Form No. 3418-825 Rev A

TORO®

Count on it.

Parts Catalog

# Groundsmaster® 7210 Series

## Traction Unit

**Model No. 30487TC—Serial No. 401400001 and Up**

Register at www.Toro.com.
Original Instructions (EN)

CE

*3418-825* A

# Ordering Replacement Parts

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

**Understanding Reference Numbers**

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

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

**Service Assembly Reference Numbers**

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

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

**Reference Numbers Indicating Quantity**

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

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

# Contents


Rear Frame Assembly . . . 5
Engine Assembly . . . 6
Transmission and Gear Pump Assembly . . . 7
Charge Pump Housing Assembly Transmission Assembly No. 131-5510 . . . 8
Center Section Assembly Transmission Assembly No. 131-5510 . . . 10
Gear Case and Clutch Assembly Transmission Assembly No. 131-5510 . . . 12
Driveshaft Assembly No. 110-3575 . . . 14
Hydraulic Gear Pump Assembly No. 112-9542 . . . 15
Rear Drive Assembly . . . 16
Hydraulic Motor Assembly No. 108-5155 . . . 17
Hydraulic Motor Assembly No. 108-5230 . . . 18
LH Brake Caliper Assembly No. 120-0013 . . . 19
RH Brake Caliper Assembly No. 120-0014 . . . 20
Brake Handle Assembly . . . 21
Radiator and Oil Cooler Assembly . . . 22
Traction Control Assembly . . . 23
Link Assembly No. 112-5099 . . . 24
RH Lever Assembly No. 125-2687 . . . 25
Control Panel Assembly . . . 26
Left-Hand and Right-Hand Fuel Tank Assembly . . . 27
LH Fuel Tank Assembly No. 110-8230 . . . 28
RH Fuel Tank Assembly No. 110-8236 . . . 29
Fuel Filter / Separator Assembly . . . 30
Hood and Screen Assembly . . . 31
Seat and Seat Plate Assembly . . . 32
Seat Assembly No. 125-3107 . . . 33
Floorplate and Carrier Frame Assembly . . . 34
Carrier Frame Assembly No. 136-4466 . . . 35
Lift Valve and Cylinder Assembly . . . 36
Valve Assembly No. 131-1934 . . . 37
Hydraulic Cylinder Assembly No. 110-9834 . . . 38
Caster Wheel Assembly . . . 39
Caster Wheel Assembly No. 133-4723 . . . 40
Deck Lift Assembly . . . 41
Electrical Assembly . . . 42
Transmission and Oil Cooler Hydraulic Assembly . . . 43
Hydraulic Reservoir Assembly . . . 44
Hydraulic Reservoir Assembly No. 110-8237 . . . 45
Air Cleaner and Hose Assembly . . . 46
Air Cleaner Assembly No. 136-4481 . . . 47
Crankcase Assembly . . . 48
Oil Pan Assembly . . . 49
Cylinder Head Assembly . . . 50
Head Cover Assembly . . . 51
Gear Case Assembly . . . 52
Main Bearing Case Assembly . . . 53
Camshaft and Idle Gear Shaft Assembly . . . 54
Piston and Crankshaft Assembly . . . 55
Flywheel Assembly . . . 56
Fuel Camshaft and Governor Shaft Assembly . . . 57
Idle Apparatus Assembly . . . 58
Injection Pump Assembly . . . 59
Governor Assembly . . . 60
Speed Control Plate Assembly . . . 61



**© 2018—The Toro® Company**
**8111 Lyndale Avenue South**
**Bloomington, MN 55420**

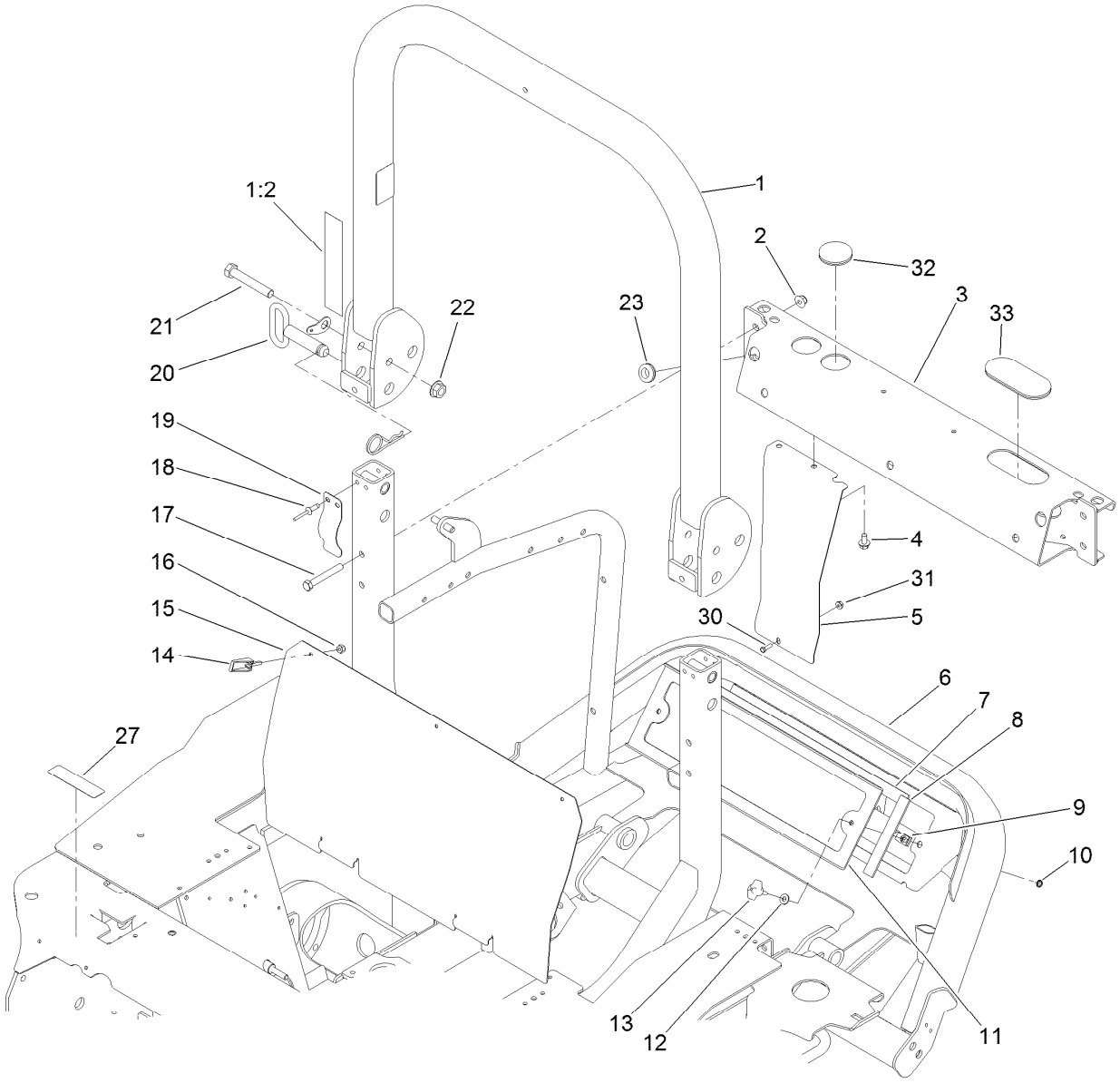




**Contact us at www.Toro.com.**
**Printed in the USA.**
**All Rights Reserved**

# Contents (continued)

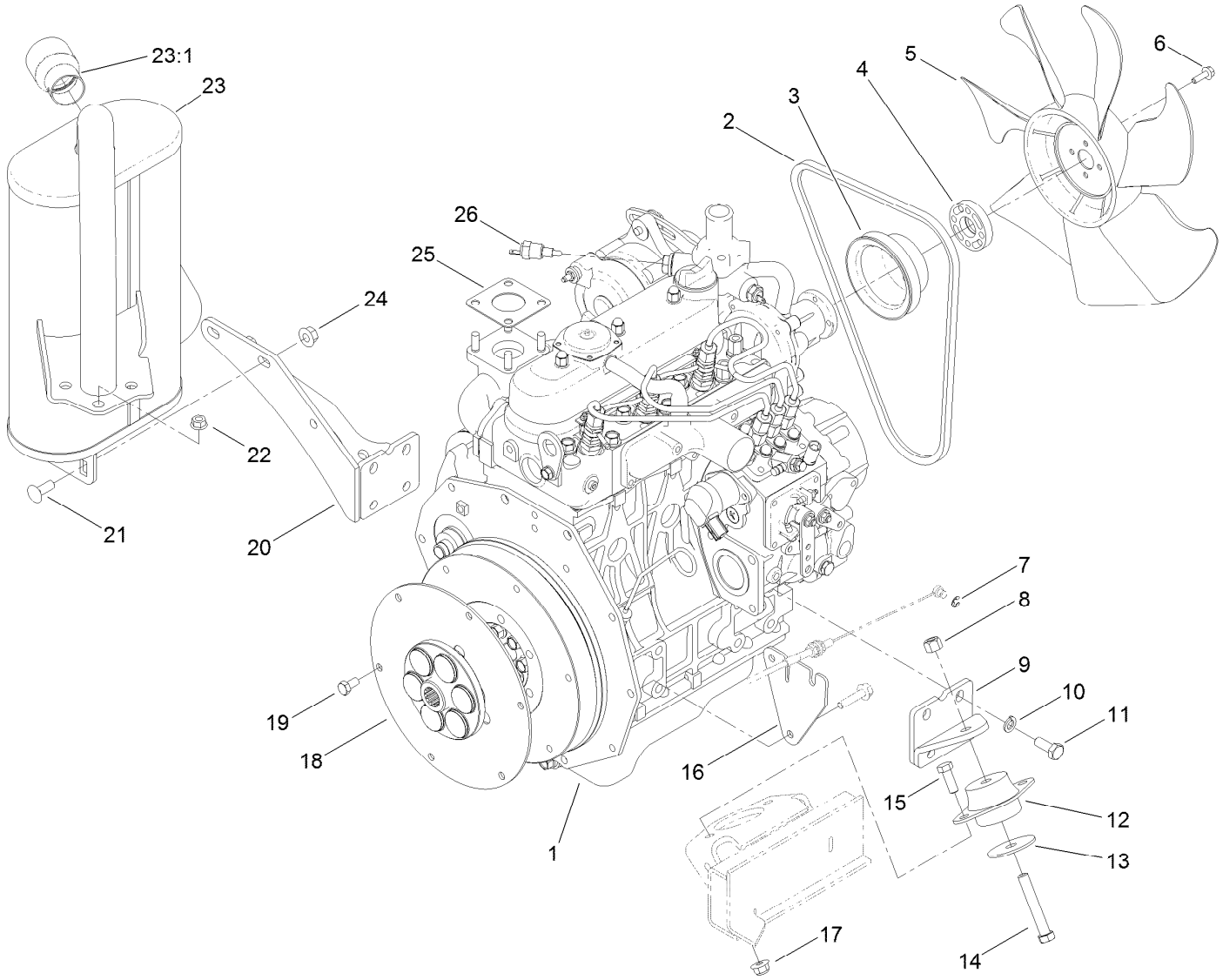
Nozzle Holder and Glow Plug Assembly . . . . . 62
Nozzle Holder Assembly . . . . . 63
Alternator and Pulley Assembly . . . . . 64
Alternator Components Assembly . . . . . 65
Starter (Component Part) Assembly No. 98-9705 . . . . . 66
Water Flange and Thermostat Assembly . . . . . 67
Water Pump Assembly . . . . . 68
Inlet and Exhaust Manifold Assembly . . . . . 69
Valve and Rocker Arm Assembly . . . . . 70
Turbo Charger Assembly . . . . . 71
Turbo Charger Oil Pipe Assembly . . . . . 72
Oil Cooler Assembly . . . . . 73
Gasket Kit . . . . . 74
Electric Fuel Pump, Fuel Filter, Starter and Overflow Bottle Assemblies . . . . . 75
Attachments and Accessories . . . . . 76




# Rear Frame Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 110-9770 | 1 | Upper ROPS ASM |
| 1:2 | 107-3069 | 1 | Decal-Warning |
| 2 | 104-8301 | 4 | Nut-HF, NI |
| 3 | 132-8150-03 | 1 | Crossmember ASM |
| 4 | 32144-14 | 2 | Screw-HWHTF |
| 5 | 112-6368-03 | 1 | Shield-Heat |
| 6 | 125-2714-03 | 1 | Frame-Rear |
| 7 | 120-0019 | 2 | Strip-Foam |
| 8 | 120-0017 | 2 | Strip-Foam |
| 9 | 107069 | 2 | Clip |
| 10 | 32151-106 | 2 | Ring-Retaining |
| 11 | 112-6384-03 | 1 | Screen |
| 12 | 3256-22 | 2 | Washer-Flat |
| 13 | 98-8332 | 2 | Knob |
| 14 | 74-5950 | 3 | Latch-Swell |

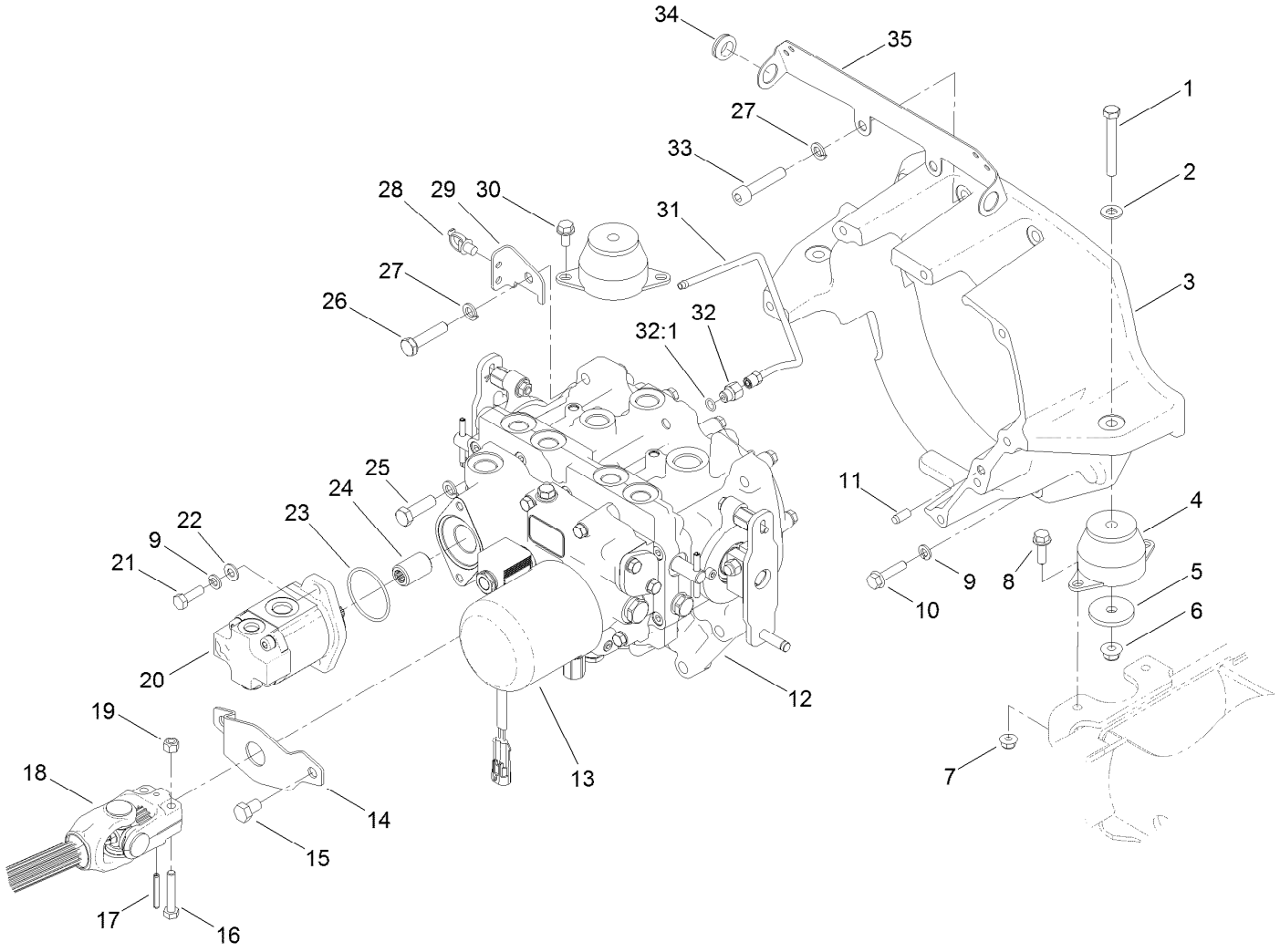
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 15 | 125-2718-03 | 1 | Panel-Rear |
| 16 | 1-804254 | 3 | Nut-Lock, HH |
| 17 | 323-13 | 4 | Screw-HH |
| 18 | 3290-412 | 4 | Rivet-Blind |
| 19 | 110-5696 | 2 | Spring-Leaf |
| 20 | 103-4553 | 2 | Pin-Fold, ROPS |
| 21 | 112-7264 | 2 | Screw-HH |
| 22 | 32128-23 | 2 | Nut-HF |
| 23 | 237-124 | 2 | Grommet |
| 27 | 133-5618 | 1 | Decal-Arrester, Spark |
| 30 | 3290-134 | 1 | Screw |
| 31 | 32128-17 | 1 | Nut-Lock, Flange |
| 32 | 105-5761 | 2 | Grommet |
| 33 | 130-6086 | 1 | Grommet |




# Engine Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 132-5202 | 1 | Engine-Kubota, D1105T |
| 2 | 98-9676 | 1 | V-Belt |
| 3 | 98-9584 | 1 | Pulley-Fan |
| 4 | 108-2872 | 1 | Collar-Fan |
| 5 | 104-4246 | 1 | Fan-Engine |
| 6 | 33103-020 | 4 | Screw-HHF |
| 7 | 701197 | 1 | E-Ring |
| 8 | 3296-48 | 2 | Nut-Lock, NI |
| 9 | 105-7235-03 | 1 | Mount-Rear |
| 10 | 48-9590 | 8 | Washer-Lock |
| 11 | 43-0090 | 8 | Screw-HH |
| 12 | 130-2486 | 2 | Mount-ISO |
| 13 | 87-5100 | 2 | Washer-Snubbing |
| 14 | 324-11 | 2 | Screw-HH |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 15 | 323-6 | 4 | Screw-HH |
| 16 | 114-4060 | 1 | Bracket-Throttle |
| 17 | 104-8301 | 4 | Nut-HF, NI |
| 18 | 110-9729 | 1 | Coupling-Flywheel |
| 19 | 99-5132 | 6 | Bolt |
| 20 | 108-9926-03 | 1 | Bracket-Muffler |
| 21 | 3231-22 | 2 | Screw-CARR |
| 22 | 33004-00 | 4 | Nut-HF |
| 23 | 108-9912 | 1 | Muffler |
| 23:1 | 112-1688 | 1 | Spark Arrestor Kit |
| 24 | 32128-29 | 2 | Nut-Lock, Flange |
| 25 | 99-8343 | 1 | Gasket-Muffler |
| 26 | 98-9719 | 1 | Thermoswitch |

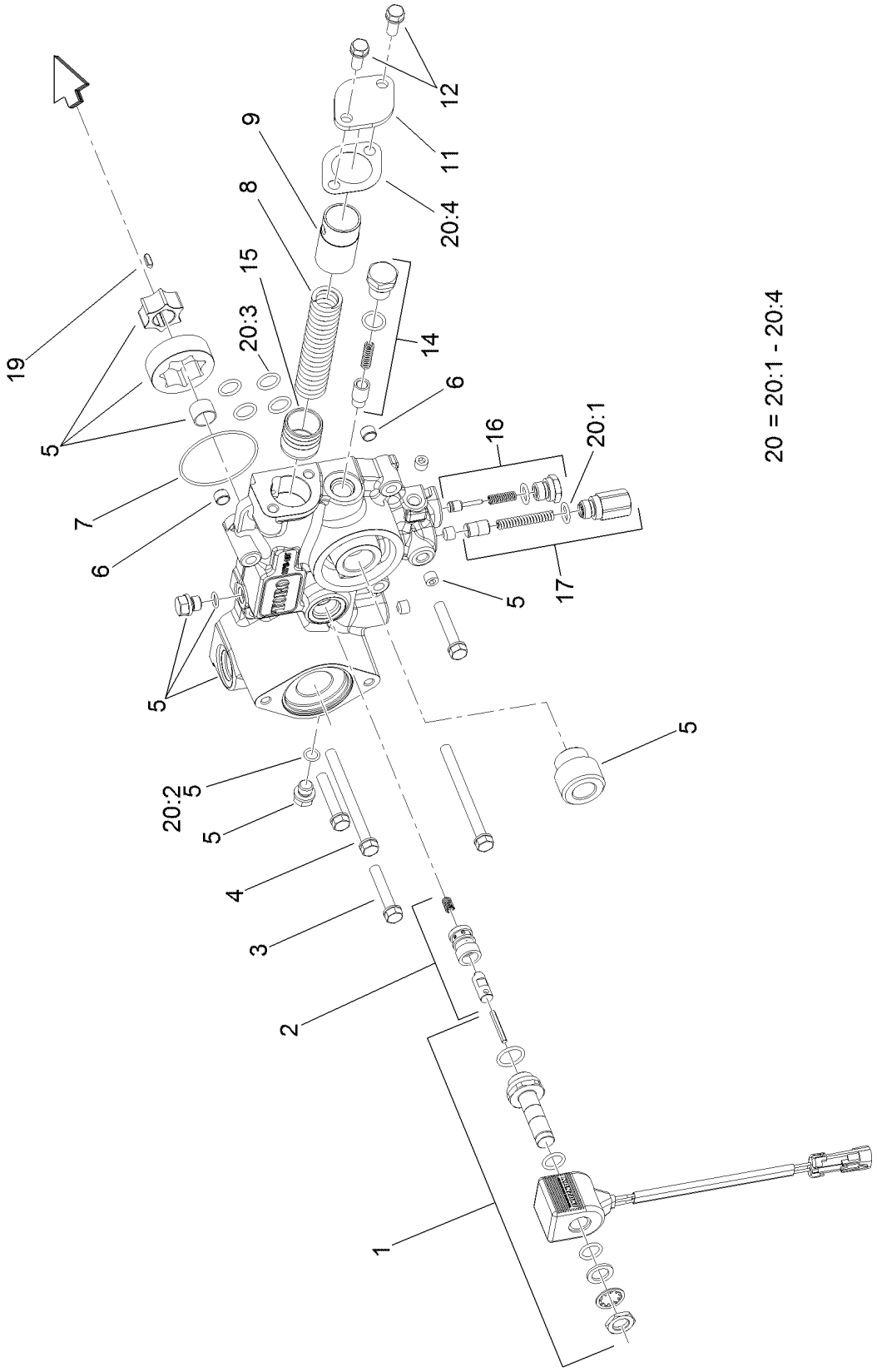



# Transmission and Gear Pump Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 323-13 | 2 | Screw-HH |
| 2 | 3256-24 | 2 | Washer-Flat |
| 3 | 108-5193 | 1 | Housing-Flywheel |
| 4 | 107-2289 | 2 | Mount-Motor |
| 5 | 80-8560 | 2 | Washer-Hardened |
| 6 | 104-8301 | 2 | Nut-HF, NI |
| 7 | 104-8300 | 2 | Nut-HF, NI |
| 8 | 3234-17 | 2 | Screw-HHF |
| 9 | 3253-4 | 10 | Washer-Lock |
| 10 | 33104-035 | 8 | Screw-HHF |
| 11 | 87-1910 | 4 | Pin-Dowel |
| 12 | 131-5510 | 1 | Transmisson ASM |
| 13 | 108-5194 | 1 | Filter-Oil, HYD |
| 14 | 114-4088 | 1 | Shield-Seal |
| 15 | 33115-016 | 2 | Screw-HH |
| 16 | 322-9 | 4 | Screw-HH |
| 17 | 32121-34 | 2 | Pin-Roll |
| 18 | 110-3575 | 1 | Driveshaft ASM |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 19 | 3296-29 | 4 | Nut-Lock, NI |
| 20 | 112-9542 | 1 | HYD Gear Pump ASM |
| 21 | 33114-025 | 2 | Screw-HH |
| 22 | 3256-23 | 2 | Washer-Plain |
| 23 | 108-9919 | 1 | O-Ring |
| 24 | 108-9920 | 1 | Coupler-Spline |
| 25 | 33115-035 | 1 | Screw-HH |
| 26 | 33115-045 | 6 | Screw-HH |
| 27 | 48-9590 | 9 | Washer-Lock |
| 28 | 32180-030 | 1 | Clip-Tie |
| 29 | 120-0239 | 1 | Support-Tube |
| 30 | 32144-14 | 2 | Screw-HWHTF |
| 31 | 110-5537 | 1 | Tube |
| 32 | 110-5536 | 1 | Fitting-HYD, Adapter |
| 32:1 | 237-78 | 1 | O-Ring |
| 33 | 3274-106 | 2 | Screw-HSH |
| 34 | 99-3481 | 2 | Grommet |
| 35 | 125-2716-03 | 1 | Bracket-Wire |

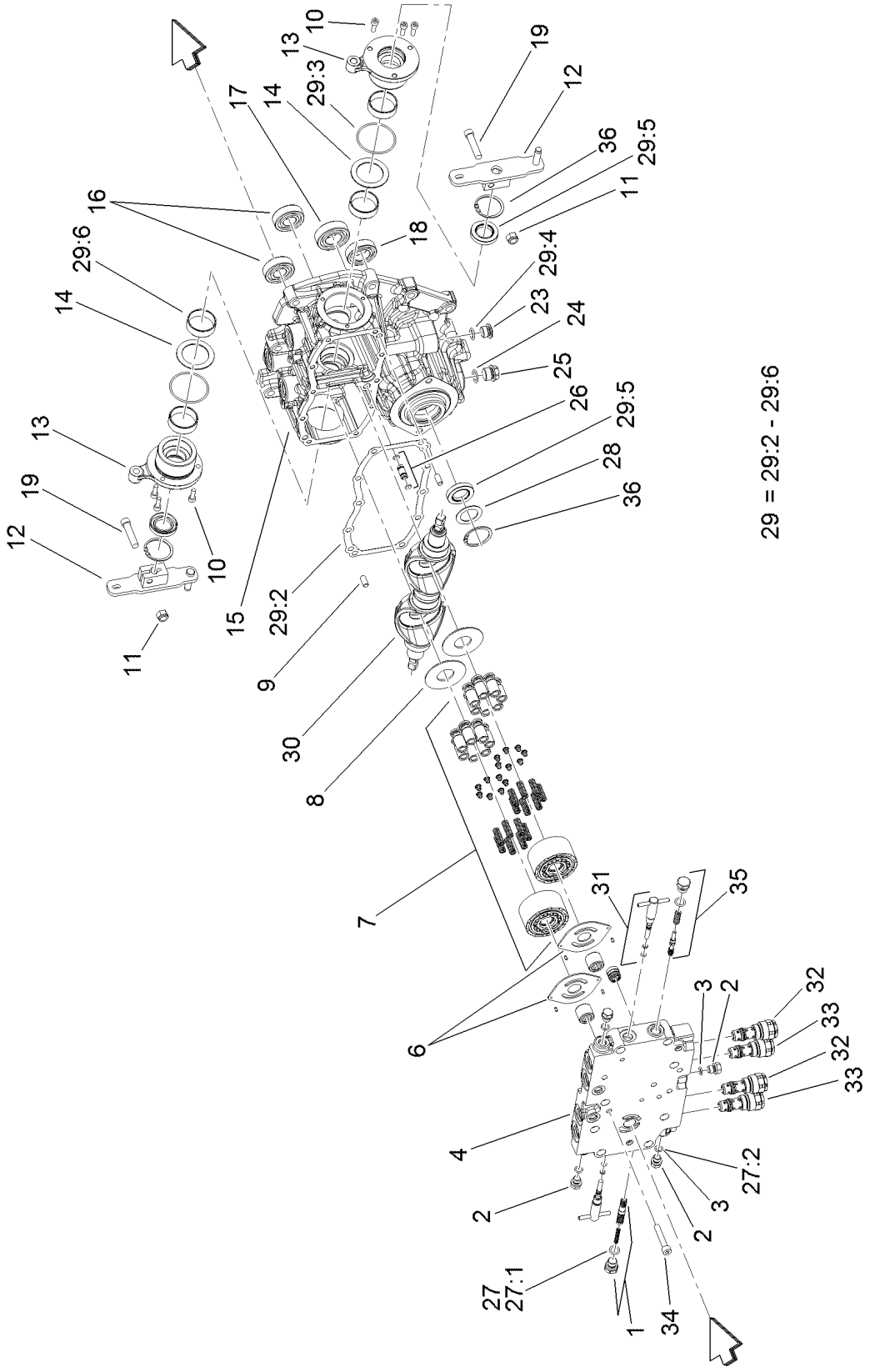
# Charge Pump Housing Assembly
# Transmission Assembly No. 131-5510



# Charge Pump Housing Assembly
# Transmission Assembly No. 131-5510 (continued)

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 107-0851 | 1 | Solenoid ASM |
| 2 | 107-0850 | 1 | Solenoid Valve ASM |
| 3 | 107-0863 | 3 | Bolt |
| 4 | 107-0864 | 2 | Bolt |
| 5 | 107-0840 | 1 | Pump Body ASM |
| 6 | 107-0848 | 2 | Pin |
| 7 | 107-0856 | 1 | O-Ring |
| 8 | 107-0845 | 1 | Spring |
| 9 | 107-0844 | 1 | Collar |
| 11 | 107-0846 | 1 | Cover |
| 12 | 93-0457 | 2 | Bolt And Washer ASM |
| 14 | 107-0843 | 1 | Filter Bypass Valve ASM |
| 15 | 107-0818 | 1 | Piston |
| 16 | 107-0842 | 1 | Charge Relief Valve ASM |
| 17 | 107-0841 | 1 | Pressure Valve ASM |
| 19 | 107-0865 | 1 | Key |
| 20 | 107-0855 | 1 | Charge Pump Seal Kit |
| 20:1 | 93-0418 | 2 | O-Ring |
| 20:2 | 107-0817 | 2 | O Ring-Plug |
| 20:3 | 104-3298 | 6 | Packing |
| 20:4 | 107-0847 | 1 | Gasket |

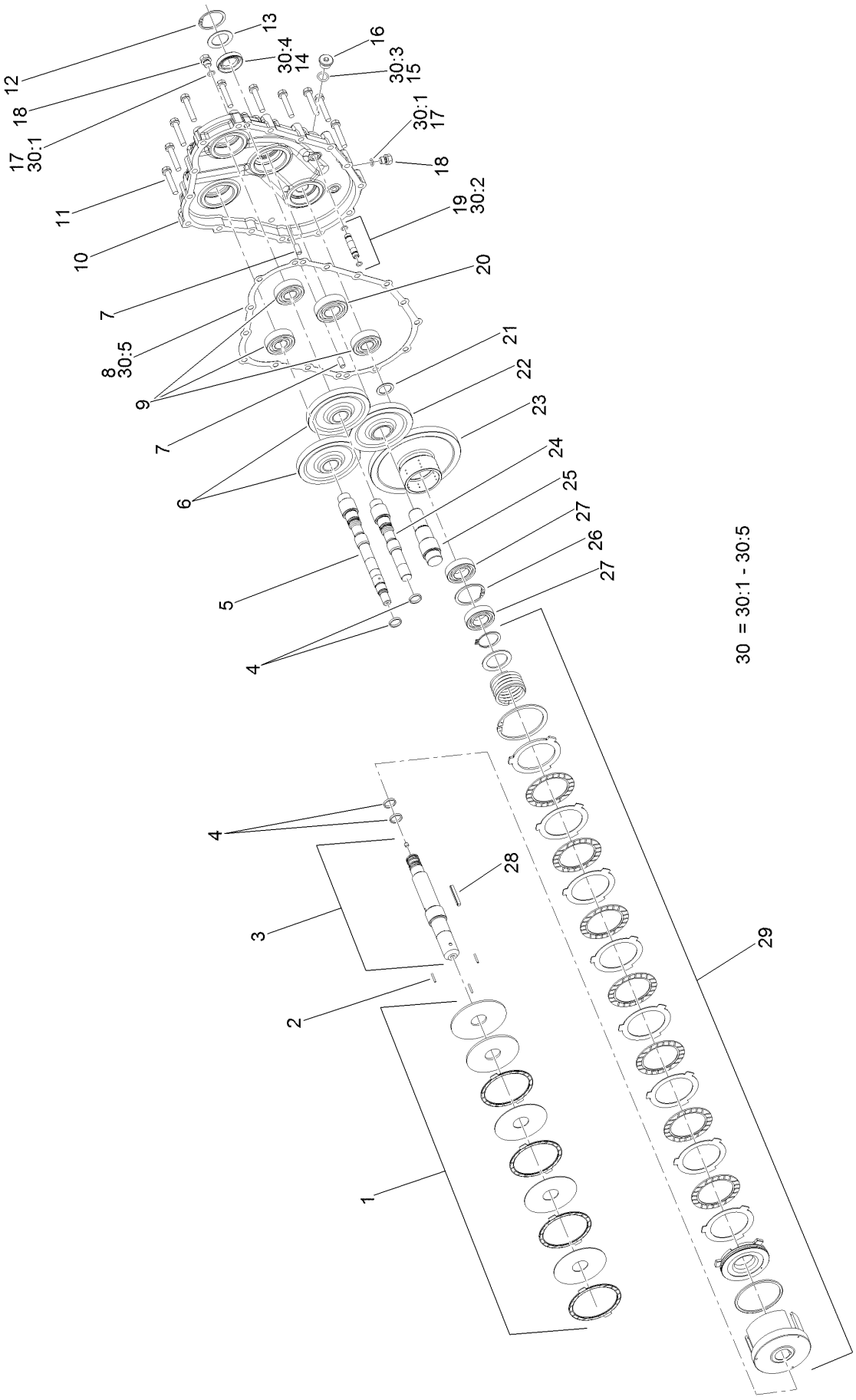
# Center Section Assembly
# Transmission Assembly No. 131-5510



# Center Section Assembly
# Transmission Assembly No. 131-5510 (continued)

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 107-0807 | 1 | Valve-Flushing, RH |
| 2 | 107-0857 | 6 | Plug |
| 3 | 107-0817 | 6 | O Ring-Plug |
| 4 | 121-3377 | 1 | Center Case, Complete |
| 6 | 107-0805 | 2 | Plate-Valve |
| 7 | 107-0824 | 2 | Cylinder Block ASM |
| 8 | 107-0830 | 2 | Plate-Thrust |
| 9 | 92-0765 | 4 | Pin-Parallel |
| 10 | 107-0859 | 6 | Bolt |
| 11 | 120-6681 | 2 | U-Nut |
| 12 | 120-6680 | 2 | Arm-Control |
| 13 | 107-0832 | 2 | Side Cover ASM |
| 14 | 107-0829 | 2 | Washer |
| 15 | 120-5151 | 1 | Pump Housing ASM |
| 16 | 107-0826 | 2 | Bearing |
| 17 | 107-0821 | 1 | Bearing |
| 18 | 107-0838 | 1 | Bearing |
| 19 | 120-6682 | 2 | Bolt |
| 23 | 107-0861 | 1 | Plug-NPTF |
| 24 | 237-79 | 1 | O-Ring |
| 25 | 107-0867 | 1 | Plug |
| 26 | 107-0812 | 1 | Pipe |
| 27 | 107-0852 | 1 | Center Case Seal Kit |
| 27:1 | 93-0418 | 2 | O-Ring |
| 27:2 | 107-0817 | 6 | O Ring-Plug |
| 28 | 107-0813 | 1 | Spacer |
| 29 | 107-0853 | 1 | Pump Housing Seal Kit |
| 29:2 | 107-0810 | 1 | Gasket-Case, Center |
| 29:3 | 107-0817 | 2 | O Ring-Plug |
| 29:4 | 104-3298 | 1 | Packing |
| 29:5 | 107-0814 | 3 | Seal |
| 29:6 | 107-0825 | 4 | Ring-Seal |
| 30 | 120-6679 | 2 | Plate-Swash |
| 31 | 107-0808 | 2 | Valve-Bypass |
| 32 | 107-0804 | 2 | Valve-Rear |
| 33 | 107-0803 | 2 | Valve-Front |
| 34 | 107-0863 | 8 | Bolt |
| 35 | 107-0806 | 1 | Valve-Flushing, LH |
| 36 | 92-0757 | 2 | Ring-Snap |

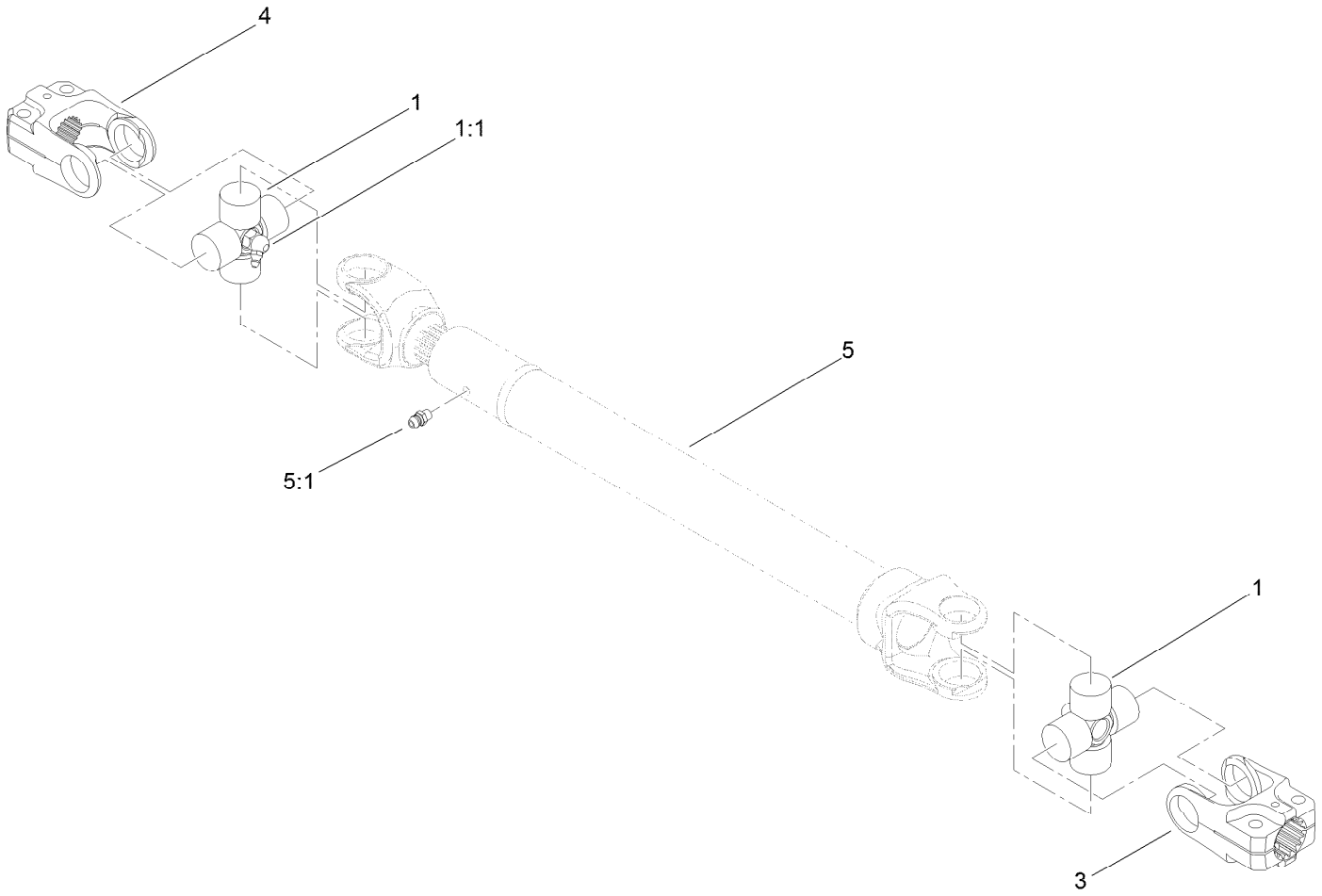
# Gear Case and Clutch Assembly
# Transmission Assembly No. 131-5510



