



Form No. 3354-407 Rev D

**Count on it.**

# Parts Catalog

## Groundsmaster® 3500-D

Model No. 30839—Serial No. 260000001 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.

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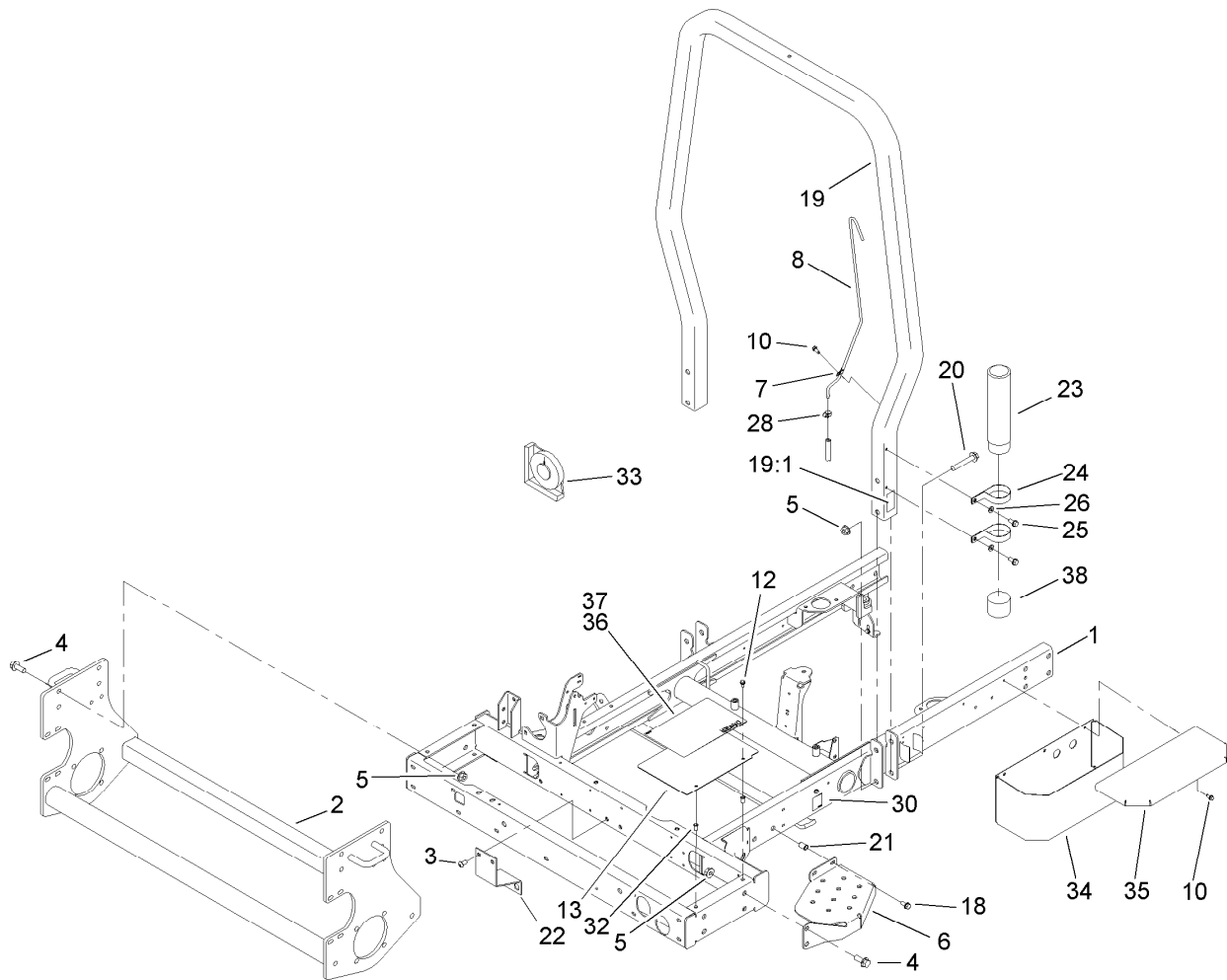
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## Frame Assembly

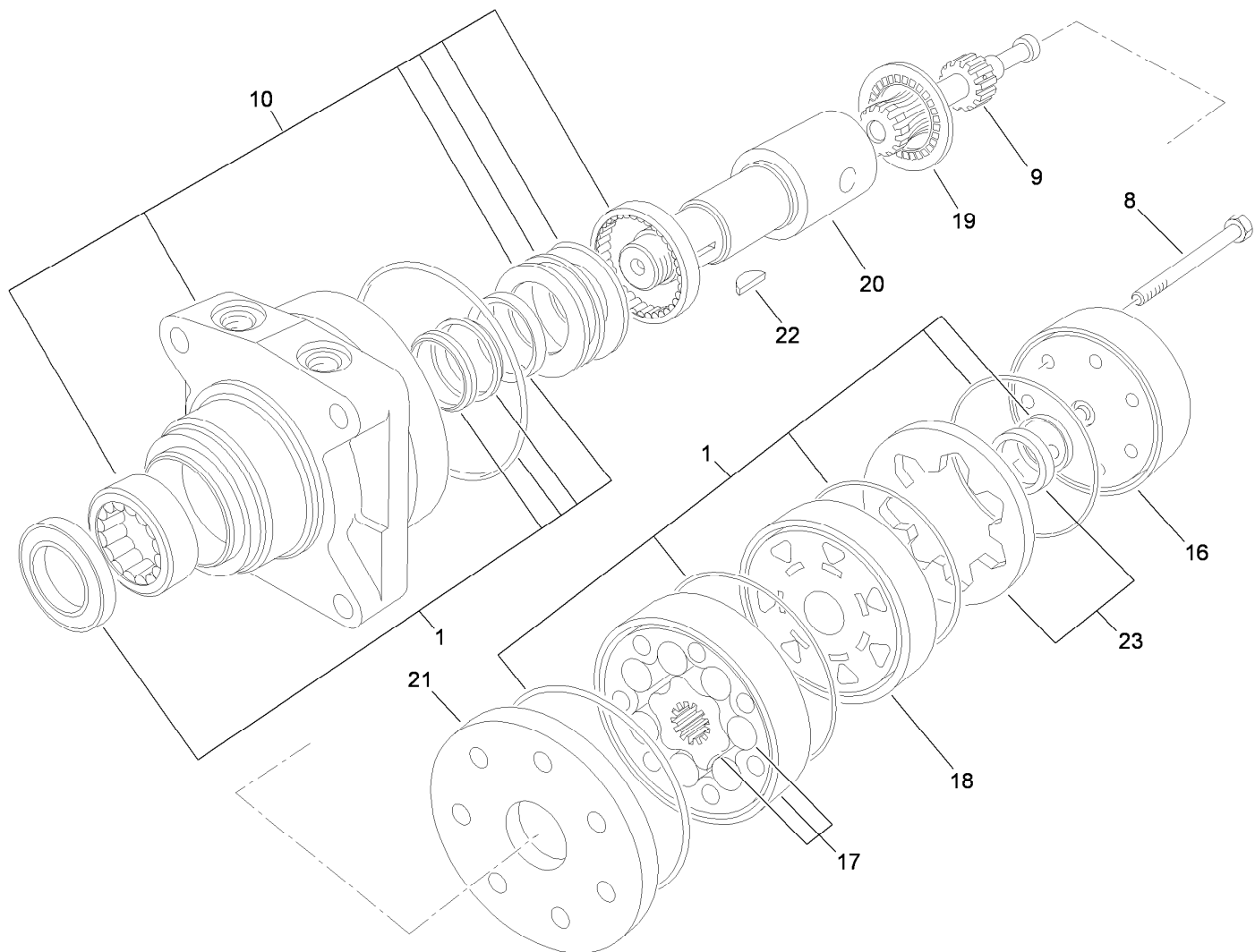
| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 1    | 99-3610-03  | 1    | Frame                  |
| 2    | 95-8568-03  | 1    | Frame-Lower            |
| 3    | 3274-80     | 2    | Screw-HH               |
| 4    | 3234-38     | 8    | Screw-HHF              |
| 5    | 32128-49    | 12   | Nut-HHF                |
| 6    | 99-3375-03  | 1    | Step                   |
| 7    | 2412-72     | 3    | Clip-Closed, Insulated |
| 8    | 95-8615     | 1    | Tube-Breather          |
| 10   | 32144-10    | 6    | Screw-HWH              |
| 12   | 3234-4      | 2    | Screw-HHF              |
| 13   | 104-0468-01 | 1    | Cover-Frame            |
| 18   | 3234-5      | 2    | Screw-HHF              |
| 19   | 107-7833    | 1    | ROPS ASM               |
| 19:1 | 107-7831    | 1    | Decal-ROPS             |
| 20   | 3234-40     | 4    | Screw-HF               |

| Ref. | Part Number | Qty. | Description               |
|------|-------------|------|---------------------------|
| 21   | 32148-8     | 2    | Insert-Threaded           |
| 22   | 95-8598-03  | 1    | Bracket-Bulkhead, Scissor |
| 23   | 104-7050    | 1    | Tube-Manual               |
| 24   | 2412-133    | 2    | Clamp-R                   |
| 25   | 32144-70    | 2    | Screw-HWHTF               |
| 26   | 3256-23     | 2    | Washer-Plain              |
| 28   | 2412-108    | 1    | Clamp-Worm                |
| 30   | 105-4674    | 1    | Decal-Noise               |
| 32   | 32148-6     | 2    | Insert-Nut                |
| 33   | 99-3503     | 1    | Indicator-Angle           |
| 34   | 104-4634-03 | 1    | Toolbox                   |
| 35   | 104-4633-03 | 1    | Cover-Toolbox             |
| 36   | 104-0484    | 1    | Decal-Danger              |
| 37   | 104-5181    | 1    | Decal-Danger, CE          |
| 38   | 104-7048    | 1    | Cap-Housing               |



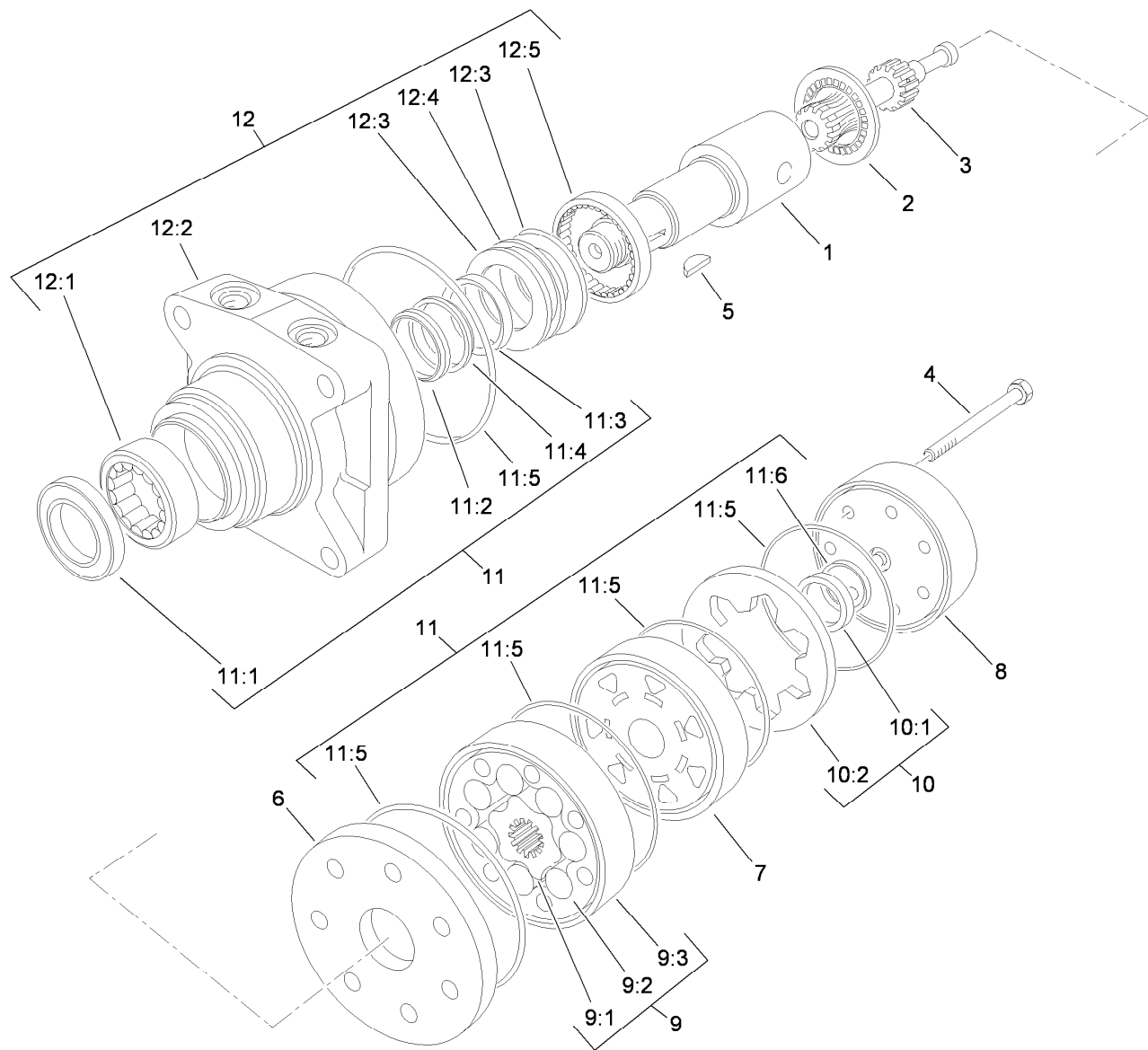
| <b>Ref.</b> | <b>Part Number</b> | <b>Qty.</b> | <b>Description</b>   |
|-------------|--------------------|-------------|----------------------|
| 19:2        | 104-0451           | 1           | Tire-Turf, Trac      |
| 19:3        | 104-0452           | 1           | Rim-Wheel            |
| 20          | 242-50             | 8           | Nut-Lug              |
| 21          | 321-5              | 8           | Screw-HH             |
| 22          | 3296-42            | 8           | Nut-Lock, NI         |
| 23          | 104-7705           | 2           | Brake ASM            |
| 24          | 104-0485-03        | 2           | Shield-Wheel         |
| 25          | 92-1715            | 8           | Spacer               |
| 26          | 93-6850            | 2           | Lever-Brake          |
| 27          | 282-2              | 2           | Yoke                 |
| 28          | 283-1              | 2           | Pin-Clevis           |
| 29          | 3272-10            | 2           | Pin-Cotter           |
| 30          | 104-4627           | 2           | Rod-Adjusting        |
| 31          | 3272-6             | 2           | Pin-Cotter           |
| 32          | 3220-2             | 2           | Nut-Jam              |
| 33          | 104-4625-03        | 1           | Shaft-Pivot, Brake   |
| 34          | 95-8683            | 2           | Bracket-Pivot, Brake |
| 35          | 3234-11            | 4           | Screw-HHF            |
| 36          | 32128-43           | 4           | Nut-Flange           |
| 37          | 256-156            | 2           | Bushing-Flange       |
| 39          | 3274-105           | 8           | Screw-HSBH           |
| 40          | 104-4809           | 2           | Drum-Brake           |

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## Hydraulic Motor Assembly No. 75-9990

| Ref. | Part Number | Qty. | Description    |
|------|-------------|------|----------------|
| 1    | 76-0800     | 1    | Seal Kit       |
| 8    | 76-1010     | 7    | Screw          |
| 9    | 76-0960     | 1    | Link-Drive     |
| 10   | 76-0810     | 1    | Housing ASM    |
| 16   | 76-0940     | 1    | End Cover ASM  |
| 17   | 76-0970     | 1    | Rotor Set      |
| 18   | 76-0840     | 1    | Manifold       |
| 19   | 76-0850     | 1    | Bearing-Thrust |
| 20   | 76-0860     | 1    | Shaft-Coupling |
| 21   | 76-0870     | 1    | Plate-Wear     |
| 22   | 3257-42     | 1    | Key-Woodruff   |
| 23   | 76-0880     | 1    | Commutator ASM |

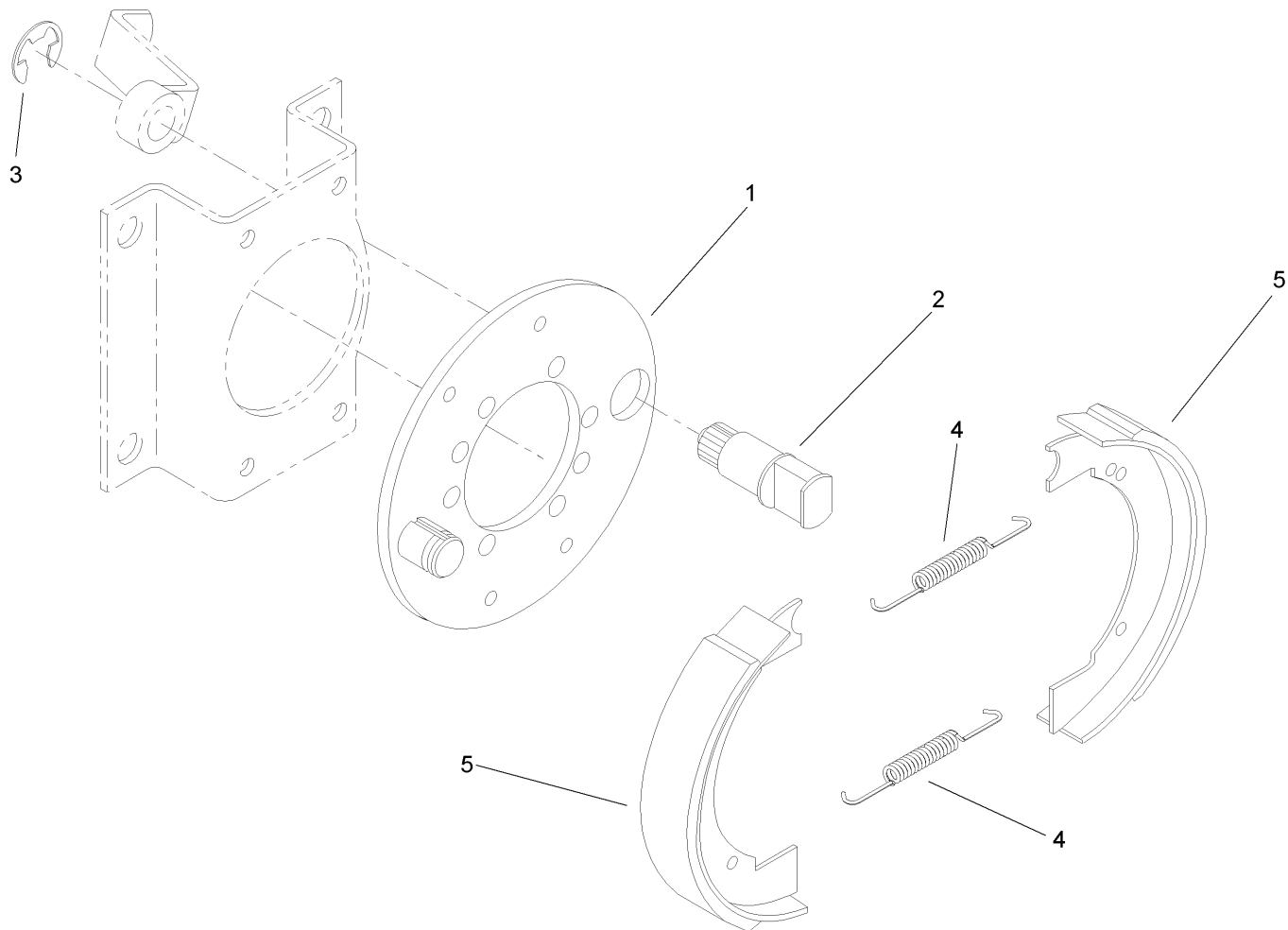


## Hydraulic Motor Assembly No. 95-8693

| Ref. | Part Number | Qty. | Description    |
|------|-------------|------|----------------|
| 1    | 76-0860     | 1    | Shaft-Coupling |
| 2    | 76-0850     | 1    | Bearing-Thrust |
| 3    | 76-0960     | 1    | Link-Drive     |
| 4    | 76-1010     | 7    | Screw          |
| 5    | 3257-42     | 1    | Key-Woodruff   |
| 6    | 76-0870     | 1    | Plate-Wear     |
| 7    | 99-3535     | 1    | Manifold       |
| 8    | 76-0940     | 1    | End Cover ASM  |
| 9    | 76-0970     | 1    | Rotor Set      |
| 9:1  |             | 1    | Rotor ●        |
| 9:2  |             | 7    | Vane ●         |
| 9:3  |             | 1    | Stator ●       |
| 10   | 76-0880     | 1    | Commutator ASM |
| 10:1 |             | 1    | Commutator ●   |

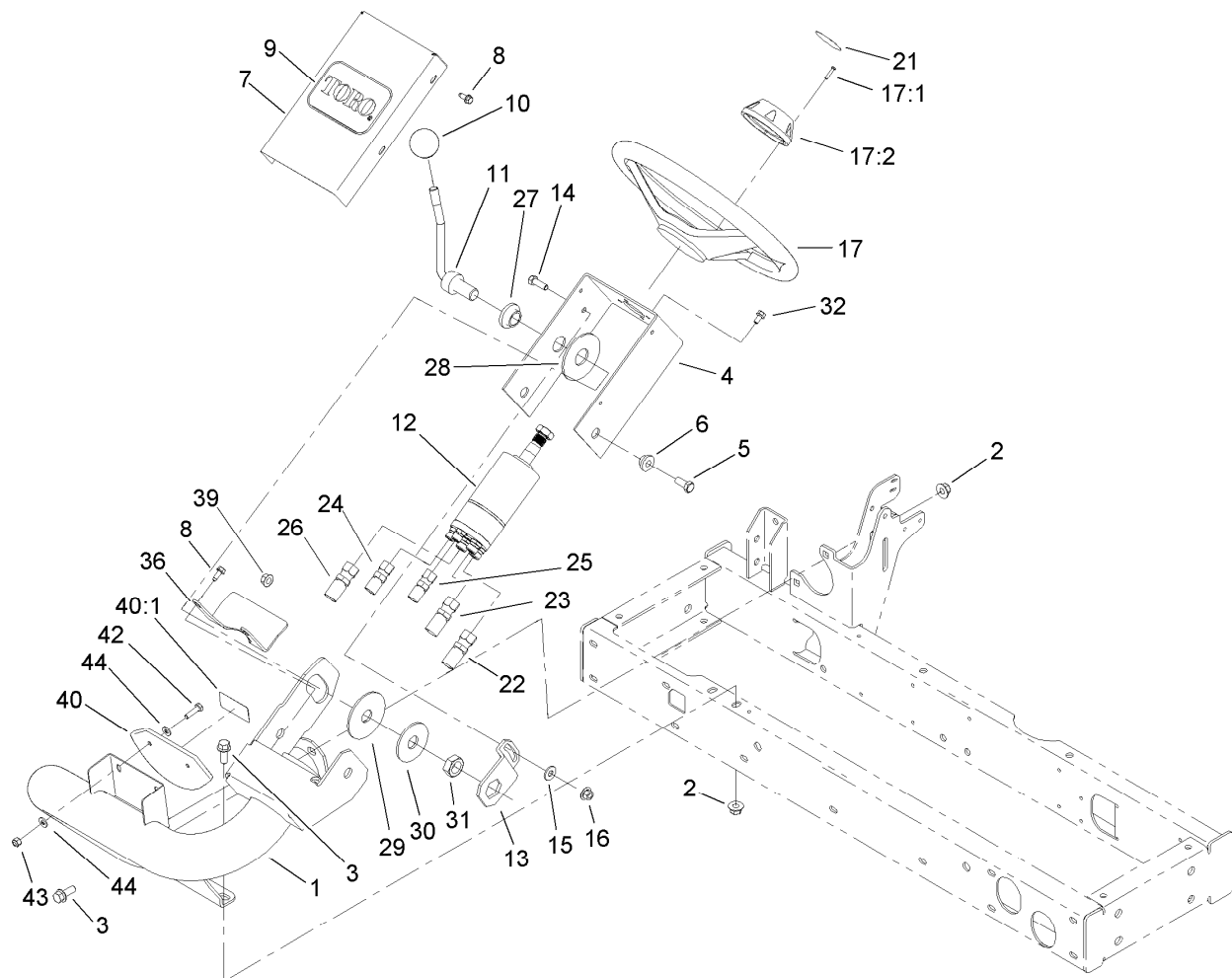
| Ref. | Part Number | Qty. | Description                 |
|------|-------------|------|-----------------------------|
| 10:2 |             | 1    | Ring-Commutator ●           |
| 11   | 76-0800     | 1    | Seal Kit                    |
| 11:1 |             | 1    | Seal-Dirt And Water ●       |
| 11:2 |             | 1    | Backup-Ring ●               |
| 11:3 |             | 1    | Seal-Shaft ●                |
| 11:4 |             | 1    | Washer-Back Up ●            |
| 11:5 |             | 5    | Seal-Square, Ring (Inner) ● |
| 11:6 |             | 1    | Seal-Commutator ●           |
| 12   | 76-0810     | 1    | Housing ASM                 |
| 12:1 |             | 1    | Bearing ●                   |
| 12:2 |             | 1    | Housing ●                   |
| 12:3 |             | 2    | Washer-Thrust ●             |
| 12:4 |             | 1    | Bearing-Thrust ●            |
| 12:5 |             | 1    | Bearing ●                   |

● Not serviced separately



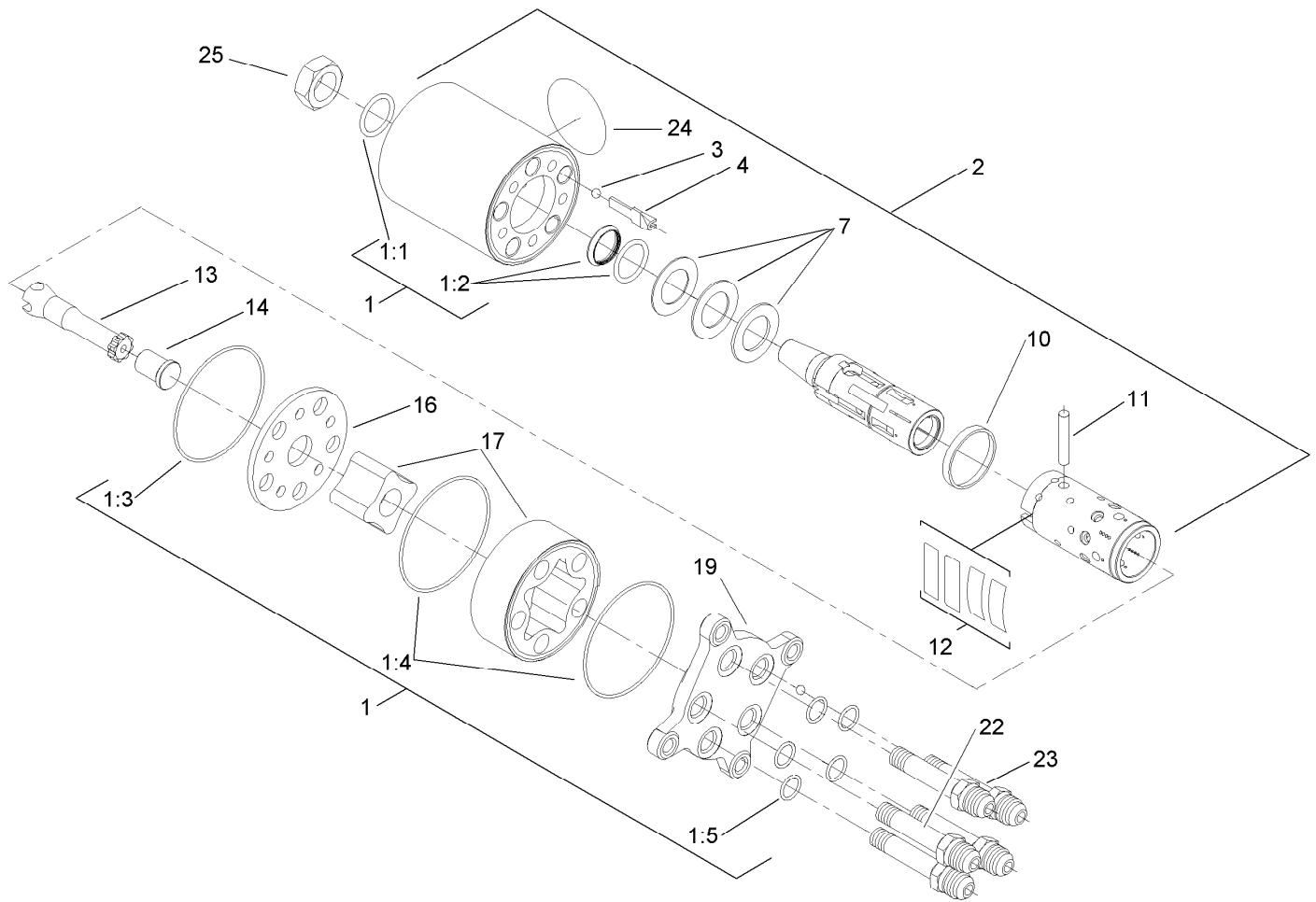
## Brake Assembly No. 104-7705

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 70-9870            | 1           | Plate-Backing      |
| 2           | 104-7707           | 1           | Shaft-Cam, Brake   |
| 3           | 104-7706           | 1           | E-Ring, Bowed      |
| 4           | 70-9880            | 2           | Spring-Return      |
| 5           | 70-9840            | 2           | Shoe-Brake         |



## Steering Column Assembly

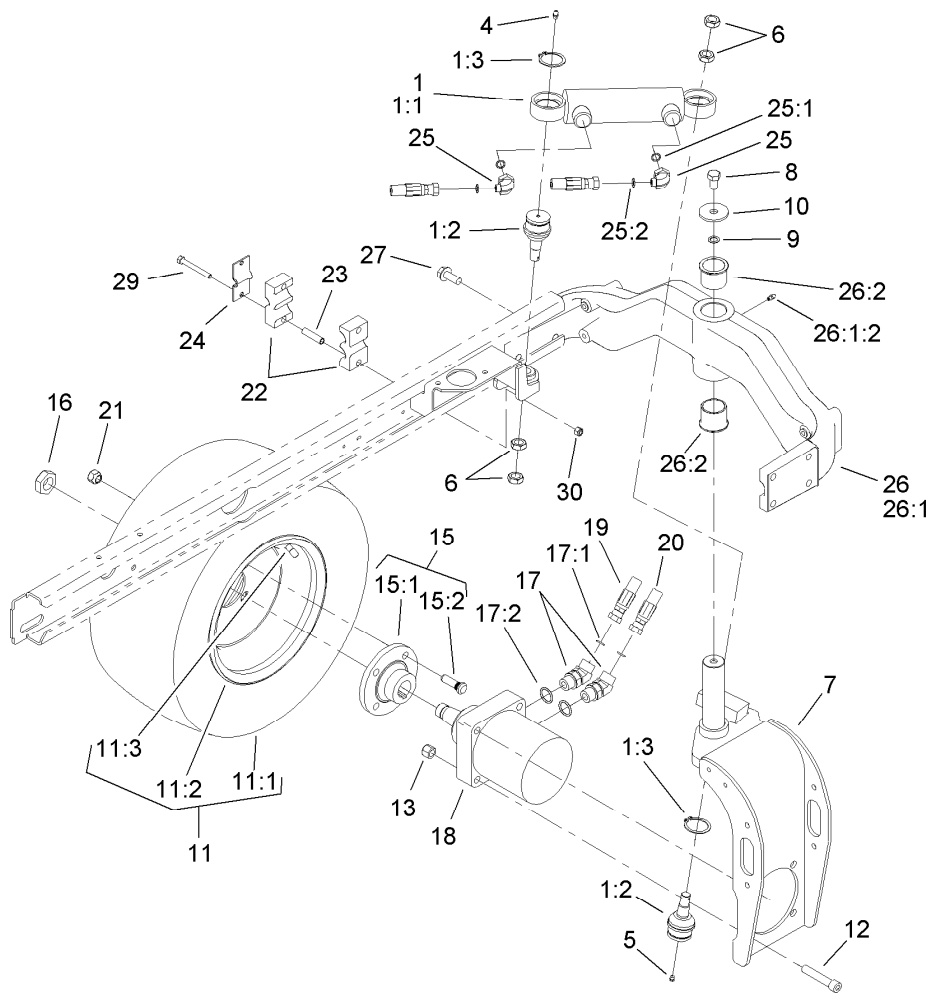
| Ref. | Part Number | Qty. | Description             | Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|------|-------------|------|-------------------------|
| 1    | 105-8536-01 | 1    | Arm-Steering            | 22   | 95-8842     | 1    | Hose-HYD                |
| 2    | 32128-43    | 4    | Nut-Flange              | 23   | 95-8843     | 1    | Hose-HYD                |
| 3    | 3234-11     | 4    | Screw-HHF               | 24   | 100-4892    | 1    | Hose ASM                |
| 4    | 104-5185-01 | 1    | Bracket-Valve, Steering | 25   | 100-4893    | 1    | Hose-HYD                |
| 5    | 323-5       | 2    | Screw-HH                | 26   | 95-8846     | 1    | Hose-HYD                |
| 6    | 93-5988     | 2    | Hub-Pivot               | 27   | 99-3502     | 1    | Boss                    |
| 7    | 95-8794-01  | 1    | Cover-Valve, Steering   | 28   | 31-0390     | 1    | Disc-Friction           |
| 8    | 32144-10    | 5    | Screw-HWH               | 29   | 82-9010     | 1    | Disc-Friction           |
| 9    | 67-1300     | 1    | Decal                   | 30   | 80-2930     | 1    | Washer-Flat             |
| 10   | 233-48      | 1    | Knob                    | 31   | 3218-7      | 1    | Nut-Jam                 |
| 11   | 95-8798-03  | 1    | Lever-Steering          | 32   | 33103-012   | 4    | Screw-HHF               |
| 12   | 104-5180    | 1    | Steering Valve ASM      | 36   | 99-3405-01  | 1    | Shield-Steering         |
| 13   | 80-2880     | 1    | Bracket-Tilt            | 39   | 32128-21    | 2    | Nut-HF                  |
| 14   | 322-5       | 1    | Screw-HH                | 40   | 100-4929    | 1    | Slope Indicator ASM     |
| 15   | 3256-3      | 1    | Washer-Flat             | 40:1 | 107-7801    | 1    | Decal-Danger, 15 Degree |
| 16   | 32128-44    | 1    | Nut                     | 40:1 | 100-4837    | 1    | Decal-Danger            |
| 17   | 75-0560     | 1    | Steering Wheel ASM      | 42   | 321-7       | 2    | Screw-HH                |
| 17:1 | 32144-21    | 1    | Screw                   | 43   | 3296-42     | 2    | Nut-Lock, NI            |
| 17:2 | 68-5140     | 1    | Cap-Wheel, Steering     | 44   | 3256-22     | 4    | Washer-Flat             |
| 21   | 68-5370     | 1    | Decal                   |      |             |      |                         |



## Steering Valve Assembly No. 104-5180

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 1    | 106-6716    | 1    | Seal Kit            |
| 1:1  |             | 1    | Ring-Seal, Dust ●   |
| 1:2  |             | 1    | Seal-Shaft ●        |
| 1:3  |             | 1    | Seal-Dust ●         |
| 1:4  |             | 2    | Seal-Dust ●         |
| 1:5  |             | 5    | Seal-Dust ●         |
| 2    |             | 1    | Housing ●           |
| 3    |             | 1    | Ball ●              |
| 4    |             | 1    | Stop-Ball ●         |
| 7    |             | 1    | Bearing ASM ●       |
| 10   |             | 1    | Ring ●              |
| 11   |             | 1    | Pin-Cross ●         |
| 12   |             | 1    | Springs ●           |
| 13   |             | 1    | Shaft ●             |
| 14   |             | 1    | Spacer ●            |
| 16   |             | 1    | Plate-Distributor ● |
| 17   |             | 1    | Gearwheel Set ●     |
| 19   |             | 1    | Cover-End ●         |
| 22   |             | 1    | Screw-Special ●     |
| 23   |             | 4    | Screw-Special ●     |
| 24   |             | 1    | Plate-Name ●        |
| 25   | 3220-6      | 1    | Nut-Jam             |

● Not serviced separately

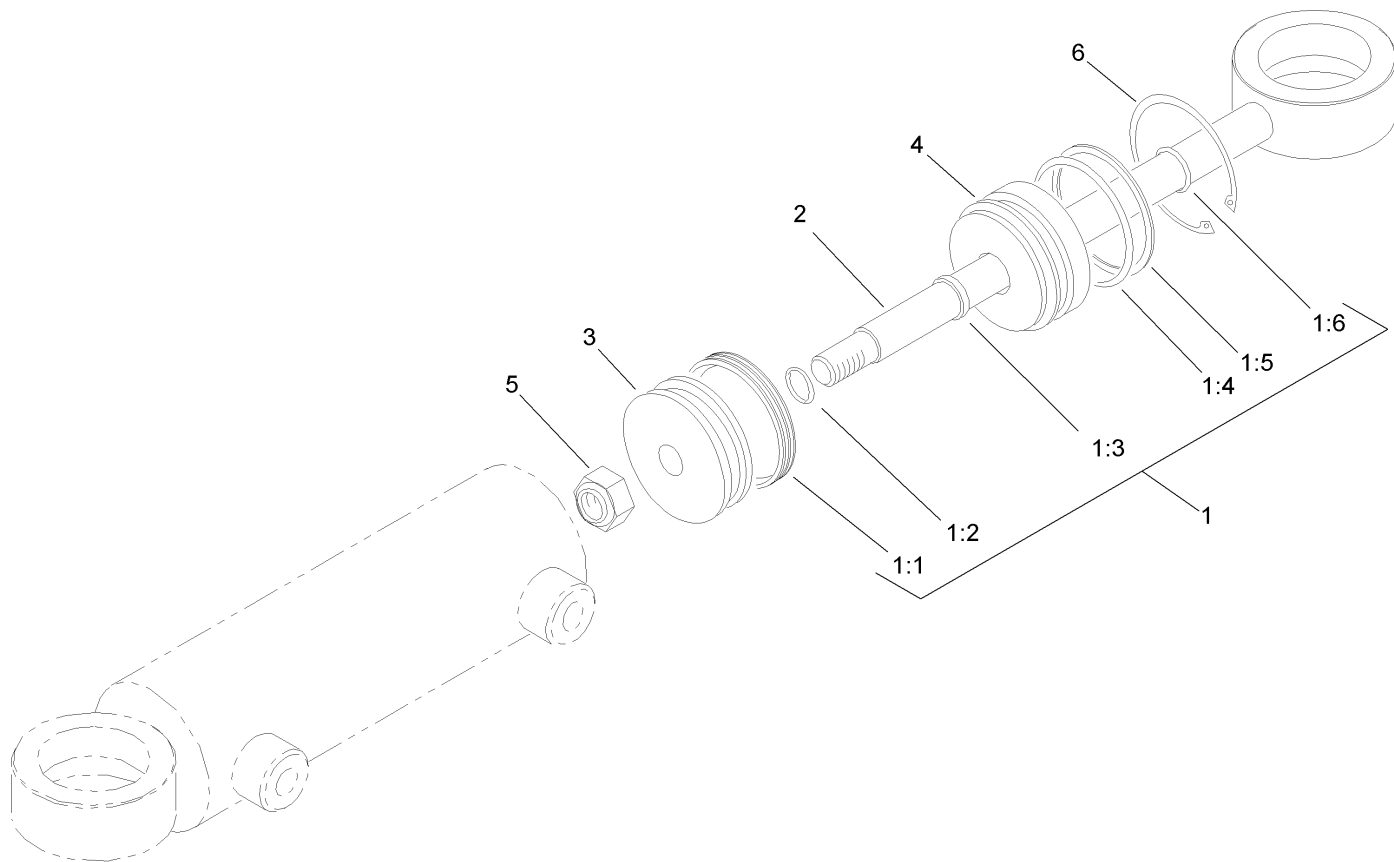


## Rear Fork and Tire Assembly

| Ref. | Part Number | Qty. | Description                         |
|------|-------------|------|-------------------------------------|
| 1    |             | 1    | Steering Cylinder / Balljoint ASM ● |
| 1:1  | 94-8141     | 1    | HYD Cylinder ASM                    |
| 1:2  | 106-6774    | 2    | Joint-Ball                          |
| 1:3  | 32151-104   | 2    | Ring-Retaining, External            |
| 4    | 302-5       | 1    | Fitting-Grease                      |
| 5    | 302-59      | 1    | Plug-Threaded                       |
| 6    | 3220-6      | 4    | Nut-Jam                             |
| 7    | 95-8905-01  | 1    | Fork-Rear                           |
| 8    | 325-3       | 1    | Screw-HH                            |
| 9    | 3255-2      | 1    | Washer-Lock, EXT                    |
| 10   | 75-7730     | 1    | Washer-Thrust                       |
| 11   |             | 1    | Tire And Wheel ASM ●                |
| 11:1 | 95-8656     | 1    | Tire-4-Ply Turf-Trac                |
| 11:2 | 95-8657     | 1    | Rim-Wheel                           |
| 11:3 | 232-27      | 1    | Stem-Valve                          |
| 12   | 3274-93     | 4    | Screw-HSH                           |
| 13   | 3296-23     | 4    | Nut-Lock, NI                        |
| 15   |             | 1    | Wheel Hub / Stud ASM ●              |
| 15:1 | 10-6870-03  | 1    | Hub-Wheel                           |
| 15:2 | 10-6830     | 4    | Stud-Type, Drive                    |
| 16   | 26-3790     | 1    | Nut-Lock                            |

| Ref.   | Part Number | Qty. | Description       |
|--------|-------------|------|-------------------|
| 17     | 340-14      | 2    | Fitting-HYD-45    |
| 17:1   | 237-65      | 1    | O-Ring            |
| 17:2   | 237-80      | 1    | O-Ring            |
| 18     | 95-8694     | 1    | HYD Motor ASM     |
| 19     | 105-1213    | 1    | Hose-HYD          |
| 20     | 105-1212    | 1    | Hose-HYD          |
| 21     | 242-50      | 4    | Nut-Lug           |
| 22     | 82-8170     | 2    | Clamp             |
| 23     | 93-7960     | 2    | Spacer            |
| 24     | 93-7961     | 1    | Clamp-Drain, Case |
| 25     | 340-132     | 2    | Fitting-90 DEG    |
| 25:1   | 237-78      | 1    | O-Ring            |
| 25:2   | 237-21      | 1    | O-Ring            |
| 26     | 107-7828    | 1    | Rear Casting ASM  |
| 26:1   |             | 1    | Casting-Rear ●    |
| 26:1:2 | 302-5       | 1    | Fitting-Grease    |
| 26:2   | 95-8805     | 2    | Bushing           |
| 27     | 3234-38     | 8    | Screw-HHF         |
| 29     | 322-13      | 2    | Screw-HH          |
| 30     | 3296-29     | 2    | Nut-Lock, NI      |

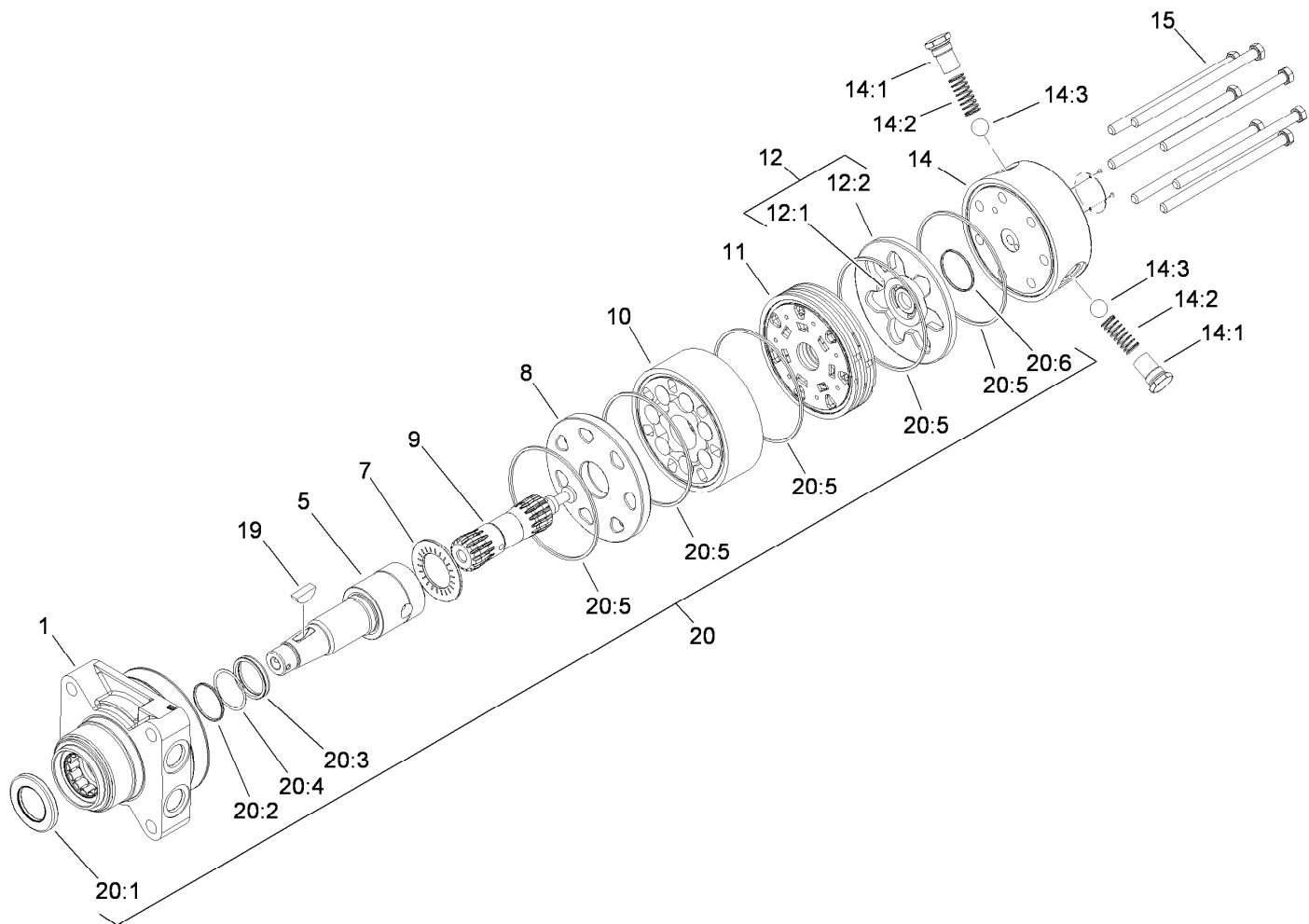
● Not serviced separately



## Hydraulic Cylinder Assembly No. 94-8141

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 86-5390            | 1           | Seal Kit           |
| 1:1         |                    | 1           | Uniring ●          |
| 1:2         |                    | 1           | Seal-Dust ●        |
| 1:3         |                    | 1           | Seal-Rod ●         |
| 1:4         |                    | 1           | Seal-Dust ●        |
| 1:5         |                    | 1           | Ring-Backup ●      |
| 1:6         |                    | 1           | Seal-Dust ●        |
| 2           |                    | 1           | Rod ●              |
| 3           |                    | 1           | Piston ●           |
| 4           |                    | 1           | Gland ●            |
| 5           |                    | 1           | Nut-Lock ●         |
| 6           |                    | 1           | Ring-Retaining ●   |

● Not serviced separately

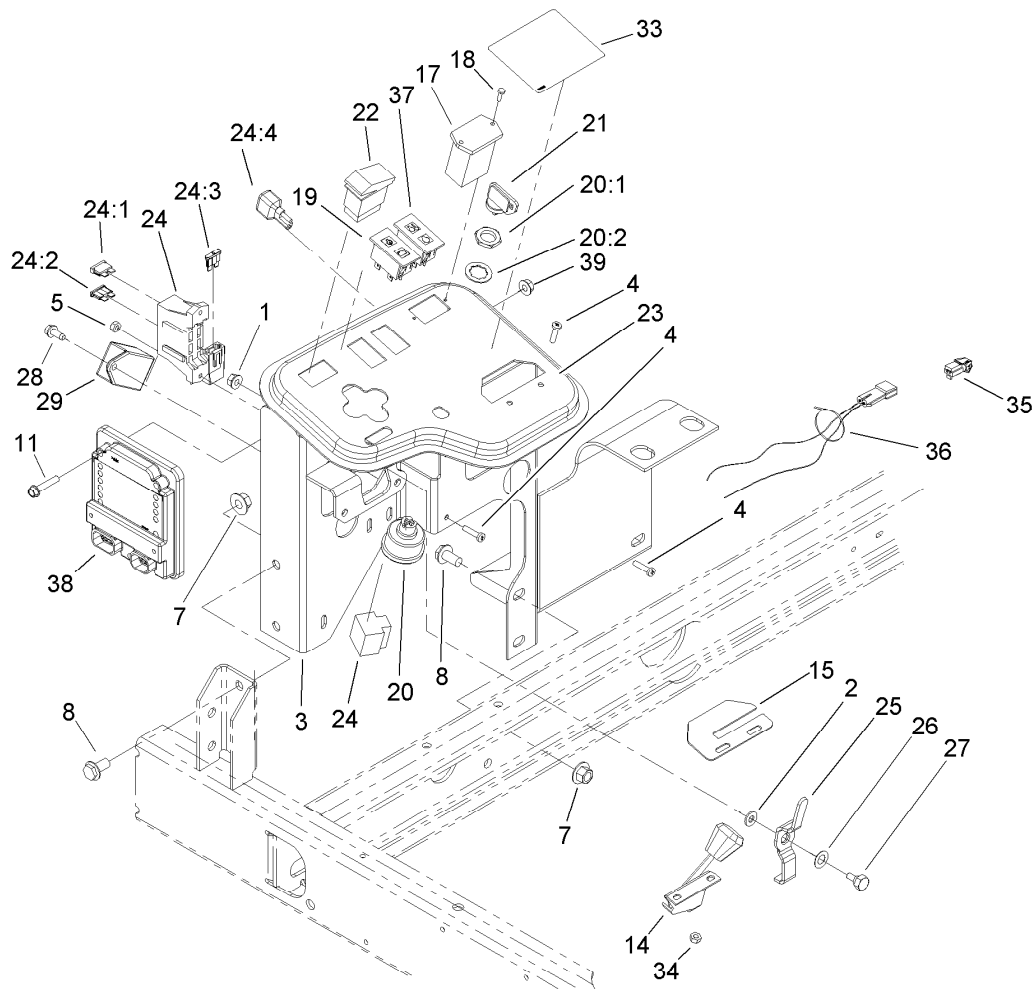


## Hydraulic Motor Assembly No. 95-8694

| Ref. | Part Number | Qty. | Description                 |
|------|-------------|------|-----------------------------|
| 1    | 76-0810     | 1    | Housing ASM                 |
| 5    | 99-3090     | 1    | Shaft-Coupling              |
| 7    | 76-0850     | 1    | Bearing-Thrust              |
| 8    | 76-0870     | 1    | Plate-Wear                  |
| 9    | 99-3537     | 1    | Link-Drive                  |
| 10   | 99-3539     | 1    | Set-Rotor                   |
| 11   | 99-3535     | 1    | Manifold                    |
| 12   | 76-0880     | 1    | Commutator ASM              |
| 12:1 |             | 1    | Commutator ●                |
| 12:2 |             | 1    | Ring-Commutator ●           |
| 14   | 99-3538     | 1    | End Cover ASM               |
| 14:1 |             | 1    | Spring Cap And O-Ring ASM ● |

| Ref. | Part Number | Qty. | Description                 |
|------|-------------|------|-----------------------------|
| 14:2 | 99-3541     | 1    | Spring                      |
| 14:3 | 99-3540     | 1    | Ball                        |
| 15   | 99-3536     | 7    | Screw-HH                    |
| 19   | 3257-42     | 1    | Key-Woodruff                |
| 20   | 94-8178     | 1    | Seal Kit                    |
| 20:1 |             | 1    | Seal-Dirt And Water ●       |
| 20:2 |             | 1    | Backup-Ring ●               |
| 20:3 |             | 1    | Seal-Shaft ●                |
| 20:4 |             | 1    | Washer-Backup ●             |
| 20:5 |             | 5    | Seal-Square, Ring (Inner) ● |
| 20:6 |             | 1    | Seal-Commutator ●           |

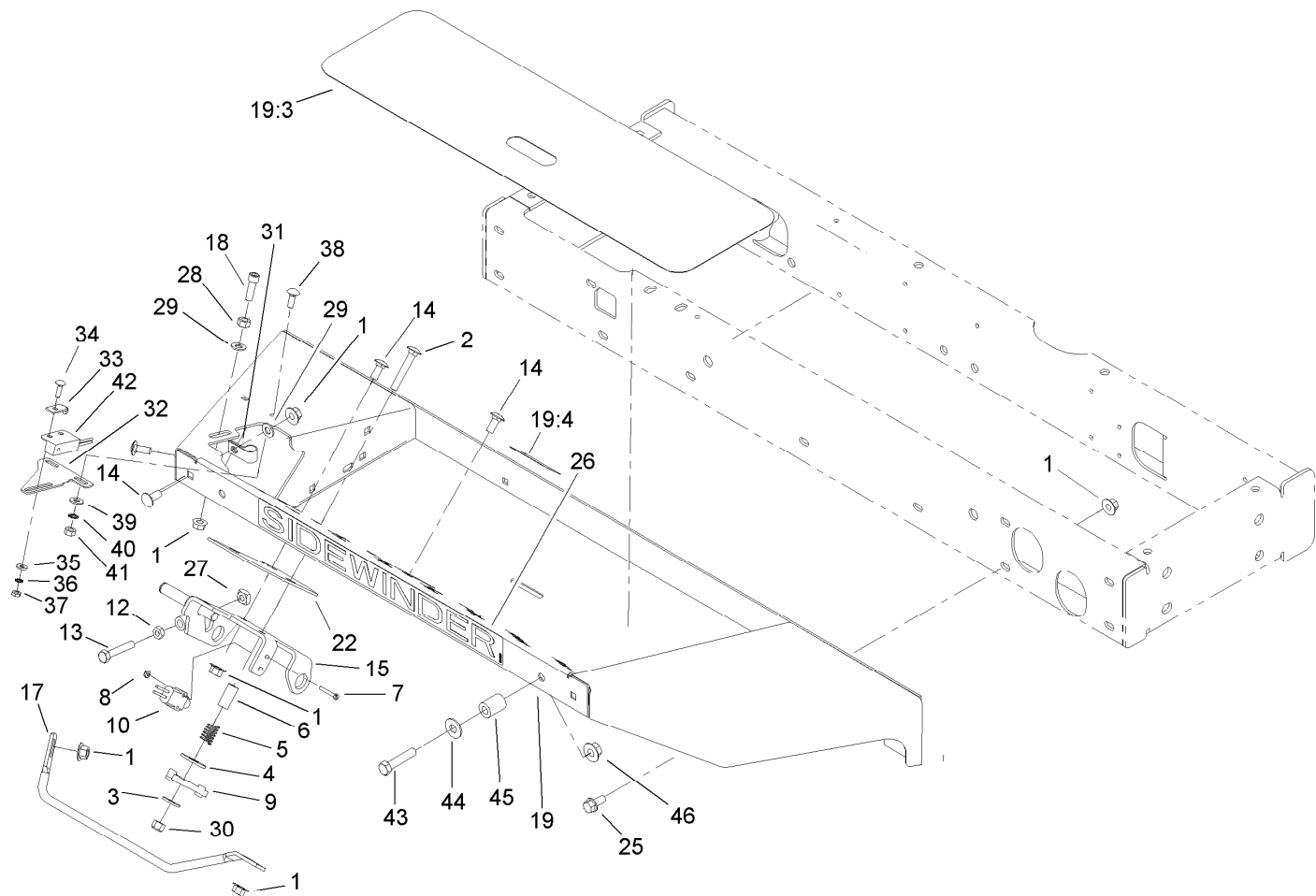
● Not serviced separately



## Control Panel Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 1    | 32128-32    | 1    | Nut-HHF                |
| 2    | 3256-22     | 1    | Washer-Flat            |
| 3    | 104-5190-03 | 1    | Panel-Control          |
| 4    | 32105-13    | 4    | Screw-HWH              |
| 5    | 3296-2      | 2    | Nut-Lock, NI           |
| 7    | 32128-43    | 5    | Nut-Flange             |
| 8    | 3234-1      | 5    | Screw-HHF              |
| 11   | 321-8       | 3    | Screw-HH               |
| 14   | 110-8750    | 1    | Cable-Throttle         |
| 15   | 104-0421    | 1    | Plate-Stop, Throttle   |
| 17   | 75-6820     | 1    | Hourmeter              |
| 18   | 32144-18    | 2    | Screw-HWH              |
| 19   | 100-8070    | 1    | Lamp-Warning           |
| 20   | 104-2541    | 1    | Switch ASM             |
| 20:1 | 218-461     | 1    | Nut-HH                 |
| 20:2 | 3254-5      | 1    | Washer-Tooth, Internal |
| 21   | 63-8360     | 2    | Key-Ignition           |
| 22   | 95-8999     | 1    | Switch                 |

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 23   | 104-5191    | 1    | Decal-Console            |
| 24   | 104-5165    | 1    | Harness-Wire             |
| 24:1 | 109355      | 1    | Fuse-Blade, 15 Amp       |
| 24:2 | 218-578     | 2    | Fuse-Blade, 10 Amp       |
| 24:3 | 94-6710     | 1    | Fuse-2 Amp               |
| 24:4 | 100-4918    | 1    | Diode                    |
| 25   | 99-3401-03  | 1    | Lever-Valve, Lock        |
| 26   | 3290-477    | 1    | Washer-Curved            |
| 27   | 63-3410     | 1    | Screw-Shoulder           |
| 28   | 32144-10    | 1    | Screw-HWH                |
| 29   | 98-7611     | 1    | Controller-Glow          |
| 33   | 99-3558     | 1    | Decal-Console, CE        |
| 34   | 3290-148    | 2    | Nut-HF                   |
| 35   | 104-4875    | 1    | Harness-Wire, Jumper     |
| 36   | 3290-379    | 1    | Tie-Cable                |
| 37   | 100-8071    | 1    | Lamp-Warning             |
| 38   | 106-9277    | 1    | Module-Control, Standard |
| 39   | 32128-33    | 3    | Nut-HF                   |

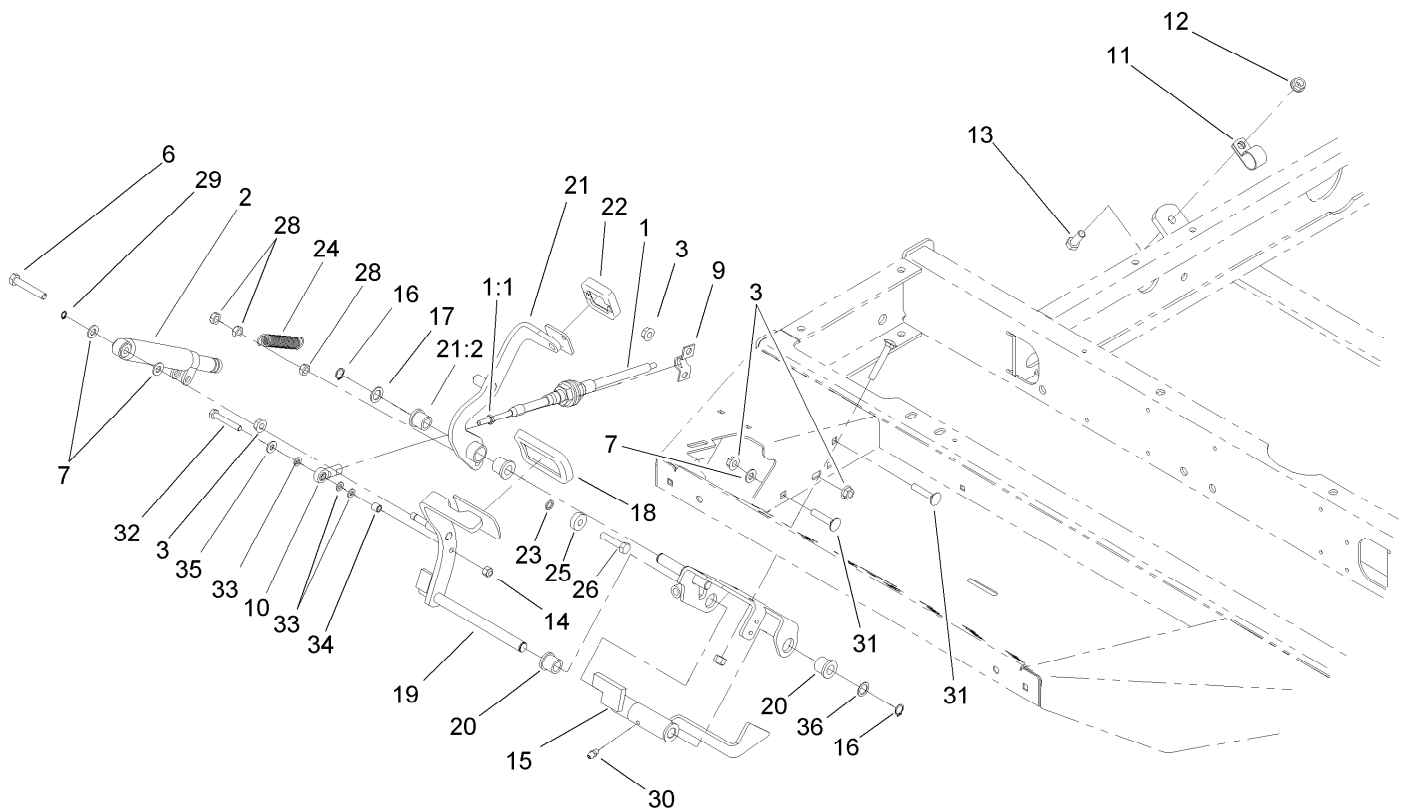


## Front Platform Assembly

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 1    | 32128-20    | 18   | Nut-HF                  |
| 2    | 3230-6      | 1    | Screw-CARR              |
| 3    | 3256-3      | 1    | Washer-Flat             |
| 4    | 3256-40     | 1    | Washer-Flat             |
| 5    | 65-9940     | 1    | Spring                  |
| 6    | 95-8866     | 1    | Tube-Arm, Rocker        |
| 7    | 32105-9     | 2    | Screw                   |
| 8    | 3296-9      | 2    | Nut-Hex                 |
| 9    | 99-3593     | 1    | Arm-Rocker              |
| 10   | 95-8900     | 1    | Switch                  |
| 12   | 3218-2      | 1    | Nut-Jam                 |
| 13   | 322-41      | 1    | Screw-HH                |
| 14   | 3230-23     | 7    | Screw-CARR              |
| 15   | 95-8869-03  | 1    | Bracket-Pedal, Traction |
| 17   | 95-8893     | 1    | Bar-Deflector           |
| 18   | 3274-22     | 1    | Screw-HSH               |
| 19   | 106-4154    | 1    | Floorplate ASM          |
| 19:3 | 99-3478     | 1    | Tread-Foot              |
| 19:4 | 99-3444     | 1    | Decal-Mow / Transport   |
| 22   | 106-2661-01 | 1    | Plate-Support           |
| 25   | 3234-5      | 10   | Screw-HHF               |

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 26   | 99-3388     | 1    | Decal                   |
| 27   | 99-3565     | 1    | Nut-Square              |
| 28   | 3217-6      | 1    | Nut-Hex                 |
| 29   | 3256-23     | 2    | Washer-Plain            |
| 30   | 3296-29     | 1    | Nut-Lock, NI            |
| 31   | 2412-103    | 1    | Clamp                   |
| 32   | 100-4871    | 1    | Bracket-Switch, Neutral |
| 33   | 100-4872    | 1    | Plate-Switch, Neutral   |
| 34   | 3229-20     | 1    | Screw-CARR              |
| 35   | 3256-14     | 1    | Washer-Flat             |
| 36   | 3255-17     | 1    | Washer-Lock, EXT        |
| 37   | 3296-2      | 1    | Nut-Lock, NI            |
| 38   | 3229-1      | 2    | Bolt-CARR               |
| 39   | 3256-22     | 2    | Washer-Flat             |
| 40   | 3255-7      | 2    | Washer-Lock/EXT         |
| 41   | 3217-5      | 2    | Nut-Hex                 |
| 42   | 100-1270    | 1    | Switch-Proximity        |
| 43   | 323-9       | 2    | Screw-HH                |
| 44   | 3256-4      | 2    | Washer-Flat             |
| 45   | 104-4613    | 2    | Tube-Latch              |
| 46   | 32128-43    | 2    | Nut-Flange              |

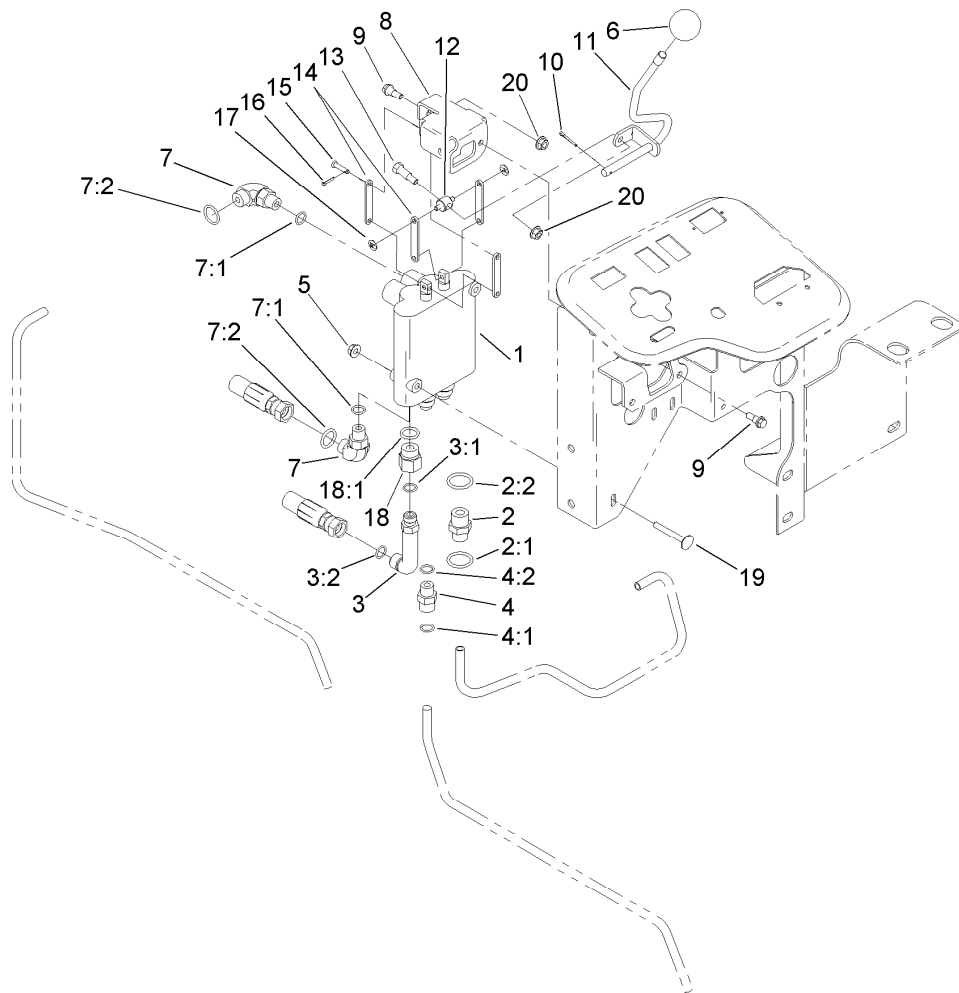
● Not serviced separately



## Traction Pedal Assembly

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 1    | 100-4815    | 1    | Cable-Control, Traction |
| 1:1  | 3220-1      | 2    | Nut-Jam                 |
| 2    | 76-8870     | 1    | Damper-Lever            |
| 3    | 32128-20    | 5    | Nut-HF                  |
| 6    | 322-10      | 1    | Screw-HH                |
| 7    | 3256-23     | 3    | Washer-Plain            |
| 9    | 93-2092     | 1    | Clamp-Cable             |
| 10   | 2411-41     | 1    | Rod End-Ball Joint      |
| 11   | 2412-41     | 1    | Clamp-R                 |
| 12   | 3290-357    | 1    | Nut-HHF, Whiz           |
| 13   | 323-6       | 1    | Screw-HH                |
| 14   | 3296-42     | 1    | Nut-Lock, NI            |
| 15   | 95-8861     | 1    | Slide                   |
| 16   | 32151-84    | 2    | Ring-Shaft, EXT         |
| 17   | 41-8440     | 1    | Washer                  |
| 18   | 74-9100     | 1    | Pad-Pedal, Forward      |
| 19   | 104-4852-03 | 1    | Pedal-Traction          |

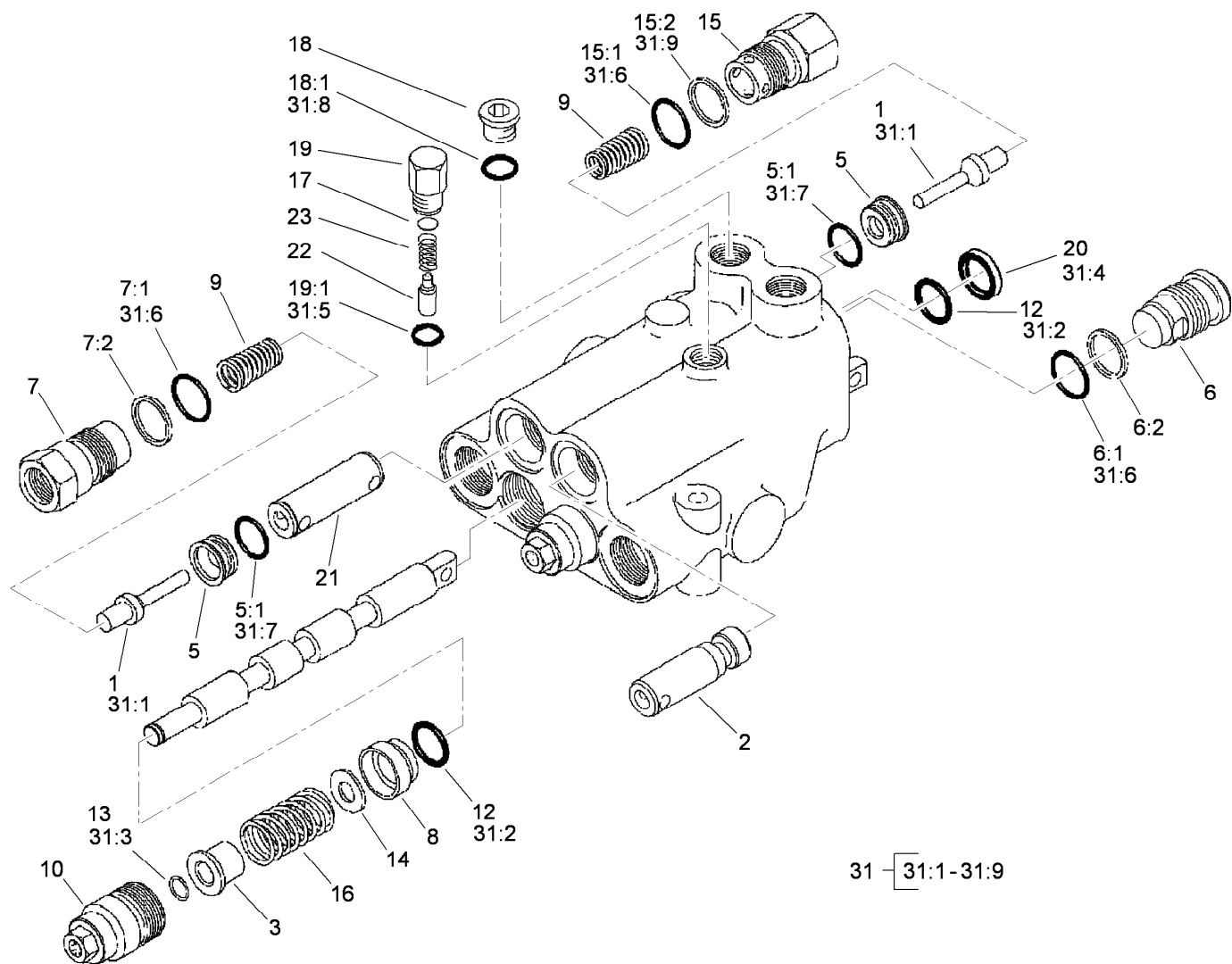
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 20   | 256-243     | 2    | Bearing-Flange     |
| 21   | 99-3379     | 1    | Pedal-Reverse      |
| 21:2 | 256-243     | 2    | Bearing-Flange     |
| 22   | 74-9110     | 1    | Pad-Pedal, Reverse |
| 23   | 75-5470     | 1    | Spacer-Bearing     |
| 24   | 99-3476     | 1    | Spring-Extension   |
| 25   | 251-259     | 1    | Bearing-Ball       |
| 26   | 322-7       | 1    | Screw-HH           |
| 28   | 3296-47     | 3    | Nut-Lock, NI       |
| 29   | 32151-3     | 1    | Ring-Grip          |
| 30   | 302-5       | 1    | Fitting-Grease     |
| 31   | 3230-27     | 1    | Screw-CARR         |
| 32   | 321-10      | 1    | Screw-HH           |
| 33   | 33093-00    | 3    | Washer-Flat        |
| 34   | 99-3545     | 1    | Spacer             |
| 35   | 3256-22     | 1    | Washer-Flat        |
| 36   | 73-0040     | 4    | Washer-Thrust      |



## Control Valve Installation Assembly

| Ref. | Part Number | Qty. | Description               |
|------|-------------|------|---------------------------|
| 1    | 95-8581     | 1    | 2-Spool Control Valve ASM |
| 2    | 340-3       | 1    | Fitting-Str               |
| 2:1  | 237-22      | 1    | O-Ring                    |
| 2:2  | 237-79      | 1    | O-Ring                    |
| 3    | 69-4320     | 1    | Fitting-HYD, 90 DEG       |
| 3:1  | 237-22      | 1    | O-Ring                    |
| 3:2  | 237-42      | 1    | O-Ring                    |
| 4    | 340-2       | 1    | Fitting-Straight          |
| 4:1  | 237-22      | 1    | O-Ring                    |
| 4:2  | 237-42      | 1    | O-Ring                    |
| 5    | 32128-33    | 2    | Nut-HF                    |
| 6    | 233-42      | 1    | Knob                      |
| 7    | 340-77      | 2    | Fitting-Elbow, 90 Def     |
| 7:1  | 237-22      | 1    | O-Ring                    |
| 7:2  | 237-42      | 1    | O-Ring                    |

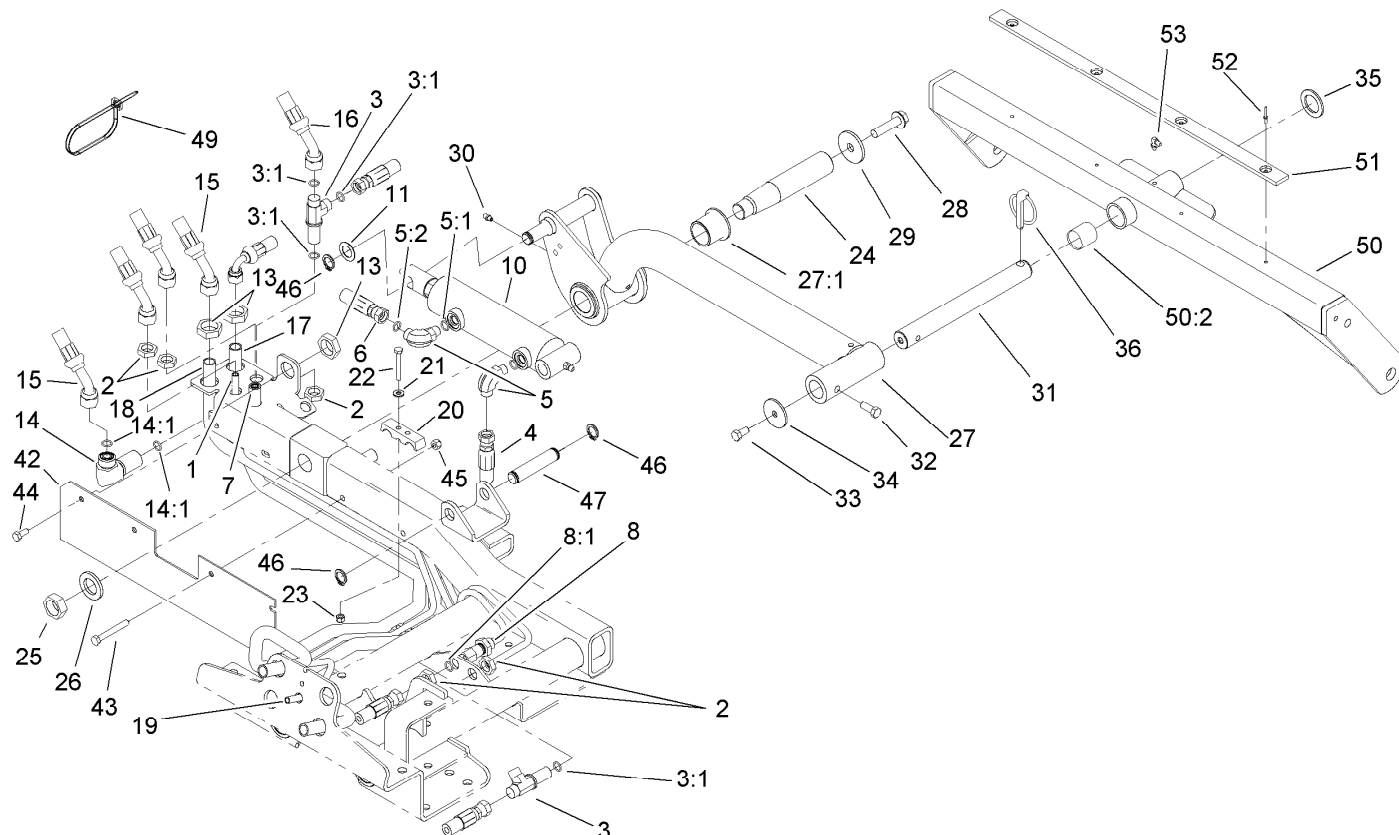
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 8    | 95-8633     | 1    | Bracket-Valve, Actuator  |
| 9    | 42-3560     | 2    | Bolt-Shoulder            |
| 10   | 3272-6      | 1    | Pin-Cotter               |
| 11   | 95-8635     | 1    | Lever-Valve              |
| 12   | 95-8638     | 1    | Trunnion-Valve, Actuator |
| 13   | 92-8916     | 1    | Bolt-Shoulder            |
| 14   | 95-8634     | 4    | Link                     |
| 15   | 58-3830     | 3    | Pin-Clevis               |
| 16   | 3272-5      | 3    | Pin-Cotter               |
| 17   | 93-3988     | 2    | Pushnut-Tinnerman        |
| 18   | 353-397     | 1    | Reducer-Adapter          |
| 18:1 | 237-79      | 1    | O-Ring                   |
| 19   | 3230-33     | 2    | Screw-CARR               |
| 20   | 32128-32    | 3    | Nut-HHF                  |



## 2-Spool Control Valve Assembly No. 95-8581

| Ref. | Part Number | Qty. | Description    |
|------|-------------|------|----------------|
| 1    | 58-6290     | 3    | Poppet         |
| 2    | 69-1840     | 1    | Plunger        |
| 3    | 58-6310     | 2    | Spacer         |
| 5    | 58-6330     | 3    | Seat           |
| 5:1  | 58-6340     | 1    | O-Ring         |
| 6    | 58-6350     | 1    | Plug           |
| 6:1  | 60-5720     | 1    | O-Ring         |
| 6:2  | 58-6370     | 1    | Washer         |
| 7    | 69-1800     | 2    | Plug ASM       |
| 7:1  | 60-5720     | 1    | O-Ring         |
| 7:2  | 58-6370     | 1    | Washer         |
| 8    | 58-6400     | 2    | Bushing        |
| 9    | 69-1810     | 3    | Spring         |
| 10   | 58-6420     | 2    | Cap            |
| 12   | 58-6450     | 4    | O-Ring         |
| 13   | 58-6460     | 2    | Ring-Retaining |
| 14   | 65-2770     | 2    | Washer         |
| 15   | 99-3526     | 1    | Plug ASM       |
| 15:1 | 60-5720     | 1    | O-Ring         |
| 15:2 | 59-7730     | 1    | Washer-Backup  |

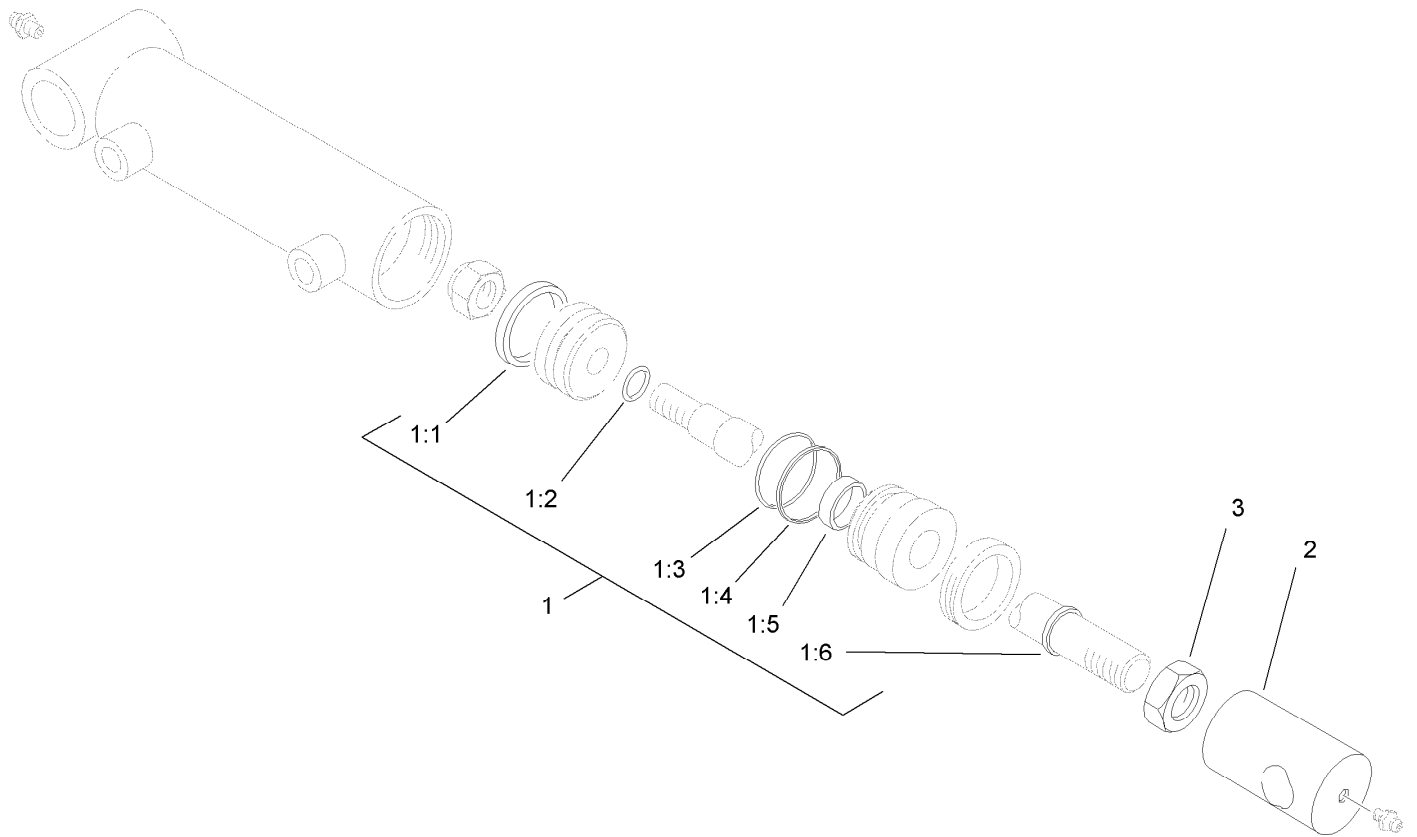
| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 16   | 99-3531     | 2    | Spring           |
| 17   | 60-6450     | 1    | Disc             |
| 18   | 353-989     | 1    | Plug-Hex, Hollow |
| 18:1 | 237-42      | 1    | O-Ring           |
| 19   | 58-6780     | 1    | Plug             |
| 19:1 | 58-6790     | 1    | O-Ring           |
| 20   | 58-6320     | 2    | Wiper            |
| 21   | 99-3528     | 1    | Plunger          |
| 22   | 58-6770     | 1    | Plunger          |
| 23   | 58-6760     | 1    | Spring           |
| 31   | 99-3530     | 1    | Seal Kit         |
| 31:1 | 58-6290     | 3    | Poppet           |
| 31:2 | 58-6450     | 4    | O-Ring           |
| 31:3 | 58-6460     | 2    | Ring-Retaining   |
| 31:4 | 58-6320     | 2    | Wiper            |
| 31:5 | 58-6790     | 1    | O-Ring           |
| 31:6 | 60-5720     | 4    | O-Ring           |
| 31:7 | 58-6340     | 2    | O-Ring           |
| 31:8 | 237-42      | 1    | O-Ring           |
| 31:9 | 59-7730     | 2    | Washer-Backup    |



## Rear Lift Arm Assembly

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 1    | 104-0402    | 1    | Tube-HYD                   |
| 2    | 340-70      | 5    | Nut-Lock                   |
| 3    | 340-68      | 2    | Fitting-Tee, Bulkhead      |
| 3:1  | 237-22      | 3    | O-Ring                     |
| 4    | 104-0407    | 1    | Hose-HYD                   |
| 5    | 340-77      | 2    | Fitting-Elbow, 90 Def      |
| 5:1  | 237-22      | 1    | O-Ring                     |
| 5:2  | 237-42      | 1    | O-Ring                     |
| 6    | 100-4891    | 1    | Hose-HYD                   |
| 7    | 104-0403    | 1    | Tube ASM                   |
| 8    | 340-71      | 1    | Fitting-Straight, Bulkhead |
| 8:1  | 237-22      | 2    | O-Ring                     |
| 10   | 108-9033    | 1    | HYD Cylinder ASM           |
| 11   | 3-6498      | 1    | Washer-Thrust              |
| 13   | 340-74      | 3    | Nut-Lock, Bulkhead         |
| 14   | 340-72      | 1    | Fitting-Bulkhead, 90 DEG   |
| 14:1 | 237-65      | 2    | O-Ring                     |
| 15   | 100-4879    | 2    | Hose-HYD                   |
| 16   | 95-8825     | 1    | Hose ASM                   |
| 17   | 104-0401    | 1    | Tube ASM                   |
| 18   | 104-0400    | 1    | Tube ASM                   |
| 19   | 104-0404    | 1    | Tube ASM                   |
| 20   | 99-3641     | 2    | Clamp-Tube                 |
| 21   | 3256-22     | 4    | Washer-Flat                |
| 22   | 321-11      | 2    | Screw-HH                   |
| 23   | 3296-42     | 2    | Nut-Lock, NI               |

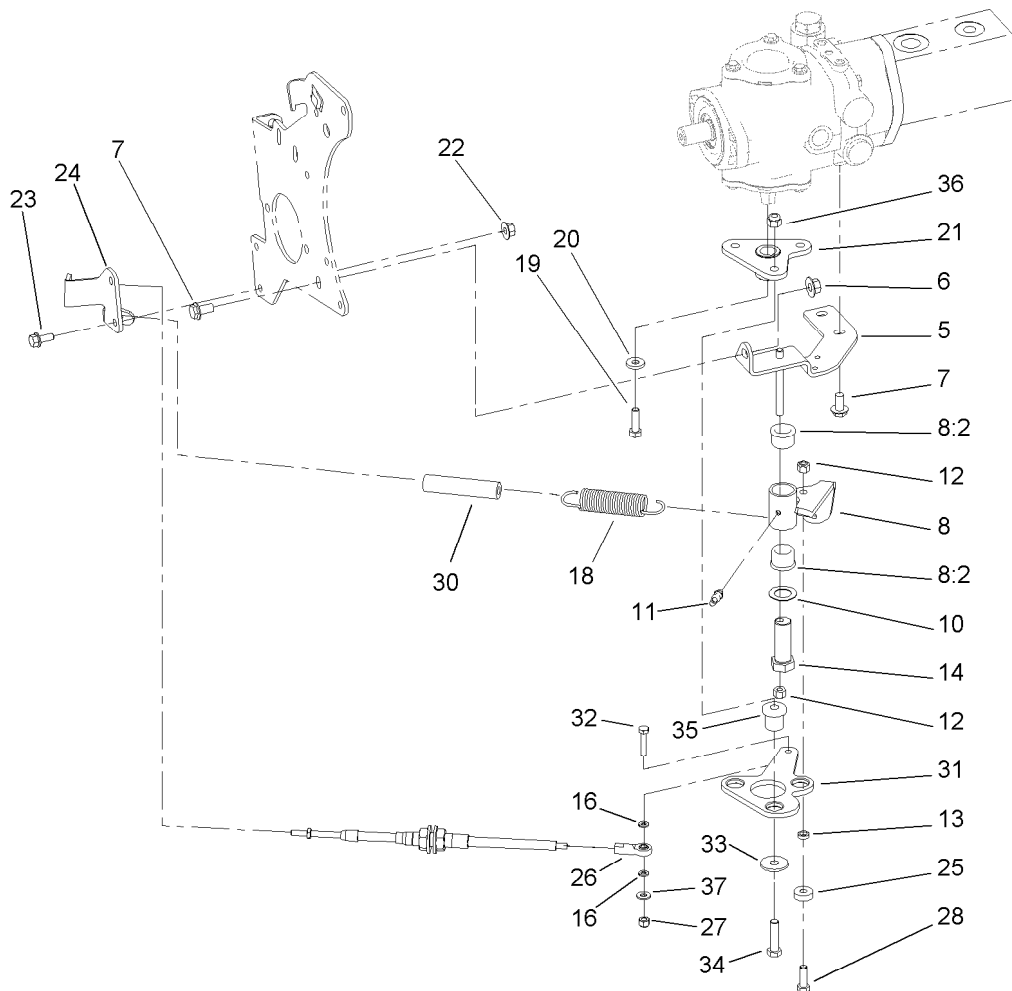
| Ref. | Part Number | Qty. | Description               |
|------|-------------|------|---------------------------|
| 24   | 95-8990     | 1    | Shaft-Pivot, Rear         |
| 25   | 3220-9      | 1    | Nut-Jam                   |
| 26   | 86-1480     | 1    | Washer                    |
| 27   | 100-4938    | 1    | Rear Lift Arm ASM         |
| 27:1 | 69-6470     | 2    | Bushing-Castor            |
| 28   | 3234-27     | 1    | Screw-HHF                 |
| 29   | 75-7730     | 1    | Washer-Thrust             |
| 30   | 302-5       | 1    | Fitting-Grease            |
| 31   | 100-4944    | 1    | Shaft-Pivot, Cutting Unit |
| 32   | 323-6       | 1    | Screw-HH                  |
| 33   | 323-4       | 1    | Screw-HH                  |
| 34   | 63-7400     | 1    | Washer-Rebound            |
| 35   | 3-6781      | 1    | Washer-Thrust             |
| 36   | 283-71      | 1    | Pin-Lynch                 |
| 42   | 104-0453-03 | 1    | Guard                     |
| 43   | 322-12      | 2    | Screw-HH                  |
| 44   | 322-3       | 2    | Screw-HH                  |
| 45   | 32128-20    | 4    | Nut-HF                    |
| 46   | 32120-93    | 3    | Ring-Retaining            |
| 47   | 95-8575     | 1    | Pin-Clevis                |
| 49   | 3334-945    | 2    | Tie-Cable                 |
| 50   | 104-4229    | 1    | Rear Carrier Frame ASM    |
| 50:2 | 108-4000    | 2    | Bushing                   |
| 51   | 95-8936     | 1    | Strip-Wear                |
| 52   | 3269-18     | 4    | Rivet-Blind               |
| 53   | 302-60      | 1    | Fitting-Grease            |



## Hydraulic Cylinder Assembly No. 108-9033

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 99-8163            | 1           | Seal Kit           |
| 1:1         |                    | 1           | Uniring ●          |
| 1:2         |                    | 1           | Seal-Dust ●        |
| 1:3         |                    | 1           | Seal-Dust ●        |
| 1:4         |                    | 1           | Washer-Back-Up ●   |
| 1:5         |                    | 1           | Seal-Dust ●        |
| 1:6         |                    | 1           | Seal-Rod ●         |
| 2           | 108-9035           | 1           | Clevis             |
| 3           | 3220-7             | 1           | Nut-Jam            |

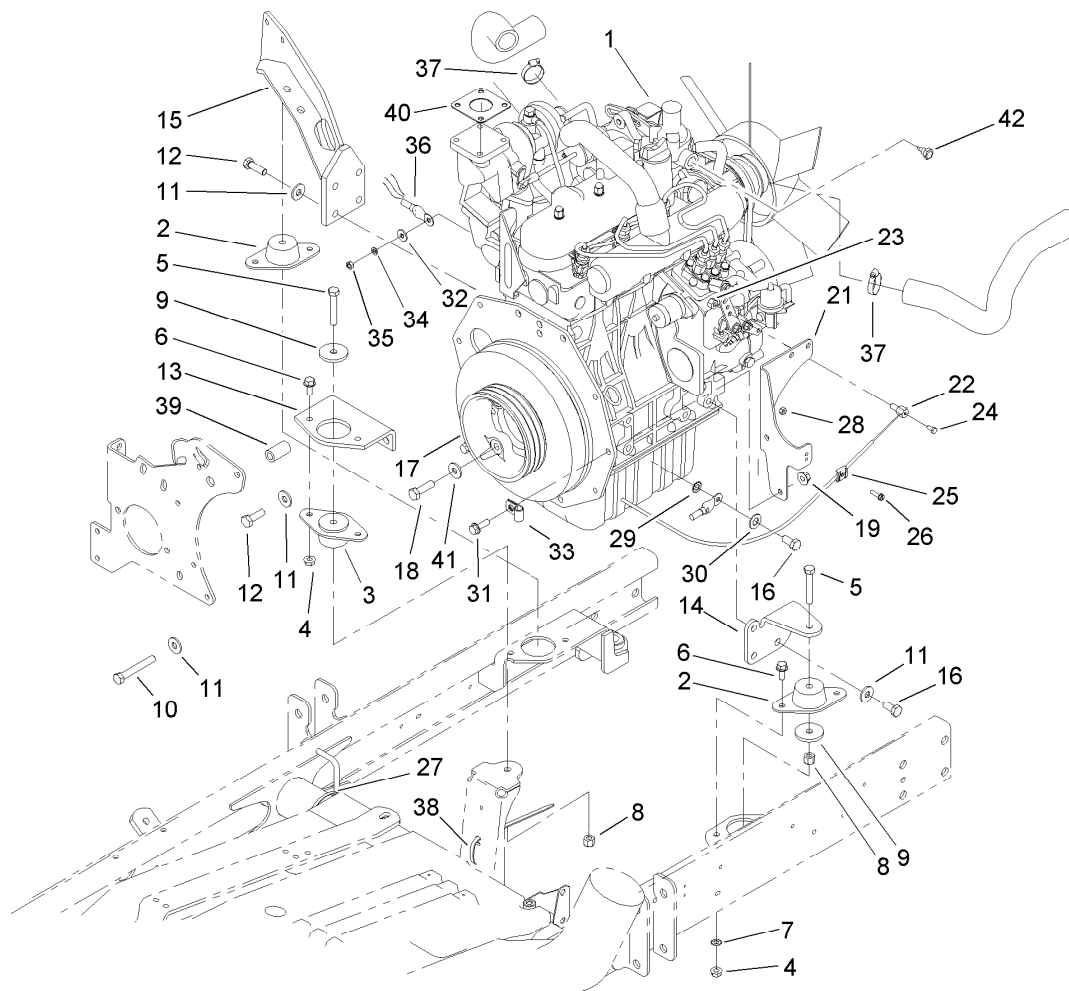
● Not serviced separately



## Neutral Arm Assembly

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 5    | 95-8960-03  | 1    | Bracket-Neutral  |
| 6    | 32128-43    | 1    | Nut-Flange       |
| 7    | 3234-1      | 3    | Screw-HHF        |
| 8    | 104-0422    | 1    | Neutral Arm ASM  |
| 8:2  | 256-113     | 2    | Bushing-Flange   |
| 10   | 3-6498      | 1    | Washer-Thrust    |
| 11   | 302-60      | 1    | Fitting-Grease   |
| 12   | 3296-29     | 2    | Nut-Lock, NI     |
| 13   | 100-4817    | 1    | Spacer-Bearing   |
| 14   | 76-8640     | 1    | Stud-Traction    |
| 16   | 33093-00    | 2    | Washer-Flat      |
| 18   | 94-1369     | 1    | Spring-Extension |
| 19   | 3210-6      | 1    | Screw-HH         |
| 20   | 88-7200     | 1    | Washer-Flat      |
| 21   | 99-3598-03  | 1    | Hub              |

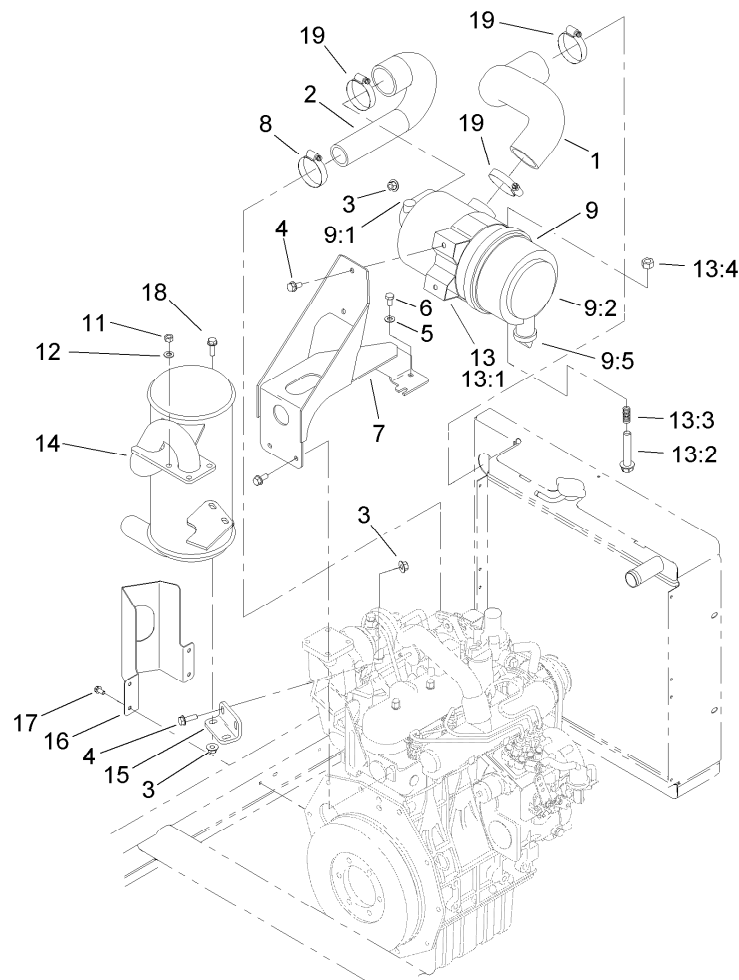
| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 22   | 32128-44    | 2    | Nut                    |
| 23   | 3234-5      | 2    | Screw-HHF              |
| 24   | 104-0464-03 | 1    | Bracket-Support, Cable |
| 25   | 251-259     | 1    | Bearing-Ball           |
| 26   | 2411-41     | 1    | Rod End-Ball Joint     |
| 27   | 3296-42     | 1    | Nut-Lock, NI           |
| 28   | 3274-104    | 1    | Screw-HSBH             |
| 30   | 99-3556     | 1    | Hose                   |
| 31   | 99-3594-03  | 1    | Lever-Pump             |
| 32   | 321-8       | 1    | Screw-HH               |
| 33   | 2844        | 3    | Washer                 |
| 34   | 95-3857     | 3    | Screw-HSBH             |
| 35   | 63-9750     | 3    | Mount                  |
| 36   | 3296-39     | 3    | Nut-Lock, NI           |
| 37   | 3256-22     | 1    | Washer-Flat            |



## Engine Assembly

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 1    | 107-7822    | 1    | Engine-Diesel            |
| 2    | 83-1030     | 2    | Mount-Engine             |
| 3    | 93-5265     | 1    | Mount-Engine             |
| 4    | 32128-20    | 6    | Nut-HF                   |
| 5    | 323-11      | 3    | Screw-HH                 |
| 6    | 3234-5      | 6    | Screw-HHF                |
| 7    | 3255-8      | 1    | Washer-Lock              |
| 8    | 3296-39     | 3    | Nut-Lock, NI             |
| 9    | 80-8560     | 3    | Washer-Hardened          |
| 10   | 42-9370     | 1    | Screw-HH                 |
| 11   | 80-6990     | 9    | Washer-Hardened          |
| 12   | 95-8812     | 5    | Screw-HH                 |
| 13   | 99-3618-03  | 1    | Mount-Engine, Front      |
| 14   | 95-8937-03  | 1    | Mount-Engine, LH         |
| 15   | 100-4838-03 | 1    | Mount-Engine             |
| 16   | 63-7790     | 4    | Screw-Cap                |
| 17   | 99-3626-03  | 1    | Pulley                   |
| 18   | 56-2140     | 3    | Screw-HH                 |
| 19   | 32128-44    | 2    | Nut                      |
| 21   | 100-4867-03 | 1    | Support-Throttle, Filter |
| 22   | 98-9311     | 1    | Swivel-Throttle          |

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 23   | 3296-20     | 1    | Nut-Lock, NI               |
| 24   | 25-8640     | 1    | Screw-HH                   |
| 25   | 81-1690     | 1    | Clamp-Cable                |
| 26   | 32105-13    | 1    | Screw-HWH                  |
| 27   | 3290-379    | 2    | Tie-Cable                  |
| 28   | 3296-2      | 1    | Nut-Lock, NI               |
| 29   | 3255-9      | 1    | Washer-Lock                |
| 30   | 3256-25     | 1    | Washer-Flat                |
| 31   | 3234-17     | 2    | Screw-HHF                  |
| 32   | 3256-78     | 1    | Washer-Flat                |
| 33   | 2412-10     | 1    | Clamp-R                    |
| 34   | 43-5930     | 1    | Washer-Lock, Spring        |
| 35   | 48-7890     | 1    | Nut-Hex                    |
| 36   | 99-3441     | 1    | Harness-Wire, Fusible Link |
| 37   | 2412-34     | 2    | Clamp-Hose                 |
| 38   | 3290-378    | 14   | Tie-Cable                  |
| 39   | 95-8736     | 1    | Spacer                     |
| 40   | 98-9611     | 1    | Gasket                     |
| 41   | 3256-24     | 4    | Washer-Flat                |
| 42   | 106-7772    | 1    | Thermoswitch               |



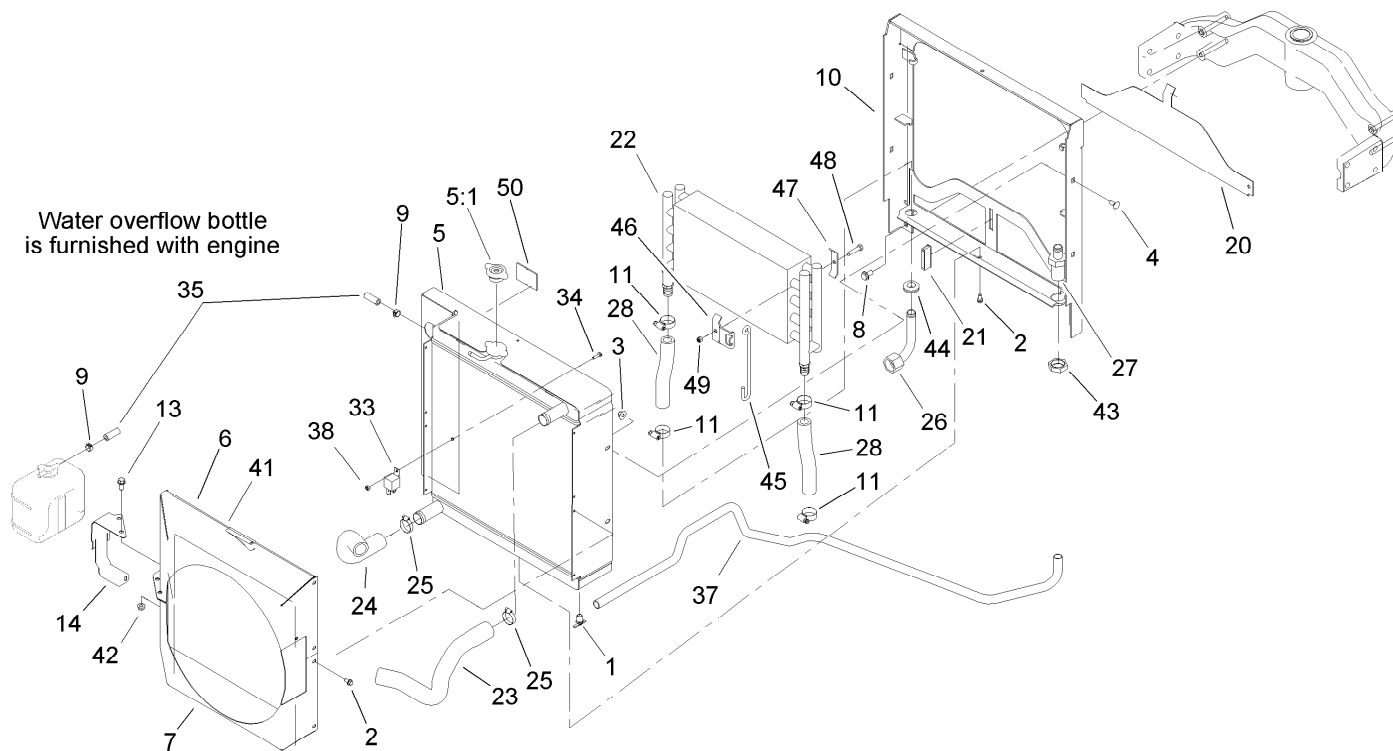
## Air Cleaner and Muffler Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 1    | 104-0420    | 1    | Hose-Air Intake, Upper |
| 2    | 99-3643     | 1    | Hose-Air Intake, Lower |
| 3    | 32128-44    | 6    | Nut                    |
| 4    | 3234-5      | 3    | Screw-HHF              |
| 5    | 3256-23     | 4    | Washer-Plain           |
| 6    | 33114-016   | 4    | Screw-HH               |
| 7    | 99-3648-03  | 1    | Air Filter Mount ASM   |
| 8    | 2412-92     | 1    | Clamp-Hose             |
| 9    | 100-4824    | 1    | Air Cleaner ASM        |
| 9:1  | 285-17      | 1    | Plug-Pipe              |
| 9:2  | 104-0497    | 1    | Cover                  |
| 9:5  | 104-0498    | 1    | Valve-Vacuator         |
| 9:6  | 108-3810    | 1    | Filter-Air ●           |
| 9:7  | 104-4897    | 1    | Gasket ●               |

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 11   | 33014-00    | 4    | Nut-Hex                    |
| 12   | 3253-4      | 4    | Washer-Lock                |
| 13   | 100-4825    | 1    | Band-Mounting, Air Cleaner |
| 13:1 |             | 1    | Clamp ASM ■                |
| 13:2 | 94-3653     | 1    | Bolt                       |
| 13:3 | 94-3654     | 1    | Spring                     |
| 13:4 | 48-9510     | 1    | Nut                        |
| 14   | 100-4810    | 1    | Muffler                    |
| 15   | 95-8943-03  | 1    | Bracket-Muffler            |
| 16   | 99-3425-03  | 1    | Guard-Exhaust              |
| 17   | 32144-4     | 4    | Screw-HWH                  |
| 18   | 3234-17     | 3    | Screw-HHF                  |
| 19   | 2412-130    | 3    | Clamp-Hose                 |

● Not illustrated

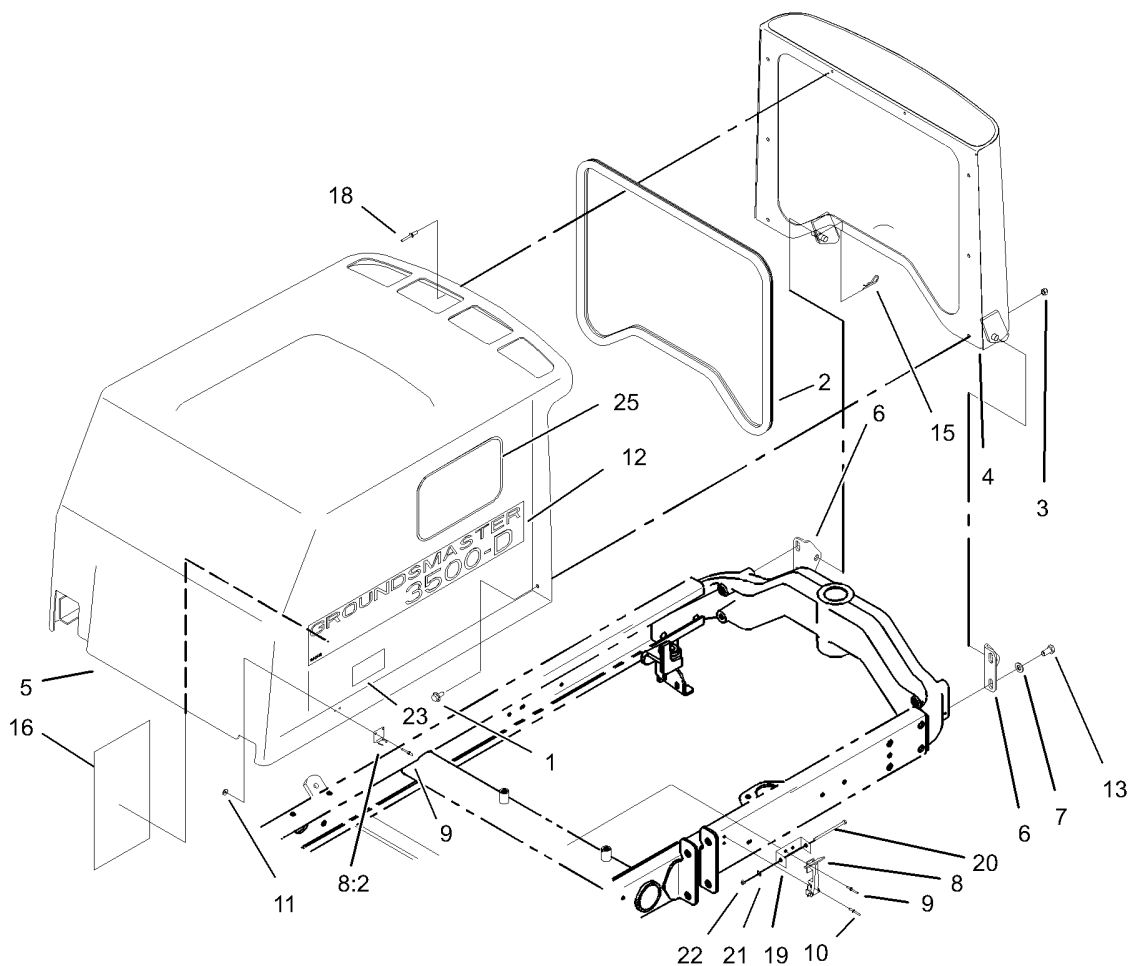
■ Not serviced separately



## Radiator Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 1    | 304-46      | 1    | Draincock              |
| 2    | 32104-116   | 11   | Screw-Thd Frm,HWH      |
| 3    | 32128-44    | 4    | Nut                    |
| 4    | 3230-1      | 4    | Bolt-CARR              |
| 5    | 99-3637     | 1    | Radiator               |
| 5:1  | 93-5957     | 1    | Cap-Radiator           |
| 6    | 100-4885-03 | 1    | Shroud-Fan, Top        |
| 7    | 100-4898-03 | 1    | Shroud-Fan, Bottom     |
| 8    | 3234-1      | 4    | Screw-HHF              |
| 9    | 92-2379     | 2    | Clamp-Hose             |
| 10   | 104-4855-03 | 1    | Frame-Radiator         |
| 11   | 2412-129    | 4    | Clamp-Hose             |
| 13   | 3234-5      | 2    | Screw-HHF              |
| 14   | 100-4899-03 | 1    | Bracket-Reservoir      |
| 20   | 95-8702-03  | 1    | Shield-Radiator, Lower |
| 21   | 99-3497     | 1    | Magnet                 |
| 22   | 100-4869    | 1    | Cooler-Oil             |
| 23   | 104-0454    | 1    | Hose-Radiator, Upper   |
| 24   | 100-4809    | 1    | Hose-Radiator, Lower   |

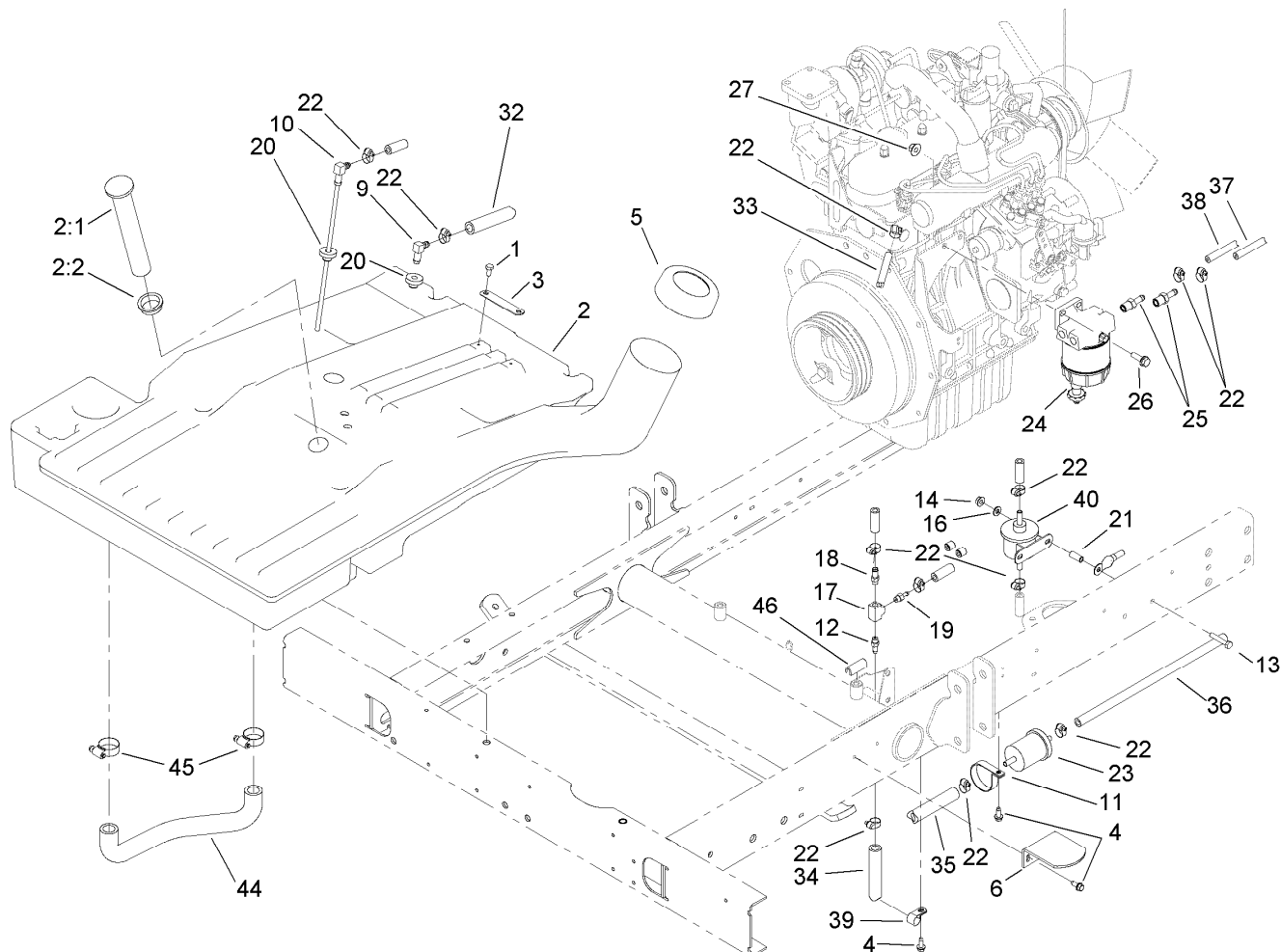
| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 25   | 2412-34     | 2    | Clamp-Hose             |
| 26   | 99-3644     | 1    | Tube-Head, Filter      |
| 27   | 100-4925    | 1    | Fitting-Bulkhead       |
| 28   | 99-3646     | 2    | Hose-Cooler, Oil       |
| 33   | 99-7435     | 1    | Relay-Power            |
| 34   | 32105-13    | 1    | Screw-HWH              |
| 35   | 63-9640     | 1    | Hose                   |
| 37   | 100-4924    | 1    | Tube ASM               |
| 38   | 32128-17    | 1    | Nut-Lock, Flange       |
| 41   | 93-6681     | 1    | Decal-Warning, Fan     |
| 42   | 32128-20    | 2    | Nut-HF                 |
| 43   | 340-126     | 1    | Nut-Bulkhead           |
| 44   | 100-4866    | 1    | Grommet                |
| 45   | 100-4858    | 2    | Form-Wire              |
| 46   | 100-4859    | 2    | Bracket-Cooler, Keeper |
| 47   | 100-4860    | 2    | Bracket-Clamp          |
| 48   | 322-17      | 2    | Screw-HH               |
| 49   | 3296-47     | 2    | Nut-Lock, NI           |
| 50   | 104-9459    | 2    | Seal-Foam              |



## Hood Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 1    | 3234-4      | 6    | Screw-HHF              |
| 2    | 100-4932    | 1    | Trim-Seal              |
| 3    | 3296-42     | 6    | Nut-Lock, NI           |
| 4    | 104-4853-03 | 1    | Screen-Hood            |
| 5    | 100-4855    | 1    | Hood                   |
| 5:5  | 106-8115    | 1    | Heat Tape Repair Kit ● |
| 6    | 95-8728     | 2    | Bracket-Pivot, Hood    |
| 7    | 3256-24     | 8    | Washer-Flat            |
| 8    | 59-9740     | 2    | Flex Draw Latch ASM    |
| 8:2  | 249-40      | 1    | Keeper                 |
| 9    | 98-7310     | 4    | Rivet                  |
| 10   | 3290-55     | 4    | Rivet-Pop              |
| 11   | 3269-10     | 4    | Washer-Back            |
| 12   | 104-5152    | 2    | Decal-Hood             |
| 13   | 323-6       | 4    | Screw-HH               |
| 15   | 3290-467    | 1    | Pin-Hair               |
| 16   | 107-7800    | 1    | Decal-Service          |
| 18   | 3269-21     | 2    | Rivet-Pop              |
| 19   | 99-3568     | 1    | Bracket-Lock, CE       |
| 20   | 321-9       | 1    | Screw-HH               |
| 21   | 3256-22     | 1    | Washer-Flat            |
| 22   | 3296-42     | 1    | Nut-Lock, NI           |
| 23   | 106-6754    | 1    | Decal-Danger           |
| 25   | 66-6140     | 2    | Decal                  |

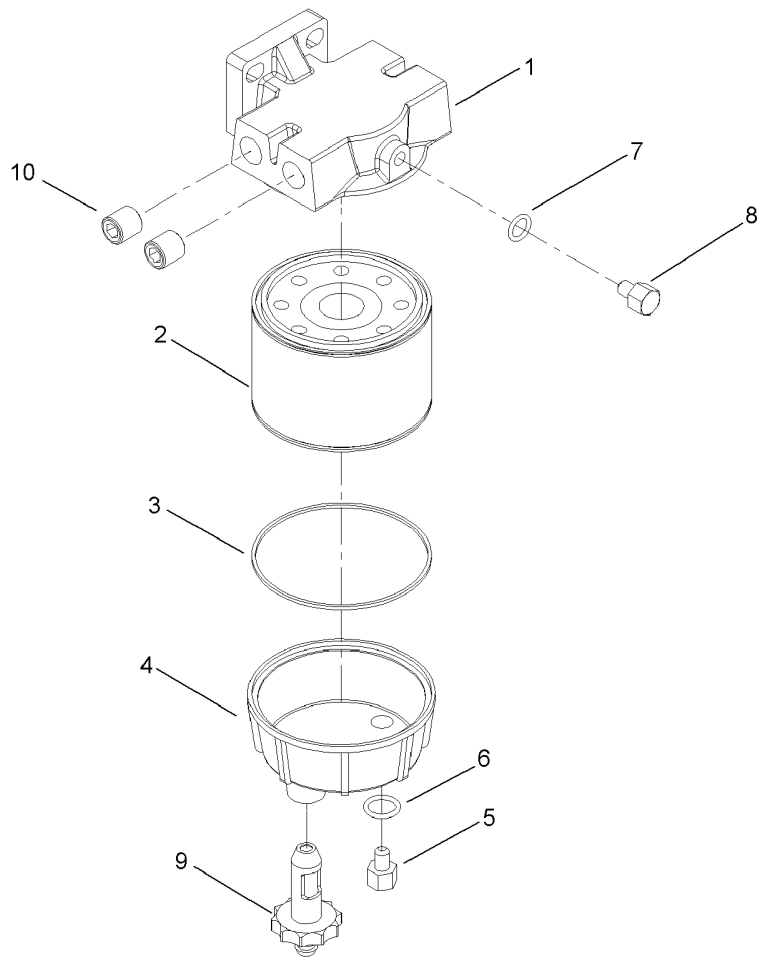
● Not illustrated



## Fuel Tank Assembly

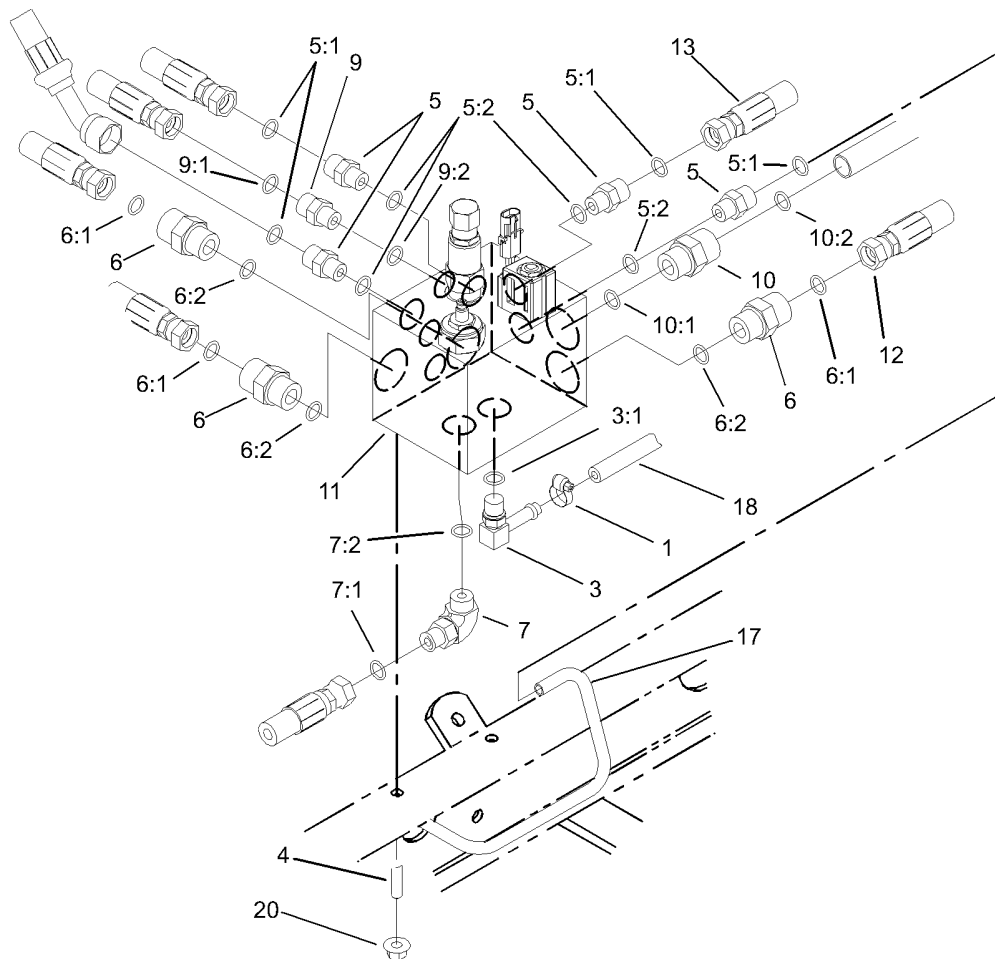
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 1    | 321-2       | 2    | Screw-HH            |
| 2    | 105-7865    | 1    | Tank-Fuel           |
| 2:1  | 95-8971     | 1    | Gauge-Fuel          |
| 2:2  | 95-8972     | 1    | Grommet             |
| 3    | 95-8881     | 1    | Strap-Line, Fuel    |
| 4    | 32144-10    | 4    | Screw-HWH           |
| 5    | 95-4193     | 1    | Diesel Fuel Cap ASM |
| 6    | 95-8968-03  | 1    | Support-Tank, Fuel  |
| 9    | 46-6550     | 1    | Fitting-Elbow-90    |
| 10   | 66-8121     | 1    | Standpipe           |
| 11   | 2412-148    | 1    | Clamp-R             |
| 12   | 304-73      | 1    | Fitting-Straight    |
| 13   | 321-9       | 2    | Screw-HH            |
| 14   | 32128-33    | 2    | Nut-HF              |
| 16   | 3256-22     | 2    | Washer-Flat         |
| 17   | 354-20      | 1    | Fitting-Tee         |
| 18   | 354-21      | 1    | Fitting-Barbed      |
| 19   | 354-22      | 1    | Fitting-Barbed      |
| 20   | 46-6560     | 2    | Bushing             |

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 21   | 87-4710     | 2    | Spacer-Brake, Parking   |
| 22   | 2412-108    | 13   | Clamp-Worm              |
| 23   | 98-7612     | 1    | Filter-Fuel             |
| 24   | 98-9305     | 1    | Water / Fuel Filter ASM |
| 25   | 353-783     | 2    | Fitting-Straight        |
| 26   | 3234-17     | 2    | Screw-HHF               |
| 27   | 32128-44    | 2    | Nut                     |
| 32   | 110-6187    | 1    | Hose-Fuel               |
| 33   | 110-8751    | 1    | Hose-Fuel               |
| 34   | 110-5701    | 1    | Hose-Fuel               |
| 35   | 110-6186    | 1    | Hose-Fuel               |
| 36   | 110-4110    | 1    | Hose-LP                 |
| 37   | 110-8752    | 1    | Hose-Fuel               |
| 38   | 104-4857    | 1    | Hose-Fuel               |
| 39   | 2412-73     | 1    | Clamp-R                 |
| 40   | 107-0122    | 1    | Pump-Fuel, Electric     |
| 44   | 105-4094    | 1    | Hose-Formed             |
| 45   | 2412-129    | 2    | Clamp-Hose              |
| 46   | 110-8754    | 1    | Trim                    |



## Water and Fuel Filter Assembly No. 98-9305

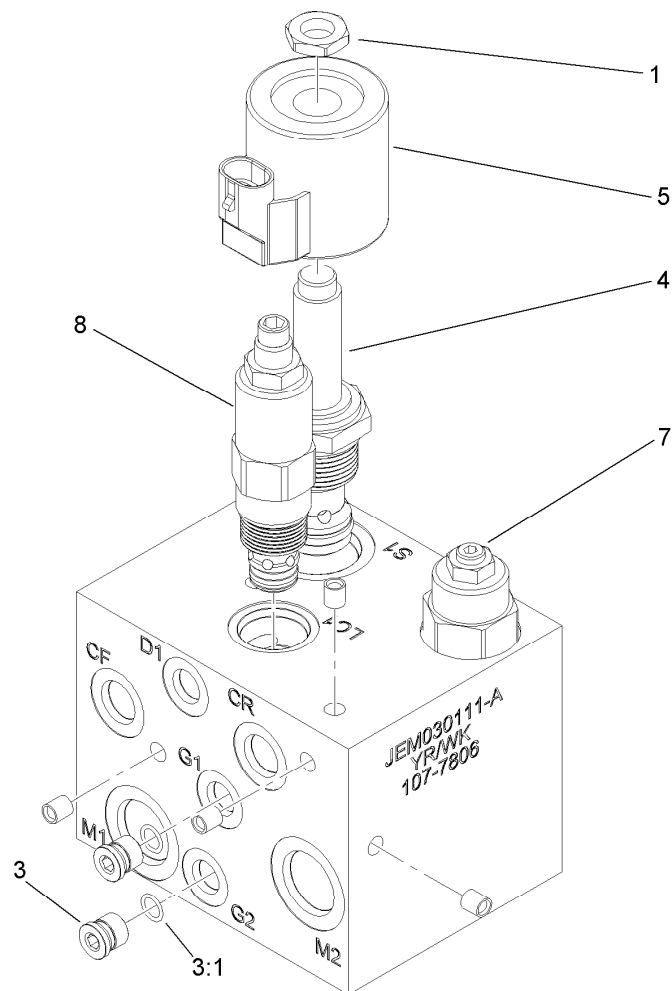
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 98-9772            | 1           | Head-Filter        |
| 2           | 98-9764            | 1           | Element            |
| 3           | 98-9774            | 1           | O-Ring             |
| 4           | 98-9775            | 1           | Base-Filter        |
| 5           | 98-9773            | 1           | Plug-Base, Filter  |
| 6           | 237-42             | 1           | O-Ring             |
| 7           | 237-78             | 1           | O-Ring             |
| 8           | 98-9776            | 1           | Plug-Head, Filter  |
| 9           | 98-9777            | 1           | Drain Valve ASM    |
| 10          | 285-22             | 2           | Plug-Pipe          |



## Manifold Block Installation Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 1    | 2412-36     | 1    | Clamp-Hose            |
| 3    | 100-4887    | 1    | Fitting-Barbed        |
| 3:1  | 237-42      | 1    | O-Ring                |
| 4    | 104-0430    | 2    | Stud                  |
| 5    | 340-2       | 4    | Fitting-Straight      |
| 5:1  | 237-22      | 1    | O-Ring                |
| 5:2  | 237-42      | 1    | O-Ring                |
| 6    | 340-7       | 3    | Fitting-Straight      |
| 6:1  | 237-65      | 1    | O-Ring                |
| 6:2  | 237-80      | 1    | O-Ring                |
| 7    | 340-77      | 1    | Fitting-Elbow, 90 Def |
| 7:1  | 237-22      | 1    | O-Ring                |
| 7:2  | 237-42      | 1    | O-Ring                |

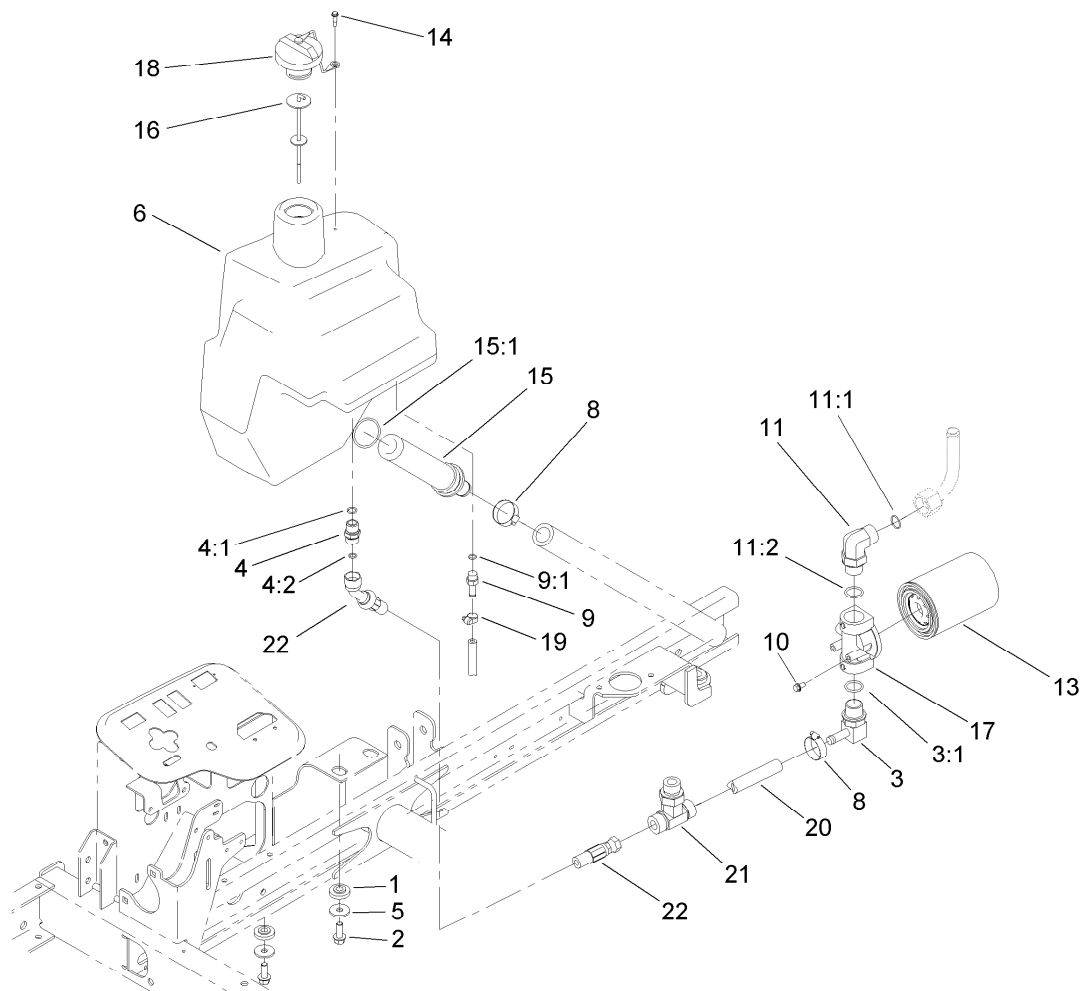
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 9    | 340-88      | 1    | Fitting-Str        |
| 9:1  | 237-22      | 1    | O-Ring             |
| 9:2  | 237-78      | 1    | O-Ring             |
| 10   | 340-66      | 1    | Fitting-Str        |
| 10:1 | 237-80      | 1    | O-Ring             |
| 10:2 | 237-58      | 1    | O-Ring             |
| 11   | 107-7806    | 1    | Manifold Block ASM |
| 12   | 104-0488    | 1    | Hose-HYD           |
| 13   | 92-7595     | 1    | Hose-HYD           |
| 17   | 100-4827    | 1    | Tube-HYD           |
| 18   | 80-7342     | 1    | Hose-HYD           |
| 20   | 32128-20    | 2    | Nut-HF             |



## Manifold Block Assembly No. 107-7806

| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 1    | 107-7812    | 1    | Nut-Solenoid    |
| 2    | 107-7815    | 1    | Seal Kit ●      |
| 3    | 353-512     | 2    | Plug            |
| 3:1  | 237-78      | 1    | O-Ring          |
| 4    | 107-7809    | 1    | Cartridge ASM   |
| 5    | 107-7811    | 1    | Solenoid        |
| 6    | 107-7813    | 1    | Seal Kit ●      |
| 7    | 107-7810    | 1    | Valve-Braking   |
| 8    | 107-7808    | 1    | Cartridge-Logic |
| 9    | 107-7814    | 1    | Seal Kit ●      |

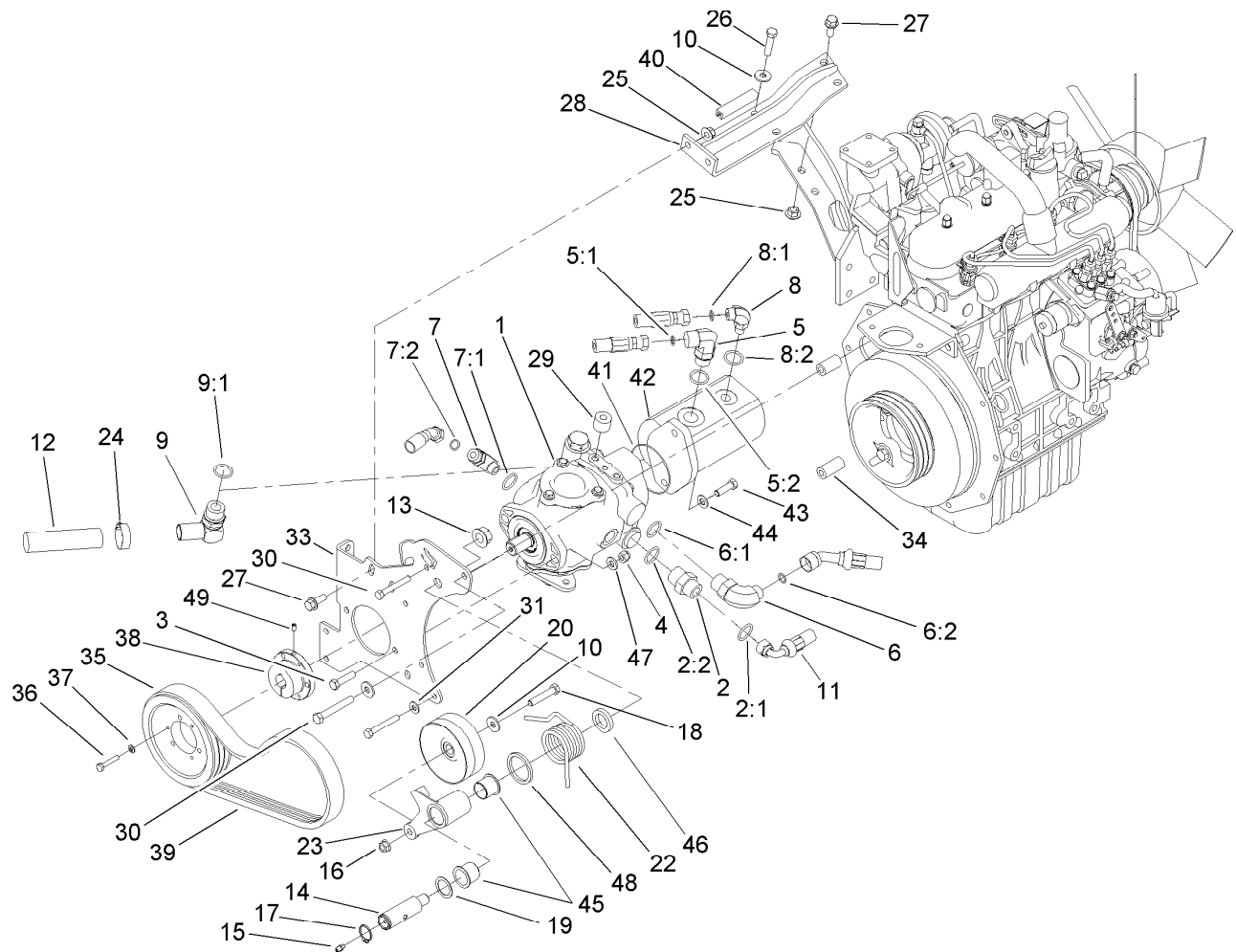
● Not illustrated



## Hydraulic Tank Assembly

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 1    | 240-11      | 4    | Bushing-Flange   |
| 2    | 3234-11     | 4    | Screw-HHF        |
| 3    | 353-987     | 1    | Fitting-Elb 90   |
| 3:1  | 237-81      | 1    | O-Ring           |
| 4    | 100-4890    | 1    | Fitting-Check    |
| 4:1  | 237-79      | 1    | O-Ring           |
| 4:2  | 237-30      | 1    | O-Ring           |
| 5    | 63-8410     | 4    | Washer           |
| 6    | 104-4840    | 1    | Tank-HYD         |
| 8    | 2412-34     | 2    | Clamp-Hose       |
| 9    | 353-979     | 1    | Fitting-Straight |
| 9:1  | 237-42      | 1    | O-Ring           |
| 10   | 3234-13     | 2    | Screw-HHF        |
| 11   | 340-142     | 1    | Fitting-Elbow-90 |

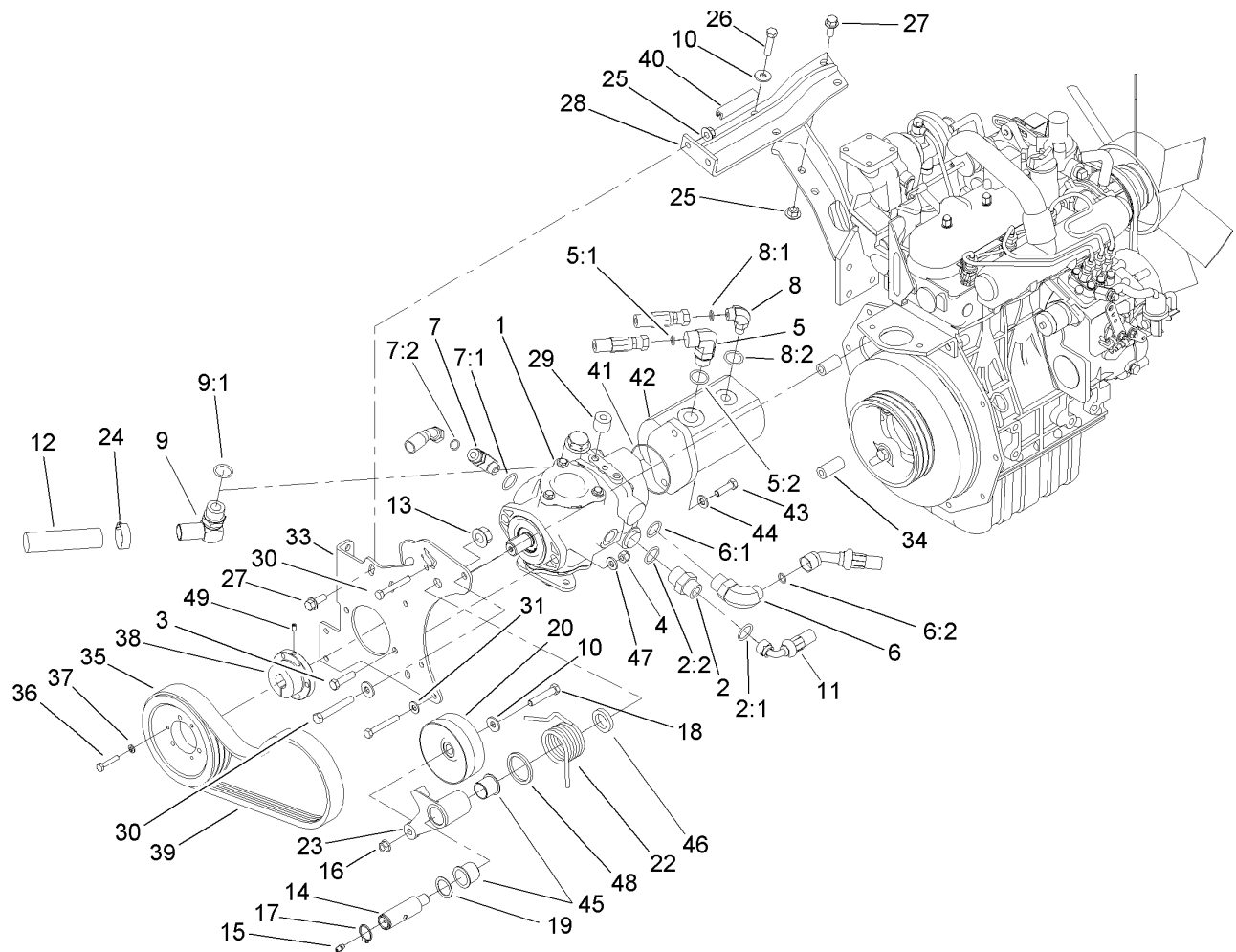
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 11:1 | 237-58      | 1    | O-Ring            |
| 11:2 | 237-81      | 1    | O-Ring            |
| 13   | 86-3010     | 1    | Filter-Oil        |
| 14   | 57-5420     | 1    | Screw-Shoulder    |
| 15   | 104-7546    | 1    | Tank Strainer ASM |
| 15:1 | 340-136     | 1    | O-Ring            |
| 16   | 75-3710     | 1    | Dipstick          |
| 17   | 92-5821     | 1    | Head-Filter       |
| 18   | 93-7160     | 1    | Cap-Oil, HYD      |
| 19   | 2412-36     | 1    | Clamp-Hose        |
| 20   | 104-0486    | 1    | Hose-HYD          |
| 21   | 104-4836    | 1    | Fitting-Tee       |
| 22   | 104-0487    | 1    | Hose-HYD          |



## Hydrostat Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 1    | 104-4890    | 1    | Piston Pump ASM       |
| 2    | 340-8       | 1    | Fitting-Straight      |
| 2:1  | 237-65      | 1    | O-Ring                |
| 2:2  | 237-81      | 1    | O-Ring                |
| 3    | 323-8       | 2    | Screw-HH              |
| 4    | 3296-39     | 2    | Nut-Lock, NI          |
| 5    | 340-17      | 1    | Fitting-Elbow-90      |
| 5:1  | 237-65      | 1    | O-Ring                |
| 5:2  | 237-80      | 1    | O-Ring                |
| 6    | 340-139     | 1    | Fitting-Elbow 90      |
| 6:1  | 237-81      | 1    | O-Ring                |
| 6:2  | 237-65      | 1    | O-Ring                |
| 7    | 340-18      | 1    | Fitting-HYD, 90 DEG   |
| 7:1  | 237-79      | 1    | O-Ring                |
| 7:2  | 237-22      | 1    | O-Ring                |
| 8    | 340-77      | 1    | Fitting-Elbow, 90 Def |
| 8:1  | 237-22      | 1    | O-Ring                |
| 8:2  | 237-42      | 1    | O-Ring                |
| 9    | 95-3502     | 1    | Fitting-Elbow         |
| 9:1  | 237-81      | 1    | O-Ring                |
| 10   | 80-6990     | 3    | Washer-Hardened       |
| 11   | 105-1214    | 1    | Hose-HYD              |
| 12   | 104-5486    | 1    | Hose                  |
| 13   | 32128-54    | 1    | Nut-HF                |
| 14   | 99-3624     | 1    | Shaft-Pivot, Idler    |
| 15   | 302-5       | 1    | Fitting-Grease        |
| 16   | 32128-21    | 1    | Nut-HF                |

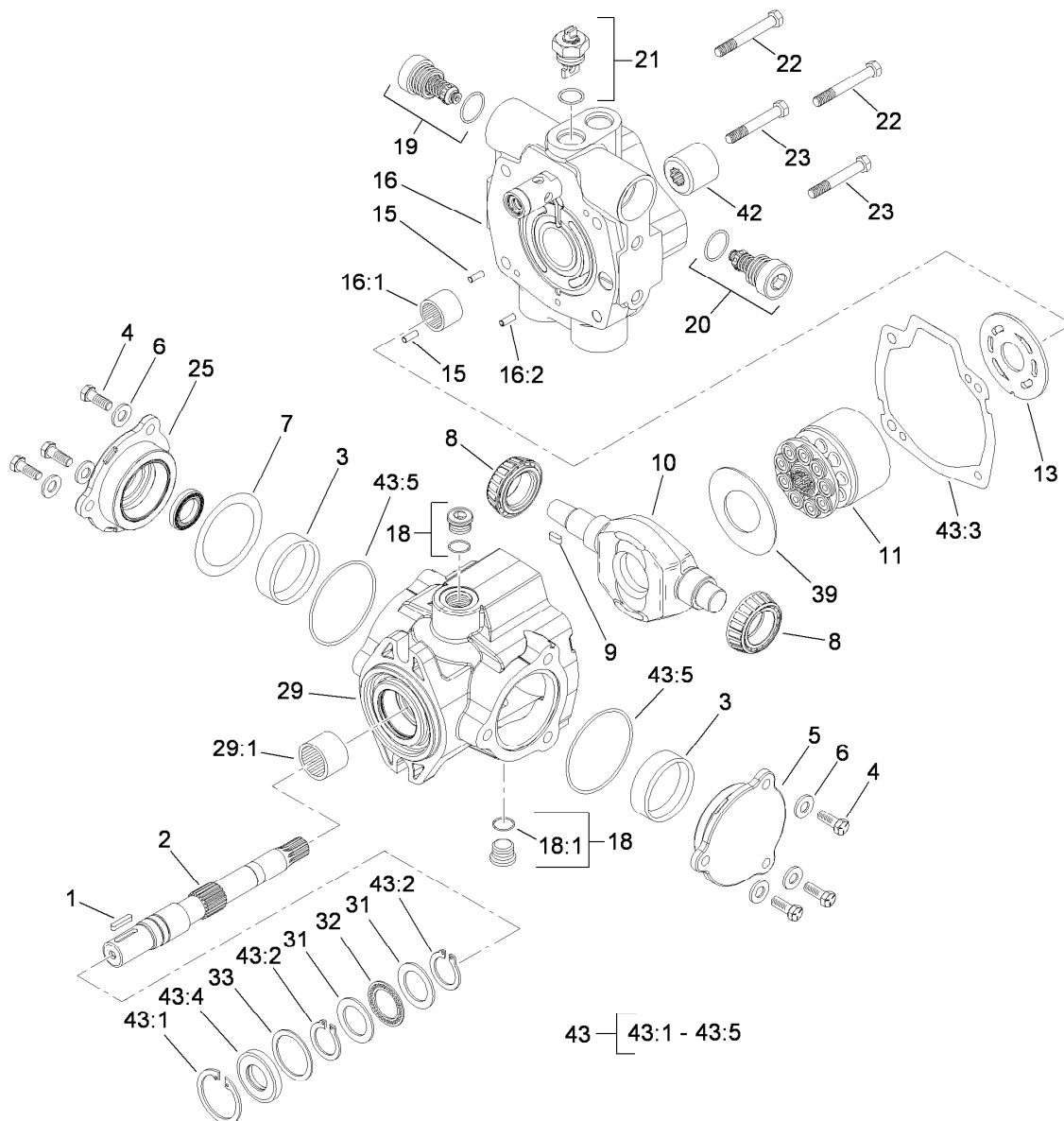
| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 17   | 32151-36    | 1    | Ring-Retaining      |
| 18   | 323-10      | 1    | Screw-HH            |
| 19   | 74-1810     | 1    | Washer              |
| 20   | 107-7834    | 1    | Pulley-Idler        |
| 22   | 100-4844    | 1    | Spring-Torsion      |
| 23   | 99-3623-03  | 1    | Arm-Idler           |
| 24   | 2412-34     | 1    | Clamp-Hose          |
| 25   | 32128-43    | 4    | Nut-Flange          |
| 26   | 323-19      | 2    | Screw-HH            |
| 27   | 3234-11     | 4    | Screw-HHF           |
| 28   | 99-3436-03  | 1    | Support-Pump        |
| 29   | 99-3440     | 2    | Spacer              |
| 30   | 33114-060   | 4    | Screw-HH            |
| 31   | 87-8640     | 3    | Washer-Flat         |
| 33   | 95-8933-03  | 1    | Plate-Mount, Pump   |
| 34   | 95-8941     | 4    | Spacer-Mount, Pump  |
| 35   | 99-3620     | 1    | Pulley-3V, Pump     |
| 36   | 321-13      | 3    | Screw-HH            |
| 37   | 3253-3      | 3    | Washer-Lock         |
| 38   | 100-4813    | 1    | Bushing-Lock, Taper |
| 39   | 99-3619     | 1    | Belt-3V             |
| 40   | 70-2041     | 1    | Trim                |
| 41   | 353-949     | 1    | O-Ring              |
| 42   | 100-1646    | 1    | Gear Pump ASM       |
| 43   | 323-7       | 2    | Screw-HH            |
| 44   | 3256-24     | 2    | Washer-Flat         |
| 45   | 99-3631     | 2    | Bushing-Flange      |
| 46   | 99-3625     | 1    | Spacer-Arm, Idler   |



## Hydrostat Assembly (continued)

| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 47   | 100-4852    | 2    | Washer-Hardened |

| Ref. | Part Number | Qty. | Description |
|------|-------------|------|-------------|
| 48   | 72-4170     | 1    | Washer      |
| 49   | 3245-41     | 1    | Screw-HSH   |

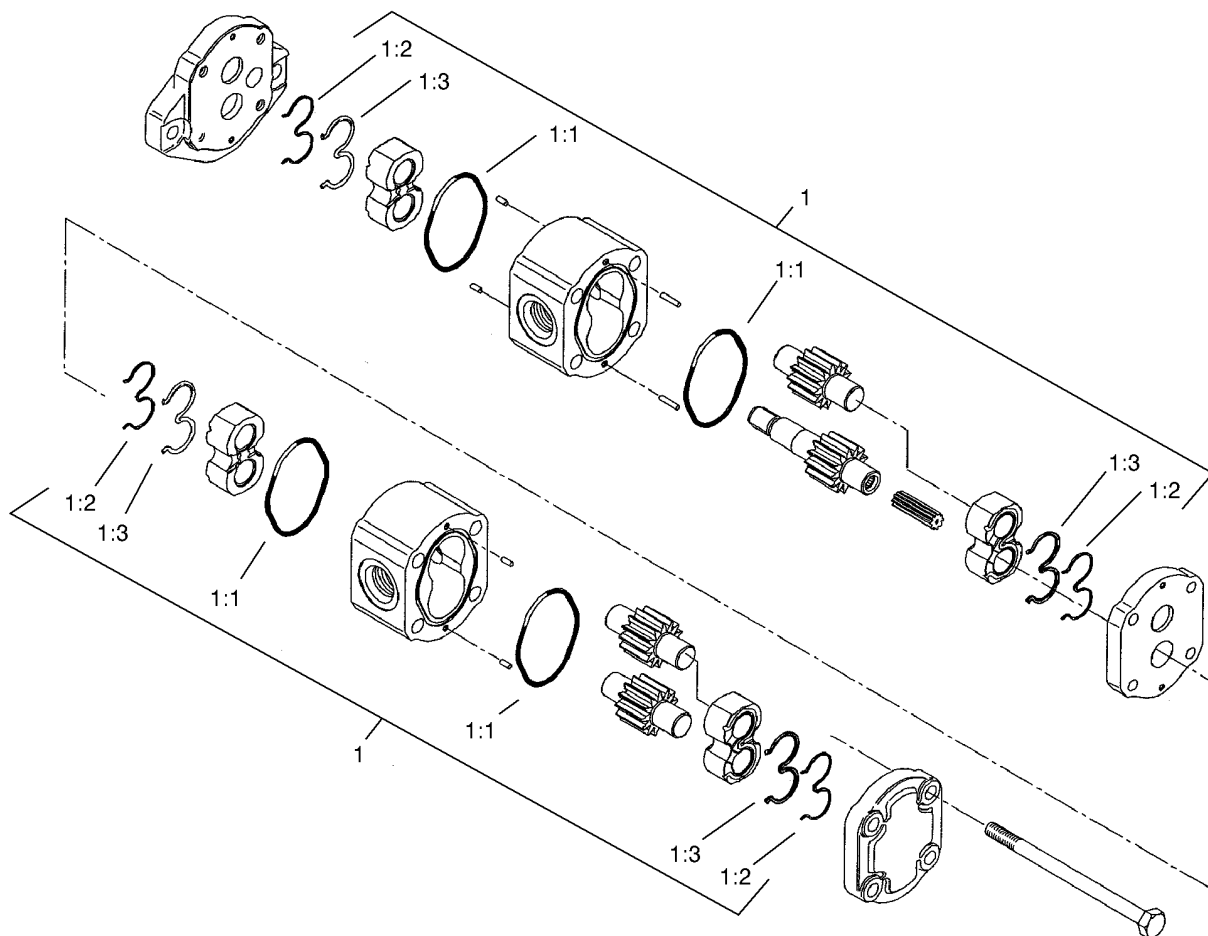


## Piston Pump Assembly No. 104-4890

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 1    | 94-3645     | 1    | Key              |
| 2    | 94-6359     | 1    | Shaft-Drive      |
| 3    | 104-4046    | 2    | Bearing-Cup      |
| 4    | 98-4640     | 6    | Screw-Cap        |
| 5    | 98-4644     | 1    | Plate-Cover      |
| 6    | 105-9762    | 6    | Washer           |
| 7    | 100-3182    | 2    | Shim Kit         |
| 8    | 98-4639     | 2    | Bearing-Cone     |
| 9    | 94-3646     | 1    | Key              |
| 10   | 104-4888    | 1    | Swashplate       |
| 11   | 76-6070     | 1    | Rotating Kit     |
| 13   | 104-0429    | 1    | Plate-Valve      |
| 15   | 76-6150     | 2    | Pin-Dowel        |
| 16   | 105-3813    | 1    | Endcover Sub ASM |
| 16:1 | 94-6368     | 1    | Bearing          |
| 16:2 |             | 1    | Pin-Roll ●       |
| 18   | 74-9280     | 2    | Plug ASM         |
| 18:1 |             | 1    | Ring-Retaining ● |
| 19   | 104-4889    | 1    | Relief Valve ASM |

| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 20   | 105-3812    | 1    | Valve-Check       |
| 21   | 105-3811    | 1    | Valve-Bypass      |
| 22   | 76-6170     | 2    | Capscrew          |
| 23   | 76-6160     | 2    | Capscrew          |
| 25   | 98-4645     | 1    | Plate-Cover       |
| 29   | 100-3176    | 1    | Housing ASM       |
| 29:1 | 94-6363     | 1    | Bearing           |
| 31   | 252-71      | 2    | Washer-Thrust     |
| 32   | 252-66      | 1    | Bearing-Thrust    |
| 33   | 33-3720     | 1    | Washer            |
| 39   | 98-4635     | 1    | Insert-Plate, Cam |
| 42   | 74-9040     | 1    | Coupler           |
| 43   | 104-4868    | 1    | Seal Repair Kit   |
| 43:1 | 32151-13    | 1    | Ring-Retaining    |
| 43:2 | 32151-29    | 1    | Ring-Retaining    |
| 43:3 | 33-4930     | 1    | Gasket-Housing    |
| 43:4 | 104-4861    | 1    | Seal-Shaft        |
| 43:5 | 100-3179    | 1    | O-Ring            |

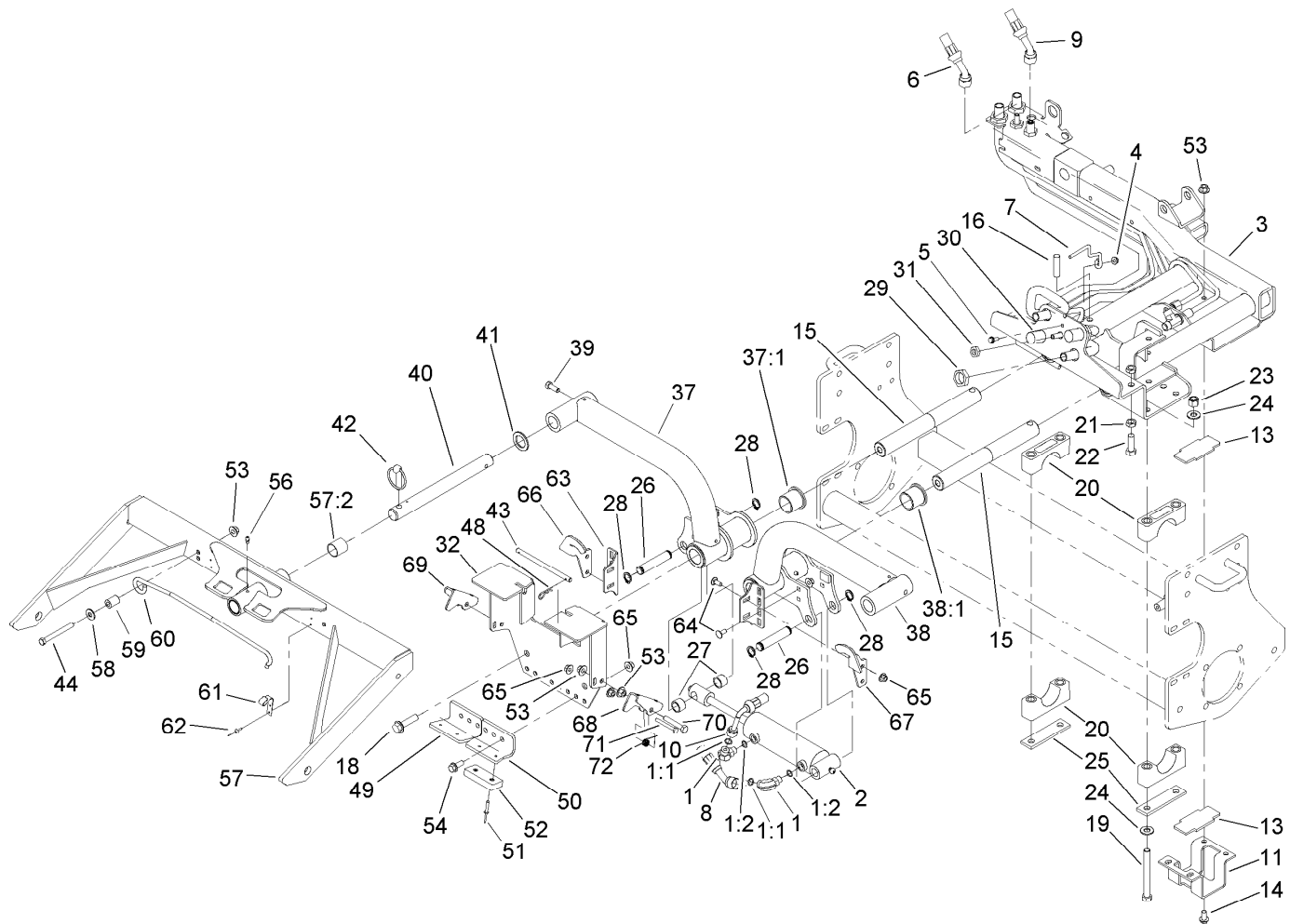
● Not serviced separately



## Gear Pump Assembly No. 100-1646

| Ref. | Part Number | Qty. | Description   |
|------|-------------|------|---------------|
| 1    | 104-4226    | 1    | Seal Kit      |
| 1:1  |             | 4    | Seal-Dust ●   |
| 1:2  |             | 4    | E-Seal ●      |
| 1:3  |             | 4    | Seal-Backup ● |

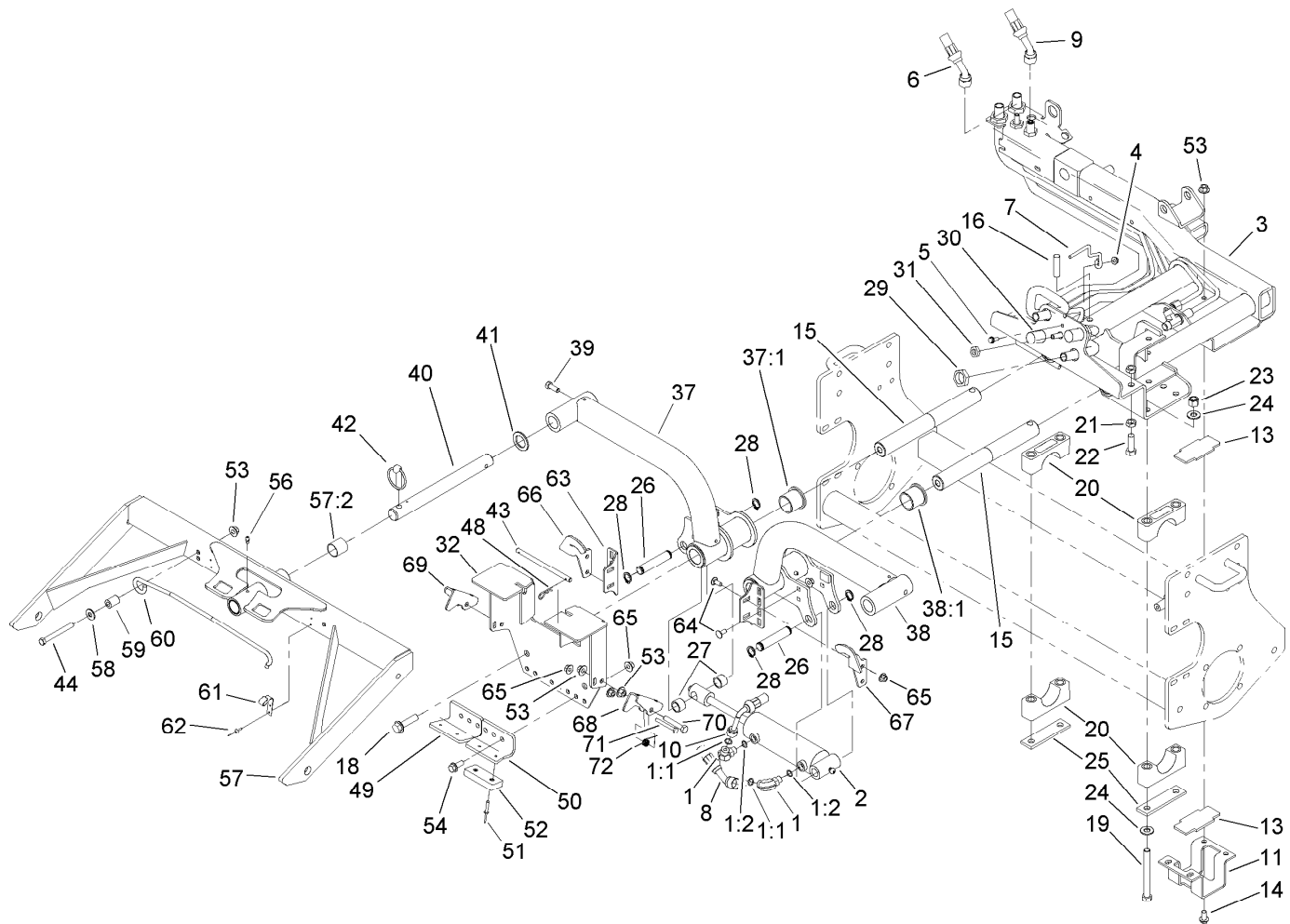
● Not serviced separately



## Carrier Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 1    | 340-77      | 2    | Fitting-Elbow, 90 Def |
| 1:1  | 237-22      | 1    | O-Ring                |
| 1:2  | 237-42      | 1    | O-Ring                |
| 2    | 108-9033    | 1    | HYD Cylinder ASM      |
| 3    | 100-4939-03 | 1    | Carrier-Sidewinder    |
| 4    | 32128-33    | 1    | Nut-HF                |
| 5    | 3234-4      | 1    | Screw-HHF             |
| 6    | 95-8822     | 1    | Hose-HYD              |
| 7    | 99-3433     | 1    | Wire-Center           |
| 8    | 104-0405    | 1    | Hose-HYD              |
| 9    | 95-8821     | 1    | Hose-HYD              |
| 10   | 104-0406    | 1    | Hose-HYD              |
| 11   | 104-0416-03 | 1    | Bracket-Slide         |
| 13   | 104-0417    | 2    | Slide-Plastic         |
| 14   | 3234-1      | 4    | Screw-HHF             |
| 15   | 95-8531     | 2    | Shaft-Pivot, Liftarm  |
| 16   | 32121-122   | 2    | Pin-Roll              |
| 18   | 3234-27     | 2    | Screw-HHF             |
| 19   | 325-19      | 8    | Screw-HH              |
| 20   | 104-4865    | 8    | Cap-Bearing           |
| 21   | 3218-5      | 4    | Nut-Jam               |
| 22   | 325-6       | 2    | Screw-HH              |
| 23   | 3296-23     | 8    | Nut-Lock, NI          |
| 24   | 87-7270     | 16   | Washer-Thrust         |
| 25   | 99-3373     | 4    | Bar-Support, Slide    |
| 26   | 95-8575     | 2    | Pin-Clevis            |
| 27   | 75-9590     | 2    | Spacer-Cylinder       |
| 28   | 32120-93    | 4    | Ring-Retaining        |

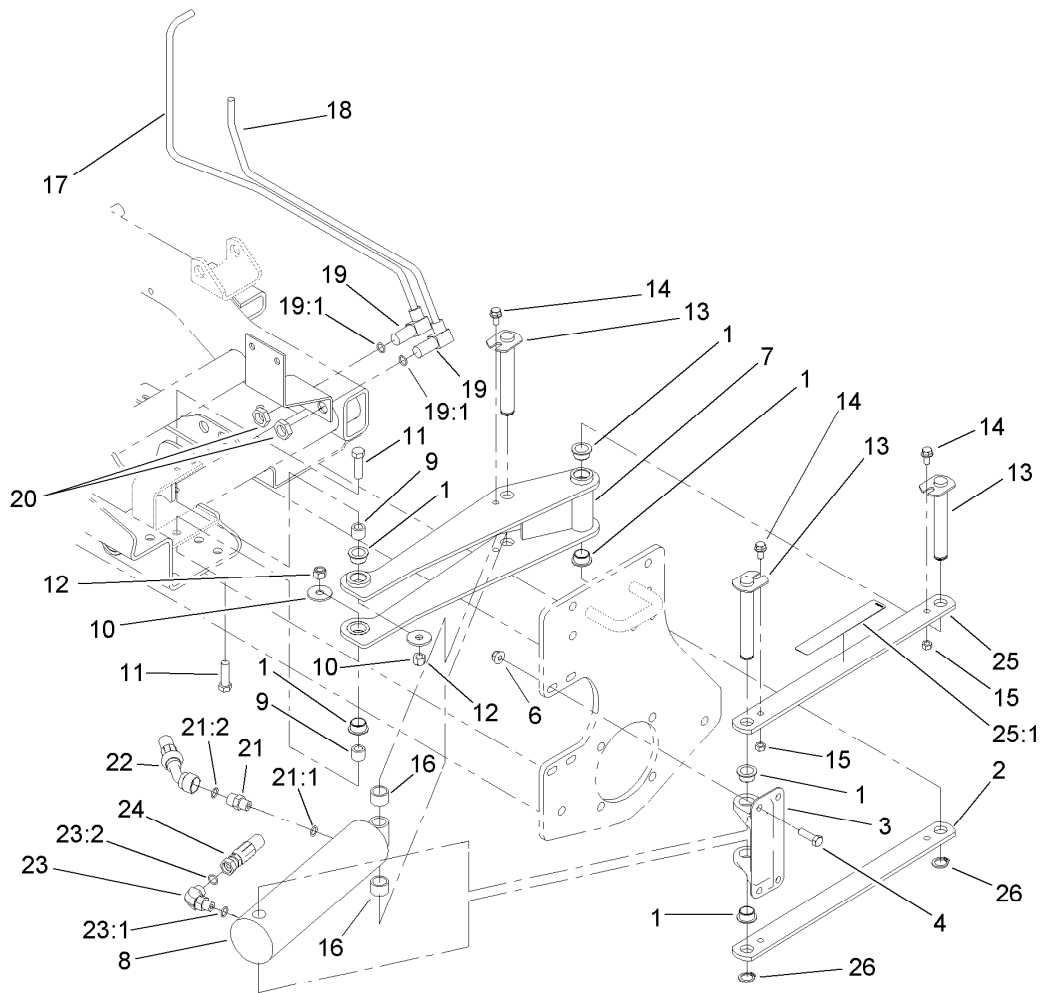
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 29   | 340-74      | 4    | Nut-Lock, Bulkhead      |
| 30   | 99-3640     | 1    | Tube ASM                |
| 31   | 340-78      | 1    | Nut-Lock                |
| 32   | 104-4820-03 | 1    | Bracket-Stop, Carrier   |
| 37   | 104-0481    | 1    | RH Liftarm ASM          |
| 37:1 | 69-6470     | 2    | Bushing-Castor          |
| 38   | 104-0482    | 1    | LH Liftarm ASM          |
| 38:1 | 69-6470     | 2    | Bushing-Castor          |
| 39   | 323-6       | 2    | Screw-HH                |
| 40   | 95-8979     | 2    | Shaft                   |
| 41   | 3-6781      | 2    | Washer-Thrust           |
| 42   | 283-71      | 2    | Pin-Lynch               |
| 43   | 104-0472    | 1    | Rod                     |
| 44   | 323-15      | 2    | Screw-HH                |
| 48   | 3290-467    | 2    | Pin-Hair                |
| 49   | 104-4639-03 | 1    | Stop-Deck, LH           |
| 50   | 104-4640-03 | 1    | Stop-Deck, RH           |
| 51   | 3269-11     | 4    | Rivet-Pop               |
| 52   | 86-5350     | 2    | Bumper-Rubber           |
| 53   | 32128-43    | 14   | Nut-Flange              |
| 54   | 3234-11     | 4    | Screw-HHF               |
| 56   | 302-5       | 2    | Fitting-Grease          |
| 57   | 106-4198    | 2    | Front Carrier Frame ASM |
| 57:2 | 108-4000    | 2    | Bushing                 |
| 58   | 3256-4      | 2    | Washer-Flat             |
| 59   | 104-4613    | 2    | Tube-Latch              |
| 60   | 104-4612    | 2    | Rod-Latch               |
| 61   | 104-4237    | 2    | Clip-Rod                |



## Carrier Assembly (continued)

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 62   | 3290-271    | 4    | Rivet-Pop        |
| 63   | 104-4828-03 | 2    | Bracket-Actuator |
| 64   | 3230-23     | 8    | Screw-CARR       |
| 65   | 32128-44    | 12   | Nut              |
| 66   | 104-4826-03 | 1    | Actuator-RH      |
| 67   | 104-4827-03 | 1    | Actuator-LH      |

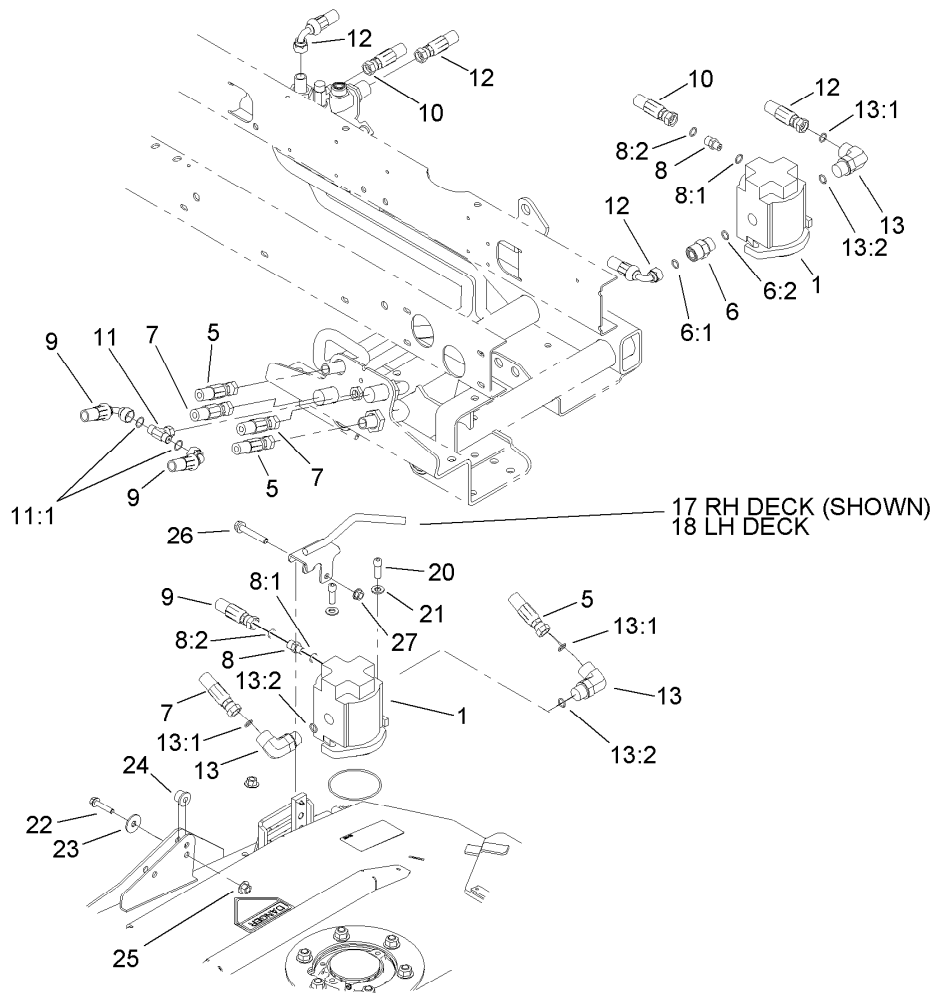
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 68   | 104-4819-03 | 1    | Bracket-Pivot, LH |
| 69   | 104-4825-03 | 1    | Bracket-Pivot, RH |
| 70   | 323-11      | 2    | Screw-HH          |
| 71   | 322-11      | 2    | Screw-HH          |
| 72   | 104-4821    | 2    | Spring-Torsion    |



## Scissor Assembly

| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 1    | 95-8526     | 6    | Bushing-Plastic |
| 2    | 95-8527-03  | 1    | Link-Scissor    |
| 3    | 95-8883     | 1    | Mount-Scissor   |
| 4    | 323-7       | 4    | Screw-HH        |
| 6    | 104-8301    | 4    | Nut-HF, NI      |
| 7    | 95-8521-03  | 1    | Frame-Scissor   |
| 8    | 95-8512     | 1    | Cylinder-HYD    |
| 9    | 95-8603     | 2    | Spacer          |
| 10   | 87-5330     | 2    | Washer          |
| 11   | 324-6       | 2    | Screw-HH        |
| 12   | 3296-48     | 2    | Nut-Lock, NI    |
| 13   | 95-8529     | 3    | Pin             |
| 14   | 3234-14     | 3    | Screw-HHF       |
| 15   | 32152-1     | 3    | Nut-Lock, Cone  |
| 16   | 46-6350     | 2    | Spacer          |
| 17   | 95-8790     | 1    | Tube-HYD        |

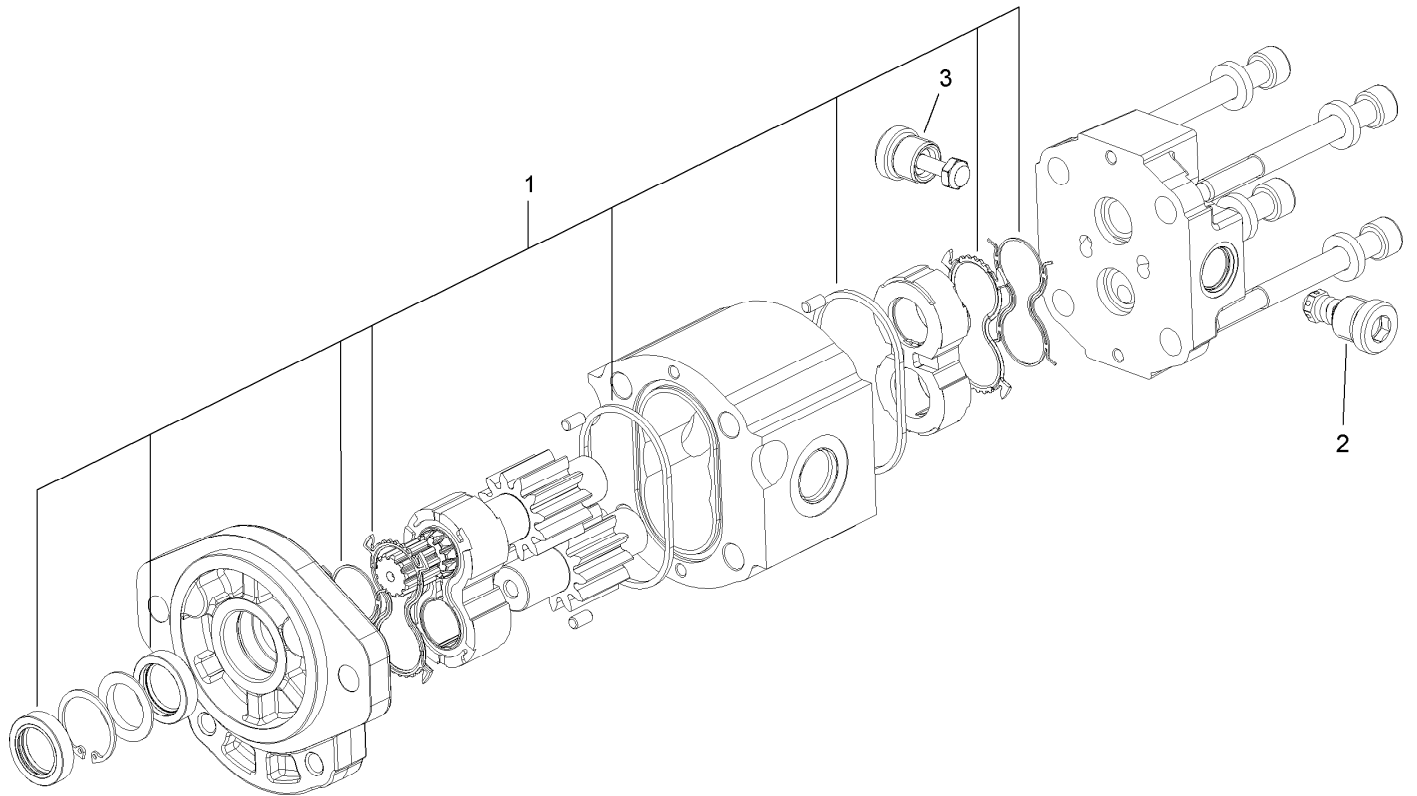
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 18   | 95-8791     | 1    | Tube-HYD           |
| 19   | 340-154     | 2    | Union-Bulkhead     |
| 19:1 | 237-22      | 2    | O-Ring             |
| 20   | 340-70      | 2    | Nut-Lock           |
| 21   | 85-9720     | 1    | Fitting-Str, Orif  |
| 21:1 | 237-78      | 1    | O-Ring             |
| 21:2 | 237-21      | 1    | O-Ring             |
| 22   | 95-8838     | 1    | Hose-HYD           |
| 23   | 340-132     | 1    | Fitting-90 DEG     |
| 23:1 | 237-78      | 1    | O-Ring             |
| 23:2 | 237-21      | 1    | O-Ring             |
| 24   | 95-8839     | 1    | Hose-HYD           |
| 25   | 99-3505     | 1    | Scissors Link ASM  |
| 25:1 | 94-3353     | 1    | Decal-Point, Pinch |
| 26   | 32120-93    | 2    | Ring-Retaining     |



## Rotary Motor Assembly

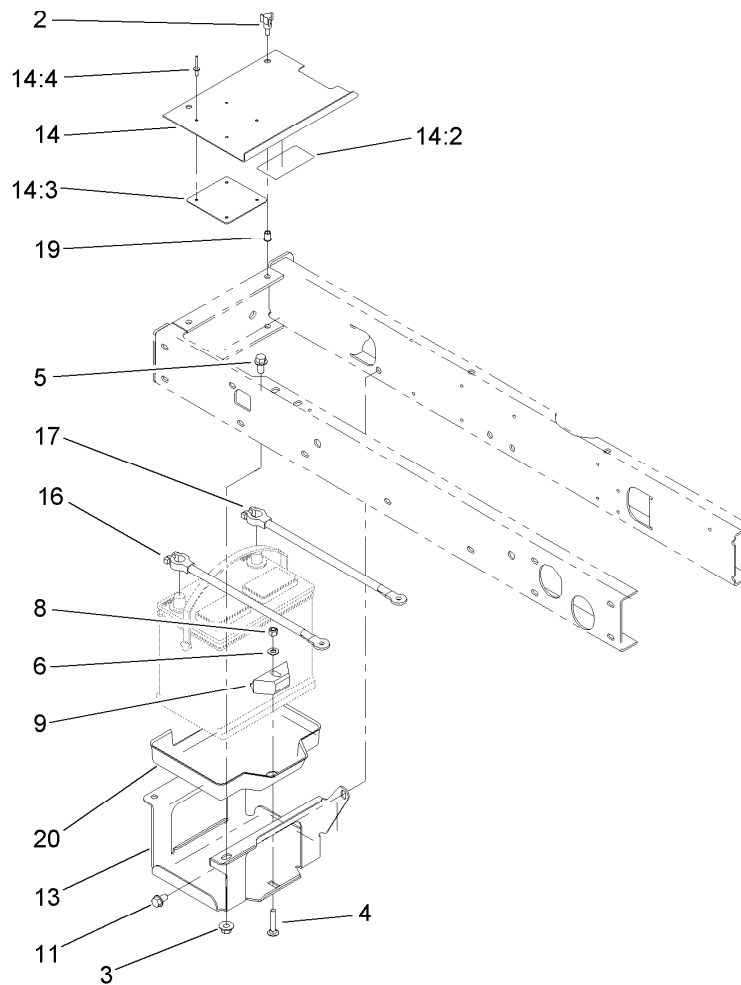
| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 1    | 105-9872    | 3    | HYD Motor ASM    |
| 5    | 105-1216    | 2    | Hose-HYD         |
| 6    | 340-7       | 1    | Fitting-Straight |
| 6:1  | 237-65      | 1    | O-Ring           |
| 6:2  | 237-80      | 1    | O-Ring           |
| 7    | 105-1215    | 2    | Hose-HYD         |
| 8    | 340-92      | 3    | Fitting-Straight |
| 8:1  | 237-78      | 1    | O-Ring           |
| 8:2  | 237-21      | 1    | O-Ring           |
| 9    | 104-1080    | 2    | Hose-HYD         |
| 10   | 100-4876    | 1    | Hose-HYD         |
| 11   | 99-3477     | 1    | Fitting-Tee      |
| 11:1 | 237-42      | 2    | O-Ring           |
| 12   | 100-4880    | 2    | Hose-HYD         |

| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 13   | 340-17      | 5    | Fitting-Elbow-90  |
| 13:1 | 237-65      | 1    | O-Ring            |
| 13:2 | 237-80      | 1    | O-Ring            |
| 17   | 108-9028-03 | 2    | RH Foot Guard ASM |
| 18   | 108-9029-03 | 2    | LH Foot Guard ASM |
| 20   | 3274-7      | 6    | Screw-HSH         |
| 21   | 3256-24     | 6    | Washer-Flat       |
| 22   | 3234-18     | 6    | Screw-HHF         |
| 23   | 93-8806     | 6    | Washer-Hardened   |
| 24   | 95-8803     | 6    | Bushing-Flange    |
| 25   | 32128-43    | 6    | Nut-Flange        |
| 26   | 100-2592    | 4    | Screw-HHF         |
| 27   | 3290-357    | 4    | Nut-HHF, Whiz     |



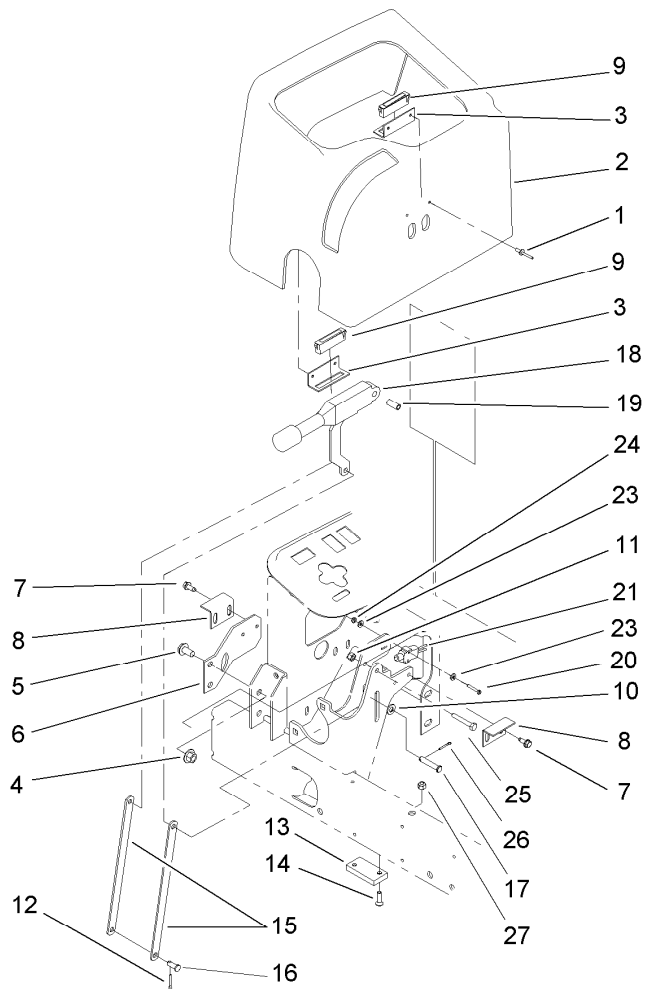
## Hydraulic Motor Assembly No. 105-9872

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   |
|-------------|--------------------|-------------|----------------------|
| 1           | 107-7819           | 1           | Seal Kit             |
| 2           | 107-7820           | 1           | Valve-Relief         |
| 3           | 107-7821           | 1           | Valve-Anticavitation |



## Battery Assembly

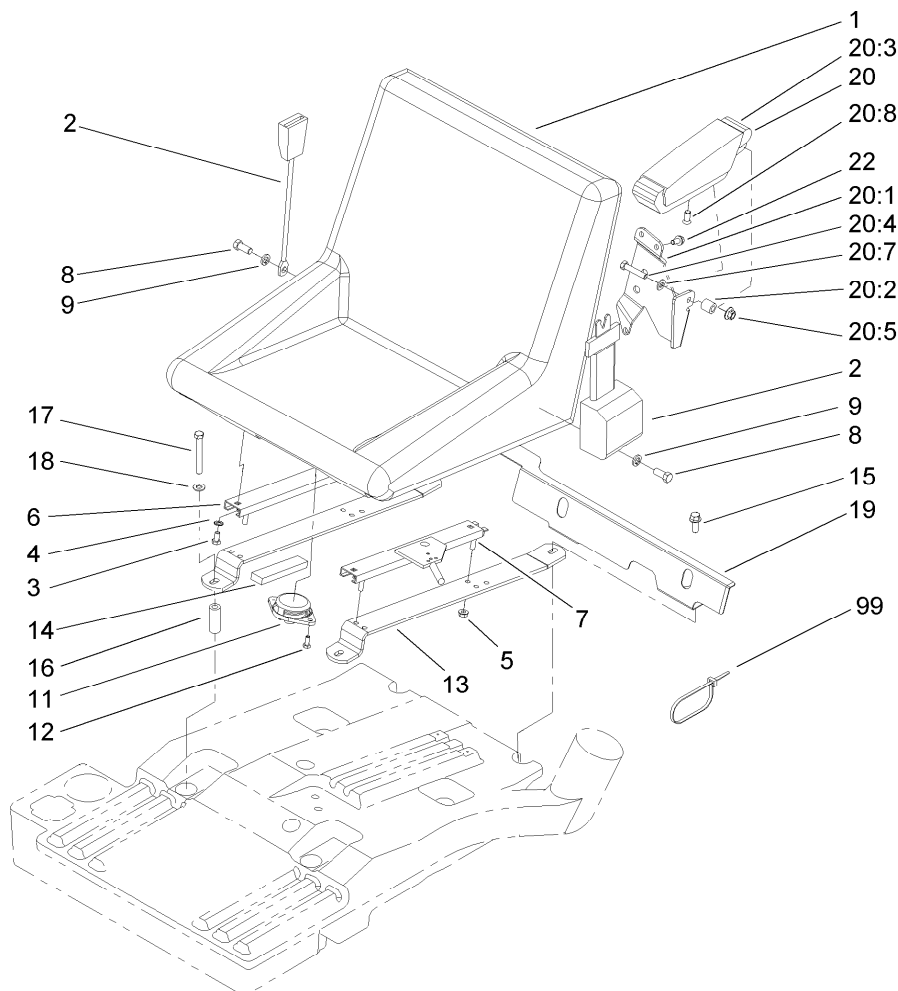
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 2    | 233-70      | 2    | Knob-Star, Three         |
| 3    | 32128-43    | 3    | Nut-Flange               |
| 4    | 3230-6      | 1    | Screw-CARR               |
| 5    | 3234-1      | 3    | Screw-HHF                |
| 6    | 3256-23     | 1    | Washer-Plain             |
| 8    | 3296-29     | 1    | Nut-Lock, NI             |
| 9    | 66-2490     | 1    | Retainer-Battery         |
| 11   | 32144-15    | 1    | Screw-HHFTF              |
| 13   | 95-8796-03  | 1    | Support-Battery          |
| 14   | 99-3602     | 1    | Battery Cover ASM        |
| 14:2 | 93-7276     | 1    | Decal-Danger             |
| 14:3 | 87-7620     | 1    | Shield-Terminal, Battery |
| 14:4 | 3269-27     | 4    | Rivet-Snap               |
| 16   | 95-8853     | 1    | Cable-Battery, Positive  |
| 17   | 95-8854     | 1    | Cable-Battery, Negative  |
| 19   | 32148-6     | 2    | Insert-Nut               |
| 20   | 99-3513     | 1    | Tray-Battery             |



## Parking Brake Assembly

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 1    | 3269-5      | 4    | Rivet-Pop                |
| 2    | 95-8707     | 1    | Cover-Dash               |
| 3    | 95-8763     | 2    | Bracket-Hold Down, Cover |
| 4    | 32128-43    | 2    | Nut-Flange               |
| 5    | 3234-1      | 2    | Screw-HHF                |
| 6    | 95-8764-03  | 1    | Support-Magnet           |
| 7    | 32144-10    | 4    | Screw-HWH                |
| 8    | 95-8765     | 2    | Bracket-Strike, Magnet   |
| 9    | 58-4250     | 2    | Catch-Magnetic           |
| 10   | 3256-23     | 1    | Washer-Plain             |
| 11   | 3296-42     | 1    | Nut-Lock, NI             |
| 12   | 3272-10     | 1    | Pin-Cotter               |
| 13   | 95-8684     | 1    | Pad-Bumper               |

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 14   | 3289-4      | 2    | Screw-FH              |
| 15   | 104-4628-03 | 2    | Link-Brake, Parking   |
| 16   | 283-62      | 1    | Pin-Clevis            |
| 17   | 94-3829     | 1    | Pin-Clevis            |
| 18   | 104-4817    | 1    | Lever-Brake           |
| 19   | 87-4710     | 1    | Spacer-Brake, Parking |
| 20   | 32105-9     | 2    | Screw                 |
| 21   | 95-8900     | 1    | Switch                |
| 23   | 3256-21     | 4    | Washer-Flat           |
| 24   | 3296-9      | 2    | Nut-Hex               |
| 25   | 321-10      | 1    | Screw-HH              |
| 26   | 3272-6      | 1    | Pin-Cotter            |
| 27   | 32128-32    | 2    | Nut-HHF               |

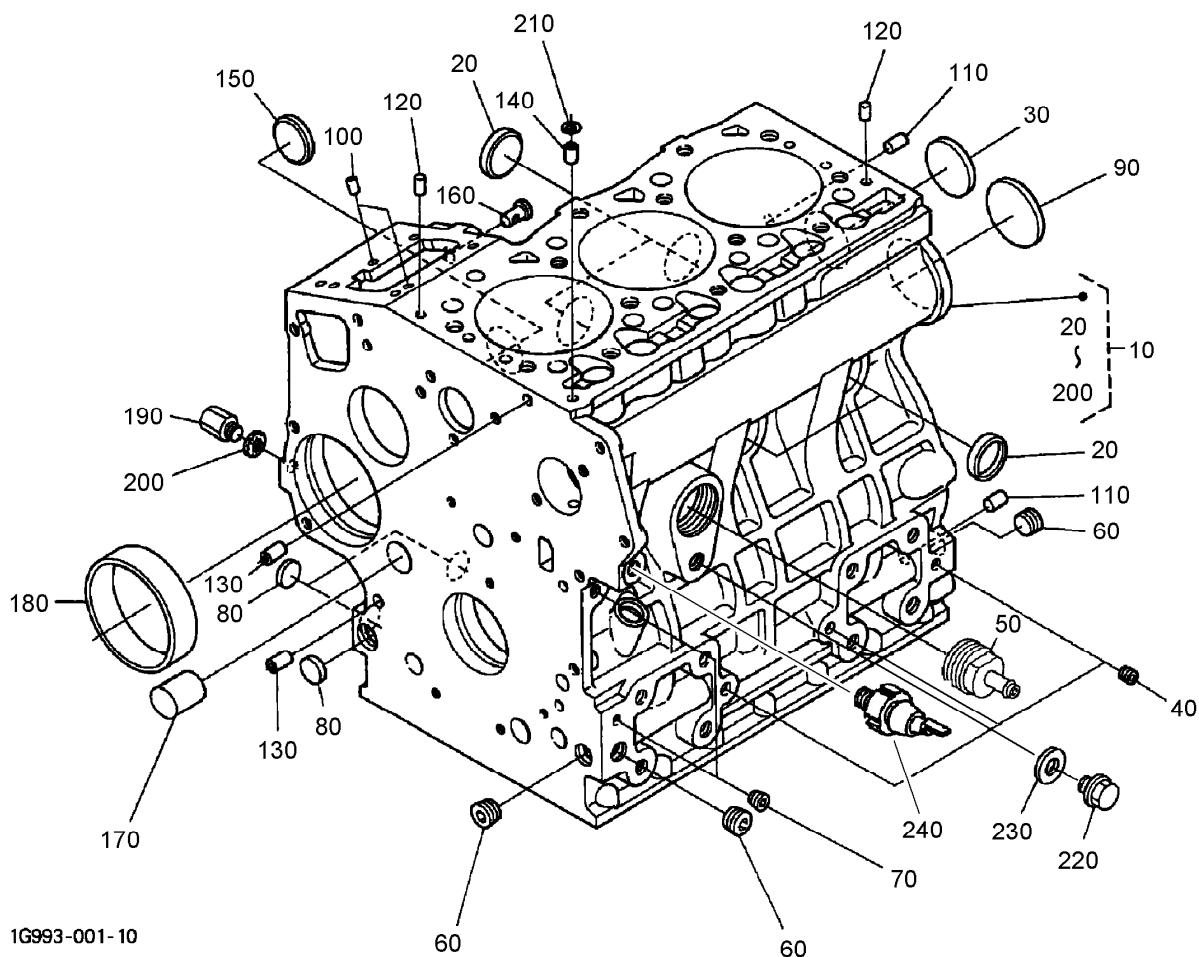


## Seat Mounting Assembly

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 1    | 104-4620    | 1    | Seat                |
| 2    | 100-4928    | 1    | Belt-Seat           |
| 3    | 322-2       | 4    | Screw-HH            |
| 4    | 3255-8      | 4    | Washer-Lock         |
| 5    | 32128-25    | 4    | Nut-HF              |
| 6    | 92-8990     | 1    | Adjuster-Slave      |
| 7    | 92-8991     | 1    | Adjuster (W/Latch)  |
| 8    | 3212-4      | 2    | Screw-HH            |
| 9    | 3253-6      | 2    | Washer-Lock         |
| 11   | 92-6282     | 1    | Switch-Seat         |
| 12   | 32144-10    | 2    | Screw-HWH           |
| 13   | 104-0467-03 | 2    | Strap-Support, Seat |
| 14   | 95-8896     | 2    | Foam                |
| 15   | 3234-11     | 2    | Screw-HHF           |
| 16   | 104-0466    | 2    | Spacer-Tube         |
| 17   | 323-14      | 2    | Screw-HH            |
| 18   | 3256-24     | 2    | Washer-Flat         |
| 19   | 104-4833-03 | 1    | Shield-Heat         |

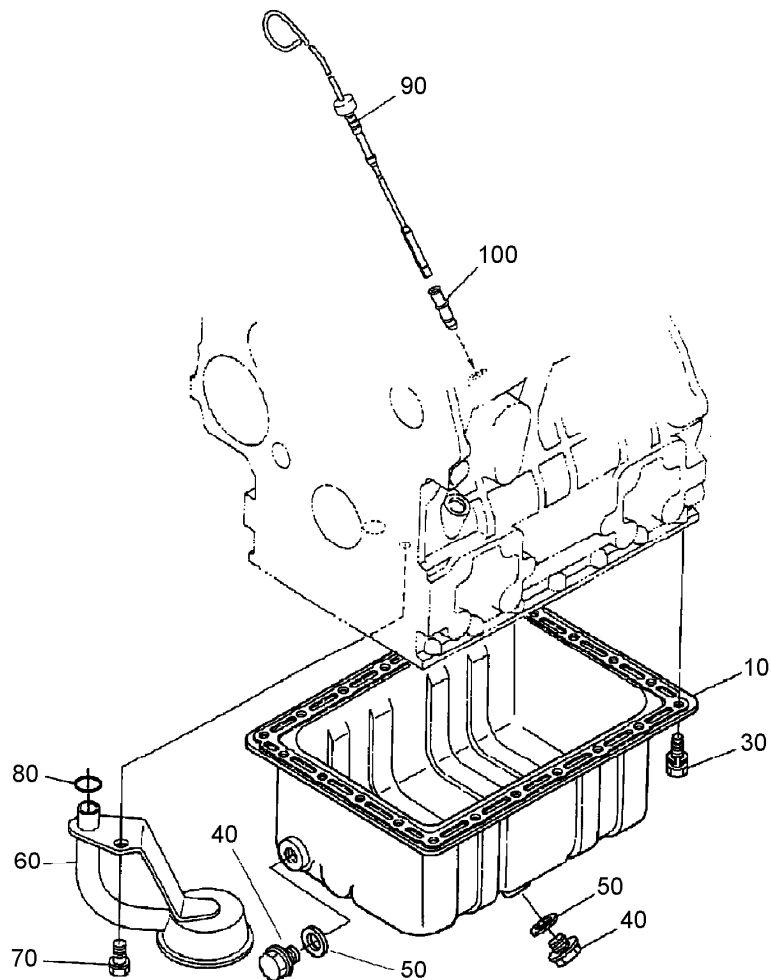
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 20   | 92-7307     | 1    | LH Armrest ASM    |
| 20:1 | 69-0760     | 1    | Bracket-Arm, LH   |
| 20:2 | 92-7301     | 1    | Spacer            |
| 20:3 | 69-1180     | 1    | Armrest           |
| 20:4 | 323-9       | 1    | Screw-HH          |
| 20:5 | 32128-19    | 1    | Nut-HF            |
| 20:7 | 3256-24     | 1    | Washer-Flat       |
| 20:8 | 92-7318     | 1    | Screw             |
| 21   | 92-7306     | 1    | RH Armrest ASM ●  |
| 21:1 | 69-0770     | 1    | Bracket-Arm, RH ● |
| 21:2 | 92-7301     | 1    | Spacer ●          |
| 21:3 | 69-1180     | 1    | Armrest ●         |
| 21:4 | 323-9       | 1    | Screw-HH ●        |
| 21:5 | 32128-19    | 1    | Nut-HF ●          |
| 21:7 | 3256-24     | 1    | Washer-Flat ●     |
| 21:8 | 92-7318     | 1    | Screw ●           |
| 22   | 3234-14     | 6    | Screw-HHF         |
| 99   | 3290-378    | 1    | Tie-Cable         |

● Not illustrated



## Crankcase Assembly

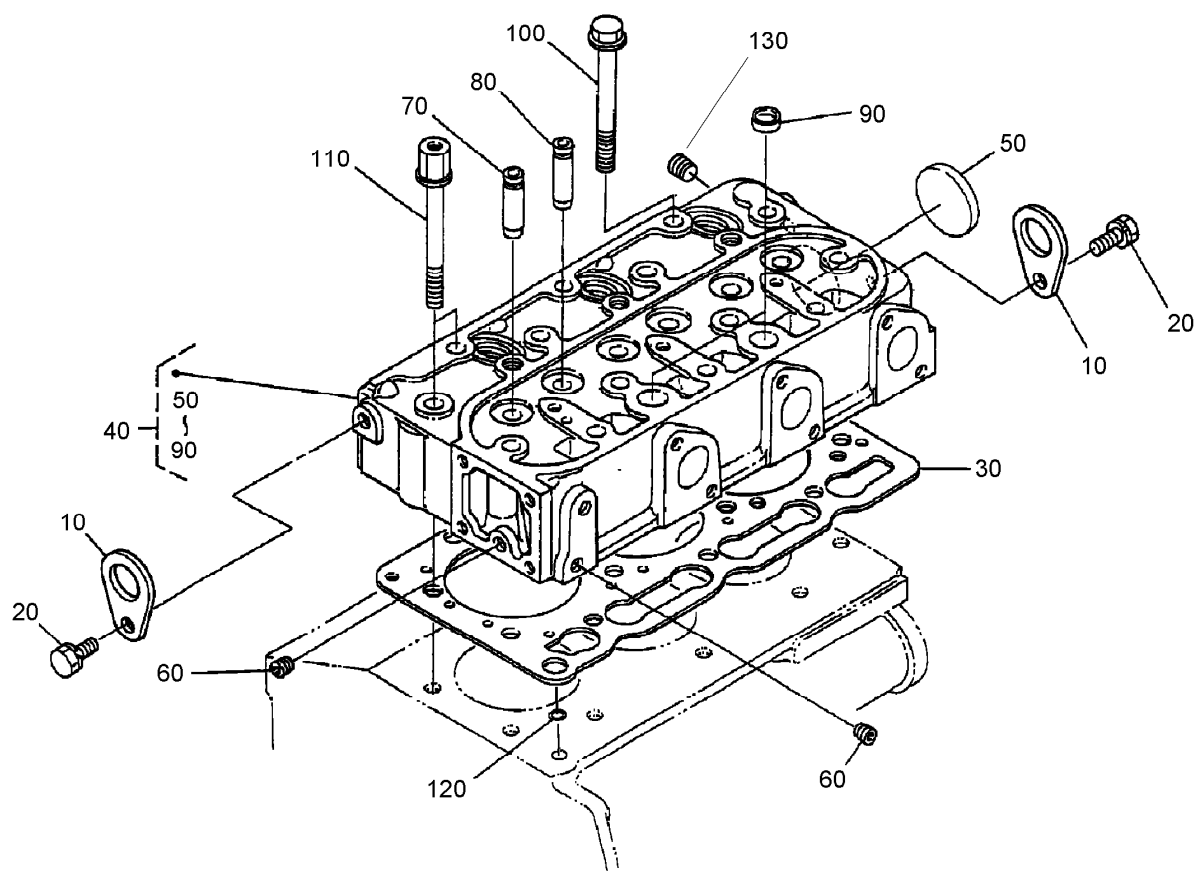
| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 10   | 107-7824    | 1    | Crankcase ASM          |
| 20   | 98-9398     | 4    | Cap-Sealing            |
| 30   | 98-7539     | 1    | Cap-Sealing            |
| 40   | 98-7540     | 3    | Plug                   |
| 50   | 99-8347     | 1    | Joint-Pipe, Drain      |
| 60   | 98-9597     | 3    | Plug                   |
| 70   | 98-7487     | 2    | Plug                   |
| 80   | 98-7489     | 3    | Plug                   |
| 90   | 98-9668     | 1    | Plug-Expansion         |
| 100  | 98-9375     | 2    | Pin-Straight           |
| 110  | 98-9377     | 2    | Pin-Straight           |
| 120  | 105-3795    | 2    | Pin-Straight           |
| 130  | 98-9387     | 2    | Pin-Pipe               |
| 140  | 98-9539     | 1    | Pin-Pipe               |
| 150  | 98-9599     | 1    | Plug                   |
| 160  | 98-9630     | 1    | Pin-Spring, Start      |
| 170  | 98-9675     | 1    | Plug                   |
| 180  | 98-9656     | 1    | Bushing-Governor, Gear |
| 190  | 98-7507     | 1    | Plug                   |
| 200  | 98-7428     | 1    | Gasket                 |
| 210  | 98-7509     | 1    | O-Ring                 |
| 220  | 99-3447     | 1    | Plug                   |
| 230  | 106-7056    | 1    | Gasket                 |
| 240  | 98-9416     | 1    | Switch-Oil             |



## Dipstick and Oil Pan Assembly

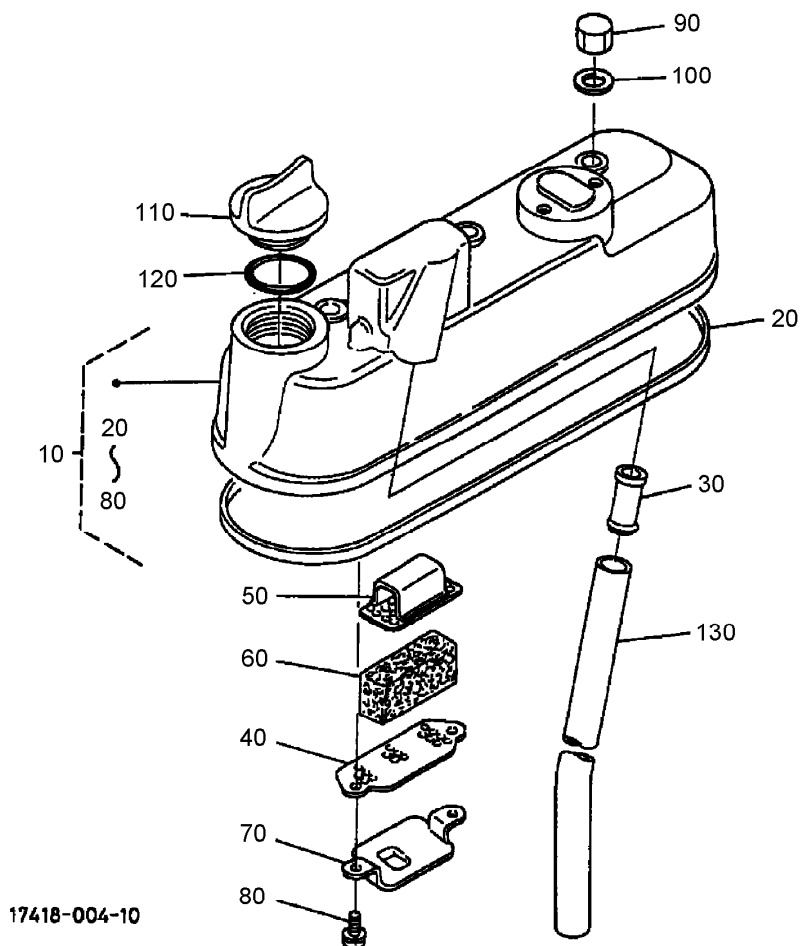
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 10          | 98-9685            | 1           | Pan-Oil            |
| 30          | 107-9065           | 22          | Bolt               |
| 40          | 98-9386            | 2           | Plug               |
| 50          | 98-7524            | 2           | Gasket             |
| 60          | 108-1401           | 1           | Base-Filter        |
| 70          | 98-7526            | 1           | Bolt               |
| 80          | 105-3776           | 1           | O-Ring             |
| 90          | 107-9076           | 1           | Gauge-Oil          |
| 100         | 105-3713           | 1           | Guide-Gauge, Oil   |

● Not illustrated



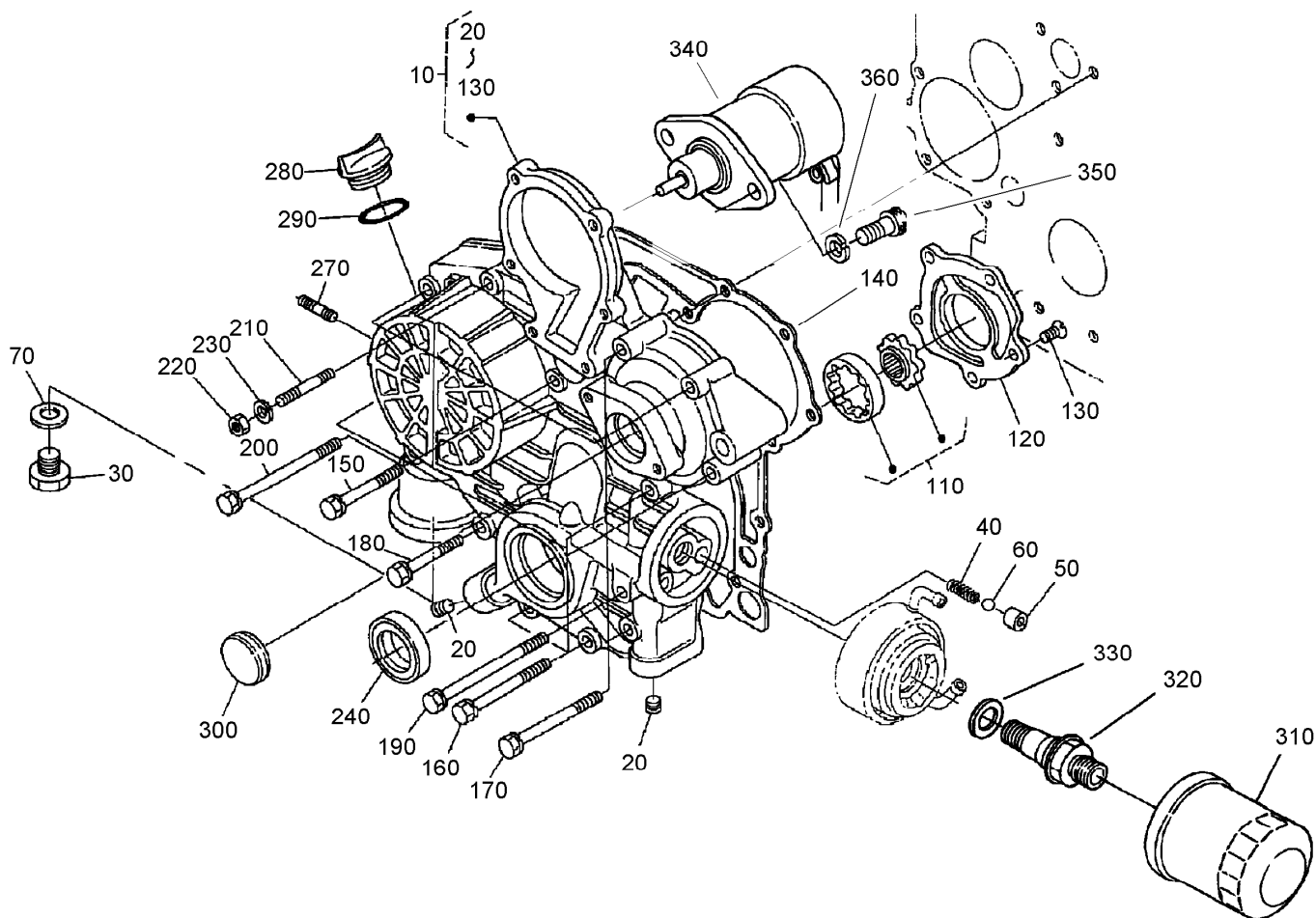
## Cylinder Head Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 10   | 98-7531     | 2    | Hook-Engine           |
| 20   | 100-9195    | 2    | Bolt                  |
| 30   | 105-3780    | 1    | Gasket-Head, Cylinder |
| 40   | 107-7823    | 1    | Cylinder Head ASM     |
| 50   | 98-9395     | 1    | Cap-Sealing           |
| 60   | 98-7540     | 2    | Plug                  |
| 70   | 107-9066    | 3    | Guide-Valve, Inlet    |
| 80   | 107-9067    | 3    | Guide-Valve, Exhaust  |
| 90   | 98-9389     | 2    | Cap-Sealing           |
| 100  | 98-9479     | 12   | Bolt-Head, Cylinder   |
| 110  | 98-9647     | 2    | Bolt-Head, Cylinder   |
| 120  | 98-7509     | 1    | O-Ring                |
| 130  | 98-9444     | 1    | Plug                  |



## Head Cover Assembly

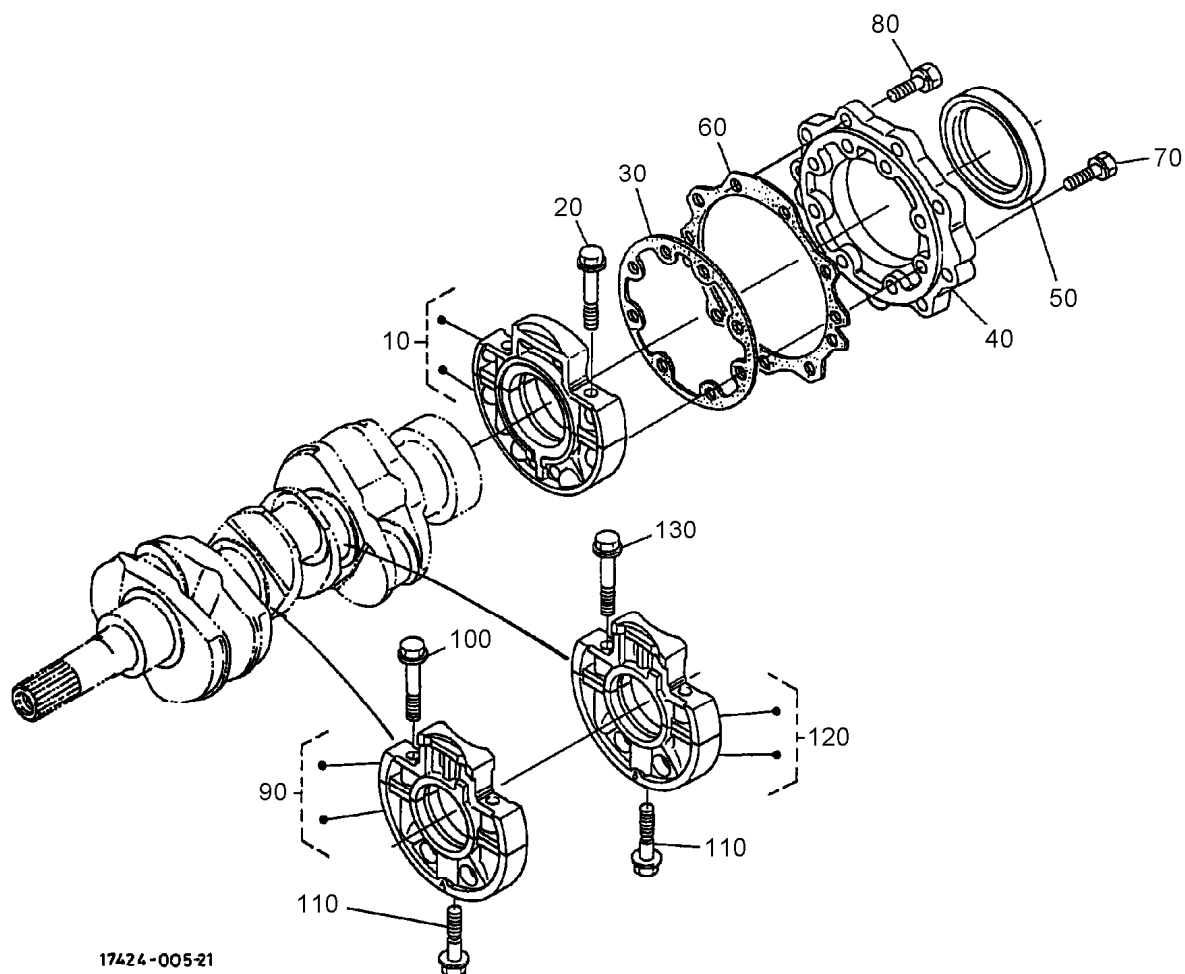
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 98-9614     | 1    | Cylinder Head Cover ASM |
| 20   | 98-9615     | 1    | Gasket-Cover, Head      |
| 30   | 98-9492     | 1    | Joint-Pipe, Breather    |
| 40   | 98-9488     | 1    | Plate-Element, Breather |
| 50   | 98-9489     | 1    | Plate-Element, Breather |
| 60   | 98-9493     | 1    | Element-Breather        |
| 70   | 98-9490     | 1    | Shield-Oil, Breather    |
| 80   | 98-9364     | 2    | Screw (With Washer)     |
| 90   | 98-9455     | 3    | Nut-Cap                 |
| 100  | 98-9454     | 3    | Gasket                  |
| 110  | 107-9075    | 1    | Plug-Filler, Oil        |
| 120  | 99-3446     | 1    | O-Ring                  |
| 130  | 98-9491     | 1    | Pipe-Breather           |



## Gear Case, Oil Filter and Stop Solenoid Assembly

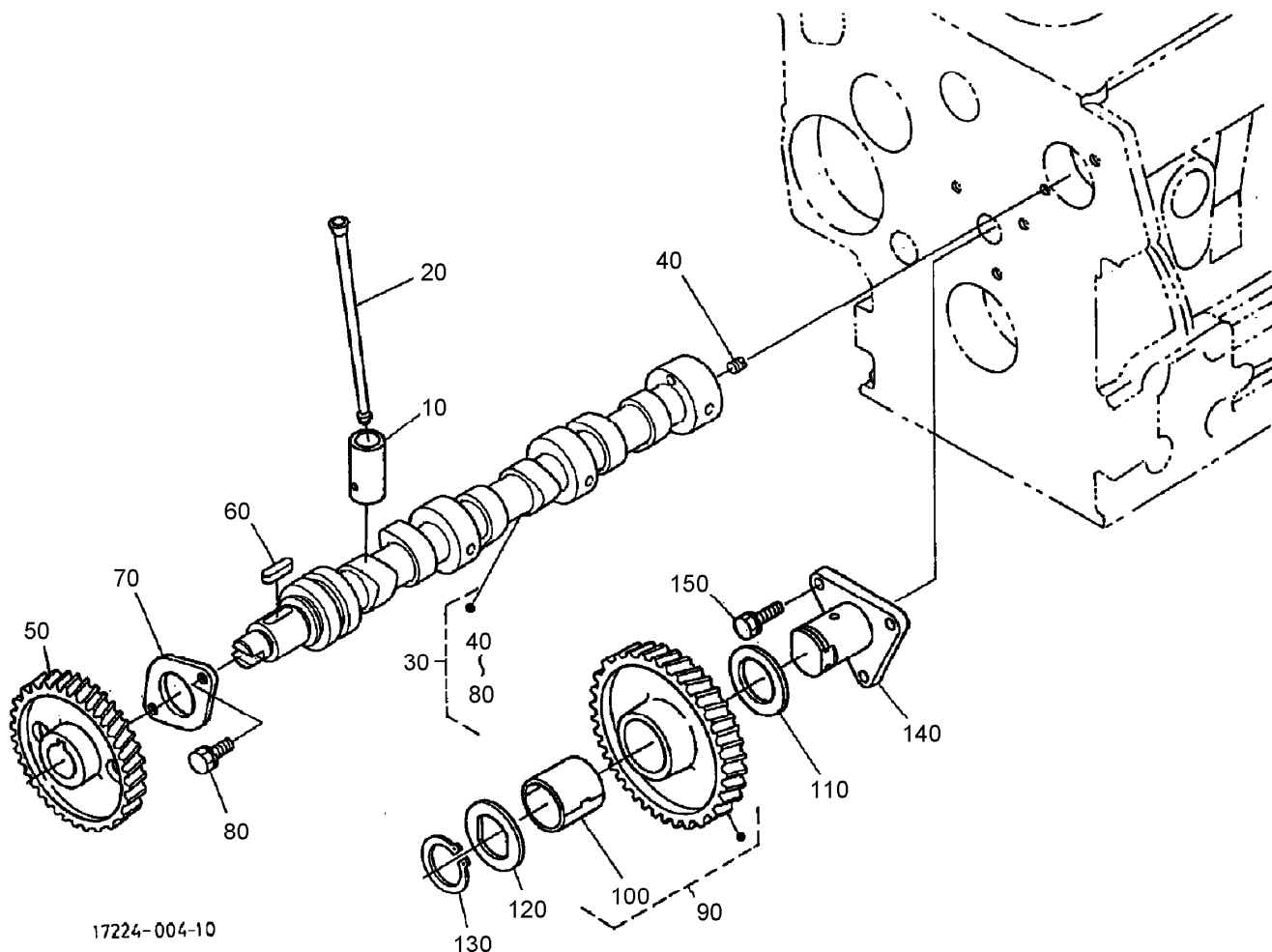
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 107-7825    | 1    | Gear Case ASM      |
| 20   | 98-9598     | 5    | Plug               |
| 30   | 99-3450     | 1    | Plug               |
| 40   | 98-9544     | 1    | Spring             |
| 50   | 98-9543     | 1    | Seat-Valve         |
| 60   | 98-9380     | 1    | Ball               |
| 70   | 99-3451     | 1    | Plug-Packing       |
| 110  | 98-9540     | 1    | Oil Pump Rotor ASM |
| 120  | 105-3708    | 1    | Cover-Pump, Oil    |
| 130  | 98-9592     | 5    | Screw              |
| 140  | 98-9633     | 1    | Gasket-Case, Gear  |
| 150  | 98-7496     | 3    | Bolt               |
| 160  | 105-3797    | 4    | Bolt               |
| 170  | 98-9356     | 2    | Bolt               |
| 180  | 98-9437     | 1    | Bolt               |
| 190  | 98-9586     | 2    | Bolt               |

| Ref. | Part Number | Qty. | Description      |
|------|-------------|------|------------------|
| 200  | 99-3511     | 1    | Bolt             |
| 210  | 105-3709    | 1    | Stud             |
| 220  | 98-7572     | 1    | Nut              |
| 230  | 98-7699     | 1    | Washer-Spring    |
| 240  | 98-9482     | 1    | Seal-Oil         |
| 270  | 105-3710    | 2    | Stud             |
| 280  | 107-9075    | 1    | Plug-Filler, Oil |
| 290  | 99-3446     | 1    | O-Ring           |
| 300  | 98-9641     | 1    | Cover-Case, Gear |
| 310  | 99-8384     | 1    | Filter-Oil       |
| 320  | 104-5159    | 1    | Holder ASM       |
| 330  | 98-9727     | 1    | Collar           |
| 340  | 104-5155    | 1    | Solenoid-Stop    |
| 350  | 105-3799    | 2    | Bolt-HSH         |
| 360  | 98-7699     | 2    | Washer-Spring    |



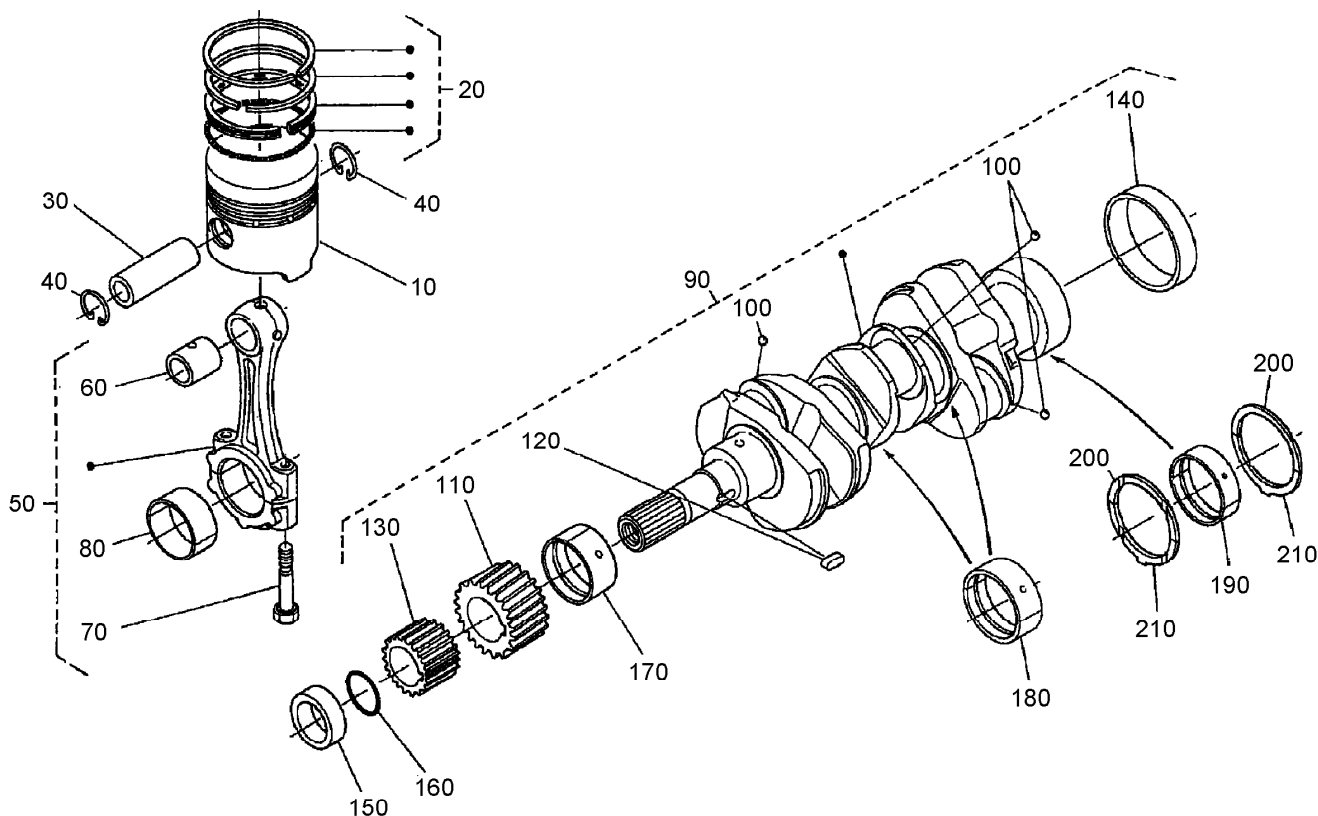
## Main Bearing Assembly

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 10   | 98-9480     | 1    | Main Bearing Case ASM      |
| 20   | 98-9484     | 2    | Bolt-Case, Bearing         |
| 30   | 98-9634     | 1    | Gasket-Case, Bearing       |
| 40   | 98-9487     | 1    | Cover-Case, Bearing        |
| 50   | 98-9483     | 1    | Seal-Oil                   |
| 60   | 98-9635     | 1    | Gasket-Cover, Bearing Case |
| 70   | 98-9352     | 8    | Bolt                       |
| 80   | 98-7568     | 9    | Bolt                       |
| 90   | 99-8361     | 1    | Case-Bearing, Main         |
| 100  | 98-9484     | 2    | Bolt-Case, Bearing         |
| 110  | 98-9485     | 2    | Bolt-Case, Bearing         |
| 120  | 99-8360     | 1    | Case-Bearing, Main         |
| 130  | 98-9484     | 2    | Bolt-Case, Bearing         |



## Camshaft and Idle Gear Shaft Assembly

| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 98-9616     | 6    | Tappet             |
| 20   | 98-9509     | 6    | Rod-Push           |
| 30   | 99-8362     | 1    | Camshaft ASM       |
| 40   | 98-7449     | 1    | Screw-Set          |
| 50   | 98-9512     | 1    | Gear-Cam           |
| 60   | 98-9378     | 1    | Key-Feather        |
| 70   | 98-9510     | 1    | Stopper-Camshaft   |
| 80   | 98-7692     | 2    | Bolt               |
| 90   | 98-9649     | 1    | Idle Gear ASM      |
| 100  | 98-9650     | 1    | Bushing-Gear, Idle |
| 110  | 98-9535     | 1    | Collar-Gear, Idle  |
| 120  | 98-9536     | 1    | Collar-Gear, Idle  |
| 130  | 98-9534     | 1    | Circlip-Gear, Idle |
| 140  | 98-9533     | 1    | Shaft-Gear, Idle   |
| 150  | 98-7692     | 3    | Bolt               |



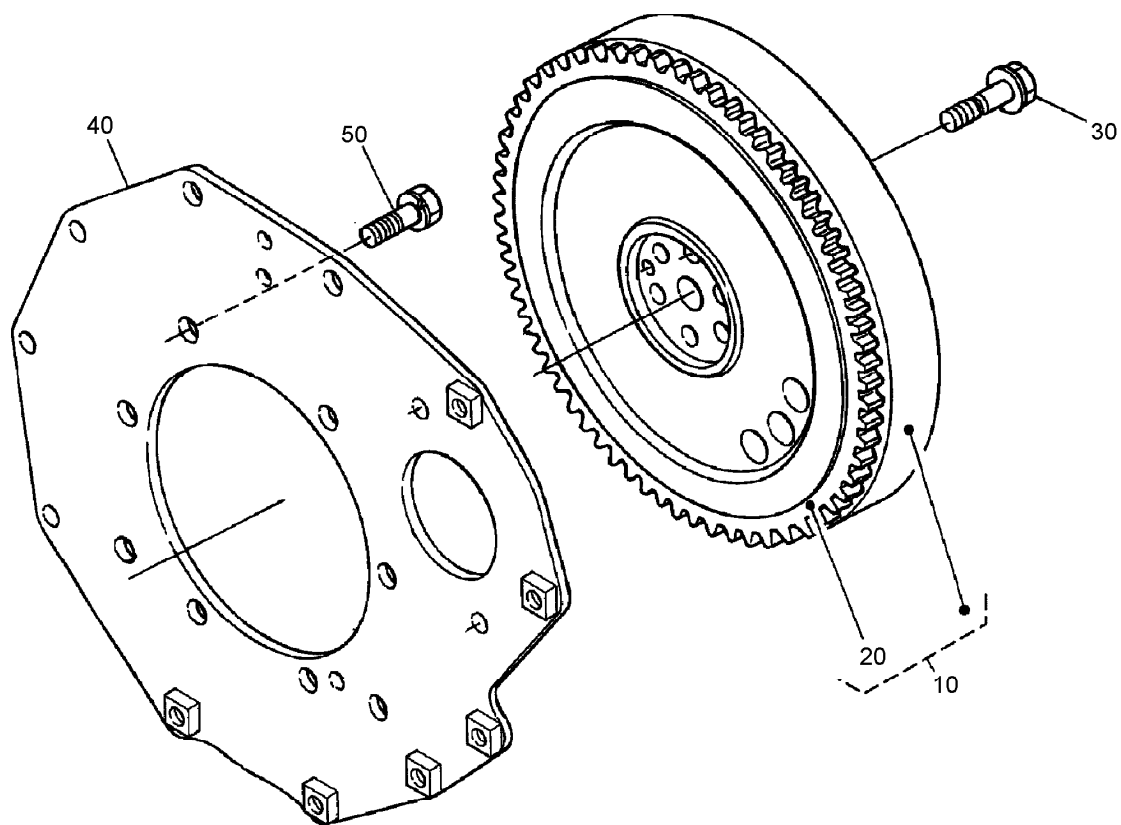
16221-009-10

## Piston and Crankshaft Assembly

| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 98-9550     | 3    | Piston (STD)             |
| 10   | 108-1417    | 3    | Piston (+0.5Mm)          |
| 20   | 98-9551     | 3    | Piston Ring ASM (STD)    |
| 20   | 108-1404    | 3    | Piston Ring ASM (+0.5Mm) |
| 30   | 98-9513     | 3    | Pin-Piston               |
| 40   | 98-9514     | 6    | Circlip-Pin, Piston      |
| 50   | 98-9552     | 3    | Connecting Rod ASM       |
| 60   | 98-9515     | 3    | Bushing-Pin, Piston      |
| 70   | 98-9517     | 6    | Bolt-Rod, Connecting     |
| 80   | 98-9553     | 3    | Bearing-Rod (STD)        |
| 80   | 108-1405    | 3    | Metal-Crankpin (-0.2Mm)  |
| 80   | 108-1406    | 3    | Metal-Crankpin (-0.4Mm)  |
| 90   | 98-9642     | 1    | Crankshaft ASM           |
| 100  | 98-7473     | 3    | Ball                     |
| 110  | 98-9532     | 1    | Gear-Crankshaft          |
| 120  | 98-9666     | 1    | Key                      |
| 130  | 98-9542     | 1    | Gear-Drive, Oil Pump     |
| 140  | 98-9522     | 1    | Sleeve-Crankshaft        |

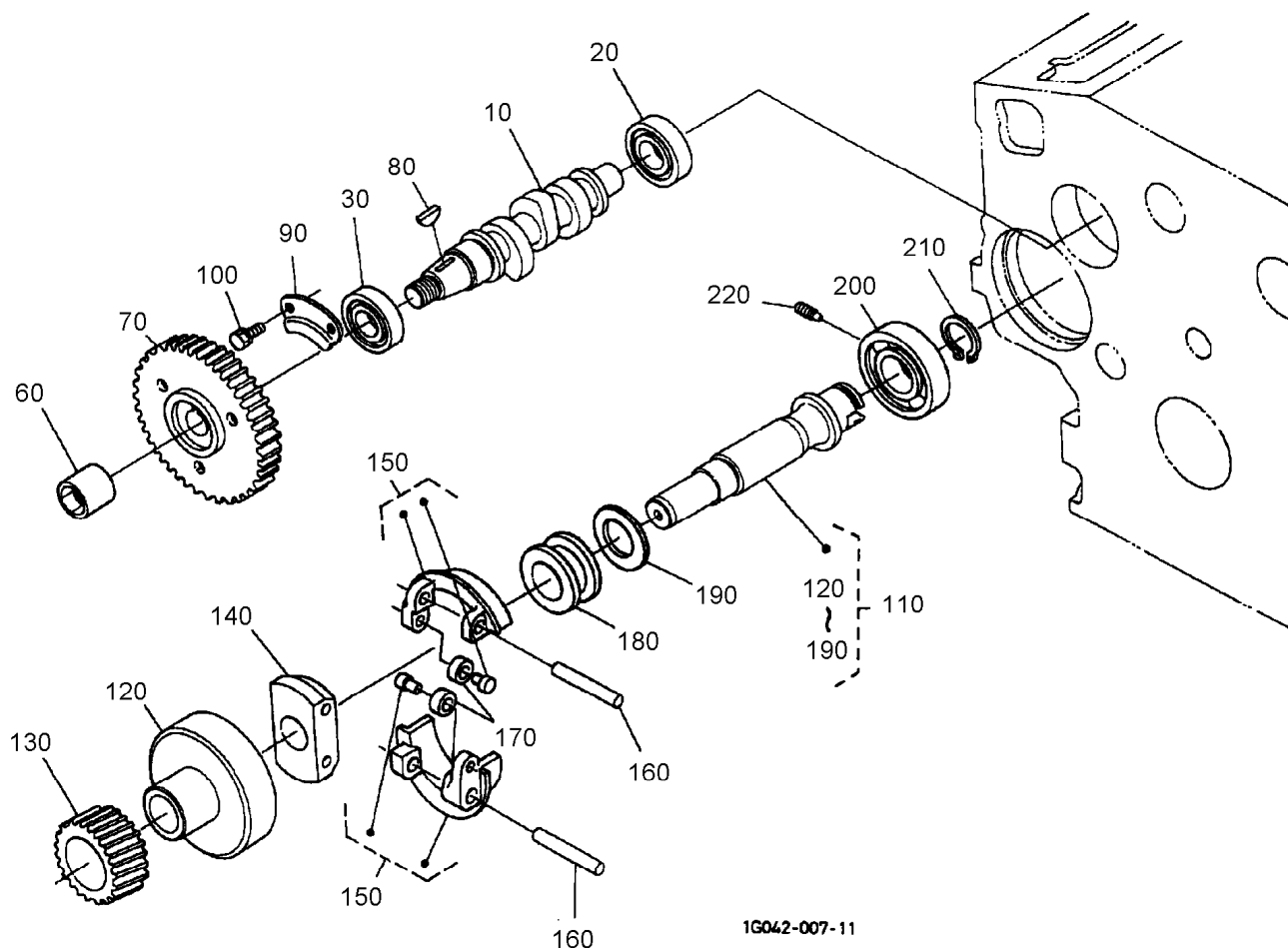
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 150  | 98-9521     | 1    | Collar-Crankshaft        |
| 160  | 105-3783    | 1    | O-Ring                   |
| 170  | 98-9554     | 1    | *obs* Bearing-Main (STD) |
| 170  | 108-1407    | 1    | Metal-Crankpin, -0.2Mm   |
| 170  | 108-1408    | 1    | Metal-Crankpin, -0.4Mm   |
| 180  | 98-9555     | 2    | Bearing-Main (STD)       |
| 180  | 108-1409    | 2    | Metal-Crankpin, -0.2Mm   |
| 180  | 108-1410    | 2    | Metal-Crankpin, -0.4Mm   |
| 190  | 98-9556     | 1    | Bearing-Main (STD)       |
| 190  | 105-3719    | 1    | Metal-Crankshaft (.2Mm)  |
| 190  | 105-3720    | 1    | Metal-Crankshaft (.4Mm)  |
| 200  | 99-6864     | 2    | Metal-Side (STD)         |
| 200  | 99-6865     | 2    | Metal-Side, O/S (0.2Mm)  |
| 200  | 99-6866     | 2    | Metal-Side, O/S (0.4Mm)  |
| 210  | 99-6867     | 2    | Metal-Side (STD)         |
| 210  | 99-6868     | 2    | Metal-Side, O/S (0.2Mm)  |
| 210  | 99-6869     | 2    | Metal-Side, O/S (0.4Mm)  |

● Not serviced separately



## Flywheel Assembly

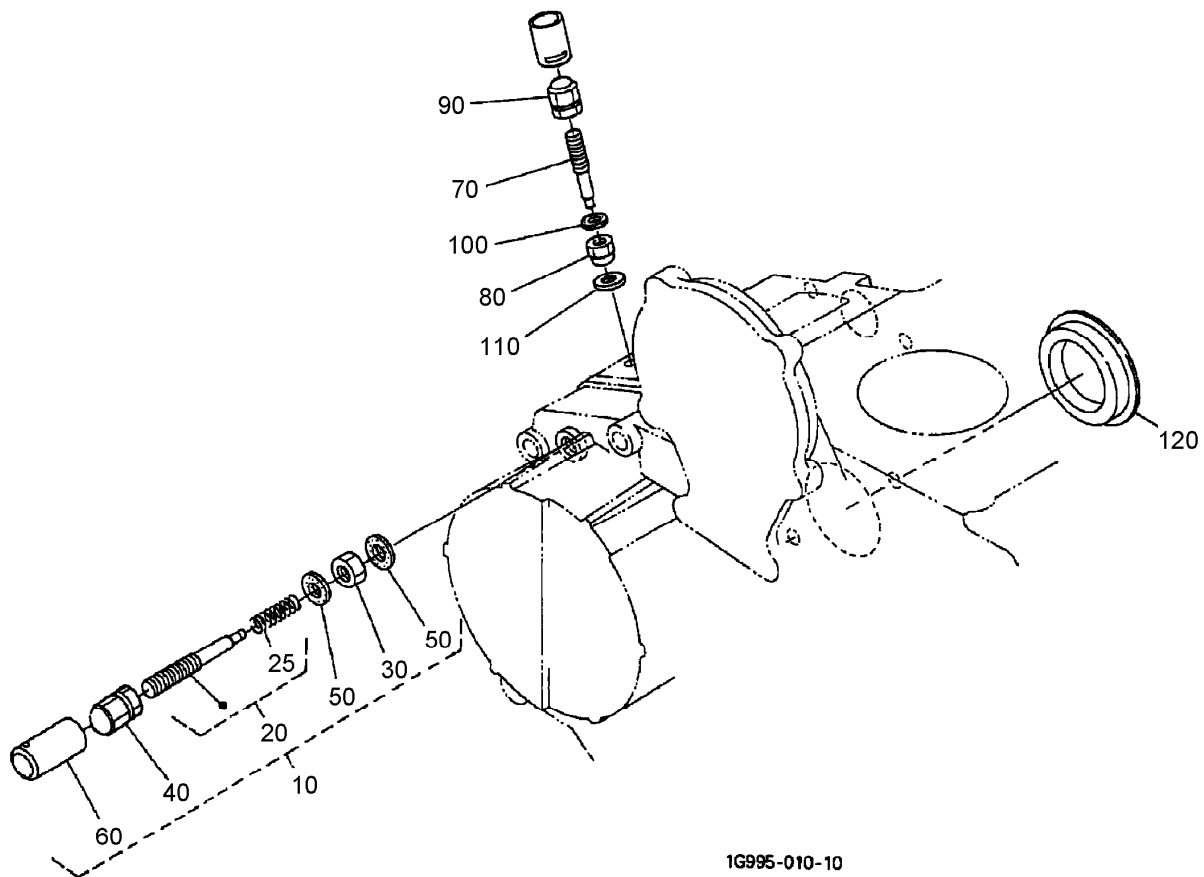
| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 10   | 105-3784    | 1    | Flywheel ASM    |
| 20   | 105-3722    | 1    | Gear-Ring       |
| 30   | 98-9537     | 6    | Bolt-Flywheel   |
| 40   | 98-9486     | 1    | Plate-End, Rear |
| 50   | 98-9392     | 8    | Bolt            |



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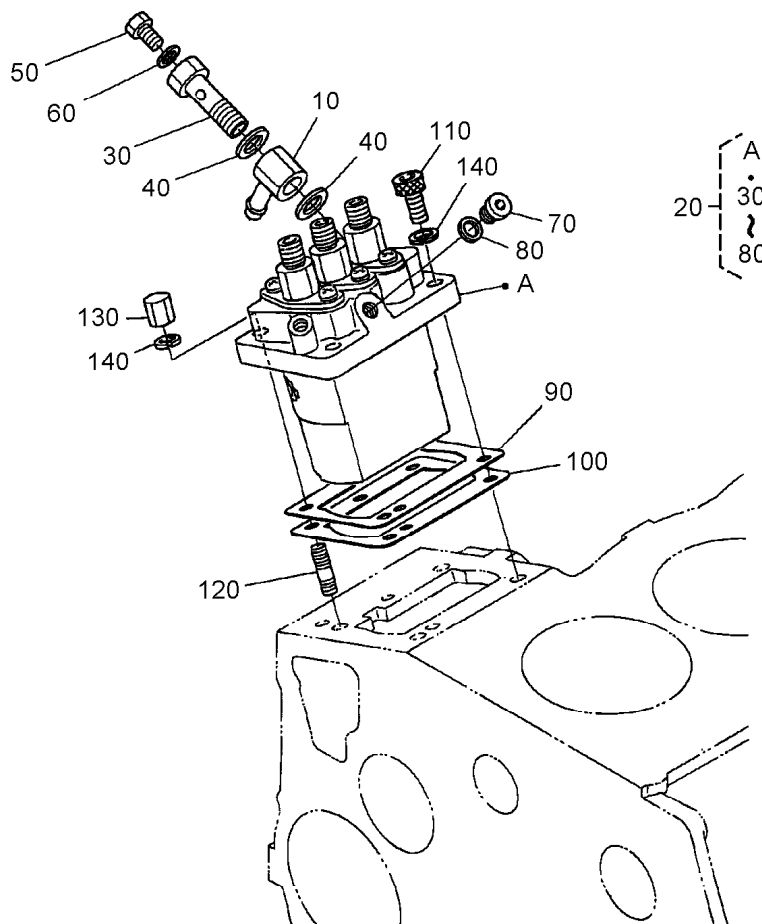
## Fuel Camshaft and Governor Shaft Assembly

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 98-9459     | 1    | Camshaft-Fuel           |
| 20   | 107-9077    | 1    | Bearing-Ball            |
| 30   | 107-9078    | 1    | Bearing-Ball            |
| 60   | 98-9590     | 1    | Nut-Cap                 |
| 70   | 98-9669     | 1    | Gear-Pump, Injection    |
| 80   | 98-9595     | 1    | Key-Woodruff            |
| 90   | 98-9511     | 1    | Stopper-Fuel, Camshaft  |
| 100  | 98-7692     | 2    | Bolt                    |
| 110  | 98-9644     | 1    | Governor Shaft ASM      |
| 120  | 98-9562     | 1    | Holder-Gear, Governor   |
| 130  | 98-9673     | 1    | Gear-Governor           |
| 140  | 98-9561     | 1    | Holder-Weight, Governor |
| 150  | 98-9559     | 2    | Governor Weight ASM     |
| 160  | 98-9560     | 2    | Shaft-Weight, Governor  |
| 170  | 98-9692     | 2    | Roller                  |
| 180  | 98-9563     | 1    | Sleeve-Governor         |
| 190  | 98-9564     | 1    | Washer-Thrust           |
| 200  | 107-9079    | 1    | Bearing-Ball            |
| 210  | 98-9657     | 1    | Circlip-Shaft, Governor |
| 220  | 98-9565     | 1    | Screw-Set               |



## Idle Apparatus Assembly

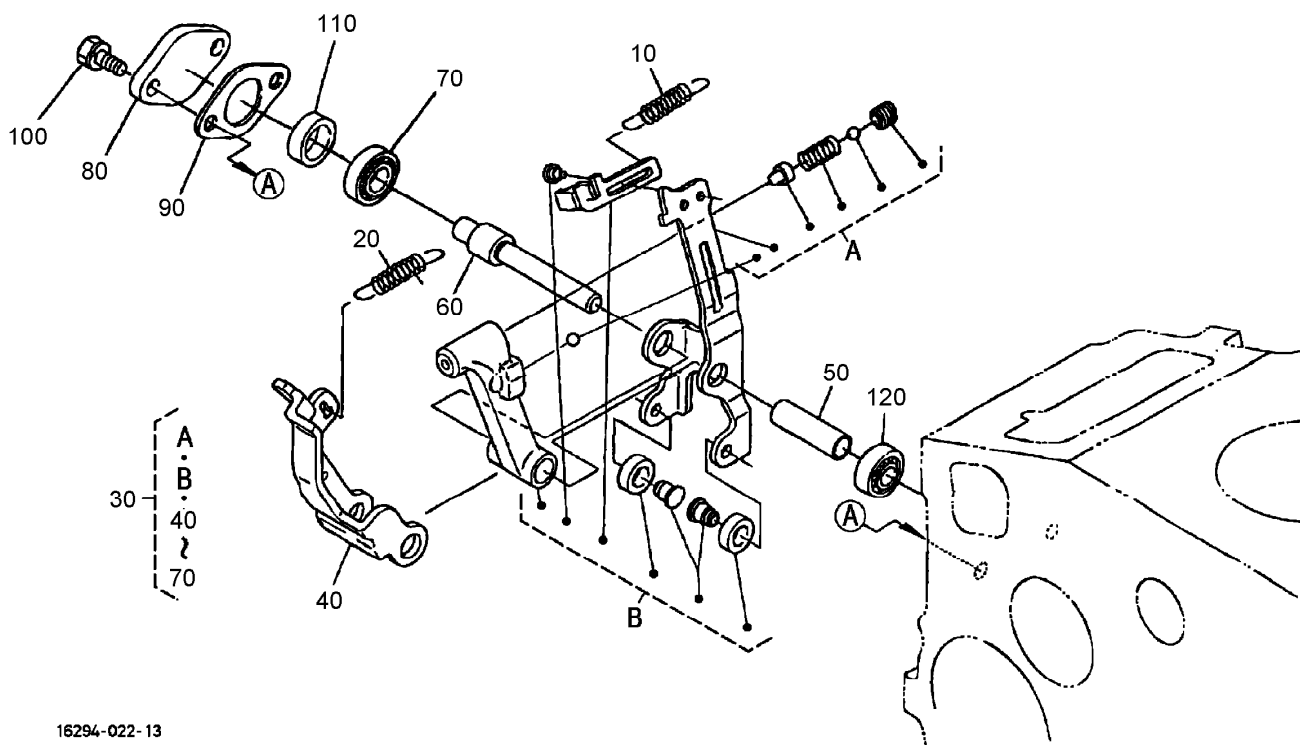
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 105-3726    | 1    | Idle Apparatus ASM |
| 20   | 104-4802    | 1    | Adjusting Bolt ASM |
| 25   | 107-9080    | 1    | Spring             |
| 30   | 98-9439     | 1    | Nut                |
| 40   | 99-8387     | 1    | Nut-Cap            |
| 50   | 98-7654     | 2    | Gasket             |
| 60   | 98-7656     | 1    | Cap                |
| 70   | 98-9557     | 1    | Bolt-Adjusting     |
| 80   | 100-2175    | 1    | Nut-Lock           |
| 90   | 99-8387     | 1    | Nut-Cap            |
| 100  | 98-7654     | 1    | Gasket             |
| 110  | 107-9081    | 1    | Gasket             |
| 120  | 98-9640     | 1    | Cover-Pump         |



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## Injection Pump Assembly

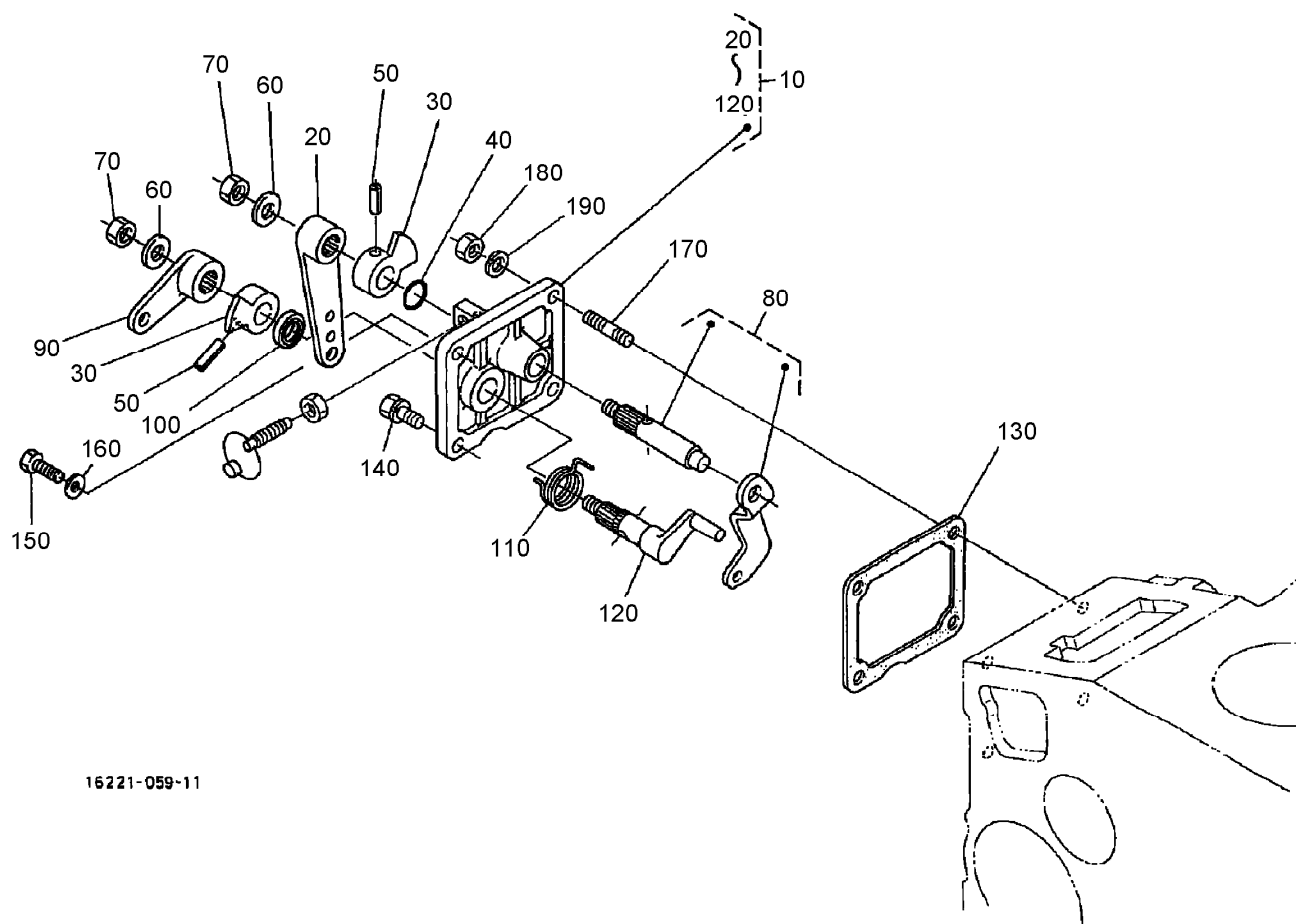
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 98-9596     | 1    | Joint-Eye               |
| 20   | 98-9643     | 1    | Injection Pump ASM      |
| 30   | 98-9464     | 1    | Bolt-Joint              |
| 40   | 98-9445     | 2    | Gasket                  |
| 50   | 98-9430     | 1    | Screw                   |
| 60   | 98-9446     | 1    | Gasket                  |
| 70   | 98-9466     | 1    | Plug                    |
| 80   | 98-9451     | 1    | Gasket                  |
| 90   | 98-9457     | 1    | Shim-Injection (0.25Mm) |
| 90   | 98-9456     | 1    | Shim-Injection (0.20Mm) |
| 100  | 98-9458     | 1    | Shim-Injection (0.30Mm) |
| 110  | 98-9361     | 2    | Bolt-HSH                |
| 120  | 98-9438     | 2    | Stud                    |
| 130  | 98-9440     | 2    | Nut-Cap                 |
| 140  | 98-7699     | 4    | Washer-Spring           |



16294-022-13

## Governor Assembly

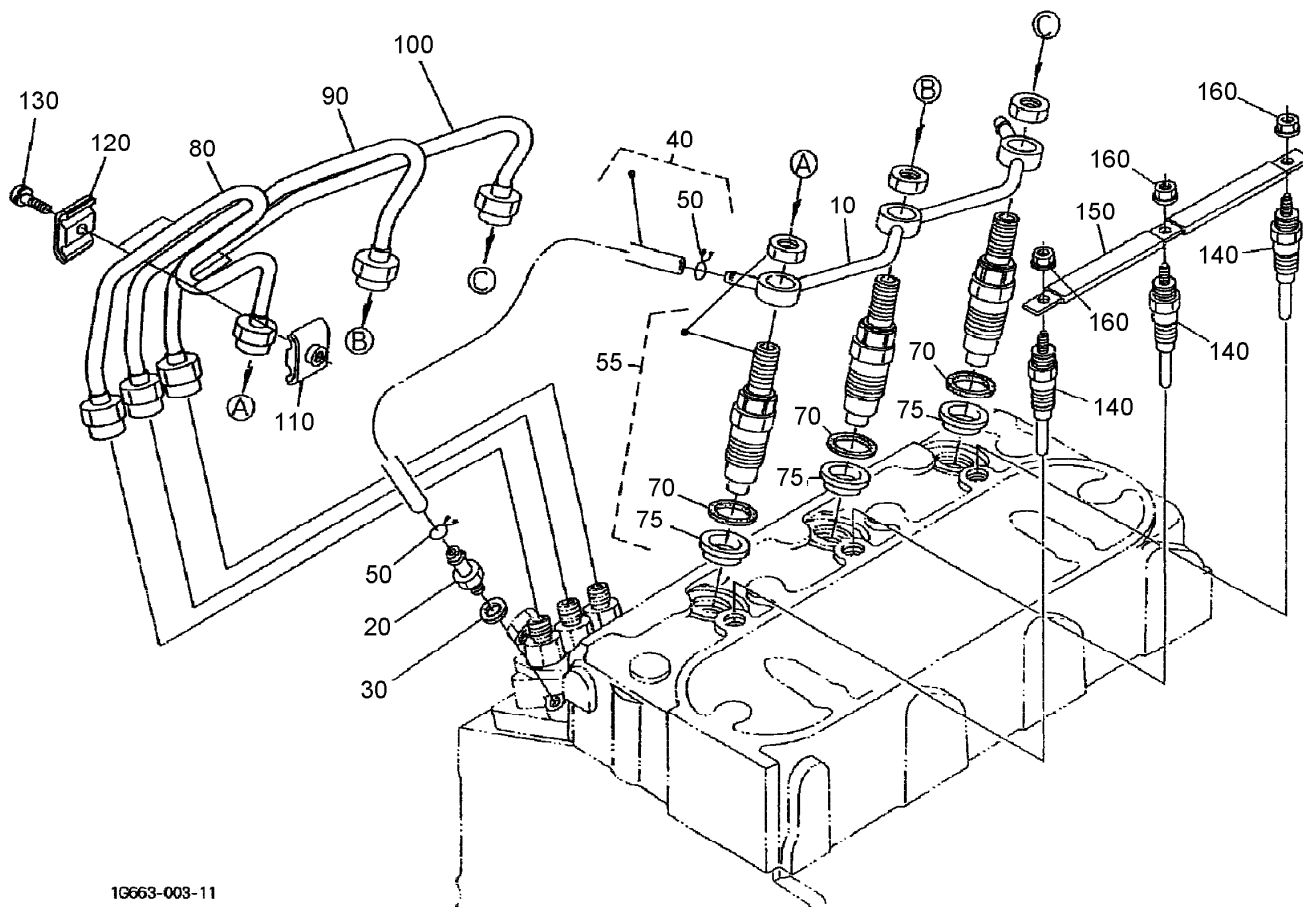
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 105-3786    | 1    | Spring-Start            |
| 20   | 98-9681     | 1    | Spring-Governor         |
| 30   | 107-9082    | 1    | Fork Lever ASM          |
| 40   | 107-9084    | 1    | Lever-Fork              |
| 50   | 107-9085    | 1    | Shaft-Lever, Fork       |
| 60   | 107-9086    | 1    | Shaft-Lever, Fork       |
| 70   | 98-9570     | 1    | Bearing-Miniaturize     |
| 80   | 98-9569     | 1    | Cover-Shaft, Fork Lever |
| 90   | 98-9682     | 1    | Gasket                  |
| 100  | 98-9351     | 2    | Bolt                    |
| 110  | 98-9567     | 1    | Collar                  |
| 120  | 98-9571     | 1    | Bearing-Miniaturize     |



16221-059-11

## Speed Control Plate Assembly

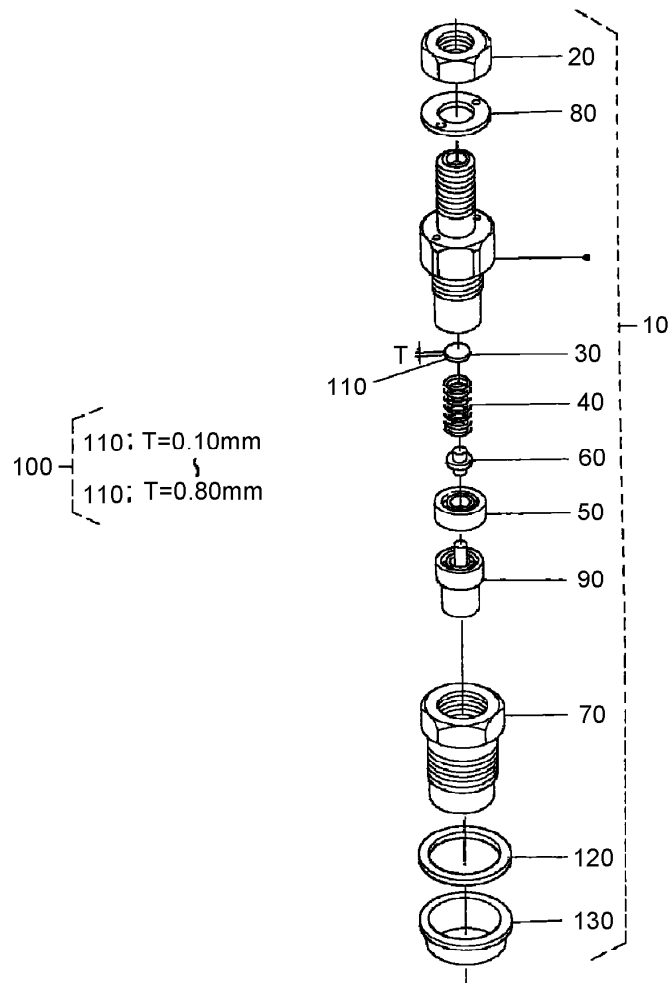
| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 10   | 105-3735    | 1    | Control Plate ASM    |
| 20   | 98-9662     | 1    | Lever-Control, Speed |
| 30   | 98-9572     | 2    | Lever-Control, Speed |
| 40   | 105-3788    | 1    | O-Ring               |
| 50   | 98-7602     | 2    | Pin-Spring           |
| 60   | 98-9594     | 2    | Washer-Plain         |
| 70   | 98-9589     | 2    | Nut                  |
| 80   | 98-9658     | 1    | Governor Lever ASM   |
| 90   | 98-9663     | 1    | Lever-Stop, Engine   |
| 100  | 98-7601     | 1    | Seal-Oil             |
| 110  | 98-9472     | 1    | Spring-Return        |
| 120  | 98-9664     | 1    | Shaft-Lever, Stop    |
| 130  | 98-9637     | 1    | Gasket               |
| 140  | 98-7692     | 1    | Bolt                 |
| 150  | 99-8348     | 1    | Bolt                 |
| 160  | 98-7654     | 1    | Gasket               |
| 170  | 105-3710    | 2    | Stud                 |
| 180  | 98-7572     | 2    | Nut                  |
| 190  | 98-7699     | 2    | Washer-Spring        |



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## Nozzle Holder and Glow Plug Assembly

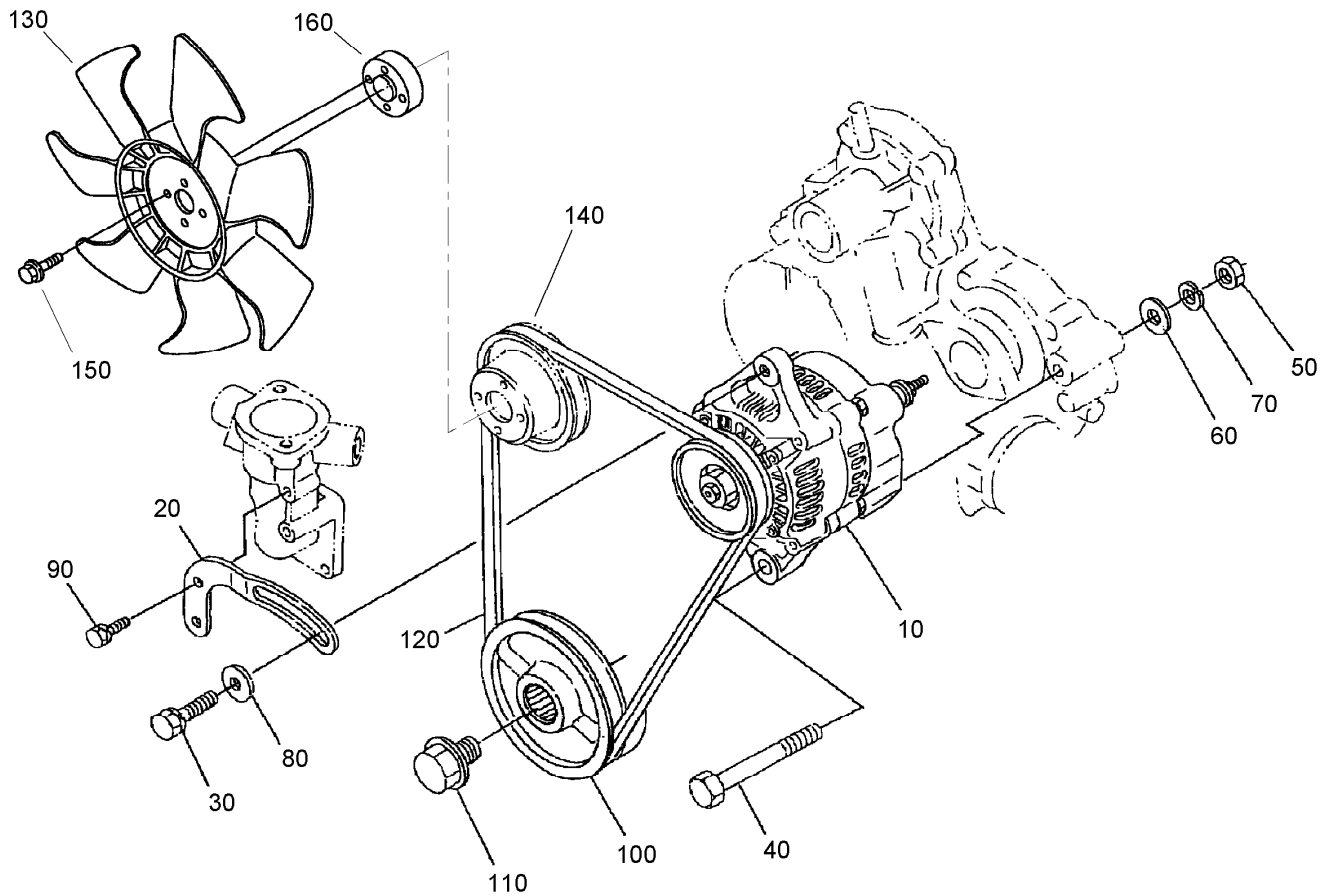
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 10   | 98-9621     | 1    | Overflow Pipe ASM  |
| 20   | 98-9431     | 1    | Screw-Bleeder, Air |
| 30   | 98-7654     | 1    | Gasket             |
| 40   | 98-9624     | 1    | Overflow Pipe ASM  |
| 50   | 98-7672     | 2    | Clip-Pipe          |
| 55   | 108-2866    | 3    | Nozzle Holder Kit  |
| 70   | 98-7676     | 3    | Gasket             |
| 75   | 98-7677     | 3    | Seal-Heat          |
| 80   | 98-9622     | 1    | Pipe-Injection     |
| 90   | 98-9654     | 1    | Pipe-Injection     |
| 100  | 98-9655     | 1    | Pipe-Injection     |
| 110  | 98-7682     | 2    | Clamp-Pipe         |
| 120  | 98-7683     | 2    | Clamp-Pipe         |
| 130  | 98-7684     | 2    | Screw (W/Washer)   |
| 140  | 98-9623     | 3    | Plug-Glow          |
| 150  | 98-9631     | 1    | Cord-Plug, Glow    |
| 160  | 99-8377     | 3    | Nut-Flange         |



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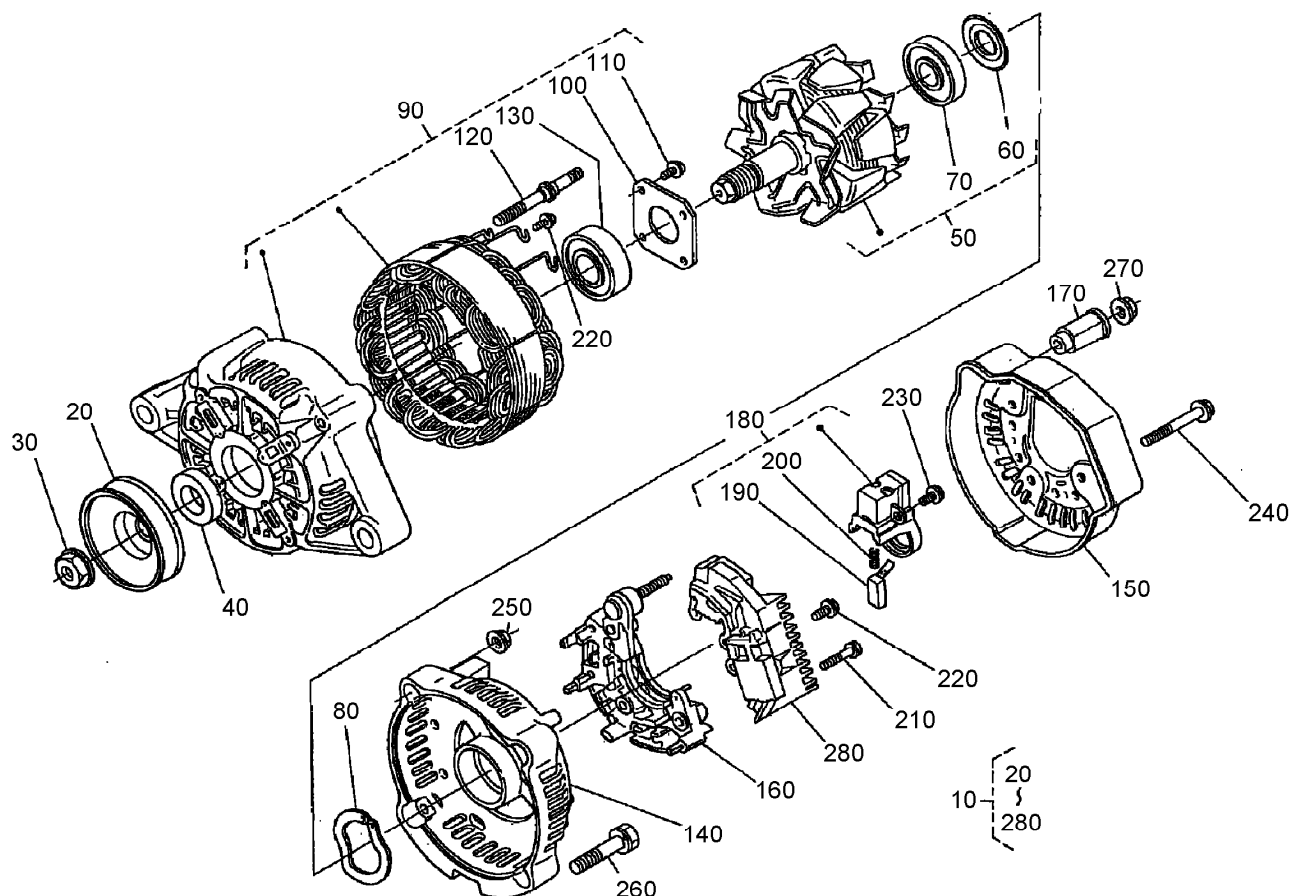
## Nozzle Holder Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 10   | 108-2866    | 3    | Nozzle Holder Kit      |
| 20   | 99-8301     | 3    | Nut                    |
| 30   | 99-8302     | 3    | Washer-Adjusting       |
| 40   | 99-8303     | 3    | Spring-Nozzle          |
| 50   | 99-8304     | 3    | Spacer-Distance        |
| 60   | 99-8305     | 3    | Rod-Push               |
| 70   | 99-8306     | 3    | Nut-Nozzle             |
| 80   | 99-8307     | 3    | Washer-Plain           |
| 90   | 107-7826    | 3    | Piece-Nozzle           |
| 100  | 99-8309     | 3    | Adjusting Washer ASM   |
| 110  | 99-8310     | 3    | Washer-Adjust (0.10Mm) |
| 110  | 99-8311     | 3    | Washer-Adjust (0.20Mm) |
| 110  | 99-8312     | 3    | Washer-Adjust (0.30Mm) |
| 110  | 99-8313     | 3    | Washer-Adjust (0.40Mm) |
| 110  | 99-8314     | 3    | Washer-Adjust (0.50Mm) |
| 110  | 99-8315     | 3    | Washer-Adjust (0.52Mm) |
| 110  | 99-8316     | 3    | Washer-Adjust (0.54Mm) |
| 110  | 99-8317     | 3    | Washer-Adjust (0.56Mm) |
| 110  | 99-8318     | 3    | Washer-Adjust (0.58Mm) |
| 110  | 99-8319     | 3    | Washer-Adjust (0.80Mm) |
| 120  | 98-7676     | 3    | Gasket                 |
| 130  | 98-7677     | 3    | Seal-Heat              |



## Alternator and Pulley Assembly

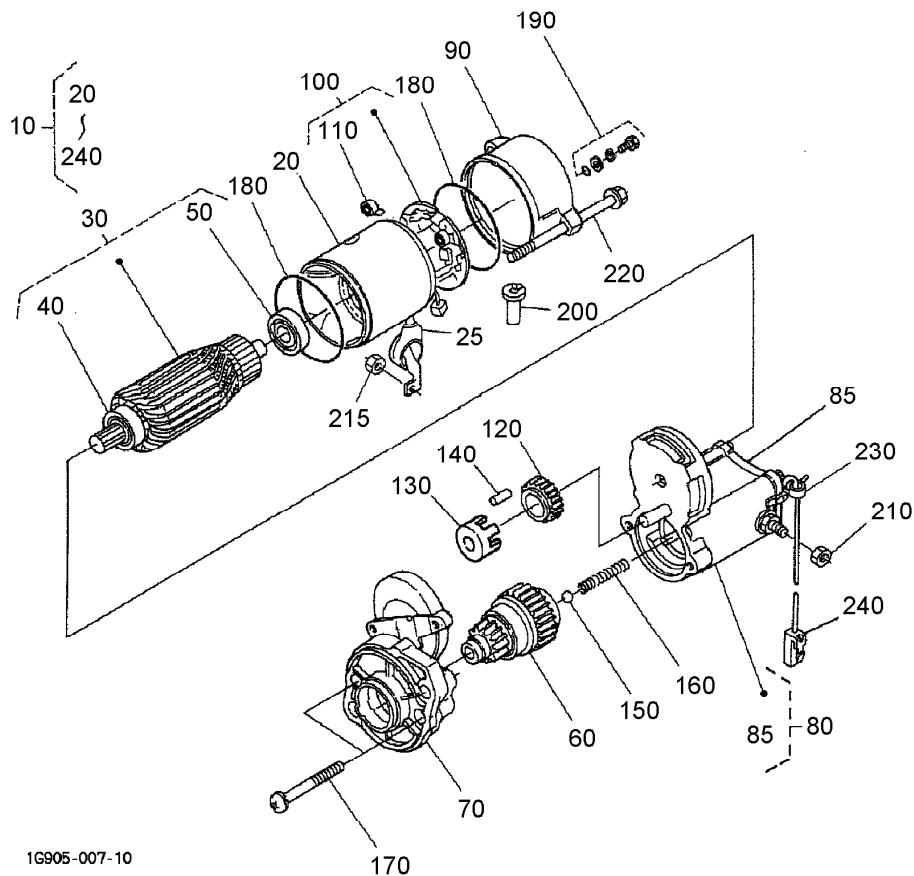
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 10   | 98-9474     | 1    | Alternator ASM    |
| 20   | 98-9573     | 1    | Stay-Dynamo       |
| 30   | 98-7697     | 1    | Bolt              |
| 40   | 98-9360     | 1    | Bolt              |
| 50   | 98-7737     | 1    | Nut               |
| 60   | 98-9366     | 1    | Washer-Plain      |
| 70   | 98-7738     | 1    | Washer-Spring     |
| 80   | 100-9233    | 1    | Washer-Plain      |
| 90   | 98-7692     | 1    | Bolt              |
| 100  | 99-3456     | 1    | Pulley-Drive, Fan |
| 110  | 98-9585     | 1    | Bolt              |
| 120  | 98-9676     | 1    | V-Belt            |
| 130  | 104-4246    | 1    | Fan-Engine        |
| 140  | 98-9584     | 1    | Pulley-Fan        |
| 150  | 108-2873    | 4    | Bolt-Flange       |
| 160  | 108-2872    | 1    | Collar-Fan        |



## Alternator (Component Part) Assembly

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 10   | 98-9474     | 1    | Alternator ASM      |
| 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   | 107-0139    | 1    | Drive End Frame ASM |
| 100  | 98-7715     | 1    | Plate-Retainer      |
| 110  | 98-7716     | 4    | Screw-Head, Round   |
| 120  | 98-7717     | 2    | Bolt-Through        |
| 130  | 107-0137    | 1    | Bearing-Ball        |
| 140  | 107-9087    | 1    | Frame-End           |

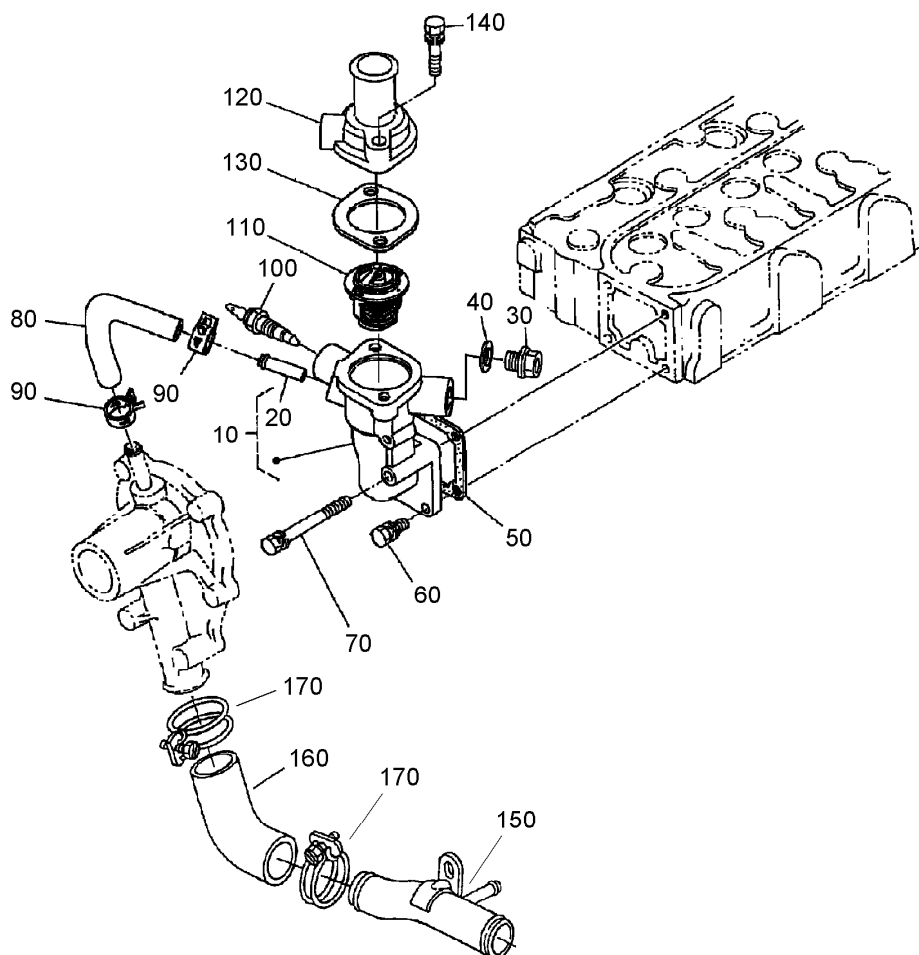
| Ref. | Part Number | Qty. | Description        |
|------|-------------|------|--------------------|
| 150  | 107-0140    | 1    | Cover-End          |
| 160  | 98-9476     | 1    | Rectifier ASM      |
| 170  | 98-7722     | 1    | Bushing-Insulation |
| 180  | 107-0141    | 1    | Brush Holder ASM   |
| 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  | 107-9088    | 1    | Regulator ASM      |



## Starter (Component Part) Assembly No. 98-9705

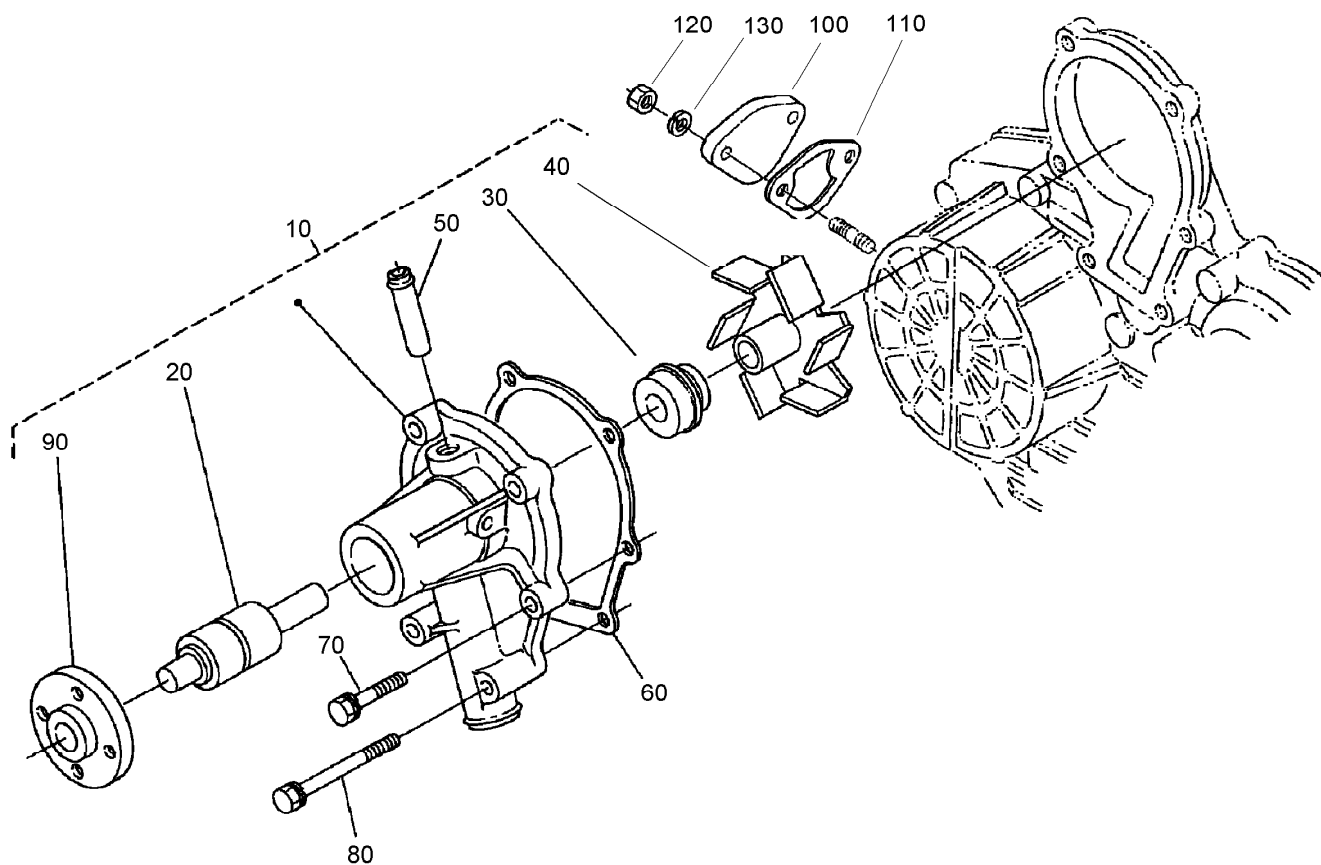
| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 10   | 98-9705     | 1    | Starter ASM          |
| 20   | 104-8608    | 1    | Yoke ASM             |
| 25   | 99-8375     | 1    | Cover                |
| 30   | 98-7742     | 1    | Armature ASM         |
| 40   | 98-7744     | 1    | Bearing              |
| 50   | 98-7743     | 1    | Bearing              |
| 60   | 99-8373     | 1    | Clutch-Running, Over |
| 70   | 99-8374     | 1    | Frame-End, Drive     |
| 80   | 105-3746    | 1    | Magnetic Switch ASM  |
| 85   | 105-2886    | 1    | Cover ASM            |
| 90   | 98-7748     | 1    | Frame-End            |
| 100  | 98-7749     | 1    | Brush Holder ASM     |
| 110  | 98-7750     | 4    | Spring-Brush         |
| 120  | 98-7751     | 1    | Gear                 |

| Ref. | Part Number | Qty. | Description         |
|------|-------------|------|---------------------|
| 130  | 98-7752     | 1    | Retainer            |
| 140  | 98-7753     | 5    | Roller              |
| 150  | 98-7755     | 1    | Ball                |
| 160  | 98-7754     | 1    | Spring              |
| 170  | 98-7756     | 2    | Bolt                |
| 180  | 98-7757     | 2    | O-Ring              |
| 190  | 98-7758     | 2    | Bolt ASM            |
| 200  | 98-7759     | 1    | Pipe-Drain          |
| 210  | 99-8371     | 1    | Nut-Hex             |
| 215  | 99-8376     | 1    | Nut-Hex             |
| 220  | 100-9240    | 2    | Bolt                |
| 230  | 98-9712     | 1    | Band-Cover          |
| 240  | 98-9711     | 1    | Cord-Solenoid, Stop |



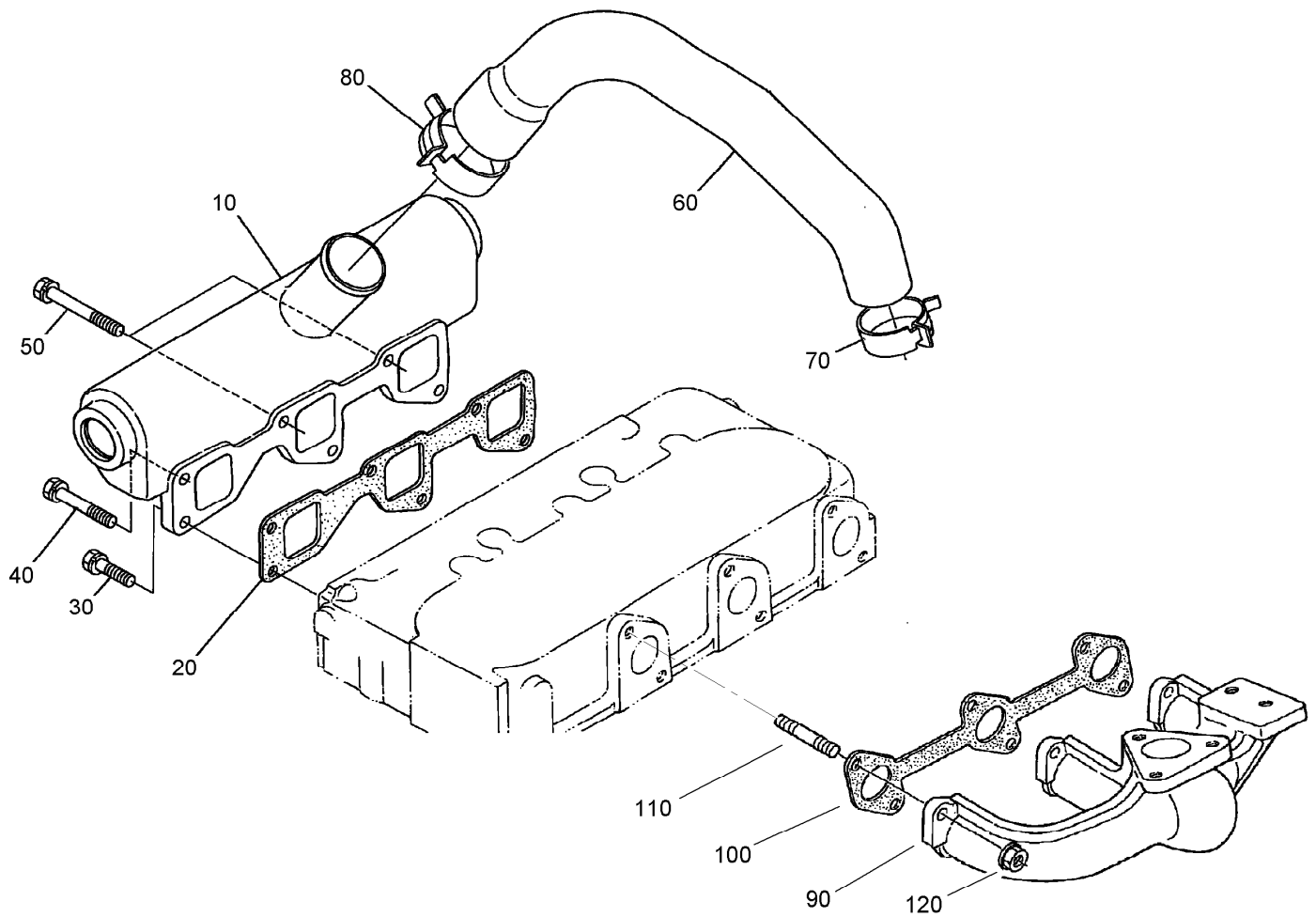
## Water Flange and Thermostat Assembly

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   |
|-------------|--------------------|-------------|----------------------|
| 10          | 98-9713            | 1           | Water Flange ASM     |
| 20          | 98-9580            | 1           | Pipe-Return, Water   |
| 30          | 105-3747           | 1           | Plug                 |
| 40          | 99-3583            | 1           | Gasket               |
| 50          | 98-9638            | 1           | Gasket-Flange, Water |
| 60          | 98-7692            | 3           | Bolt                 |
| 70          | 98-9356            | 1           | Bolt                 |
| 80          | 98-9578            | 1           | Pipe-Return, Water   |
| 90          | 98-9579            | 2           | Band-Pipe            |
| 100         | 98-9719            | 1           | Thermoswitch         |
| 110         | 98-7778            | 1           | Thermostat ASM       |
| 120         | 104-4804           | 1           | Outlet-Water         |
| 130         | 105-3748           | 1           | Gasket-Thermostat    |
| 140         | 98-7777            | 2           | Bolt                 |
| 150         | 99-8379            | 1           | Pipe-Water           |
| 160         | 107-9091           | 1           | Pipe-Water           |
| 170         | 98-9717            | 2           | Clamp                |



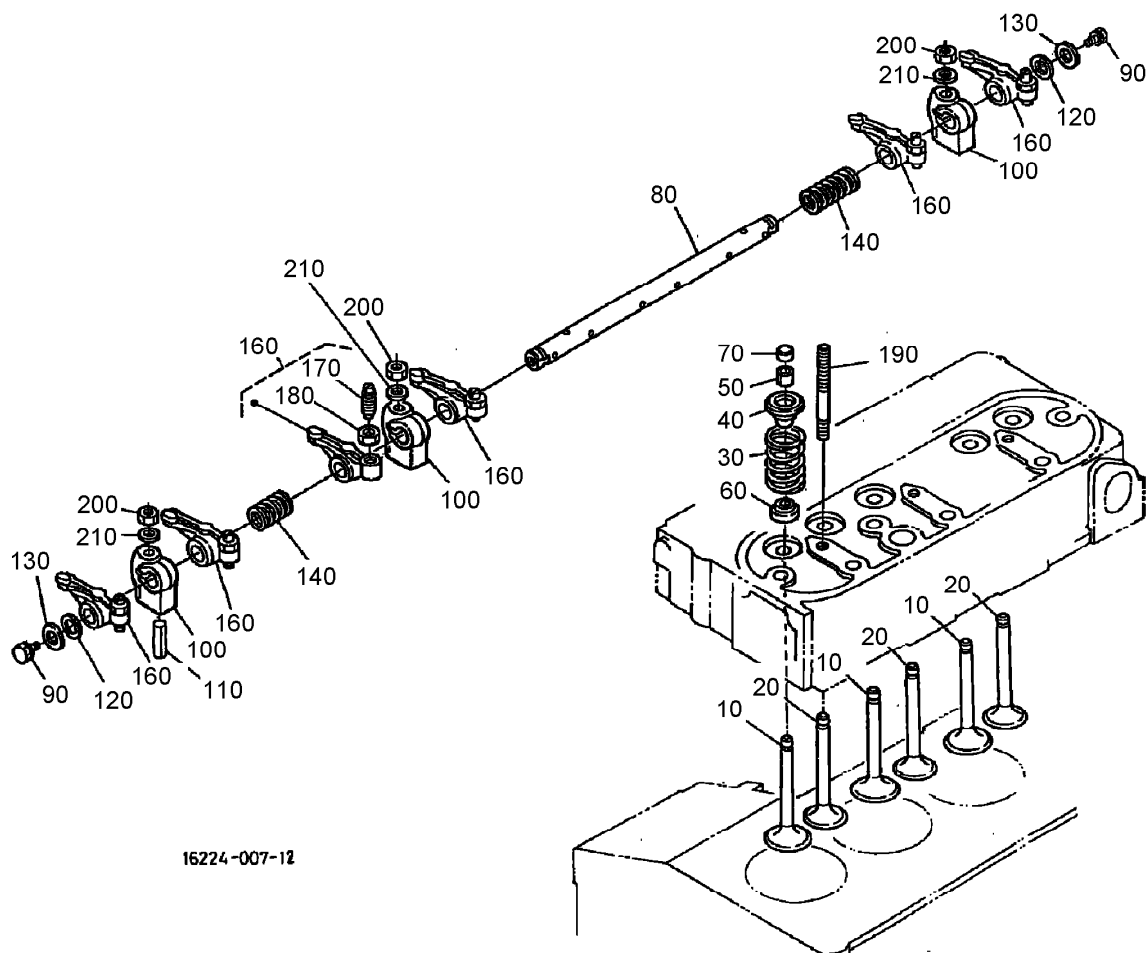
## Water Pump Assembly

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   |
|-------------|--------------------|-------------|----------------------|
| 10          | 107-9089           | 1           | Water Pump ASM       |
| 20          | 99-3517            | 1           | Bearing-Pump, Water  |
| 30          | 105-3750           | 1           | Mechanical Seal ASM  |
| 40          | 99-3519            | 1           | Impeller-Pump, Water |
| 50          | 98-9577            | 1           | Pipe-Return, Water   |
| 60          | 99-3454            | 1           | Gasket-Pump, Water   |
| 70          | 98-9353            | 4           | Bolt                 |
| 80          | 98-9357            | 2           | Bolt                 |
| 90          | 99-3516            | 1           | Flange-Pump, Water   |
| 100         | 99-3514            | 1           | Cover                |
| 110         | 98-9636            | 1           | Gasket-Pump, Fuel    |
| 120         | 98-7572            | 2           | Nut                  |
| 130         | 98-7699            | 2           | Washer-Spring        |



## Inlet and Exhaust Manifold Assembly

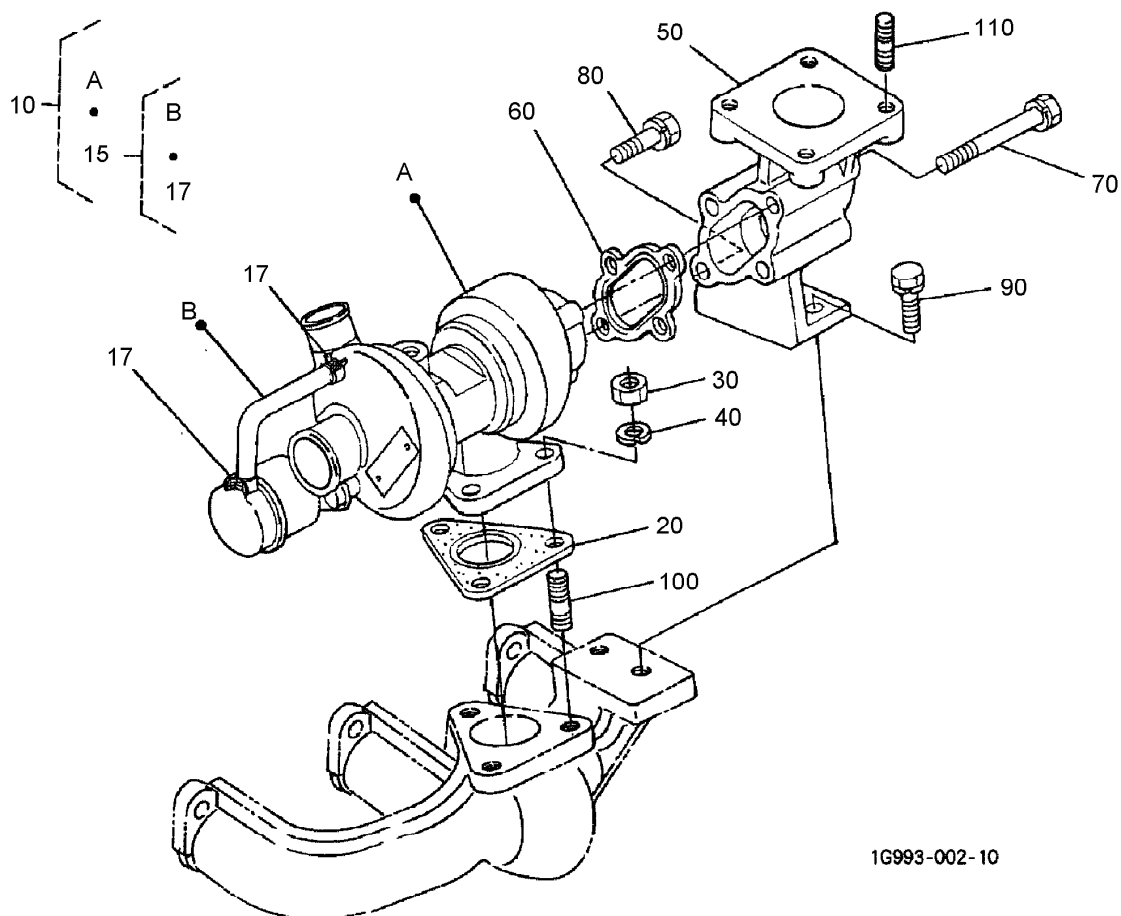
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 99-8321     | 1    | Manifold-Inlet          |
| 20   | 99-8329     | 1    | Gasket-Manifold, Intake |
| 30   | 98-7568     | 3    | Bolt                    |
| 40   | 107-9073    | 1    | Bolt                    |
| 50   | 99-8320     | 2    | Bolt                    |
| 60   | 99-8323     | 1    | Hose-Inlet              |
| 70   | 99-8324     | 1    | Band-Pipe               |
| 80   | 99-8322     | 1    | Band-Pipe               |
| 90   | 108-1411    | 1    | Manifold-Exhaust        |
| 100  | 98-9610     | 1    | Gasket                  |
| 110  | 98-9588     | 6    | Stud                    |
| 120  | 98-9665     | 6    | Nut                     |



16224-007-12

## Valve Rocker Arm Assembly

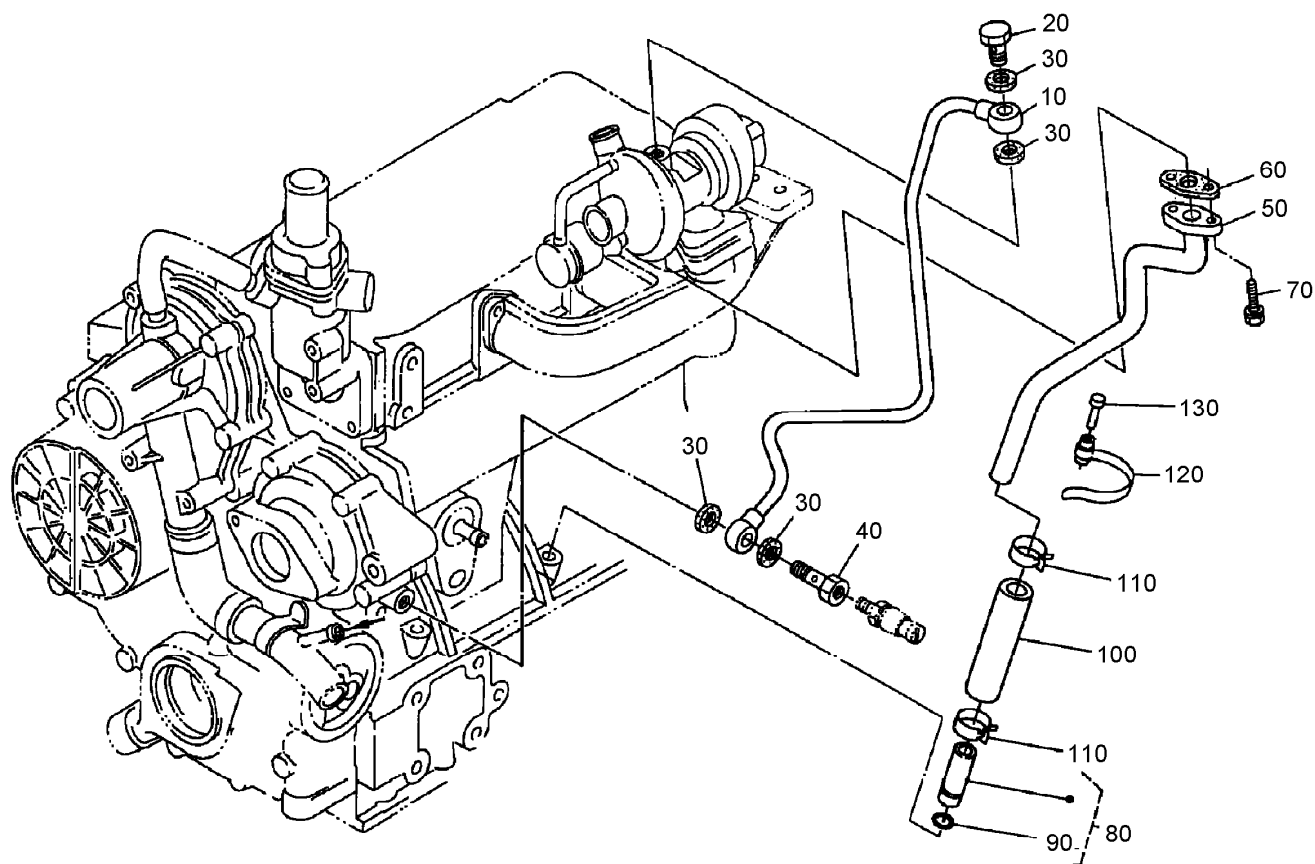
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 98-9494     | 3    | Valve-Inlet              |
| 20   | 98-9625     | 3    | Valve-Exhaust            |
| 30   | 98-9626     | 6    | Spring-Valve             |
| 40   | 107-9092    | 6    | Retainer-Spring          |
| 50   | 98-9390     | 6    | Collet-Spring, Valve     |
| 60   | 99-8385     | 6    | Seal-Stem, Valve         |
| 70   | 98-9497     | 6    | Cap-Valve                |
| 80   | 105-3790    | 1    | R-Arm Shaft ASM          |
| 90   | 100-9265    | 2    | Bolt                     |
| 100  | 98-9505     | 3    | Bracket-Arm, Rocker      |
| 110  | 105-3758    | 1    | Pin-Spring               |
| 120  | 98-9507     | 2    | Washer-Shaft, Rocker Arm |
| 130  | 100-1927    | 2    | Washer-Plain             |
| 140  | 98-9504     | 2    | Spring-Arm, Rocker       |
| 160  | 98-9501     | 6    | Rocker Arm ASM           |
| 170  | 98-9502     | 6    | Screw-Adjusting          |
| 180  | 98-9503     | 6    | Nut                      |
| 190  | 98-9506     | 3    | Stud                     |
| 200  | 98-9393     | 3    | Nut                      |
| 210  | 98-9385     | 3    | Washer-Flat              |



1G993-002-10

## Turbo Charger Assembly

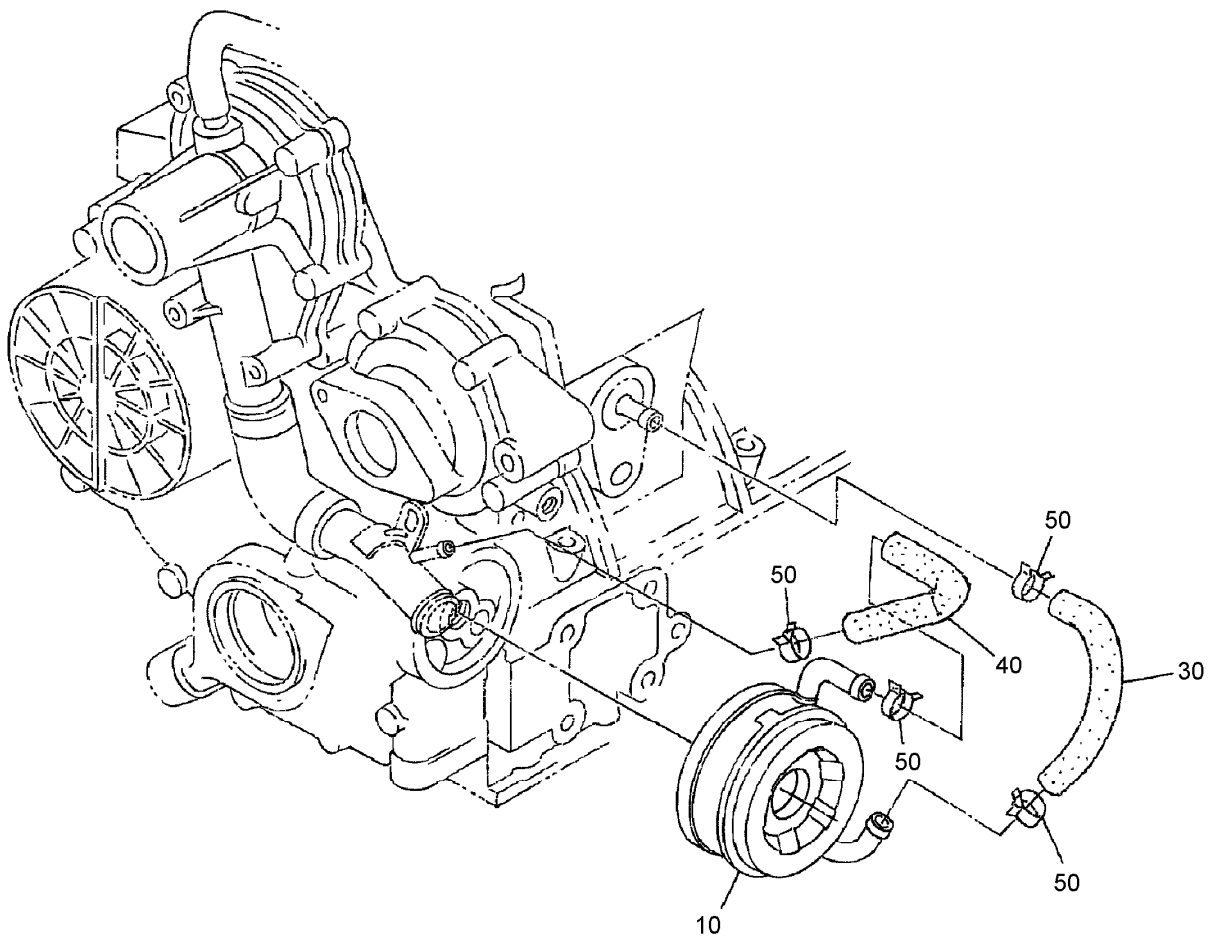
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 10   | 108-1412    | 1    | Turbo Charger ASM |
| 15   | 108-1413    | 1    | Hose ASM          |
| 17   | 108-1414    | 2    | Clamp-Hose        |
| 20   | 105-3767    | 1    | Gasket            |
| 30   | 98-7534     | 3    | Nut               |
| 40   | 98-7535     | 3    | Washer-Spring     |
| 50   | 99-8335     | 1    | Flange-Muffler    |
| 60   | 105-3768    | 1    | Gasket            |
| 70   | 105-2894    | 3    | *obs* Bolt        |
| 80   | 105-2895    | 1    | Bolt              |
| 90   | 98-7610     | 2    | Bolt              |
| 100  | 99-8341     | 3    | Stud              |
| 110  | 98-7769     | 4    | Stud              |



W535-016-10

## Turbo Charger Oil Pipe Assembly

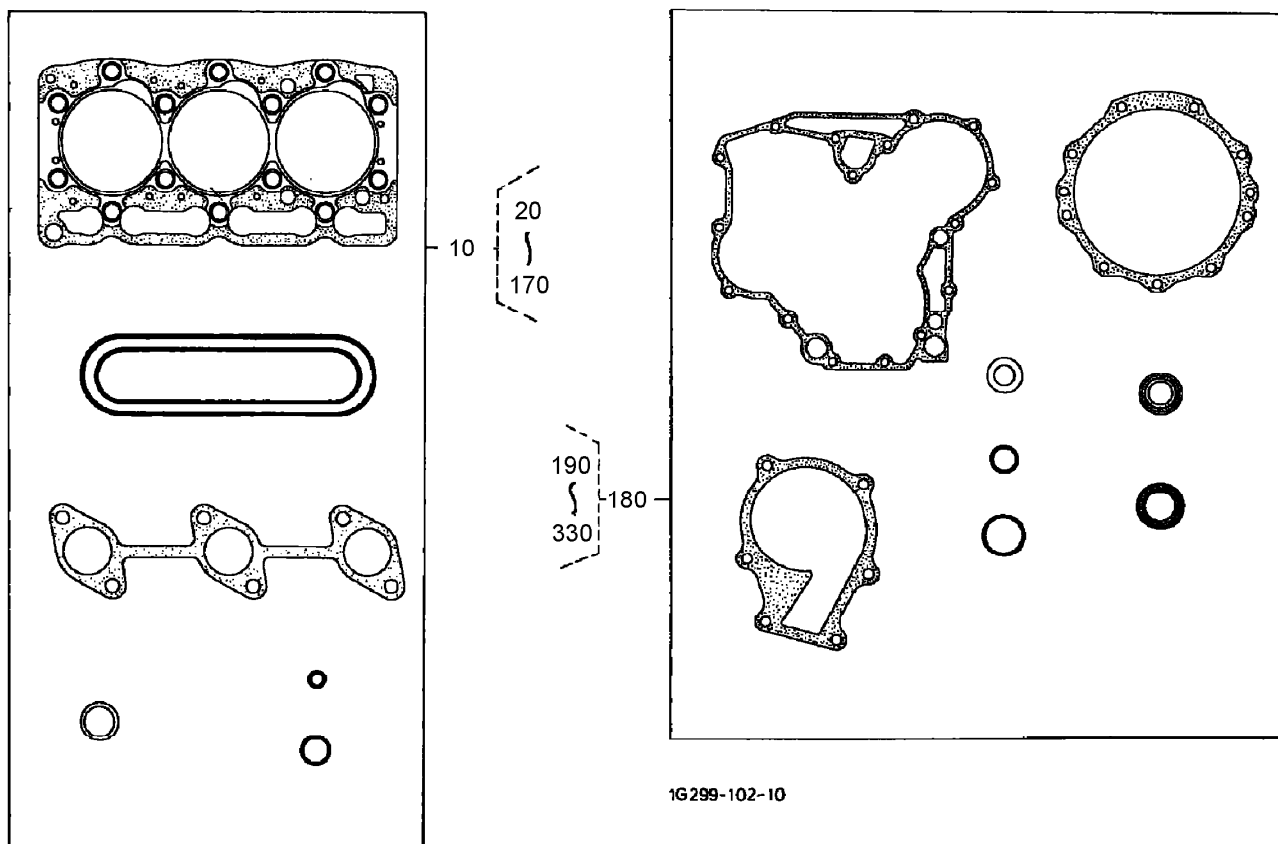
| Ref. | Part Number | Qty. | Description              |
|------|-------------|------|--------------------------|
| 10   | 98-9419     | 1    | Oil Pipe ASM             |
| 20   | 98-9418     | 1    | Bolt-Joint, Eye          |
| 30   | 99-8346     | 4    | Gasket                   |
| 40   | 98-9417     | 1    | Bolt-Joint, Eye          |
| 50   | 98-9461     | 1    | Pipe Line ASM            |
| 60   | 98-9435     | 1    | Gasket-Oil Return, Turbo |
| 70   | 98-7605     | 2    | Bolt                     |
| 80   | 99-8383     | 1    | Oil Pipe ASM             |
| 90   | 98-9374     | 1    | *obs* O-Ring             |
| 100  | 98-9721     | 1    | Pipe-Oil                 |
| 110  | 98-9714     | 2    | Clamp-Hose               |
| 120  | 98-9601     | 1    | Clamp-Pipe               |
| 130  | 98-9591     | 1    | Pin-Band                 |



1G643-006-10

## Oil Cooler Assembly

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 10          | 104-5158           | 1           | Oil Cooler ASM     |
| 30          | 98-9724            | 1           | Pipe-Cooler, Oil   |
| 40          | 98-9578            | 1           | Pipe-Return, Water |
| 50          | 98-9579            | 4           | Band-Pipe          |

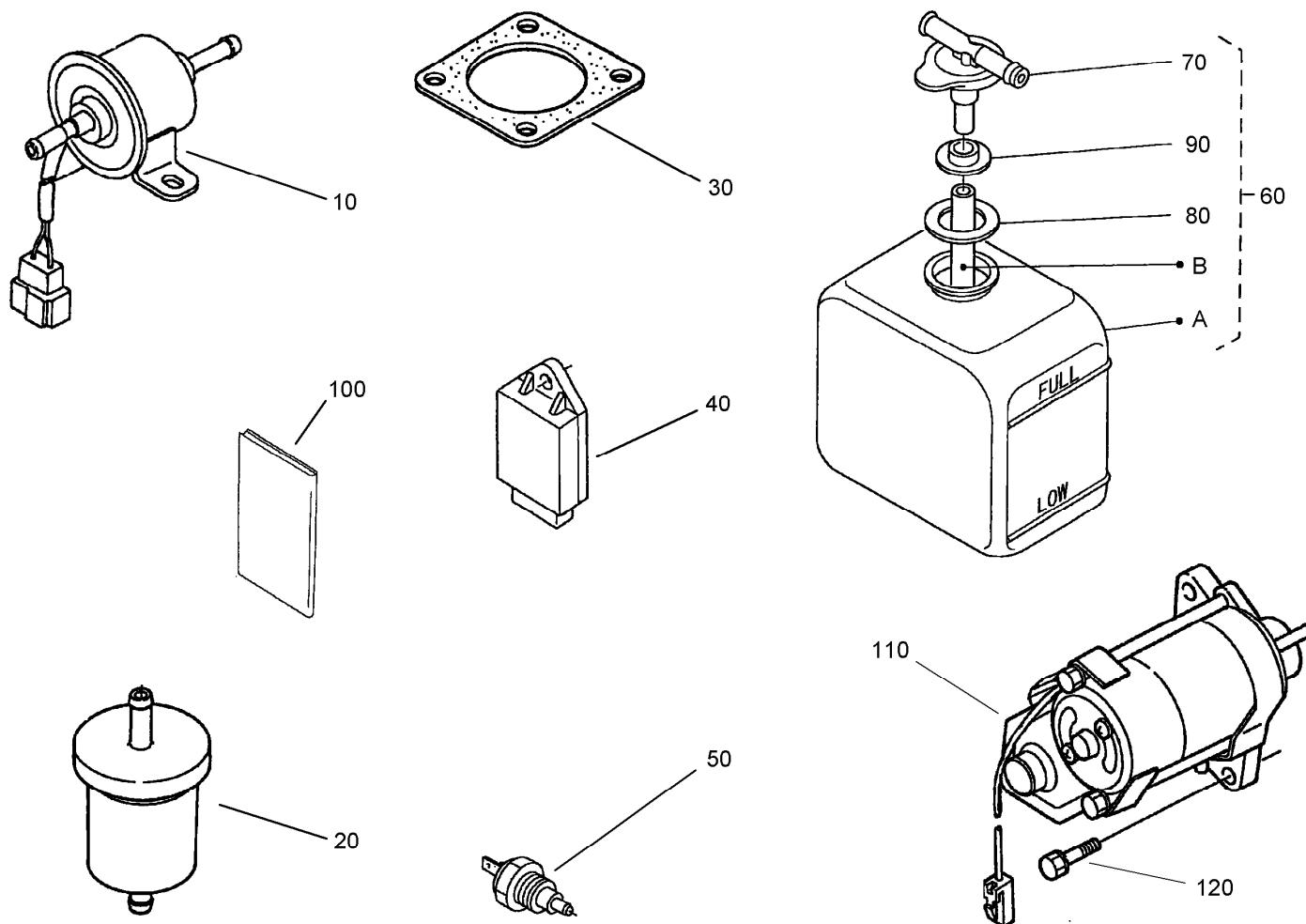


## Gasket Kit Assembly

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 10   | 108-1415    | 1    | Upper Gasket Kit           |
| 20   | 98-7538     | 1    | Cap-Sealing ●              |
| 30   | 105-3780    | 1    | Gasket-Head, Cylinder ●    |
| 40   | 99-8329     | 1    | Gasket-Manifold, Intake ●  |
| 50   | 105-3767    | 1    | Gasket ●                   |
| 60   | 105-3768    | 1    | Gasket ●                   |
| 70   | 98-9610     | 1    | Gasket ●                   |
| 80   | 99-8385     | 6    | Seal-Stem, Valve ●         |
| 90   | 98-9615     | 1    | Gasket-Cover, Head ●       |
| 100  | 98-9454     | 3    | Gasket ●                   |
| 110  | 99-3446     | 1    | O-Ring ●                   |
| 120  | 99-8346     | 4    | Gasket ●                   |
| 130  | 98-9435     | 1    | Gasket-Oil Return, Turbo ● |
| 140  | 98-9374     | 1    | *obs* O-Ring ●             |
| 150  | 98-9638     | 1    | Gasket-Flange, Water ●     |
| 160  | 105-3748    | 1    | Gasket-Thermostat ●        |
| 170  | 98-9611     | 1    | Gasket ●                   |

| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 180  | 108-1416    | 1    | Lower Gasket Kit             |
| 190  | 98-9632     | 1    | Gasket-Pump, Water ●         |
| 200  | 98-9633     | 1    | Gasket-Case, Gear ●          |
| 210  | 105-3781    | 2    | O-Ring ●                     |
| 220  | 105-3777    | 2    | O-Ring ●                     |
| 230  | 98-9634     | 1    | Gasket-Case, Bearing ●       |
| 240  | 98-9635     | 1    | Gasket-Cover, Bearing Case ● |
| 250  | 105-3783    | 1    | O-Ring ●                     |
| 260  | 105-3776    | 1    | O-Ring ●                     |
| 270  | 98-9729     | 1    | O-Ring ●                     |
| 280  | 98-9636     | 1    | Gasket-Pump, Fuel ●          |
| 290  | 98-9682     | 1    | Gasket ●                     |
| 300  | 105-3788    | 1    | O-Ring ●                     |
| 310  | 98-7601     | 1    | Seal-Oil ●                   |
| 320  | 98-9637     | 1    | Gasket ●                     |
| 330  | 98-9683     | 1    | Gasket-Cover, Solenoid ●     |

● Not illustrated



## Starter, Overflow Bottle and Other Miscellaneous Part Assembly

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 10   | 107-0122    | 1    | Pump-Fuel, Electric     |
| 20   | 98-7612     | 1    | Filter-Fuel             |
| 30   | 98-9611     | 1    | Gasket                  |
| 40   | 98-7611     | 1    | Controller-Glow         |
| 50   | 106-7772    | 1    | Thermoswitch            |
| 60   | 104-9318    | 1    | Bottle-Overflow         |
| 70   | 105-3754    | 1    | Cap                     |
| 80   | 105-3755    | 1    | Gasket                  |
| 90   | 105-3756    | 1    | Plate                   |
| 100  | 107-7827    | 1    | Manual-Operator, Kubota |
| 110  | 98-9705     | 1    | Starter ASM             |
| 120  | 98-7697     | 2    | Bolt                    |

# Attachments and Accessories

## For 30839 Groundsmaster 3500-D

| Product Name                              | Model/Part  |
|-------------------------------------------|-------------|
| Blade-Lift, High .....                    | 105-4089-03 |
| Blade-Angle Sail .....                    | 105-9810-03 |
| Blade-Atomic .....                        | 107-0235-03 |
| Blade-Combo.....                          | 108-9026-03 |
| 400-hour Filter Maintenance MVP Kit ..... | 30058       |
| 27in Rotary Cutting Unit.....             | 30834       |
| Leaf Mulching Kit .....                   | 30836       |

**Notes:**

**Notes:**

**Notes:**



**Count on it.**