10-24 | (15-FEB-78) | 30-15,30-16 | (15-FEB-78) | 50-1,50-2   | (15-FEB-78) |
| 10-25,10-26 | (15-FEB-78) | 30-17,30-18 | (15-FEB-78) | 50-3,50-4   | (15-FEB-78) |
| 10-27,10-28 | (15-FEB-78) | 30-19,30-20 | (15-FEB-78) | 50-5,50-6   | (15-FEB-78) |
| 10-29,10-30 | (15-FEB-78) | 30-21,30-22 | (15-FEB-78) | 50-7,50-8   | (15-FEB-78) |
| 15-1,15-2   | (15-FEB-78) | 30-23,30-24 | (15-FEB-78) | 50-9,50-10  | (15-FEB-78) |

T51530F

# CYLINDER BLOCK (WITH TURBOCHARGER)

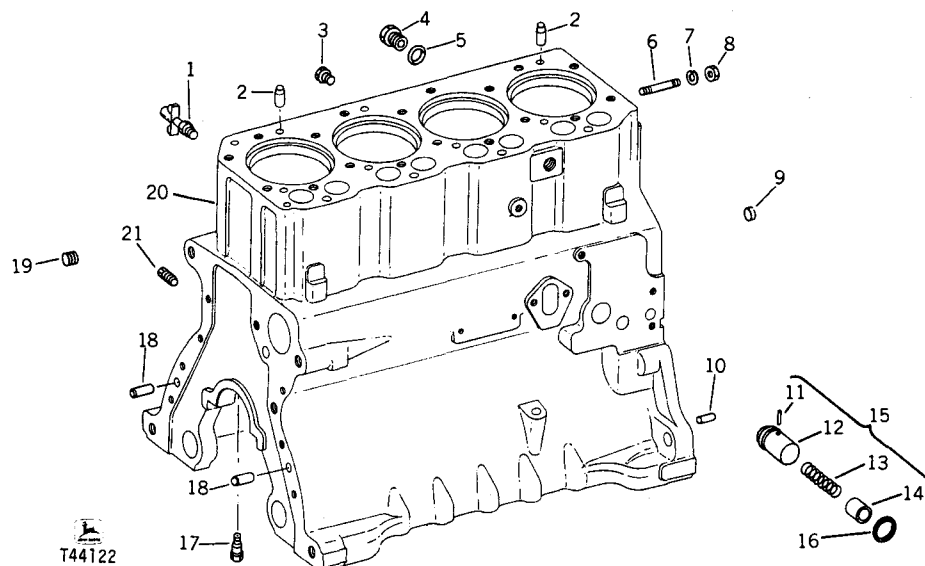


T51530F

| KEY | PART NO.  | SERIAL NO. | DESCRIPTION   |
|-----|-----------|------------|---|
| 1   | AT 13740  | -          | COCK, DRAIN   |
| 2   | R 56834   | -325067    | PIN, DOWEL (2 USED)   |
|     | R 26241   | 325068-    | PIN, DOWEL (2 USED)   |
| 3   | 15H 624   | -          | PLUG, PIPE, HEX. CTSK., 1/2"  |
| 4   | R 39741   | -          | PLUG  |
| 5   | U 13639   | -          | O-RING  |
| 6   | T 33279   | -          | STUD, TIMING GEAR COVER (2 USED)  |
|     | T 25701   | -          | STUD, WATER PUMP  |
| 7   | 12H 304   | -          | WASHER, LOCK, 3/8" (3 USED)   |
| 8   | 14H 812   | -          | NUT, 3/8" (3 USED)  |
| 9   | T 18891   | -          | PLUG, SPECIAL (2 USED)  |
| 10  | R 26650   | -          | PIN, DOWEL (2 USED)   |
| 11  | 34H 184   | -          | PIN, SPRING, 1/8" X 1-1/8"  |
| 12  | ...       | -          | HOUSING (SUB. AR63351)  |
| 13  | R 46625 R | -          | SPRING  |
| 14  | ...       | -          | VALVE (SUB. AR63351)  |
| 15  | AR 63351  | -          | VALVE, OIL PRESSURE CONTROL   |
| 16  | A 4730 R  | -          | O-RING  |
| 17  | R 54802   | -          | ORIFICE, PISTON COOLING (4 USED)  |
| 18  | A 120 R   | -          | PIN, DOWEL (2 USED)   |
| 19  | 15H 665   | -          | PLUG, PIPE, SQ. CTSK., 3/4"   |
| 20  | AR 73805  | -          | BLOCK, CYLINDER, WITH BUSHINGS, STUDS, DOWEL PINS, MAIN BEARING CAPS, AND PLUGS (MARKED R60832) (WITH TURBOCHARGER)   |
| 21  | 15H 558   | ( 251002-  | PLUG, PIPE, HEX. CTSK., 1/8" (5 USED)   |
| 22  | 19H 1895  | ( -        | SCREW, CAP, 1/2" X 3/4" (WITH CODE 1907 ENGINE OIL DIPSTICK)  |
| ..  | AR 76495  | ( -        | BLOCK ASSEMBLY, SHORT, COMPLETE, WITH CYLINDER BLOCK ASSEMBLY, CRANKSHAFT, CAMSHAFT, TAPPETS, PISTONS, CONNECTING RODS, CYLINDER LINERS, FRONT PLATE, FRONT PLATE SET SCREWS, PIPE PLUG, PISTON COOLING ORIFICES, RELIEF VALVE SPRING, PUMP OUTLET TUBE, AND OVERHAUL GASKET SET (ALSO ORDER FOUR T20182 SPECIAL CAP SCREWS) (USE WITH SAE NO. 2 AND SAE NO. 3 FLYWHEEL HOUSINGS) |
| ..  | AR 76494  | ( -        | BLOCK ASSEMBLY, SHORT, COMPLETE, WITH CYLINDER BLOCK ASSEMBLY, CRANKSHAFT, CAMSHAFT, TAPPETS, PISTONS, CONNECTING RODS, CYLINDER LINERS, FRONT PLATE, FRONT PLATE SET SCREWS, PIPE PLUG, PISTON COOLING ORIFICES, RELIEF VALVE SPRING, PUMP OUTLET TUBE, AND OVERHAUL GASKET SET (ALSO ORDER FOUR T20182 SPECIAL CAP SCREWS) (USE WITH SAE NO. 4 FLYWHEEL HOUSING)                |

# **CYLINDER BLOCK (WITHOUT TURBOCHARGER)**

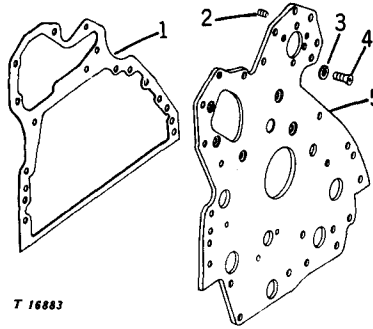
T44122



| KEY | PART NO.  | SERIAL NO.   | DESCRIPTION  |
|-----|-----------|--------------|--|
| 1   | AT 13740  | ( - )        | COCK, DRAIN  |
| 2   | R 56834   | ( -325067 )  | PIN, DOWEL (2 USED)  |
|     | R 26241   | ( 325068 - ) | PIN, DOWEL (2 USED)  |
| 3   | 15H 624   | ( - )        | PLUG, PIPE, HEX. CTSK., 1/2"   |
| 4   | R 39741   | ( - )        | PLUG   |
| 5   | U 13639   | ( - )        | O-RING   |
| 6   | T 33279   | ( - )        | STUD, TIMING GEAR COVER (2 USED)   |
|     | T 25701   | ( - )        | STUD, WATER PUMP   |
| 7   | 12H 304   | ( - )        | WASHER, LOCK, 3/8" (3 USED)  |
| 8   | 14H 812   | ( - )        | NUT, 3/8" (3 USED)   |
| 9   | T 18891   | ( - )        | PLUG, SPECIAL (2 USED)   |
| 10  | R 26650   | ( - )        | PIN, DOWEL (2 USED)  |
| 11  | 34H 184   | ( - )        | PIN, SPRING, 1/8" X 1-1/8"   |
| 12  | ...       | ( - )        | HOUSING (SUB. AR63351)   |
| 13  | R 46625 R | ( - )        | SPRING   |
| 14  | ...       | ( - )        | VALVE (SUB. AR63351)   |
| 15  | AR 63351  | ( - )        | VALVE, OIL PRESSURE CONTROL  |
| 16  | A 4730 R  | ( - )        | O-RING   |
| 17  | R 54802   | ( - )        | ORIFICE, PISTON COOLING (4 USED)   |
| 18  | A 120 R   | ( - )        | PIN, DOWEL (2 USED)  |
| 19  | 15H 665   | ( - )        | PLUG, PIPE, SQ. CTSK., 3/4"  |
| 20  | AR 68319  | ( -355345 )  | BLOCK, CYLINDER, WITH BUSHINGS, STUDS, DOWEL PINS, MAIN BEARING CAPS, AND PLUGS (MARKED R54620) (SUB. ONE AR73805 AND FOUR T20182, SEE PAGE 10-10)   |
|     | AR 73805  | ( 355346 - ) | BLOCK, CYLINDER, WITH BUSHINGS, STUDS, DOWEL PINS, MAIN BEARING CAPS, AND PLUGS (MARKED R60832)  |
| 21  | 15H 558   | ( 251002 - ) | PLUG, PIPE, HEX. CTSK., 1/8" (5 USED)  |
| ..  | AR 68315  | ( -355345 )  | BLOCK ASSEMBLY, SHORT, COMPLETE, WITH CYLINDER BLOCK ASSEMBLY, CRANKSHAFT, CAMSHAFT, PISTONS, CONNECTING RODS, BEARINGS, CYLINDER LINERS, TAPPETS, FRONT PLATE, PISTON COOLING ORIFICES, PIPE PLUGS, WASHERS, SCREWS, AND OVERHAUL GASKET SET (USE WITH SAE NO. 4 FLYWHEEL HOUSING) (SUB. ONE AR73800 AND FOUR T20182 SPECIAL CAP SCREWS, SEE PAGE 10-10)      |
| ..  | AR 73800  | ( 355346 - ) | BLOCK ASSEMBLY, SHORT, COMPLETE, WITH CYLINDER BLOCK ASSEMBLY, CRANKSHAFT, CAMSHAFT, PISTONS, CONNECTING RODS, BEARINGS, CYLINDER LINERS, TAPPETS, FRONT PLATE, PISTON COOLING ORIFICES, PIPE PLUGS, WASHERS, SCREWS, AND OVERHAUL GASKET SET (USE WITH SAE NO. 4 FLYWHEEL HOUSING) (ALSO ORDER FOUR T20182 CAP SCREWS)  |
| ..  | AR 76496  | ( - )        | BLOCK ASSEMBLY, SHORT, COMPLETE, WITH CYLINDER BLOCK ASSEMBLY, FRONT PLATE, CRANKSHAFT, PISTONS, CONNECTING RODS, CAMSHAFT, CYLINDER LINERS, TAPPETS, PISTON COOLING ORIFICES, PIPE PLUGS, WASHERS, SCREWS AND OVERHAUL GASKET SET (ALSO ORDER FOUR T20182 SPECIAL CAP SCREWS) (FOR PARTS SEE PAGE 10-10) (USE WITH SAE NO. 2 AND SAE NO. 3 FLYWHEEL HOUSINGS) |

T16883F

## ENGINE FRONT PLATE

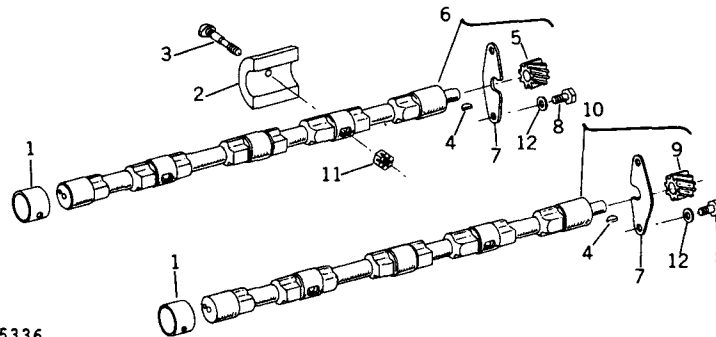


T 16883

| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | T 24965  | ( - )      | GASKET  |
| 2   | AT 21191 | ( - )      | SCREW, SET, SPECIAL (2 USED)  |
|     | AT 22919 | ( - )      | SCREW, SET, SPECIAL (2 USED)  |
| 3   | 12H 324  | ( - )      | WASHER, LOCK, EXTERNAL-TOOTH, 3/8" (5 USED)   |
| 4   | T 20166  | ( - )      | SCREW, CAP, SPECIAL (5 USED)  |
| 5   | R 56057  | ( - )      | PLATE, FRONT (ALSO ORDER FIVE AT21191 SET SCREWS AND TWO AT22919 SET SCREWS) (WITH TURBOCHARGER)    |
| R   | 56736    | ( - )      | PLATE, FRONT (ALSO ORDER FIVE AT21191 SET SCREWS AND TWO AT22919 SET SCREWS) (WITHOUT TURBOCHARGER) |

## ENGINE BALANCER SHAFT

T35336

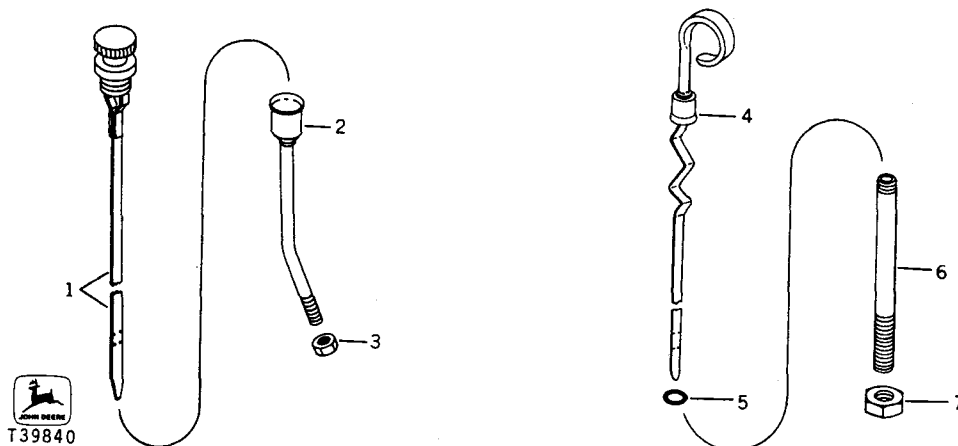


T35336

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                      |
|-----|----------|------------|--|
| 1   | R 57160  | ( - )      | BUSHING (6 USED)                                 |
| 2   | R 54635  | ( - )      | WEIGHT, BALANCER SHAFT (4 USED)                  |
| 3   | T 28745  | ( - )      | BOLT, BALANCER SHAFT (4 USED)                    |
| 4   | T 28041  | ( - )      | KEY (2 USED)                                     |
| 5   | T 20133  | ( - )      | GEAR, L.H. (12 TEETH)                            |
| 6   | AR 69711 | ( - )      | SHAFT, BALANCER, WITH GEAR, L.H. (MARKED R54634) |
| 7   | R 58007  | ( - )      | PLATE, THRUST (2 USED)                           |
| 8   | 19H 2021 | ( - )      | SCREW, CAP, 3/8" X 5/8" (4 USED)                 |
| 9   | T 20130  | ( - )      | GEAR, R.H. (12 TEETH)                            |
| 10  | AR 69710 | ( - )      | SHAFT, BALANCER, WITH GEAR, R.H. (MARKED R54634) |
| 11  | T 15634  | ( - )      | NUT, SPECIAL (4 USED)                            |
| 12  | 12H 304  | ( - )      | WASHER, LOCK, 3/8" (4 USED)                      |

## ENGINE OIL DIPSTICK

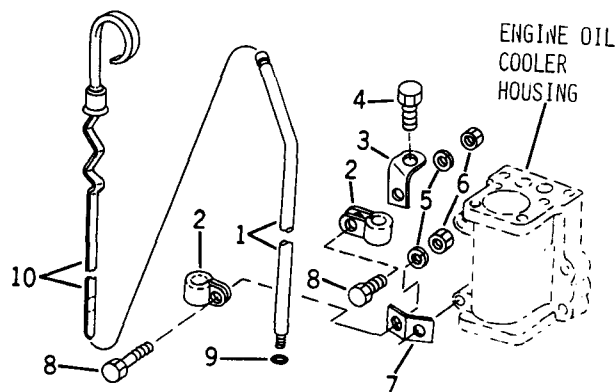
T39840



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                           |
|-----|----------|------------|---------------------------------------|
| 1   | AR 63348 | -          | DIPSTICK (WITH TURBOCHARGER)          |
| 2   | AR 72889 | -          | TUBE, DIPSTICK (WITH TURBOCHARGER)    |
| 3   | 14H 826  | -          | NUT, JAM, 1/2" (WITH TURBOCHARGER)    |
| 4   | AT 21535 | -          | DIPSTICK (WITHOUT TURBOCHARGER)       |
| 5   | R 27976  | -          | O-RING (WITHOUT TURBOCHARGER)         |
| 6   | R 55300  | -          | TUBE, DIPSTICK (WITHOUT TURBOCHARGER) |
| 7   | 14H 826  | -          | NUT, JAM, 1/2" (WITHOUT TURBOCHARGER) |

**ENGINE OIL DIPSTICK  
(WITH TURBOCHARGER)  
CODE 1907      ENGINE OIL DIPSTICK**

T51528F

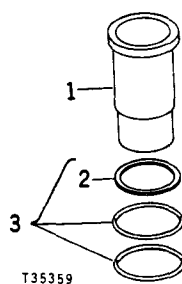


T51528F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                      |
|-----|----------|------------|----------------------------------|
| 1   | AR 77020 | -          | TUBE, DIPSTICK                   |
| 2   | T 29299  | -          | CLAMP (2 USED)                   |
| 3   | R 60357  | -          | BRACKET                          |
| 4   | 19H 2351 | -          | SCREW, CAP, 1/2" X 1/2"          |
| 5   | 12H 304  | -          | WASHER, LOCK, 3/8" (2 USED)      |
| 6   | 14H 812  | -          | NUT, 3/8" (2 USED)               |
| 7   | R 59395  | -          | BRACKET                          |
| 8   | 19H 1134 | -          | SCREW, CAP, 3/8" X 3/4" (2 USED) |
| 9   | F 3353 R | -          | O-RING                           |
| 10  | AR 69686 | -          | DIPSTICK                         |

## CYLINDER LINERS

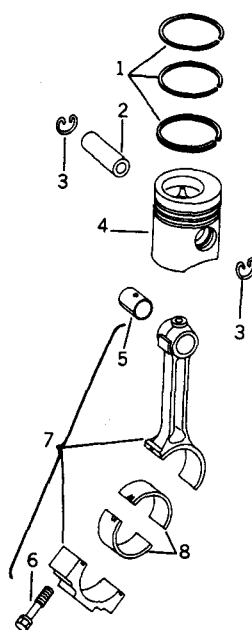
T35359



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 54505  | ( - )      | LINER, CYLINDER (4 USED)  |
| 2   | R 48767  | ( - )      | PACKING (4 USED)  |
| 3   | AR 65507 | ( - )      | KIT, O-RING, CYLINDER LINER (4 USED)  |
| ..  | AR 54749 | ( - )      | LUBRICANT, CYLINDER LINER PACKING (USED FOR CYLINDER LINER PACKING INSTALLATION)  |
| ..  | AR 71597 | ( - )      | KIT, CYLINDER LINER (CONTAINS CYLINDER LINER, CYLINDER LINER PACKINGS AND PISTON WITH PISTON RINGS) (4 USED) (WITH TURBOCHARGER)    |
| ..  | AR 71596 | ( - )      | KIT, CYLINDER LINER (CONTAINS CYLINDER LINER, CYLINDER LINER PACKINGS AND PISTON WITH PISTON RINGS) (4 USED) (WITHOUT TURBOCHARGER) |

# PISTON RINGS AND CONNECTING ROD (WITH TURBOCHARGER)

R15386



| KEY | PART NO.   | SERIAL NO. | DESCRIPTION   |
|-----|------------|------------|---|
| 1   | DD 11831 * | ( - )      | RINGS, PISTON, STANDARD (SET OF 3 RINGS) (4 SETS USED)      |
| 2   | R 56188    | ( - )      | PIN, PISTON (4 USED)  |
| 3   | R 54114    | ( - )      | RING, SNAP (8 USED)   |
| 4   | AR 66401 * | ( - )      | PISTON, WITH INSERT (4 USED)                                |
| 5   | R 57451    | ( - )      | BUSHING, CONNECTING ROD (4 USED)                            |
| 6   | R 56445    | ( - )      | SCREW, CONNECTING ROD (8 USED)                              |
| 7   | AR 66400   | ( - )      | ROD, CONNECTING, WITH SCREWS AND BUSHINGS (4 USED)          |
| 8   | AR 69098   | ( - )      | BEARING, CONNECTING ROD (4 USED)                            |
|     | AR 68413   | ( - )      | BEARING, CONNECTING ROD, .002" (0.05 MM) UNDERSIZE (4 USED) |
|     | AR 68414   | ( - )      | BEARING, CONNECTING ROD, .010" (0.25 MM) UNDERSIZE (4 USED) |
|     | AR 68415   | ( - )      | BEARING, CONNECTING ROD, .020" (0.51 MM) UNDERSIZE (4 USED) |
|     | AR 68416   | ( - )      | BEARING, CONNECTING ROD, .030" (0.76 MM) UNDERSIZE (4 USED) |

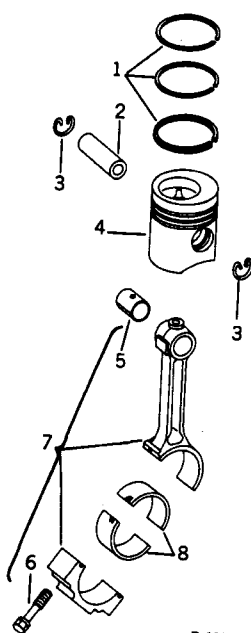
\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND ONE R54505 CYLINDER LINER AND ONE AR68318 O-RING KIT (SEE PAGE 10-5):

|          |       |  |
|----------|-------|--|
| AR 71597 | ( - ) | KIT, CYLINDER LINER (CONTAINS CYLINDER LINER WITH O-RINGS AND PISTON WITH PISTON RINGS) (4 USED) |
|----------|-------|--|



# PISTON RINGS AND CONNECTING ROD (WITHOUT TURBOCHARGER)

R15386



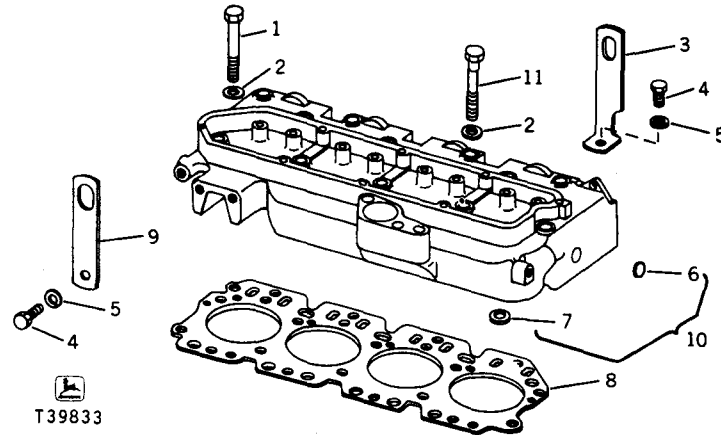
| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | DD 11831 | *          | RINGS, PISTON, STANDARD (SET OF 3 RINGS) (4 SETS USED)      |
| 2   | R 51731  | -          | PIN, PISTON (4 USED)  |
| 3   | M 41029  | -          | RING, SNAP (8 USED)   |
| 4   | AR 63342 | *          | PISTON, WITH INSERT (4 USED)                                |
| 5   | R 57450  | -          | BUSHING, CONNECTING ROD (4 USED)                            |
| 6   | R 56445  | -          | SCREW, CONNECTING ROD (8 USED)                              |
| 7   | AR 63023 | -          | ROD, CONNECTING, WITH SCREWS AND BUSHING (4 USED)           |
| 8   | AR 69098 | -          | BEARING, CONNECTING ROD (4 USED)                            |
|     | AR 68413 | -          | BEARING, CONNECTING ROD, .002" (0.05 MM) UNDERSIZE (4 USED) |
|     | AR 68414 | -          | BEARING, CONNECTING ROD, .010" (0.25 MM) UNDERSIZE (4 USED) |
|     | AR 68415 | -          | BEARING, CONNECTING ROD, .020" (0.51 MM) UNDERSIZE (4 USED) |
|     | AR 68416 | -          | BEARING, CONNECTING ROD, .030" (0.76 MM) UNDERSIZE (4 USED) |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND ONE R54505 CYLINDER LINER AND ONE AR68318 O-RING KIT (SEE PAGE 10-5):

|          |       |  |
|----------|-------|--|
| AR 71596 | ( - ) | KIT, CYLINDER LINER (CONTAINS CYLINDER LINER WITH O-RINGS AND PISTON WITH PISTON RINGS) (4 USED) |
|----------|-------|--|

