



Count on it.

Parts Catalog

**Groundsmaster® 3200
2-Wheel Drive Traction Unit**

Model No. 31900A—Serial No. 417300000 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.

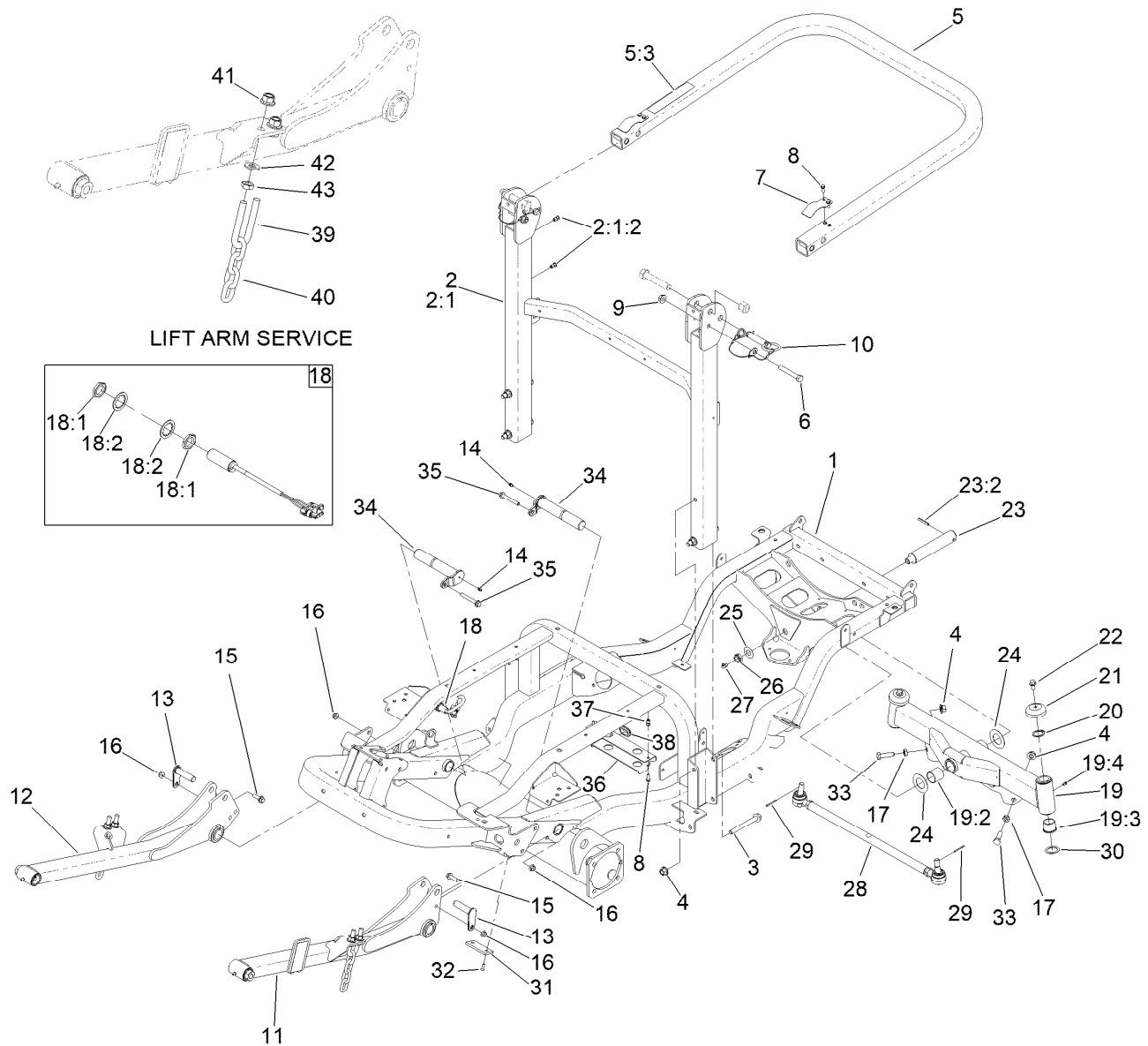
Reference Numbers Indicating Quantity

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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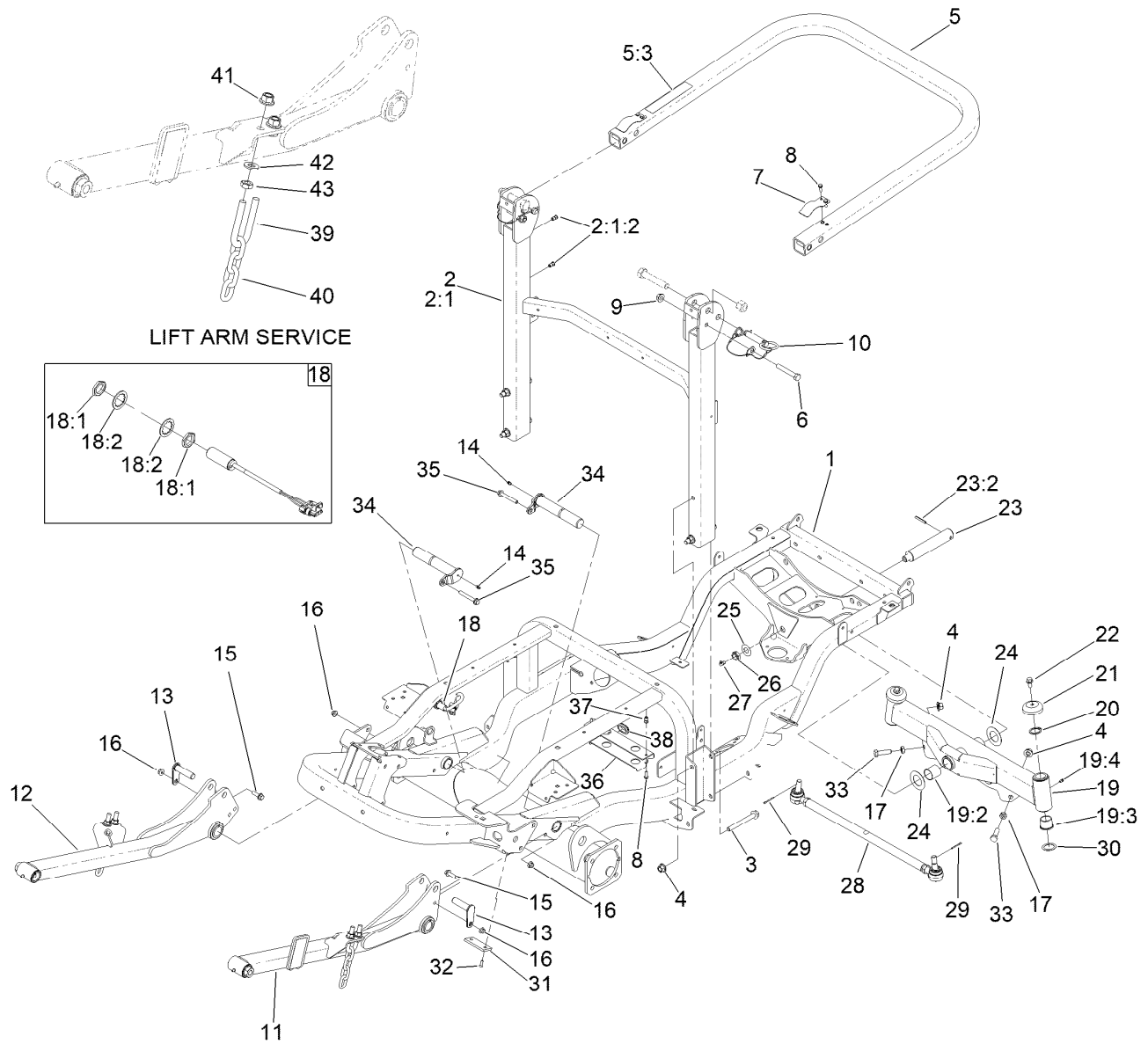
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Frame and Roll-Over Protection System Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|-------|-------------|------|------------------------|------|-------------|------|-----------------------------|
| 1 | 145-6050SP | 1 | Frame ASM | 16 | 104-8301 | 4 | Nut-HF, NI |
| 2 | 139-6254SP | 1 | ROPS ASM, Lower | 17 | 3218-5 | 2 | Nut-Jam |
| 2:1 | | 1 | ROPS ASM, Lower ● | 18 | 115-5300 | 1 | Proximity Switch ASM |
| 2:1:2 | 138-2758 | 4 | Nut-Clinch,Hex | 18:1 | 117-3207 | 2 | Nut-Hex |
| 3 | 117-3176 | 4 | Screw-HHF | 18:2 | 117-3208 | 2 | Washer-Lock, Internal Tooth |
| 4 | 99-5107 | 6 | Nut-Lock | 19 | 138-4588 | 1 | Axle ASM |
| 5 | 138-7470 | 1 | ROPS ASM, Upper | 19:2 | 99-6964 | 2 | Bushing-Axle |
| 5:3 | 108-2073 | 1 | Decal-Warning | 19:3 | 104-0015 | 4 | Bushing-Flange |
| 6 | 325-13 | 2 | Screw-HH | 19:4 | 302-5 | 2 | Fitting-Grease |
| 7 | 110-5696 | 2 | Spring-Leaf | 20 | 32151-77 | 2 | Ring-Retaining, External |
| 8 | 32105-15 | 6 | Screw-HWH | 21 | 69-8890 | 2 | Cap-Spindle |
| 9 | 32128-23 | 2 | Nut-HF | 22 | 3234-1 | 2 | Screw-HHF |
| 10 | 161-4477 | 2 | Pin-ROPS, ASM | 23 | 140-6101 | 1 | Pin ASM-Axle Pivot |
| 11 | 144-3943 | 1 | Lift Arm ASM. LH | 23:2 | 32121-32 | 1 | Pin-Roll |
| 12 | 144-3942 | 1 | Lift Arm ASM. RH | 24 | 99-8432 | 2 | Washer-Thrust |
| 13 | 138-7489 | 2 | Pin (Machined) | 25 | 71-4540 | 1 | Washer-Thrust |
| 14 | 302-40 | 2 | Fitting-Grease, 90 DEG | 26 | 3296-15 | 1 | Nut-Lock, NI |
| 15 | 119-4061 | 2 | Screw-HHF | 27 | 302-33 | 1 | Fitting-Grease |

● Not serviced separately

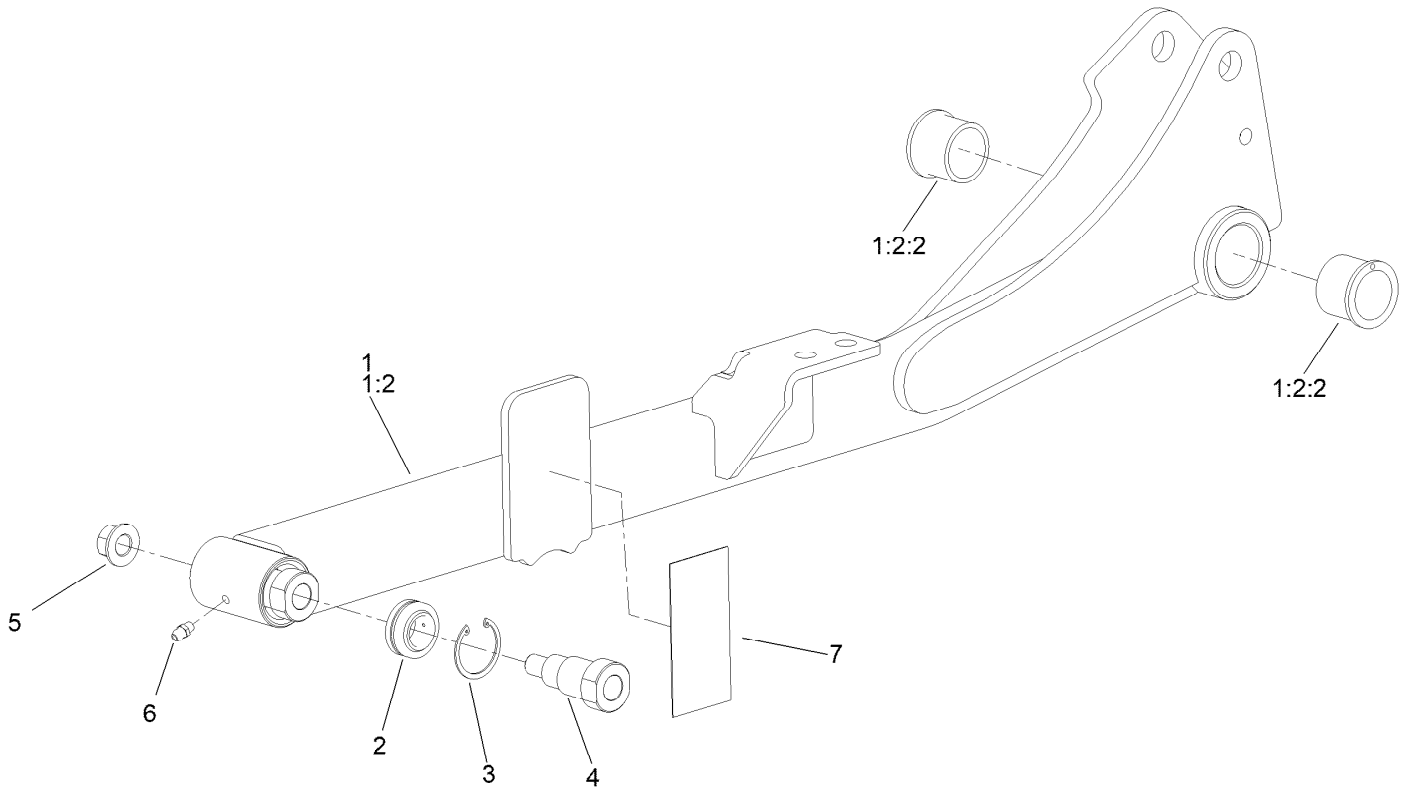


Frame and Roll-Over Protection System Assembly (continued)

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|----------------|------|-------------|------|--------------------------|
| 28 | 144-3900 | 1 | Tie Rod ASM | 36 | 147-0045-0P | 1 | Channel-Harness Retainer |
| 29 | 3272-12 | 2 | Pin-Cotter | 37 | 138-2758 | 2 | Nut-Clinch,Hex |
| 30 | 76-2980 | 2 | Washer-Thrust | 38 | 240-5 | 1 | Grommet |
| 31 | 138-4452 | 2 | Pad-Stop, Deck | 39 | 104-0108 | 2 | U-Bolt |
| 32 | 3289-4 | 4 | Screw-FH | 40 | 95-6231 | 2 | Chain-HOC |
| 33 | 325-7 | 2 | Screw-HH | 41 | 99-5107 | 4 | Nut-Lock |
| 34 | 138-4593 | 2 | Pin | 42 | 3256-26 | 4 | Washer-Flat |
| 35 | 133-9682 | 2 | Screw-Hfh | 43 | 3218-5 | 4 | Nut-Jam |

● Not serviced separately

LH Lift Arm Assembly No. 144-3943

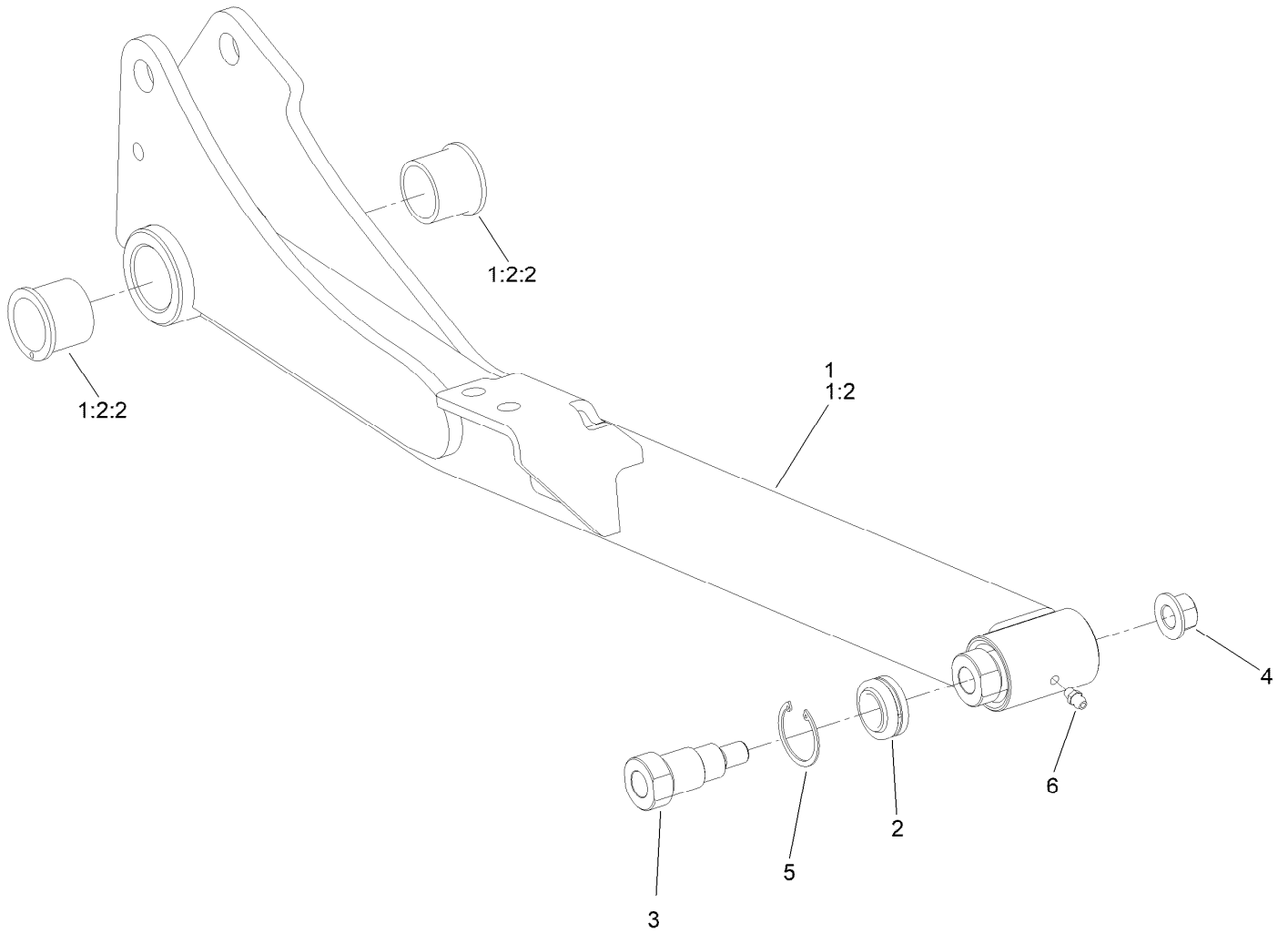


LH Lift Arm Assembly No. 144-3943 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | | 1 | Lift Arm ASM, LH ● | 4 | 139-0910 | 1 | Bolt-Shoulder |
| 1:2 | | 1 | Hub-ASM ● | 5 | 99-5107 | 1 | Nut-Lock |
| 1:2:2 | 104-0015 | 2 | Bushing-Flange | 6 | 302-5 | 1 | Fitting-Grease |
| 2 | 105-7441 | 1 | Bearing-Spherical | 7 | 139-0948 | 1 | Pad-Ride, Pin |
| 3 | 32151-34 | 1 | Ring-Retaining | | | | |

● Not serviced separately

RH Lift Arm Assembly No. 144-3942

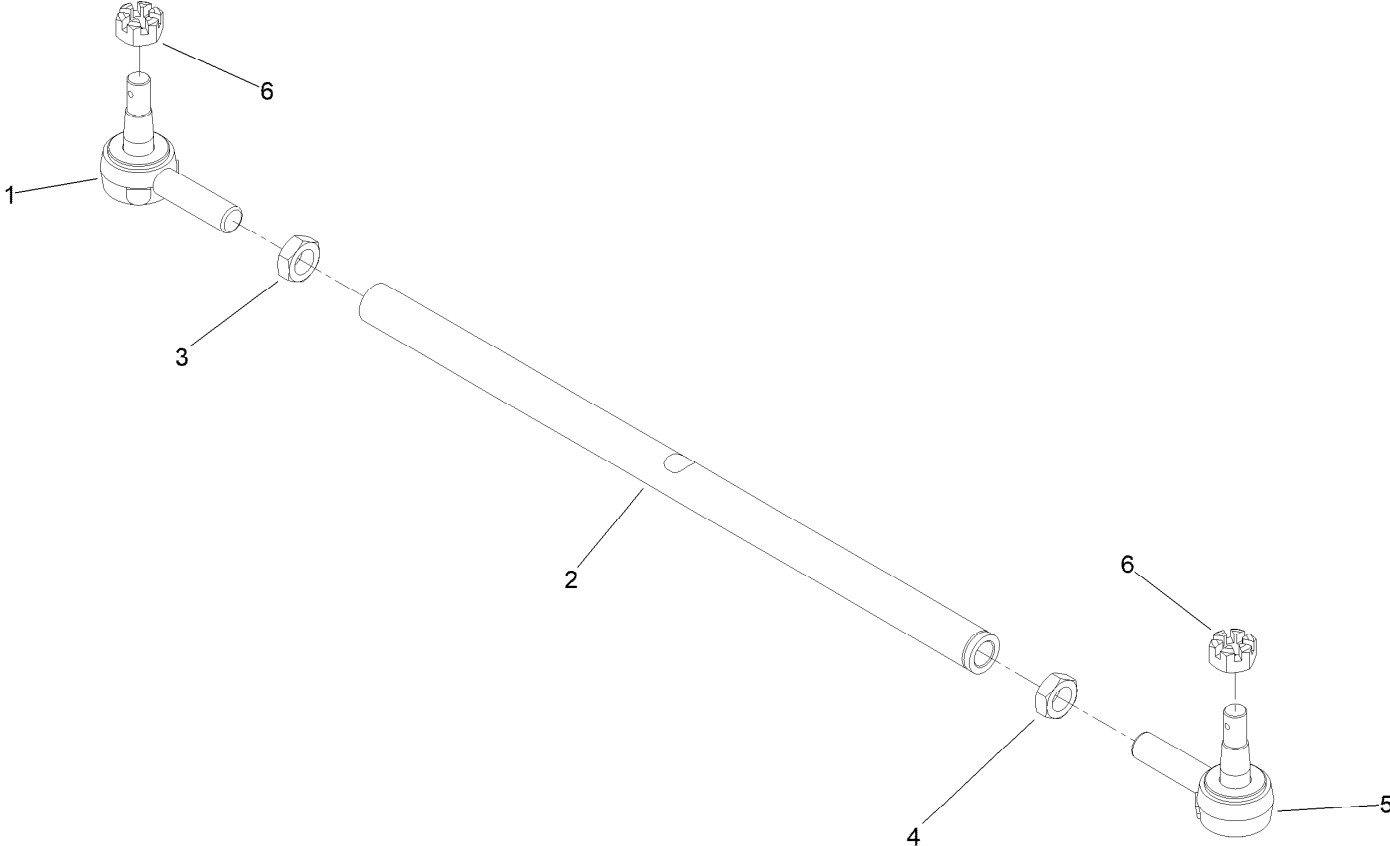


RH Lift Arm Assembly No. 144-3942 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | | 1 | Lift Arm ASM, RH ● | 3 | 139-0910 | 1 | Bolt-Shoulder |
| 1:2 | | 1 | Hub-ASM ● | 4 | 99-5107 | 1 | Nut-Lock |
| 1:2:2 | 104-0015 | 2 | Bushing-Flange | 5 | 32151-34 | 1 | Ring-Retaining |
| 2 | 105-7441 | 1 | Bearing-Spherical | 6 | 302-5 | 1 | Fitting-Grease |

● Not serviced separately

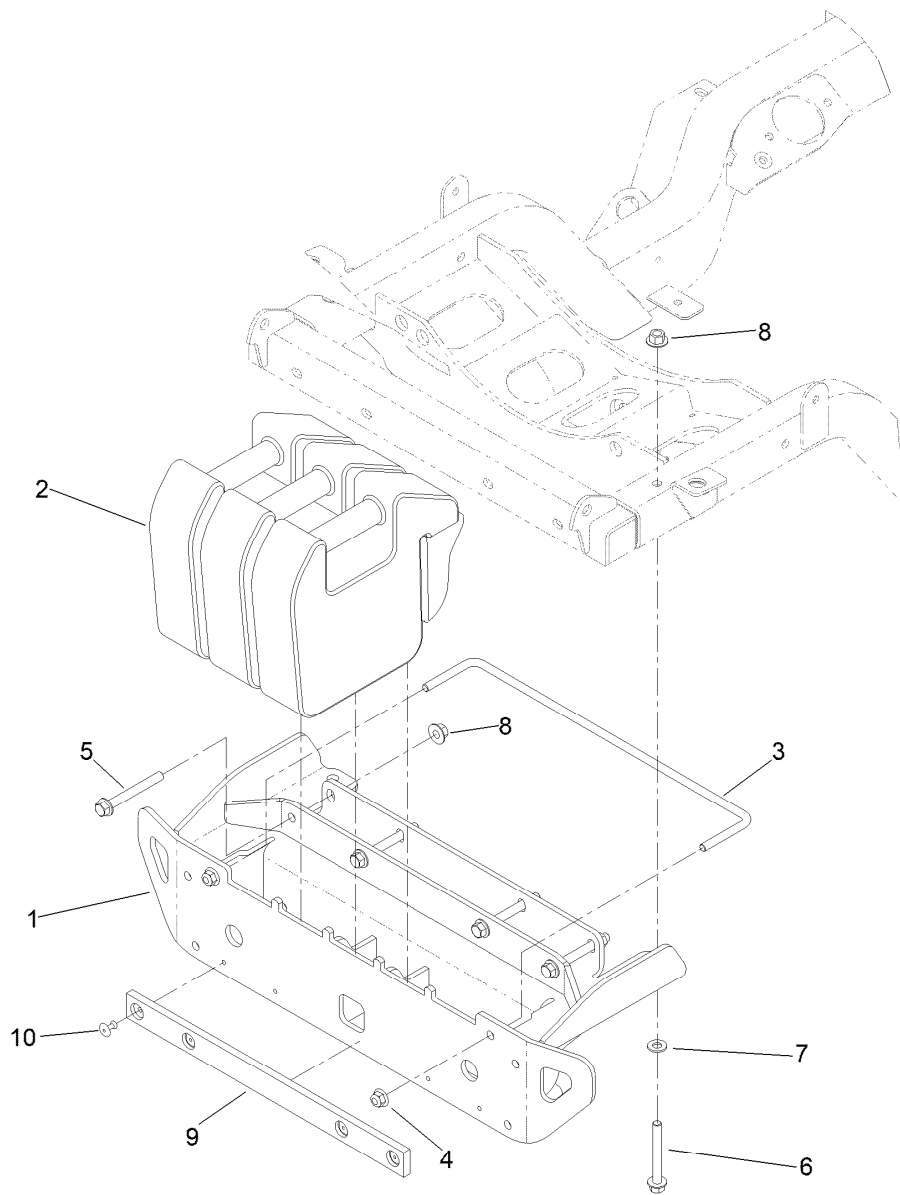
Tie Rod Assembly No. 144-3900



Tie Rod Assembly No. 144-3900 (continued)

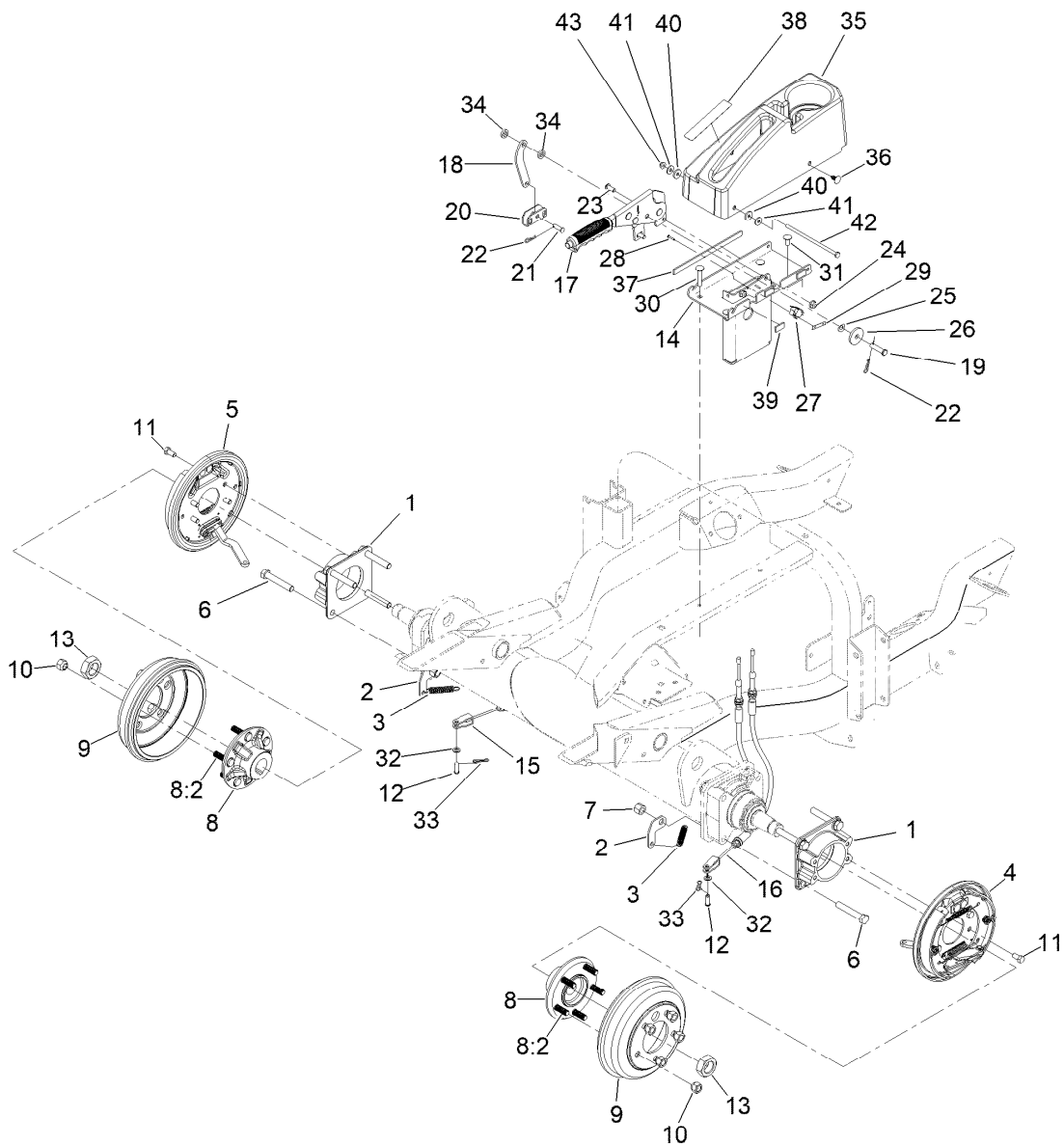
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1 | 144-3901 | 1 | Tie Rod End |
| 2 | 133-6463 | 1 | Tie-Rod |
| 3 | 84-5300 | 1 | Nut-Jam |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 4 | 110-5337 | 1 | Nut-Jam |
| 5 | 144-3902 | 1 | Tie Rod End |
| 6 | 140-6135 | 2 | Nut-Hex, Slotted |



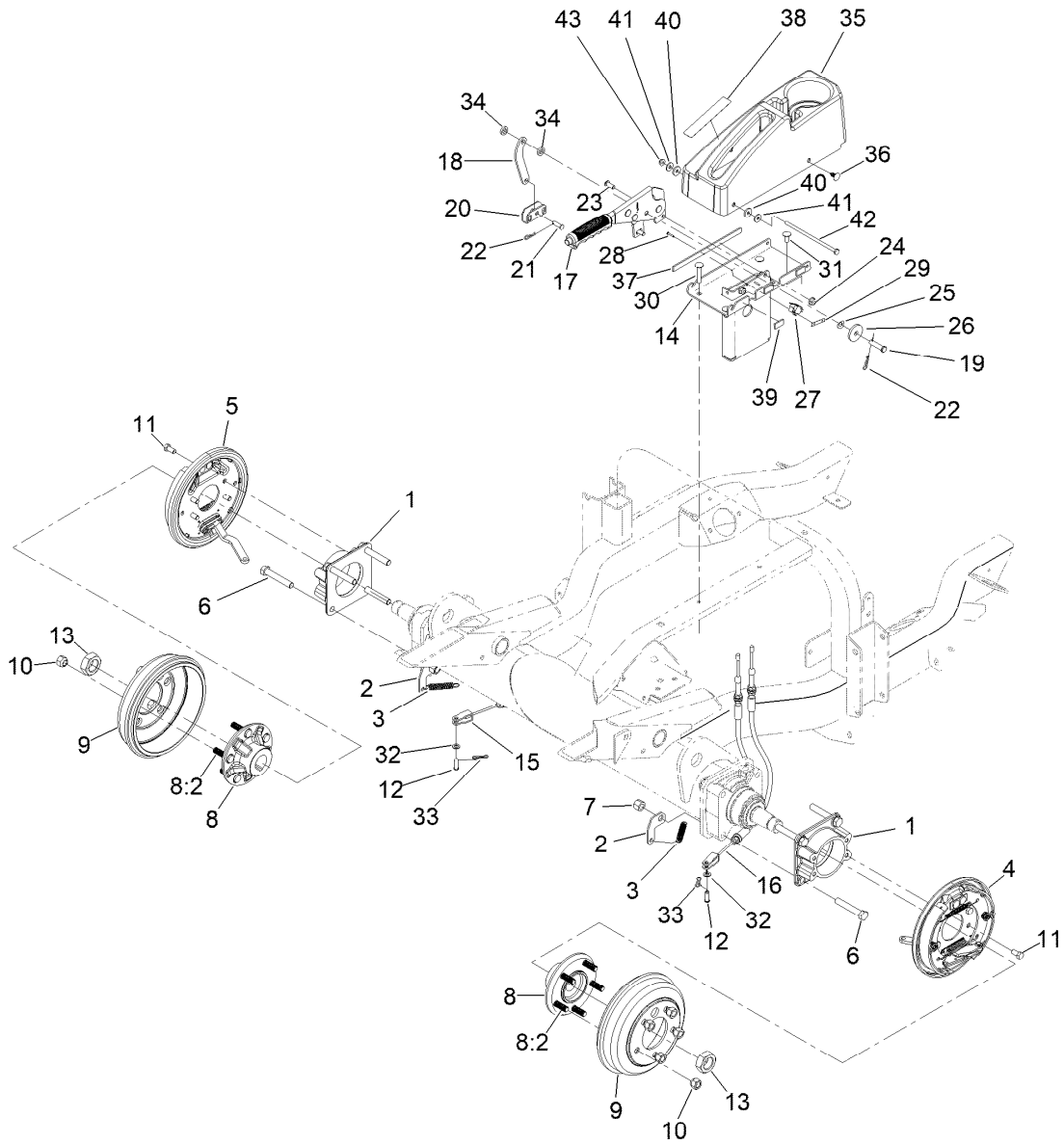
Bumper and Weight Assembly

| Ref. | Part Number | Qty. | Description |
|------|-------------|------|----------------|
| 1 | 145-5981SP | 1 | Bumper-Rear Wa |
| 2 | 114-4096 | 2 | Weight |
| 3 | 125-2667 | 1 | Lock-Weight |
| 4 | 104-8301 | 2 | Nut-HF, NI |
| 5 | 3234-41 | 4 | Screw-HHF |
| 6 | 139-2429 | 2 | Screw-HHF |
| 7 | 3256-24 | 2 | Washer-Plain |
| 8 | 32128-43 | 6 | Nut-Flange |
| 9 | 144-4014 | 1 | Bumper-Rubber |
| 10 | 3269-11 | 4 | Rivet-Pop |