# Gear Case and Clutch Assembly
# Transmission Assembly No. 131-5510 (continued)

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 107-0839 | 1 | PTO Brake ASM |
| 2 | 107-0837 | 3 | Rod-Push |
| 3 | 107-0833 | 1 | PTO Shaft ASM |
| 4 | 107-0825 | 2 | Ring-Seal |
| 5 | 107-0827 | 1 | Shaft-Pump |
| 6 | 107-0823 | 2 | Gear-Pump |
| 7 | 92-0765 | 4 | Pin-Parallel |
| 8 | 107-0816 | 1 | Gasket-Housing, Gear |
| 9 | 107-0826 | 4 | Bearing |
| 10 | 120-5152 | 1 | Housing-Case, Gear |
| 11 | 107-0863 | 13 | Bolt |
| 12 | 92-0757 | 1 | Ring-Snap |
| 13 | 107-0813 | 1 | Spacer |
| 14 | 107-0814 | 1 | Seal |
| 15 | 104-3298 | 1 | Packing |
| 16 | 107-0861 | 1 | Plug-NPTF |
| 17 | 107-0817 | 6 | O Ring-Plug |
| 18 | 107-0857 | 6 | Plug |
| 19 | 107-0811 | 1 | Pipe |
| 20 | 107-0821 | 2 | Bearing |
| 21 | 107-0836 | 1 | Spacer |
| 22 | 107-0820 | 1 | Gear-Input |
| 23 | 107-0834 | 1 | Gear-PTO |
| 24 | 107-0822 | 1 | Shaft-Pump |
| 25 | 107-0819 | 1 | Shaft-Input |
| 26 | 92-0758 | 1 | Ring-Snap |
| 27 | 107-0838 | 3 | Bearing |
| 28 | 107-0866 | 1 | Key |
| 29 | 107-0835 | 1 | Clutch Cylinder ASM |
| 30 | 107-0854 | 1 | Gear Housing Seal Kit |
| 30:1 | 107-0817 | 2 | O Ring-Plug |
| 30:2 | | 2 | O-Ring ● |
| 30:3 | 104-3298 | 1 | Packing |
| 30:4 | 107-0814 | 1 | Seal |
| 30:5 | 107-0816 | 1 | Gasket-Housing, Gear |

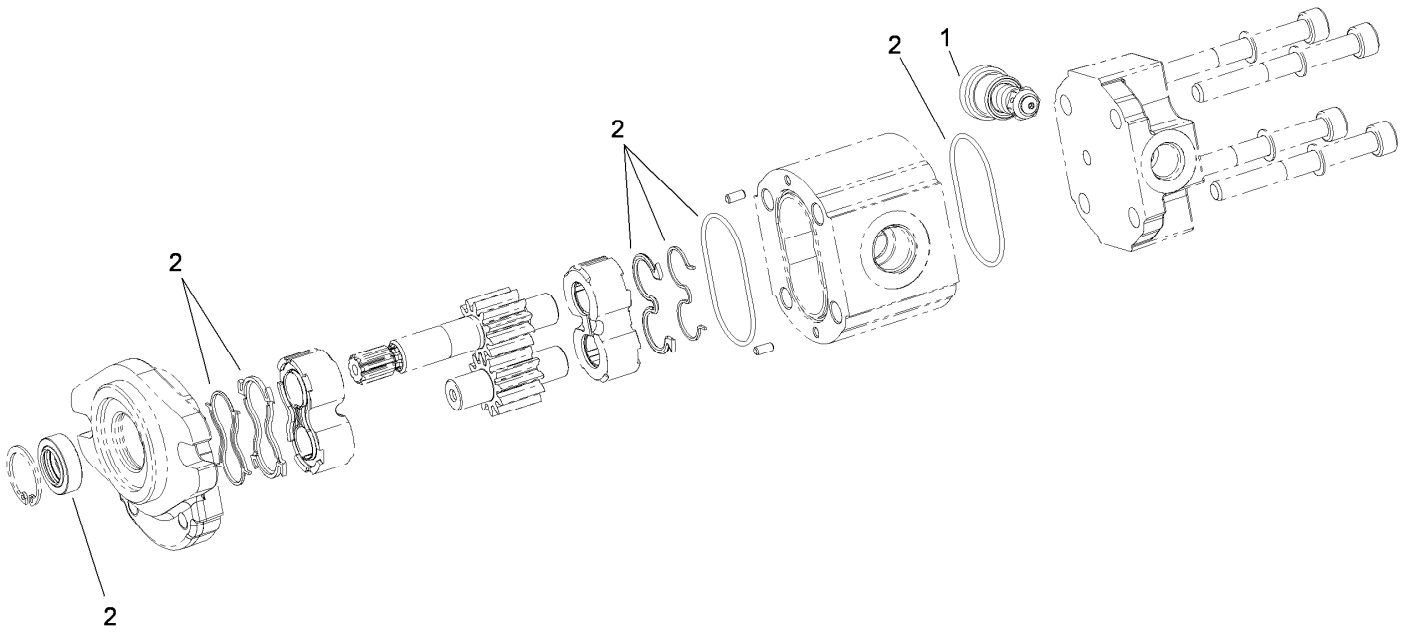
● Not serviced separately




# Driveshaft Assembly No. 110-3575

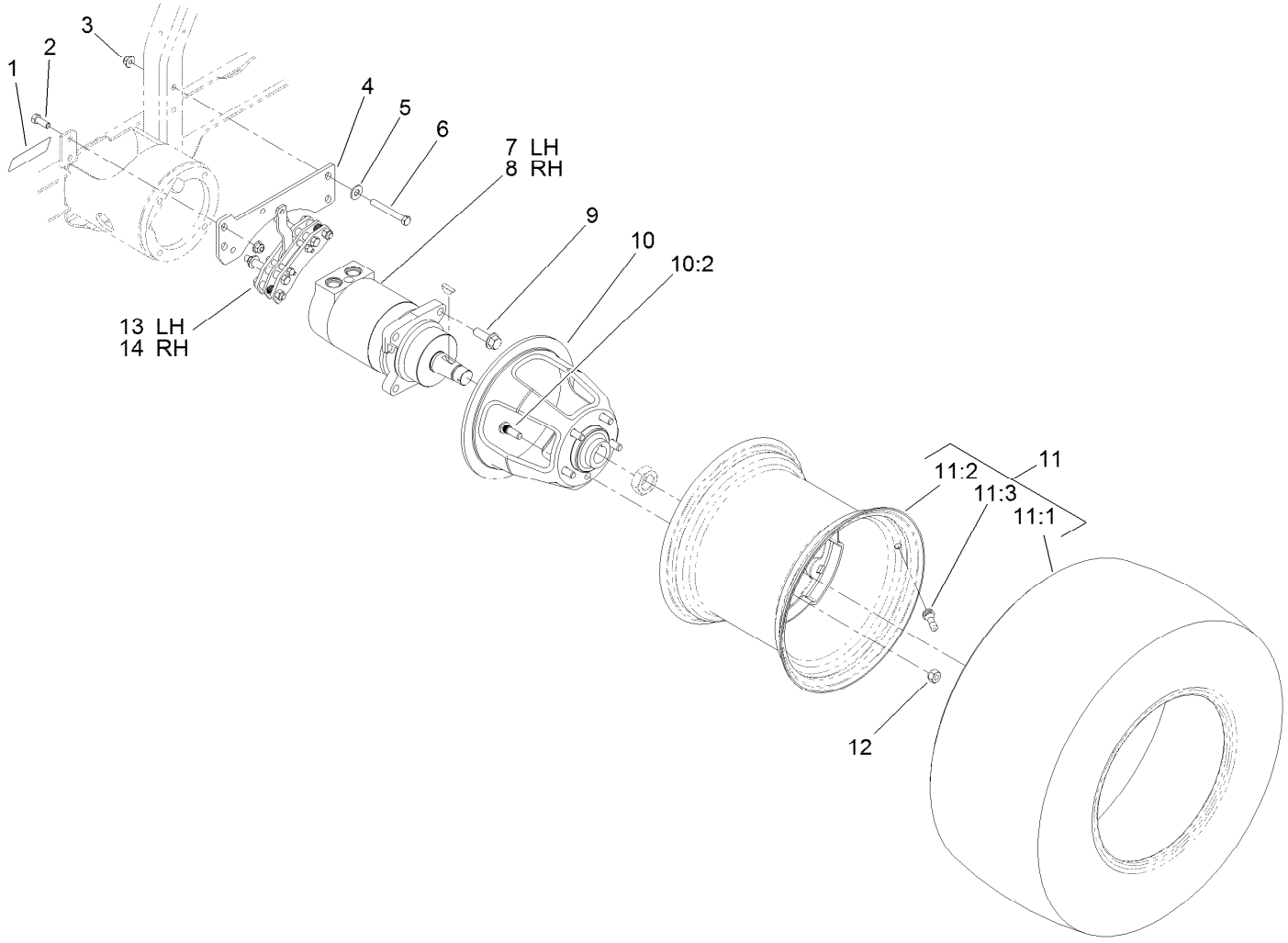
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 112-1687 | 2 | Cross And Bearing Kit |
| 1:1 | 62-3820 | 1 | Fitting-Grease |
| 3 | 54-9040 | 1 | Yoke-End |
| 4 | 54-9090 | 1 | Yoke-End |
| 5 | | 1 | Tube-Yoke, Slip ● |
| 5:1 | 302-22 | 1 | Fitting-Grease |

● Not serviced separately




# Hydraulic Gear Pump Assembly No. 112-9542

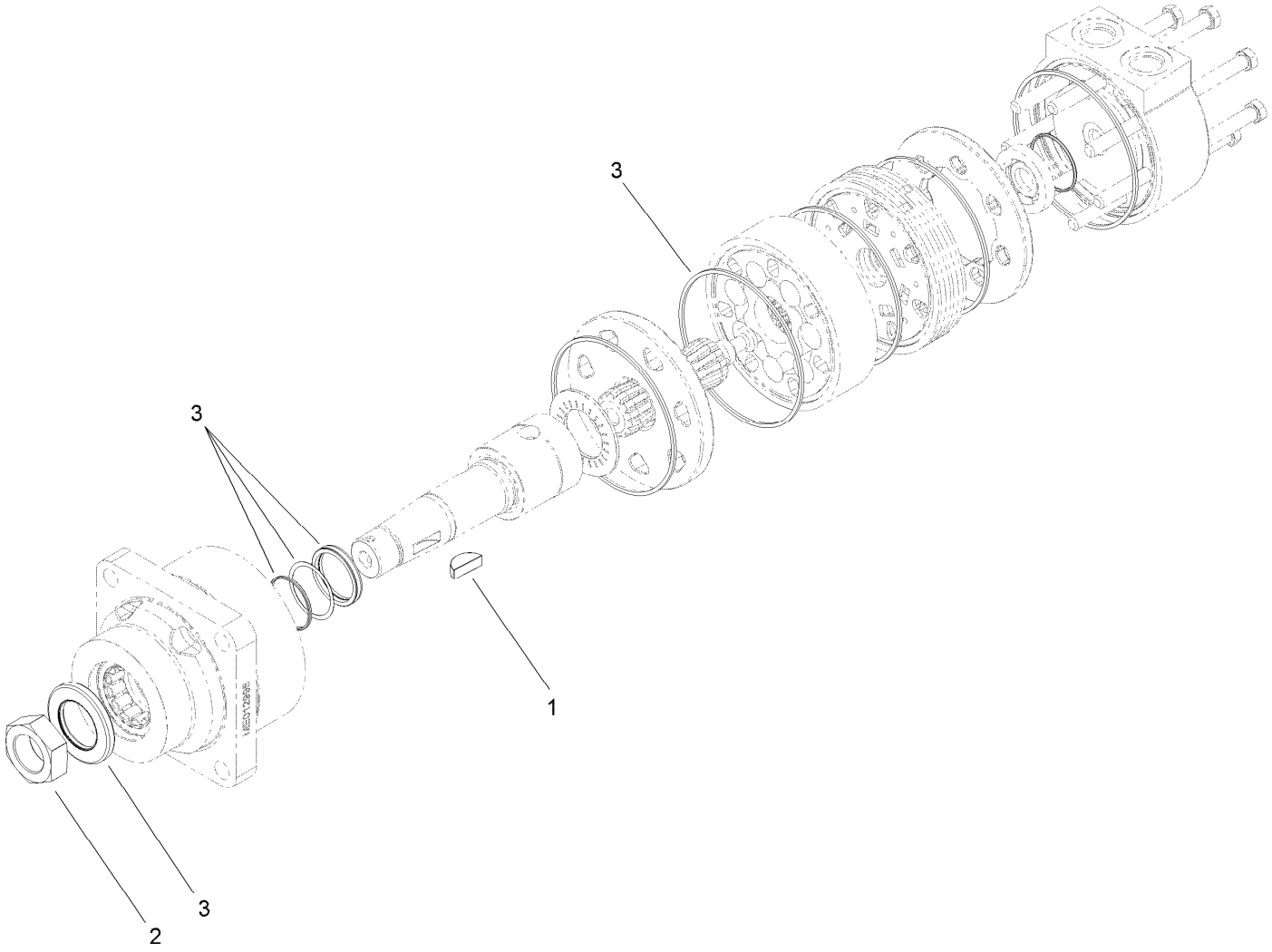
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 112-0198 | 1 | Valve |
| 2 | 112-0199 | 1 | Seal Kit |




# Rear Drive Assembly

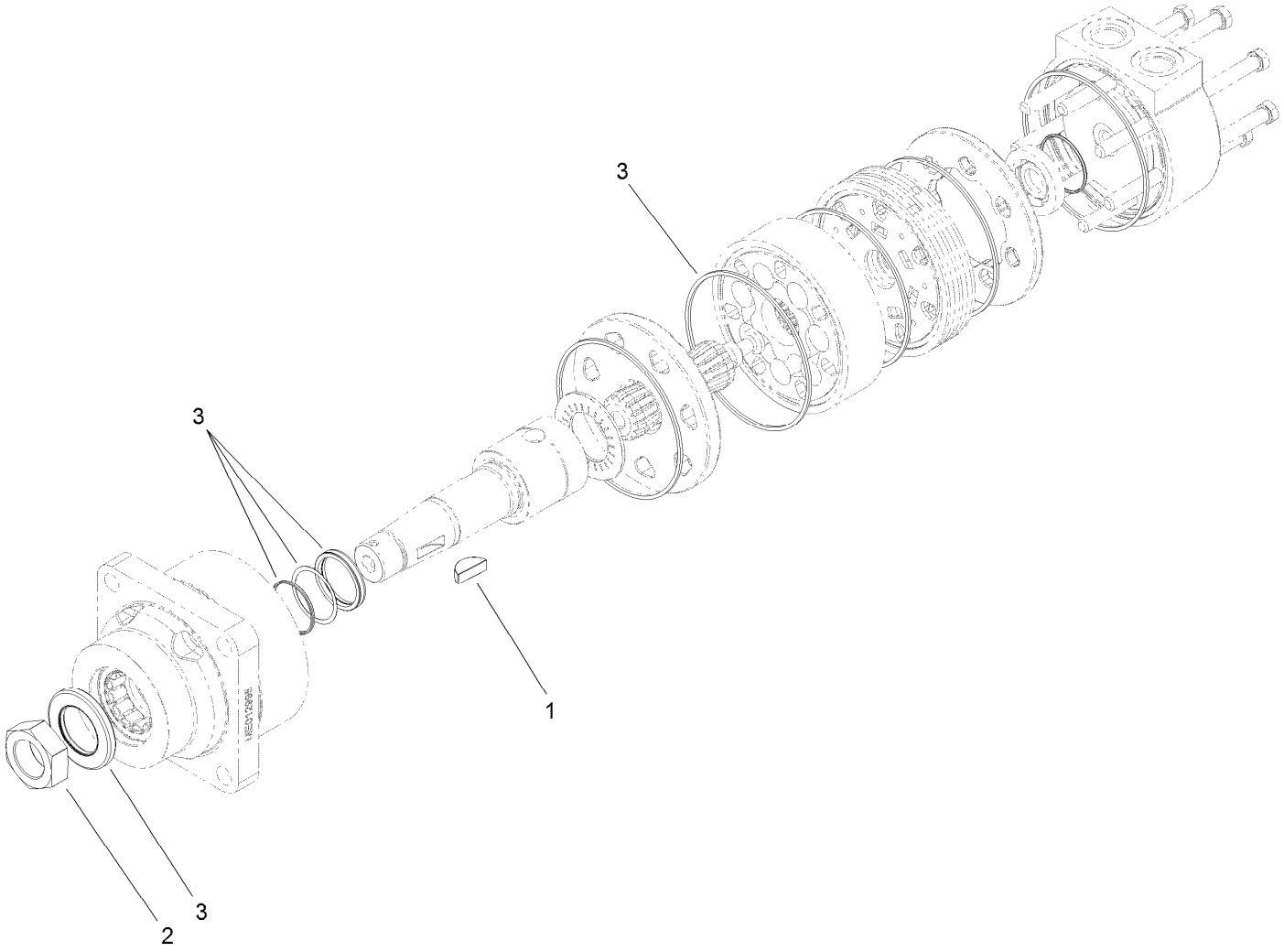
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 106-9206 | 2 | Decal-Torque, Wheel |
| 2 | 323-6 | 4 | Screw-HH |
| 3 | 104-8301 | 8 | Nut-HF, NI |
| 4 | 112-9550-03 | 2 | Bracket-Brake |
| 5 | 3256-4 | 4 | Washer-Flat |
| 6 | 323-14 | 4 | Screw-HH |
| 7 | 108-5155 | 1 | LH HYD Motor ASM |
| 8 | 108-5230 | 1 | RH HYD Motor ASM |
| 9 | 100-6116 | 8 | Screw-HHF |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 10 | 110-5535 | 2 | Wheel Hub ASM |
| 10:2 | 87-8730 | 5 | Stud |
| 11 | 106-7864 | 2 | Tire And Wheel ASM |
| 11:1 | 106-7868 | 1 | Tire |
| 11:2 | 87-6750 | 1 | Wheel |
| 11:3 | 232-27 | 1 | Stem-Valve |
| 12 | 23-7270 | 10 | Nut-Lug |
| 13 | 120-0013 | 1 | LH Brake Caliper ASM |
| 14 | 120-0014 | 1 | RH Brake Caliper ASM |



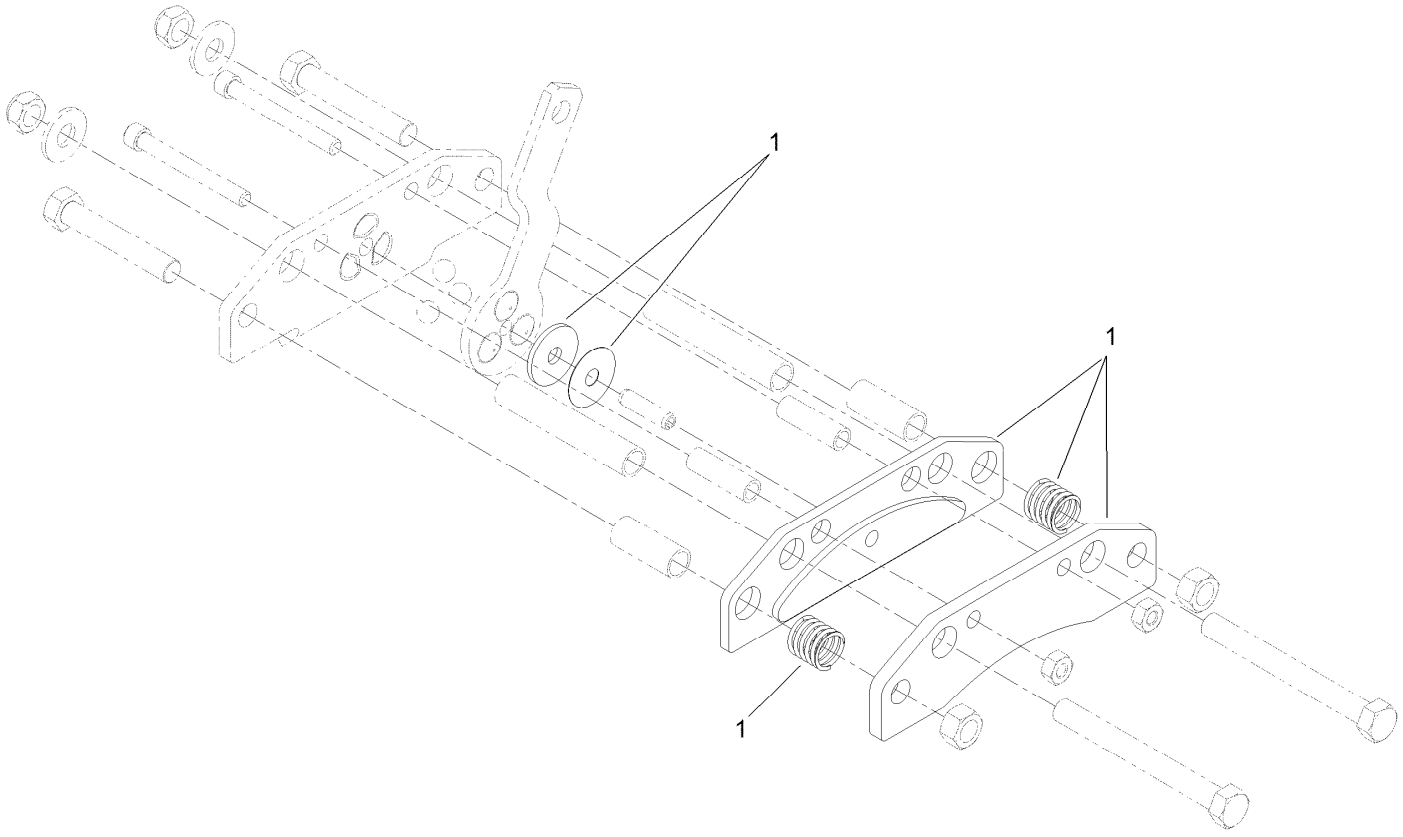

# Hydraulic Motor Assembly No. 108-5155

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 3257-42 | 1 | Key-Woodruff |
| 2 | 107-9319 | 1 | Nut-Hex |
| 3 | 112-8405 | 1 | Seal Kit |



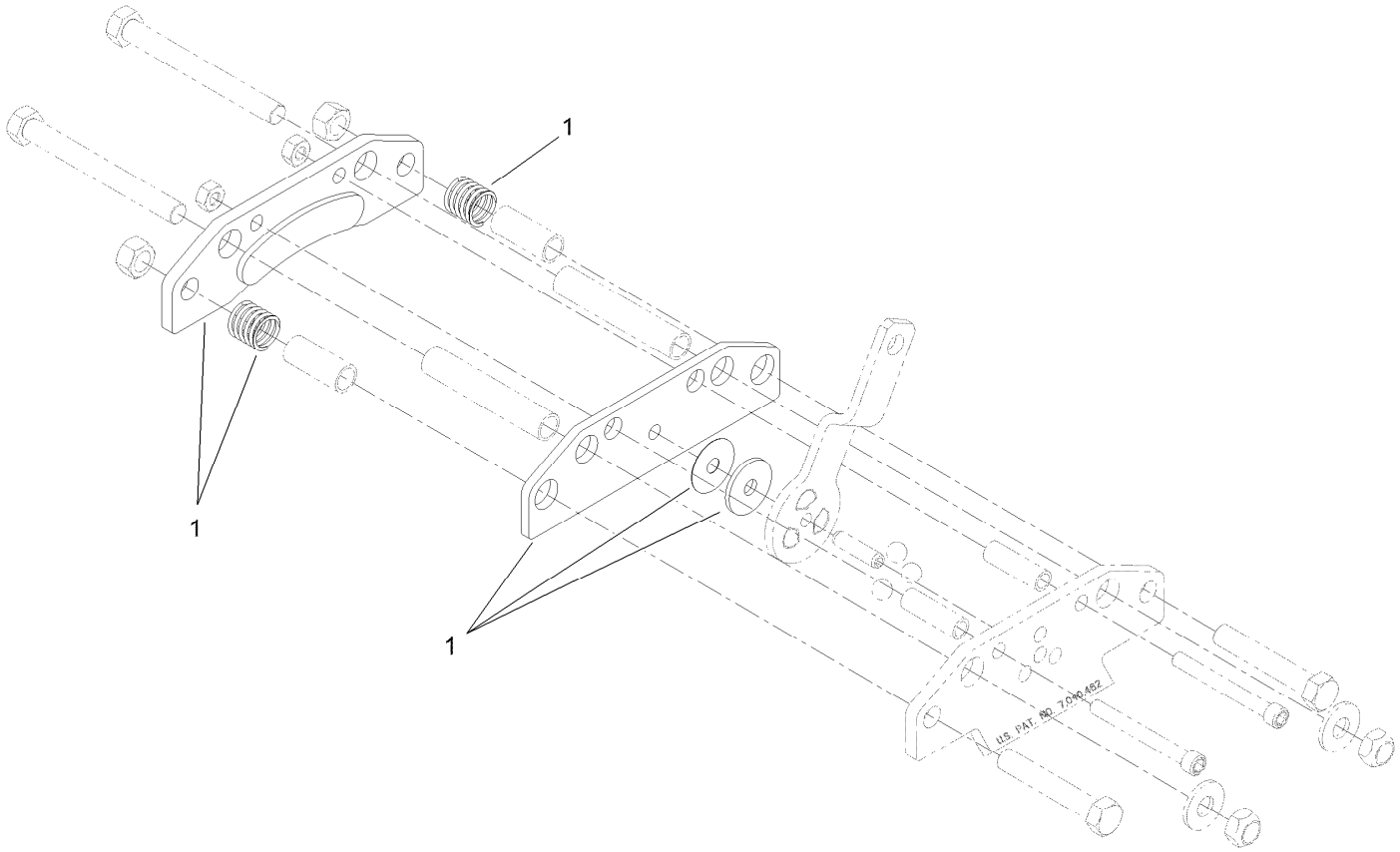

# Hydraulic Motor Assembly No. 108-5230

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 3257-42 | 1 | Key-Woodruff |
| 2 | 107-9319 | 1 | Nut-Hex |
| 3 | 112-8405 | 1 | Seal Kit |



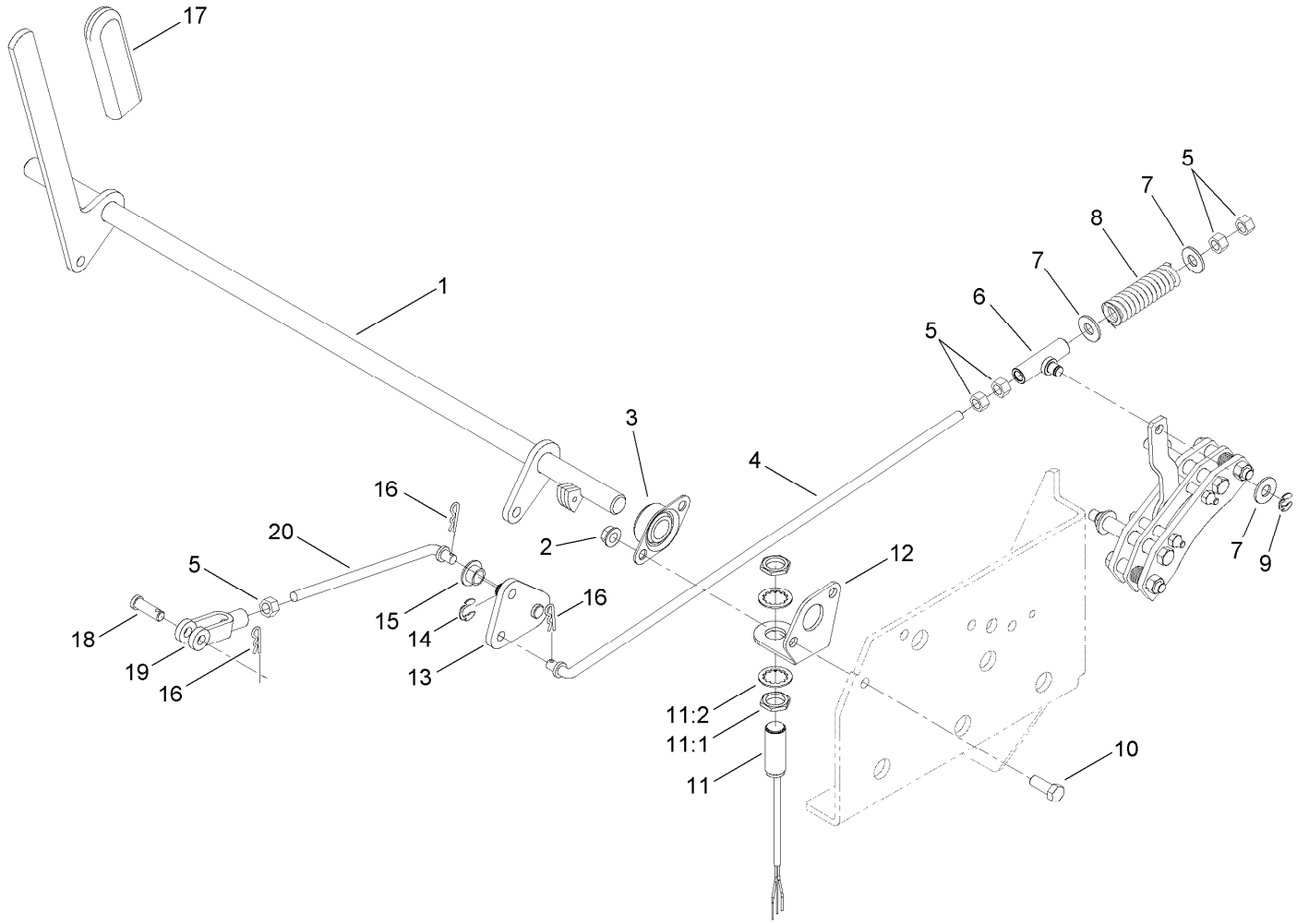

# LH Brake Caliper Assembly No. 120-0013

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 120-0015 | 1 | Replacement Brake Pad Service Kit |




# RH Brake Caliper Assembly No. 120-0014

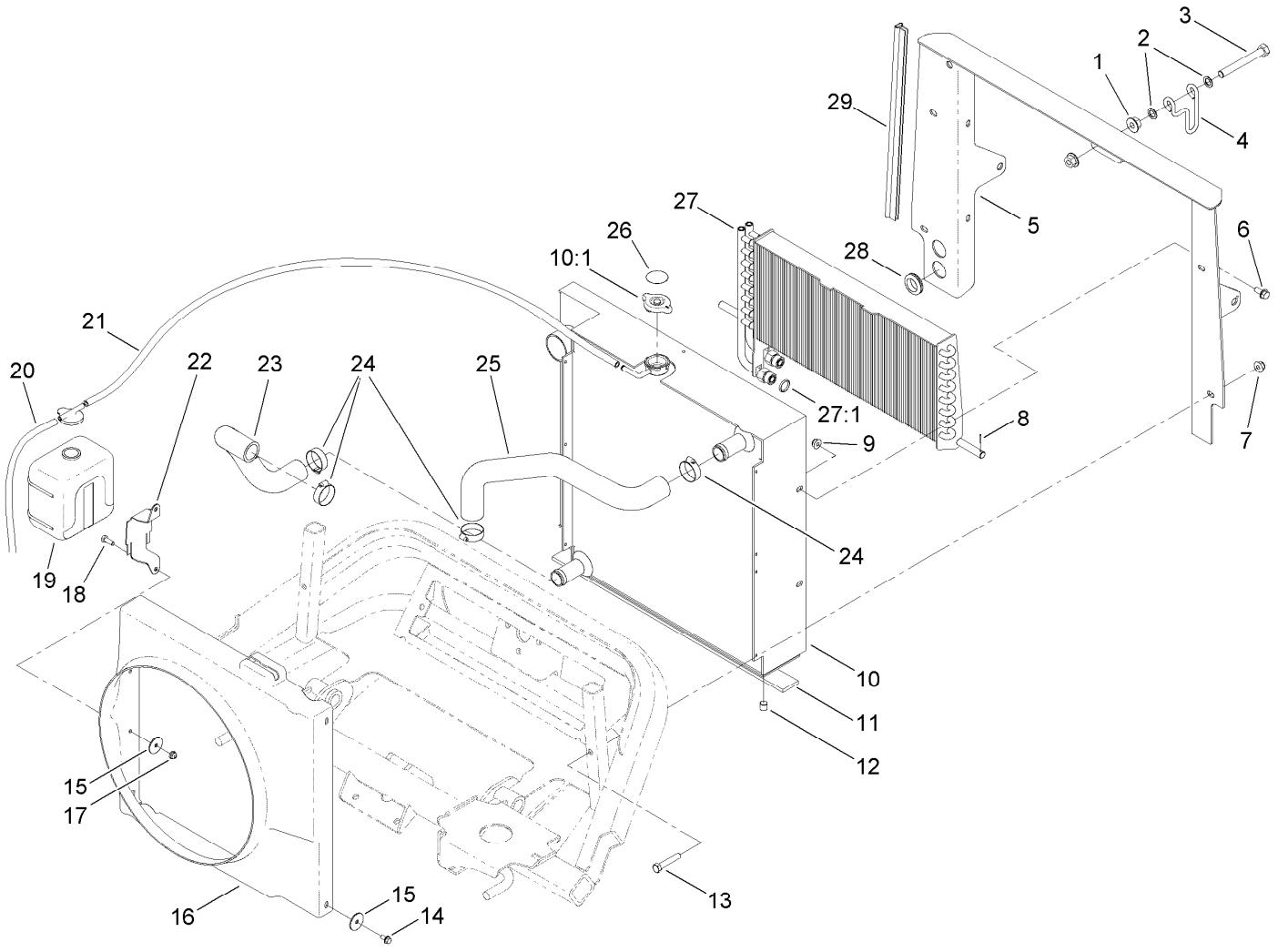
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 120-0015 | 1 | Replacement Brake Pad Service Kit |




# Brake Handle Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 117-5582-03 | 1 | Handle-Brake |
| 2 | 3290-357 | 4 | Nut-HHF, Whiz |
| 3 | 1-633102 | 2 | Bearing-Flange, Side |
| 4 | 120-0009 | 2 | Rod-Brake |
| 5 | 3219-3 | 10 | Nut-Hex |
| 6 | 132-8128 | 2 | Swivel ASM |
| 7 | 3256-4 | 6 | Washer-Flat |
| 8 | 109-2230 | 2 | Spring-Compression |
| 9 | 32151-47 | 2 | Ring-Retaining |
| 10 | 323-6 | 4 | Screw-HH |
| 11 | 115-5300 | 1 | Proximity Switch ASM |

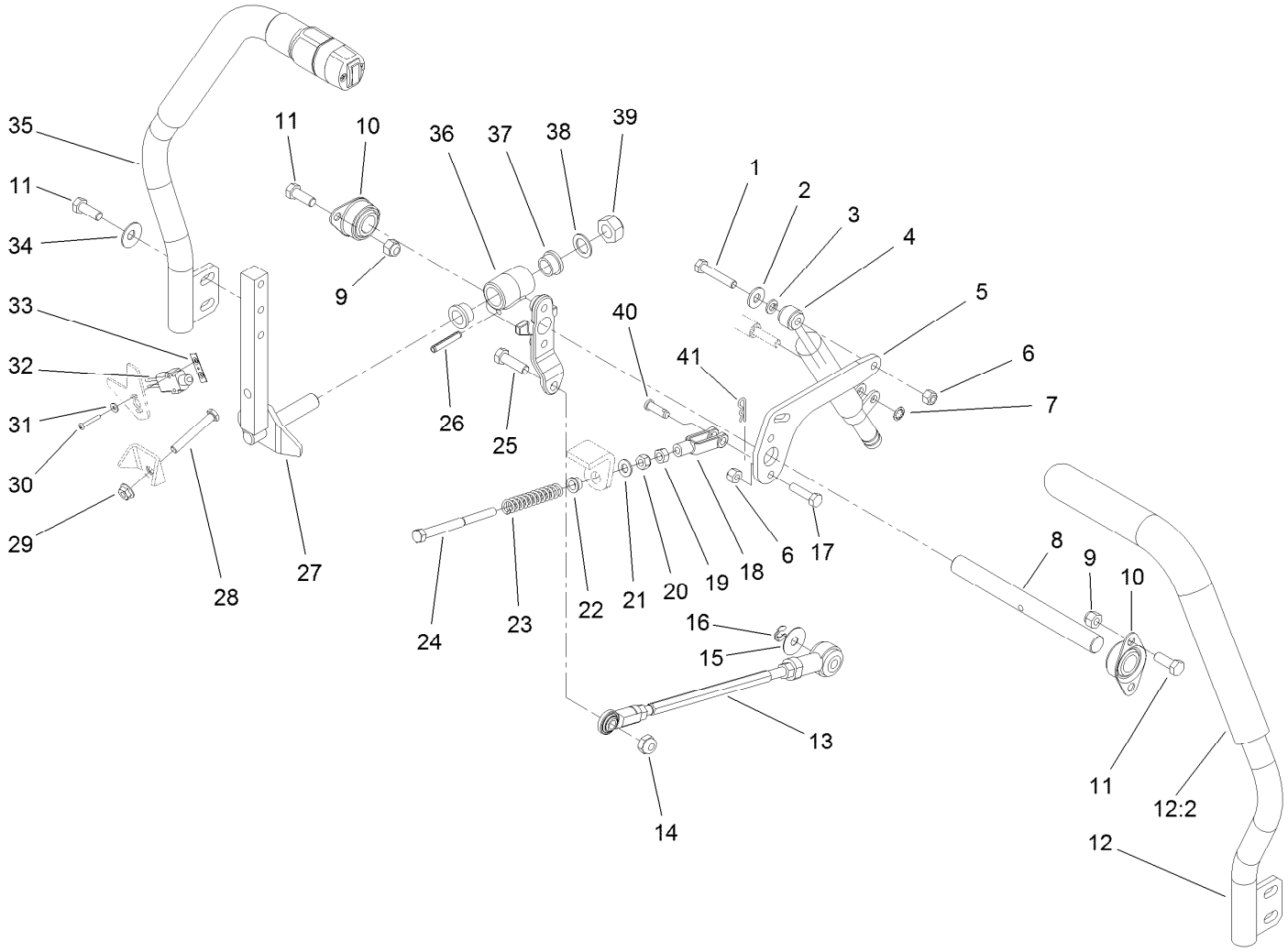
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 11:1 | 117-3207 | 2 | Nut-Hex |
| 11:2 | 117-3208 | 2 | Washer-Lock, Internal Tooth |
| 12 | 117-5572 | 1 | Bracket-Switch |
| 13 | 120-0022 | 2 | Pivot-Brake |
| 14 | 32151-68 | 2 | Ring-Retaining |
| 15 | 1-513140 | 4 | Bearing-Control |
| 16 | 3290-307 | 6 | Pin-Cotter |
| 17 | 1-633268 | 1 | Grip-Lever |
| 18 | 1-808285 | 2 | Pin-Clevis |
| 19 | 1-633131 | 2 | Yoke-Linkage, Brake |
| 20 | 120-0023 | 2 | Rod-Brake |