T39833

# CYLINDER HEAD (WITH TURBOCHARGER)

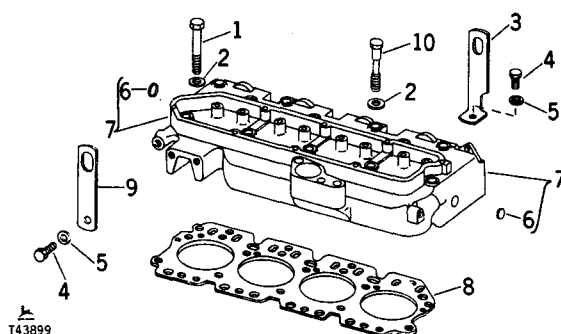


| KEY | PART NO.  | SERIAL NO.  | DESCRIPTION   |
|-----|-----------|-------------|---|
| 1   | R 53223   | ( - )       | SCREW, CAP, SPECIAL (14 USED)   |
| 2   | T 20168   | ( - )       | WASHER, SPECIAL (18 USED)   |
| 3   | R 62380   | ( - )       | STRAP, FRONT, ENGINE LIFT   |
| 4   | 19H 1792  | ( - )       | SCREW, CAP, 1/2" X 1" (2 USED)  |
| 5   | 12H 301   | ( - )       | WASHER, LOCK, 1/2" (2 USED)   |
| 6   | A 3910 R  | ( - )       | PLUG (2 USED)   |
| 7   | R 51734   | ( - )       | INSERT, EXHAUST VALVE (4 USED)  |
|     | R 57079   | ( - )       | INSERT, INTAKE VALVE (4 USED)   |
| 8   | R 59448   | ( -406734 ) | GASKET, CYLINDER HEAD   |
|     | R 59448 * | ( 406735- ) | GASKET, CYLINDER HEAD (MARKED WITH A RED DOT) (USE WITH CYLINDER BLOCKS STAMPED "S")                        |
|     | R 64152 * | ( 406735- ) | GASKET, CYLINDER HEAD (MARKED WITH A YELLOW DOT AND HAS A "V" NOTCH) (USE WITH CYLINDER BLOCKS STAMPED "T") |
| 9   | T 26509   | ( - )       | STRAP, REAR, ENGINE LIFT  |
| 10  | AR 68341  | ( - )       | HEAD, CYLINDER, WITH PLUGS AND INSERTS (MARKED R57078)  |
| 11  | T 20182   | ( - )       | SCREW, CAP, SPECIAL (4 USED)  |

\*NOTE: "S" OR "T" IS STAMPED ON RIGHT HAND SIDE OF ENGINE AT FRONT LOCATING PAD:

T43899

# CYLINDER HEAD (WITHOUT TURBOCHARGER)

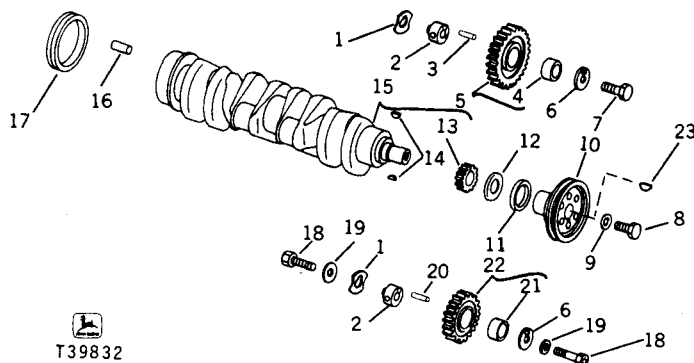


| KEY | PART NO.  | SERIAL NO.      | DESCRIPTION   |
|-----|-----------|-----------------|---|
| 1   | R 53223   | ( -355345       | SCREW, CAP, SPECIAL (18 USED)   |
| 2   | R 53223   | 355346-         | SCREW, CAP, SPECIAL (14 USED)   |
| 3   | T 20168   | -               | WASHER, SPECIAL (18 USED)   |
| 4   | T 26508   | -               | STRAP, FRONT, ENGINE LIFT   |
| 5   | 19H 1792  | -               | SCREW, CAP, 1/2" X 1" (2 USED)  |
| 6   | 12H 301   | -               | WASHER, LOCK, 1/2" (2 USED)   |
| 7   | A 3910 R  | -               | PLUG (2 USED)   |
| 8   | AR 62452  | -               | HEAD, CYLINDER, WITH PLUGS (MARKED R54560 OR R56790)  |
| 9   | R 56573   | -325067         | GASKET, CYLINDER HEAD   |
| 10  | R 59448   | ( 325068-406734 | GASKET, CYLINDER HEAD   |
|     | R 59448 * | ( 406735-       | GASKET, CYLINDER HEAD (MARKED WITH A RED DOT) (USE WITH CYLINDER BLOCKS STAMPED "S")                        |
|     | R 64152 * | ( 406735-       | GASKET, CYLINDER HEAD (MARKED WITH A YELLOW DOT AND HAS A "V" NOTCH) (USE WITH CYLINDER BLOCKS STAMPED "T") |
| 9   | T 26509   | ( -             | STRAP, REAR, ENGINE LIFT  |
| 10  | T 20182   | ( 355346-       | SCREW, CAP, SPECIAL (4 USED)  |

\*NOTE: "S" OR "T" IS STAMPED ON RIGHT HAND SIDE OF ENGINE AT FRONT LOCATING PAD:

**CRANKSHAFT AND IDLER GEARS  
(WITH TURBOCHARGER)  
CODE 1302      CRANKSHAFT PULLEY, DUAL GROOVE**

T39832



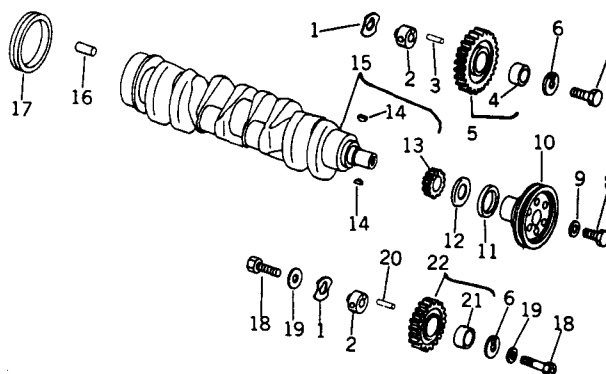
T39832

| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | T 26324  | ( - )      | WASHER, INNER THRUST (2 USED)                              |
| 2   | T 26323  | ( - )      | SHAFT, IDLER GEAR (2 USED)                                 |
| 3   | 34H 283  | ( - )      | PIN, SPRING, 3/16" X 1-1/8"                                |
| 4   | T 20034  | ( - )      | BUSHING  |
| 5   | AT 18009 | ( - )      | GEAR, CRANKSHAFT UPPER IDLER, WITH BUSHING (MARKED T20029) |
| 6   | T 26326  | ( - )      | WASHER, OUTER THRUST (2 USED)                              |
| 7   | T 26327  | ( - )      | BOLT, PLACE  |
| 8   | 19H 1721 | ( - )      | SCREW, CAP, 1/2" X 1-1/2"                                  |
| 9   | T 20217  | ( - )      | WASHER, SPECIAL  |
| 10  | R 56048  | ( - )      | PULLEY   |
| 11  | AR 67942 | ( - )      | SEAL, OIL, FRONT   |
| 12  | T 20046  | ( - )      | SLINGER  |
| 13  | T 20094  | ( - )      | GEAR, CRANKSHAFT   |
| 14  | 26H 72   | ( - )      | KEY, WOODRUFF, 1/8" X 5/8" (2 USED)                        |
| 15  | AR 62362 | ( - )      | CRANKSHAFT WITH GEAR, KEY AND DOWEL PIN (MARKED R54501)    |
| 16  | T 26565  | ( - )      | PIN, DOWEL   |
| 17  | AT 22965 | ( - )      | SEAL, OIL, REAR, WITH WEAR RING                            |
| 18  | T 26325  | ( - )      | BOLT, PLACE (2 USED)                                       |
| 19  | R 42364  | ( - )      | WASHER, SPECIAL (2 USED)                                   |
| 20  | 34H 286  | ( - )      | PIN, SPRING, 3/16" X 1-1/2"                                |
| 21  | T 26321  | ( - )      | BUSHING  |
| 22  | AT 24252 | ( - )      | GEAR, CRANKSHAFT LOWER IDLER, WITH BUSHING (MARKED T26322) |
| 23  | T 23604  | ( - )      | KEY  |

**CRANKSHAFT AND IDLER GEARS  
(WITHOUT TURBOCHARGER)  
CODE 1301      CRANKSHAFT PULLEY, SINGLE GROOVE**

T35323

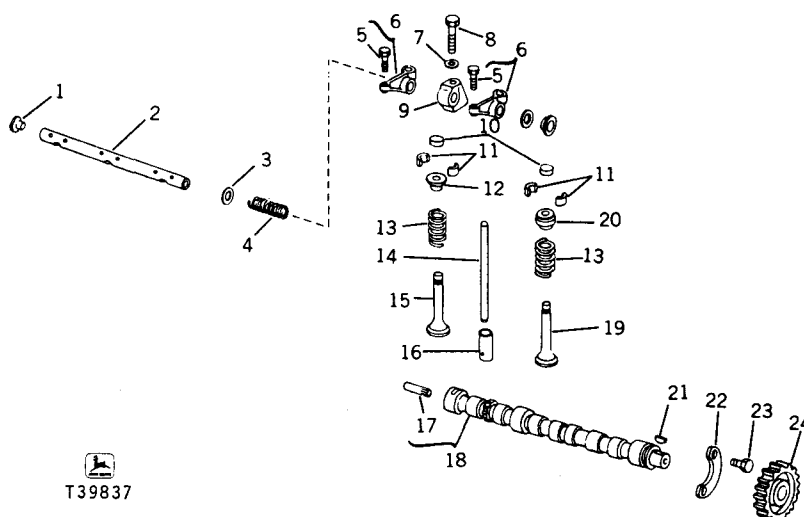
T35323



| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | T 26324  | ( - )      | WASHER, INNER THRUST (2 USED)                              |
| 2   | T 26323  | ( - )      | SHAFT, IDLER GEAR (2 USED)                                 |
| 3   | 34H 283  | ( - )      | PIN, SPRING, 3/16" X 1-1/8"                                |
| 4   | T 20034  | ( - )      | BUSHING  |
| 5   | AT 18009 | ( - )      | GEAR, CRANKSHAFT UPPER IDLER, WITH BUSHING (MARKED T20029) |
| 6   | T 26326  | ( - )      | WASHER, OUTER THRUST (2 USED)                              |
| 7   | T 26327  | ( - )      | BOLT, PLACE  |
| 8   | 19H 1721 | ( - )      | SCREW, CAP, 1/2" X 1-1/2"                                  |
| 9   | T 20217  | ( - )      | WASHER, SPECIAL  |
| 10  | T 24440  | ( - )      | PULLEY   |
| 11  | AR 67942 | ( - )      | SEAL, OIL, FRONT   |
| 12  | T 20046  | ( - )      | SLINGER  |
| 13  | T 20094  | ( - )      | GEAR, CRANKSHAFT   |
| 14  | 26H 72   | ( - )      | KEY, WOODRUFF, 1/8" X 5/8" (2 USED)                        |
| 15  | AR 62362 | ( - )      | CRANKSHAFT WITH GEAR, KEY AND DOWEL PIN (MARKED R54501)    |
| 16  | T 26565  | ( - )      | PIN, DOWEL   |
| 17  | AT 22965 | ( - )      | SEAL, OIL, REAR, WITH WEAR RING                            |
| 18  | T 26325  | ( - )      | BOLT, PLACE (2 USED)                                       |
| 19  | R 42364  | ( - )      | WASHER, SPECIAL (2 USED)                                   |
| 20  | 34H 286  | ( - )      | PIN, SPRING, 3/16" X 1-1/2"                                |
| 21  | T 26321  | ( - )      | BUSHING  |
| 22  | AT 24252 | ( - )      | GEAR, CRANKSHAFT LOWER IDLER, WITH BUSHING (MARKED T26322) |

# CAMSHAFT, ROCKER ARMS, AND VALVES (WITH TURBOCHARGER)

T39837

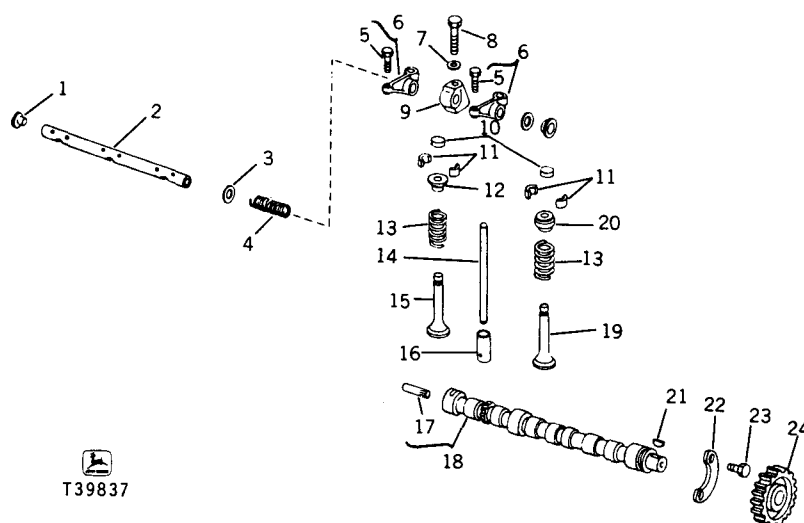


T39837

| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 54565  | ( - )      | PLUG (2 USED)   |
| 2   | R 54987  | ( - )      | SHAFT, ROCKER ARM   |
| 3   | T 20316  | ( - )      | WASHER, BOWED (2 USED)  |
| 4   | T 20314  | ( - )      | SPRING (3 USED)   |
| 5   | T 32213  | ( - )      | SCREW, VALVE ADJUSTING (8 USED)   |
| 6   | AT 31250 | ( - )      | ARM, ROCKER, WITH ADJUSTING SCREW (8 USED)  |
| 7   | R 42729  | ( - )      | WASHER, SPECIAL (4 USED) (SUB. FOR T23594)  |
| 8   | 19H 1733 | ( - )      | SCREW, CAP, 3/8" X 2-1/2" (4 USED)  |
| 9   | T 20315  | ( - )      | SUPPORT (4 USED)  |
| 10  | T 20129  | ( - )      | CAP, VALVE STEM (8 USED)  |
| 11  | T 20077  | ( - )      | LOCK, RETAINER (16 USED)  |
| 12  | T 20176  | ( - )      | CAP, VALVE (4 USED)   |
| 13  | R 26125  | ( - )      | SPRING, VALVE (8 USED)  |
| 14  | R 54799  | ( - )      | ROD, PUSH (8 USED)  |
| 15  | R 51735  | ( - )      | VALVE, INTAKE, STANDARD STEM (4 USED)   |
|     | R 57426  | ( - )      | VALVE, INTAKE, .003" (0.08 MM) OVERSIZE STEM (4 USED)   |
|     | R 57427  | ( - )      | VALVE, INTAKE, .015" (0.38 MM) OVERSIZE STEM (4 USED)   |
|     | R 57428  | ( - )      | VALVE, INTAKE, .030" (0.76 MM) OVERSIZE STEM (4 USED)   |
| 16  | T 20073  | ( - )      | TAPPET (8 USED)   |
| 17  | T 20071  | ( - )      | SHAFT, TACHOMETER DRIVE (USE WITH AT18049 CAMSHAFT)   |
|     | T 22535  | ( - )      | GEAR, TACHOMETER DRIVE (12 TEETH) (USE WITH AT20830 CAMSHAFT)   |
| 18  | AT 18049 | ( - )      | CAMSHAFT, WITH TACHOMETER DRIVE SHAFT (MARKED T20013) (USE WITH SAE NO. 4 FLYWHEEL HOUSING)               |
|     | AT 20830 | ( - )      | CAMSHAFT, WITH TACHOMETER DRIVE GEAR (MARKED T20013) (USE WITH SAE NO. 2 AND SAE NO. 3 FLYWHEEL HOUSINGS) |
| 19  | R 52252  | ( - )      | VALVE, EXHAUST, STANDARD STEM (4 USED)  |
|     | R 57333  | ( - )      | VALVE, EXHAUST, .003" (0.08 MM) OVERSIZE STEM (4 USED)  |
|     | R 57335  | ( - )      | VALVE, EXHAUST, .015" (0.38 MM) OVERSIZE STEM (4 USED)  |
|     | R 57337  | ( - )      | VALVE, EXHAUST, .030" (0.76 MM) OVERSIZE STEM (4 USED)  |
| 20  | AR 41006 | ( - )      | ROTATOR, EXHAUST VALVE (8 USED)   |
| 21  | T 28041  | ( - )      | KEY, WOODRUFF   |
| 22  | T 20072  | ( - )      | PLATE, THRUST   |
| 23  | 19H 1731 | ( - )      | SCREW, CAP, 3/8" X 1" (2 USED)  |
| 24  | T 20070  | ( - )      | GEAR, CAMSHAFT (48 TEETH)   |

# CAMSHAFT, ROCKER ARMS, AND VALVES (WITHOUT TURBOCHARGER)

T39837

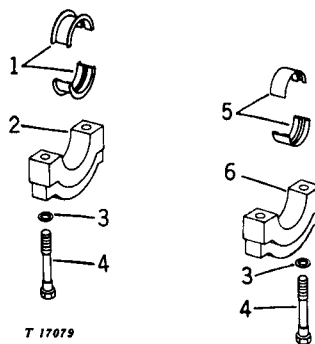


T39837

| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 54565  | ( - )      | PLUG (2 USED)   |
| 2   | R 54987  | ( - )      | SHAFT, ROCKER ARM   |
| 3   | T 20316  | ( - )      | WASHER, BOWED (2 USED)  |
| 4   | T 20314  | ( - )      | SPRING (3 USED)   |
| 5   | T 32213  | ( - )      | SCREW, VALVE ADJUSTING (8 USED)   |
| 6   | AT 31250 | ( - )      | ARM, ROCKER, WITH ADJUSTING SCREW (8 USED)  |
| 7   | R 42729  | ( - )      | WASHER, SPECIAL (4 USED) (SUB. FOR T23594)  |
| 8   | 19H 1733 | ( - )      | SCREW, CAP, 3/8" X 2-1/2" (4 USED)  |
| 9   | T 20315  | ( - )      | SUPPORT (4 USED)  |
| 10  | T 20129  | ( - )      | CAP, VALVE STEM (8 USED)  |
| 11  | T 20077  | ( - )      | LOCK, RETAINER (16 USED)  |
| 12  | T 20176  | ( - )      | CAP, VALVE (4 USED)   |
| 13  | R 26125  | ( - )      | SPRING, VALVE (8 USED)  |
| 14  | R 54799  | ( - )      | ROD, PUSH (8 USED)  |
| 15  | R 52251  | ( - )      | VALVE, INTAKE, STANDARD STEM (4 USED)   |
|     | R 57332  | ( - )      | VALVE, INTAKE, .003" (0.08 MM) OVERSIZE STEM (4 USED)   |
|     | R 57334  | ( - )      | VALVE, INTAKE, .015" (0.38 MM) OVERSIZE STEM (4 USED)   |
|     | R 57336  | ( - )      | VALVE, INTAKE, .030" (0.76 MM) OVERSIZE STEM (4 USED)   |
| 16  | T 20073  | ( - )      | TAPPET (8 USED)   |
| 17  | T 20071  | ( - )      | SHAFT, TACHOMETER DRIVE (USE WITH AT18049 CAMSHAFT)   |
|     | T 22535  | ( - )      | GEAR, TACHOMETER DRIVE (12 TEETH) (USE WITH AT20830 CAMSHAFT)   |
| 18  | AT 18049 | ( - )      | CAMSHAFT, WITH TACHOMETER DRIVE SHAFT (MARKED T20013) (USE WITH SAE NO. 4 FLYWHEEL HOUSING)               |
|     | AT 20830 | ( - )      | CAMSHAFT, WITH TACHOMETER DRIVE GEAR (MARKED T20013) (USE WITH SAE NO. 2 AND SAE NO. 3 FLYWHEEL HOUSINGS) |
| 19  | R 52252  | ( - )      | VALVE, EXHAUST, STANDARD STEM (4 USED)  |
|     | R 57333  | ( - )      | VALVE, EXHAUST, .003" (0.08 MM) OVERSIZE STEM (4 USED)  |
|     | R 57335  | ( - )      | VALVE, EXHAUST, .015" (0.38 MM) OVERSIZE STEM (4 USED)  |
|     | R 57337  | ( - )      | VALVE, EXHAUST, .030" (0.76 MM) OVERSIZE STEM (4 USED)  |
| 20  | AR 41006 | ( - )      | ROTATOR, EXHAUST VALVE (8 USED)   |
| 21  | T 28041  | ( - )      | KEY, WOODRUFF   |
| 22  | T 20072  | ( - )      | PLATE, THRUST   |
| 23  | 19H 1731 | ( - )      | SCREW, CAP, 3/8" X 1" (2 USED)  |
| 24  | T 20070  | ( - )      | GEAR, CAMSHAFT  |

## CRANKSHAFT BEARINGS AND CAPS

T17079

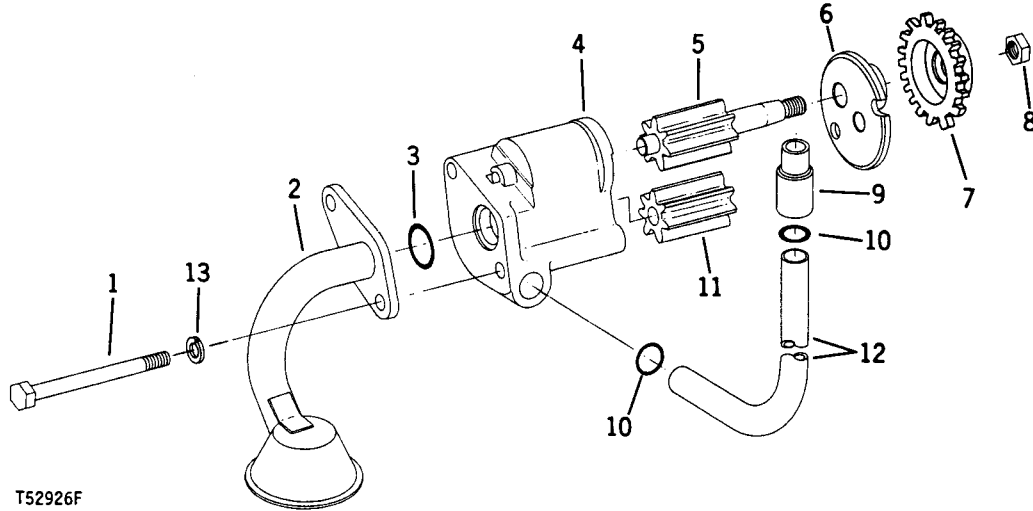


| KEY  | PART NO. | SERIAL NO.   | DESCRIPTION   |
|------|----------|--------------|---|
| 1    | AT 21139 | ( - )        | BEARING, MAIN, STANDARD, REAR (PKG. OF 2 HALVES) (1 PKG. USED)                    |
|      | AT 21130 | ( - )        | BEARING, MAIN, .002" (0.05 MM) UNDERSIZE, REAR (PKG. OF 2 HALVES) (1 PKG. USED)   |
|      | AT 21132 | ( - )        | BEARING, MAIN, .010" (0.25 MM) UNDERSIZE, REAR (PKG. OF 2 HALVES) (1 PKG. USED)   |
|      | AT 21134 | ( - )        | BEARING, MAIN, .020" (0.51 MM) UNDERSIZE, REAR (PKG. OF 2 HALVES) (1 PKG. USED)   |
|      | AT 21136 | ( - )        | BEARING, MAIN, .030" (0.76 MM) UNDERSIZE, REAR (PKG. OF 2 HALVES) (1 PKG. USED)   |
| I 2  | AT 21227 | ( -402787 )  | CAP, MAIN BEARING, REAR, WITH SHIMS AND SET GAUGE                                 |
| I AR | 82295    | ( 402788 - ) | CAP, MAIN BEARING, REAR, WITH SHIMS AND SET GAUGE                                 |
| 3    | T 20168  | ( - )        | WASHER, SPECIAL (10 USED)   |
| 4    | T 23474  | ( - )        | SCREW, SPECIAL CAP (10 USED)  |
| 5    | AT 21140 | ( - )        | BEARING, MAIN, STANDARD, PLAIN (PKG. OF 2 HALVES) (4 PKGS. USED)                  |
|      | AT 21108 | ( - )        | BEARING, MAIN, .002" (0.05 MM) UNDERSIZE, PLAIN (PKG. OF 2 HALVES) (4 PKGS. USED) |
|      | AT 21110 | ( - )        | BEARING, MAIN, .010" (0.25 MM) UNDERSIZE, PLAIN (PKG. OF 2 HALVES) (4 PKGS. USED) |
|      | AT 21112 | ( - )        | BEARING, MAIN, .020" (0.51 MM) UNDERSIZE, PLAIN (PKG. OF 2 HALVES) (4 PKGS. USED) |
|      | AT 21114 | ( - )        | BEARING, MAIN, .030" (0.76 MM) UNDERSIZE, PLAIN (PKG. OF 2 HALVES)                |
| I 6  | AT 21226 | ( -402787 )  | CAP, MAIN BEARING, FRONT AND CENTER, WITH SHIMS AND SET GAUGE (4 USED)            |
| I AR | 82294    | ( 402788 - ) | CAP, MAIN BEARING, FRONT AND CENTER, WITH SHIMS AND GAUGE (4 USED)                |