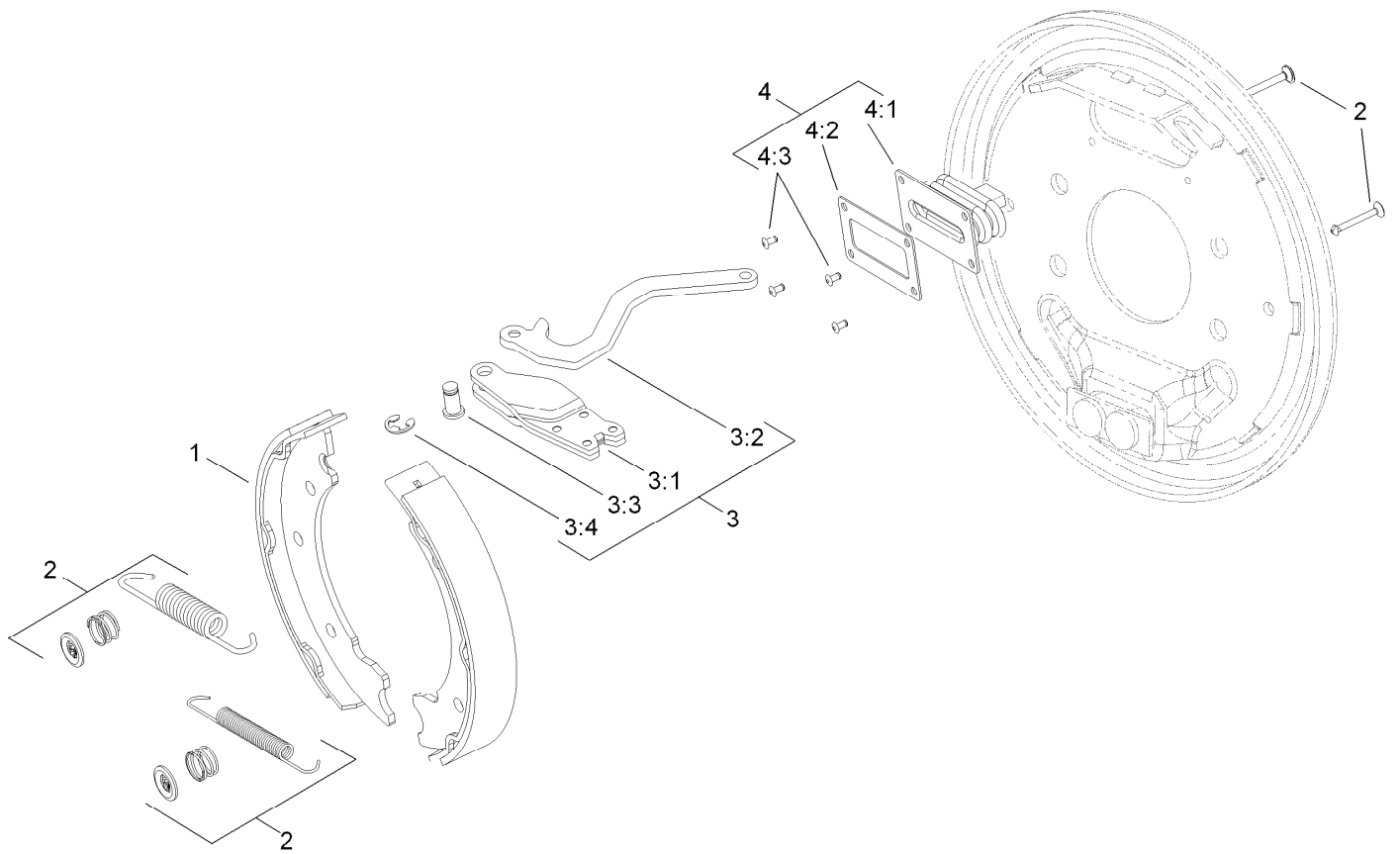
Brake Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|---------------------------------|------|-------------|------|--------------------------|
| 1 | 147-3594 | 2 | Adapter-Brake | 20 | 87-3480 | 1 | Bracket-Equalizer, Cable |
| 2 | 138-4499 | 2 | Clip-Spring | 21 | 1-808280 | 1 | Pin-Clevis |
| 3 | 137-2591 | 2 | Spring-Extension | 22 | 1-806003 | 2 | Pin-Cotter |
| 4 | 120-0235 | 1 | LH Brake ASM | 23 | 3274-55 | 2 | Screw-HSBH |
| 5 | 120-0233 | 1 | RH Brake ASM | 24 | 104-8300 | 6 | Nut-HF, NI |
| 6 | 325-12 | 8 | Screw-HH | 25 | 121-4605 | 1 | Washer-Spring |
| 7 | 3296-23 | 8 | Nut-Lock, NI | 26 | 131-8496 | 1 | Washer-Plain |
| 8 | 137-2470 | 2 | Hub ASM | 27 | 108-6496 | 1 | Switch (W/Boot) |
| 8:2 | 114-3918 | 5 | Stud-Wheel | 28 | 95-3003 | 2 | Screw-PPHTF |
| 9 | 114-8864 | 2 | Drum-Brake | 29 | 3290-354 | 1 | Nut-Speed |
| 10 | 139-2564 | 10 | Nut-Lug | 30 | 116-0629 | 2 | Screw-CARR |
| 11 | 323-4 | 8 | Screw-HH | 31 | 3230-23 | 2 | Bolt-CARR |
| 12 | 283-58 | 2 | Pin-Clevis | 32 | 3256-74 | 2 | Washer-Flat |
| 13 | 107-9319 | 2 | Nut-Hex | 33 | 119-1415 | 2 | Pin-Cotter, Locking |
| 14 | 147-0064-0P | 1 | Parking Brake Mount [primed] | 34 | 3-3287 | 2 | Spacer |
| 15 | 137-2640 | 1 | Cable-Brake, Adjustable RH | 35 | 138-7475 | 1 | Cover-Brake, Parking |
| 16 | 137-2641 | 1 | Cable-Brake, Adjustable LH | 36 | 117-2382 | 2 | Plug-Plastic |
| 17 | 131-8320 | 1 | Lever-Brake, Park | 37 | 132-7282 | 1 | Strip-Foam |
| 18 | 144-0516 | 1 | Link-Park, Brake | 38 | 139-6224 | 1 | Decal-Brake, Parking |
| 19 | 283-10 | 1 | Pin-Clevis | 39 | 115-5417 | 3 | Strip-Foam |
| | | | | 40 | 144-0499 | 2 | Washer-Epdm |



Brake Assembly (continued)

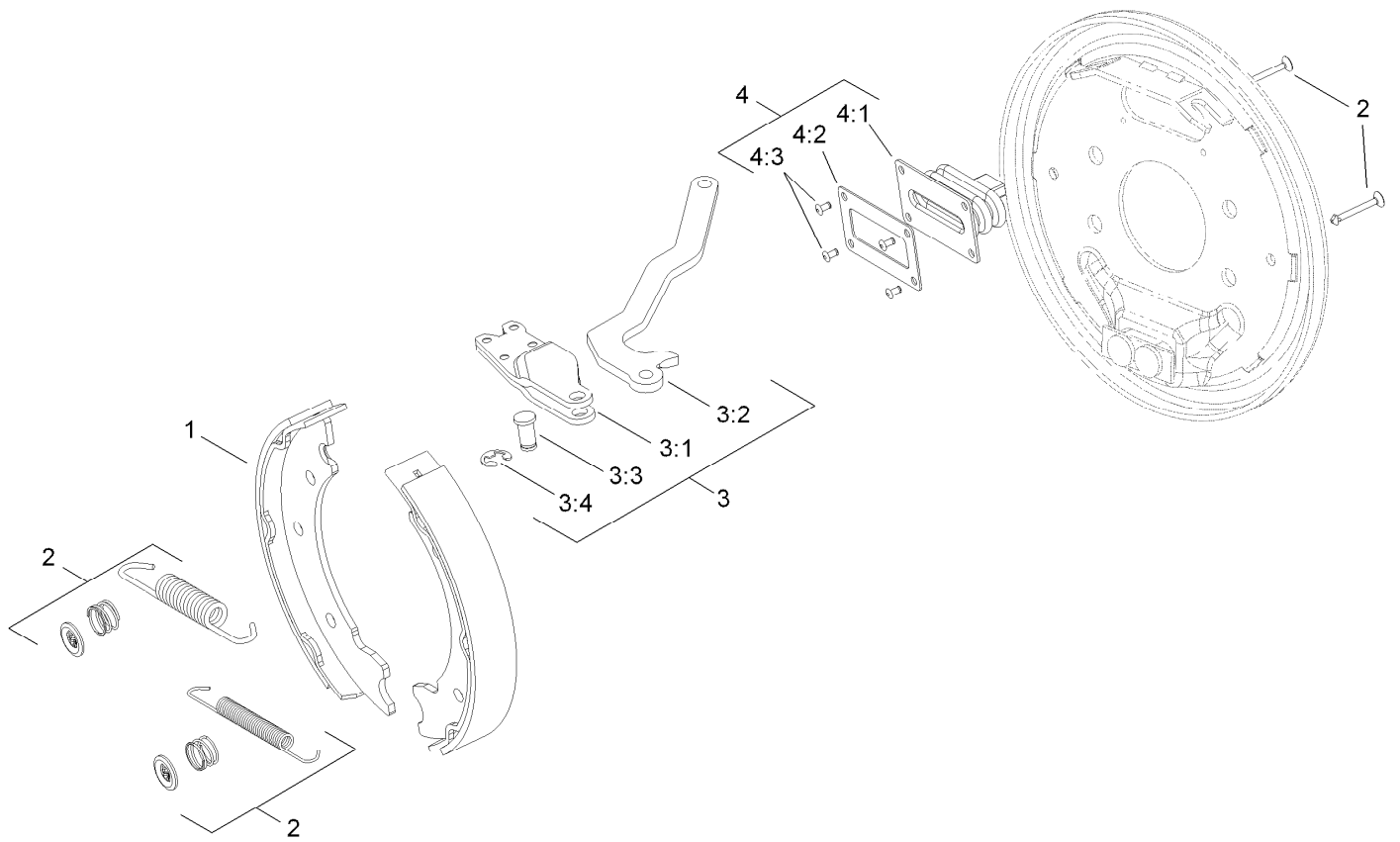
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 41 | 3256-78 | 2 | Washer-Flat | 42 | 321-21 | 1 | Screw-HH |
| | | | | 43 | 104-7201 | 1 | Nut-HF, NI |



Left Hand Brake Assembly No. 120-0235

| Ref. | Part Number | Qty. | Description |
|------|-------------|------|--------------------|
| 1 | 139-5950 | 1 | Brake Shoe Kit |
| 2 | 108-6983 | 1 | Brake Hardware Kit |
| 3 | 120-0236 | 1 | LH Actuator Kit |
| 3:1 | | 1 | Housing ● |
| 3:2 | | 1 | Lever-LH ● |
| 3:3 | | 1 | Pin-Pivot ● |
| 3:4 | | 1 | E-Ring ● |
| 4 | 110-8885 | 1 | Dust Boot Kit |
| 4:1 | | 1 | Boot ● |
| 4:2 | | 1 | Plate-Back Up ● |
| 4:3 | | 2 | Rivet ● |

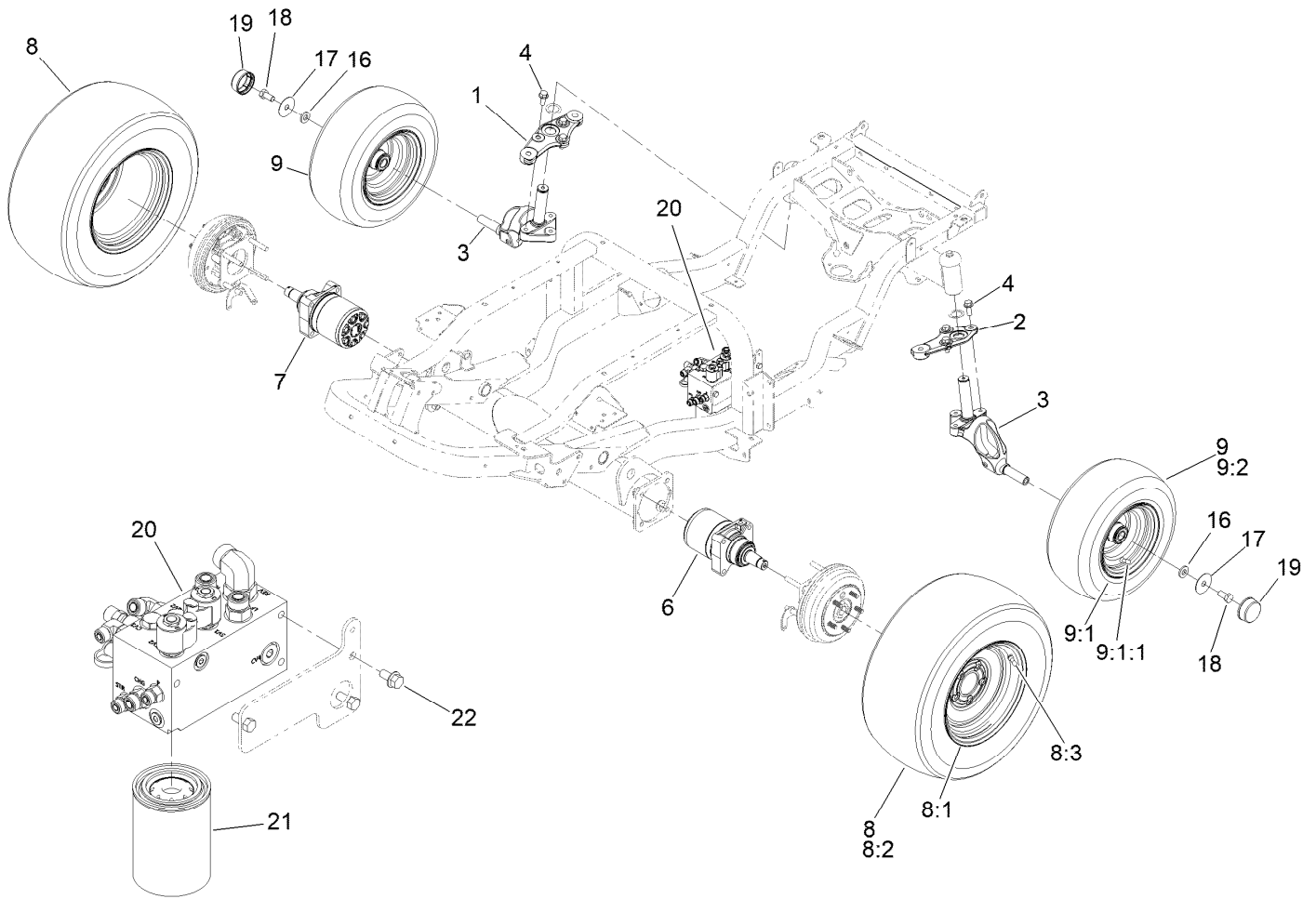
● Not serviced separately



Right Hand Brake Assembly No. 120-0233

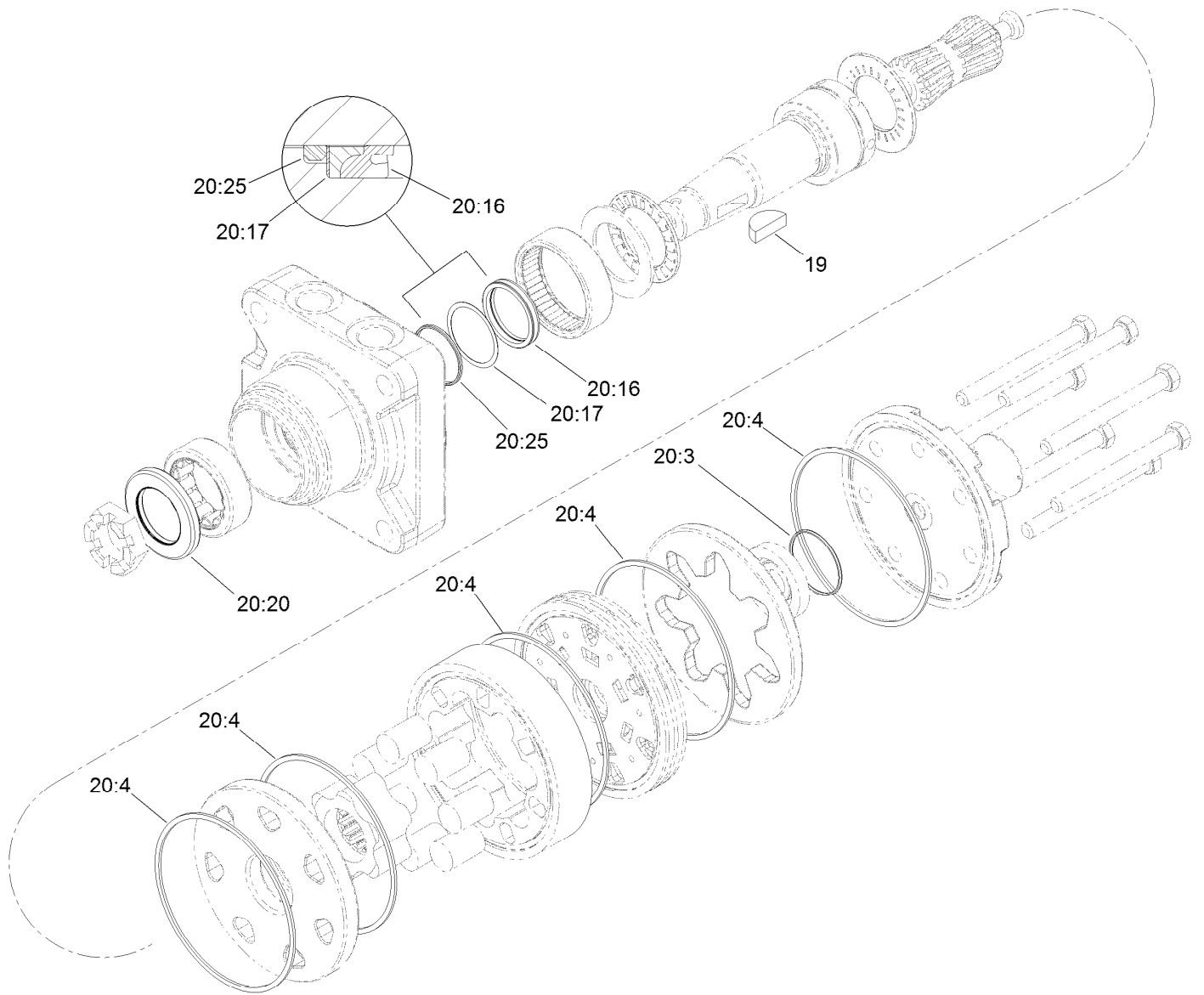
| Ref. | Part Number | Qty. | Description |
|------|-------------|------|--------------------|
| 1 | 139-5950 | 1 | Brake Shoe Kit |
| 2 | 108-6983 | 1 | Brake Hardware Kit |
| 3 | 120-0234 | 1 | RH Actuator Kit |
| 3:1 | | 1 | Housing ● |
| 3:2 | | 1 | Lever-RH ● |
| 3:3 | | 1 | Pin-Pivot ● |
| 3:4 | | 1 | E-Ring ● |
| 4 | 110-8885 | 1 | Dust Boot Kit |
| 4:1 | | 1 | Boot ● |
| 4:2 | | 1 | Plate-Back Up ● |
| 4:3 | | 2 | Rivet ● |

● Not serviced separately



Hydraulic Drive Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|----------------------|-------|-------------|------|----------------------------|
| 1 | 140-3142 | 1 | Link-Drag, RH | 9:1 | 138-0311 | 1 | Rim-8" X 5.38" |
| 2 | 140-3144 | 1 | Link-Drag, LH | 9:1:1 | 232-27 | 1 | Stem-Valve |
| 3 | 137-1647 | 2 | Spindle-Steer | 9:2 | 1-413474 | 1 | Tire-Turfmaster |
| 4 | 3234-38 | 6 | Screw-HHF | 16 | 99-7667 | 2 | Washer-Flat |
| 6 | 137-2459 | 1 | Motor-Hydraulic, CCW | 17 | 99-7719 | 2 | Washer |
| 7 | 137-2479 | 1 | Motor-Hydraulic, CW | 18 | 327-3 | 2 | Screw-HH |
| 8 | 137-2593 | 2 | Wheel ASM | 19 | 94-7871 | 2 | Cap-Dust |
| 8:1 | 137-2595 | 1 | Rim | 20 | 145-6070 | 1 | Manifold Steering/Lift-2Wd |
| 8:2 | 137-2581 | 1 | Tire | 21 | 86-3010 | 1 | Filter-Oil |
| 8:3 | 232-27 | 1 | Stem-Valve | 22 | 3234-1 | 3 | Screw-HHF |
| 9 | 138-0310 | 2 | Wheel ASM | | | | |

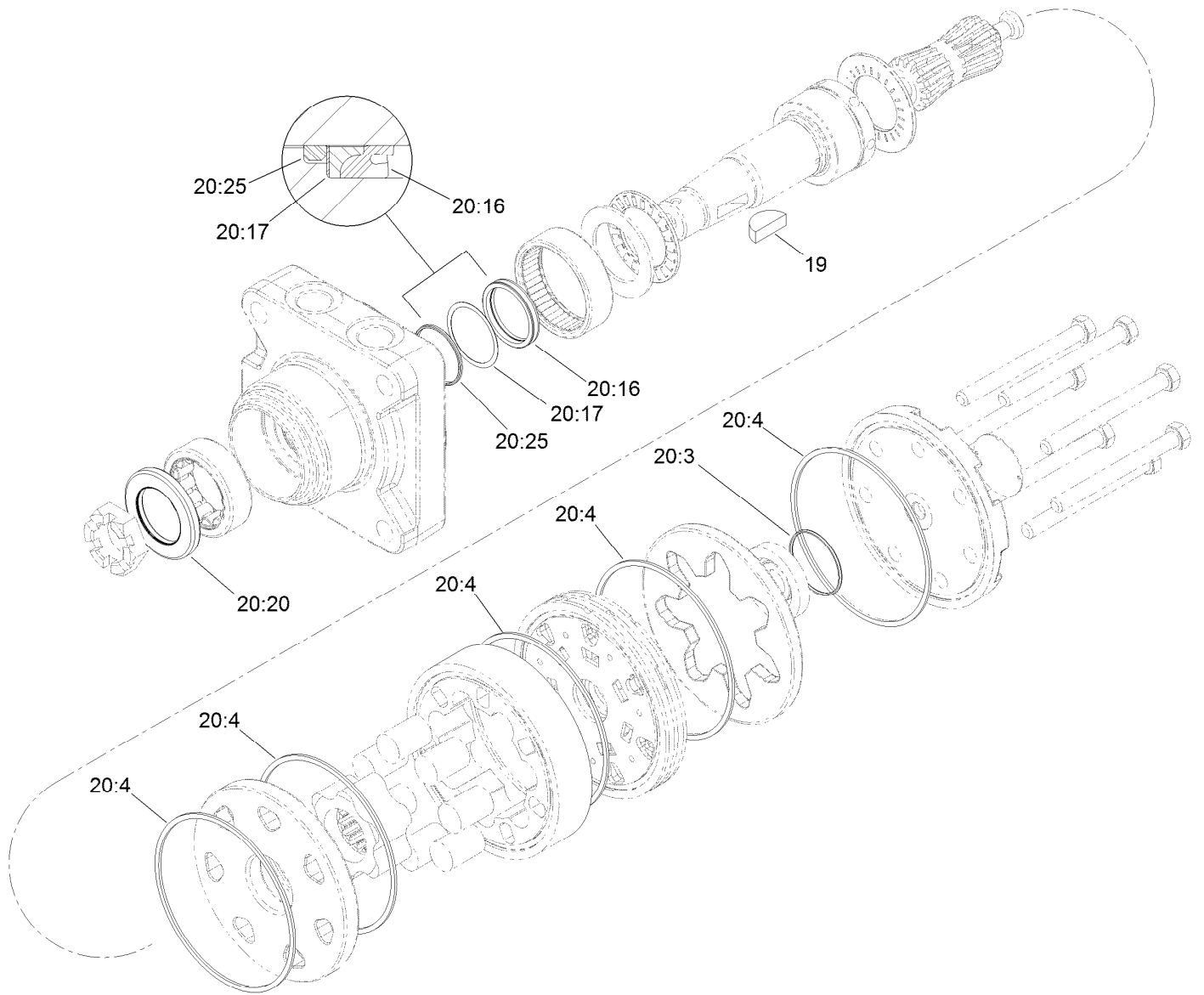


Hydraulic Motor Assembly No. 137-2459

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------------|
| 19 | 3257-42 | 1 | Key-Woodruff |
| 20 | 110-8896 | 1 | Seal Kit ● |
| 20:3 | | 1 | Seal-Commutator, Vespel ■ |
| 20:4 | | 6 | Seal-Body, Buna ■ |
| 20:16 | | 1 | Seal-Shaft ■ |
| 20:17 | | 1 | Washer-Back Up ■ |
| 20:20 | | 1 | Seal-Dirt/Water ■ |
| 20:25 | | 1 | Ring-Back Up ■ |

● Not illustrated

■ Not serviced separately

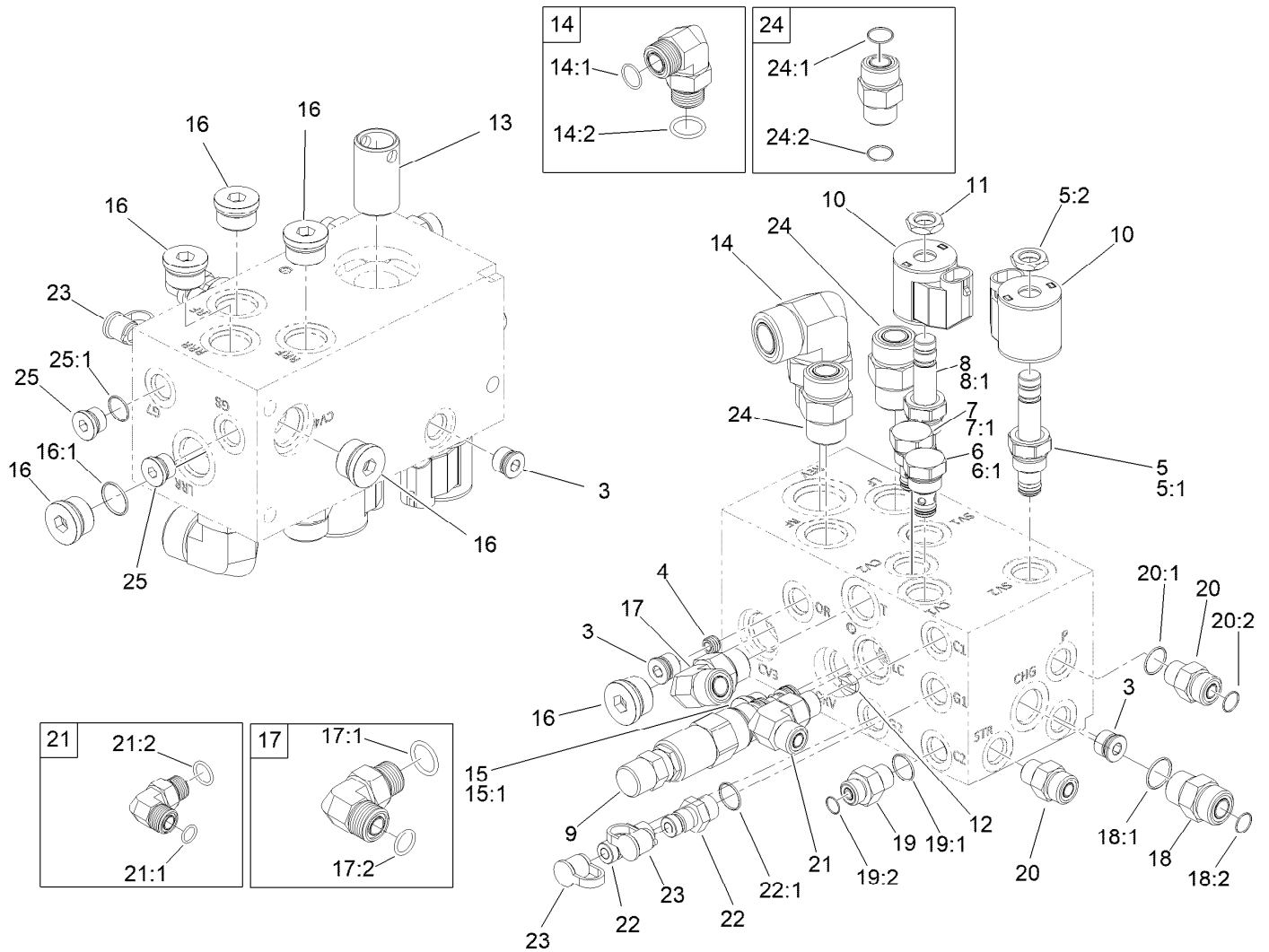


Hydraulic Motor Assembly No. 137-2479

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------------|
| 19 | 3257-42 | 1 | Key-Woodruff |
| 20 | 110-8896 | 1 | Seal Kit ● |
| 20:3 | | 1 | Seal-Commutator, Vespel ■ |
| 20:4 | | 6 | Seal-Body, Buna ■ |
| 20:16 | | 1 | Seal-Shaft ■ |
| 20:17 | | 1 | Washer-Back Up ■ |
| 20:20 | | 1 | Seal-Dirt/Water ■ |
| 20:25 | | 1 | Ring-Back Up ■ |

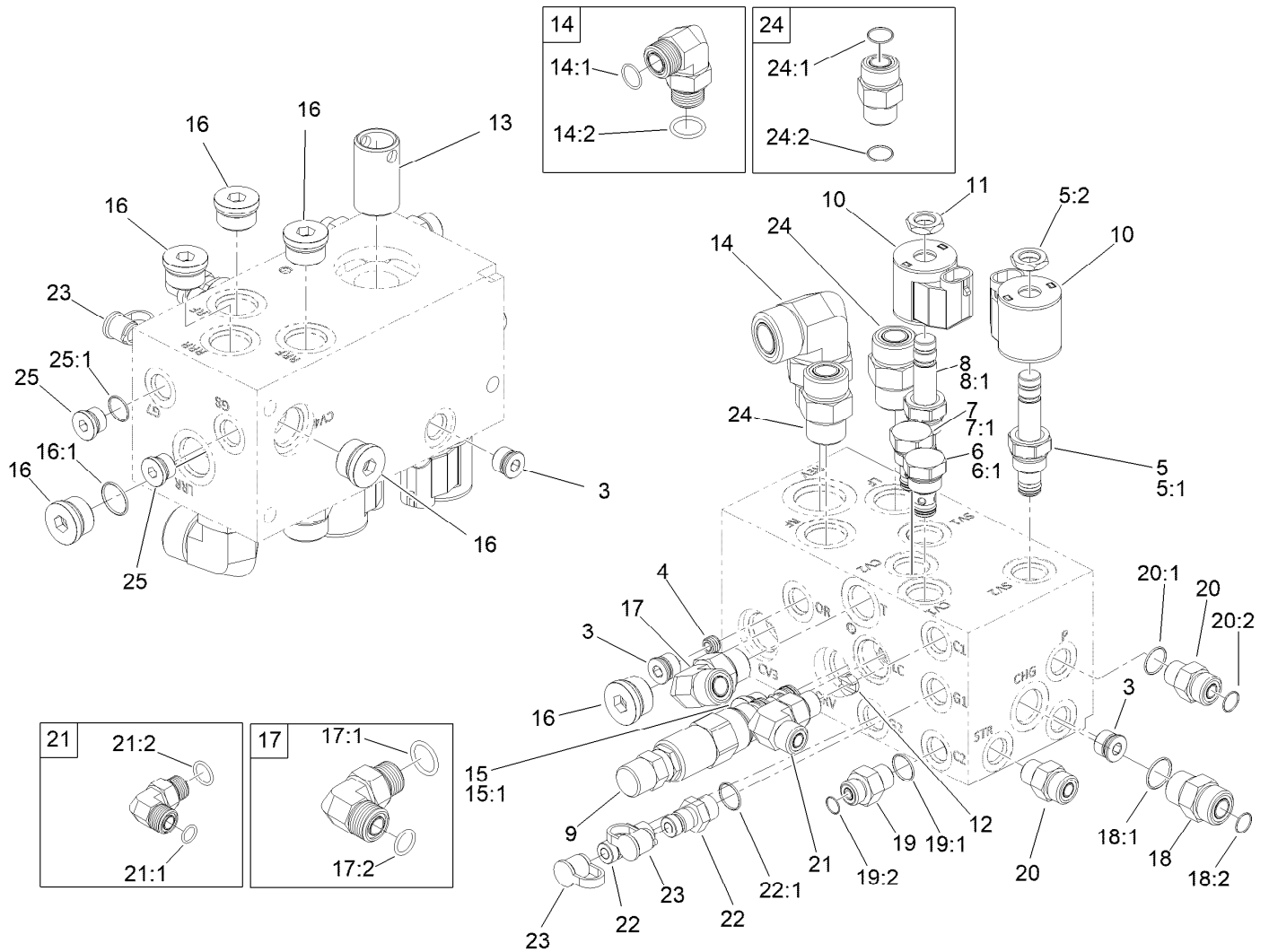
● Not illustrated

■ Not serviced separately



Steer/Lift Manifold Assembly No. 145-6070

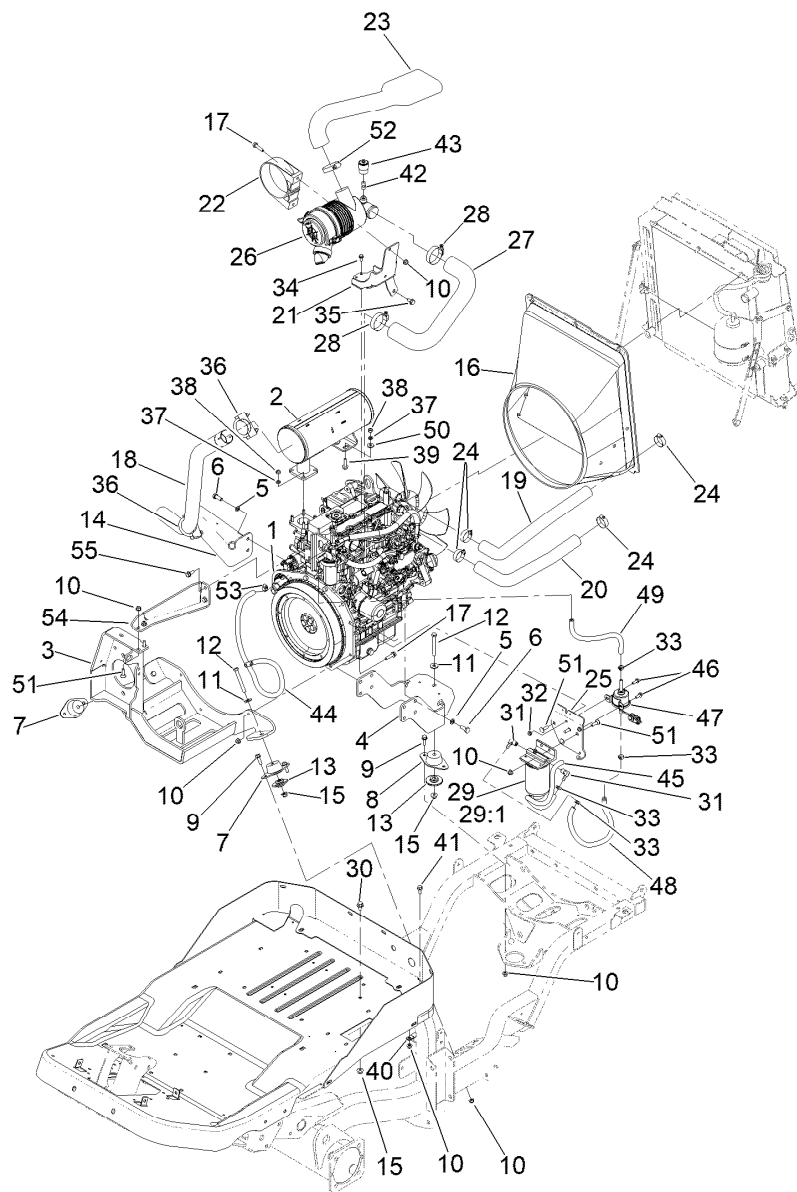
| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-----------------------------------|------|-------------|------|-----------------------|
| 3 | 112-9213 | 3 | Plug | 15:1 | 237-79 | 1 | O-Ring |
| 4 | 110-8883 | 1 | Plug-Orifice (0.040) | 16 | 139-6024 | 6 | Plug-Socket, SAE |
| 5 | 112-9206 | 1 | Solenoid Valve ASM | 16:1 | 237-80 | 1 | O-Ring |
| 5:1 | 105-9156 | 1 | Seal Kit | 17 | 340-98 | 1 | Fitting-Elbow, 90 DEG |
| 5:2 | 110-2634 | 1 | Nut-Coil | 17:1 | 237-79 | 1 | O-Ring |
| 6 | 114-2873 | 1 | Check Valve ASM | 17:2 | 237-30 | 1 | O-Ring |
| 6:1 | 105-9156 | 1 | Seal Kit | 18 | 340-4 | 1 | Fitting-Straight |
| 7 | 139-1213 | 1 | Valve-Check | 18:1 | 237-30 | 1 | O-Ring |
| 7:1 | 105-9156 | 1 | Seal Kit | 18:2 | 237-79 | 1 | O-Ring |
| 8 | 120-6562 | 1 | Valve-Solenoid | 19 | 340-1 | 1 | Fitting-Straight |
| 8:1 | 105-9156 | 1 | Seal Kit | 19:1 | 237-21 | 1 | O-Ring |
| 9 | 144-0501 | 1 | Valve-Logic, 220 PSI (Adjustable) | 19:2 | 237-42 | 1 | O-Ring |
| 10 | 110-0497 | 2 | Coil-Solenoid | 20 | 340-2 | 2 | Fitting-Straight |
| 11 | 110-2634 | 2 | Nut-Coil | 20:1 | 237-22 | 1 | O-Ring |
| 12 | 139-6296 | 1 | Orifice-Check 0.100 DIA | 20:2 | 237-42 | 1 | O-Ring |
| 13 | 139-6297 | 1 | Nipple-Filter | 21 | 340-77 | 1 | Fitting-Elbow, 90 DEG |
| 14 | 340-142 | 1 | Fitting-Elbow, 90 DEG | 21:1 | 237-22 | 1 | O-Ring |
| 14:1 | 237-58 | 1 | O-Ring | 21:2 | 237-42 | 1 | O-Ring |
| 14:2 | 237-81 | 1 | O-Ring | 22 | 59-7410 | 2 | Fitting-Diagnostic |
| 15 | 353-988 | 1 | Plug-Hex | 22:1 | 237-42 | 1 | O-Ring |
| | | | | 23 | 354-79 | 2 | Cap-Dust |