# Radiator and Oil Cooler Assembly

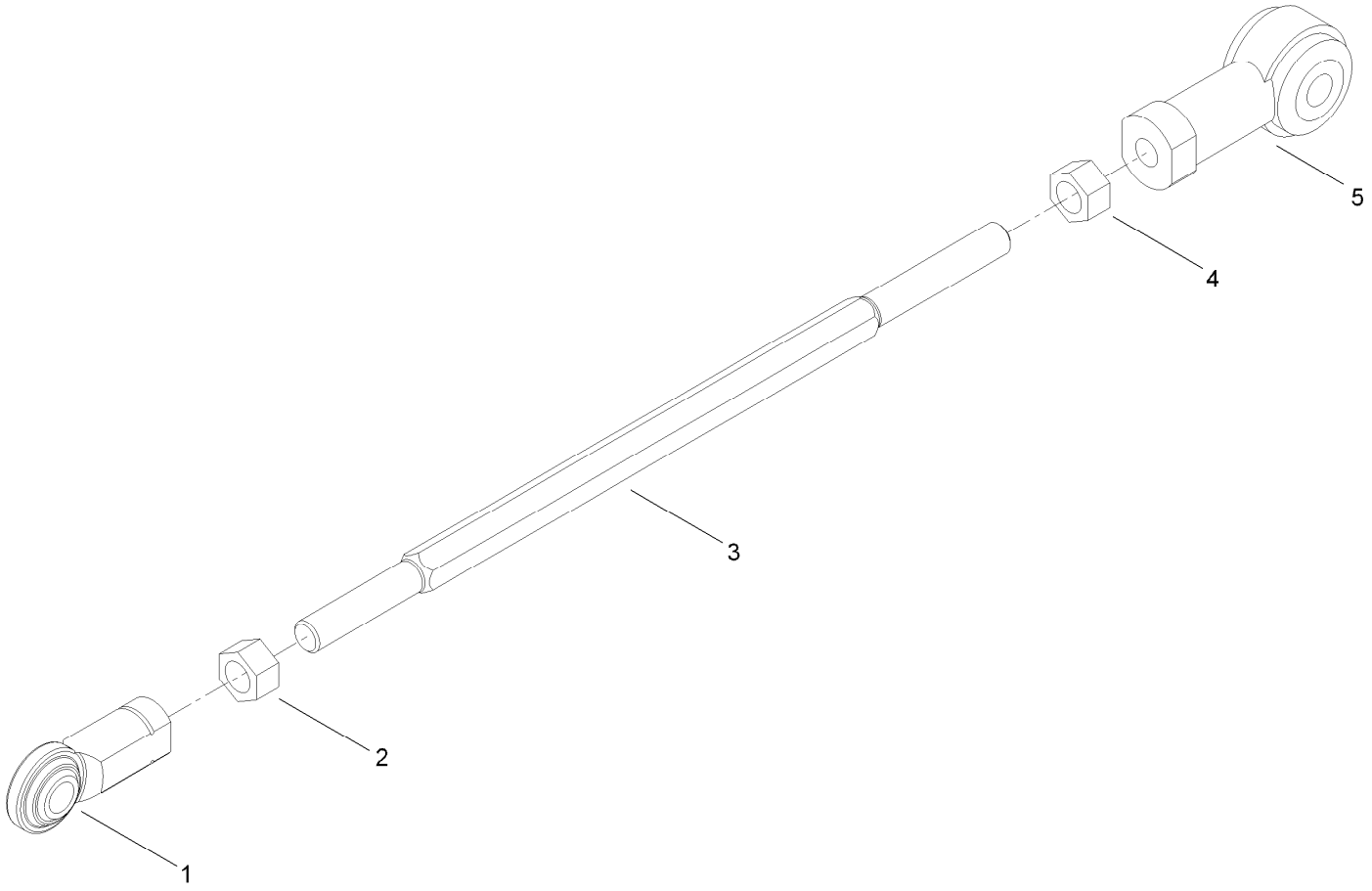
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 32128-49 | 2 | Nut-HHF |
| 2 | 41-8440 | 2 | Washer |
| 3 | 325-17 | 1 | Screw-HH |
| 4 | 104-5429 | 1 | Clamp-Form, Wire |
| 5 | 110-8277-03 | 1 | Frame-Radiator |
| 6 | 3234-5 | 4 | Screw-HHF |
| 7 | 104-8301 | 4 | Nut-HF, NI |
| 8 | 32121-107 | 1 | Pin-Roll |
| 9 | 104-8300 | 4 | Nut-HF, NI |
| 10 | 117-5135 | 1 | Radiator |
| 10:1 | 121-3518 | 1 | Cap-Radiator |
| 11 | 108-9935 | 1 | Strip-Foam |
| 12 | 99-8551 | 1 | Plug-Pipe |
| 13 | 323-10 | 4 | Screw-HH |
| 14 | 32104-116 | 4 | Screw-HWHTF |
| 15 | 3256-55 | 6 | Washer-Flat |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 16 | 117-9232 | 1 | Shroud-Fan |
| 17 | 104-7201 | 2 | Nut-HF |
| 18 | 321-4 | 2 | Screw-HH |
| 19 | 104-9318 | 1 | Bottle-Overflow |
| 20 | 110-6187 | 1 | Hose-Fuel |
| 21 | 109-0274 | 1 | Hose-Fuel |
| 22 | 108-9930-03 | 1 | Bracket-Bottle |
| 23 | 105-7283 | 1 | Hose-Radiator, Lower |
| 24 | 2412-34 | 4 | Clamp-Hose |
| 25 | 105-7282 | 1 | Hose-Radiator, Upper |
| 26 | 106-6755 | 1 | Decal-Cap, Radiator |
| 27 | 112-1684 | 1 | Cooler-Oil |
| 27:1 | 237-30 | 2 | O-Ring |
| 28 | 240-5 | 2 | Grommet |
| 29 | 107-2269 | 2 | Seal-Bulb |



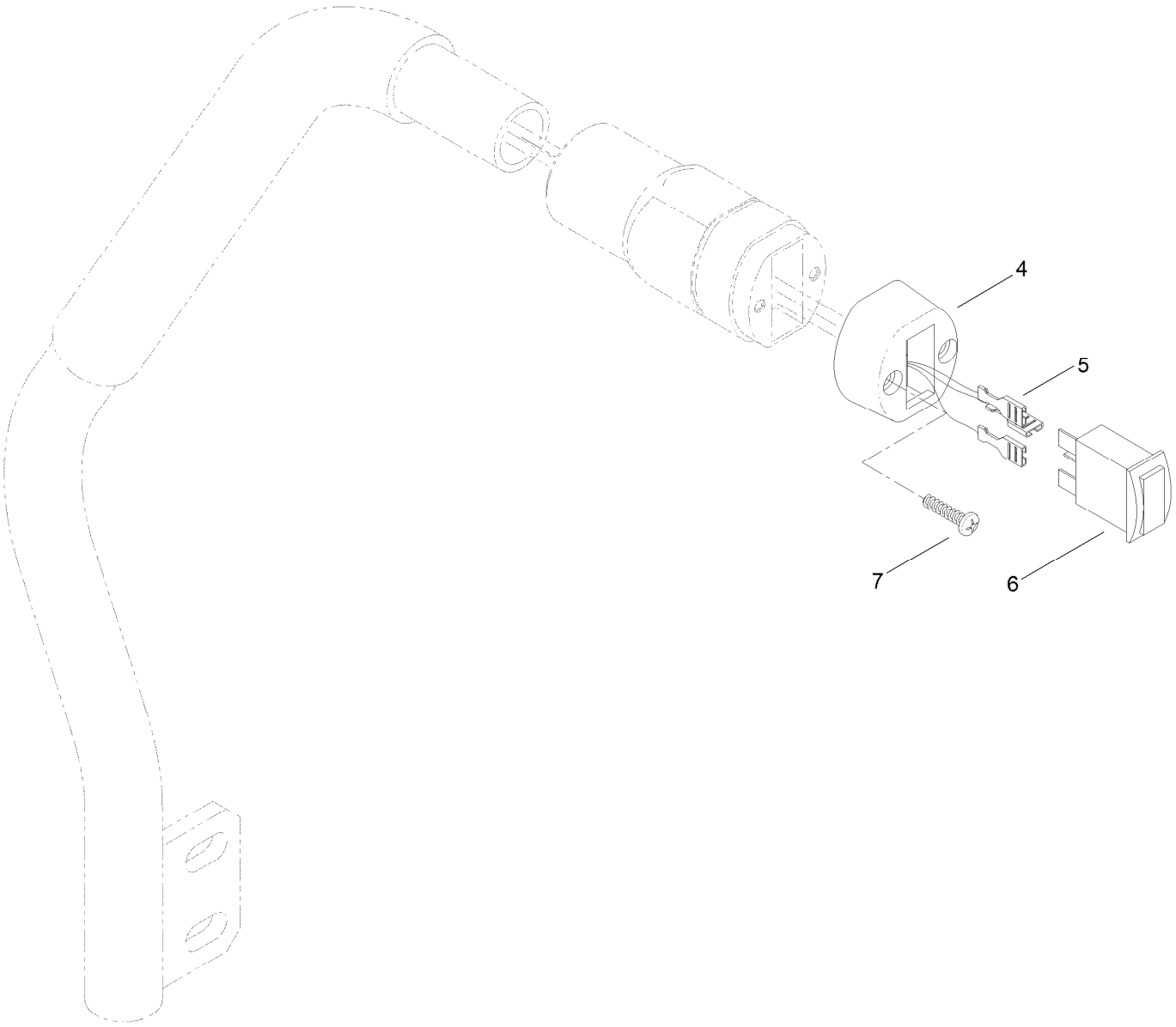

# Traction Control Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 322-9 | 2 | Screw-HH |
| 2 | 3256-3 | 2 | Washer-Flat |
| 3 | 3253-4 | 4 | Washer-Lock |
| 4 | 105-7280 | 2 | Damper |
| 5 | 108-9829-03 | 2 | Lever-Damper |
| 6 | 3296-29 | 6 | Nut-Lock, NI |
| 7 | 32151-72 | 2 | Ring-Retaining |
| 8 | 108-9830 | 2 | Shaft-Pivot |
| 9 | 3296-39 | 8 | Nut-Lock, NI |
| 10 | 1-633102 | 4 | Bearing-Flange, Side |
| 11 | 323-6 | 12 | Screw-HH |
| 12 | 125-2688 | 1 | LH Lever ASM |
| 12:2 | 125-2704 | 1 | Grip-Foam |
| 13 | 112-5099 | 2 | Link ASM |
| 14 | 3296-44 | 2 | Nut-Lock, NI |
| 15 | 105-6814 | 2 | Washer-Plain |
| 16 | 32151-47 | 2 | Ring-Retaining |
| 17 | 322-6 | 4 | Screw-HH |
| 18 | 1-303105 | 2 | Yoke-Adjustable |
| 19 | 3219-2 | 2 | Nut-Hex |
| 20 | 3296-4 | 2 | Nut-Lock |
| 21 | 3256-23 | 2 | Washer-Plain |
| 22 | 1-603735 | 2 | Bushing-Flanged |
| 23 | 1-603807 | 2 | Spring-Return, Neutral |
| 24 | 1-603737 | 2 | Bolt-Return, Neutral |
| 25 | 323-7 | 2 | Screw-HH |
| 26 | 32121-15 | 2 | Pin-Roll |
| 27 | 108-9833-03 | 2 | Lever |
| 28 | 9114524 | 2 | Bolt-TAP, HH |
| 29 | 32128-26 | 2 | Nut-Flange |
| 30 | 3250-35 | 4 | Screw-PPH |
| 31 | 3256-53 | 4 | Washer-Flat |
| 32 | 99-3410 | 2 | Switch |
| 33 | 108-9824 | 2 | Nut-Switch |
| 34 | 3290-461 | 4 | Washer-Spring |
| 35 | 125-2687 | 1 | RH Lever ASM |
| 36 | 108-9831 | 2 | Hub-Control |
| 37 | 105-3455 | 4 | Bushing |
| 38 | 105-3481 | 4 | Washer-Thrust |
| 39 | 32152-6 | 2 | Nut-Lock, Cone |
| 40 | 283-1 | 2 | Pin-Clevis |
| 41 | 3290-307 | 2 | Pin-Cotter |



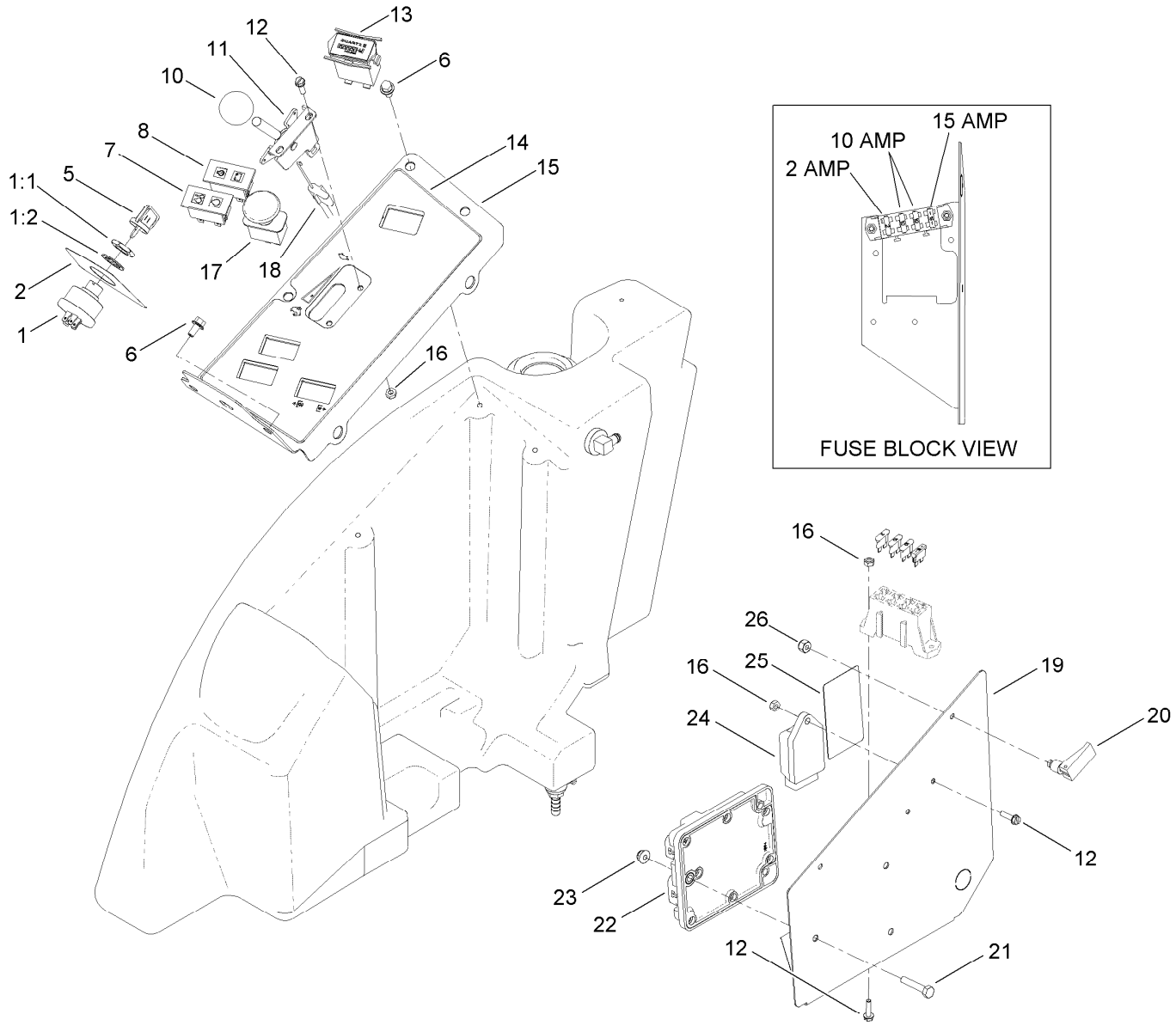

# Link Assembly No. 112-5099

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 103-1167 | 1 | Joint-Ball End, LH |
| 2 | 3219-20 | 1 | Nut-Hex, LH |
| 3 | 105-7239 | 1 | Rod-Threaded |
| 4 | 3219-3 | 1 | Nut-Hex |
| 5 | 105-7199 | 1 | End-Rod, Isolated |




# RH Lever Assembly No. 125-2687

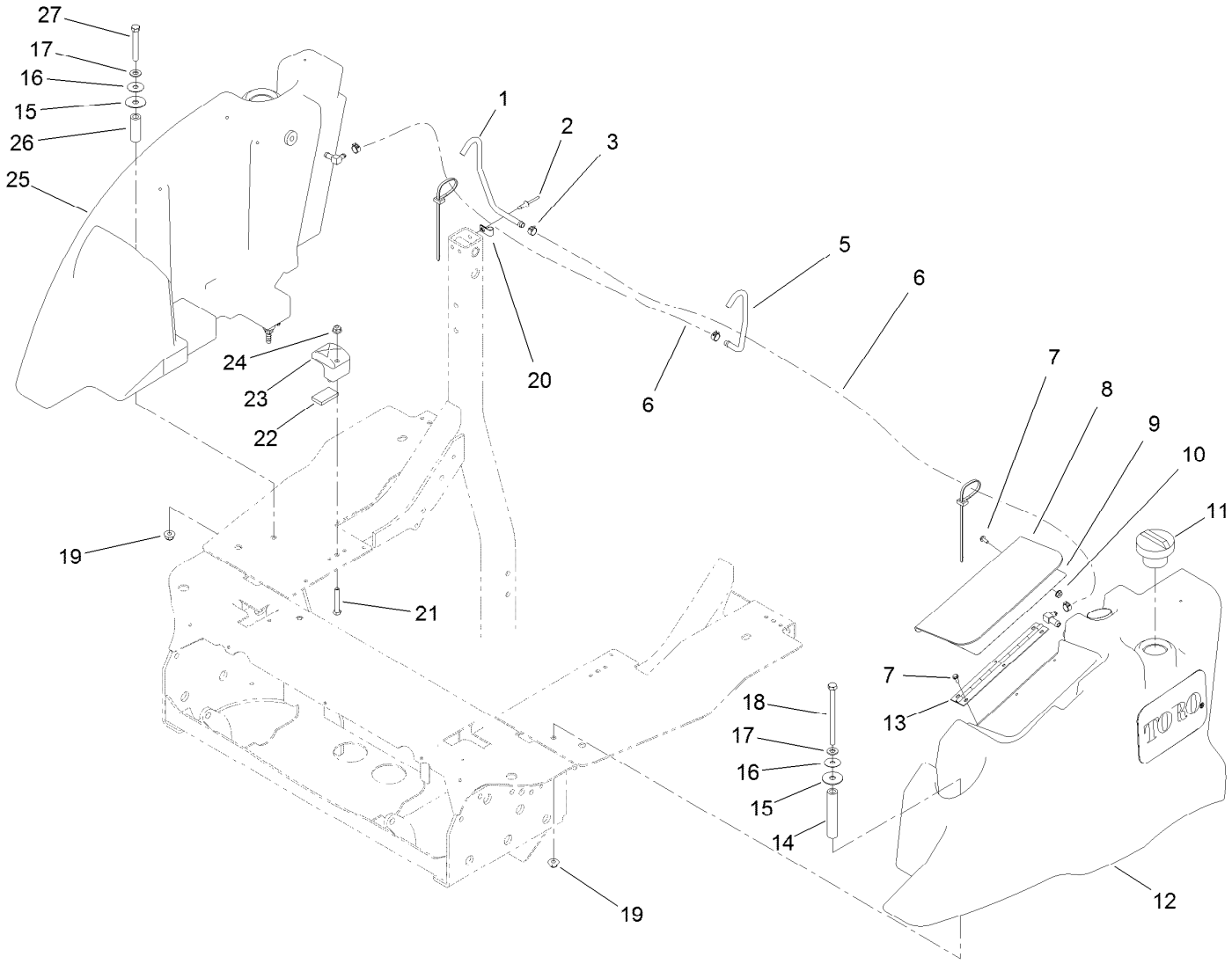
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 4 | 121-3399 | 1 | Cap-Switch |
| 5 | 119-4382 | 1 | Harness-Control Handle |
| 6 | 125-2702 | 1 | Switch, Spst (On)-Off-On |
| 7 | 94-4496 | 2 | Screw-PPH |




# Control Panel Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 104-2541 | 1 | Switch ASM |
| 1:1 | 218-461 | 1 | Nut-HH |
| 1:2 | 3254-5 | 1 | Washer-Tooth, Internal |
| 2 | 110-8254 | 1 | Decal-Start, Control Panel |
| 5 | 63-8360 | 2 | Key-Ignition |
| 6 | 3234-13 | 5 | Screw-HHF |
| 7 | 100-8071 | 1 | Lamp-Warning |
| 8 | 100-8070 | 1 | Lamp-Warning |
| 10 | 233-42 | 1 | Knob |
| 11 | 110-5547 | 1 | Lever-Control |
| 12 | 32105-13 | 5 | Screw-HWH |
| 13 | 1-513374 | 1 | Meter-Hour |
| 14 | 110-8253 | 1 | Decal-Panel, Control |

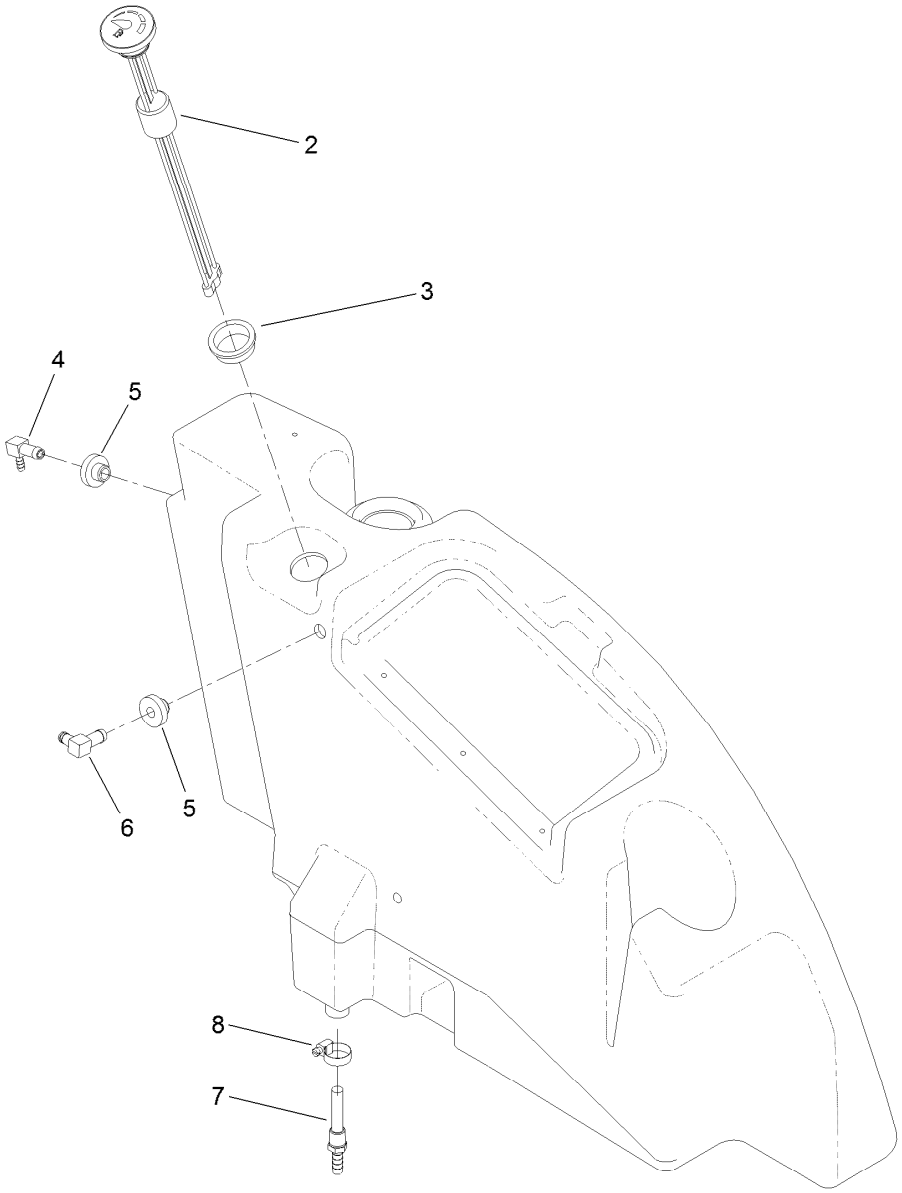
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 15 | 110-8256-03 | 1 | Panel-Control |
| 16 | 3296-2 | 5 | Nut-Lock, NI |
| 17 | 93-9999 | 1 | Switch-PTO, On-On-None |
| 18 | 110-5548 | 1 | Cable-Throttle |
| 19 | 110-8257-03 | 1 | Cover-Panel, Control |
| 20 | 74-5950 | 2 | Latch-Swell |
| 21 | 321-13 | 3 | Screw-HH |
| 22 | 106-9277 | 1 | Module-Control, Standard |
| 23 | 104-7201 | 3 | Nut-HF |
| 24 | 107-9097 | 1 | Controller-Glow |
| 25 | 110-9796 | 1 | Decal-Block, Fuse |
| 26 | 1-804254 | 2 | Nut-Lock, HH |




# Left-Hand and Right-Hand Fuel Tank Assembly

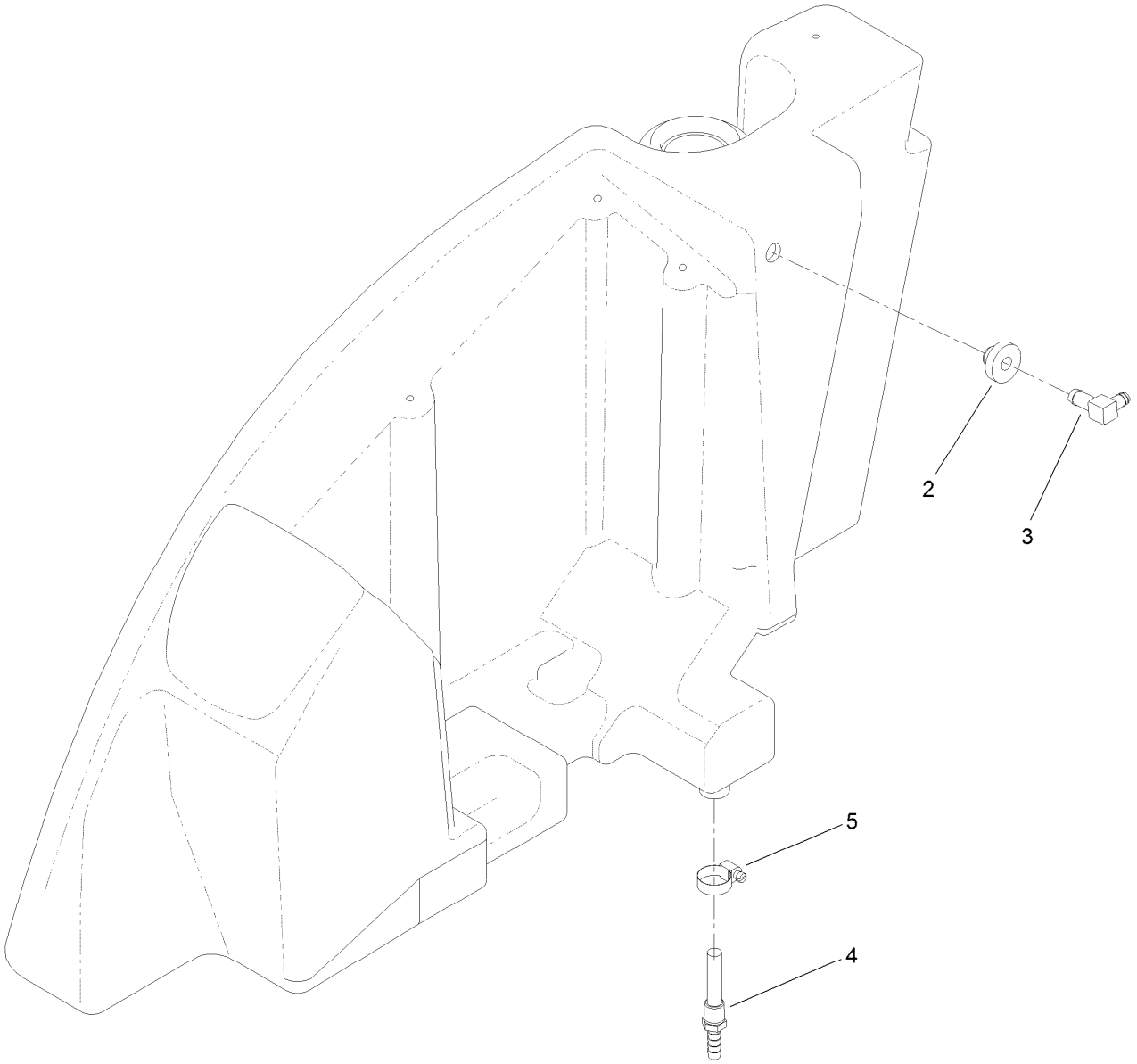
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 110-8260 | 1 | Tube-Vent, RH |
| 2 | 3290-412 | 2 | Rivet-Blind |
| 3 | 92-2379 | 4 | Clamp-Hose |
| 5 | 110-8261 | 1 | Tube-Vent, LH |
| 6 | 110-6186 | 2 | Hose-Fuel |
| 7 | 112-6349 | 6 | Screw-HWH |
| 8 | 110-5540-03 | 1 | Cover-Toolbox |
| 9 | 110-8252 | 1 | Decal-Instructions, Service |
| 10 | 32149-8 | 3 | Nut-Keps |
| 11 | 115-5305 | 2 | Cap-Fuel |
| 12 | 110-8230 | 1 | LH Fuel Tank ASM |
| 13 | 108-2024 | 1 | Hinge |
| 14 | 110-5539 | 1 | Spacer |

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 15 | 95-1905 | 2 | Washer-Rubber |
| 16 | 105-6814 | 2 | Washer-Plain |
| 17 | 3256-24 | 2 | Washer-Flat |
| 18 | 323-39 | 1 | Screw-HH |
| 19 | 104-8301 | 2 | Nut-HF, NI |
| 20 | 2412-89 | 2 | Clamp-R |
| 21 | 322-10 | 4 | Screw-HH |
| 22 | 112-9561 | 4 | Pad-Foam |
| 23 | 107-4543 | 4 | Clamp |
| 24 | 104-8300 | 4 | Nut-HF, NI |
| 25 | 110-8236 | 1 | RH Fuel Tank ASM |
| 26 | 92-1239 | 1 | Spacer-Support |
| 27 | 323-13 | 1 | Screw-HH |



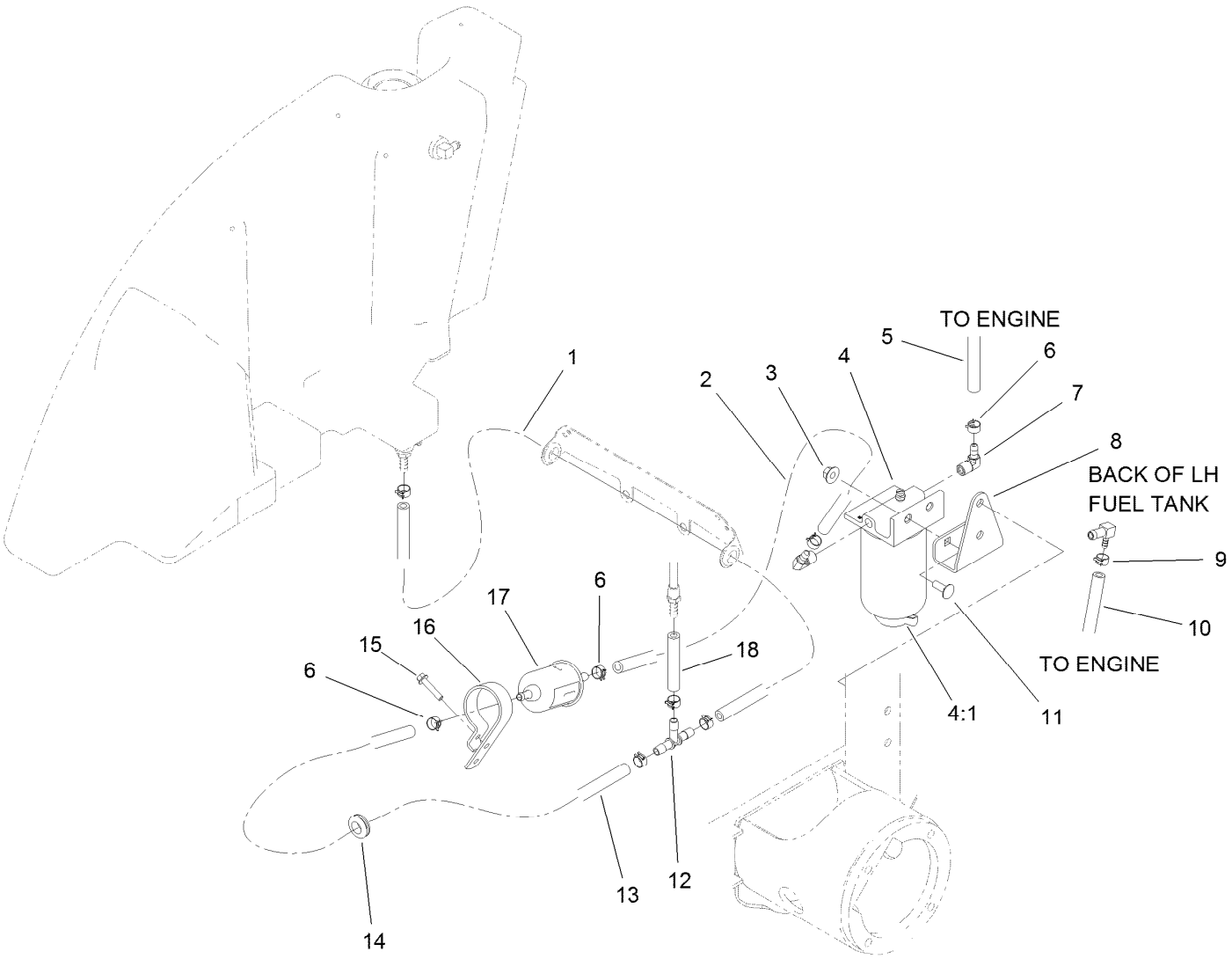

# LH Fuel Tank Assembly No. 110-8230

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 2 | 110-8262 | 1 | Gauge-Fuel |
| 3 | 95-8972 | 1 | Grommet |
| 4 | 104-5228 | 1 | Fitting-Elbow, 90 DEG |
| 5 | 46-6560 | 2 | Bushing |
| 6 | 1-643259 | 1 | Fitting-Elbow |
| 7 | 112-6374 | 1 | Fitting-Strainer |
| 8 | 2412-36 | 1 | Clamp-Hose |




# RH Fuel Tank Assembly No. 110-8236

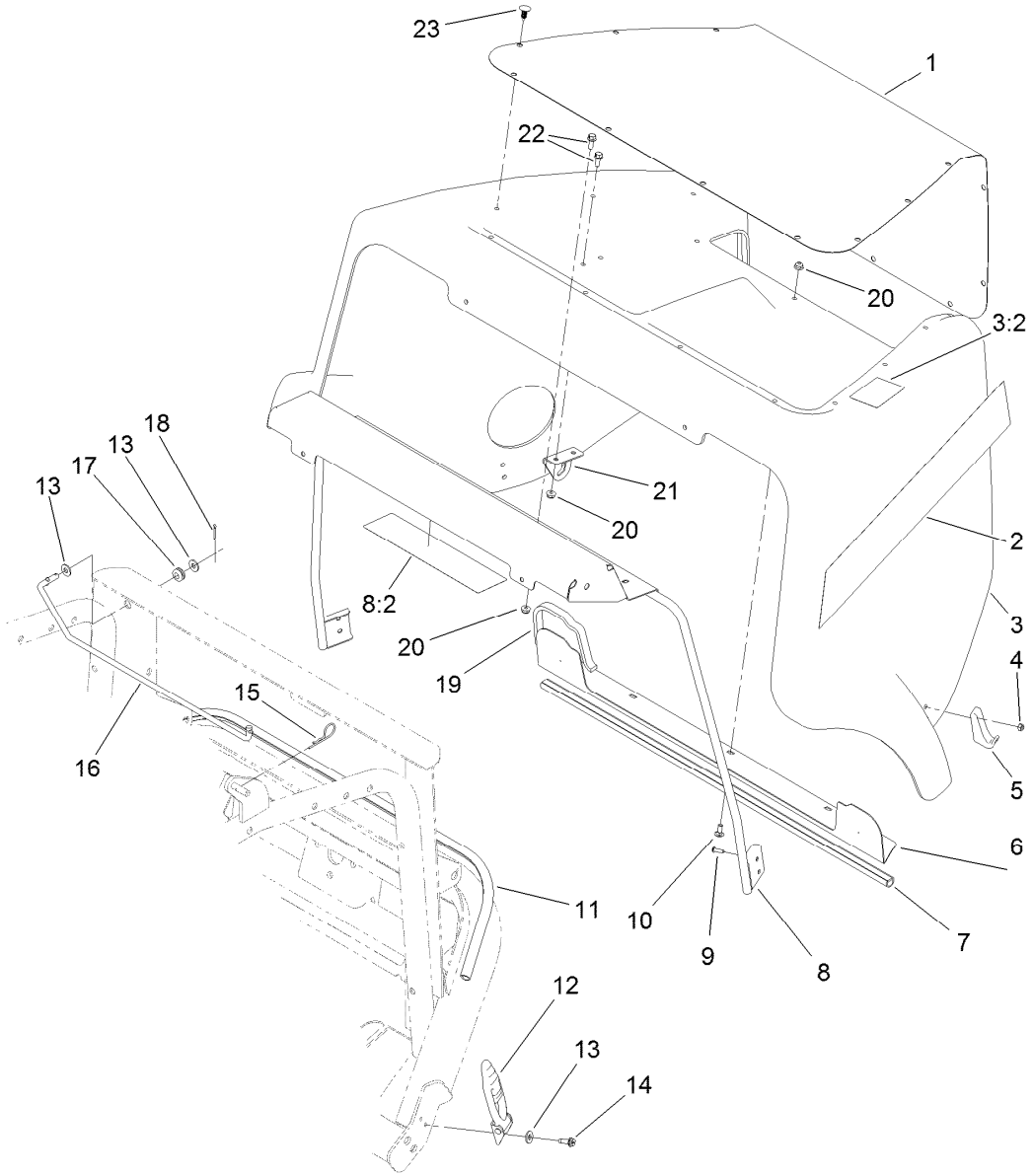
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 2 | 46-6560 | 1 | Bushing |
| 3 | 1-643259 | 1 | Fitting-Elbow |
| 4 | 112-6374 | 1 | Fitting-Strainer |
| 5 | 2412-36 | 1 | Clamp-Hose |