## ENGINE OIL PUMP

T52926F



T52926F

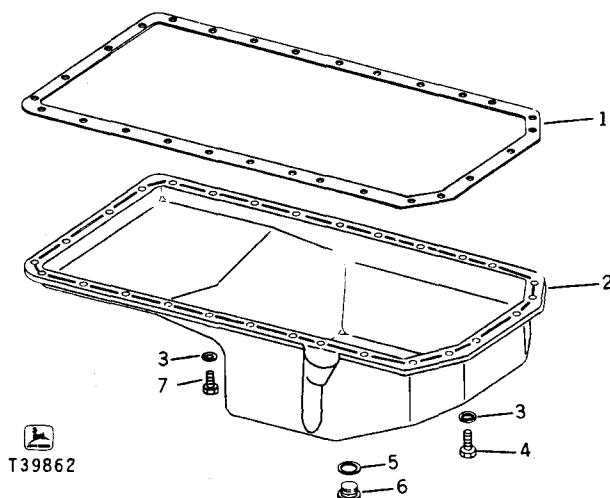
| KEY    | PART NO. | SERIAL NO. | DESCRIPTION   |
|--------|----------|------------|---|
| 1 R    | 59409    | *          | SCREW, CAP, SPECIAL (2 USED)  |
| 2 AR   | 68370    | *          | INTAKE, OIL PUMP (WITH TURBOCHARGER)  |
|        | AR 63350 | *          | INTAKE, OIL PUMP (WITHOUT TURBOCHARGER)                                       |
| 3 A    | 4730 R   | *          | O-RING  |
| 4 AR   | 63037    | *          | HOUSING, OIL PUMP WITH SHAFT  |
| 5 AR   | 85788    | *          | SHAFT, OIL PUMP DRIVE WITH GEAR (SUB. FOR AR63038)<br>(ALSO ORDER ONE R66177) |
| 6 R    | 54632    | ( - )      | COVER   |
| 7 T    | 20298    | ( - )      | GEAR (33 TEETH)   |
| 8 14H  | 826      | ( - )      | NUT, HEX., 1/2"   |
| 9 R    | 54815    | ( - )      | CONNECTOR, OIL PUMP TUBE  |
| 10 R   | 27564    | *          | O-RING (2 USED)   |
| 11 R   | 66177    | *          | GEAR (7 TEETH) (SUB. FOR R54631)<br>(ALSO ORDER ONE AR85788)                  |
| 12 R   | 54814    | ( - )      | TUBE, OIL PUMP OUTLET   |
| 13 12H | 304      | ( - )      | WASHER, LOCK, 3/8" (2 USED)   |

\*ASSEMBLY LISTED BELOW INCLUDES ALL PARTS FOLLOWED BY AN ASTERISK:

AR 79464 ( - ) PUMP, ENGINE OIL

ENGINE OIL PAN  
(WITH TURBOCHARGER)  
CODE 1904 OIL PAN, BOTTOM DRAIN

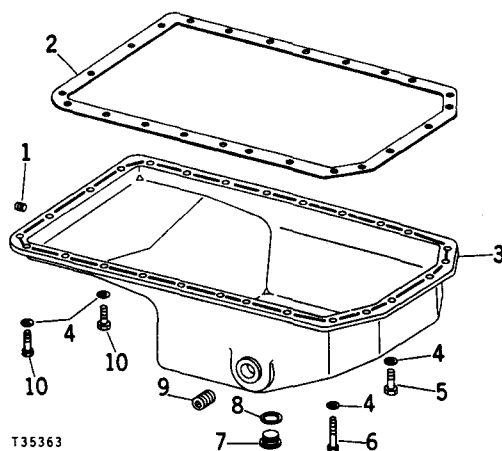
T39862



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 49515  | ( - )      | GASKET, OIL PAN (SUB. FOR T24535, THIS APPLICATION) |
| 2   | R 59355  | ( - )      | PAN, OIL  |
| 3   | 12H 304  | ( - )      | WASHER, LOCK (28 USED)                              |
| 4   | 19H 246  | ( - )      | SCREW, CAP, 3/8" X 1-3/4" (4 USED)                  |
| 5   | T 13213  | ( - )      | WASHER, SPECIAL                                     |
| 6   | M 1746 T | ( - )      | PLUG, SPECIAL                                       |
| 7   | 19H 1732 | ( - )      | SCREW, CAP, 3/8" X 1-1/4" (23 USED)                 |
|     | 19H 1801 | ( - )      | SCREW, CAP, 3/8" X 2"                               |

ENGINE OIL PAN  
(WITHOUT TURBOCHARGER)  
CODE 1901 OIL PAN, BOTTOM SIDE OR REAR DRAIN  
CODE 1902 OIL PAN, REAR DRAIN  
CODE 1903 OIL PAN, BOTTOM DRAIN

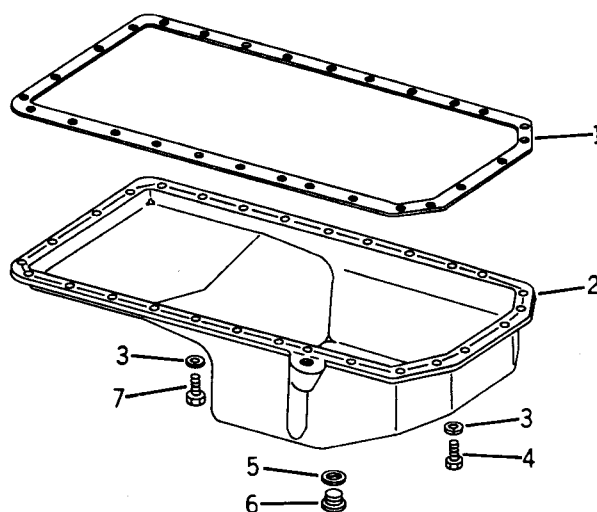
T35363



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | 15H 624  | ( - )      | PLUG, PIPE, HEX. CTSK., 1/2"                              |
| 2   | T 24535  | ( - )      | GASKET  |
| 3   | AR 66726 | ( - )      | PAN, OIL (ALSO ORDER ONE 15H624 AND ONE 15H665 PIPE PLUG) |
| 4   | 12H 304  | ( - )      | WASHER, LOCK, 3/8" (28 USED)                              |
| 5   | 19H 2284 | ( - )      | SCREW, CAP, 3/8" X 7/8" (5 USED)                          |
| 6   | 19H 2284 | ( - )      | SCREW, CAP, 3/8" X 7/8" (6 USED) FRONT RIGHT SIDE HOLE    |
| 7   | T 20098  | ( - )      | PLUG, DRAIN   |
| 8   | T 13213  | ( - )      | WASHER, SPECIAL   |
| 9   | 15H 665  | ( - )      | PLUG, PIPE, HEX. CTSK., 3/4"                              |
| 10  | 19H 1936 | ( - )      | SCREW, CAP, 3/8" X 3/4" (22 USED)                         |

ENGINE OIL PAN  
(WITH TURBOCHARGER)  
CODE 1907 OIL PAN, BOTTOM DRAIN

T51522F

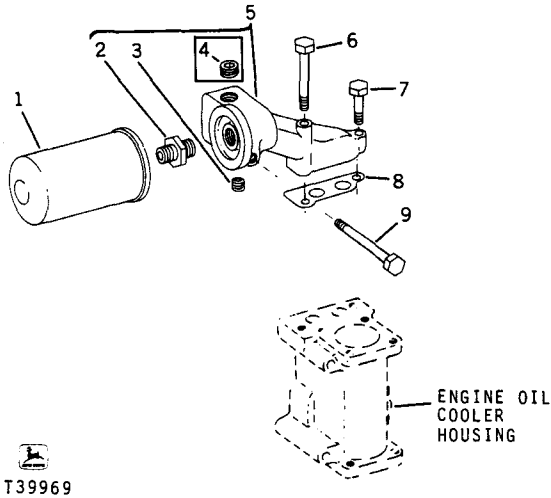


T51522F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                         |
|-----|----------|------------|-------------------------------------|
| 1   | R 49515  | ( - )      | GASKET, OIL PAN                     |
| 2   | R 54650  | ( - )      | PAN, OIL                            |
| 3   | 12H 304  | ( - )      | WASHER, LOCK, 3/8" (28 USED)        |
| 4   | 19H 246  | ( - )      | SCREW, CAP, 3/8" X 1-3/4" (4 USED)  |
| 5   | T 13213  | ( - )      | WASHER, SPECIAL                     |
| 6   | M 1746 T | ( - )      | PLUG, OIL DRAIN                     |
| 7   | 19H 1732 | ( - )      | SCREW, CAP, 3/8" X 1-1/4" (23 USED) |
|     | 19H 1801 | ( - )      | SCREW, CAP, 3/8" X 2"               |

ENGINE OIL FILTER AND OIL FILTER ADAPTER

T39969

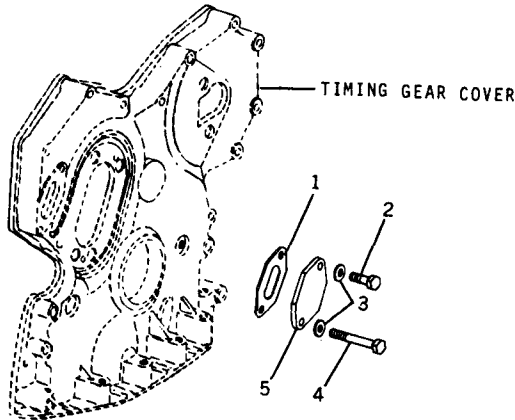


T39969

| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | T 19044  | -          | FILTER, OIL  |
| 2   | R 54823  | -          | NIPPLE, OIL FILTER   |
| 3   | 15H 638  | -          | PLUG, PIPE, SQ. HD., 1/8"                                      |
| 4   | 15H 561  | -333190    | PLUG, PIPE, HEX. CTSK., 1/2" (WITHOUT TURBOCHARGER)            |
|     | 15H 563  | 333191-    | PLUG, PIPE, HEX. CTSK., 3/8" (WITHOUT TURBOCHARGER)            |
| 5   | AR 63353 | -          | ADAPTER, OIL FILTER WITH NIPPLE AND PIPE PLUGS (MARKED R54822) |
| 6   | 19H 1944 | -          | SCREW, CAP, 3/8" X 2-3/4"                                      |
| 7   | 19H 1800 | -          | SCREW, CAP, 3/8" X 1-1/2"                                      |
| 8   | R 54824  | -          | GASKET   |
| 9   | 19H 1925 | -          | SCREW, CAP, 3/8" X 4-1/4"                                      |

ENGINE OIL FILLER COVER  
CODE 1200 OIL FILLER COVER

T30587

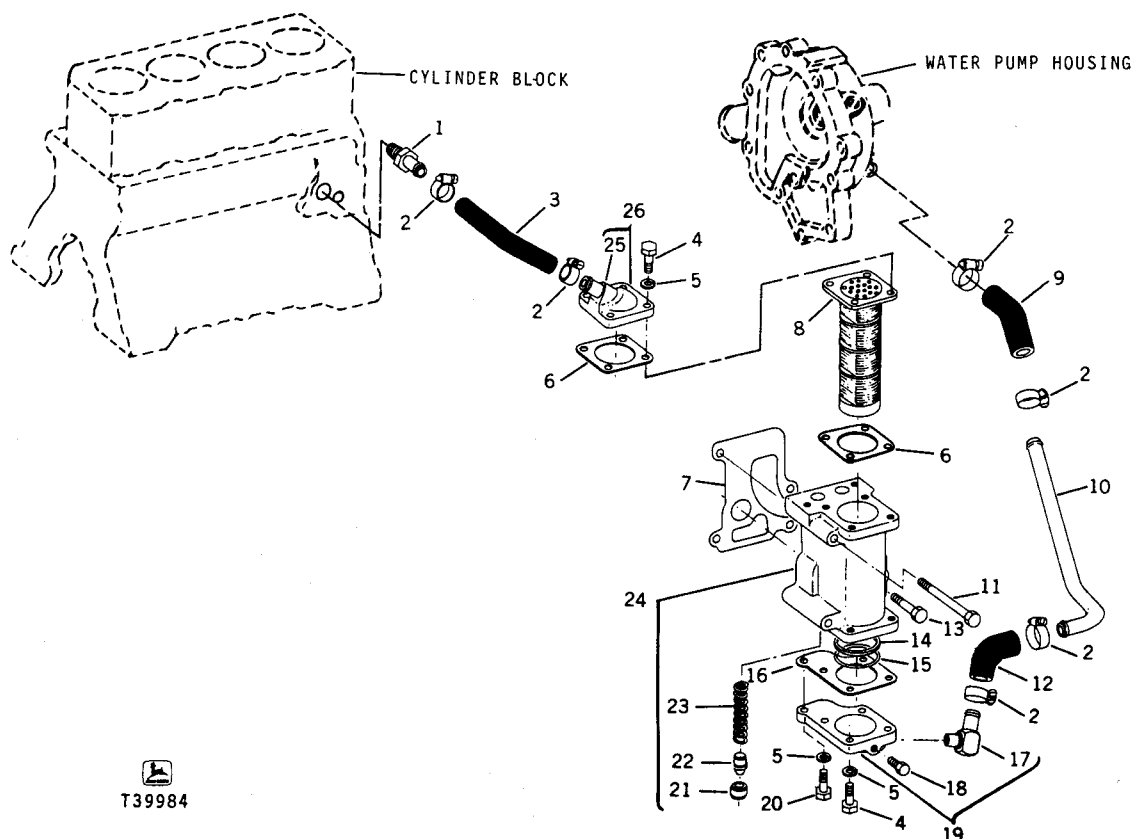


T30587

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                              |
|-----|----------|------------|--|
| 1   | T 20336  | -          | GASKET                                   |
| 2   | 19H 2284 | -          | SCREW, CAP, 3/8" X 7/8"                  |
| 3   | 24H 1304 | -          | WASHER, 13/32" X 23/64" X .120" (2 USED) |
| 4   | 19H 1726 | -          | SCREW, CAP, 3/8" X 2-1/4"                |
| 5   | T 23260  | -          | COVER                                    |

## ENGINE OIL COOLER

T39984

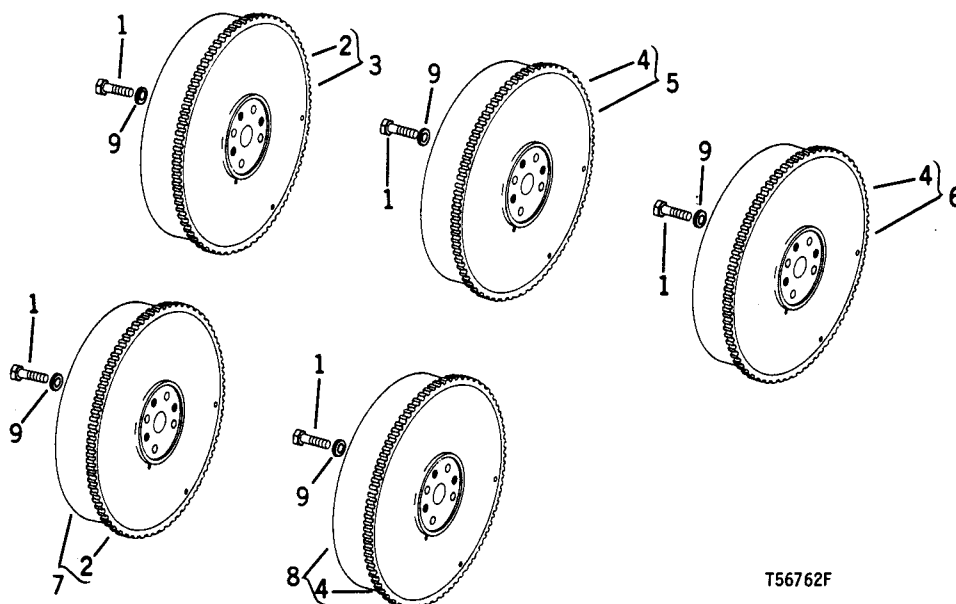

  
T39984

| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | R 39503  | -          | CONNECTOR  |
| 2   | AR 21839 | -          | CLAMP, HOSE (4 USED)   |
| 3   | R 54826  | -          | HOSE, FORMED   |
| 4   | 19H 1849 | -          | SCREW, CAP, 5/16" X 1-1/4" (8 USED)  |
| 5   | 12H 303  | -          | WASHER, LOCK, 5/16" (9 USED)   |
| 6   | R 56020  | -          | GASKET (2 USED)  |
| 7   | R 54821  | -          | GASKET   |
| 8   | AR 65812 | -          | COOLER, OIL  |
| 9   | R 26905  | -          | HOSE, FORMED   |
| 10  | R 54830  | -          | SCREW, CAP, 3/8" X 4-1/4" (2 USED)   |
| 11  | 19H 1925 | -          | SCREW, CAP, 3/8" X 4-1/4" (2 USED)   |
| 12  | R 54829  | -          | HOSE, FORMED   |
| 13  | 19H 1801 | -          | SCREW, CAP, 3/8" X 2" (2 USED)   |
| 14  | R 56814  | -          | O-RING, INNER  |
| 15  | R 56815  | -          | O-RING, OUTER  |
| 16  | R 54831  | -          | GASKET   |
| 17  | AR 26732 | -          | ELBOW, SPECIAL   |
| 18  | R 42852  | -          | PLUG, SPECIAL  |
| 19  | AR 63356 | -          | COVER, OIL COOLER LOWER, WITH PLUG AND ELBOW (MARKED R54828)                   |
| 20  | 19H 118  | -          | SCREW, CAP, 5/16" X 1"   |
| 21  | R 54817  | -          | BUSHING  |
| 22  | R 57740  | -          | VALVE  |
| 23  | R 43548  | -          | SPRING   |
| 24  | AR 65811 | -          | HOUSING, OIL COOLER, WITH SPRING, BUSHING, AND VALVE (MARKED R56019)           |
| 25  | R 34985  | -          | TUBE   |
| 26  | AR 70464 | -          | COVER, OIL COOLER, WITH TUBE (MARKED R58632) (SUB. FOR AR63355, MARKED R54825) |

**ENGINE FLYWHEEL**

CODE 1501 FLYWHEEL, 10" (254 MM) OVERCENTER CLUTCH, 10" (254 MM)  
 CODE 1502 FLYWHEEL, SPRING LOADED CLUTCH, 12" (305 MM)  
 CODE 1503 FLYWHEEL, DAMPER TYPE CLUTCH  
 CODE 1504 FLYWHEEL, SPRING LOADED CLUTCH, 12" (305 MM)  
 CODE 1505 FLYWHEEL, OVERCENTER CLUTCH, 11-1/2" (292 MM)

T56762F



T56762F

**PARTS COMMON TO CODE 1501, 1502, 1503, 1504 AND 1505**

| KEY   | PART NO. | SERIAL NO.  | DESCRIPTION  |
|-------|----------|-------------|--|
| I 1 R | 58253    | ( -413473 ) | SCREW, CAP, SPECIAL (4 USED) (SUB. FOUR 19H2993 AND FOUR T23891, THIS APPLICATION) |
| I 19H | 2993     | ( 413474-   | SCREW, CAP, 1/2" X 1-1/2" (4 USED)   |

**ADDITIONAL PARTS USED WITH CODE 1501**

| KEY  | PART NO. | SERIAL NO. | DESCRIPTION                     |
|------|----------|------------|---------------------------------|
| 2 T  | 20088    | ( -        | GEAR, FLYWHEEL RING (142 TEETH) |
| 3 AT | 30260    | ( -        | FLYWHEEL, WITH RING GEAR        |

**ADDITIONAL PARTS USED WITH CODE 1502 AND CODE 1503**

| KEY    | PART NO. | SERIAL NO. | DESCRIPTION                               |
|--------|----------|------------|---|
| 4 R    | 28811    | ( -        | GEAR, FLYWHEEL RING (129 TEETH)           |
| I 5 AT | 25473    | ( -        | FLYWHEEL, WITH RING GEAR (WITH CODE 1502) |
| I 6 AT | 30429    | ( -        | FLYWHEEL, WITH RING GEAR (WITH CODE 1503) |

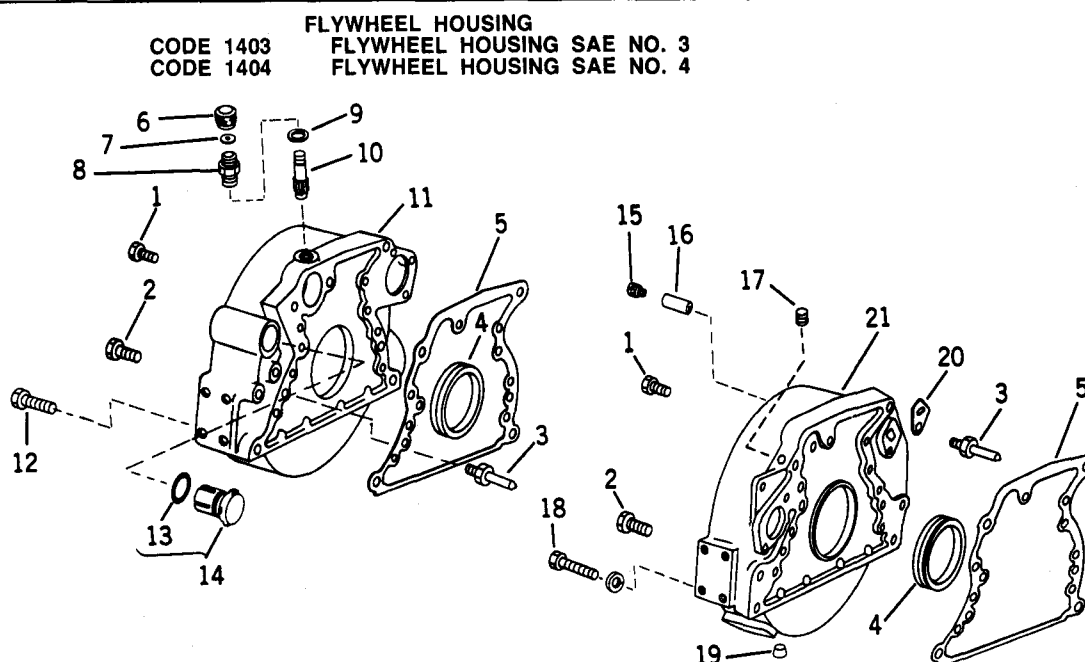
**ADDITIONAL PARTS USED WITH CODE 1504**

| KEY  | PART NO. | SERIAL NO. | DESCRIPTION                     |
|------|----------|------------|---------------------------------|
| 2 T  | 20088    | ( -        | GEAR, FLYWHEEL RING (142 TEETH) |
| 7 AR | 70361    | ( -        | FLYWHEEL, WITH RING GEAR        |

**ADDITIONAL PARTS USED WITH CODE 1505**

| KEY   | PART NO. | SERIAL NO. | DESCRIPTION                     |
|-------|----------|------------|---------------------------------|
| 4 R   | 28811    | ( -        | GEAR, FLYWHEEL RING (129 TEETH) |
| 8 AR  | 70612    | ( -        | FLYWHEEL, WITH RING GEAR        |
| I 9 T | 23891    | ( 413474-  | WASHER, SPECIAL (4 USED)        |

