



**Count on it.**

Form No. 3393-643 Rev C

# Parts Catalog

## 320-D Compact Utility Loader

Model No. 22337CP—Serial No. 315000001 and Up



# Ordering Replacement Parts

To order replacement parts, please supply the part number, the quantity, and the description of each part desired.

## Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

## Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form a:b. The a represents the reference number of the entire service assembly and the b represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number 6, the tire by 6:1, the valve by 6:2, and the wheel by 6:3. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually. Reference numbers of this type appear in illustration and in parts lists.

## Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form nX y. The n represents the quantity of the part, the X is the multiplication symbol, and the y represents the reference number.

For example, in an illustration, the reference number 2X 37 means that two of the parts identified by reference number 37 are indicated.

# Contents

|                                                          |    |
|----------------------------------------------------------|----|
| Frame Assembly . . . . .                                 | 6  |
| Hood and Cover Assembly . . . . .                        | 8  |
| Rear Cover and Thigh Support Assembly . . . . .          | 10 |
| Wheel and Motor Assembly . . . . .                       | 12 |
| Hydraulic Motor Assembly No. 99-3052 . . . . .           | 14 |
| Parking Brake Assembly . . . . .                         | 16 |
| Engine, Muffler and Pump Assembly . . . . .              | 18 |
| Tandem Hydraulic Pump Assembly No. 98-4702 . . . . .     | 20 |
| Engine Mount Assembly . . . . .                          | 22 |
| Fuel Tank and Air Filter Assembly . . . . .              | 24 |
| Air Cleaner Assembly No. 117-9989 . . . . .              | 26 |
| Radiator and Fan Assembly . . . . .                      | 28 |
| Loader Arm and Quick-Attach Assembly . . . . .           | 30 |
| Lever Lock Assembly No. 108-4702 . . . . .               | 32 |
| Battery Mount Assembly . . . . .                         | 34 |
| Switch, Hour Meter and Wire Harness Assembly . . . . .   | 36 |
| Cylinder Lock and Hydraulic Assembly . . . . .           | 38 |
| Auxiliary Control Lever Assembly . . . . .               | 40 |
| Selector Valve and Auxiliary Valve Assembly . . . . .    | 42 |
| Auxiliary Hydraulic Valve Assembly No. 99-3077 . . . . . | 44 |
| Hydraulic Valve Assembly No. 104-4221 . . . . .          | 46 |
| Hydraulic Selector Valve Assembly No. 99-3072 . . . . .  | 48 |
| Four Spool Valve Assembly . . . . .                      | 50 |
| Four Spool Valve Assembly No. 130-7589 . . . . .         | 52 |
| Hydraulic Motor Assembly . . . . .                       | 54 |
| Counterbalance Valve Assembly No. 99-3040 . . . . .      | 56 |
| Hydraulic Cylinder and Pivot Pin Assembly . . . . .      | 58 |
| Hydraulic Cylinder Assembly No. 117-1834 . . . . .       | 60 |
| Crankcase Assembly . . . . .                             | 62 |
| Oil Pan and Oil Pump Assembly . . . . .                  | 63 |
| Cylinder Head Assembly . . . . .                         | 64 |
| Gear Case and Oil Filter Cartridge Assembly . . . . .    | 65 |
| Cylinder Head Cover Assembly . . . . .                   | 66 |
| Dipstick and Guide Assembly . . . . .                    | 67 |
| Main Bearing Case Assembly . . . . .                     | 68 |
| Camshaft and Idle Gear Shaft Assembly . . . . .          | 69 |
| Piston and Crankshaft Assembly . . . . .                 | 70 |
| Flywheel Assembly . . . . .                              | 71 |
| Fuel Camshaft Assembly . . . . .                         | 72 |
| Idle Apparatus Assembly . . . . .                        | 73 |
| Injection Pump Assembly . . . . .                        | 74 |
| Stop Solenoid and Speed Control Plate Assembly . . . . . | 75 |
| Nozzle Holder Assembly . . . . .                         | 76 |
| Nozzle Holder and Glow Plug Assembly . . . . .           | 78 |
| Fork Lever (Governor) Assembly . . . . .                 | 79 |
| Fuel Pump (Mechanical) Assembly . . . . .                | 80 |
| Alternator and Pulley Assembly . . . . .                 | 81 |
| Alternator Assembly No. 131-0561 . . . . .               | 82 |
| Starter Installation Assembly . . . . .                  | 83 |
| Starter Component Assembly No. 100-2179 . . . . .        | 84 |
| Water Flange and Thermostat Assembly . . . . .           | 85 |
| Water Pump and Water Pipe Assembly . . . . .             | 86 |
| Valve and Rocker Arm Assembly . . . . .                  | 87 |
| Inlet and Exhaust Manifold Assembly . . . . .            | 88 |

Contents (continued)

Miscellaneous Engine Parts ..... 89

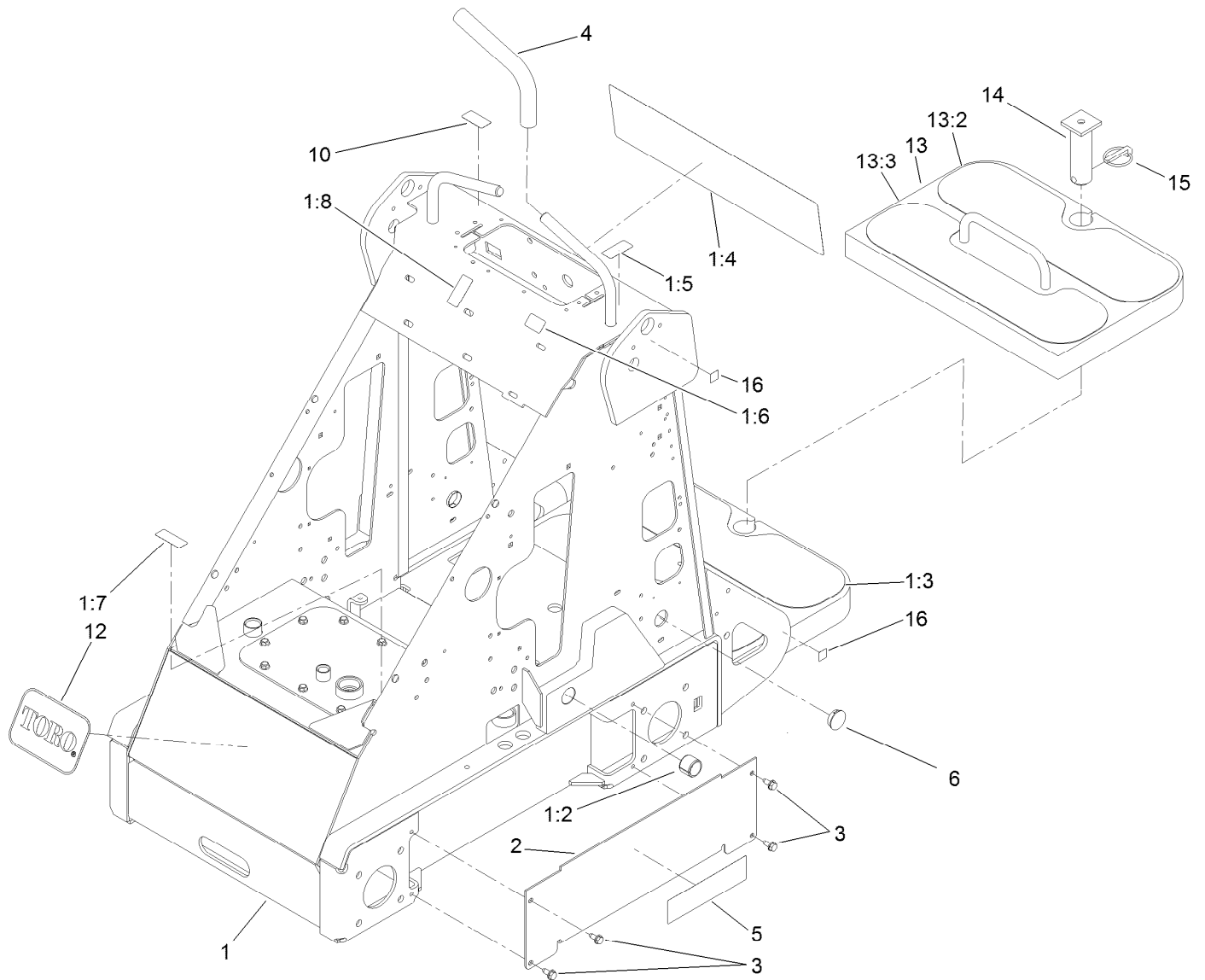
Upper Engine Gasket Kit. .... 90

Lower Engine Gasket Kit. .... 91

Attachments and Accessories ..... 92



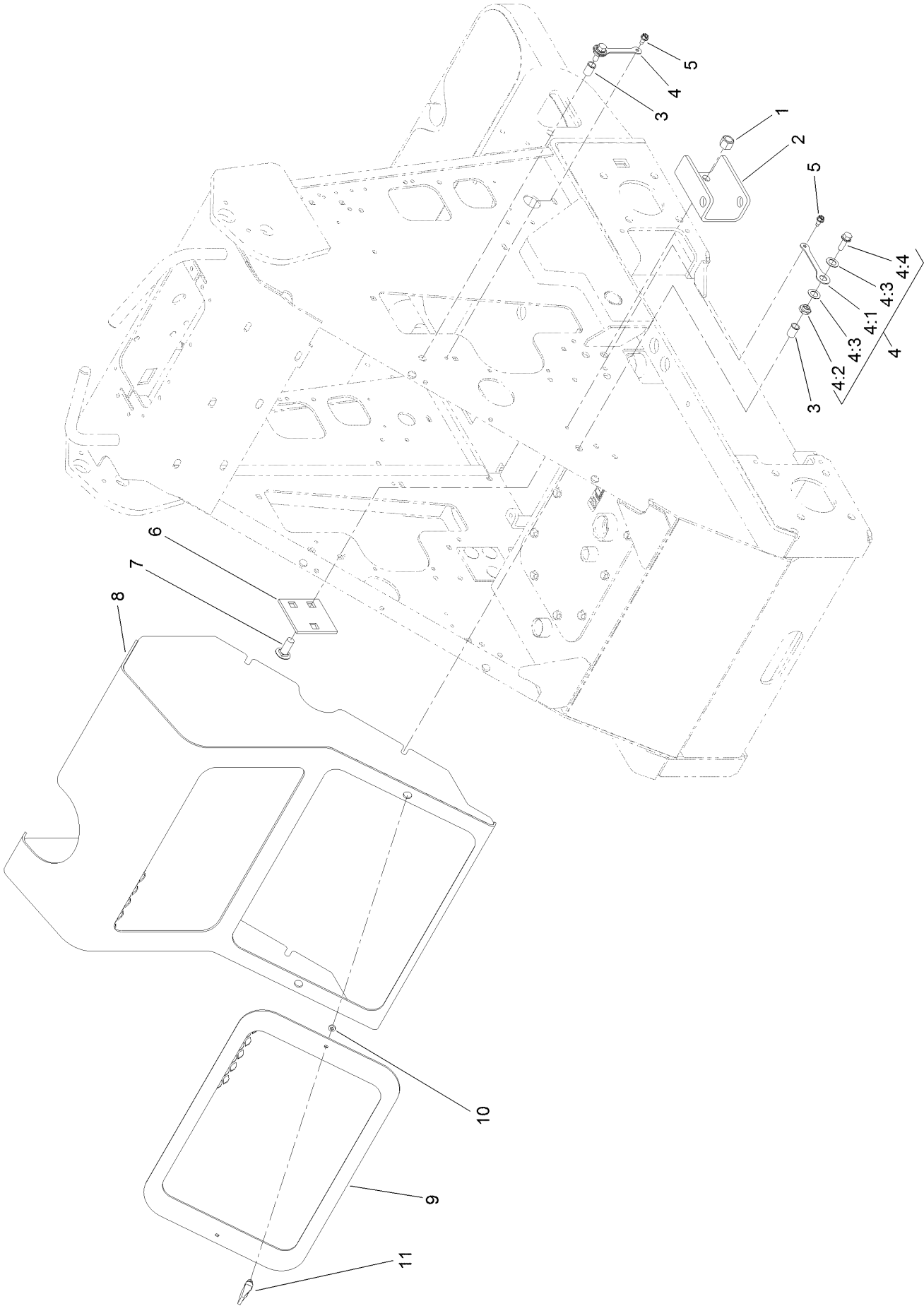
# Frame Assembly



## Frame Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|-----------------------|
| 1           | 114-1753           | 1           | Frame ASM               | 5           | 105-8429           | 2           | Decal                 |
| 1:2         | 98-4871            | 2           | Bushing-Tension         | 6           | 94-1402            | 2           | Plug-Hole             |
| 1:3         | 98-9947            | 2           | Tread-Foot              | 10          | 98-4387            | 1           | Decal-Protection, Ear |
| 1:4         | 108-9733           | 1           | Decal-Control Panel, CE | 12          | 62-5550            | 1           | Decal                 |
| 1:5         | 98-8219            | 1           | Decal-Throttle          | 13          | 112-4947           | 1           | Counterweight ASM     |
| 1:6         | 100-1703           | 1           | Decal-Limiter, Speed    | 13:2        | 98-9947            | 1           | Tread-Foot            |
| 1:7         | 93-6686            | 1           | Decal-Oil, HYD          | 13:3        | 112-4948           | 1           | Tread                 |
| 1:8         | 98-8235            | 1           | Decal-Selector          | 14          | 99-8638            | 1           | Pin                   |
| 2           | 106-8178-01        | 2           | Cover-Hose              | 15          | 99-9978            | 1           | Pin-Lynch             |
| 3           | 32144-70           | 8           | Screw-HWHTF             | 16          | 93-9084            | 4           | Decal-Point, Lift     |
| 4           | 98-4845            | 2           | Grip-Cushion            |             |                    |             |                       |

# Hood and Cover Assembly

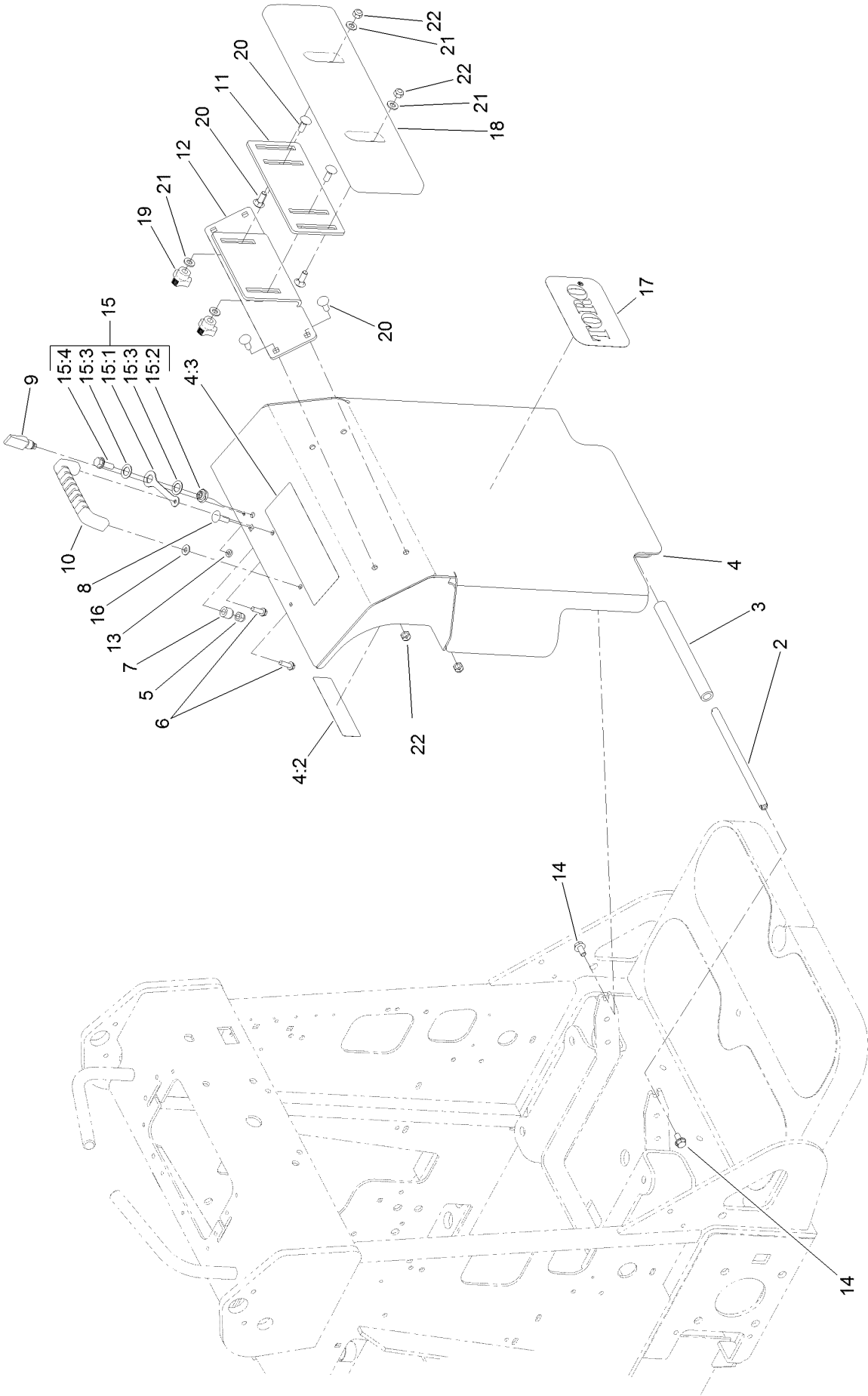




## Hood and Cover Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| 1           | 3296-23            | 6           | Nut-Lock, NI       | 5           | 32104-17           | 4           | Screw-HWH              |
| 2           | 100-4122-01        | 2           | Bracket-Anchor     | 6           | 100-4116-01        | 2           | Plate-Anchor           |
| 3           | 32148-8            | 4           | Nut-Clinch         | 7           | 3233-26            | 6           | Screw-CARR, Short Neck |
| 4           | 117-1762           | 4           | Lanyard ASM        | 8           | 99-3120-03         | 1           | Hood                   |
| 4:1         | 117-8339           | 1           | Lanyard-3 Inch     | 9           | 99-3118-03         | 1           | Cover                  |
| 4:2         | 117-1764           | 1           | Nut-Shoulder       | 10          | 99-3058            | 2           | Washer                 |
| 4:3         | 98-1629            | 2           | Washer             | 11          | 74-5950            | 2           | Latch-Swell            |
| 4:4         | 3234-29            | 1           | Screw-HHF          |             |                    |             |                        |

# Rear Cover and Thigh Support Assembly



## Rear Cover and Thigh Support Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|------------------------|
| 2           | 99-3083            | 1           | Bar-Hinge              |
| 3           | 99-3085            | 1           | Hose-Hinge             |
| 4           | 114-1755           | 1           | Cover ASM              |
| 4:2         | 93-7814            | 1           | Decal-Danger           |
| 4:3         | 100-1701           | 1           | Decal-Danger           |
| 5           | 32111-8            | 1           | Nut-Acorn              |
| 6           | 46-8091            | 2           | Screw-HWH              |
| 7           | 99-3035            | 1           | Spacer-Guide           |
| 8           | 3230-22            | 1           | Screw-CARR             |
| 9           | 74-5950            | 2           | Latch-Swell            |
| 10          | 65-5100            | 1           | Handle-Door            |
| 11          | 105-0337-03        | 1           | Plate-Adjusting        |
| 12          | 105-0331-03        | 1           | Bracket-Support, Thigh |
| 13          | 99-3058            | 2           | Washer                 |

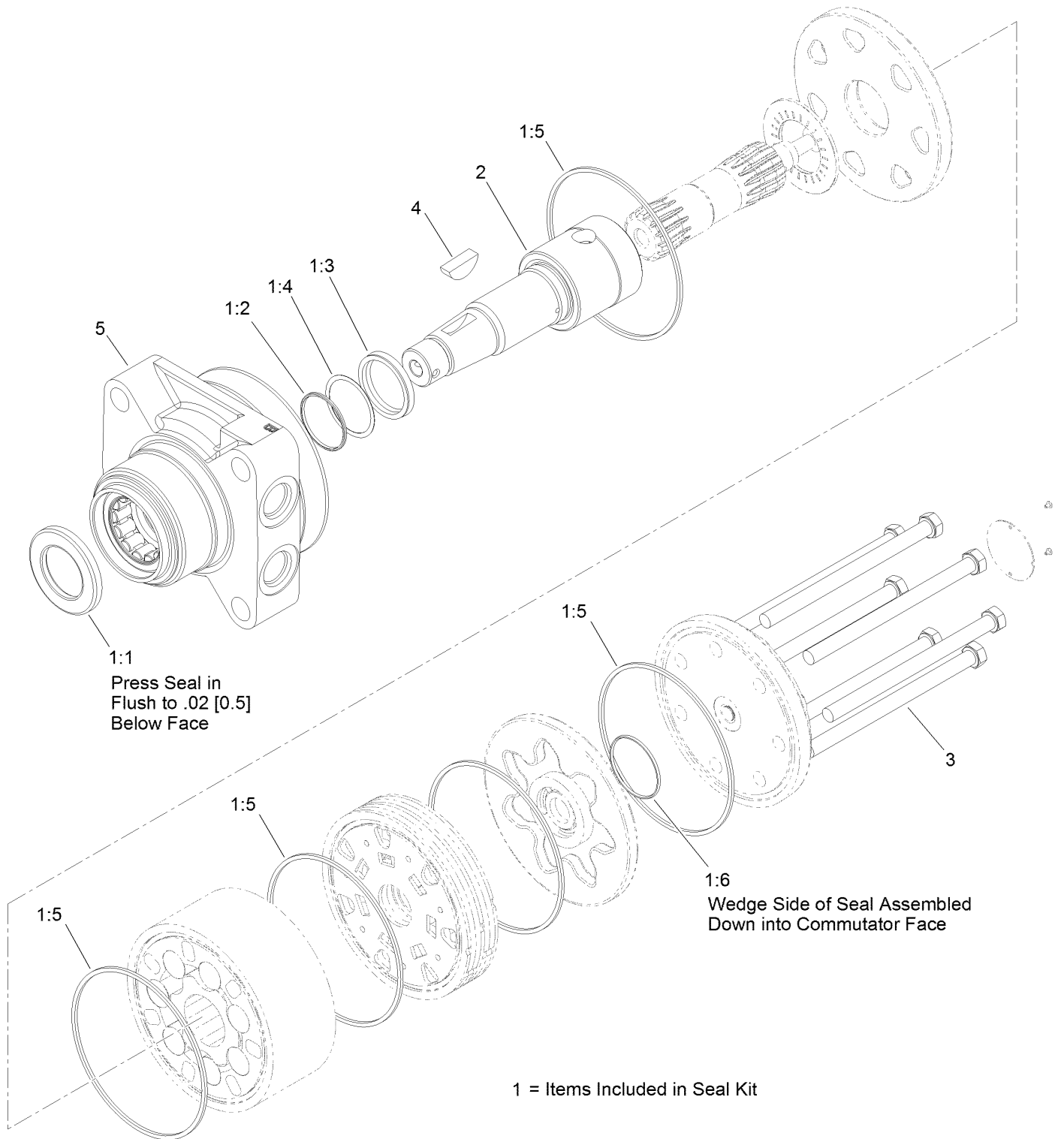
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 14          | 3234-7             | 2           | Screw-HHF          |
| 15          | 117-1762           | 1           | Lanyard ASM        |
| 15:1        | 117-8339           | 1           | Lanyard-3 Inch     |
| 15:2        | 117-1764           | 1           | Nut-Shoulder       |
| 15:3        | 98-1629            | 2           | Washer             |
| 15:4        | 3234-29            | 1           | Screw-HHF          |
| 16          | 3256-22            | 1           | Washer-Flat        |
| 17          | 93-7340            | 1           | Decal              |
| 18          | 105-0333           | 1           | Support-Thigh      |
| 19          | 104-6156           | 2           | Knob-Adjustment    |
| 20          | 3230-16            | 8           | Screw-CARR         |
| 21          | 3256-70            | 4           | Washer-Flat        |
| 22          | 3296-72            | 6           | Nut-Lock, NI       |

This exploded view diagram illustrates the assembly of a vehicle chassis. The central component is a long, flat chassis rail (1) with multiple mounting points. At each end, there is a suspension assembly. On the left, a wheel hub (2) is shown with a tire (1) mounted on it. The hub is connected to the chassis rail via a suspension arm (3) and a shock absorber (4). A bracket (5) is also shown, which is part of the suspension assembly. On the right, a similar suspension assembly is shown, but with a different bracket (6) and a different shock absorber (7). A small component (8) is shown near the center of the chassis rail. The diagram uses dashed lines to indicate the assembly path and alignment of the components. Numbered callouts 1 through 8 identify the various parts.

## Wheel and Motor Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|-----------------------|-------------|--------------------|-------------|-----------------------|
| 1           | 242-50             | 20          | Nut-Lug               | 5           | 99-1447            | 2           | RH Wheel And Tire ASM |
| 2           | 98-2747            | 2           | LH Wheel And Tire ASM | 5:1         | 232-27             | 1           | Stem-Valve            |
| 2:1         | 232-27             | 1           | Stem-Valve            | 5:2         | 98-2748            | 1           | Wheel                 |
| 2:2         | 98-2748            | 1           | Wheel                 | 5:3         | 98-2749            | 1           | Tire                  |
| 2:3         | 98-2749            | 1           | Tire                  | 6           | 99-3052            | 4           | HYD Motor ASM         |
| 3           | 106-8159           | 4           | Nut-Lock              | 7           | 105-4056           | 2           | Wheel Hub ASM         |
| 4           | 99-3064            | 2           | Hub ASM               | 7:2         | 10-6830            | 5           | Stud-Type, Drive      |
| 4:2         | 10-6830            | 5           | Stud-Type, Drive      | 8           | 3234-27            | 16          | Screw-HHF             |

# Hydraulic Motor Assembly No. 99-3052

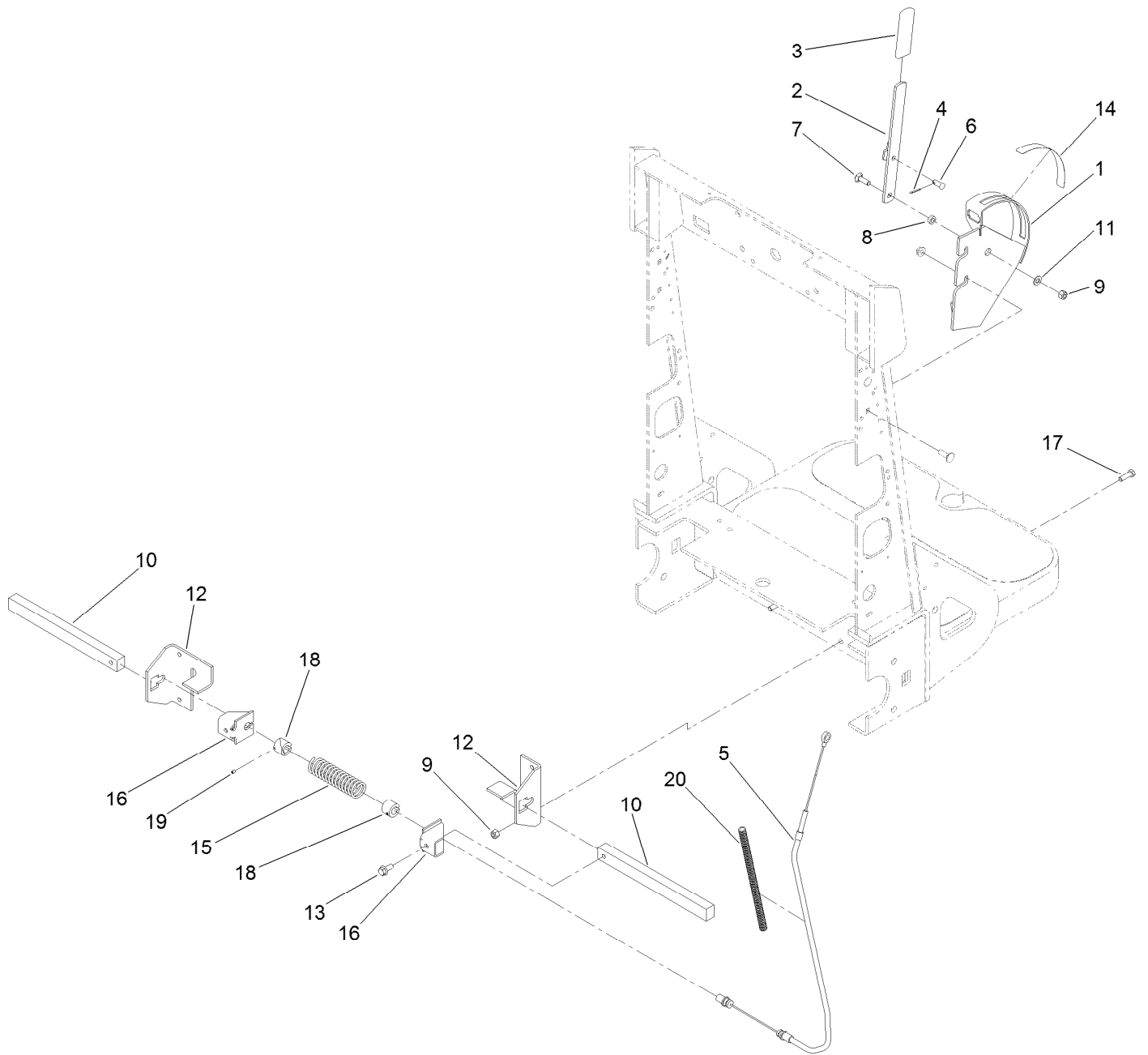


# Hydraulic Motor Assembly No. 99-3052 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>          | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|-----------------------------|-------------|--------------------|-------------|--------------------|
| 1           | 94-8178            | 1           | Seal Kit                    | 1:6         |                    | 1           | Seal-Commutator ●  |
| 1:1         |                    | 1           | Seal-Dirt And Water ●       | 2           | 99-3090            | 1           | Shaft-Coupling     |
| 1:2         |                    | 1           | Backup-Ring ●               | 3           | 99-3091            | 7           | Screw-Cap, HH      |
| 1:3         |                    | 1           | Seal-Shaft ●                | 4           | 3257-42            | 1           | Key-Woodruff       |
| 1:4         |                    | 1           | Washer-Backup ●             | 5           | 120-5392           | 1           | Motor Housing ASM  |
| 1:5         |                    | 5           | Seal-Square, Ring (Inner) ● |             |                    |             |                    |

● Not serviced separately

# Parking Brake Assembly

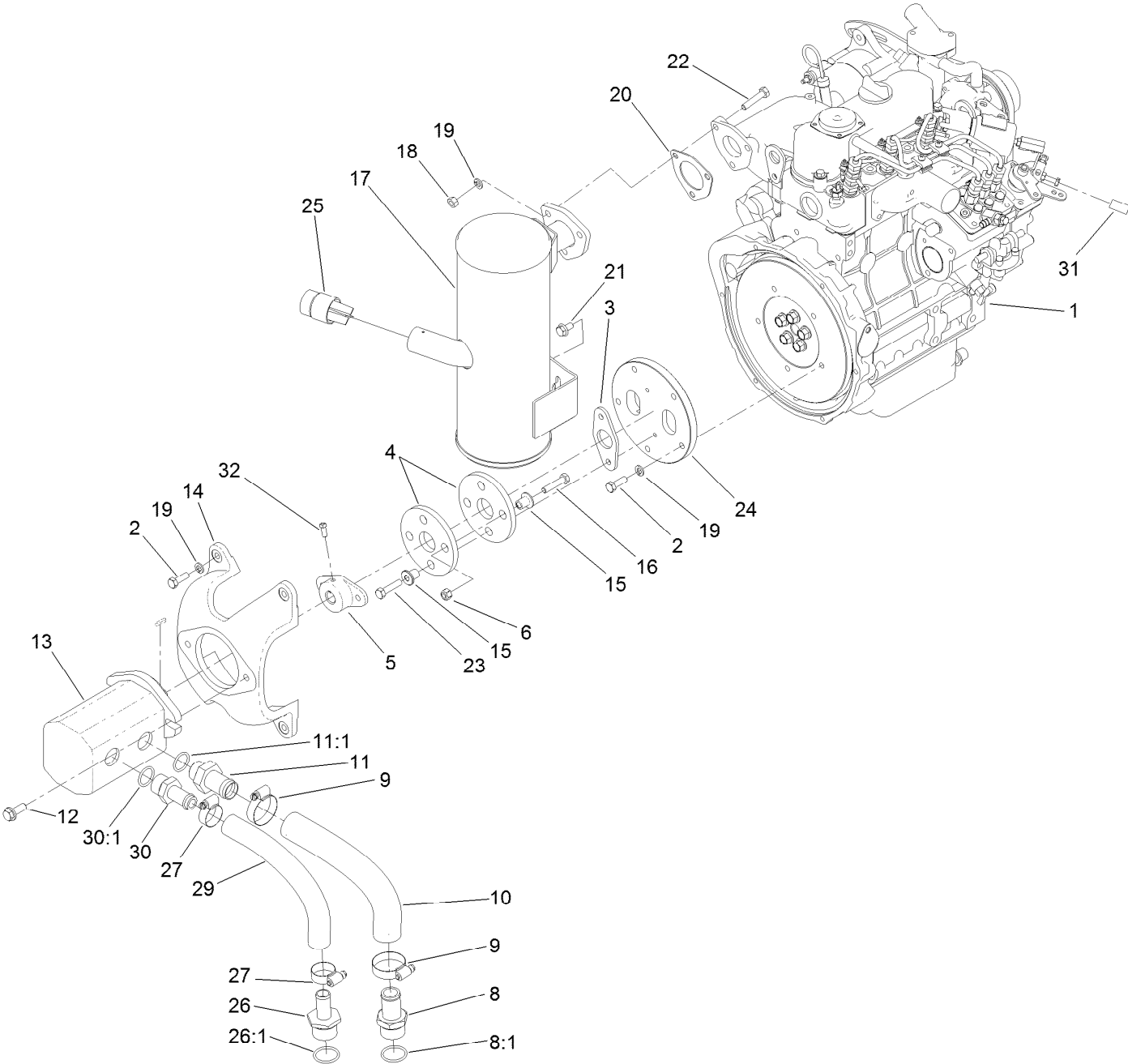




## Parking Brake Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1           | 105-8414-03        | 1           | Plate-Brake        | 11          | 3256-23            | 1           | Washer-Plain       |
| 2           | 100-1684-03        | 1           | Lever-Brake        | 12          | 100-1676-03        | 2           | Bracket-Brake      |
| 3           | 62-9130            | 1           | Grip-Handle        | 13          | 100-1668           | 2           | Screw-HHF          |
| 4           | 3272-6             | 1           | Pin-Cotter         | 14          | 100-1692           | 1           | Decal-Brake        |
| 5           | 100-1679           | 1           | Cable              | 15          | 100-1678-03        | 1           | Spring             |
| 6           | 283-62             | 1           | Pin-Clevis         | 16          | 100-1677-03        | 2           | Bracket-Cable      |
| 7           | 3230-22            | 1           | Screw-CARR         | 17          | 322-5              | 4           | Screw-HH           |
| 8           | 100-1683           | 1           | Hub-Lever          | 18          | 100-6274           | 2           | Tube-Guide         |
| 9           | 3296-29            | 5           | Nut-Lock, NI       | 19          | 3245-20            | 2           | Screw-HSH          |
| 10          | 100-1674-03        | 2           | Bar-Brake          | 20          | 100-4697           | 1           | Tube-Convolute     |