Steer/Lift Manifold Assembly No. 145-6070 (continued)

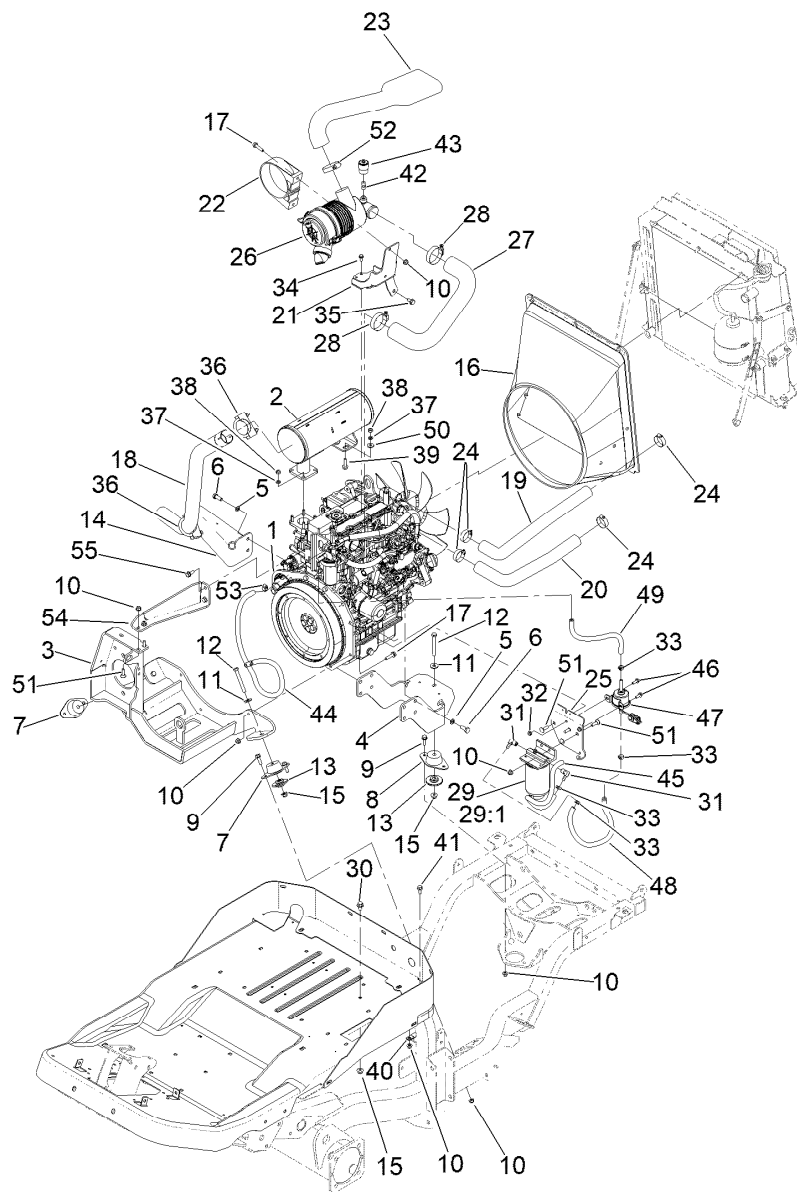
| Ref. | Part Number | Qty. | Description |
|------|-------------|------|------------------|
| 24 | 340-7 | 2 | Fitting-Straight |
| 24:1 | 237-65 | 1 | O-Ring |
| 24:2 | 237-80 | 1 | O-Ring |

| Ref. | Part Number | Qty. | Description |
|------|-------------|------|------------------|
| 25 | 353-989 | 2 | Plug-Hex, Hollow |
| 25:1 | 237-42 | 1 | O-Ring |



Engine, Muffler and Air Cleaner Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-------------------------------------|------|-------------|------|----------------------------------|
| 1 | 139-6182 | 1 | Engine-Yanmar 3Tnv80F-Nxdtr | 19 | 138-4493 | 1 | Hose-Radiator, Upper |
| 2 | 139-6269 | 1 | Muffler ASM | 20 | 138-4494 | 1 | Hose-Radiator, Lower |
| 3 | 145-5951-0P | 1 | Bracket-Pump Mount ASM [primed] | 21 | 138-4486-0P | 1 | Bracket-Air Cleaner [primed] |
| 4 | 138-0424-0P | 1 | Mount-Engine, Rear 24HP [primed] | 22 | 95-5806 | 1 | Bracket-Mounting, Air Cleaner |
| 5 | 48-9590 | 8 | Washer-Lock | 23 | 138-4460 | 1 | Hose-Intake, Air Cleaner |
| 6 | 33115-025 | 8 | Screw-HH | 24 | 2412-34 | 4 | Clamp-Hose |
| 7 | 139-0856 | 2 | Mount-Engine | 25 | 138-4472-0P | 1 | Angle-Filter Mount |
| 8 | 125-5244 | 1 | Mount-Engine | 26 | 93-2190 | 1 | Air Cleaner ASM |
| 9 | 3234-29 | 6 | Screw-HHF | 27 | 137-5881 | 1 | Hose-Intake |
| 10 | 104-8300 | 19 | Nut-HF, NI | 28 | 2412-92 | 2 | Clamp-Hose |
| 11 | 80-6990 | 3 | Washer-Hardened | 29 | 110-9044 | 1 | Separator-Filter |
| 12 | 323-14 | 3 | Screw-HH | 29:1 | 110-9049 | 1 | Filter-Spin On, Fuel/Water |
| 13 | 138-6462 | 3 | Support-Isolator | 30 | 3234-9 | 1 | Screw-HHF |
| 14 | 144-0515-03 | 1 | Support-Tailpipe | 31 | 353-781 | 2 | Fitting-HYD, 90 |
| 15 | 104-8301 | 4 | Nut-HF, NI | 32 | 104-7201 | 2 | Nut-HF, NI |
| 16 | 139-6279 | 1 | Shroud - Fan ASM | 33 | 92-2379 | 4 | Clamp-Hose |
| 17 | 3234-36 | 6 | Screw-HHF | 34 | 33103-016 | 3 | Screw-HHF |
| 18 | 144-0570 | 1 | Pipe-Exhaust | 35 | 33104-016 | 1 | Screw-HHF |
| | | | | 36 | 18-2130 | 2 | Clamp |
| | | | | 37 | 3253-4 | 6 | Washer-Lock |



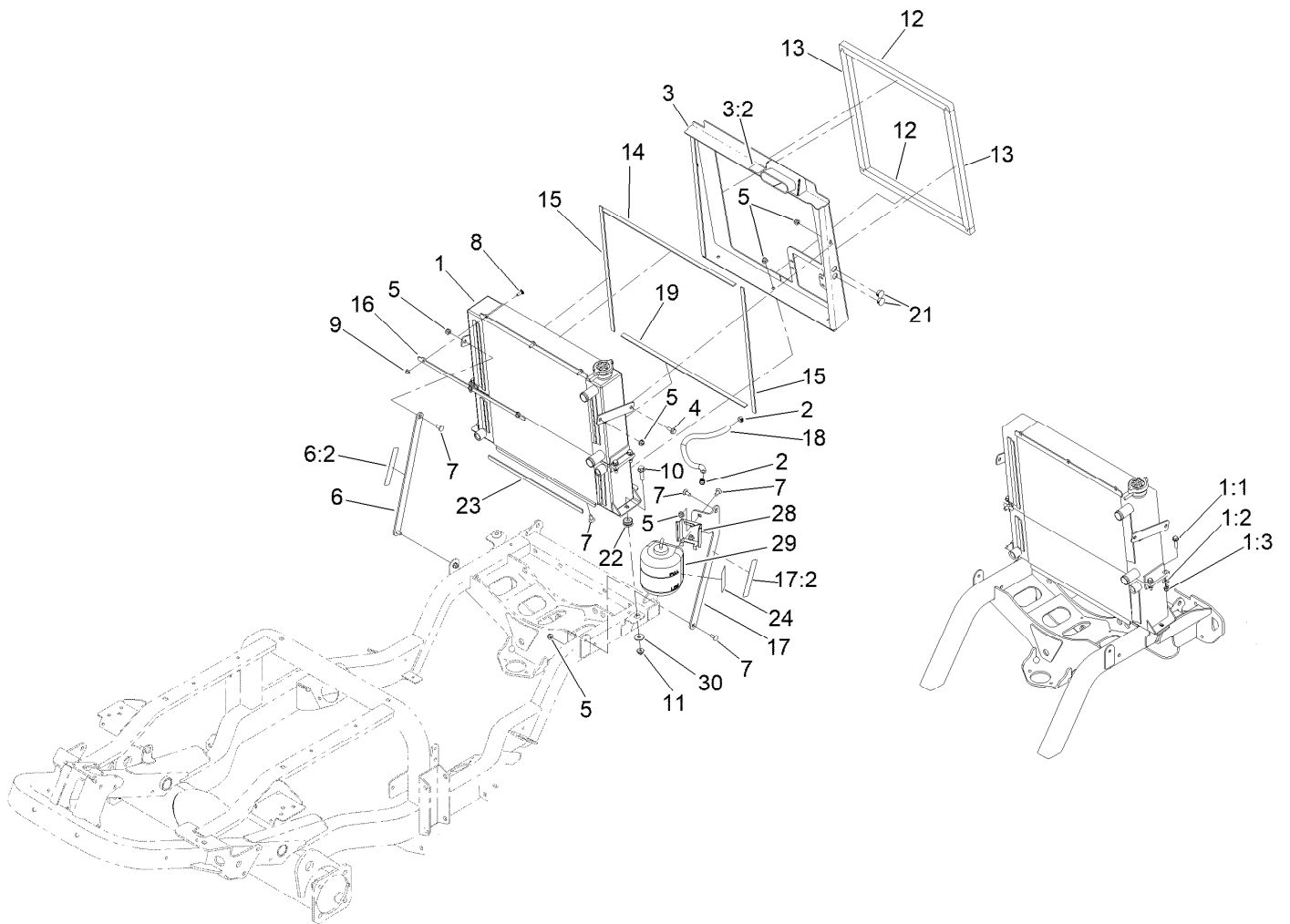
Engine, Muffler and Air Cleaner Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|---------------------------|
| 38 | 33014-00 | 6 | Nut-Hex | 47 | 121-5613 | 1 | Pump-Fuel, Electric |
| 39 | 33104-030 | 2 | Screw-HHF | 48 | 110-4101 | 1 | Hose-Fuel |
| 40 | 120-1959 | 1 | Clamp | 49 | 110-4104 | 1 | Hose-Fuel |
| 41 | 3234-47 | 1 | Screw-HHF | 50 | 88-7200 | 2 | Washer-Flat |
| 42 | 94-1416 | 1 | Adapter-Indicator | 51 | 3230-2 | 6 | Bolt-CARR |
| 43 | 93-9164 | 1 | Indicator-Mini | 52 | 2412-130 | 1 | Clamp-Hose |
| 44 | 132-7563 | 1 | Hose-Fuel | 53 | 2412-108 | 2 | Clamp-Worm |
| 45 | 110-4112 | 1 | Hose-Fuel | 54 | 145-5958-0P | 1 | Strap-Pump Mount [primed] |
| 46 | 3234-4 | 2 | Screw-HHF | 55 | 33104-020 | 2 | Screw-HHF |



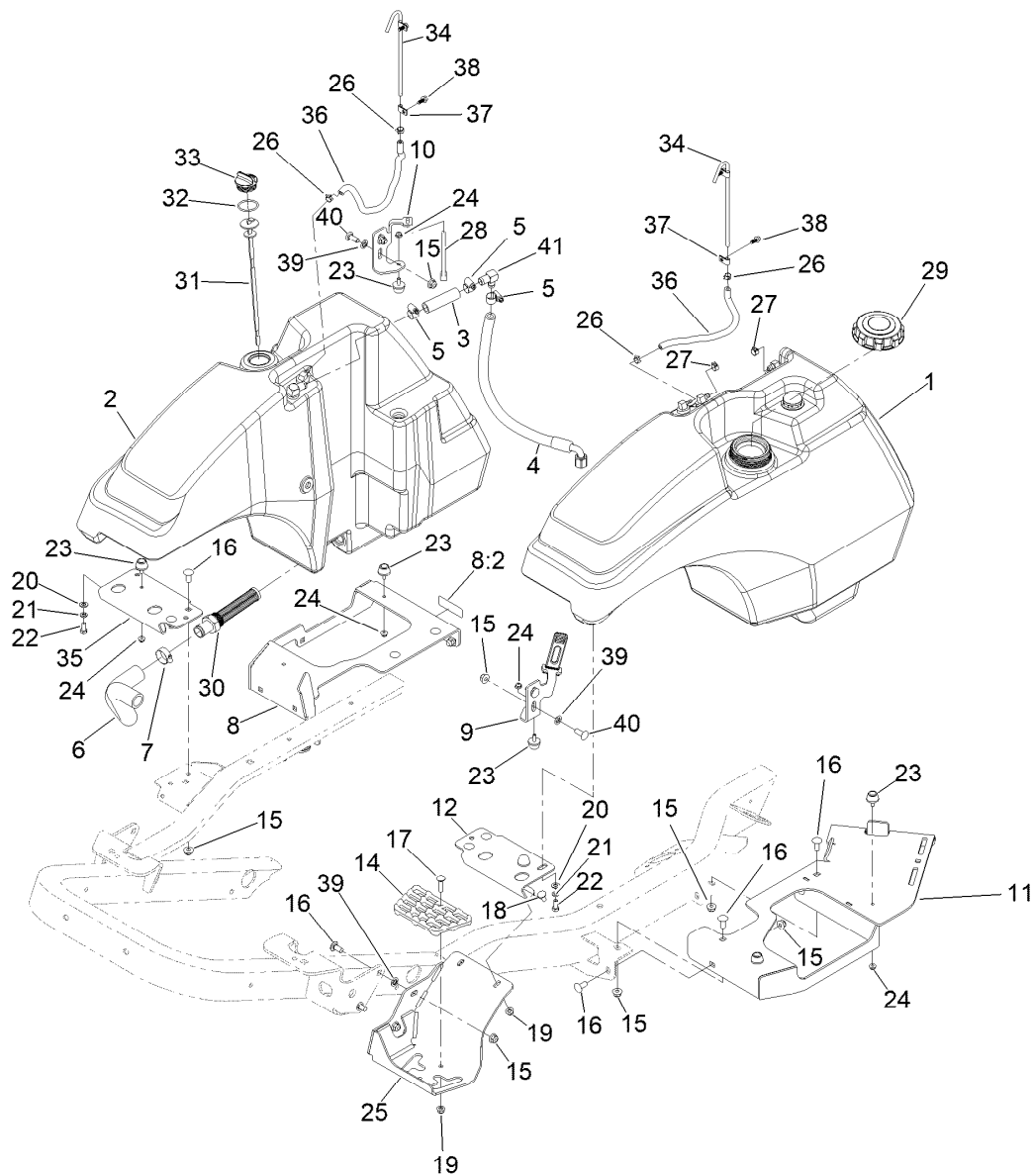
Air Cleaner Assembly No. 93-2190

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|----------------------|
| 2 | 108-3811 | 1 | Filter-Air V-Twin HD |
| 3 | 94-3652 | 1 | Cover ASM |
| 3:1 | 1-643283 | 2 | Latch-Cleaner, Air |
| 4 | 87-9400 | 1 | Valve-Vacuator |
| 5 | 285-17 | 1 | Plug-Pipe |



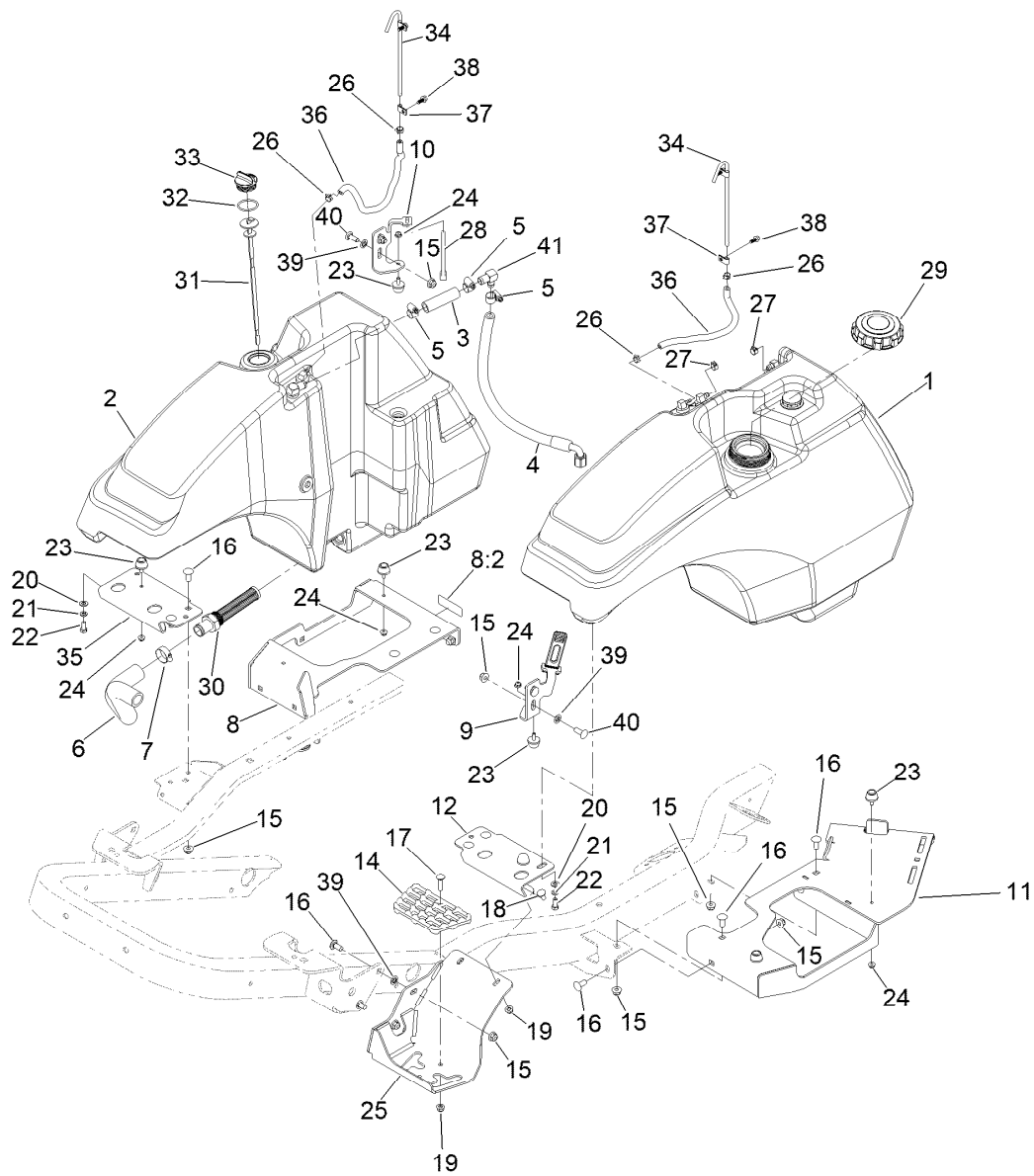
Radiator/Oil Cooler Assembly

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|-------------------------|
| 1 | 147-0062 | 1 | Radiator/Oil Cooler ASM | 12 | 138-4410 | 2 | Seal-Foam |
| 1:1 | 119-4036 | 4 | Screw-HHF | 13 | 138-4411 | 2 | Seal-Foam |
| 1:2 | 3256-23 | 4 | Washer-Plain | 14 | 138-4453 | 1 | Foam-Radiator |
| 1:3 | 137-3093 | 4 | Nut-Hex | 15 | 138-4454 | 2 | Foam-Radiator, Side |
| 2 | 92-2379 | 2 | Clamp-Hose | 16 | 138-4461-0P | 1 | Bracket-Shroud Retainer |
| 3 | 139-6232 | 1 | Shroud-Cooler ASM | 17 | 139-6230 | 1 | Bracket-Bottle Mount |
| 3:2 | 115-8155 | 1 | Decal-Warning | 17:2 | 93-7272 | 1 | Decal-Warning |
| 4 | 3234-47 | 2 | Screw-HHF | 18 | 106-1126 | 1 | Hose-Fuel |
| 5 | 104-8300 | 11 | Nut-HF, NI | 19 | 108-1393 | 1 | Strip-Foam |
| 6 | 139-6229 | 1 | Strap-Cooler | 21 | 130-8439 | 2 | Plug-Dome |
| 6:2 | 93-7272 | 1 | Decal-Warning | 22 | 63-9750 | 2 | Mount |
| 7 | 3230-23 | 9 | Bolt-CARR | 23 | 130-9182 | 1 | Foam-Radiator, Short |
| 8 | 1-807512 | 3 | Bolt-CARR | 24 | 144-0472 | 1 | Decal-Coolant Level |
| 9 | 104-7201 | 3 | Nut-HF, NI | 28 | 140-7165 | 1 | Bracket-Tank |
| 10 | 114-4681 | 2 | Screw-HHF | 29 | 140-7185RT01 | 1 | Tank ASM |
| 11 | 104-8301 | 2 | Nut-HF, NI | 30 | 52-2861 | 2 | Washer |



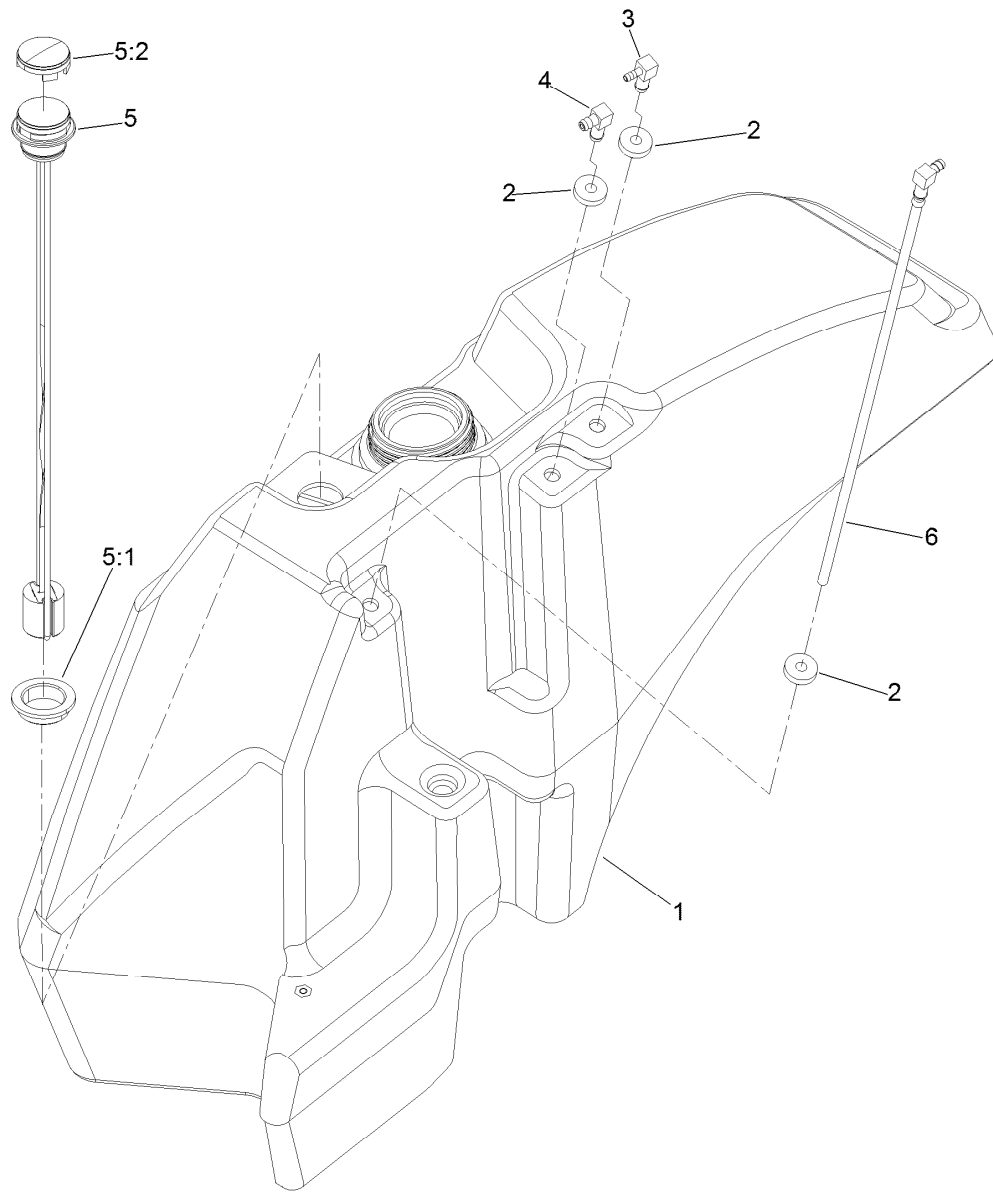
Fuel System Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|------------------------------|------|-------------|------|------------------------------|
| 1 | 138-0291 | 1 | Fuel Tank | 19 | 104-8300 | 3 | Nut-HF, NI |
| 2 | 138-4418 | 1 | Hydraulics Tank ASM | 20 | 3256-23 | 2 | Washer-Plain |
| 3 | 114-4920 | 1 | Hose | 21 | 3253-4 | 2 | Washer-Lock |
| 4 | 145-5933 | 1 | Hose ASM-Hydraulic | 22 | 322-3 | 2 | Screw-HH |
| 5 | 2412-119 | 3 | Clamp-Hose | 23 | 109-2365 | 8 | Bumper-Rubber |
| 6 | 138-7361 | 1 | Hose-Suction | 24 | 104-7201 | 8 | Nut-HF, NI |
| 7 | 2412-34 | 1 | Clamp-Hose | 25 | 139-0927-01 | 1 | Bracket-Mount, Step |
| 8 | 145-6099 | 1 | Tank Support-Hydraulic | 26 | 2412-98 | 4 | Clamp-Hose |
| 8:2 | 127-0392 | 1 | Decal-Hot Surface | 27 | 92-2379 | 2 | Clamp-Hose |
| 9 | 138-0441-03 | 1 | Bracket-Tank Hold Down, LH | 28 | 131-8402 | 2 | Strap-Down, Hold |
| 10 | 138-7315-03 | 1 | Bracket-Tank Hold Down, RH | 29 | 125-9171 | 1 | Cap-Fuel |
| 11 | 145-6031 | 1 | Tank And Battery Tray ASM | 30 | 138-7499 | 1 | Fitting-Strainer |
| 12 | 138-7365-03 | 1 | Bracket-Tank Mount, Front LH | 31 | 138-7388 | 1 | Dipstick |
| 14 | 126-4781 | 1 | Step-Deck | 32 | 94-8166 | 1 | O-Ring |
| 15 | 104-8301 | 19 | Nut-HF, NI | 33 | 93-7498 | 1 | Plug-Plastic |
| 16 | 3231-27 | 15 | Screw-CARR | 34 | 139-6252 | 2 | Tube-Vent |
| 17 | 3230-3 | 1 | Screw-CARR | 35 | 139-0940-03 | 1 | Bracket-Tank Mount, Front RH |
| 18 | 3230-23 | 2 | Bolt-CARR | 36 | 139-6253 | 2 | Hose-Fuel |
| | | | | 37 | 2412-72 | 4 | Clip-Closed, Insulated |
| | | | | 38 | 99-6810 | 4 | Screw-HHF |



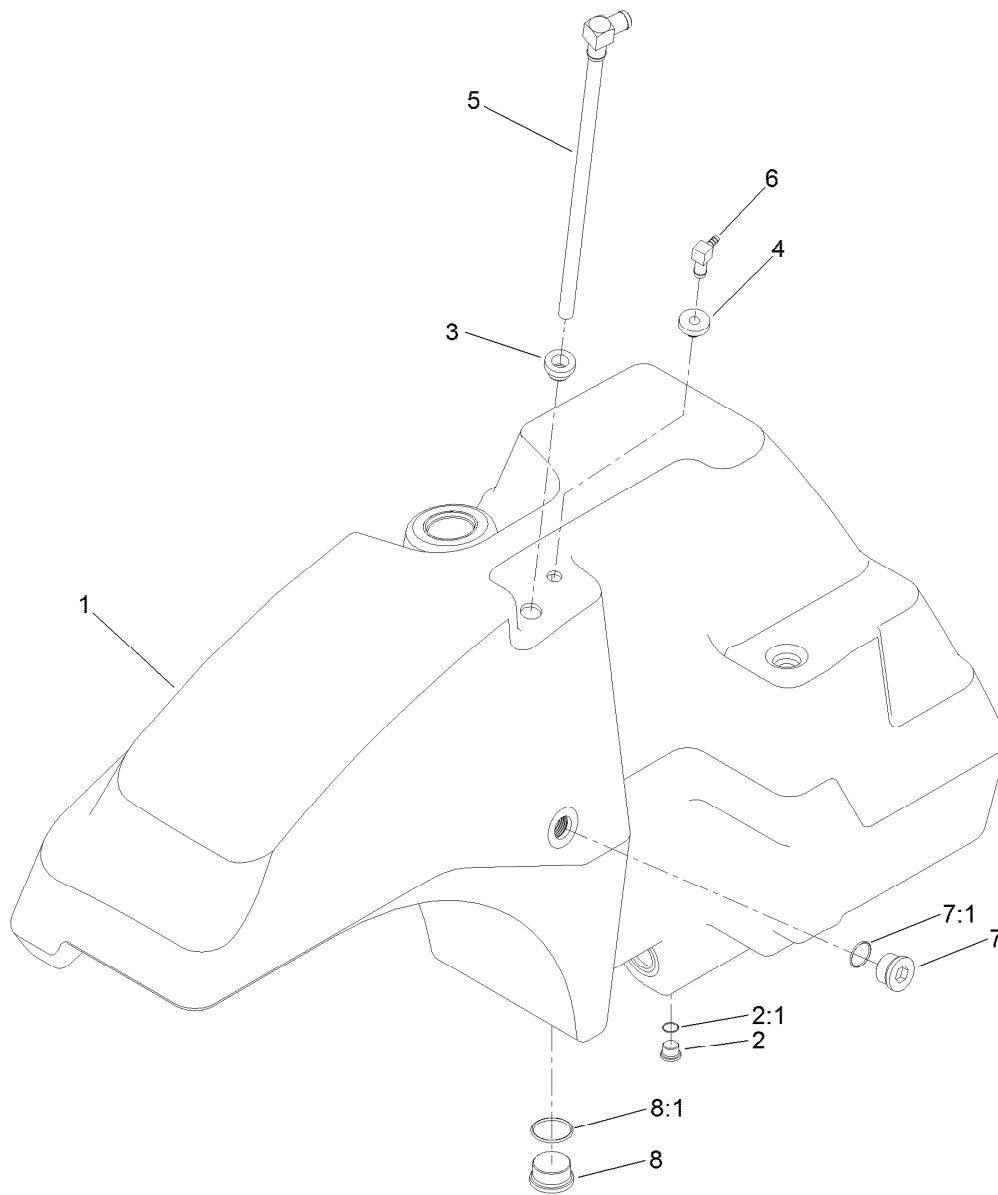
Fuel System Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 39 | 107-3154 | 6 | Nut-Push | 40 | 3231-22 | 4 | Screw-CARR |
| | | | | 41 | 117-0943 | 1 | Fitting-Elbow |