T54856F



T54856F

**PARTS COMMON TO CODE 1403 AND 1404**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                        |
|-----|----------|------------|------------------------------------|
| 1   | 19H 2545 | ( - )      | SCREW, CAP, 3/8" X 1-1/2" (8 USED) |
| 2   | 19H 1387 | ( - )      | SCREW, CAP, 5/8" X 2-1/4" (2 USED) |
| 3   | T 20090  | ( - )      | SCREW, SPECIAL                     |
| 4   | AT 22965 | ( - )      | SEAL, OIL, WITH WEAR RING          |
| 5   | R 49516  | ( - )      | GASKET                             |

**ADDITIONAL PARTS USED WITH CODE 1403**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                        |
|-----|----------|------------|------------------------------------|
| 6   | B 3362 R | ( - )      | CAP                                |
| 7   | B 3285 R | ( - )      | GASKET                             |
| 8   | T 22537  | ( - )      | ADAPTER                            |
| 9   | H 1058 R | ( - )      | WASHER, SPECIAL                    |
| 10  | T 22536  | ( - )      | PINION, TACHOMETER DRIVE           |
| 11  | R 58190  | ( - )      | HOUSING, FLYWHEEL                  |
| 12  | 19H 1847 | ( - )      | SCREW, CAP, 5/8" X 2-1/2" (2 USED) |
| 13  | R 27149  | ( - )      | O-RING                             |
| 14  | AR 61533 | ( - )      | PLUG, WITH O-RING                  |

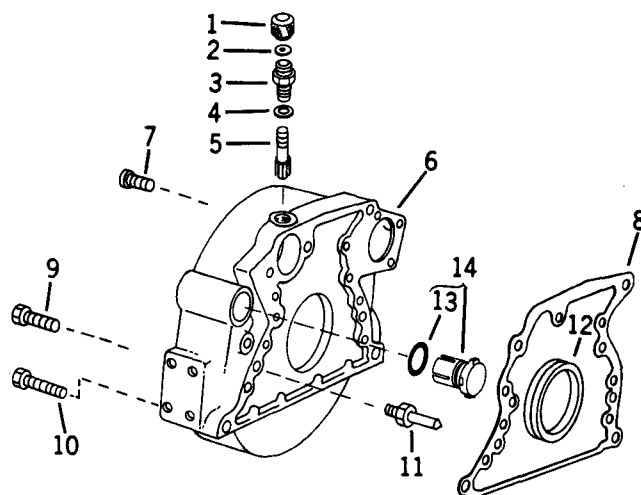
**ADDITIONAL PARTS USED WITH CODE 1404**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                        |
|-----|----------|------------|------------------------------------|
| 15  | 22H 1035 | ( - )      | SCREW, SET, 5/8" X 1/2"            |
| 16  | T 20461  | ( - )      | ADAPTER, TACHOMETER DRIVE          |
| 17  | R 21630  | ( - )      | PLUG, SPECIAL                      |
| 18  | 19H 1923 | ( - )      | SCREW, CAP, 5/8" X 5-1/2" (2 USED) |
| 19  | T 23590  | ( - )      | CORK                               |
| 20  | T 20089  | ( - )      | COVER, TIMING HOLE                 |
| 21  | T 25114  | ( - )      | HOUSING, FLYWHEEL                  |



FLYWHEEL HOUSING  
CODE 1405 FLYWHEEL HOUSING SAE NO. 2

T54863F

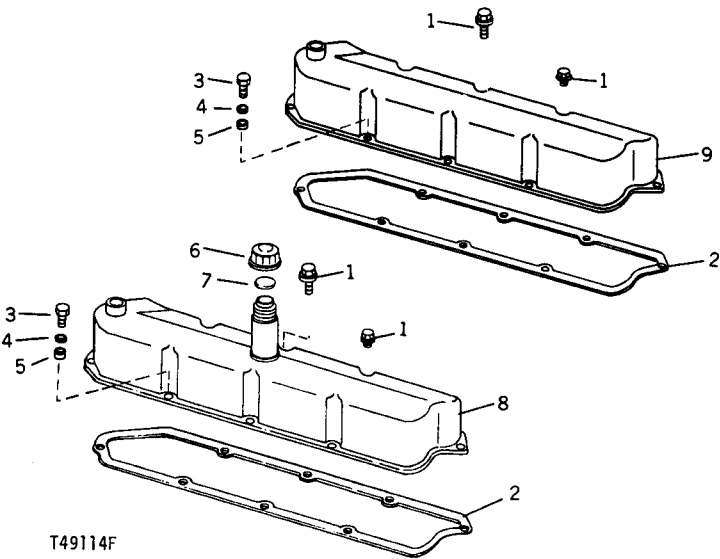


T54863F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                        |
|-----|----------|------------|------------------------------------|
| 1   | B 3362 R | ( - )      | CAP                                |
| 2   | B 3285 R | ( - )      | GASKET                             |
| 3   | T 22537  | ( - )      | ADAPTER                            |
| 4   | H 1058 R | ( - )      | WASHER, SPECIAL                    |
| 5   | T 22536  | ( - )      | PINION, TACHOMETER DRIVE           |
| 6   | R 58967  | ( - )      | HOUSING, FLYWHEEL                  |
| 7   | 19H 2545 | ( - )      | SCREW, CAP, 3/8" X 1-1/2" (2 USED) |
| 8   | R 49516  | ( - )      | GASKET                             |
| 9   | 19H 1387 | ( - )      | SCREW, CAP, 5/8" X 2-1/4" (2 USED) |
| 10  | 19H 1847 | ( - )      | SCREW, CAP, 5/8" X 2-1/2" (2 USED) |
| 11  | T 20090  | ( - )      | SCREW, SPECIAL                     |
| 12  | AT 22965 | ( - )      | SEAL, OIL, WITH WEAR RING          |
| 13  | R 27149  | ( - )      | O-RING                             |
| 14  | AR 61533 | ( - )      | PLUG, WITH O-RING                  |

T49114F

ROCKER ARM COVER  
(WITH TURBOCHARGER)  
CODE 1101  
ROCKER ARM COVER, CENTER FILLER  
CODE 1102  
ROCKER ARM COVER, NO FILLER



PARTS COMMON TO CODE 1101 AND 1102

| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | AR 45530 | ( - )      | SCREW, CAP, SPECIAL (9 USED)                       |
| 2   | T 20075  | ( - )      | GASKET   |
| 3   | 19H 2036 | ( - )      | SCREW, CAP, 1/4" X 7/8"                            |
| 4   | 12H 302  | ( - )      | WASHER, LOCK, 1/4"                                 |
| 5   | R 64764  | ( - )      | WASHER, SPECIAL (SUB. FOR L186T, THIS APPLICATION) |

ADDITIONAL PARTS USED WITH CODE 1101

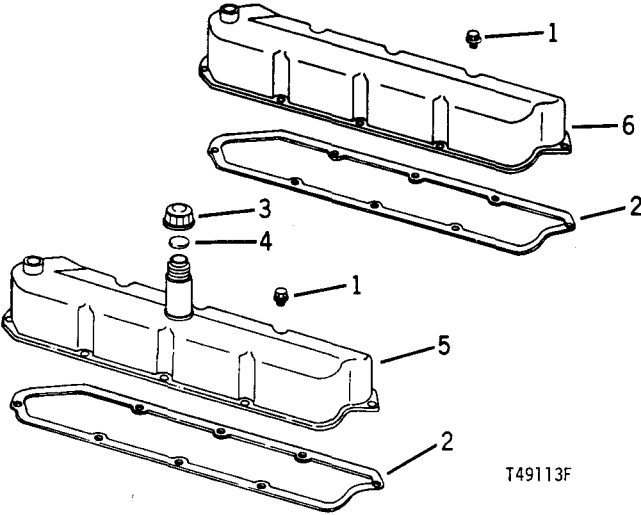
| KEY | PART NO. | SERIAL NO. | DESCRIPTION            |
|-----|----------|------------|------------------------|
| 6   | T 20294  | ( - )      | CAP, OIL FILLER        |
| 7   | T 20328  | ( - )      | GASKET, OIL FILLER CAP |
| 8   | AT 30695 | ( - )      | COVER, ROCKER ARM      |

ADDITIONAL PARTS USED WITH CODE 1102

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 9   | AT 18015 | ( - )      | COVER, ROCKER ARM |

ROCKER ARM COVER  
(WITHOUT TURBOCHARGER)  
CODE 1101 ROCKER ARM COVER, CENTER FILLER  
CODE 1102 ROCKER ARM COVER, NO FILLER

T49113F



PARTS COMMON TO CODE 1101 AND 1102

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                  |
|-----|----------|------------|------------------------------|
| 1   | AR 45530 | ( - )      | SCREW, CAP, SPECIAL (8 USED) |
| 2   | T 20075  | ( - )      | GASKET                       |

ADDITIONAL PARTS USED WITH CODE 1101

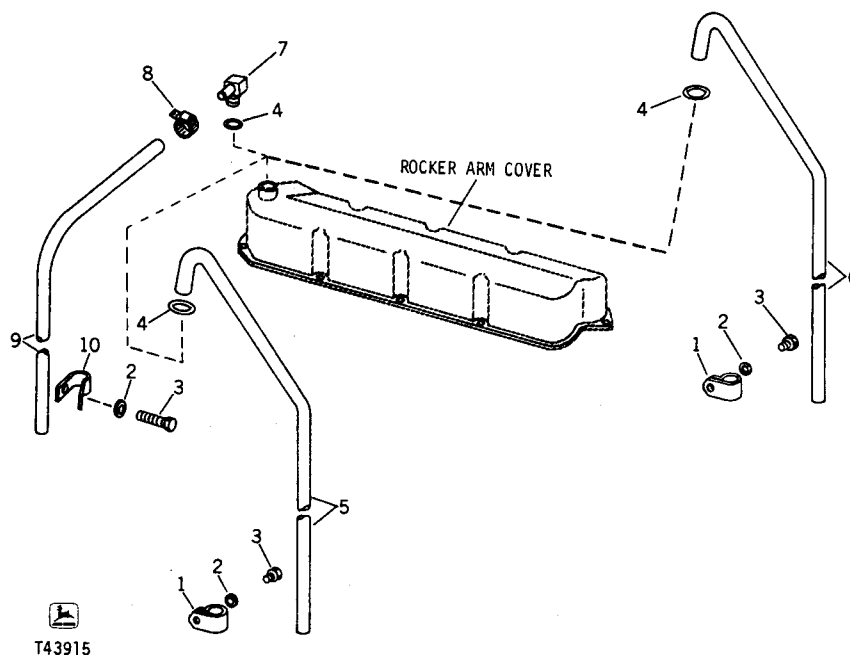
| KEY | PART NO. | SERIAL NO. | DESCRIPTION            |
|-----|----------|------------|------------------------|
| 3   | T 20294  | ( - )      | CAP, OIL FILLER        |
| 4   | T 20328  | ( - )      | GASKET, OIL FILLER CAP |
| 5   | AT 30695 | ( - )      | COVER, ROCKER ARM      |

ADDITIONAL PARTS USED WITH CODE 1102

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 6   | AT 18015 | ( - )      | COVER, ROCKER ARM |

ENGINE VENTILATING SYSTEM  
 CODE 2901 VENTILATOR SYSTEM, R.H.  
 CODE 2902 VENTILATOR SYSTEM, FLEXIBLE  
 CODE 2903 VENTILATOR SYSTEM, L.H.

T43915



## PARTS COMMON TO CODE 2901, 2902 AND 2903

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                     |
|-----|----------|------------|---------------------------------|
| 1   | R 40791  | ( - )      | CLAMP                           |
| 2   | 24H 1303 | ( - )      | WASHER, 13/32" X 11/16" X .060" |
| 3   | 19H 2038 | ( - )      | SCREW, CAP, 3/8" X 1/2"         |
| 4   | R 495 R  | ( - )      | O-RING                          |

## ADDITIONAL PARTS USED WITH CODE 2901

| KEY | PART NO. | SERIAL NO. | DESCRIPTION |
|-----|----------|------------|-------------|
| 5   | T 28207  | ( - )      | TUBE, VENT  |

## ADDITIONAL PARTS USED WITH CODE 2903

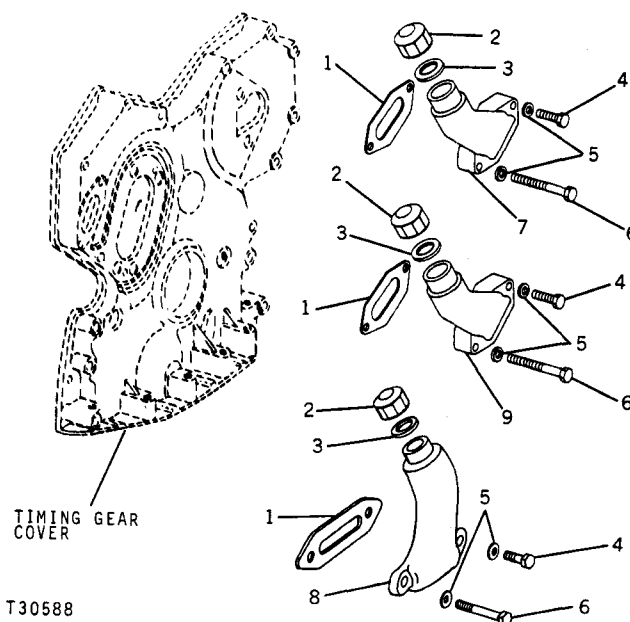
| KEY | PART NO. | SERIAL NO. | DESCRIPTION |
|-----|----------|------------|-------------|
| 6   | T 20074  | ( - )      | TUBE, VENT  |

## ADDITIONAL PARTS USED WITH CODE 2902

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                       |
|-----|----------|------------|-----------------------------------|
| 7   | AT 25192 | ( - )      | ELBOW, 90°                        |
| 8   | AR 21839 | ( - )      | CLAMP, HOSE                       |
| 9   | H 36031  | ( - )      | HOSE, 3/4" X 36" (19 MM X 914 MM) |
| 10  | A 4773 R | ( - )      | CLAMP                             |

T30588

ENGINE OIL FILLER INLET  
 CODE 1201 OIL FILLER INLET, MEDIUM LENGTH  
 CODE 1202 OIL FILLER INLET, LONG LENGTH  
 CODE 1203 OIL FILLER INLET, SHORT LENGTH



## PARTS COMMON TO CODE 1201, 1202, AND 1203

| KEY   | PART NO. | SERIAL NO. | DESCRIPTION                              |
|-------|----------|------------|--|
| 1 T   | 20336    | ( - )      | GASKET                                   |
| 2 T   | 20294    | ( - )      | CAP, OIL FILLER                          |
| 3 T   | 20328    | ( - )      | GASKET, OIL FILLER CAP                   |
| 4 19H | 2665     | ( - )      | SCREW, CAP, 3/8" X 1-5/8"                |
| 5 24H | 1304     | ( - )      | WASHER, 13/32" X 23/64" X .120" (2 USED) |
| 6 19H | 2128     | ( - )      | SCREW, CAP, 3/8" X 3"                    |

## ADDITIONAL PARTS USED WITH CODE 1201

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 7 T | 23614    | ( - )      | INLET, OIL FILLER |

## ADDITIONAL PARTS USED WITH CODE 1202

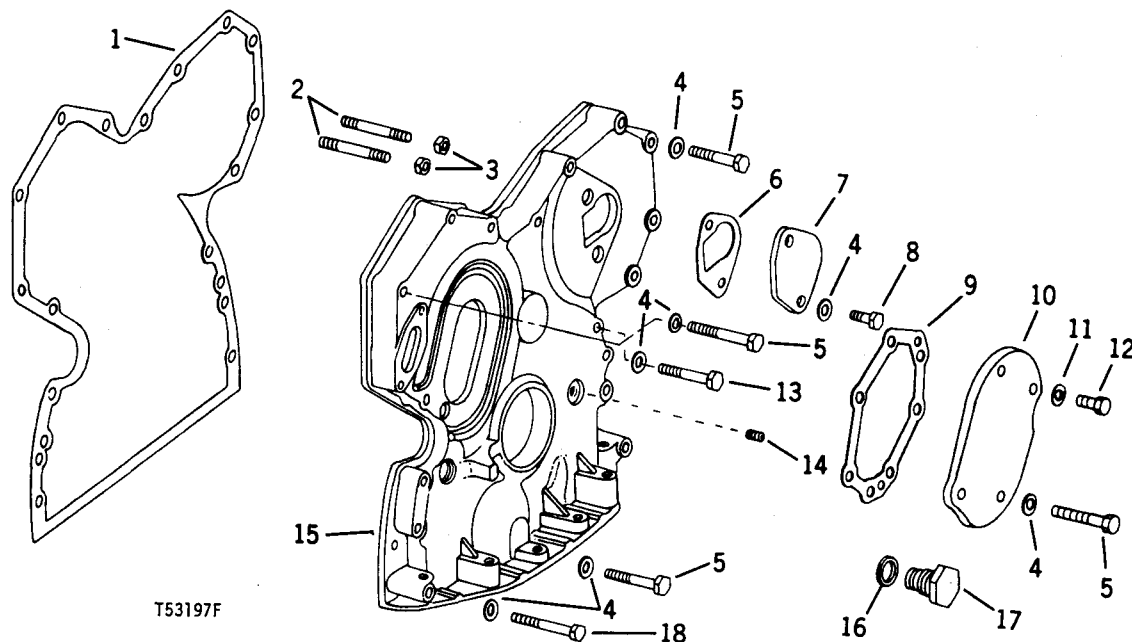
| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 8 T | 24192    | ( - )      | INLET, OIL FILLER |

## ADDITIONAL PARTS USED WITH CODE 1203

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 9 T | 20335    | ( - )      | INLET, OIL FILLER |

## TIMING GEAR COVER

T53197F

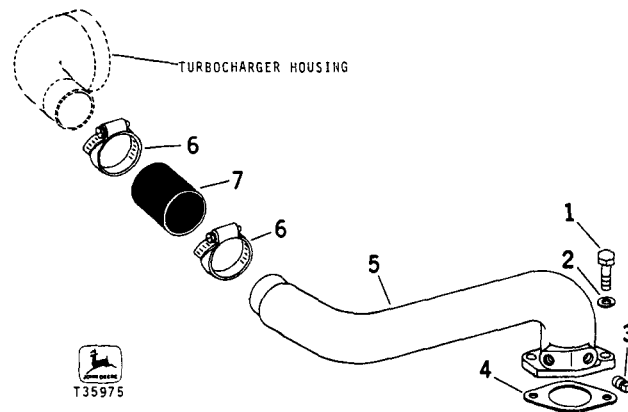


T53197F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | T 20155  | -          | GASKET   |
| 2   | T 33279  | -          | STUD (2 USED)  |
| 3   | 14H 812  | -          | NUT, 3/8" (2 USED)   |
| 4   | 24H 1304 | -          | WASHER, 13/32" X 23/32" X .120" (16 USED)  |
| 5   | 19H 1801 | -          | SCREW, CAP, 3/8" X 1" (10 USED)  |
| 6   | T 20364  | -          | GASKET   |
| 7   | T 20362  | -          | COVER, INJECTION PUMP GEAR   |
| 8   | 19H 2284 | -          | SCREW, CAP, 3/8" X 7/8" (2 USED)   |
| 9   | T 20273  | -          | GASKET   |
| 10  | T 20272  | -          | COVER, TIMING GEAR OPENING   |
| 11  | 24H 1304 | -          | WASHER, 13/32" X 23/32" X .120" (3 USED)   |
| 12  | 19H 2284 | -          | SCREW, CAP, 3/8" X 7/8" (3 USED)   |
| 13  | 19H 2128 | -          | SCREW, CAP, 3/8" X 3" (2 USED)   |
| 14  | 15H 275  | -          | PLUG, PIPE, HEX. CTSK., 1/4"   |
| 15  | AR 58196 | -          | COVER, TIMING GEAR, WITH INSERTS (MARKED R52879) (ALSO ORDER ONE T20272, ONE T20273, THREE 19H2284, ONE 19H1726, FOUR 24H1304, AND ONE 15H275) |
| 16  | A 4827 R | -          | WASHER, ALUMINUM   |
| 17  | T 27657  | -          | PLUG, RELIEF VALVE   |
| 18  | 19H 1733 | -          | SCREW, CAP, 3/8" X 2-1/2" (2 USED)   |

AIR INLET  
(WITH TURBOCHARGER)

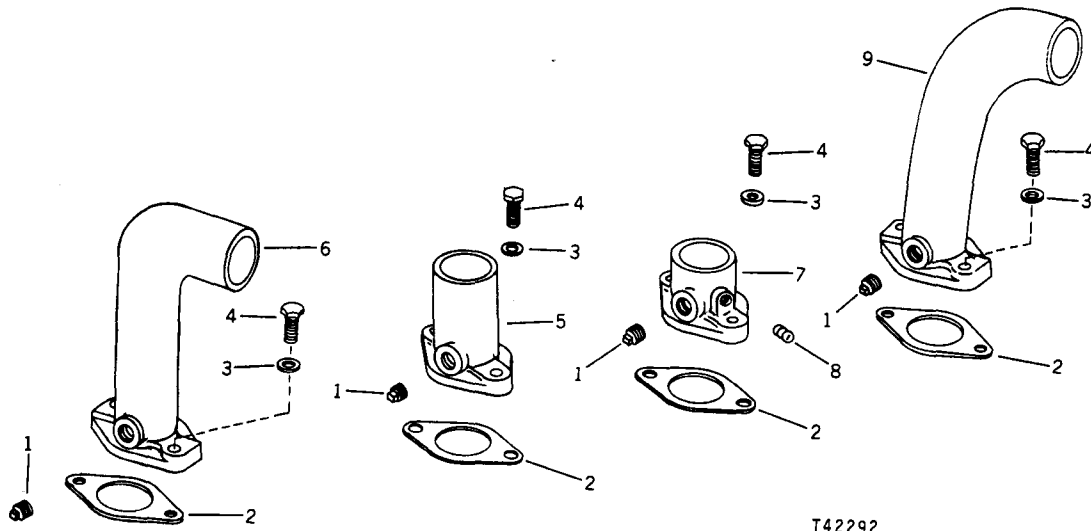
T35975



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | 19H 1732 | ( - )      | SCREW, CAP, 3/8" X 1-1/4" (2 USED)                        |
| 2   | 12H 304  | ( - )      | WASHER, LOCK, 3/8" (2 USED)                               |
| 3   | 15H 255  | ( - )      | PLUG, PIPE, SQ. HD., 3/8"                                 |
| 4   | T 20159  | ( - )      | GASKET  |
| 5   | R 56549  | ( - )      | ELBOW, AIR INTAKE   |
| 6   | R 56552  | ( - )      | CLAMP, HOSE (2 USED) (SUB. FOR AR21839, THIS APPLICATION) |
| 7   | R 56551  | ( - )      | HOSE, 2" X 2-1/2" (51 MM X 64 MM)                         |

**AIR INLET**  
**(WITHOUT TURBOCHARGER)**  
**CODE 1701 AIR INTAKE, MEDIUM LENGTH**  
**CODE 1702 AIR INTAKE, 10" (254 MM) LONG**  
**CODE 1703 AIR INTAKE, SHORT LENGTH**  
**CODE 1704 AIR INTAKE, 12" (305 MM) LONG**

T42292



**PARTS COMMON TO CODE 1701, 1702, 1703 AND 1704**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                        |
|-----|----------|------------|------------------------------------|
| 1   | 15H 255  | ( - )      | PLUG, PIPE, SQ. HD., 3/8"          |
| 2   | T 20159  | ( - )      | GASKET                             |
| 3   | 12H 304  | ( - )      | WASHER, LOCK, 3/8" (2 USED)        |
| 4   | 19H 1732 | ( - )      | SCREW, CAP, 3/8" X 1-1/4" (2 USED) |

**ADDITIONAL PARTS USED WITH CODE 1701**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION |
|-----|----------|------------|-------------|
| 5   | T 25829  | ( - )      | INLET, AIR  |

**ADDITIONAL PARTS USED WITH CODE 1702**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION |
|-----|----------|------------|-------------|
| 6   | T 23611  | ( - )      | INLET, AIR  |

**ADDITIONAL PARTS USED WITH CODE 1703**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                  |
|-----|----------|------------|------------------------------|
| 7   | T 31948  | ( - )      | INLET, AIR                   |
| 8   | 15H 558  | ( - )      | PLUG, PIPE, HEX. CTSK., 1/8" |