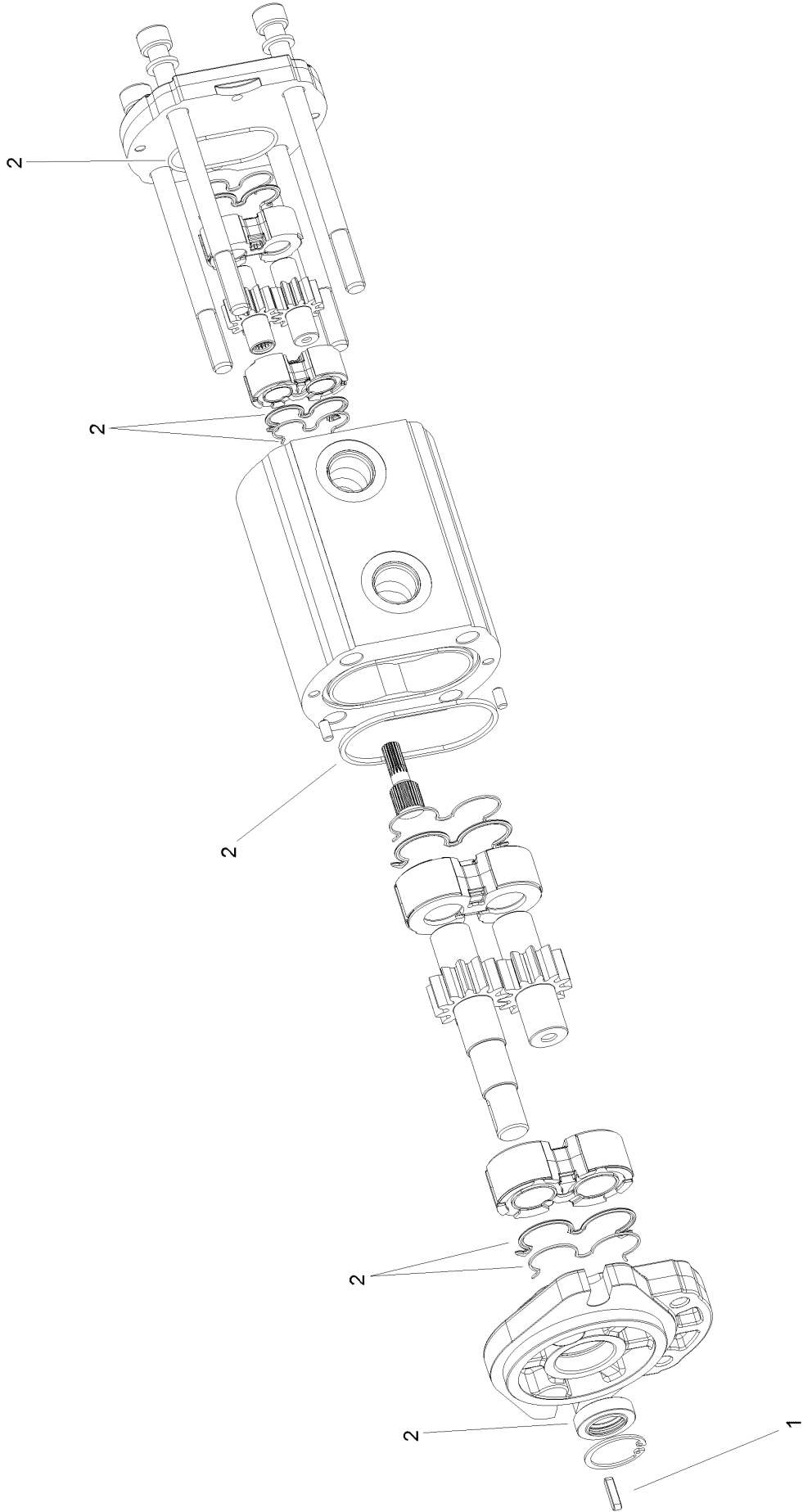
# Engine, Muffler and Pump Assembly



## Engine, Muffler and Pump Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|---------------------|-------------|--------------------|-------------|------------------------|
| 1           | 131-5700           | 1           | Engine-Kubota, D722 | 17          | 117-1828           | 1           | Muffler                |
| 2           | 99-5131            | 9           | Bolt                | 18          | 3217-6             | 3           | Nut-Hex                |
| 3           | 99-1430            | 1           | Spacer-Coupler      | 19          | 3253-4             | 12          | Washer-Lock            |
| 4           | 115-4523           | 2           | Coupling-Rubber     | 20          | 100-2238           | 1           | Gasket-Muffler         |
| 5           | 98-4701            | 1           | Hub-Pump            | 21          | 117-1836           | 1           | Screw-HHF, Lock        |
| 6           | 104-9469           | 2           | Nut-Lock            | 22          | 322-7              | 3           | Screw-HH               |
| 8           | 354-78             | 1           | Fitting-STR         | 23          | 99-5133            | 2           | Bolt                   |
| 8:1         | 237-146            | 1           | O-Ring              | 24          | 99-1431            | 1           | Adapter-Flywheel       |
| 9           | 2412-111           | 2           | Clamp               | 25          | 75-6880            | 1           | Screen-Arrester, Spark |
| 10          | 131-0581           | 1           | Hose-Suction        | 26          | 99-6932            | 1           | Fitting-STR            |
| 11          | 99-3017            | 1           | Fitting             | 26:1        | 237-117            | 1           | O-Ring                 |
| 11:1        | 237-81             | 1           | O-Ring              | 27          | 2412-129           | 2           | Clamp-Hose             |
| 12          | 66-9300            | 2           | Screw-HHF           | 29          | 131-0583           | 1           | Hose Suction           |
| 13          | 98-4702            | 1           | Pump-Gear, Tandem   | 30          | 354-73             | 1           | Fitting                |
| 14          | 131-0555-03        | 1           | Mount-Pump          | 30:1        | 237-81             | 1           | O-Ring                 |
| 15          | 71-4411            | 4           | Spacer              | 31          | 117-1765           | 1           | Tube-Aluminum          |
| 16          | 5-1470             | 2           | Screw-HH            | 32          | 3241-5             | 1           | Screw-Set              |

# Tandem Hydraulic Pump Assembly No. 98-4702

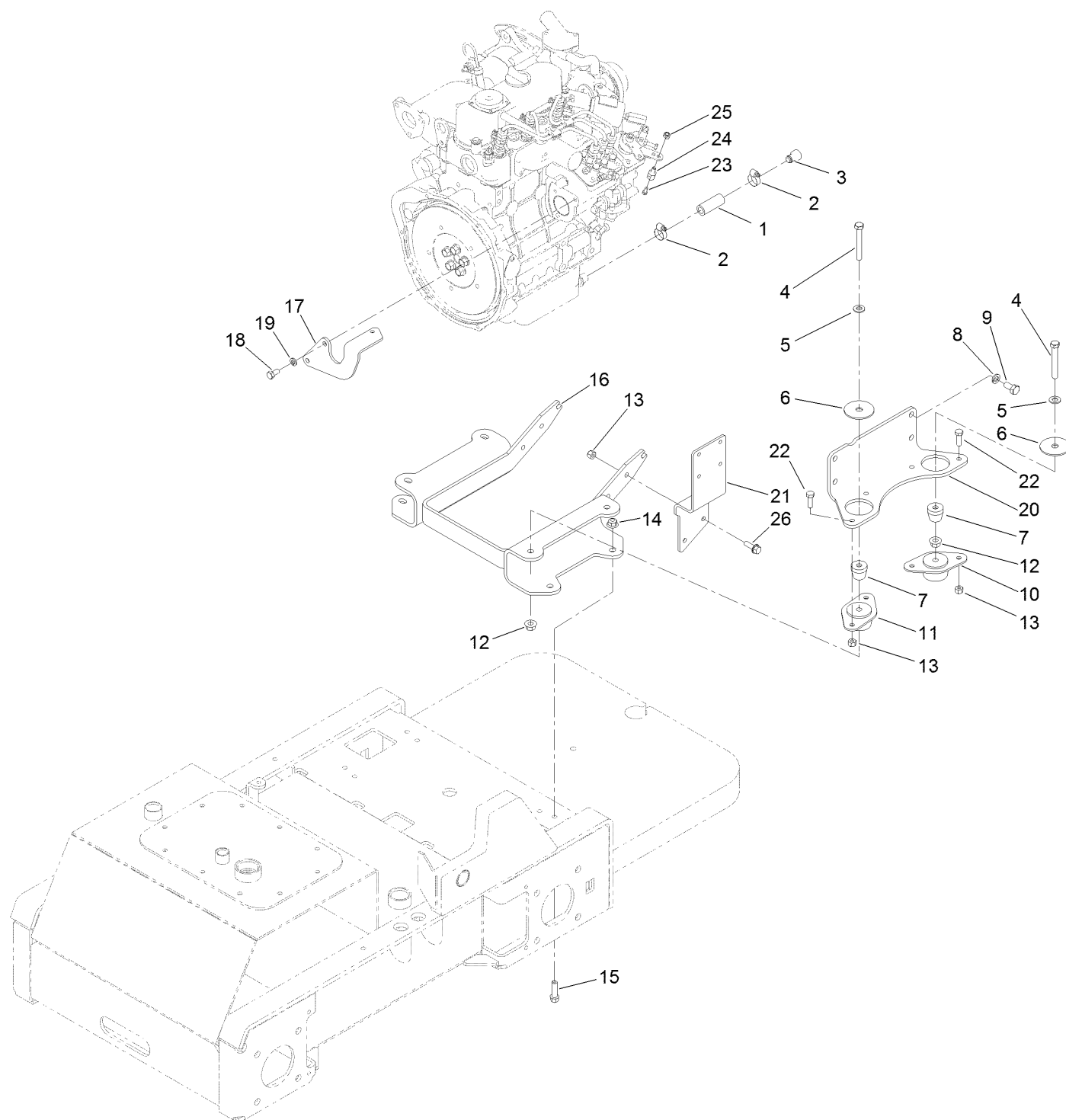


## Tandem Hydraulic Pump Assembly No. 98-4702 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 98-4700            | 1           | Key-Square         |
| 2           | 99-1353            | 1           | Seal Kit ●         |

● Not illustrated

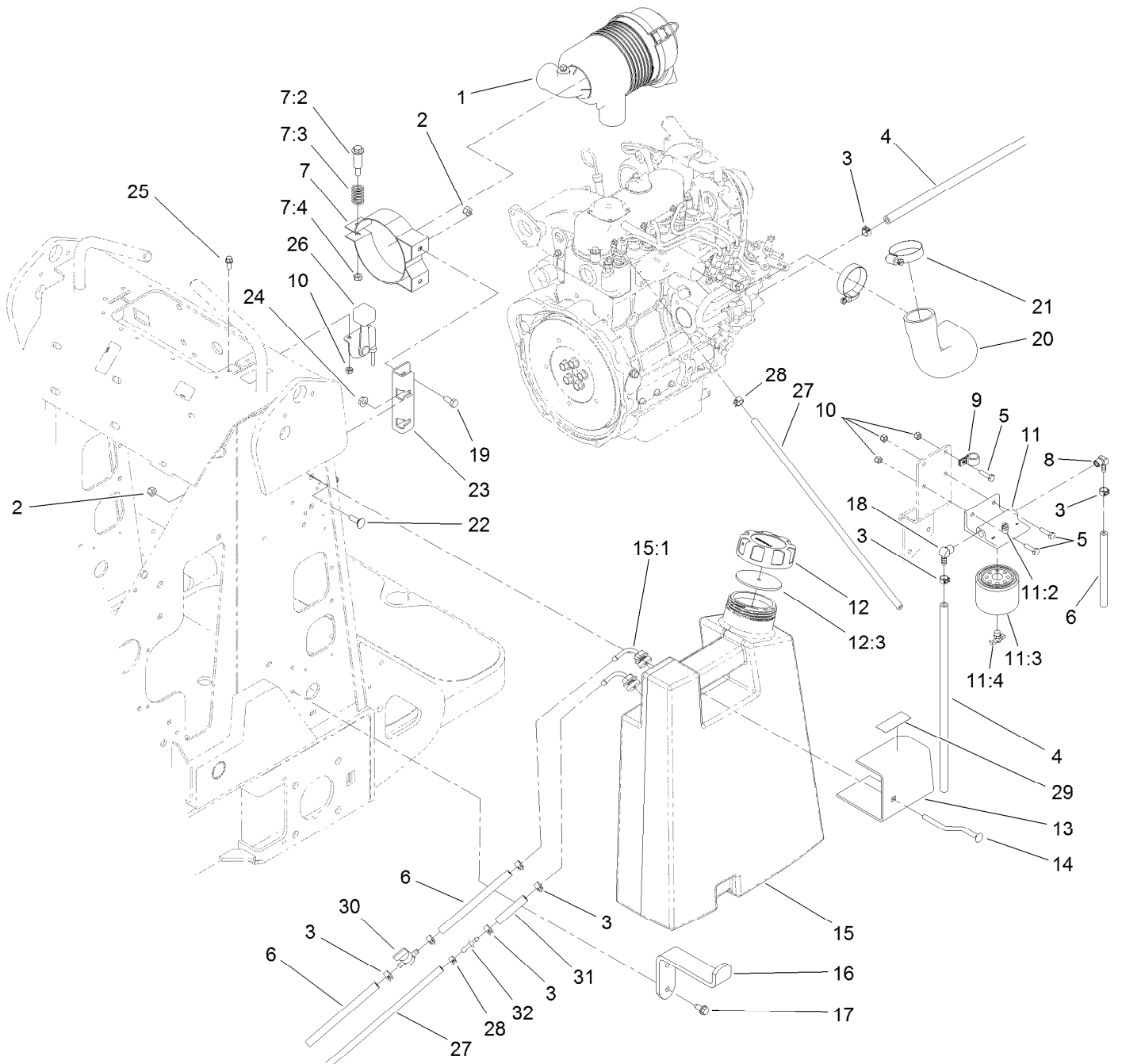
# Engine Mount Assembly



## Engine Mount Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|------------------------|
| 1           | 56-2230            | 1           | Hose-Fuel            | 14          | 104-8301           | 4           | Nut-HF, NI             |
| 2           | 2412-36            | 2           | Clamp-Hose           | 15          | 95-1727            | 4           | Screw-Taptite          |
| 3           | 99-1445            | 1           | Plug-Oil             | 16          | 98-0066-01         | 1           | Mount-Engine           |
| 4           | 323-13             | 4           | Screw-HH             | 17          | 130-2838-01        | 1           | Mount-Solenoid         |
| 5           | 3256-24            | 4           | Washer-Flat          | 18          | 99-5132            | 2           | Bolt                   |
| 6           | 87-5100            | 4           | Washer-Snubbing      | 19          | 3253-4             | 2           | Washer-Lock            |
| 7           | 117-1859           | 4           | Snubber-Engine Mount | 20          | 98-0055-01         | 2           | Plate-Mount, Engine    |
| 8           | 42-9600            | 6           | Washer-Lock          | 21          | 98-0059-01         | 1           | Mount-Filter, Fuel     |
| 9           | 99-5130            | 8           | Screw-HH             | 22          | 322-5              | 8           | Screw-HH               |
| 10          | 83-1030            | 2           | Mount-Engine         | 23          | 25-8640            | 1           | Screw-HH               |
| 11          | 93-5265            | 2           | Mount-Engine         | 24          | 93-0021            | 1           | Swivel-Cable, Throttle |
| 12          | 32128-29           | 4           | Nut-Lock, Flange     | 25          | 3296-13            | 1           | Nut-Lock, NI           |
| 13          | 3296-29            | 10          | Nut-Lock, NI         | 26          | 3234-29            | 2           | Screw-HHF              |

# Fuel Tank and Air Filter Assembly

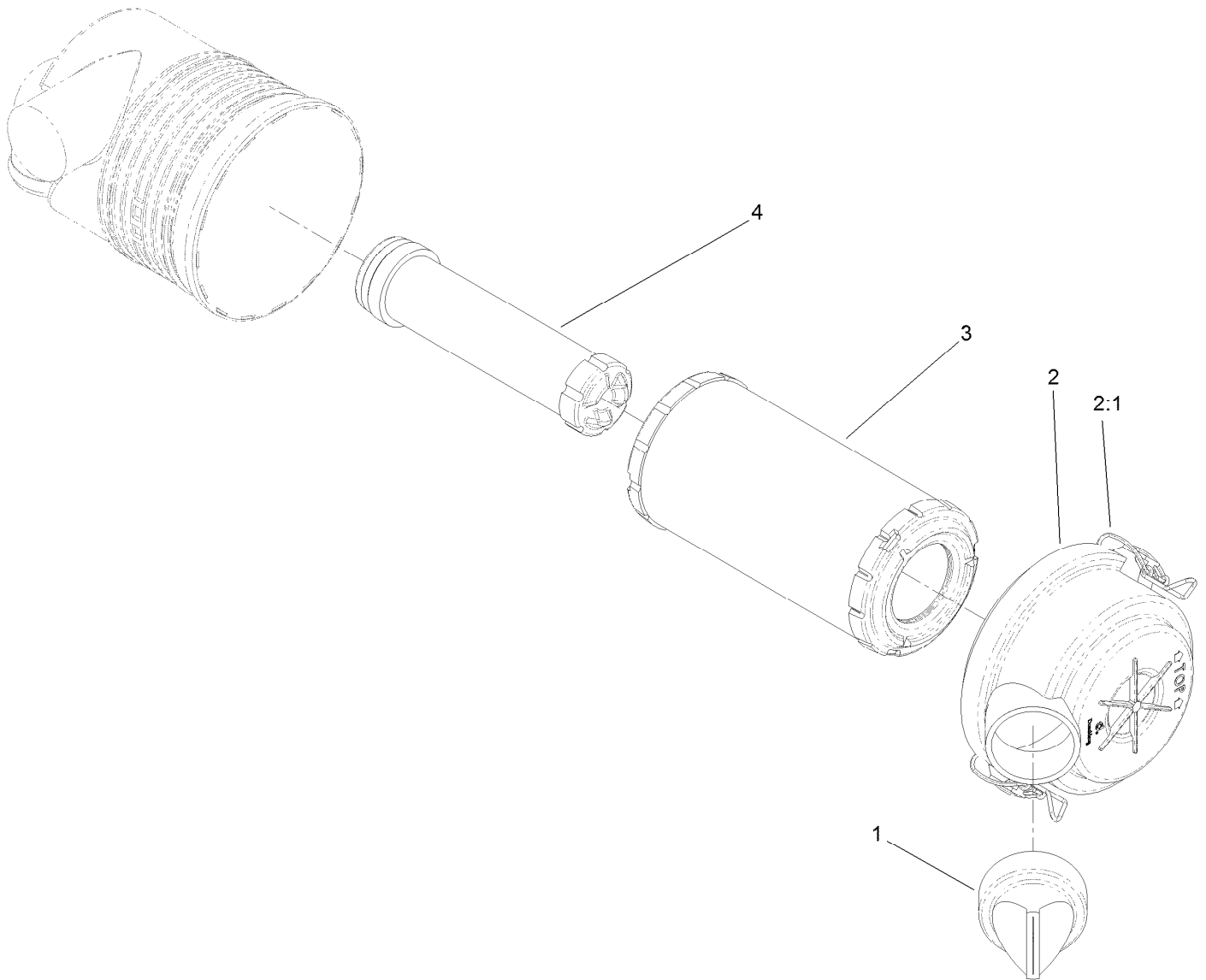




## Fuel Tank and Air Filter Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>               | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|----------------------------------|-------------|--------------------|-------------|------------------------|
| 1           | 117-9989           | 1           | Air Cleaner ASM                  | 14          | 98-4657            | 1           | Bolt-Mount             |
| 2           | 3296-29            | 3           | Nut-Lock, NI                     | 15          | 105-8438           | 1           | LH Fuel Tank ASM       |
| 3           | 92-2379            | 8           | Clamp-Hose                       | 15:1        | 103-2615           | 2           | Fitting-Fuel, Bulkhead |
| 4           | 110-4113           | 1           | Hose-Fuel                        | 16          | 98-4656-03         | 1           | Mount-Bottom, Tank     |
| 5           | 321-6              | 3           | Screw-HH                         | 17          | 32144-70           | 2           | Screw-HWHTF            |
| 6           | 107-0588           | 2           | Hose-Fuel                        | 18          | 353-781            | 1           | Fitting-HYD, 90        |
| 7           | 93-2191            | 1           | Air Cleaner Mounting Band<br>ASM | 19          | 322-3              | 2           | Screw-HH               |
| 7:2         | 94-3653            | 1           | Bolt                             | 20          | 99-5041            | 1           | Hose-Cleaner, Air      |
| 7:3         | 94-3654            | 1           | Spring                           | 21          | 2412-92            | 2           | Clamp-Hose             |
| 7:4         | 48-9510            | 1           | Nut                              | 22          | 3230-2             | 2           | Bolt-CARR              |
| 8           | 304-96             | 1           | Elbow                            | 23          | 99-3080-03         | 1           | Mount-Cleaner, Air     |
| 9           | 2412-87            | 1           | Clamp-Cable                      | 24          | 32128-20           | 2           | Nut-HF                 |
| 10          | 3296-42            | 5           | Nut-Lock, NI                     | 25          | 3234-33            | 2           | Screw-HHF              |
| 11          | 109-2678           | 1           | Filter Head ASM                  | 26          | 99-1422            | 1           | Control-Throttle       |
| 11:2        | 63-8290            | 1           | Vent-Air                         | 27          | 110-8751           | 1           | Hose-Fuel              |
| 11:3        | 109-3117           | 1           | Filter-Separator, Water          | 28          | 2412-80            | 2           | Clamp-Hose             |
| 11:4        | 63-8310            | 1           | Valve-Drain                      | 29          | 114-9600           | 1           | Decal-Low Sulfur       |
| 12          | 104-7419           | 1           | Cap-Fuel, Diesel                 | 30          | 1-603770           | 1           | Valve-Fuel             |
| 12:3        | 104-7420           | 1           | Gasket-Vented                    | 31          | 109-0304           | 1           | Hose-Fuel              |
| 13          | 99-1444-03         | 1           | Plate-Mount, Left                | 32          | 106-8150           | 1           | Fitting-Straight       |

# Air Cleaner Assembly No. 117-9989

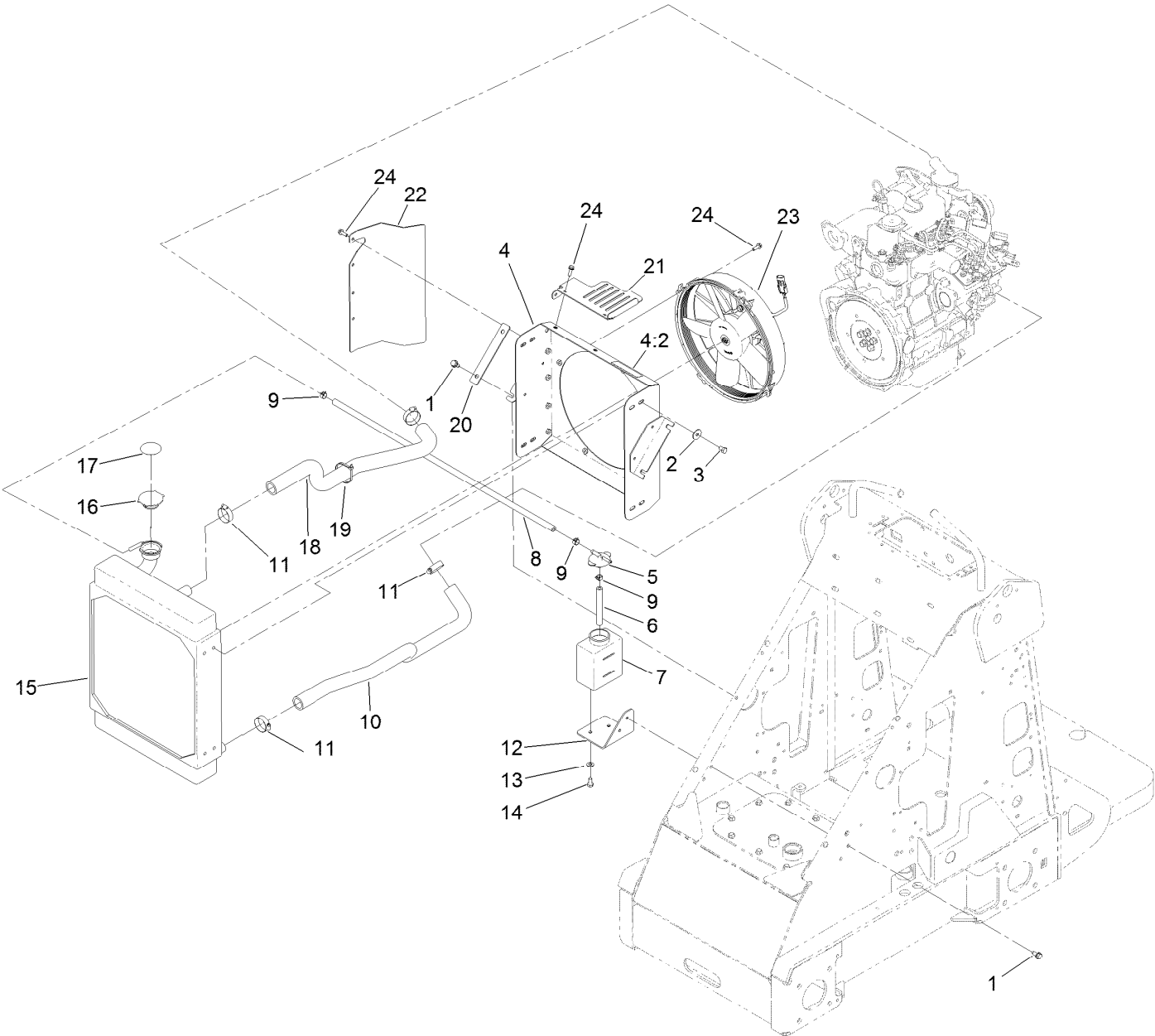


## Air Cleaner Assembly No. 117-9989 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 87-9400            | 1           | Valve-Vacuator     |
| 2           | 94-3652            | 1           | Cover ASM          |
| 2:1         | 1-643283           | 2           | Latch-Cleaner, Air |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|------------------------|
| 3           | 108-3811           | 1           | Filter-Air             |
| 4           | 98-2982            | 1           | Filter-Element, Safety |

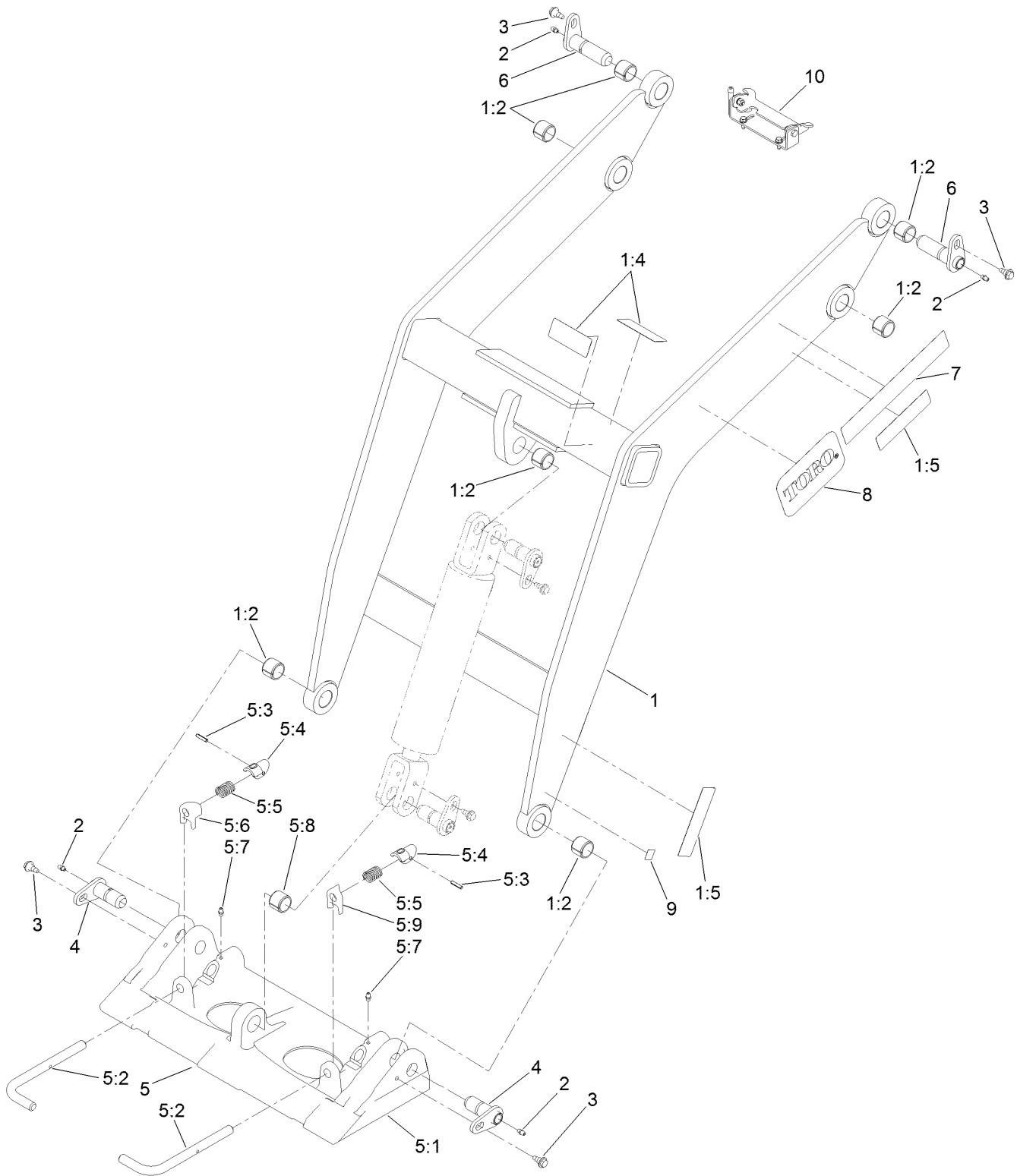
# Radiator and Fan Assembly



## Radiator and Fan Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|-----------------------|
| 1           | 32144-70           | 6           | Screw-HWHTF          | 13          | 3256-23            | 2           | Washer-Plain          |
| 2           | 3256-82            | 8           | Washer-Flat          | 14          | 99-5132            | 2           | Bolt                  |
| 3           | 322-1              | 8           | Screw-HH             | 15          | 99-5125            | 1           | Radiator              |
| 4           | 130-2832           | 1           | Mount-Radiator       | 16          | 66-3240            | 1           | Cap-Radiator          |
| 4:2         | 120-0627           | 1           | Decal-Warning        | 17          | 106-5976           | 1           | Decal-Warning         |
| 5           | 93-2048            | 1           | Cap-Tank, Overflow   | 18          | 99-5043            | 1           | Hose-Radiator, Upper  |
| 6           | 108-3283           | 1           | Hose-Fuel            | 19          | 3290-379           | 1           | Tie-Cable             |
| 7           | 93-2049            | 1           | Tank-Overflow        | 20          | 108-9746-01        | 2           | Plate-Clamp, Radiator |
| 8           | 110-6186           | 1           | Hose-Fuel            | 21          | 130-2831-03        | 1           | Fan-Guard             |
| 9           | 92-2379            | 3           | Clamp-Hose           | 22          | 130-2833-03        | 1           | Plate-Baffle          |
| 10          | 99-5042            | 1           | Hose-Radiator, Lower | 23          | 131-0558           | 1           | Fan                   |
| 11          | 2412-34            | 4           | Clamp-Hose           | 24          | 117-8304           | 11          | Screw-HHF             |
| 12          | 99-1446-01         | 1           | Mount-Tank, Overflow |             |                    |             |                       |

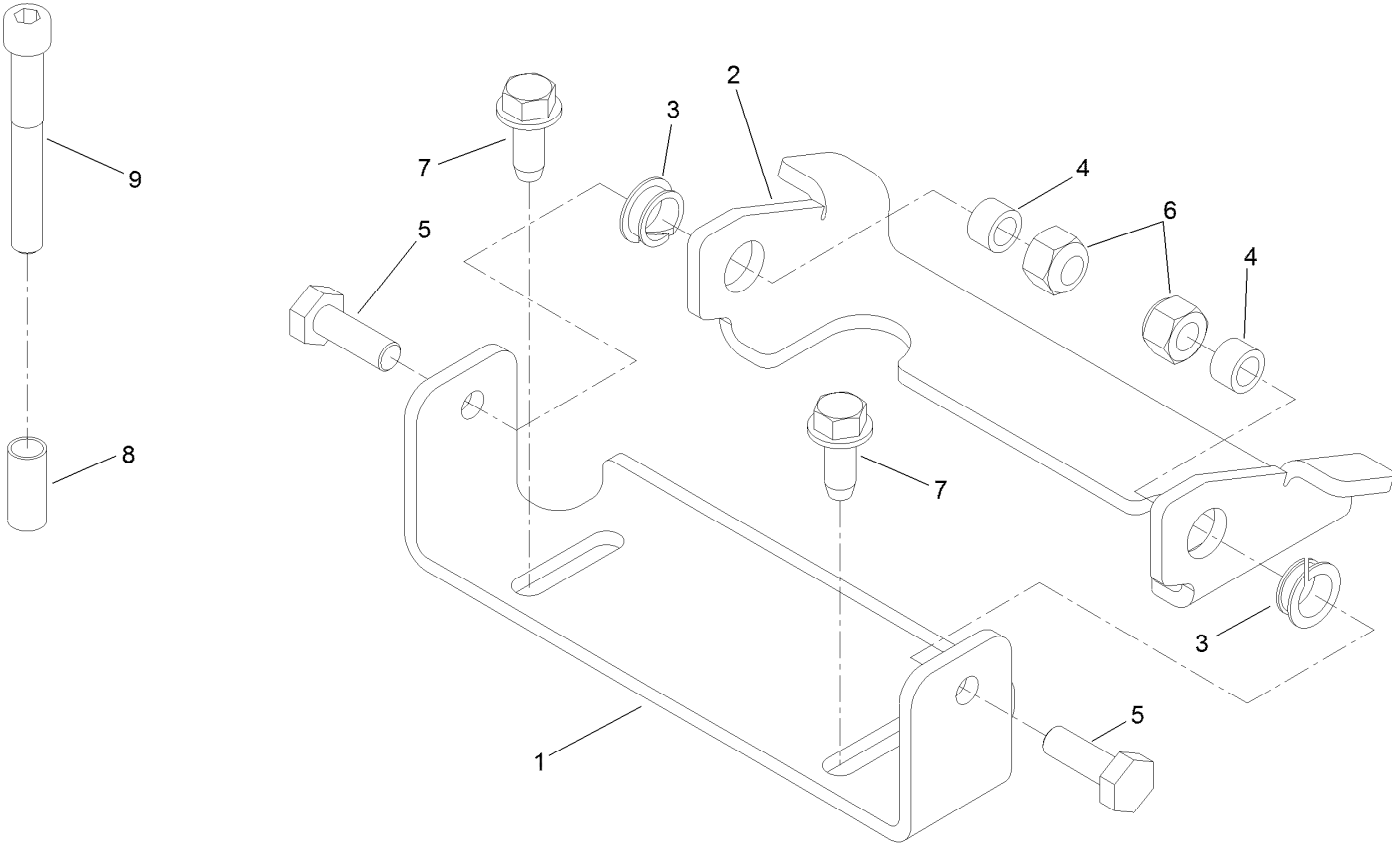
# Loader Arm and Quick-Attach Assembly



## Loader Arm and Quick-Attach Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|--------------------|
| 1           | 114-1754           | 1           | Loader ASM              | 5:4         | 105-0246           | 2           | Cam                |
| 1:2         | 98-4871            | 7           | Bushing-Tension         | 5:5         | 98-4694            | 2           | Spring-Compression |
| 1:4         | 130-2836           | 4           | Decal-Warning, Crushing | 5:6         | 104-5909           | 1           | Stop-RH            |
| 1:5         | 130-2837           | 2           | Decal-Warning, No Rider | 5:7         | 302-5              | 2           | Fitting-Grease     |
| 2           | 302-5              | 4           | Fitting-Grease          | 5:8         | 98-4871            | 1           | Bushing-Tension    |
| 3           | 99-5105            | 4           | Screw-Shoulder          | 5:9         | 104-5903           | 1           | Stop-LH            |
| 4           | 112-2609           | 2           | Pin-Pivot               | 6           | 120-5363           | 2           | Pin-Pivot          |
| 5           | 115-0788           | 1           | Quick Attach ASM        | 7           | 117-1816           | 2           | Decal              |
| 5:1         | 115-0774-03        | 1           | Mount-Qtach             | 8           | 93-7340            | 2           | Decal              |
| 5:2         | 105-8367           | 2           | Pin-Locking             | 9           | 93-9084            | 2           | Decal-Point, Lift  |
| 5:3         | 3285-1             | 2           | Pin-Grooved             | 10          | 108-4702           | 1           | Lever Lock ASM     |

Lever Lock Assembly No. 108-4702

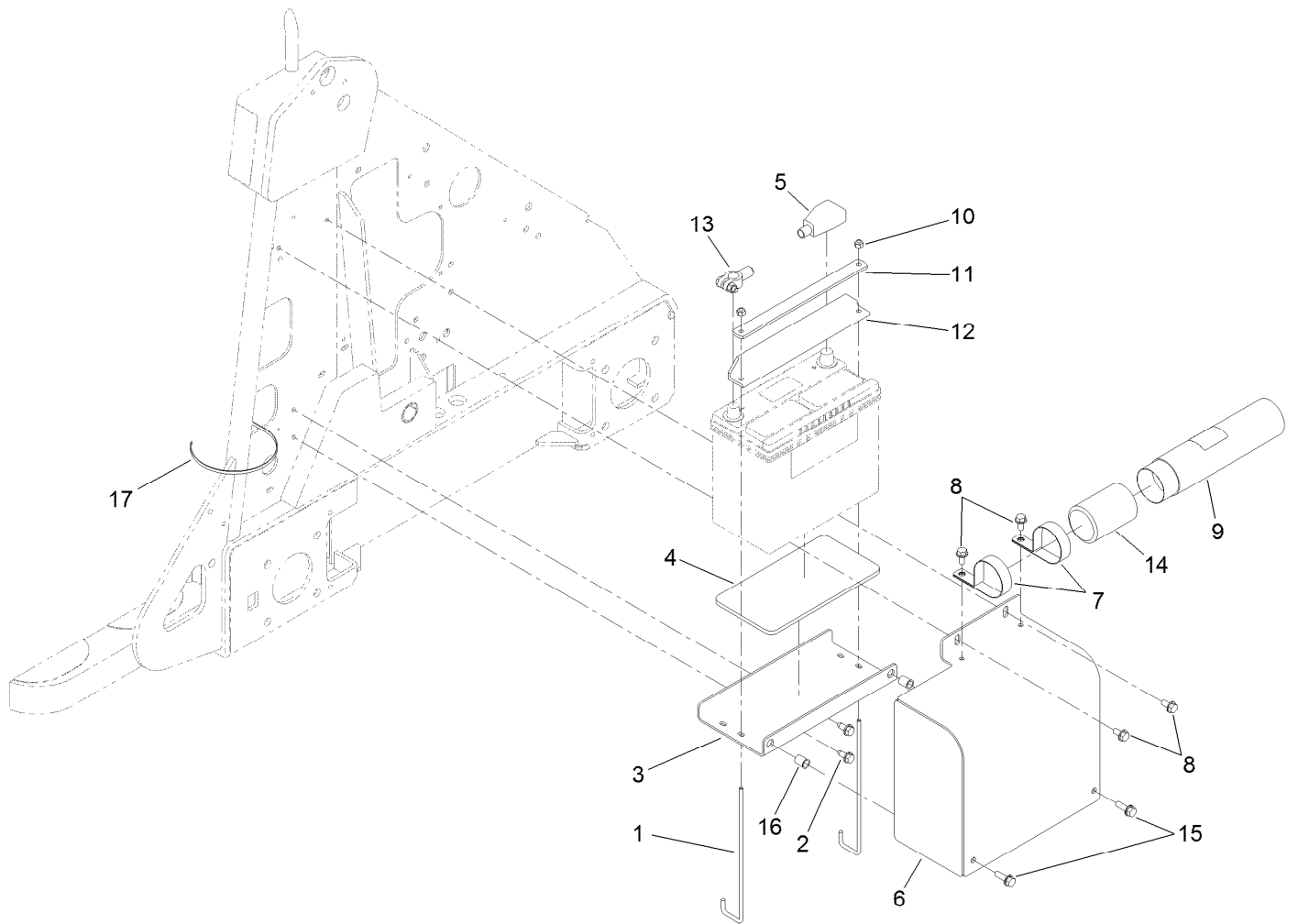




## Lever Lock Assembly No. 108-4702 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1           | 108-4703-03        | 1           | Bracket-Lever Lock | 6           | 3296-42            | 2           | Nut-Lock, NI       |
| 2           | 108-4704-03        | 1           | Arm-Lever Lock     | 7           | 32144-10           | 2           | Screw-HWH          |
| 3           | 5979               | 2           | Bushing-Nyliner    | 8           | 108-4705           | 1           | Spacer             |
| 4           | 88-7860            | 2           | Spacer             | 9           | 3274-19            | 1           | Screw-HSH          |
| 5           | 321-4              | 2           | Screw-HH           |             |                    |             |                    |

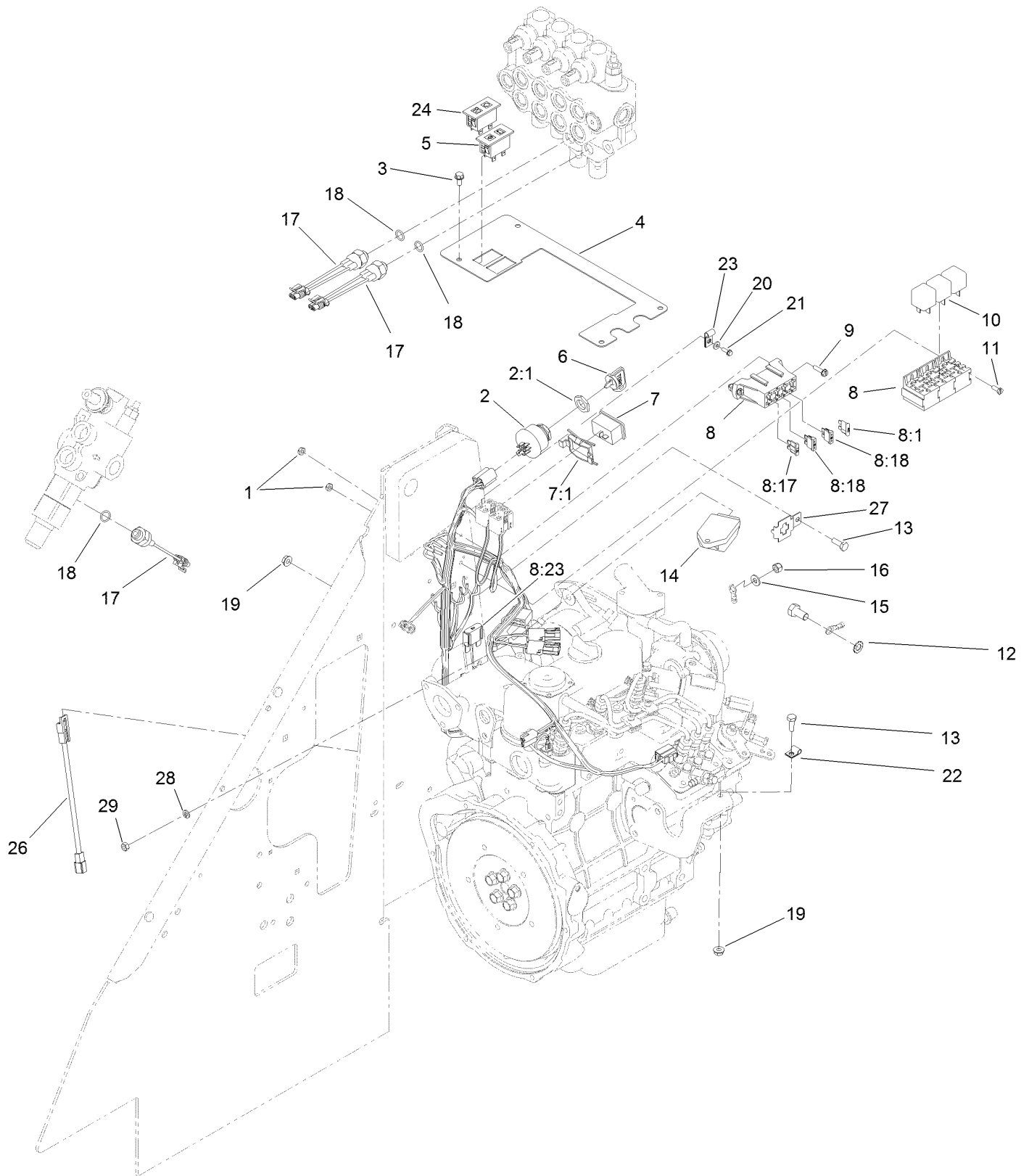
# Battery Mount Assembly



## Battery Mount Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|-------------------------|
| 1           | 99-5035            | 2           | Retainer-Battery        | 10          | 3296-42            | 2           | Nut-Lock, NI            |
| 2           | 32144-70           | 2           | Screw-HWHTF             | 11          | 99-5008-01         | 1           | Retainer-Battery        |
| 3           | 98-2665-03         | 1           | Mount-Battery           | 12          | 99-5039            | 1           | Retainer-Battery        |
| 4           | 99-5030            | 1           | Pad-Battery             | 13          | 100-1709           | 1           | Cable-Battery, Negative |
| 5           | 100-1708           | 1           | Cable-Battery, Positive | 14          | 104-7048           | 1           | Cap-Housing             |
| 6           | 98-2670-03         | 1           | Cover-Battery           | 15          | 3234-29            | 2           | Screw-HHF               |
| 7           | 2412-133           | 2           | Clamp-R                 | 16          | 32148-7            | 2           | Nut-Clinch              |
| 8           | 32144-14           | 4           | Screw-HWHTF             | 17          | 3290-379           | 1           | Tie-Cable               |
| 9           | 104-7050           | 1           | Tube-Manual             |             |                    |             |                         |

# Switch, Hour Meter and Wire Harness Assembly



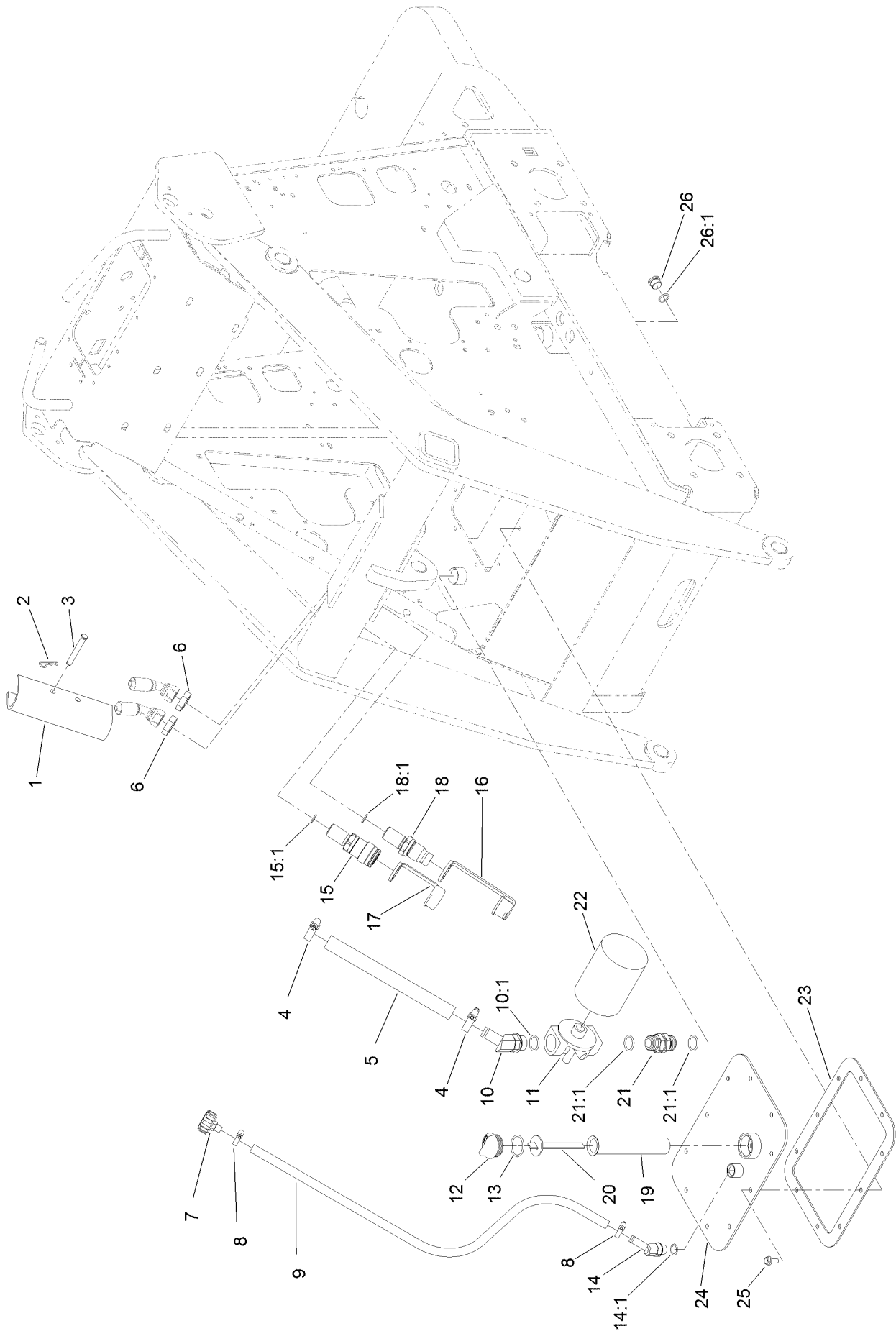
## Switch, Hour Meter and Wire Harness Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|---------------------|-------------|--------------------|-------------|------------------------|
| 1           | 3296-12            | 4           | Nut-Lock, NI        | 12          | 3255-9             | 1           | Washer-Lock            |
| 2           | 104-2541           | 1           | Ignition Switch ASM | 13          | 321-4              | 2           | Screw-HH               |
| 2:1         | 218-461            | 1           | Nut-HH              | 14          | 107-9097           | 1           | Controller-Glow        |
| 2:2         | 3254-5             | 1           | Washer-Lock ■●      | 15          | 100-2215           | 1           | Washer-Spring          |
| 3           | 32144-4            | 4           | Screw-HWH           | 16          | 100-2171           | 1           | Nut-Hex                |
| 4           | 105-8351-03        | 1           | Plate-Cover         | 17          | 72-4310            | 3           | Switch-Ball            |
| 5           | 100-8070           | 1           | Lamp-Warning        | 18          | 237-42             | 3           | O-Ring                 |
| 6           | 63-8360            | 2           | Key-Ignition        | 19          | 32128-33           | 2           | Nut-HF                 |
| 7           | 104-7429           | 1           | Hour Meter ASM      | 20          | 3256-21            | 1           | Washer-Flat            |
| 7:1         | 104-4234           | 1           | Clip-Mounting       | 21          | 32144-87           | 1           | Screw-HWHTF            |
| 8           | 131-5710           | 1           | Harness-Wire        | 22          | 2412-31            | 1           | Clamp-Boden            |
| 8:1         | 99-6124            | 1           | Fuse-40 Amp         | 23          | 2412-72            | 1           | Clip-Closed, Insulated |
| 8:17        | 114241             | 1           | Fuse-Blade, 7.5 Amp | 24          | 100-8071           | 1           | Lamp-Warning           |
| 8:18        | 109355             | 2           | Fuse-Blade, 15 Amp  | 26          | 112-2463           | 1           | Harness-Link, Fusible  |
| 8:23        | 94-8002            | 1           | Fuse-Blade, 50 Amp  | 27          | 114-5502           | 1           | Clip-Fuse              |
| 9           | 32105-13           | 2           | Screw-HWH           | 28          | 43-5930            | 1           | Washer-Lock, Spring    |
| 10          | 98-7249            | 3           | Relay               | 29          | 43-2830            | 1           | Nut-Hex                |
| 11          | 32105-8            | 1           | Screw-SHH           |             |                    |             |                        |

● Not illustrated

■ Not used for this configuration

# Cylinder Lock and Hydraulic Assembly

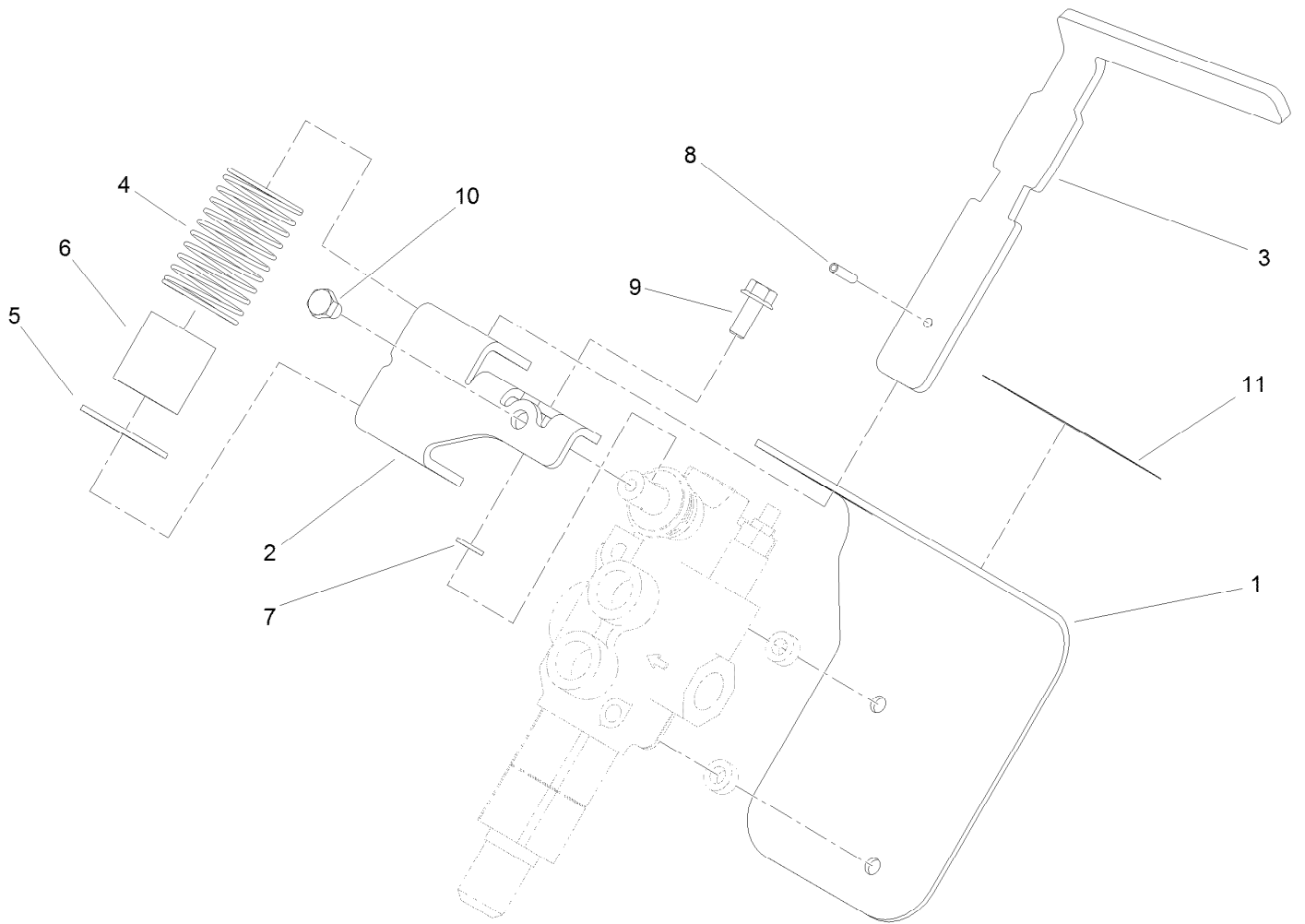


## Cylinder Lock and Hydraulic Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>       |
|-------------|--------------------|-------------|-----------------------|-------------|--------------------|-------------|--------------------------|
| 1           | 98-4675-01         | 2           | Lock-Cylinder         | 15:1        | 237-65             | 1           | O-Ring                   |
| 2           | 3290-467           | 2           | Pin-Hair              | 16          | 100-8815           | 1           | Cap-Dust, Nipple         |
| 3           | 283-52             | 2           | Pin-Clevis            | 17          | 100-8816           | 1           | Cap-Dust, Coupler        |
| 4           | 2412-129           | 2           | Clamp-Hose            | 18          | 105-8395           | 1           | Bulkhead Nipple ASM      |
| 5           | 98-4745            | 1           | Hose-HYD, Suction, Hi | 18:1        | 237-65             | 1           | O-Ring                   |
| 6           | 340-74             | 2           | Nut-Lock, Bulkhead    | 18:2        | 100-6120           | 1           | Seal Kit ●               |
| 7           | 68-6150            | 1           | Breather              | 19          | 61-2790            | 1           | Filter-Screen            |
| 8           | 2412-36            | 2           | Clamp-Hose            | 20          | 100-2097           | 1           | Dipstick-Oil             |
| 9           | 98-2708            | 1           | Hose-Vent             | 21          | 98-9906            | 1           | Fitting-Thread, Straight |
| 10          | 354-127            | 1           | Fitting-Elbow45       | 21:1        | 237-81             | 2           | O-Ring                   |
| 10:1        | 237-81             | 1           | O-Ring                | 22          | 54-0110            | 1           | Filter-Oil, Transmission |
| 11          | 92-5821            | 1           | Head-Filter           | 23          | 98-9927            | 1           | Gasket-Cover             |
| 12          | 93-7498            | 1           | Plug-Plastic          | 24          | 100-1713-01        | 1           | Cover                    |
| 13          | 237-123            | 1           | O-Ring                | 25          | 98-9940            | 10          | Screw-HHF                |
| 14          | 354-126            | 1           | Fitting-Elbow, 45     | 26          | 353-988            | 1           | Plug-Hex                 |
| 14:1        | 237-79             | 1           | O-Ring                | 26:1        | 237-79             | 1           | O-Ring                   |
| 15          | 105-8394           | 1           | Bulkhead Coupler ASM  |             |                    |             |                          |

● Not illustrated

# Auxiliary Control Lever Assembly

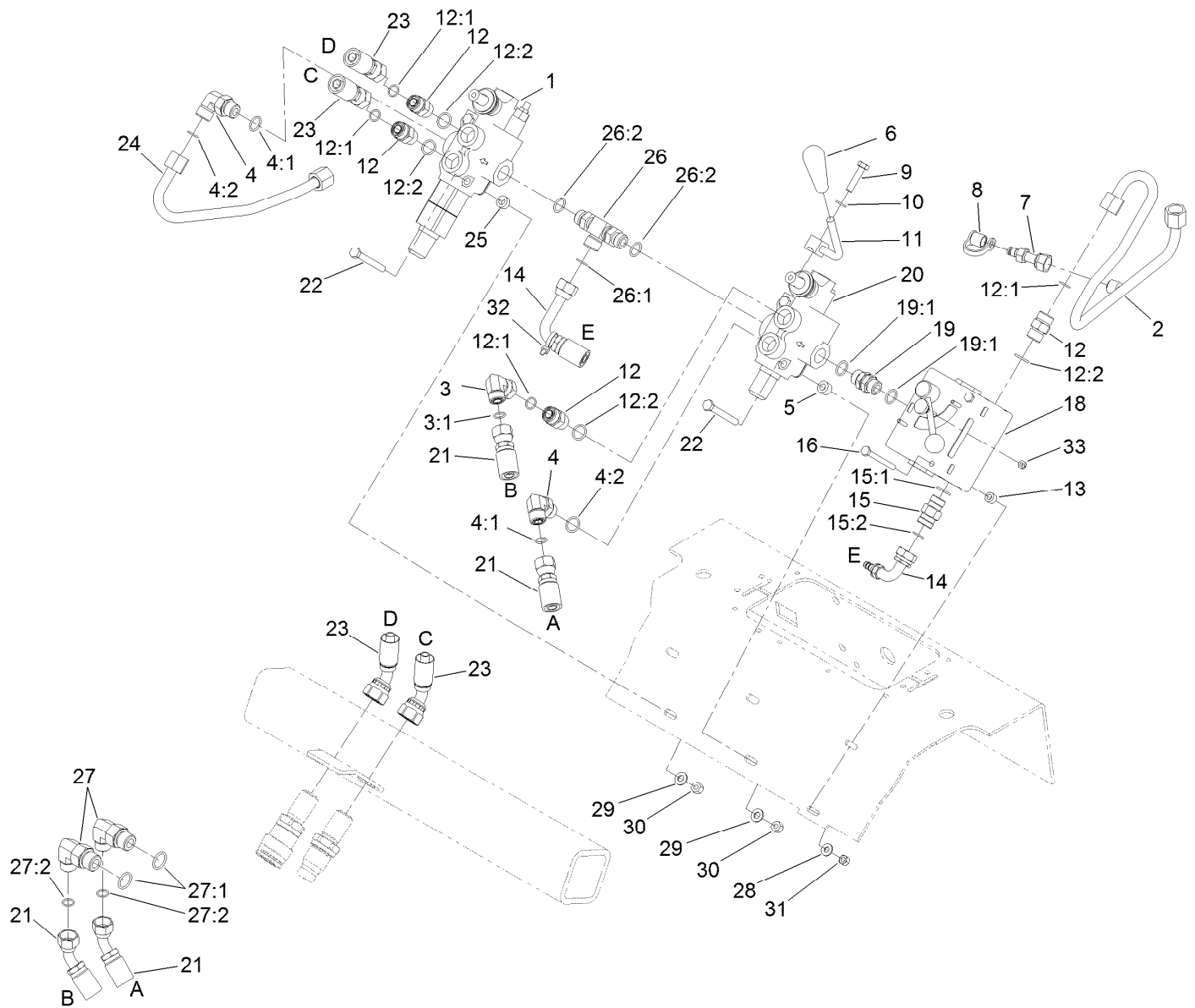




## Auxiliary Control Lever Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>         | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  |
|-------------|--------------------|-------------|----------------------------|-------------|--------------------|-------------|---------------------|
| 1           | 110-0121-03        | 1           | Bracket-Auxiliary          | 7           | 3253-4             | 1           | Washer-Lock         |
| 2           | 114-1263-03        | 1           | Mount-Lever, Auxiliary     | 8           | 32121-3            | 1           | Pin-Spring          |
| 3           | 110-0123           | 1           | Handle-Lever, Auxiliary    | 9           | 33104-020          | 1           | Screw-HHF           |
| 4           | 110-0124           | 1           | Spring                     | 10          | 33114-010          | 1           | Screw-HH            |
| 5           | 110-0125           | 1           | Retainer-Spring, Auxiliary | 11          | 108-4723           | 1           | Decal-Auxiliary, CE |
| 6           | 110-0160           | 1           | Tube-Spring                |             |                    |             |                     |

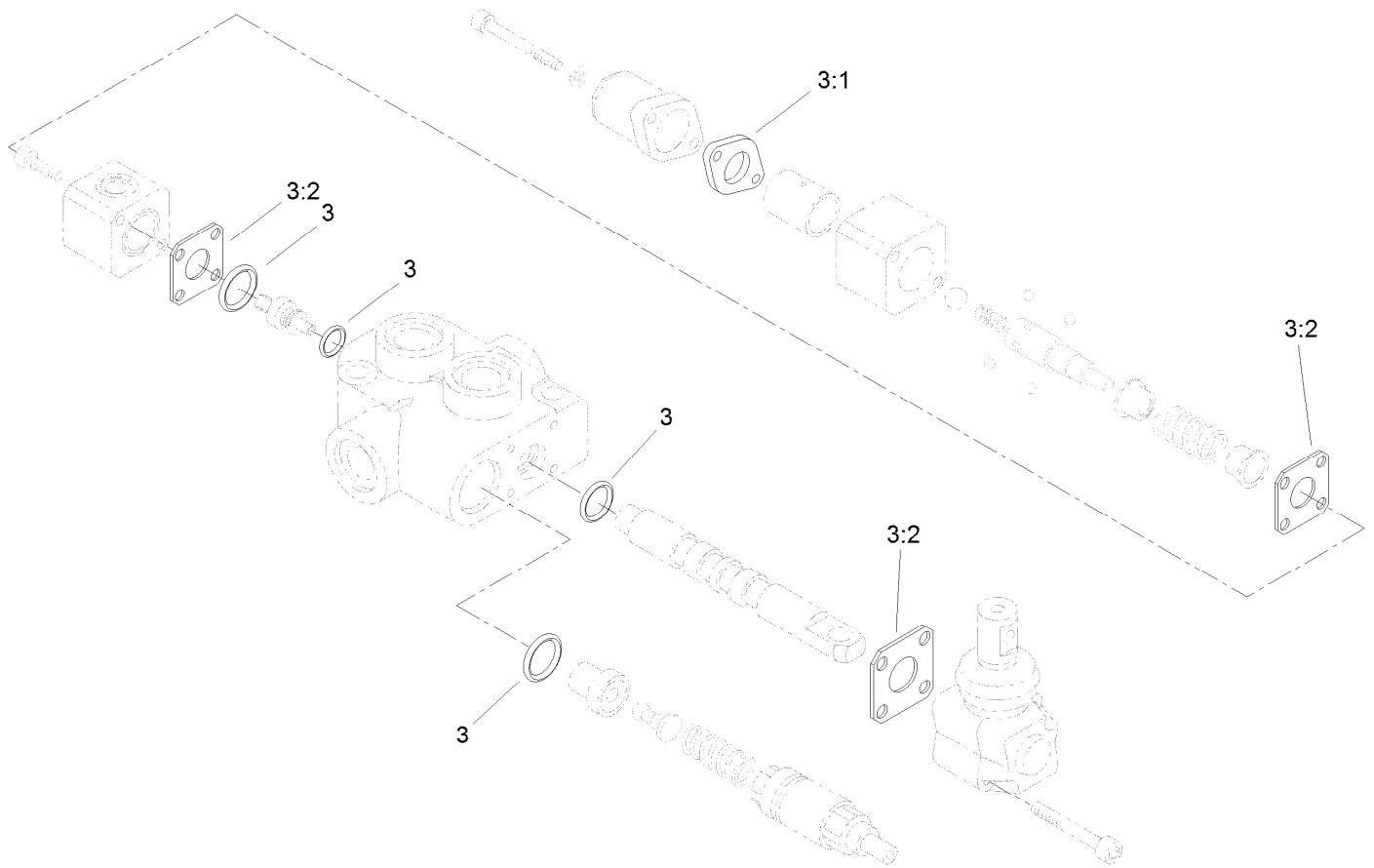
# Selector Valve and Auxiliary Valve Assembly



## Selector Valve and Auxiliary Valve Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>       |
|-------------|--------------------|-------------|-----------------------|-------------|--------------------|-------------|--------------------------|
| 1           | 99-3077            | 1           | Valve-HYD, Auxiliary  | 16          | 321-14             | 2           | Screw-HH                 |
| 2           | 105-7878           | 1           | Tube-HYD              | 18          | 104-4221           | 1           | HYD Valve Kit            |
| 3           | 94-6031            | 1           | Elbow-90              | 19          | 95-3209            | 1           | Fitting-Thread, Straight |
| 3:1         | 237-30             | 1           | O-Ring                | 19:1        | 237-79             | 2           | O-Ring                   |
| 4           | 340-98             | 2           | Fitting-Elbow, 90 DEG | 20          | 99-3072            | 1           | Valve-Selector, HYD      |
| 4:1         | 237-79             | 1           | O-Ring                | 21          | 100-1730           | 2           | Hose-Pump, HYD           |
| 4:2         | 237-30             | 1           | O-Ring                | 22          | 322-13             | 4           | Screw-HH                 |
| 5           | 98-4695            | 2           | Spacer                | 23          | 100-8817           | 2           | Hose-HYD                 |
| 6           | 98-0152            | 1           | Knob-Tapered          | 24          | 105-7879           | 1           | Tube-HYD                 |
| 7           | 86-5480            | 1           | Nipple-Test           | 25          | 100-2085           | 2           | Spacer                   |
| 8           | 354-79             | 1           | Cap-Dust              | 26          | 98-9079            | 1           | Adapter-Tee, Adjustable  |
| 9           | 33114-035          | 1           | Screw-HH              | 26:1        | 237-30             | 1           | O-Ring                   |
| 10          | 3253-4             | 1           | Washer-Lock           | 26:2        | 237-79             | 2           | O-Ring                   |
| 11          | 108-9709-03        | 1           | Lever-Control         | 27          | 340-105            | 2           | Fitting-Elbow, 90 DEG    |
| 12          | 340-4              | 4           | Fitting-Straight      | 27:1        | 237-80             | 1           | O-Ring                   |
| 12:1        | 237-30             | 1           | O-Ring                | 27:2        | 237-30             | 1           | O-Ring                   |
| 12:2        | 237-79             | 1           | O-Ring                | 28          | 3256-22            | 2           | Washer-Flat              |
| 13          | 98-4799            | 2           | Spacer                | 29          | 3256-23            | 4           | Washer-Plain             |
| 14          | 100-2245           | 1           | Hose-HYD              | 30          | 3296-29            | 4           | Nut-Lock, NI             |
| 15          | 98-4735            | 1           | Valve-Check, HYD      | 31          | 3296-42            | 2           | Nut-Lock, NI             |
| 15:1        | 237-30             | 1           | O-Ring                | 32          | 3290-379           | 18          | Tie-Cable                |
| 15:2        | 237-79             | 1           | O-Ring                | 33          | 3296-27            | 1           | Nut-Lock, NI             |

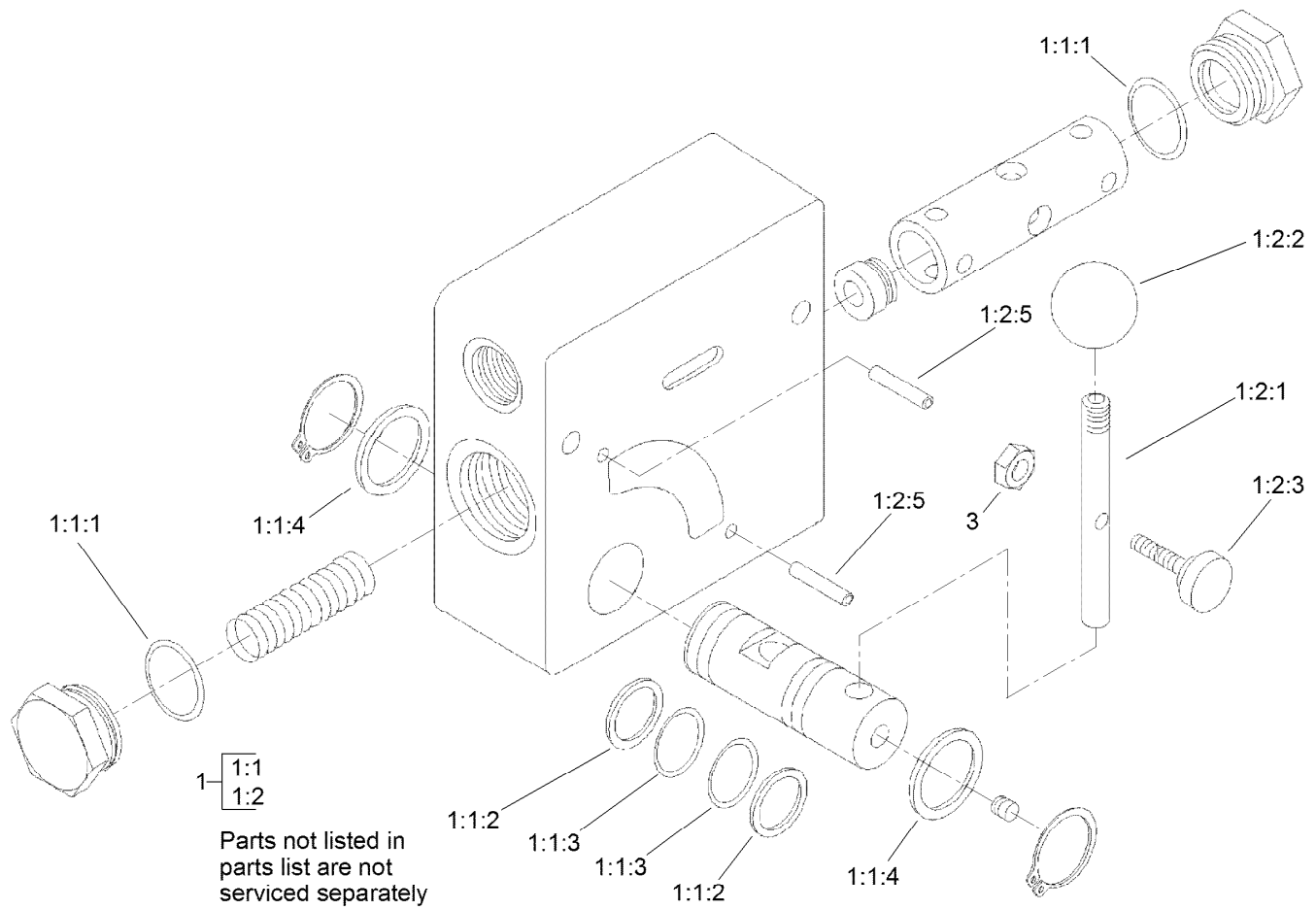
# Auxiliary Hydraulic Valve Assembly No. 99-3077



## Auxiliary Hydraulic Valve Assembly No. 99-3077 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 3           | 99-4390            | 1           | Seal Kit           |
| 3:1         | 99-3074            | 4           | Gasket             |
| 3:2         | 99-3075            | 8           | Gasket             |

# Hydraulic Valve Assembly No. 104-4221

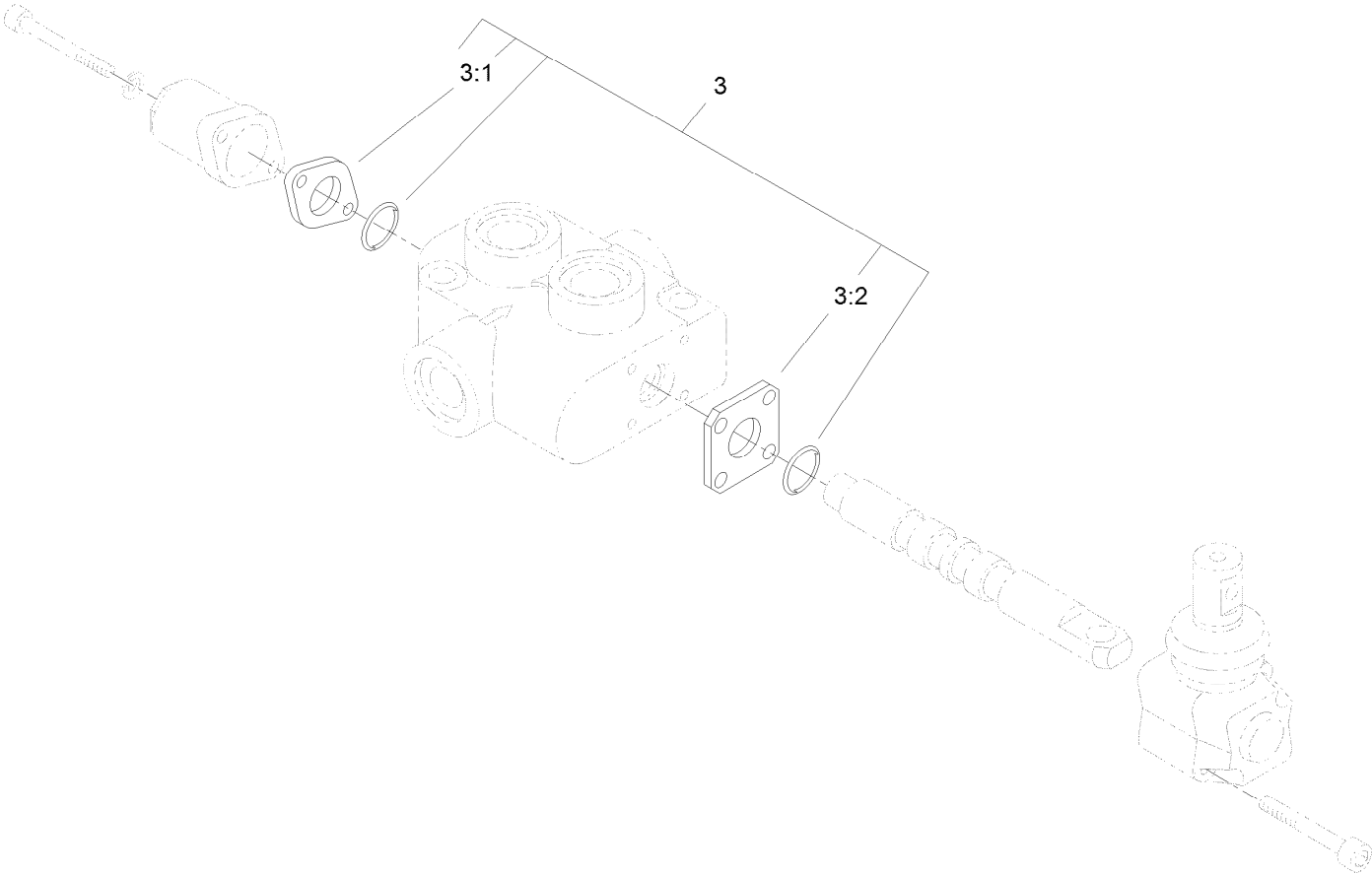


# Hydraulic Valve Assembly No. 104-4221 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|---------------------|
| 1           |                    | 1           | Valve-Flow, Hydraulic ● | 1:2         | 98-9098            | 1           | Handle Hardware Kit |
| 1:1         | 104-4231           | 1           | Seal Kit                | 1:2:1       |                    | 1           | Handle ●            |
| 1:1:1       |                    | 2           | O-Ring ●                | 1:2:2       |                    | 1           | Knob ●              |
| 1:1:2       |                    | 2           | Back-Up ●               | 1:2:3       |                    | 1           | Screw-Thumb ●       |
| 1:1:3       |                    | 2           | O-Ring ●                | 1:2:5       |                    | 2           | Pin-Roll ●          |
| 1:1:4       |                    | 2           | Quad Ring ●             | 3           | 3296-27            | 1           | Nut-Lock, NI        |

● Not serviced separately

# Hydraulic Selector Valve Assembly No. 99-3072

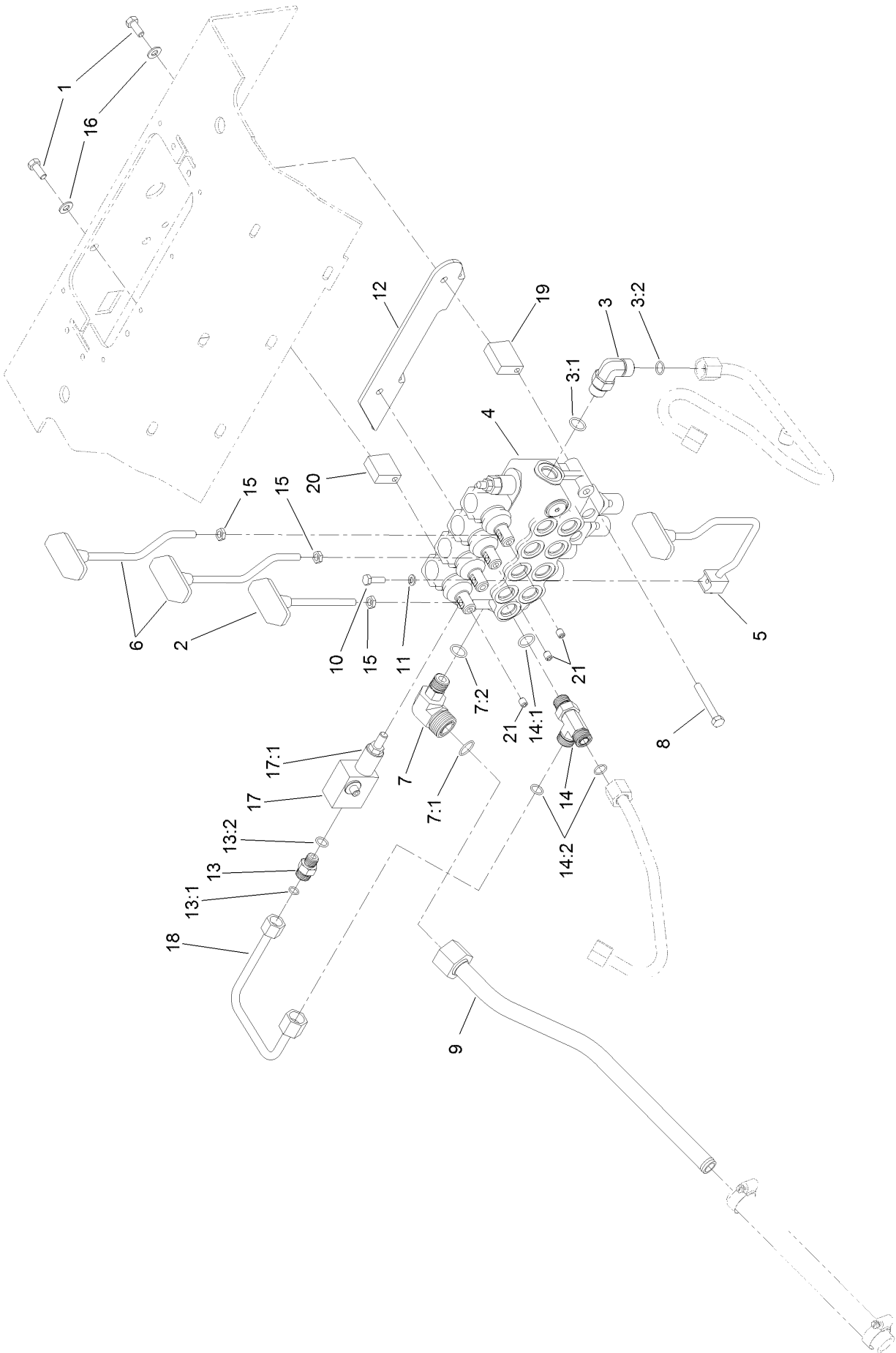




# Hydraulic Selector Valve Assembly No. 99-3072 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 3           | 99-4390            | 1           | Seal Kit           |
| 3:1         | 99-3074            | 4           | Gasket             |
| 3:2         | 99-3075            | 8           | Gasket             |

# Four Spool Valve Assembly

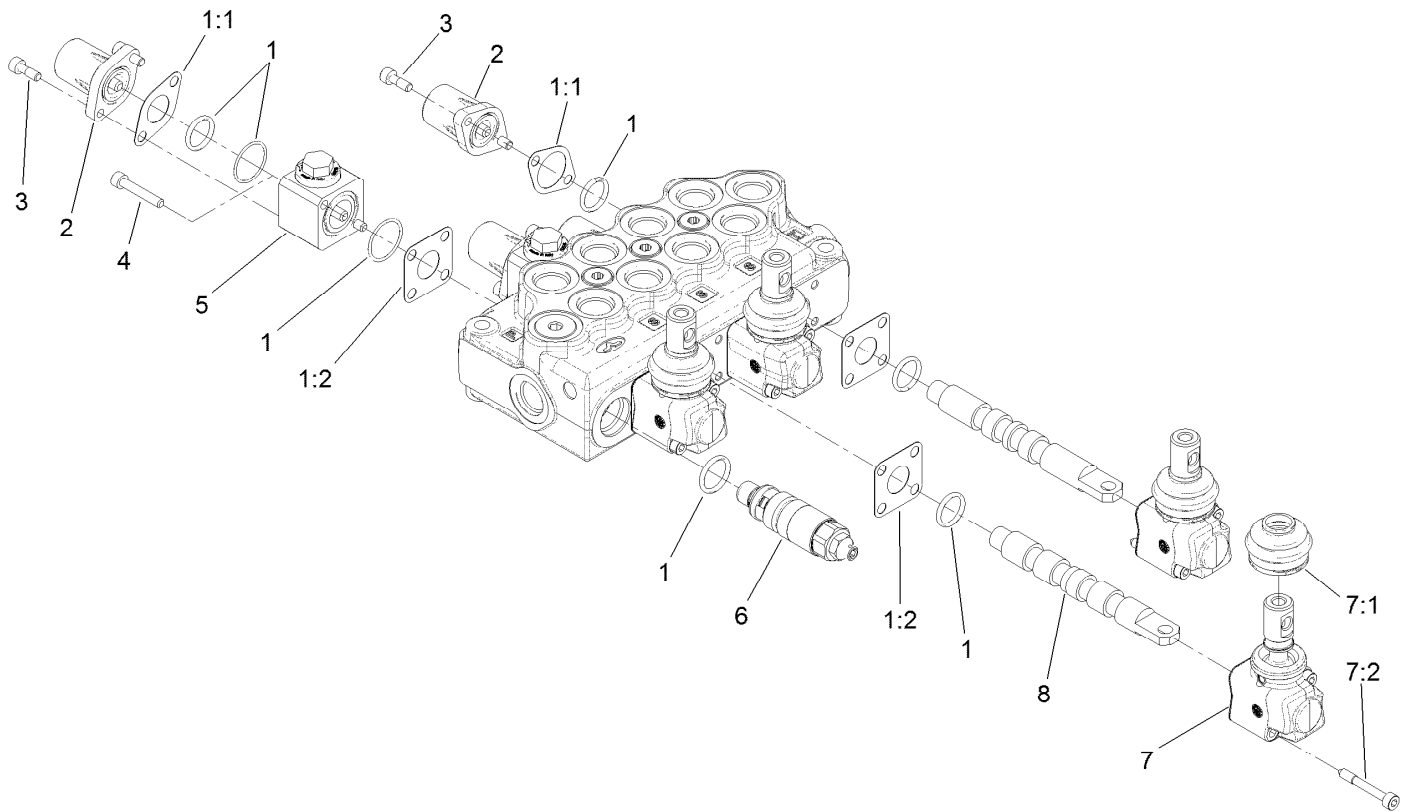


## Four Spool Valve Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>       | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      |
|-------------|--------------------|-------------|--------------------------|-------------|--------------------|-------------|-------------------------|
| 1           | 322-3              | 3           | Screw-HH                 | 13          | 340-2              | 1           | Fitting-Straight        |
| 2           | 105-7881           | 1           | Lever-Cylinder           | 13:1        | 237-22             | 1           | O-Ring                  |
| 3           | 340-98             | 1           | Fitting-Elbow, 90 DEG    | 13:2        | 237-42             | 1           | O-Ring                  |
| 3:1         | 237-79             | 1           | O-Ring                   | 14          | 340-109            | 1           | Fitting-Tee             |
| 3:2         | 237-30             | 1           | O-Ring                   | 14:1        | 237-79             | 1           | O-Ring                  |
| 4           | 130-7589           | 1           | HYD Four Spool Valve ASM | 14:2        | 237-30             | 2           | O-Ring                  |
| 5           | 106-8165           | 1           | Lever-Control            | 15          | 42-9580            | 3           | Nut-Hex                 |
| 6           | 104-5733           | 2           | Lever-Drive              | 16          | 3256-23            | 3           | Washer-Plain            |
| 7           | 92-5696            | 1           | Fitting-Elbow, 90 DEG    | 17          | 105-7882           | 1           | Relief Valve ASM        |
| 7:1         | 237-58             | 1           | O-Ring                   | 17:1        | 105-8358           | 1           | Cartridge-Valve, Relief |
| 7:2         | 237-79             | 1           | O-Ring                   | 17:2        | 105-8357           | 1           | Seal Kit ●              |
| 8           | 322-11             | 3           | Screw-HH                 | 18          | 105-7866           | 1           | Line-HYD                |
| 9           | 106-8177           | 1           | Tube-Tank, HYD           | 19          | 105-8354           | 2           | Spacer-Lower V          |
| 10          | 321-5              | 1           | Screw-HH                 | 20          | 105-7870           | 1           | Spacer-Upper V          |
| 11          | 3253-3             | 1           | Washer-Lock              | 21          | 105-4068           | 3           | Screw-Set, HSH          |
| 12          | 104-4222-03        | 1           | Bracket-Cover, Mount     |             |                    |             |                         |

● Not illustrated

# Four Spool Valve Assembly No. 130-7589



## Four Spool Valve Assembly No. 130-7589 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|-----------------------|
| 1           | 99-4390            | 1           | Seal Kit              |
| 1:1         | 99-3074            | 4           | Gasket                |
| 1:2         | 99-3075            | 8           | Gasket                |
| 2           | 100-8801           | 4           | High Force Spring Kit |
| 2           | 100-8800           | 4           | Standard Spring Kit   |
| 3           | 100-8802           | 8           | Screw-Cap, End        |
| 4           | 100-8803           | 4           | Screw                 |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  |
|-------------|--------------------|-------------|---------------------|
| 5           | 144-7359           | 2           | Block-Switch, Mount |
| 6           | 100-8805           | 1           | Valve-Relief        |
| 7           | 100-8807           | 4           | Operator ASM        |
| 7:1         | 100-8829           | 1           | Boot                |
| 7:2         | 100-8806           | 2           | Screw               |
| 8           | 130-2839           | 4           | Valve-Spool         |

This technical drawing is an exploded view of a hydraulic system, showing various components and their assembly relationships. The components are numbered as follows:

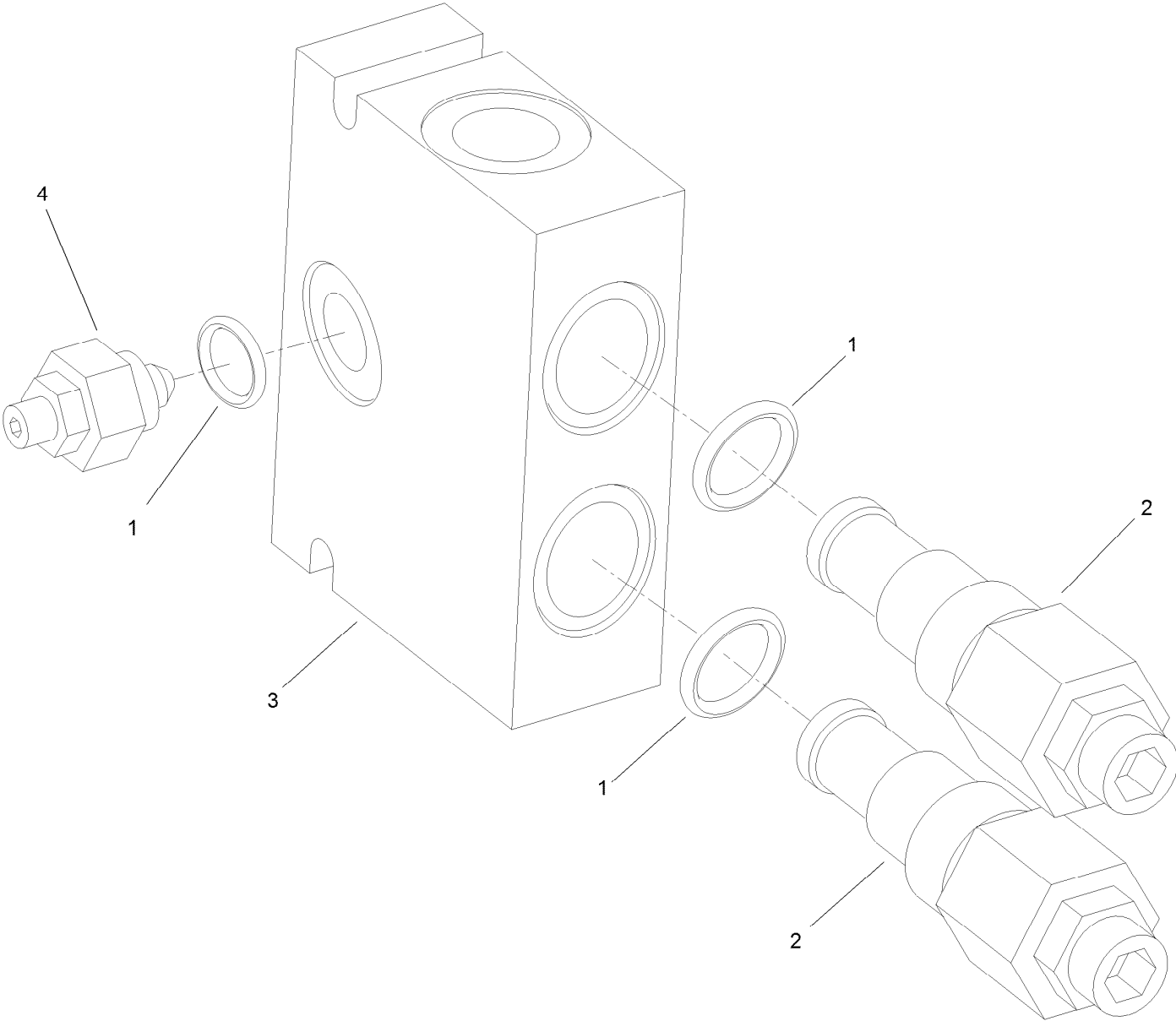
- 1:** Hydraulic cylinder (bottom left)
- 2:** Hydraulic line (bottom left)
- 3:** Hydraulic line (bottom left)
- 4:** Hydraulic line (bottom left)
- 5:** Hydraulic line (bottom right)
- 6:** Hydraulic line (bottom right)
- 7:** Hydraulic line (bottom right)
- 8:** Hydraulic line (top right)
- 9:** Hydraulic line (top right)
- 10:** Hydraulic line (top right)
- 11:** Hydraulic line (top right)
- 12:** Hydraulic line (top right)
- 13:** Hydraulic line (top right)
- 14:** Hydraulic line (top right)
- 15:** Hydraulic line (top right)
- 16:** Hydraulic line (top right)
- 17:** Hydraulic line (top right)
- 18:** Hydraulic line (top right)
- 19:** Hydraulic line (top right)
- 20:** Hydraulic line (top right)
- 21:** Hydraulic line (top right)

The diagram is divided into four main sections labeled A, B, C, and D, which represent different functional areas of the system. Section A shows the main hydraulic line assembly, Section B shows the main hydraulic line assembly, Section C shows the main hydraulic line assembly, and Section D shows the main hydraulic line assembly.

## Hydraulic Motor Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>              | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>       |
|-------------|--------------------|-------------|---------------------------------|-------------|--------------------|-------------|--------------------------|
| 1           | 340-7              | 8           | Fitting-Straight                | 9           | 108-9729           | 1           | Tube-HYD                 |
| 1:1         | 237-65             | 1           | O-Ring                          | 10          | 108-9727           | 1           | Tube-HYD                 |
| 1:2         | 237-80             | 1           | O-Ring                          | 11          | 108-9726           | 1           | Tube-HYD                 |
| 2           | 99-3012            | 2           | Hose-HYD                        | 12          | 99-3025            | 1           | Tube-HYD                 |
| 3           | 99-3010            | 2           | Hose-HYD                        | 13          | 99-3028            | 1           | Tube-HYD                 |
| 4           | 99-3011            | 2           | Hose-HYD                        | 14          | 108-9725           | 1           | Tube-HYD                 |
| 5           | 340-153            | 2           | Fitting-Elbow, 90 DEG           | 15          | 99-3026            | 1           | Tube-HYD                 |
| 5:1         | 237-79             | 1           | O-Ring                          | 16          | 340-72             | 4           | Fitting-Bulkhead, 90 DEG |
| 5:2         | 237-151            | 1           | O-Ring                          | 16:1        | 237-65             | 2           | O-Ring                   |
| 6           | 99-3022            | 1           | Tube-HYD                        | 17          | 340-74             | 4           | Nut-Lock, Bulkhead       |
| 7           | 99-3040            | 2           | HYD Counterbalance Valve<br>ASM | 18          | 99-3057            | 2           | Spacer-Valve             |
| 8           | 340-155            | 10          | Fitting-Straight                | 19          | 321-23             | 2           | Screw-HH                 |
| 8:1         | 237-79             | 1           | O-Ring                          | 20          | 3256-22            | 4           | Washer-Flat              |
| 8:2         | 237-151            | 1           | O-Ring                          | 21          | 3296-42            | 2           | Nut-Lock, NI             |

**Counterbalance Valve Assembly No. 99-3040**



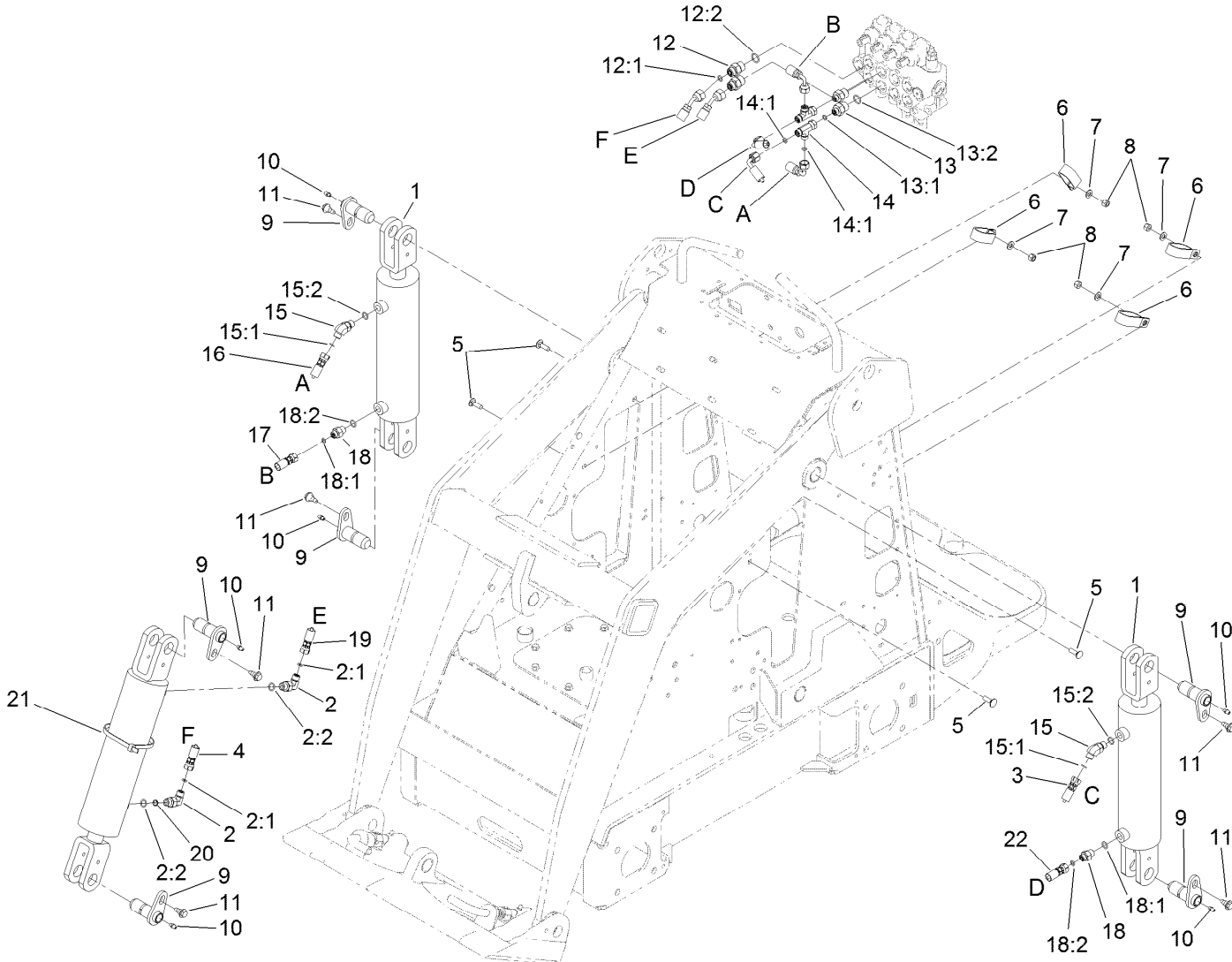


## Counterbalance Valve Assembly No. 99-3040 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 105-4099           | 1           | Seal Kit           |
| 2           | 99-3271            | 2           | Valve-Cartridge    |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 3           | 100-8864           | 1           | Manifold ASM       |
| 4           | 100-8865           | 1           | Needle Valve ASM   |

# Hydraulic Cylinder and Pivot Pin Assembly



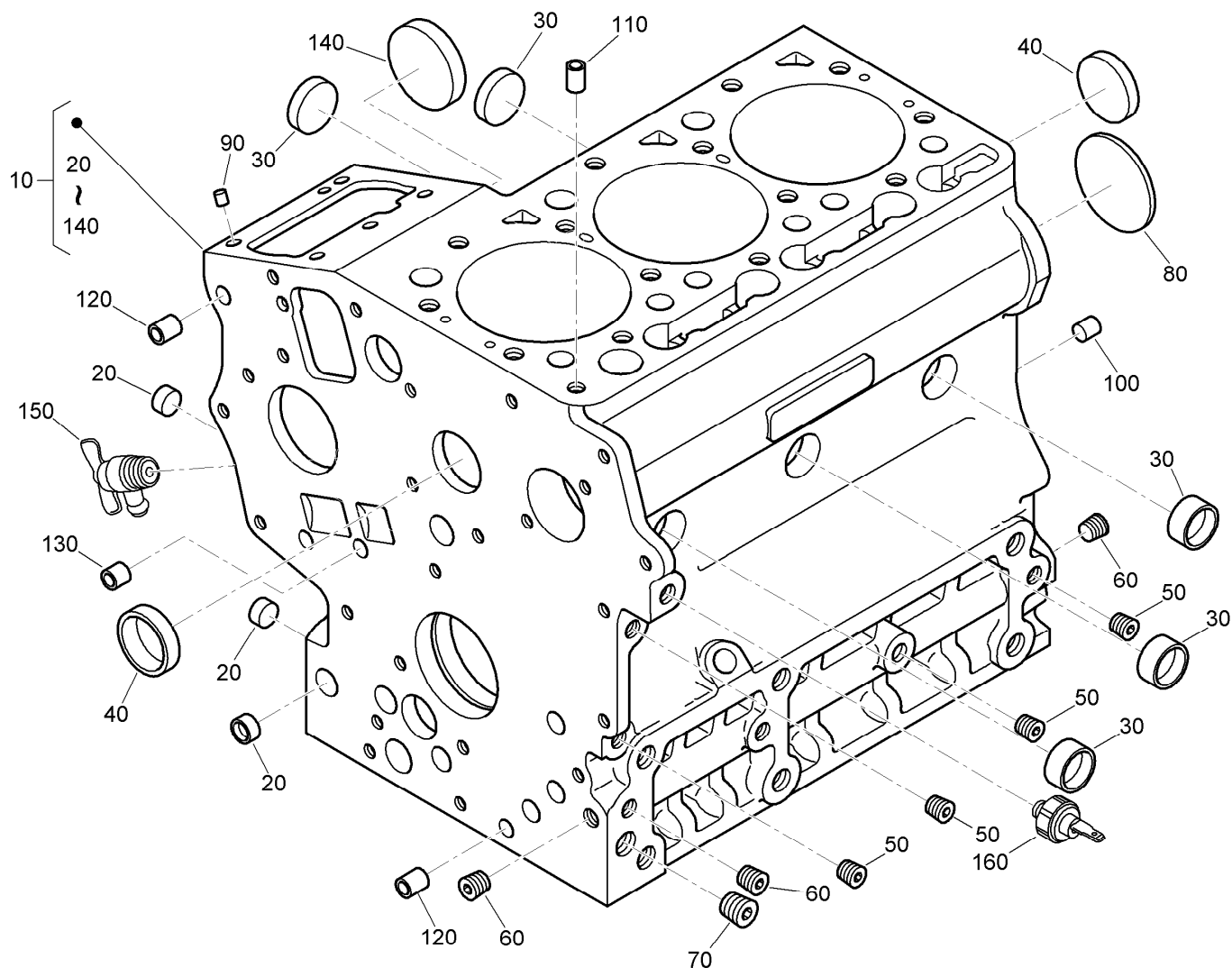
## Hydraulic Cylinder and Pivot Pin Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>           |
|-------------|--------------------|-------------|-----------------------|-------------|--------------------|-------------|------------------------------|
| 1           | 117-1834           | 3           | Cylinder-HYD          | 13:1        | 237-79             | 1           | O-Ring                       |
| 2           | 340-82             | 2           | Fitting-Elbow, 90 DEG | 13:2        | 237-21             | 1           | O-Ring                       |
| 2:1         | 237-42             | 1           | O-Ring                | 14          | 340-151            | 2           | Fitting-Tee                  |
| 2:2         | 237-21             | 1           | O-Ring                | 14:1        | 237-75             | 2           | O-Ring                       |
| 3           | 106-3692           | 1           | Hose-HYD              | 15          | 340-137            | 2           | Fitting                      |
| 4           | 98-4726            | 1           | Hose-HYD              | 15:1        | 237-21             | 1           | O-Ring                       |
| 5           | 3230-2             | 4           | Bolt-CARR             | 15:2        | 237-42             | 1           | O-Ring                       |
| 6           | 2412-137           | 4           | Clamp-R, Double       | 16          | 98-4725            | 1           | Hose-HYD                     |
| 7           | 3256-23            | 4           | Washer-Plain          | 17          | 100-1731           | 1           | Hose-HYD, Right              |
| 8           | 3296-29            | 4           | Nut-Lock, NI          | 18          | 340-1              | 2           | Fitting-Straight             |
| 9           | 112-2609           | 6           | Pin-Pivot             | 18:1        | 237-21             | 1           | O-Ring                       |
| 10          | 302-5              | 6           | Fitting-Grease        | 18:2        | 237-42             | 1           | O-Ring                       |
| 11          | 99-5105            | 6           | Screw-Shoulder        | 19          | 98-4727            | 1           | Hose-HYD                     |
| 12          | 340-3              | 2           | Fitting-Straight      | 20          | 108-4714           | 1           | Orifice-Port Insert, One Way |
| 12:1        | 237-22             | 1           | O-Ring                | 21          | 3334-945           | 1           | Tie-Cable                    |
| 12:2        | 237-79             | 1           | O-Ring                | 22          | 131-0584           | 1           | Hose-HYD HP                  |
| 13          | 340-133            | 2           | Fitting-STR           |             |                    |             |                              |

# Hydraulic Cylinder Assembly No. 117-1834

## Hydraulic Cylinder Assembly No. 117-1834 (continued)

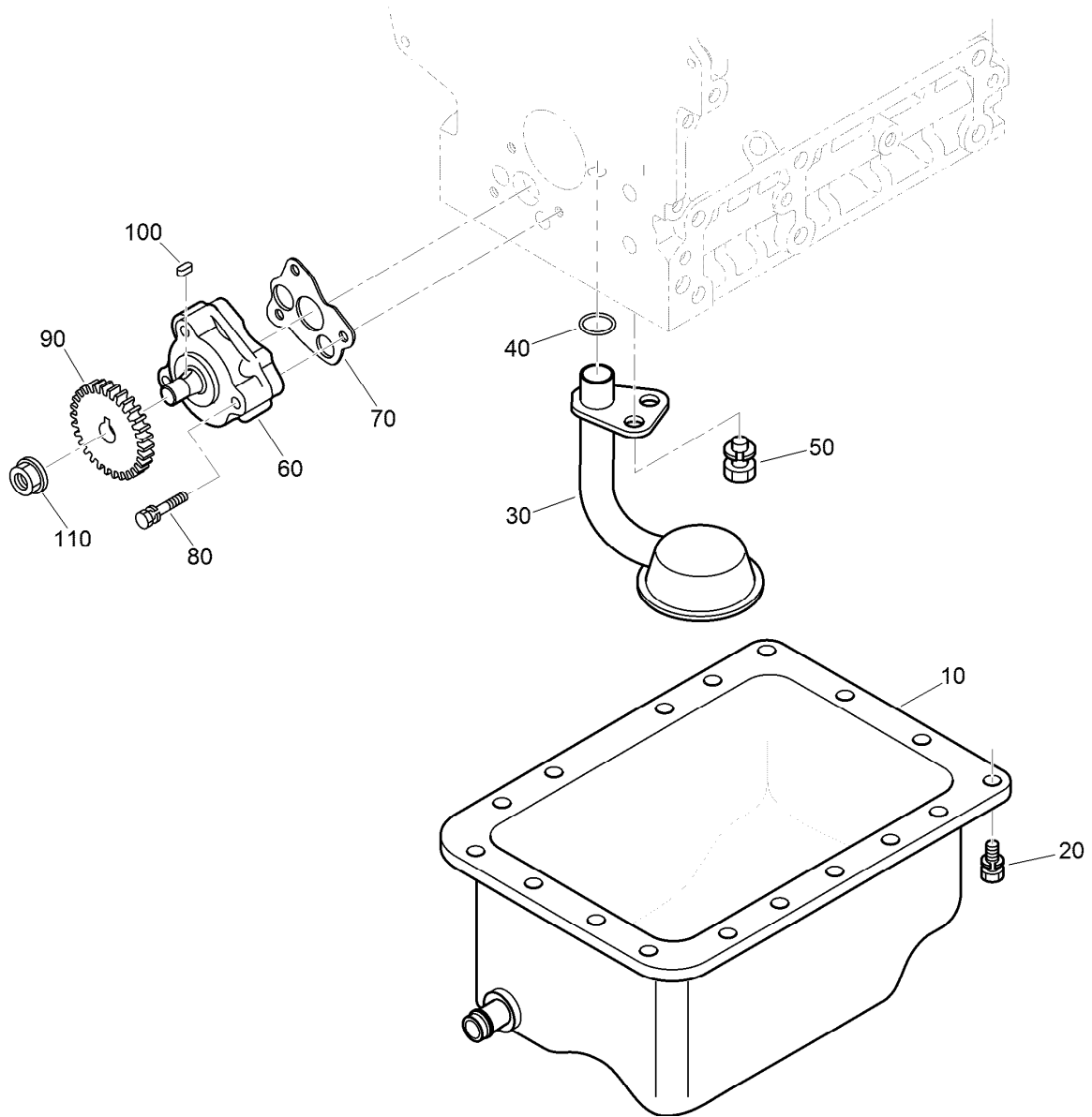
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 117-1837           | 1           | Kit-Seal           |



## Crankcase Assembly

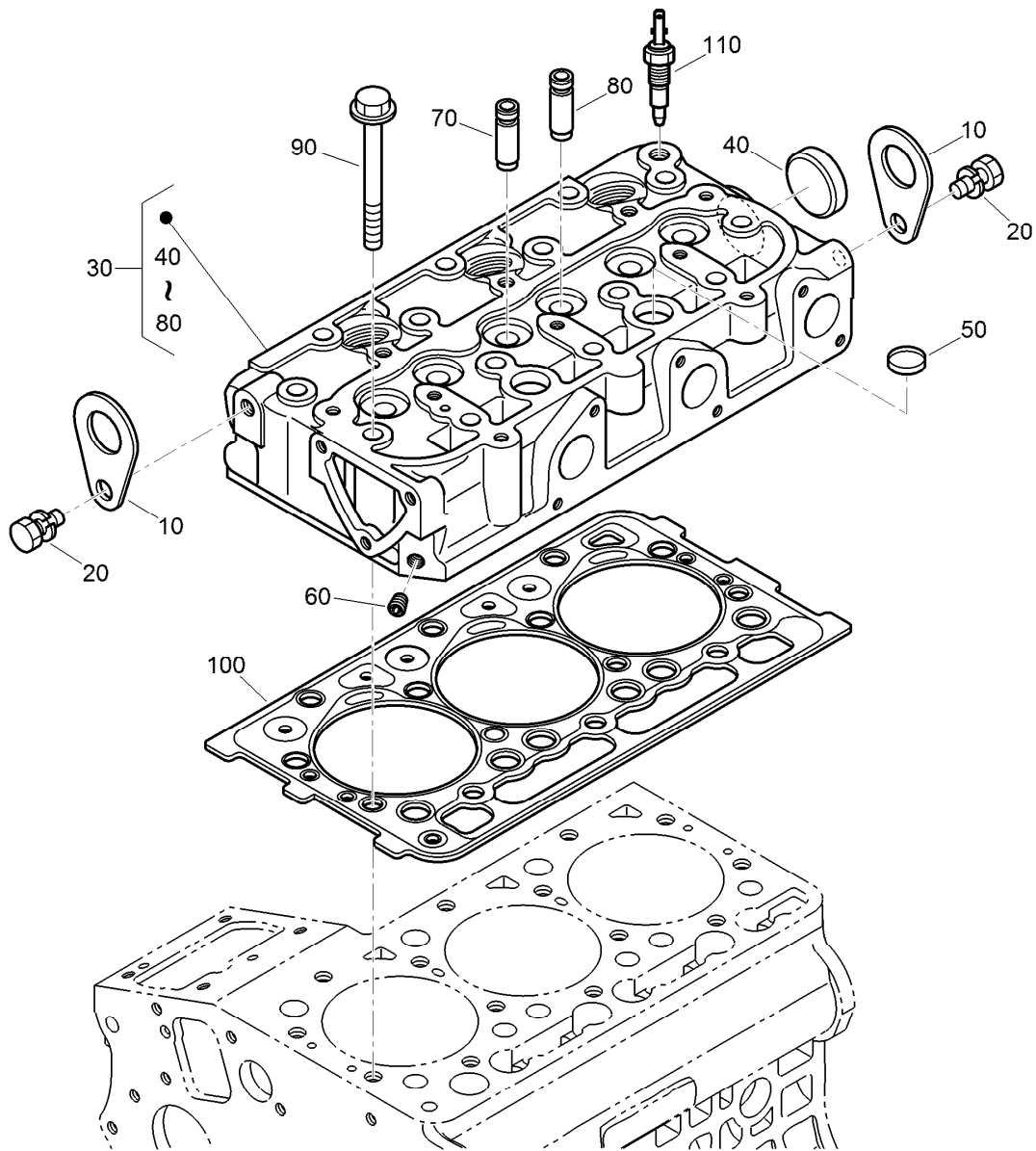
| Ref. | Part Number | Qty. | Description    |
|------|-------------|------|----------------|
| 10   | 130-1503    | 1    | Crankcase ASM  |
| 20   | 100-2019    | 3    | Cap-Sealing    |
| 30   | 100-2020    | 5    | Cap-Sealing    |
| 40   | 98-9398     | 2    | Cap-Sealing    |
| 50   | 98-9687     | 5    | Plug           |
| 60   | 98-7487     | 3    | Plug           |
| 70   | 98-7488     | 1    | Plug           |
| 80   | 100-1851    | 1    | Plug-Expansion |

| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 90   | 98-9375     | 2    | Pin-Straight         |
| 100  | 98-9377     | 2    | Pin-Straight         |
| 110  | 98-7506     | 1    | Pin-Pipe             |
| 120  | 100-2051    | 2    | Pin-Pipe             |
| 130  | 100-2051    | 2    | Pin-Pipe             |
| 140  | 100-1991    | 1    | Cover-Fuel, Camshaft |
| 150  | 120-3121    | 1    | Draincock ASM        |
| 160  | 98-9416     | 1    | Switch-Oil           |



## Oil Pan and Oil Pump Assembly

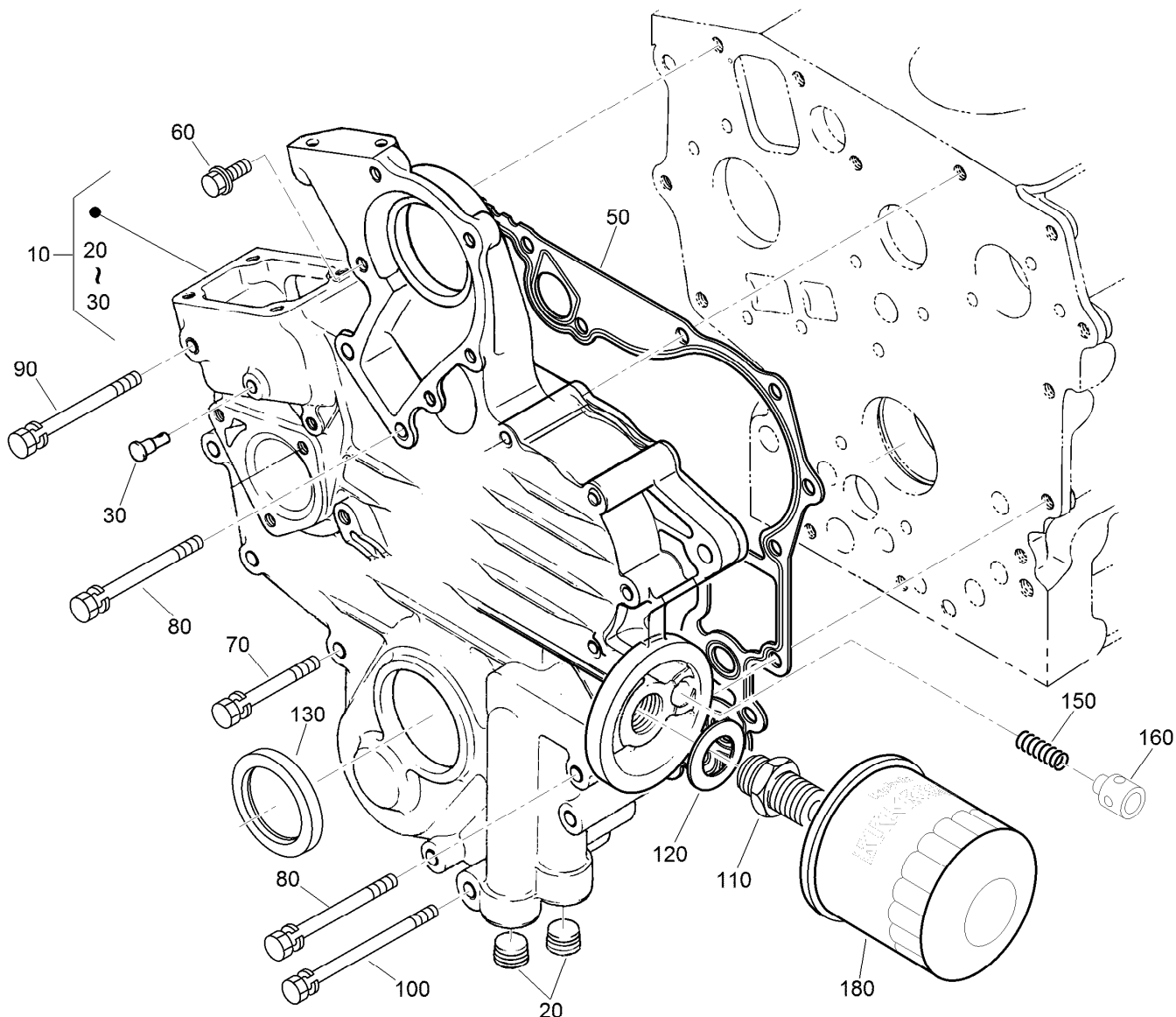
| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 10   | 100-2239    | 1    | Pan-Oil              |
| 20   | 98-9350     | 18   | Bolt                 |
| 30   | 100-2001    | 1    | Strainer-Pickup, Oil |
| 40   | 105-3776    | 1    | O-Ring               |
| 50   | 100-9195    | 1    | Bolt                 |
| 60   | 100-2002    | 1    | Oil Pump ASM         |
| 70   | 100-2003    | 1    | Gasket-Pump, Oil     |
| 80   | 100-1923    | 3    | Bolt                 |
| 90   | 130-1419    | 1    | Gear-Drive, Oil Pump |
| 100  | 98-7658     | 1    | Key-Feather          |
| 110  | 120-5822    | 1    | Nut-Flange           |



## Cylinder Head Assembly

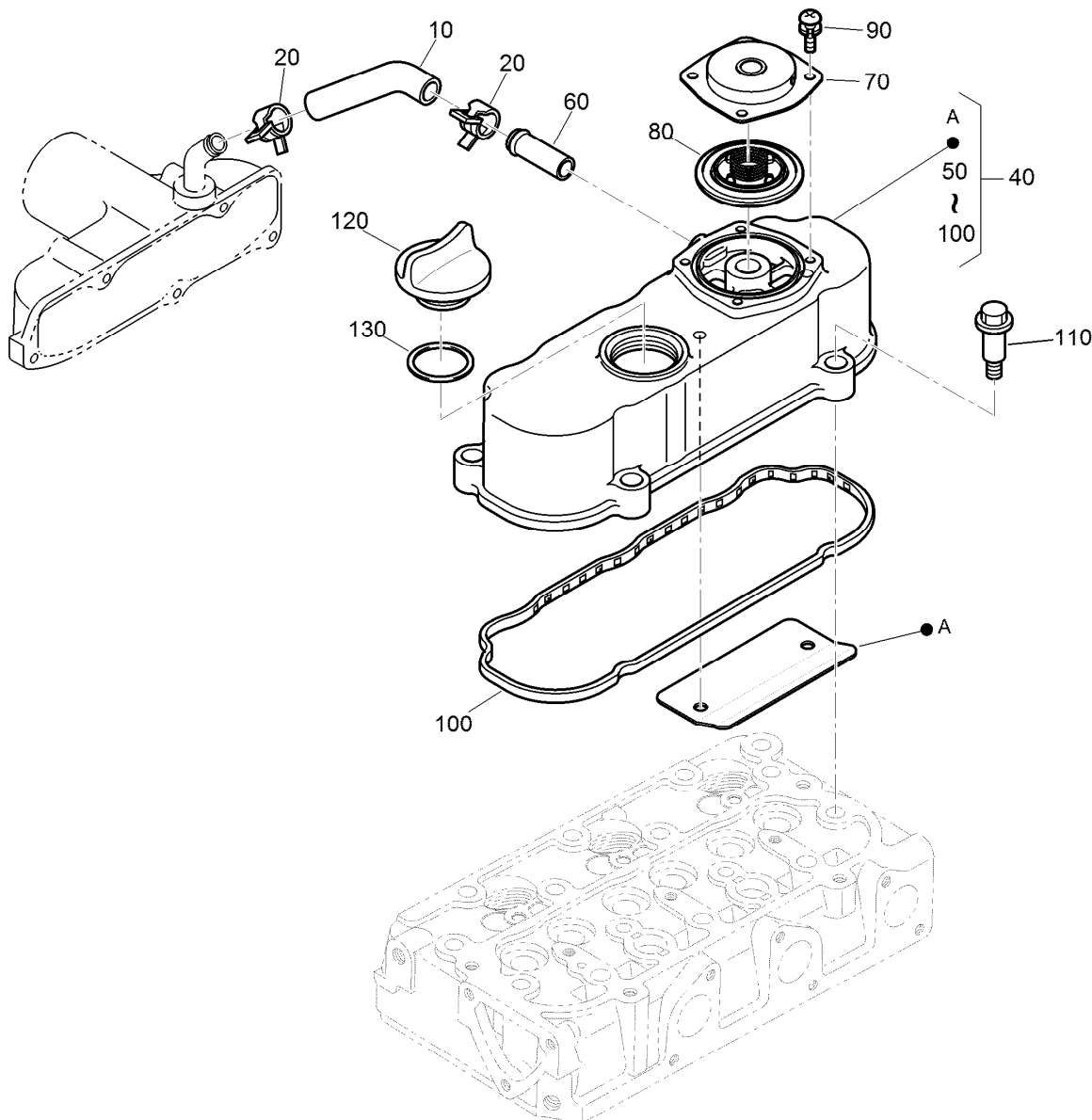
| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 10   | 98-7531     | 2    | Hook-Engine           |
| 20   | 100-9195    | 2    | Bolt                  |
| 30   | 130-1524    | 1    | Cylinder Head ASM     |
| 40   | 105-3705    | 1    | Cap-Sealing           |
| 50   | 98-9389     | 2    | Cap-Sealing           |
| 60   | 98-9687     | 1    | Plug                  |
| 70   | 100-1882    | 3    | Guide-Valve, Inlet    |
| 80   | 100-1883    | 3    | Guide-Valve, Exhaust  |
| 90   | 100-1820    | 14   | Bolt-Head, Cylinder   |
| 100  | 130-1525    | 1    | Gasket-Head, Cylinder |
| 110  | 99-3582     | 1    | Thermoswitch          |





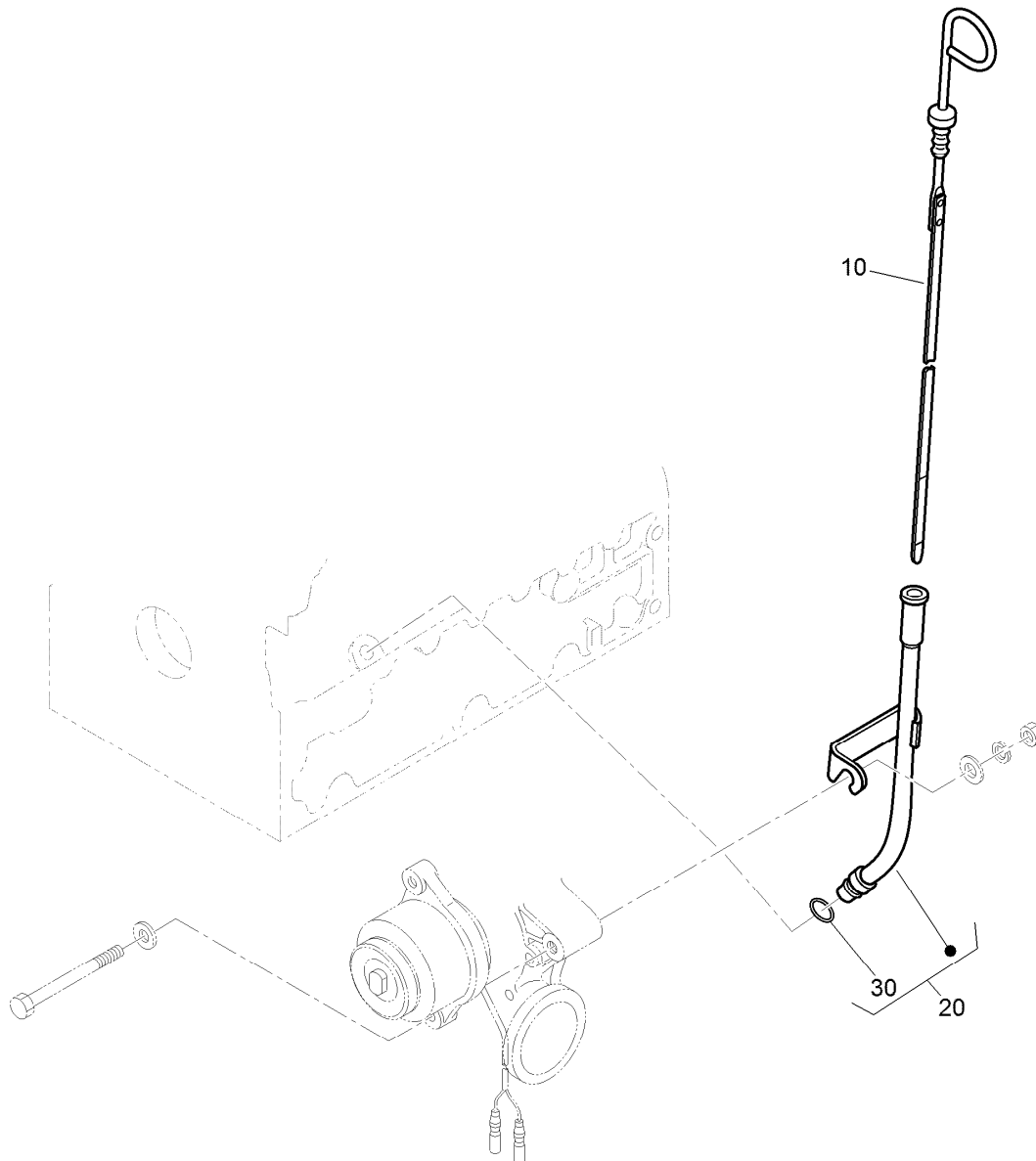
## Gear Case and Oil Filter Cartridge Assembly

| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 130-1293    | 1    | Gear Case ASM      |
| 20   | 98-7488     | 2    | Plug               |
| 30   | 100-1910    | 1    | Pin-Spring, Start  |
| 50   | 130-1302    | 1    | Gasket-Case, Gear  |
| 60   | 127-0403    | 1    | Bolt-Flange        |
| 70   | 125-9063    | 8    | Bolt-Sems          |
| 80   | 100-1922    | 5    | Bolt               |
| 90   | 100-1766    | 1    | Bolt               |
| 100  | 100-1767    | 1    | Bolt               |
| 110  | 98-9388     | 1    | Joint-Pipe         |
| 120  | 100-1926    | 1    | Washer-Plain       |
| 130  | 132-4884    | 1    | Seal, Oil          |
| 150  | 132-4885    | 1    | Spring             |
| 160  | 130-1510    | 1    | Valve-Relief       |
| 180  | 115-8189    | 1    | Filter-Oil, Engine |



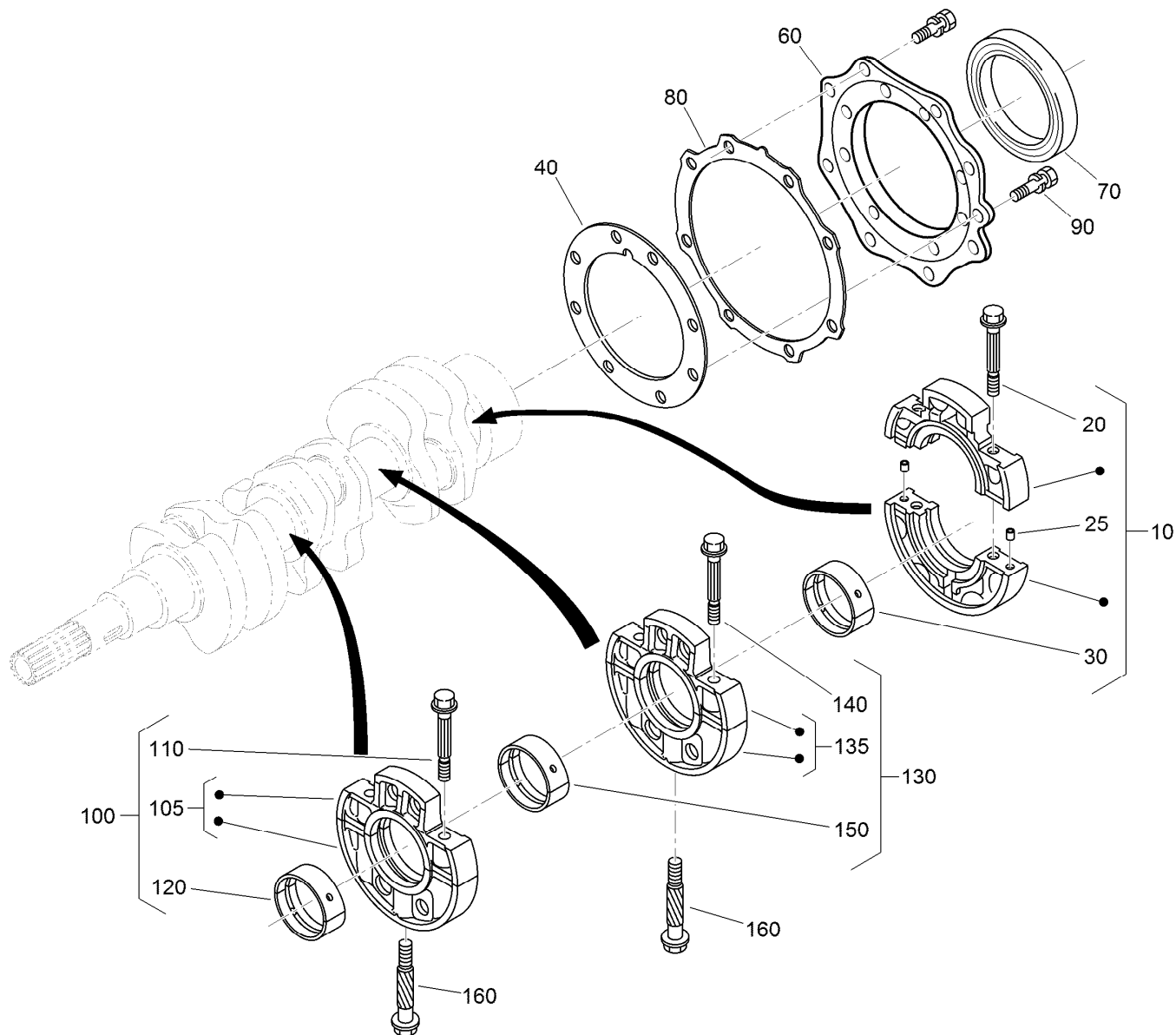
## Cylinder Head Cover Assembly

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 10   | 130-1488    | 1    | Tube-Breather       |
| 20   | 110-3712    | 2    | Clamp-Hose          |
| 40   | 130-1489    | 1    | Cover-Cylinder Head |
| 50   | 130-1490    | 1    | Cylinder Head ASM   |
| 60   | 98-9580     | 1    | Pipe-Return, Water  |
| 70   | 110-3714    | 1    | Cover-Breather      |
| 80   | 110-3715    | 1    | Valve-Breather      |
| 90   | 98-9364     | 4    | Screw (With Washer) |
| 100  | 112-2807    | 1    | Gasket-Cover, Head  |
| 110  | 108-7063    | 4    | Bolt                |
| 120  | 107-9075    | 1    | Plug-Filler, Oil    |
| 130  | 99-3446     | 1    | O-Ring              |



## Dipstick and Guide Assembly

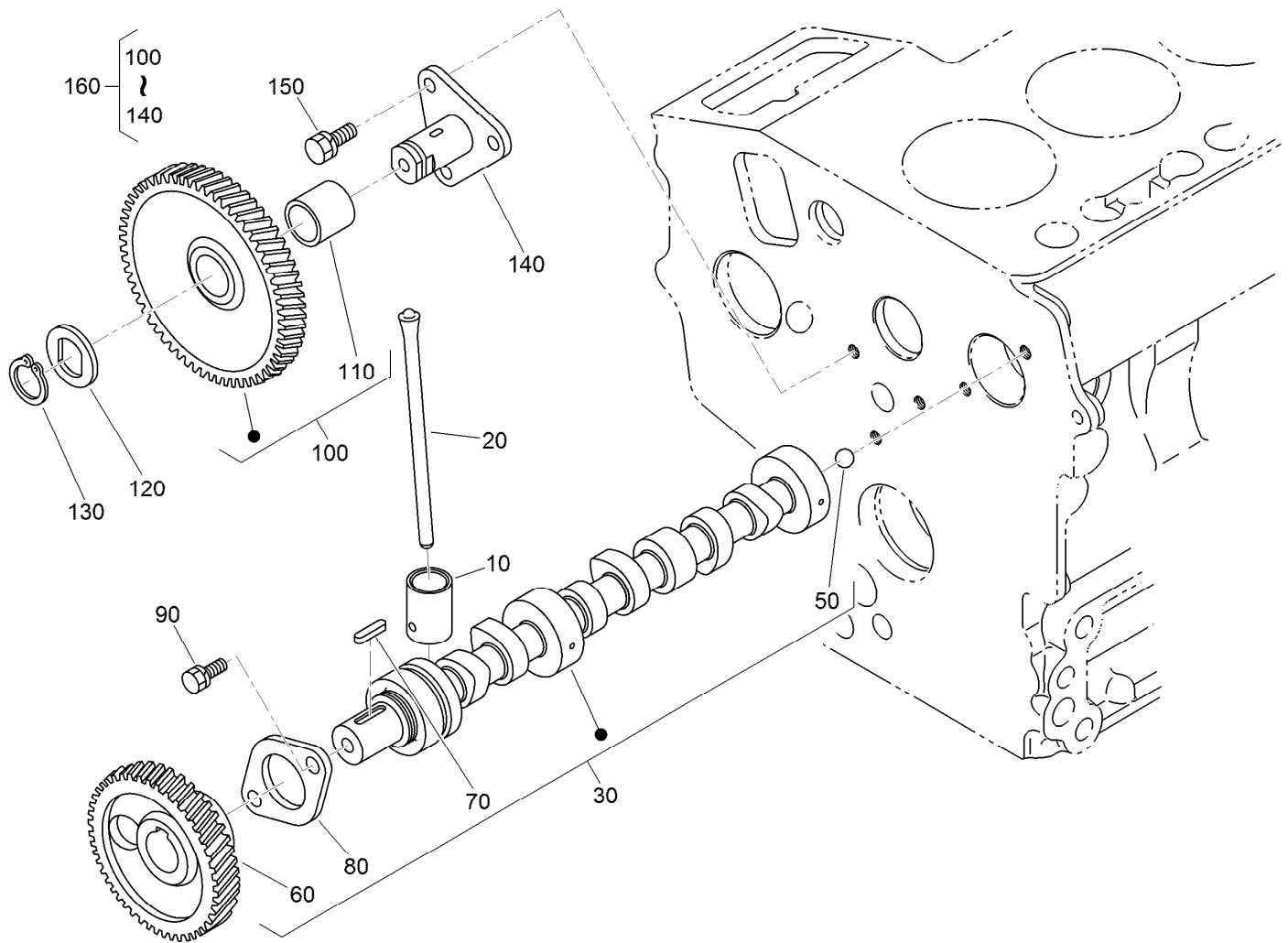
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  |
|-------------|--------------------|-------------|---------------------|
| 10          | 112-2811           | 1           | Gauge-Oil           |
| 20          | 130-1386           | 1           | Oil Gauge Guide ASM |
| 30          | 98-9722            | 1           | O-Ring              |



## Main Bearing Case Assembly

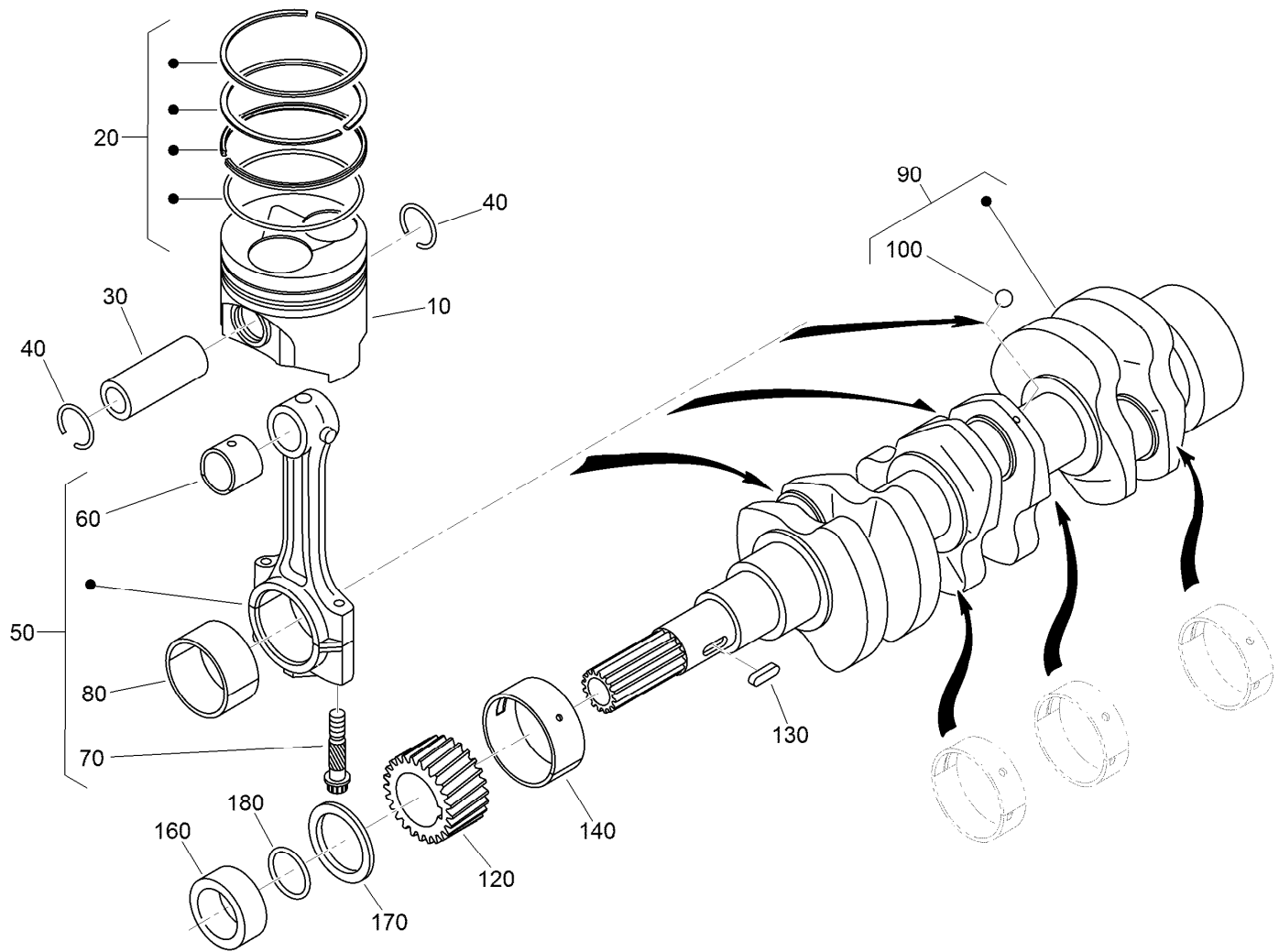
| Ref. | Part Number | Qty. | Description                   |
|------|-------------|------|-------------------------------|
| 10   | 125-9064    | 1    | Wheel Bearing Case ASM        |
| 20   | 125-9065    | 2    | Bolt-Flange                   |
| 25   | 125-9082    | 2    | Pin-Straight                  |
| 30   | 130-1209    | 1    | Metal-Crankshaft              |
| 30   | 100-1870    | 1    | Crankshaft-Metal (-0.2Mm Set) |
| 30   | 130-1210    | 1    | Metal-Crankshaft              |
| 40   | 100-1873    | 1    | Gasket-Case, Bearing          |
| 60   | 112-8334    | 1    | Cover-Case, Bearing           |
| 70   | 110-3724    | 1    | Seal-Oil                      |
| 80   | 100-1876    | 1    | Gasket-Cover, Case            |
| 90   | 100-1750    | 16   | Bolt                          |
| 100  | 130-1177    | 1    | Bearing Case ASM              |

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 105  | 100-1987    | 1    | Main Bearing Case ASM |
| 110  | 100-1757    | 2    | Bolt-Case, Bearing    |
| 120  | 130-1215    | 1    | Metal-Crankshaft      |
| 120  | 130-1216    | 1    | Metal-Crankshaft      |
| 120  | 130-1217    | 1    | Metal-Crankshaft      |
| 130  | 130-1299    | 1    | Bearing Case ASM      |
| 135  | 100-2027    | 1    | Main Bearing Case ASM |
| 140  | 100-1757    | 2    | Bolt-Case, Bearing    |
| 150  | 130-1215    | 1    | Metal-Crankshaft      |
| 150  | 130-1216    | 1    | Metal-Crankshaft      |
| 150  | 130-1217    | 1    | Metal-Crankshaft      |
| 160  | 100-1874    | 2    | Bolt-Case, Bearing    |



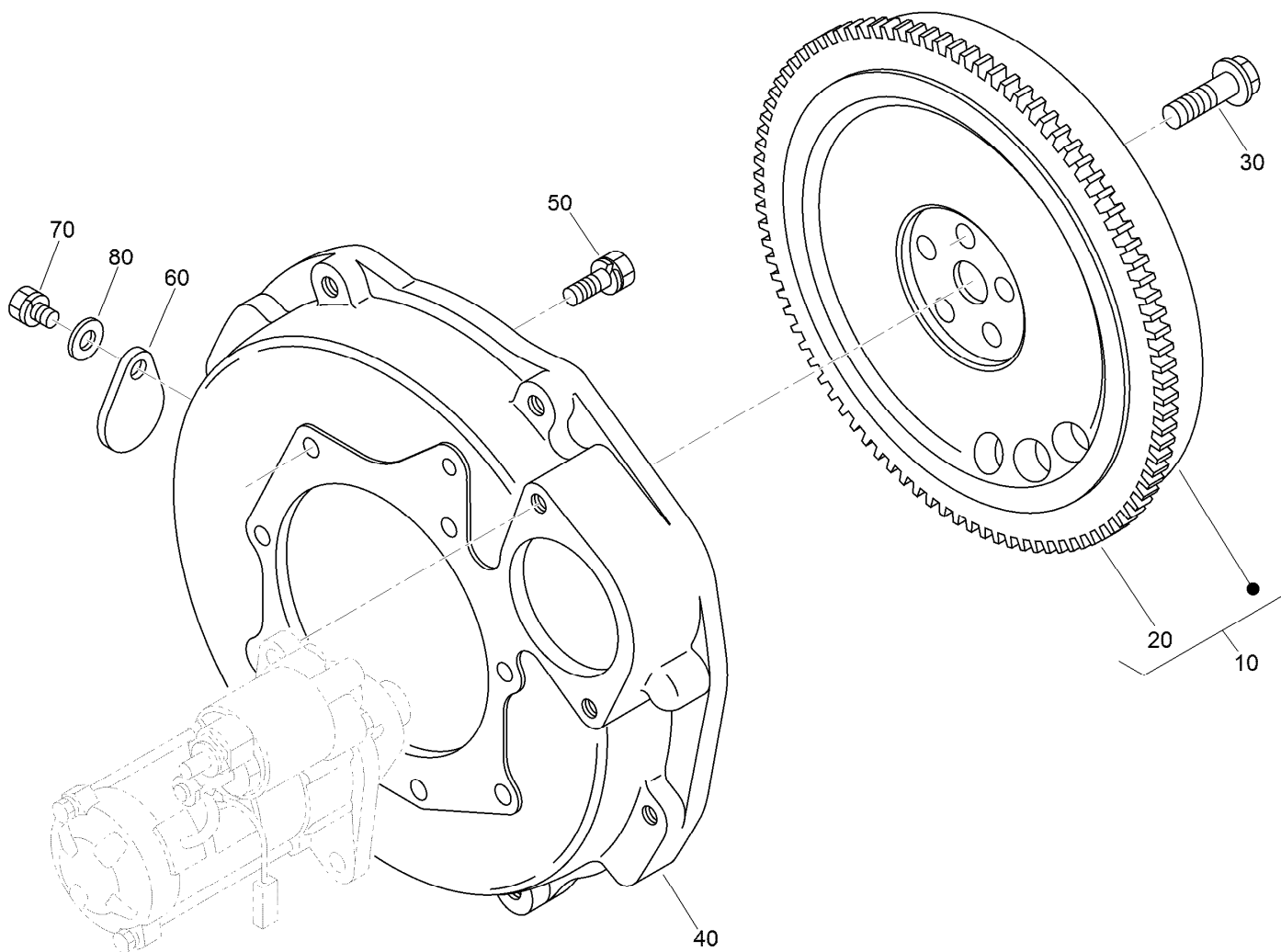
## Camshaft and Idle Gear Shaft Assembly

| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 10   | 110-3727    | 6    | Tappet            |
| 20   | 100-1989    | 6    | Rod-Push          |
| 30   | 130-1526    | 1    | Camshaft ASM      |
| 50   | 110-3729    | 1    | Ball              |
| 60   | 130-1534    | 1    | Gear-Cam          |
| 70   | 98-9378     | 1    | Key-Feather       |
| 80   | 100-1887    | 1    | Stopper-Camshaft  |
| 90   | 98-9350     | 2    | Bolt              |
| 100  | 121-2421    | 1    | Idle Gear ASM     |
| 110  | 121-2422    | 1    | Bushing           |
| 120  | 100-1970    | 1    | Collar-Gear, Idle |
| 130  | 100-1969    | 1    | Ring-Snap         |
| 140  | 100-1967    | 1    | Shaft-Gear, Idle  |
| 150  | 100-1774    | 3    | Bolt-Flange       |
| 160  | 100-2240    | 1    | Idle Gear ASM     |



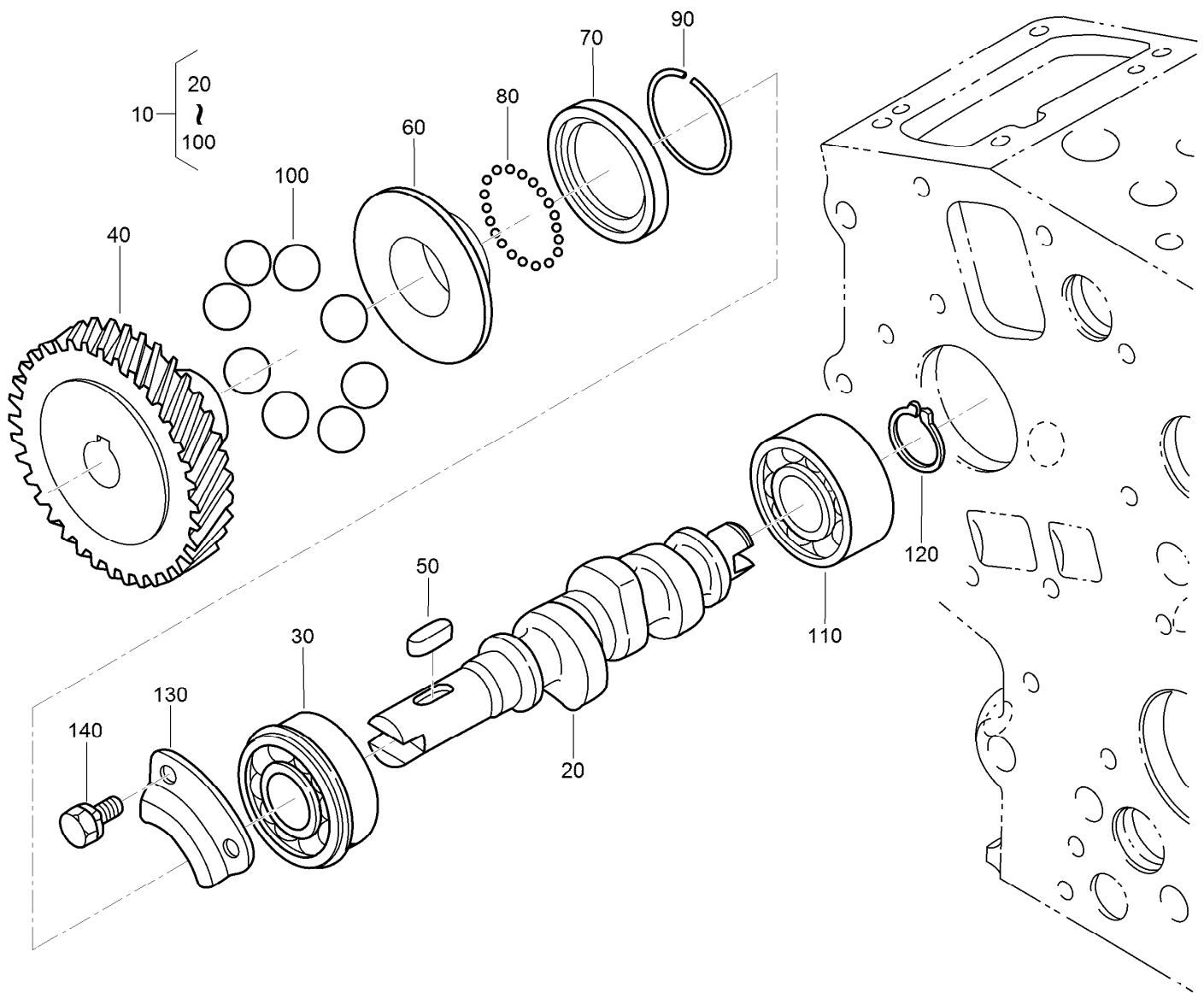
## Piston and Crankshaft Assembly

| Ref. | Part Number | Qty. | Description             | Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|------|-------------|------|-------------------------|
| 10   | 130-1530    | 3    | Piston                  | 80   | 121-2420    | 3    | Metal-Crankpin (-.40Mm) |
| 10   | 130-1531    | 3    | Piston                  | 90   | 100-2160    | 1    | Crankshaft              |
| 20   | 130-1528    | 3    | Piston Ring ASM         | 100  | 100-1791    | 3    | Ball                    |
| 20   | 130-1529    | 3    | Piston Ring ASM         | 120  | 100-1891    | 1    | Gear-Crankshaft         |
| 30   | 110-3734    | 3    | Pin-Piston              | 130  | 100-1752    | 1    | Key-Feather             |
| 40   | 100-1835    | 6    | Circlip-Internal        | 140  | 130-1214    | 1    | Metal-Crankshaft        |
| 50   | 125-9070    | 3    | Connecting Rod ASM      | 140  | 130-1218    | 1    | Metal-Crankshaft        |
| 60   | 110-3736    | 3    | Bushing-Pin, Piston     | 140  | 130-1219    | 1    | Metal-Crankshaft        |
| 70   | 100-1999    | 6    | Bolt-Rod, Connecting    | 160  | 100-1890    | 1    | Collar-Crankshaft       |
| 80   | 100-2000    | 3    | Metal-Crankpin (STD)    | 170  | 100-1974    | 1    | Slinger-Oil             |
| 80   | 121-3849    | 3    | Metal-Crankpin (-.20Mm) | 180  | 100-2209    | 1    | O-Ring                  |



## Flywheel Assembly

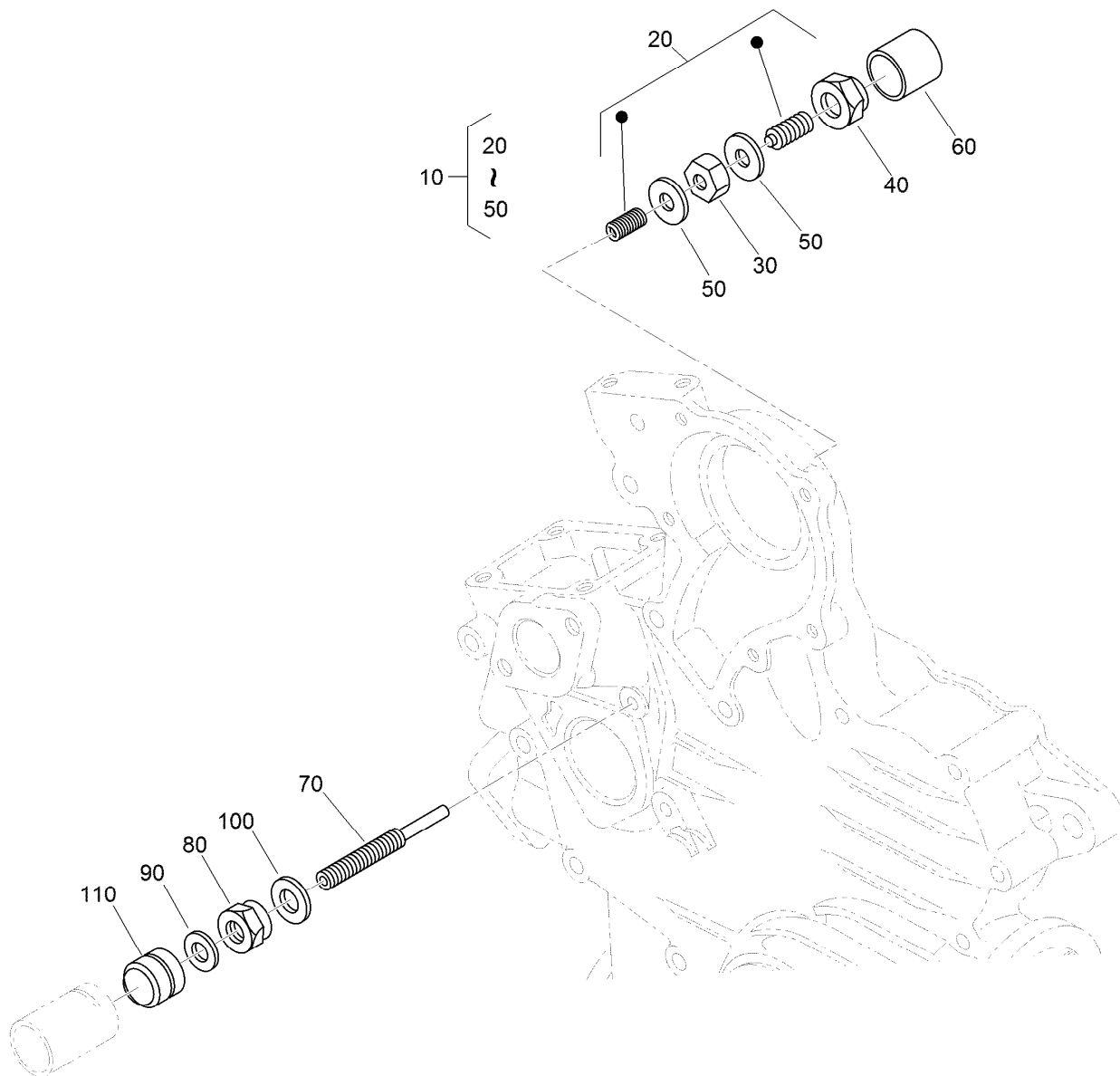
| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 10   | 130-1300    | 1    | Flywheel ASM     |
| 20   | 127-1604    | 1    | Gear-Ring        |
| 30   | 100-1930    | 5    | Bolt-Flywheel    |
| 40   | 117-1703    | 1    | Housing-Flywheel |
| 50   | 98-9359     | 8    | Bolt             |
| 60   | 100-2177    | 1    | Cover            |
| 70   | 100-9195    | 1    | Bolt             |
| 80   | 120-5832    | 1    | Washer-Plain     |



## Fuel Camshaft Assembly

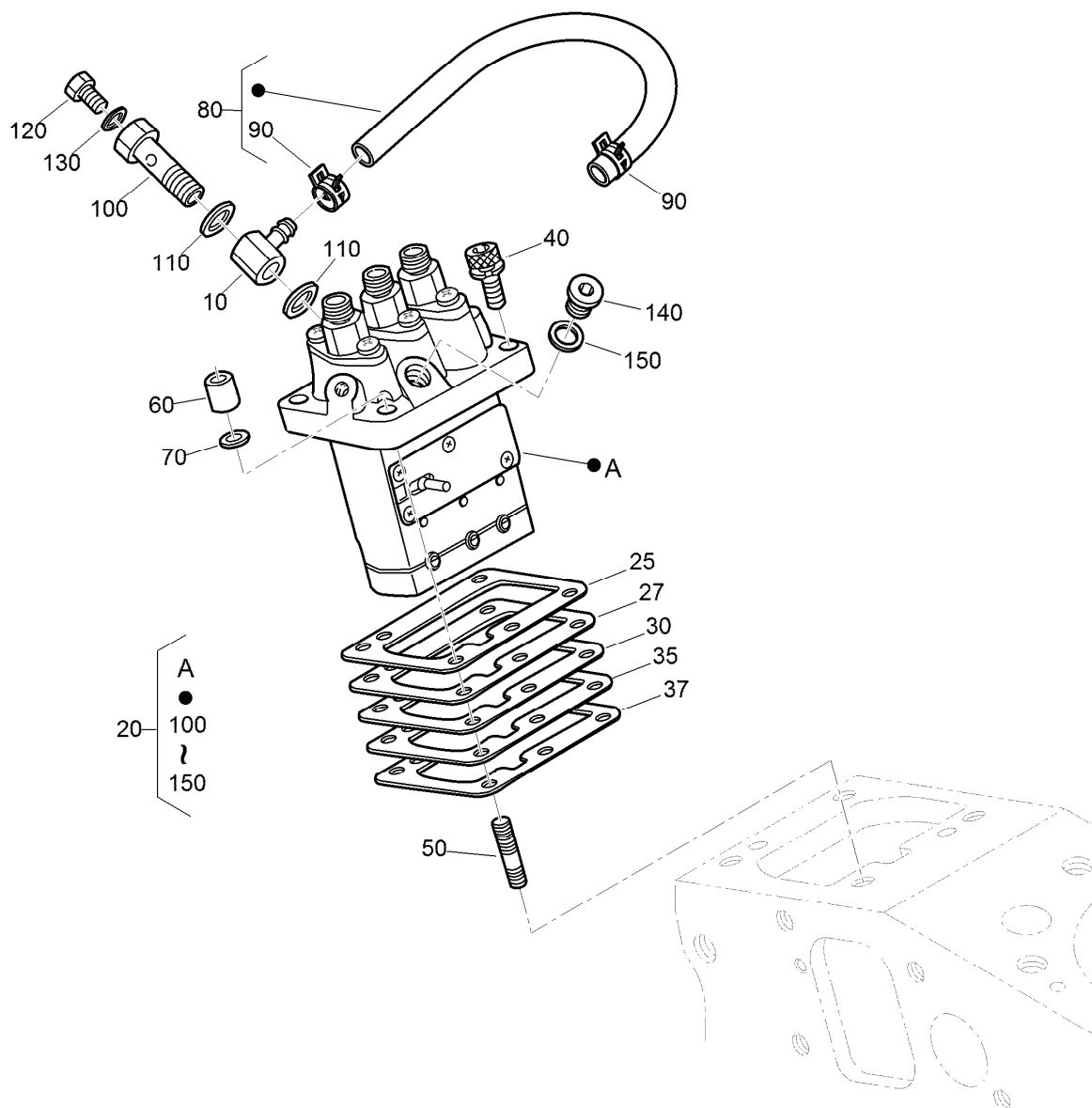
| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 10   | 130-1527    | 1    | Fuel Camshaft ASM      |
| 20   | 110-3756    | 1    | Camshaft-Fuel          |
| 30   | 100-1795    | 1    | Bearing-Ball           |
| 40   | 130-1521    | 1    | Pump-Gear, Injection   |
| 50   | 100-1752    | 1    | Key-Feather            |
| 60   | 112-8336    | 1    | Sleeve-Governor        |
| 70   | 100-1904    | 1    | Case-Ball, Governor    |
| 80   | 100-1790    | 32   | Ball                   |
| 90   | 100-1843    | 1    | Circ-Clip              |
| 100  | 100-1793    | 8    | Ball                   |
| 110  | 110-3757    | 1    | Bearing-Ball           |
| 120  | 100-1784    | 1    | Circ-Clip, External    |
| 130  | 100-1888    | 1    | Stopper-Fuel, Camshaft |
| 140  | 98-9350     | 2    | Bolt                   |





## Idle Apparatus Assembly

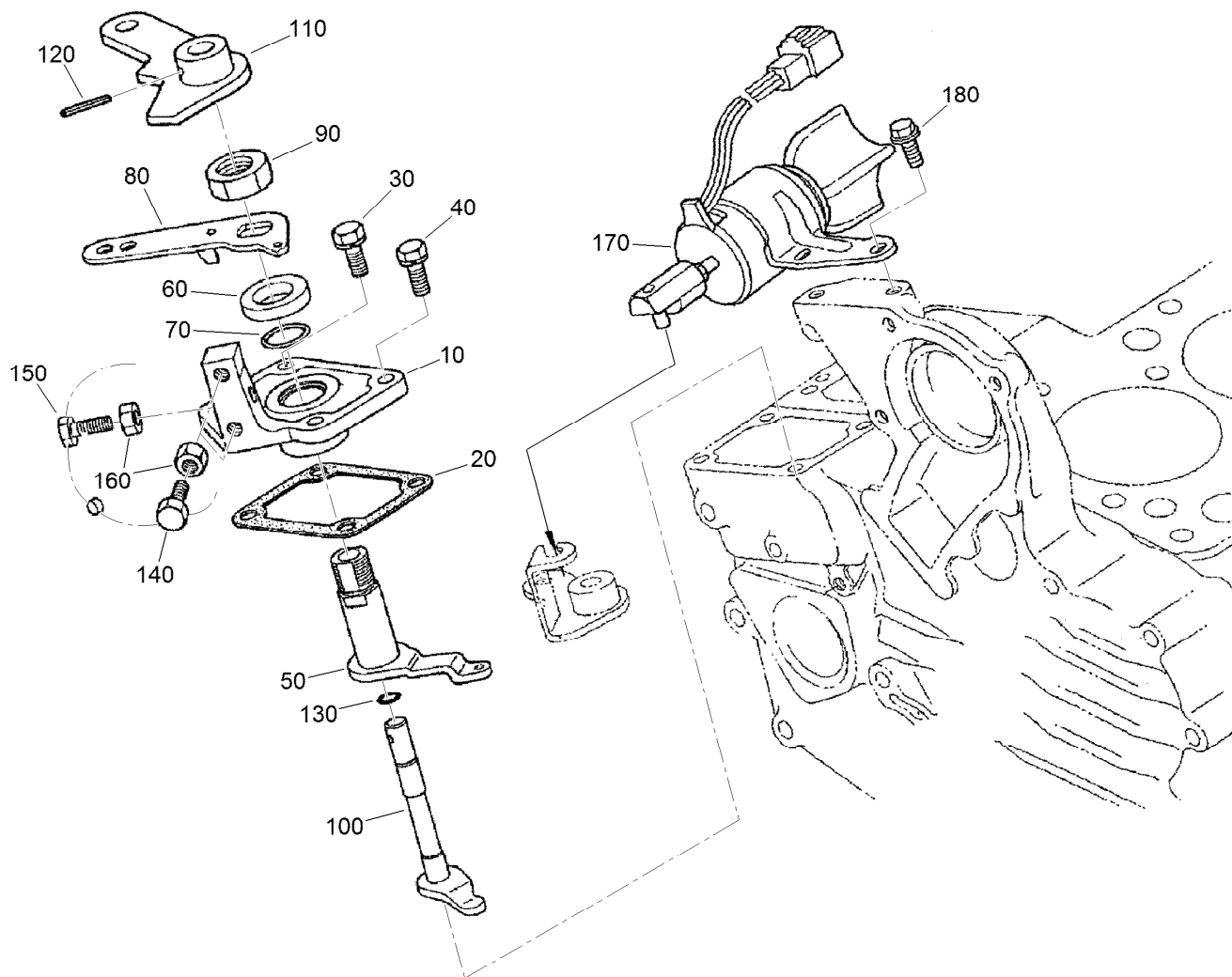
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 100-1898    | 1    | Idle Apparatus ASM |
| 20   | 100-1899    | 1    | Adjusting Bolt ASM |
| 30   | 100-1846    | 1    | Nut                |
| 40   | 100-1901    | 1    | Nut-Cap            |
| 50   | 98-7428     | 2    | Gasket             |
| 60   | 100-1902    | 1    | Cap                |
| 70   | 110-3758    | 1    | Bolt-Adjusting     |
| 80   | 100-2175    | 1    | Nut-Lock           |
| 90   | 98-7654     | 1    | Gasket             |
| 100  | 107-9081    | 1    | Gasket             |
| 110  | 99-8387     | 1    | Nut-Cap            |



## Injection Pump Assembly

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 100-1928    | 1    | Joint-Eye                |
| 20   | 130-1223    | 1    | Injection Pump ASM       |
| 25   | 115-3045    | 1    | Shim-Injection (0.175Mm) |
| 27   | 98-9456     | 1    | Shim-Injection (0.20Mm)  |
| 30   | 98-9457     | 1    | Shim-Injection (0.25Mm)  |
| 35   | 98-9458     | 1    | Shim-Injection (0.30Mm)  |
| 37   | 115-3046    | 1    | Shim-Injection (0.35Mm)  |
| 40   | 117-7564    | 2    | Bolt-Hex Soc HD          |
| 50   | 98-9438     | 2    | Stud                     |
| 60   | 98-9440     | 2    | Nut-Cap                  |

| Ref. | Part Number | Qty. | Description   |
|------|-------------|------|---------------|
| 70   | 98-7699     | 2    | Washer-Spring |
| 80   | 100-1842    | 1    | Fuel Pipe ASM |
| 90   | 100-2217    | 2    | Clip-Pipe     |
| 100  | 100-1896    | 1    | Screw-Hollow  |
| 110  | 98-9445     | 2    | Gasket        |
| 120  | 98-9430     | 1    | Screw         |
| 130  | 98-9446     | 1    | Gasket        |
| 140  | 98-9466     | 1    | Plug          |
| 150  | 98-9451     | 1    | Gasket        |

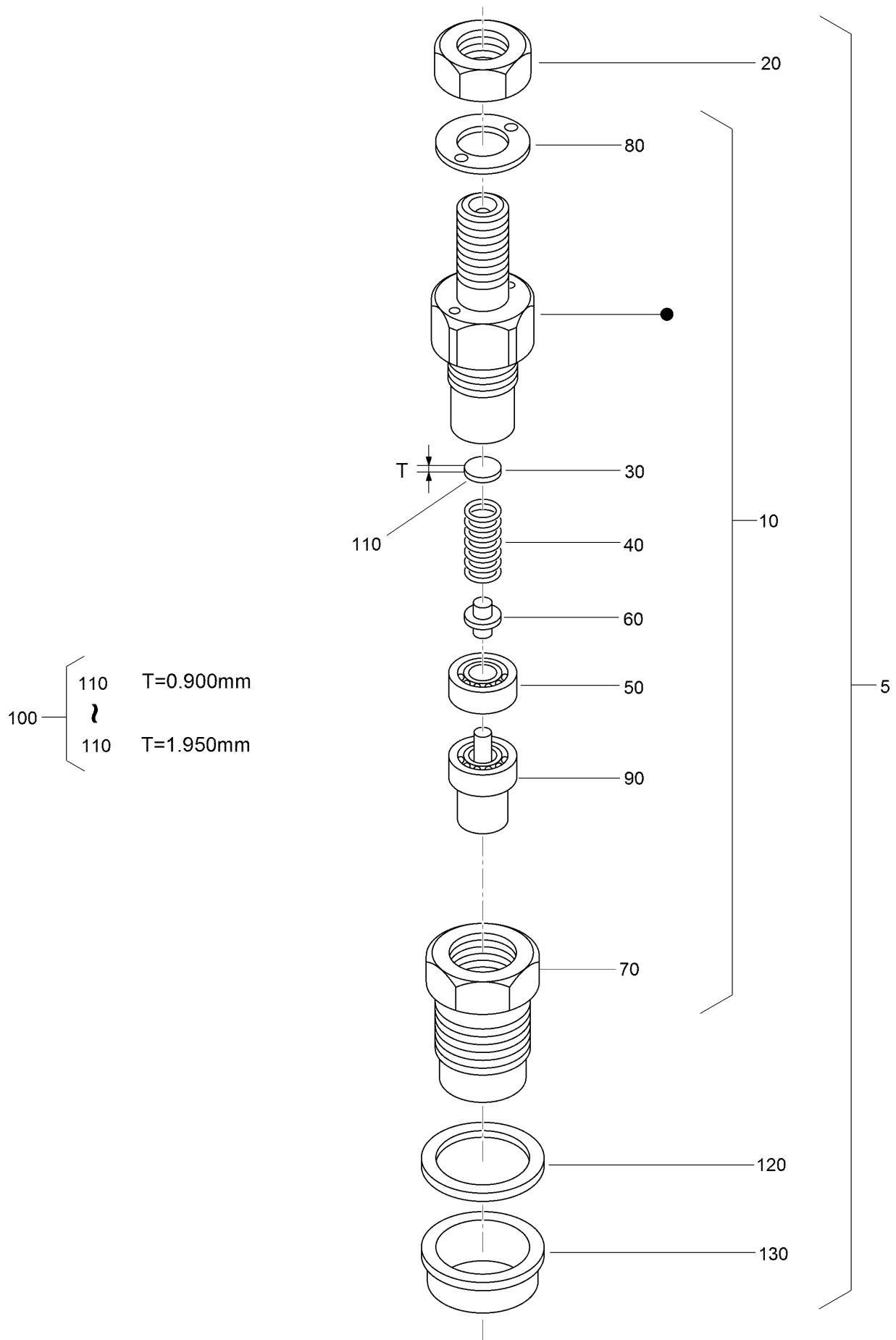


## Stop Solenoid and Speed Control Plate Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 10   | 110-3770    | 1    | Plate-Control, Speed  |
| 20   | 100-1962    | 1    | Gasket-Plate, Control |
| 30   | 127-0403    | 2    | Bolt-Flange           |
| 40   | 112-2507    | 2    | Bolt                  |
| 50   | 112-2822    | 1    | Lever-Governor        |
| 60   | 110-3772    | 1    | Collar                |
| 70   | 100-2208    | 1    | O-Ring                |
| 80   | 110-3773    | 1    | Lever-Control, Speed  |
| 90   | 110-3774    | 1    | Nut-Control, Speed    |

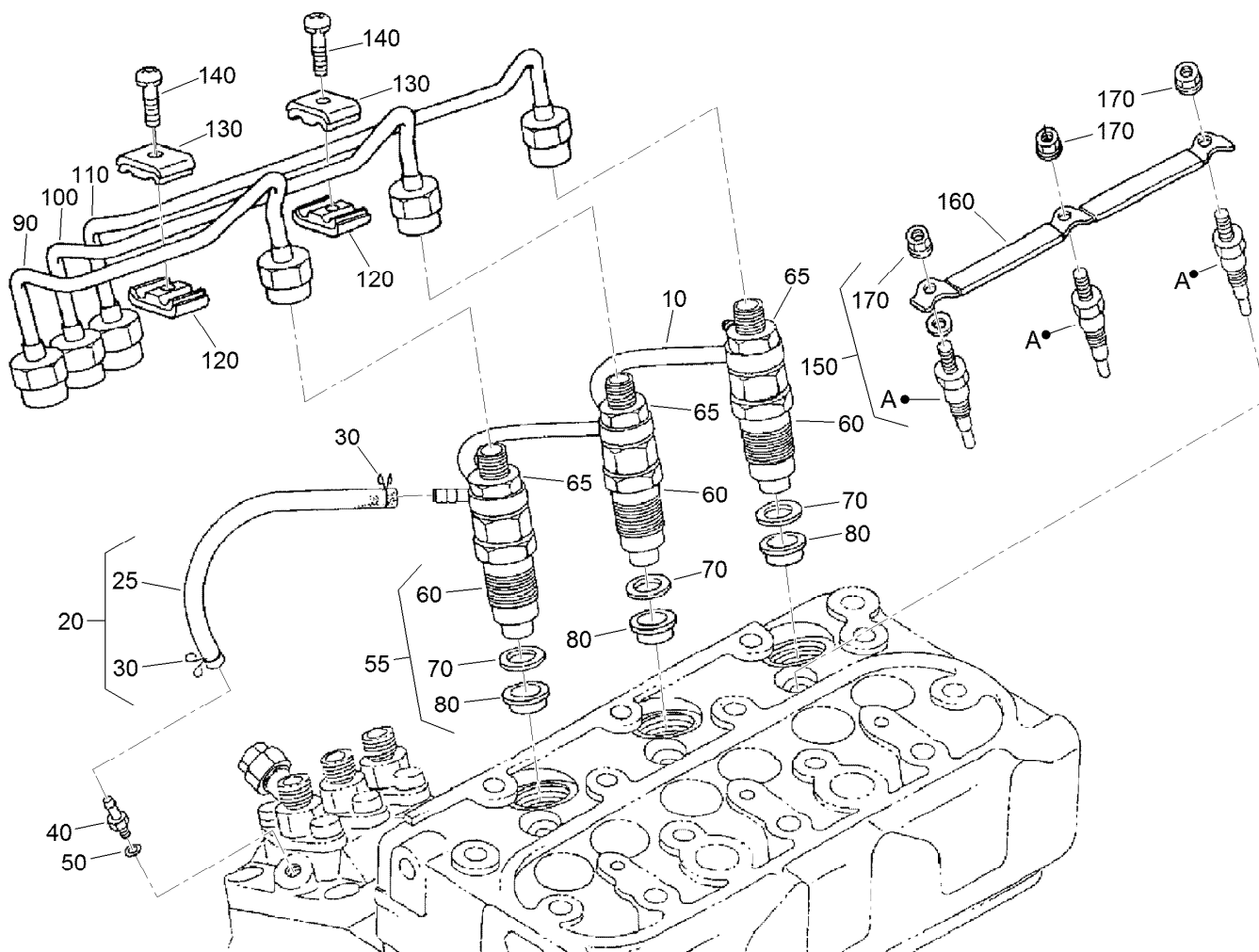
| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 100  | 112-2826    | 1    | Shaft-Lever          |
| 110  | 112-2827    | 1    | Lever-Stop, Engine   |
| 120  | 110-3777    | 1    | Pin-Spring           |
| 130  | 100-2207    | 1    | O-Ring               |
| 140  | 120-3133    | 2    | Screw-Stopper        |
| 150  | 120-3134    | 1    | Bolt                 |
| 160  | 98-7572     | 3    | Nut                  |
| 170  | 131-0564    | 1    | Solenoid-Shut Off/On |
| 180  | 100-1774    | 2    | Bolt-Flange          |

# Nozzle Holder Assembly



## Nozzle Holder Assembly (continued)

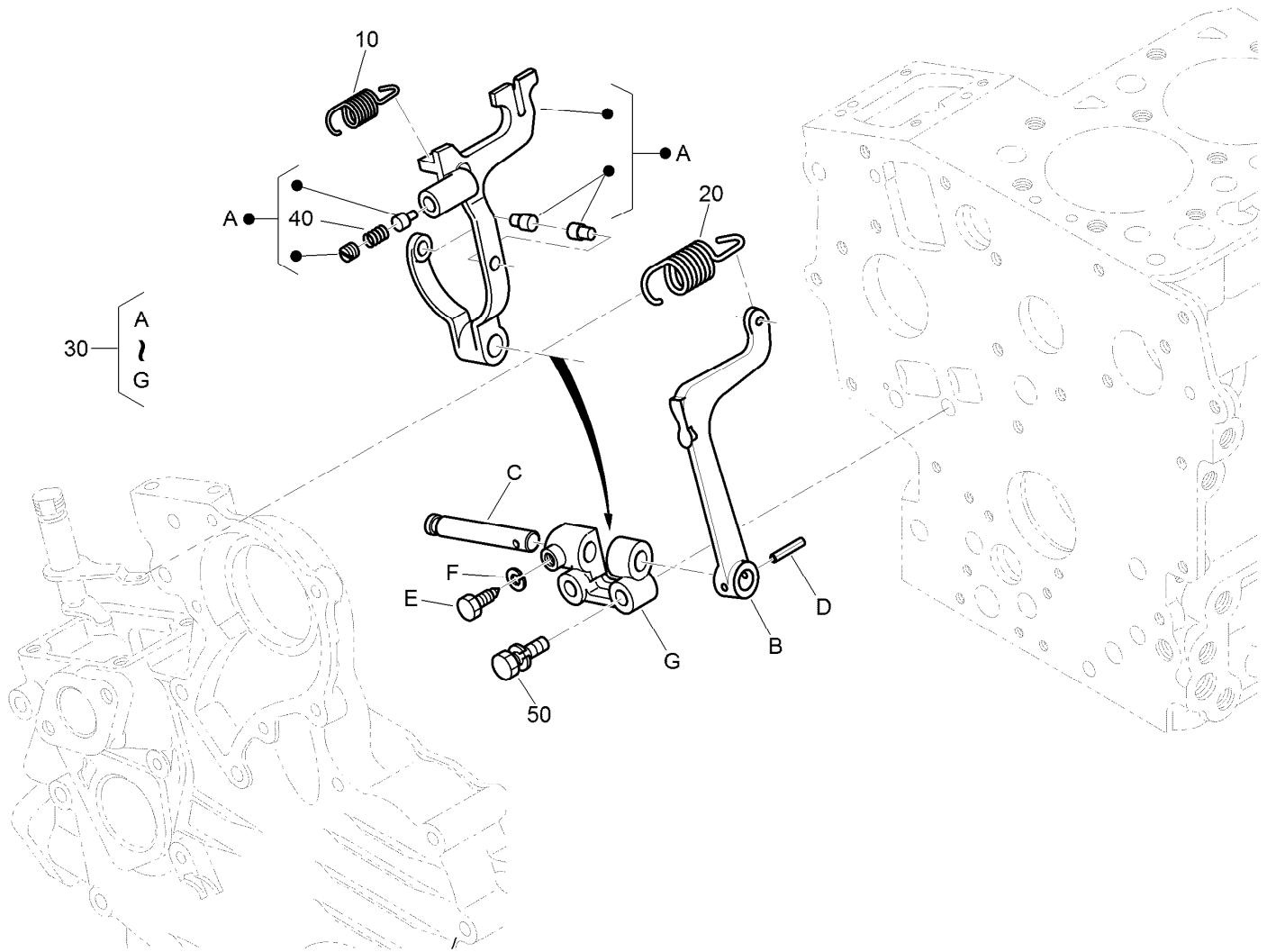
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>         | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>         |
|-------------|--------------------|-------------|----------------------------|-------------|--------------------|-------------|----------------------------|
| 5           | 130-1305           | 3           | Nozzle Holder Kit          | 110         | 98-7860            | 3           | Washer-Adjusting (1.400Mm) |
| 10          | 130-1303           | 3           | Nozzle Holder ASM          | 110         | 98-7861            | 3           | Washer-Adjusting (1.425Mm) |
| 20          | 121-2411           | 3           | Nut                        | 110         | 98-7862            | 3           | Washer-Adjusting (1.450Mm) |
| 30          | 99-8302            | 3           | Washer-Adjusting           | 110         | 98-7863            | 3           | Washer-Adjusting (1.475Mm) |
| 40          | 99-8303            | 3           | Spring-Nozzle              | 110         | 98-7864            | 3           | Washer-Adjusting (1.500Mm) |
| 50          | 99-8304            | 3           | Spacer-Distance            | 110         | 98-7865            | 3           | Washer-Adjusting (1.525Mm) |
| 60          | 99-8305            | 3           | Rod-Push                   | 110         | 98-7866            | 3           | Washer-Adjusting (1.550Mm) |
| 70          | 130-1304           | 3           | Nut-Nozzle                 | 110         | 98-7867            | 3           | Washer-Adjusting (1.575Mm) |
| 80          | 99-8307            | 3           | Washer-Plain               | 110         | 98-7868            | 3           | Washer-Adjusting (1.600Mm) |
| 90          | 130-1497           | 3           | Nozzle-Piece               | 110         | 98-7869            | 3           | Washer-Adjusting (1.625Mm) |
| 100         | 98-9448            | 3           | Adjusting Washer ASM       | 110         | 98-7870            | 3           | Washer-Adjusting (1.650Mm) |
| 110         | 98-7642            | 3           | Washer-Adjusting (0.900Mm) | 110         | 98-7871            | 3           | Washer-Adjusting (1.675Mm) |
| 110         | 98-7841            | 3           | Washer-Adjusting (0.925Mm) | 110         | 98-7872            | 3           | Washer-Adjusting (1.700Mm) |
| 110         | 98-7842            | 3           | Washer-Adjusting (0.950Mm) | 110         | 98-7873            | 3           | Washer-Adjusting (1.725Mm) |
| 110         | 98-7843            | 3           | Washer-Adjusting (0.975Mm) | 110         | 98-7874            | 3           | Washer-Adjusting (1.750Mm) |
| 110         | 98-7844            | 3           | Washer-Adjusting (1.000Mm) | 110         | 98-7875            | 3           | Washer-Adjusting (1.775Mm) |
| 110         | 98-7845            | 3           | Washer-Adjusting (1.025Mm) | 110         | 98-7876            | 3           | Washer-Adjusting (1.800Mm) |
| 110         | 98-7846            | 3           | Washer-Adjusting (1.050Mm) | 110         | 98-7877            | 3           | Washer-Adjusting (1.825Mm) |
| 110         | 98-7847            | 3           | Washer-Adjusting (1.075Mm) | 110         | 98-7878            | 3           | Washer-Adjusting (1.850Mm) |
| 110         | 98-7848            | 3           | Washer-Adjusting (1.100Mm) | 110         | 98-7879            | 3           | Washer-Adjusting (1.875Mm) |
| 110         | 98-7849            | 3           | Washer-Adjusting (1.125Mm) | 110         | 98-7880            | 3           | Washer-Adjusting (1.900Mm) |
| 110         | 98-7850            | 3           | Washer-Adjusting (1.150Mm) | 110         | 98-7881            | 3           | Washer-Adjusting (1.925Mm) |
| 110         | 98-7851            | 3           | Washer-Adjusting (1.175Mm) | 110         | 98-7882            | 3           | Washer-Adjusting (1.950Mm) |
| 110         | 98-7852            | 3           | Washer-Adjusting (1.200Mm) | 120         | 98-7676            | 3           | Gasket                     |
| 110         | 98-7853            | 3           | Washer-Adjusting (1.225Mm) | 130         | 98-7677            | 3           | Seal-Heat                  |
| 110         | 98-7854            | 3           | Washer-Adjusting (1.250Mm) |             |                    |             |                            |
| 110         | 98-7855            | 3           | Washer-Adjusting (1.275Mm) |             |                    |             |                            |
| 110         | 98-7856            | 3           | Washer-Adjusting (1.300Mm) |             |                    |             |                            |
| 110         | 98-7857            | 3           | Washer-Adjusting (1.325Mm) |             |                    |             |                            |
| 110         | 98-7858            | 3           | Washer-Adjusting (1.350Mm) |             |                    |             |                            |
| 110         | 98-7859            | 3           | Washer-Adjusting (1.375Mm) |             |                    |             |                            |



## Nozzle Holder and Glow Plug Assembly

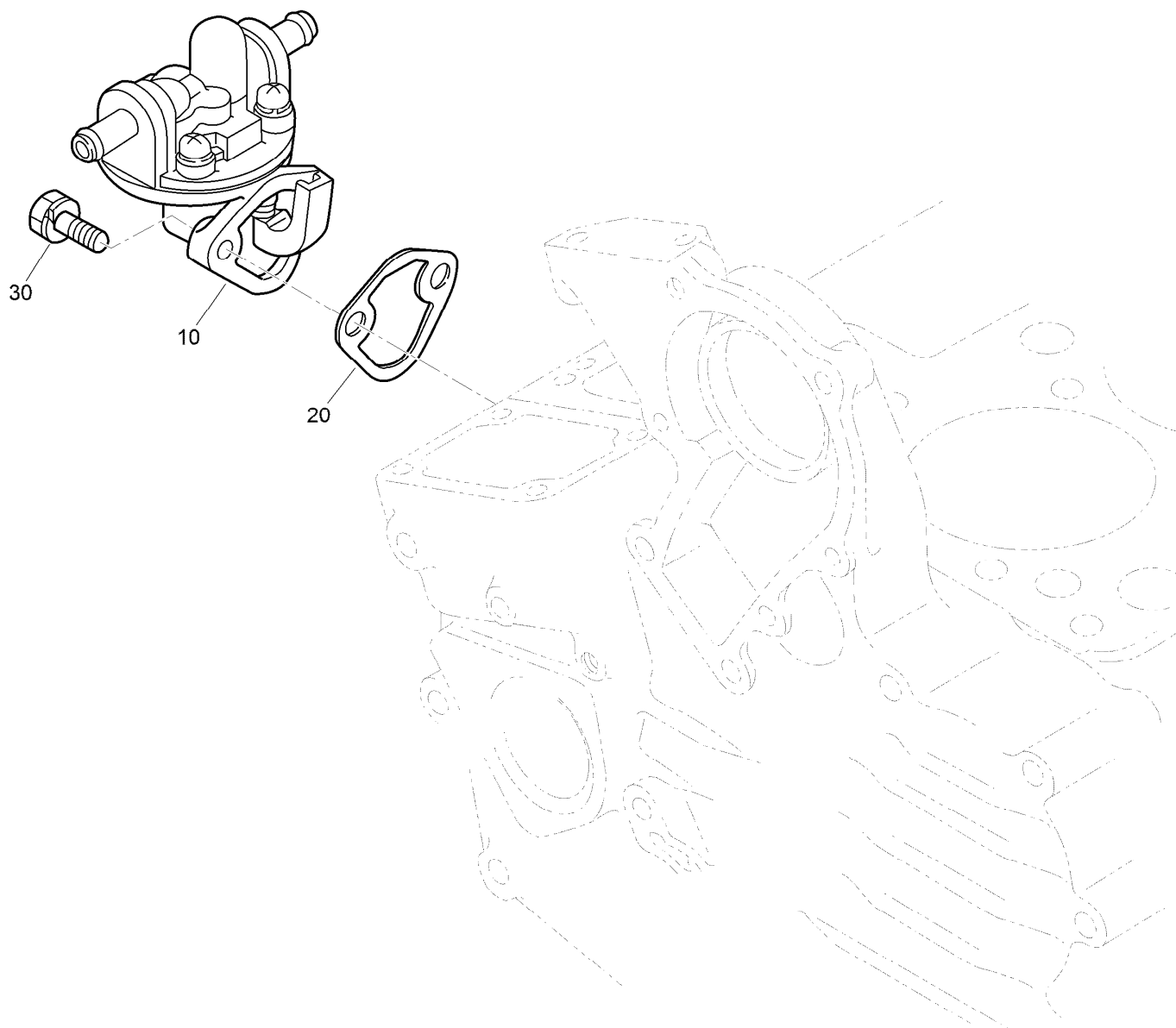
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 100-1960    | 1    | Over Flow Pipe ASM |
| 20   | 98-9420     | 1    | Overflow Pipe ASM  |
| 25   | 112-0182    | 1    | Pipe-Overflow      |
| 30   | 98-7671     | 2    | Clip-Pipe          |
| 40   | 98-9431     | 1    | Screw-Bleeder, Air |
| 50   | 98-7654     | 1    | Gasket             |
| 55   | 130-1305    | 3    | Nozzle Holder Kit  |
| 60   | 130-1303    | 3    | Nozzle Holder ASM  |
| 65   | 121-2411    | 3    | Nut                |
| 70   | 98-7676     | 3    | Gasket             |

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 80   | 98-7677     | 3    | Seal-Heat        |
| 90   | 130-1414    | 1    | Pipe-Injection   |
| 100  | 130-1415    | 1    | Pipe-Injection   |
| 110  | 130-1416    | 1    | Pipe-Injection   |
| 120  | 98-7682     | 2    | Clamp-Pipe       |
| 130  | 98-7683     | 2    | Clamp-Pipe       |
| 140  | 98-7684     | 2    | Screw (W/Washer) |
| 150  | 130-1411    | 3    | Plug-Glow        |
| 160  | 100-2037    | 1    | Cord-Plug, Glow  |
| 170  | 99-8377     | 3    | Nut-Flange       |



## Fork Lever (Governor) Assembly

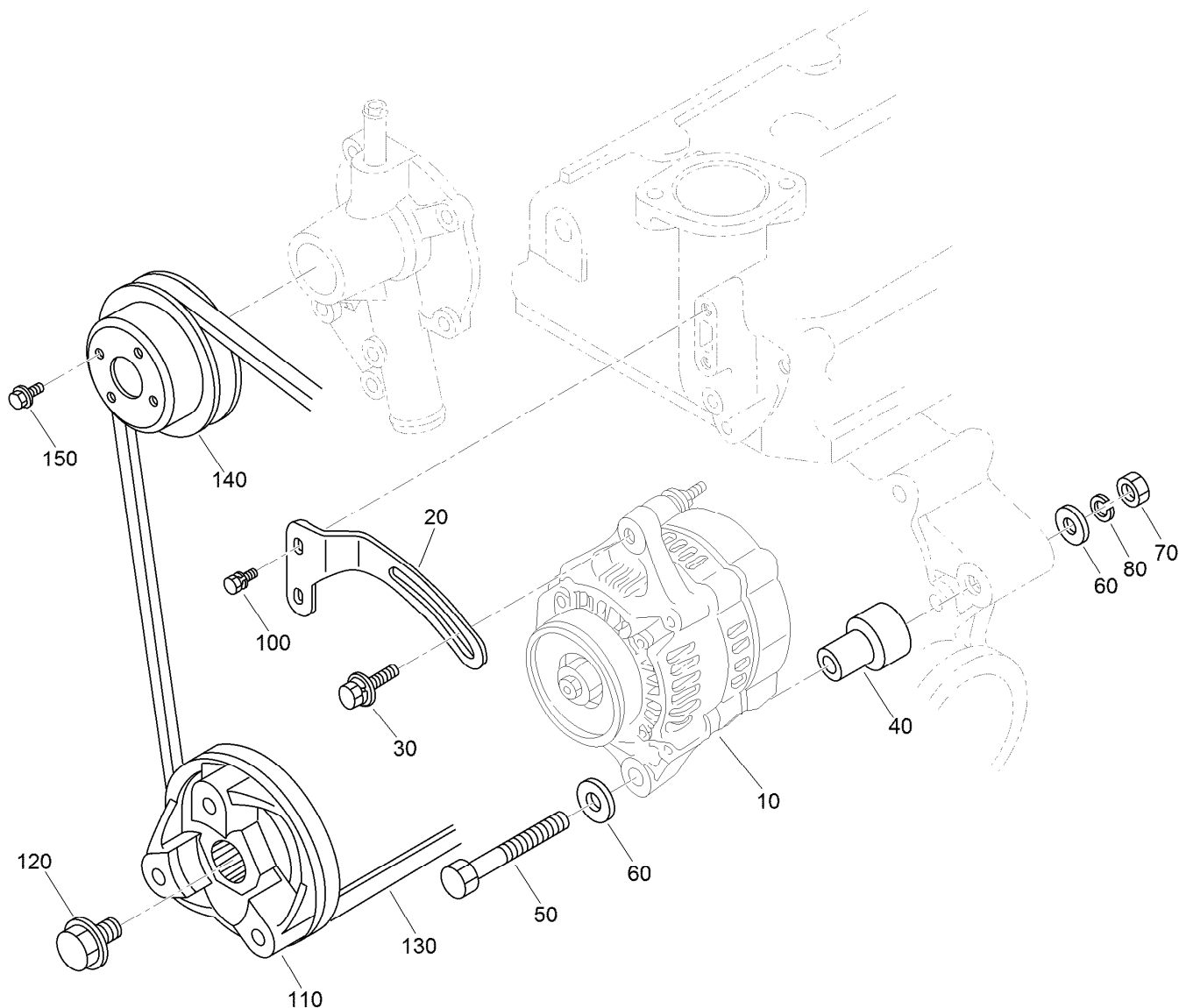
| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 10   | 100-1911    | 1    | Spring-Start    |
| 20   | 100-2059    | 1    | Spring-Governor |
| 30   | 130-1532    | 1    | Fork Lever ASM  |
| 40   | 117-0313    | 1    | Spring          |
| 50   | 100-1763    | 2    | Bolt            |



## Fuel Pump (Mechanical) Assembly

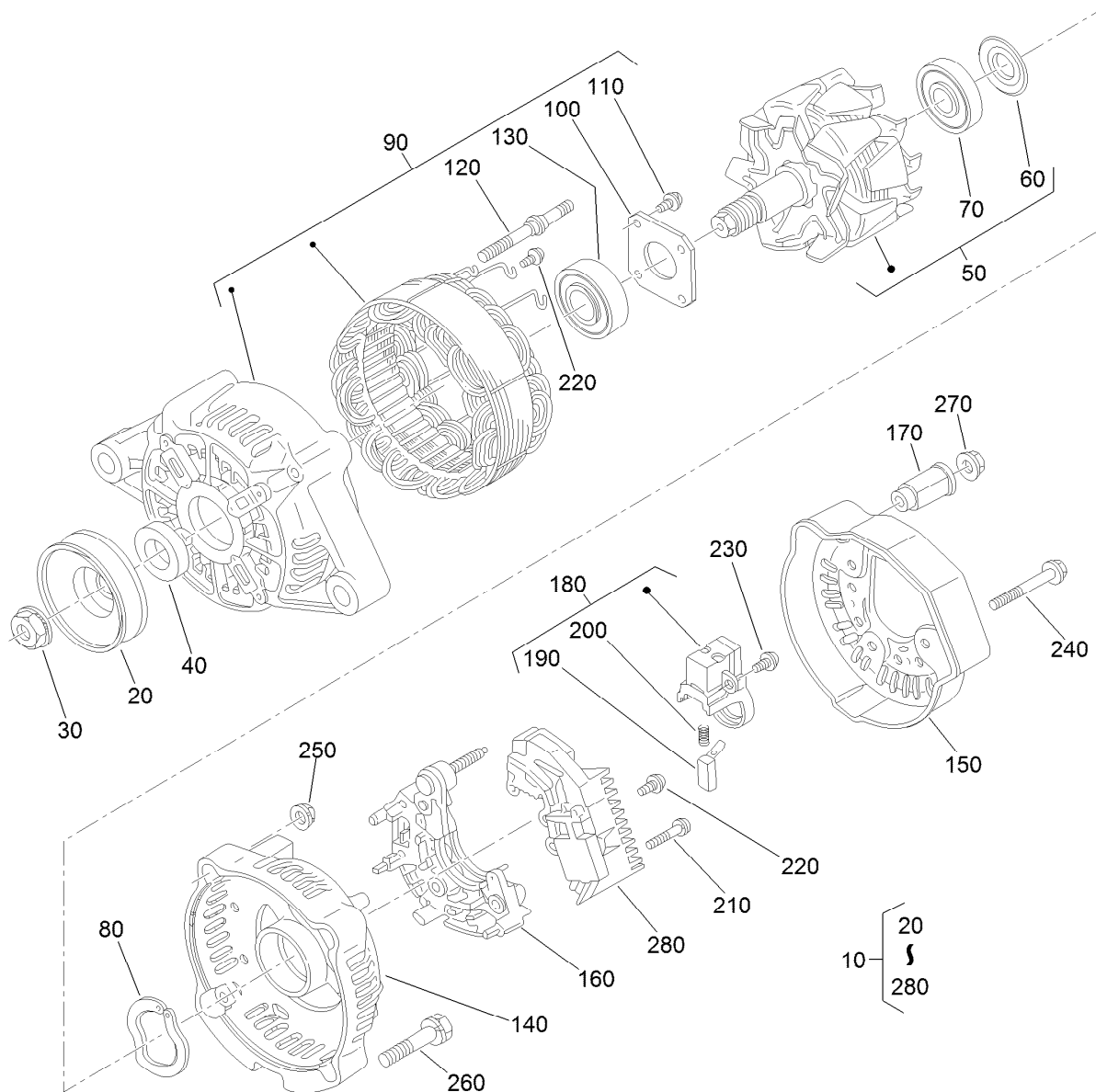
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 10   | 100-2232    | 1    | Fuel Pump ASM     |
| 20   | 98-9636     | 1    | Gasket-Pump, Fuel |
| 30   | 98-7692     | 2    | Bolt              |





## Alternator and Pulley Assembly

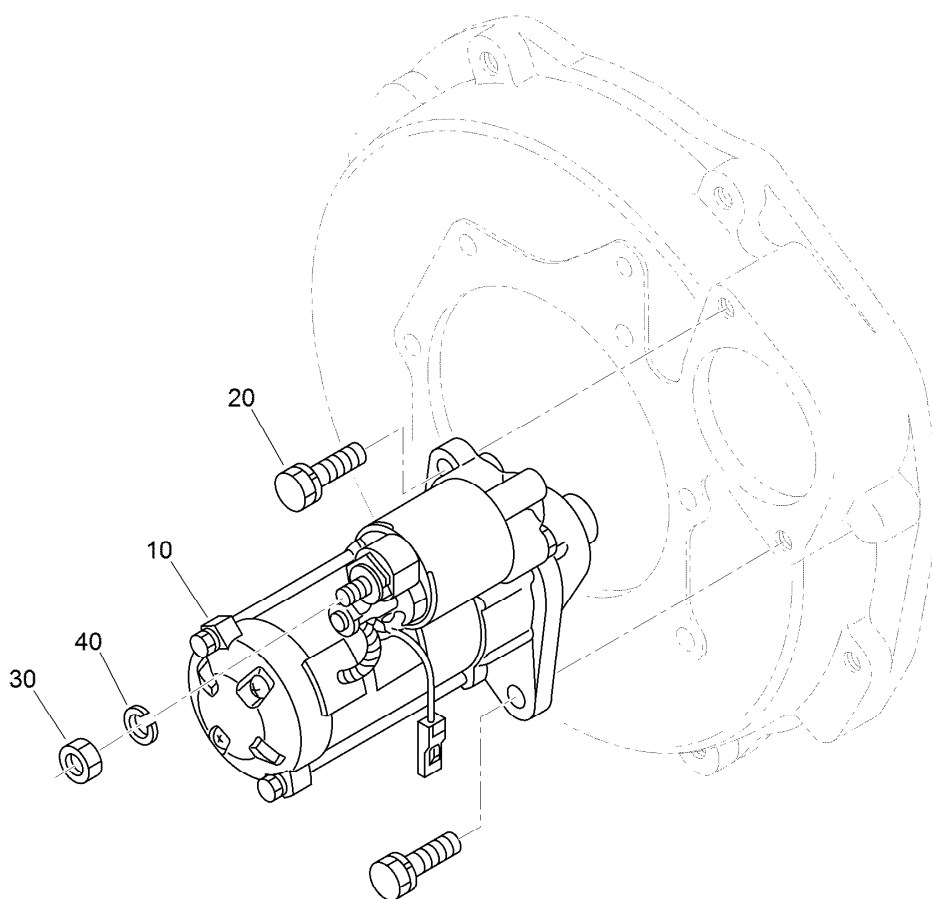
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 10   | 131-0561    | 1    | Alternator          |
| 20   | 121-2412    | 1    | Stay-Alternator     |
| 30   | 121-2413    | 1    | Bolt                |
| 40   | 110-3794    | 1    | Collar              |
| 50   | 98-7556     | 1    | Bolt                |
| 60   | 120-5832    | 2    | Washer-Plain        |
| 70   | 98-7534     | 1    | Nut                 |
| 80   | 131-9579    | 1    | Washer-Spring, Lock |
| 100  | 98-7692     | 2    | Bolt                |
| 110  | 100-2039    | 1    | Pulley-Drive, Fan   |
| 120  | 100-1978    | 1    | Bolt                |
| 130  | 100-1979    | 1    | V-Belt              |
| 140  | 100-1921    | 1    | Pulley-Fan          |
| 150  | 99-8363     | 4    | Bolt-Flange         |



## Alternator Assembly No. 131-0561

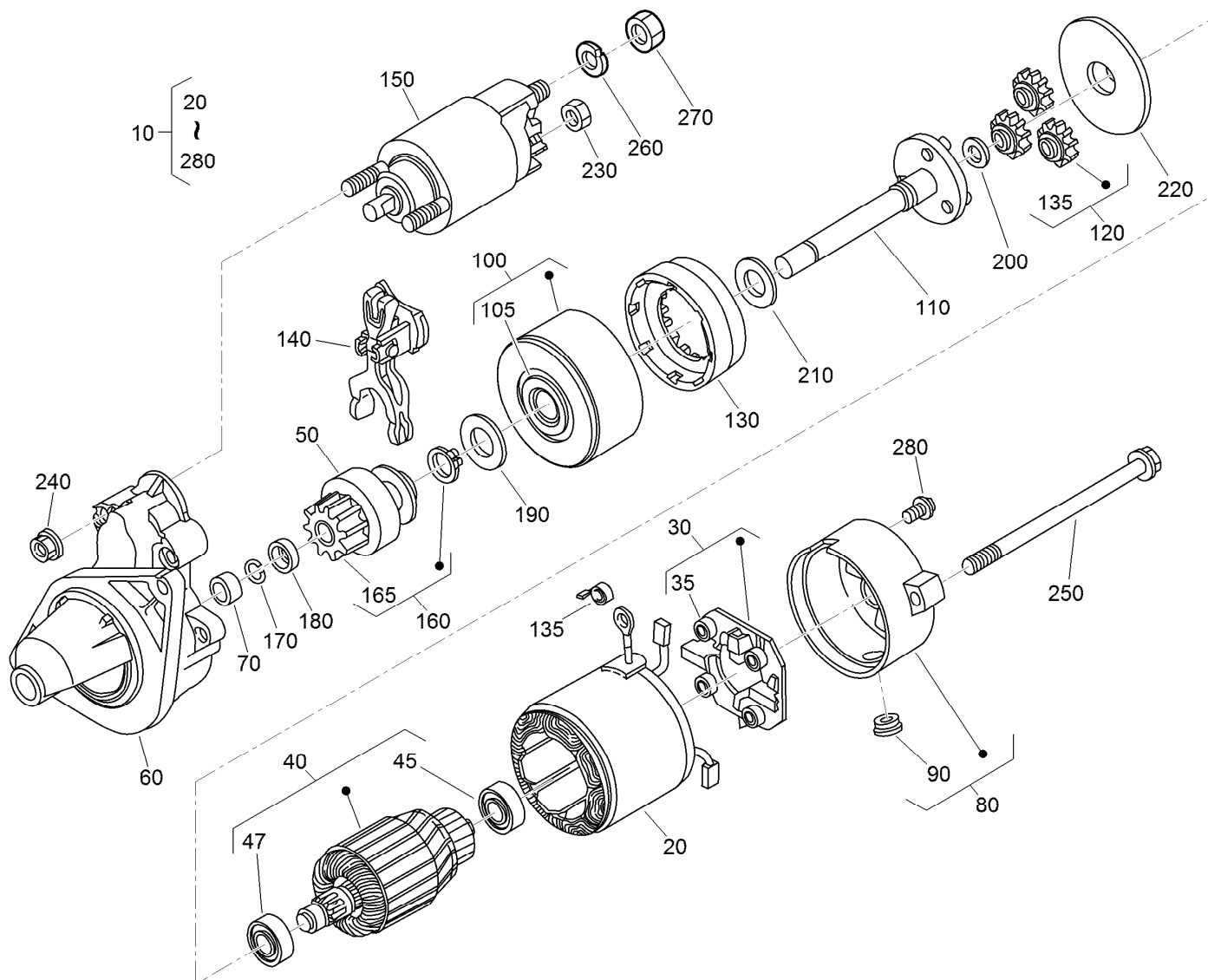
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 131-0561    | 1    | Alternator         |
| 20   | 98-9453     | 1    | Pulley-Dynamo      |
| 30   | 98-7708     | 1    | Nut                |
| 40   | 98-7709     | 1    | Collar             |
| 50   | 107-0136    | 1    | Rotor ASM          |
| 60   | 98-7711     | 1    | Cover-Bearing      |
| 70   | 107-0138    | 1    | Bearing-Ball       |
| 80   | 98-7713     | 1    | Washer-Thrust      |
| 90   | 98-9475     | 1    | Frame, Drive End   |
| 100  | 98-7715     | 1    | Plate-Retainer     |
| 110  | 98-7716     | 4    | Screw-Head, Round  |
| 120  | 98-7717     | 2    | Bolt-Through       |
| 130  | 131-6560    | 1    | *obs* Bearing-Ball |
| 140  | 107-9087    | 1    | Frame-End          |

| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 150  | 107-0140    | 1    | Cover-End          |
| 160  | 98-7721     | 1    | Rectifier ASM      |
| 170  | 98-7722     | 1    | Bushing-Insulation |
| 180  | 107-0141    | 1    | Brush Holder ASM   |
| 190  | 98-7724     | 2    | Brush              |
| 200  | 98-7725     | 2    | Spring-Brush       |
| 210  | 98-7726     | 2    | Screw-Head, Round  |
| 220  | 98-7727     | 6    | Screw-Head, Round  |
| 230  | 98-7728     | 1    | Screw-Head, Round  |
| 240  | 98-7729     | 3    | Bolt               |
| 250  | 98-7730     | 2    | Nut                |
| 260  | 98-7731     | 2    | Bolt               |
| 270  | 98-7732     | 1    | Nut                |
| 280  | 110-3799    | 1    | Regulator ASM      |



## Starter Installation Assembly

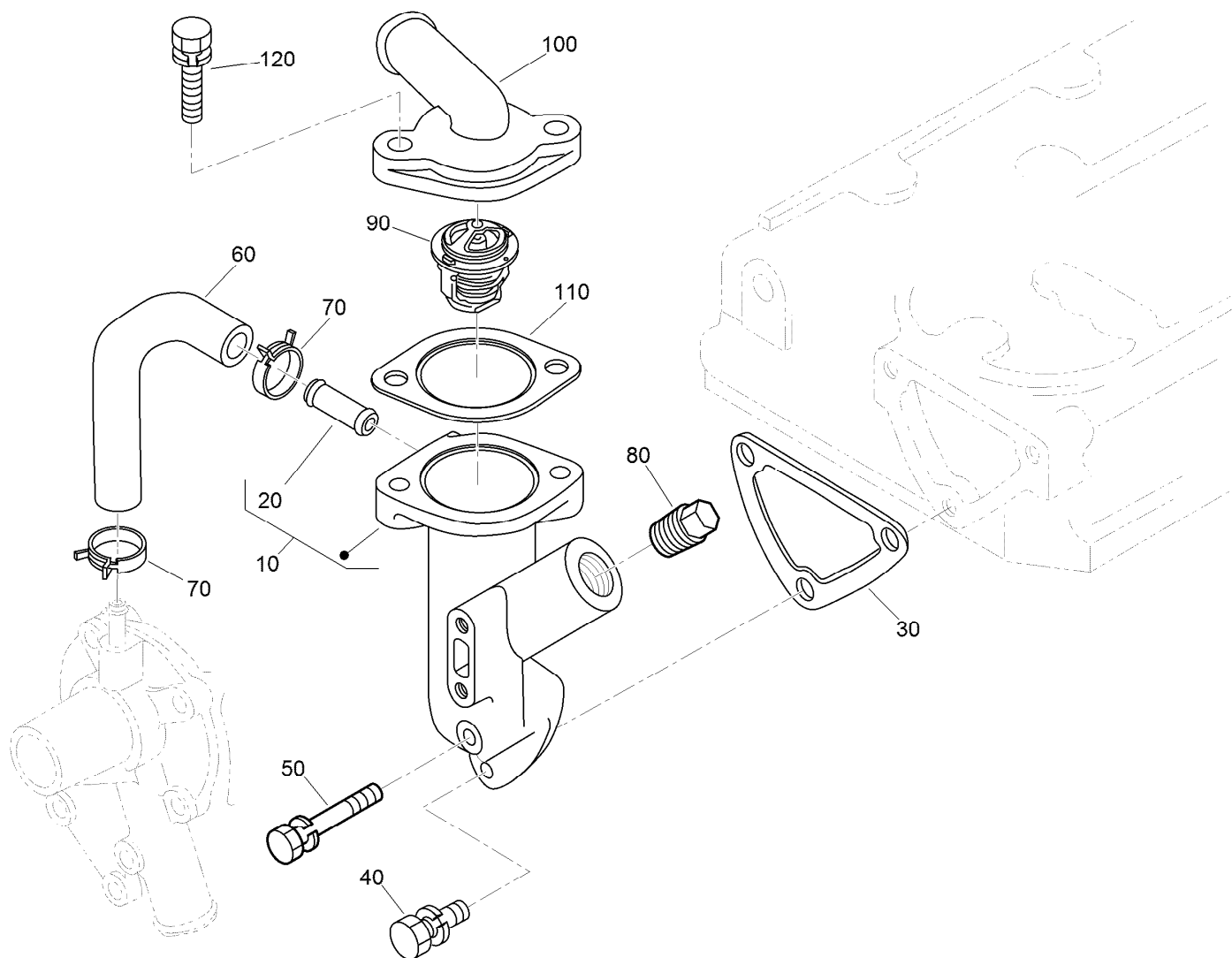
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 10          | 100-2179           | 1           | Starter ASM        |
| 20          | 98-7438            | 2           | Bolt               |
| 30          | 98-7534            | 1           | Nut                |
| 40          | 105-2893           | 1           | Washer-Spring      |



## Starter Component Assembly No. 100-2179

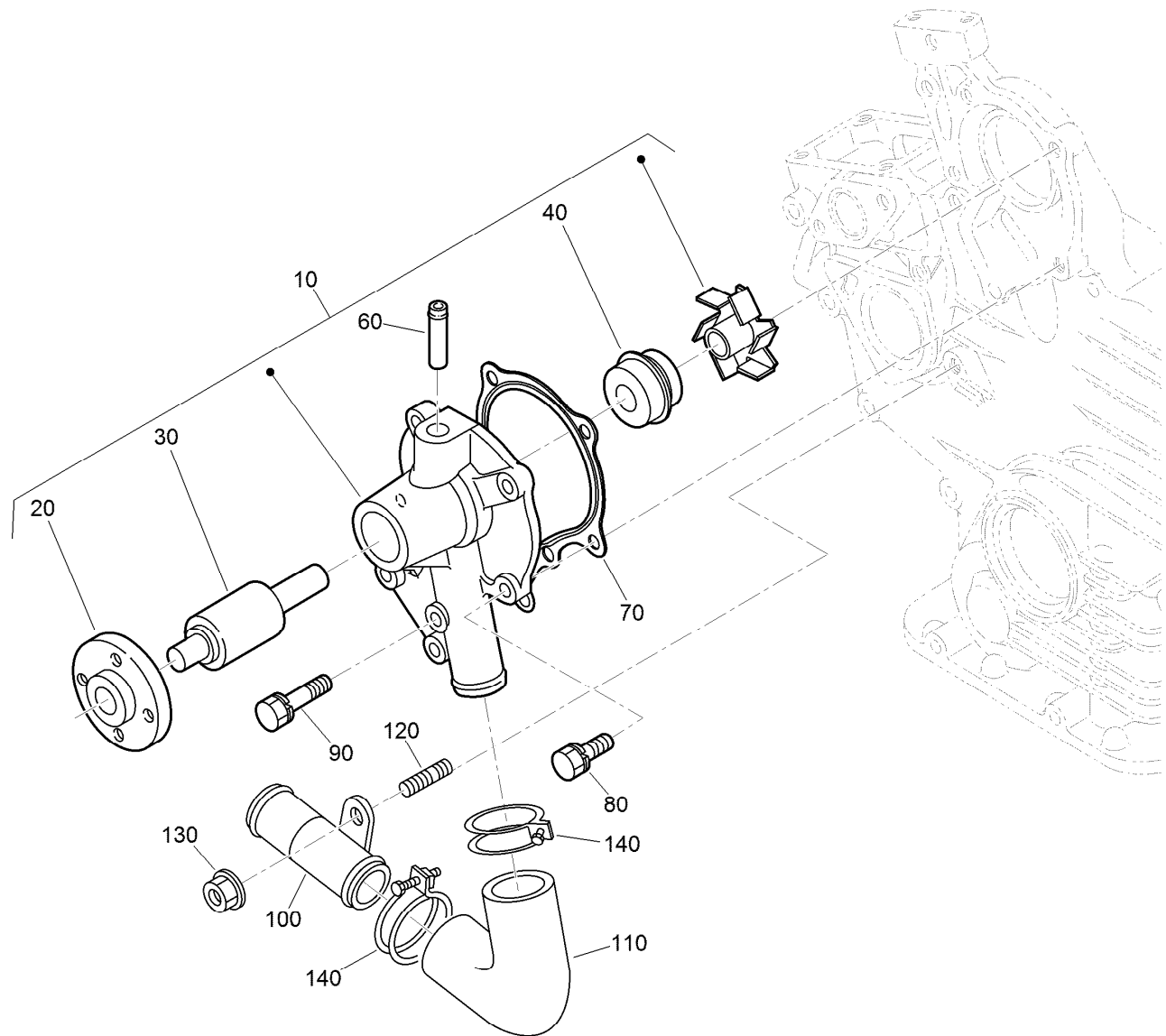
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 10   | 100-2179    | 1    | Starter ASM         |
| 20   | 100-2181    | 1    | Starter Yoke ASM    |
| 30   | 100-2222    | 1    | Holder ASM          |
| 35   | 127-0415    | 4    | Spring-Brush        |
| 40   | 100-2182    | 1    | Armature ASM        |
| 45   | 98-9412     | 1    | Bearing-Ball        |
| 47   | 98-9411     | 1    | Bearing-Ball        |
| 50   | 100-2185    | 1    | Starter Clutch ASM  |
| 60   | 100-2180    | 1    | Starter Housing ASM |
| 70   | 100-2183    | 1    | Bearing             |
| 80   | 100-2186    | 1    | Frame ASM           |
| 90   | 100-2213    | 1    | Cover               |
| 100  | 100-2223    | 1    | Bearing ASM         |
| 105  | 127-0414    | 1    | Bearing             |
| 110  | 100-2187    | 1    | Starter Shaft ASM   |
| 120  | 100-2220    | 3    | Gear                |
| 130  | 100-2221    | 1    | Gear                |

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 135  | 98-7750     | 4    | Spring-Brush        |
| 140  | 100-2218    | 1    | Lever               |
| 150  | 100-2211    | 1    | Magnetic Switch ASM |
| 160  | 100-2219    | 1    | Ring-Snap           |
| 165  | 112-2833    | 1    | Gear-Pinion         |
| 170  | 100-2212    | 1    | Ring-Snap           |
| 180  | 100-2216    | 1    | Collar              |
| 190  | 100-2224    | 1    | Washer-Plain        |
| 200  | 100-2225    | 1    | Washer-Plain        |
| 210  | 100-2226    | 1    | Washer-Plain        |
| 220  | 100-2227    | 1    | Plate               |
| 230  | 99-8371     | 1    | Nut-Hex             |
| 240  | 100-1813    | 2    | Nut                 |
| 250  | 100-2210    | 2    | Bolt-Through        |
| 260  | 100-2215    | 1    | Washer-Spring       |
| 270  | 100-2171    | 1    | Nut-Hex             |
| 280  | 100-2188    | 2    | Screw               |



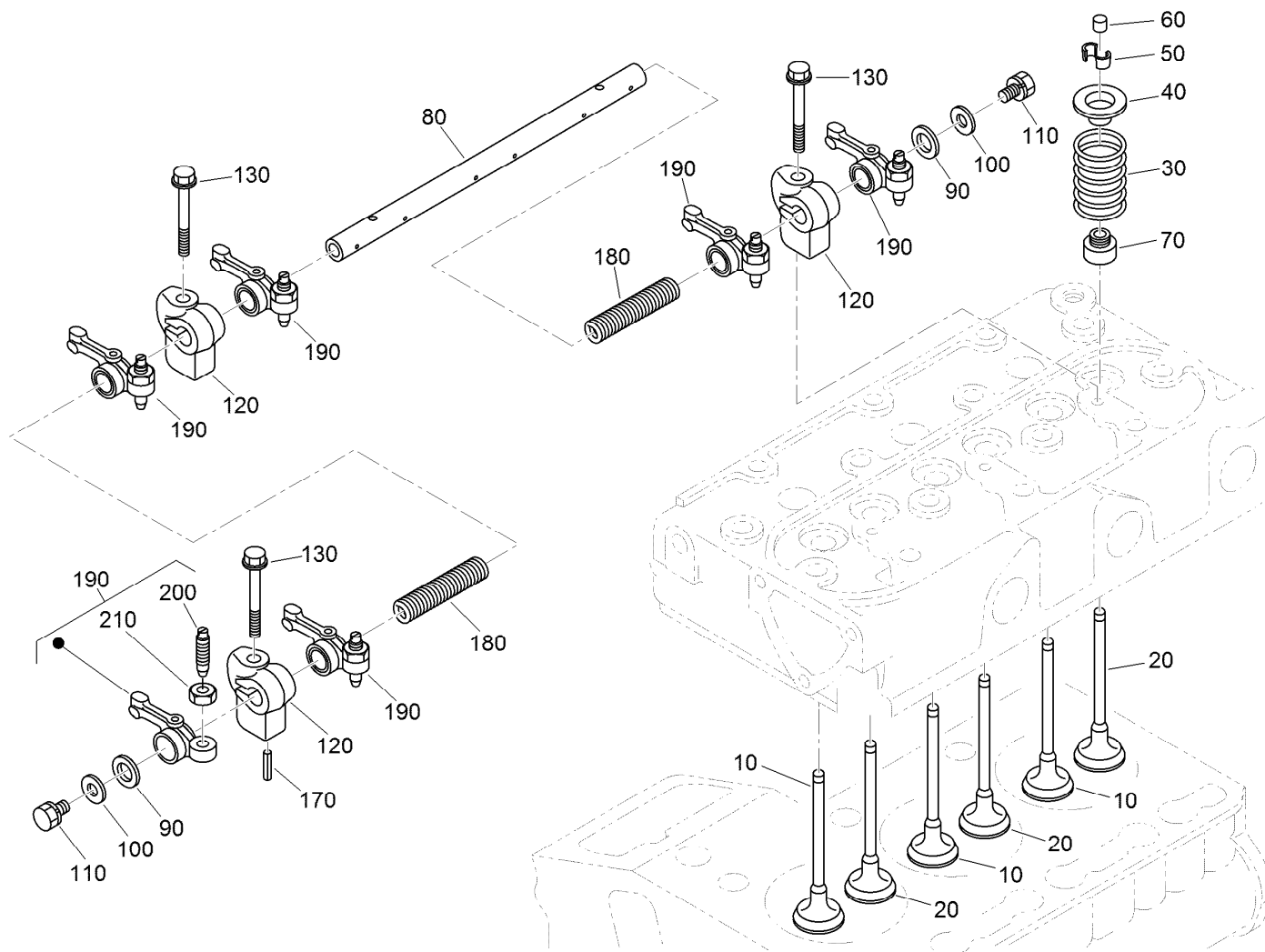
## Water Flange and Thermostat Assembly

| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 10   | 100-2165    | 1    | Water Flange ASM     |
| 20   | 98-9580     | 1    | Pipe-Return, Water   |
| 30   | 110-3820    | 1    | Gasket-Flange, Water |
| 40   | 98-7692     | 2    | Bolt                 |
| 50   | 125-9063    | 1    | Bolt-Sems            |
| 60   | 100-2017    | 1    | Pipe-Return, Water   |
| 70   | 125-9078    | 2    | Clamp-Hose           |
| 80   | 110-3821    | 1    | Plug                 |
| 90   | 100-2053    | 1    | Thermostat ASM       |
| 100  | 100-2231    | 1    | Cover-Thermostat     |
| 110  | 100-2157    | 1    | Gasket-Thermostat    |
| 120  | 98-9353     | 2    | Bolt                 |



## Water Pump and Water Pipe Assembly

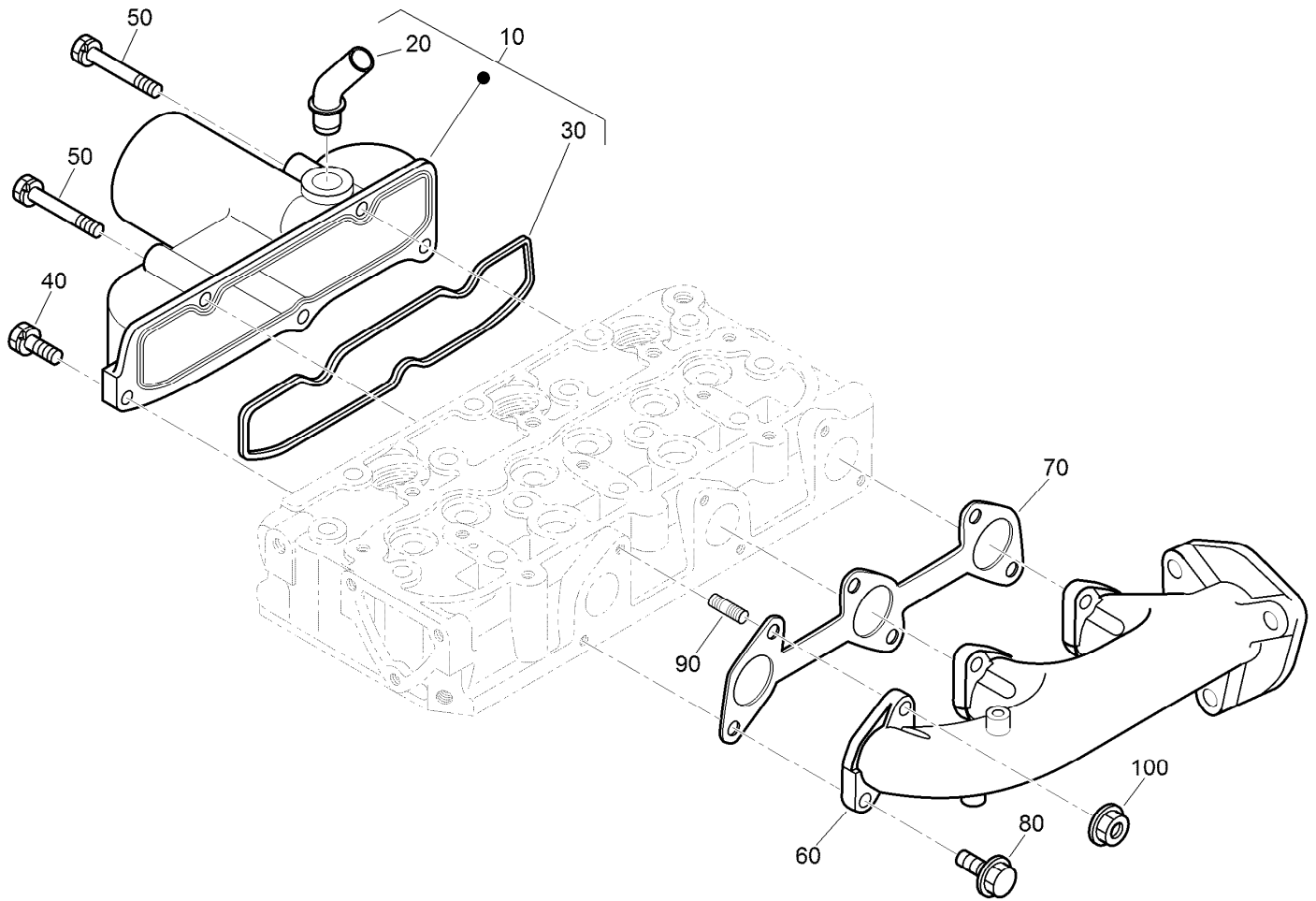
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 10   | 127-1607    | 1    | Water Pump ASM      |
| 20   | 125-9081    | 1    | Flange-Pump, Water  |
| 30   | 100-1934    | 1    | Bearing-Ball        |
| 40   | 99-3518     | 1    | Water Pump Seal ASM |
| 60   | 100-1932    | 1    | Pipe-Return, Water  |
| 70   | 117-8846    | 1    | Gasket-Pump, Water  |
| 80   | 100-1750    | 4    | Bolt                |
| 90   | 100-1764    | 1    | Bolt                |
| 100  | 112-2835    | 1    | Pipe-Water          |
| 110  | 112-2836    | 1    | Hose-Water          |
| 120  | 100-1924    | 1    | Stud                |
| 130  | 100-2203    | 1    | Nut-Flange          |
| 140  | 110-3828    | 2    | Band-Pipe           |



## Valve and Rocker Arm Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 10   | 130-1412    | 3    | Valve-Intake           |
| 20   | 130-1413    | 3    | Valve-Exhaust          |
| 30   | 100-1823    | 6    | Spring-Valve           |
| 40   | 100-1825    | 6    | Retainer-Spring, Valve |
| 50   | 120-3136    | 6    | Collet-Spring, Valve   |
| 60   | 100-2155    | 6    | Cap-Valve              |
| 70   | 100-1797    | 6    | Seal-Stem, Valve       |
| 80   | 130-1213    | 1    | Shaft-Rocker Arm       |
| 90   | 100-2044    | 2    | Washer                 |

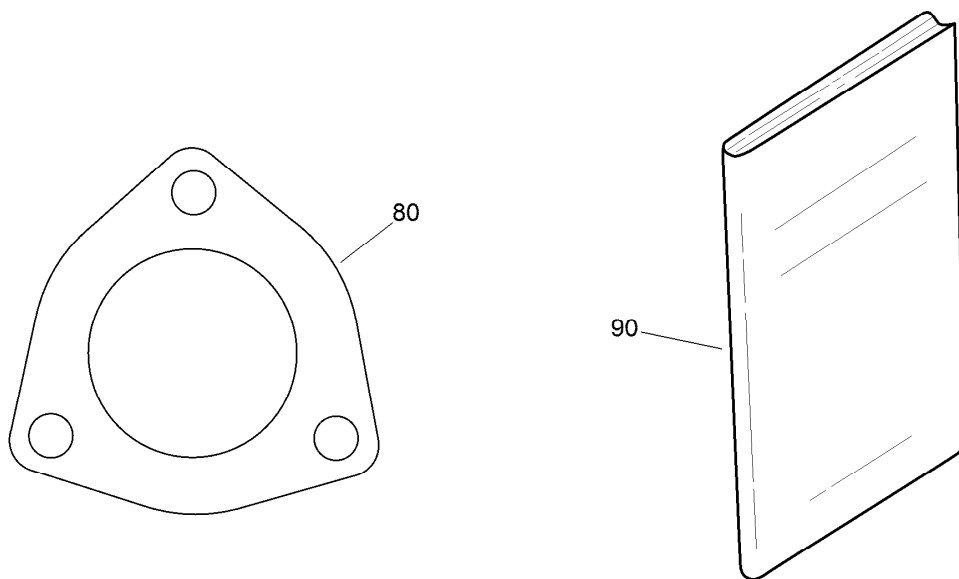
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 100  | 110-3832    | 2    | Washer-Plain        |
| 110  | 100-1762    | 2    | Bolt                |
| 120  | 112-2838    | 3    | Bracket-Arm, Rocker |
| 130  | 110-3834    | 3    | Bolt-Flange         |
| 170  | 98-7602     | 1    | Pin-Spring          |
| 180  | 130-1178    | 2    | Spring-Rocker Arm   |
| 190  | 100-1884    | 6    | Rocker Arm ASM      |
| 200  | 100-1885    | 6    | Screw-Adjusting     |
| 210  | 100-1827    | 6    | Nut                 |



## Inlet and Exhaust Manifold Assembly

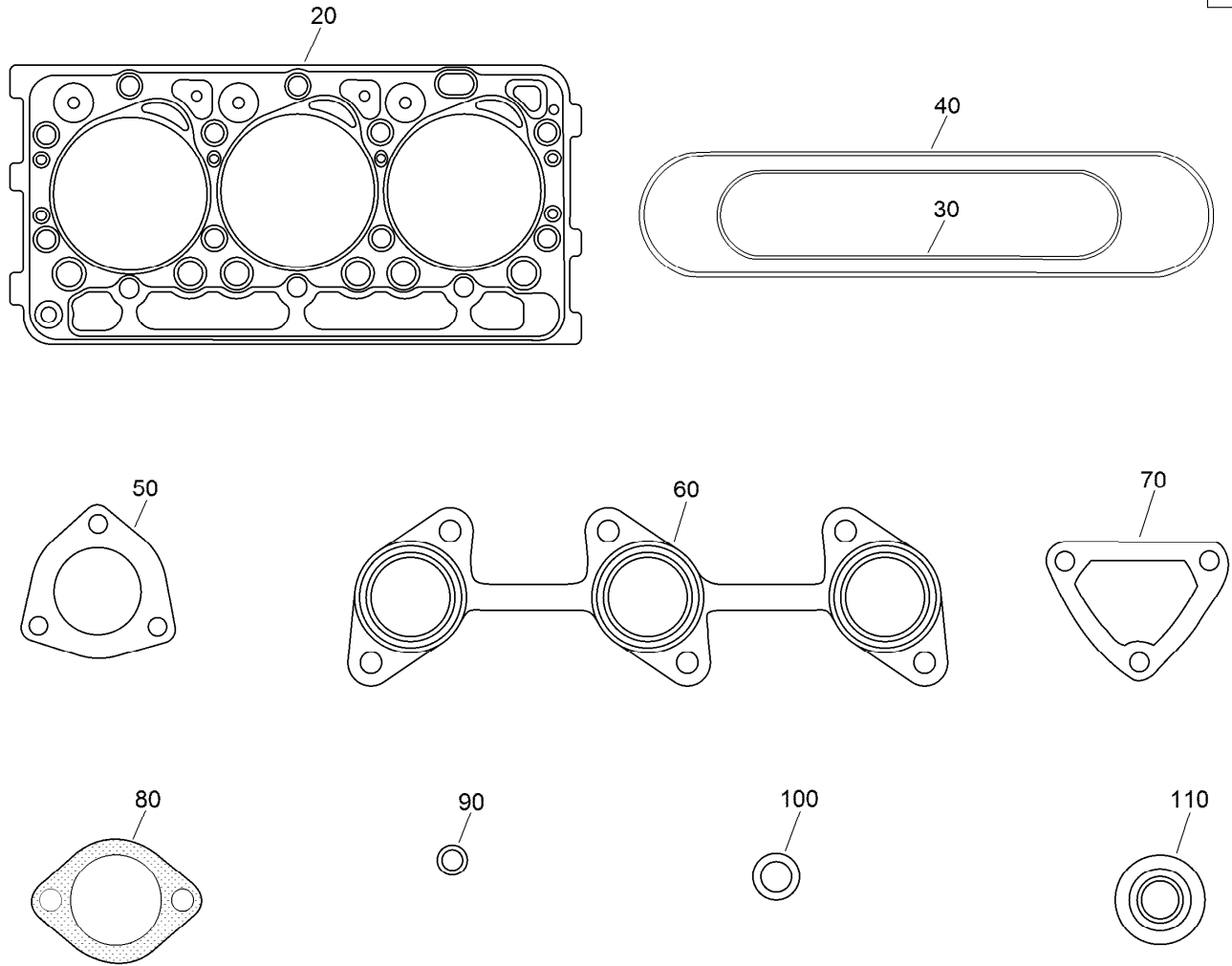
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 112-2839    | 1    | Intake Manifold ASM      |
| 20   | 110-3837    | 1    | Pipe-Breather            |
| 30   | 100-1937    | 1    | Gasket-Manifold, Intake  |
| 40   | 127-0403    | 2    | Bolt-Flange              |
| 50   | 100-1765    | 3    | Bolt                     |
| 60   | 100-2244    | 1    | Manifold-Exhaust         |
| 70   | 130-1384    | 1    | Gasket-Manifold, Exhaust |
| 80   | 130-1154    | 3    | Screw-Hex HD             |
| 90   | 130-1156    | 3    | Bolt-Stud                |
| 100  | 100-1778    | 3    | Nut                      |





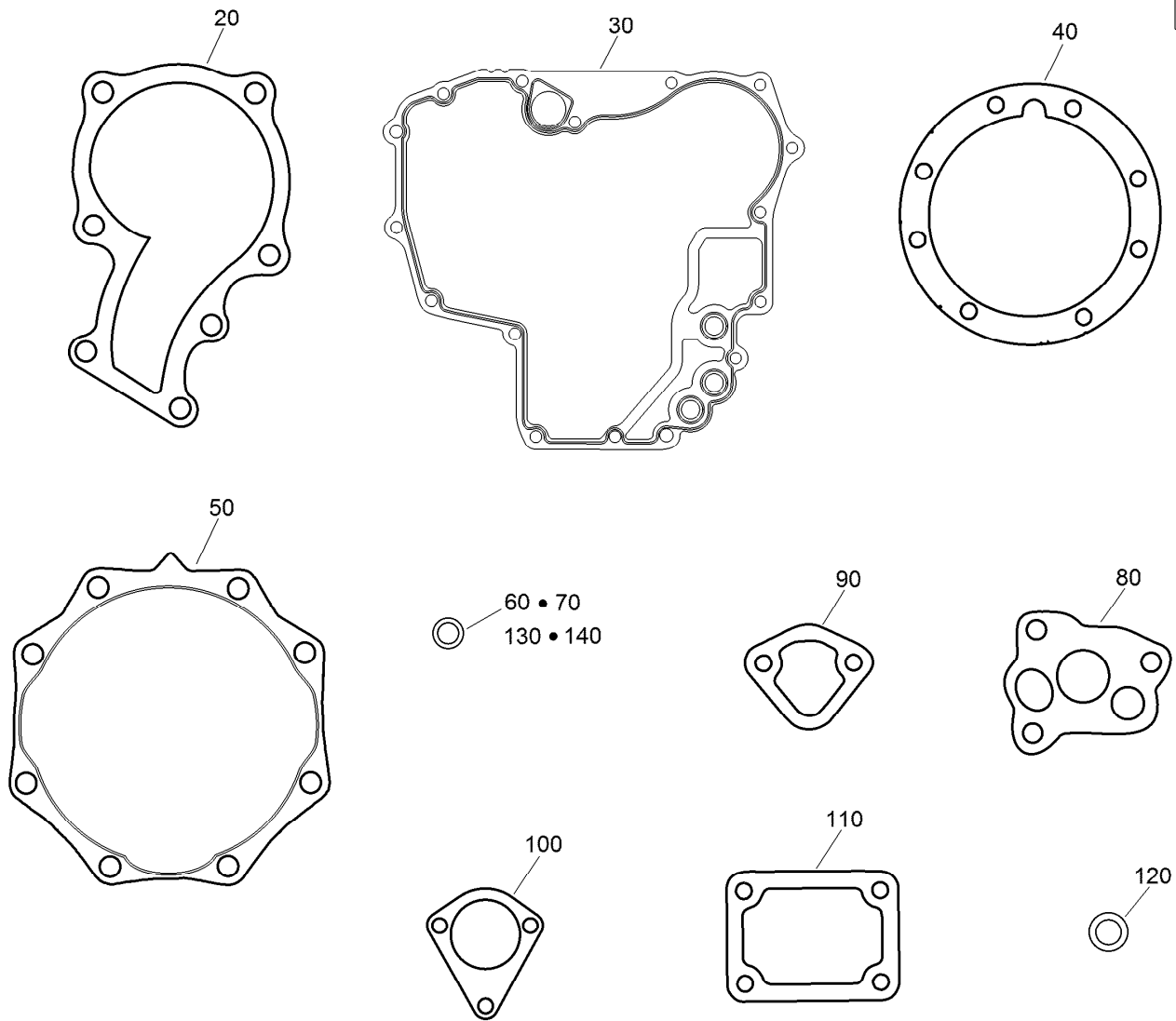
## Miscellaneous Engine Parts

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 80          | 100-2238           | 1           | Gasket-Muffler     |
| 90          | 130-1513           | 1           | Manual-Operator    |



## Upper Engine Gasket Kit

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 130-1383    | 1    | Upper Gasket Kit         |
| 20   | 130-1525    | 1    | Gasket-Head, Cylinder    |
| 30   | 112-2842    | 1    | Gasket-Cover, Head       |
| 40   | 100-1937    | 1    | Gasket-Manifold, Intake  |
| 50   | 100-2238    | 1    | Gasket-Muffler           |
| 60   | 130-1384    | 1    | Gasket-Manifold, Exhaust |
| 70   | 110-3820    | 1    | Gasket-Flange, Water     |
| 80   | 100-2157    | 1    | Gasket-Thermostat        |
| 90   | 99-3446     | 1    | O-Ring                   |
| 100  | 98-7654     | 3    | Gasket                   |
| 110  | 100-1797    | 6    | Seal-Stem, Valve         |



## Lower Engine Gasket Kit

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 10   | 130-1365    | 1    | Lower Gasket Kit      |
| 20   | 117-8846    | 1    | Gasket-Pump, Water    |
| 30   | 130-1302    | 1    | Gasket-Case, Gear     |
| 40   | 100-1873    | 1    | Gasket-Case, Bearing  |
| 50   | 100-1876    | 1    | Gasket-Cover, Case    |
| 60   | 100-2209    | 1    | O-Ring                |
| 70   | 105-3776    | 1    | O-Ring                |
| 80   | 100-2003    | 1    | Gasket-Pump, Oil      |
| 90   | 98-9636     | 1    | Gasket-Pump, Fuel     |
| 100  | 100-2062    | 1    | Gasket                |
| 110  | 100-1962    | 1    | Gasket-Plate, Control |
| 120  | 98-7428     | 2    | Gasket                |
| 130  | 100-2208    | 1    | O-Ring                |
| 140  | 100-2207    | 1    | O-Ring                |

# Attachments and Accessories

## For 22337CP 320-D Compact Utility Loader

| Product Name                           | Model/Part |
|----------------------------------------|------------|
| Tire Chain Kit .....                   | 100-4140   |
| Helmet-Face Shield .....               | 100-4143   |
| Light Kit.....                         | 100-8940   |
| Narrow Tire ASM .....                  | 104-0572   |
| Tube-Tire (18 x 8.50-10) .....         | 105-4070   |
| Rubber Foot Mat.....                   | 105-5805   |
| Tube-Tire (18 X 8.50-8).....           | 106396     |
| Solenoid Shutoff Kit .....             | 131-0569   |
| 4 Cubic Foot Standard Bucket .....     | 22409      |
| Loose Materials Bucket .....           | 22410      |
| 48in Hydraulic Blade .....             | 22414      |
| Bore Drive Head .....                  | 22420      |
| Rod and Reamer .....                   | 22421      |
| Multi-Purpose Tool .....               | 22423      |
| Direct Drive Power Box Rake .....      | 22426      |
| Stump Grinder .....                    | 22429      |
| Tree Forks .....                       | 22438      |
| Cement Bowl .....                      | 22442      |
| 40in Tiller .....                      | 22445      |
| Snowthrower.....                       | 22456      |
| Trench Filler.....                     | 22472      |
| High-Torque Trencher Head .....        | 22473      |
| High-Speed Trencher Head .....         | 22474      |
| Narrow Bucket .....                    | 22520      |
| Grapple Rake .....                     | 22521      |
| Auger Head .....                       | 22805      |
| Universal Swivel Auger Head .....      | 22806      |
| Vibratory Plow .....                   | 22911      |
| Soil Cultivator .....                  | 23102      |
| Concrete Breaker .....                 | 23135      |
| Backhoe.....                           | 23163      |
| Adjustable Forks.....                  | 23164      |
| Leveler.....                           | 23165      |
| Tube .....                             | 232-37     |
| LH Wheel And Tire ASM .....            | 98-2747    |
| Wheel and Tire ASM.....                | 98-4709    |
| RH Wheel And Tire ASM .....            | 99-1447    |
| RH Wheel And Tire ASM (Powerlug) ..... | 99-3140    |
| LH Wheel And Tire ASM (Powerlug).....  | 99-3141    |
| Hydraulic Relief Valve Kit.....        | 99-4360    |

**Notes:**

**Notes:**

**Notes:**



**Count on it.**