# Fuel Filter / Separator Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 110-6186 | 1 | Hose-Fuel |
| 2 | 110-8752 | 1 | Hose-Fuel |
| 3 | 32128-44 | 2 | Nut |
| 4 | 110-9044 | 1 | Separator-Filter |
| 4:1 | 110-9049 | 1 | Filter-Spin On |
| 5 | 110-4104 | 1 | Hose-Fuel |
| 6 | 92-2379 | 10 | Clamp-Hose |
| 7 | 353-781 | 2 | Fitting-Elb, 90 |
| 8 | 114-4058-03 | 1 | Mount-Separator |
| 9 | 2412-80 | 2 | Clamp-Hose |

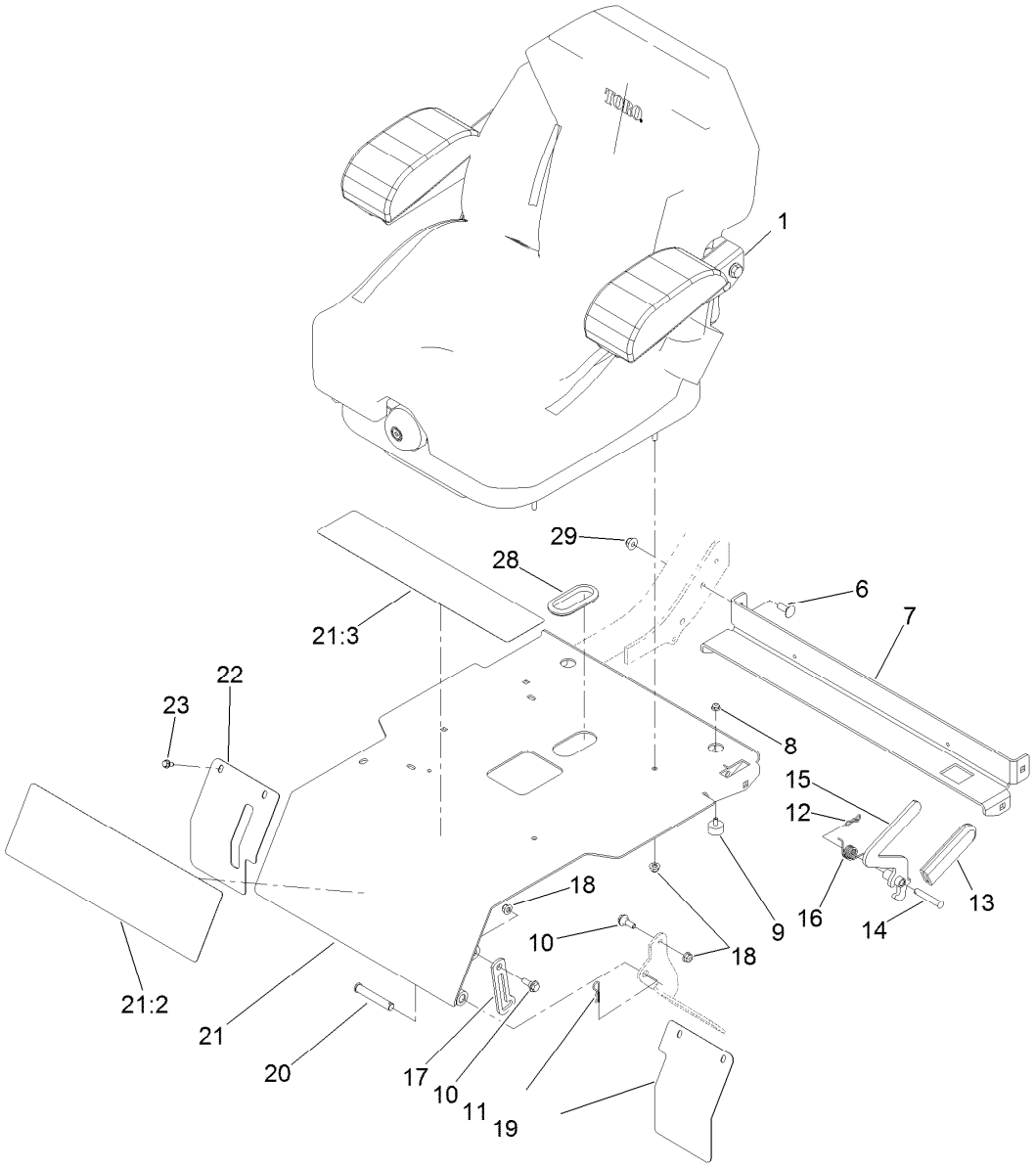
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 10 | 110-8255 | 1 | Hose-Fuel |
| 11 | 3230-10 | 2 | Bolt-CARR |
| 12 | 354-107 | 1 | Fitting-HYD, Tee |
| 13 | 114-4028 | 1 | Hose-Fuel |
| 14 | 32180-030 | 1 | Clip-Tie |
| 15 | 32144-110 | 1 | Screw-HWH |
| 16 | 110-8817 | 1 | Bracket-Pump, Fuel |
| 17 | 110-8806 | 1 | Pump-Fuel |
| 18 | 112-6388 | 1 | Hose-Fuel |




# Hood and Screen Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 115-1446-03 | 1 | Screen-Intake |
| 2 | 110-5545 | 2 | Decal-Hood |
| 3 | 112-6311 | 1 | Hood ASM |
| 3:2 | 106-6754 | 1 | Decal-Danger |
| 4 | 3296-2 | 4 | Nut-Lock, NI |
| 5 | 103-2897 | 2 | Latch-Catch |
| 6 | 110-8285-03 | 1 | Angle-Seal |
| 7 | 110-8287 | 1 | Bulb-Seal |
| 8 | 110-9795 | 1 | Support-Hood |
| 8:2 | 110-9781 | 1 | Decal-Danger |
| 9 | 3274-39 | 4 | Screw-HSBH |
| 10 | 3229-11 | 3 | Screw-CARR |
| 11 | 112-1694 | 1 | Seal-Bulb |

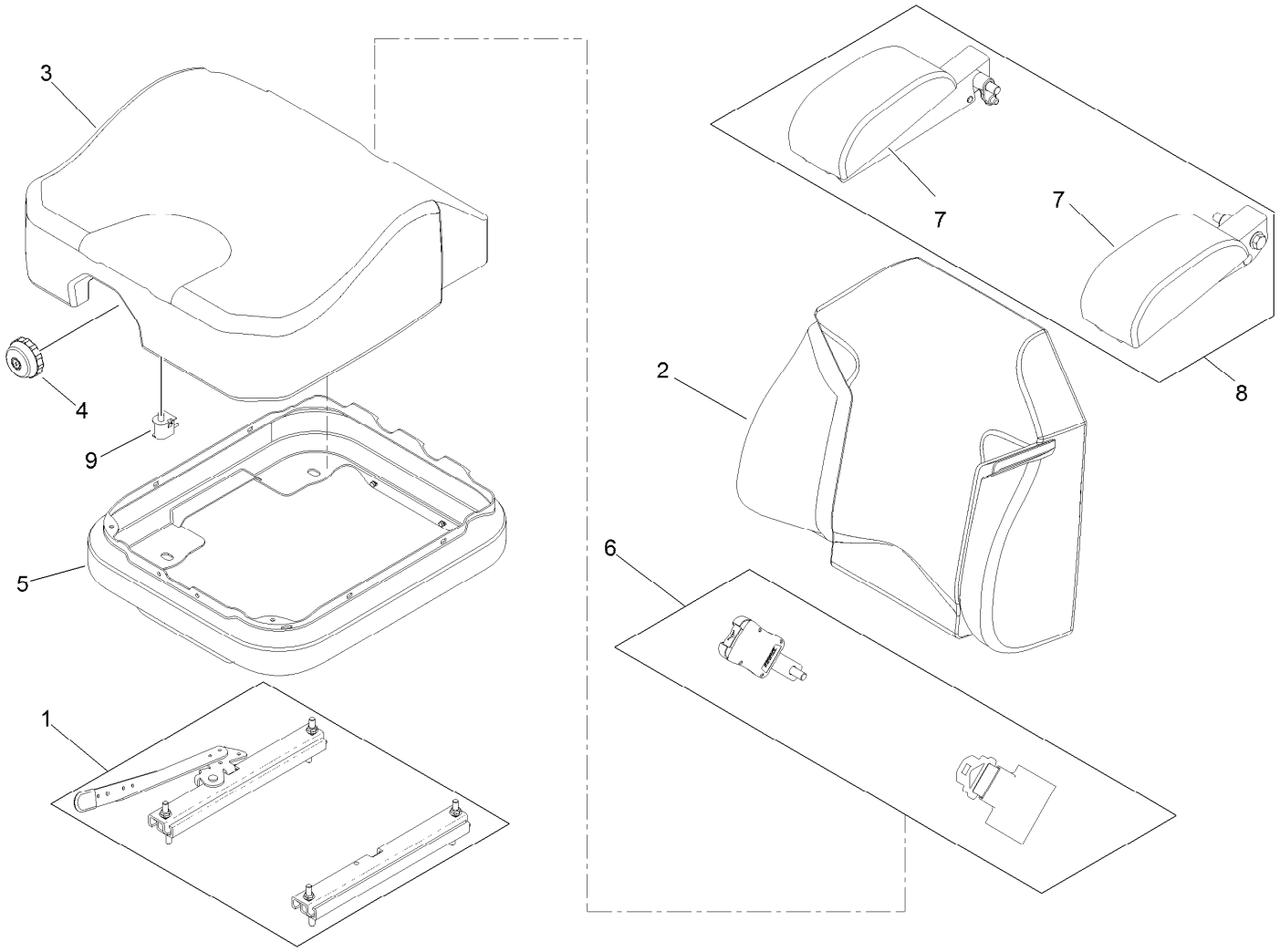
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 12 | 103-2898 | 2 | Latch-Rubber |
| 13 | 3256-2 | 4 | Washer-Flat |
| 14 | 32104-95 | 2 | Screw-HWH |
| 15 | 3290-255 | 1 | Pin-Cotter, Hair |
| 16 | 110-8291 | 1 | Rod-Prop, Hood |
| 17 | 237-136 | 1 | Grommet |
| 18 | 3272-6 | 1 | Pin-Cotter |
| 19 | 110-8288 | 2 | Seal-Foam |
| 20 | 104-7201 | 11 | Nut-HF |
| 21 | 108-9811 | 1 | Support-Rod, Prop |
| 22 | 3234-33 | 8 | Screw-HHF |
| 23 | 117-2382 | 17 | Plug-Plastic |




# Seat and Seat Plate Assembly

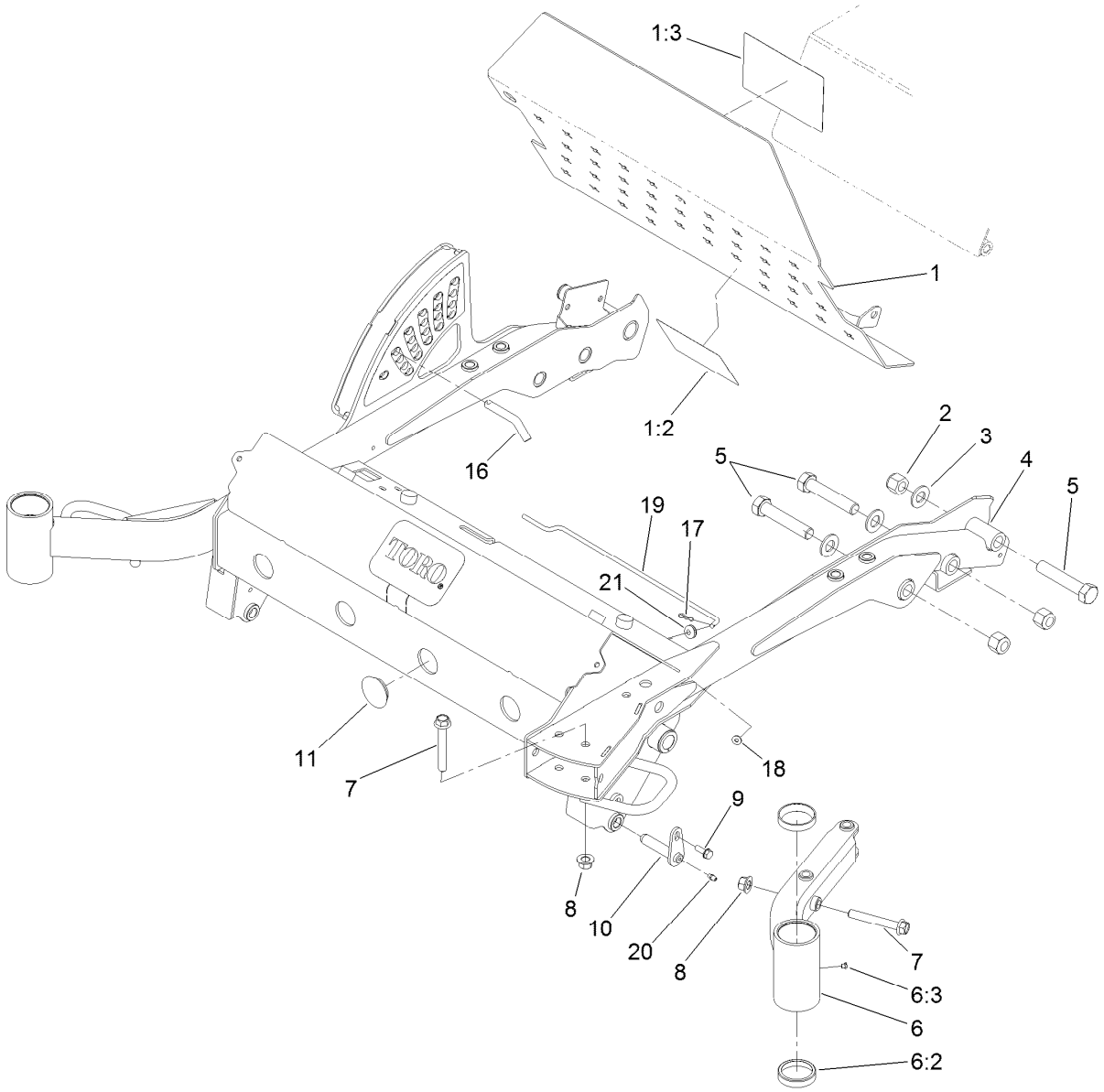
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 125-3107 | 1 | Suspension Seat ASM |
| 6 | 3231-2 | 4 | Bolt-CARR |
| 7 | 120-0095-03 | 1 | Support-Seat |
| 8 | 104-7201 | 2 | Nut-HF |
| 9 | 240-14 | 2 | Bumper-Rubber |
| 10 | 116-2670 | 2 | Screw-Shoulder |
| 11 | 3290-467 | 2 | Pin-Hair |
| 12 | 119-1415 | 1 | Pin-Cotter, Locking |
| 13 | 1-633268 | 1 | Grip-Lever |
| 14 | 86-2130 | 1 | Pin-Clevis |
| 15 | 121-3390-03 | 1 | Lever-Seat |
| 16 | 121-3386 | 1 | Spring-Torsion |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 17 | 130-8754 | 1 | Prop-Seat |
| 18 | 104-8300 | 6 | Nut-HF, NI |
| 19 | 130-8767-03 | 1 | Cover-LH |
| 20 | 283-55 | 2 | Pin-Clevis |
| 21 | 130-8749 | 1 | Seat Plate ASM |
| 21:2 | 120-9195 | 1 | Decal-Safety |
| 21:3 | 120-9196 | 1 | Decal-Console, Top (CE) |
| 22 | 130-8768-03 | 1 | Cover-RH |
| 23 | 32144-10 | 4 | Screw-HWH |
| 28 | 237-164 | 1 | Grommet |
| 29 | 104-8301 | 4 | Nut-HF, NI |



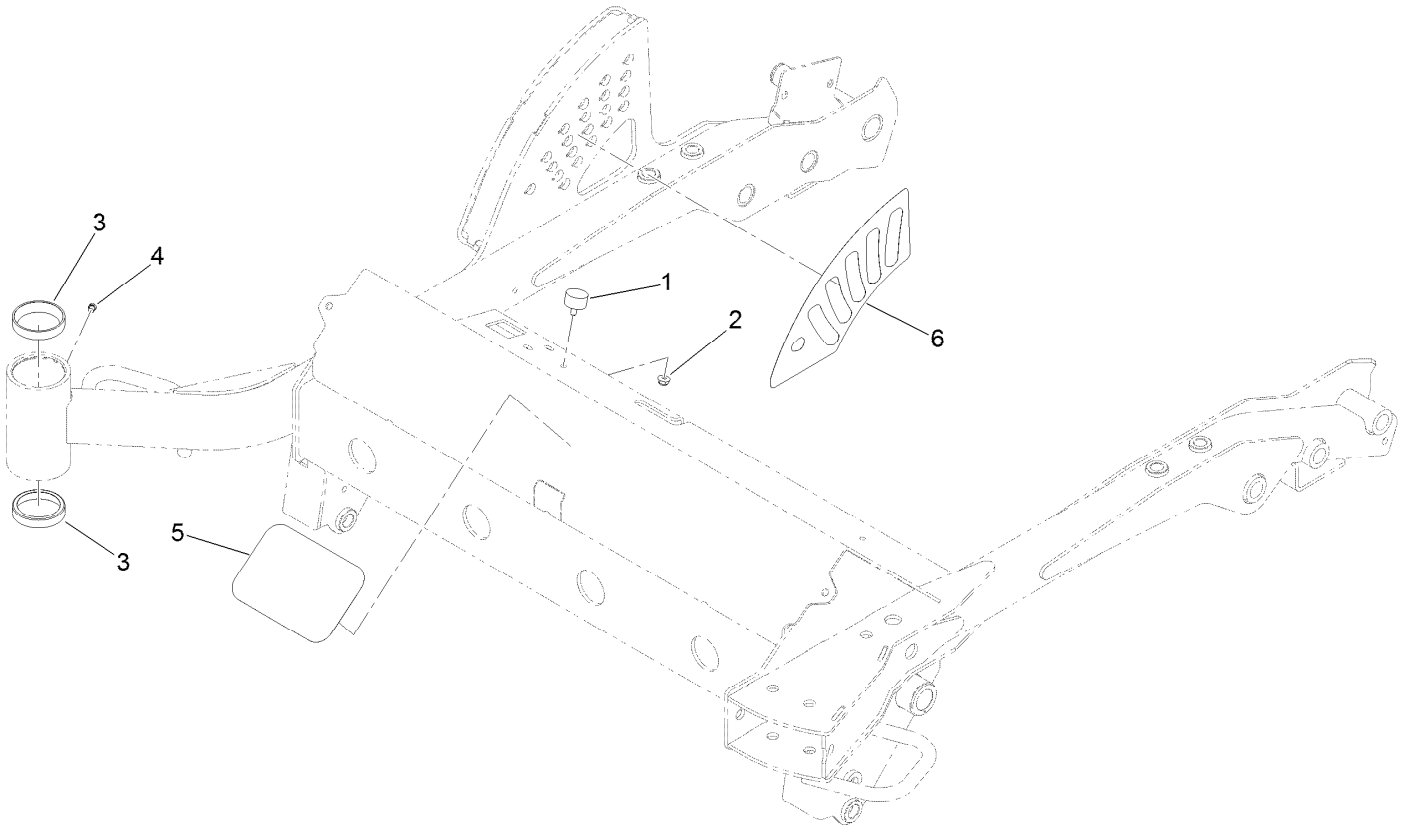

# Seat Assembly No. 125-3107

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 116-8910 | 1 | Seat Track Set |
| 2 | 125-3112 | 1 | Cover-Back |
| 3 | 125-3111 | 1 | Cover-Cushion |
| 4 | 116-8911 | 1 | Knob-Adjuster |
| 5 | 116-5659 | 1 | Cover-Suspension Bellows |
| 6 | 126-2061 | 1 | Seat Belt Service Kit |
| 7 | 109-9802 | 1 | Arm Rest Pad Set |
| 8 | 109-9803 | 1 | Arm Rest Set |
| 9 | 82-2190 | 1 | Switch-Bail |



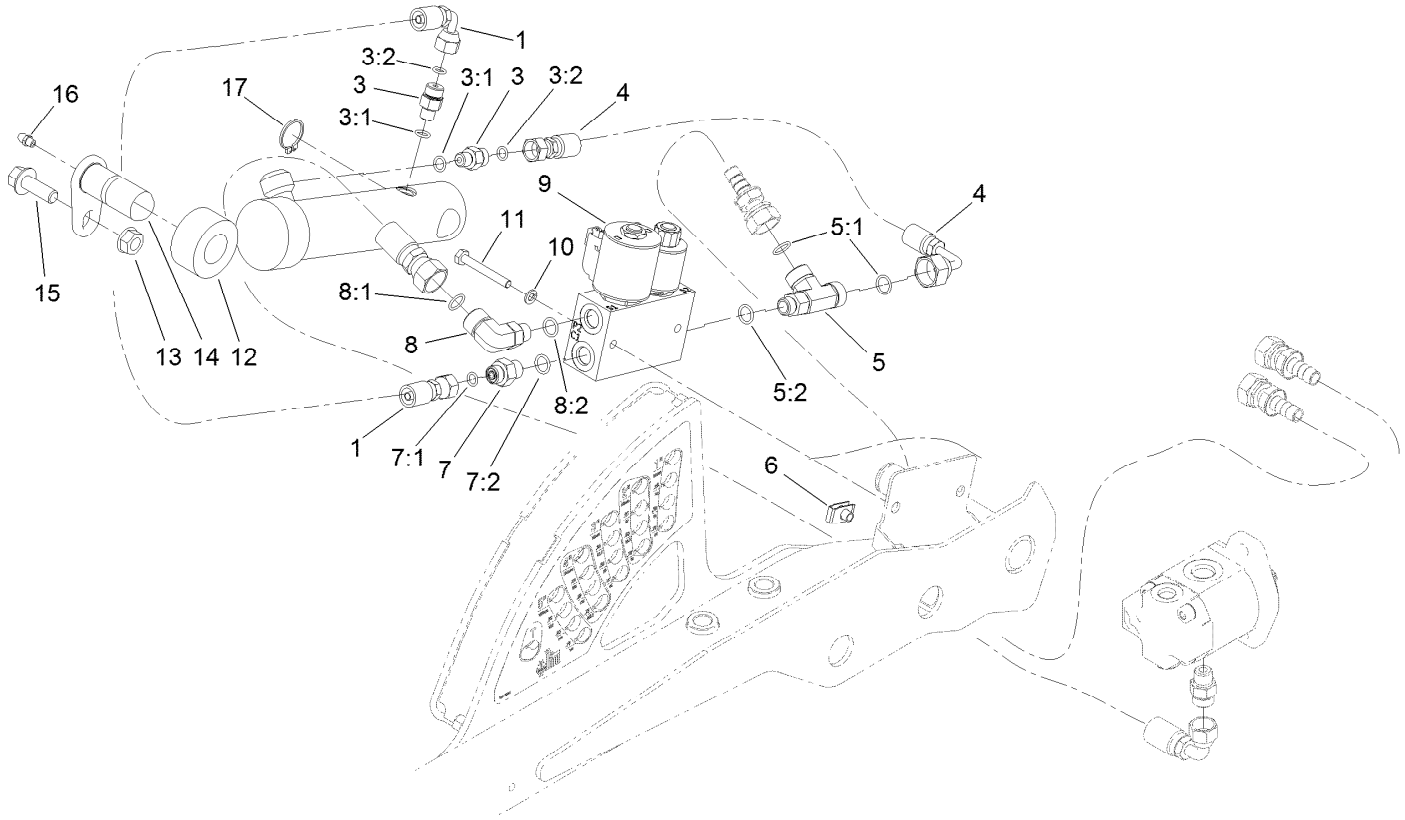

# Floorplate and Carrier Frame Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 120-9165 | 1 | Floorplate ASM |
| 1:2 | 112-1461 | 1 | Decal-Routing, Belt |
| 1:3 | 107-1866 | 1 | Decal-Danger, Slope |
| 2 | 3296-51 | 5 | Nut-Lock, NI |
| 3 | 92-5836 | 5 | Washer |
| 4 | 136-4466 | 1 | Carrier Frame ASM |
| 5 | 328-7 | 5 | Screw-HH |
| 6 | 121-3340 | 1 | Castor Arm ASM |
| 6:2 | 254-107 | 2 | Cup-Bearing, Tapered |
| 6:3 | 1-811010 | 1 | Plug |
| 7 | 114-8419 | 3 | Screw-HHF |
| 8 | 99-5107 | 3 | Nut-Lock |
| 9 | 32144-41 | 2 | Screw-Taptite |
| 10 | 112-1602 | 2 | Pin-Retainer |
| 11 | 121-3397 | 4 | Plug-Grommet |
| 16 | 112-9544 | 1 | Pin-HOC |
| 17 | 119-1414 | 1 | Pin-Cotter, Locking |
| 18 | 3256-22 | 1 | Washer-Flat |
| 19 | 110-9847 | 1 | Rod-Prop |
| 20 | 302-5 | 2 | Fitting-Grease |
| 21 | 237-141 | 1 | Grommet-Rubber |




# Carrier Frame Assembly No. 136-4466

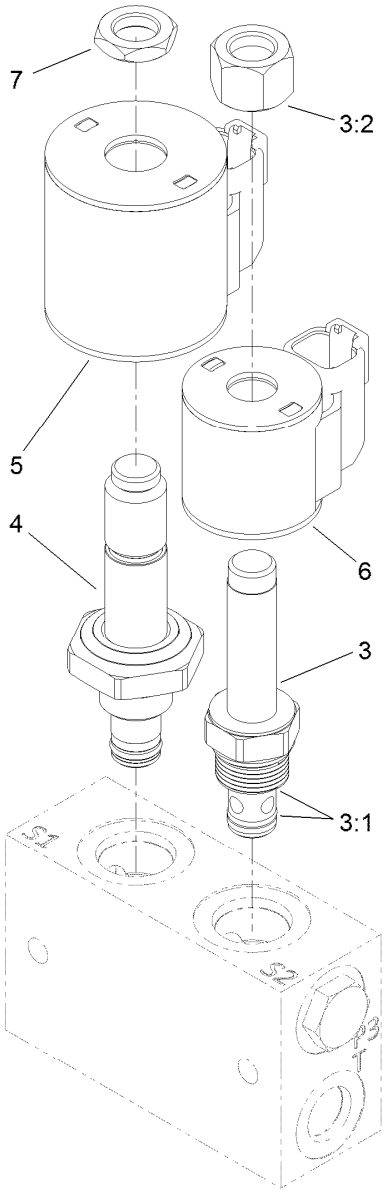
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 240-14 | 4 | Bumper-Rubber |
| 2 | 104-7201 | 4 | Nut-HF |
| 3 | 254-107 | 2 | Cup-Bearing, Tapered |
| 4 | 1-811010 | 1 | Plug |
| 5 | 99-4693 | 1 | Decal |
| 6 | 127-6519 | 1 | Decal-HOC |




# Lift Valve and Cylinder Assembly

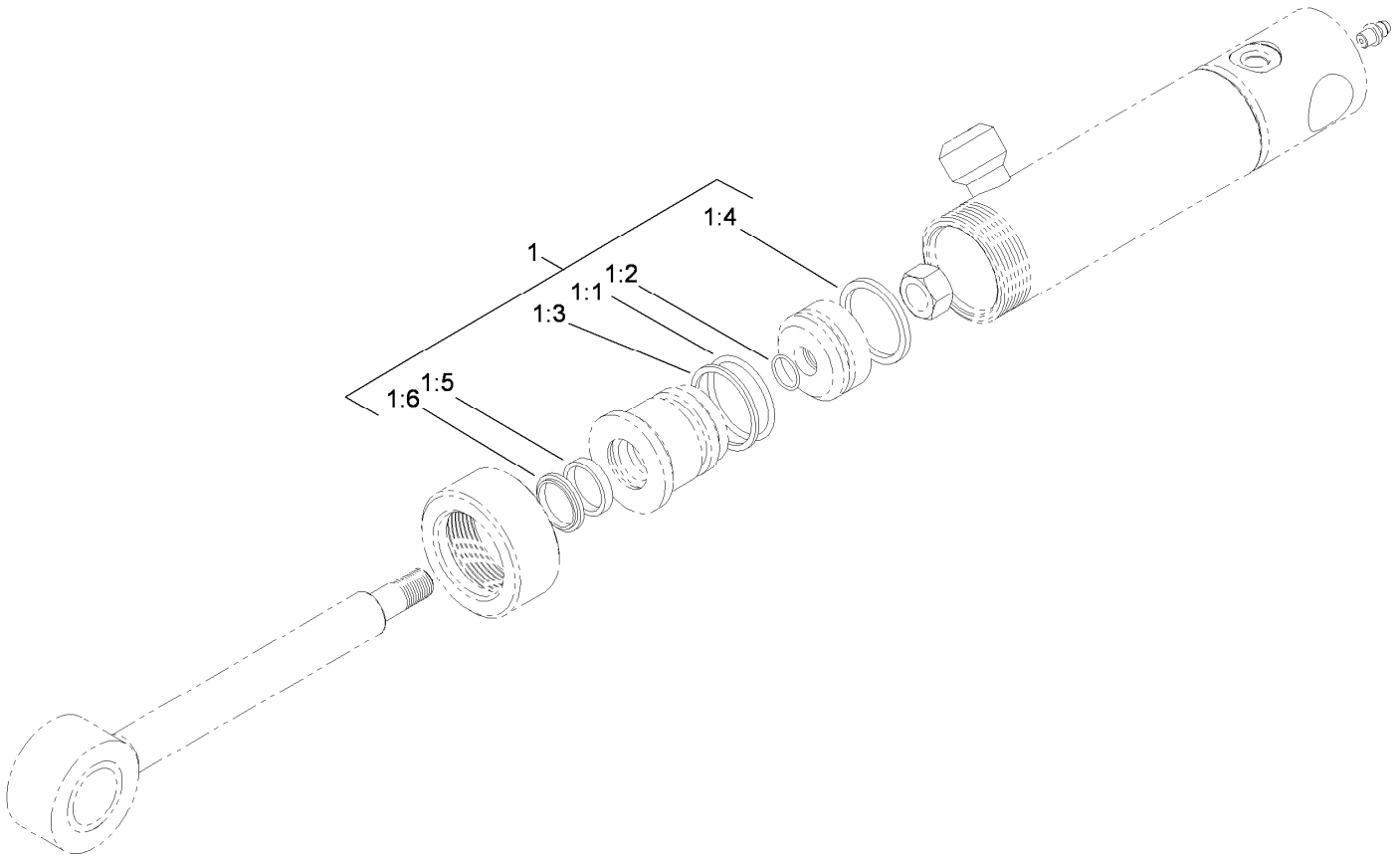
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 127-4908 | 1 | Hose-HYD |
| 3 | 340-92 | 2 | Fitting-Straight |
| 3:1 | 237-78 | 1 | O-Ring |
| 3:2 | 237-21 | 1 | O-Ring |
| 4 | 127-4909 | 1 | Hose-HYD |
| 5 | 110-0064 | 1 | Fitting-Tee |
| 5:1 | 237-30 | 2 | O-Ring |
| 5:2 | 237-42 | 1 | O-Ring |
| 6 | 107069 | 2 | Clip |
| 7 | 340-1 | 1 | Fitting-Straight |
| 7:1 | 237-21 | 1 | O-Ring |
| 7:2 | 237-42 | 1 | O-Ring |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 8 | 340-99 | 1 | Fitting-HYD, 90 DEG |
| 8:1 | 237-30 | 1 | O-Ring |
| 8:2 | 237-42 | 1 | O-Ring |
| 9 | 131-1934 | 1 | Deck Lift Valve ASM |
| 10 | 3253-3 | 2 | Washer-Lock |
| 11 | 321-11 | 2 | Screw-HH |
| 12 | 110-9834 | 1 | HYD Cylinder ASM |
| 13 | 32128-37 | 1 | Nut-HF |
| 14 | 125-1910 | 1 | Pin-Pivot |
| 15 | 3234-15 | 1 | Screw-HHF |
| 16 | 302-5 | 1 | Fitting-Grease |
| 17 | 32151-36 | 1 | Ring-Retaining |




# Valve Assembly No. 131-1934

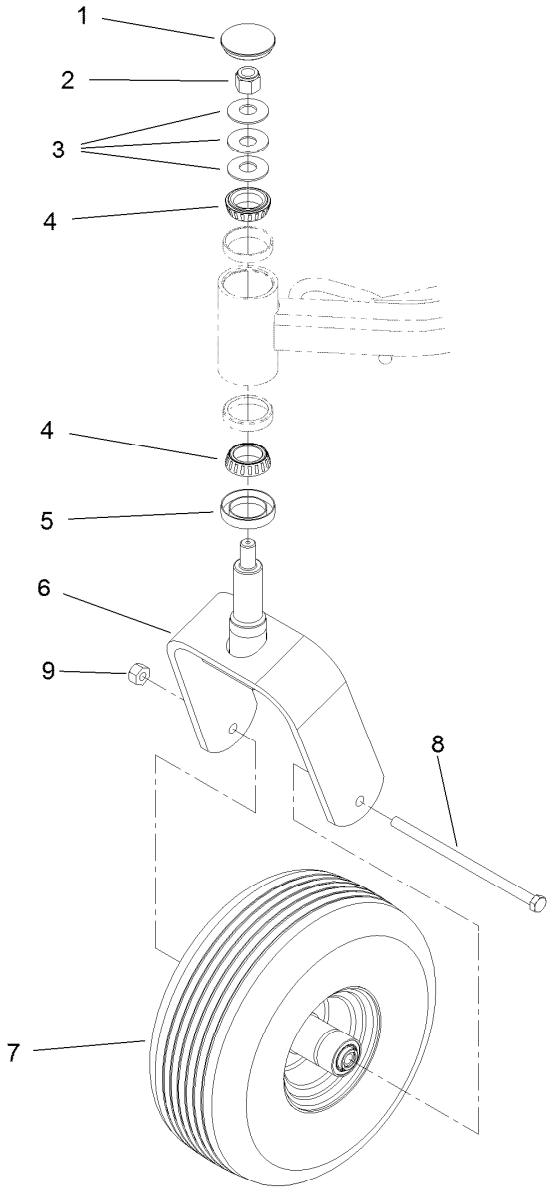
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 3 | 107-7517 | 1 | Valve-Solenoid |
| 3:1 | 105-9156 | 1 | Seal Kit |
| 3:2 | 107-7812 | 1 | Nut-Solenoid |
| 4 | 131-1935 | 1 | Valve-Solenoid |
| 5 | 115-3021 | 1 | Coil-12V |
| 6 | 119-8036 | 1 | Coil |
| 7 | 110-2634 | 1 | Nut-Coil |




# Hydraulic Cylinder Assembly No. 110-9834

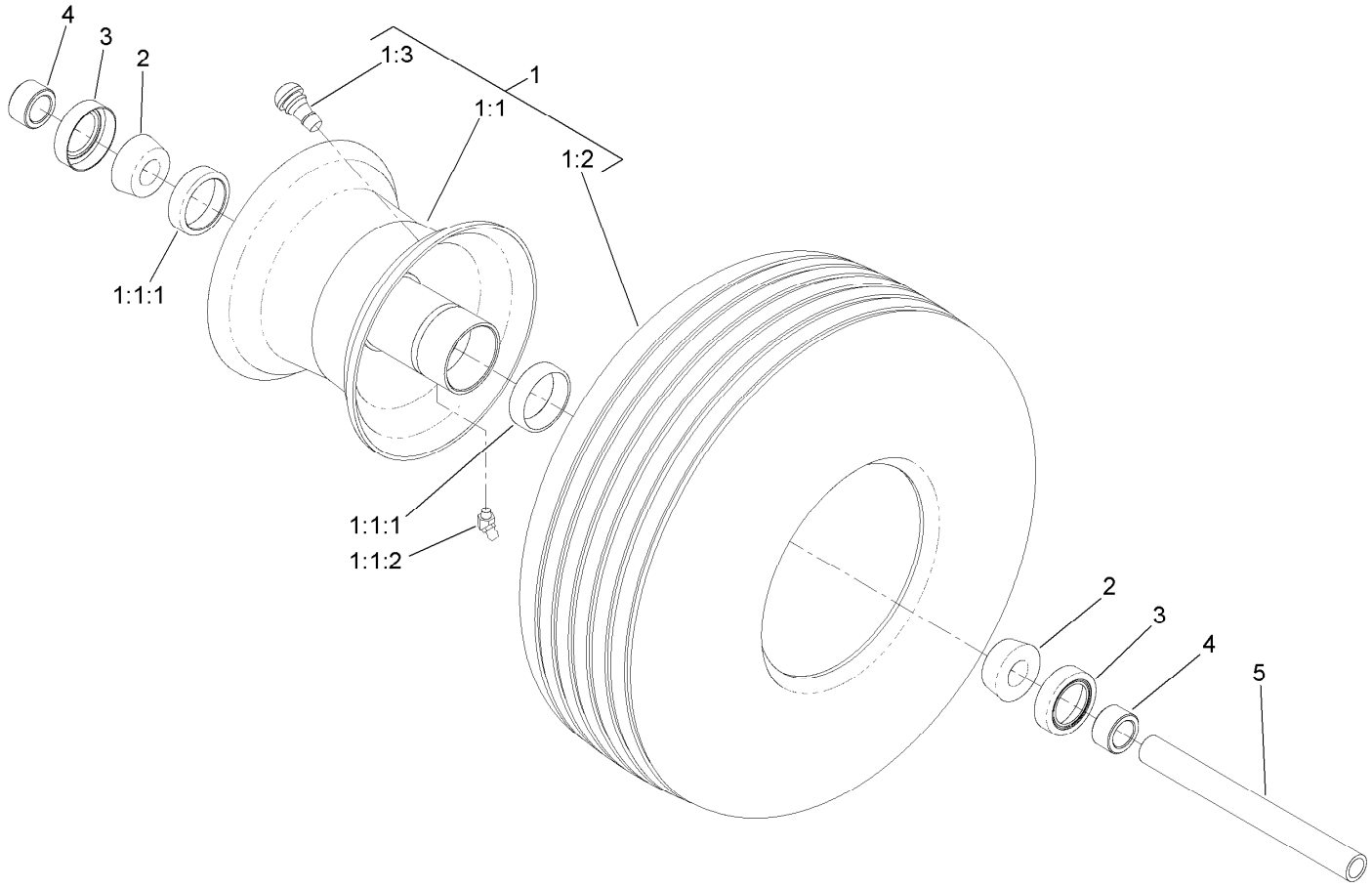
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 112-6353 | 1 | Seal Kit |
| 1:1 | | 1 | O-Ring ● |
| 1:2 | | 1 | O-Ring ● |
| 1:3 | | 1 | Backup ● |
| 1:4 | | 1 | Seal-Bp ● |
| 1:5 | | 1 | Seal-Rod ● |
| 1:6 | | 1 | Seal-Dust ● |

● Not serviced separately



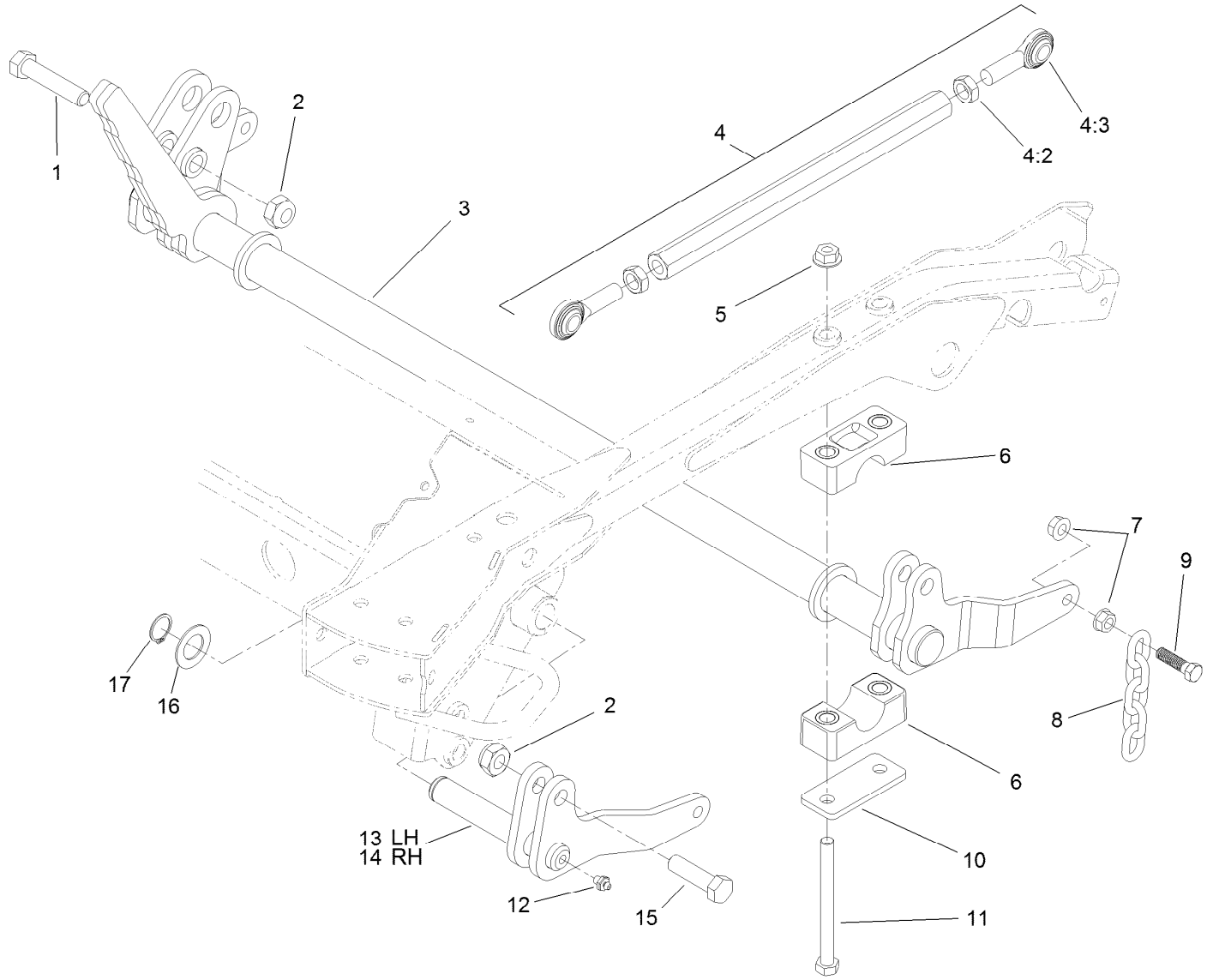

# Caster Wheel Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 108-9950 | 2 | Cap-Grease |
| 2 | 3296-51 | 2 | Nut-Lock, NI |
| 3 | 108-9957 | 6 | Washer-Belleville |
| 4 | 254-106 | 4 | Cone-Bearing, Tapered |
| 5 | 69-2980 | 2 | Seal |
| 6 | 108-9946-03 | 2 | Fork-Caster |
| 7 | 133-4723 | 2 | Caster Wheel ASM |
| 8 | 325-39 | 2 | Screw-HH |
| 9 | 3296-25 | 2 | Nut-Lock, NI |




# Caster Wheel Assembly No. 133-4723

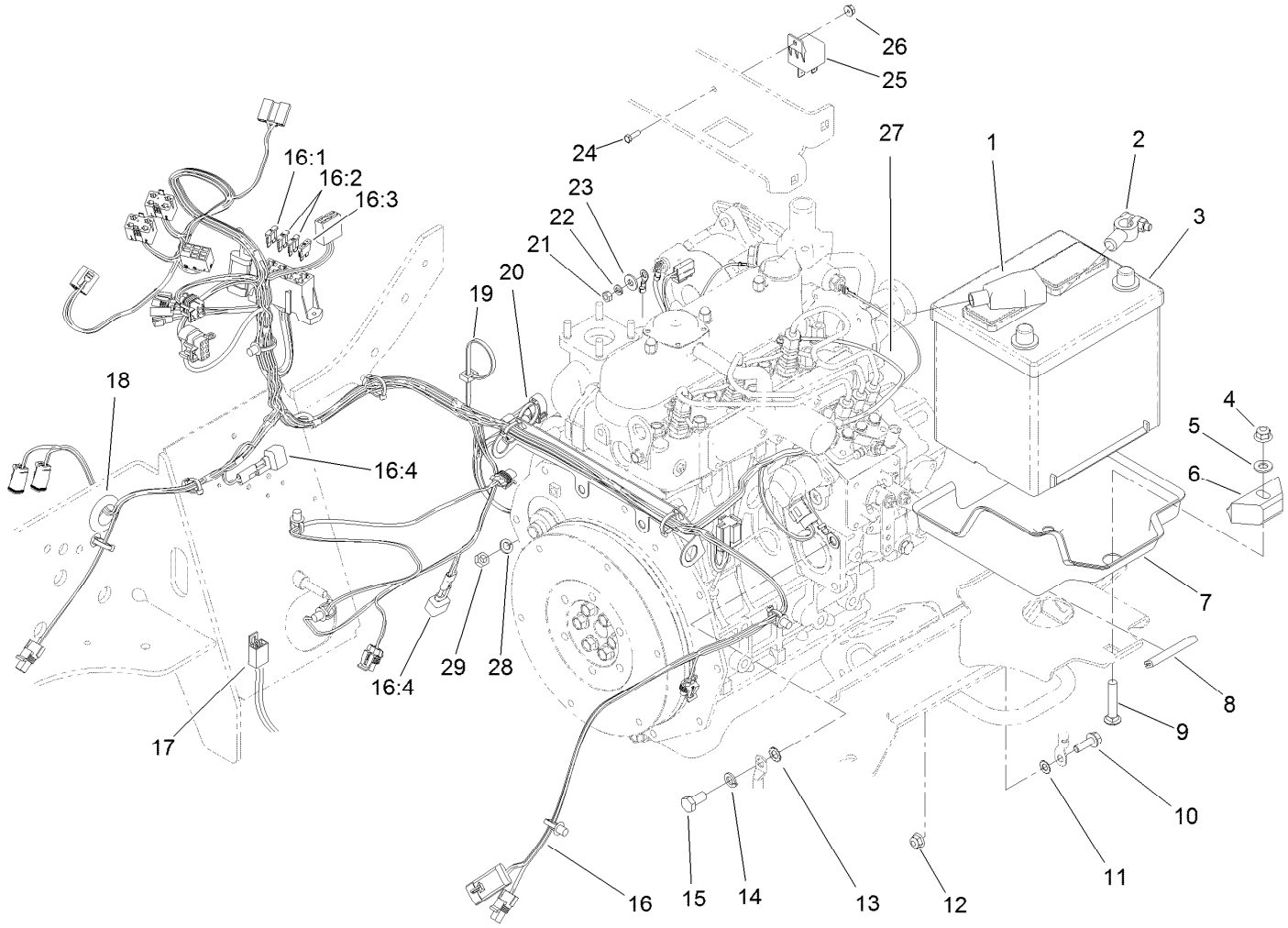
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 133-4730 | 1 | Tire And Wheel ASM |
| 1:1 | 133-4725 | 1 | Wheel |
| 1:1:1 | 1-633584 | 2 | Bearing-Cup |
| 1:1:2 | 302-11 | 1 | Fitting-Lube, 45 DEG |
| 1:2 | 133-4724 | 1 | Tire |
| 1:3 | 5108 | 1 | Valve |
| 2 | 1-633585 | 2 | Bearing-Cone, Taper |
| 3 | 1-633580 | 2 | Seal-Bearing |
| 4 | 1-633581 | 2 | Spacer-Bearing |
| 5 | 1-633959 | 1 | Spacer-Caster, Front |




# Deck Lift Assembly

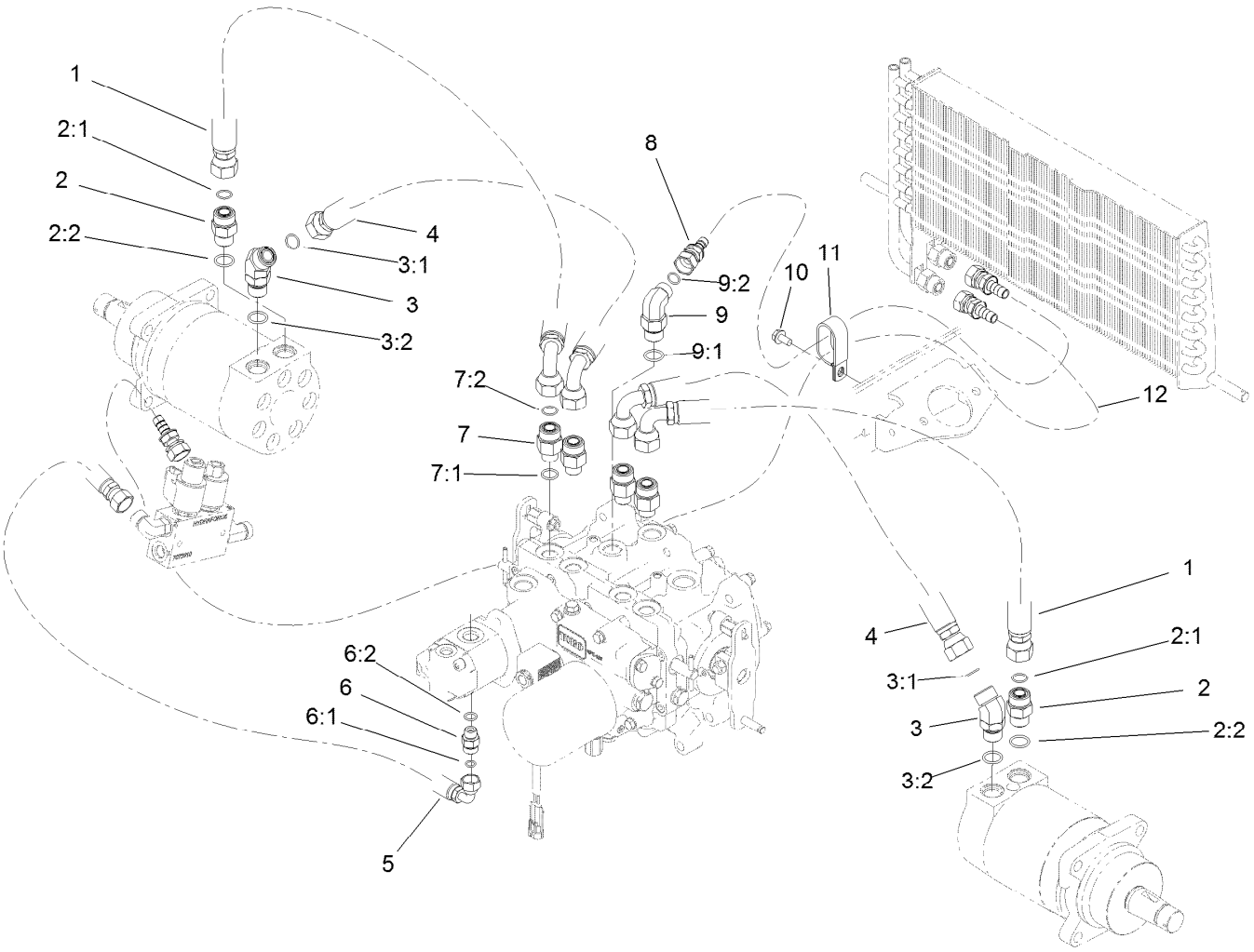
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 104-5895 | 1 | Screw-HH |
| 2 | 3296-61 | 4 | Nut-Lock |
| 3 | 117-9220-03 | 1 | Shaft-Lift |
| 4 | 114-4059 | 2 | Link ASM |
| 4:2 | 3220-6 | 2 | Nut-Jam |
| 4:3 | 1-633029 | 2 | Balljoint-Spherical |
| 5 | 32128-49 | 4 | Nut-HHF |
| 6 | 115-0491 | 4 | Cap-Bearing |
| 7 | 32128-37 | 8 | Nut-HF |
| 8 | 1-633447 | 4 | Chain-Lift, Deck |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 9 | 103-1898 | 4 | Screw-HH |
| 10 | 117-2903 | 2 | Plate-Bearing |
| 11 | 325-22 | 4 | Screw-HH |
| 12 | 302-2 | 2 | Fitting-Grease |
| 13 | 110-9818-03 | 1 | Lift-LH |
| 14 | 110-9820-03 | 1 | Lift-RH |
| 15 | 327-22 | 3 | Screw-HH |
| 16 | 69-9010 | 2 | Washer |
| 17 | 32151-29 | 2 | Ring-Retaining |




# Electrical Assembly

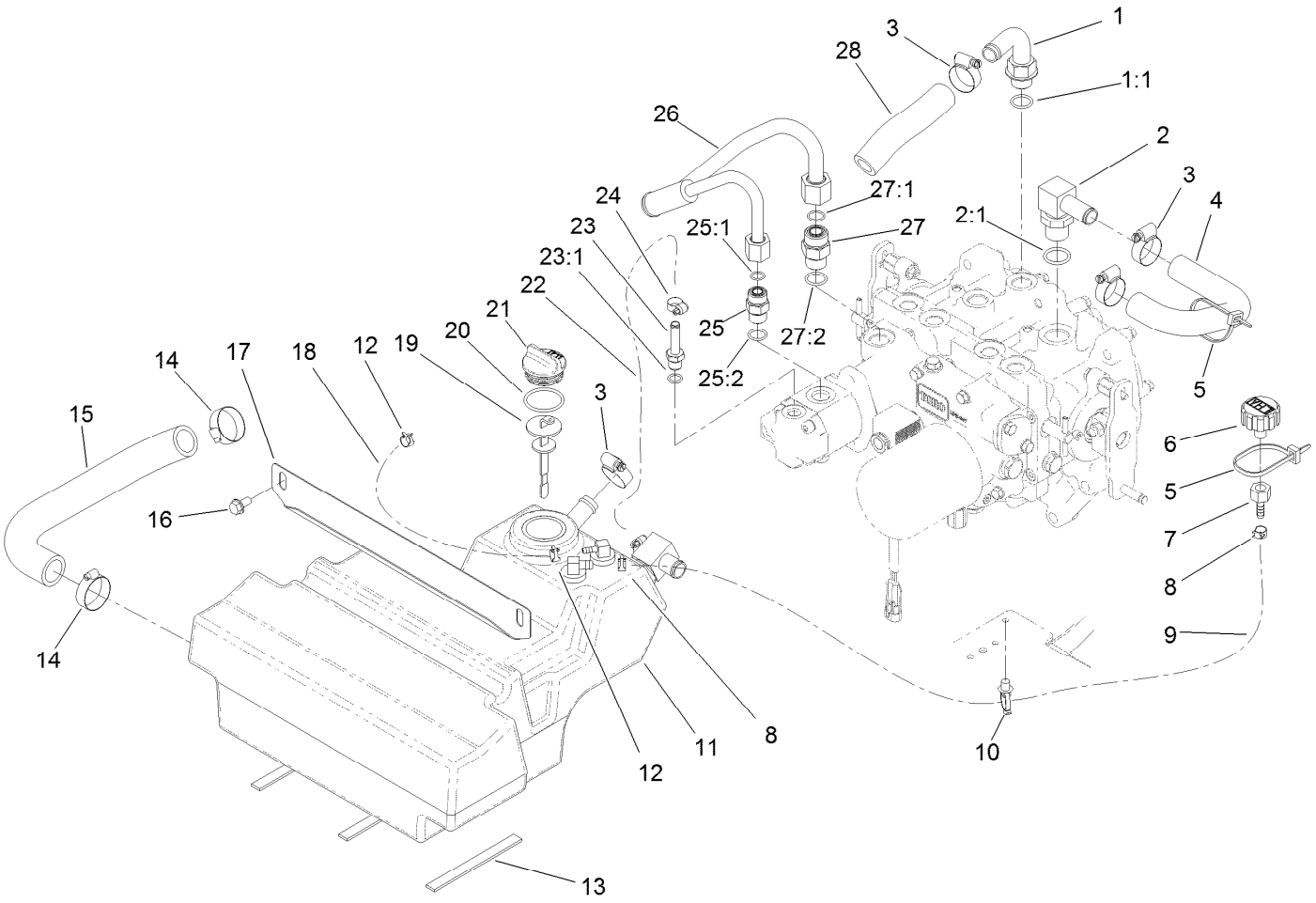
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 119-1796 | 1 | Cable-Battery, Positive |
| 2 | 105-0040 | 1 | Cable-Battery, Negative |
| 3 | 106-5187 | 1 | Battery-Dry |
| 4 | 104-8301 | 1 | Nut-HF, NI |
| 5 | 3256-24 | 1 | Washer-Flat |
| 6 | 66-2490 | 1 | Retainer-Battery |
| 7 | 133-4913 | 1 | Tray-Battery |
| 8 | 110-8276 | 1 | Trim-Hold Down, Battery |
| 9 | 3231-6 | 1 | Screw-CARR |
| 10 | 3234-17 | 1 | Screw-HHF |
| 11 | 3255-8 | 1 | Washer-Lock |
| 12 | 104-8300 | 1 | Nut-HF, NI |
| 13 | 3255-9 | 1 | Washer-Lock |
| 14 | 48-9590 | 1 | Washer-Lock |
| 15 | 63-7790 | 1 | Screw-Cap |
| 16 | 119-4380 | 1 | Harness-Wire, Main |
| 16:1 | 94-6710 | 1 | Fuse-2 Amp |
| 16:2 | 218-578 | 2 | Fuse-Blade, 10 Amp |
| 16:3 | 109355 | 1 | Fuse-Blade, 15 Amp |
| 16:4 | 100-4918 | 2 | Diode |
| 17 | 108-8657 | 1 | Harness-Wire, Seat |
| 18 | 237-165 | 1 | Grommet |
| 19 | 3290-378 | 2 | Tie-Cable |
| 20 | 32180-030 | 2 | Clip-Tie |
| 21 | 33013-00 | 1 | Nut-Hex |
| 22 | 43-5930 | 1 | Washer-Lock, Spring |
| 23 | 3256-2 | 1 | Washer-Flat |
| 24 | 3290-134 | 1 | Screw |
| 25 | 99-7435 | 1 | Relay-Power |
| 26 | 3290-148 | 1 | Nut-HF |
| 27 | 99-3441 | 1 | Harness-Wire, Fusible Link |
| 28 | 3253-4 | 1 | Washer-Lock |
| 29 | 33014-00 | 1 | Nut-Hex |




# Transmission and Oil Cooler Hydraulic Assembly

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 112-1683 | 2 | Hose |
| 2 | 340-7 | 2 | Fitting-Straight |
| 2:1 | 237-65 | 1 | O-Ring |
| 2:2 | 237-80 | 1 | O-Ring |
| 3 | 340-14 | 2 | Fitting-HYD, 45 DEG |
| 3:1 | 237-65 | 1 | O-Ring |
| 3:2 | 237-80 | 1 | O-Ring |
| 4 | 110-5518 | 2 | Hose |
| 5 | 127-4910 | 1 | Hose-HYD |
| 6 | 340-2 | 1 | Fitting-Straight |
| 6:1 | 237-22 | 1 | O-Ring |

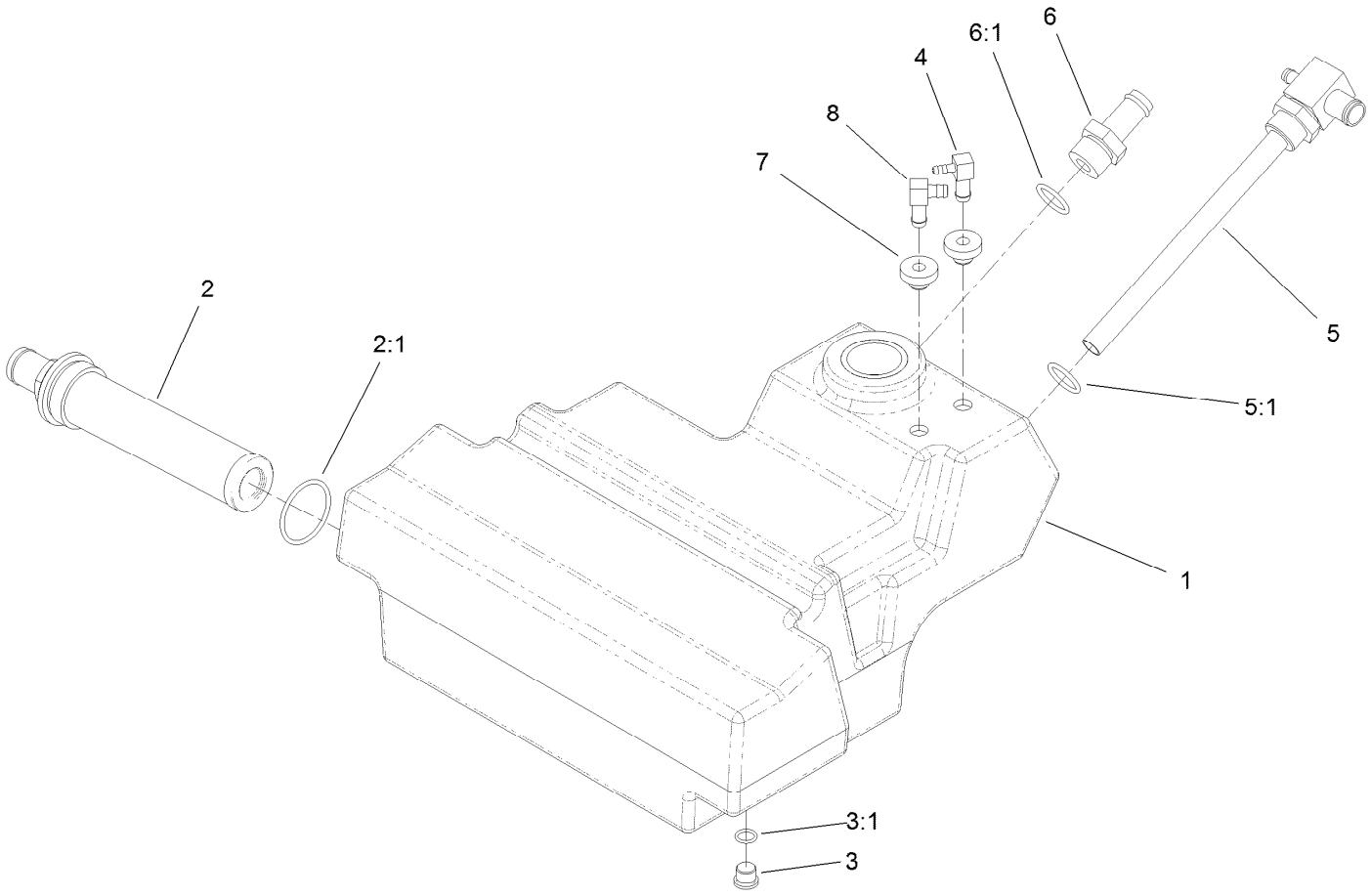
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 6:2 | 237-42 | 1 | O-Ring |
| 7 | 340-155 | 4 | Fitting-Straight |
| 7:1 | 237-79 | 1 | O-Ring |
| 7:2 | 237-151 | 1 | O-Ring |
| 8 | 110-5542 | 1 | Hose-HYD |
| 9 | 340-105 | 1 | Fitting-Elbow, 90 DEG |
| 9:1 | 237-80 | 1 | O-Ring |
| 9:2 | 237-30 | 1 | O-Ring |
| 10 | 32144-14 | 1 | Screw-HWHTF |
| 11 | 2412-137 | 1 | Clamp-R, Double |
| 12 | 110-5543 | 1 | Hose-HYD |




# Hydraulic Reservoir Assembly

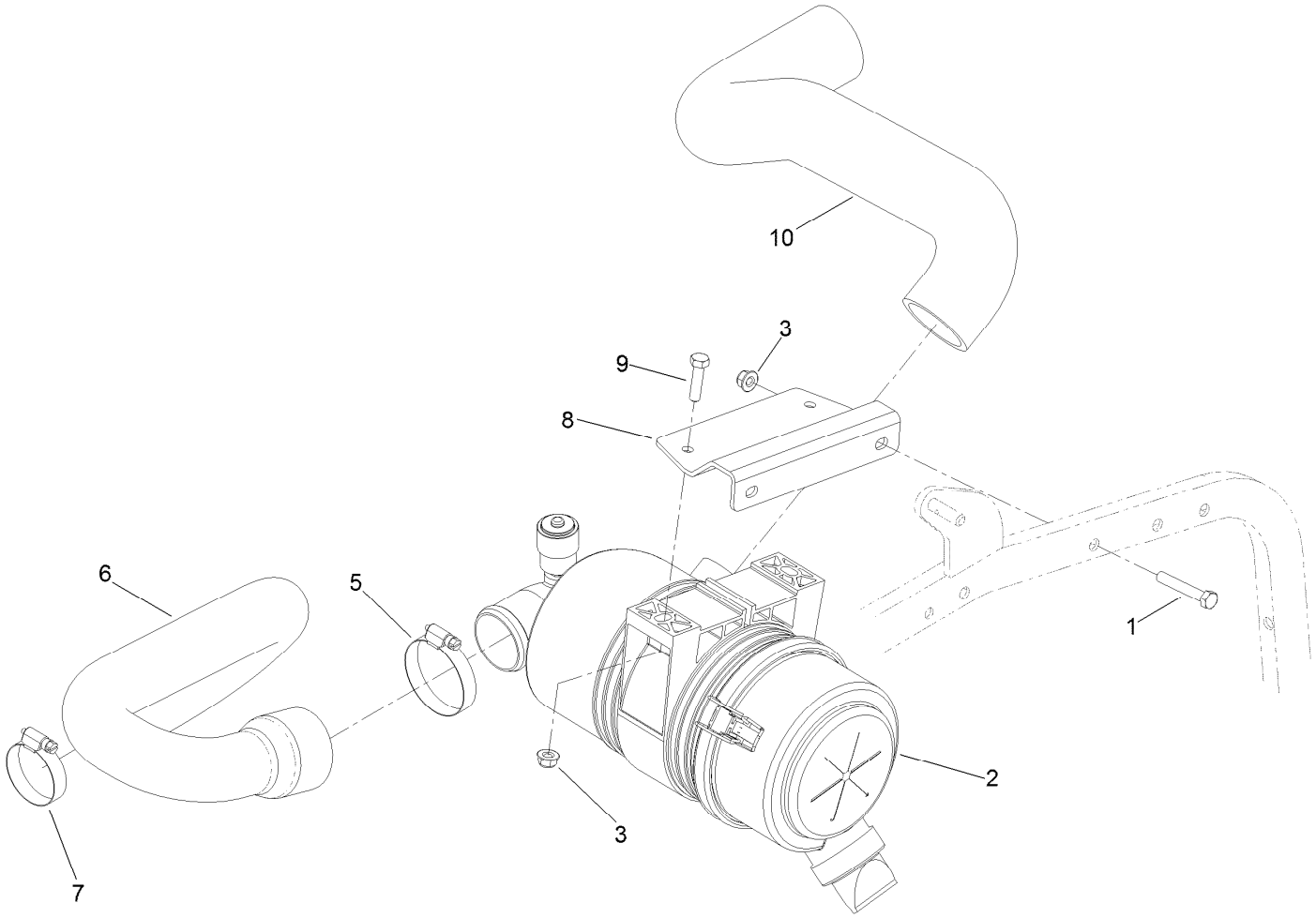
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 1 | 110-5522 | 1 | Fitting-Elbow, 90 |
| 1:1 | 237-80 | 1 | O-Ring |
| 2 | 353-987 | 1 | Fitting-Elbow, 90 |
| 2:1 | 237-81 | 1 | O-Ring |
| 3 | 2412-129 | 4 | Clamp-Hose |
| 4 | 110-5524 | 1 | Hose-Return |
| 5 | 3290-379 | 2 | Tie-Cable |
| 6 | 68-6150 | 1 | Breather |
| 7 | 354-95 | 1 | Fitting-Straight |
| 8 | 92-2379 | 2 | Clamp-Hose |
| 9 | 110-9662 | 1 | Hose-Fuel |
| 10 | 32180-030 | 1 | Clip-Tie |
| 11 | 110-8237 | 1 | HYD Reservoir ASM |
| 12 | 2412-98 | 2 | Clamp-Hose |
| 13 | 120-0017 | 3 | Strip-Foam |
| 14 | 2412-34 | 2 | Clamp-Hose |
| 15 | 110-5526 | 1 | Hose-Suction |
| 16 | 32144-14 | 2 | Screw-HWHTF |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 17 | 110-5529-03 | 1 | Support-Reservoir |
| 18 | 109-0299 | 1 | Hose-Fuel |
| 19 | 112-6365 | 1 | Dipstick |
| 20 | 94-8166 | 1 | O-Ring |
| 21 | 93-7498 | 1 | Plug-Plastic |
| 22 | 94-5625 | 1 | Hose |
| 23 | 353-979 | 1 | Fitting-STR |
| 23:1 | 237-42 | 1 | O-Ring |
| 24 | 2412-108 | 2 | Clamp-Worm |
| 25 | 340-4 | 1 | Fitting-STR |
| 25:1 | 237-30 | 1 | O-Ring |
| 25:2 | 237-79 | 1 | O-Ring |
| 26 | 110-5532 | 1 | Tube |
| 27 | 340-7 | 1 | Fitting-Straight |
| 27:1 | 237-65 | 1 | O-Ring |
| 27:2 | 237-80 | 1 | O-Ring |
| 28 | 112-1680 | 1 | Hose-HYD |



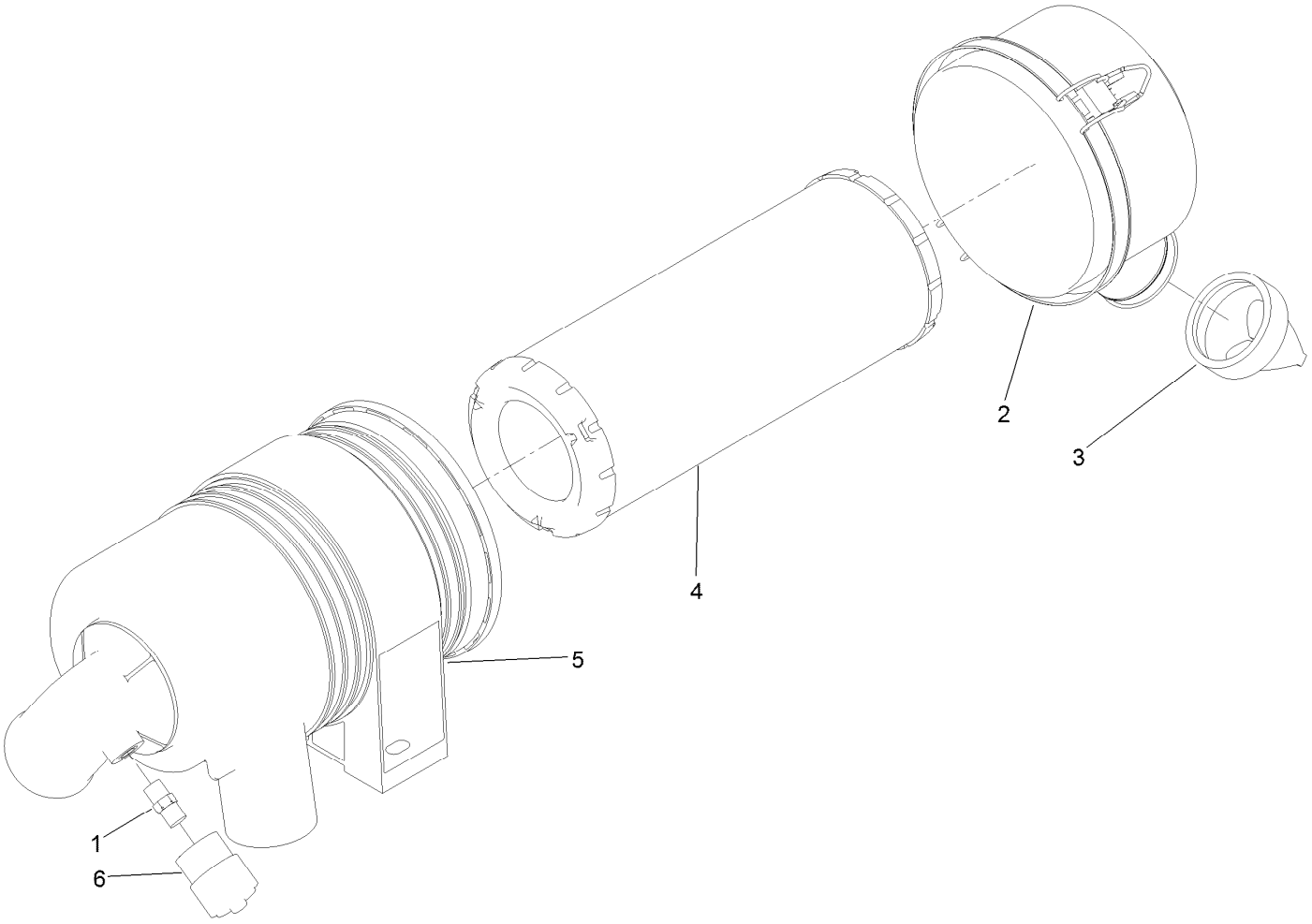

# Hydraulic Reservoir Assembly No. 110-8237

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 108-5200 | 1 | Reservoir-HYD |
| 2 | 104-7546 | 1 | Tank Strainer ASM |
| 2:1 | 340-136 | 1 | O-Ring |
| 3 | 353-989 | 1 | Plug-Hex, Hollow |
| 3:1 | 237-42 | 1 | O-Ring |
| 4 | 104-5228 | 1 | Fitting-Elbow, 90 DEG |
| 5 | 108-9894 | 1 | Fitting-Elbow, Special |
| 5:1 | 237-81 | 1 | O-Ring |
| 6 | 354-73 | 1 | Fitting |
| 6:1 | 237-81 | 1 | O-Ring |
| 7 | 46-6560 | 2 | Bushing |
| 8 | 46-6550 | 1 | Fitting-Elbow, 90 DEG |



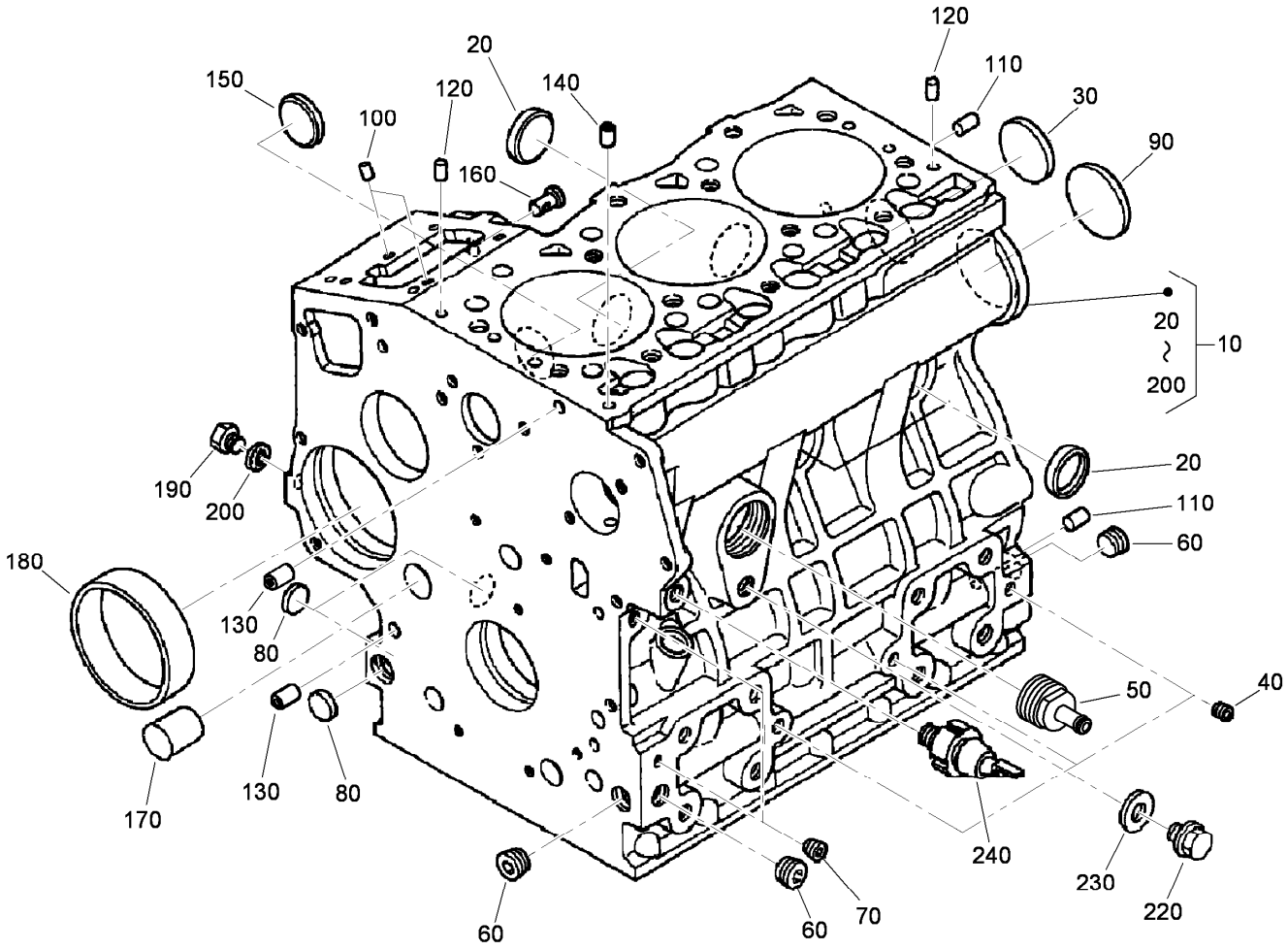

# Air Cleaner and Hose Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 322-10 | 2 | Screw-HH |
| 2 | 136-4481 | 1 | Air Cleaner ASM |
| 3 | 104-8300 | 4 | Nut-HF, NI |
| 5 | 2412-130 | 1 | Clamp-Hose |
| 6 | 112-9582 | 1 | Hose-Air Inlet, Turbo |
| 7 | 2412-3 | 1 | Clamp-Hose |
| 8 | 108-9843-03 | 1 | Support-Cleaner, Air |
| 9 | 322-6 | 2 | Screw-HH |
| 10 | 105-7281 | 1 | Hose-Air Inlet, Upper |



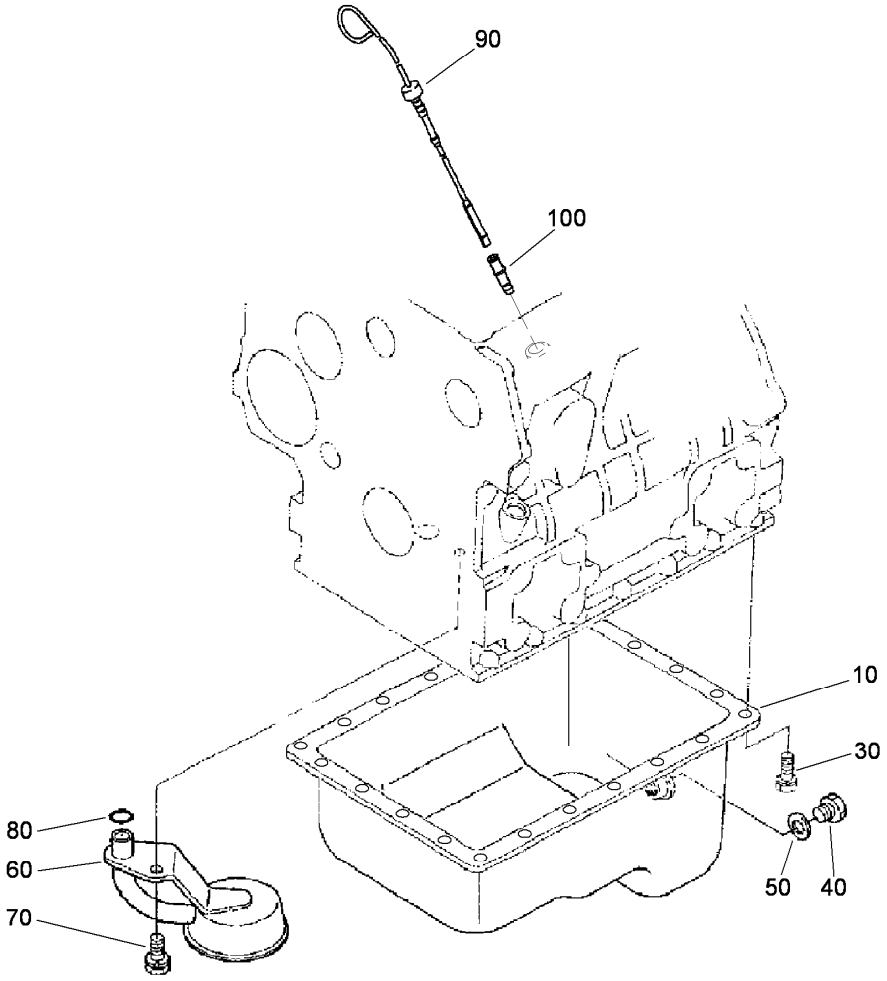

# Air Cleaner Assembly No. 136-4481

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 1 | 94-1416 | 1 | Adapter-Indicator |
| 2 | 98-9771 | 1 | Cover ASM |
| 3 | 94-1414 | 1 | Valve-Vacuator |
| 4 | 108-3810 | 1 | Filter-Air |
| 5 | 98-4525 | 1 | Bracket-Cleaner, Air |
| 6 | 93-9164 | 1 | Indicator-Mini |



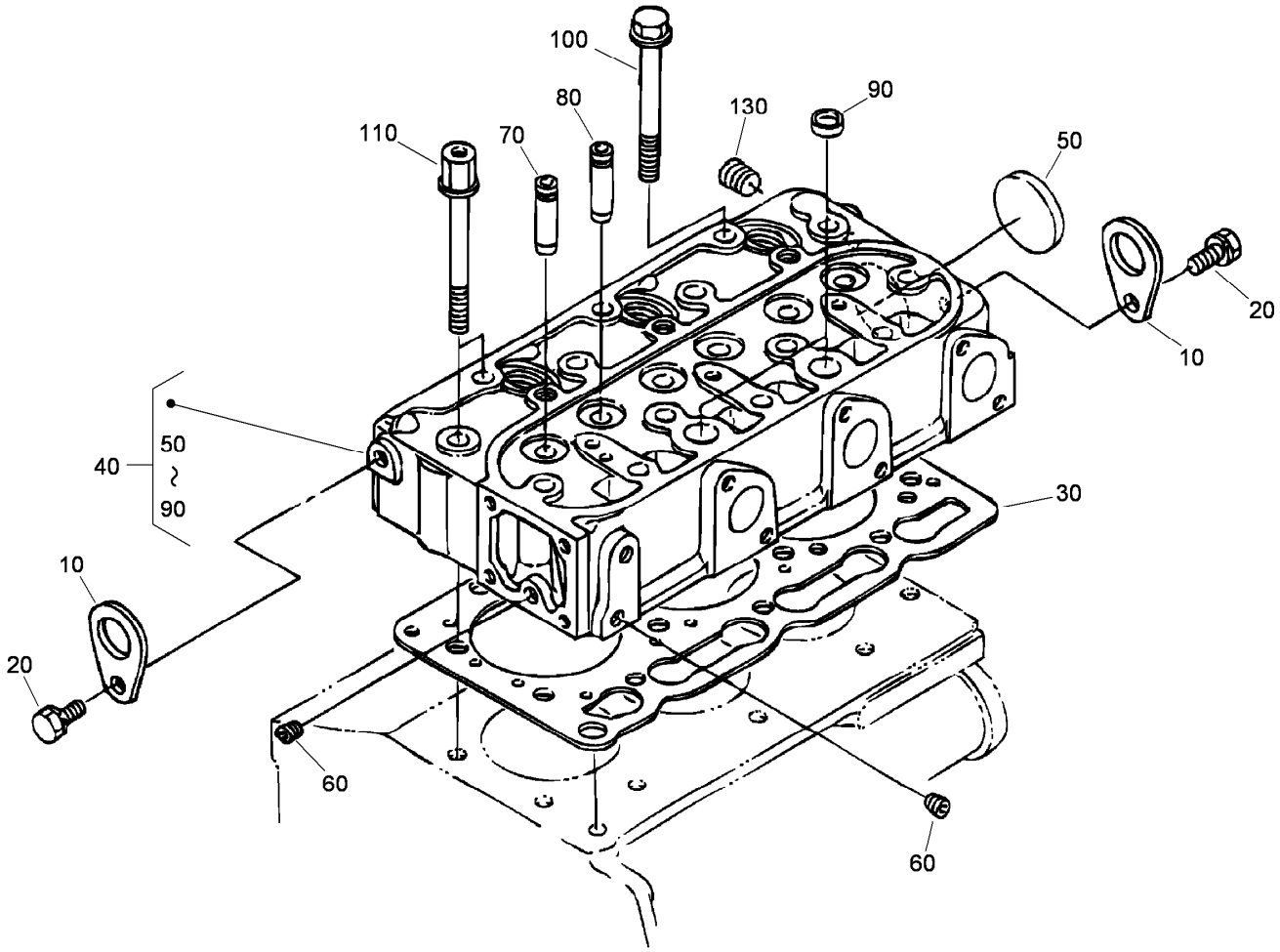

# Crankcase Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 112-7043 | 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 | 98-9379 | 3 | Plug-Expansion |
| 90 | 98-9668 | 1 | Plug-Expansion |
| 100 | 98-9375 | 2 | Pin-Straight |
| 110 | 98-9377 | 2 | Pin-Straight |
| 120 | 98-9376 | 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 |
| 220 | 99-3447 | 1 | Plug |
| 230 | 106-7056 | 1 | Gasket |
| 240 | 98-9416 | 1 | Switch-Oil |



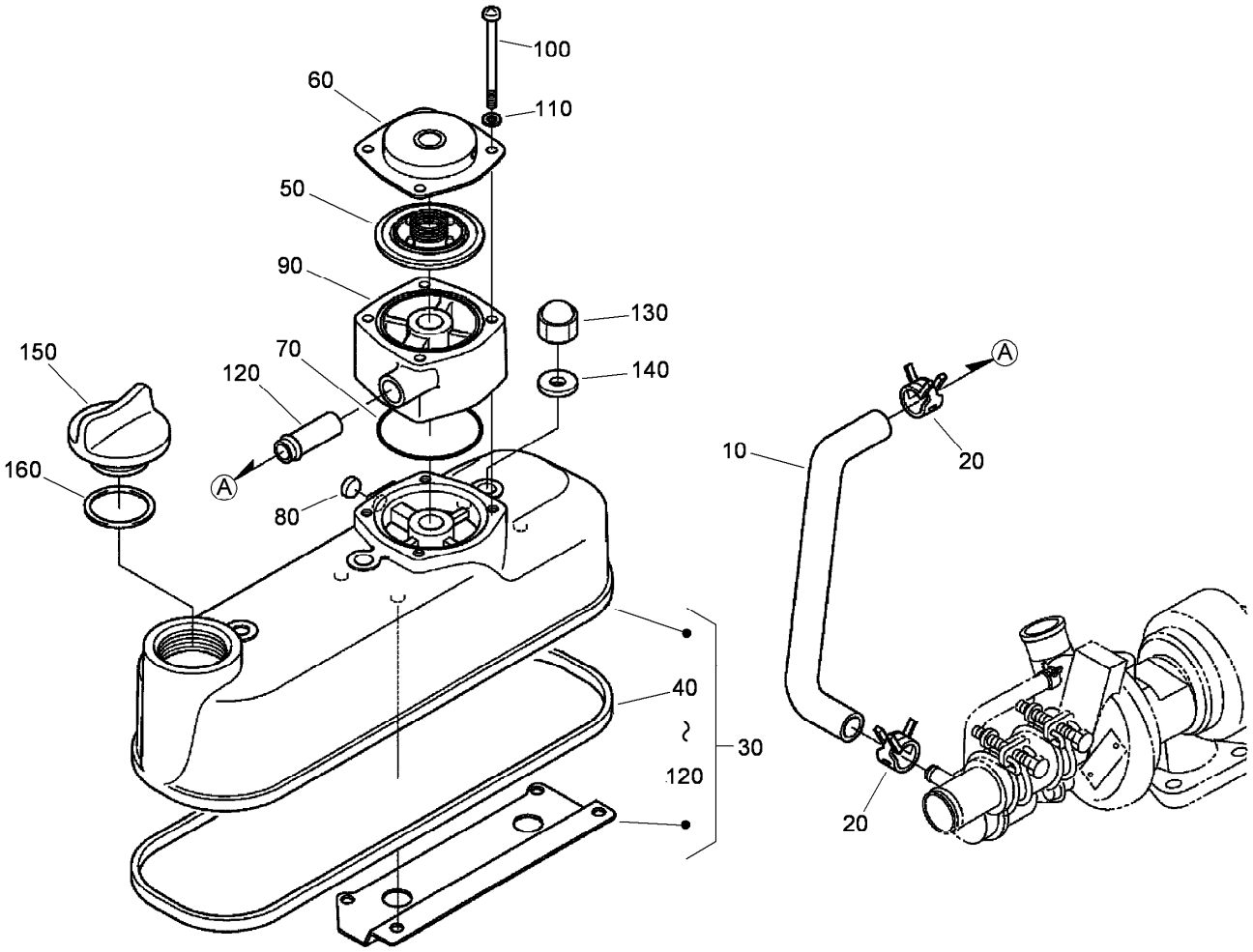

# Oil Pan Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 112-0179 | 1 | Pan-Oil |
| 30 | 98-9351 | 22 | Bolt |
| 40 | 114-8151 | 1 | Plug-Drain |
| 50 | 98-7524 | 1 | Gasket |
| 60 | 112-7044 | 1 | Head-Filter |
| 70 | 98-7526 | 1 | Bolt |
| 80 | 105-3776 | 1 | O-Ring |
| 90 | 107-9076 | 1 | Gauge-Oil |
| 100 | 105-4580 | 1 | Guide-Gauge, Oil |



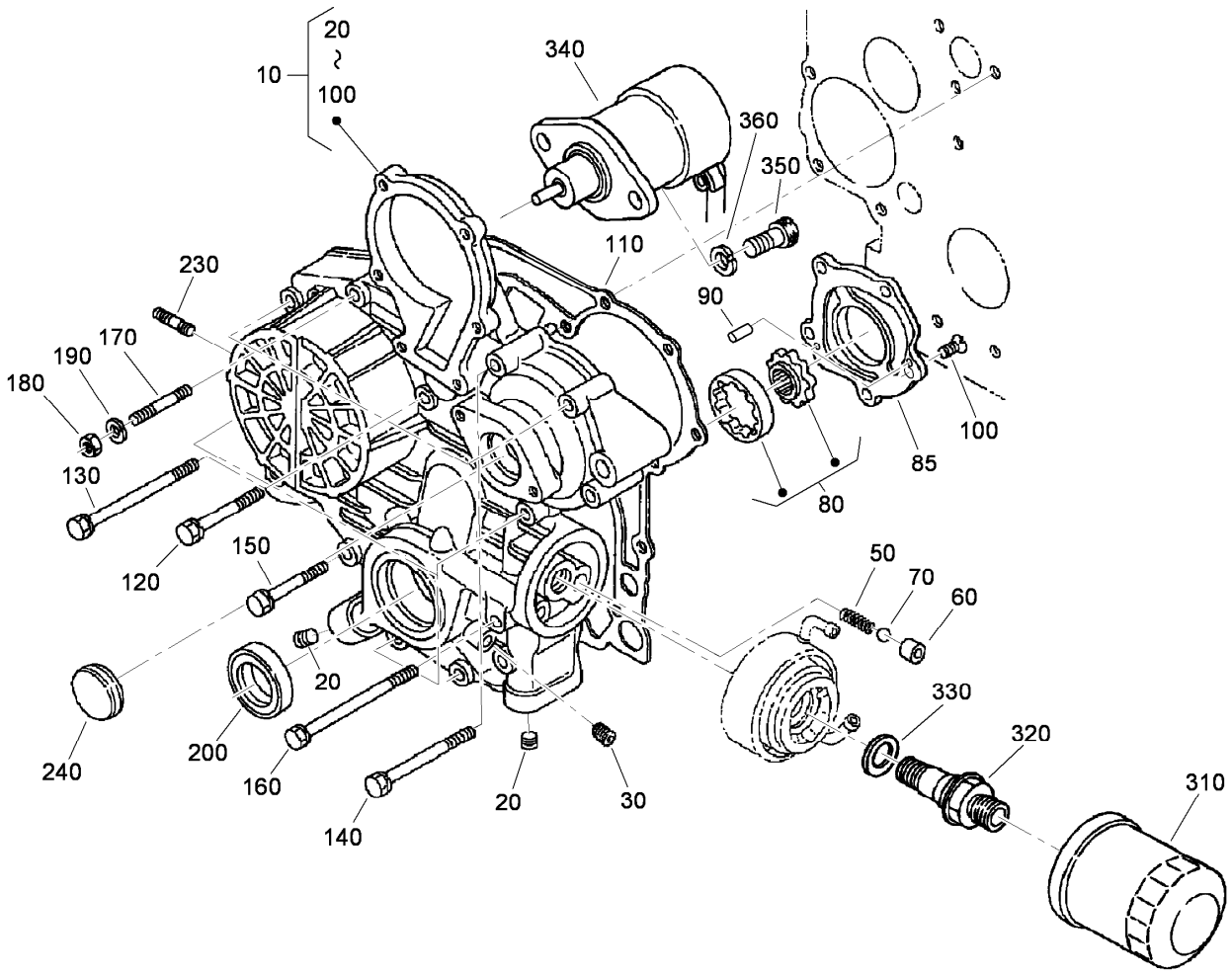

# Cylinder Head Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-7531 | 2 | Hook-Engine |
| 20 | 100-9195 | 2 | Bolt |
| 30 | 108-6573 | 1 | Gasket-Head, Cylinder |
| 40 | 107-7823 | 1 | Cylinder Head ASM |
| 50 | 105-3705 | 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 |
| 130 | 98-9444 | 1 | Plug |




# Head Cover Assembly

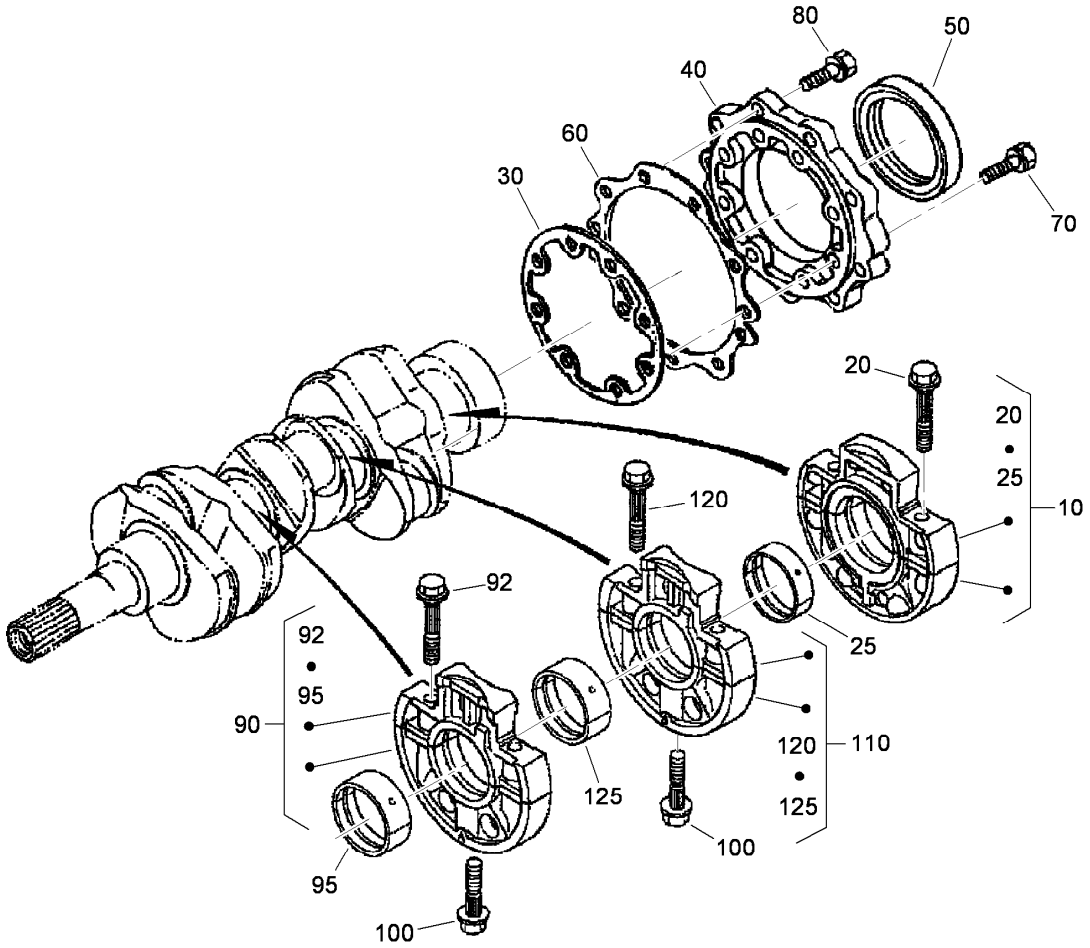
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 115-3040 | 1 | Tube-Breather |
| 20 | 108-2859 | 2 | Clamp-Hose |
| 30 | 115-3041 | 1 | Cylinder Head Cover ASM |
| 40 | 98-9615 | 1 | Gasket-Cover, Head |
| 50 | 108-2861 | 1 | Breather Valve ASM |
| 60 | 110-3714 | 1 | Cover-Breather |
| 70 | 110-3846 | 1 | O Ring-Breather |
| 80 | 115-3042 | 1 | Cap-Sealing |
| 90 | 115-3043 | 1 | Spacer-Breather |
| 100 | 115-3044 | 4 | Screw-Pan Head |
| 110 | 100-2204 | 4 | Washer-Spring |
| 120 | 98-7766 | 1 | Pipe-Return, Water |
| 130 | 98-9455 | 3 | Nut-Cap |
| 140 | 98-9454 | 3 | Gasket |
| 150 | 107-9075 | 1 | Plug-Filler, Oil |
| 160 | 99-3446 | 1 | O-Ring |




# Gear Case Assembly

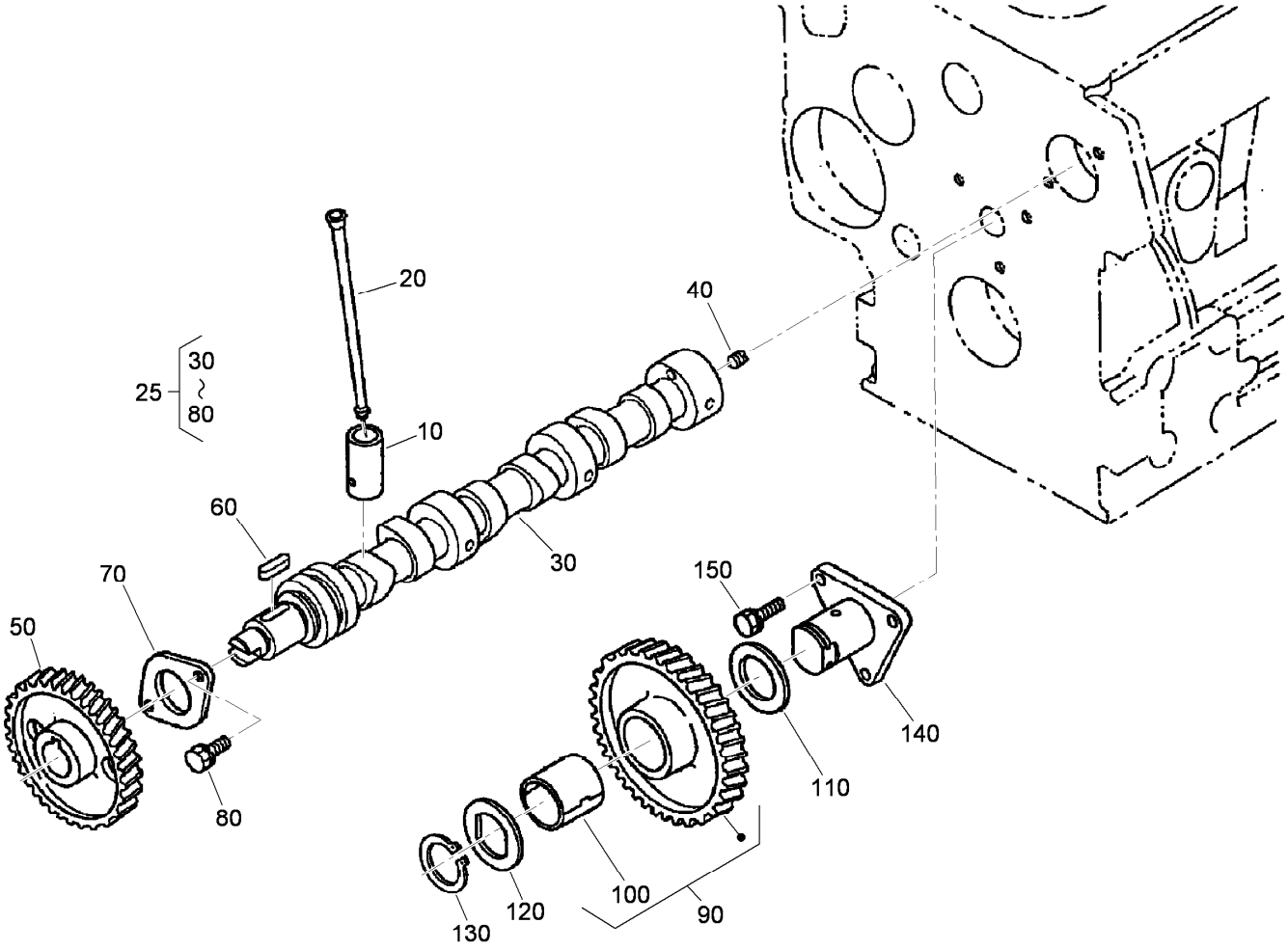
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 10 | 115-4111 | 1 | Gear Case ASM |
| 20 | 98-9598 | 2 | Plug |
| 30 | 98-7487 | 1 | Plug |
| 50 | 98-9544 | 1 | Spring |
| 60 | 98-9543 | 1 | Seat-Valve |
| 70 | 98-9380 | 1 | Ball |
| 80 | 98-9540 | 1 | Oil Pump Rotor ASM |
| 85 | 107-9069 | 1 | Cover-Pump, Oil |
| 90 | 107-9072 | 2 | Pin-Straight |
| 100 | 107-9071 | 5 | Screw |
| 110 | 98-9633 | 1 | Gasket-Case, Gear |
| 120 | 98-7496 | 3 | Bolt |
| 130 | 105-3797 | 4 | Bolt |
| 140 | 98-9356 | 4 | Bolt |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 150 | 107-9074 | 1 | Bolt |
| 160 | 98-9586 | 2 | Bolt |
| 170 | 105-3709 | 1 | Stud |
| 180 | 98-7572 | 1 | Nut |
| 190 | 98-7699 | 1 | Washer-Spring |
| 200 | 98-9482 | 1 | Seal-Oil |
| 230 | 105-3710 | 2 | Stud |
| 240 | 98-9641 | 1 | Cover-Case, Gear |
| 310 | 108-3841 | 1 | Filter-Oil |
| 320 | 104-5159 | 1 | Holder ASM |
| 330 | 98-9727 | 1 | Collar |
| 340 | 104-5155 | 1 | Solenoid-Stop |
| 350 | 115-3039 | 2 | Bolt-HSH |
| 360 | 98-7699 | 2 | Washer-Spring |



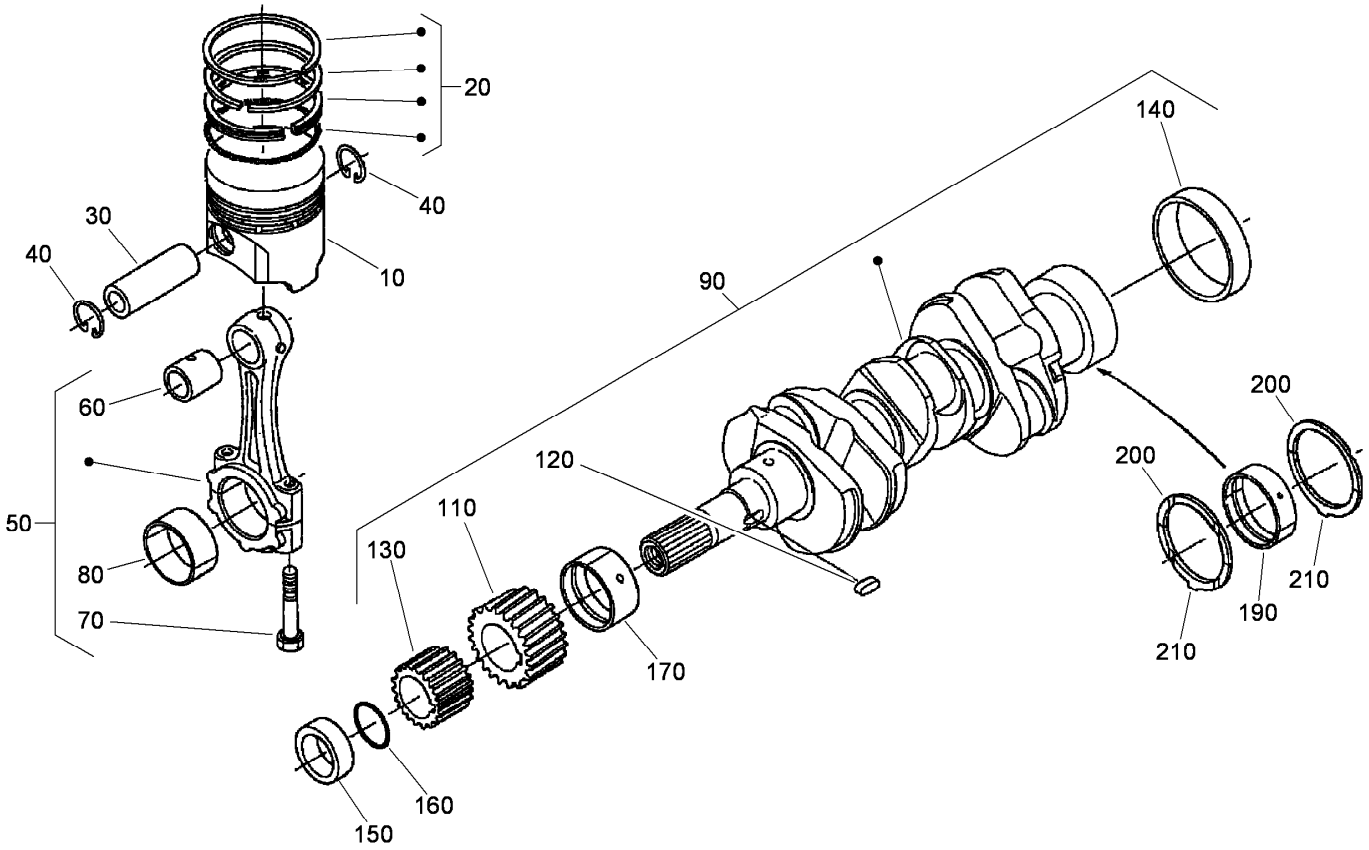

# Main Bearing Case Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 112-7026 | 1 | Wheel Bearing Case ASM |
| 20 | 98-9484 | 2 | Bolt-Case, Bearing |
| 25 | 112-7045 | 1 | Metal-Crankshaft |
| 25 | 112-7039 | 1 | Metal-Crankshaft (0.2Mm) |
| 25 | 112-7040 | 1 | Metal-Crankshaft (-0.4Mm) |
| 30 | 98-9634 | 1 | Gasket-Case, Bearing |
| 40 | 112-7046 | 1 | Cover-Case, Bearing |
| 50 | 112-0180 | 1 | Seal-Oil |
| 60 | 112-7037 | 1 | Gasket-Cover, Case |
| 70 | 98-9352 | 8 | Bolt |
| 80 | 98-7568 | 9 | Bolt |
| 90 | 112-7028 | 1 | Bearing ASM |
| 92 | 98-9484 | 2 | Bolt-Case, Bearing |
| 95 | 112-7011 | 1 | Bearing-Main (STD) |
| 95 | 112-7012 | 1 | Metal-Crankpin (-0.2Mm) |
| 95 | 112-7013 | 1 | Metal-Crankpin (-0.4Mm) |
| 100 | 98-9485 | 2 | Bolt-Case, Bearing |
| 110 | 112-7027 | 1 | Bearing ASM |
| 120 | 98-9484 | 2 | Bolt-Case, Bearing |
| 125 | 112-7011 | 1 | Bearing-Main (STD) |
| 125 | 112-7012 | 1 | Metal-Crankpin (-0.2Mm) |
| 125 | 112-7013 | 1 | Metal-Crankpin (-0.4Mm) |




# Camshaft and Idle Gear Shaft Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 112-0185 | 6 | Tappet |
| 20 | 98-9509 | 6 | Rod-Push |
| 25 | 112-7029 | 1 | Camshaft ASM |
| 30 | 108-1403 | 1 | Camshaft |
| 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 |

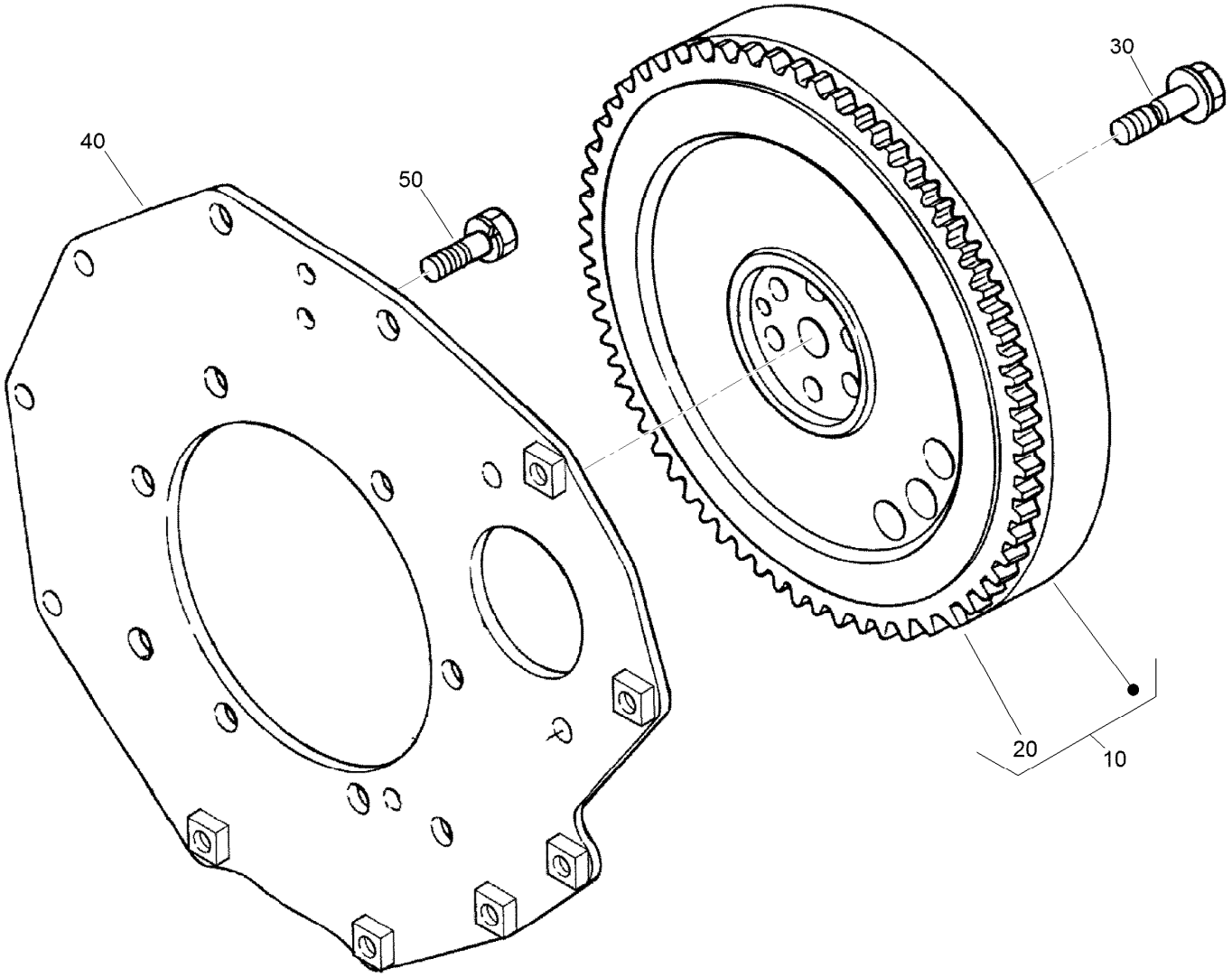



# Piston and Crankshaft Assembly

| 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 | 115-3014 | 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 | 110-3729 | 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 |

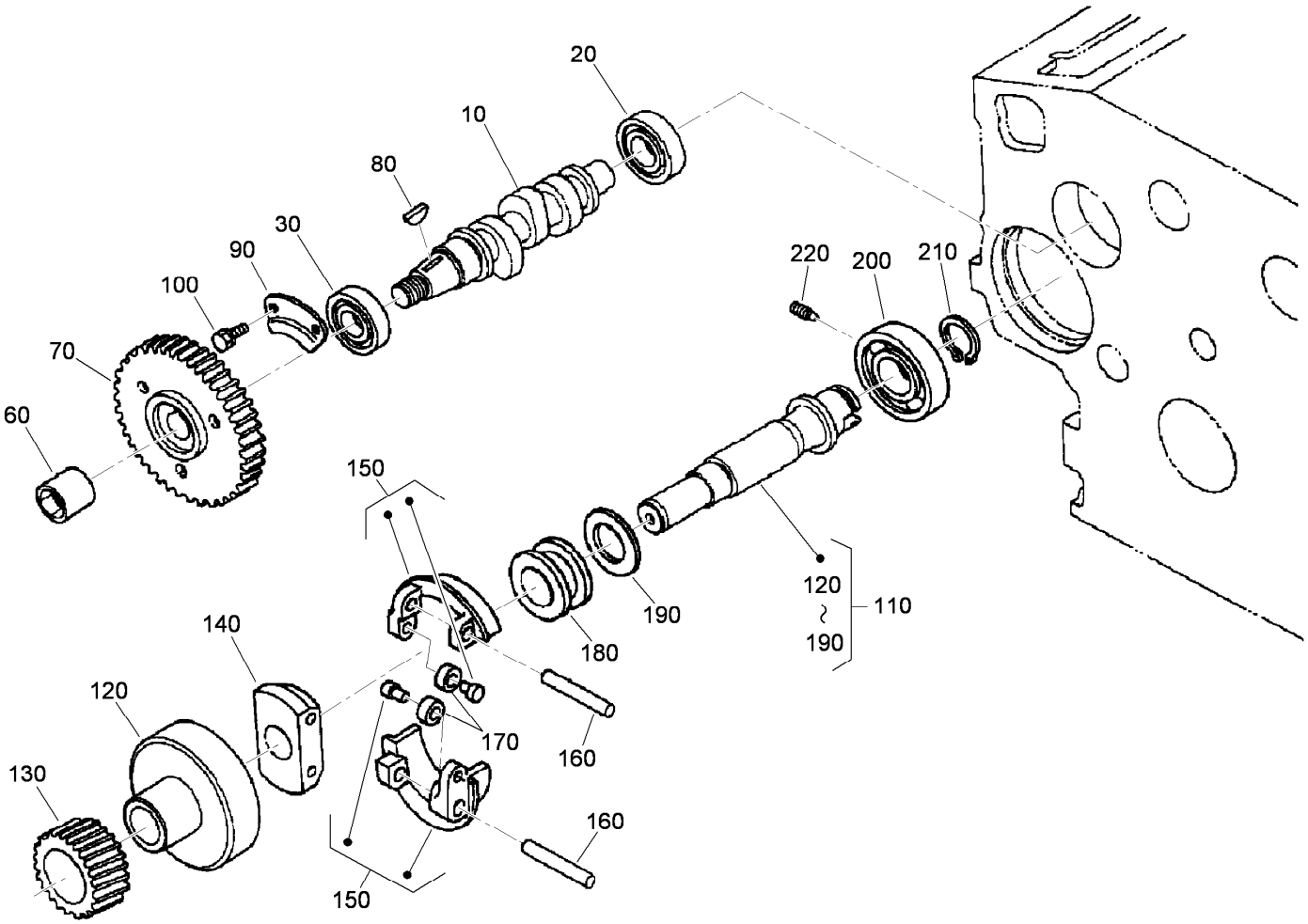
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 150 | 98-9521 | 1 | Collar-Crankshaft |
| 160 | 105-3783 | 1 | O-Ring |
| 170 | 112-7005 | 1 | Bearing-Main (STD) |
| 170 | 112-7009 | 1 | Metal-Crankpin (-0.2Mm) |
| 170 | 112-7010 | 1 | Metal-Crankpin (-0.4Mm) |
| 180 | 112-7011 | 2 | Bearing-Main (STD) ● |
| 180 | 112-7012 | 2 | Metal-Crankpin (-0.2Mm) ● |
| 180 | 112-7013 | 2 | Metal-Crankpin (-0.4Mm) ● |
| 190 | 112-7045 | 1 | Metal-Crankshaft |
| 190 | 112-7039 | 1 | Metal-Crankshaft (0.2Mm) |
| 190 | 112-7040 | 1 | Metal-Crankshaft (-0.4Mm) |
| 200 | 98-9413 | 2 | Bearing-Thrust (STD) |
| 200 | 98-9414 | 2 | Bearing-Thrust (0.2Mm) |
| 200 | 98-9415 | 2 | Bearing-Thrust (0.4Mm) |
| 210 | 98-9688 | 2 | Bearing-Thrust (STD) |
| 210 | 98-9689 | 2 | Bearing-Thrust (0.2Mm) |
| 210 | 98-9690 | 2 | Bearing-Thrust (0.4Mm) |

● Not illustrated



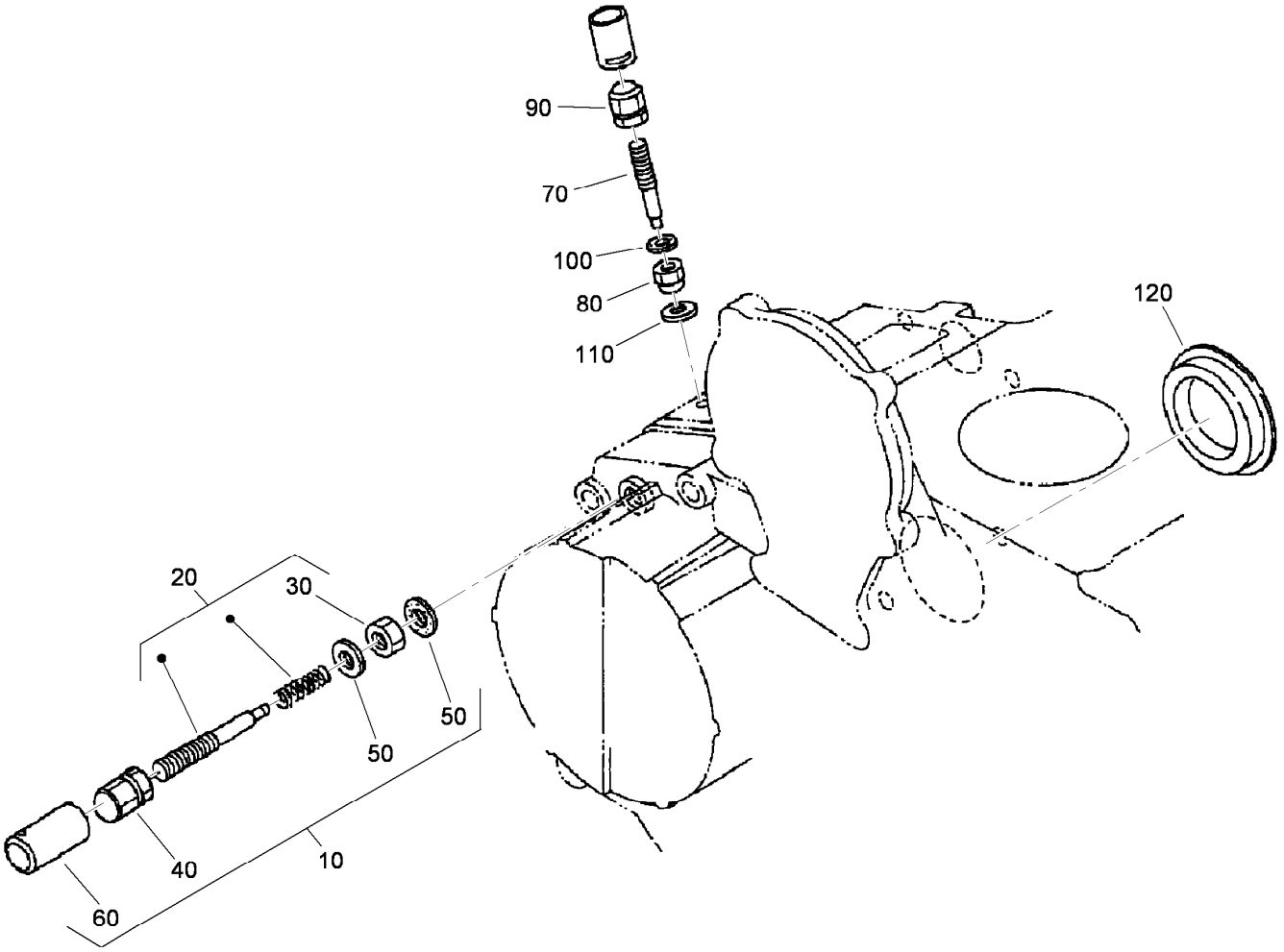

# Flywheel Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 105-3784 | 1 | Flywheel ASM |
| 20 | 115-3015 | 1 | Gear-Ring |
| 30 | 98-9537 | 6 | Bolt-Flywheel |
| 40 | 98-9486 | 1 | Plate-End, Rear |
| 50 | 98-9392 | 8 | Bolt |



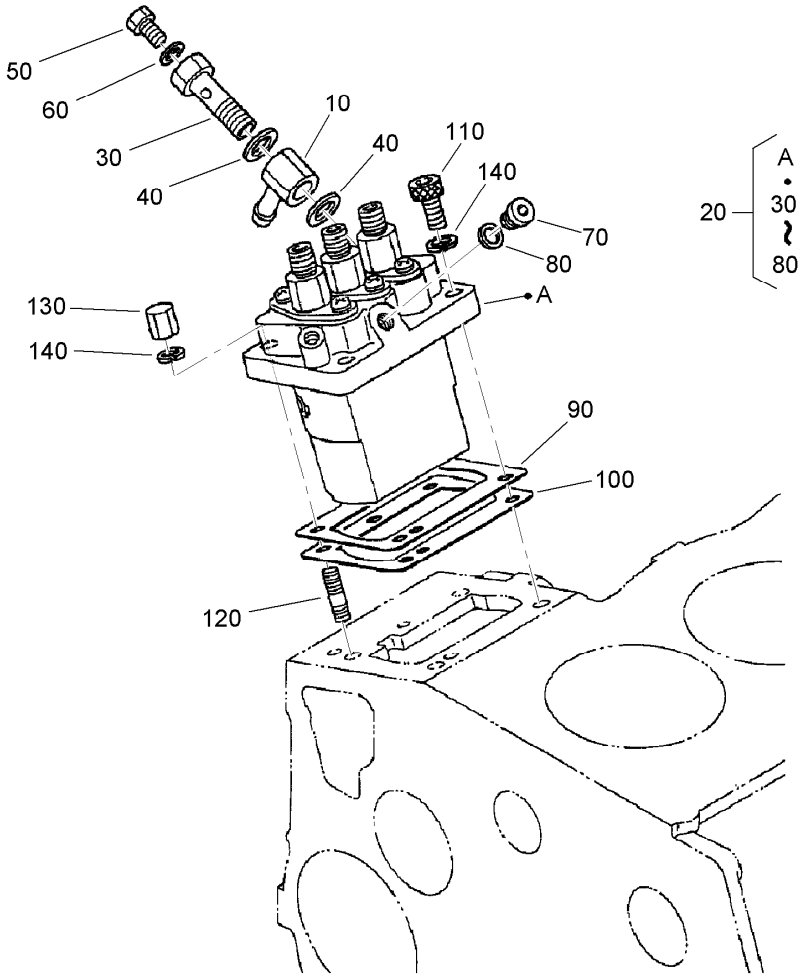

# Fuel Camshaft and Governor Shaft Assembly

| *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 |



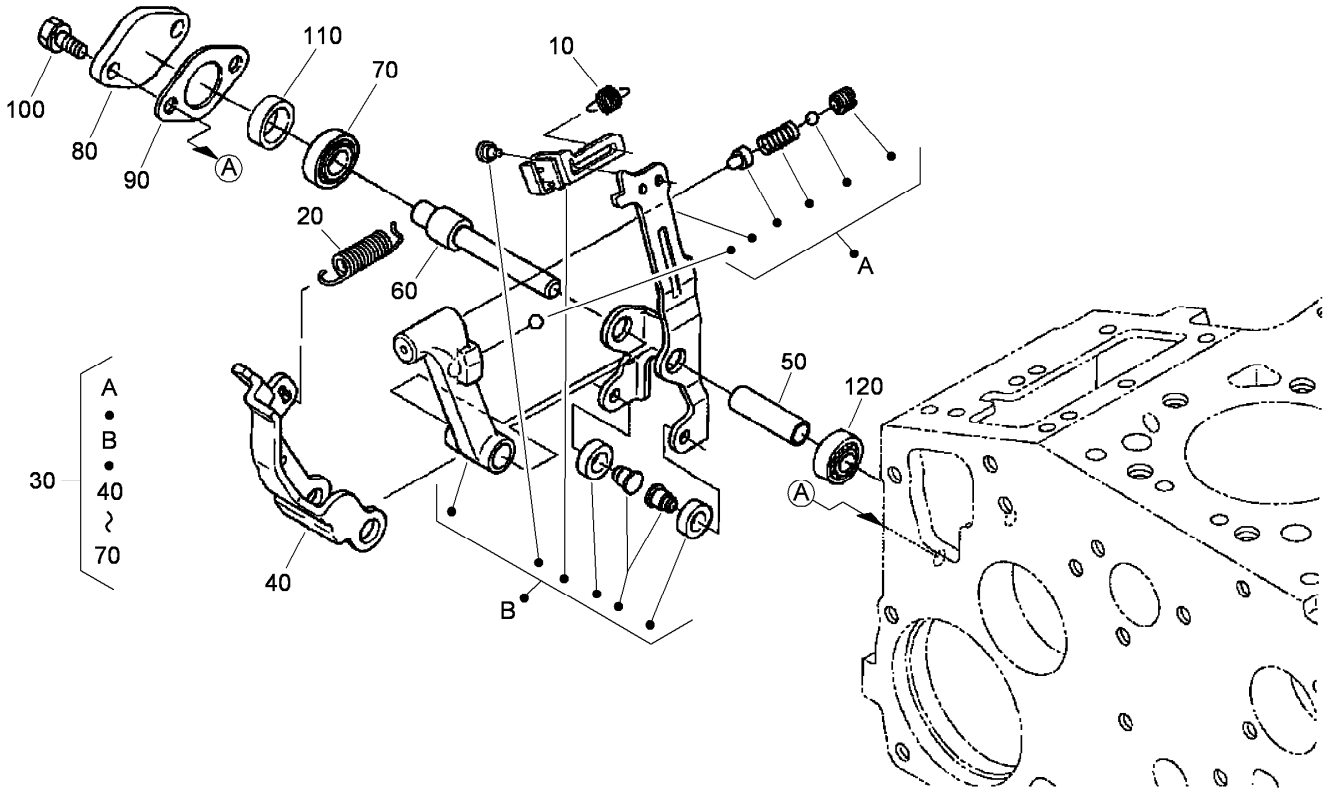

# Idle Apparatus Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-9678 | 1 | Idle Apparatus ASM |
| 20 | 112-7014 | 1 | Adjusting Bolt ASM |
| 30 | 99-8387 | 1 | Nut-Cap |
| 40 | 112-0181 | 1 | Nut |
| 50 | 98-7654 | 2 | Gasket |
| 60 | 98-7656 | 1 | Cap |
| 70 | 112-7015 | 1 | Bolt-Adjusting |
| 80 | 100-2175 | 1 | Nut-Lock |
| 90 | 112-0181 | 1 | Nut |
| 100 | 98-7654 | 1 | Gasket |
| 110 | 107-9081 | 1 | Gasket |
| 120 | 112-7016 | 1 | Cover-Pump |



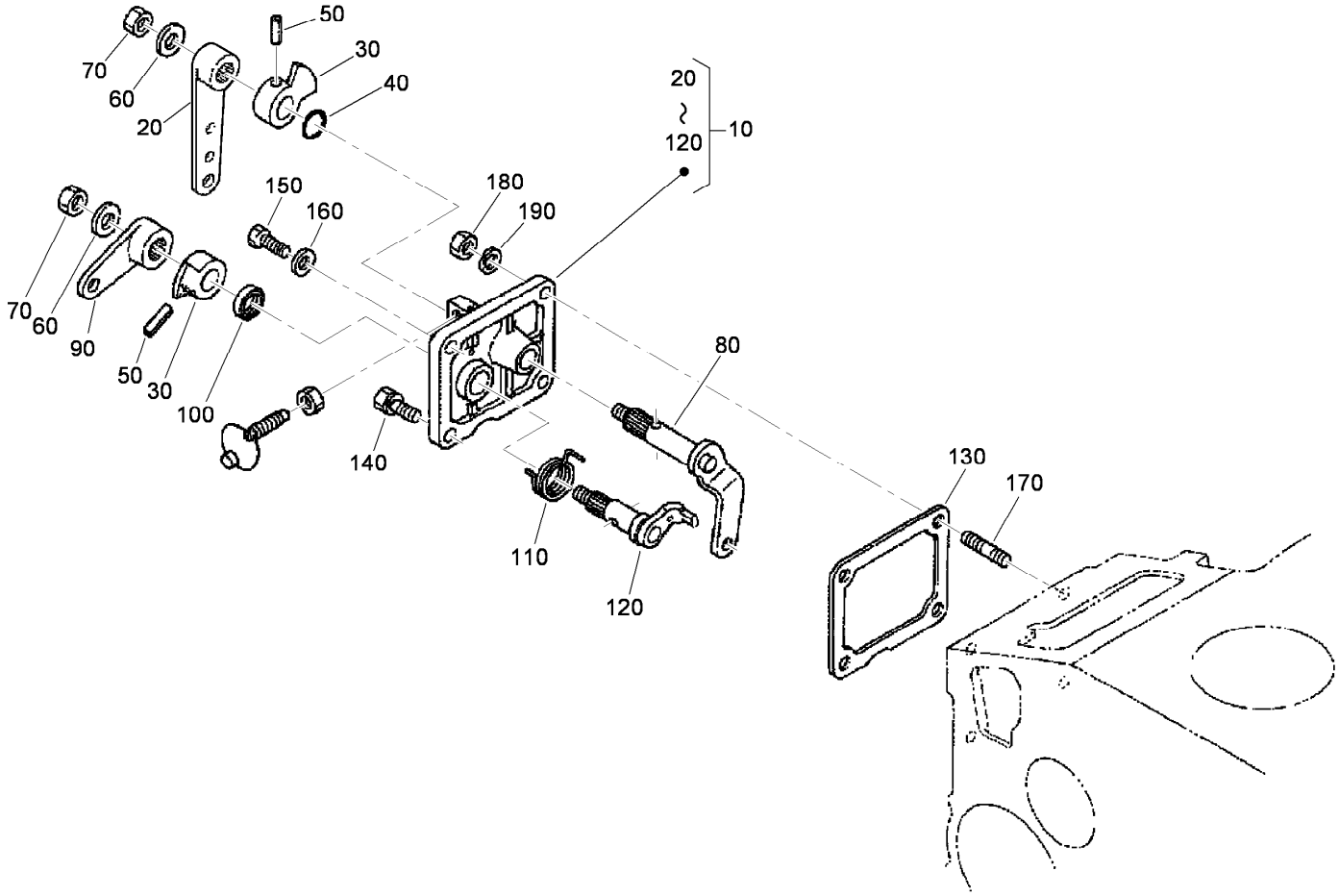

# Injection Pump Assembly

| *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 |



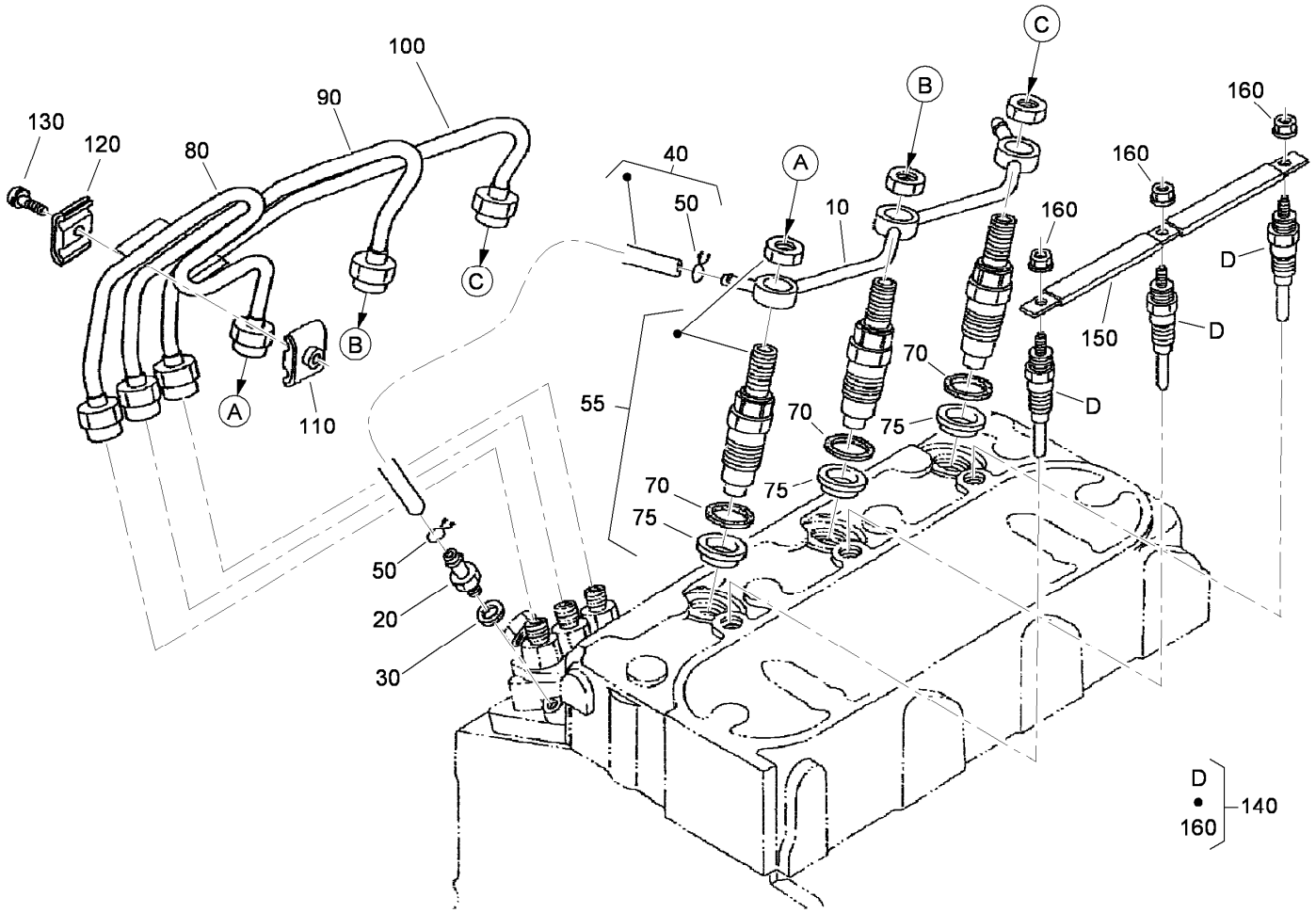

# Governor Assembly

| *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 | 98-9350 | 2 | Bolt |
| 110 | 98-9567 | 1 | Collar |
| 120 | 98-9571 | 1 | Bearing-Miniaturize |



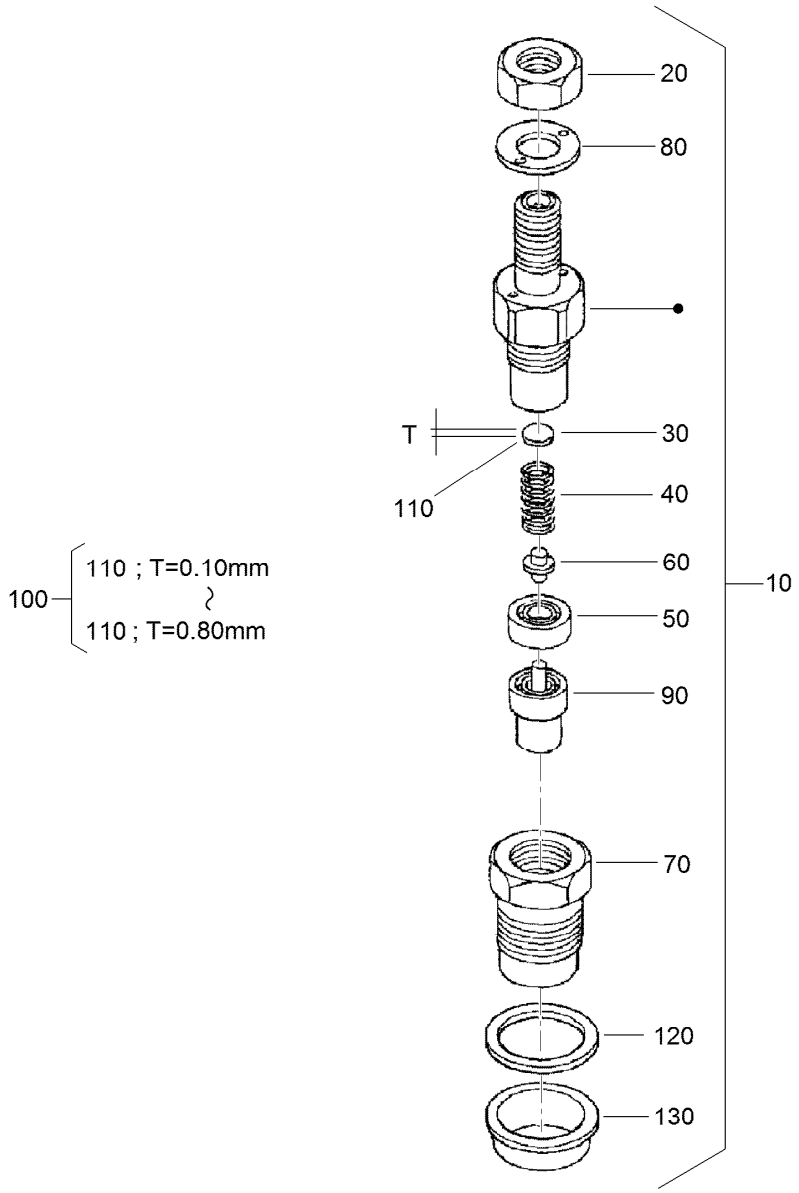

# Speed Control Plate Assembly

| *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 |




# Nozzle Holder and Glow Plug Assembly

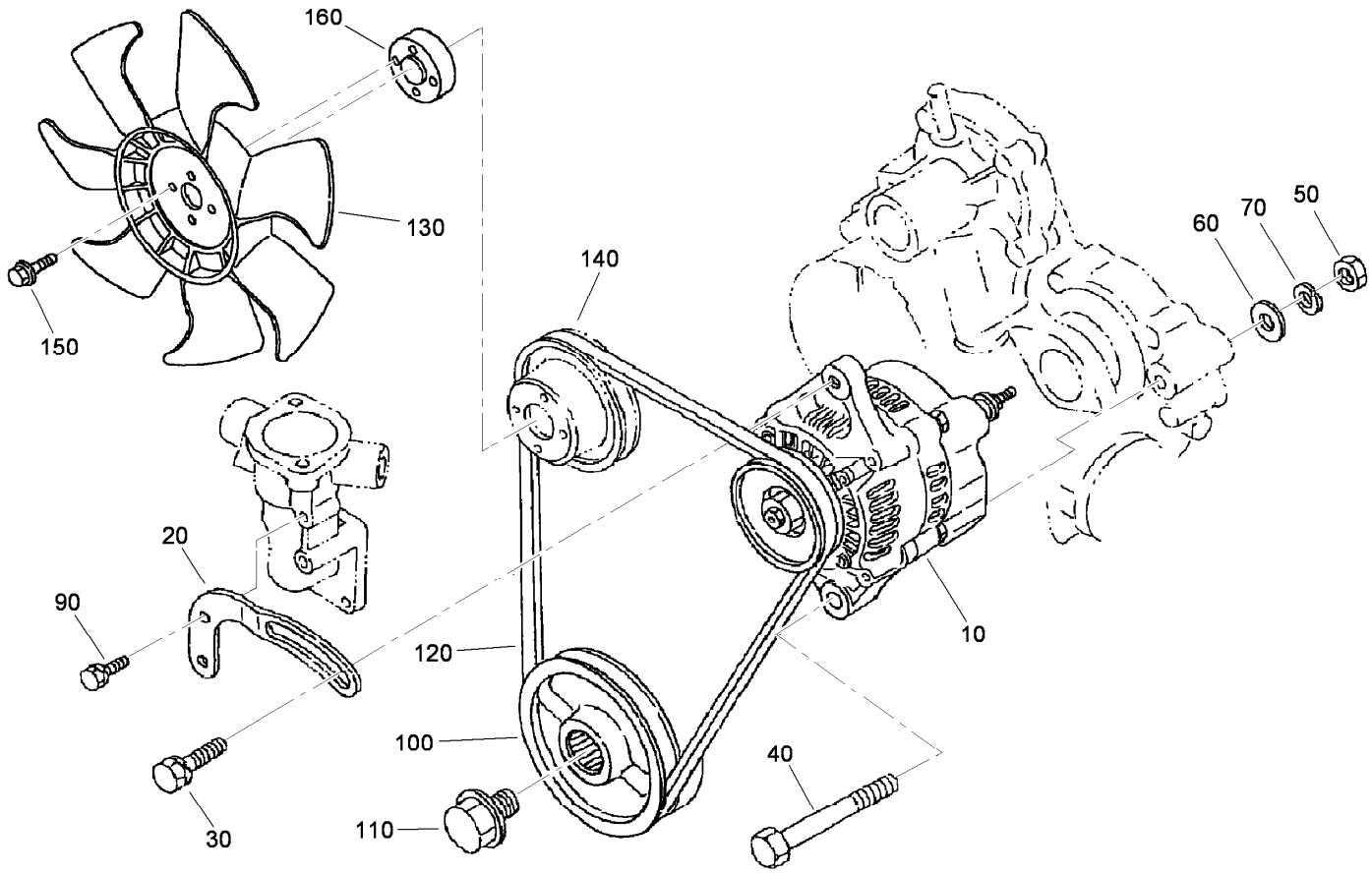
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-9621 | 1 | Overflow Pipe ASM |
| 20 | 98-9431 | 1 | Screw-Bleeder, Air |
| 30 | 98-7654 | 1 | Gasket |
| 40 | 98-9624 | 1 | Overflow Pipe ASM |
| 50 | 98-7671 | 2 | Clip-Pipe |
| 55 | 108-2866 | 3 | Nozzle Holder Kit |
| 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 |




# Nozzle Holder Assembly

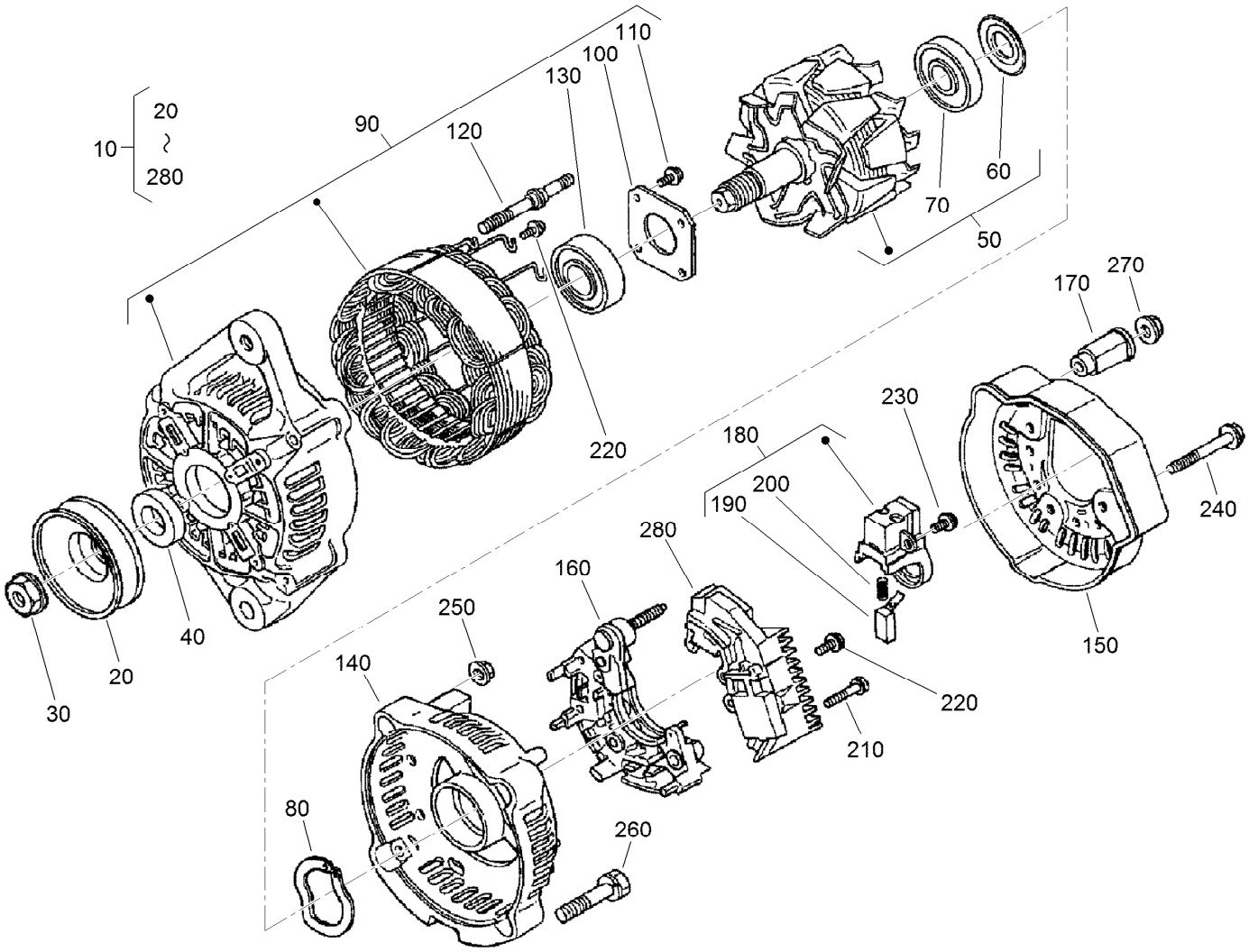
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 10 | 108-2866 | 3 | Nozzle Holder Kit |
| 20 | 99-8301 | 3 | Nut |
| 30 | 99-8302 | 3 | Washer-Adjusting |
| 40 | 99-8303 | 3 | Spring-Nozzle |
| 50 | 99-8304 | 3 | Spacer-Distance |
| 60 | 99-8305 | 3 | Rod-Push |
| 70 | 99-8306 | 3 | Nut-Nozzle |
| 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) |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 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

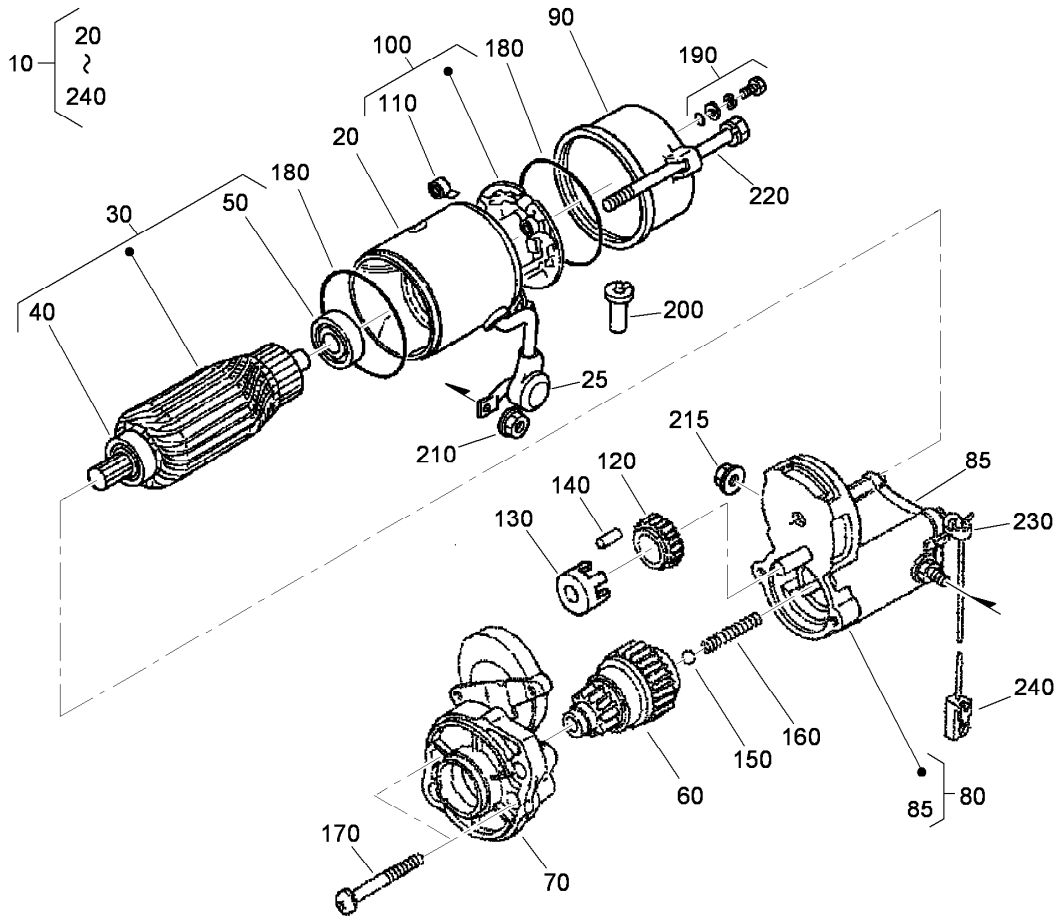
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-9474 | 1 | Alternator ASM |
| 20 | 112-7047 | 1 | Stay-Dynamo |
| 30 | 108-7088 | 1 | Bolt |
| 40 | 98-9360 | 1 | Bolt |
| 50 | 98-7737 | 1 | Nut |
| 60 | 98-9366 | 1 | Washer-Plain |
| 70 | 98-7738 | 1 | Washer-Spring |
| 90 | 98-7692 | 1 | Bolt |
| 100 | 98-9473 | 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 | 33103-020 | 4 | Screw-HHF |
| 160 | 108-2872 | 1 | Collar-Fan |




# Alternator Components 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 | 133-2811 | 1 | Bearing |
| 140 | 107-9087 | 1 | Frame-End |

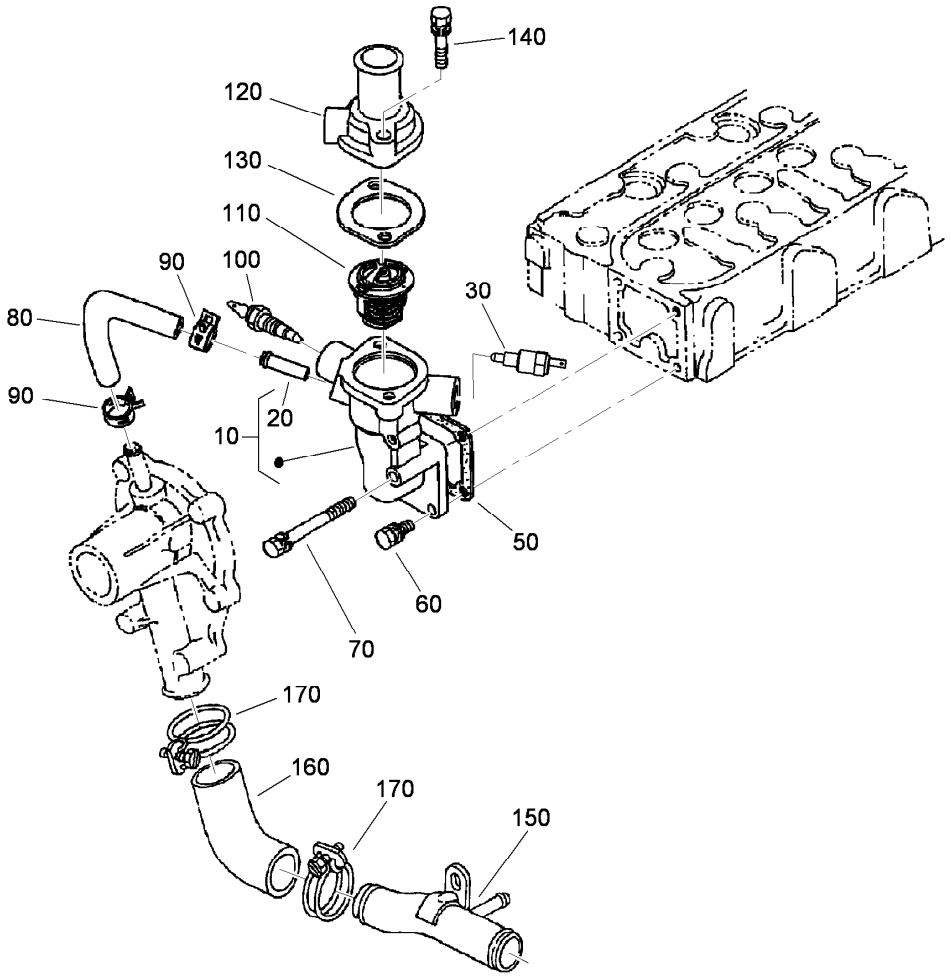
| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 150 | 107-0140 | 1 | Cover-End |
| 160 | 98-7721 | 1 | Rectifier ASM |
| 170 | 98-7722 | 1 | Bushing-Insulation |
| 180 | 107-0141 | 1 | Brush Holder ASM |
| 190 | 98-7724 | 2 | Brush |
| 200 | 98-7725 | 2 | Spring-Brush |
| 210 | 98-7726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




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

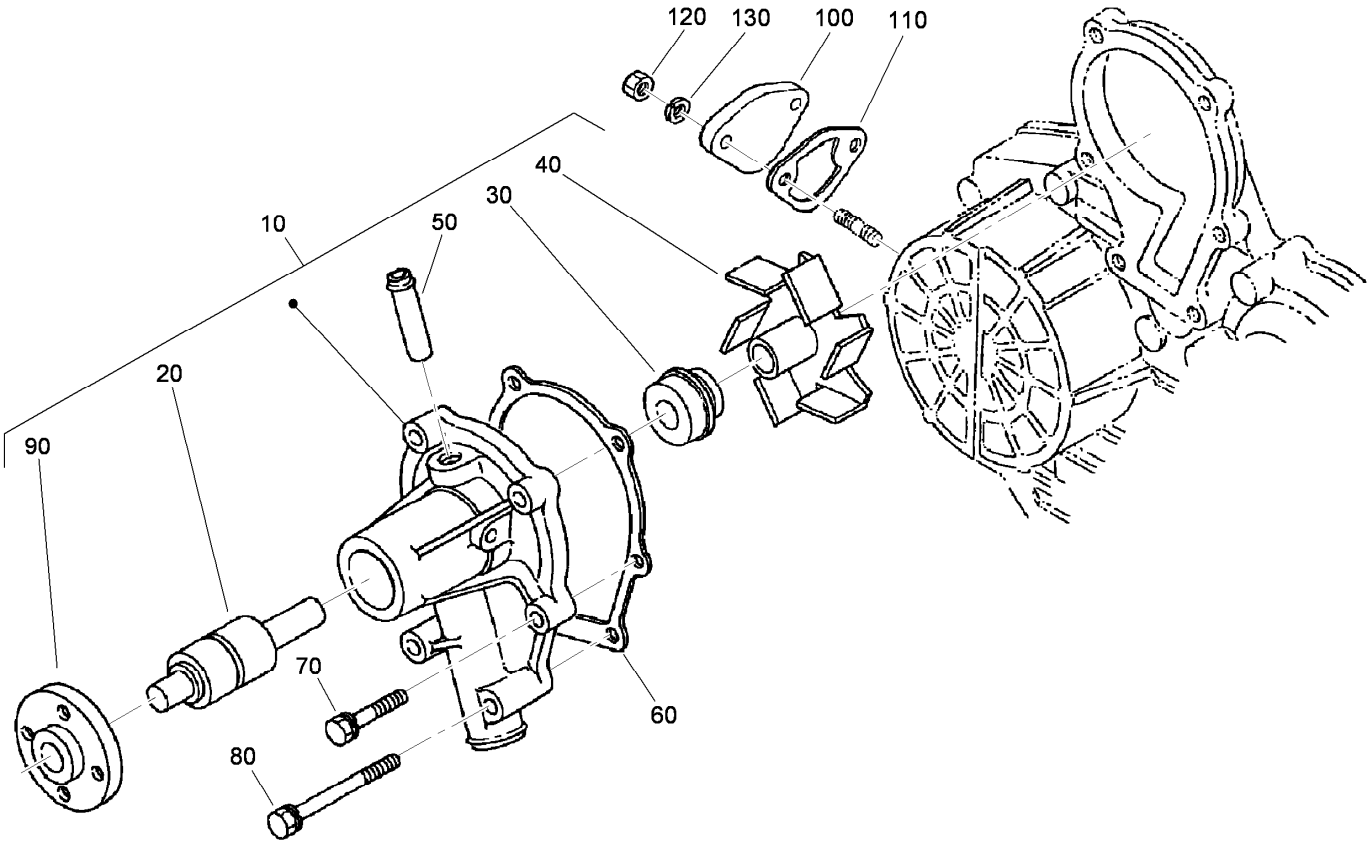
| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-9705 | 1 | Starter ASM |
| 20 | 104-8608 | 1 | Yoke ASM |
| 25 | 99-8375 | 1 | Cover |
| 30 | 98-7742 | 1 | Armature ASM |
| 40 | 98-7744 | 1 | Bearing |
| 50 | 98-7743 | 1 | Bearing |
| 60 | 99-8373 | 1 | Clutch-Running, 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 |



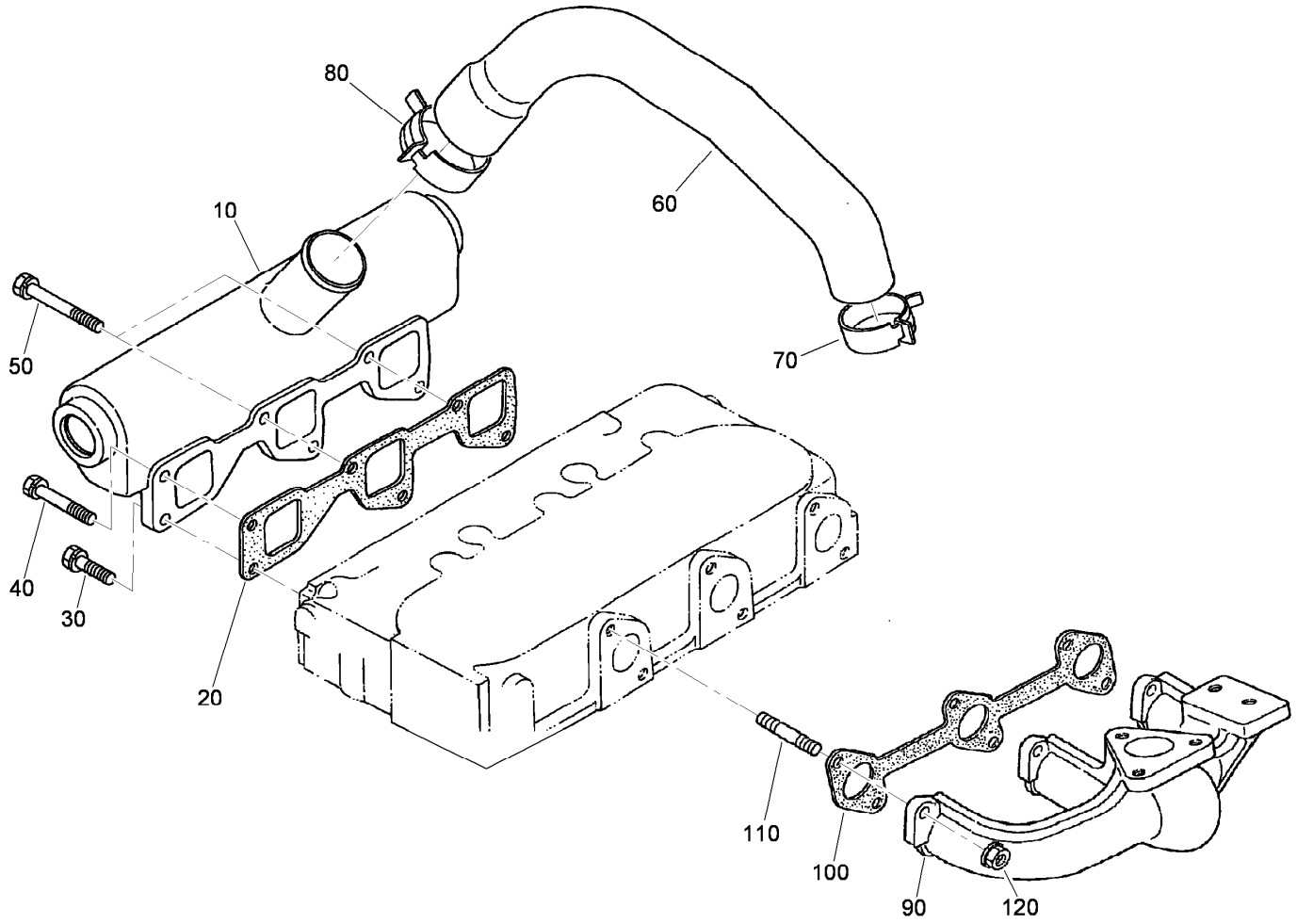

# Water Flange and Thermostat Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 98-9713 | 1 | Water Flange ASM |
| 20 | 98-9580 | 1 | Pipe-Return, Water |
| 30 | 98-9719 | 1 | Thermoswitch |
| 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 | 112-0183 | 1 | Switch-Thermometer |
| 110 | 98-7778 | 1 | Thermostat ASM |
| 120 | 98-9471 | 1 | Cover-Thermostat |
| 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 |



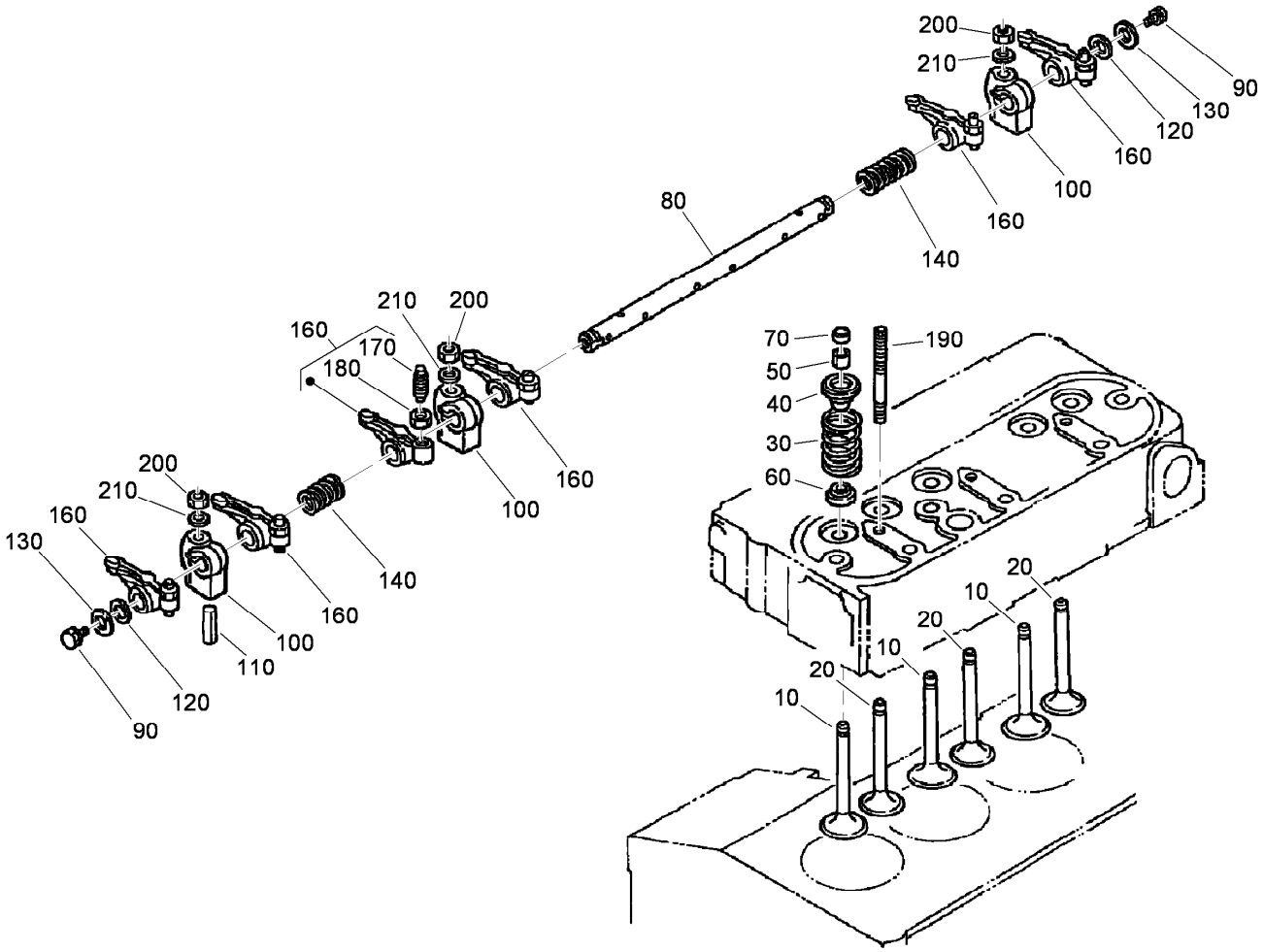

# Water Pump Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 107-9089 | 1 | Water Pump ASM |
| 20 | 99-3517 | 1 | Bearing-Pump, Water |
| 30 | 105-3750 | 1 | Mechanical Seal ASM |
| 40 | 112-7017 | 1 | Impeller-Pump, Water |
| 50 | 100-1932 | 1 | Pipe-Return, Water |
| 60 | 99-3454 | 1 | Gasket-Pump, Water |
| 70 | 98-9353 | 4 | Bolt |
| 80 | 107-9090 | 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 |



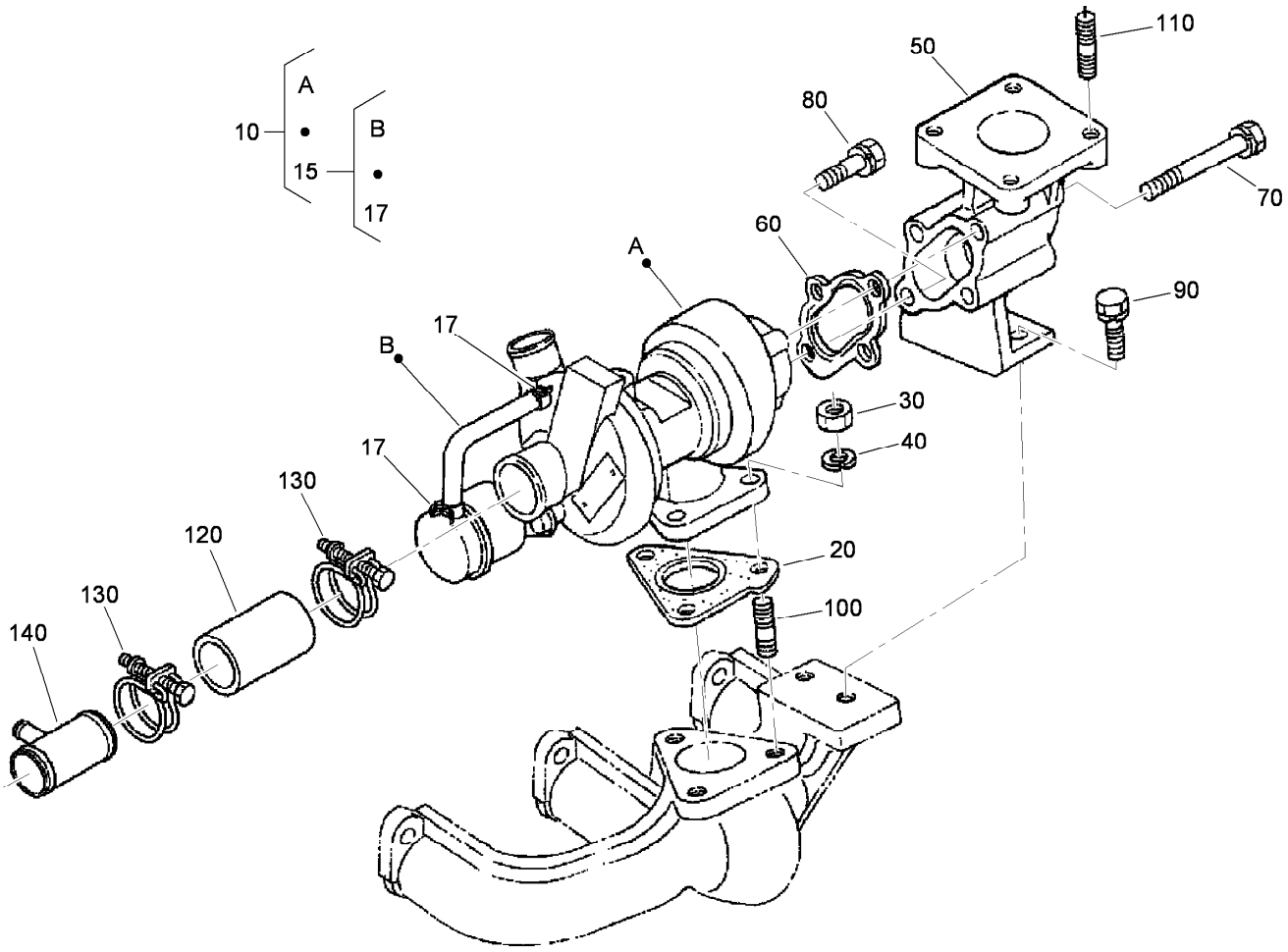

# Inlet and Exhaust Manifold Assembly

| *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 | 115-3047 | 1 | Hose-Inlet |
| 70 | 115-3048 | 1 | Clamp-Hose |
| 80 | 115-3049 | 1 | Clamp-Hose |
| 90 | 108-1411 | 1 | Manifold-Exhaust |
| 100 | 99-8327 | 1 | Gasket-Manifold, Exhaust |
| 110 | 98-9588 | 6 | Stud |
| 120 | 98-9665 | 6 | Nut |



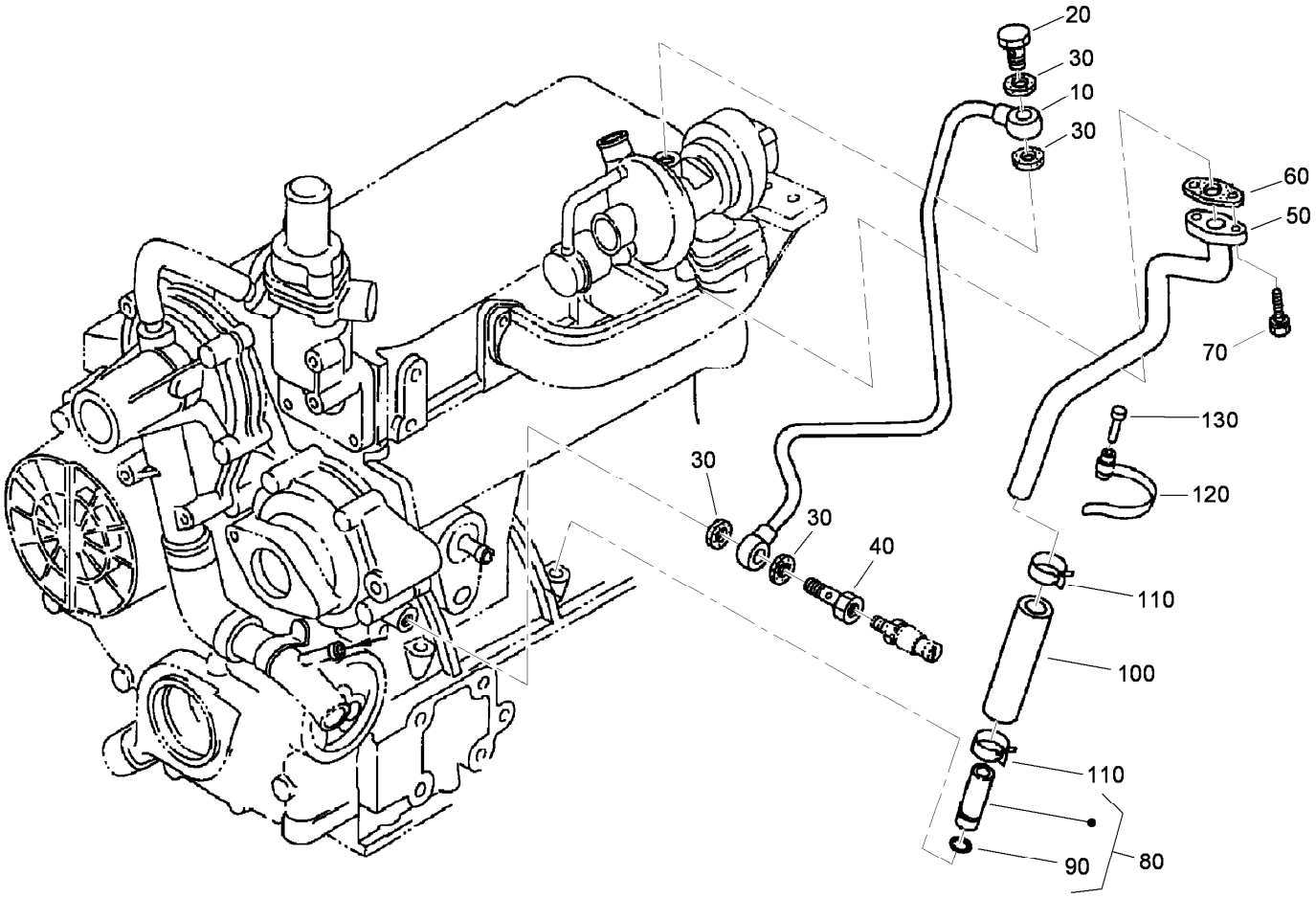

# Valve and Rocker Arm Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 112-7018 | 3 | Valve-Inlet |
| 20 | 112-7019 | 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 | 110-3832 | 2 | Washer-Plain |
| 140 | 98-9504 | 2 | Spring-Arm, Rocker |
| 160 | 112-7020 | 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 |



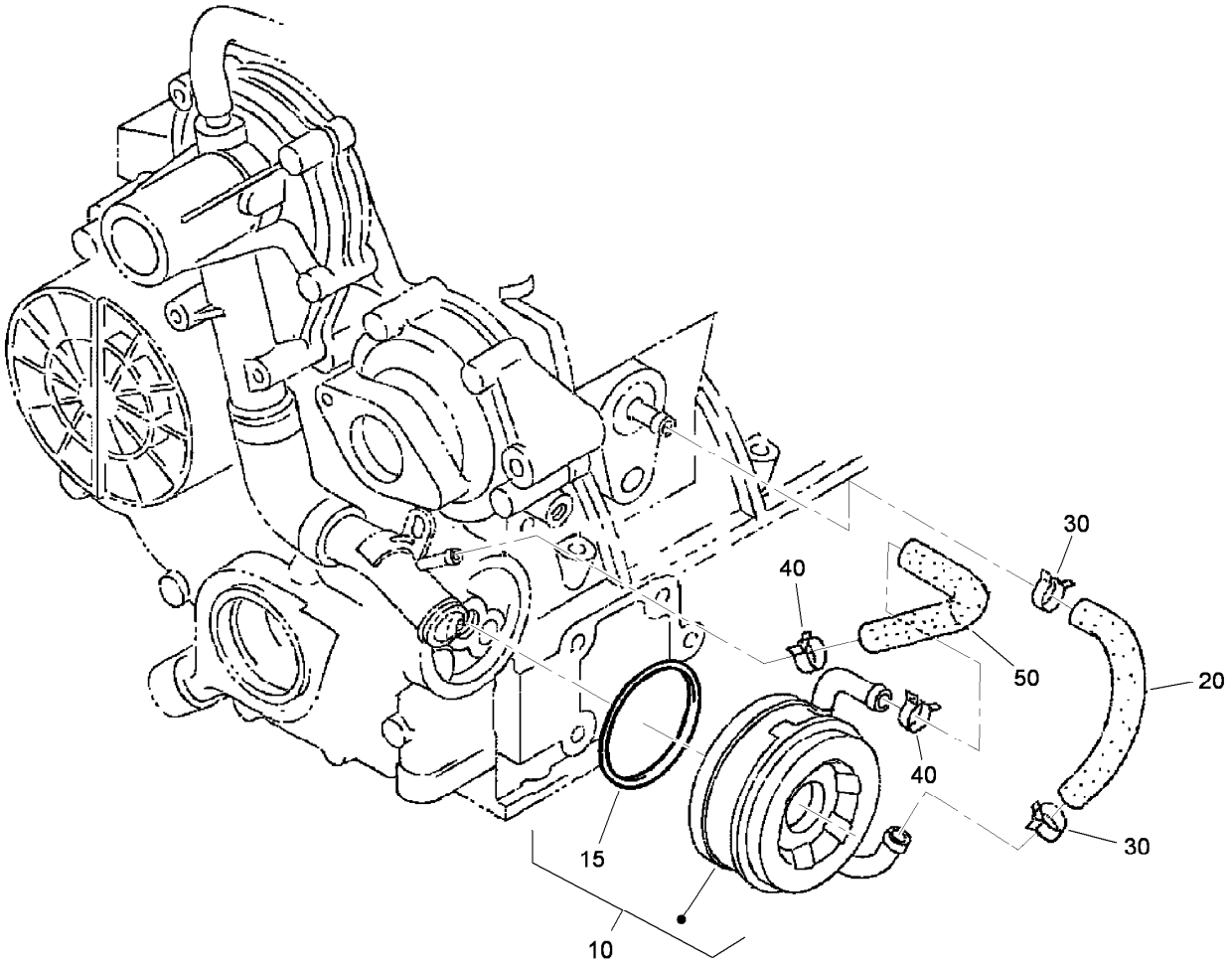

# Turbo Charger Assembly

| *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 | 105-2893 | 3 | Washer-Spring |
| 50 | 99-8335 | 1 | Flange-Muffler |
| 60 | 105-3768 | 1 | Gasket |
| 70 | 115-4100 | 3 | Bolt |
| 80 | 105-2895 | 1 | Bolt |
| 90 | 98-7610 | 2 | Bolt |
| 100 | 99-8342 | 3 | Stud |
| 110 | 98-7769 | 4 | Stud |
| 120 | 115-4101 | 1 | Tube-Inlet, Turbo |
| 130 | 115-4102 | 2 | Band |
| 140 | 115-4103 | 1 | Pipe-Inlet, Breather |



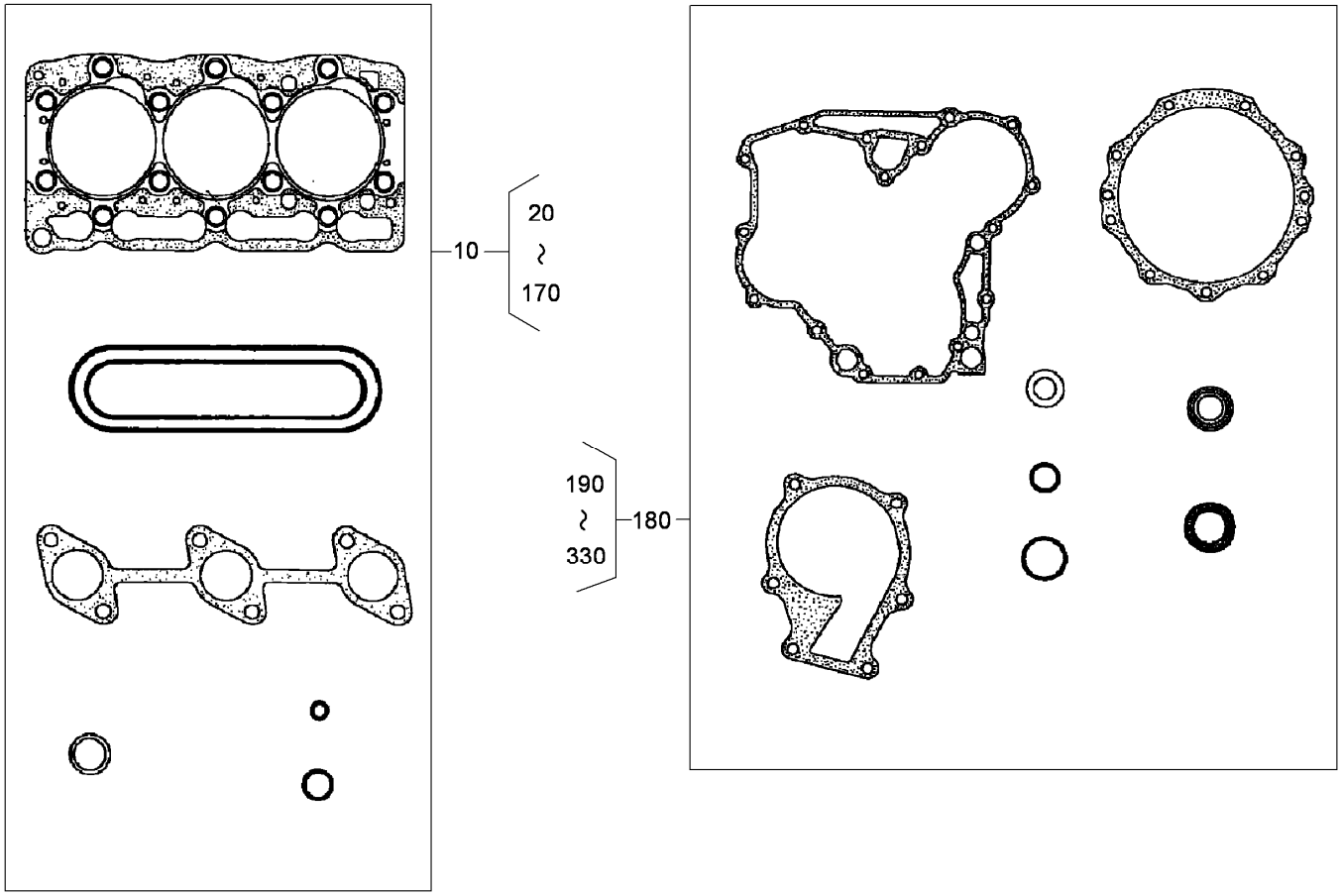

# Turbo Charger Oil Pipe Assembly

| *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 | 108-4422 | 1 | Gasket |
| 70 | 98-7605 | 2 | Bolt |
| 80 | 99-8383 | 1 | Oil Pipe ASM |
| 90 | 98-9722 | 1 | 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 |




# Oil Cooler Assembly

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 104-5158 | 1 | Oil Cooler ASM |
| 15 | 112-7030 | 1 | O-Ring |
| 20 | 98-9724 | 1 | Pipe-Cooler, Oil |
| 30 | 98-9579 | 2 | Band-Pipe |
| 40 | 98-9579 | 2 | Band-Pipe |
| 50 | 98-9578 | 1 | Pipe-Return, Water |

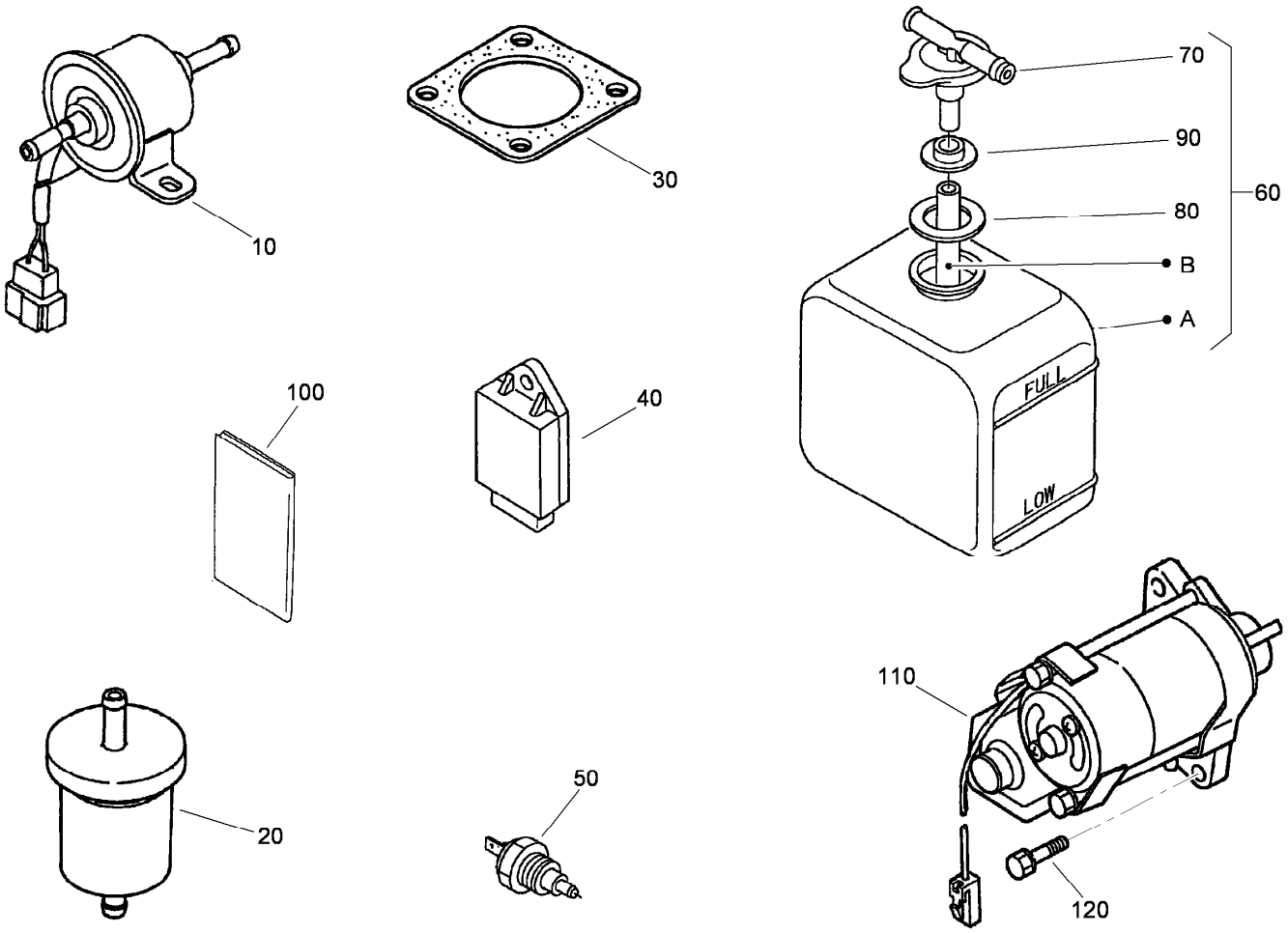



# Gasket Kit

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 10 | 108-1415 | 1 | Upper Gasket Kit |
| 20 | 108-6573 | 1 | Gasket-Head, Cylinder ● |
| 40 | 99-8329 | 1 | Gasket-Manifold, Intake ● |
| 50 | 105-3767 | 1 | Gasket ● |
| 60 | 105-3768 | 1 | Gasket ● |
| 70 | 99-8327 | 1 | Gasket-Manifold, Exhaust ● |
| 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 | 108-4422 | 1 | Gasket ● |
| 140 | 98-9722 | 1 | O-Ring ● |
| 150 | 98-9638 | 1 | Gasket-Flange, Water ● |
| 160 | 105-3748 | 1 | Gasket-Thermostat ● |
| 170 | 99-8343 | 1 | Gasket-Muffler ● |
| 180 | 112-7041 | 1 | Lower Gasket Kit |

| Ref. | Part Number | Qty. | Description |
|---|---|---|---|
| 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




# Electric Fuel Pump, Fuel Filter, Starter and Overflow Bottle Assemblies

| *Ref.* | *Part Number* | *Qty.* | *Description* |
|---|---|---|---|
| 10 | 107-0122 | 1 | Pump-Fuel, Electric |
| 20 | 98-7612 | 1 | Filter-Fuel |
| 30 | 99-8343 | 1 | Gasket-Muffler |
| 40 | 98-7611 | 1 | Controller-Glow |
| 50 | 98-9719 | 1 | Thermoswitch |
| 60 | 108-0638 | 1 | Bottle-Overflow |
| 70 | 105-3754 | 1 | Cap |
| 80 | 105-3755 | 1 | Gasket |
| 90 | 105-3756 | 1 | Plate |
| 100 | 115-4104 | 1 | Operator Manual |
| 110 | 98-9705 | 1 | Starter ASM |
| 120 | 98-7697 | 2 | Bolt |

# Attachments and Accessories

## For 30487TC Groundsmaster 7210 Series Traction Unit

| Product Name | Model/Part |
|---|---|
| Auxiliary Hydraulic Power Kit | 30380 |
| Auxiliary Power Unit | 30382 |
| Debris Blower | 30393 |
| Tooth Rake | 08751 |
| Finish Grader | 08754 |
| Drag Mat Carrier System | 08756 |
| Steel Drag Mat | 08757 |
| Coco Drag Mat | 08758 |
| Universal Sunshade | 30349 |
| 42-pound Weight, For Kit 114-4090 | 114-4096 |
| Premium Transmission/Hydraulic Tractor Fluid (55 Gallon Drum) | 108-1183 |
| Premium Transmission/Hydraulic Tractor Fluid (5 Gallon Pail) | 108-1184 |
| Green Diesel Cap | 107-2172 |
| Yellow Hydraulic Cap | 107-1576 |
| Overflow Tank Kit | 117-5570 |
| Brake Service Kit | 120-0015 |
| Gm7210 Manufacturers Certificate | 111-5968 |
| Jack-Stand Kit | 30483 |
| Fender Kit | 117-9170 |
| Polar Trac Cab | 30474 |
| V-Plow Mounting Kit | 30378 |
| Polar Trac Kit | 30675 |
| 48in V-Plow | 30750 |
| Tuv Kit Instructions | 111-5910 |
| Tuv Kit Instructions | 111-5243 |
| TÜV Kit - Speed Decal 20kph | 02980 |
| TÜV Kit - German Vehicle Serial Plate | 02983 |
| 5in Air Cleaner Safety Element | 114-4057 |
| Fuse-In Line | 111-5101 |
| CE Kit | 30240 |
| Blade-Belt Kit, 72in Side Discharge Deck | 105-7272 |
| Spark Arrestor Kit | 112-1688 |
| 400-hour Filter Maintenance Kit | 30052 |
| Grass Collection System | 30460 |
| Rear QAS | 30812 |
| 60-Amp Alternator Kit, Kubota 05 Series-Powered Traction Unit | 117-5540 |
| Hitch Kit, Groundsmaster 7200/7210 Series Traction Unit with Kubota Engine | 130-8717 |
| Hitch Kit | 130-8718 |
| Wheel and Tire ASM (Semi Pneumatic) | 110-6406 |
| Weight Mount Bracket Kit | 114-4090 |
| Weight Bracket Kit | 125-2670 |
| Premium Engine Oil 15w40 (55 Gallon Drum) | 121-6394 |
| Tire-Lug (24 X 12 - 12) | 103-6771 |
| Premium Engine Oil 15w40 (5 Gallon Pail) | 121-6395 |
| Slow Moving Vehicle Kit | 114-4050 |
| North American Road Light Kit | 30374 |

# Attachments and Accessories (continued)

Recycler Kit, 60in Side Discharge Deck ..... 30348
CE Kit, Grass Collection System ..... 117-9249
60in Side Discharge Mower ..... 30456
Baffle, Blower Housing ..... 30658
Blade-Belt Kit ..... 105-7270
62in Rear Discharge Completion Kit ..... 30463
62in Guardian Recycler Completion Kit ..... 30306
62in Rotary Mower ..... 30457
62in CE Mower Cover Kit ..... 30683
Blade-Belt Kit, 72in Guardian Only ..... 105-7271
72in Rear Discharge Completion Kit ..... 30466
72in Guardian Recycler Completion Kit ..... 30304
72in Guardian Fine Recycler Completion Kit ..... 30346
72in Base Deck ..... 30353
72in Guardian and Rear Discharge CE Mower Cover Kit ..... 30685
Leaf Mulching Kit ..... 108-5273
Recycler Kit, 72in Side Discharge Deck ..... 30347
Striping Kit ..... 105-7273
72in Side Discharge Deck ..... 30481
72in Side Discharge Mower (CE) ..... 30354
CE Kit, 72in Side Deck With French Guards ..... 30679
100in Rear Discharge Deck ..... 31101
Adapter Kit for 100in Rear Discharge Deck ..... 31104
Leaf Mulching Kit for 100in Rear Discharge Deck ..... 31105
100in CE Mower Cover Kit ..... 30687

## Notes:

## Notes:

**Count on it.**