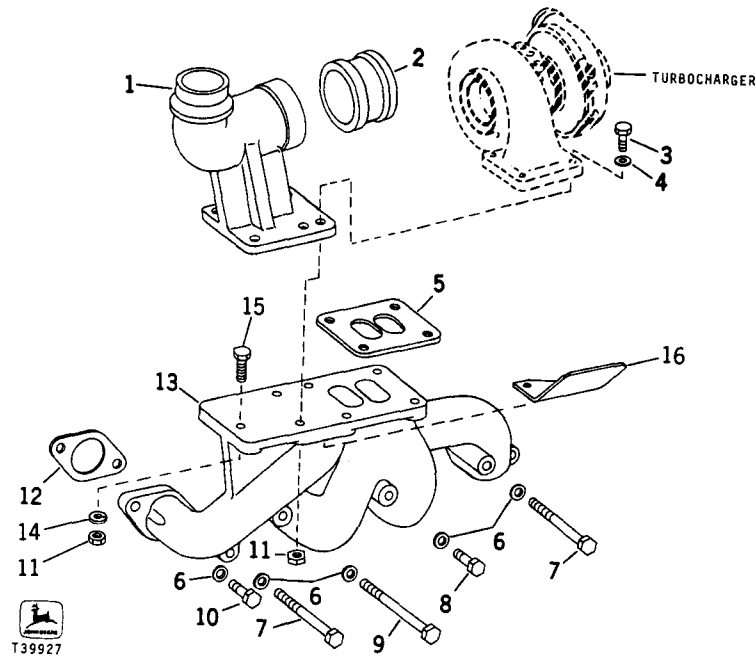
**ADDITIONAL PARTS USED WITH CODE 1704**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION |
|-----|----------|------------|-------------|
| 9   | R 38526  | ( - )      | INLET, AIR  |



EXHAUST MANIFOLD AND ELBOW  
(WITH TURBOCHARGER)

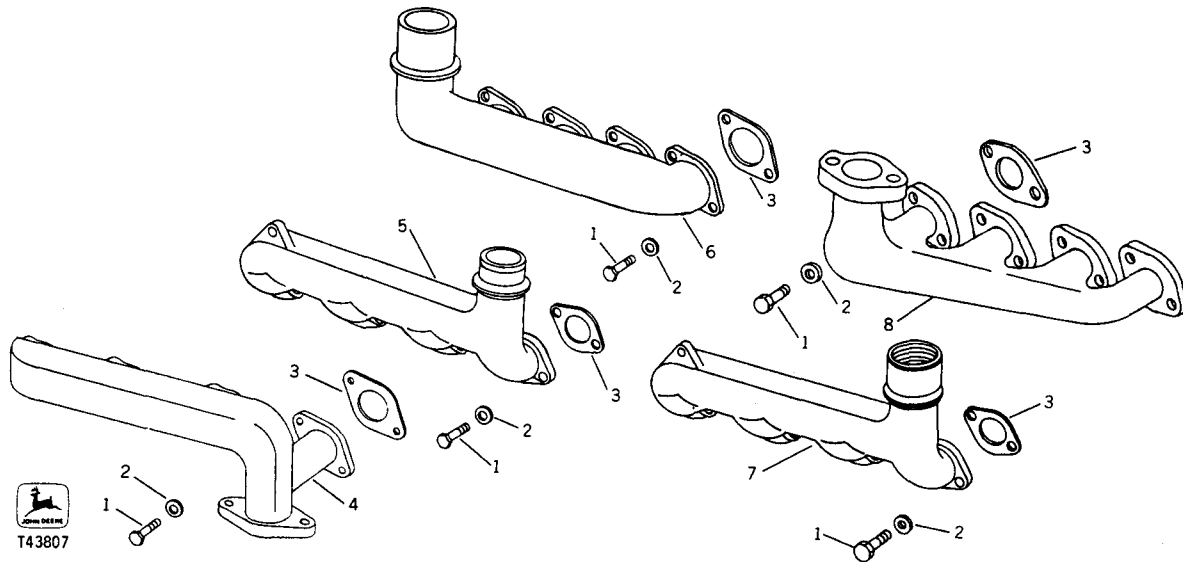
T39927



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                              |
|-----|----------|------------|--|
| 1   | R 57270  | -          | ELBOW, EXHAUST                           |
| 2   | R 43724  | -          | ADAPTER                                  |
| 3   | 19H 1800 | -          | SCREW, CAP, 3/8" X 1-1/2" (3 USED)       |
| 4   | 24H 1305 | -          | WASHER, 13/32" X 13/16" X .060" (3 USED) |
| 5   | R 55509  | -          | GASKET, TURBOCHARGER                     |
| 6   | 24H 1304 | -          | WASHER, 13/32" X 23/32" X .120" (8 USED) |
| 7   | 19H 1925 | -          | SCREW, CAP, 3/8" X 4-1/4" (2 USED)       |
| 8   | 19H 2228 | -          | SCREW, CAP, 3/8" X 4"                    |
| 9   | 19H 2104 | -          | SCREW, CAP, 3/8" X 5" (2 USED)           |
| 10  | 19H 1732 | -          | SCREW, CAP, 3/8" X 1-1/4" (3 USED)       |
| 11  | 14H 812  | -          | NUT, JAM, 3/8" (8 USED)                  |
| 12  | T 20006  | -          | GASKET (4 USED)                          |
| 13  | R 52819  | -          | MANIFOLD                                 |
| 14  | 12H 304  | -          | WASHER, LOCK, 3/8"                       |
| 15  | 19H 218  | -          | SCREW, CAP, 3/8" X 1"                    |
| 16  | R 61595  | -          | SHIELD, HEAT                             |

EXHAUST MANIFOLD (WITHOUT TURBOCHARGER)  
 CODE 2801 EXHAUST MANIFOLD, REAR DOWN  
 CODE 2802 EXHAUST MANIFOLD, REAR VERTICAL  
 CODE 2803 EXHAUST MANIFOLD, FRONT VERTICAL  
 CODE 2807 EXHAUST MANIFOLD, REAR VERTICAL  
 CODE 2808 EXHAUST MANIFOLD, FRONT VERTICAL

T43807



PARTS COMMON TO CODE 2801, 2802, AND 2803

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                              |
|-----|----------|------------|--|
| 1   | 19H 988  | ( - )      | SCREW, CAP, 3/8" X 1-1/4" (8 USED)       |
| 2   | 24H 1304 | ( - )      | WASHER, 13/32" X 23/32" X .120" (8 USED) |
| 3   | T 20006  | ( - )      | GASKET (4 USED)                          |

ADDITIONAL PARTS USED WITH CODE 2801

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 4   | R 56474  | ( - )      | MANIFOLD, EXHAUST |

ADDITIONAL PARTS USED WITH CODE 2802

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 5   | T 20200  | ( - )      | MANIFOLD, EXHAUST |

ADDITIONAL PARTS USED WITH CODE 2803

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 6   | T 20249  | ( - )      | MANIFOLD, EXHAUST |

ADDITIONAL PARTS USED WITH CODE 2807

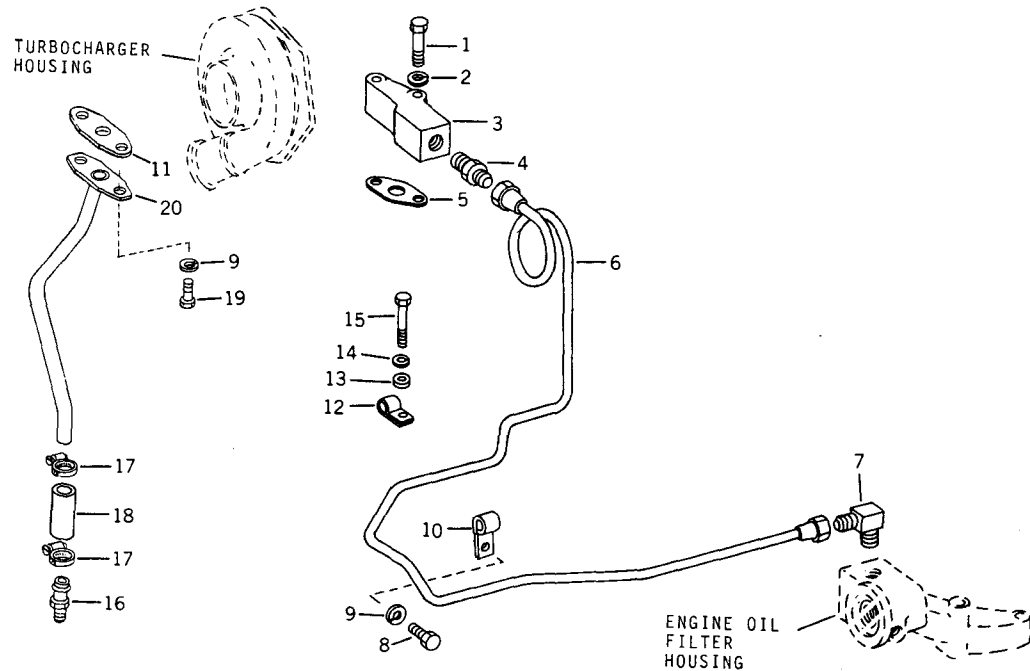
| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 7   | AR 72263 | ( - )      | MANIFOLD, EXHAUST |

ADDITIONAL PARTS USED WITH CODE 2808

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 8   | R 56474  | ( - )      | MANIFOLD, EXHAUST |

TURBOCHARGER OIL LINES

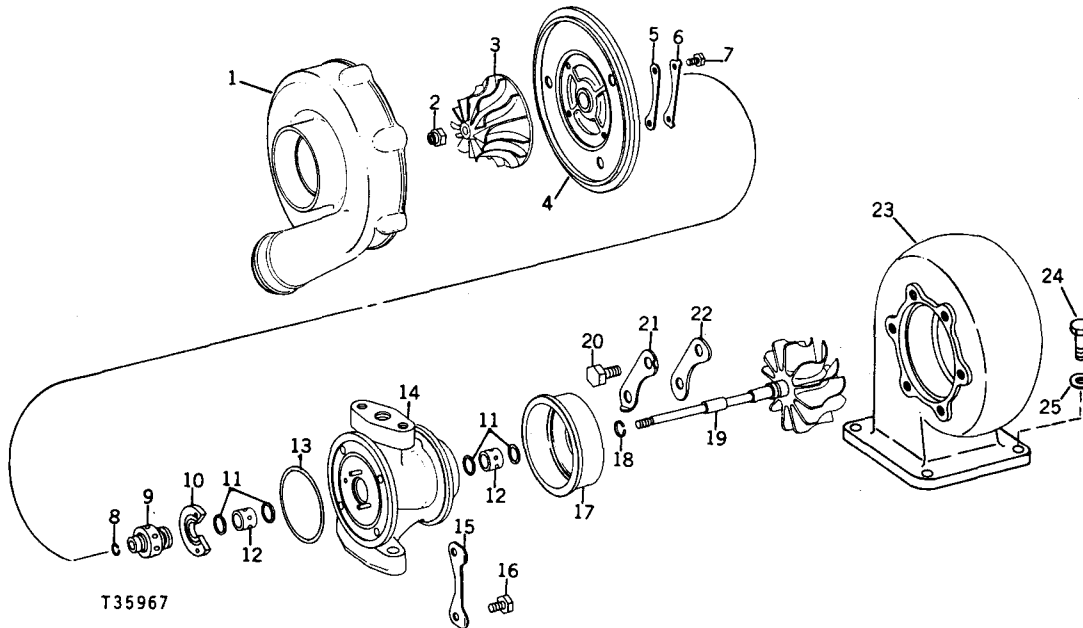
T44044



| KEY | PART NO. | T44044 | SERIAL NO. | DESCRIPTION                         |
|-----|----------|--------|------------|-------------------------------------|
| 1   | 19H 1906 |        | -          | SCREW, CAP, 5/16" X 1-1/2" (2 USED) |
| 2   | 12H 303  |        | -          | WASHER, LOCK, 5/16" (2 USED)        |
| 3   | R 43928  |        | -          | ADAPTER                             |
| 4   | R 44795  |        | -          | CONNECTOR                           |
| 5   | R 43413  |        | -          | GASKET                              |
| 6   | AR 70692 |        | -          | LINE, OIL INLET                     |
| 7   | AR 26708 |        | -          | ELBOW, 90°                          |
| 8   | 19H 1134 |        | -          | SCREW, CAP, 3/8" X 3/4"             |
| 9   | 12H 304  |        | -          | WASHER, LOCK, 3/8" X 3/4" (3 USED)  |
| 10  | T 13814  |        | -          | CLAMP                               |
| 11  | R 43416  |        | -          | GASKET                              |
| 12  | T 22645  |        | -          | CLAMP                               |
| 13  | L 186 T  |        | -          | WASHER, SPECIAL                     |
| 14  | 12H 302  |        | -          | WASHER, LOCK, 1/4"                  |
| 15  | 19H 1898 |        | -          | SCREW, CAP, 1/4" X 1-1/2"           |
| 16  | R 39503  |        | -          | CONNECTOR                           |
| 17  | AR 21839 |        | -          | CLAMP, HOSE (2 USED)                |
| 18  | U 42686  |        | -          | HOSE, 3/4" X 4" (19 MM X 102 MM)    |
| 19  | 19H 2284 |        | -          | SCREW, CAP, 3/8" X 7/8" (2 USED)    |
| 20  | AR 71578 |        | -          | LINE, DRAIN                         |

**TURBOCHARGER  
(AIRESEARCH)**

T35967



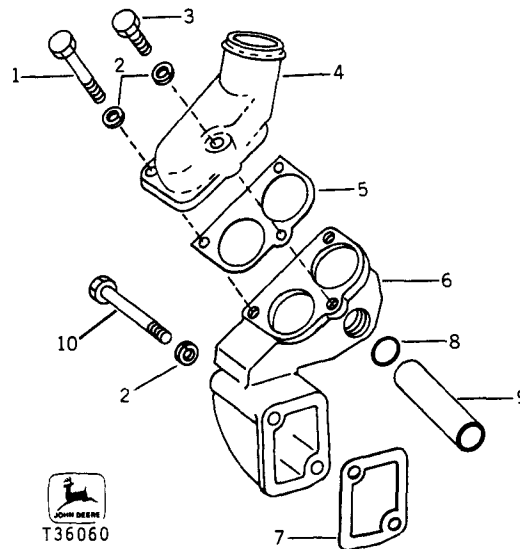
| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                 |
|-----|----------|------------|---|
| 1   | R 58610  | ( - )      | HOUSING, COMPRESSOR                         |
| 2   | R 43817  | ( * )      | NUT, LOCK                                   |
| 3   | R 58609  | ( * )      | IMPELLER                                    |
| 4   | AR 54934 | ( * )      | BACKPLATE ASSEMBLY                          |
| 5   | R 48709  | ( - )      | CLAMP (3 USED)                              |
| 6   | R 48710  | ( - )      | PLATE, LOCK (3 USED)                        |
| 7   | 19H 2020 | ( - )      | SCREW, CAP, 5/16" X 1/2" (6 USED)           |
| 8   | R 43806  | ( * )      | RING, PISTON                                |
| 9   | R 43801  | ( * )      | COLLAR, THRUST                              |
| 10  | R 43808  | ( * )      | BEARING                                     |
| 11  | R 43816  | ( * )      | RING, RETAINING (4 USED)                    |
| 12  | R 43803  | ( * )      | BEARING (2 USED)                            |
|     | R 50784  | ( - )      | BEARING, .005" (0.13 MM) UNDERSIZE (2 USED) |
|     | R 50785  | ( - )      | BEARING, .010" (0.25 MM) UNDERSIZE (2 USED) |
| 13  | R 43805  | ( * )      | O-RING                                      |
| 14  | AR 63781 | ( * )      | HOUSING, CENTER ASSEMBLY                    |
| 15  | R 43986  | ( * )      | PLATE, LOCK (2 USED)                        |
| 16  | 19H 1919 | ( * )      | SCREW, CAP, 1/4" X 5/8" (4 USED)            |
| 17  | R 43804  | ( * )      | SHROUD, WHEEL                               |
| 18  | R 55024  | ( * )      | RING, PISTON                                |
| 19  | AR 51988 | ( * )      | WHEEL, TURBINE, WITH SHAFT                  |
| 20  | R 43819  | ( - )      | BOLT, SPECIAL (6 USED)                      |
| 21  | R 43815  | ( - )      | PLATE, LOCK (3 USED)                        |
| 22  | R 43821  | ( - )      | CLAMP (3 USED)                              |
| 23  | R 58611  | ( - )      | HOUSING, TURBINE                            |
| 24  | 19H 246  | ( - )      | SCREW, CAP, 3/8" X 1-3/4" (4 USED)          |
| 25  | 24H 1305 | ( - )      | WASHER, 13/32" X 13/16" X .060" (4 USED)    |
| ..  | AR 70439 | ( - )      | TURBOCHARGER, COMPLETE                      |

\*ASSEMBLY LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK:

|    |          |       |   |
|----|----------|-------|---|
| .. | AR 70440 | ( - ) | HOUSING ASSEMBLY, CENTER, WITH ROTATING PARTS |
|----|----------|-------|---|

**THERMOSTAT HOUSING AND COVER  
(WITH TURBOCHARGER)  
CODE 2101 THERMOSTAT COVER, HORIZONTAL**

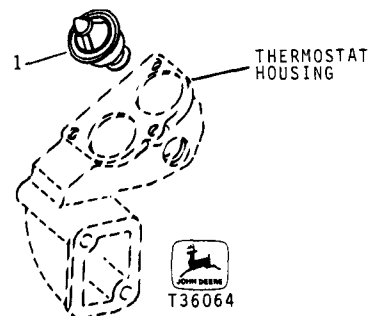
T36060



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                    |
|-----|----------|------------|--------------------------------|
| 1   | 19H 1801 | -          | SCREW, CAP, 3/8" X 2" (2 USED) |
| 2   | 12H 304  | -          | WASHER, LOCK, 3/8" (3 USED)    |
| 3   | 19H 1731 | -          | SCREW, CAP, 3/8" X 1"          |
| 4   | R 54639  | -          | COVER, THERMOSTAT              |
| 5   | R 54638  | -          | GASKET                         |
| 6   | R 56273  | -          | HOUSING, THERMOSTAT            |
| 7   | R 54641  | -          | GASKET                         |
| 8   | R 47144  | -          | O-RING                         |
| 9   | R 55967  | -          | TUBE, BYPASS                   |
| 10  | 19H 2228 | -          | SCREW, CAP, 3/8" X 4" (2 USED) |

**ENGINE THERMOSTAT  
CODE 2204 THERMOSTAT (180°F (82°C))**

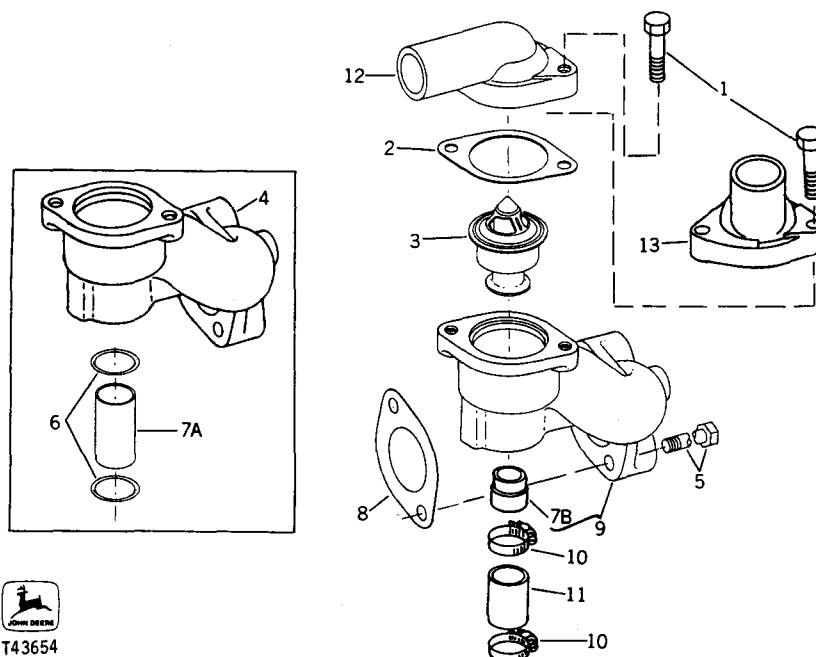
T36064



| KEY | PART NO. | SERIAL NO. | DESCRIPTION              |
|-----|----------|------------|--------------------------|
| 1   | AR 48675 | -          | THERMOSTAT, 180°F (82°C) |

**THERMOSTAT HOUSING AND COVER  
(WITHOUT TURBOCHARGER)**  
**CODE 2101 THERMOSTAT COVER, HORIZONTAL**  
**CODE 2102 THERMOSTAT COVER, VERTICAL**

T43654

**PARTS COMMON TO CODE 2101 AND 2102**

| KEY | PART NO. | SERIAL NO.  | DESCRIPTION   |
|-----|----------|-------------|---|
| 1   | 19H 988  | ( - )       | SCREW, CAP, 3/8" X 1-1/4" (2 USED)                    |
| 2   | T 20215  | ( - )       | GASKET  |
| 3   | AR 48675 | ( - )       | THERMOSTAT, 180°F (82°C)                              |
| 4   | R 54808  | ( -366182 ) | HOUSING, THERMOSTAT                                   |
| 5   | 19H 1944 | ( - )       | SCREW, CAP, 3/8" X 2-3/4" (2 USED)                    |
| 6   | R 47144  | ( -366182 ) | O-RING (2 USED)                                       |
| 7A  | R 54809  | ( -366182 ) | TUBE, BYPASS  |
| 7B  | R 59050  | ( 366183- ) | TUBE, BYPASS  |
| 8   | T 20219  | ( - )       | GASKET  |
| 9   | AR 71134 | ( 366183- ) | HOUSING, THERMOSTAT, WITH BYPASS TUBE (MARKED R59051) |
| 10  | AR 21839 | ( 366183- ) | CLAMP, HOSE (2 USED)                                  |
| 11  | R 59052  | ( 366183- ) | HOSE, 1-1/2" X 2" (38 MM X 51 MM)                     |

**ADDITIONAL PARTS USED WITH CODE 2101**

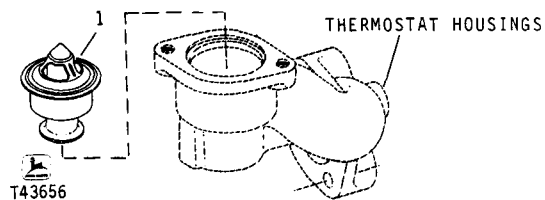
| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 12  | T 23620  | ( - )      | COVER, THERMOSTAT |

**ADDITIONAL PARTS USED WITH CODE 2102**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION       |
|-----|----------|------------|-------------------|
| 13  | T 20317  | ( - )      | COVER, THERMOSTAT |

ENGINE THERMOSTAT  
(WITHOUT TURBOCHARGER)  
CODE 2204 THERMOSTAT (180°F (82°C))

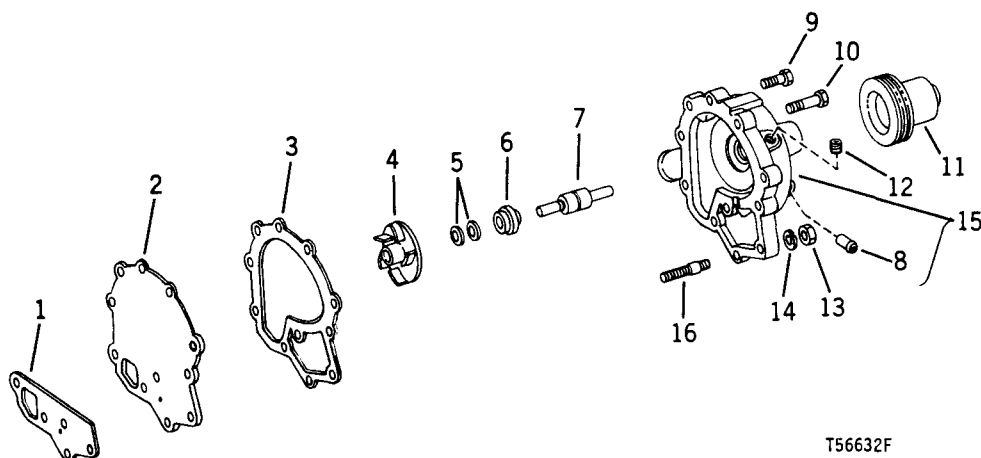
T43656



| KEY | PART NO. | SERIAL NO. | DESCRIPTION              |
|-----|----------|------------|--------------------------|
| 1   | AR 48675 | ( - )      | THERMOSTAT, 180°F (82°C) |