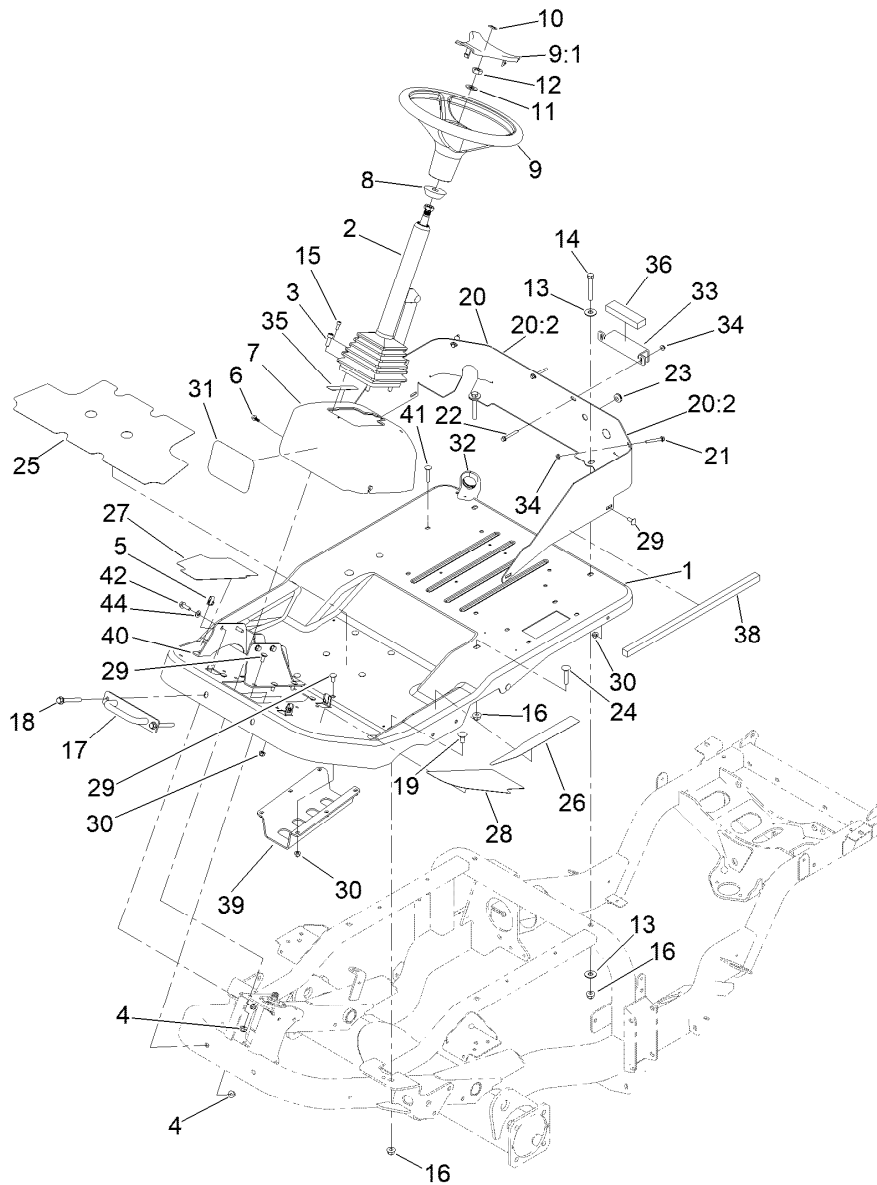
Fuel Tank Assembly No. 138-0291

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|-------------------------|
| 1 | 138-7385 | 1 | Fuel Tank W/Inserts ASM |
| 2 | 46-6560 | 3 | Bushing |
| 3 | 104-5228 | 1 | Fitting-Elbow, 90 DEG |
| 4 | 46-6550 | 1 | Fitting-Elbow, 90 DEG |
| 5 | 139-0872 | 1 | Gauge-Fuel |
| 5:1 | 119-0508 | 1 | Seal |
| 5:2 | 117-8404 | 1 | Dial-Gauge |
| 6 | 138-7389 | 1 | Pipe-Stand |



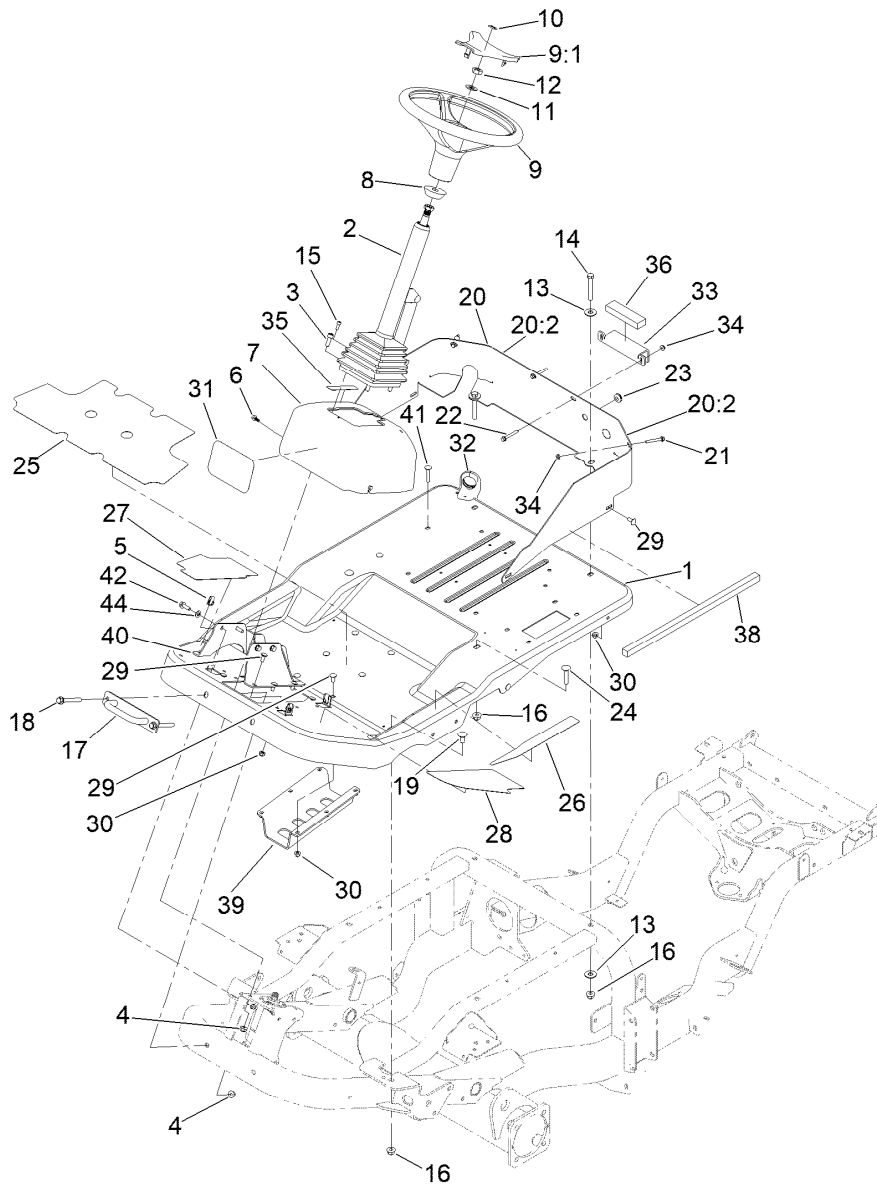
Hydraulic Tank Assembly No. 138-4418

| Ref. | Part Number | Qty. | Description |
|------|-------------|------|--------------------------|
| 1 | 138-7386 | 1 | Tank-Hydraulic W/Inserts |
| 2 | 353-989 | 1 | Plug-Hex, Hollow |
| 2:1 | 237-42 | 1 | O-Ring |
| 3 | 104-0790 | 1 | Bushing |
| 4 | 46-6560 | 1 | Bushing |
| 5 | 138-7384 | 1 | Tube-Drop |
| 6 | 104-5228 | 1 | Fitting-Elbow, 90 DEG |
| 7 | 139-6333 | 1 | Fitting-Plug |
| 7:1 | 237-81 | 1 | O-Ring |
| 8 | 105-3921 | 1 | Fitting-Plug |
| 8:1 | 237-146 | 1 | O-Ring |



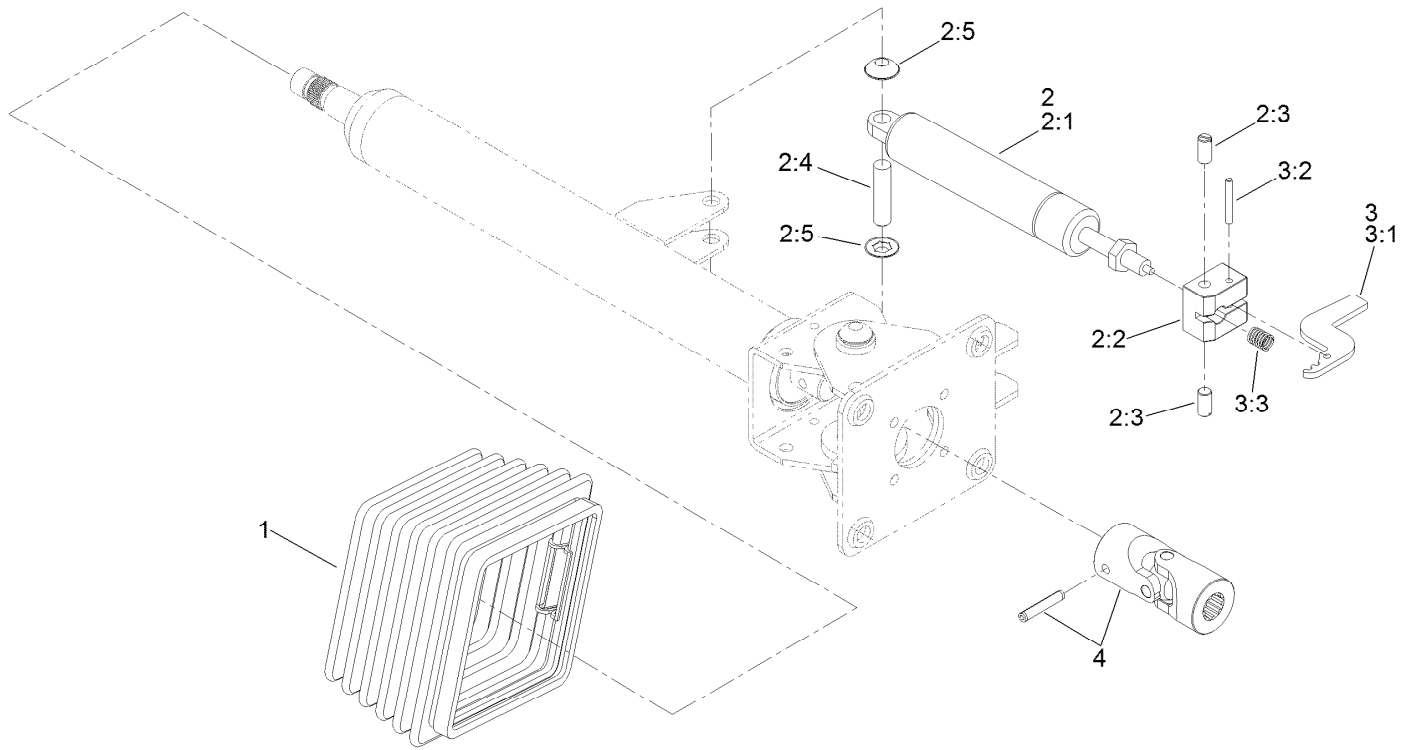
Platform, Steering and Console Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-----------------------|------|-------------|------|---------------------------------|
| 1 | 144-4030SP | 1 | Platform-Stamped | 20:2 | 132-1316 | 2 | Decal-Danger, Belt |
| 2 | 139-0857 | 1 | Column-Steering, Tilt | 21 | 125-4287 | 2 | Screw-HHF |
| 3 | 3274-7 | 4 | Screw-HSH | 22 | 3234-34 | 2 | Screw-HHF |
| 4 | 104-8301 | 6 | Nut-HF, NI | 23 | 1-633630 | 1 | Grommet |
| 5 | 107069 | 4 | Clip | 24 | 3232-5 | 2 | Screw-CARR |
| 6 | 99-6810 | 4 | Screw-HHF | 25 | 144-4029 | 1 | Tread-Foot, Main |
| 7 | 138-7494 | 1 | Cover-Steering | 26 | 139-0859 | 1 | Tread-Foot, Side |
| 8 | 93-5429 | 1 | Collar-Foam | 27 | 139-0885 | 1 | Tread-Foot, Front RH |
| 9 | 98-1471 | 1 | Wheel-Steering | 28 | 139-0886 | 1 | Tread-Foot, Front LH |
| 9:1 | 98-1468 | 1 | Cover-Wheel, Steering | 29 | 3230-23 | 15 | Bolt-CARR |
| 10 | 98-1459 | 1 | Decal | 30 | 104-8300 | 21 | Nut-HF, NI |
| 11 | 3256-27 | 1 | Washer-Flat | 31 | 105-1217 | 1 | Decal |
| 12 | 3296-33 | 1 | Nut-Lock, NI | 32 | 144-0473 | 1 | Plug-Harness, Firewall |
| 13 | 3256-40 | 4 | Washer-Flat | 33 | 139-2166-0P | 1 | Bracket-Hood Support |
| 14 | 324-12 | 2 | Screw-HH | 34 | 104-7201 | 4 | Nut-HF, NI |
| 15 | 105-2409 | 4 | Screw-HSH | 35 | 140-1460 | 1 | Decal-Traction Pedal |
| 16 | 114-8417 | 6 | Nut-HF, NI | 36 | 139-6202 | 1 | Foam-Strip |
| 17 | 138-0288 | 1 | Bracket-Down, Tie | 38 | 139-6207 | 1 | Foam-Strip |
| 18 | 3234-41 | 2 | Screw-HHF | 39 | 144-3954-03 | 1 | Guard-Tubes, Hydraulic |
| 19 | 3232-1 | 2 | Screw-CARR | 40 | 145-5983-0P | 1 | Bracket-Steering Mount [primed] |
| 20 | 144-0528 | 1 | Plate-Firewall, Lower | | | | |



Platform, Steering and Console Assembly (continued)

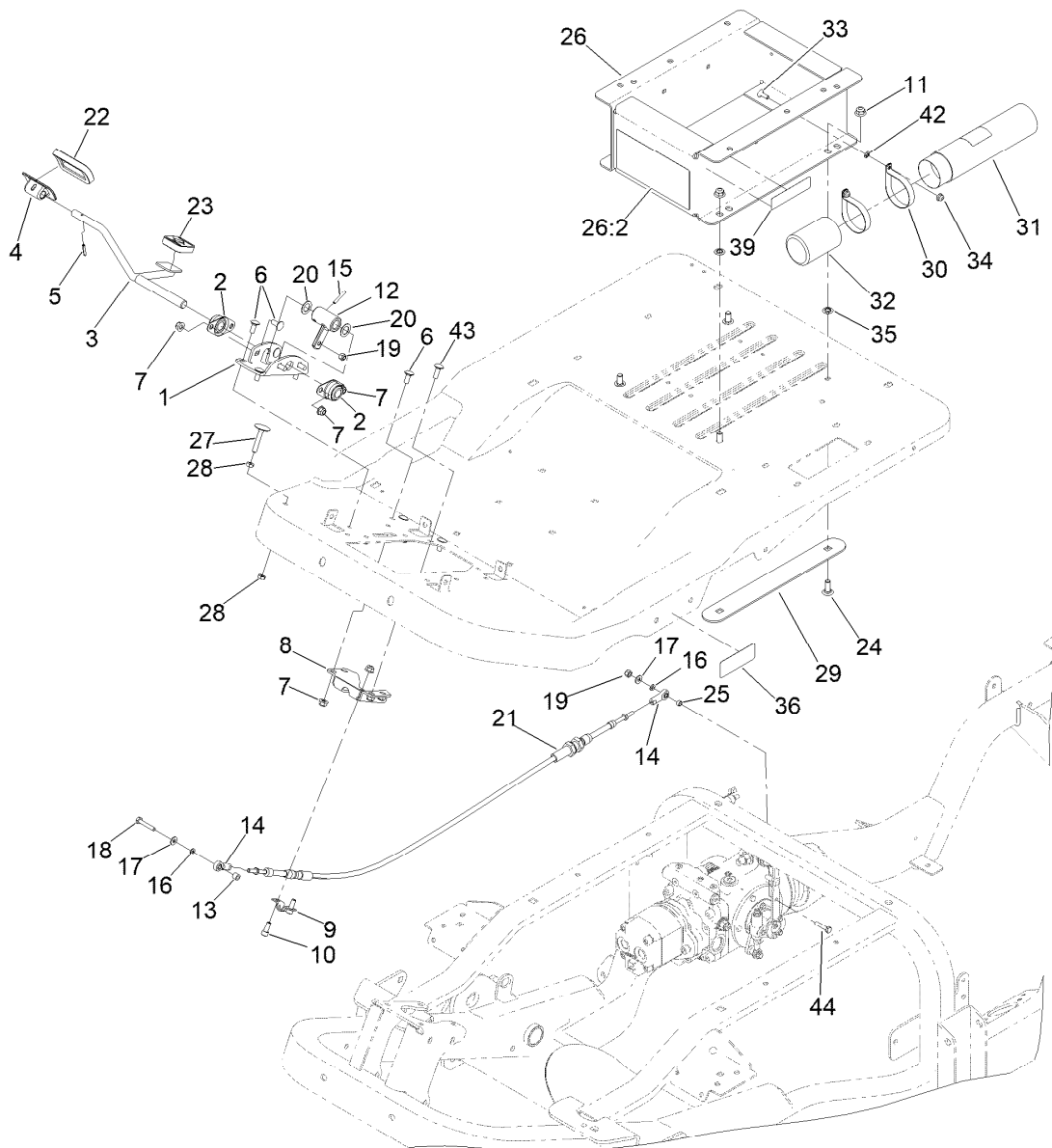
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 41 | 116-0629 | 2 | Screw-CARR | 42 | 3234-29 | 4 | Screw-HHF |
| | | | | 44 | 3256-38 | 4 | Washer-Flat |



Steering Column Assembly No. 139-0857

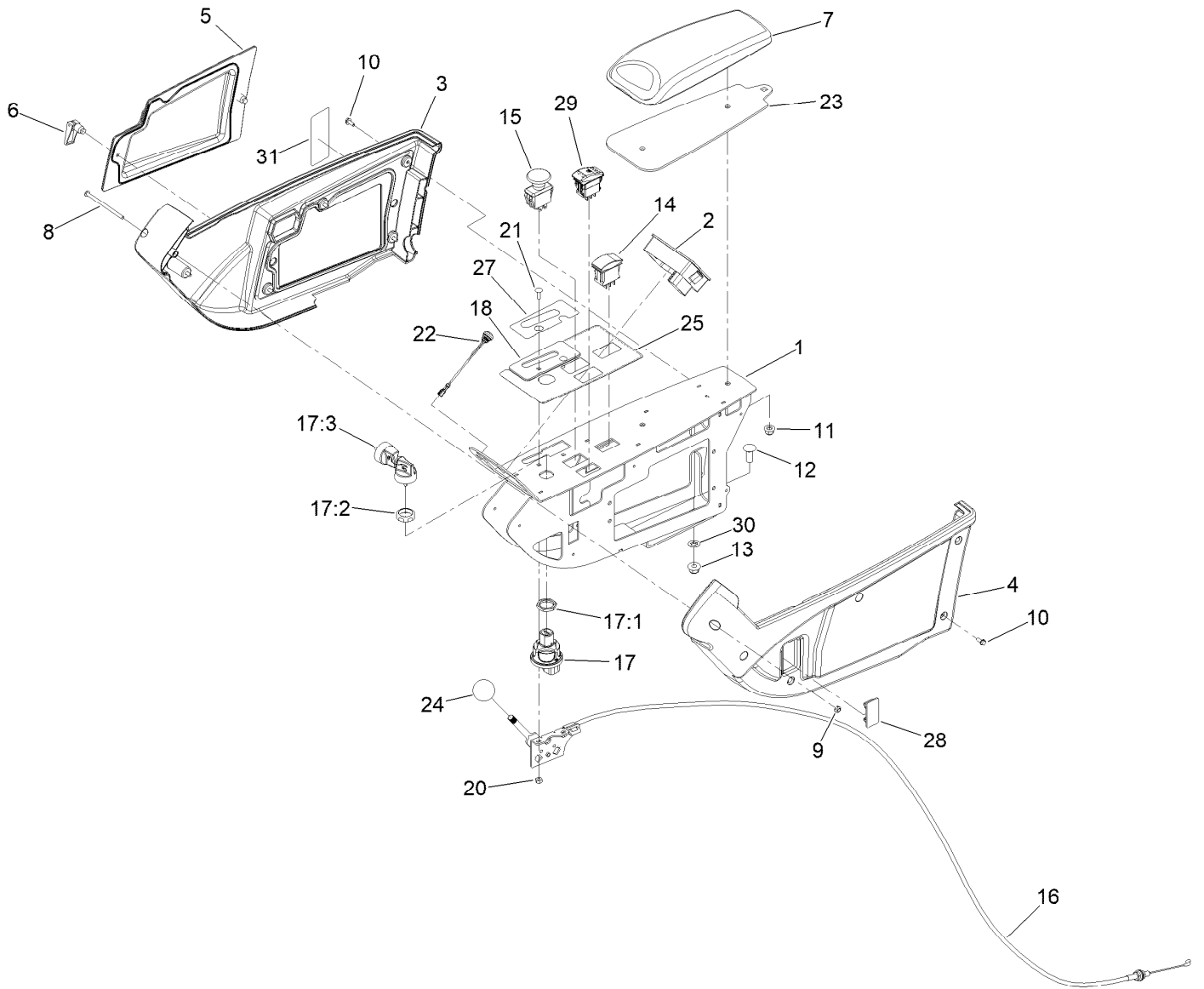
| Ref. | Part Number | Qty. | Description |
|------|-------------|------|----------------------|
| 1 | 110-6462 | 1 | Bellows-Rubber |
| 2 | 110-6463 | 1 | Cylinder Service Kit |
| 2:1 | | 1 | Cylinder-Gas ● |
| 2:2 | | 1 | Block-Pedal ● |
| 2:3 | | 2 | Bolt ● |
| 2:4 | | 1 | Pin ● |
| 2:5 | | 2 | Washer-Lock ● |
| 3 | 136-4385 | 1 | Pedal Service Kit |
| 3:1 | | 1 | Pedal ● |
| 3:2 | | 1 | Pin ● |
| 3:3 | | 1 | Spring ● |
| 4 | 120-6256 | 1 | Universal Joint Kit |

● Not serviced separately



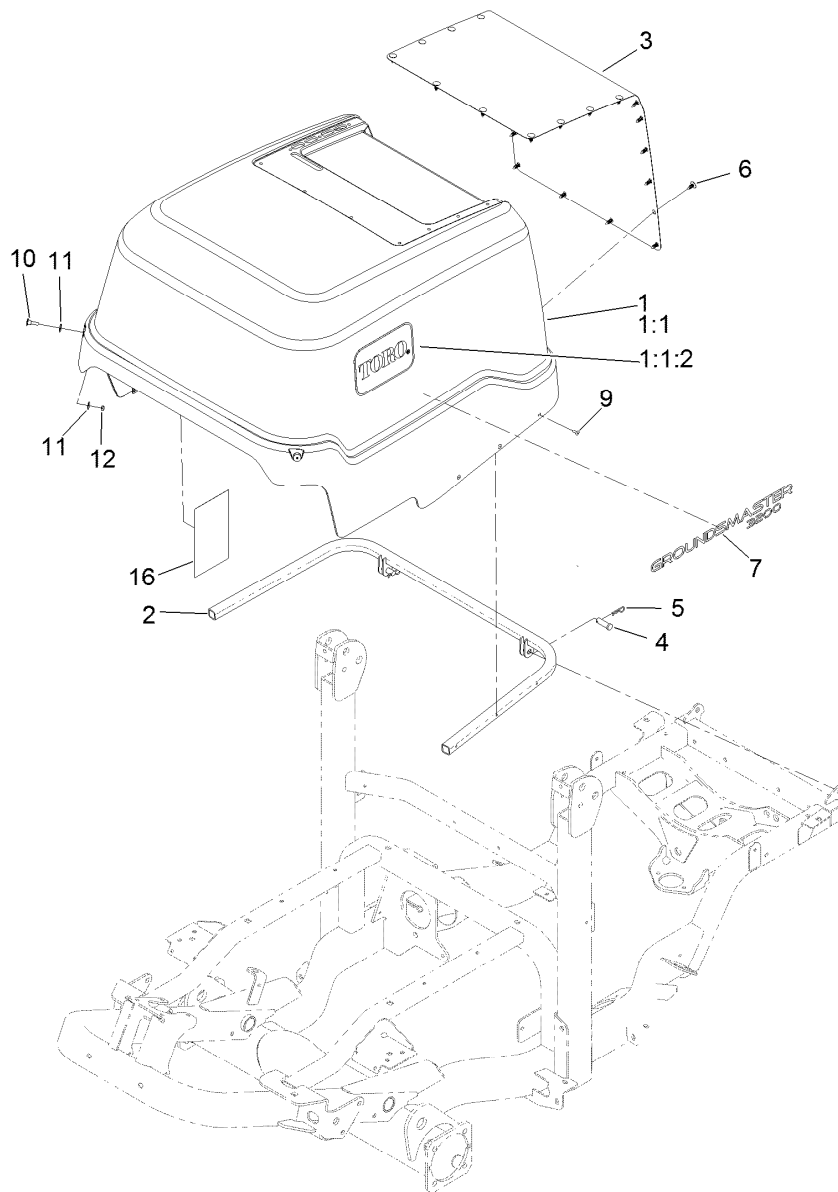
Pedal Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-------------------------|------|-------------|------|----------------------|
| 1 | 138-7477-01 | 1 | Bracket-Pedal, Traction | 22 | 74-9100 | 1 | Pad-Pedal, Forward |
| 2 | 256-236 | 2 | Bearing-Mount, Flange | 23 | 74-9110 | 1 | Pad-Pedal, Reverse |
| 3 | 138-4594 | 1 | Pedal-Traction | 24 | 3231-22 | 4 | Screw-CARR |
| 4 | 117-9507 | 1 | Pedal-Accelerator | 25 | 130-9691 | 1 | Spacer |
| 5 | 32121-45 | 1 | Pin-Spring | 26 | 139-6221 | 1 | Seat Box ASM |
| 6 | 3230-23 | 11 | Bolt-CARR | 26:2 | 139-6215 | 1 | Decal-Warning |
| 7 | 104-8300 | 14 | Nut-HF, NI | 27 | 115-8240 | 1 | Screw-Elevator |
| 8 | 138-7446-01 | 1 | Bracket-Cable, Traction | 28 | 3218-2 | 2 | Nut-Hex Jam |
| 9 | 93-2092 | 1 | Clamp-Cable | 29 | 138-7422-0P | 2 | Strip-Seat Mount |
| 10 | 3274-10 | 2 | Screw-HSH | 30 | 107-1865 | 2 | R-Clamp |
| 11 | 104-8301 | 4 | Nut-HF, NI | 31 | 104-7050 | 1 | Tube-Manual |
| 12 | 117-5199 | 1 | Hub-Pedal, Traction | 32 | 104-7048 | 1 | Cap-Housing |
| 13 | 66-8010 | 1 | Spacer | 33 | 1-807512 | 2 | Bolt-CARR |
| 14 | 2411-41 | 2 | Rod End-Ball Joint | 34 | 104-7201 | 2 | Nut-HF, NI |
| 15 | 32121-6 | 1 | Pin-Roll, Slotted | 35 | 107-3154 | 4 | Nut-Push |
| 16 | 33093-00 | 2 | Washer-Flat | 36 | 106-9206 | 2 | Decal-Torque, Wheel |
| 17 | 3256-22 | 2 | Washer-Flat | 39 | 133-8062 | 1 | Decal-Spark Arrestor |
| 18 | 321-9 | 1 | Screw-HH | 42 | 32115-15 | 2 | Nut-Push |
| 19 | 3296-42 | 2 | Nut-Lock, NI | 43 | 3230-10 | 1 | Bolt-CARR |
| 20 | 137-2601 | 2 | Washer | 44 | 321-8 | 1 | Screw-HH |
| 21 | 145-6040 | 1 | Cable-ASM, Traction | | | | |



Control Console Assembly

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------------------|-------------|--------------------|-------------|-------------------------------|
| 1 | 133-6406-03 | 1 | Panel | 17 | 121-5159 | 1 | Switch-Ignition |
| 2 | 132-9751 | 1 | Tdm 2001 | 17:1 | 121-5160 | 1 | Nut-Hex |
| 3 | 108-7605 | 1 | Cover-RH | 17:2 | 122-2704 | 1 | Nut-Face, M22 (Plastic) |
| 4 | 108-7604 | 1 | Cover-LH | 17:3 | 121-5162 | 1 | Set-Key, Ignition |
| 5 | 108-7616 | 1 | Panel-Access | 18 | 137-2510 | 1 | Cover-Throttle, Lever |
| 6 | 74-5950 | 2 | Latch-Swell | 20 | 3296-2 | 2 | Nut-Lock, NI |
| 7 | 131-9637 | 1 | Armrest-Quick Find | 21 | 1-807533 | 2 | Bolt-CARR |
| 8 | 3250-22 | 1 | Screw-PPH | 22 | 136-9678 | 1 | Switch-Pushbutton |
| 9 | 3296-12 | 1 | Nut-Lock, NI | 23 | 138-4548-03 | 1 | Plate-Spacer, Console Pad |
| 10 | 32144-112 | 10 | Screw-HWH | 24 | 1-603175 | 1 | Knob-Ball |
| 11 | 104-8300 | 2 | Nut-HF, NI | 25 | 138-7471 | 1 | Decal-Console |
| 12 | 3231-22 | 2 | Screw-CARR | 27 | 138-7473 | 1 | Decal-Throttle |
| 13 | 104-8301 | 2 | Nut-HF, NI | 28 | 99-7420 | 1 | Plug-Hole |
| 14 | 100-1535 | 1 | Switch-Rocker, (On)-Off-(On) | 29 | 110-0811 | 1 | Switch-Rocker On-None-(On) |
| 15 | 93-9999 | 1 | Switch-PTO | 30 | 107-3154 | 2 | Nut-Push |
| 16 | 138-4549 | 1 | Cable-Throttle | 31 | 140-3125 | 1 | Decal-Fuse |

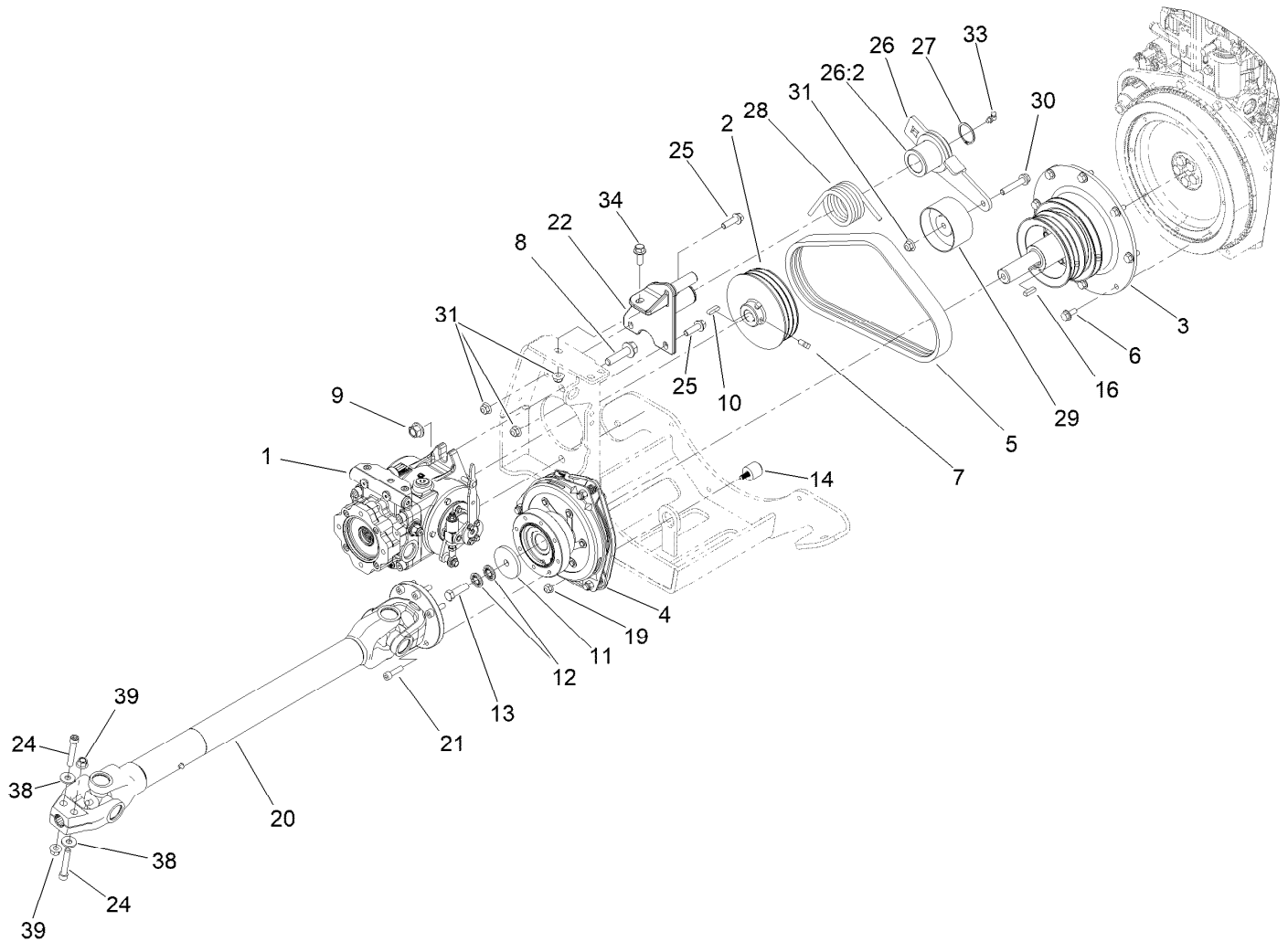


Hood Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|-------|-------------|------|-------------------------|------|-------------|------|-------------------------|
| 1 | 138-7330SP | 1 | Hood | 5 | 3290-467 | 2 | Pin-Hair |
| 1:1 | | 1 | Hood ASM ■ | 6 | 117-2382 | 24 | Plug-Plastic |
| 1:1:2 | 62-7400 | 2 | Decal-Toro Logo | 7 | 139-6151 | 2 | Decal-Identification |
| 1:2 | 139-6225 | 1 | Tape-Heat, Hood Front ● | 9 | 114439 | 10 | Rivet-Blind |
| 1:3 | 139-6226 | 1 | Tape-Heat, Hood Rear ● | 10 | 139-0855 | 2 | Screw-Countersunk, Oval |
| 1:4 | 139-6227 | 1 | Tape-Heat, Hood Side ● | 11 | 3256-2 | 4 | Washer-Flat |
| 2 | 138-7331-03 | 1 | Support-Hood | 12 | 3296-56 | 2 | Nut-Lock, NI |
| 3 | 138-7474-03 | 1 | Screen-Cooler | 16 | 144-0518 | 1 | Decal-Service, Gm3200 |
| 4 | 283-68 | 2 | Pin-Clevis | | | | |

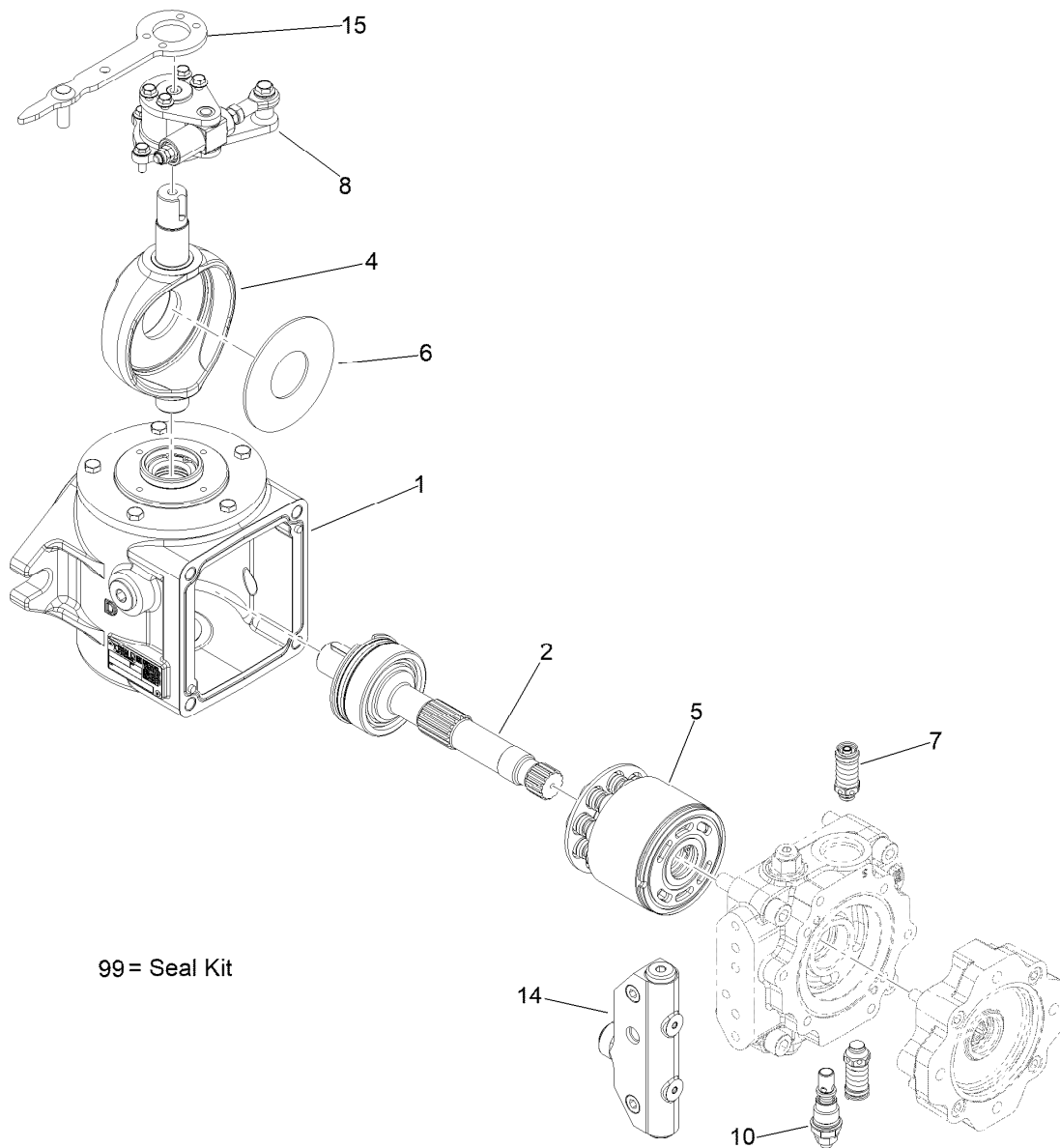
● Not illustrated

■ Not serviced separately



Pump, Driveshaft and Clutch Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|---------------------------|------|-------------|------|------------------------|
| 1 | 145-5940 | 1 | Pump-Bondioli | 20 | 144-0521SP | 1 | Driveshaft ASM |
| 2 | 145-6044 | 1 | Pulley-3/3V | 21 | 144-0452 | 6 | Screw-HSH, Patch |
| 3 | 147-0050 | 1 | Stubshaft-3/3V | 22 | 140-6200 | 1 | Idler Pivot (Mach) |
| 4 | 145-5987 | 1 | Clutch-Gt5 W/Integral Con | 24 | 131-8591 | 2 | Screw-HSH |
| 5 | 139-6259 | 1 | Belt-3/3V | 25 | 119-4061 | 2 | Screw-HHF |
| 6 | 138-0690 | 8 | Screw-HH | 26 | 140-6179 | 1 | Idler Arm ASM |
| 7 | 1-803022 | 2 | Screw-Set | 26:2 | 93-4510 | 2 | Bushing-Caster |
| 8 | 133-0041 | 2 | Screw-HF | 27 | 32120-84 | 1 | Ring-Snap, External |
| 9 | 99-5107 | 2 | Nut-Lock | 28 | 140-3102 | 1 | Spring-Torsion |
| 10 | 94-3645 | 1 | Key | 29 | 144-3904 | 1 | Pulley-Tensioner |
| 11 | 139-6238 | 1 | Washer | 30 | 108-3742 | 1 | Screw-HHF |
| 12 | 1-603610 | 2 | Washer-Spring | 31 | 104-8301 | 4 | Nut-HF, NI |
| 13 | 109-9761 | 1 | Screw-HH | 33 | 302-40 | 1 | Fitting-Grease, 90 DEG |
| 14 | 147-0060 | 1 | Bumper | 34 | 3234-42 | 1 | Screw-HHF |
| 16 | 10-7070 | 1 | Key-Square | 38 | 80-6990 | 2 | Washer-Hardened |
| 19 | 104-8300 | 2 | Nut-HF, NI | 39 | 32128-36 | 2 | Nut-HF |



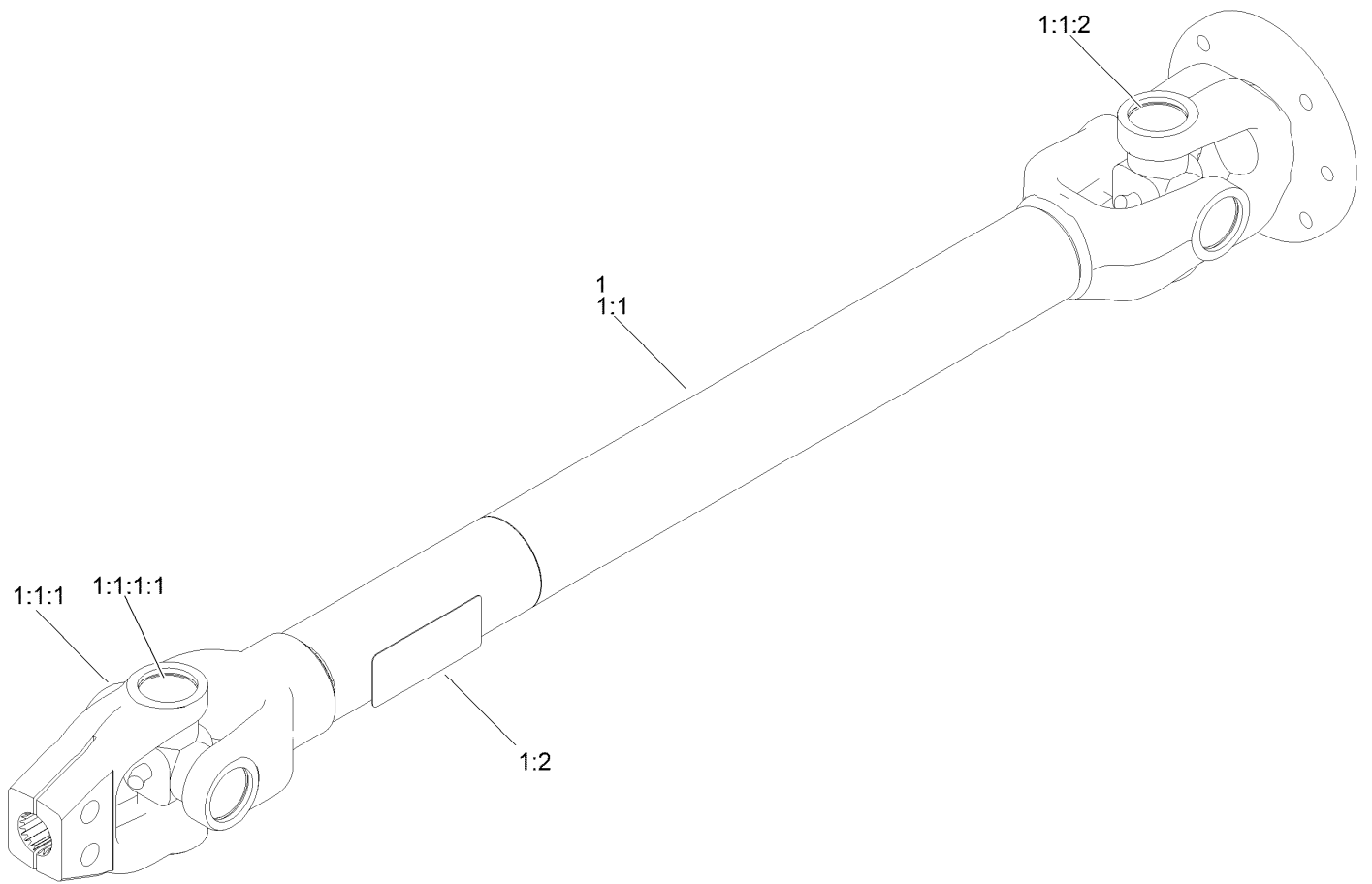
99= Seal Kit

Pump Assembly No. 145-5940

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|------------------------|-------|-------------|------|---------------------------|
| 1 | 147-0161 | 1 | Housing-Pump | 99:2 | | 1 | O-Ring ●■ |
| 2 | 147-0162 | 1 | Shaft ASM | 99:3 | | 1 | Gasket-Pump Body ●■ |
| 3 | 147-0163 | 1 | Distributor ASM ● | 99:4 | | 1 | Seal-Shaft ●■ |
| 4 | 147-0164 | 1 | Plate-Swash | 99:5 | | 1 | O-Ring ●■ |
| 5 | 147-0165 | 1 | Rotating Assembly | 99:6 | | 6 | O-Ring ●■ |
| 6 | 147-0166 | 1 | Plate-Swash, Insert | 99:7 | | 2 | O-Ring ●■ |
| 7 | 147-0167 | 1 | Valve, 250 Bar | 99:8 | | 1 | O-Ring ●■ |
| 8 | 147-0168 | 1 | Spring ASM, Return | 99:9 | | 2 | Plug-Sealed, 1/8" BSPP ●■ |
| 9 | 147-0169 | 1 | Cap-Seal ● | 99:10 | | 1 | O-Ring ●■ |
| 10 | 147-0170 | 1 | Valve-Relief 10-15 Bar | 99:11 | | 1 | O-Ring ●■ |
| 11 | 147-0171 | 1 | Plug, 7/16"-20 Unf ● | 99:12 | | 2 | O-Ring ●■ |
| 12 | 147-0172 | 1 | Plug, 1-1/16"-12 Unf ● | 99:13 | | 1 | O-Ring ●■ |
| 13 | 147-0173 | 1 | Pump-Boost ASM ● | 99:14 | | 2 | Nut-Retainer, M8 ●■ |
| 14 | 147-0174 | 1 | Exchange Valve ASM | 99:15 | | 6 | O-Ring ●■ |
| 15 | 147-0175 | 1 | Lever-Control | 99:16 | | 3 | Plug-Sealed, 1/4" BSPP ●■ |
| 99 | 147-0176 | 1 | Kit-Seal | 99:17 | | 1 | O-Ring ●■ |
| 99:1 | | 1 | Seal-Shaft ●■ | 99:18 | | 1 | O-Ring ●■ |

● Not illustrated

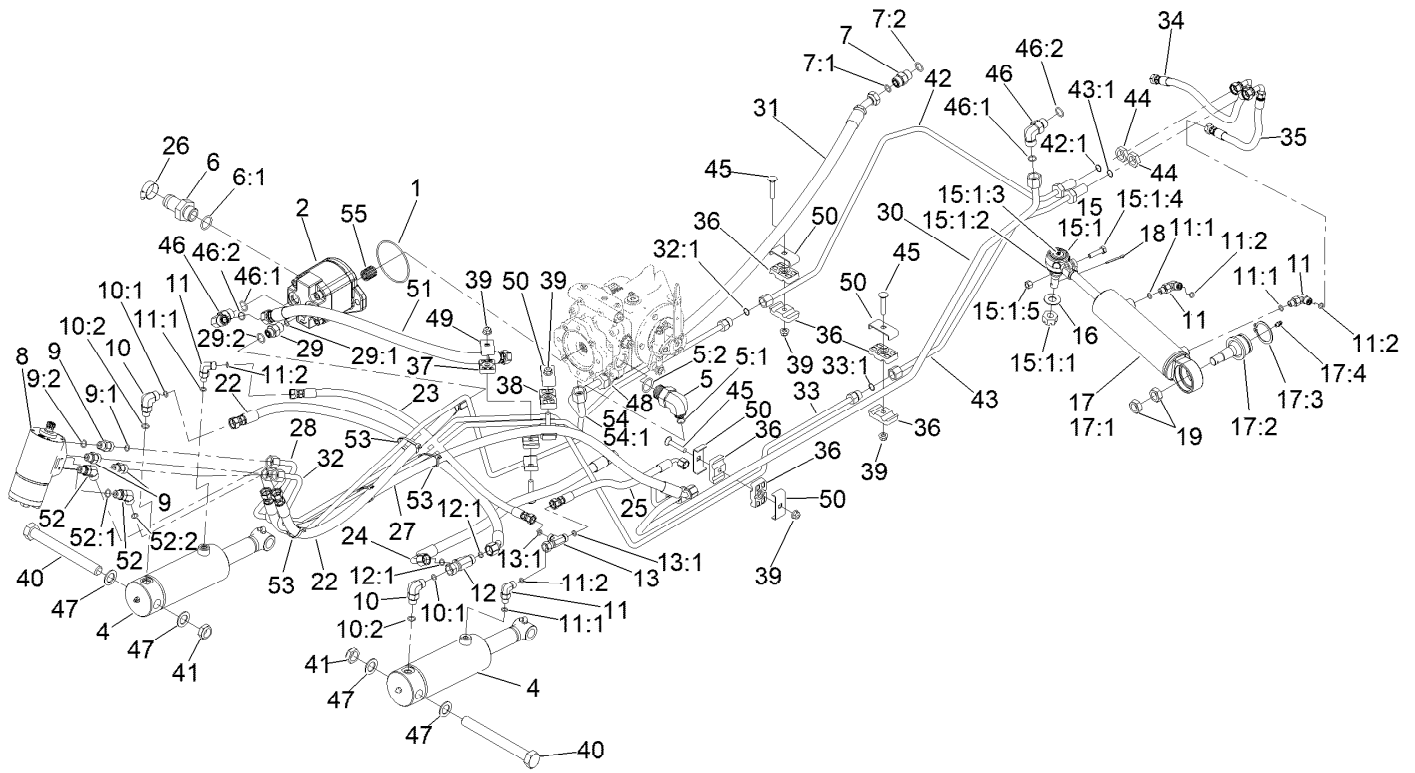
■ Not serviced separately



Driveshaft Assembly No. 144-0521SP

| Ref. | Part Number | Qty. | Description |
|---------|-------------|------|----------------------------|
| 1 | | 1 | Driveshaft ASM ● |
| 1:1 | | 1 | Shaft-Drive, Jdl ● |
| 1:1:1 | 144-0519 | 1 | Yoke-Splined W/Cross Joint |
| 1:1:1:1 | 144-0550 | 1 | Bearing-Cross Joint |
| 1:1:2 | 144-0550 | 1 | Bearing-Cross Joint |
| 1:2 | 139-6304 | 1 | Decal-Danger, Entanglement |

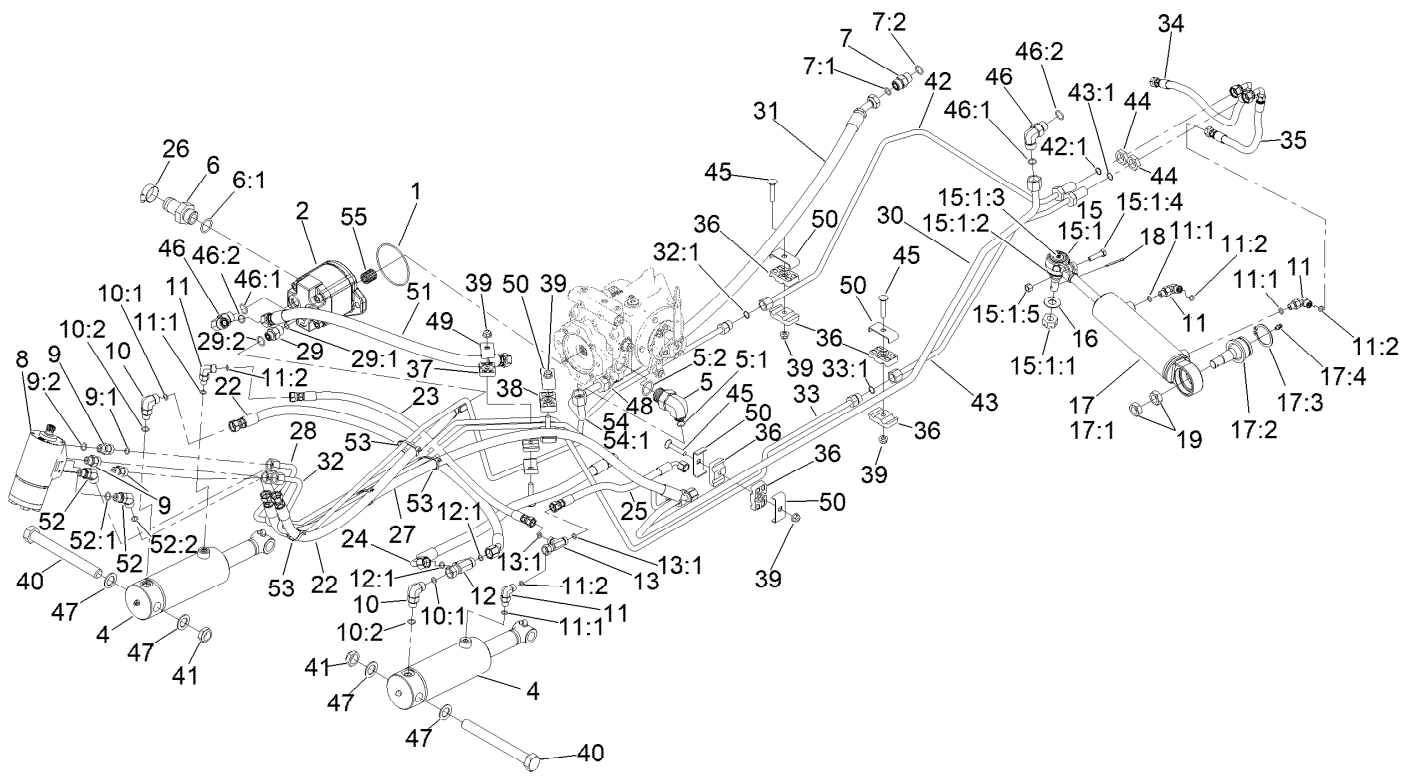
● Not serviced separately



Hydraulic Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-----------------------|--------|-------------|------|-------------------------|
| 1 | 237-161 | 1 | O-Ring | 11 | 340-132 | 4 | Fitting-Elbow, 90 DEG |
| 2 | 147-5115 | 1 | Pump-Gear | 11:1 | 237-78 | 1 | O-Ring |
| 4 | 139-0854 | 2 | Cylinder-Hydraulic | 11:2 | 237-21 | 1 | O-Ring |
| 5 | 340-131 | 1 | Fitting-HYD, 90 DEG | 12 | 340-115 | 1 | Fitting-Tee |
| 5:1 | 237-30 | 1 | O-Ring | 12:1 | 237-22 | 2 | O-Ring |
| 5:2 | 237-81 | 1 | O-Ring | 13 | 340-151 | 1 | Fitting-Tee |
| 6 | 99-3017 | 1 | Fitting | 13:1 | 237-21 | 2 | O-Ring |
| 6:1 | 237-81 | 1 | O-Ring | 15 | 106-6895-03 | 1 | Ball Joint ASM |
| 7 | 340-4 | 1 | Fitting-Straight | 15:1 | | 1 | Joint-Ball ● |
| 7:1 | 237-30 | 1 | O-Ring | 15:1:1 | 32136-13 | 1 | Nut-SHH |
| 7:2 | 237-79 | 1 | O-Ring | 15:1:2 | 106-6896 | 1 | Seal |
| 8 | 114-8119 | 1 | Steering Valve ASM | 15:1:3 | 302-5 | 1 | Fitting-Grease |
| 9 | 340-2 | 3 | Fitting-Straight | 15:1:4 | 3210-7 | 1 | Screw-HH |
| 9:1 | 237-22 | 1 | O-Ring | 15:1:5 | 32152-5 | 1 | Nut-Hex |
| 9:2 | 237-42 | 1 | O-Ring | 16 | 69-8980 | 1 | Washer |
| 10 | 340-77 | 2 | Fitting-Elbow, 90 DEG | 17 | | 1 | Steering Cylinder ASM ● |
| 10:1 | 237-22 | 1 | O-Ring | 17:1 | 139-6277 | 1 | Steering Cylinder |
| 10:2 | 237-42 | 1 | O-Ring | 17:2 | 106-6774 | 1 | Joint-Ball |

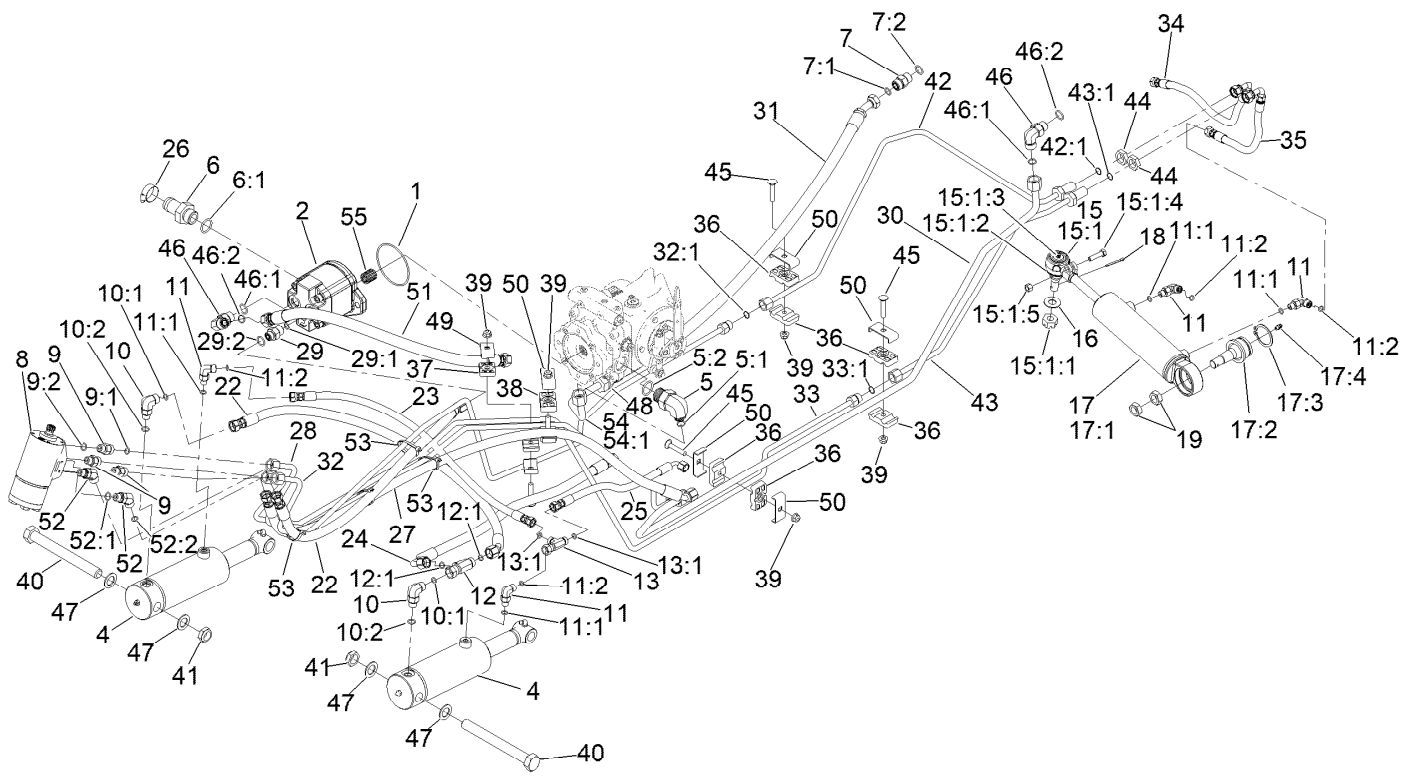
● Not serviced separately



Hydraulic Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------------|-------------|--------------------|-------------|-----------------------|
| 17:3 | 32151-104 | 1 | Ring-Retaining, External | 32:1 | 237-22 | 1 | O-Ring |
| 17:4 | 302-5 | 1 | Fitting-Grease | 33 | 145-5930 | 1 | Hydraulic Tube ASM |
| 18 | 3272-12 | 1 | Pin-Cotter | 33:1 | 237-22 | 1 | O-Ring |
| 19 | 3220-6 | 2 | Nut-Jam | 34 | 115-0383 | 1 | Hose ASM |
| 22 | 137-5844 | 2 | Hose ASM | 35 | 137-2584 | 1 | Hose ASM |
| 22 | 137-5844RT03 | 1 | Hose ASM | 36 | 56-7972 | 6 | Clamp-Tube |
| 23 | 137-5845 | 1 | Hose ASM | 37 | 56-7973 | 2 | Clamp-Tube |
| 24 | 137-5846 | 1 | Hose ASM | 38 | 56-7970 | 2 | Clamp-Tube |
| 25 | 137-5847 | 1 | Hose ASM | 39 | 104-8300 | 5 | Nut-HF, NI |
| 26 | 2412-34 | 1 | Clamp-Hose | 40 | 328-23 | 2 | Screw-HH |
| 27 | 140-3097 | 1 | Hose ASM | 41 | HDW02059 | 2 | Nut-Hex |
| 28 | 138-0331 | 1 | Hydraulic Tube ASM | 42 | 138-0343 | 1 | Hydraulic Tube ASM |
| 29 | 340-3 | 1 | Fitting-Straight | 42:1 | 237-22 | 1 | O-Ring |
| 29:1 | 237-22 | 1 | O-Ring | 43 | 138-0344 | 1 | Hydraulic Tube ASM |
| 29:2 | 237-79 | 1 | O-Ring | 43:1 | 237-22 | 1 | O-Ring |
| 30 | 138-7448 | 1 | Hydraulic Tube ASM | 44 | 340-70 | 2 | Nut-Lock |
| 31 | 145-5934 | 1 | Hose ASM-Hydraulic | 45 | 3230-5 | 5 | Bolt-CARR |
| 32 | 145-5959 | 1 | Hydraulic Tube ASM | 46 | 340-98 | 2 | Fitting-Elbow, 90 DEG |

● Not serviced separately

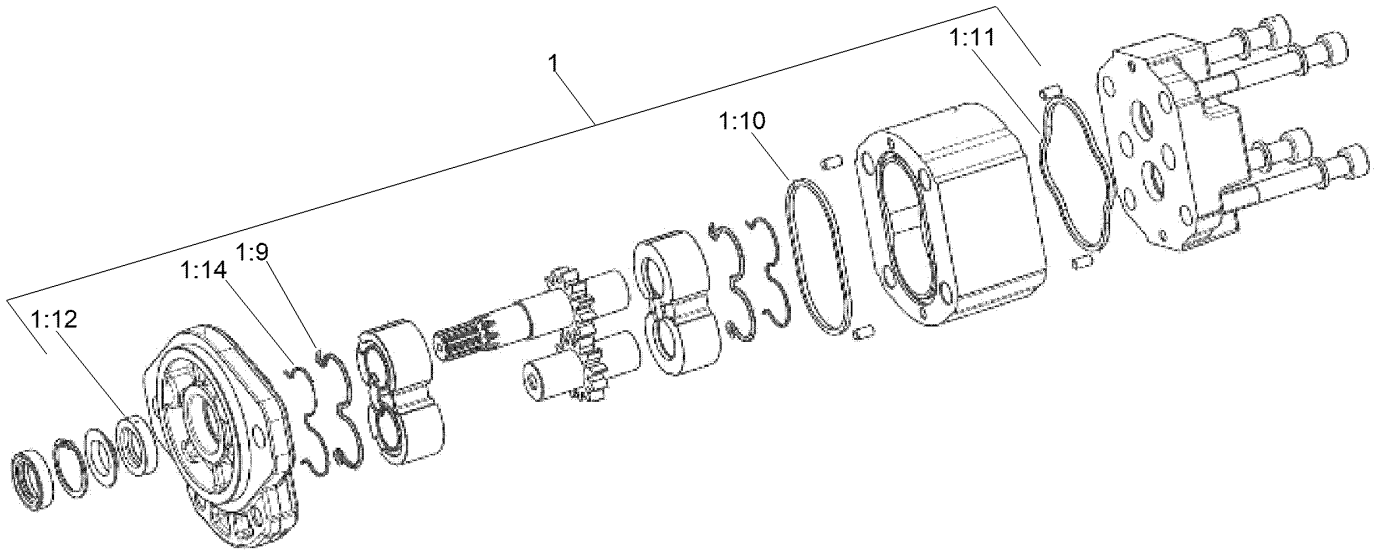


Hydraulic Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| 46:1 | 237-79 | 1 | O-Ring | 52 | 340-87 | 2 | Fitting-Elbow, 45 DEG |
| 46:2 | 237-30 | 1 | O-Ring | 52:1 | 237-22 | 1 | O-Ring |
| 47 | 126-7888 | 4 | Washer-Nylon | 52:2 | 237-42 | 1 | O-Ring |
| 48 | 340-127 | 1 | Nut-Bulkhead | 53 | 3290-378 | 4 | Tie-Cable |
| 49 | 119-1418 | 2 | Plate-Clamp, Short | 54 | 145-5945 | 1 | Hydraulic Tube ASM |
| 50 | 119-1419 | 6 | Plate-Clamp | 54:1 | 237-30 | 1 | O-Ring |
| 51 | 145-5931 | 1 | Hose ASM-Hydraulic | 55 | 147-0196 | 1 | Coupler-Pump, Bondioli |

● Not serviced separately

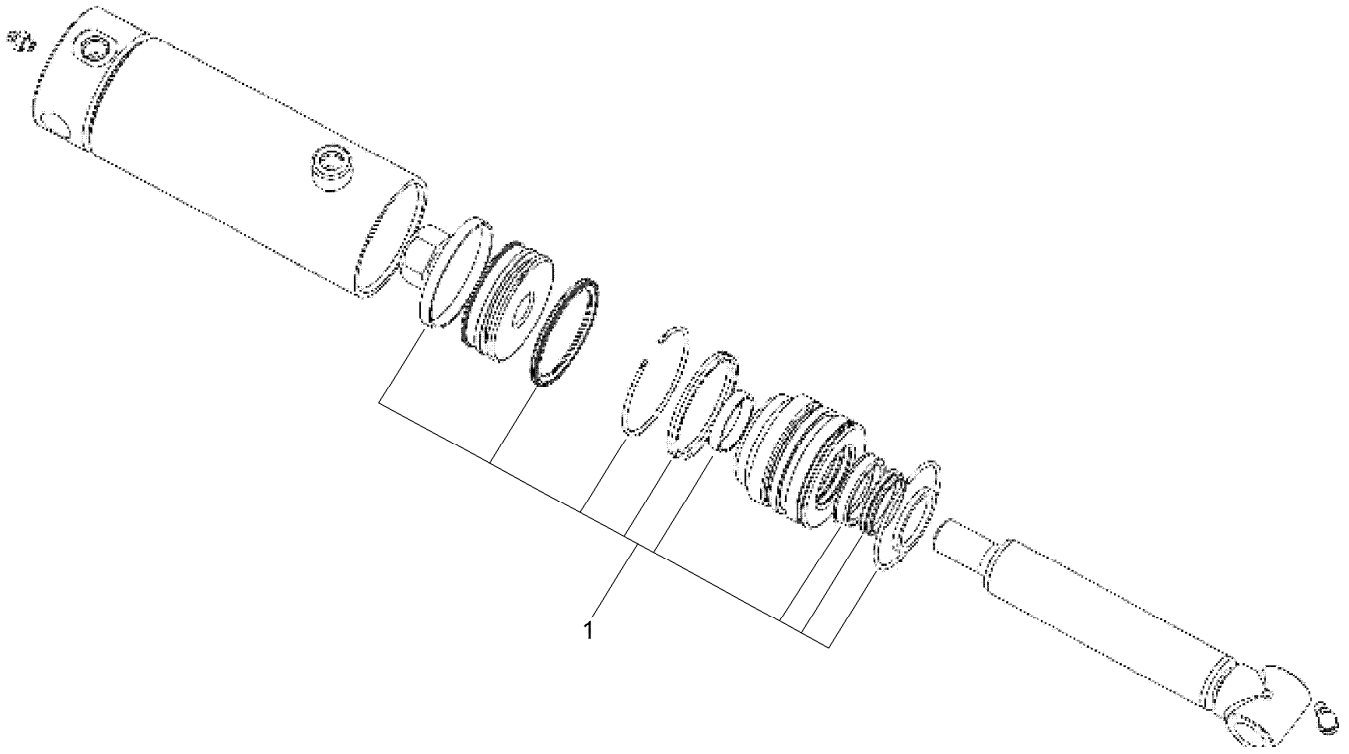
Gear Pump Assembly No. 147-5115



Gear Pump Assembly No. 147-5115 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 139-6299 | 1 | Kit-Seal | 1:11 | | 1 | Seal-Square ● |
| 1:9 | | 1 | Seal ● | 1:12 | | 1 | Seal-Shaft ● |
| 1:10 | | 1 | Seal-Standard ● | 1:14 | | 1 | Anti Extrusion ● |

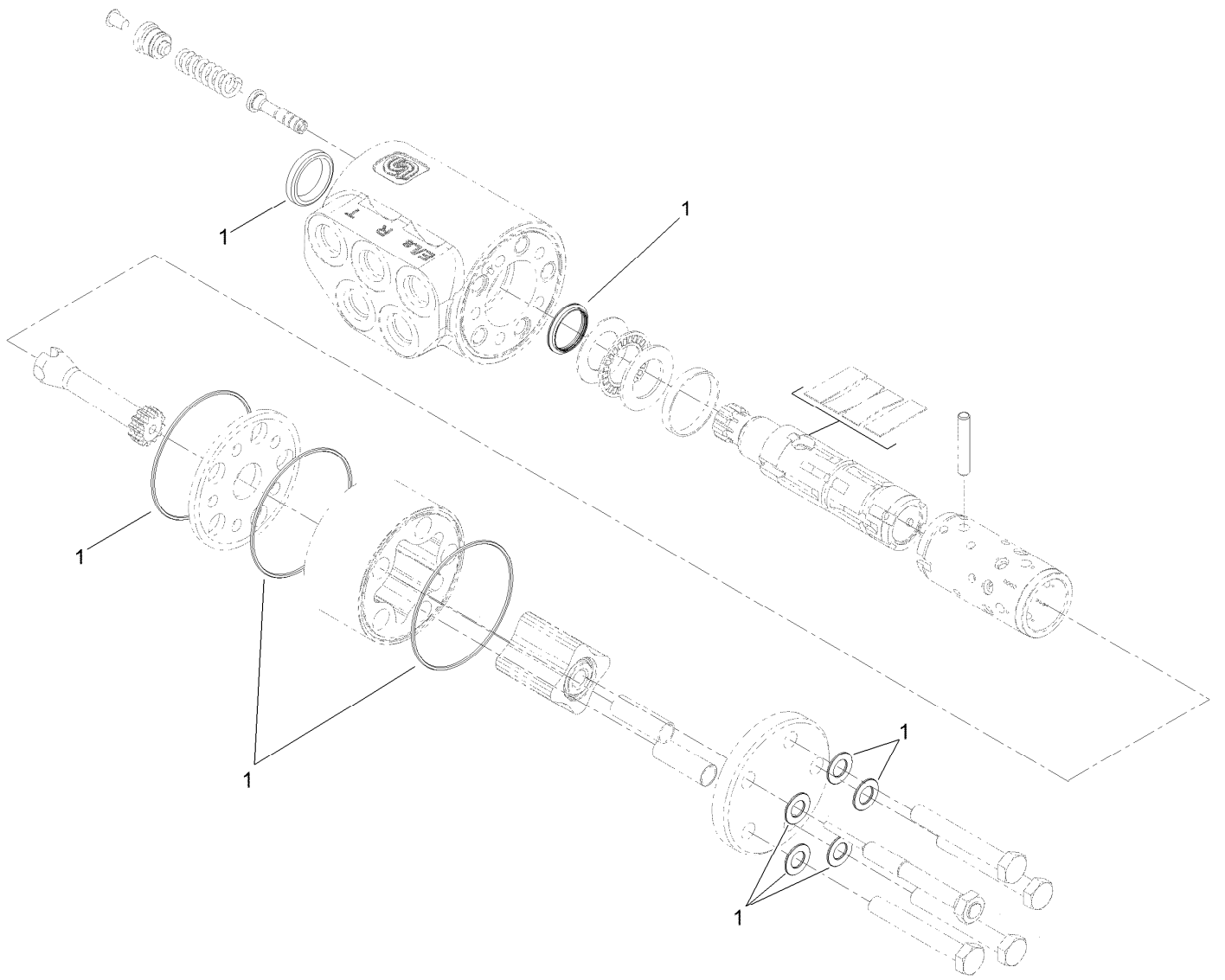
● Not serviced separately



Hydraulic Cylinder No. 139-0854

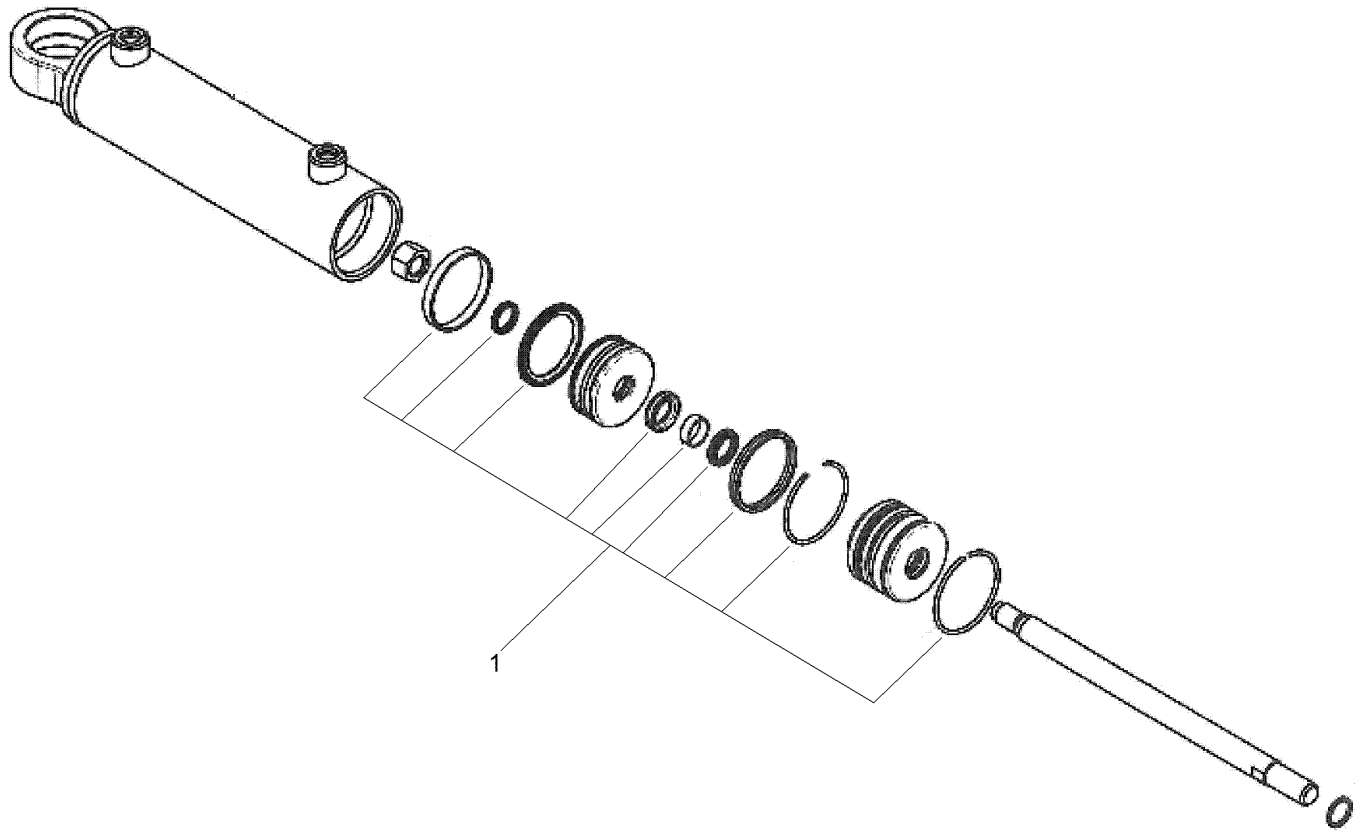
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1 | 140-3110 | 1 | Kit-Seal ● |

● Not illustrated



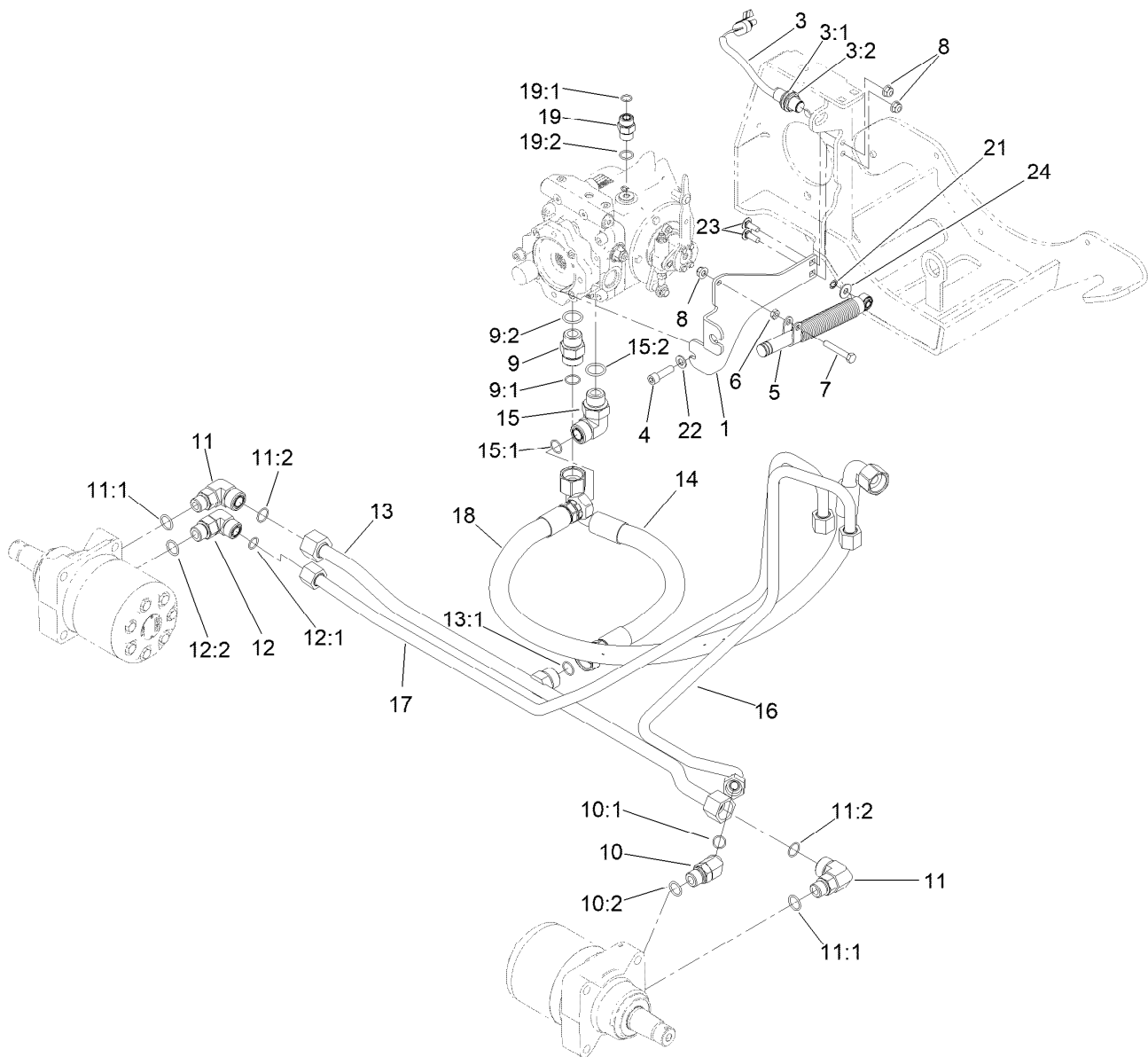
Steering Valve Assembly No. 114-8119

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1 | 106-6716 | 1 | Seal Kit |



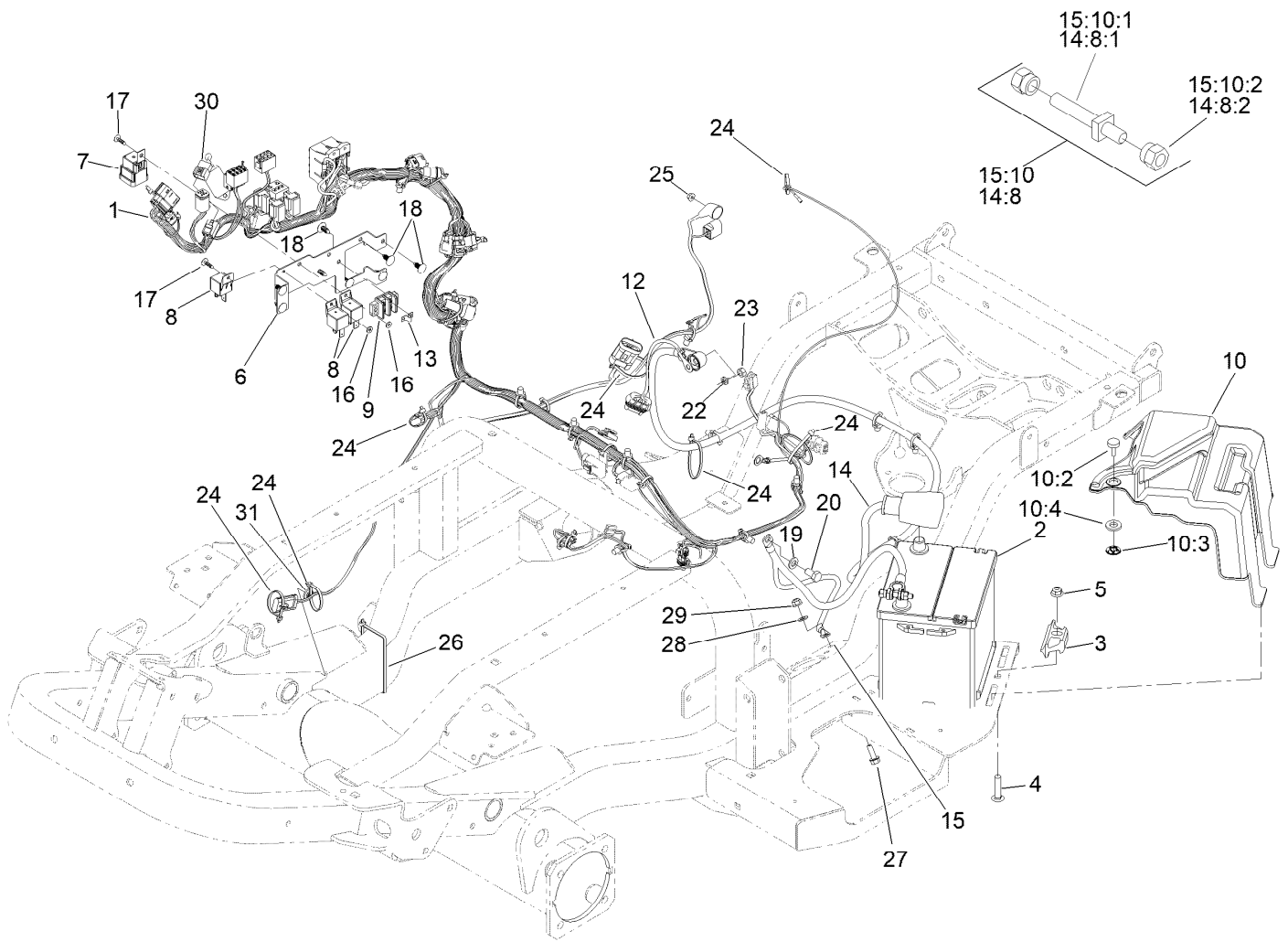
Steering Cylinder Assembly No. 139-6277

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1 | 140-3120 | 1 | Kit-Seal |



Hydraulic Traction Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-----------------------------|------|-------------|------|-------------------------------------|
| 1 | 145-6065-0P | 1 | Plate-Cable Mount | 12:1 | 237-65 | 1 | O-Ring |
| 3 | 115-5300 | 1 | Proximity Switch ASM | 12:2 | 237-80 | 1 | O-Ring |
| 3:1 | 117-3207 | 2 | Nut-Hex | 13 | 138-0340 | 1 | Hydraulic Tube ASM |
| 3:2 | 117-3208 | 2 | Washer-Lock, Internal Tooth | 13:1 | 237-58 | 1 | O-Ring |
| 4 | ST80801 | 2 | Screw-HSH | 14 | 145-5928 | 1 | Hose ASM-Hydraulic |
| 5 | 140-6248 | 1 | Damper | 15 | 340-142 | 1 | Fitting-Elbow, 90 DEG |
| 6 | 3218-2 | 1 | Nut-Hex Jam | 15:1 | 237-58 | 1 | O-Ring |
| 7 | 322-10 | 1 | Screw-HH | 15:2 | 237-81 | 1 | O-Ring |
| 8 | 104-8300 | 3 | Nut-HF, NI | 16 | 145-5929 | 1 | Hydraulic Tube ASM |
| 9 | 340-9 | 1 | Fitting-STR | 17 | 145-5923 | 1 | Hydraulic Tube ASM |
| 9:1 | 237-58 | 1 | O-Ring | 18 | 145-5927 | 1 | Hose ASM-Hydraulic |
| 9:2 | 237-81 | 1 | O-Ring | 19 | 340-4 | 1 | Fitting-Straight |
| 10 | 340-14 | 1 | Fitting-HYD, 45 DEG | 19:1 | 237-30 | 1 | O-Ring |
| 10:1 | 237-65 | 1 | O-Ring | 19:2 | 237-79 | 1 | O-Ring |
| 10:2 | 237-80 | 1 | O-Ring | 21 | 32151-72 | 1 | Ring-Retaining |
| 11 | 340-16 | 2 | Fitting-HYD, 90 DEG | 22 | 107-1413 | 2 | Washer-Hardened |
| 11:1 | 237-80 | 1 | O-Ring | 23 | 3230-10 | 2 | Bolt-CARR |
| 11:2 | 237-58 | 1 | O-Ring | 24 | HDW14535 | 1 | Flat Washer, 5/16 Nom,ST/ST,18-8 |
| 12 | 340-17 | 1 | Fitting-Elbow, 90 DEG | | | | |

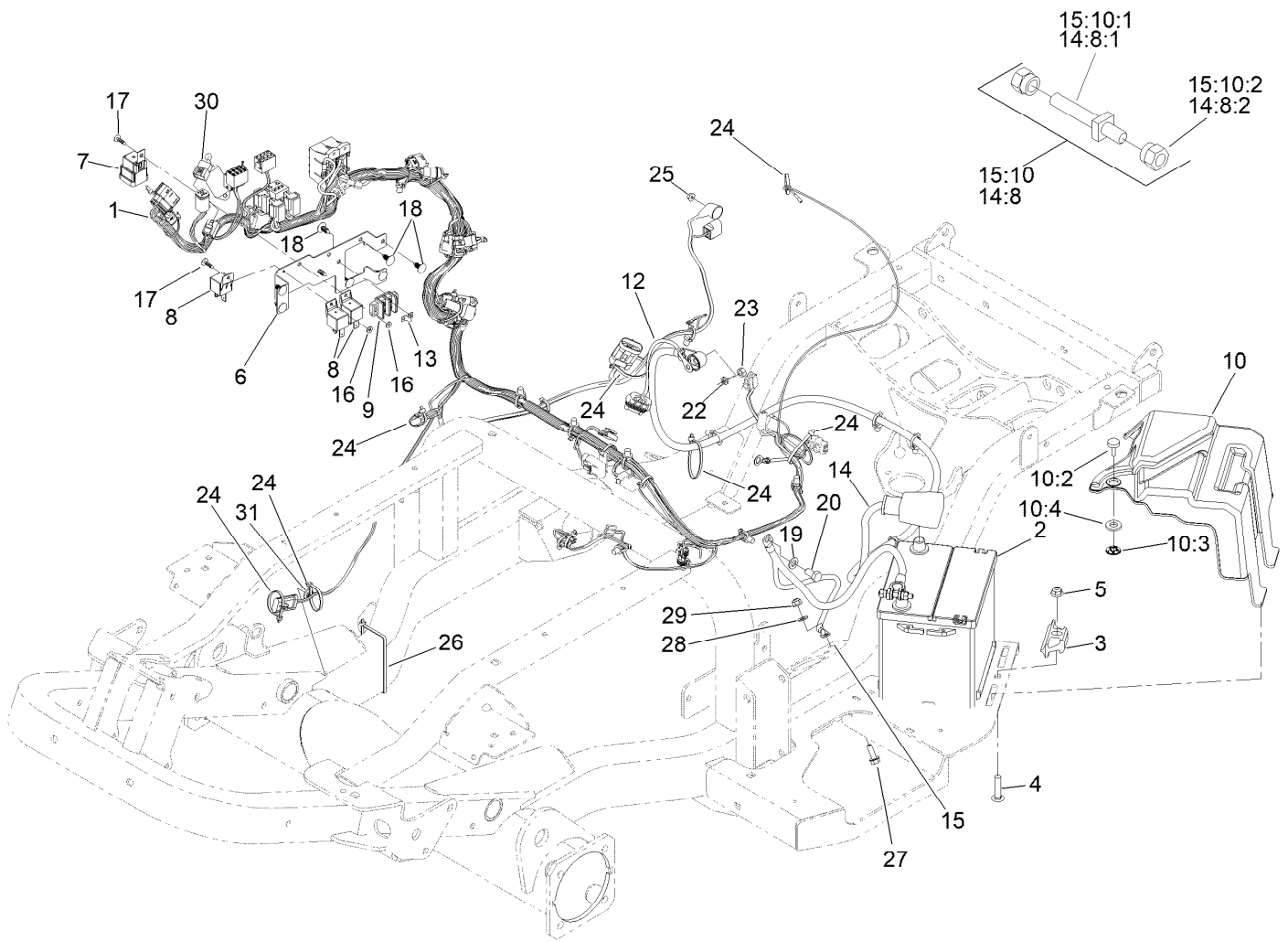


Electrical Assembly

| Ref. | Part Number | Qty. | Description | Ref. | Part Number | Qty. | Description |
|------|-------------|------|-----------------------------------|---------|-------------|------|--------------------------------|
| 1 | 122-2518 | 1 | Harness-Wire, Main | 14:8 | | 1 | Bolt ASM ■▲ |
| 2 | | 1 | Battery - Wet, 12V, 540 CCA ▲● | 14:8:1 | 32180-107 | 1 | Bolt-Clamp, Battery |
| 3 | 138-6335 | 1 | Retainer-Battery | 14:8:2 | 32180-108 | 2 | Nut-Hex Shoulder |
| 4 | 3231-29 | 1 | Screw-CARR | 15 | 122-1276 | 1 | Cable-Battery, Negative ASM |
| 5 | 104-8301 | 1 | Nut-HF, NI | 15:10 | | 1 | Bolt ASM ■▲ |
| 6 | 138-7467-0P | 1 | Bracket-Electrical | 15:10:1 | 32180-107 | 1 | Bolt-Clamp, Battery |
| 7 | 99-7430 | 1 | Relay-Mini | 15:10:2 | 32180-108 | 2 | Nut-Hex Shoulder |
| 8 | 99-7435 | 3 | Relay | 16 | 3256-21 | 2 | Washer-Flat |
| 9 | 42862 | 1 | Block-Terminal, Ground | 17 | 125-8067 | 2 | Plug-Plastic |
| 10 | 140-9010 | 1 | Battery Cover ASM | 18 | 117-2382 | 8 | Plug-Plastic |
| 10:2 | 140-9033 | 1 | Knob-Stud | 19 | 33095-00 | 1 | Washer-Flat |
| 10:3 | 32115-15 | 1 | Nut-Push | 20 | 33115-020 | 1 | Screw-HH |
| 10:4 | 3256-22 | 1 | Washer-Flat | 22 | 3253-4 | 1 | Washer-Lock |
| 12 | 99-3441 | 1 | Harness-Wire, Fusible Link | 23 | 33014-00 | 1 | Nut-Hex |
| 13 | 42863 | 1 | Strip-Jumper | 24 | 3290-378 | 7 | Tie-Cable |
| 14 | 122-1275 | 1 | Cable-Battery, Positive ASM | 25 | 33003-00 | 1 | Nut-HF |
| 14:1 | 32180-115 | 1 | Panduit, Cable Tie ■ | 26 | 3290-379 | 1 | Tie-Cable |

● Obtain Locally
▲ Not serviced separately

■ Not illustrated



Electrical Assembly (continued)

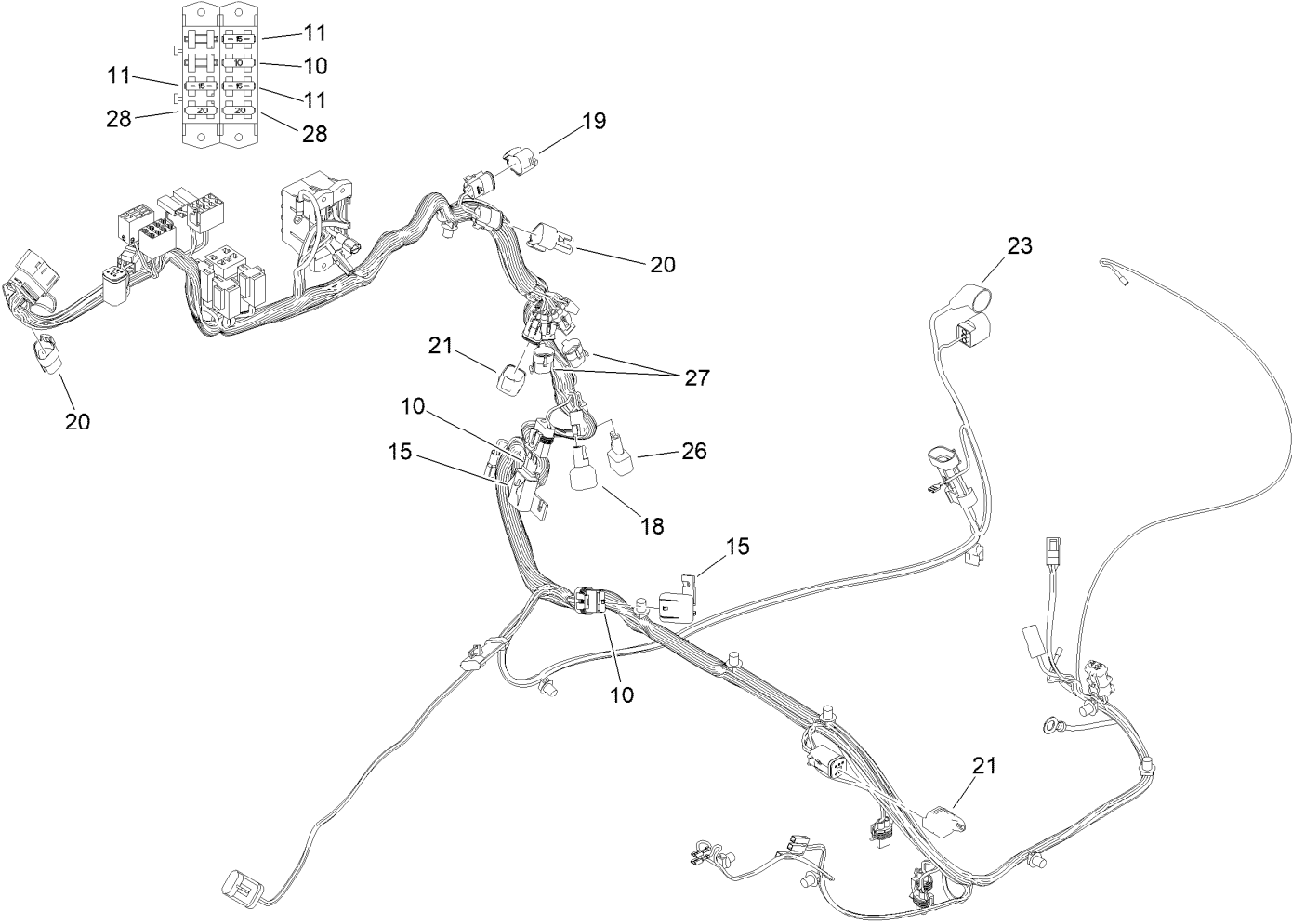
| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 27 | 3234-29 | 1 | Screw-HHF |
| 28 | 120-9683 | 1 | Washer-Plain |
| 29 | 104-8300 | 1 | Nut-HF, NI |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------------|
| 30 | 134-1507RT01 | 1 | Timer-Glowplug |
| 31 | 32180-139 | 1 | Mount-Tie Wrap, Magnetic |

● Obtain Locally
 ▲ Not serviced separately

■ Not illustrated

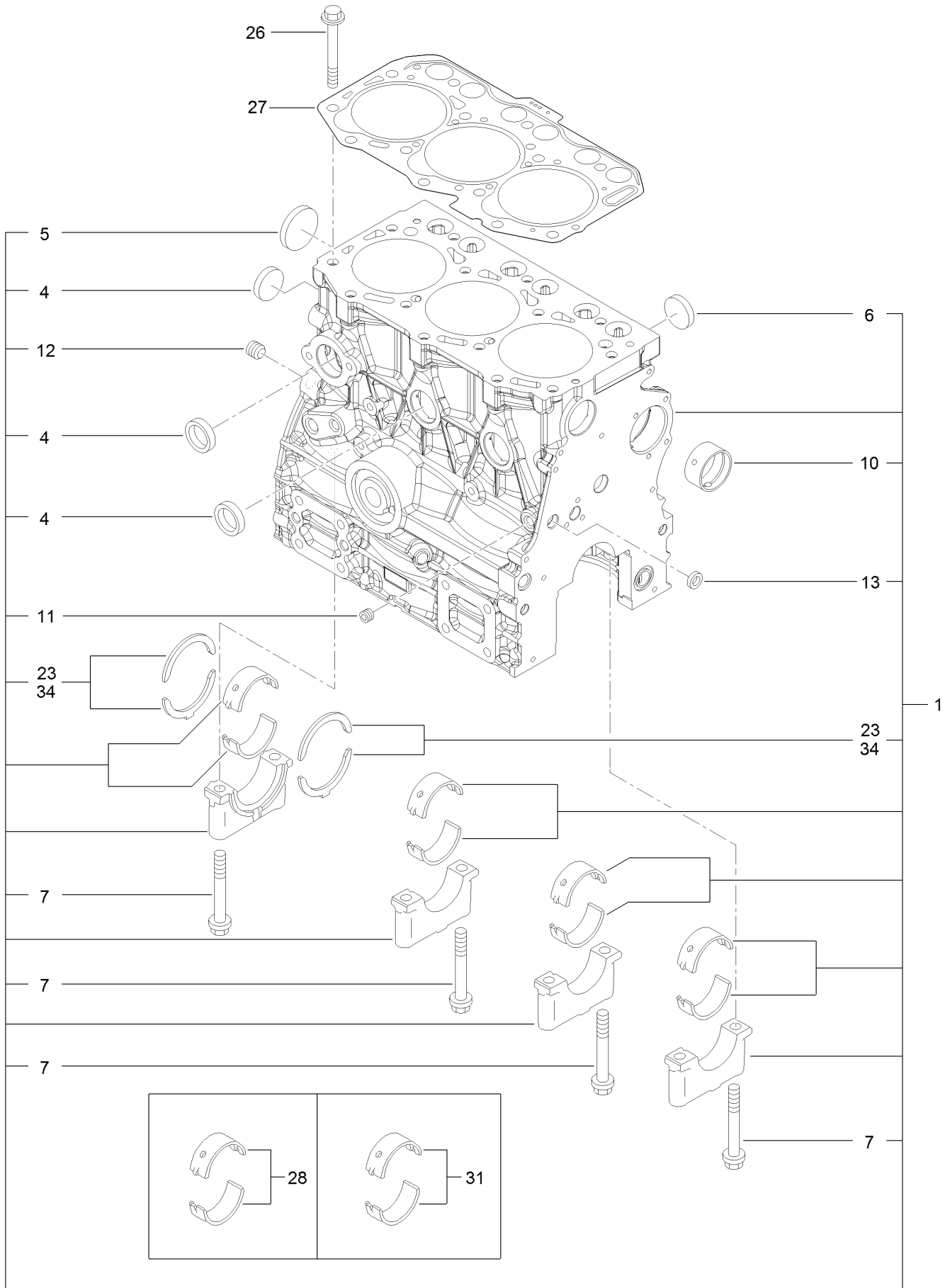
Wire Harness Assembly No. 122-2518



Wire Harness Assembly No. 122-2518 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|---------------------------|
| 10 | 218-578 | 3 | Fuse-Blade, 10 Amp | 21 | 32180-156 | 2 | Cap-Plug, 6 Way |
| 11 | 109355 | 3 | Fuse-Blade, 15 Amp | 23 | 32180-017 | 1 | Insulator-Terminal, Black |
| 15 | 32180-019 | 2 | Cover-Fuse, Single | 26 | 104-4022 | 1 | Resistor-75 Ohm |
| 18 | 108-9493 | 1 | Diode-Tvs | 27 | 32180-056 | 2 | Cap |
| 19 | 32180-089 | 1 | Cap-Plug, 3 Way | 28 | 109101 | 2 | Fuse-Blade, 20 Amp |
| 20 | 32180-043 | 2 | Resistor-120 Ohm | | | | |

Cylinder Block Assembly



Cylinder Block Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|---------------------|
| 1 | 135-4030 | 1 | Cylinder Block ASM | 13 | 125-7237 | 1 | Plug |
| 4 | 135-4031 | 4 | Plug-Cup | 23 | 135-4036 | 2 | Thrust Bearing ASM |
| 5 | 135-4032 | 1 | Plug-Dish | 26 | 135-4037 | 14 | Bolt-Head, Cylinder |
| 6 | 135-4033 | 3 | Plug-Cup | 27 | 135-4038 | 1 | Head Gasket Set |
| 7 | 135-4034 | 8 | Bolt-Cap | 28 | 135-4039 | 1 | Main Bearing ASM |
| 10 | 135-4035 | 1 | Bushing-Camshaft | 31 | 135-4040 | 2 | Main Bearing ASM |
| 11 | 125-6969 | 1 | Plug | 34 | 135-4041 | 2 | Bearing-Thrust |
| 12 | 125-6973 | 1 | Plug | | | | |

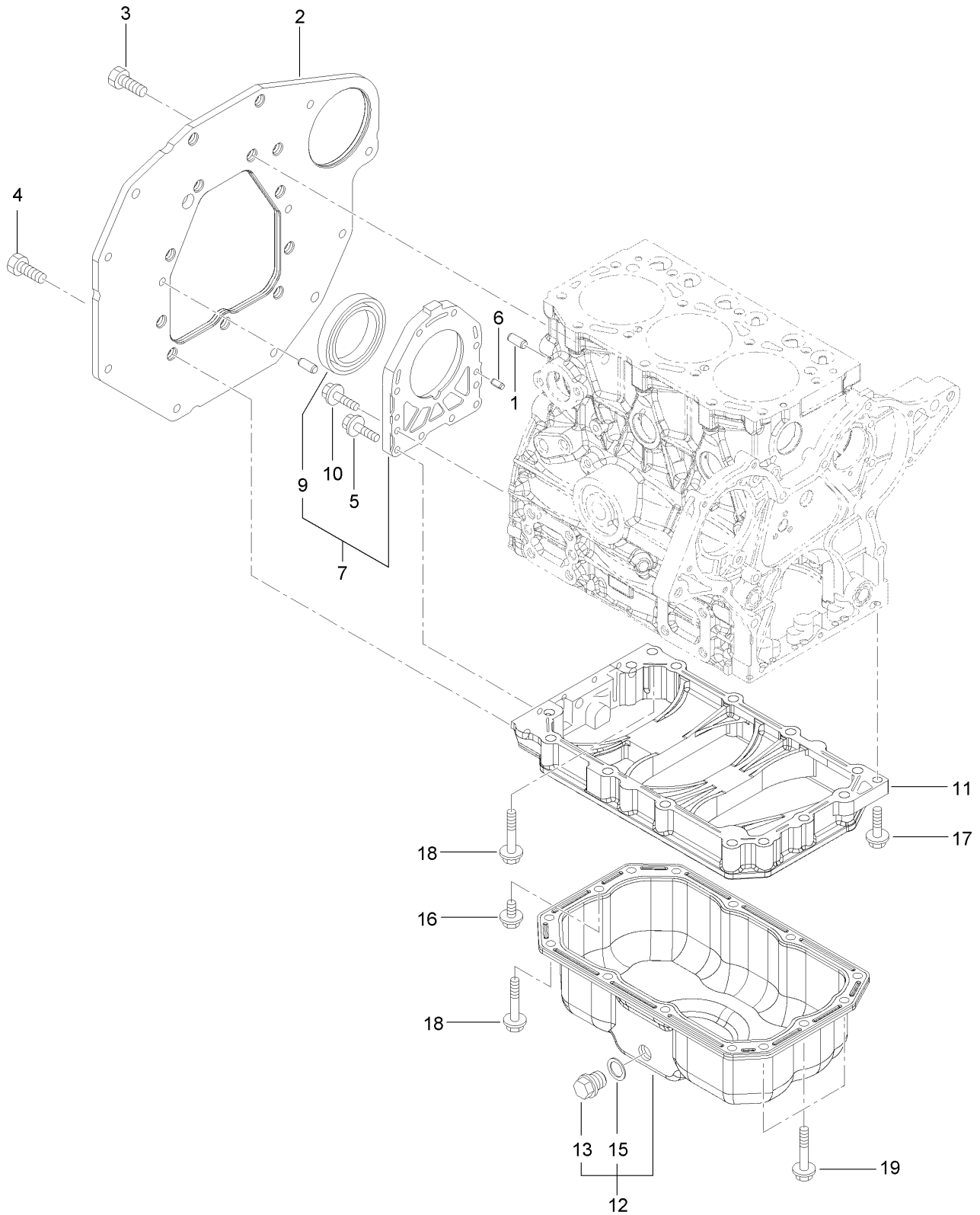
Gear Housing Assembly



Gear Housing Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------|-------------|--------------------|-------------|--------------------|
| 1 | 135-4042 | 1 | Case-Gear | 16 | 135-4056 | 1 | Cover-Pump |
| 2 | 135-4043 | 3 | Bolt-Stud | 17 | 135-4057 | 4 | Dowel-Pipe |
| 3 | 135-4044 | 1 | Gear Case Cover ASM | 18 | 127-2973 | 1 | O-Ring |
| 4 | 135-4045 | 1 | Gear Case Cover ASM | 19 | 135-4058 | 3 | O-Ring |
| 5 | 135-4046 | 1 | Cover-Case, Gear | 20 | 125-6957 | 1 | O-Ring |
| 6 | 133-6798 | 2 | Plug | 21 | 125-7206 | 1 | Bolt |
| 7 | 135-4047 | 1 | Seal-Oil | 22 | 125-7208 | 4 | Bolt |
| 8 | 135-4048 | 1 | Cover ASM | 23 | 125-7211 | 4 | Bolt |
| 9 | 135-4049 | 1 | Cover-Pump | 24 | 125-7211 | 3 | Bolt |
| 10 | 135-4050 | 1 | Valve-Relief | 25 | 135-4059 | 7 | Bolt |
| 11 | 135-4051 | 1 | Spring | 26 | 136-8257 | 2 | Bolt |
| 12 | 135-4052 | 1 | Plug | 27 | 125-7229 | 3 | Nut |
| 13 | 135-4053 | 1 | Rotor-Inner | 28 | 125-6972 | 1 | Cover-Filler |
| 14 | 135-4054 | 1 | Rotor-Outer | 29 | 125-7197 | 1 | O-Ring |
| 15 | 135-4055 | 8 | Screw | | | | |

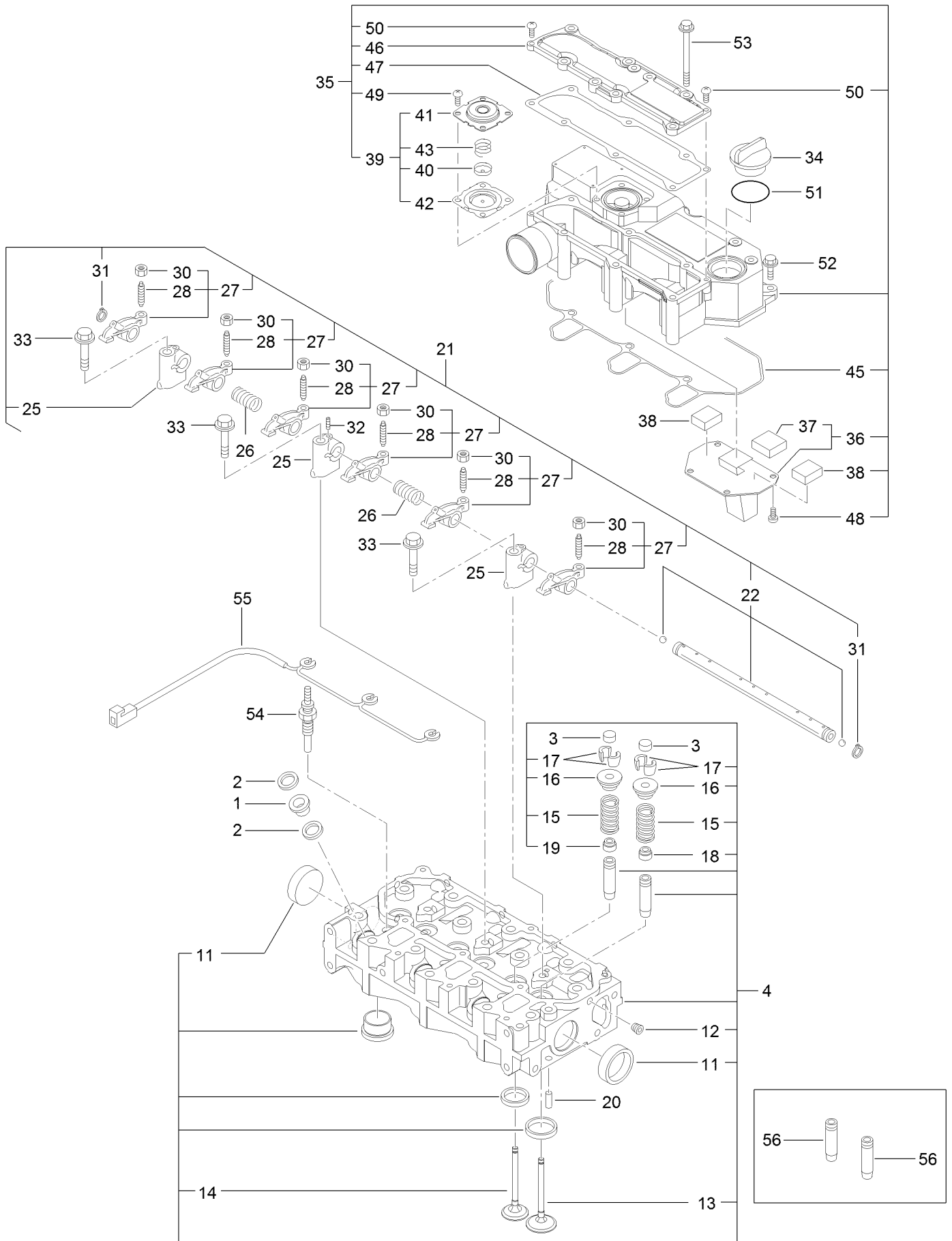
Mounting Flange and Oil Sump Assembly



Mounting Flange and Oil Sump Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 125-6995 | 2 | Pin | 11 | 135-4066 | 1 | Spacer-Pan, Oil |
| 2 | 140-7156 | 1 | Flange-Mounting | 12 | 134-1398 | 1 | Oil Pan ASM |
| 3 | 140-7181 | 9 | Bolt | 13 | 135-4068 | 1 | Plug |
| 4 | 125-7226 | 3 | Bolt | 15 | 136-8236 | 1 | Washer-Seal |
| 5 | 140-7152 | 4 | Bolt | 16 | 125-7212 | 1 | Bolt |
| 6 | 135-4062 | 2 | Pin-Parallel | 17 | 125-7216 | 1 | Bolt |
| 7 | 140-7160 | 1 | Case Oil Seal ASM | 18 | 125-7219 | 11 | Bolt |
| 9 | 135-4064 | 1 | Seal-Oil | 19 | 125-7220 | 3 | Bolt |
| 10 | 135-4065 | 6 | Bolt | | | | |

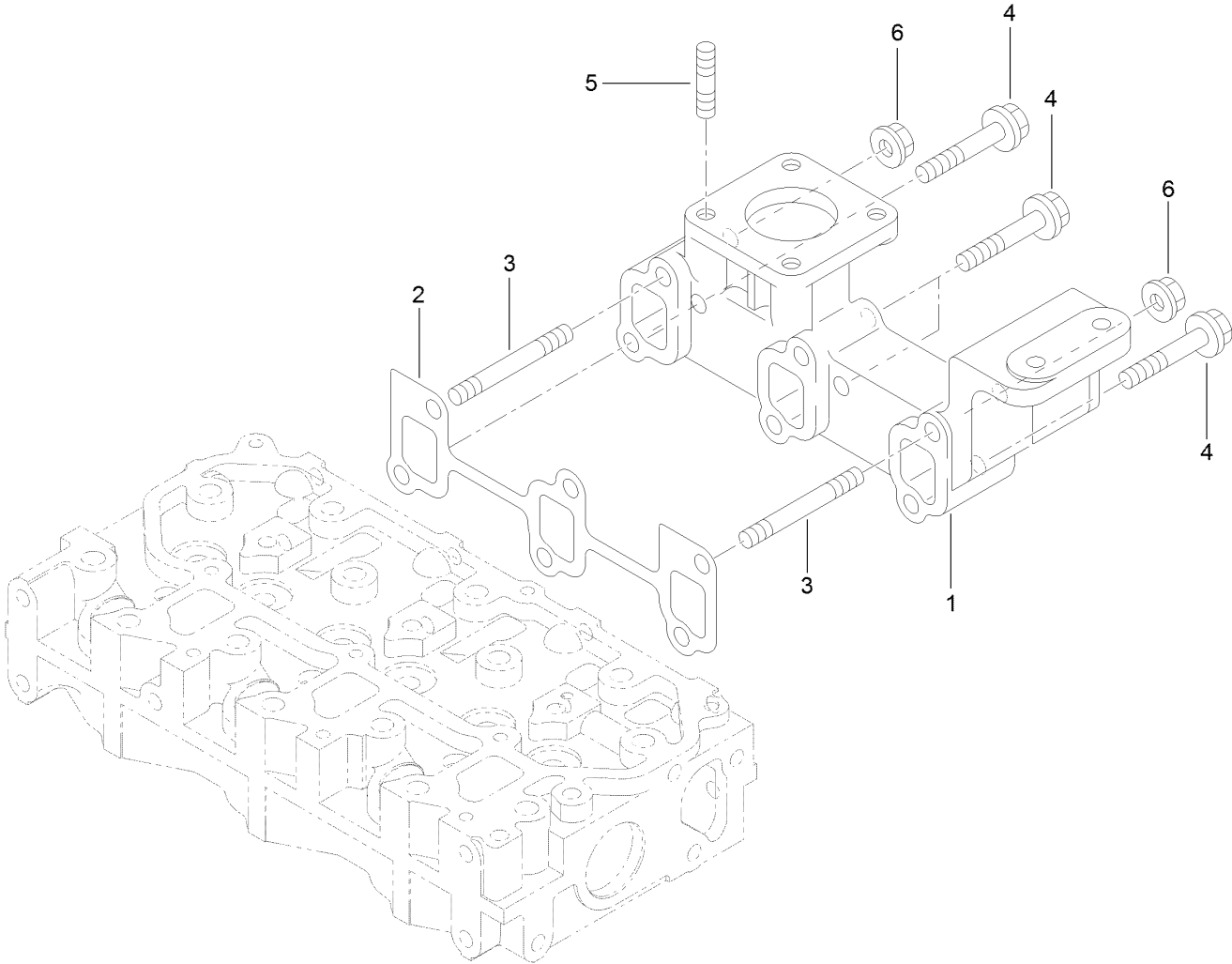
Cylinder Head and Cover Assembly



Cylinder Head and Cover Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------|-------------|--------------------|-------------|--------------------------------|
| 1 | 135-4069 | 3 | Protector-Nozzle | 34 | 125-6972 | 1 | Cover-Filler |
| 2 | 135-4070 | 6 | Gasket-Nozzle | 35 | 134-1402 | 1 | Cylinder Head Cover ASM |
| 3 | 135-4071 | 6 | Cap-Valve | 36 | 135-4085 | 1 | Plate-Baffle |
| 4 | 134-4001 | 1 | Cylinder Head ASM | 37 | 135-4086 | 1 | Baffle-Breather |
| 11 | 135-4073 | 2 | Plug-Cup | 38 | 135-4086 | 2 | Baffle-Breather |
| 12 | 133-6797 | 1 | Plug | 39 | 135-4088 | 1 | Diaphragm ASM |
| 13 | 135-4074 | 3 | Valve-Suction | 40 | 135-4089 | 1 | Plate-Diaphragm |
| 14 | 135-4075 | 3 | Valve-Exhaust | 41 | 135-4090 | 1 | Cover-Diaphragm |
| 15 | 135-4076 | 6 | Spring-Valve | 42 | 135-4091 | 1 | Diaphragm |
| 16 | 125-7054 | 6 | Retainer | 43 | 135-4092 | 1 | Spring-Diaphragm |
| 17 | 125-6914 | 12 | Cotter | 45 | 135-4093 | 1 | Gasket-Cover, Cylinder Head |
| 18 | 125-6915 | 3 | Seal-Stem, Valve | 46 | 134-1401 | 1 | Cover-Head, Cylinder |
| 19 | 125-6916 | 3 | Seal-Stem, Valve | 47 | 135-4095 | 1 | Gasket |
| 20 | 125-7184 | 2 | Pin-Spring | 48 | 125-7186 | 4 | Screw |
| 21 | 135-4077 | 1 | Rocker Support ASM | 49 | 125-7186 | 4 | Screw |
| 22 | 135-4078 | 1 | Rocker Shaft ASM | 50 | 127-3168 | 2 | Screw |
| 25 | 135-4079 | 3 | Support-Arm, Rocker | 51 | 125-7197 | 1 | O-Ring |
| 26 | 135-4080 | 2 | Spring-Rocker | 52 | 125-7209 | 3 | Bolt |
| 27 | 135-4081 | 6 | Rocker Arm ASM | 53 | 135-4096 | 6 | Bolt |
| 28 | 125-7013 | 6 | Screw-Adjust, Valve | 54 | 135-4291 | 3 | Plug-Glow |
| 30 | 125-7014 | 6 | Nut | 55 | 134-1443 | 1 | Connector-Plug, Glow |
| 31 | 135-7082 | 2 | Ring | 56 | 125-6917 | 6 | Guide |
| 32 | 135-4083 | 1 | Screw | | | | |
| 33 | 125-7218 | 3 | Bolt | | | | |

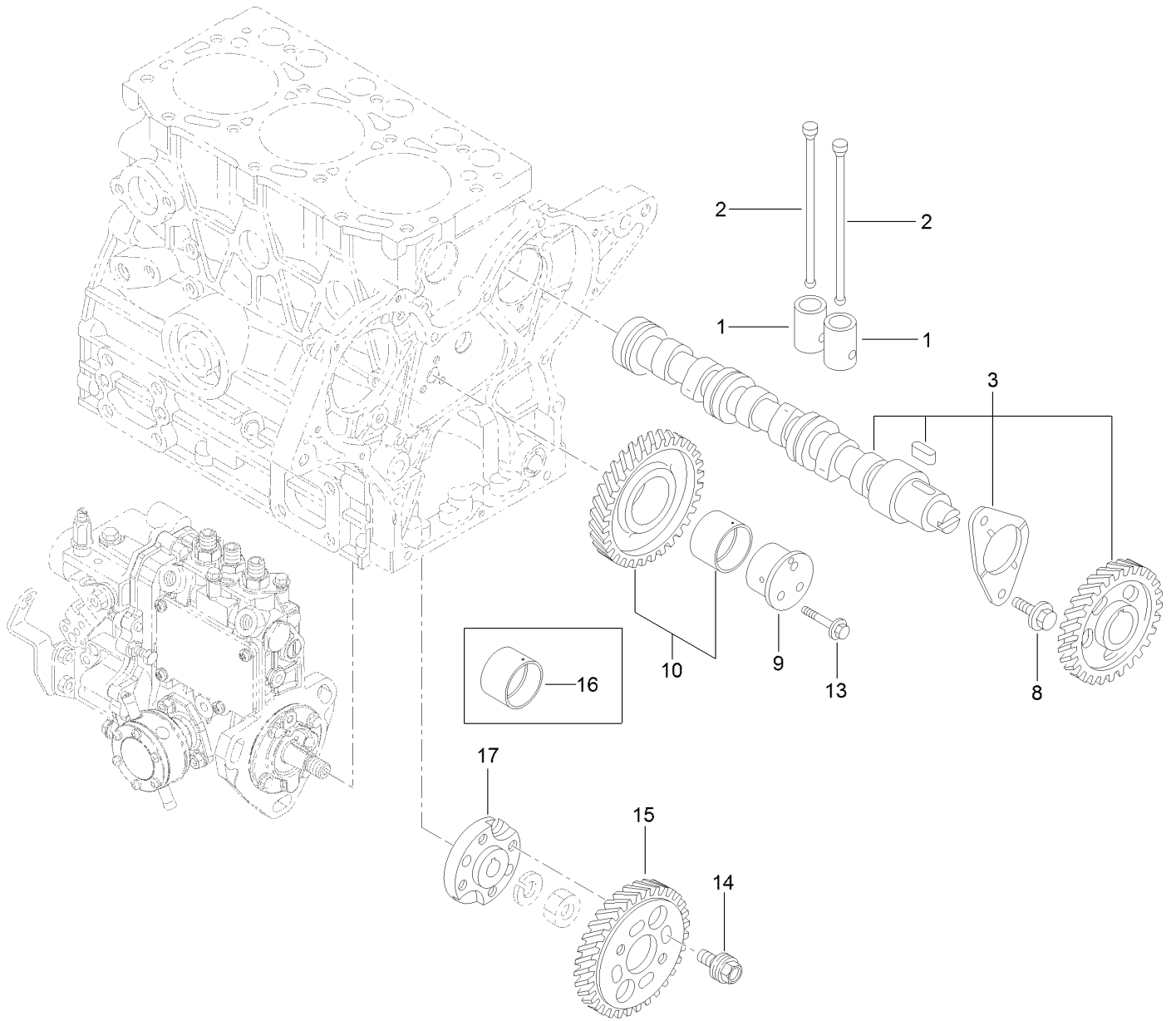
Exhaust Manifold Assembly



Exhaust Manifold Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------------|-------------|--------------------|-------------|--------------------|
| 1 | 140-7161 | 1 | Manifold-Exhaust | 4 | 133-6714 | 4 | Bolt |
| 2 | 135-4107 | 1 | Gasket-Manifold, Exhaust | 5 | 125-6906 | 4 | Stud |
| 3 | 134-1404 | 2 | Bolt-Stud | 6 | 125-7229 | 2 | Nut |

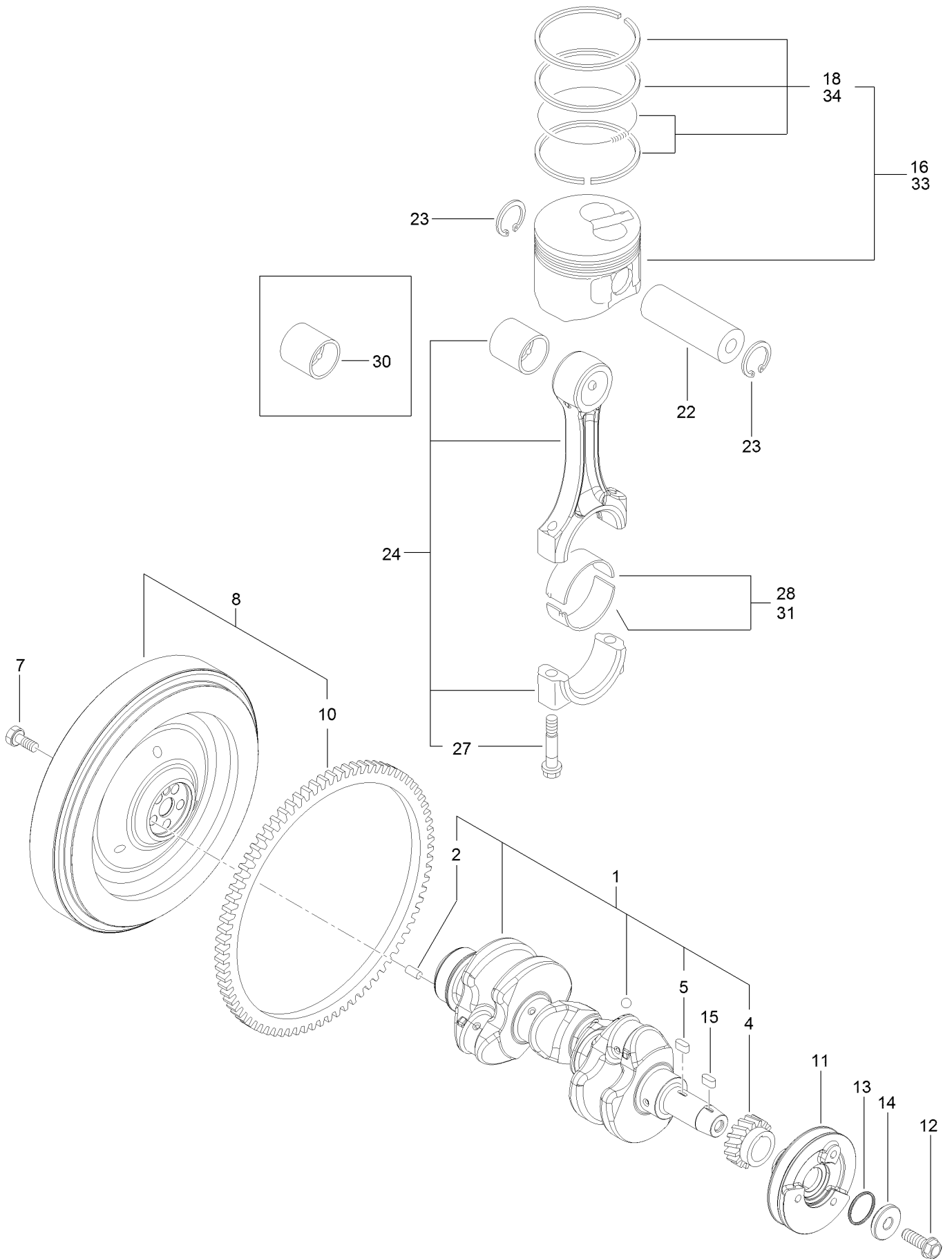
Camshaft and Driving Gear Assembly



Camshaft and Driving Gear Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 135-4108 | 6 | Tappet | 13 | 135-4147 | 3 | Bolt |
| 2 | 135-4109 | 6 | Push-Rod | 14 | 125-7020 | 4 | Bolt |
| 3 | 135-4110 | 1 | Camshaft ASM | 15 | 135-4148 | 1 | Gear-Pump |
| 8 | 125-7206 | 2 | Bolt | 16 | 135-4149 | 1 | Bushing-Gear, Idle |
| 9 | 135-4145 | 1 | Shaft-Idle | 17 | 135-4150 | 1 | Flange |
| 10 | 135-4146 | 1 | Idle Gear ASM | | | | |

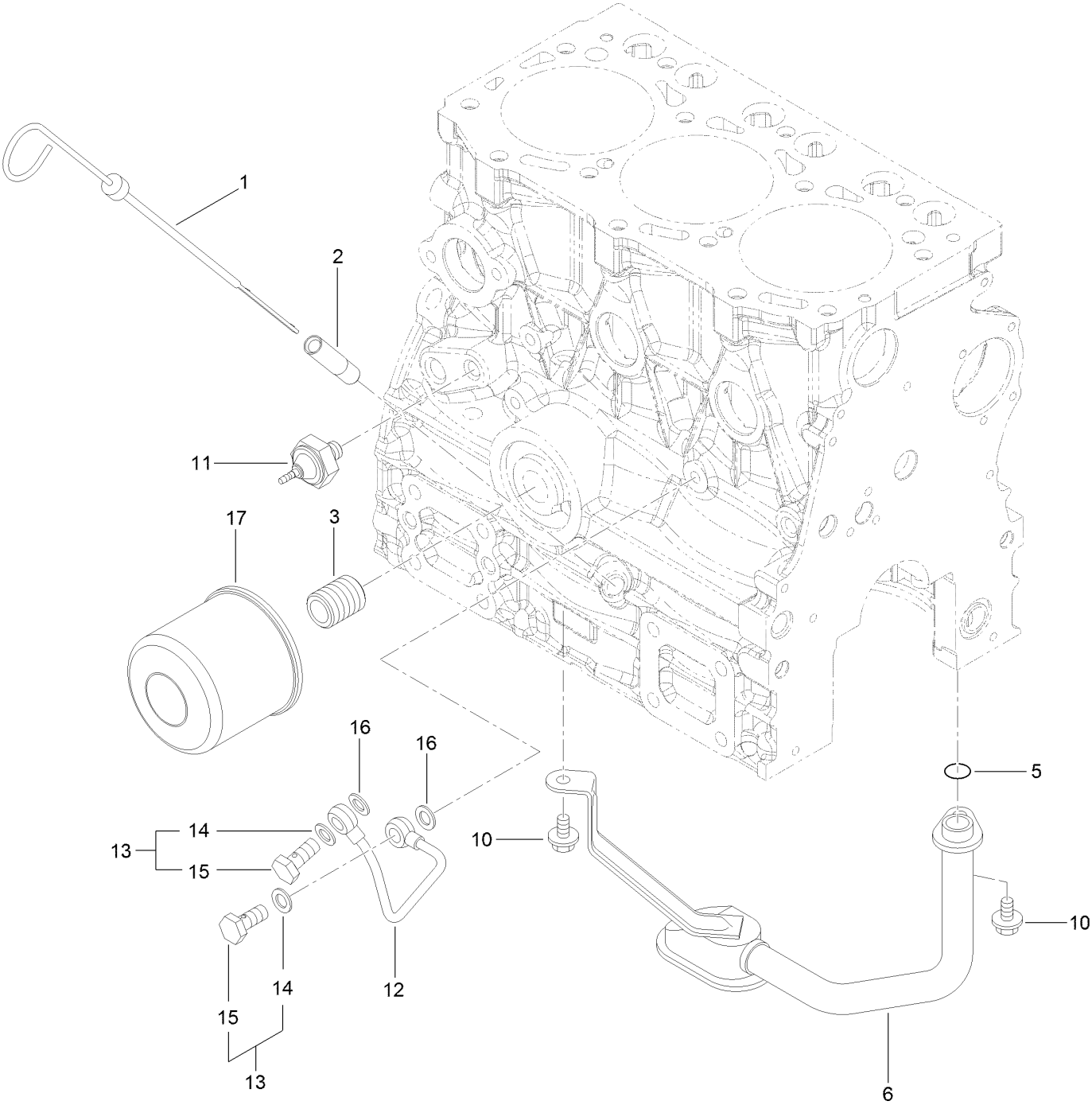
Crankshaft and Piston Assembly



Crankshaft and Piston Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|----------------------|
| 1 | 135-4152 | 1 | Crankshaft ASM | 16 | 135-4163 | 3 | Piston ASM |
| 2 | 125-6995 | 1 | Pin | 18 | 135-4164 | 3 | Ring ASM |
| 4 | 135-4153 | 1 | Gear-Crankshaft | 22 | 135-4165 | 3 | Pin-Piston |
| 5 | 135-4154 | 1 | Key | 23 | 135-4166 | 6 | Ring |
| 7 | 125-6951 | 5 | Bolt | 24 | 134-4005 | 3 | Connecting Rod ASM |
| 8 | 140-7164 | 1 | Flywheel ASM | 27 | 135-4168 | 6 | Bolt-Rod, Connecting |
| 10 | 125-6943 | 1 | Gear | 28 | 135-4169 | 3 | Bearing-Pin, Crank |
| 11 | 135-4158 | 1 | V-Pulley, Crankshaft | 30 | 134-4006 | 3 | Bushing-Pin, Piston |
| 12 | 135-4159 | 1 | Bolt-Flange | 31 | 135-4171 | 3 | Bearing-Pin (0.25) |
| 13 | 134-4004 | 1 | Packing-Washer | 33 | 134-4007 | 3 | Piston ASM (0.25 Os) |
| 14 | 135-4161 | 1 | Washer | 34 | 135-4173 | 3 | Ring ASM |
| 15 | 135-4154 | 1 | Key | | | | |

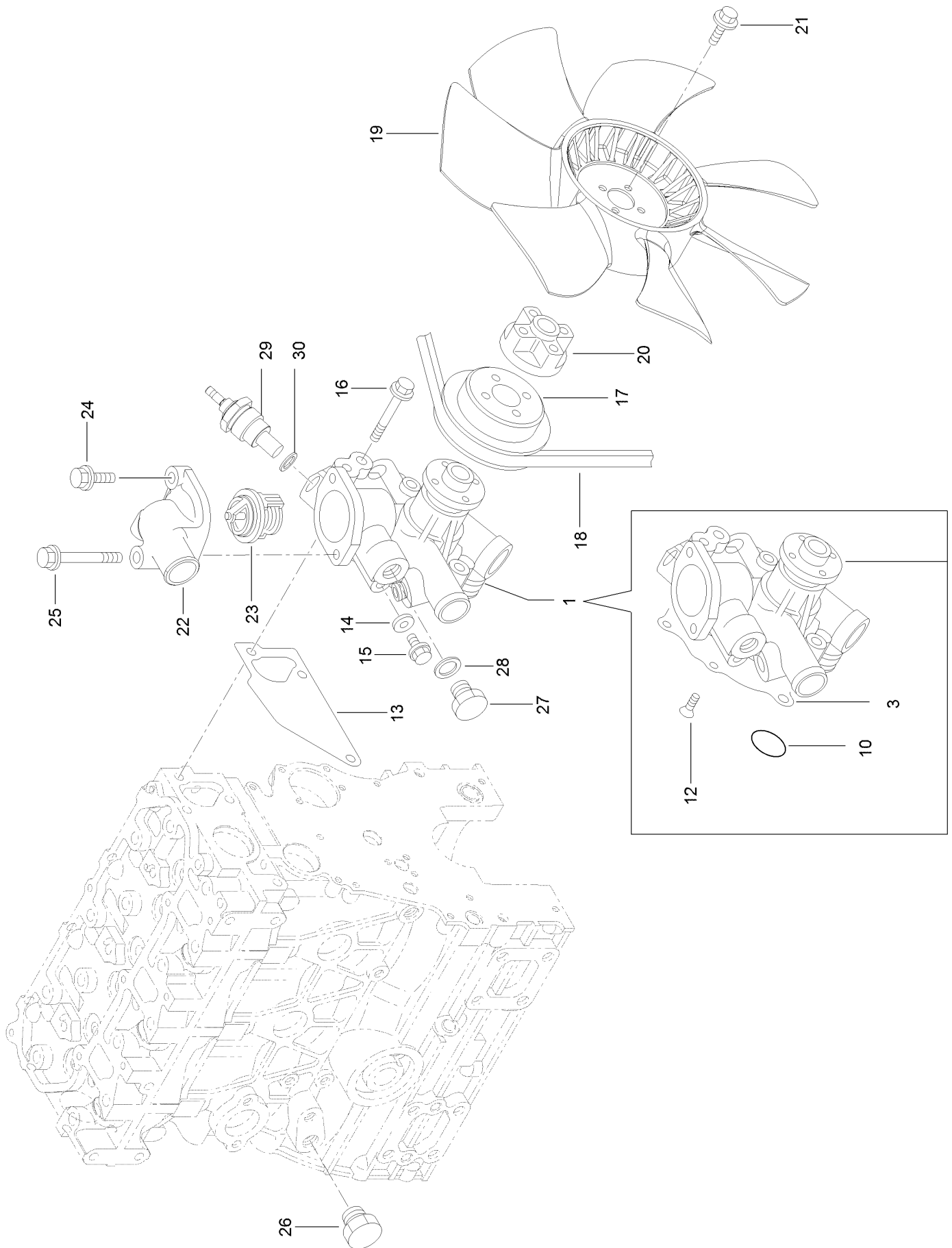
Lubrication and Oil System Assembly



Lubrication and Oil System Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 134-1413 | 1 | Dipstick | 12 | 135-4182 | 1 | Pipe-Oil |
| 2 | 125-6954 | 1 | Guide-Dipstick | 13 | 125-6988 | 2 | Joint Bolt ASM |
| 3 | 134-4008 | 1 | Stud | 14 | 125-7174 | 2 | Washer-Seal |
| 5 | 135-4178 | 1 | O-Ring | 15 | 125-7194 | 2 | Bolt-Joint |
| 6 | 134-1414 | 1 | Oil Inlet Pipe ASM | 16 | 125-7174 | 2 | Washer-Seal |
| 10 | 125-7205 | 2 | Bolt | 17 | 135-4181 | 1 | Filter-Oil, Engine |
| 11 | 134-1377 | 1 | Switch-Hydraulic | | | | |

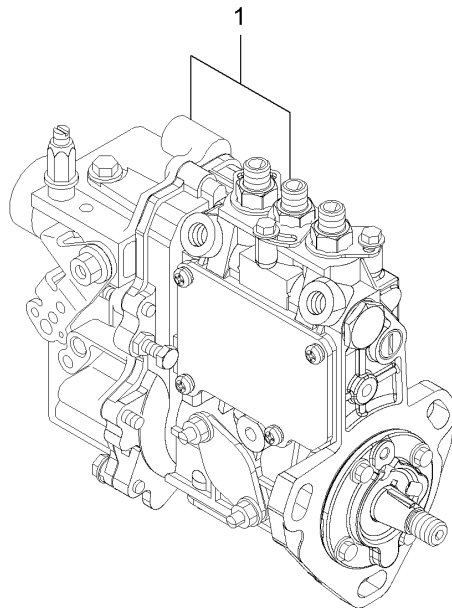
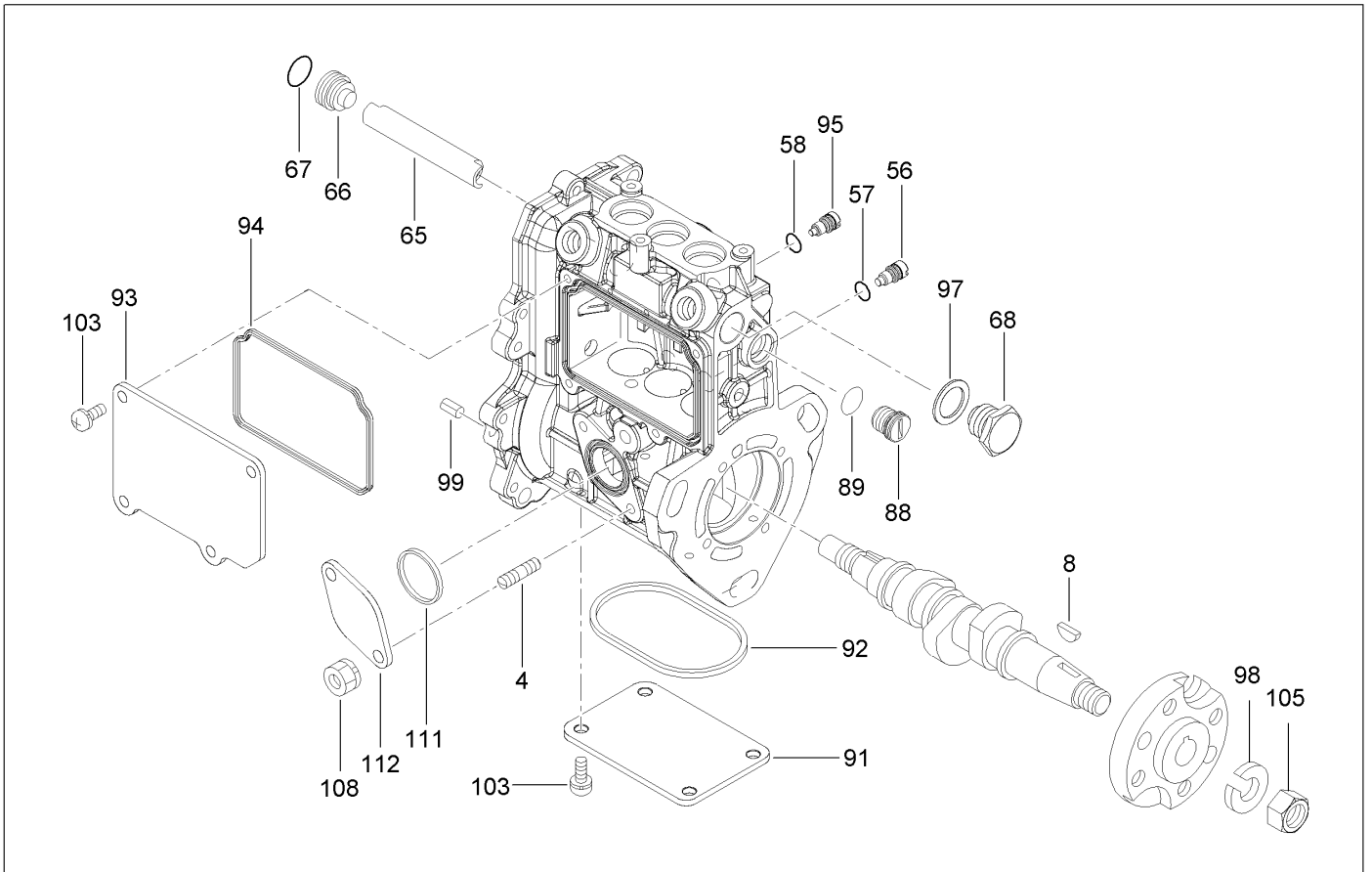
Cooling Water System Assembly



Cooling Water System Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|-------------------------------------|
| 1 | 134-4009 | 1 | CW Pump ASM | 21 | 131-2739 | 4 | Bolt |
| 3 | 135-4188 | 1 | Gasket | 22 | 135-4199 | 1 | Cover-Thermostat |
| 10 | 135-4190 | 1 | O-Ring | 23 | 135-4200 | 1 | Thermostat |
| 12 | 133-2504 | 4 | Screw | 24 | 135-4201 | 1 | Bolt |
| 13 | 135-4193 | 1 | Gasket-Pump, Water | 25 | 135-4202 | 1 | Bolt |
| 14 | 125-7192 | 1 | Gasket | 26 | 125-7171 | 1 | Plug-Drain |
| 15 | 125-7212 | 1 | Bolt | 27 | 125-6953 | 1 | Plug |
| 16 | 125-7220 | 3 | Bolt | 28 | 125-6979 | 1 | Gasket |
| 17 | 134-1417 | 1 | V-Pulley | 29 | 134-3128 | 1 | Sensor-Temperature (X1 Terminal) |
| 18 | 140-7179 | 1 | V-Belt | 30 | 134-4010 | 1 | Gasket |
| 19 | 140-7157 | 1 | Fan-Cooling | | | | |
| 20 | 131-2705 | 1 | Spacer | | | | |

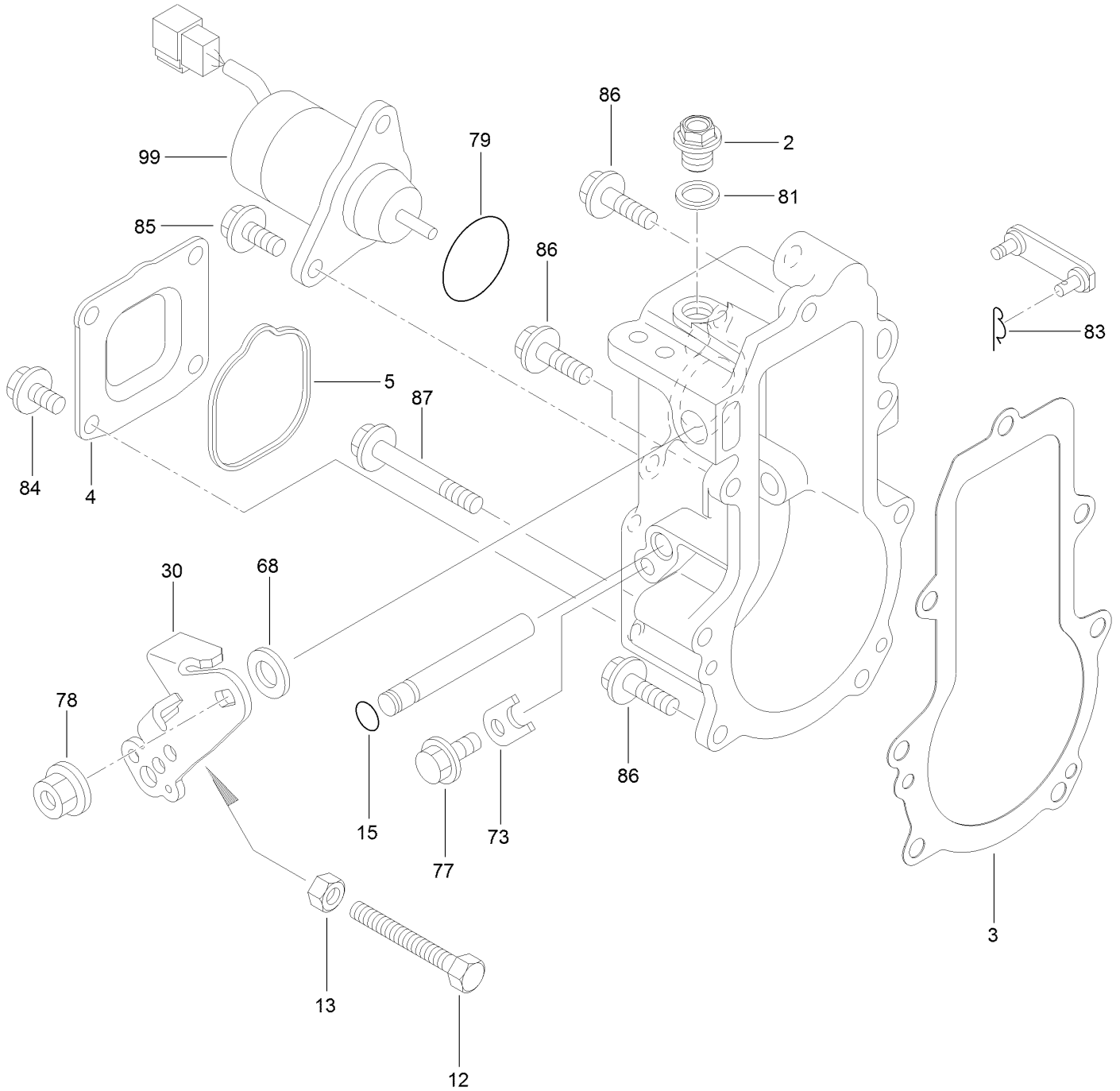
Fuel Injection Pump Assembly



Fuel Injection Pump Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|---------------------------------|-------------|--------------------|-------------|--------------------|
| 1 | 140-7183 | 1 | Fuel Injection Equipment ASM | 91 | 135-4215 | 1 | Cover |
| 4 | 135-4205 | 2 | Bolt-Stud | 92 | 135-4216 | 1 | Gasket |
| 8 | 135-4206 | 1 | Key-Feather, Woodruff | 93 | 135-4217 | 1 | Cover |
| 56 | 125-7156 | 3 | Stopper | 94 | 135-4218 | 1 | Gasket |
| 57 | 135-4207 | 3 | O-Ring | 95 | 135-4219 | 1 | Stopper-Rack |
| 58 | 135-4207 | 1 | O-Ring | 97 | 136-8236 | 1 | Washer-Seal |
| 65 | 135-4209 | 1 | Deflector | 98 | 135-4220 | 1 | Washer-Spring |
| 66 | 135-4210 | 1 | Plug-Deflector | 99 | 125-7183 | 2 | Pin-Spring |
| 67 | 135-4211 | 1 | O-Ring | 103 | 135-4221 | 8 | Screw |
| 68 | 135-4212 | 1 | Plug-Deflector | 105 | 133-2506 | 1 | Nut |
| 88 | 135-4213 | 1 | Plug-Rack | 108 | 135-4222 | 2 | Nut |
| 89 | 135-4214 | 1 | O-Ring | 111 | 135-4223 | 1 | Gasket |
| | | | | 112 | 135-4224 | 1 | Cover-Pump |

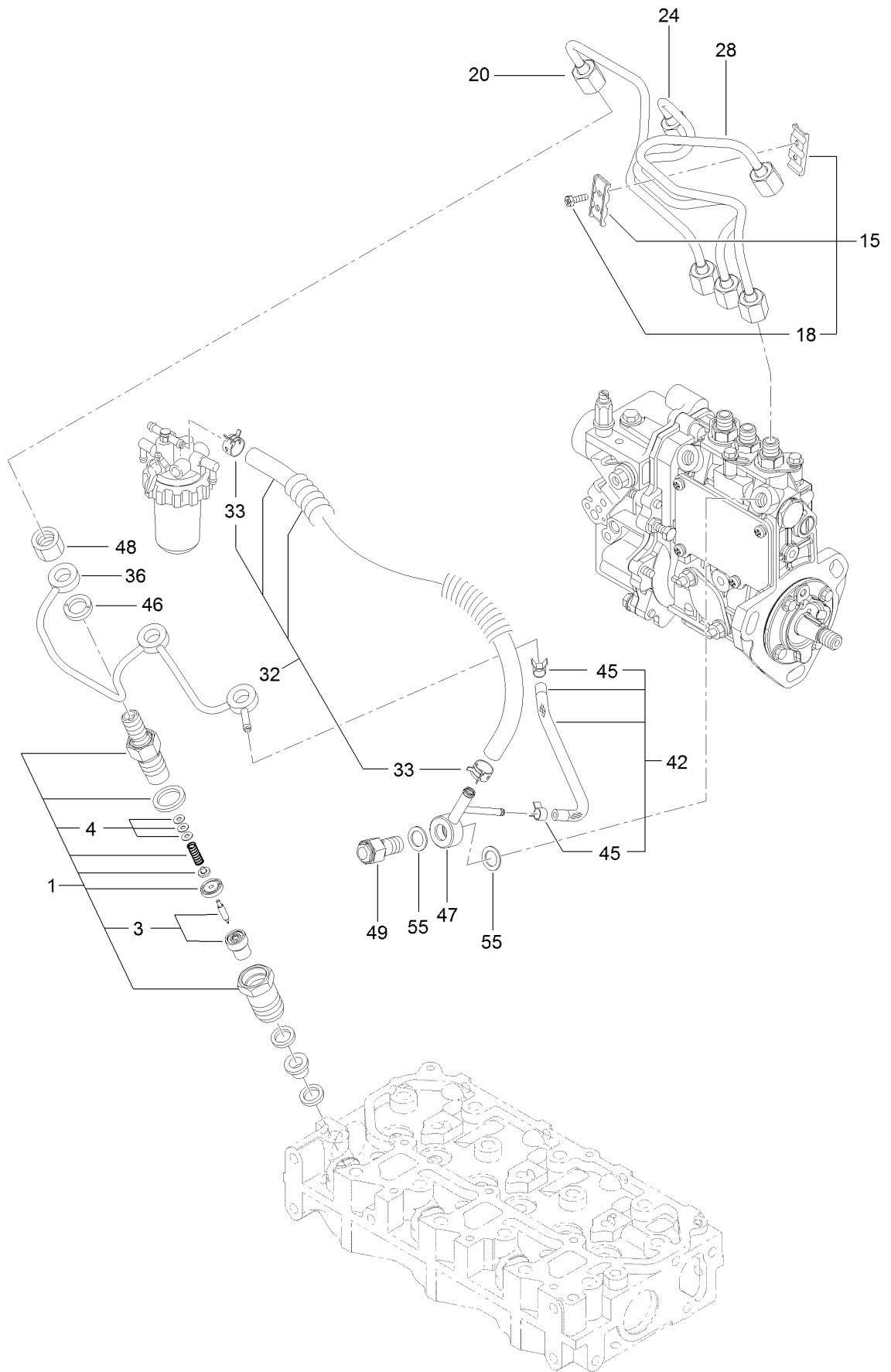
Governor Assembly



Governor Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|--------------------|
| 2 | 135-4226 | 1 | Plug | 77 | 125-7205 | 1 | Bolt |
| 3 | 135-4227 | 1 | Gasket | 78 | 134-4012 | 1 | Nut-M8 |
| 4 | 140-7159 | 1 | Cover-Case, Governor | 79 | 134-1520 | 1 | O-Ring |
| 5 | 134-1435 | 1 | Gasket | 81 | 125-7175 | 1 | Washer-Seal |
| 12 | 134-4013 | 1 | Bolt-Limit, Idle | 83 | 134-1529 | 1 | Pin |
| 13 | 134-4014 | 1 | Nut | 84 | 125-7205 | 4 | Bolt |
| 15 | 135-4207 | 1 | O-Ring | 85 | 125-7207 | 2 | Bolt |
| 30 | 134-1385 | 1 | Lever-Control | 86 | 125-7209 | 4 | Bolt |
| 68 | 134-1518 | 1 | Shim Set | 87 | 136-8256 | 3 | Bolt |
| 73 | 134-1395 | 1 | Stopper-Shaft | 99 | 140-7172 | 1 | Stop-Solenoid |

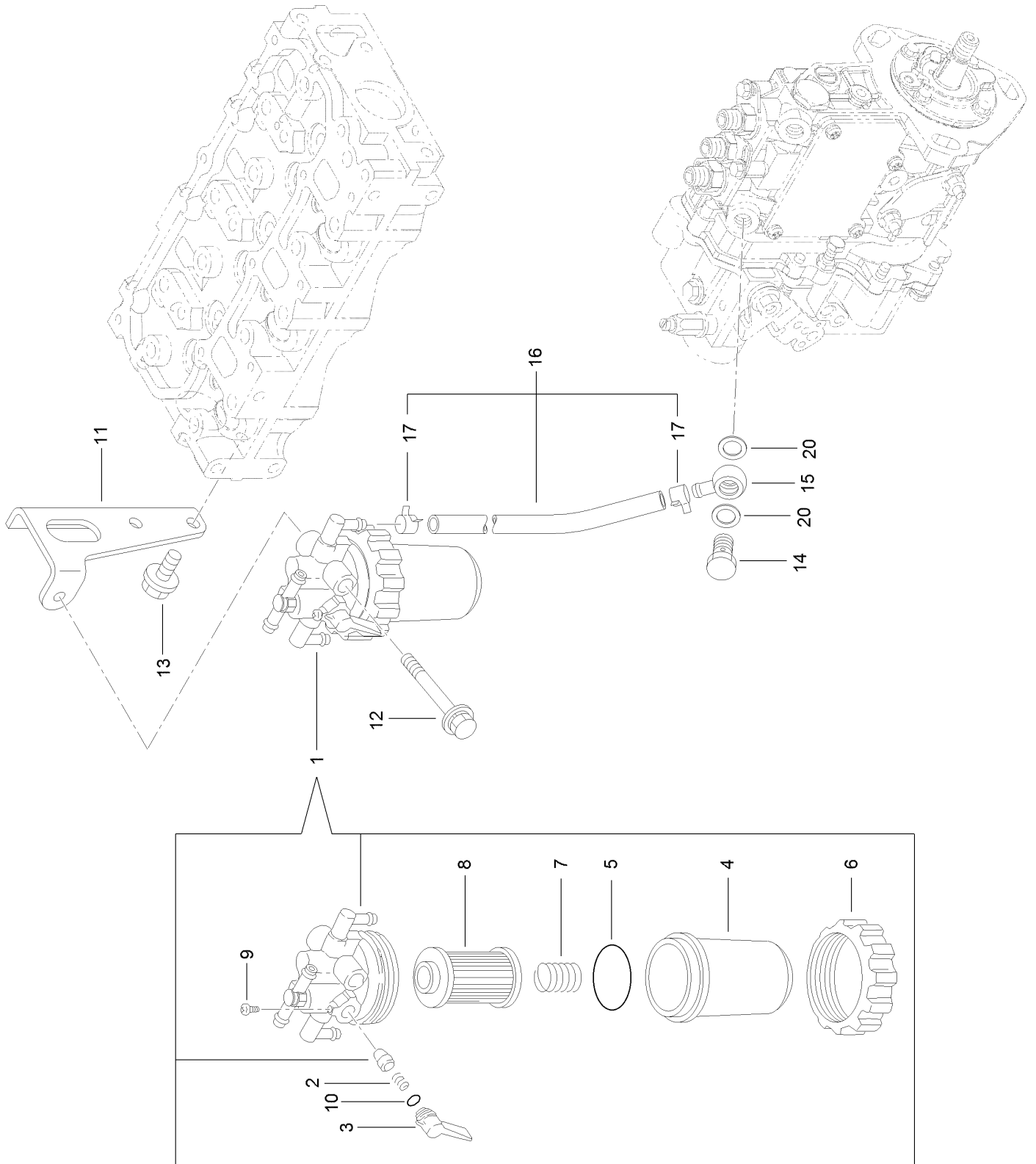
Fuel Injection Valve Assembly



Fuel Injection Valve Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 135-4229 | 3 | Nozzle ASM | 33 | 140-7167 | 2 | Clamp-Hose (11.5) |
| 3 | 135-4230 | 3 | Nozzle ASM | 36 | 134-1431 | 1 | Return Pipe ASM |
| 4 | 135-4231 | 3 | Adjusting Shim Set | 42 | 140-7155 | 1 | Fuel Pipe ASM |
| 15 | 134-1488 | 1 | Retainer-Pipe | 45 | 125-6970 | 2 | Clip |
| 18 | 125-7027 | 2 | Bolt | 46 | 135-4237 | 3 | Gasket |
| 20 | 135-4233 | 1 | Pipe ASM (Inj No1) | 47 | 135-4239 | 1 | Joint-Over Flow |
| 24 | 135-4234 | 1 | Pipe ASM (Inj No2) | 48 | 135-4240 | 3 | Nut-Nozzle |
| 28 | 135-4235 | 1 | Pipe ASM (Inj No3) | 49 | 135-4241 | 1 | Check Valve ASM |
| 32 | 140-7154 | 1 | Fuel Pipe ASM | 55 | 125-7176 | 2 | Washer-Seal |

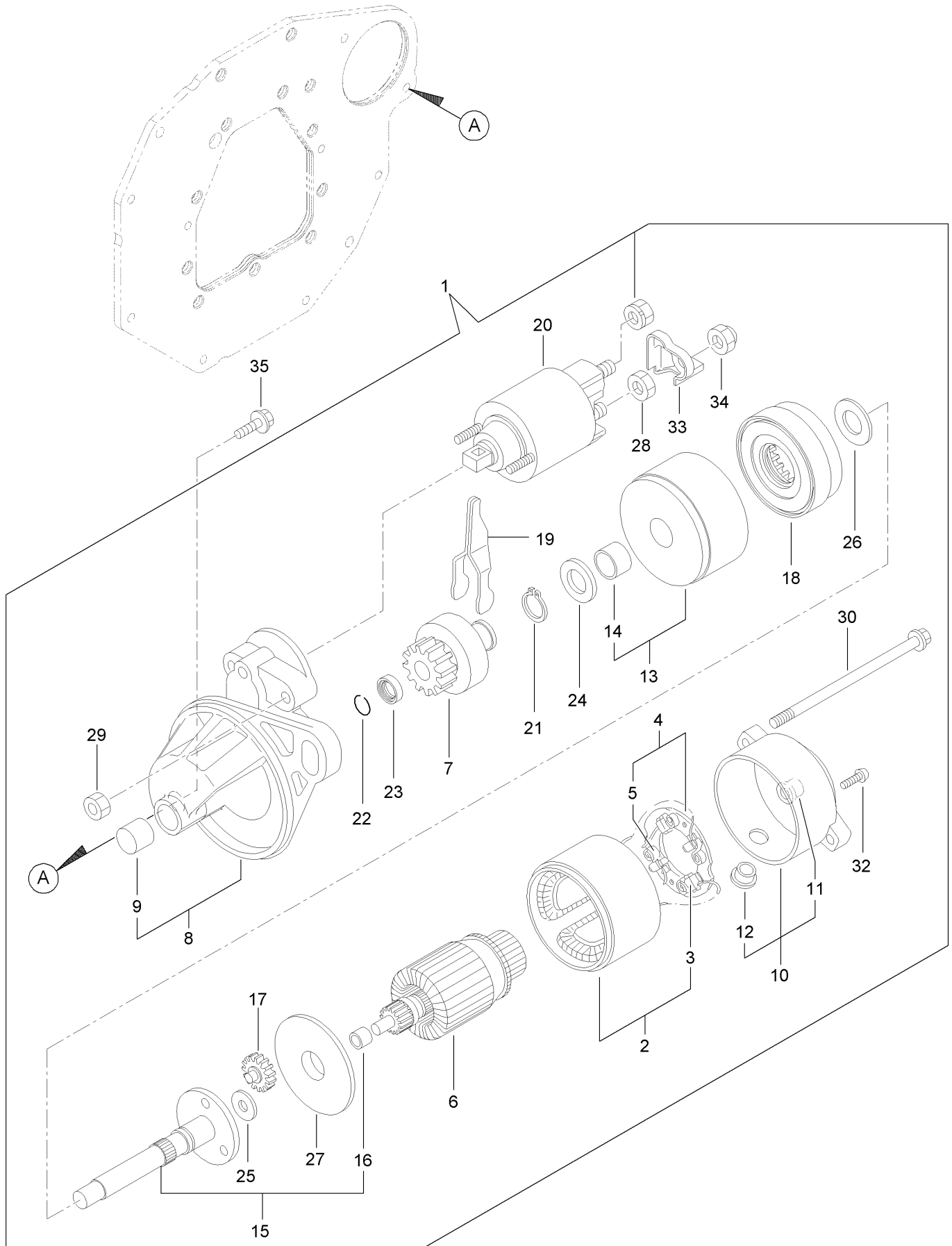
Fuel Pipe Assembly



Fuel Pipe Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|--------------------|
| 1 | 139-6234 | 1 | Fuel Filter ASM | 10 | 134-1535 | 1 | O-Ring |
| 2 | 134-1373 | 1 | Spring-Valve, Fuel | 11 | 140-7158 | 1 | Bracket, Filter |
| 3 | 134-1454 | 1 | Lever-Fuel | 12 | 140-7180 | 1 | Bolt |
| 4 | 134-1459 | 1 | Cup-Strainer, Fuel | 13 | 125-7214 | 2 | Bolt |
| 5 | 134-1371 | 1 | O-Ring | 14 | 135-4242 | 1 | Bolt-Joint, Pipe |
| 6 | 134-1376 | 1 | Ring-Retaining, Cup | 15 | 135-4243 | 1 | Joint-Pipe |
| 7 | 134-1458 | 1 | Spring-Element | 16 | 140-7153 | 1 | Fuel Pipe ASM |
| 8 | 134-3085 | 1 | Element-Filter, Fuel | 17 | 140-7167 | 2 | Clamp-Hose (11.5) |
| 9 | 134-1375 | 1 | Screw-Pan | 20 | 125-7176 | 2 | Washer-Seal |

Starter Motor Assembly



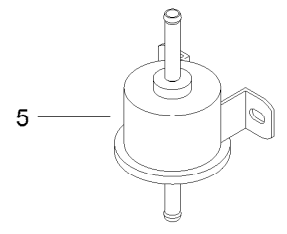
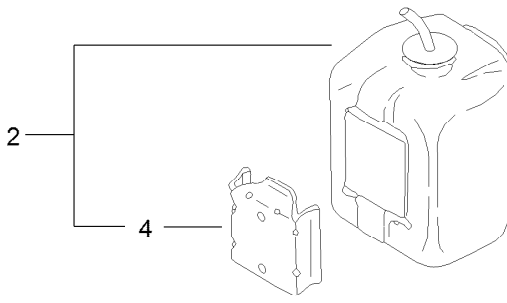
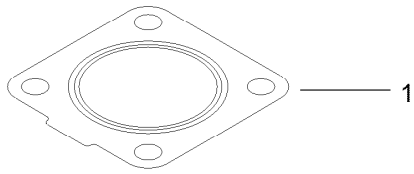
Starter Motor Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
| 1 | 135-4244 | 1 | Starter ASM | 18 | 135-4261 | 1 | Gear |
| 2 | 135-4245 | 1 | Yoke ASM | 19 | 135-4262 | 1 | Lever |
| 3 | 135-4246 | 2 | Starter Kit | 20 | 135-4263 | 1 | Switch ASM |
| 4 | 135-4247 | 1 | Holder ASM | 21 | 135-4264 | 1 | Ring |
| 5 | 135-4248 | 4 | Spring | 22 | 135-4265 | 1 | Ring |
| 6 | 135-4249 | 1 | Armature ASM | 23 | 135-4266 | 1 | Nut |
| 7 | 135-4250 | 1 | Clutch ASM | 24 | 135-4267 | 1 | Washer |
| 8 | 135-4251 | 1 | Housing ASM | 25 | 135-4268 | 1 | Washer |
| 9 | 135-4252 | 1 | Bearing-Needle | 26 | 135-4269 | 1 | Washer |
| 10 | 135-4253 | 1 | Frame ASM | 27 | 135-4270 | 1 | Plate |
| 11 | 135-4254 | 1 | Bearing | 28 | 135-4271 | 1 | Nut |
| 12 | 135-4255 | 1 | Cover | 29 | 135-4272 | 2 | Nut |
| 13 | 135-4256 | 1 | Bearing ASM | 30 | 135-4273 | 2 | Bolt-Through |
| 14 | 135-4257 | 1 | Bearing | 32 | 135-4274 | 2 | Screw |
| 15 | 135-4258 | 1 | Shaft ASM | 33 | 135-4275 | 1 | Cover-Terminal |
| 16 | 135-4259 | 1 | Bearing | 34 | 135-4276 | 1 | Nut |
| 17 | 135-4260 | 3 | Gear | 35 | 133-2496 | 2 | Bolt |

Generator Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|--------------------|
| 1 | 140-7162 | 1 | Alternator (12V-40A) | 17 | 127-2963 | 1 | Holder |
| 2 | 127-2999 | 1 | Cover | 18 | 127-2993 | 1 | Holder |
| 3 | 135-4025 | 1 | Frame ASM | 19 | 127-2956 | 2 | Brush ASM |
| 4 | 127-2958 | 1 | Bearing-Ball | 20 | 127-2964 | 2 | Spring |
| 5 | 127-2959 | 1 | Plate-Retainer | 21 | 127-2965 | 6 | Screw |
| 6 | 127-2960 | 4 | Screw | 22 | 127-2966 | 1 | Screw |
| 7 | 127-2961 | 2 | Stud | 23 | 127-2967 | 3 | Bolt |
| 8 | 140-7163 | 1 | Rear Frame ASM | 24 | 127-2968 | 2 | Screw |
| 9 | 127-3190 | 1 | Nut | 25 | 127-2969 | 2 | Bolt |
| 10 | 127-2951 | 1 | Rotor ASM | 26 | 127-2970 | 1 | Bushing-Insulation |
| 11 | 127-2983 | 1 | Bearing-Ball | 27 | 127-2971 | 2 | Nut |
| 12 | 127-2962 | 1 | Cover | 28 | 127-2972 | 1 | Washer |
| 13 | 127-2954 | 1 | Pulley | 29 | 135-4277 | 1 | Bolt |
| 14 | 127-2955 | 1 | Nut | 30 | 140-7151 | 1 | Adjuster-Belt |
| 15 | 127-2957 | 1 | Collar | 31 | 140-7166 | 1 | Spacer-Adjuster |
| 16 | 134-4018 | 1 | Regulator ASM | 32 | 125-7134 | 1 | Bolt |

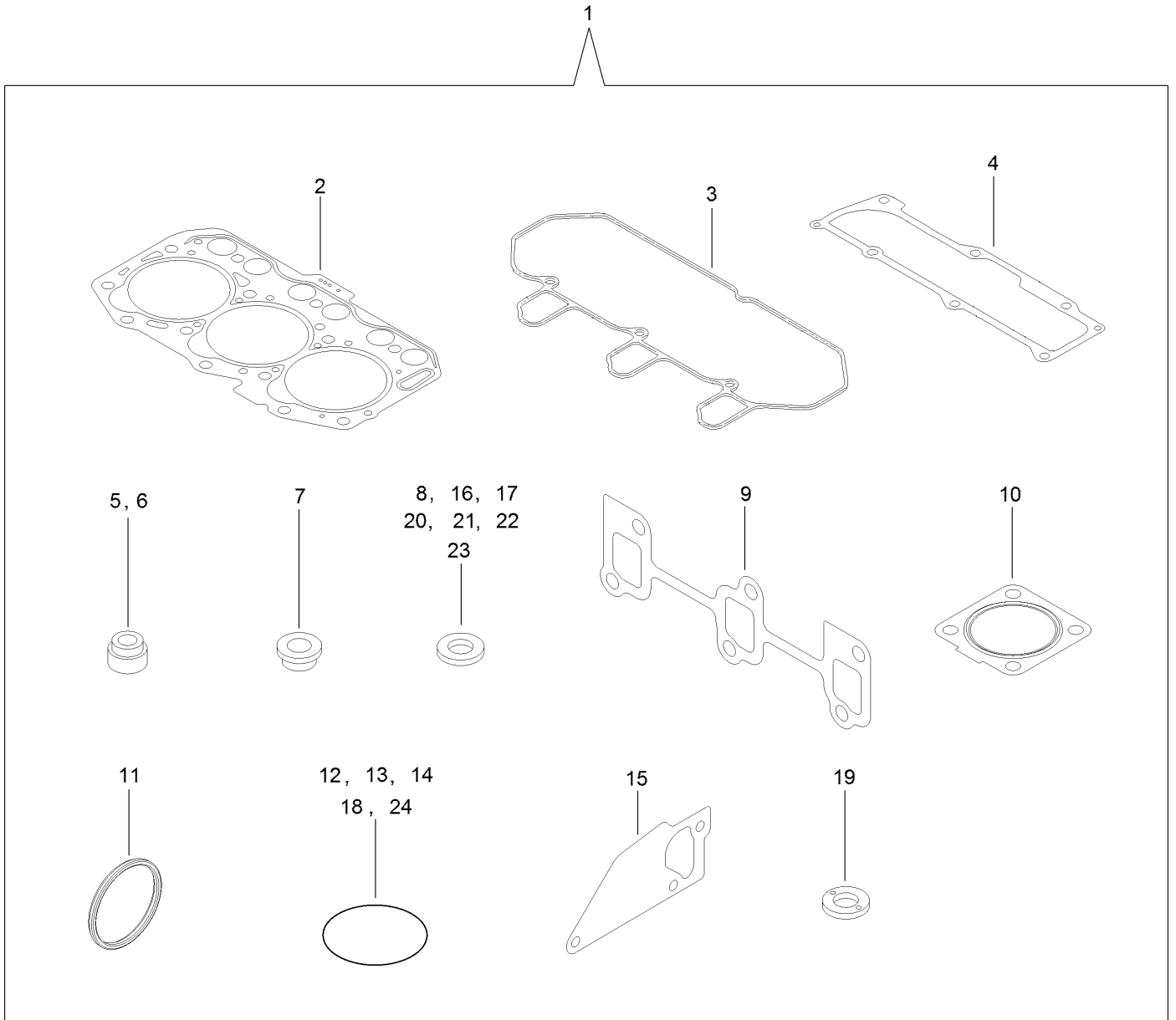
Accessory Assembly



Accessory Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|---------------------|
| 1 | 134-1383 | 1 | Gasket-Silencer | 5 | 121-5613 | 1 | Pump-Fuel, Electric |
| 2 | 140-7185 | 1 | Tank ASM | 11 | 134-1507 | 1 | Timer |
| 4 | 140-7165 | 1 | Bracket-Tank | | | | |

Gasket Set



Gasket Set (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------------------|-------------|--------------------|-------------|--------------------|
| 1 | 140-7184 | 1 | Gasket Set | 13 | 135-4058 | 2 | O-Ring |
| 2 | 135-4038 | 1 | Head Gasket Set | 14 | 135-4178 | 1 | O-Ring |
| 3 | 135-4093 | 1 | Gasket-Cover, Cylinder Head | 15 | 135-4193 | 1 | Gasket-Pump, Water |
| 4 | 135-4095 | 1 | Gasket | 16 | 125-6979 | 1 | Gasket |
| 5 | 125-6915 | 3 | Seal-Stem, Valve | 17 | 134-4010 | 1 | Gasket |
| 6 | 125-6916 | 3 | Seal-Stem, Valve | 18 | 125-6957 | 1 | O-Ring |
| 7 | 135-4069 | 3 | Protector-Nozzle | 19 | 135-4237 | 3 | Gasket |
| 8 | 135-4070 | 6 | Gasket-Nozzle | 20 | 125-7174 | 4 | Washer-Seal |
| 9 | 135-4107 | 1 | Gasket-Manifold, Exhaust | 21 | 125-7176 | 4 | Washer-Seal |
| 10 | 134-1383 | 1 | Gasket-Silencer | 22 | 136-8236 | 1 | Washer-Seal |
| 11 | 134-4004 | 1 | Packing-Washer | 23 | 125-7192 | 1 | Gasket |
| 12 | 127-2973 | 1 | O-Ring | 24 | 125-7197 | 2 | O-Ring |

Attachments and Accessories

For 31900A Groundsmaster 3200 2-Wheel Drive Traction Unit

| Product Name | Model/Part |
|---|-------------|
| Operator Cooling Fan | 03247 |
| Switch Panel-Universal Sunshade..... | 03248 |
| Filter-Air | 108-3811 |
| Filter-Spin On, Fuel/Water | 110-9049 |
| Paint-Black Bottle | 112-0176 |
| Paint-Red Pen | 112-0177 |
| Paint-Red Bottle | 112-0178 |
| 15-Pound Cast Weight..... | 112-7059-01 |
| 42-Pound Weight..... | 114-4096 |
| Seat Cover (W/arm rest)..... | 117-0095 |
| Premium Synthetic Bio-Degradable Hydraulic Fluid (5 Gallon Pail) | 119-2157 |
| Premium Synthetic Bio-Degradable Hydraulic Fluid (55 Gallon Drum)..... | 119-2158 |
| PX Hydraulic Fluid (5 Gal) | 133-8086 |
| PX Hydraulic Fluid (55 Gal)..... | 133-8087 |
| Element-Filter, Fuel | 134-3085 |
| Filter-Oil, Engine..... | 135-4181 |
| Beacon Kit | 138-2699 |
| Wrench-Caster Cap/Latch | 138-6367 |
| Storage Bag Kit..... | 139-2020 |
| SMV Kit..... | 139-2339 |
| Work Lights Kit, Groundsmaster and Reelmaster Traction Units with Universal Sunshade..... | 140-1554 |
| Power Harness Kit..... | 140-1559 |
| Kit-Weight | 144-0480 |
| Plate-Weight, 25 LBS | 144-0484 |
| Universal Wireless Hourmeter Kit | 144-2436 |
| Kit-Blade, Std (24.5) 3pk..... | 144-3911 |
| Kit-Blade, Med Flow (20.5) 3pk..... | 144-3912 |
| Kit-Blade, High Flow (20.5) 3pk | 144-3913 |
| Kit-Blade, Atomic (20.5) 3pk | 144-3914 |
| Kit-Blade, Low Flow (24.5) 3pk | 144-3915 |
| Kit-Blade, Recycling (24.5) 3pk..... | 144-3916 |
| Kit-Blade, Low Flow (20.5) 3pk | 144-3917 |
| Kit-Blade, Recycling (20.5) 3pk..... | 144-3918 |
| Kit-Blade-24.50 Low Flow 3pk | 144-3962 |
| Kit-Blade-24.50 Recycler 3pk | 144-3963 |
| Kit-Blade-20.50 Low Flow 3pk | 144-3964 |
| Kit-Blade-20.50 Recycler 3pk | 144-3965 |
| Kit-Blade-24.50 Atomic 3pk | 144-3966 |
| Kit-Blade-20.50 Atomic 3pk | 144-3967 |
| White Universal Sunshade | 30669 |
| Red Universal Sunshade | 30671 |
| Slope Sensor Kit..... | 31952 |
| CE Kit, Groundsmaster 3200 or 3300 Series Traction Unit..... | 31953 |
| CE Kit, Groundsmaster 3200 or 3300 Series 60in Side Discharge Rotary Mower..... | 31957 |
| CE Kit, Groundsmaster 3200 or 3300 Series 72in Side Discharge Rotary Mower..... | 31958 |
| CE Kit, Groundsmaster 3200 or 3300 Series 60in Rear Discharge Rotary Mower | 31959 |

Attachments and Accessories (continued)

| | |
|--|-----------|
| CE Kit, Groundsmaster 3200 or 3300 Series 72in Rear Discharge Rotary Mower | 31960 |
| Auxiliary HYD Kit | 31966 |
| 60in SD Deck..... | 31970 |
| 60in RD Deck..... | 31971 |
| 72in SD Deck..... | 31972 |
| 72in RD Deck..... | 31973 |
| 60in RD Deck, T2 | 31974 |
| 72in RD Deck, T2 | 31975 |
| Recycler Kit 60in/152cm SD | 31976 |
| Recycler Kit, 60In/152cm RD..... | 31977 |
| Recycler Kit, 72In/183cm SD | 31978 |
| Recycler Kit, 72In/183cm RD..... | 31979 |
| Storage Box Kit..... | 31983 |
| USB Charging Kit..... | 31984 |
| Recycler Kit 60in/152cm Rd T2..... | 31985 |
| Recycler Kit 72in/183cm Rd T2..... | 31986 |
| Cab-Winter, GM3000 Series..... | 31990 |
| Road Light Kit (North America) | 31991 |
| Road Light Kit (EU)..... | 31992 |
| Accessory Control Kit | 31994 |
| Led Beacon Kit | 31996 |
| Led Work-light Kit (GM3200/3300, Rops) | 31997 |
| Hydraulic Hose Kit | 31999 |
| Seat Asm - Standard | 32301 |
| Seat Asm - Mech Susp | 32302 |
| Air Ride Suspension Seat Kit, Groudsmaster e3200, 3200, 3300, e3300 SeriesTraction Unit | 32303 |
| Toro Red 12oz Aerosol Can | 361-10 |
| Semi-Gloss Black Spray Paint | 361-9 |
| Filter-Oil, Transmission..... | 86-3010 |
| Boss Plow, 5ft Straight Blade | MSC23345 |
| Blade Crate (Snowplow), ATV Poly S | STB13567B |



Count on it.