**WATER PUMP ASSEMBLY  
(WITH TURBOCHARGER)  
CODE 2001      WATER PUMP, STANDARD POSITION**

T56632F



T56632F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | T 20243  | -          | GASKET  |
| 2   | R 56811  | *          | COVER, WATER PUMP   |
| 3   | R 56809  | *          | GASKET  |
| 4   | R 56812  | *          | IMPELLER  |
| 5   | AR 41691 | *          | SEAL, CUP AND INSERT  |
| 6   | T 27261  | *          | SEAL  |
| 7   | JD 8643  | *          | BEARING   |
| 8   | R 34985  | *          | TUBE  |
| 9   | 19H 1800 | *          | SCREW, CAP, 3/8" X 1-1/2" (4 USED)                                |
|     | 19H 268  | -          | SCREW, CAP, 3/8" X 2-1/2" (2 USED)                                |
|     | 19H 246  | -          | SCREW, CAP, 3/8" X 1-3/4"   |
|     | 19H 2116 | -          | SCREW, CAP, 3/8" X 2-1/4"   |
| 10  | 19H 1726 | *          | SCREW, CAP, 3/8" X 2-1/4"   |
|     | 19H 218  | *          | SCREW, CAP, 3/8" X 1"   |
| 11  | R 56810  | *          | PULLEY, FAN   |
| 12  | 15H 584  | *          | PLUG, PIPE, SQ. HD., 1/2"   |
| 13  | 14H 812  | -          | NUT, 3/8"   |
| 14  | 12H 304  | -          | WASHER, LOCK, 3/8"  |
| 15  | AR 80116 | *          | HOUSING, WATER PUMP, WITH TUBES (MARKED R56813) (SUB. FOR R56813) |
| 16  | T 25701  | -          | STUD  |

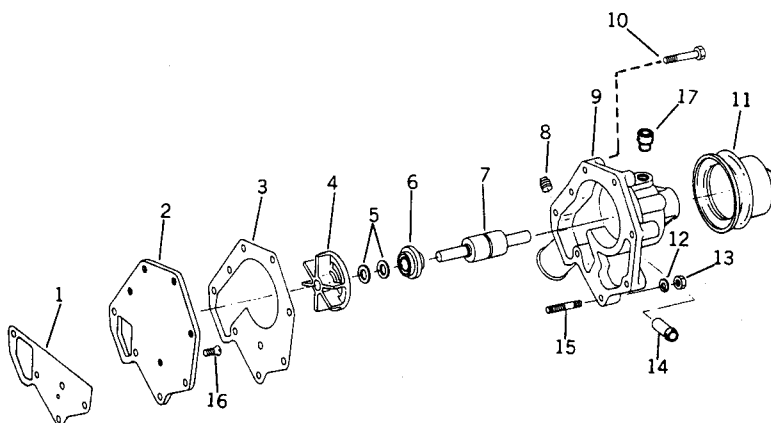
\*ASSEMBLY LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK:

.. AR 74110 ( ) PUMP ASSEMBLY, WATER, COMPLETE (SUB. FOR AR68389)



**WATER PUMP ASSEMBLY  
(WITHOUT TURBOCHARGER)  
CODE 2001      WATER PUMP, STANDARD POSITION**

T42287



T42287

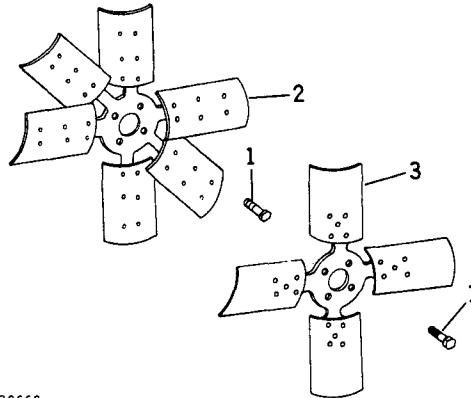
| KEY | PART NO. | SERIAL NO.  | DESCRIPTION                         |
|-----|----------|-------------|-------------------------------------|
| 1   | T 20243  | ( - )       | GASKET                              |
| 2   | T 26851  | ( - )       | COVER                               |
| 3   | T 20242  | ( - )       | GASKET                              |
| 4   | T 30897  | ( - )       | IMPELLER                            |
| 5   | AR 41691 | ( - )       | CUP AND INSERT                      |
| 6   | T 27261  | ( - )       | SEAL                                |
| 7   | JD 9257  | ( - )       | BEARING                             |
| 8   | 15H 584  | ( - )       | PLUG, PIPE, SQ. HD., 1/2"           |
| 9   | R 54805  | ( -366182 ) | HOUSING, WATER PUMP                 |
|     | R 59049  | ( 366183- ) | HOUSING, WATER PUMP                 |
| 10  | 19H 2545 | ( - )       | SCREW, CAP, 3/8" X 1-3/8" (4 USED)  |
|     | 19H 2549 | ( - )       | SCREW, CAP, 3/8" X 1-7/8"           |
|     | 19H 1912 | ( - )       | SCREW, CAP, 3/8" X 3-1/2" (2 USED)  |
| 11  | T 26850  | ( - )       | PULLEY, FAN                         |
| 12  | 12H 304  | ( - )       | WASHER, LOCK, 3/8"                  |
| 13  | 14H 812  | ( - )       | NUT, 3/8"                           |
| 14  | R 34985  | ( - )       | TUBE                                |
| 15  | T 25701  | ( - )       | STUD                                |
| 16  | 22H 979  | ( - )       | SCREW, HEX. SOCKET SET, 3/8" X 3/8" |
| 17  | R 59050  | ( 366183- ) | TUBE, BYPASS                        |
| ..  | AR 63343 | ( -366182 ) | PUMP, WATER, COMPLETE               |
| ..  | AR 71133 | ( 366183- ) | PUMP, WATER, COMPLETE               |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK:

.. AT 32489 ( - ) KIT, REPAIR

**FAN BLADE ASSEMBLY**  
**CODE 2501 FAN BLADE, BLOWER**  
**CODE 2502 FAN BLADE, SUCTION**

T30662



T30662

**PARTS COMMON TO CODE 2501 AND 2502**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                      |
|-----|----------|------------|----------------------------------|
| 1   | 19H 2284 | ( - )      | SCREW, CAP, 3/8" X 7/8" (4 USED) |

**ADDITIONAL PARTS USED WITH CODE 2501**

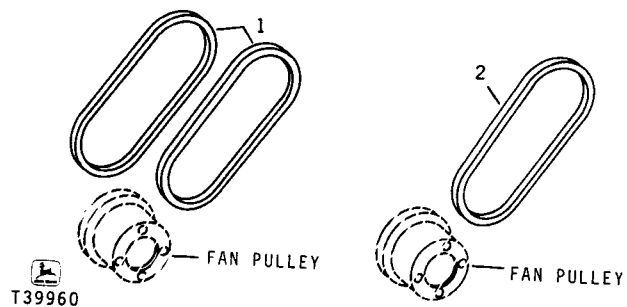
| KEY | PART NO. | SERIAL NO. | DESCRIPTION          |
|-----|----------|------------|----------------------|
| 2   | AT 34613 | ( - )      | BLADE, FAN (6 BLADE) |

**ADDITIONAL PARTS USED WITH CODE 2502**

| KEY | PART NO. | SERIAL NO. | DESCRIPTION          |
|-----|----------|------------|----------------------|
| 3   | AT 23180 | ( - )      | BLADE, FAN (4 BLADE) |

**FAN BELT**  
**CODE 2401 FAN BELT, STANDARD POSITION WATER PUMP**

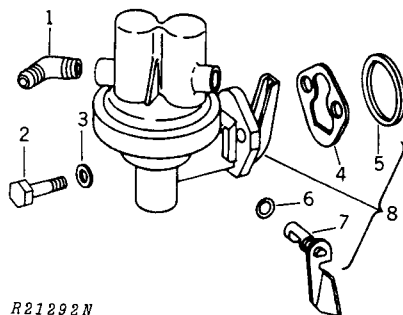
T39960



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                      |
|-----|----------|------------|--|
| 1   | AT 24833 | ( - )      | BELT, FAN (SET OF TWO BELTS) (WITH TURBOCHARGER) |
| 2   | T 24473  | ( - )      | BELT, FAN (WITHOUT TURBOCHARGER)                 |

R21292N

## AIRTEX FUEL TRANSFER PUMP

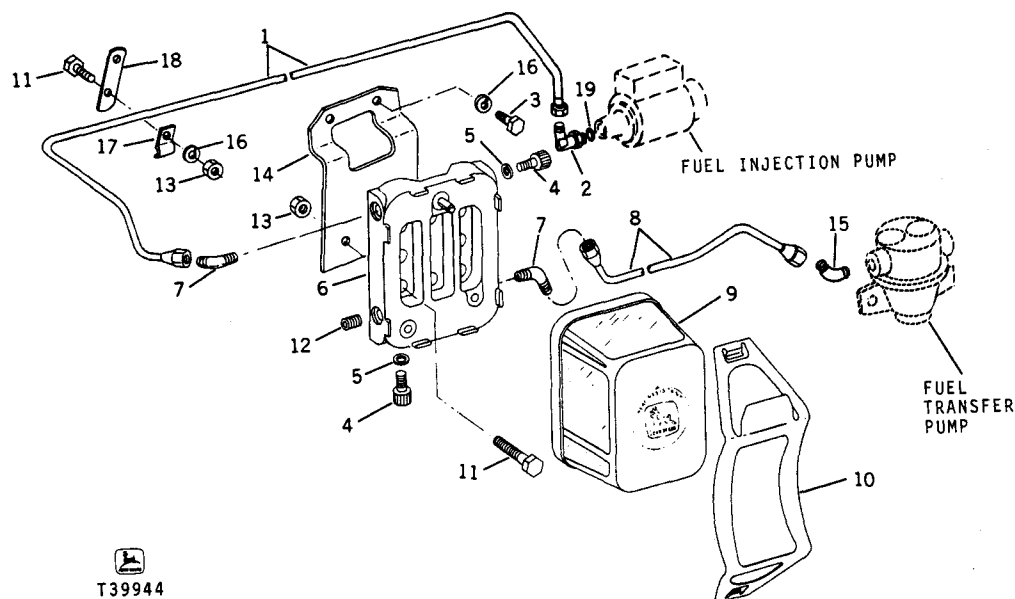


R21292N

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                         |
|-----|----------|------------|-------------------------------------|
| 1   | T 30738  | ( - )      | ELBOW, 90° (2 USED)                 |
| 2   | 19H 1849 | ( - )      | SCREW, CAP, 5/16" X 1-1/4" (2 USED) |
| 3   | R 20498  | ( - )      | WASHER, ALUMINUM (2 USED)           |
| 4   | R 27285  | ( - )      | GASKET                              |
| 5   | R 48399  | ( - )      | PACKING                             |
| 6   | A 4365 R | ( - )      | O-RING                              |
| 7   | AR 52556 | ( - )      | LEVER, PRIMING                      |
| 8   | AR 52159 | ( - )      | PUMP, FUEL, COMPLETE                |

## FUEL FILTER AND FUEL LINES

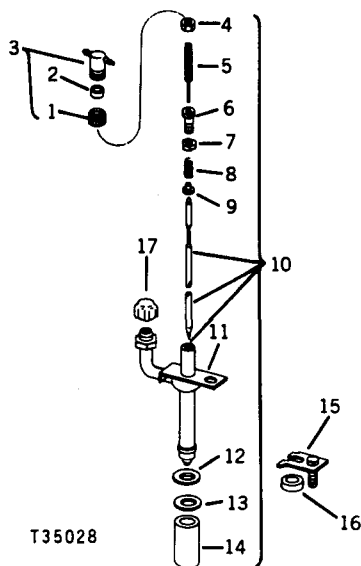
T39944


  
T39944

| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | AR 65873 | -          | LINE, FILTER TO INJECTION PUMP (WITH TURBOCHARGER)                |
|     | AR 63363 | -          | LINE, FILTER TO INJECTION PUMP (WITHOUT TURBOCHARGER)             |
| I 2 | AT 32333 | -          | ELBOW, 90°, FUEL LINE TO INJECTION PUMP (WITH TURBOCHARGER) (SUB. |
|     |          |            | FOR AR26771, THIS APPLICATION)                                    |
|     | R 48008  | -          | ELBOW, 90° (WITHOUT TURBOCHARGER)                                 |
| 3   | 19H 1134 | -          | SCREW, CAP, 3/8" X 3/4" (2 USED)                                  |
| 4   | R 48071  | -          | SCREW, BLEED (2 USED)   |
| 5   | R 34447  | -          | PACKING (2 USED)  |
| 6   | AR 50040 | -          | BODY, FUEL FILTER   |
| 7   | T 24945  | -          | ELBOW, 45° (2 USED)   |
| 8   | AR 63346 | -          | LINE, TRANSFER PUMP TO FILTER                                     |
| 9   | AR 50041 | -          | ELEMENT, FUEL FILTER  |
| 10  | R 57258  | -          | SPRING, RETAINING   |
| 11  | 19H 2284 | -          | SCREW, CAP, 3/8" X 7/8" (3 USED)                                  |
| 12  | 15H 558  | -          | PLUG, PIPE, HEX. CTSK., 1/8"                                      |
| 13  | 14H 812  | -          | NUT, 3/8" (2 USED)  |
| 14  | R 53214  | -          | BRACKET, FUEL FILTER  |
| 15  | T 30738  | -          | ELBOW, 90°  |
| 16  | 12H 304  | -          | WASHER, LOCK, 3/8" (3 USED)                                       |
| 17  | A 4881 R | -          | CLIP  |
| 18  | R 56588  | -          | BRACKET   |
| 19  | R 26286  | -          | O-RING (WITH TURBOCHARGER)  |

CODE 1602 FUEL INJECTION NOZZLE ASSEMBLY  
 CODE 1603 FUEL INJECTION SYSTEM, REGULAR GOVERNOR  
 CODE 1605 FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR  
 FUEL INJECTION SYSTEM, REGULAR GOVERNOR  
 (CALIFORNIA CERTIFIED)

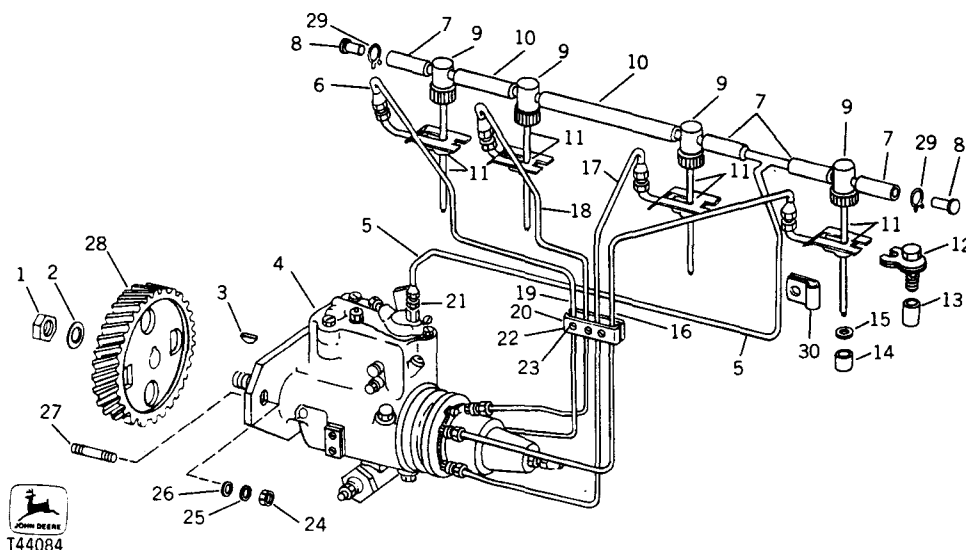
T35028



| KEY | PART NO. | SERIAL NO. | DESCRIPTION  |
|-----|----------|------------|--|
| 1   | T 29540  | ( - )      | NUT, NOZZLE LEAK-OFF                                       |
| 2   | T 29539  | ( - )      | GROMMET  |
| 3   | AT 27622 | ( - )      | CAP ASSEMBLY, LEAK-OFF                                     |
| 4   | R 47733  | ( - )      | NUT, SPECIAL   |
| 5   | R 47732  | ( - )      | SCREW, LIFT ADJUSTING                                      |
| 6   | R 47734  | ( - )      | SCREW, PRESSURE ADJUSTING                                  |
| 7   | R 46675  | ( - )      | NUT, SPECIAL   |
| 8   | R 47731  | ( - )      | SPRING   |
| 9   | R 39886  | ( - )      | SEAT, SPRING   |
| 10  | AR 68364 | ( - )      | NOZZLE ASSEMBLY (ROOSA-MASTER NO. 20291 AND 20504)         |
| 11  | T 26870  | ( - )      | CLAMP, NOZZLE LOCATING                                     |
| 12  | R 34764  | ( - )      | WASHER, NOZZLE UPPER                                       |
| 13  | R 48000  | ( - )      | WASHER, NOZZLE LOWER                                       |
| 14  | T 24472  | ( - )      | CAP, NOZZLE  |
| 15  | R 34760  | ( - )      | CLAMP, WITH SCREW AND WASHER                               |
| 16  | R 34761  | ( - )      | SPACER   |
| 17  | T 31174  | ( - )      | CAP, PROTECTION (USED FOR SERVICING FUEL INJECTION NOZZLE) |

FUEL INJECTION SYSTEM (WITH TURBOCHARGER)  
 CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR  
 CODE 1603 FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR  
 CODE 1605 FUEL INJECTION SYSTEM, REGULAR GOVERNOR  
 (CALIFORNIA CERTIFIED)

T44084



| KEY    | PART NO. | SERIAL NO. | DESCRIPTION  |
|--------|----------|------------|--|
| 1 R    | 56422    | -          | NUT, SPECIAL   |
| 2 R    | 56423    | -          | WASHER, SPECIAL  |
| 3 R    | 56424    | -          | KEY, SPECIAL   |
| 4 AR   | 71421    | -          | PUMP, FUEL INJECTION, WITH REGULAR GOVERNOR, COMPLETE (ROOSA-MASTER NO. DM4427MD2876) (FOR PARTS SEE PAGES 30-1 THROUGH 30-7)                |
| AR     | 70538    | -          | PUMP, FUEL INJECTION, WITH 3 PERCENT - 5 PERCENT GOVERNOR, COMPLETE (ROOSA-MASTER NO. DM4427HB2915) (FOR PARTS SEE PAGES 30-8 THROUGH 30-14) |
| AR     | 76503    | -          | PUMP, FUEL INJECTION, WITH REGULAR GOVERNOR, COMPLETE (ROOSA-MASTER NO. DM4427NH2957) (FOR PARTS SEE PAGES 30-24 THROUGH 30-30)              |
| 5 AR   | 65872    | -          | LINE, LEAK-OFF   |
| 6 AR   | 65868    | -          | LINE, FUEL INJECTION, NO. 1  |
| 7      |          | -          | HOSE (MAKE FROM AT32064 5' (1 524 MM)) (4 USED)  |
| 8 16H  | 246      | -          | RIVET, 3/16" X 3/8" (2 USED)   |
| 9 AT   | 27622    | -          | CAP, LEAK-OFF (4 USED)   |
| 10     |          | -          | HOSE (MAKE FROM AT32064 5' (1 524 MM)) (2 USED)  |
| 11 AR  | 68364    | -          | NOZZLE ASSEMBLY (4 USED) (ROOSA-MASTER NO. 20291 AND 20504) (FOR PARTS SEE PAGE 25-4)  |
| 12 R   | 34760    | -          | CLAMP, WITH SCREW AND WASHER (4 USED)  |
| 13 R   | 34761    | -          | SPACER (4 USED)  |
| 14 R   | 48000    | -          | WASHER, SPECIAL, LOWER (4 USED)  |
| 15 R   | 34764    | -          | WASHER, SPECIAL, UPPER (4 USED)  |
| 16 AR  | 65871    | -          | LINE, FUEL INJECTION, NO. 4  |
| 17 AR  | 65870    | -          | LINE, FUEL INJECTION, NO. 3  |
| 18 AR  | 65869    | -          | LINE, FUEL INJECTION, NO. 2  |
| 19 T   | 23463    | -          | CLAMP, HALF, THREADED  |
| 20 T   | 23462    | -          | CLAMP, HALF  |
| 21 R   | 35352    | -          | CONNECTOR  |
| 22 12H | 246      | -          | WASHER, LOCK, NO. 10 (3 USED)  |
| 23 21H | 1317     | -          | SCREW, MACH., NO. 10 X 5/8" (3 USED)   |
| 24 14H | 785      | -          | NUT, 5/16" (3 USED)  |
| 25 12H | 303      | -          | WASHER, LOCK, 5/16" (3 USED)   |
| 26 24H | 1136     | -          | WASHER, 11/32" X 11/16" X .060" (3 USED)   |
| 27 R   | 56055    | -          | STUD (3 USED)  |
| 28 R   | 56056    | -          | GEAR, DRIVE (48 TEETH)   |
| 29 T   | 13254    | -          | CLAMP  |
| 30 T   | 29527    | -          | CLAMP (2 USED)   |

This diagram illustrates the exploded view of a Honda engine assembly, showing the relationship between various components. The parts are numbered 1 through 31. The main assembly includes the cylinder head (1), piston (2), connecting rod (3), crankshaft (4), and various valves (5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31). The diagram also shows the timing belt (10) and its tensioner (11). The legend at the bottom right identifies the components:

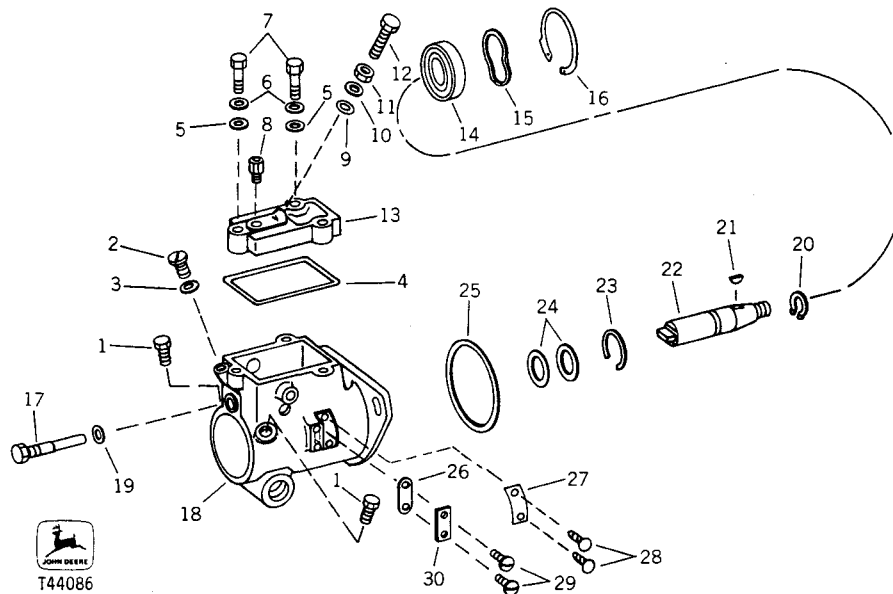
- 1. CYLINDER HEAD
- 2. PISTON
- 3. CONNECTING ROD
- 4. CRANKSHAFT
- 5. INLET VALVE
- 6. EXHAUST VALVE
- 7. VALVE SPRING
- 8. VALVE SPRING
- 9. VALVE SPRING
- 10. TIMING BELT
- 11. TIMING BELT TENSIONER
- 12. VALVE SPRING
- 13. VALVE SPRING
- 14. VALVE SPRING
- 15. VALVE SPRING
- 16. VALVE SPRING
- 17. VALVE SPRING
- 18. VALVE SPRING
- 19. VALVE SPRING
- 20. VALVE SPRING
- 21. VALVE SPRING
- 22. VALVE SPRING
- 23. VALVE SPRING
- 24. VALVE SPRING
- 25. VALVE SPRING
- 26. VALVE SPRING
- 27. VALVE SPRING
- 28. VALVE SPRING
- 29. VALVE SPRING
- 30. VALVE SPRING
- 31. VALVE SPRING

25-6 OEM ENGINES AND ACCESSORIES - 4276D AND 4276T PC-1469 (15-FEB-78) LITHO IN U.S.A.



**FUEL INJECTION PUMP HOUSING AND DRIVE GROUP**  
**(ROOSA-MASTER NO. MD4427MD2876)**  
**(WITH TURBOCHARGER)**  
**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T44086



| KEY   | PART NO. | SERIAL NO. | DESCRIPTION                                   |
|-------|----------|------------|---|
| 1 R   | 30714    | ( - )      | SCREW, SPECIAL, CAP (2 USED)                  |
| 2 T   | 11930    | ( - )      | SCREW, SPECIAL, TORQUE HOLE                   |
| 3 T   | 11878    | ( - )      | WASHER, SPECIAL                               |
| 4 T   | 11918    | ( - )      | PACKING, GOVERNOR HOUSING COVER               |
| 5 T   | 15715    | ( - )      | WASHER, SPECIAL (3 USED)                      |
| 6 12H | 295      | ( - )      | WASHER, LOCK, INTERNAL-TOOTH, NO. 10 (3 USED) |
| 7 T   | 15721    | ( - )      | SCREW, SPECIAL (3 USED)                       |
| 8 R   | 36535    | ( - )      | CONNECTOR, WITH CHECK VALVE                   |
| 9 T   | 17951    | ( - )      | PACKING                                       |
| 10 T  | 17947    | ( - )      | WASHER, SPECIAL                               |
| 11 T  | 11921    | ( - )      | NUT, SPECIAL                                  |
| 12 T  | 17953    | ( - )      | SCREW, SPECIAL, LOW IDLE ADJUSTMENT           |
| 13 R  | 37139    | ( - )      | COVER, GOVERNOR HOUSING                       |
| 14 AR | 69427    | ( - )      | BEARING, BALL                                 |
| 15 R  | 54235    | ( - )      | WASHER, DRIVE SHAFT SPRING                    |
| 16 R  | 54230    | ( - )      | RING, RETAINER                                |
| 17 T  | 11923    | ( - )      | STUD, GUIDE                                   |
| 18 AR | 69428    | ( - )      | HOUSING, PUMP                                 |
| 19 T  | 11943    | ( - )      | WASHER, GUIDE STUD                            |
| 20 R  | 57796    | ( - )      | RING, RETAINING                               |
| 21 R  | 56424    | ( - )      | KEY   |
| 22 R  | 57797    | ( - )      | SHAFT, DRIVE                                  |
| 23 R  | 54225    | ( - )      | RING, SEAL RETAINING                          |
| 24 AR | 72052    | ( - )      | SEAL, DRIVE SHAFT (2 USED)                    |
| 25 R  | 54229    | ( - )      | SEAL, PUMP FLANGE                             |
| 26 T  | 11883    | ( - )      | GASKET, TIMING WINDOW COVER                   |
| 27 T  | 11875    | ( - )      | PLATE, NAME                                   |
| 28 T  | 11876    | ( - )      | SCREW, DRIVE (2 USED)                         |
| 29 R  | 54260    | ( - )      | SCREW, TIMING WINDOW COVER (2 USED)           |
| 30 T  | 11882    | ( - )      | COVER, TIMING WINDOW                          |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-2, 30-3, 30-4, 30-5, 30-6 AND 30-7:

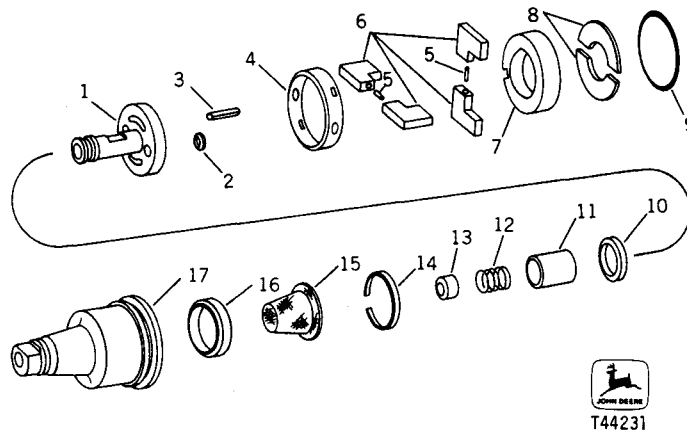
AR 63029 ( - ) KIT, GASKET OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP TRANSFER GROUP**  
**(ROOSA-MASTER NO. DM4427MD2876)**  
**(WITH TURBOCHARGER)**

**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T44231



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | AR 61995 | ( - )      | REGULATOR, TRANSFER PUMP                            |
| 2   | R 54231  | ( - )      | SEAL, REGULATING PISTON                             |
| 3   | R 54226  | ( - )      | PIN, SPRING   |
| 4   | R 61122  | ( - )      | RING, LINER LOCATING                                |
| 5   | R 34630  | ( - )      | SPRING, TRANSFER PUMP BLADE (2 USED)                |
| 6   | AR 73828 | ( - )      | BLADE, TRANSFER PUMP, WITH SPRING STANDARD (4 USED) |
|     | AR 73829 | ( - )      | BLADE, TRANSFER PUMP, WITH SPRING OVERSIZE (4 USED) |
| 7   | R 54244  | ( - )      | LINER, TRANSFER PUMP                                |
| 8   | R 61121  | ( - )      | RETAINER, ROTOR (2 USED)                            |
| 9   | R 61124  | ( - )      | O-RING  |
| 10  | R 54222  | ( - )      | SEAL, INLET FILTER SCREEN                           |
| 11  | R 54253  | ( - )      | PISTON, REGULATING                                  |
| 12  | R 54237  | ( - )      | SPRING, REGULATING                                  |
| 13  | R 34623  | ( - )      | PLUG, END PLATE ADJUSTING                           |
| 14  | R 61119  | ( - )      | RING, RETAINING                                     |
| 15  | R 61118  | ( - )      | SCREEN, INLET FILTER                                |
| 16  | R 61120  | ( - )      | PLATE, TRANSFER PUMP PRESSURE                       |
| 17  | R 61123  | ( - )      | CAP, TRANSFER PUMP END                              |

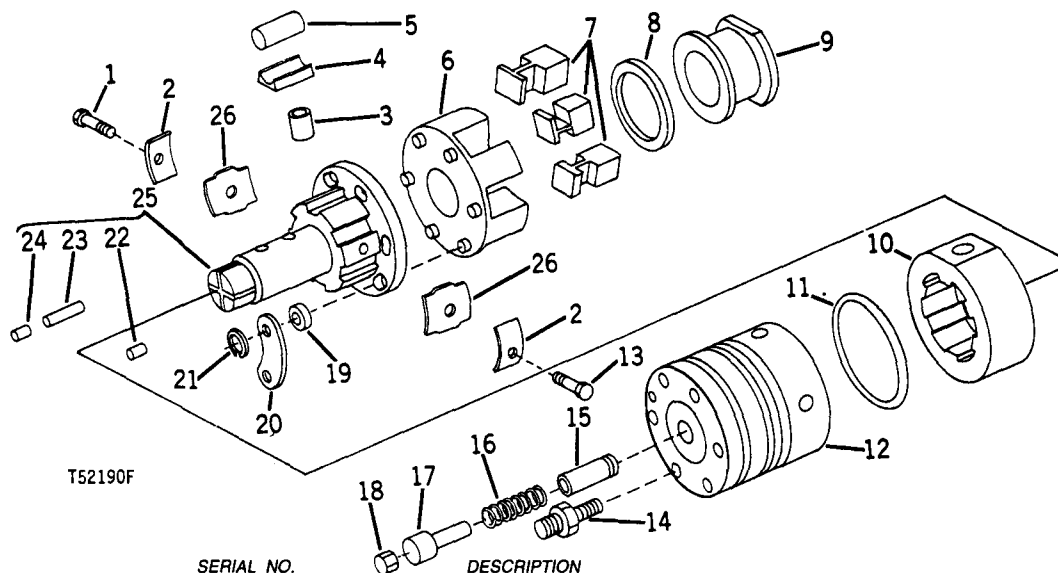
\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-3, 30-4, 30-5, 30-6 AND 30-7:

AR 63029 ( - ) KIT, GASKET OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP HYDRAULIC HEAD AND ROTOR GROUP**  
**(ROOSA-MASTER NO. DM4427MD2876)**  
**(WITH TURBOCHARGER)**  
**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T52190F



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 48509  | -          | SCREW, SPECIAL, LEAF SPRING ADJUSTING                 |
|     | R 48506  | -          | SCREW, SPECIAL, LEAF SPRING ADJUSTING (POLISHED HEAD) |
| 2   | R 58628  | -          | SUPPORT, LEAF SPRING (2 USED)                         |
| 3   | R 57800  | -          | PLUNGER, ROTOR (A) (2 USED) (15/32" (12 MM) LONG)     |
|     | R 62133  | -          | PLUNGER, ROTOR (A) (2 USED) (5/16" (8 MM) LONG)       |
|     | R 57801  | -          | PLUNGER, ROTOR (B) (2 USED) (15/32" (12 MM) LONG)     |
|     | R 62134  | -          | PLUNGER, ROTOR (B) (2 USED) (5/16" (8 MM) LONG)       |
|     | R 57802  | -          | PLUNGER, ROTOR (C) (2 USED) (15/32" (12 MM) LONG)     |
|     | R 62135  | -          | PLUNGER, ROTOR (C) (2 USED) (5/16" (8 MM) LONG)       |
|     | R 57803  | -          | PLUNGER, ROTOR (D) (2 USED) (15/32" (12 MM) LONG)     |
|     | R 62136  | -          | PLUNGER, ROTOR (D) (2 USED) (5/16" (8 MM) LONG)       |
| 4   | R 58630  | -          | SHOE, CAM ROLLER (4 USED)                             |
| 5   | T 11886  | -          | ROLLER, CAM (4 USED)                                  |
| 6   | AR 61993 | -          | RETAINER, GOVERNOR WEIGHT ASSEMBLY                    |
| 7   | R 54239  | -          | WEIGHT, GOVERNOR (6 USED)                             |
| 8   | R 54240  | -          | WASHER, GOVERNOR SLEEVE THRUST                        |
| 9   | R 65681  | -          | SLEEVE, GOVERNOR THRUST (SUB. FOR R54241)             |
| 10  | R 58629  | -          | CAM, RING   |
| 11  | T 11891  | *          | PACKING   |
| 12  | .....    | -          | HEAD ASSEMBLY (SUB. AR70460)                          |
| 13  | R 48506  | -          | SCREW, SPECIAL, LEAF SPRING ADJUSTING (POLISHED HEAD) |
|     | R 48509  | -          | SCREW, SPECIAL, LEAF SPRING ADJUSTING                 |
| 14  | R 57137  | -          | CONNECTOR, FUEL LINE (4 USED)                         |
| 15  | R 57798  | -          | VALVE, DELIVERY, STANDARD SIZE                        |
|     | R 58077  | -          | VALVE, DELIVERY, OVERSIZE                             |
| 16  | R 57799  | -          | SPRING, DELIVERY VALVE                                |
| 17  | R 57810  | -          | STOP, DELIVERY VALVE                                  |
| 18  | R 57809  | -          | SCREW, DELIVERY VALVE                                 |
| 19  | R 54249  | -          | CUSHION, GOVERNOR WEIGHT RETAINING (6 USED)           |
| 20  | R 54252  | -          | RETAINER, CUSHION (3 USED)                            |
| 21  | R 54242  | *          | RING, RETAINING (6 USED)                              |
| 22  | T 11926  | -          | SCREW, SET, SPECIAL                                   |
| 23  | R 54626  | -          | WIRE, VENT  |
| 24  | R 30725  | -          | SCREW   |
| 25  | AR 70460 | -          | HEAD, ROTOR, HYDRAULIC                                |
| 26  | R 61713  | -          | SPRING, LEAF (2 USED)                                 |

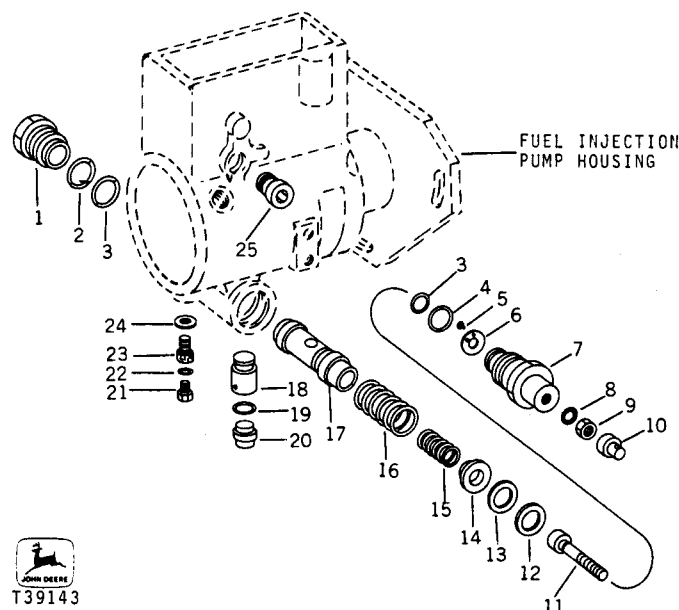
\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-2, 30-4, 30-5, 30-6 AND 30-7:

.. AR 63029 ( - ) KIT, GASKET OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP AUTOMATIC ADVANCE GROUP**  
**(ROOSA-MASTER NO. DM4427MD2876)**  
**(WITH TURBOCHARGER)**  
**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T39143



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                     |
|-----|----------|------------|---|
| 1   | R 40709  | -          | PLUG, PISTON HOLE                               |
| 2   | R 56396  | *          | SEAL, PISTON HOLE PLUG                          |
| 3   | T 15710  | *          | SEAL, PISTON HOLE PLUG (2 USED)                 |
| 4   | T 17135  | *          | SEAL, PISTON HOLE PLUG                          |
| 5   | R 54224  | -          | SCREW, REED VALVE (2 USED)                      |
| 6   | R 56484  | -          | VALVE, REED                                     |
| 7   | R 57812  | -          | PLUG, PISTON CONTROL                            |
| 8   | T 11915  | *          | O-RING, ADJUSTING SCREW                         |
| 9   | T 17122  | -          | NUT, SPECIAL                                    |
| 10  | T 17117  | -          | SCREW, SPECIAL ADJUSTING                        |
| 11  | T 17123  | -          | SCREW, SPECIAL ADJUSTING                        |
| 12  | R 49211  | -          | RING, PISTON                                    |
| 13  | R 34635  | *          | RING, PISTON                                    |
| 14  | T 17125  | -          | GUIDE, ADVANCE ADJUSTMENT                       |
| 15  | T 24415  | -          | SPRING, INNER ADVANCE (COLORED RED)             |
| 16  | R 49238  | -          | SPRING, OUTER ADVANCE (COLORED BLACK AND BROWN) |
| 17  | R 58631  | -          | PISTON, ADVANCE                                 |
| 18  | R 40703  | -          | PIN, ADVANCE                                    |
| 19  | T 15712  | *          | SEAL, ADVANCE                                   |
| 20  | R 40707  | -          | PLUG, ADVANCE                                   |
| 21  | R 54254  | -          | SCREW, SPECIAL                                  |
| 22  | T 17951  | *          | SEAL  |
| 23  | R 54251  | -          | SCREW, SPECIAL                                  |
| 24  | T 11899  | *          | SEAL, HEAD LOCATING SCREW                       |
| 25  | R 54627  | -          | SCREW, SPECIAL, THROTTLE STOP (2 USED)          |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-2, 30-3, 30-5, 30-6 AND 30-7:

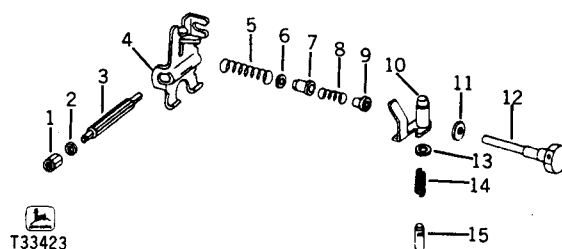
.. AR 63029 ( ) KIT, GASKET, OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP GOVERNOR GROUP**  
**(ROOSA-MASTER NO. DM4427MD2876)**  
**(WITH TURBOCHARGER)**

**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T33423



| KEY   | PART NO. | SERIAL NO. | DESCRIPTION                                |
|-------|----------|------------|--|
| 1 T   | 11932    | ( - )      | NUT, PIVOT, PIVOT SHAFT RETAINING (2 USED) |
| 2 R   | 34812    | ( - )      | O-RING (2 USED) (SUB. FOR T11906)          |
| 3 T   | 11925    | ( - )      | SHAFT, GOVERNOR ARM PIVOT                  |
| 4 R   | 54245    | ( - )      | ARM, GOVERNOR                              |
| 5 R   | 48536    | ( - )      | SPRING, GOVERNOR CONTROL                   |
| 6 T   | 17952    | ( - )      | SPACER, GOVERNOR SPRING                    |
| 7 T   | 11924    | ( - )      | RETAINER, SPRING                           |
| 8 T   | 11913    | ( - )      | SPRING, IDLER                              |
| 9 T   | 11914    | ( - )      | GUIDE, SPRING                              |
| 10 AR | 30736    | ( - )      | ARM, METERING VALVE                        |
| 11 T  | 11943    | ( - )      | WASHER, GUIDE STUD                         |
| 12 T  | 11923    | ( - )      | STUD, GUIDE                                |
| 13 R  | 30732    | ( - )      | WASHER, SPECIAL                            |
| 14 R  | 58422    | ( - )      | SPRING, METERING VALVE                     |
| 15 R  | 54238    | ( - )      | VALVE, METERING                            |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-2, 30-3, 30-4, 30-6 AND 30-7:

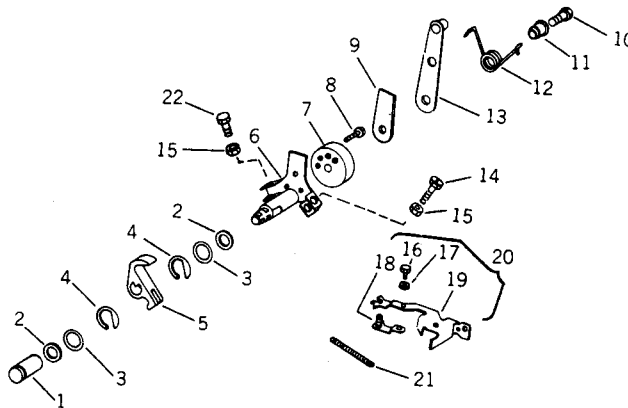
.. AR 63029 ( - ) KIT, GASKET OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

FUEL INJECTION PUMP LINKAGE GROUP  
(ROOSA-MASTER NO. DM4427MD2876)  
(WITH TURBOCHARGER)

CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR

T48922



T48922F

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                          |
|-----|----------|------------|--------------------------------------|
| 1   | R 48515  | ( - )      | SHAFT, SHUT-OFF                      |
| 2   | T 15720  | ( * )      | WASHER, FELT (2 USED)                |
| 3   | T 11915  | ( * )      | PACKING (2 USED)                     |
| 4   | T 11929  | ( - )      | CLIP, SHAFT RETAINER (2 USED)        |
| 5   | T 11927  | ( - )      | LEVER, THROTTLE SHAFT                |
| 6   | AR 51717 | ( - )      | SHAFT, THROTTLE                      |
| 7   | T 19861  | ( - )      | SPACER, ARM THROTTLE LEVER ADJUSTING |
| 8   | T 11917  | ( - )      | SCREW, SPECIAL (2 USED)              |
| 9   | T 19860  | ( - )      | ARM, THROTTLE ADJUSTING              |
| 10  | T 19859  | ( - )      | SCREW, SOCKET HEAD                   |
| 11  | T 17950  | ( - )      | RETAINER, THROTTLE LEVER SPRING      |
| 12  | T 17949  | ( - )      | SPRING, THROTTLE LEVER               |
| 13  | T 19858  | ( - )      | LEVER, THROTTLE                      |
| 14  | T 11920  | ( - )      | SCREW, HIGH IDLE ADJUSTING           |
| 15  | T 19862  | ( - )      | NUT, SPECIAL (2 USED)                |
| 16  | R 30718  | ( - )      | SCREW, SPECIAL                       |
| 17  | R 30719  | ( - )      | WASHER, SPECIAL LOCK                 |
| 18  | AR 28602 | ( - )      | LINK, GOVERNOR HOOK ADJUSTING        |
| 19  | R 48516  | ( - )      | HOOK                                 |
| 20  | AR 51719 | ( - )      | HOOK ASSEMBLY, GOVERNOR LINKAGE      |
| 21  | T 11911  | ( - )      | SPRING, GOVERNOR LINKAGE             |
| 22  | T 11941  | ( - )      | SCREW, LOW IDLE ADJUSTING            |

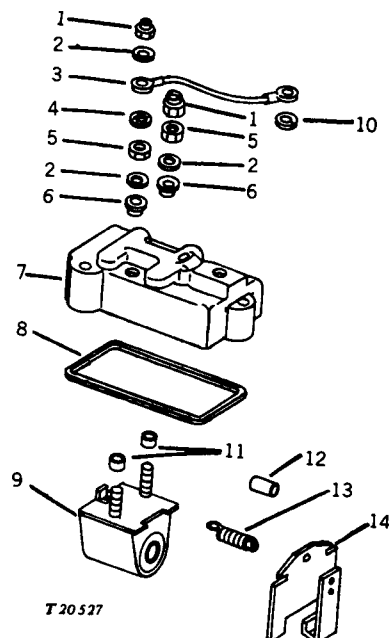
\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-2, 30-3, 30-4, 30-5 AND 30-7:

AR 63029 ( - ) KIT, GASKET, OVERHAUL

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP ELECTRIC SHUT-OFF GROUP**  
**(ROOSA-MASTER NO. DM4427MD2876)**  
**(WITH TURBOCHARGER)**  
**CODE 1602 FUEL INJECTION SYSTEM, REGULAR GOVERNOR**

T20527



| KEY | PART NO. | SERIAL NO.  | DESCRIPTION                       |
|-----|----------|-------------|-----------------------------------|
| 1   | T 19977  | † ( - )     | NUT, LOCK (2 USED)                |
| 2   | R 47049  | † ( - )     | WASHER, TERMINAL CONTACT (3 USED) |
| 3   | AR 49542 | ( - XXXXX ) | WIRE ASSEMBLY                     |
| 4   | R 66593  | ( XXXXX - ) | STRAP, GROUNDING                  |
| 5   | R 47077  | ( - )       | WASHER, SPECIAL                   |
| 6   | T 11938  | † ( - )     | NUT, SPECIAL (2 USED)             |
| 7   | T 11936  | † ( - )     | WASHER, INSULATING (2 USED)       |
| 8   | R 37139  | † ( - )     | COVER, GOVERNOR HOUSING           |
| 9   | T 11918  | *† ( - )    | PACKING                           |
| 10  | AR 48219 | † ( - )     | SOLENOID ASSEMBLY                 |
| 11  | 12H 295  | ( - )       | WASHER, LOCK, NO. 10              |
| 12  | T 11937  | † ( - )     | TUBE, COVER INSULATING (2 USED)   |
| 13  | R 48795  | † ( - )     | TUBE, SHUT-DOWN ARM SPRING        |
| 14  | T 11935  | † ( - )     | SPRING, SHUT-OFF ARM              |
| 15  | AR 73613 | † ( - )     | ARM, SHUT-OFF                     |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-1, 30-2, 30-3, 30-4, 30-5 AND 30-6:

.. AR 63029 ( - ) KIT, OVERHAUL GASKET

†ASSEMBLY LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY A DAGGER SIGN:

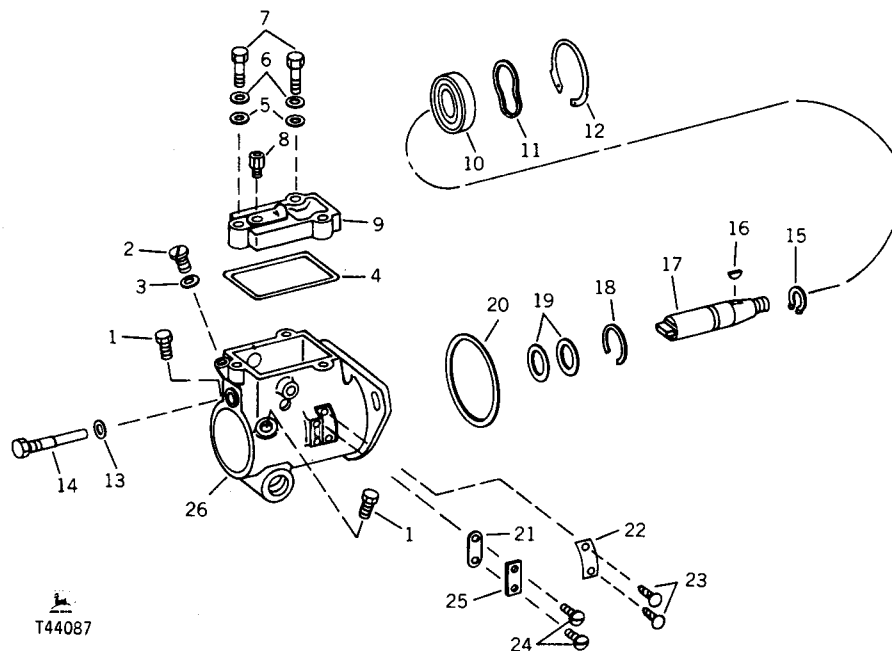
.. AR 84252 ( - ) COVER, GOVERNOR HOUSING, WITH ELECTRIC SHUT-OFF

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP HOUSING AND DRIVE**  
**(ROOSA-MASTER NO. DM4427HB2915)**  
**(WITH TURBOCHARGER)**

**CODE 1603 FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR**

T44087



T44087

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                   |
|-----|----------|------------|---|
| 1   | R 30714  | ( - )      | SCREW, SPECIAL, CAP (2 USED)                  |
| 2   | T 11930  | ( - )      | SCREW, SPECIAL, TORQUE HOLE                   |
| 3   | T 11878  | ( - )      | WASHER, SPECIAL                               |
| 4   | T 11918  | ( - )      | PACKING, GOVERNOR HOUSING COVER               |
| 5   | T 15715  | ( - )      | WASHER, SPECIAL (3 USED)                      |
| 6   | 12H 295  | ( - )      | WASHER, LOCK, INTERNAL-TOOTH, NO. 10 (3 USED) |
| 7   | T 15721  | ( - )      | SCREW, SPECIAL (3 USED)                       |
| 8   | R 36535  | ( - )      | CONNECTOR, WITH CHECK VALVE                   |
| 9   | T 11919  | ( - )      | COVER, GOVERNOR HOUSING                       |
| 10  | AR 69427 | ( - )      | BEARING, BALL                                 |
| 11  | R 54235  | ( - )      | WASHER, DRIVE SHAFT SPRING                    |
| 12  | R 54230  | ( - )      | RING, RETAINER                                |
| 13  | T 11943  | ( - )      | WASHER, GUIDE STUD                            |
| 14  | T 11923  | ( - )      | STUD, GUIDE                                   |
| 15  | R 57796  | ( - )      | RING, RETAINING                               |
| 16  | R 56424  | ( - )      | KEY   |
| 17  | R 57797  | ( - )      | SHAFT, DRIVE                                  |
| 18  | R 54225  | ( - )      | RING, SEAL RETAINING                          |
| 19  | AR 72052 | ( - )      | SEAL, DRIVE SHAFT (2 USED)                    |
| 20  | R 54229  | ( - )      | SEAL, PUMP FLANGE                             |
| 21  | T 11883  | ( - )      | GASKET, TIMING WINDOW COVER                   |
| 22  | T 11875  | ( - )      | PLATE, NAME                                   |
| 23  | T 11876  | ( - )      | SCREW, DRIVE (2 USED)                         |
| 24  | R 54260  | ( - )      | SCREW, TIMING WINDOW COVER (2 USED)           |
| 25  | T 11882  | ( - )      | COVER, TIMING WINDOW                          |
| 26  | AR 69428 | ( - )      | HOUSING, PUMP                                 |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-9, 30-10, 30-11, 30-12, 30-13 AND 30-14:

AR 63029 ( - ) KIT, OVERHAUL GASKET

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

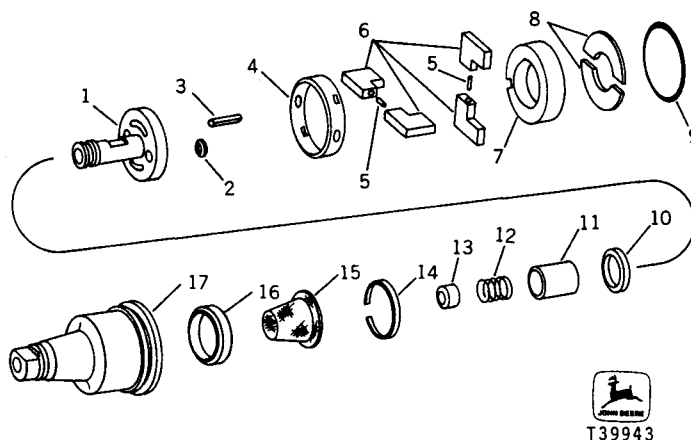


**FUEL INJECTION PUMP TRANSFER GROUP**  
**(ROOSA-MASTER NO. DM4427HB2915)**  
**(WITH TURBOCHARGER)**

CODE 1603

FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR

T39943



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | AR 61995 | -          | REGULATOR, TRANSFER PUMP                            |
| 2   | R 54231  | -          | SEAL, REGULATING PISTON                             |
| 3   | R 54226  | -          | PIN, SPRING   |
| 4   | R 61122  | -          | RING, LINER LOCATING                                |
| 5   | R 34630  | -          | SPRING, TRANSFER PUMP BLADE (2 USED)                |
| 6   | AR 73828 | -          | BLADE, TRANSFER PUMP, WITH SPRING STANDARD (4 USED) |
| 7   | AR 73829 | -          | BLADE, TRANSFER PUMP, WITH SPRING OVERSIZE (4 USED) |
| 8   | R 54244  | -          | LINER, TRANSFER PUMP                                |
| 9   | R 61121  | -          | RETAINER, ROTOR (2 USED)                            |
| 10  | R 61124  | -          | O-RING  |
| 11  | R 54222  | -          | SEAL, INLET FILTER SCREEN                           |
| 12  | R 54253  | -          | PISTON, REGULATING                                  |
| 13  | R 54237  | -          | SPRING, REGULATING                                  |
| 14  | R 34623  | -          | PLUG, END PLATE ADJUSTING                           |
| 15  | R 61119  | -          | RING, RETAINING                                     |
| 16  | R 61118  | -          | SCREEN, INLET FILTER                                |
| 17  | R 61120  | -          | PLATE, TRANSFER PUMP PRESSURE                       |
|     | R 61123  | -          | CAP, TRANSFER PUMP END                              |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-10, 30-11, 30-12, 30-13 AND 30-14:

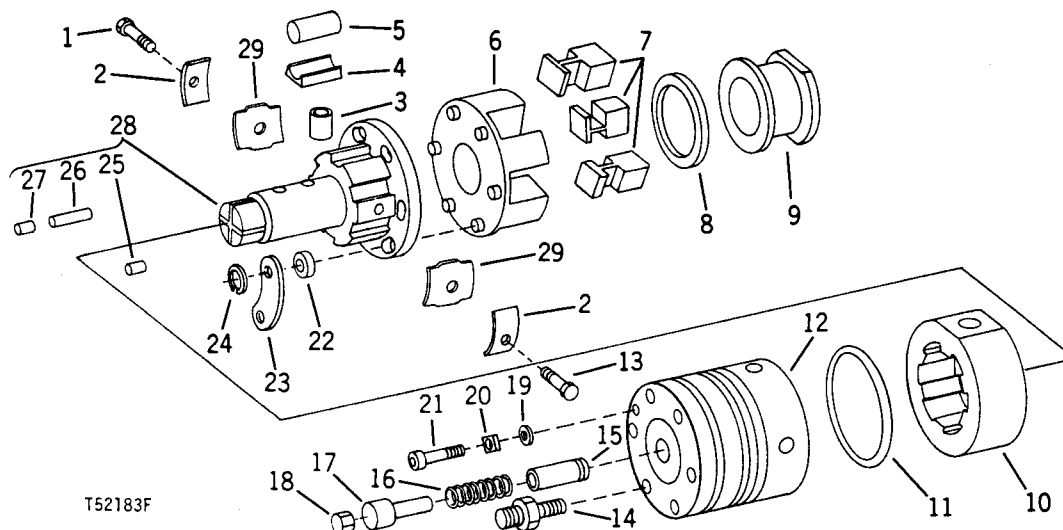
AR 63029 ( ) KIT, OVERHAUL GASKET

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP HEAD AND ROTOR GROUP**  
**(ROOSA-MASTER NO. DM4427HB2915)**  
**(WITH TURBOCHARGER)**  
**FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR**

CODE 1603

T52183F



| KEY | PART NO. | SERIAL NO. | DESCRIPTION   |
|-----|----------|------------|---|
| 1   | R 48509  | ( - )      | SCREW, SPECIAL, LEAF SPRING ADJUSTING                 |
|     | R 48506  | ( - )      | SCREW, SPECIAL, LEAF SPRING ADJUSTING (POLISHED HEAD) |
| 2   | R 58628  | ( - )      | SUPPORT, LEAF SPRING (2 USED)                         |
| 3   | R 57800  | ( - )      | PLUNGER, ROTOR (A) (2 USED) (LONG)                    |
|     | R 57801  | ( - )      | PLUNGER, ROTOR (B) (2 USED) (LONG)                    |
|     | R 57802  | ( - )      | PLUNGER, ROTOR (C) (2 USED) (LONG)                    |
|     | R 57803  | ( - )      | PLUNGER, ROTOR (D) (2 USED) (LONG)                    |
|     | R 57804  | ( - )      | PLUNGER, ROTOR (A) (2 USED) (SHORT)                   |
|     | R 57805  | ( - )      | PLUNGER, ROTOR (B) (2 USED) (SHORT)                   |
|     | R 57806  | ( - )      | PLUNGER, ROTOR (C) (2 USED) (SHORT)                   |
|     | R 57807  | ( - )      | PLUNGER, ROTOR (D) (2 USED) (SHORT)                   |
| 4   | R 58630  | ( - )      | SHOE, CAM ROLLER (4 USED)                             |
| 5   | T 11886  | ( - )      | ROLLER, CAM (4 USED)                                  |
| 6   | AR 61993 | ( - )      | RETAINER, GOVERNOR WEIGHT ASSEMBLY                    |
| 7   | R 54239  | ( - )      | WEIGHT, GOVERNOR (6 USED)                             |
| 8   | R 54240  | ( - )      | WASHER, GOVERNOR SLEEVE THRUST                        |
| 9   | R 65681  | ( - )      | SLEEVE, GOVERNOR THRUST (SUB. FOR R54241)             |
| 10  | R 58629  | ( - )      | CAM, RING   |
| 11  | T 11891  | ( - )      | PACKING   |
| 12  | ...      | ( - )      | HEAD ASSEMBLY (SUB. AR70460)                          |
| 13  | R 48506  | ( - )      | SCREW, SPECIAL, LEAF SPRING ADJUSTING (POLISHED HEAD) |
|     | R 48509  | ( - )      | SCREW, SPECIAL, LEAF SPRING ADJUSTING                 |
| 14  | R 57137  | ( - )      | CONNECTOR, FUEL LINE                                  |
| 15  | R 57798  | ( - )      | VALVE, DELIVERY                                       |
| 16  | R 57799  | ( - )      | SPRING, DELIVERY VALVE                                |
| 17  | R 57810  | ( - )      | STOP, DELIVERY VALVE                                  |
| 18  | R 57809  | ( - )      | SCREW, DELIVERY VALVE                                 |
| 19  | R 54628  | ( - )      | WASHER, SPECIAL, LOCKING PLATE                        |
| 20  | R 54259  | ( - )      | PLATE, LOCKING  |
| 21  | R 54261  | ( - )      | SCREW, LOCKING PLATE                                  |
| 22  | R 54249  | ( - )      | CUSHION, GOVERNOR WEIGHT RETAINING (6 USED)           |
| 23  | R 54252  | ( - )      | RETAINER, CUSHION (3 USED)                            |
| 24  | R 54242  | ( - )      | RING, RETAINING (6 USED)                              |
| 25  | T 11926  | ( - )      | SCREW, SET, SPECIAL                                   |
| 26  | R 54626  | ( - )      | WIRE, VENT  |
| 27  | R 30725  | ( - )      | SCREW   |
| 28  | AR 70460 | ( - )      | HEAD, ROTOR, HYDRAULIC                                |
| 29  | R 61713  | ( - )      | SPRING, LEAF (2 USED)                                 |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-9, 30-11, 30-12, 30-13 AND 30-14:

AR 63029 ( - ) KIT, OVERHAUL GASKET

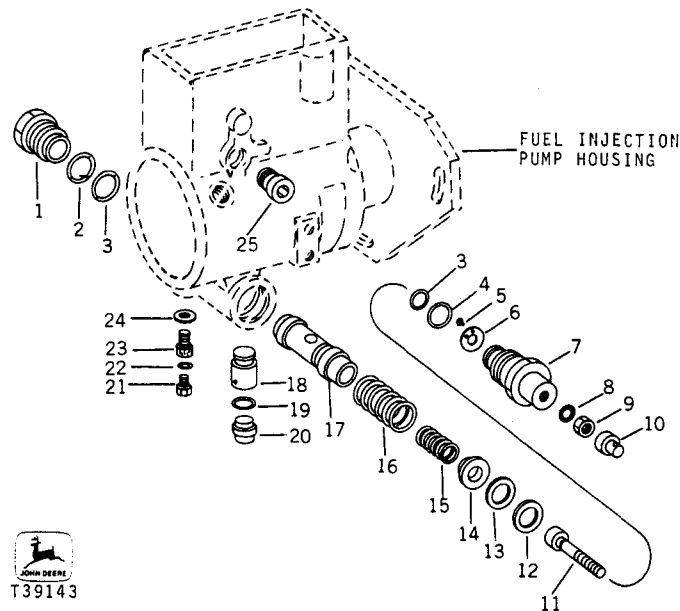
NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP AUTOMATIC ADVANCE GROUP  
(ROOSA-MASTER NO. DM4427HB2915)  
(WITH TURBOCHARGER)**

CODE 1603

FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR

T39143



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                                    |
|-----|----------|------------|--|
| 1   | R 40709  | -          | PLUG, PISTON HOLE                              |
| 2   | R 56396  | *          | SEAL, PISTON HOLE PLUG                         |
| 3   | T 15710  | *          | SEAL, PISTON HOLE PLUG (2 USED)                |
| 4   | T 17135  | *          | SEAL, PISTON HOLE PLUG                         |
| 5   | R 54224  | -          | SCREW, REED VALVE (2 USED)                     |
| 6   | R 56484  | -          | VALVE, REED                                    |
| 7   | R 57812  | -          | PLUG, PISTON CONTROL                           |
| 8   | T 11915  | *          | O-RING, ADJUSTING SCREW                        |
| 9   | T 17122  | -          | NUT, SPECIAL                                   |
| 10  | T 17117  | -          | SCREW, SPECIAL ADJUSTING                       |
| 11  | T 17123  | -          | SCREW, SPECIAL ADJUSTING                       |
| 12  | R 49211  | -          | RING, PISTON                                   |
| 13  | R 34635  | *          | RING, PISTON                                   |
| 14  | T 17125  | -          | GUIDE, ADVANCE ADJUSTMENT                      |
| 15  | R 57814  | -          | SPRING, INNER ADVANCE (COLORED GREEN)          |
| 16  | R 57813  | -          | SPRING, OUTER ADVANCE (COLORED BLUE AND WHITE) |
| 17  | R 60715  | -          | PISTON, ADVANCE                                |
| 18  | R 40703  | -          | PIN, ADVANCE                                   |
| 19  | T 15712  | *          | SEAL, ADVANCE                                  |
| 20  | R 40707  | -          | PLUG, ADVANCE                                  |
| 21  | R 54254  | -          | SCREW, SPECIAL                                 |
| 22  | T 17951  | *          | SEAL   |
| 23  | R 54251  | -          | SCREW, SPECIAL                                 |
| 24  | T 11899  | *          | SEAL, HEAD LOCATING SCREW                      |
| 25  | R 54627  | -          | SCREW, SPECIAL, THROTTLE STOP                  |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-9,

30-10, 30-12, 30-13 AND 30-14:

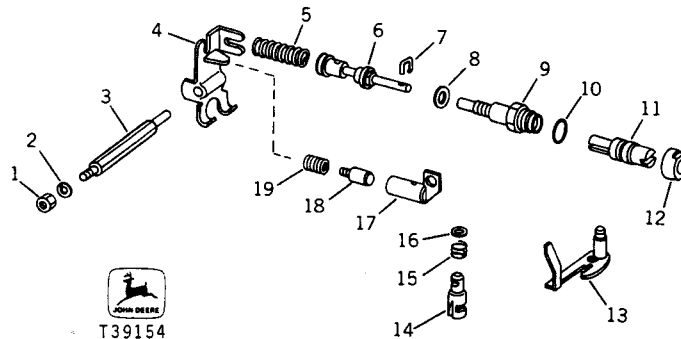
AR 63029 ( ) KIT, OVERHAUL GASKET

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP GOVERNOR  
(ROOSA-MASTER NO. DM4427HB2915)  
(WITH TURBOCHARGER)**

**CODE 1603 FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR**

T39154



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                              |
|-----|----------|------------|--|
| 1   | T 11932  | -          | NUT, SPECIAL (2 USED)                    |
| 2   | R 34812  | *          | O-RING (2 USED) (SUB. FOR T11906)        |
| 3   | T 11925  | -          | SHAFT, GOVERNOR ARM PIVOT                |
| 4   | AR 73609 | -XXXXX     | ARM, GOVERNOR                            |
| 5   | AR 80910 | XXXXX-     | ARM, GOVERNOR                            |
| 6   | R 60710  | -          | SPRING                                   |
| 7   | AR 73607 | -          | ROD, CONTROL ASSEMBLY                    |
| 8   | R 57871  | -          | PIN                                      |
| 9   | T 11943  | *          | WASHER, SPECIAL                          |
| 10  | R 60711  | -          | GUIDE, CONTROL ROD                       |
| 11  | T 26256  | -          | PACKING                                  |
| 12  | AR 73608 | -          | CAP, ADJUSTING                           |
| 13  | R 60713  | -          | CAP, LOCKING                             |
| 14  | AR 30736 | -          | ARM, METERING VALVE                      |
| 15  | R 60714  | -          | VALVE, METERING                          |
| 16  | R 58422  | -          | SPRING, METERING VALVE (SUB. FOR T11907) |
| 17  | R 30732  | -          | WASHER, SPECIAL                          |
| 18  | AR 73611 | -          | BARREL, DAMPER                           |
| 19  | AR 73610 | -          | PISTON                                   |
| 19  | R 60712  | -XXXXX     | SPRING                                   |
| 19  | R 64567  | XXXXX-     | SPRING                                   |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-9, 30-10, 30-11, 30-13 AND 30-14:

AR 63029 ( ) KIT, OVERHAUL GASKET

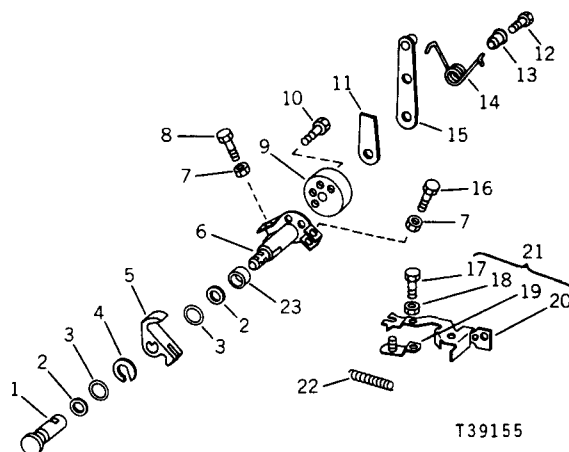
NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

**FUEL INJECTION PUMP LINKAGE GROUP**  
**(ROOSA-MASTER NO. DM4427HB2915)**  
**(WITH TURBOCHARGER)**

CODE 1603

FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR

T39155



T39155

| KEY | PART NO. | SERIAL NO. | DESCRIPTION                          |
|-----|----------|------------|--------------------------------------|
| 1   | R 59079  | ( - )      | SHAFT, SHUT-OFF                      |
| 2   | T 15720  | ( - )      | WASHER, FELT (2 USED)                |
| 3   | T 11915  | ( - )      | PACKING (2 USED)                     |
| 4   | T 11929  | ( - )      | CLIP, SHAFT RETAINER                 |
| 5   | T 11927  | ( - )      | LEVER, THROTTLE SHAFT                |
| 6   | AR 71186 | ( - )      | SHAFT, THROTTLE                      |
| 7   | T 11921  | ( - )      | NUT, SPECIAL (2 USED)                |
| 8   | T 11941  | ( - )      | SCREW, SPECIAL, LOW IDLE ADJUSTMENT  |
| 9   | T 19861  | ( - )      | SPACER, ARM THROTTLE LEVER ADJUSTING |
| 10  | T 11917  | ( - )      | SCREW, SPECIAL (2 USED)              |
| 11  | T 19860  | ( - )      | ARM, THROTTLE ADJUSTING              |
| 12  | T 19859  | ( - )      | SCREW, SOCKET HEAD                   |
| 13  | T 17950  | ( - )      | RETAINER, THROTTLE LEVER SPRING      |
| 14  | T 17949  | ( - )      | SPRING, THROTTLE LEVER               |
| 15  | AR 46843 | ( - )      | LEVER, THROTTLE                      |
| 16  | T 11920  | ( - )      | SCREW, HIGH IDLE ADJUSTING           |
| 17  | R 30718  | ( - )      | SCREW, SPECIAL                       |
| 18  | R 30719  | ( - )      | WASHER, SPECIAL LOCK                 |
| 19  | AR 28602 | ( - )      | LINK, GOVERNOR HOOK ADJUSTING        |
| 20  | R 48516  | ( - )      | HOOK                                 |
| 21  | AR 51719 | ( - )      | HOOK ASSEMBLY, GOVERNOR LINKAGE      |
| 22  | T 11911  | ( - )      | SPRING                               |
| 23  | R 60716  | ( - )      | SPACER                               |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-9, 30-10, 30-11, 30-12 AND 30-14:

AR 63029 ( - ) KIT, OVERHAUL GASKET

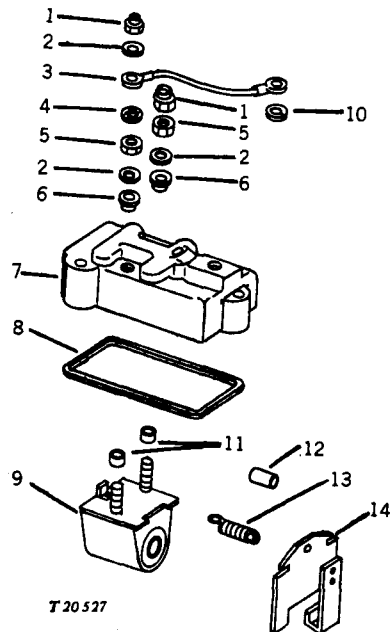
NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5:

FUEL INJECTION PUMP ELECTRIC SHUT-OFF GROUP  
(ROOSA-MASTER NO. DM4427HB2915)  
(WITH TURBOCHARGER)

CODE 1603

FUEL INJECTION SYSTEM, 3 PERCENT - 5 PERCENT GOVERNOR

T20527



| KEY | PART NO. | SERIAL NO. | DESCRIPTION                       |
|-----|----------|------------|-----------------------------------|
| 1   | T 19977  | -          | NUT, LOCK (2 USED)                |
| 2   | R 47049  | -          | WASHER, TERMINAL CONTACT (3 USED) |
| 3   | AR 49542 | -XXXXX     | WIRE ASSEMBLY                     |
| 4   | R 66593  | XXXXX-     | STRAP, GROUNDING                  |
| 5   | R 47077  | -          | WASHER, SPECIAL                   |
| 6   | T 11938  | -          | NUT, SPECIAL (2 USED)             |
| 7   | T 11936  | -          | WASHER, INSULATING (2 USED)       |
| 8   | T 11919  | -          | COVER, GOVERNOR HOUSING           |
| 9   | T 11918  | -          | PACKING                           |
| 10  | AR 48219 | -          | SOLENOID ASSEMBLY                 |
| 11  | 12H 295  | -          | WASHER, LOCK, NO. 10              |
| 12  | T 11937  | -          | TUBE, COVER INSULATING            |
| 13  | R 48795  | -          | TUBE, SHUT-DOWN ARM SPRING        |
| 14  | T 11935  | -          | SPRING, SHUT-OFF ARM              |
| 15  | AR 73613 | -          | ARM, SHUT-OFF                     |

\*KIT LISTED BELOW CONTAINS ALL PARTS FOLLOWED BY AN ASTERISK ON THIS PAGE AND PAGES 30-8, 30-9, 30-10, 30-11, 30-12 AND 30-13:

AR 63029 ( ) KIT, OVERHAUL GASKET

NOTE: FOR FUEL INJECTION PUMP COMPLETE, SEE PAGE 25-5: