



**Count on it.**

**Parts Catalog**

**Groundsmaster® 3280-D 4-Wheel  
Drive Traction Unit**

**Model No. 30345—Serial No. 311000301 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.

# List of Abbreviations

**AR:** as required

**ASM:** assembly

**BBC:** blade brake control

**BHTF:** button head thread forming

**CARR:** carriage

**CCW:** counter clockwise

**CW:** clockwise

**DEG:** degrees

**DPA:** Dual Point Adjustment

**ECM:** electronic control module

**EXT:** external

**FH:** flat head

**GA:** gauge

**HD:** heavy-duty

**HF:** hex flange

**HH:** hex head

**HHF:** hex head flange

**HHFTF:** hex head flange thread forming

**HJ:** hex jam

**HLH:** hex lag head

**HOC:** height-of-cut

**HSBH:** hex socket button head

**HSFH:** hex socket flat head

**HSH:** hex socket head

**HWH:** hex washer head

**HWTF:** hex washer head thread forming

**HYD:** hydraulic

**LH:** left hand

**LP:** Liquid Propane

**NI:** nylon insert

**NPTF:** national pipe thread fine

**PFH:** phillips flat head

**PPH:** phillips pan head

**PPHTF:** phillips pan head thread forming

**PRH:** phillips round head

**PTH:** phillips truss head

**PTO:** power-take-off

**RH:** right hand

**ROPS:** roll-over protection system

**RRB:** rear roller brush

**SFH:** slotted fillister head

**SHH:** slotted hex head

**SHWH:** slotted hex washer head

**SPH:** slotted pan head

**SQH:** square head

**SRH:** slotted round head

**STD:** standard

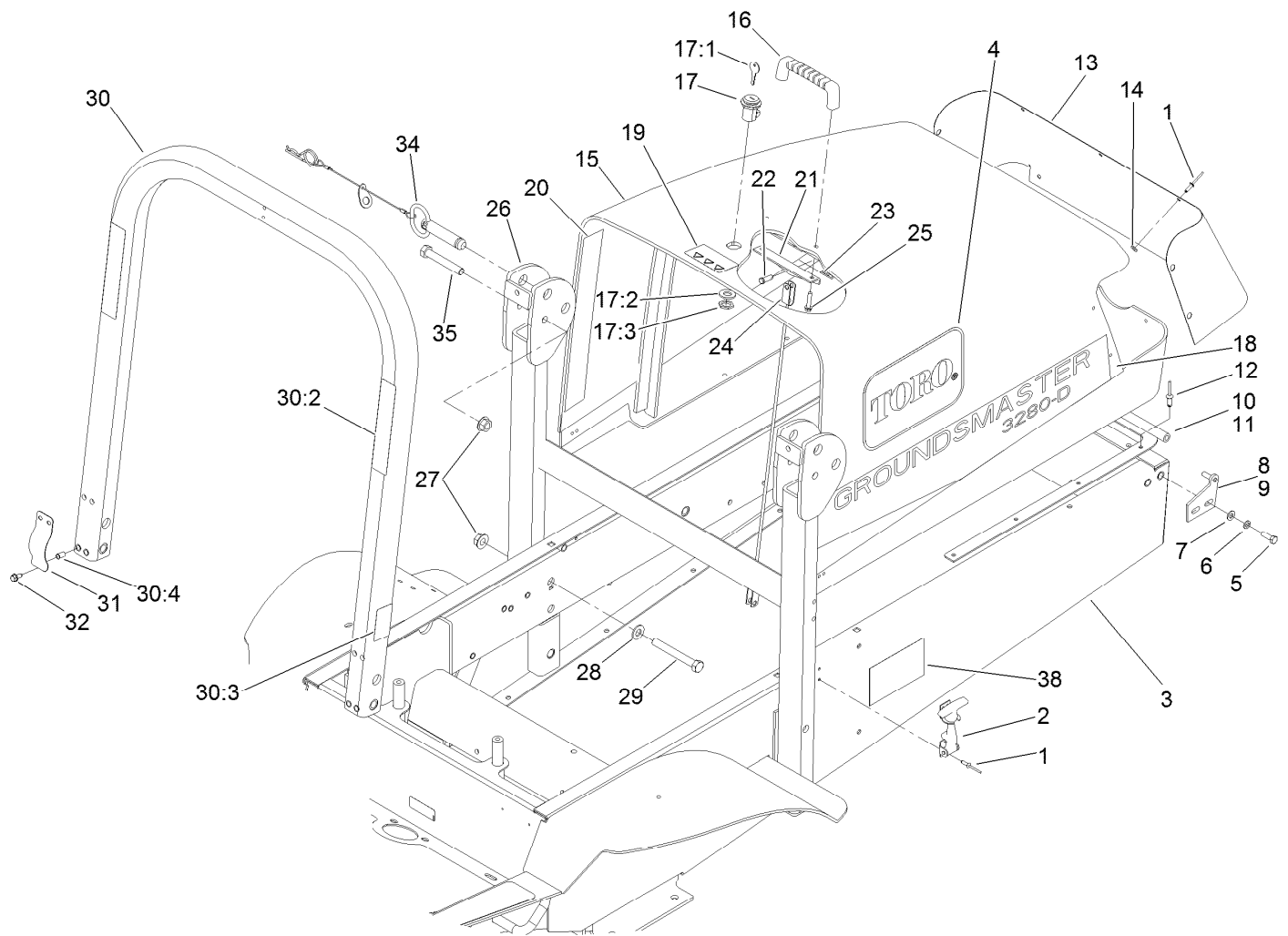
**TAP:** self tapping

**TTH:** torx truss head

# Contents

Frame and Hood Assembly	5
Frame Assembly No. 120-6601	7
Fuel Tank and Control Panel Assembly	8
Power Steering Assembly	10
Steer Valve Assembly No. 108-2077	11
Traction Pedal Assembly	12
Brake Pedal Assembly	13
Battery and Engine Mount Assembly	14
Power-Take-Off and Shaft Assembly	15
Hydraulic Cylinder and Lift Arm Assembly	16
Hydraulic Valve Assembly No. 119-4830	17
Radiator Assembly	18
Transmission Installation Assembly	20
Center Section Assembly Transmission Assembly No. 117-0849	22
Neutral Return Arm Assembly Transmission Assembly No. 117-0849	24
Fuel Delivery System Assembly	25
Lower Control Panel Assembly	26
Driveshaft and 4 Wheel Drive Assembly	27
Driveshaft Assembly No. 98-5009	28
Rear Axle Installation Assembly	29
Bevel Pinion Shaft Assembly Rear Axle Assembly No. 106-1120	30
Differential Assembly Rear Axle Assembly No. 106-1120	31
Axle Support Assembly Rear Axle Assembly No. 106-1120	32
Bevel Gear Case Assembly Drive Axle Assembly No. 106-1120	33
Bevel Gear Shaft Assembly Rear Axle Assembly No. 106-1120	34
Axle Case Assembly Rear Axle Assembly No. 106-1120	35
Axle Assembly Rear Axle Assembly No. 106-1120	36
Bi-Directional Clutch Assembly No. 95-6296	37
Tie Rod Assembly No. 98-3871-03	38
Hydraulic Cylinder Assembly No. 99-2415	39
Front Axle Assembly	40
Front Axle Assembly No. 108-6599-03	41
Right and Left Hand Brake Assembly	43
Engine, Fan and Muffler Assembly	44
Engine Mounting and Clutch Assembly	45
Air Cleaner and Drive Coupling Assembly	46
Air Cleaner Assembly No. 104-3427	47
Crankcase Assembly	48
Oil Pan Assembly	49
Cylinder Head Assembly	50
Gear Case Assembly	51
Cylinder Head Cover Assembly	52
Dipstick and Guide Assembly	53
Main Bearing Case Assembly	54
Cam Shaft and Idle Gear Assembly	55
Piston and Crankshaft Assembly	56
Flywheel Assembly	57
Fuel Camshaft and Governor Shaft Assembly	58
Idle Apparatus and Stop Solenoid Assembly	59
Injection Pump Assembly	60
Governor Assembly	61
Speed Control Plate Assembly	62
Nozzle Holder and Glow Plug Assembly	63
Nozzle Holder Assembly	64

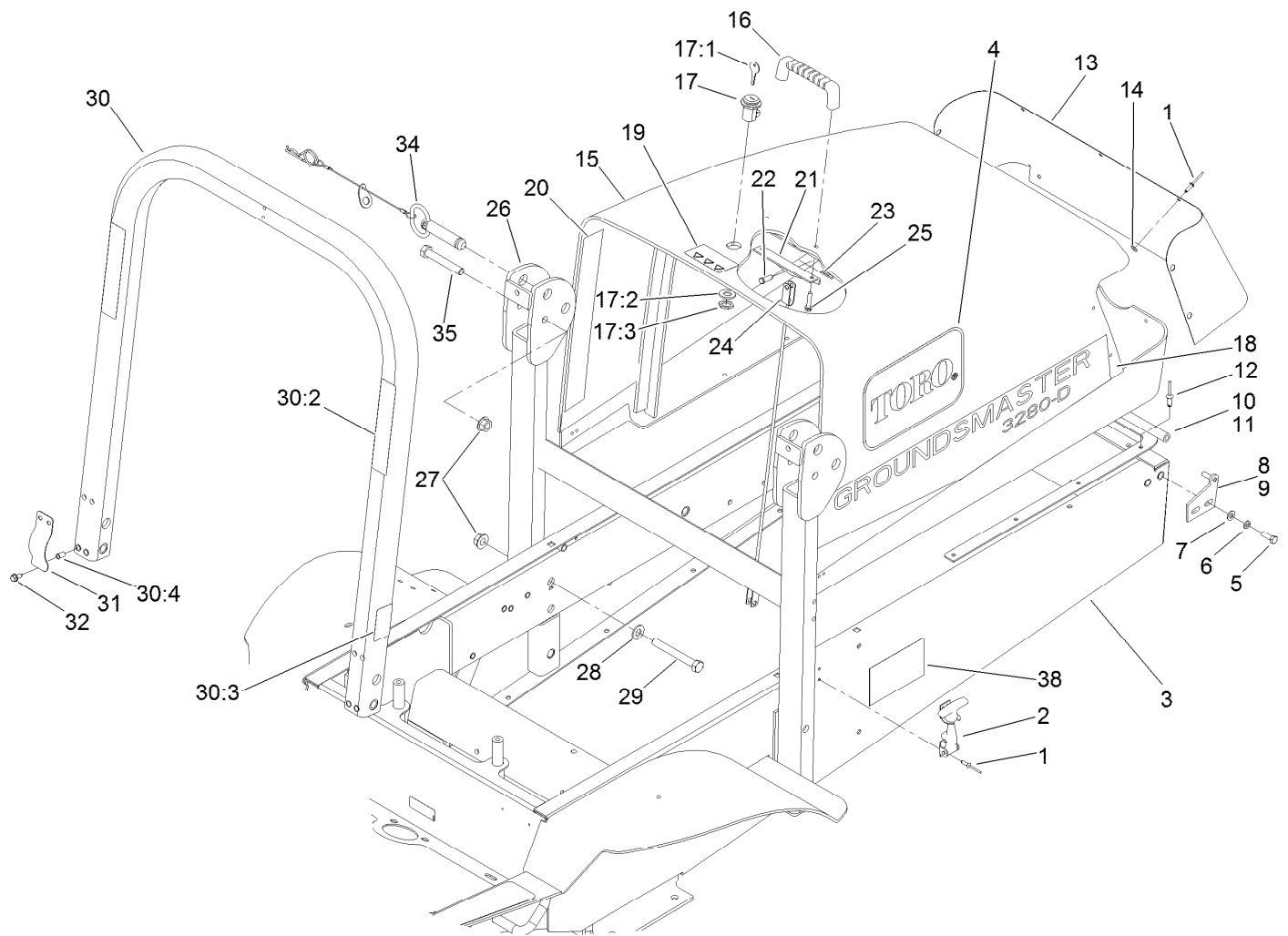
Alternator and Pulley Assembly ..... 65  
Alternator Components Assembly ..... 66  
Starter Assembly ..... 67  
Starter (Component Part) Assembly ..... 68  
Water Flange and Thermostat Assembly ..... 69  
Water Pump Assembly ..... 70  
Valve and Rocker Arm Assembly ..... 71  
Inlet and Exhaust Manifold Assembly ..... 72  
Muffler Gasket and Operator Manual ..... 73  
Upper and Lower Gasket Kits ..... 74  
Attachments and Accessories ..... 75



## Frame and Hood Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	3269-4	18	Rivet-Pop	17:3		1	Nut-Switch ●
2	95-6339	2	Latch	18	108-2067	2	Decal
3	120-6601	1	Frame ASM	19	106-6754	1	Decal-Danger
4	66-6140	2	Decal	20	105-3651	1	Strip-Foam
5	322-5	4	Screw-HH	21	105-0088-03	1	Bracket-Cable, Hood
6	3253-4	4	Washer-Lock	22	283-58	2	Pin-Clevis
7	3256-23	4	Washer-Flat	23	3290-307	2	Pin-Hair
8	105-0003-01	1	RH Hinge Pin ASM	24	105-3650	1	Cable-Hood
9	105-0004-01	1	LH Hinge Pin ASM	25	46-8092	2	Screw-Plastite
10	105-4278-03	1	LH Hood Hinge ASM	26	110-5693-03	1	Lower ROPS ASM
11	105-4277-03	1	RH Hood Hinge ASM	27	32128-23	6	Nut-HF
12	3290-412	12	Rivet	28	3256-26	4	Washer-Flat
13	105-0006-03	1	Screen-Hood	29	325-18	4	Screw-HH
14	3256-14	14	Washer-Flat	30	110-5690	1	Upper ROPS ASM
15	119-2195	1	Hood ASM	30:2	108-2073	2	Decal-Warning
16	65-5100	1	Handle-Door	30:3	108-2074	1	Decal-ROPS
17	98-9315	1	Latch-Locking	30:4	32148-11	4	Insert-Threaded
17:1	99-8350	2	Key-Latch, Locking	31	110-5696	2	Spring-Leaf
17:2		1	Washer-Switch ●	32	32144-10	4	Screw-HWH

● Not serviced separately

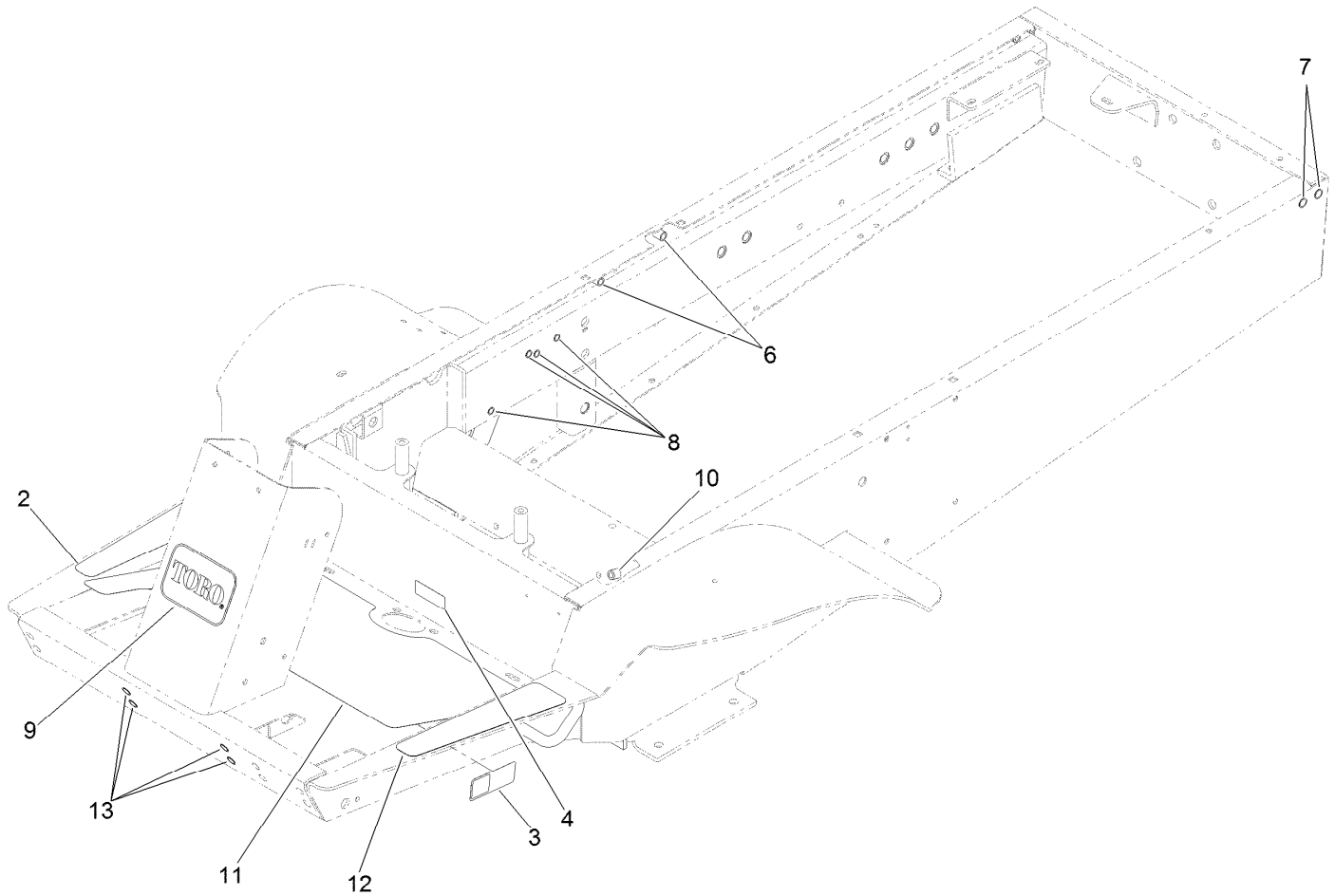


## Frame and Hood Assembly (continued)

Ref.	Part Number	Qty.	Description
34	103-4553	2	ROPS Fold Pin ASM

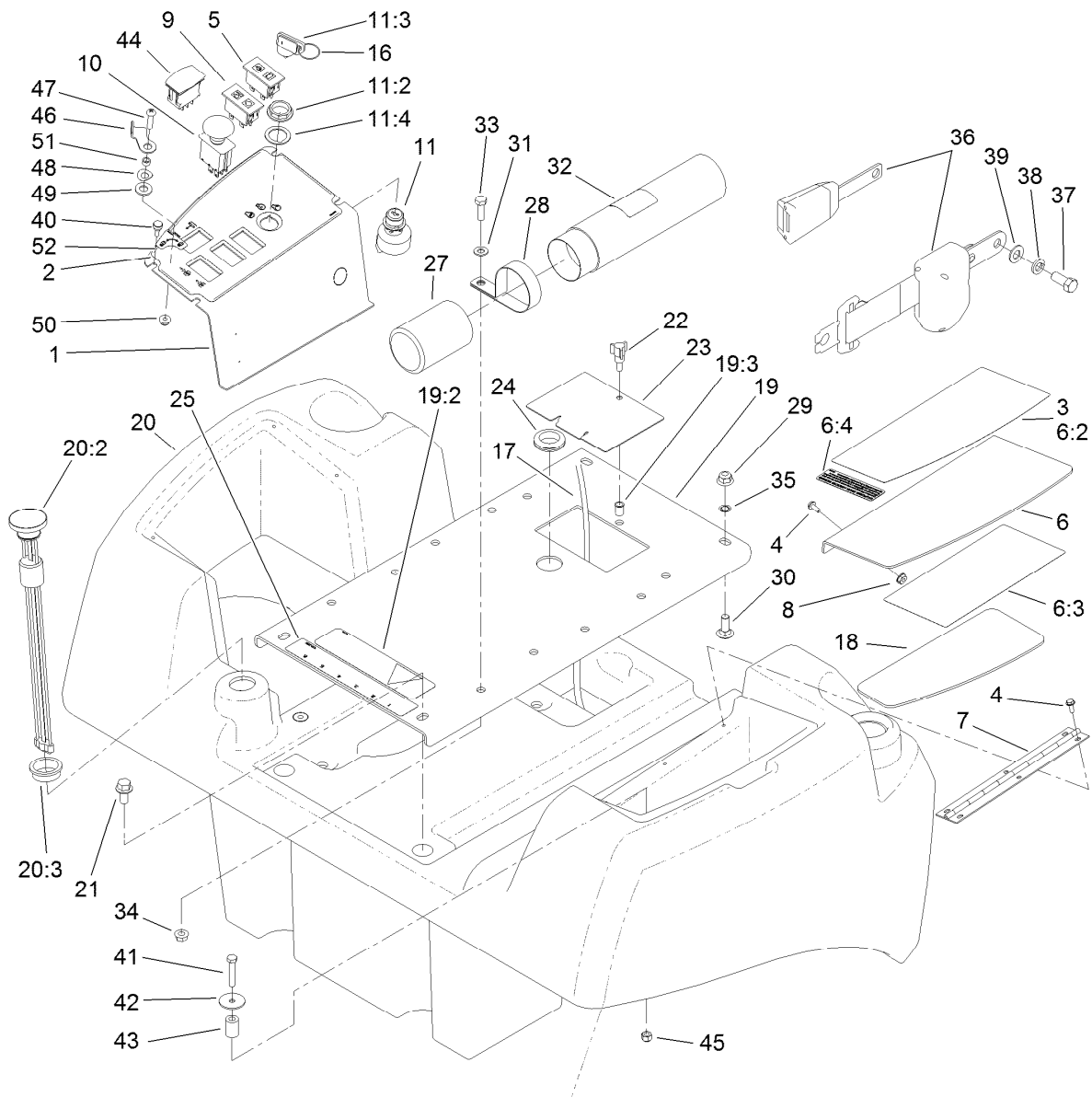
Ref.	Part Number	Qty.	Description
35	325-13	2	Screw-HH
38	94-8099	2	Decal

● Not serviced separately



## Frame Assembly No. 120-6601

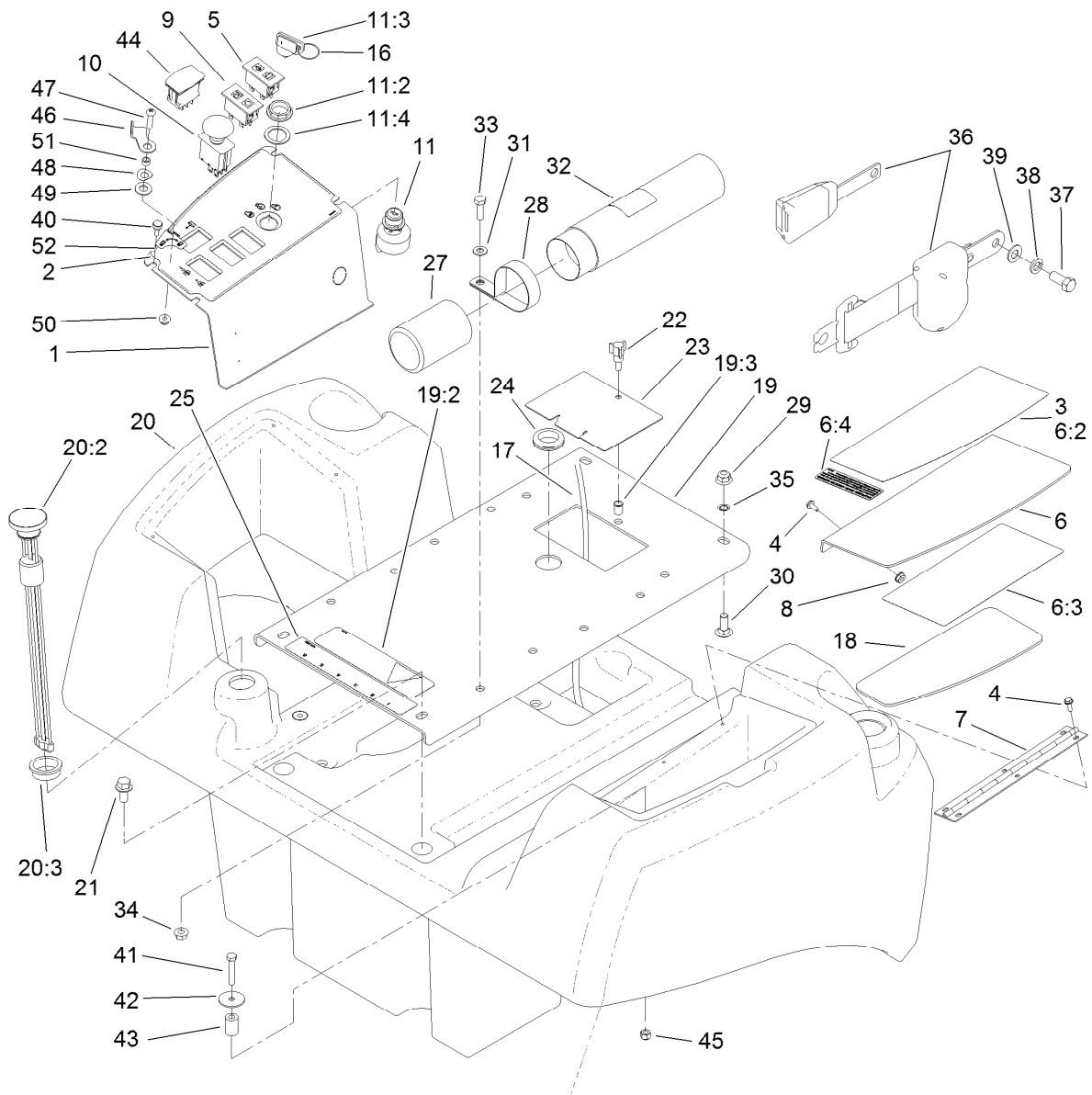
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2	93-7834	1	Decal-Footrest, RH
3	106-9206	2	Decal-Torque, Wheel
4	93-6686	1	Decal-Oil, HYD
6	32148-9	2	Insert-Nut
7	32148-7	4	Nut-Insert
8	32148-11	4	Insert-Threaded
9	67-1300	1	Decal
10	32148-8	4	Insert-Threaded
11	105-7160	1	Pad-Floor
12	66-3200	1	Tread-Footrest, LH
13	32148-10	4	Insert-Nut



## Fuel Tank and Control Panel Assembly

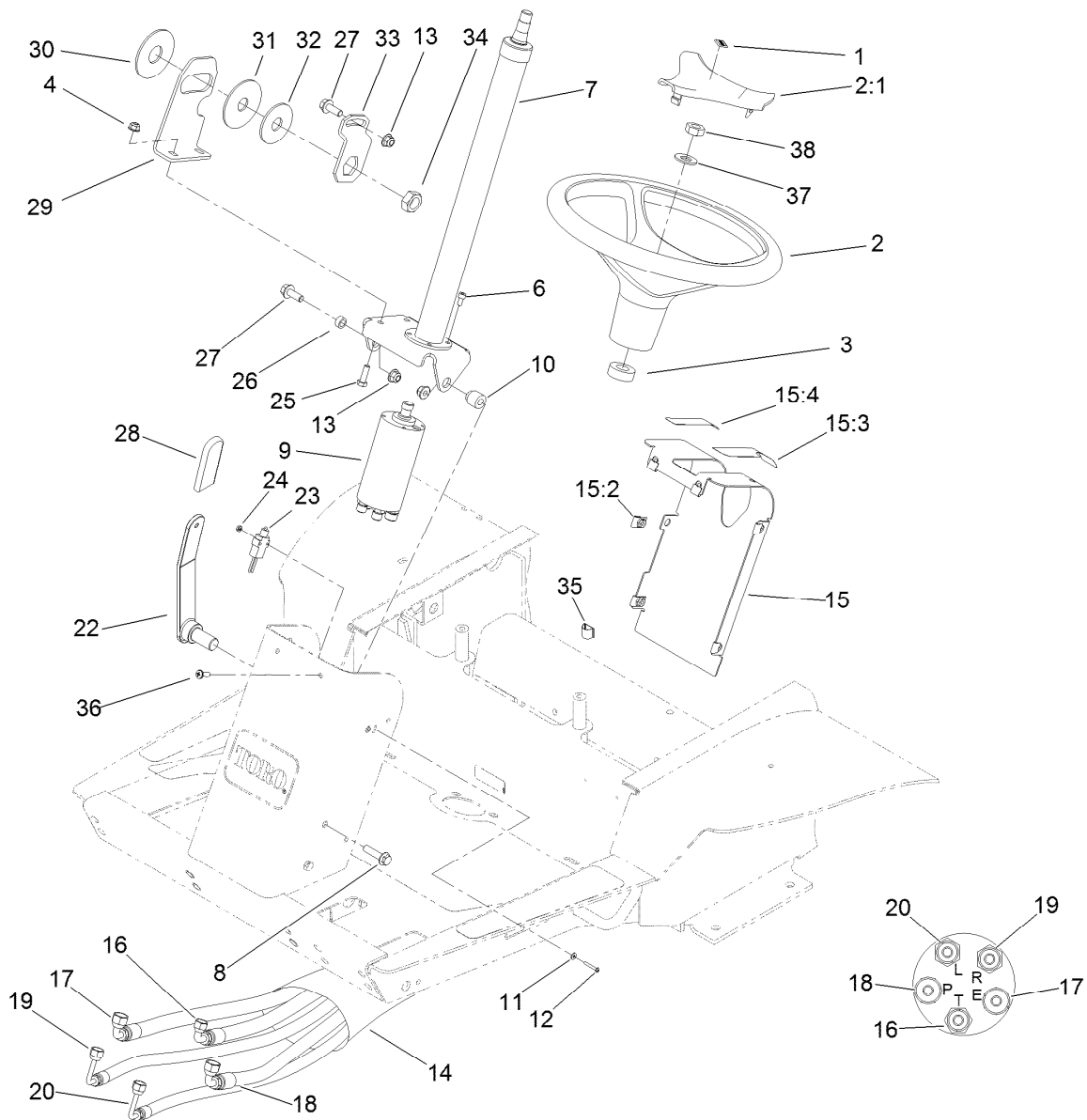
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	119-4839-03	1	Plate-Control Panel	19:2	93-7841	1	Decal-Warning
2	119-4840	1	Decal-Panel, Control	19:3	32148-6	1	Insert-Nut
3	108-6585	1	Decal-Danger	20	108-6596	1	Fuel Tank ASM
4	112-6349	6	Screw-HWH	20:2	108-2025	1	Gauge-Fuel
5	100-8070	1	Lamp-Warning	20:3	95-8972	1	Grommet
6	108-6581	1	Cover ASM	21	3234-1	2	Screw-HHF
6:2	114-2855	1	Decal-Danger	22	233-70	1	Knob-Star, Three
6:3	115-3027	1	Decal-Service	23	108-2027-03	1	Cover-Bypass
6:4	117-2718	1	Decal-Arrester, Spark	24	240-5	1	Grommet
7	108-2024	1	Hinge	25	105-2511	1	Decal-Instructions, Starting
8	32149-8	3	Nut-Keps	27	104-7048	1	Cap-Housing
9	100-8071	1	Lamp-Warning	28	2412-133	2	R-Clamp
10	93-9999	1	Switch-PTO	29	104-8301	2	Nut-Flange, NI
11	106-5269	1	Ignition Switch ASM	30	3231-2	2	Screw-CARR
11:2	108-8660	1	Nut-Mounting	31	3256-23	2	Washer-Flat
11:3	106-5270	1	Key Set-Ignition	32	104-7050	1	Tube-Manual
11:4	108-8659	1	Washer-Backup	33	322-5	2	Screw-HH
16	98-9321	1	Ring-Key	34	32128-20	2	Nut-HF
17	108-8657	1	Harness-Wire, Seat	35	32151-72	2	Ring-Retaining
18	108-2013	1	Pad-Rubber	36	110-0413	1	Seatbelt-Retractable
19	108-6580	1	Seat Plate ASM	37	3212-4	2	Screw-HH





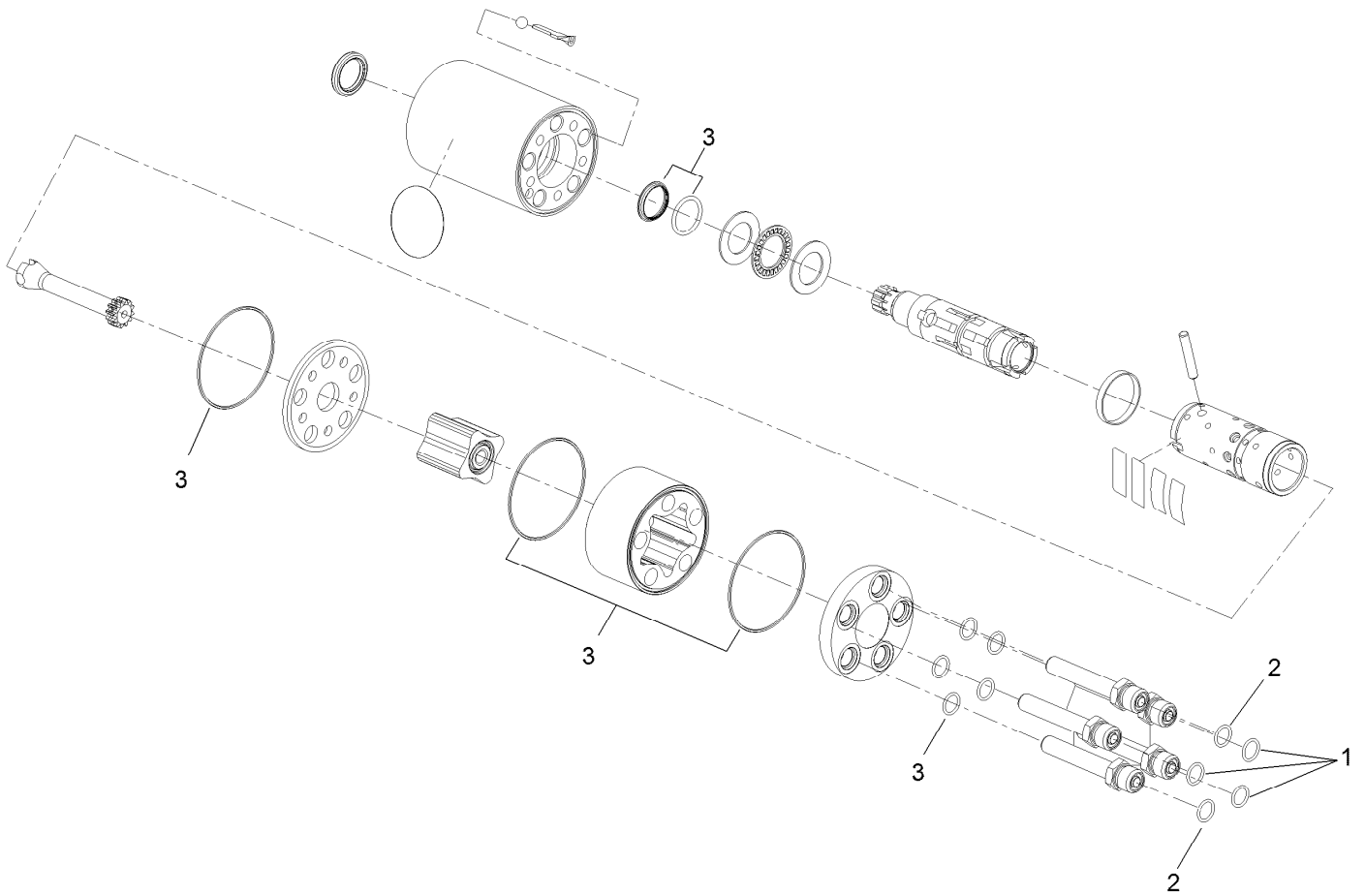
## Fuel Tank and Control Panel Assembly (continued)

<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	3253-6	2	Washer-Lock	46	120-6553	1	Stop-Ce
39	3256-25	2	Washer-Flat	47	106-9518	1	Screw-PRH
40	120-6555	4	Screw-Thumb	48	3290-301	1	Washer-Spring
41	321-9	1	Screw-HH	49	3256-80	1	Washer-Flat
42	3256-55	1	Washer-Flat	50	104-7201	1	Nut-HF
43	108-9688	1	Spacer	51	120-6564	1	Spacer
44	105-4320	1	Switch	52	120-6563	1	Decal-Ce Stop
45	3296-42	1	Nut-Lock, NI				



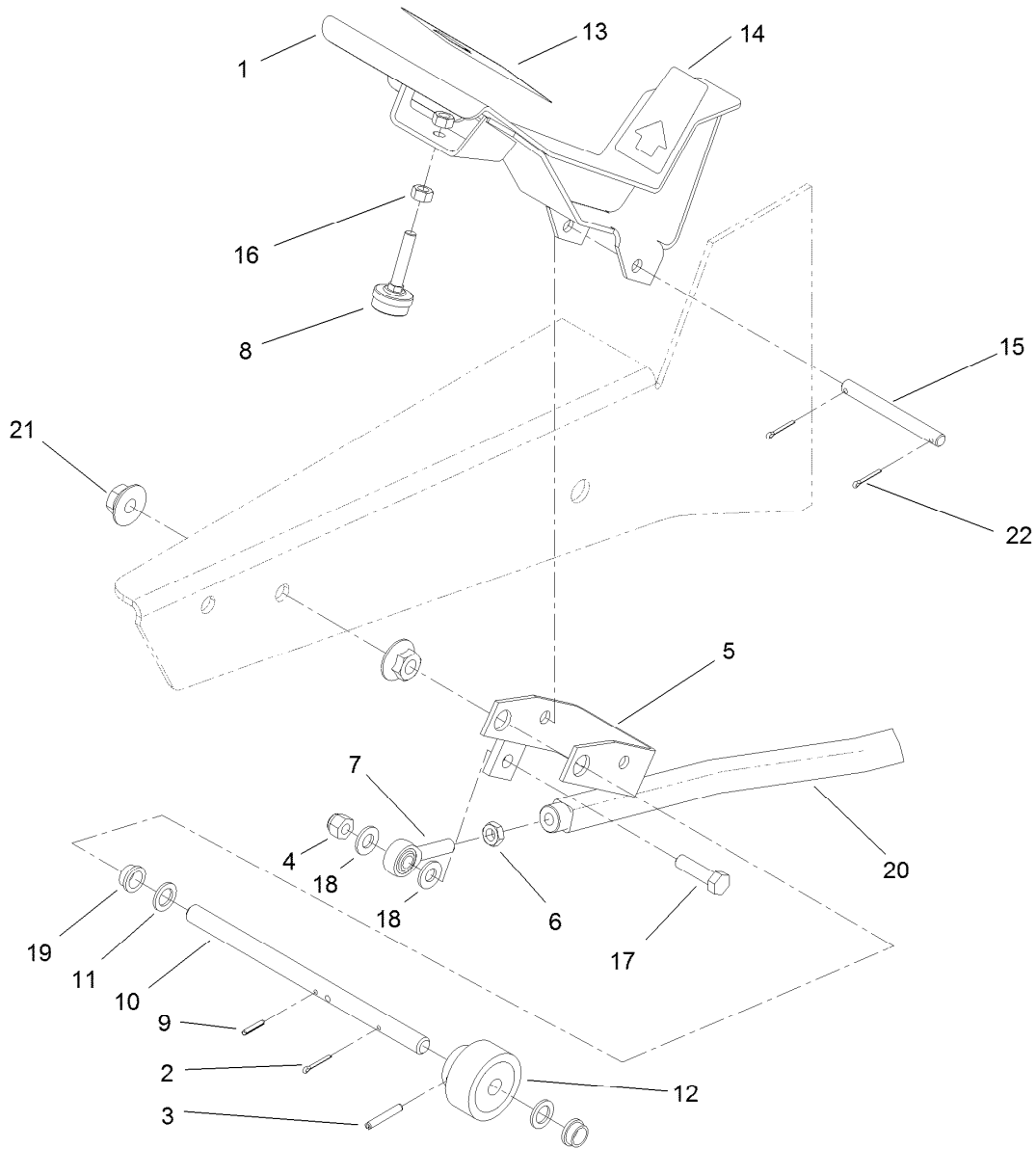
## Power Steering Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	98-1459	1	Decal	18	108-2080	1	Hose ASM
2	98-1471	1	Wheel-Steering	19	108-2084	1	Hose ASM
2:1	98-1468	1	Cover-Wheel, Steering	20	108-2085	1	Hose ASM
3	21-9260	1	Cover-Dust	22	108-6092	1	Lever-Steering, Tilt
4	104-8300	2	Nut-Flange, NI	23	99-3410	1	Switch
6	105-2409	4	Screw-HSH	24	32149-6	2	Nut-Keps
7	114-2884	1	Column ASM	25	322-5	2	Screw-HH
8	3234-18	1	Screw-HHF	26	80-2960	1	Spacer-Tower
9	108-2077	1	Steering Valve ASM	27	3234-42	2	Screw-HHF
10	105-7166	1	Spacer	28	21-1880	1	Grip-Handle
11	3256-53	2	Washer-Flat, #6	29	105-7181-03	1	Plate-Pivot
12	3250-35	2	Screw-PPH	30	31-0390	1	Disc-Friction
13	104-8301	3	Nut-Flange, NI	31	82-9010	1	Disc-Friction
14	44-8530	1	Protector-Sleeve	32	80-2930	1	Washer-Flat
15	105-7180	1	Tower Panel ASM	33	80-2880	1	Bracket-Tilt
15:2	105-7170	6	Nut-Retainer	34	3218-7	1	Nut-Jam
15:3	105-7179	1	Decal-Brake, Parking	35	105-7188	2	Clamp-Adhesive
15:4	82-8940	1	Decal-Steering, Tilt	36	3250-32	6	Screw-PPH
16	108-2089	1	Hose ASM	37	3256-27	1	Washer-Flat
17	119-3911	1	Hose ASM	38	3296-33	1	Nut-Lock, NI



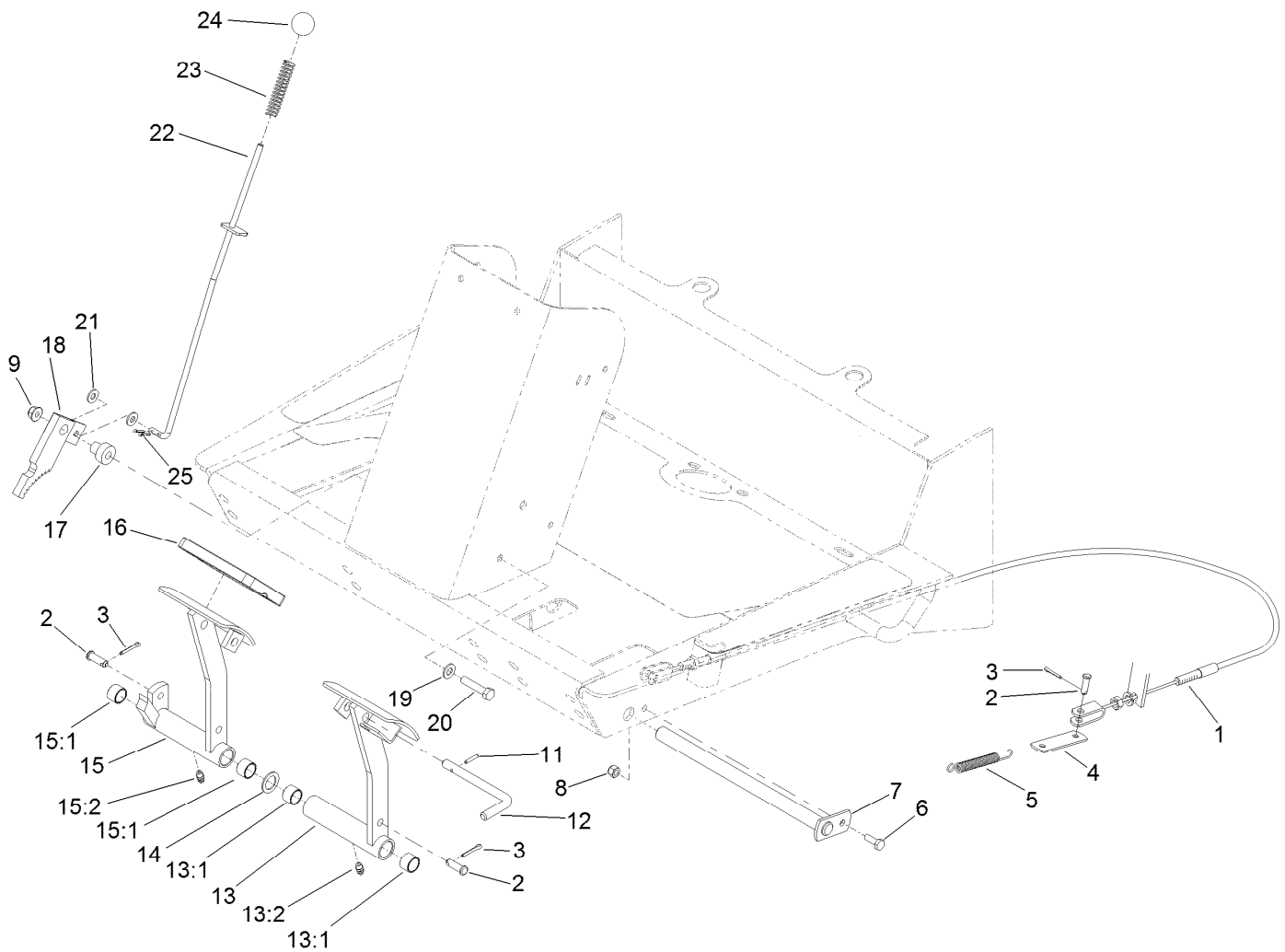
## Steer Valve Assembly No. 108-2077

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	237-21	3	O-Ring
2	237-22	2	O-Ring
3	106-6716	1	Seal Kit



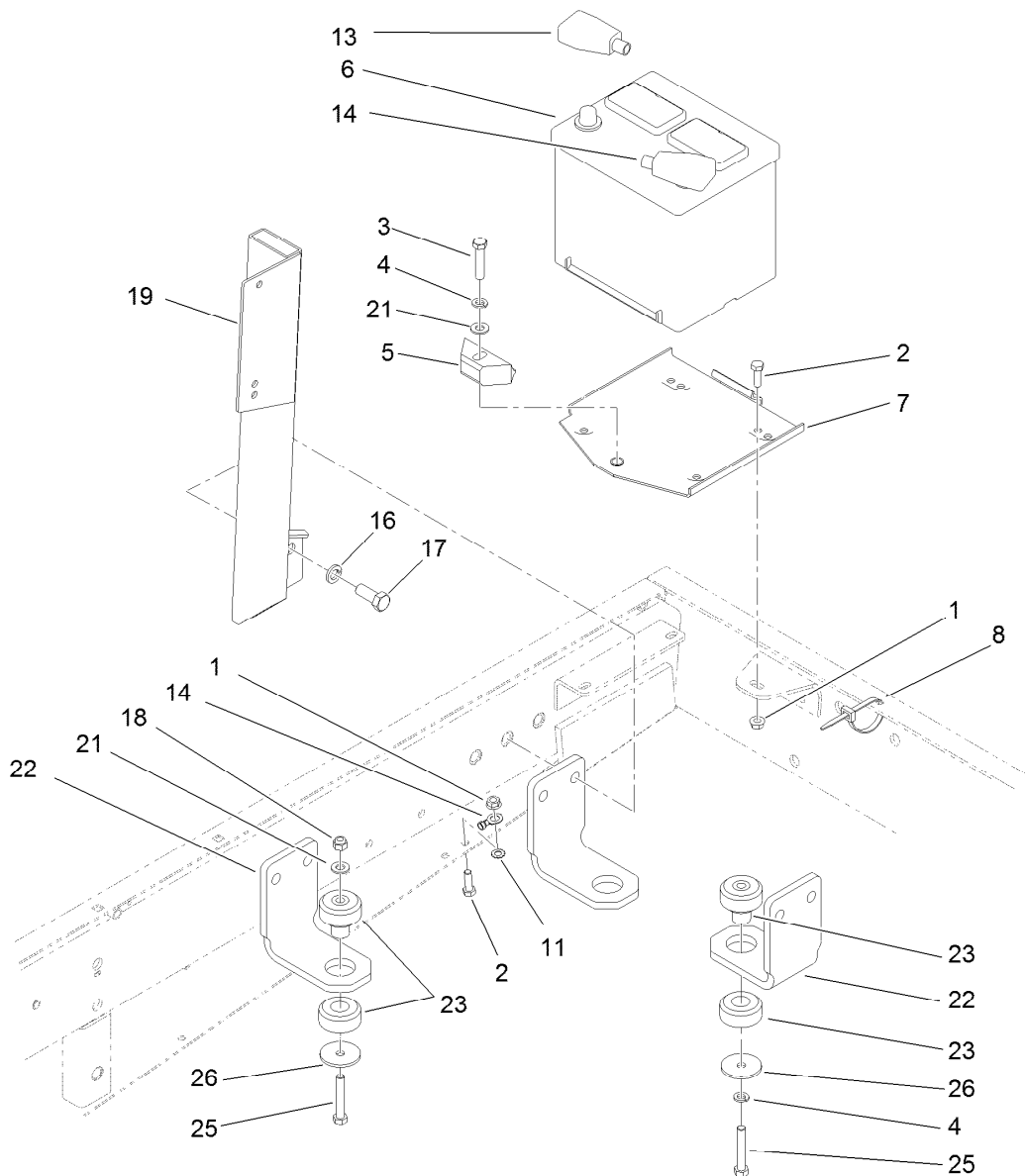
## Traction Pedal Assembly

<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	105-7150-03	1	Pedal ASM	12	28-5220	1	Friction Wheel ASM
2	3272-6	1	Pin-Cotter	13	94-3307	1	Pad-Pedal, Traction
3	32121-6	1	Pin-Roll, Slotted	14	94-3308	1	Pad-Pedal, Traction
4	3296-39	1	Nut-Lock, NI	15	92-5537	1	Pin-Pedal, Traction
5	92-8854-03	1	Pivot Bracket ASM	16	3217-6	2	Nut-Hex
6	3220-3	1	Nut-HJ	17	323-29	1	Screw-HH
7	2411-36	1	Bearing-End, Rod	18	3256-24	2	Washer-Flat
8	32141-36	1	Screw-Adjustment, Level	19	256-156	2	Bushing-Flange
9	32121-50	1	Pin-Spring	20	108-8661-03	1	Traction Rod ASM
10	92-5534	1	Shaft-Pedal, Traction	21	32128-56	2	Nut-HF
11	5-7570	2	Washer-Flat	22	3272-10	2	Pin-Cotter



## Brake Pedal Assembly

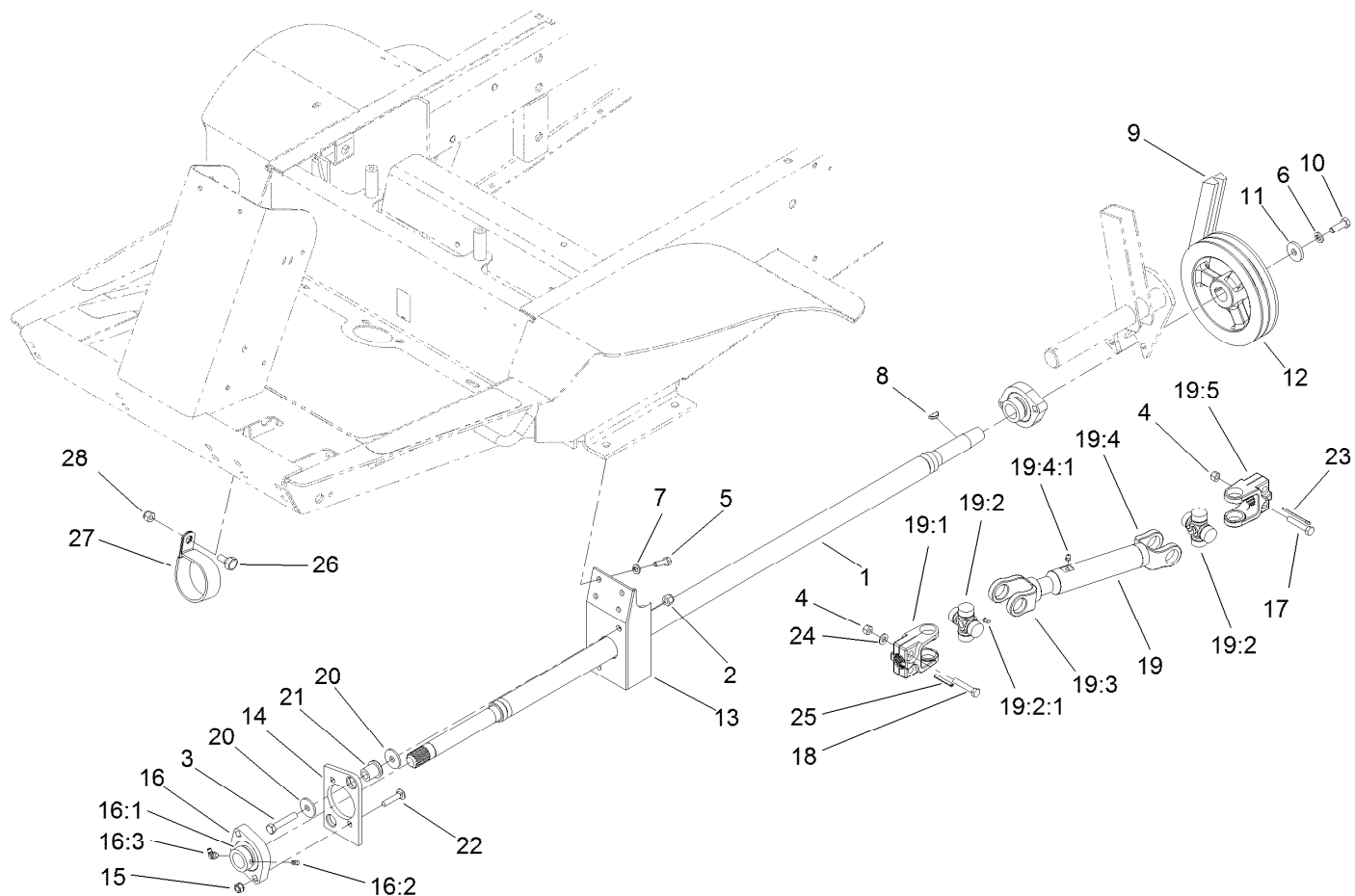
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	108-6556	2	Cable-Brake	14	3256-69	2	Washer-Flat
2	283-58	4	Pin-Clevis	15	120-6597	1	RH Brake Pedal ASM
3	3272-10	4	Pin-Cotter	15:1	256-42	2	Bushing
4	63-6750	2	Link-Cable, Brake	15:2	302-5	1	Fitting-Grease
5	3-7243	2	Spring-Extension	16	93-8742	2	Footpad-Brake
6	321-4	1	Screw-HH	17	105-7156	1	Spacer
7	63-6210-03	1	Pin-Brake	18	63-7900-03	1	Rack ASM
8	3296-42	1	Nut-Lock, NI	19	3256-23	1	Washer-Flat
9	104-8300	1	Nut-Flange, NI	20	322-7	1	Screw-HH
11	32121-50	1	Pin-Spring	21	3256-22	2	Washer-Flat
12	63-7880	1	Pin-Latch, Brake	22	105-7168	1	Rod ASM
13	63-6180	1	Pedal-Brake, LH	23	71-8310	1	Spring-Compression
13:1	256-42	2	Bushing	24	233-17	1	Knob
13:2	302-5	1	Fitting-Grease	25	3272-5	2	Pin-Cotter



## Battery and Engine Mount Assembly

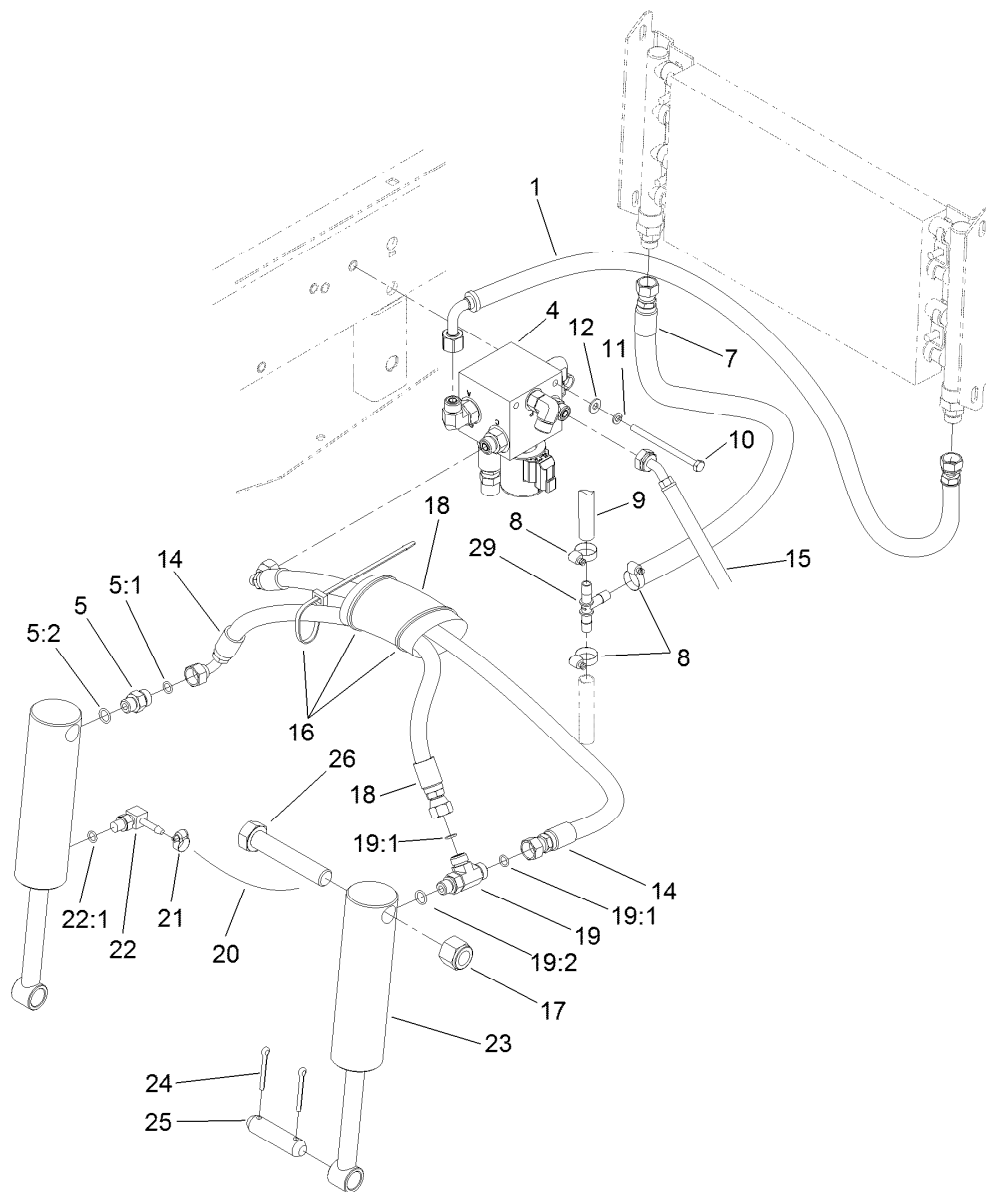
Ref.	Part Number	Qty.	Description
1	32128-20	4	Nut-HF
2	322-5	4	Screw-HH
3	323-9	1	Screw-HH
4	3253-21	2	Washer-Lock
5	66-2490	1	Retainer-Battery
6	106-5187	1	Battery
7	94-7343	1	Battery Base ASM
8	3290-378	2	Tie-Cable
11	3255-8	1	Washer-Lock
13	104-0086	1	Cable-Battery, Positive

Ref.	Part Number	Qty.	Description
14	105-0040	1	Cable-Battery, Negative
16	3253-7	8	Washer-Lock
17	3213-2	8	Screw-HH
18	3296-39	3	Nut-Lock, NI
19	105-2513-03	1	Air Cleaner Mount ASM
21	3256-24	4	Washer-Flat
22	114-2867-03	4	Bracket-Mount, Engine
23	115-0600	4	Mount-Engine
25	323-14	4	Screw-HH
26	63-7400	4	Washer-Rebound



## Power-Take-Off and Shaft Assembly

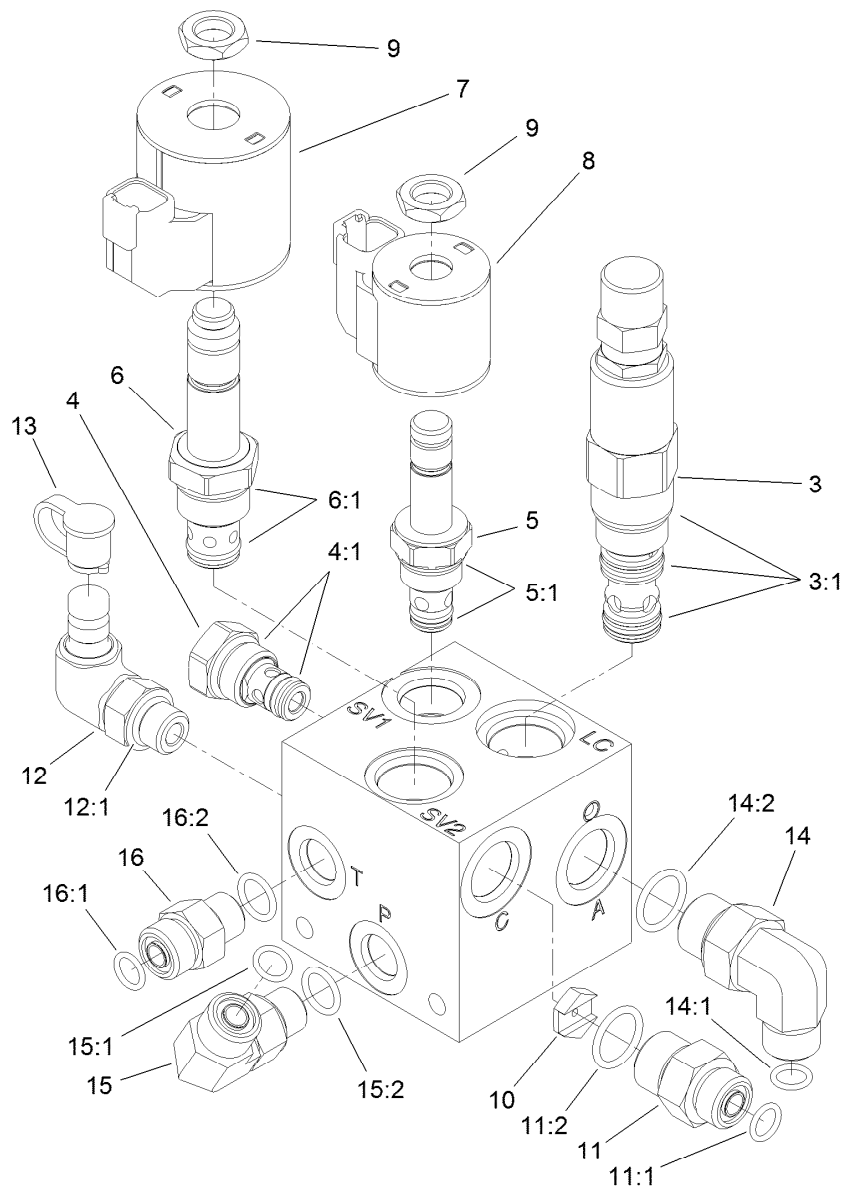
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-8855-03	1	Shaft-PTO	17	322-9	4	Screw-HH
2	3296-39	2	Nut-Lock, NI	18	322-14	1	Screw-HH
3	323-10	2	Screw-HH	19	108-1366	1	PTO Drive Shaft ASM
4	3296-29	5	Nut-Lock, NI	19:1	54-9040	1	Yoke-End
5	322-5	4	Screw-HH	19:2	54-9180	2	U-Joint Kit
6	3253-21	1	Washer-Lock	19:2:1	62-3820	1	Fitting-Grease
7	3253-4	4	Washer-Lock	19:3	108-6550	1	Shaft-Yoke, Slip
8	3257-5	1	Key-Woodruff	19:4	108-6551	1	Tube-Yoke, Slip
9	63-6240	1	V-Belt	19:4:1	302-58	1	Fitting-Straight
10	323-18	1	Screw-HH	19:5	54-9090	1	Yoke-End
11	29-4730	1	Washer-Flat	20	63-8410	4	Washer
12	43-5320-03	1	Pulley-PTO	21	63-9750	2	Mount
13	92-8751-03	1	PTO Bearing Bracket ASM	22	3230-4	2	Screw-CARR
14	84-7580	1	Plate-Support, Bushing	23	3272-15	1	Pin-Cotter
15	32149-1	2	Nut-Keps	24	3256-23	1	Washer-Flat
16	92-8799	1	Bearing-Flange	25	32121-34	1	Pin-Roll
16:1	251-77	1	Collar-Lock, Bearing	26	46-3380	1	Bolt-Shoulder
16:2	3245-35	1	Screw-Set, HSH	27	2412-102	1	Clamp-R
16:3	302-40	1	Fitting-Grease	28	3296-39	1	Nut-Lock, NI



## Hydraulic Cylinder and Lift Arm Assembly

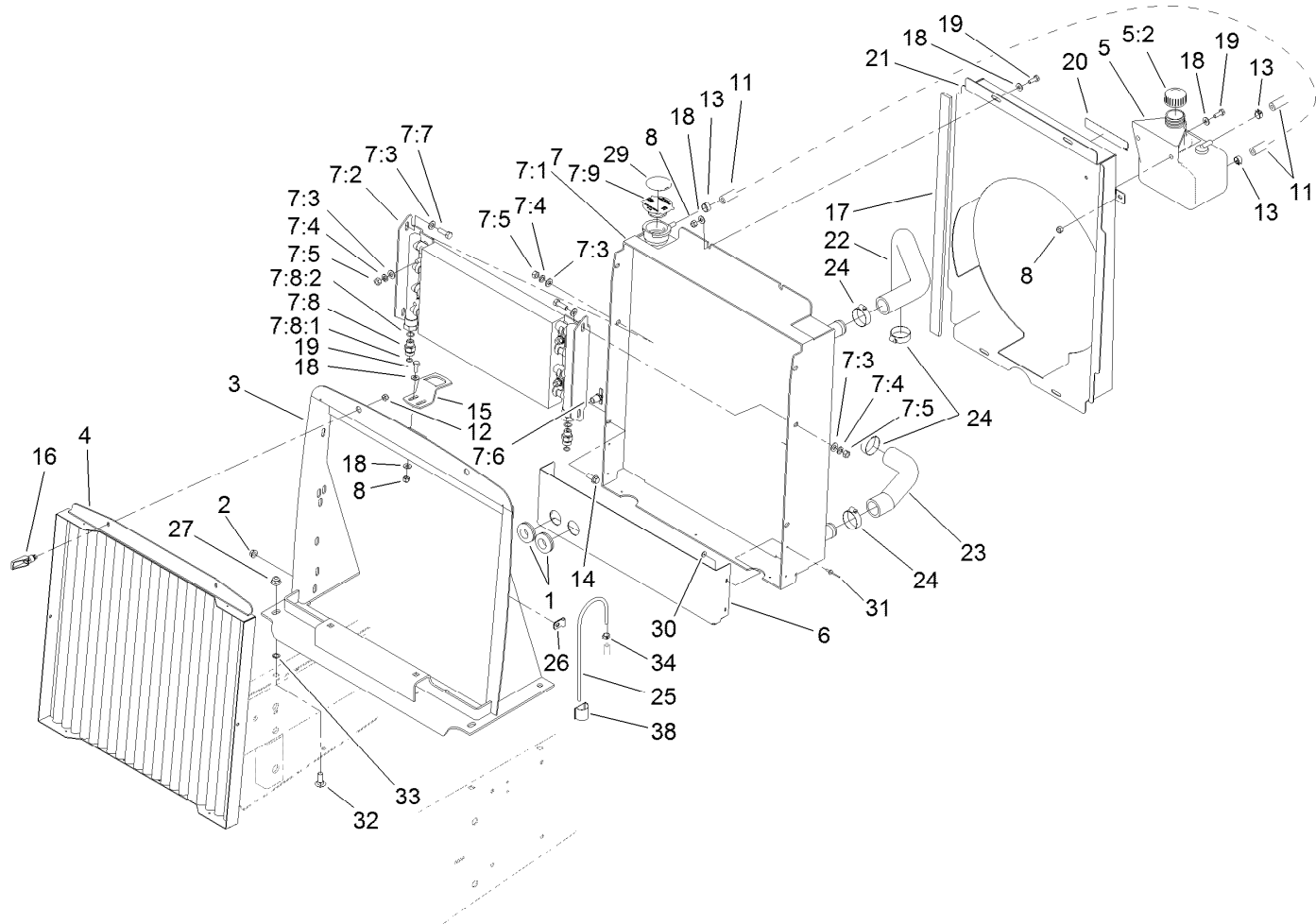
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	120-6557	1	Hose ASM	17	3296-51	2	Nut-Lock, NI
4	119-4830	1	Valve ASM	18	56-7982	1	Sleeve-Protective
5	340-2	1	Fitting-HYD, Straight	19	340-86	1	Fitting-Tee
5:1	237-22	1	O-Ring	19:1	237-22	2	O-Ring
5:2	237-42	1	O-Ring	19:2	237-42	1	O-Ring
7	100-5641	1	Hose ASM	20	92-5082	2	Hose-HYD
8	2412-36	3	Clamp-Hose	21	2412-108	2	Clamp-Worm
9	100-5649	1	Hose	22	304-99	2	Stem-Hose
10	321-28	2	Screw-HH	22:1	237-78	1	O-Ring
11	3253-3	2	Washer-Lock	23	63-6630	2	Cylinder-HYD
12	3256-22	2	Washer-Flat	24	3272-23	4	Pin-Cotter
14	120-6572	2	Hose ASM-HYD	25	27-4240	2	Pin-Cylinder
15	120-6556	1	Hose ASM	26	328-7	2	Screw-HH
16	3290-378	4	Tie-Cable	29	354-107	1	Fitting-HYD, Tee





## Hydraulic Valve Assembly No. 119-4830

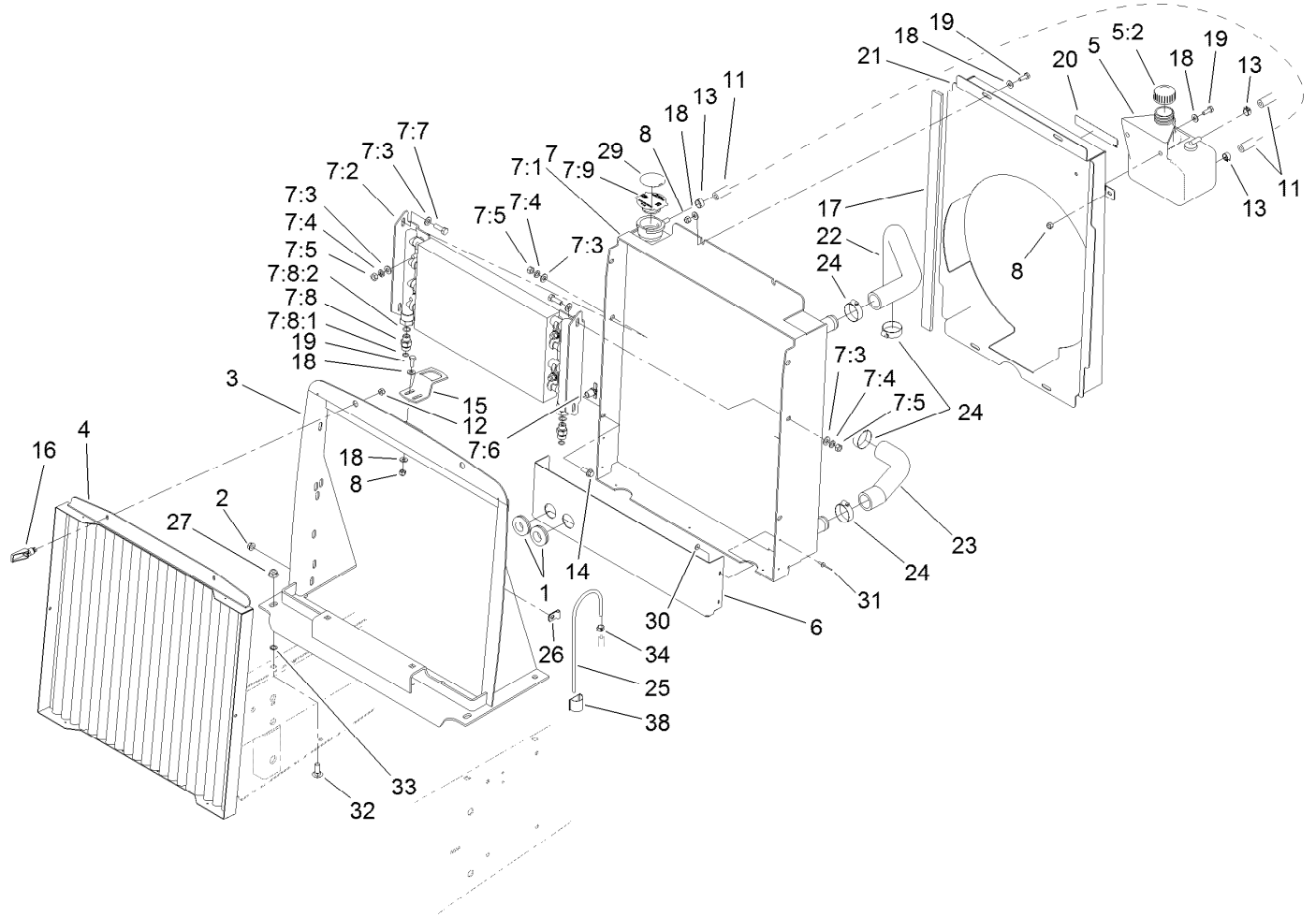
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
3	120-6554	1	Valve-Logic	11:2	237-79	1	O-Ring
3:1	119-2159	1	Seal Kit	12	120-6560	1	Fitting-Diagnostic, 90 DEG
4	114-2873	1	Check Valve	12:1	237-78	1	O-Ring
4:1	105-9156	1	Seal Kit	13	120-6559	1	Cap-Cover, Dust
5	120-6562	1	Valve-Solenoid	14	340-18	1	Fitting-HYD, 90 DEG
5:1	105-9156	1	Seal Kit	14:1	237-79	1	O-Ring
6	120-6561	1	Valve-Solenoid	14:2	237-22	1	O-Ring
6:1	105-9159	1	Seal Kit	15	340-77	1	Fitting-HYD, 90 DEG
7	115-3021	1	Coil-12V	15:1	237-22	1	O-Ring
8	119-8036	1	E-Coil, 12 Vdc, -08	15:2	237-42	1	O-Ring
9	110-2634	1	Nut-Coil	16	340-2	1	Fitting-HYD, Straight
10	120-6558	1	Orifice-Control, Flow (0.100, -8)	16:1	237-22	1	O-Ring
11	340-3	1	Adapter	16:2	237-42	1	O-Ring
11:1	237-22	1	O-Ring				



## Radiator Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	240-4	2	Grommet-Rubber	8	3296-42	8	Nut-Lock, NI
2	32128-20	4	Nut-HF	11	109-0308	2	Hose-Fuel
3	120-6550-03	1	Radiator Frame ASM	12	1-804254	2	Nut-Lock, HH
4	108-2062-03	1	Screen ASM	13	92-2379	3	Clamp-Hose
5	93-5975	1	Coolant Reservoir ASM	14	3234-5	4	Screw-HHF
5:2	93-5960	1	Cap-Reservoir	15	98-9316	1	Latch-Hood
6	110-9663-03	1	Shield-Radiator, Bottom	16	74-5950	2	Latch-Swell
7		1	Cooling ASM ●	17	108-9683	2	Strip-Foam
7:1	119-4845	1	Radiator	18	3256-22	14	Washer-Flat
7:2	119-4846	1	Oil Cooler	19	321-4	8	Screw-HH
7:3	3256-23	8	Washer-Flat	20	93-7272	1	Decal-Warning
7:4	3253-4	6	Washer-Lock	21	108-9678-03	1	Fan Shroud ASM
7:5	3217-6	6	Nut-Hex	22	104-3443	1	Hose-Radiator, Upper
7:6	304-46	1	Draincock	23	104-3442	1	Hose-Radiator, Lower
7:7	322-5	2	Screw-HH	24	2412-34	4	Clamp-Hose
7:8	340-2	2	Fitting-HYD, Straight	25	66-3180	1	Tube-Vent
7:8:1	237-22	1	O-Ring	26	2412-103	1	Clamp
7:8:2	237-42	1	O-Ring	27	104-8301	4	Nut-Flange, NI
7:9	66-3240	1	Cap-Radiator	29	106-5976	1	Decal-Warning

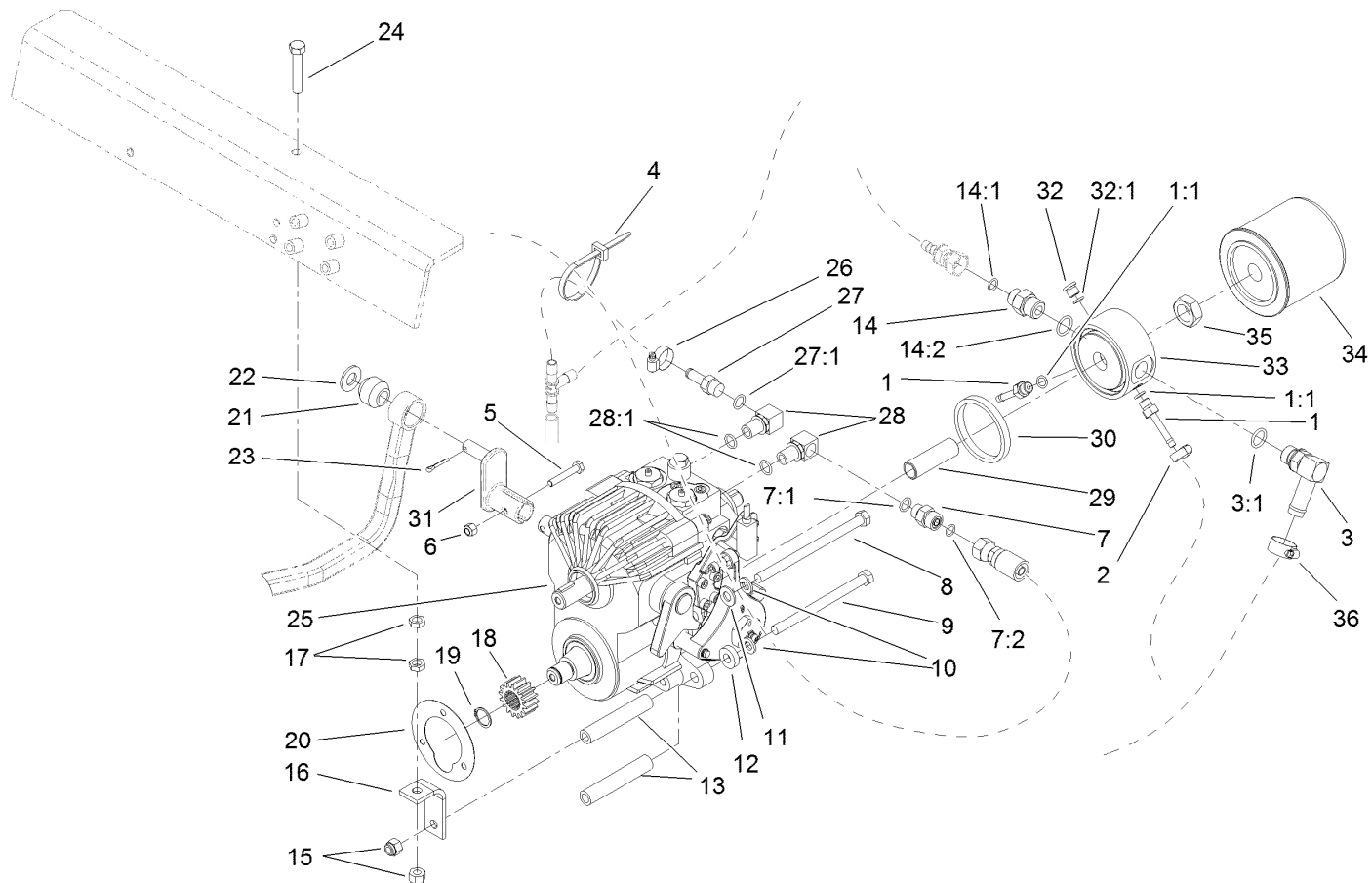
● Not serviced separately



## Radiator Assembly (continued)

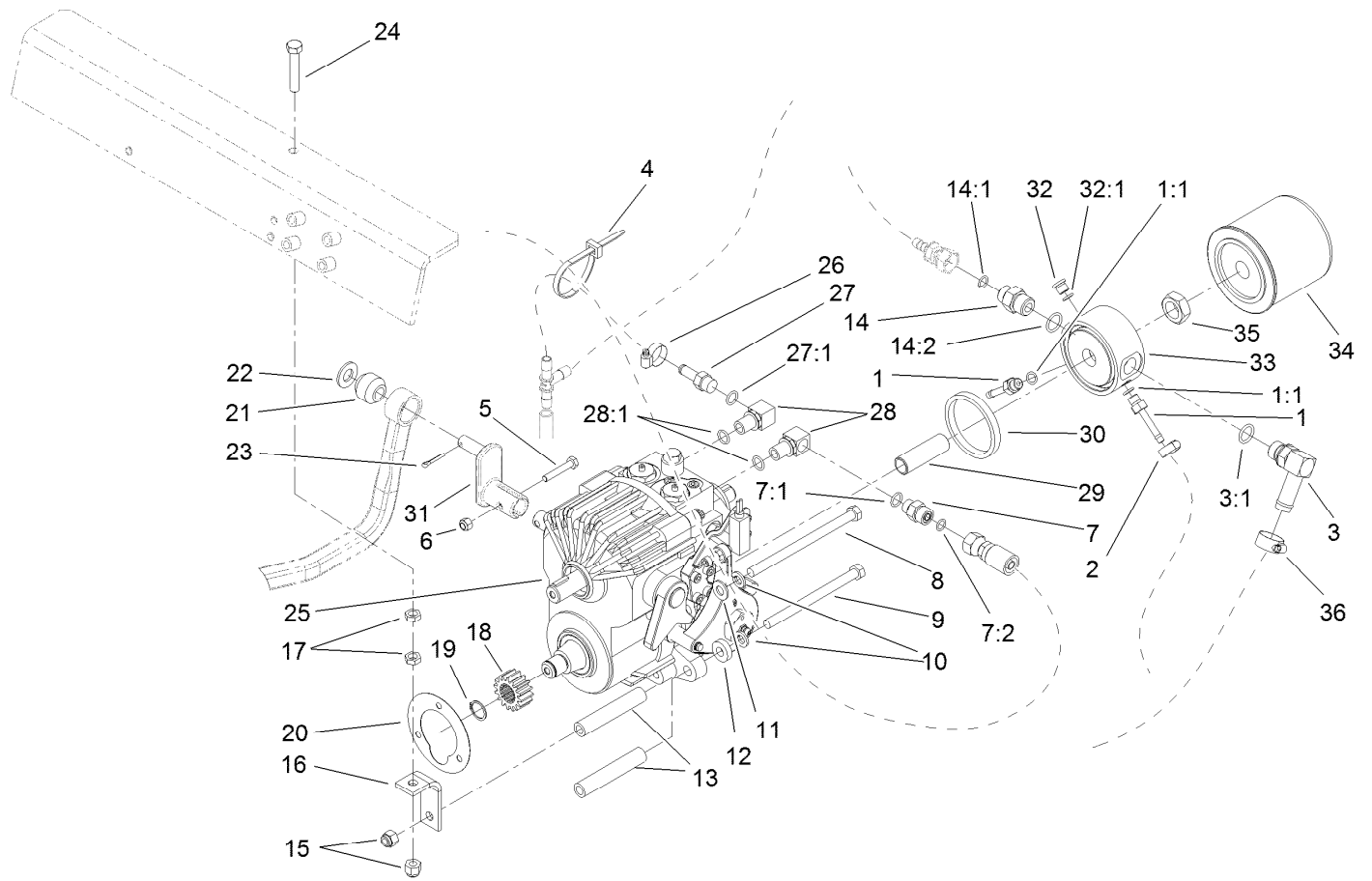
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
30	3269-10	2	Washer-Back	33	32151-72	4	Ring-Retaining
31	3269-13	5	Rivet-Pop	34	2412-98	1	Clamp
32	3231-22	4	Screw-CARR	38	105-7188	1	Clamp-Adhesive

● Not serviced separately



## Transmission Installation Assembly

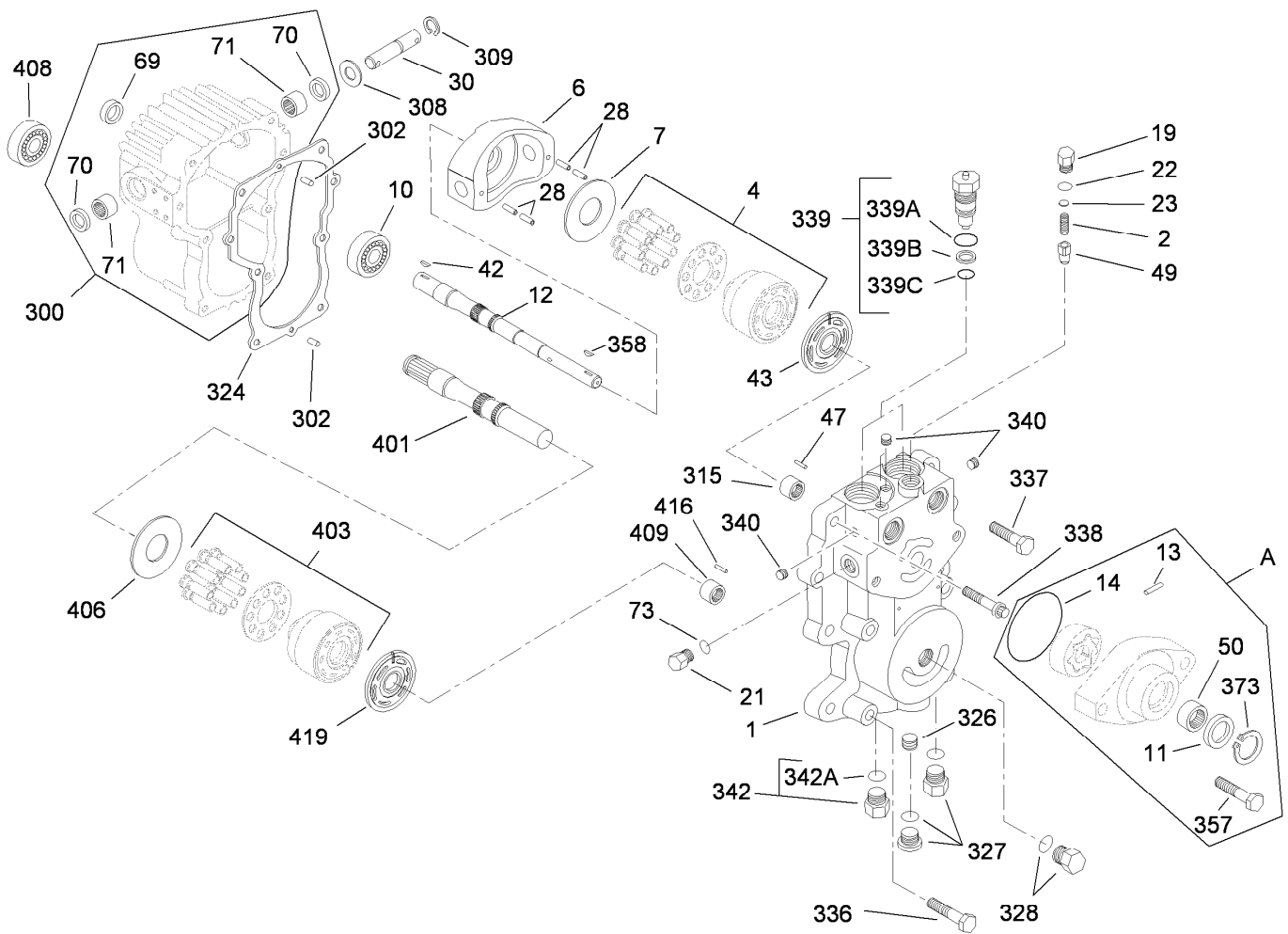
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-5512	2	Fitting-Hose, Barbed	16	63-7170	1	Anchor-Transmission
1:1	237-78	1	O-Ring	17	3218-3	2	Nut-Jam
2	2412-108	2	Clamp-Worm	18	86-7220	1	Gear-Pinion
3	92-5086	1	Fitting-Elbow, 90 DEG	19	32120-72	1	Ring-Snap
3:1	237-79	1	O-Ring	20	27-3690	1	Gasket-Transmission
4	3290-378	2	Tie-Cable	21	23-2270	1	Bushing-Rubber
5	321-9	1	Screw-HH	22	3256-26	1	Washer-Flat
6	3296-42	1	Nut-Lock, NI	23	3272-10	1	Pin-Cotter
7	82-8530	1	Fitting-Straight	24	67-1900	1	Screw-HH
7:1	237-42	1	O-Ring	25	117-0849	1	Transmission ASM
7:2	237-22	1	O-Ring	26	2412-36	1	Clamp-Hose
8	27-9620	1	Screw-HH	27	353-979	1	Fitting-Straight
9	323-39	3	Screw-HH	27:1	237-42	1	O-Ring
10	3253-21	4	Washer-Lock	28	66-3110	2	Fitting-HYD, 90 DEG
11	3256-24	1	Washer-Flat	28:1	237-42	1	O-Ring
12	5-0652	1	Spacer	29	92-5085	1	Union-Filter
13	27-3680	4	Spacer-Mounting	30	92-5087	1	Seal-Adaptor, Filter
14	340-3	1	Adapter	31	112-5098	1	Pump Lever
14:1	237-22	1	O-Ring	32	353-990	1	Plug
14:2	237-79	1	O-Ring	32:1	237-78	1	O-Ring
15	3296-39	2	Nut-Lock, NI	33	92-5076	1	Adapter-Filter



## Transmission Installation Assembly (continued)

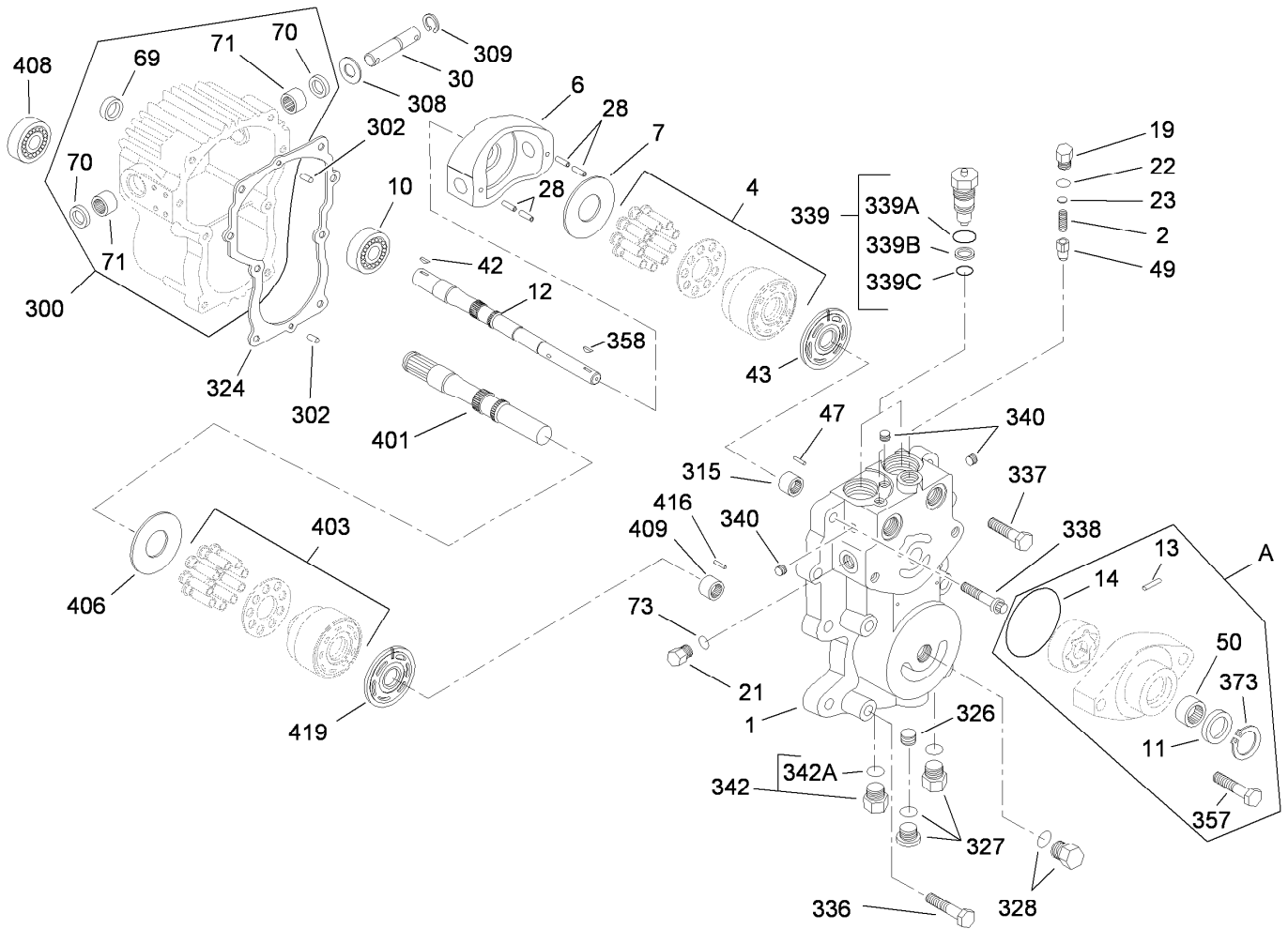
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
34	23-2300	1	Filter-Oil, Transmission

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
35	3220-7	1	Nut-Jam
36	2412-119	1	Clamp-Hose, Worm Drive



## Center Section Assembly Transmission Assembly No. 117-0849

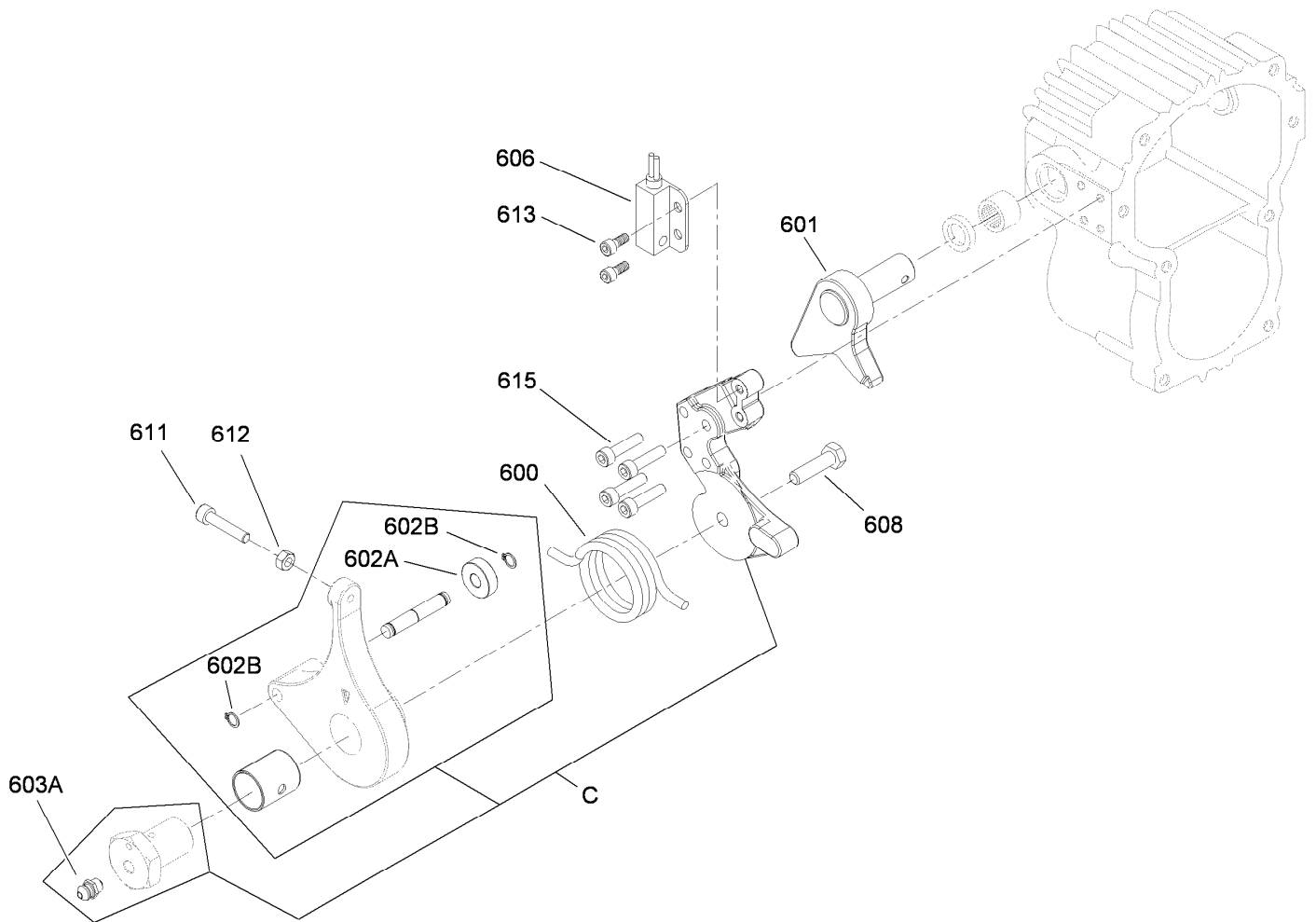
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-5716	1	Section-Center	300	110-3052	1	Housing ASM
2	25-2570	1	Spring-Valve	302	353-599	2	Pin-Dowel
4	48-1800	1	Cylinder Block Kit	308	25-2510	1	Washer-Flat
6	25-2450	1	Plate-Swash, Variable	309	32151-46	1	Ring-Retaining
7	25-2380	1	Plate-Thrust	315	25-3300	1	Bearing-Needle
A	117-6988	1	Charge Pump Kit	324	28-3340	1	Gasket
10	251-8	1	Bearing-Ball	326	107-4370	1	Plug-Expansion
11	94-2975	1	Seal-Shaft	327	67-9090	1	Plug ASM
12	28-3640	1	Shaft-Pump	328	28-3440	1	Plug-Threaded
13	38-2680	1	Pin	336	323-10	4	Screw-HH
14	28-3520	1	O-Ring	337	75-0110	2	Capscrew-HH
19	25-2460	1	Plug-HH	338	28-3530	2	Capscrew
21	25-2460	1	Plug-HH	339	49-7830	2	Check Valve Kit
22	28-3400	1	O-Ring	339A	28-3570	2	O-Ring
23	25-2470	1	Pack-Shim	339B	28-3580	2	Ring-Back Up
28	83-3880	4	Pin-Spring	339C	28-3590	2	O-Ring
30	28-3670	1	Shaft-Trunnion	340	75-0160	4	Plug-Pipe
42	3257-5	1	Key-Woodruff	342	28-3440	2	Plug-Threaded
43	110-3051	1	Plate-Valve	342A	75-0240	2	O-Ring
47	25-2430	1	Pin-Dowel	357	92-1773	2	Screw-HHF
49	67-8070	1	Cone-Relief, Charge	358	3257-5	1	Key-Woodruff
50	28-3480	1	Bearing	373	94-2976	1	Ring-Retaining
69	93-4133	1	Seal-Lip	401	49-8200	1	Shaft-Motor
70	103461	2	Seal	403	48-1800	1	Cylinder Block Kit
71	252-82	2	Bearing-Needle	406	25-2380	1	Plate-Thrust
73	28-3400	1	O-Ring	408	28-3300	1	Bearing-Roller



## Center Section Assembly Transmission Assembly No. 117-0849 (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
409	25-3300	1	Bearing-Needle

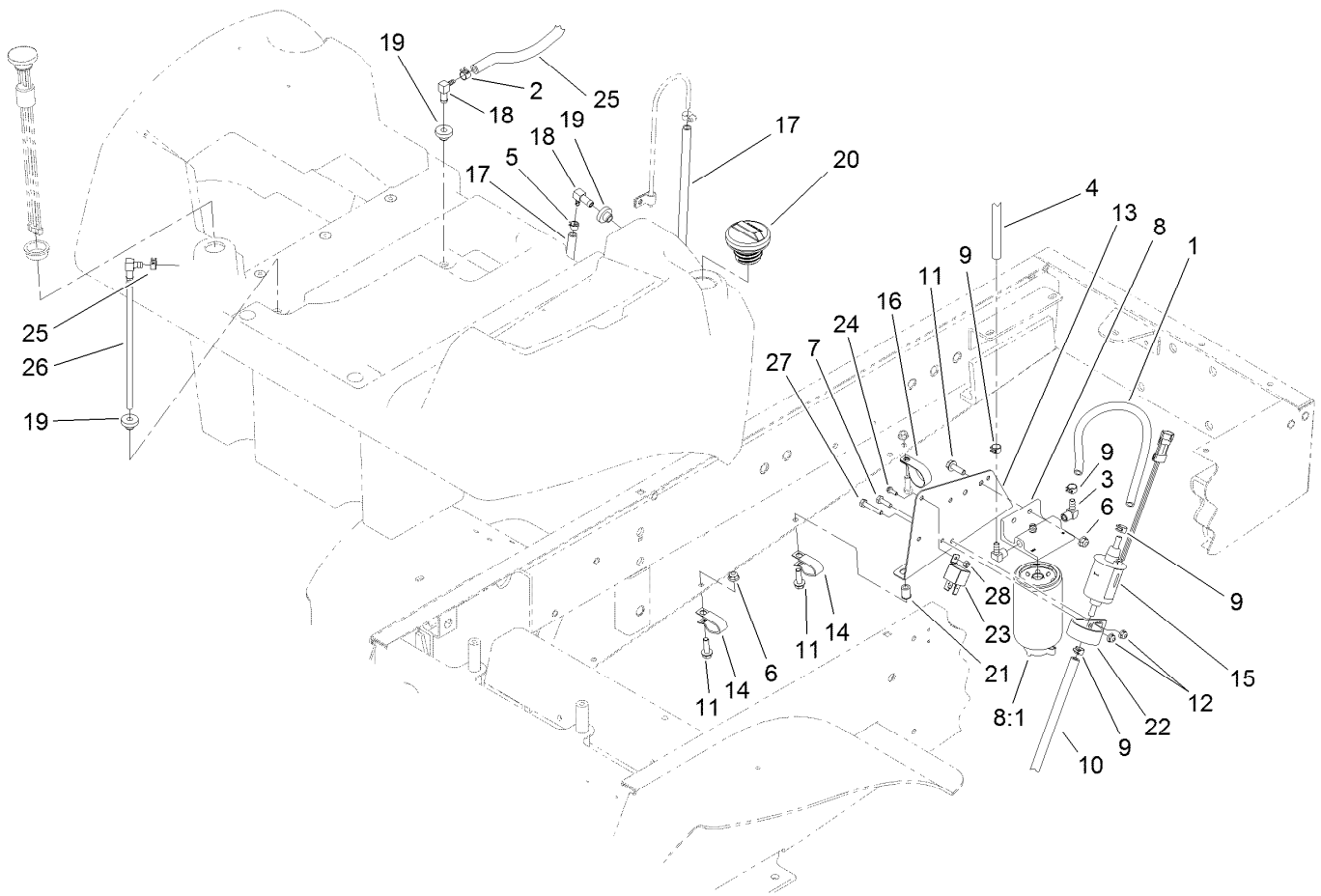
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
416	25-2430	1	Pin-Dowel
419	28-3380	1	Plate-Valve, Motor



## Neutral Return Arm Assembly Transmission Assembly No. 117-0849

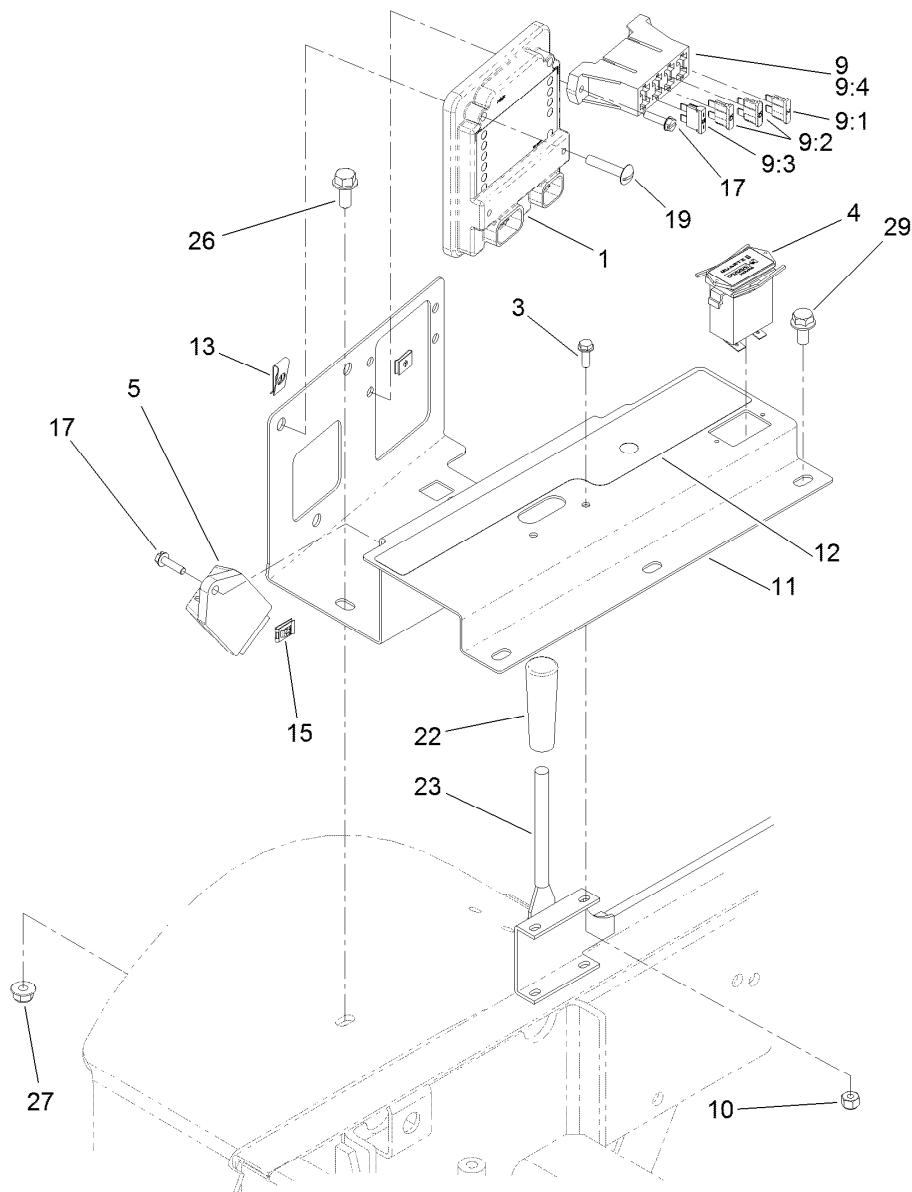
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
C	110-5685	1	Neutral Return ASM
600	110-3053	1	Spring-Return, Neutral
601	110-3054	1	Cam-Trunnion
606	100-1270	1	Switch-Proximity
608	33114-030	1	Screw-HH
611	110-3060	1	Screw-HSH
612	33013-00	1	Nut-Hex
613	110-3061	2	Screw-HSH
615	48-7850	4	Capscrew
602A	251-259	1	Bearing-Ball
602B	110-3056	2	Ring-Retaining
603A	110-3058	1	Fitting-Lube





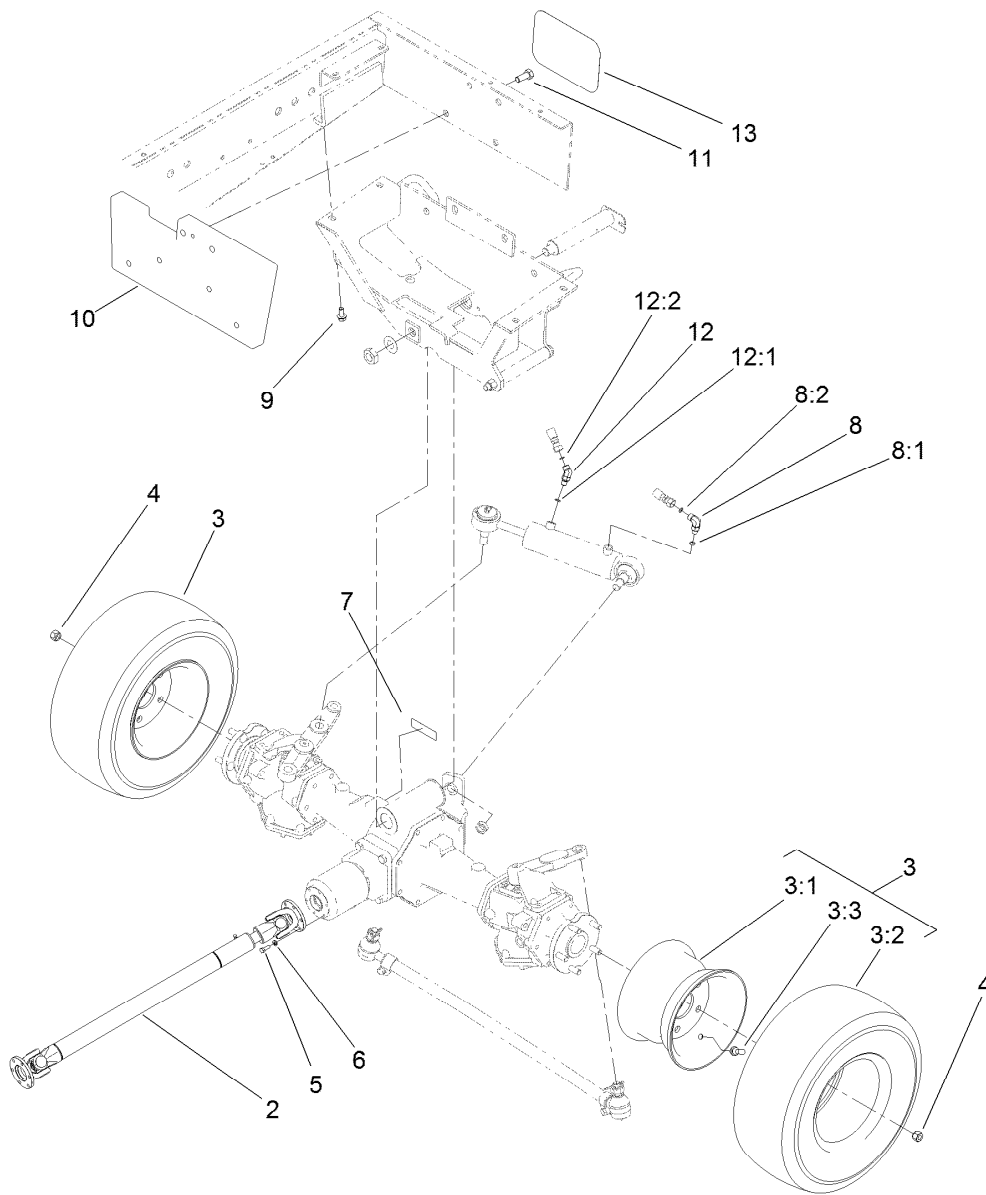
## Fuel Delivery System Assembly

<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	110-4105	1	Hose-Fuel	15	110-8806	1	Pump-Fuel
2	2412-80	2	Clamp-Line, Fuel	16	2412-74	1	R-Clamp
3	353-781	2	Fitting-Elbow	17	109-0273	1	Hose-Fuel
4	106-1126	1	Hose-Fuel	18	104-5228	2	Fitting-Elbow, 90 DEG
5	2412-98	1	Clamp	19	46-6560	3	Bushing
6	104-8300	3	Nut-Flange, NI	20	115-5305	1	Cap-Fuel
7	321-5	1	Screw-HH	21	32148-7	2	Nut-Insert
8	110-9044	1	Filter-Seperator	22	110-8817	1	Bracket-Pump, Fuel
8:1	110-9049	1	Filter-Spin On	23	99-7435	1	Relay-Power
9	92-2379	6	Clamp-Hose	24	32105-23	1	Screw
10	110-4172	1	Hose-Fuel	25	108-9698	1	Hose-Fuel
11	3234-17	5	Screw-HHF	26	110-9689	1	Pipe-Stand
12	104-7201	2	Nut-HF	27	321-9	1	Screw-HH
13	114-2854-03	1	Bracket-Support	28	3296-2	1	Nut-Lock, NI
14	92-5753	2	Clamp-Hose				



## Lower Control Panel 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	106-9277	1	Module-Control, Standard	12	119-4832	1	Decal-Panel, Lower
3	115-1727	2	Screw-HHF	13	3290-199	3	Nut-Speed
4	1-513374	1	Meter-Hour	15	107-1013	8	Nut-Speed, U-Type
5	98-7611	1	Controller-Glow	17	32105-13	3	Screw-HWH
9	119-5772	1	Harness-Wire	19	3258-19	3	Screw
9:1	94-6710	1	Fuse-2 Amp	22	233-39	1	Knob-Control
9:2	218-578	2	Fuse-Blade, 10 Amp	23	117-0824	1	Control-Throttle, Diesel
9:3	109355	1	Fuse-Blade, 15 Amp	26	3234-5	1	Screw-HHF
9:4	32160-005	1	Connector-Fuseblock, 8F	27	104-8300	1	Nut-Flange, NI
10	1-804254	2	Nut-Lock, HH	29	3234-14	3	Screw-HHF
11	119-4831-03	1	Console				

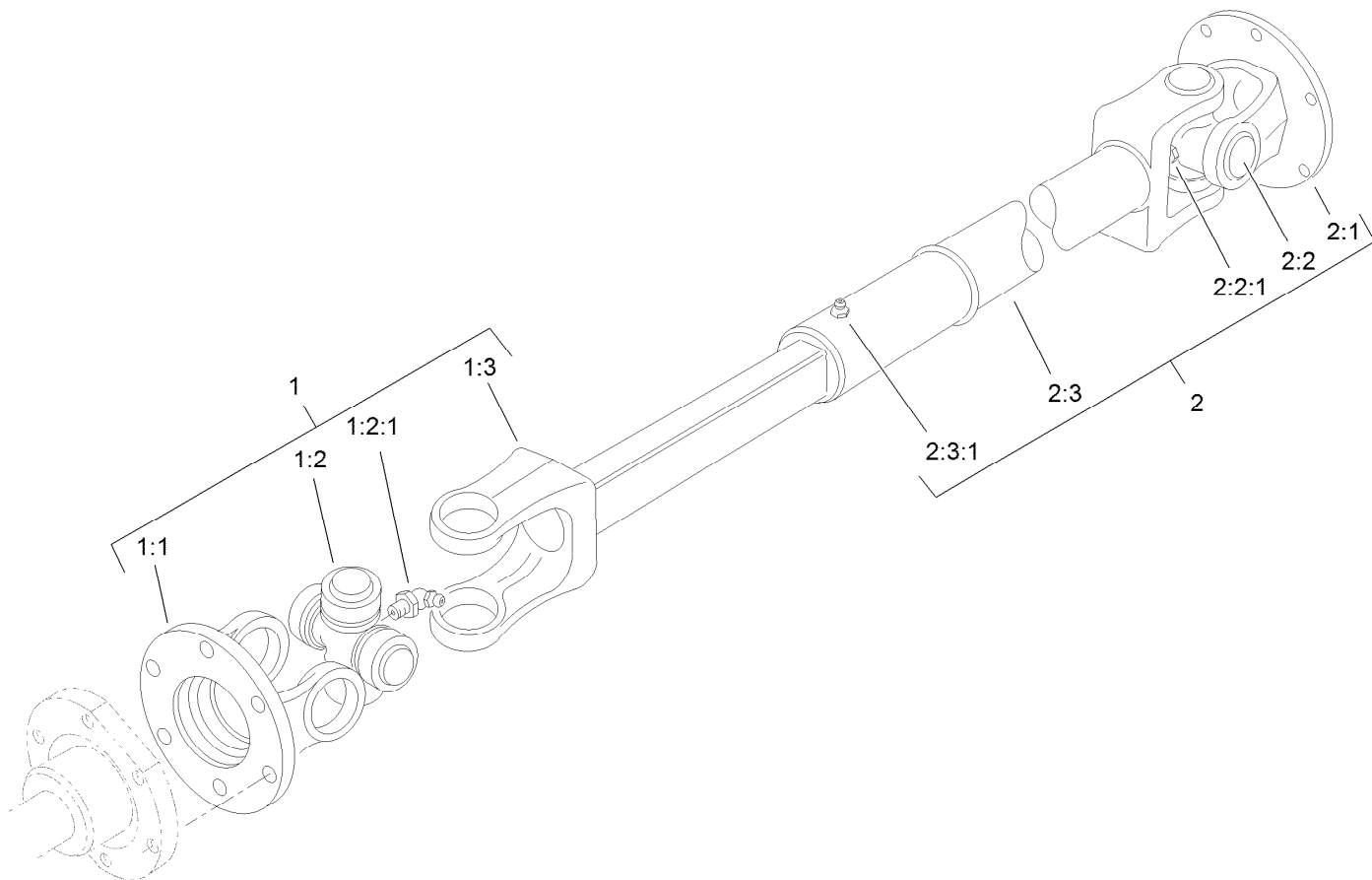


## Driveshaft and 4 Wheel Drive Assembly

Ref.	Part Number	Qty.	Description
2	98-5009	1	Driveshaft ASM
3		2	Tire And Wheel ASM ●
3:1	105-7846	1	Wheel
3:2	231-122	1	Tire (18X6.5-8) 4-Ply
3:3	232-27	1	Stem-Valve
4	93-5268	10	Nut-Lug
5	3274-8	12	Screw-HSH
6	3253-3	12	Washer-Lock
7	93-6697	1	Decal-Lube
8	340-132	1	Fitting-HYD, 90 DEG

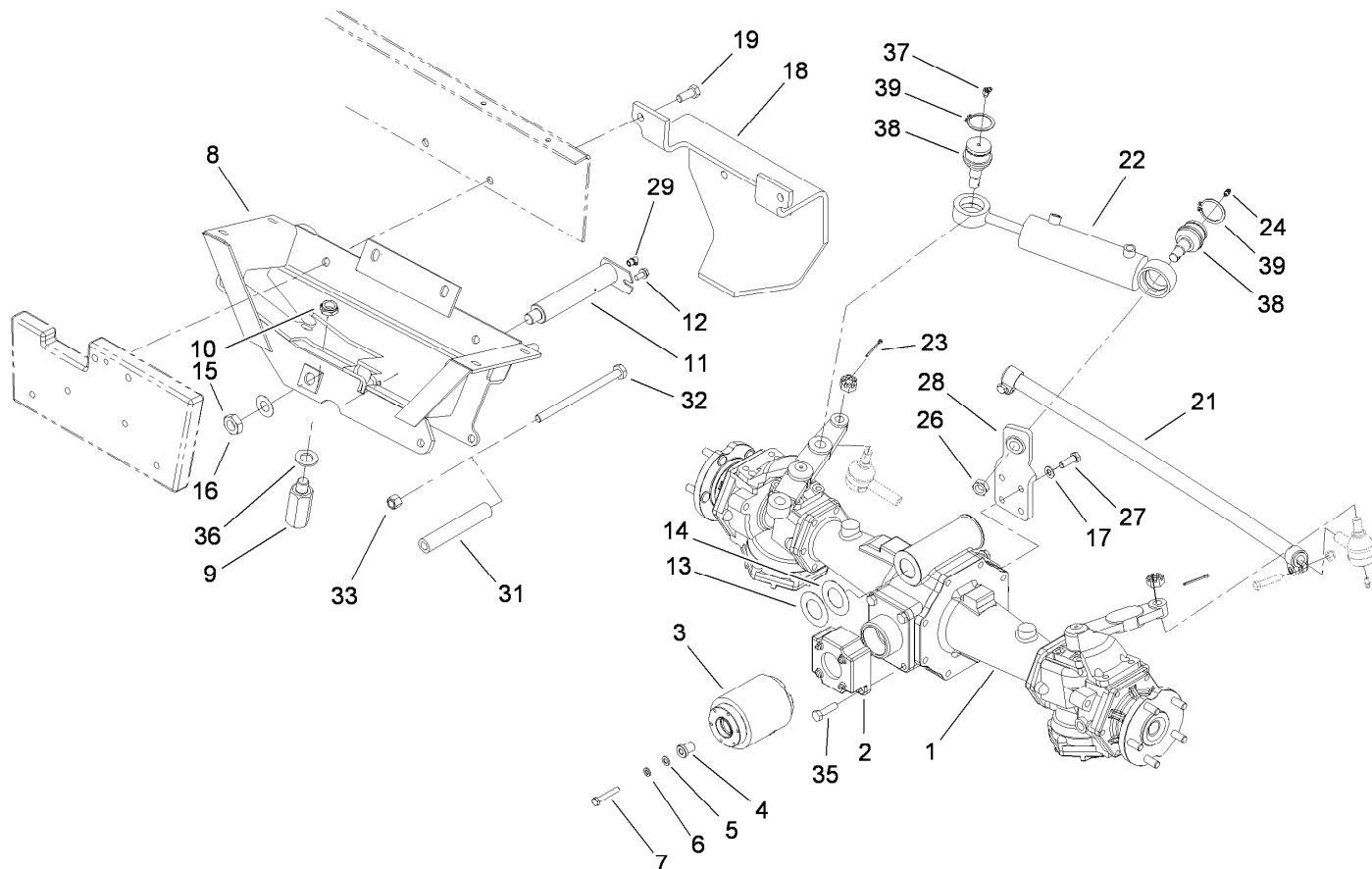
Ref.	Part Number	Qty.	Description
8:1	237-78	1	O-Ring
8:2	237-21	1	O-Ring
9	3234-25	4	Screw-HHF
10	110-1995-03	1	Weight-Rear, Inside
11	325-5	4	Screw-HH
12	340-103	1	Fitting-HYD, 45 DEG
12:1	237-78	1	O-Ring
12:2	237-21	1	O-Ring
13	62-7400	1	Decal

● Not serviced separately



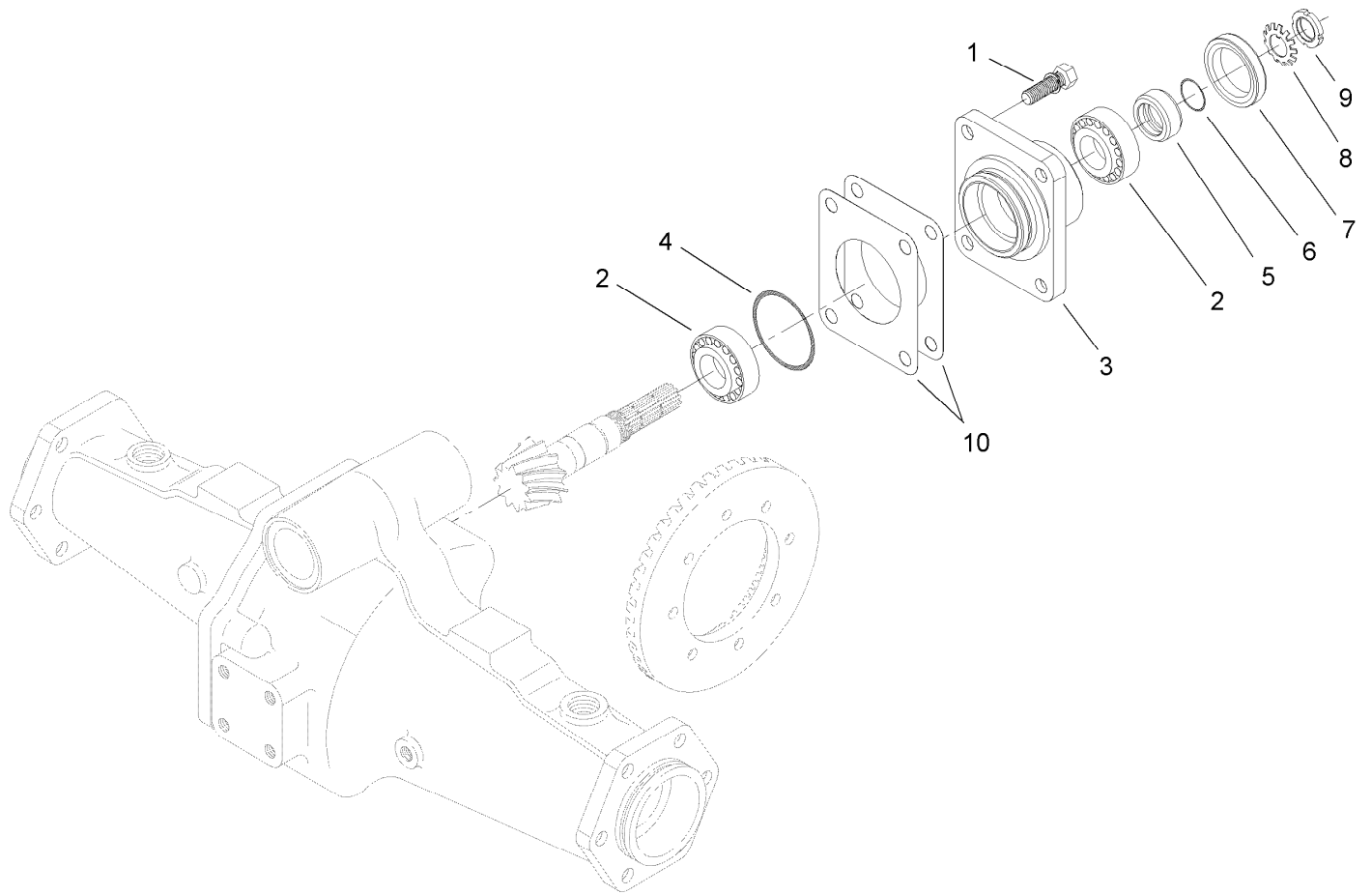
## Driveshaft Assembly No. 98-5009

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	92-5096	1	Joint And Shaft ASM
1:1	72-3410	1	Yoke-Flange
1:2	54-9180	1	U-Joint Kit
1:2:1	62-3820	1	Fitting-Grease
1:3	72-3420	1	Yoke And Shaft ASM
2	98-3882	1	Joint And Tube ASM
2:1	72-3410	1	Yoke-Flange
2:2	54-9180	1	U-Joint Kit
2:2:1	62-3820	1	Fitting-Grease
2:3	72-3431	1	Yoke And Tube ASM
2:3:1	302-58	1	Fitting-Straight



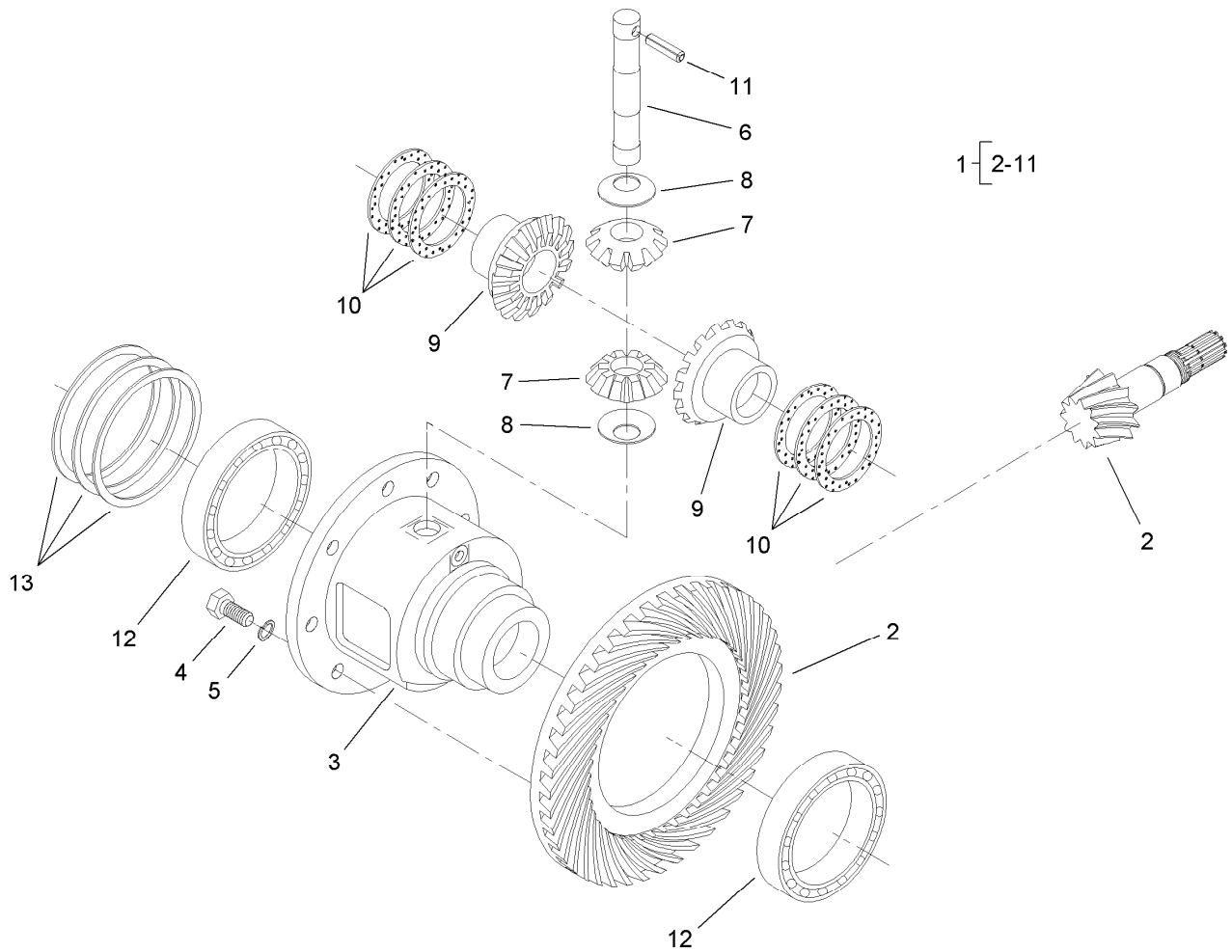
## Rear Axle Installation Assembly

<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	106-1120	1	Rear Axle ASM	19	325-5	2	Screw-HH
2	98-3860-03	1	Adaptor-Locator, Clutch	21	98-3871-03	1	Tie Rod ASM
3	95-6296	1	Clutch-Bidirectional	22	99-2415	1	Cylinder-HYD
4	98-1823	1	Spacer	23	3272-11	2	Pin-Cotter
5	33094-00	1	Washer-Plain	24	302-11	1	Fitting-Lube, 45 DEG
6	3253-4	1	Washer-Lock	26	3220-6	4	Nut-Jam
7	33114-050	1	Screw-HH	27	115-4522	4	Screw-Cap, HH
8	105-4295-03	1	Axle Support ASM	28	98-3862-03	1	Bracket-Support, Cylinder
9	98-3863	1	Stop-Oscillation	29	302-33	1	Fitting-Grease
10	3296-15	1	Nut-Lock, NI	31	99-2404-03	1	Stop-Rear Axle, LH
11	99-8434-03	1	Rear Axle Pin ASM	32	325-36	1	Screw-HH
12	32144-14	1	Screw-HWHTF	33	3296-23	1	Nut-Lock, NI
13	99-8431	2	Washer-Thrust	35	87-3700	2	Screw-Cap, HH
14	99-8432	1	Washer-Thrust	36	3256-28	1	Washer-Flat
15	71-4540	1	Washer-Thrust	37	302-5	1	Fitting-Grease
16	32146-20	1	Nut-Jam	38	106-6774	2	Joint-Ball
17	48-9220	4	Washer	39	32151-104	2	Ring-Retaining, External
18	99-2405-03	1	Bumper				



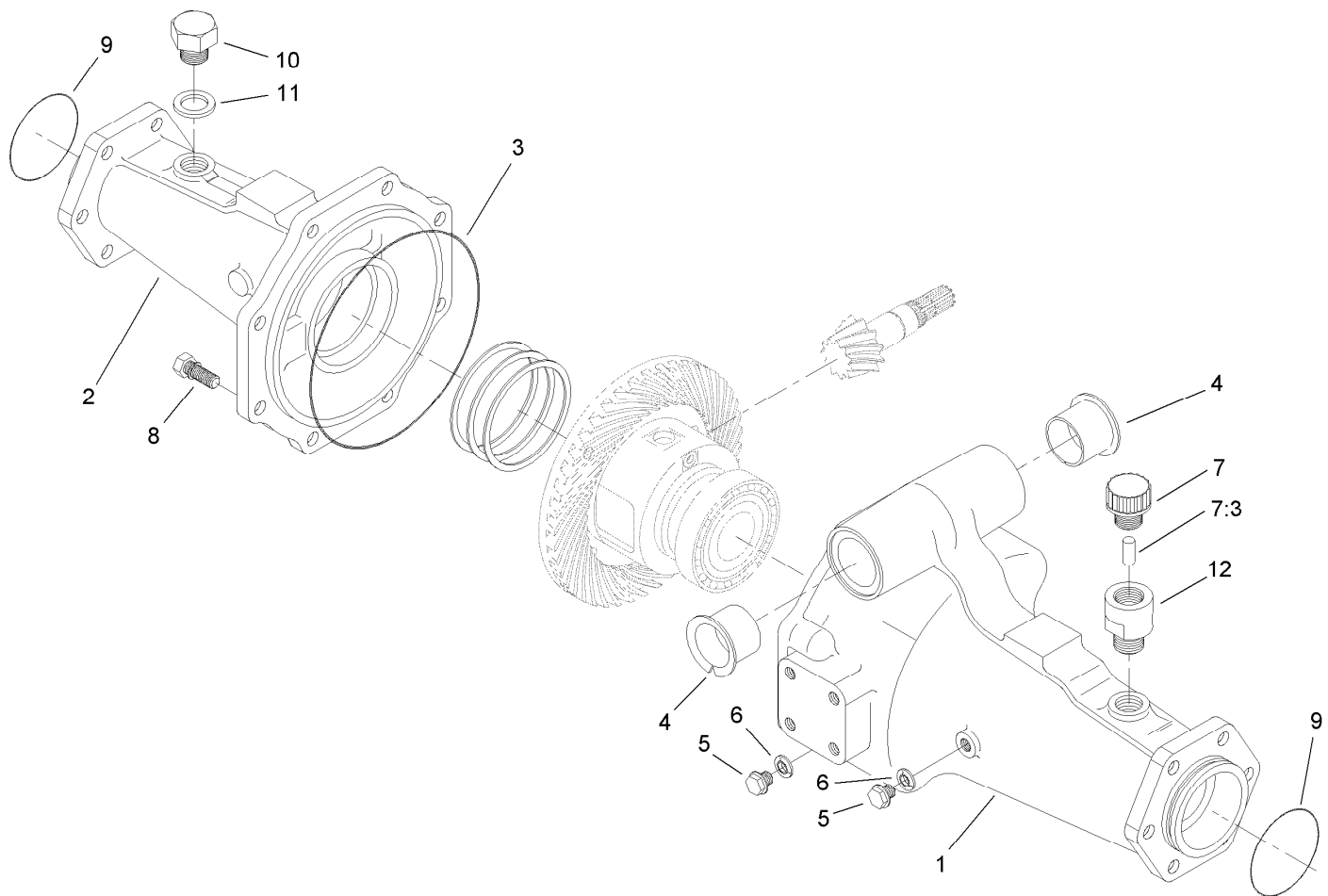
## Bevel Pinion Shaft Assembly Rear Axle Assembly No. 106-1120

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	99-7575	4	Bolt
2	99-7570	2	Bearing-Roller, Taper
3	95-7535	1	Case-Bearing
4	106-1065	1	O-Ring
5	99-7572	1	Collar-Seal, Oil
6	106-1066	1	O-Ring
7	99-7574	1	Seal-Oil
8	99-7559	1	Washer-Lock
9	99-7560	1	Nut-Lock
10	99-7550	2	Shim 0.1
10	99-7551	2	Shim 0.2



## Differential Assembly Rear Axle Assembly No. 106-1120

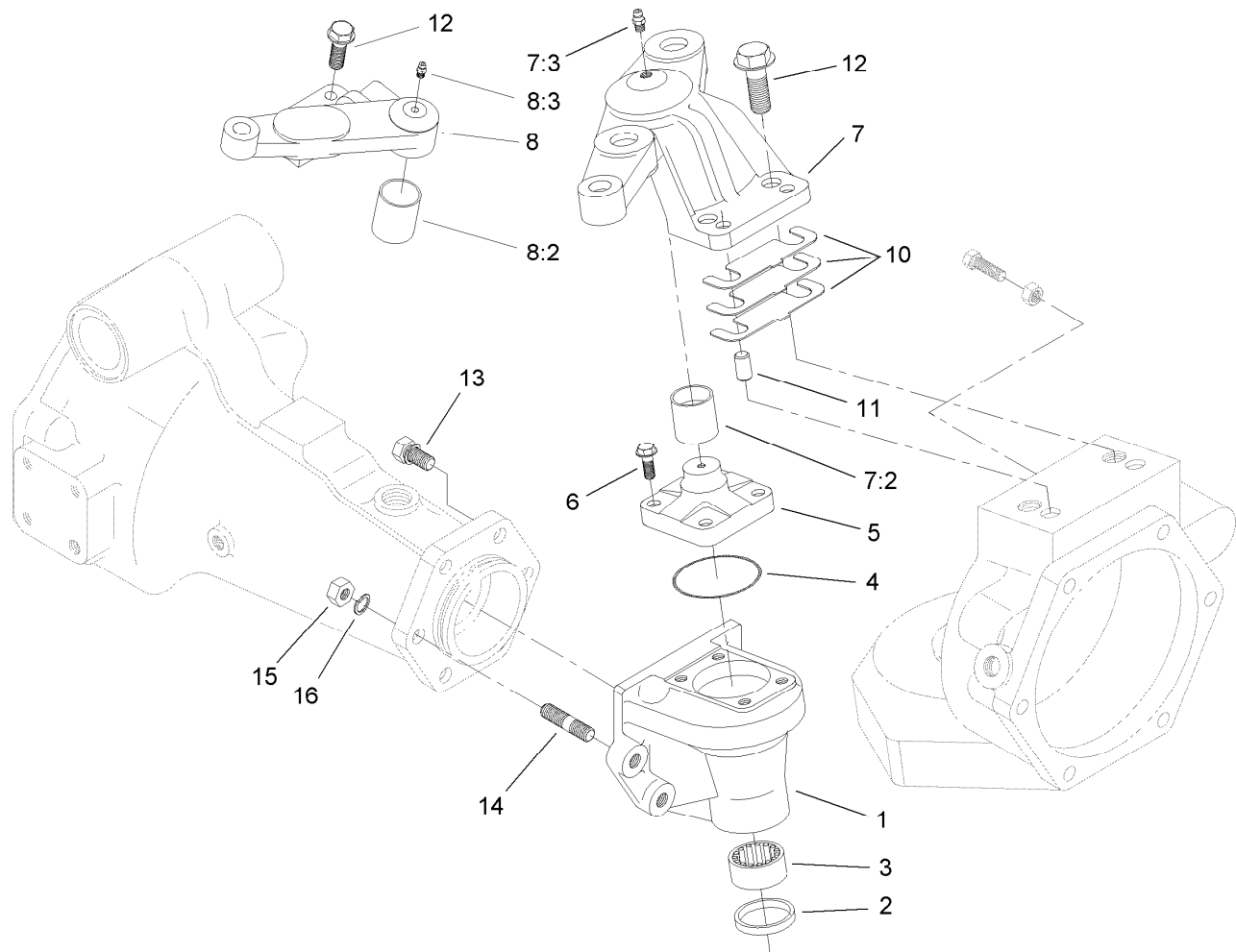
Ref.	Part Number	Qty.	Description
1	95-7503	1	Differential ASM
2	106-1093	1	Ring And Pinion, Matched Set
3	95-7502	1	Case-Differential
4	99-7576	8	Bolt
5	3253-4	8	Washer-Lock
6	99-7578	1	Shaft-Differential
7	99-7579	2	Pinion-Differential
8	99-7580	2	Washer-Differential
9	99-7581	2	Gear-Differential
10	99-7582	2	Washer-Differential
10	99-7583	2	Washer-Differential
10	99-7584	2	Washer-Differential
11	99-7588	1	Pin-Spring
12	99-7562	2	Bearing-Ball
13	99-7585	2	Shim 0.1
13	99-7586	2	Shim 0.2
13	99-7587	2	Shim 0.4



## Axle Support Assembly Rear Axle Assembly No. 106-1120

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	95-7508	1	Support-Axle
2	95-7506	1	Support-Axle
3	106-1067	1	O-Ring
4	95-7537	2	Bushing-Flanged
5	99-7589	2	Plug
6	99-7590	2	Washer-Seal
7	110-4812	1	Axle Vent ASM
7:3	110-4815	1	Insert-Filter, Foam
8	99-7592	8	Bolt
9	106-1068	2	O-Ring
10	104-8643	1	Plug
11	104-8644	1	O-Ring
12	104-2377	1	Extension-Vent

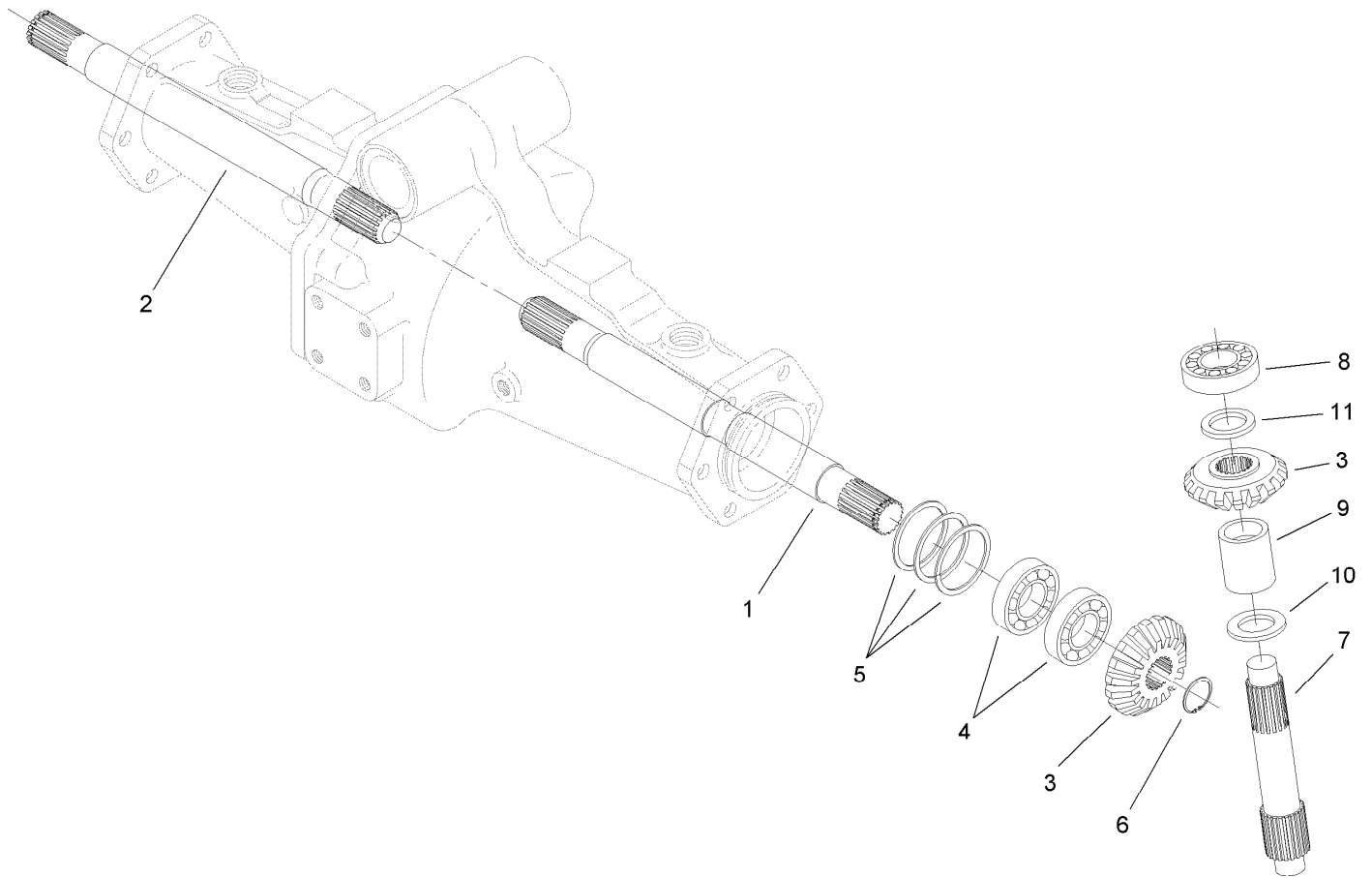




## Bevel Gear Case Assembly Drive Axle Assembly No. 106-1120

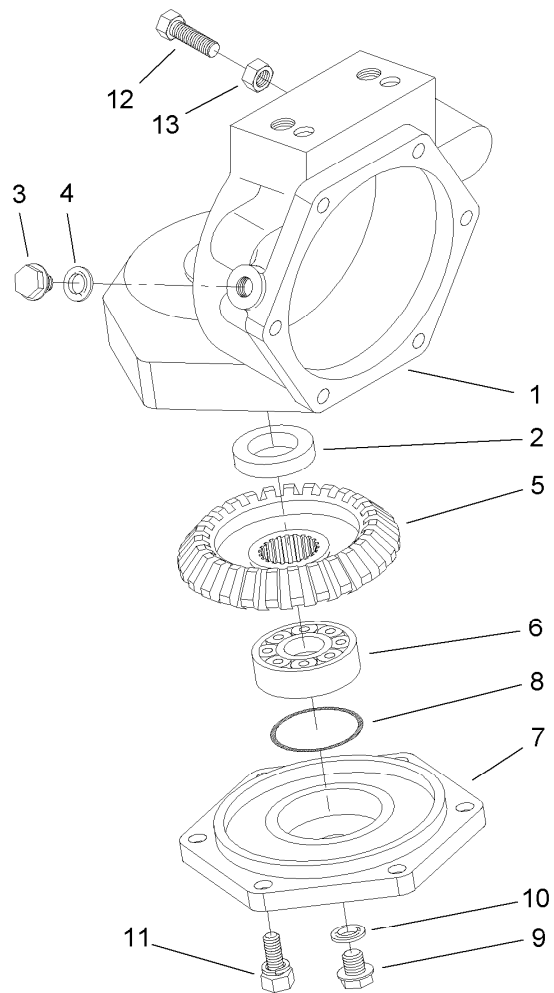
Ref.	Part Number	Qty.	Description
1	106-1099	2	Case-Gear, Bevel
2	99-7594	2	Seal-Oil
3	99-7595	2	Bearing-Needle
4	106-1069	2	O-Ring
5	104-2373	2	Knuckle
6	104-2374	8	Bolt
7	110-4757	1	LH Axle Case Support ASM
7:2	99-7529	1	Bushing ●
7:3	99-7528	1	Nipple-Grease
8	110-4756	1	RH Axle Case Support ASM
8:2	99-7529	1	Bushing ●
8:3	99-7528	1	Nipple-Grease
10	95-7547	2	Shim 0.1
10	95-7548	2	Shim 0.2
10	95-7549	2	Shim 0.3
11	99-7597	4	Pin-Dowel
12	99-7598	4	Bolt
13	99-7599	8	Bolt
14	99-7525	4	Stud
15	99-7526	4	Nut
16	99-7527	4	Washer-Spring

● Not serviced separately



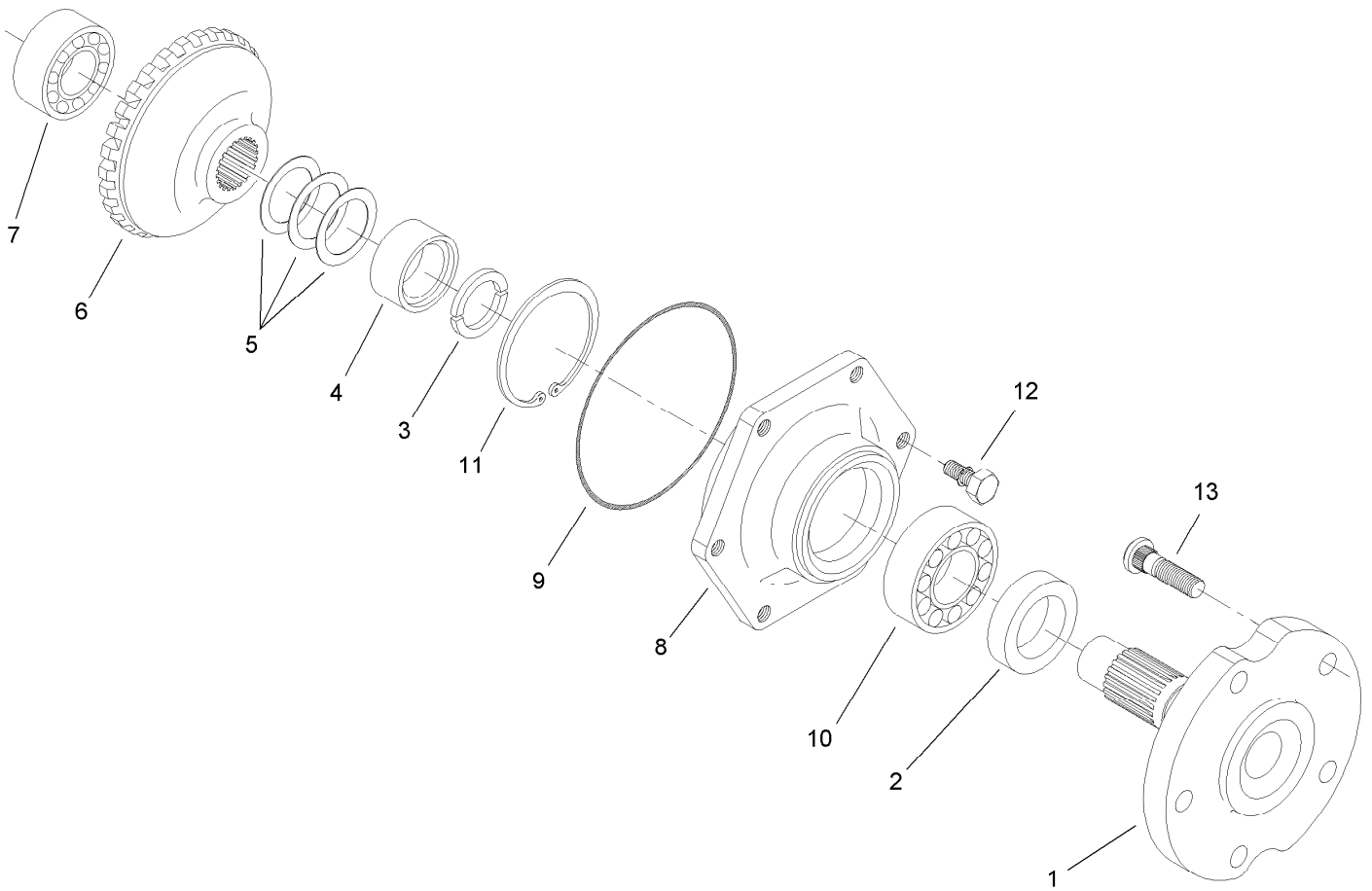
## Bevel Gear Shaft Assembly Rear Axle Assembly No. 106-1120

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	95-7509	1	Shaft-Gear, Differential
2	95-7512	1	Shaft-Gear, Differential
3	95-7518	4	Gear-Bevel, 18 Tooth
4	99-7530	4	Bearing-Ball
5	99-7552	2	Shim 0.1
5	99-7553	2	Shim 0.2
5	99-7554	2	Shim 0.5
6	99-7531	2	Clip
7	106-1101	2	Shaft-Gear, Bevel
8	99-7532	2	Bearing-Roller, Taper
9	95-7543	2	Spacer
10	99-7533	2	Collar-Thrust
11	99-7558	2	Collar



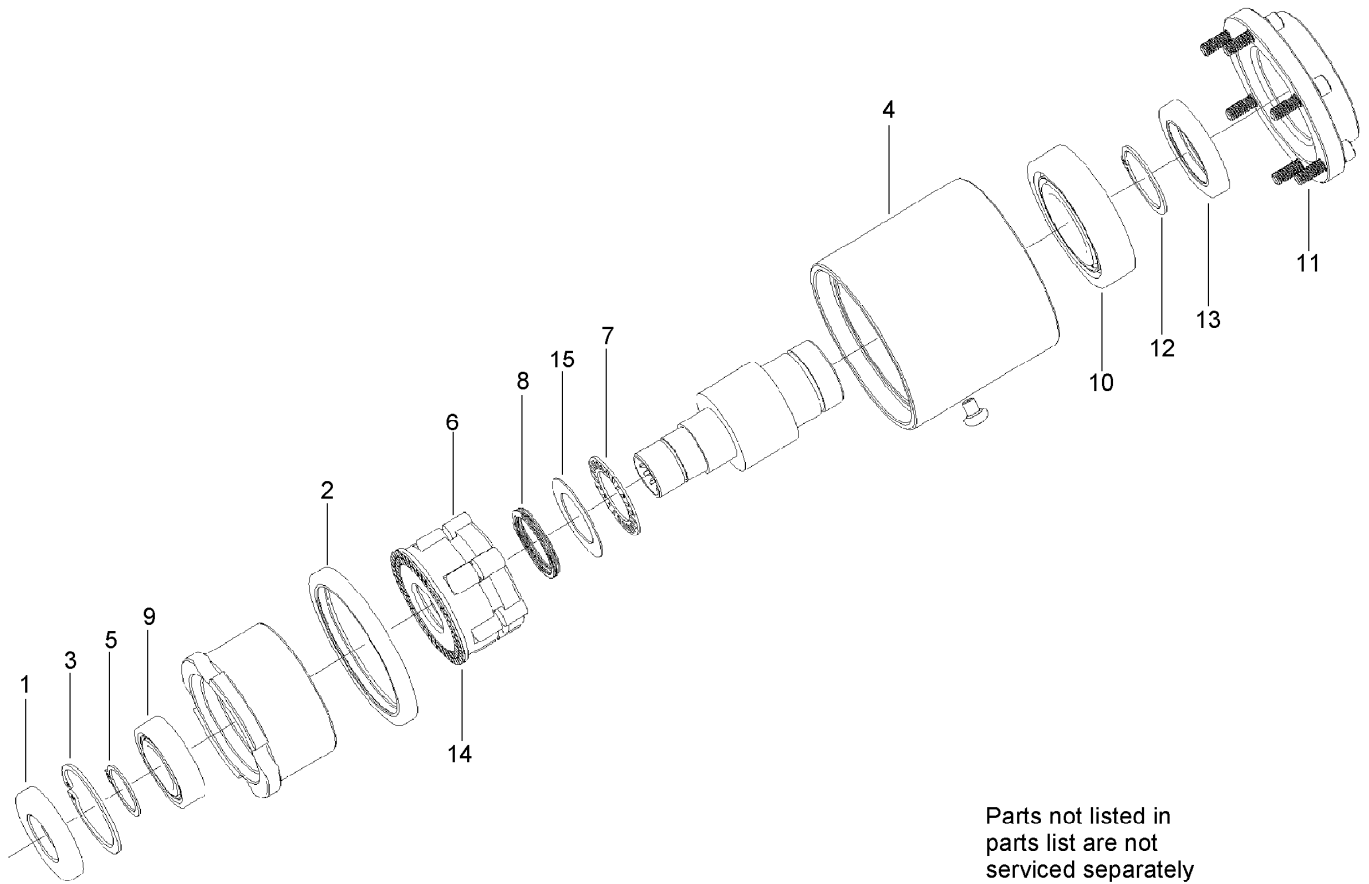
## Axle Case Assembly Rear Axle Assembly No. 106-1120

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	106-1100	2	Case-Axle
2	99-7594	2	Seal-Oil
3	99-7535	2	Plug
4	99-7536	2	Washer-Seal
5	95-7528	2	Gear-Bevel, 27 Tooth
6	99-7532	2	Bearing-Roller, Taper
7	95-7526	2	Cover-Axle
8	106-1072	2	O-Ring
9	99-7589	2	Plug
10	99-7590	2	Washer-Seal
11	99-7596	12	Bolt
12	106-1102	2	Bolt-Stop
13	106-1103	2	Nut



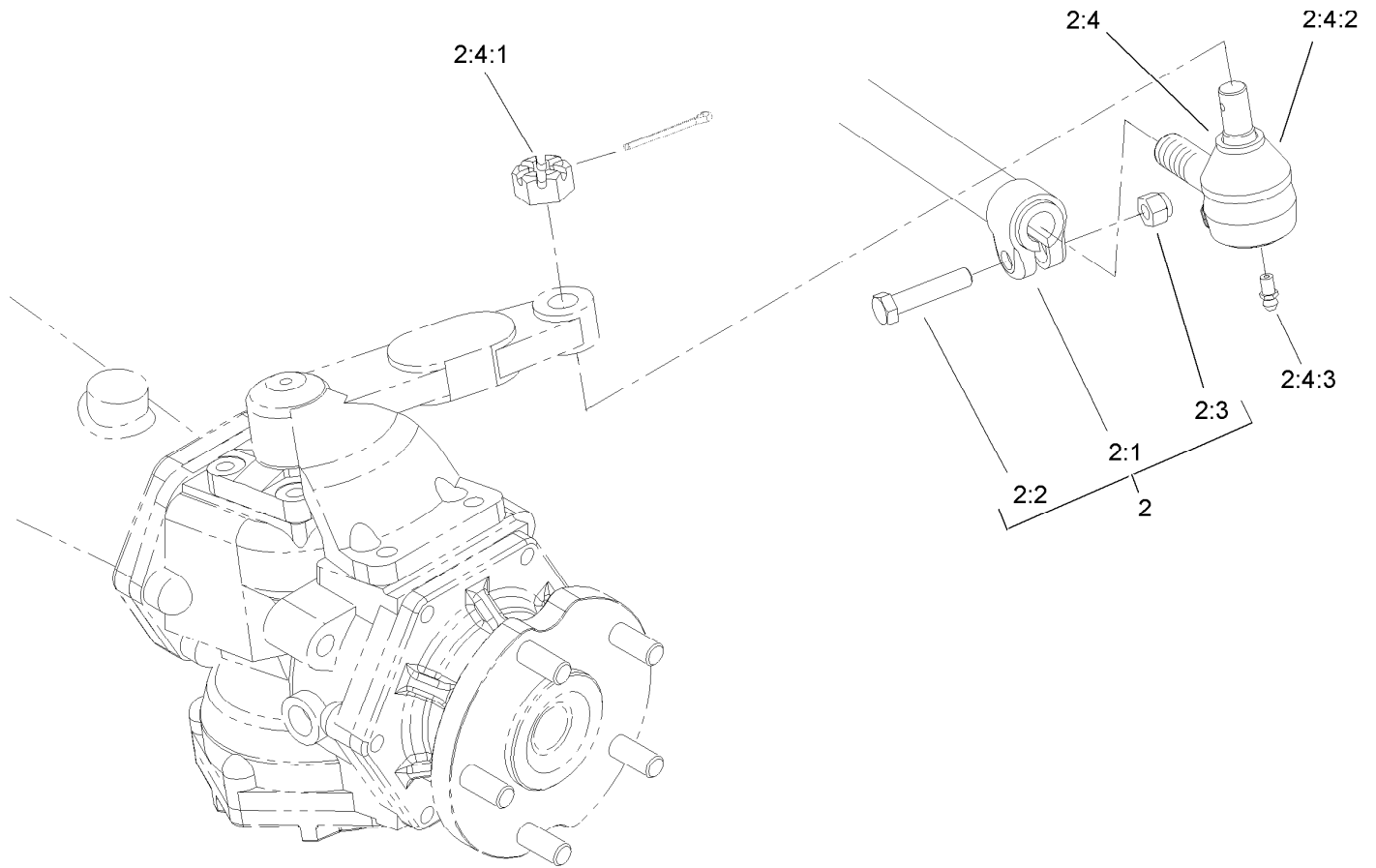
## Axle Assembly Rear Axle Assembly No. 106-1120

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	95-7522	2	Axle
2	99-7564	2	Seal-Oil
3	95-7544	4	Clip
4	95-7523	2	Spacer
5	99-7555	2	Shim 0.3
5	99-7556	2	Shim 0.2
5	99-7557	2	Shim 0.5
6	95-7525	2	Gear-Bevel, 27 Tooth
7	99-7534	2	Bearing-Ball
8	95-7521	2	Cover-Axle
9	106-1071	2	O-Ring
10	99-7561	2	Bearing-Ball
11	99-7539	2	Clip
12	99-7596	12	Bolt
13	99-7563	10	Stud



## Bi-Directional Clutch Assembly No. 95-6296

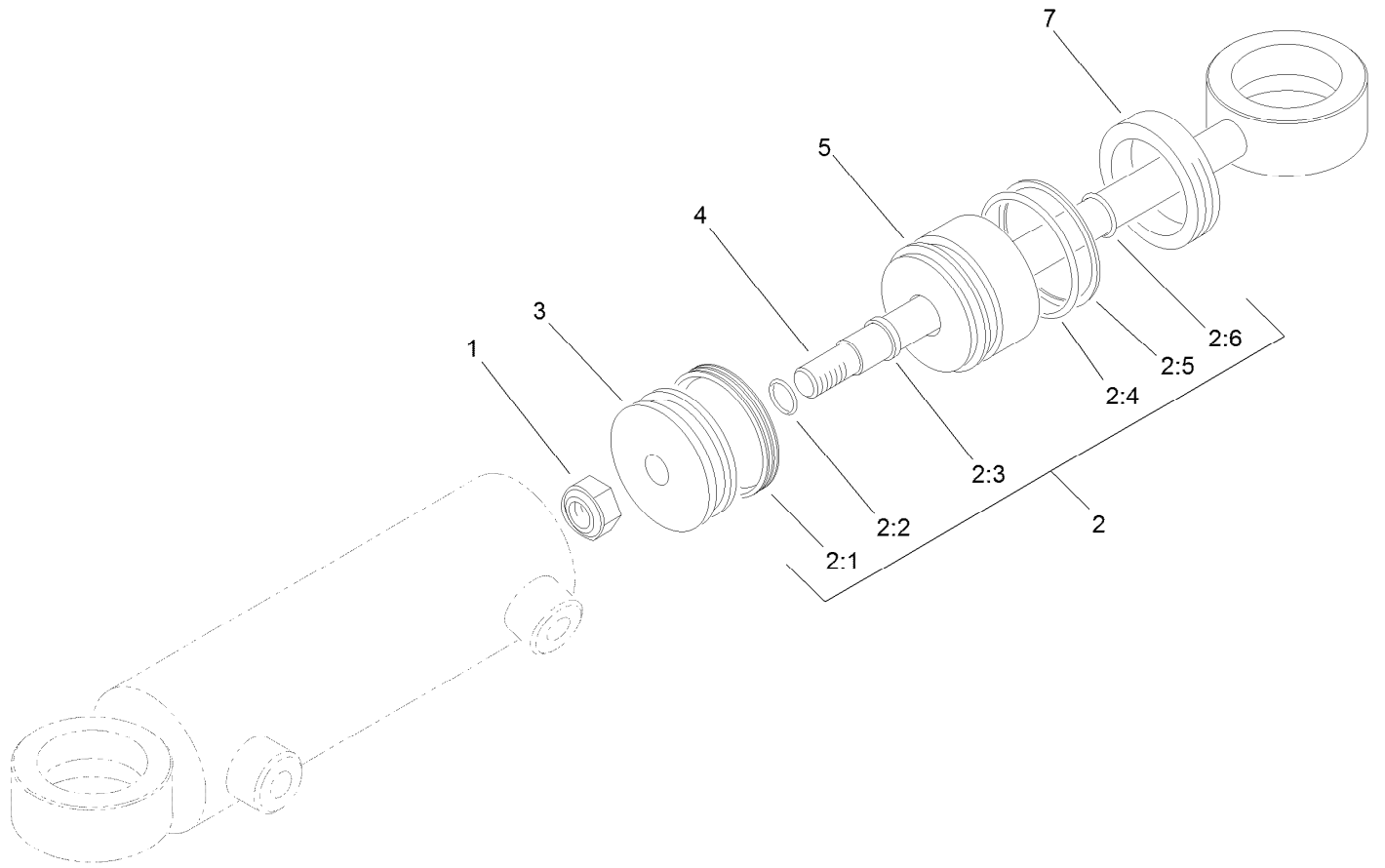
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	100-6589	1	Seal-Oil
2	100-6593	1	Seal-Oil
3	32151-75	1	Ring-Retaining
4	100-6596	1	Screw-PPH
5	100-6597	1	Ring-Snap, External
6	93-8925	6	Roller
7	93-8919	1	Bearing-Needle, Thrust
8	93-8923	1	Spring-Wave
9	99-2902	1	Bearing
10	92-9705	1	Bearing
11	3245-6	6	Screw-HSH
12	32120-84	1	Ring-Snap, External
13	71-6790	1	Seal-Oil
14	100-2568	1	Roll Cage ASM
15	93-8929	1	Washer-Thrust



## Tie Rod Assembly No. 98-3871-03

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2		1	Tie Rod ASM ●
2:1	99-2412-03	1	Rod And Clamp ASM
2:2	323-9	2	Screw-HH
2:3	3296-39	2	Nut-Lock, NI
2:4	71-4740	2	End-Rod, Tie (RH)
2:4:1	105-7941	1	Nut-Hex, Slotted
2:4:2	105-7835	1	Seal
2:4:3	302-5	1	Fitting-Grease

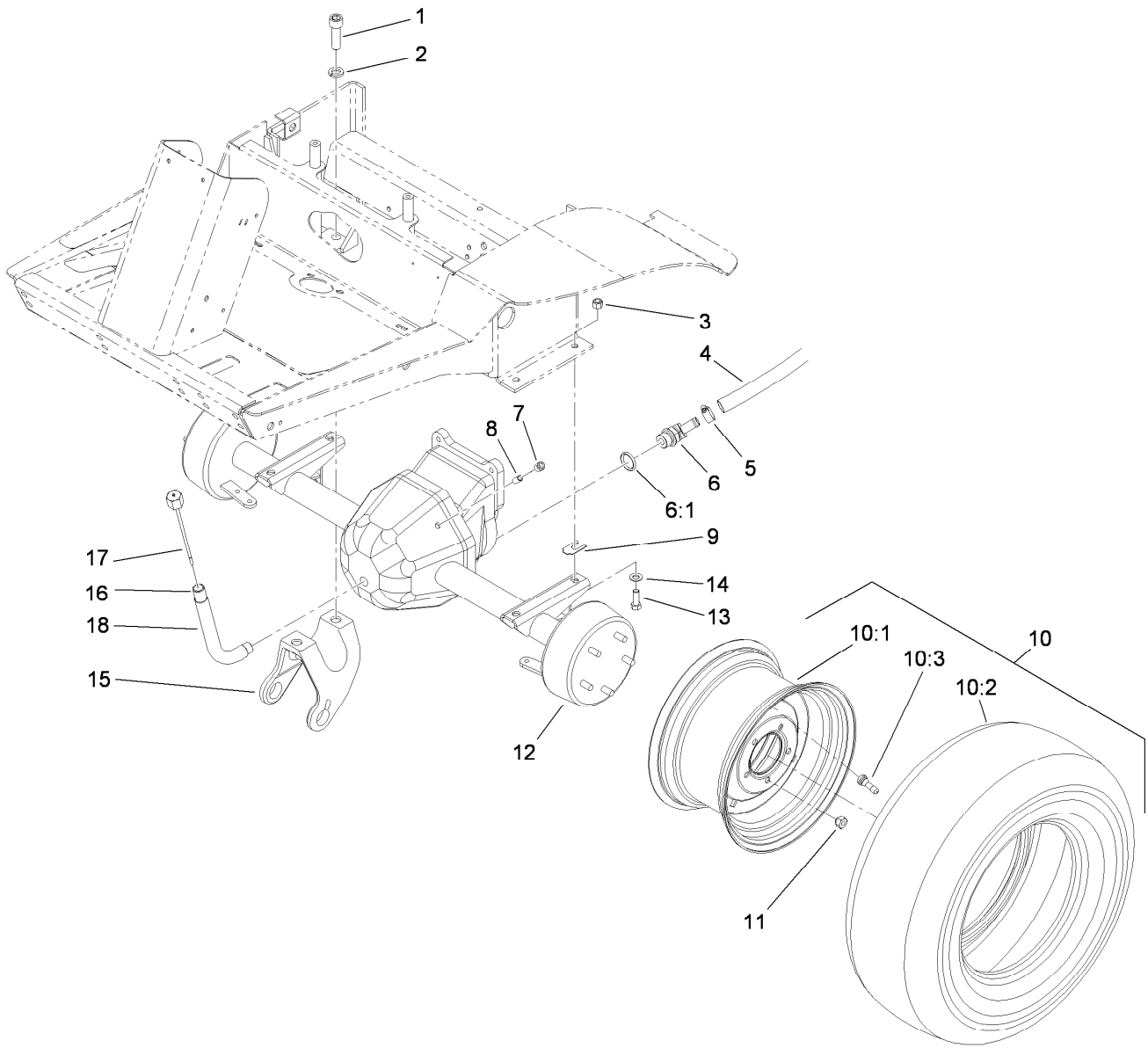
● Not serviced separately



## Hydraulic Cylinder Assembly No. 99-2415

Ref.	Part Number	Qty.	Description
1	32152-10	1	Locknut
2	86-5390	1	Seal Kit
2:1		1	Uniring ●
2:2		1	O-Ring ●
2:3		1	Seal-Rod ●
2:4		1	O-Ring ●
2:5		1	Ring-Backup ●
2:6		1	O-Ring ●
3		1	Piston ●
4		1	Rod ●
5		1	Head ●
7		1	Collar-Internal ●

● Not serviced separately

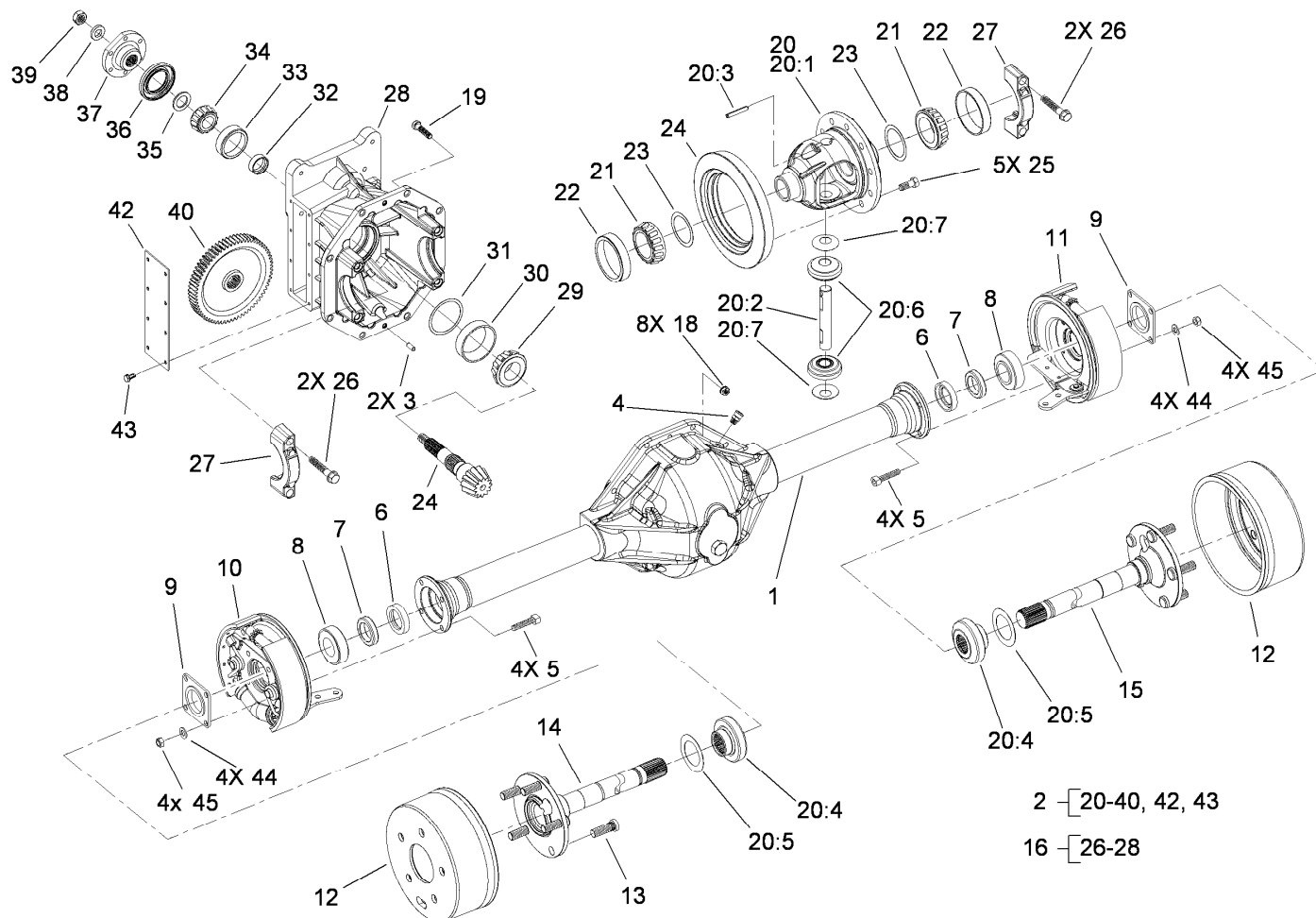


## Front Axle Assembly

<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	3273-38	4	Screw-HSH	10:1	117-0822	1	Wheel
2	3253-8	4	Washer-Lock	10:2	117-0823	1	Tire-Standard
3	3296-48	4	Nut-Lock, NI	10:3	232-27	1	Stem-Valve
4	92-5083	1	Hose-HYD	11	242-50	10	Nut-Lug
5	2412-119	1	Clamp-Hose, Worm Drive	12	108-6599-03	1	Axle ASM
6	92-5088	1	Fitting-Elbow, 45 DEG	13	324-5	4	Screw-HH
6:1	237-81	1	O-Ring	14	3256-25	4	Washer-Flat
7	2810-1	1	Coupling-Pipe	15	110-9678	2	Bracket-Carrier
8	289-6	1	Nipple-Pipe	16	105-7169	1	Tube-Fill, Oil
9	42-6080	1	Shim-Axle	17	105-7172	1	Dipstick ASM
10		2	Wheel And Tire ASM ●	18	110-5651	1	Sleeve-Protective

● Not serviced separately





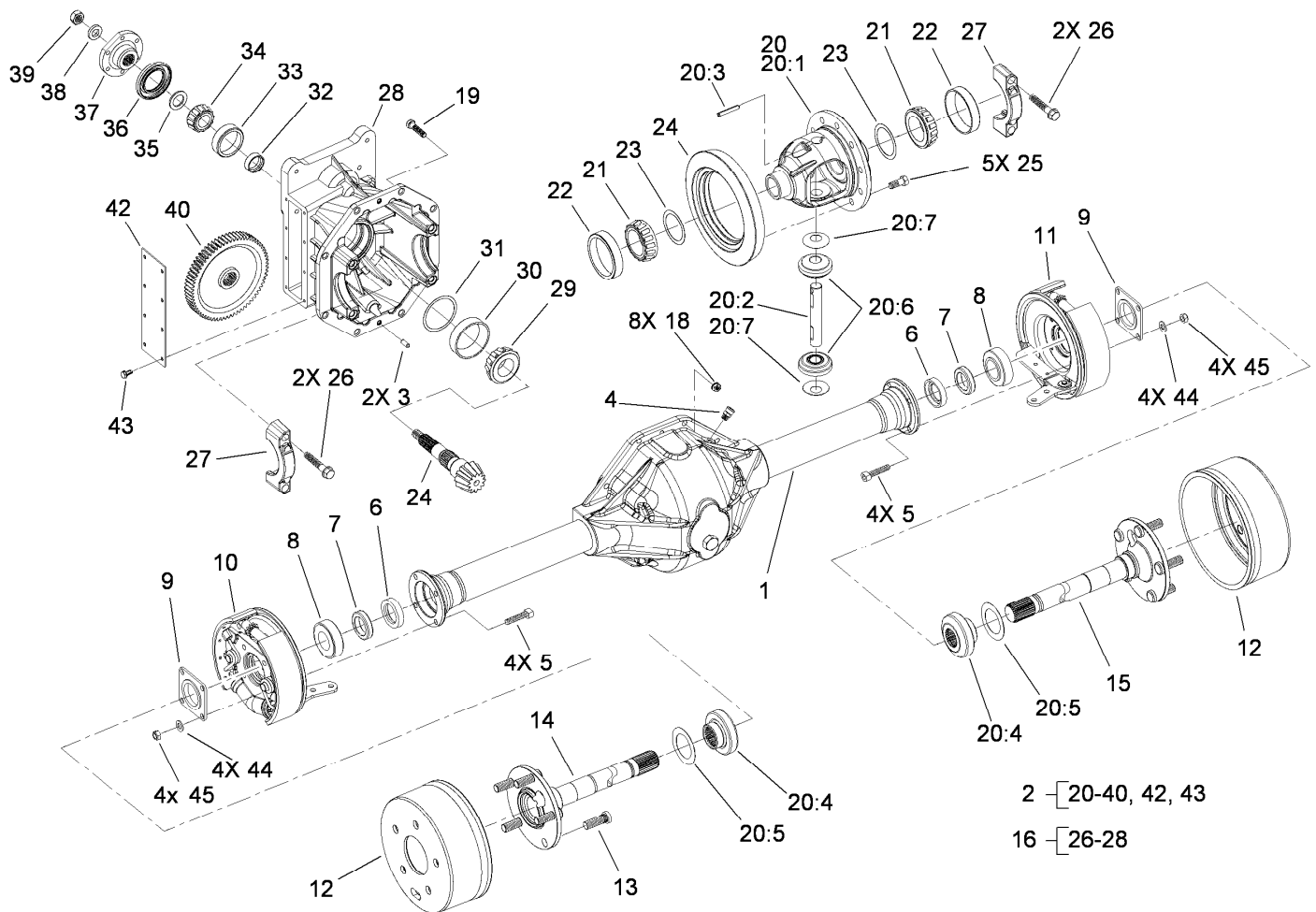
2 [20-40, 42, 43  
16 [26-28

## Front Axle Assembly No. 108-6599-03

Ref.	Part Number	Qty.	Description
1	110-9670	1	Lower Housing ASM
2	92-4907	1	Differential Carrier ASM
3	21-8270	2	Pin-Dowel
4	72-9420	1	Vent
5	94-6934	8	Screw-HH
6	24-8840	2	Ring-Retaining, Wheel Bearing
7	99-6969	2	Seal-Oil, Wheel End
8	21-8180	2	Bearing ASM
9	28-0670	2	Seal-Grease
10		1	Brake ASM, RH ●
11		1	Brake ASM, LH ●
12	110-3072	2	Drum-Brake
13	106-9205	10	Stud-Wheel
14	110-3073	1	Shaft-Axle, RH
15	110-3074	1	Shaft-Axle, LH
16	110-3076	1	Carrier ASM
18	32149-5	8	Nut-Keps
19	3210-8	8	Screw-HH
20	110-4136	1	Differential Case ASM
20:1	21-7670	1	Case-Differential
20:2	21-7700	1	Shaft-Mate, Pinion
20:3	42150	1	Pin-Lock, Pinion
20:4	110-3078	2	Gear-Differential
20:5	110-3077	2	Washer-Thrust
20:6	110-3079	2	Pinion-Differential

Ref.	Part Number	Qty.	Description
20:7	21-7730	2	Washer-Thrust, Pinion
21	254-65	2	Bearing-Roller, Cone
22	254-66	2	Cup-Bearing, Roller
23	21-8090	1	Shim-Bearing, Differential (.003)
23	21-8100	1	Shim-Bearing, Differential (.005)
23	21-8110	1	Shim-Bearing, Differential (.010)
23	21-8120	1	Shim-Bearing, Differential (.030)
24	92-1676	1	Gear And Pinion ASM
25	21-7770	5	Screw-Gear, Drive
26	92-1773	4	Screw-HHF
27		1	Cap-Bearing ●
28		1	Housing ●
29	43-6760	1	Bearing-Roller, Cone Taper
30	43-6750	1	Bearing-Taper, Cup
31	43-6713	1	Shim-Pinion (.030)
31	43-6712	1	Shim-Pinion (.010)
31	43-6711	1	Shim-Pinion (.005)
31	43-6710	1	Shim-Pinion (.003)
32	21-8020	1	Spacer-Bearing
33	254-90	1	Bearing-Cup
34	254-91	1	Cone-Bearing
35	72-3588	1	Shim-Bearing, Front (.131)

● Not serviced separately



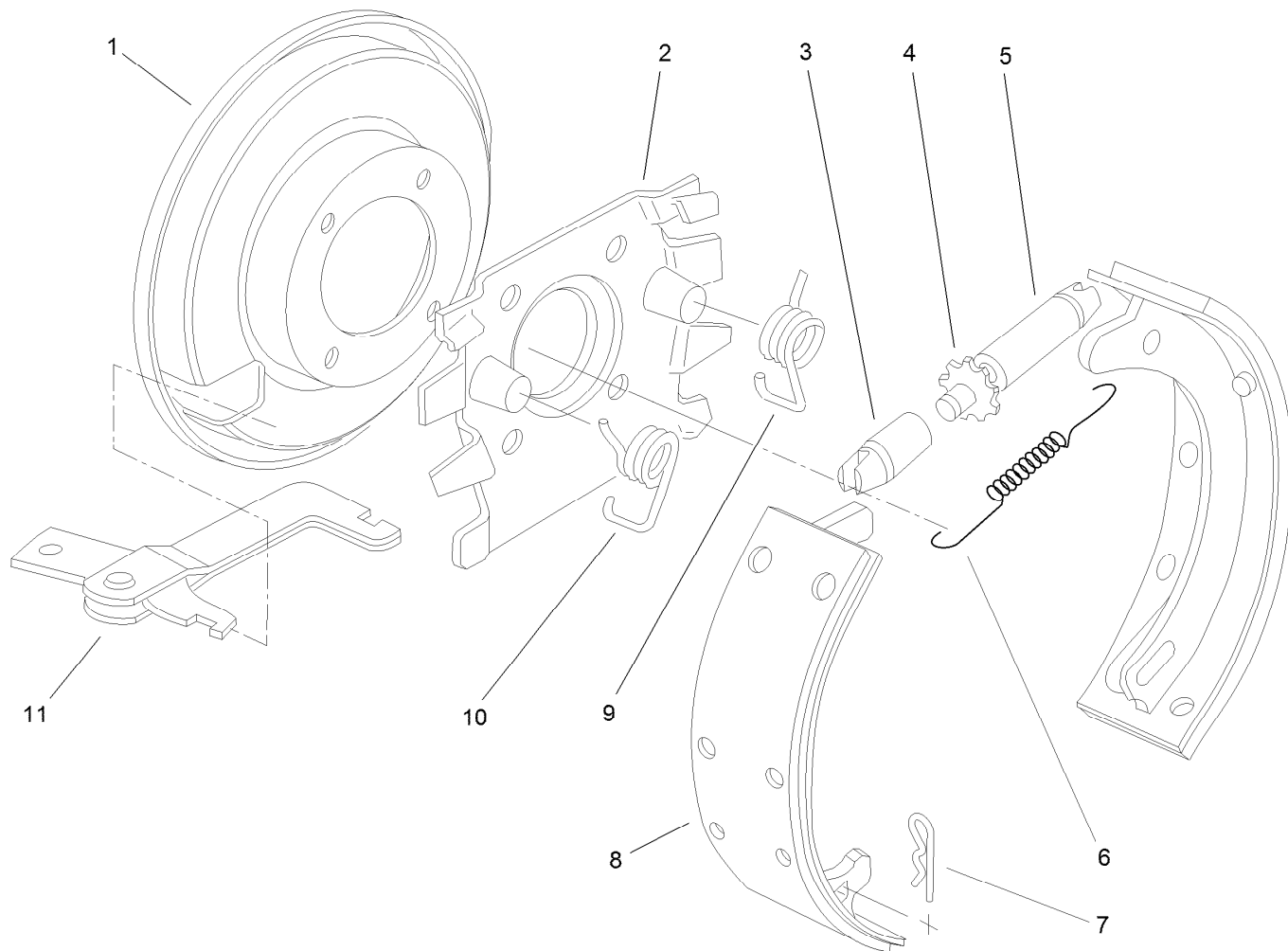
2 [20-40, 42, 43  
16 [26-28

## Front Axle Assembly No. 108-6599-03 (continued)

Ref.	Part Number	Qty.	Description
35	72-3590	1	Shim-Bearing, Front (.133)
35	72-3587	1	Shim-Bearing, Front (.129)
35	72-3594	1	Shim-Bearing, Front (.141)
35	72-3595	1	Shim-Bearing, Front (.143)
35	72-3596	1	Shim-Bearing, Front (.145)
35	72-3597	1	Shim-Bearing, Front (.147)
35	72-3598	1	Shim-Bearing, Front (.149)
35	72-3600	1	Shim-Bearing, Front (.151)
35	72-3578	1	Shim-Bearing, Front (.110)
35	72-3580	1	Shim-Bearing, Front (.112)
35	72-3577	1	Shim-Bearing, Front (.108)
35	72-3576	1	Shim-Bearing, Front (.106)
35	72-3575	1	Shim-Bearing, Front (.104)
35	72-3574	1	Shim-Bearing, Front (.102)
35	72-3573	1	Shim-Bearing, Front (.100)
35	72-3572	1	Shim-Bearing, Front (.098)
35	72-3571	1	Shim-Bearing, Front (.096)
35	72-3570	1	Shim-Bearing, Front (.094)

Ref.	Part Number	Qty.	Description
35	72-3593	1	Shim-Bearing, Front (.139)
35	72-3592	1	Shim-Bearing, Front (.137)
35	72-3591	1	Shim-Bearing, Front (.135)
35	72-3581	1	Shim-Bearing, Front (.114)
35	72-3582	1	Shim-Bearing, Front (.116)
35	72-3583	1	Shim-Bearing, Front (.118)
35	72-3584	1	Shim-Bearing, Front (.120)
35	72-3585	1	Shim-Bearing, Front (.125)
35	72-3586	1	Shim-Bearing, Front (.127)
36	71-4330	1	Seal
37	68-7010	1	Flange
38	71-4340	1	Washer
39	71-4350	1	Nut
40	86-7230	1	Gear-Input, Transmission
42	21-7830	1	Cover-Gear
43	32144-112	8	Screw-HWH
44	94-6936	8	Washer-Hardened
45	94-6935	8	Locknut

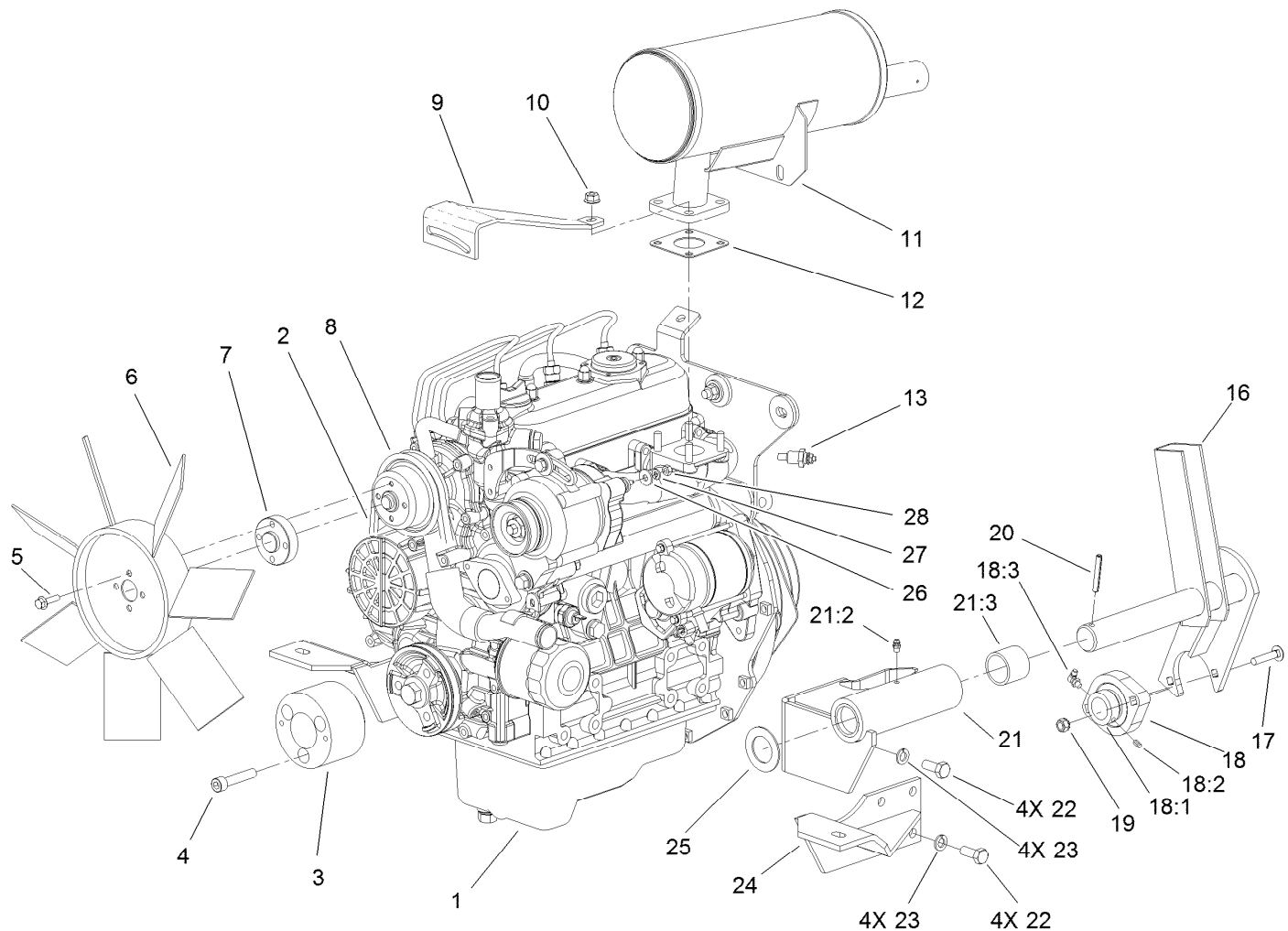
● Not serviced separately



## Right and Left Hand Brake Assembly

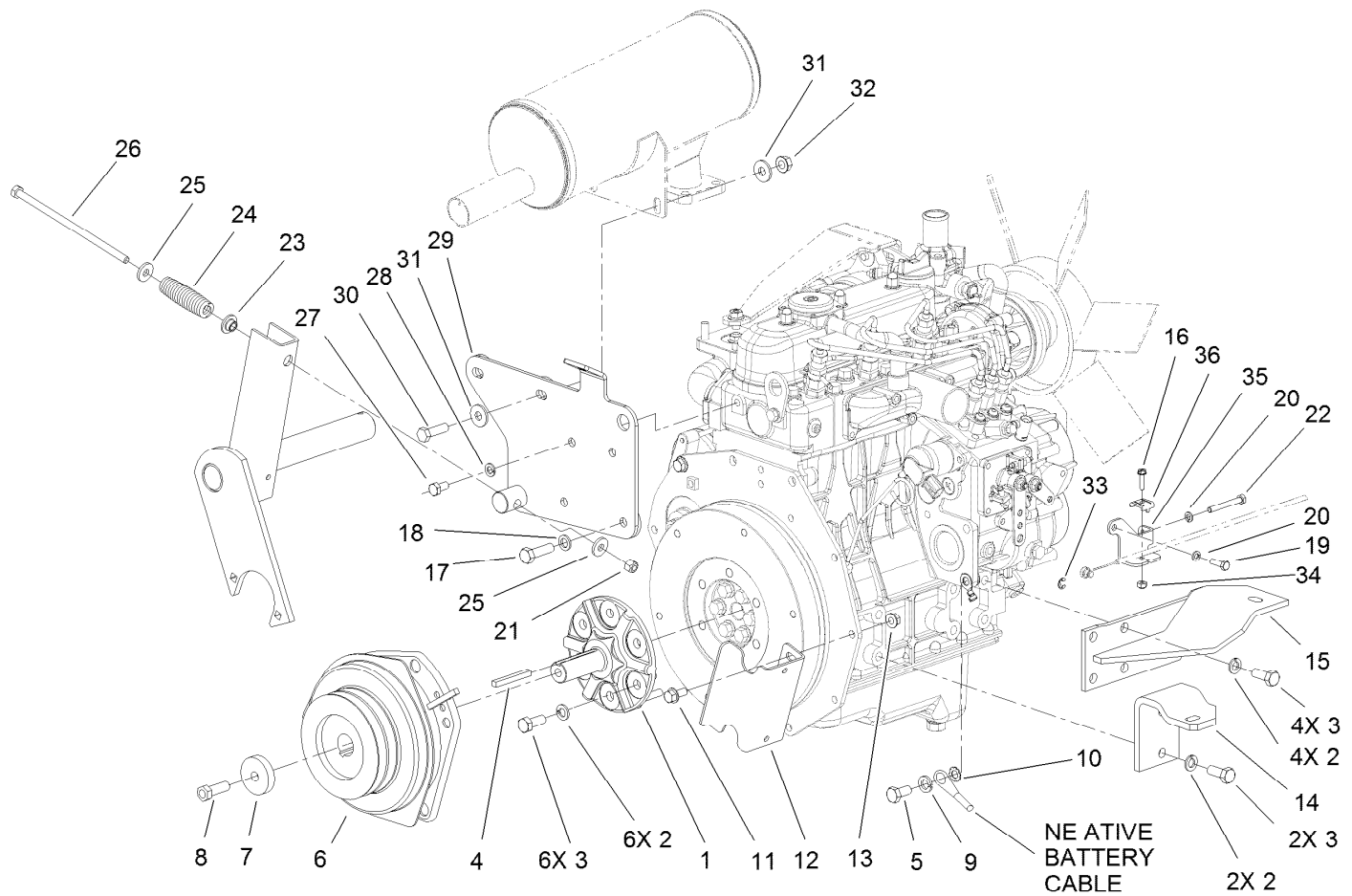
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	21-9450	1	Shield-Dust
2	43-6810	1	Spider-Torque
3	21-9390	1	Socket-Screw, Adjusting
4	21-9370	1	Screw-Adjusting
5	21-9380	1	Nut-Pivot
6	21-9440	1	Spring-Screw, Adjusting
7	21-9460	2	Retainer-Lever, Brake
8	84-8600	1	Set-Shoes, Lined
9	21-9430	1	Spring-Return, RH
10	21-9420	1	Spring-Return, LH
11	24-9180	1	Strut And Lever ASM
12	92-8775	1	Liquid Gasket Kit ●

● Not illustrated



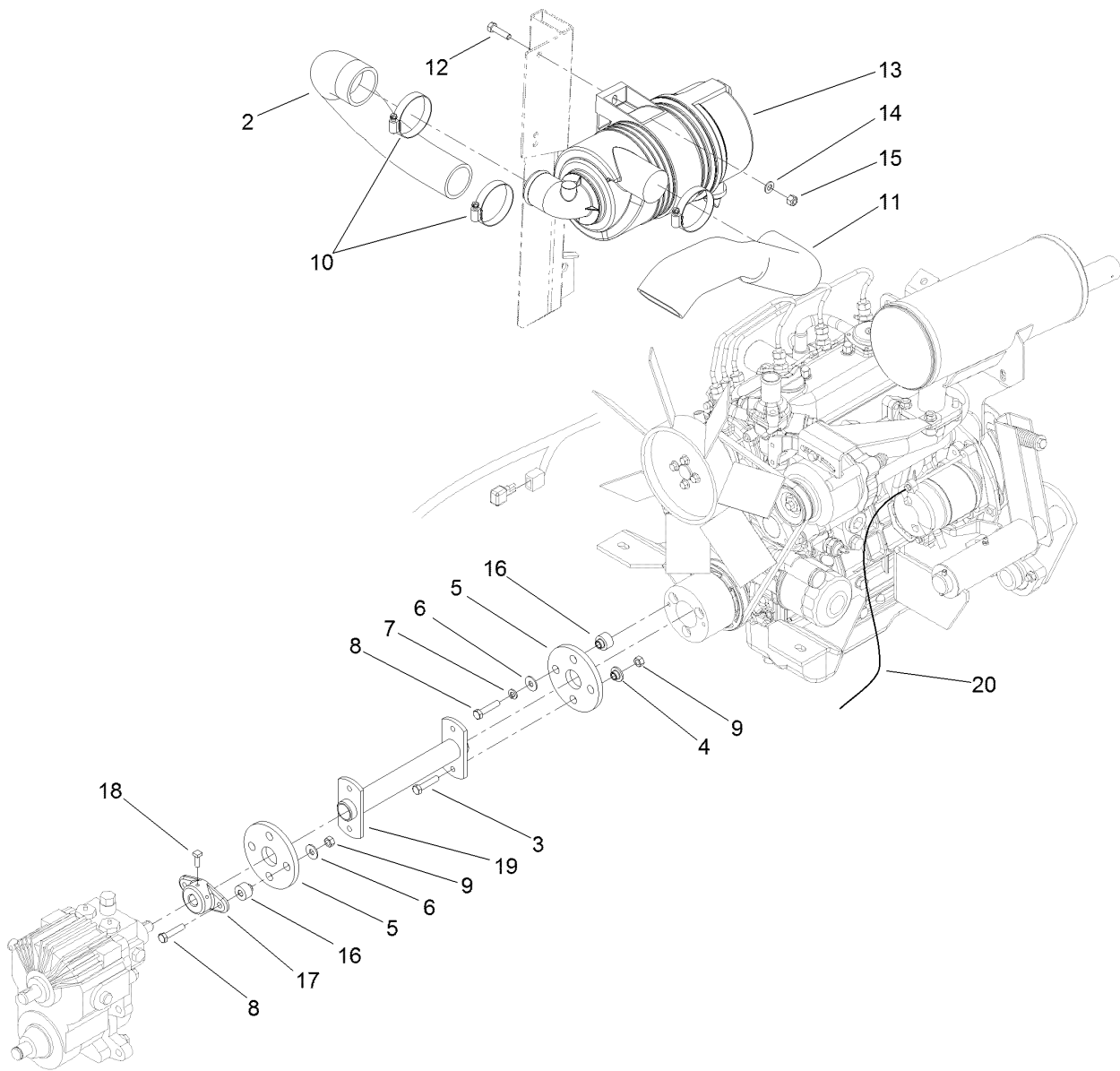
## Engine, Fan and Muffler Assembly

<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	114-2890	1	Engine ASM	18:1	251-77	1	Collar-Lock, Bearing
2	104-3494	1	Belt-V	18:2	3245-35	1	Screw-Set, HSH
3	104-1723	1	Adapter-Front Drive	18:3	302-40	1	Fitting-Grease
4	3274-106	3	Screw-HSH	19	32149-1	2	Nut-Keps
5	33103-020	4	Screw-HHF	20	32121-32	1	Pin-Roll
6	104-4246	1	Fan-Engine	21	117-0841	1	LH Rear Engine Mount ASM
7	104-4247	1	Spacer-Fan	21:2	302-5	1	Fitting-Grease
8	104-3497	1	Pulley-Fan	21:3	256-299	2	Bushing-Straight
9	105-2556-03	1	Brace-Alternator, Upper	22	43-0090	8	Screw-HH
10	33004-00	4	Nut-HF	23	42-9600	8	Washer-Lock, Spring
11	108-1363	1	Muffler-Exhaust	24	117-0831-03	1	LH Front Engine Mount ASM
12	98-9611	1	Gasket	25	3-4324	1	Washer-Flat
13	108-8682	1	Thermoswitch	26	3256-22	1	Washer-Flat
16	106-4381-03	1	PTO Tension Shaft ASM	27	43-5930	1	Washer-Lock, Spring
17	3230-4	2	Screw-CARR	28	33013-00	1	Nut-Hex
18	92-8799	1	Bearing-Flange				



## Engine Mounting and Clutch Assembly

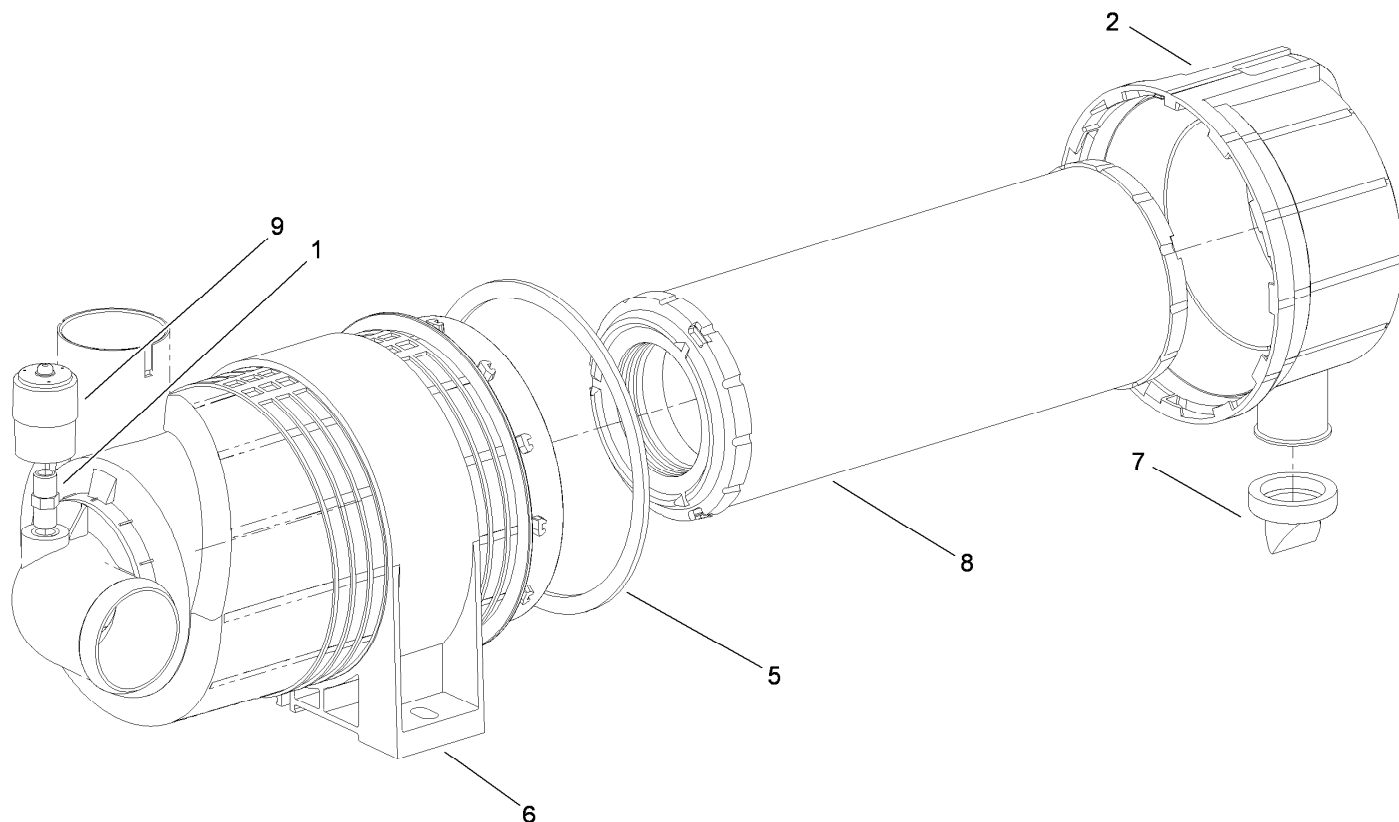
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	104-1715	1	Hub-Clutch	19	48-7630	1	Screw
2	42-9600	12	Washer-Lock, Spring	20	48-8020	2	Washer-Spring
3	43-0090	12	Screw-HH	21	3296-29	1	Nut-Lock, NI
4	63-8150	1	Key-Square	22	33113-050	1	Screw-HH
5	63-7790	1	Screw-Cap	23	27-6600	1	Spacer-Coupling
6	107-9061	1	Electric Clutch / Brake ASM	24	21-0400-01	1	Spring-Compression
7	105-3698	1	Spacer	25	4-2390	2	Washer-Flat
8	3212-5	1	Screw-HH	26	110-9696	1	Bolt-HH
9	3253-6	1	Washer-Lock	27	33114-016	2	Screw-HH
10	3255-9	1	Washer-Lock	28	3253-4	2	Washer-Lock
11	3234-5	2	Screw-HHF	29	108-6561-03	1	Muffler Mount ASM
12	120-6568-03	1	Stop-Clutch	30	323-44	2	Screw-HH
13	32128-25	2	Nut-HF	31	80-6990	4	Washer-Hardened
14	104-1713-03	1	Mount-Engine, RH Rear	32	32128-21	2	Nut-HF
15	117-0836-03	1	RH Front Engine Mount ASM	33	701197	1	E-Ring
16	32105-13	1	Screw-HWH	34	3296-2	1	Nut-Lock, NI
17	56-2140	2	Screw-HH	35	110-9682-03	1	Bracket-Throttle
18	48-9590	2	Washer-Lock	36	81-1690	1	Clamp-Cable



## Air Cleaner and Drive Coupling Assembly

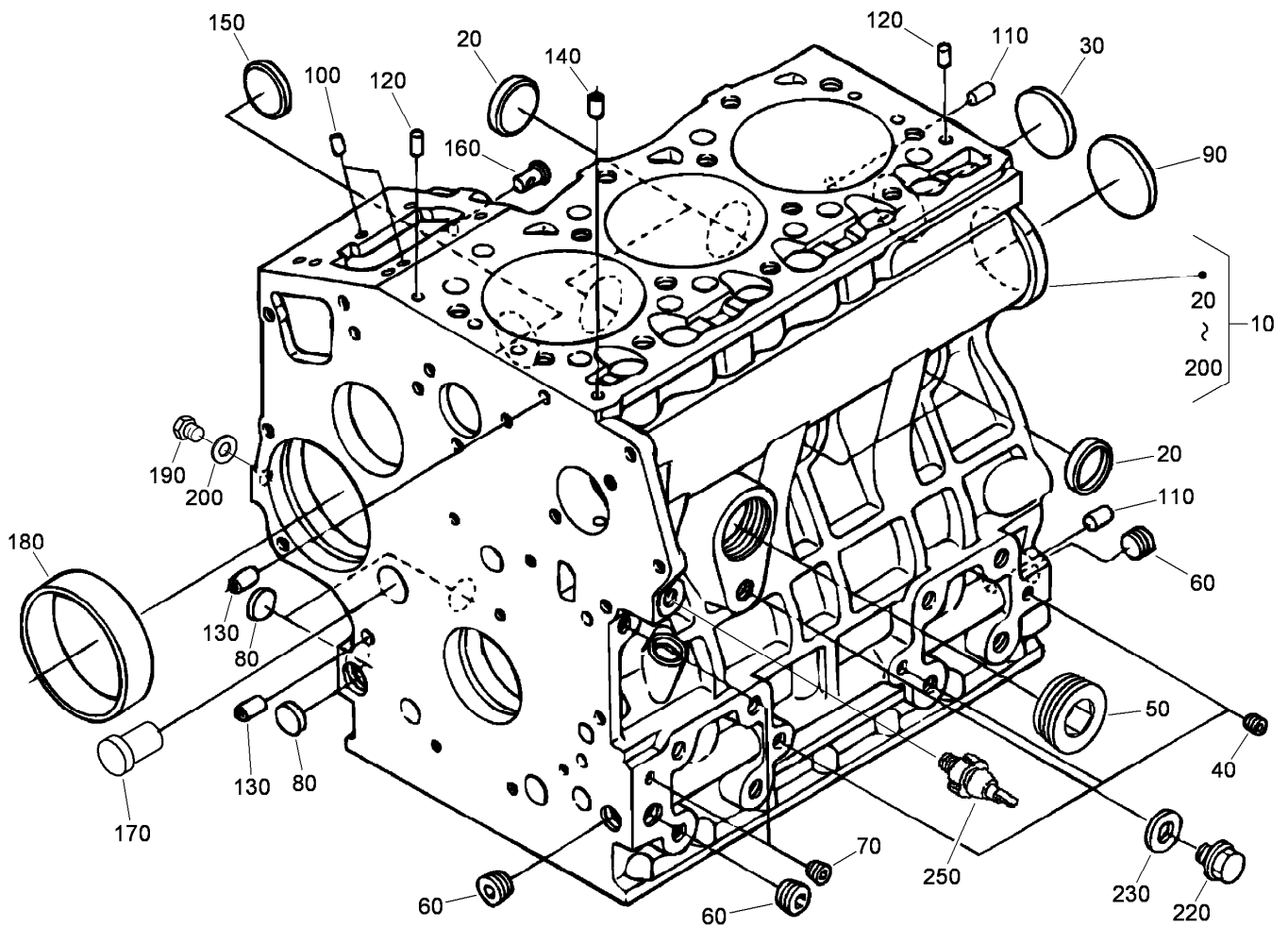
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2	104-3446	1	Hose-Outlet, Air
3	3210-5	4	Screw-HH
4	27-6600	4	Spacer-Coupling
5	115-4523	2	Coupling-Rubber
6	3256-71	4	Washer-Flat
7	3253-4	2	Washer-Lock
8	3210-8	4	Screw-HH
9	32152-5	6	Nut-Hex
10	2412-42	3	Clamp-Hose
11	104-3444	1	Hose-Inlet, Air

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
12	322-6	2	Screw-HH
13	104-3427	1	Air Cleaner ASM
14	3256-23	2	Washer-Flat
15	3296-29	2	Nut-Lock, NI
16	27-6590	4	Spacer-Coupling, Rubber
17	27-4370	1	Hub-Pump
18	3241-6	2	Screw-SQH
19	104-3401-03	1	Drive Shaft ASM
20	99-3441	1	Harness-Wire, Fusible Link



## Air Cleaner Assembly No. 104-3427

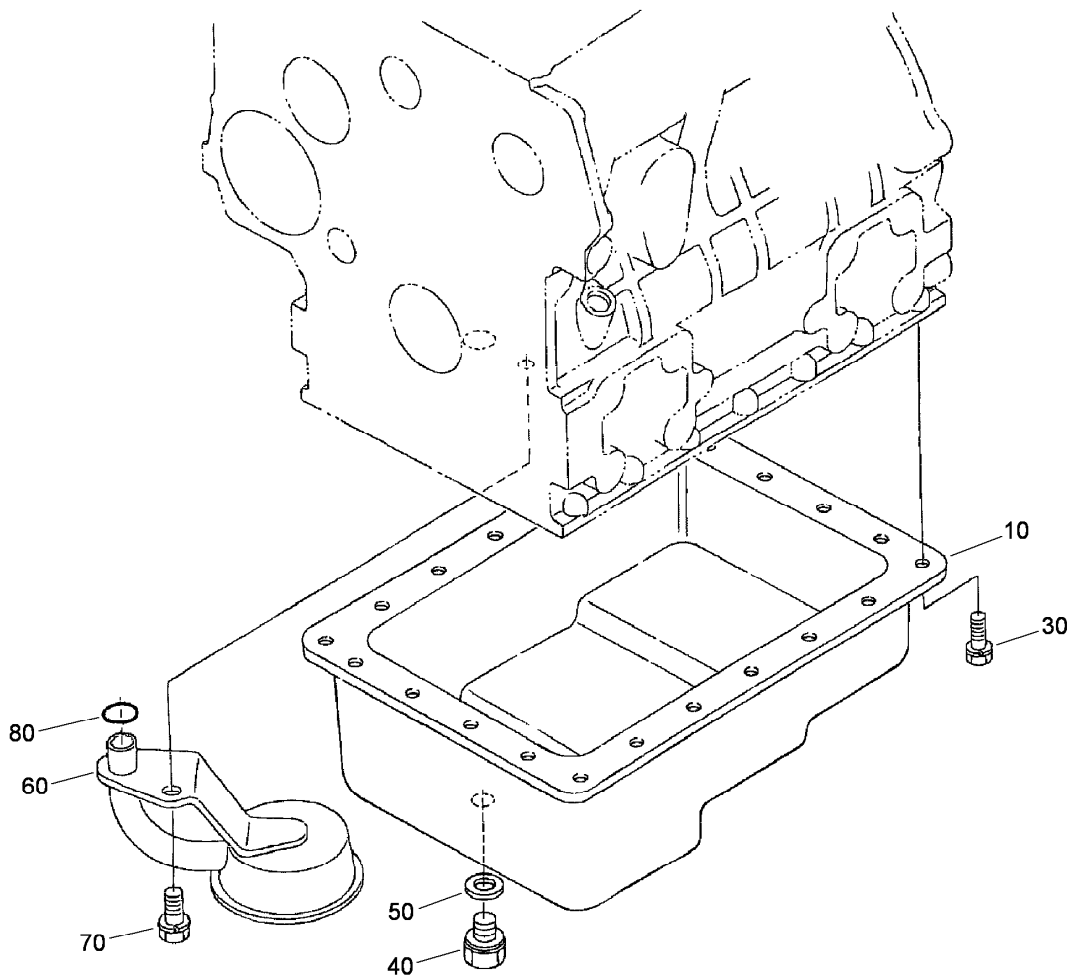
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	105-4292	1	Nipple-Pipe
2	104-0497	1	Cover ASM
5	104-4897	1	Gasket
6	98-4525	1	Bracket-Cleaner, Air
7	104-0498	1	Valve-Vacuator
8	108-3810	1	Filter-Air
9	93-9164	1	Indicator-Mini



## Crankcase Assembly

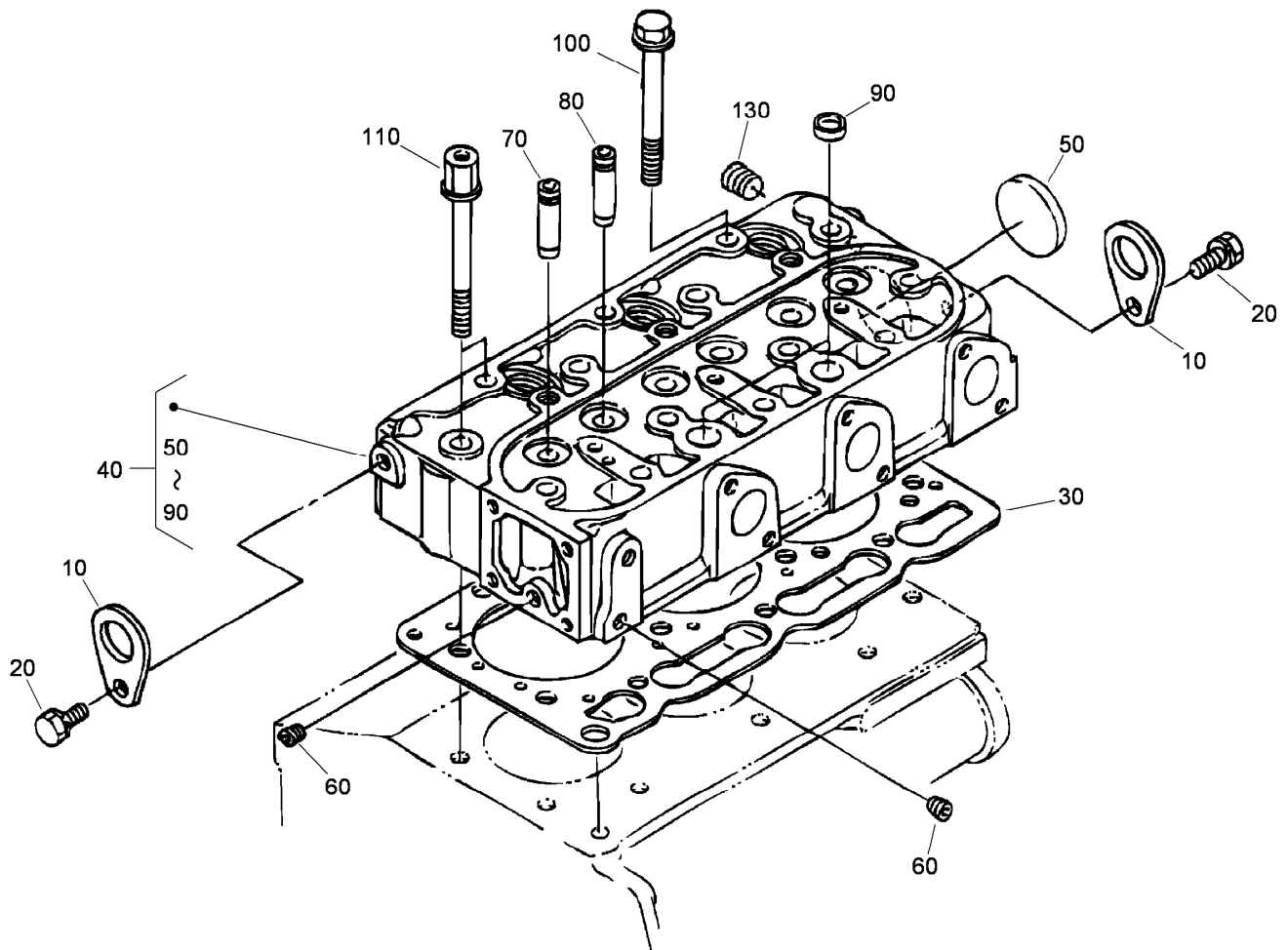
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6571	1	Crankcase ASM
20	98-9398	4	Cap-Sealing
30	98-7539	1	Cap-Sealing
40	98-9687	3	Plug
50	105-3779	1	Plug
60	98-9597	3	Plug
70	98-7487	2	Plug
80	98-9379	3	Plug-Expansion
90	98-9668	1	Plug-Expansion
100	98-9375	2	Pin-Straight
110	98-9377	2	Pin-Straight
120	98-7504	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
250	98-9416	1	Switch-Oil





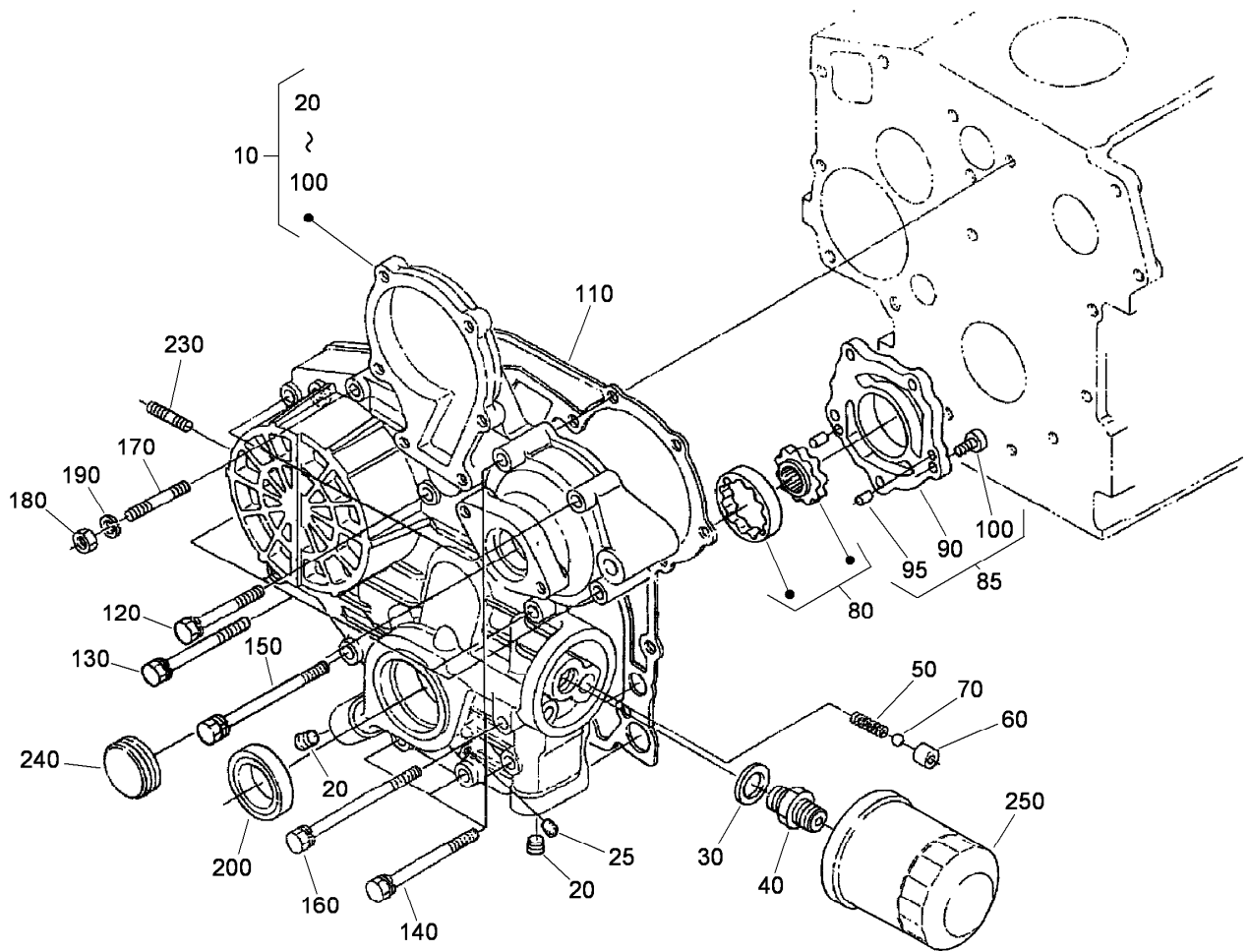
## Oil Pan Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	104-3495	1	Pan-Oil
30	107-9065	22	Bolt
40	114-8151	1	Plug-Drain
50	98-7524	1	Gasket
60	104-3496	1	Filter-Pickup, Oil
70	98-7526	1	Bolt
80	105-3776	1	O-Ring



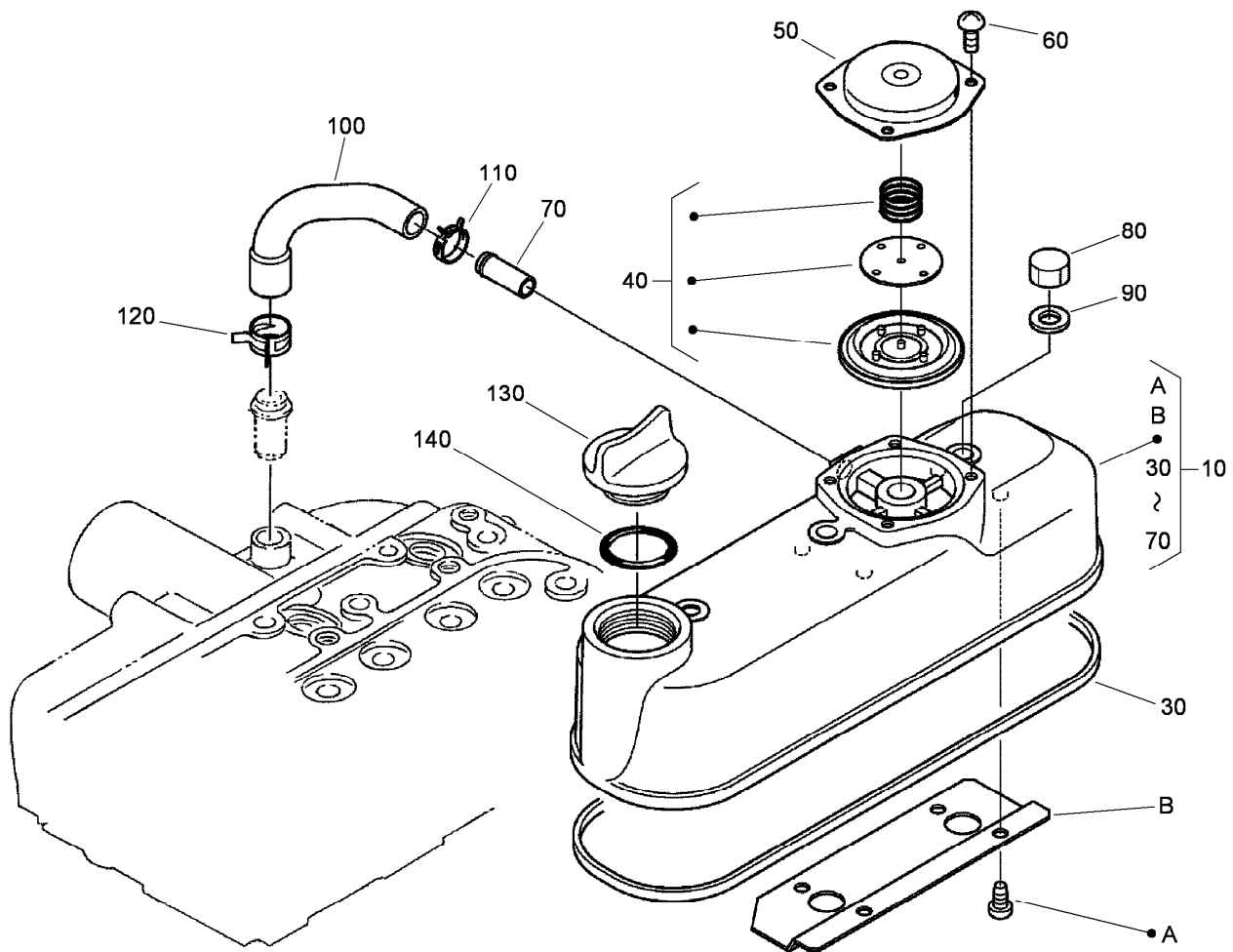
## Cylinder Head Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-7531	2	Hook-Engine
20	100-9195	2	Bolt
30	108-6573	1	Gasket-Head, Cylinder
40	108-6574	1	*obs* Cylinder Head ASM
50	105-3705	1	Cap-Sealing
60	98-9687	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	1	Bolt-Head, Cylinder
110	98-9647	2	Bolt-Head, Cylinder
130	98-9444	1	Plug



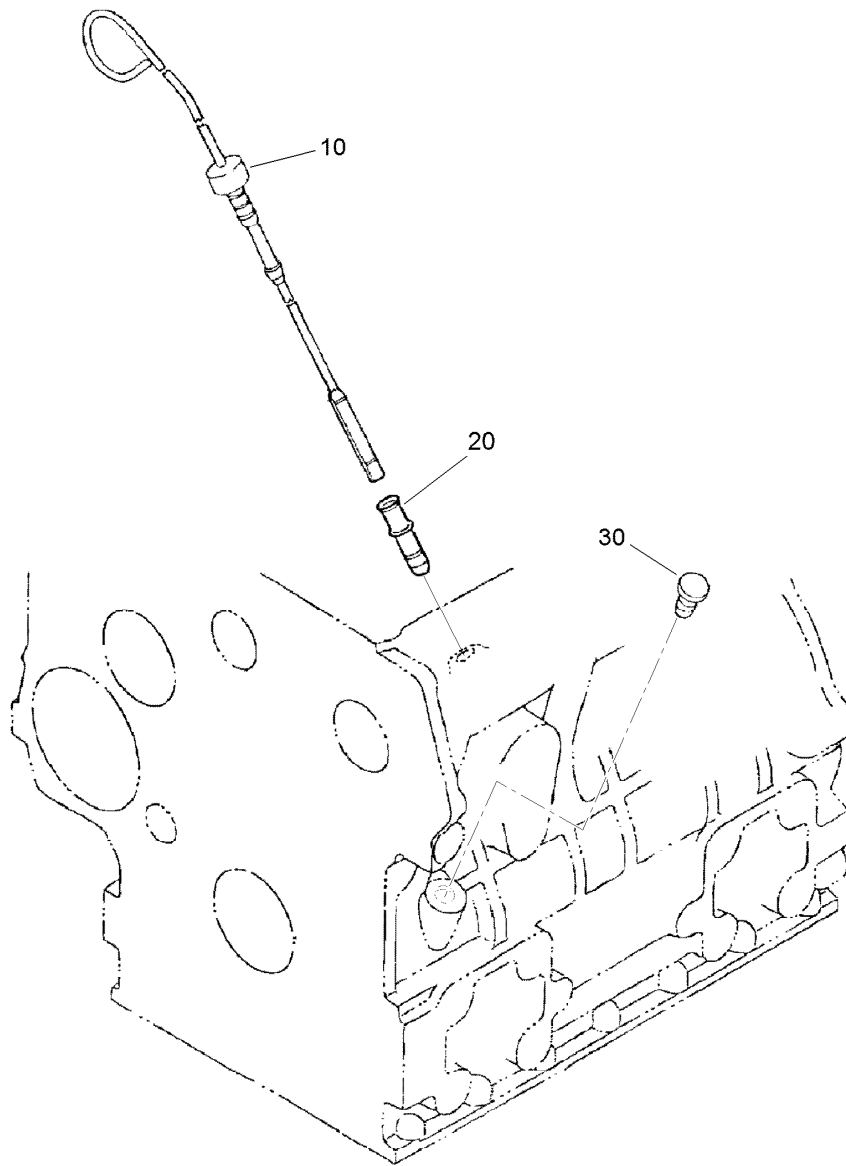
## Gear Case Assembly

<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>
10	115-4105	1	Gear Case ASM	110	98-9633	1	Gasket-Case, Gear
20	98-9598	2	Plug	120	107-9073	3	Bolt
25	98-7487	1	Plug	130	105-3797	4	Bolt
30	98-7562	1	Washer-Plain	140	98-9356	4	Bolt
40	98-9388	1	Joint-Pipe	150	107-9074	1	Bolt
50	98-9544	1	Spring	160	98-9586	1	Bolt
60	98-9543	1	Seat-Valve	170	105-3709	1	Stud
70	98-9380	1	Ball	180	98-7572	1	Nut
80	98-9540	1	Oil Pump Rotor ASM	190	98-7699	1	Washer-Spring
85	115-4501	1	Pump Cover ASM	200	98-9482	1	Seal-Oil
90	107-9069	1	Cover-Pump, Oil	230	105-3710	2	Stud
95	107-9072	2	Pin-Straight	240	98-9641	1	Cover-Case, Gear
100	107-9071	5	Screw	250	108-3841	1	Filter-Oil



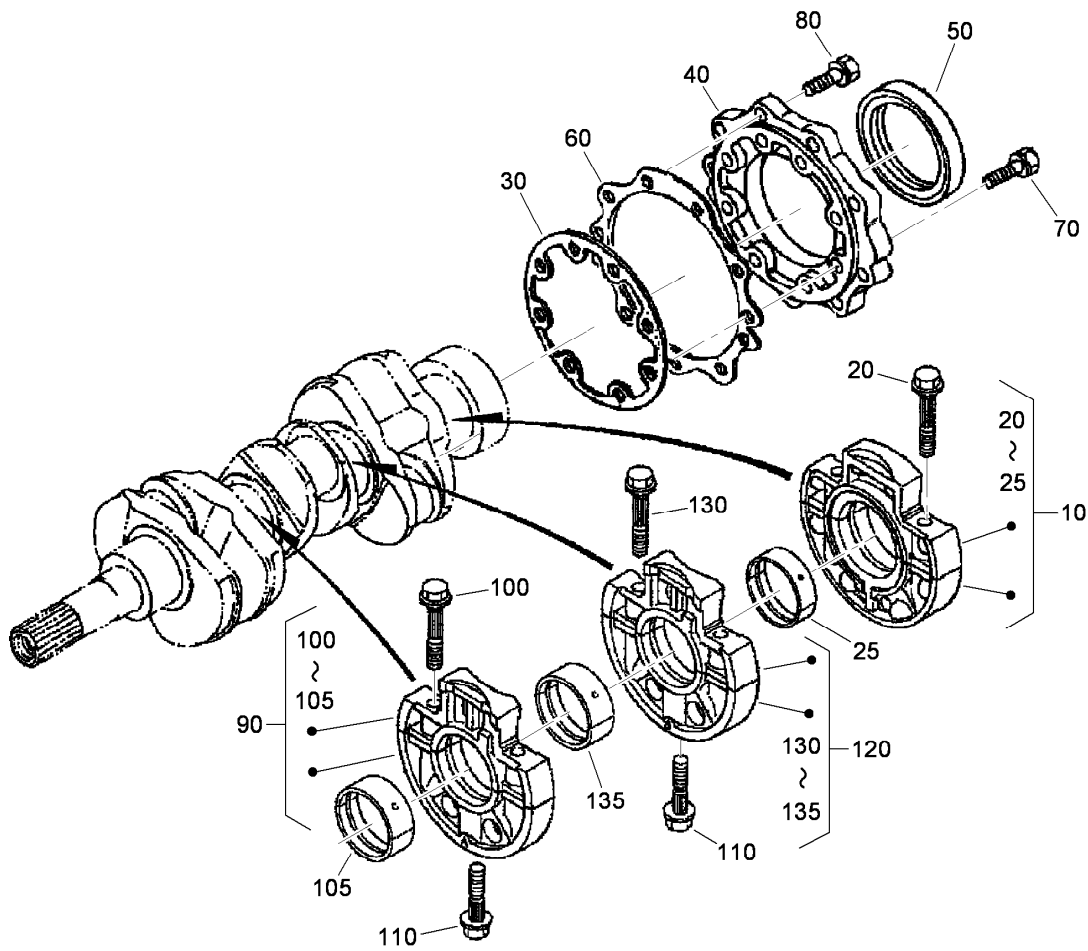
## Cylinder Head Cover Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6575	1	Cylinder Head Cover ASM
30	98-9615	1	Gasket-Cover, Head
40	108-2861	1	Breather Valve ASM
50	110-3714	1	Cover-Breather
60	98-9364	4	Screw (With Washer)
70	98-7766	1	Pipe-Return, Water
80	98-9455	3	Nut-Cap
90	98-9454	3	Gasket
100	108-2858	1	Tube-Breather
110	108-2859	1	Clamp-Hose
120	108-2860	1	Clamp-Hose
130	107-9075	1	Plug-Filler, Oil
140	99-3446	1	O-Ring



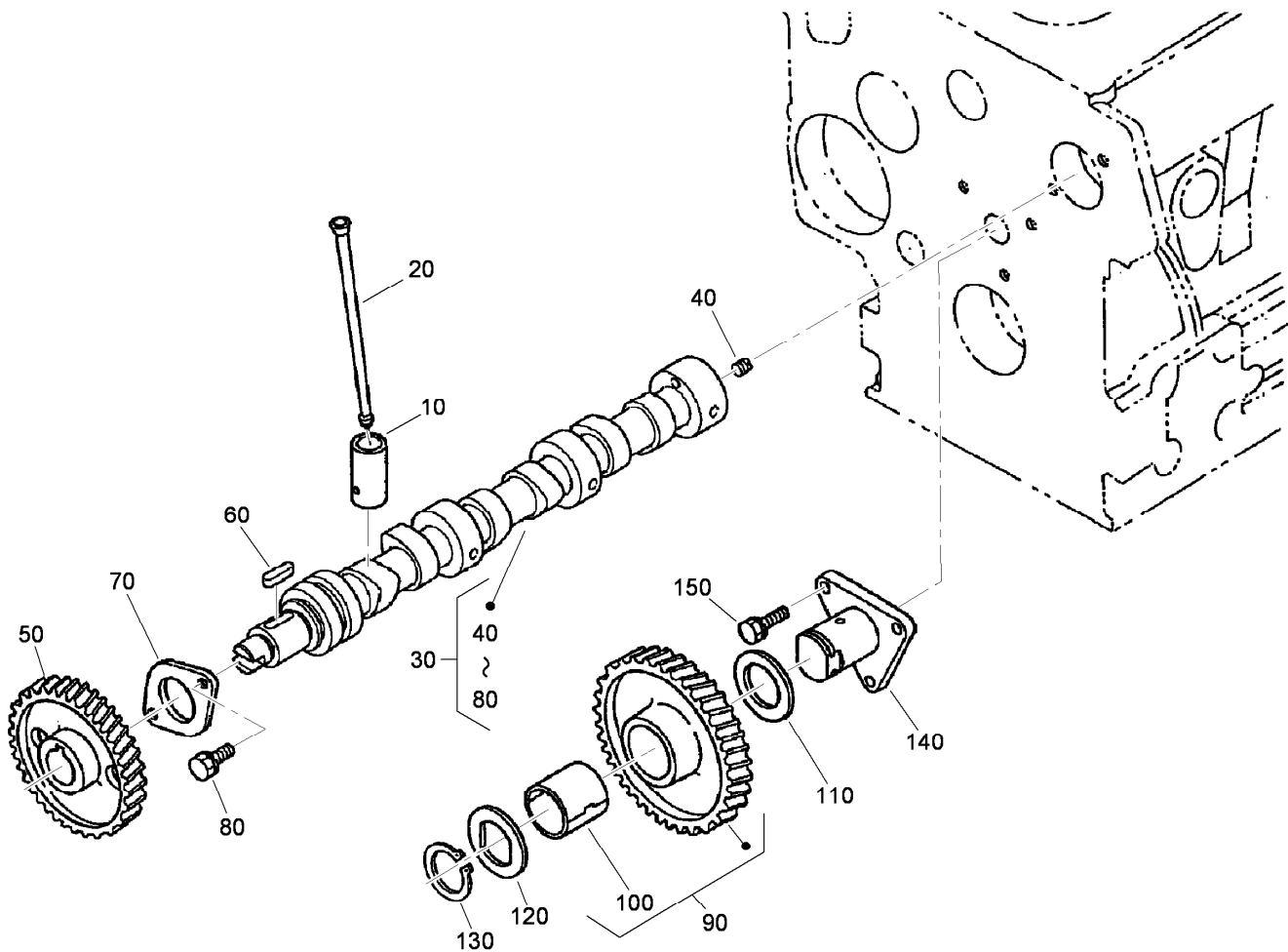
## Dipstick and Guide Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-9076	1	Gauge-Oil
20	105-4580	1	Guide-Gauge, Oil
30	110-3720	1	Plug-Gauge, Oil



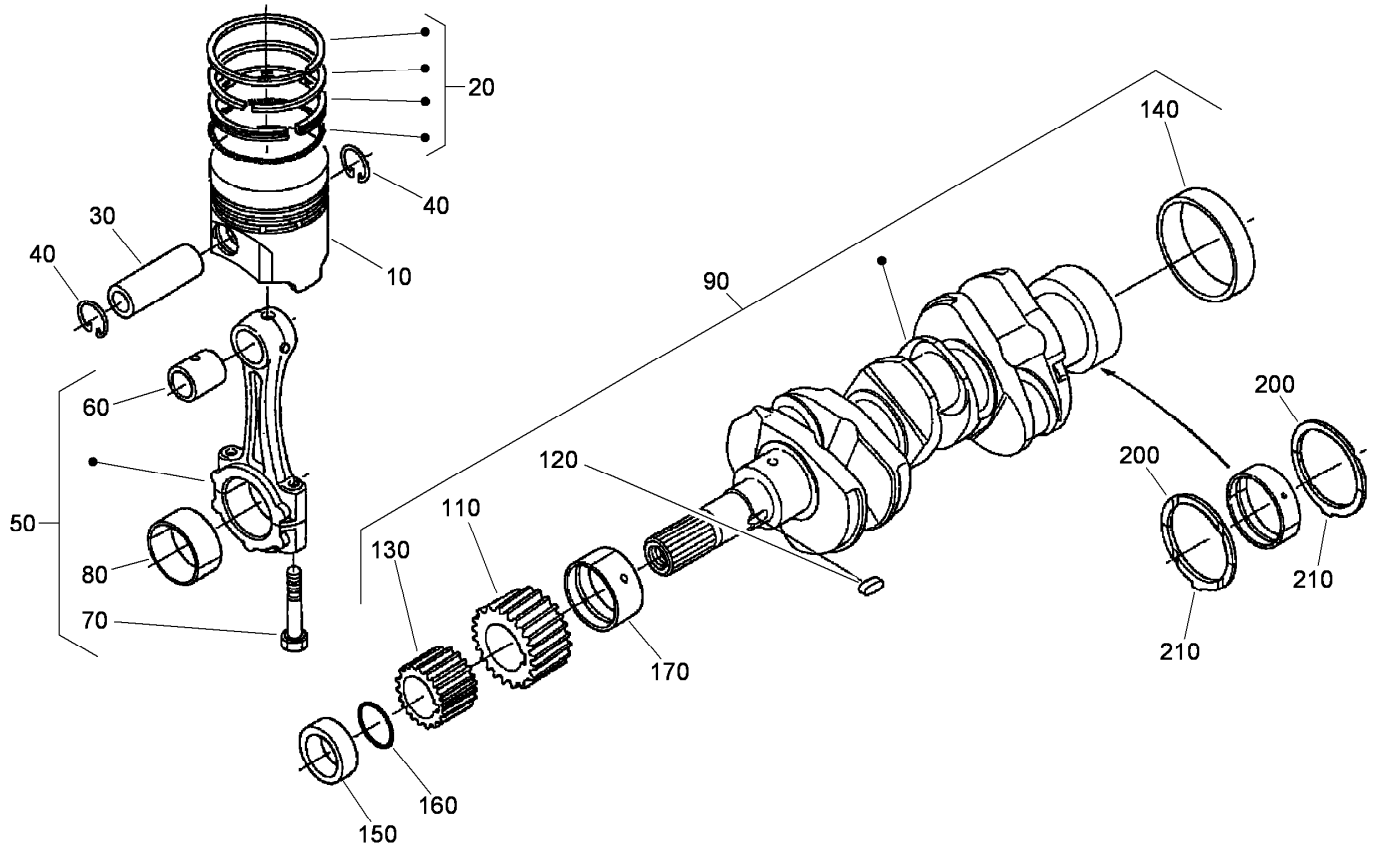
## Main Bearing Case Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7026	1	Wheel Bearing Case ASM
20	98-9484	6	Bolt-Case, Bearing
25	112-7006	1	Bearing-Main (STD)
25	112-7007	1	Metal-Crankshaft (.2Mm)
25	112-7008	1	Metal-Crankshaft (.4Mm)
30	98-9634	1	Gasket-Case, Bearing
40	98-9487	1	Cover-Case, Bearing
50	112-0180	1	Seal-Oil
60	98-9635	1	Gasket-Cover, Bearing Case
70	98-9352	8	Bolt
80	98-7568	9	Bolt
90	115-4106	1	Main Bearing Case ASM
100	98-9484	2	Bolt-Case, Bearing
105	98-9524	1	Metal-Crankshaft (STD Set)
105	98-9530	1	Bearing-Main (0.2Mm)
105	98-9531	1	Bearing-Main (0.4Mm)
110	98-9485	2	Bolt-Case, Bearing
120	115-4107	1	Main Bearing Case ASM
130	98-9484	2	Bolt-Case, Bearing
135	98-9524	1	Metal-Crankshaft (STD Set)
135	98-9530	1	Bearing-Main (0.2Mm)
135	98-9531	1	Bearing-Main (0.4Mm)



## Cam Shaft and Idle Gear Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-0185	6	Tappet
20	98-9509	6	Rod-Push
30	108-6576	1	Camshaft ASM
40	98-7449	1	Screw-Set
50	98-9512	1	Gear-Cam
60	98-9378	1	Key-Feather
70	98-9510	1	Stopper-Camshaft
80	98-9351	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

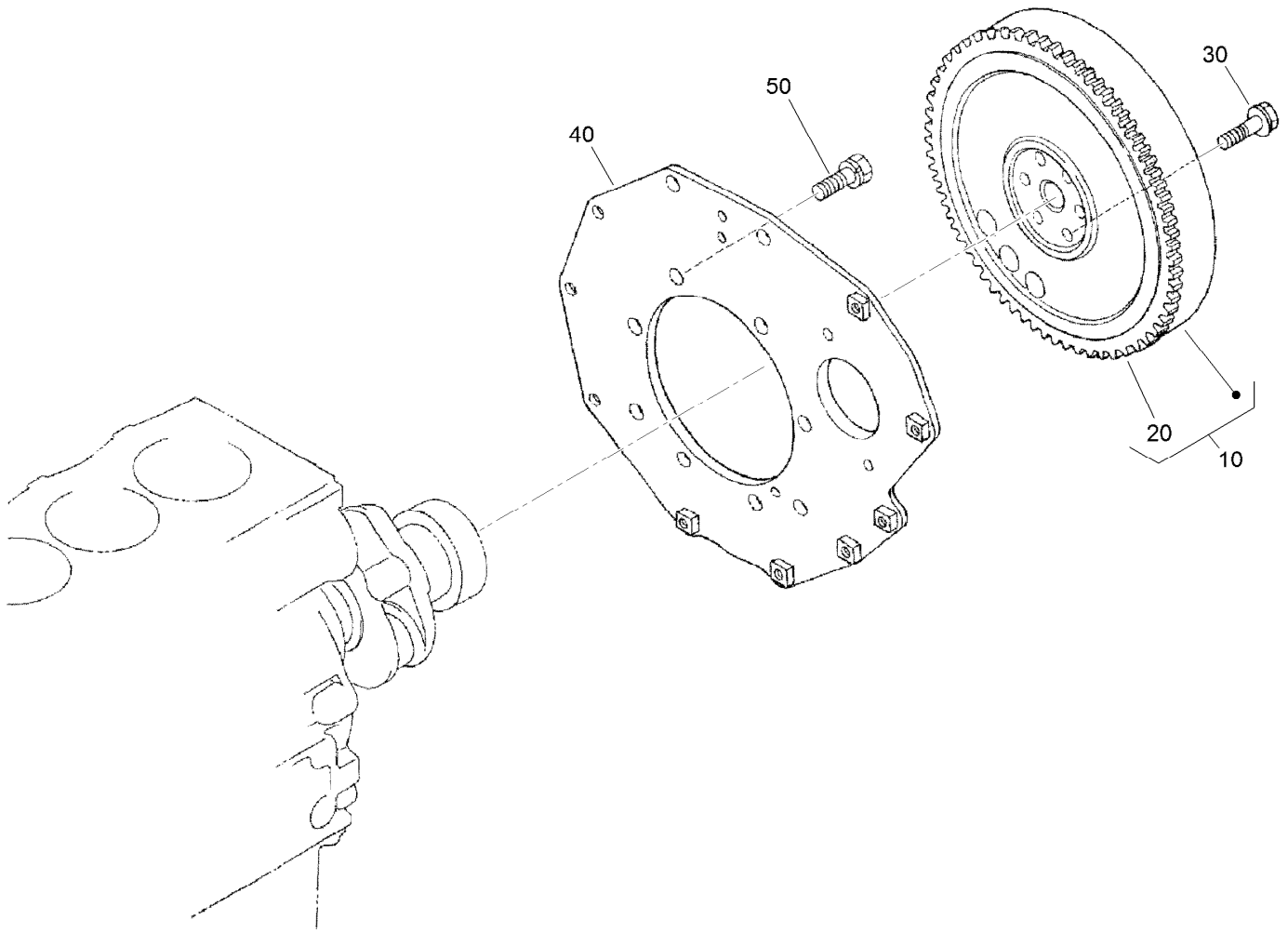


## Piston and Crankshaft Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-8415	3	Piston ASM
10	112-8404	3	Piston (STD)
20	98-9619	3	Piston Ring ASM (0.5Mm)
20	98-9618	3	Piston Ring ASM (STD)
30	98-9513	3	Pin-Piston
40	98-9514	6	Circlip-Pin, Piston
50	115-3013	3	Connecting Rod ASM
60	115-3014	3	Bushing-Pin, Piston
70	98-9517	6	Bolt-Rod, Connecting
80	98-9520	3	Bearing-Rod (0.4Mm)
80	98-9519	3	Bearing-Rod (0.2Mm)
80	98-9518	3	Metal-Crankpin (STD)
90	98-9642	1	Crankshaft ASM
110	98-9532	1	Gear-Crankshaft

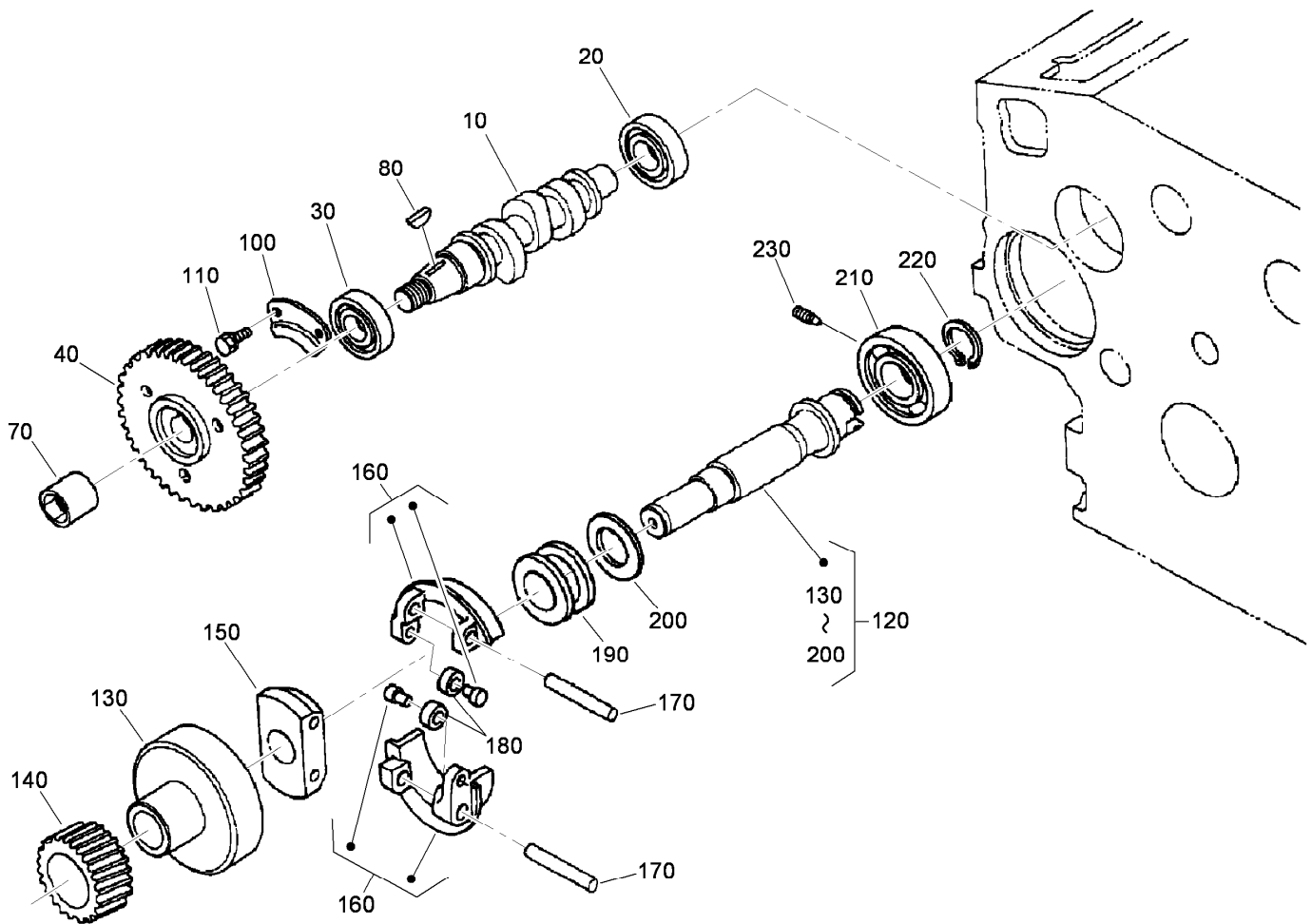
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
120	98-9666	1	Key
130	98-9542	1	Gear-Drive, Oil Pump
140	98-9522	1	Sleeve-Crankshaft
150	98-9521	1	Collar-Crankshaft
160	105-3783	1	O-Ring
170	98-9523	1	Metal Crankshaft (STD)
170	98-9528	1	Bearing-Main (0.2Mm)
170	98-9529	1	Bearing-Main (0.4Mm)
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)





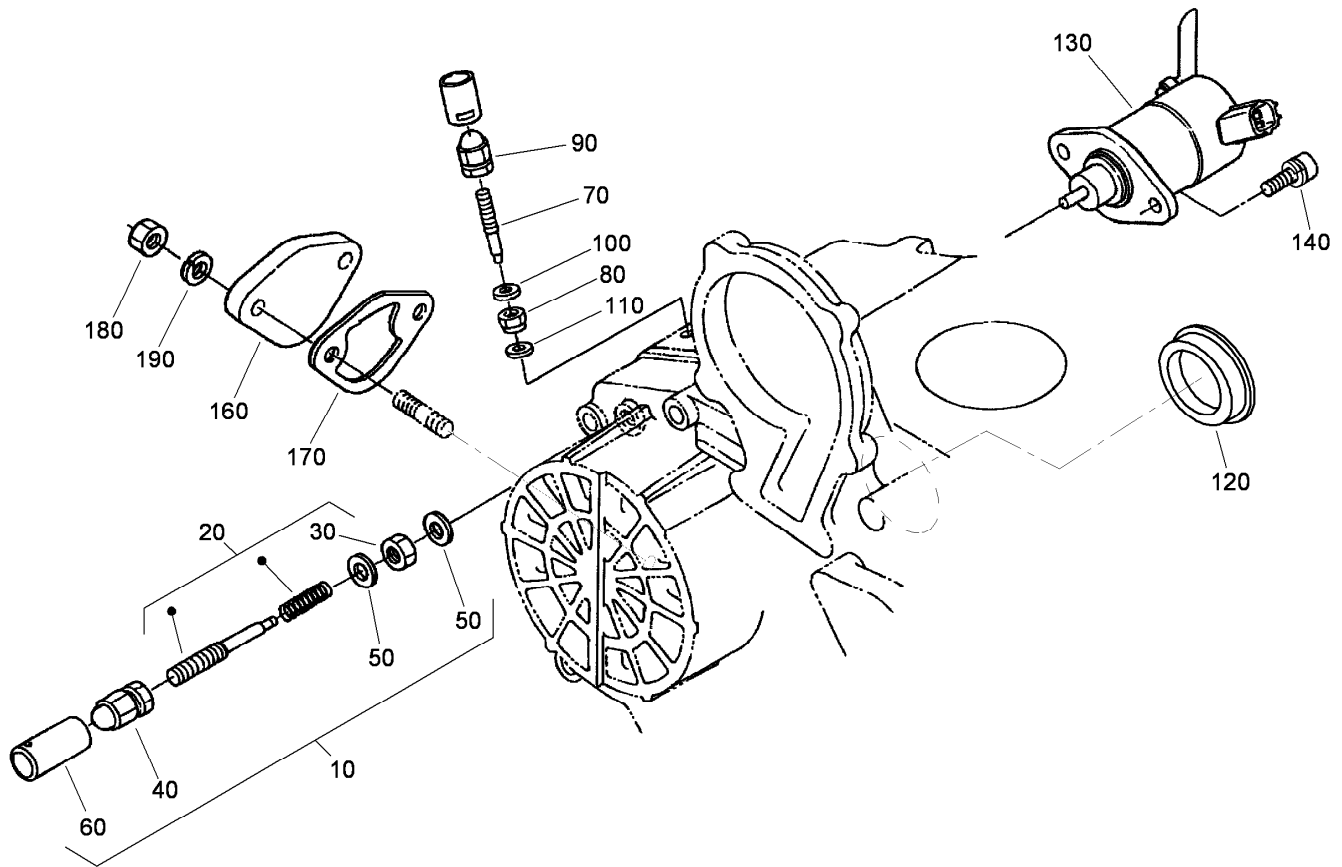
## Flywheel Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
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



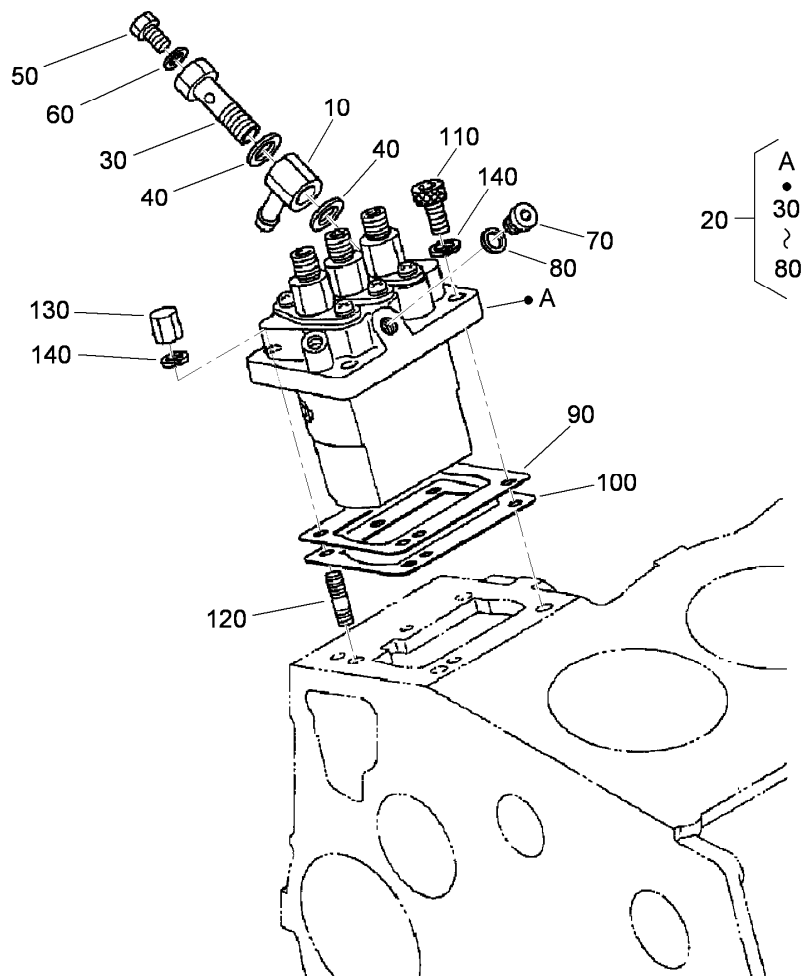
## Fuel Camshaft and Governor Shaft Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9459	1	Camshaft-Fuel
20	107-9077	1	Bearing-Ball
30	107-9078	1	Bearing-Ball
40	98-9669	1	Gear-Pump, Injection
70	98-9590	1	Nut-Cap
80	98-9595	1	Key-Woodruff
100	98-9511	1	Stopper-Fuel, Camshaft
110	98-9350	2	Bolt
120	98-9644	1	Governor Shaft ASM
130	98-9562	1	Holder-Gear, Governor
140	98-9673	1	Gear-Governor
150	98-9561	1	Holder-Weight, Governor
160	98-9559	2	Governor Weight ASM
170	98-9560	2	Shaft-Weight, Governor
180	98-9692	2	Roller
190	98-9563	1	Sleeve-Governor
200	98-9564	1	Washer-Thrust
210	107-9079	1	Bearing-Ball
220	98-9657	1	Circlip-Shaft, Governor
230	98-9565	1	Screw-Set



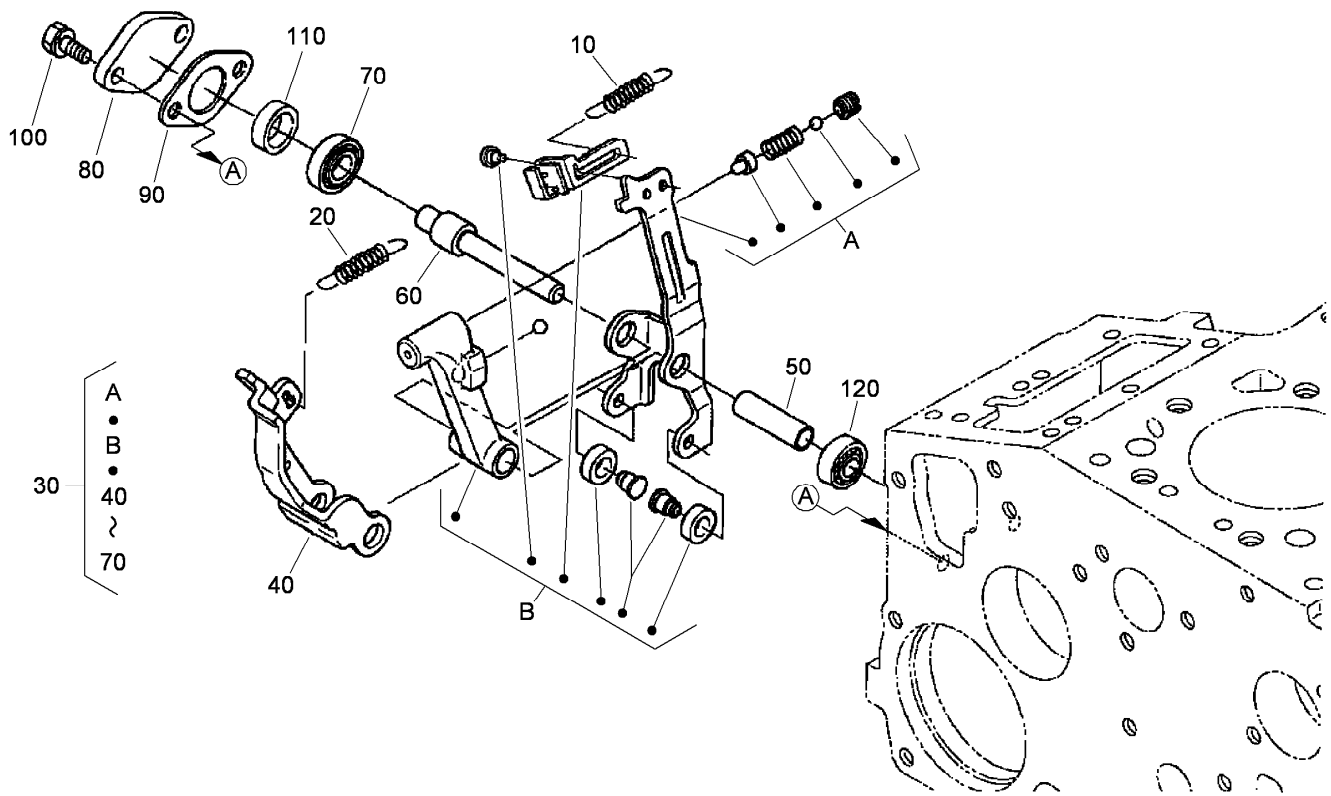
## Idle Apparatus and Stop Solenoid Assembly

Ref.	Part Number	Qty.	Description
10	98-9678	1	Idle Apparatus ASM
20	112-7014	1	Adjusting Bolt ASM
30	98-9439	1	Nut
40	112-0181	1	Nut
50	98-7654	2	Gasket
60	98-7656	1	Cap
70	112-7015	1	Bolt-Adjusting
80	99-3512	1	Nut
90	112-0181	1	Nut
100	98-7654	1	Gasket
110	107-9081	1	Gasket
120	112-7016	1	Cover-Pump
130	104-5155	1	Solenoid-Stop
140	115-3039	2	Bolt-HSH
160	99-3514	1	Cover
170	98-9636	1	Gasket-Pump, Fuel
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring



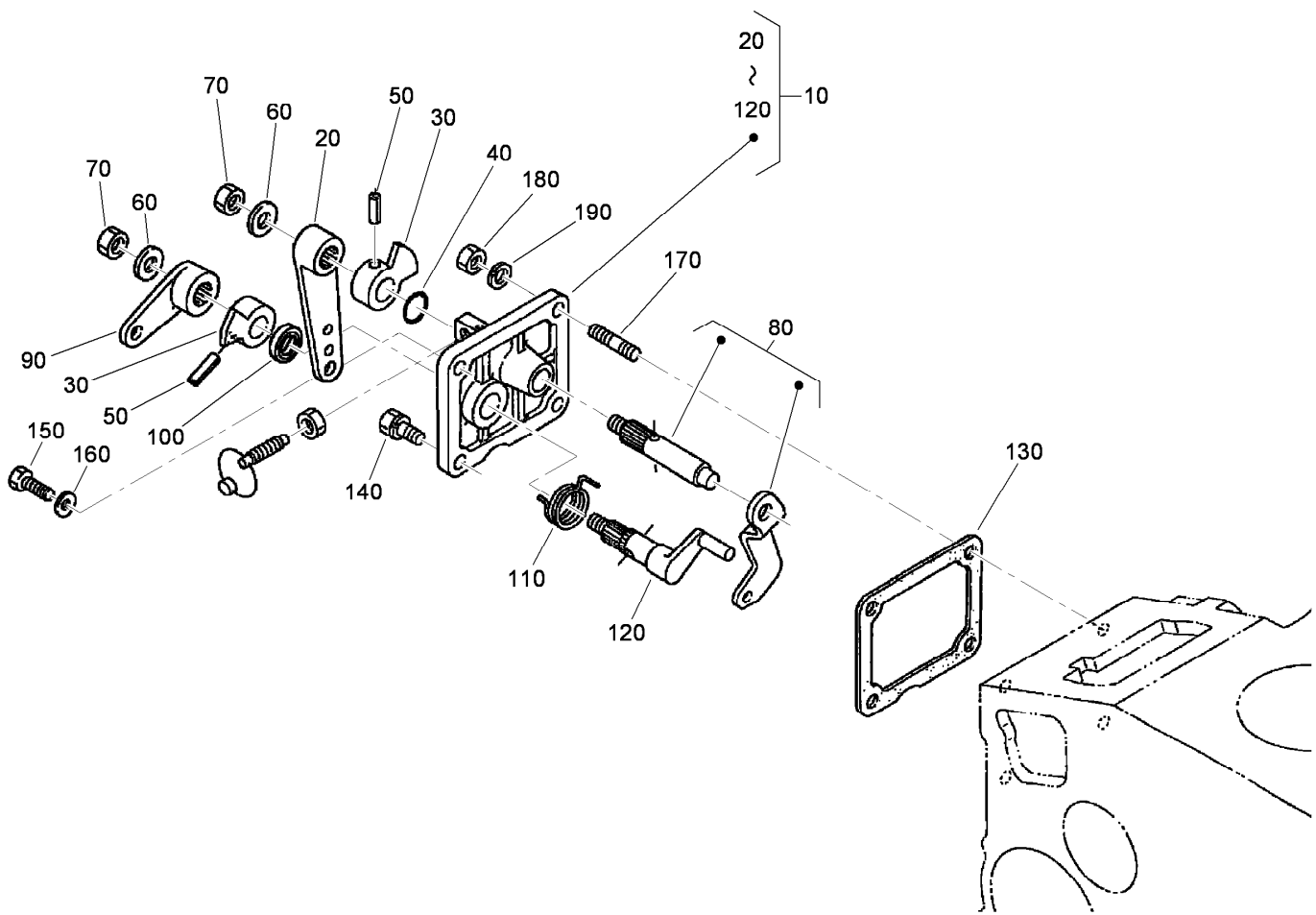
## Injection Pump Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
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	98-9456	1	Shim-Injection (0.20Mm)
90	98-9457	1	Shim-Injection (0.25Mm)
90	115-3045	1	Shim-Injection (0.175Mm)
100	98-9458	1	Shim-Injection (0.30Mm)
100	115-3046	1	Shim-Injection (0.35Mm)
110	98-9361	2	Bolt-HSH
120	98-9438	2	Stud
130	98-9440	2	Nut-Cap
140	98-7699	4	Washer-Spring



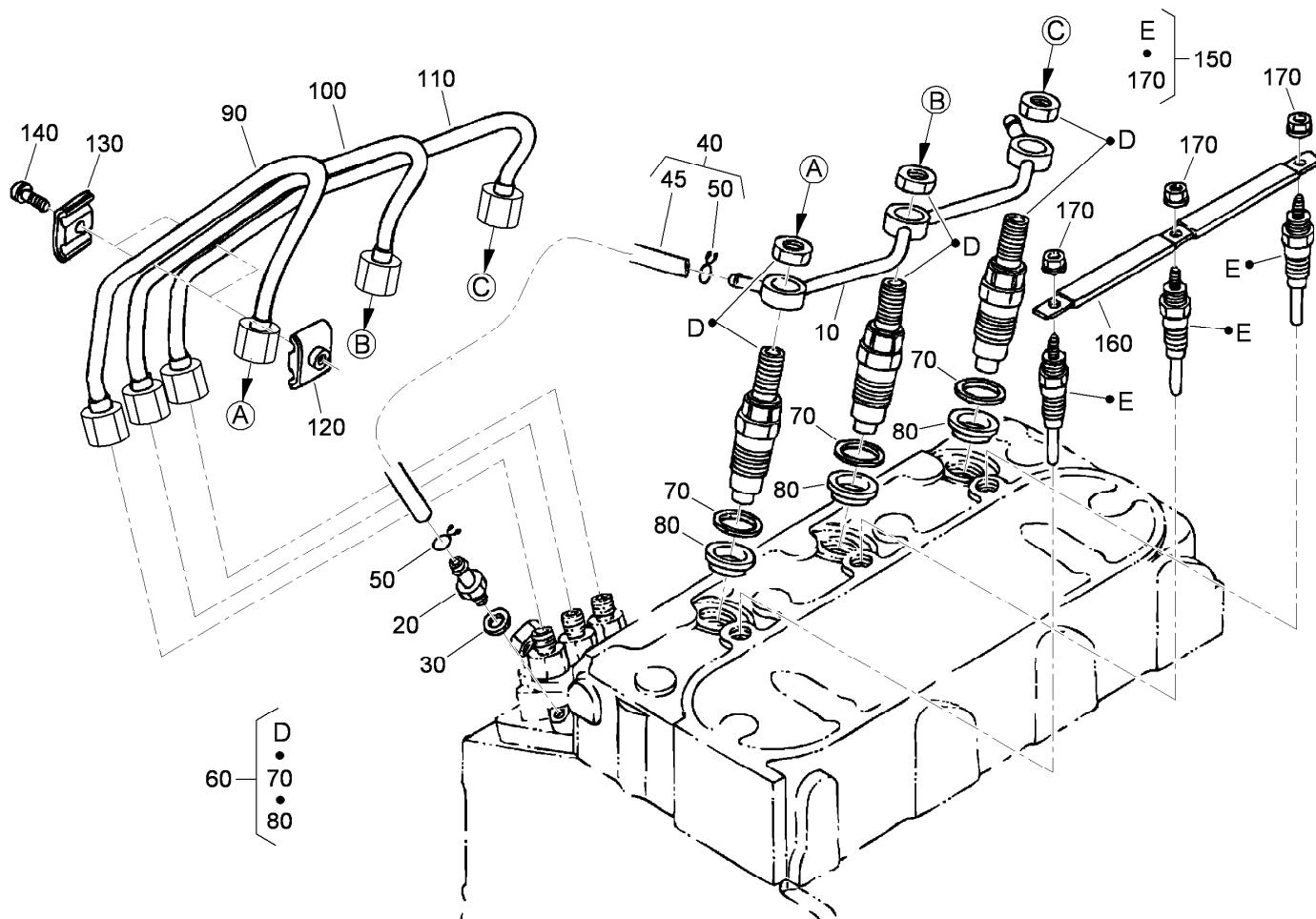
## Governor Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	105-3786	1	Spring-Start
20	98-9681	1	Spring-Governor
30	115-4502	1	Fork Lever ASM
40	107-9084	1	Lever-Fork
50	107-9085	1	Shaft-Lever, Fork
60	107-9086	1	Shaft-Lever, Fork
70	98-9570	1	Bearing-Miniaturize
80	98-9569	1	Cover-Shaft, Fork Lever
90	98-9682	1	Gasket
100	98-9351	2	Bolt
110	98-9567	1	Collar
120	98-9571	1	Bearing-Miniaturize



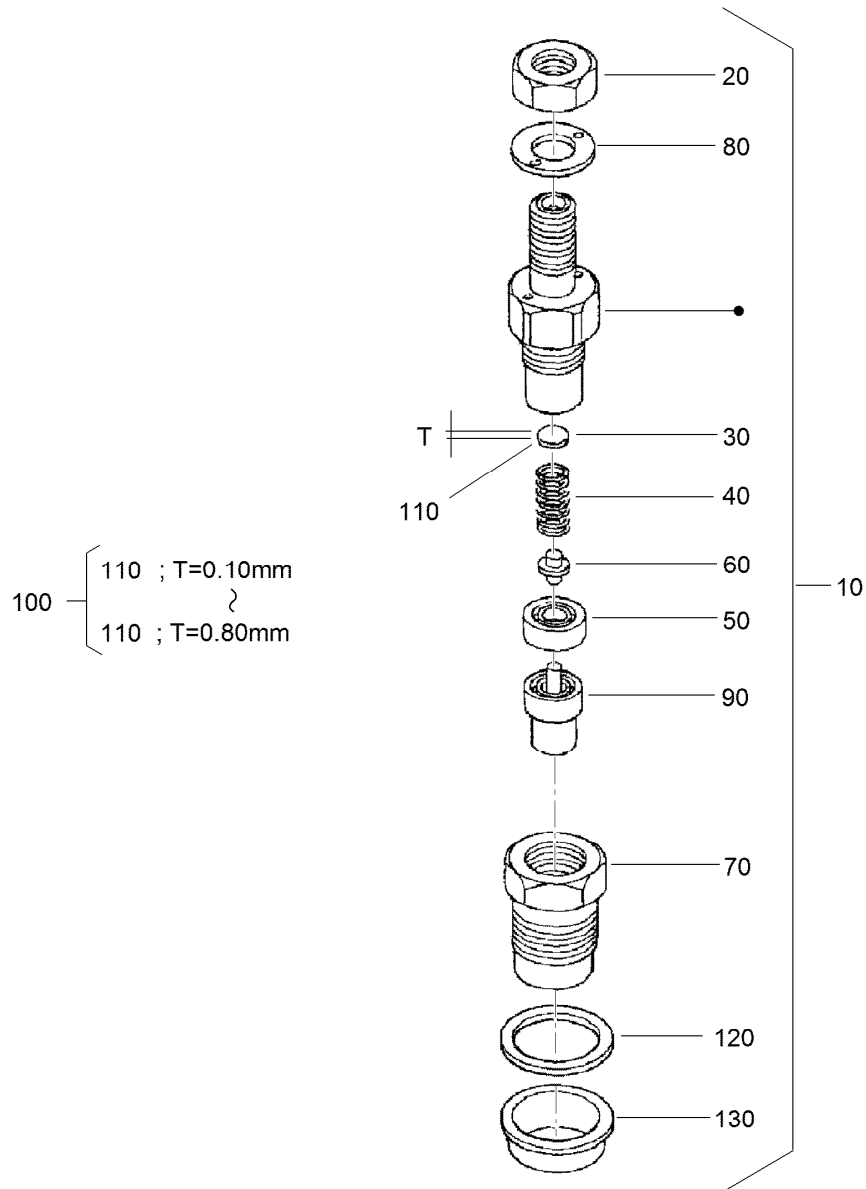
## Speed Control Plate Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
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	2	Gasket
170	105-3710	2	Stud
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring



## Nozzle Holder and Glow Plug Assembly

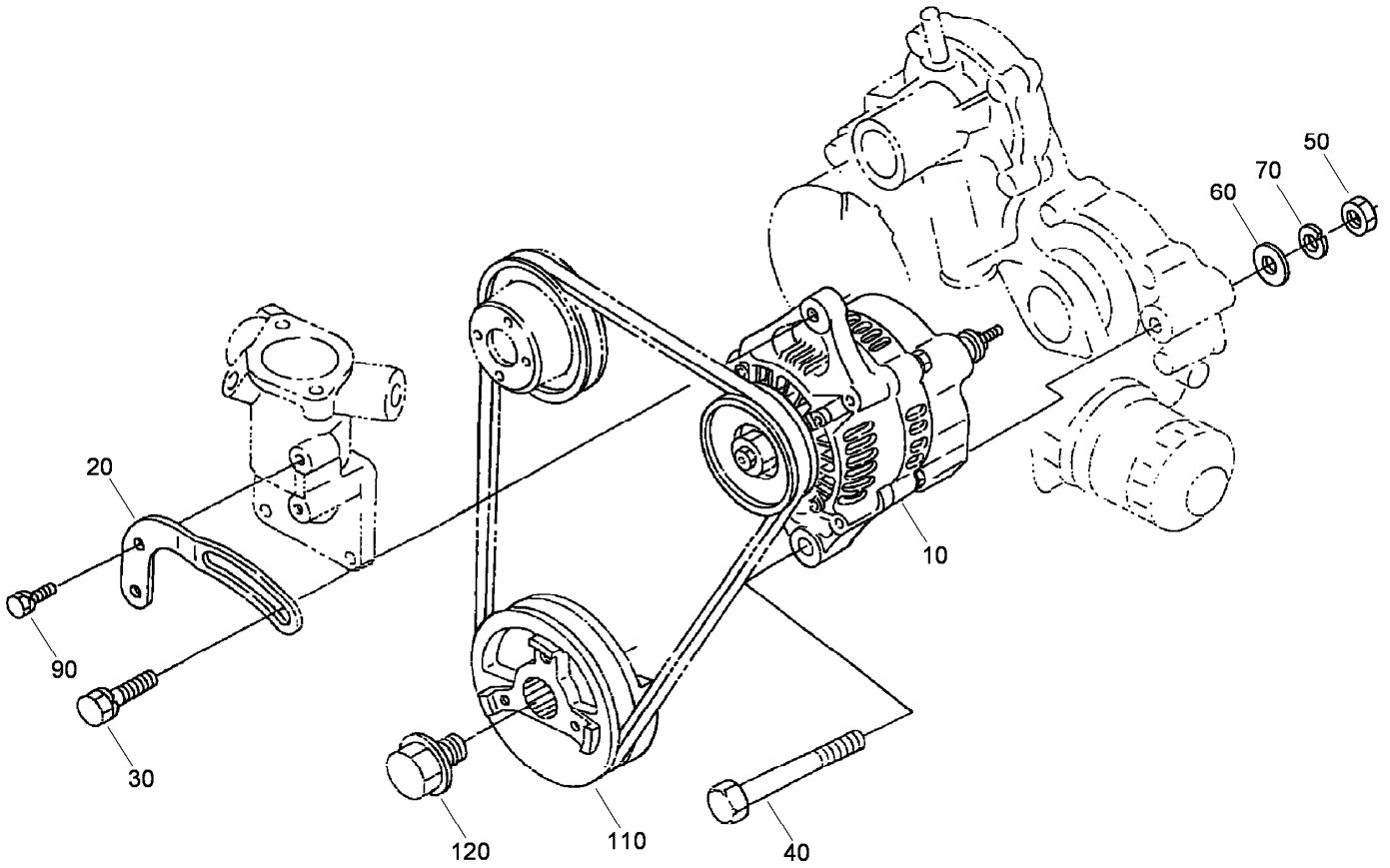
Ref.	Part Number	Qty.	Description
10	98-9620	1	Overflow Pipe ASM
20	98-9431	1	Screw-Bleeder, Air
30	98-7654	1	Gasket
40	98-9420	1	Overflow Pipe ASM
45	112-0182	1	Pipe-Overflow
50	98-7671	2	Clip-Pipe
60	108-2866	3	Nozzle Holder Kit
70	98-7676	3	Gasket
80	98-7677	3	Seal-Heat
90	98-9653	1	Pipe-Injection
100	98-9654	1	Pipe-Injection
110	98-9655	1	Pipe-Injection
120	98-7682	2	Clamp-Pipe
130	98-7683	2	Clamp-Pipe
140	98-7684	2	Screw (W/Washer)
150	115-3019	3	Plug-Glow
160	98-9631	1	Cord-Plug, Glow
170	99-8377	3	Nut-Flange



## Nozzle Holder Assembly

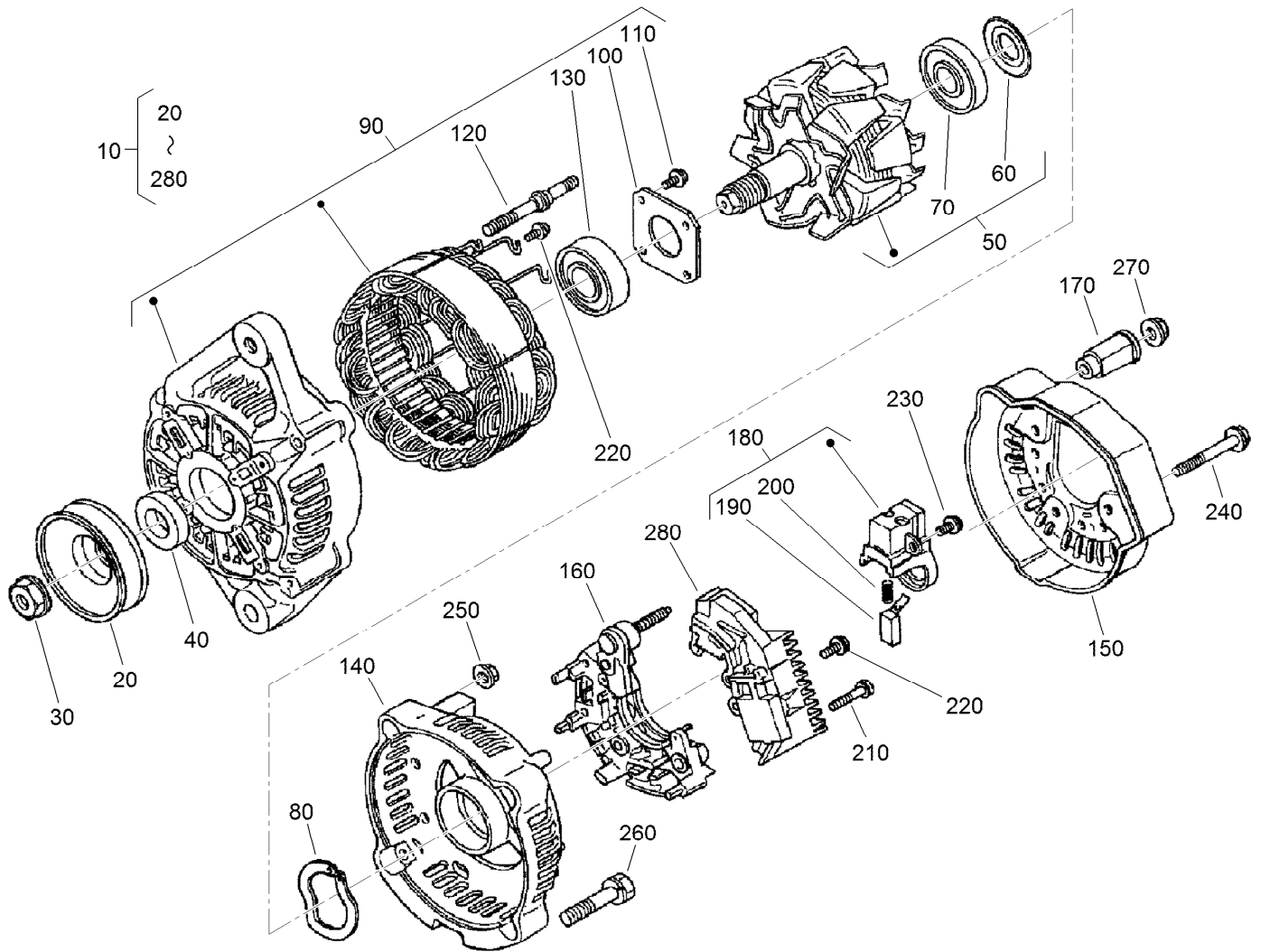
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
10	108-2866	3	Nozzle Holder Kit	110	99-8311	3	Washer-Adjust (0.20Mm)
20	99-8301	3	Nut	110	99-8312	3	Washer-Adjust (0.30Mm)
30	99-8302	3	Washer-Adjusting	110	99-8313	3	Washer-Adjust (0.40Mm)
40	99-8303	3	Spring-Nozzle	110	99-8314	3	Washer-Adjust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





## Alternator and Pulley Assembly

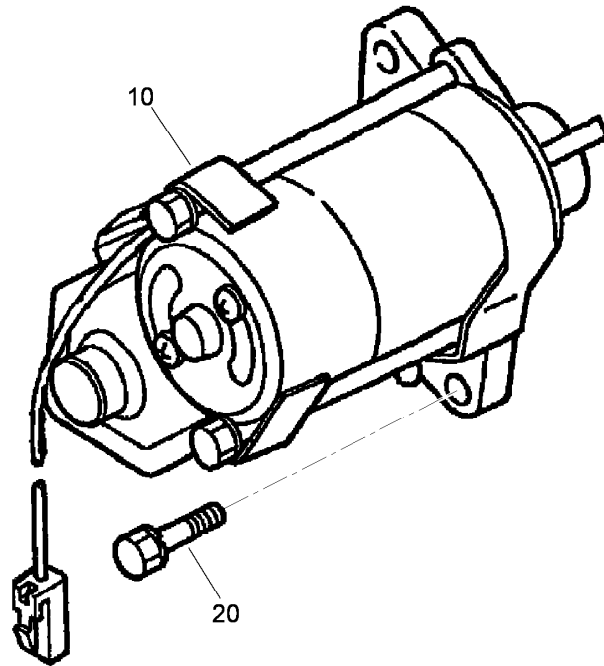
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9474	1	Alternator ASM
20	98-9573	1	Stay-Dynamo
30	108-7088	1	Bolt
40	98-9360	1	Bolt
50	98-7737	1	Nut
60	3256-24	1	Washer-Flat
70	98-7738	1	Washer-Spring
90	98-7692	1	Bolt
110	98-9473	1	Pulley-Drive, Fan
120	98-9585	1	Bolt



## Alternator Components Assembly

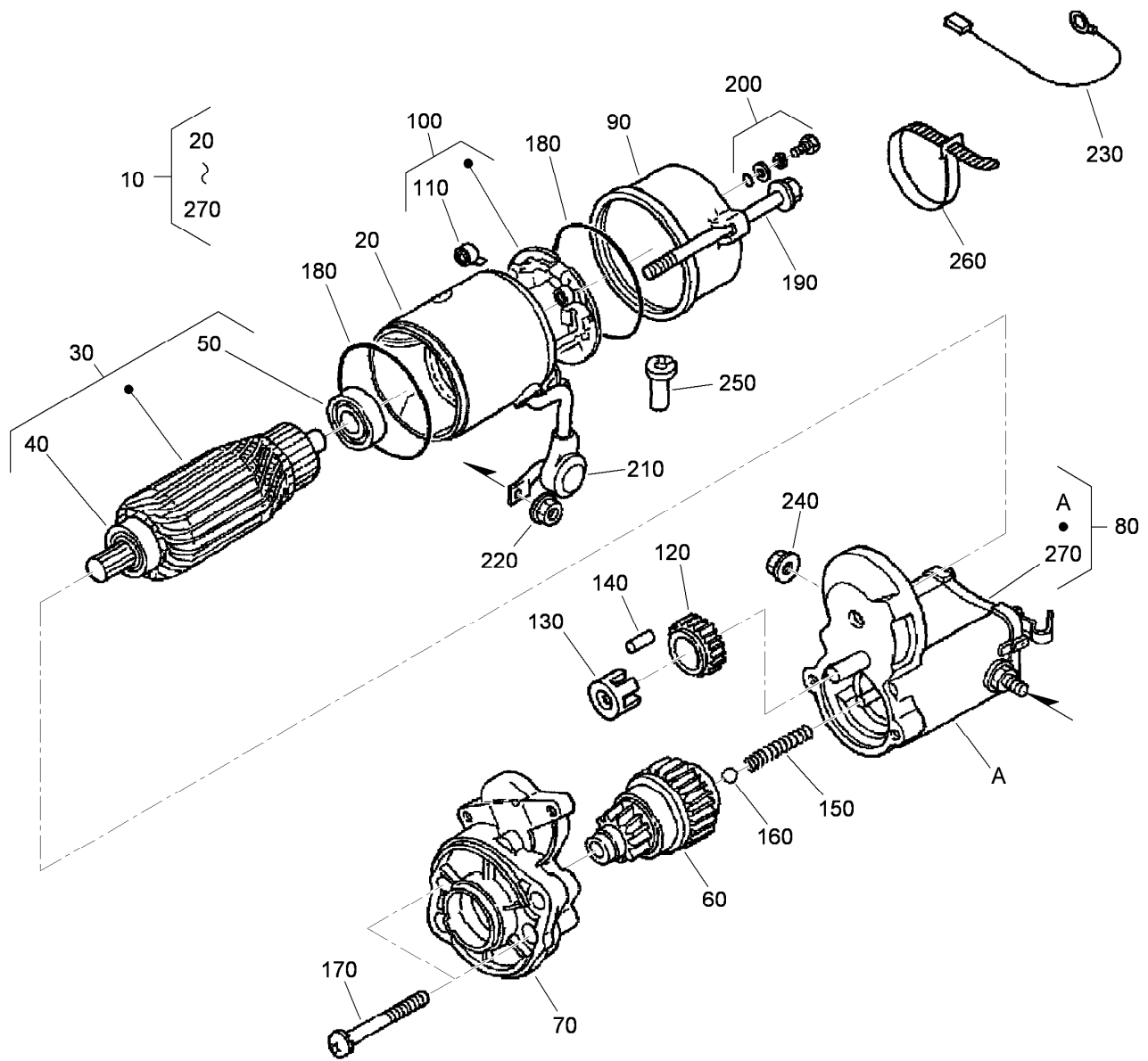
Ref.	Part Number	Qty.	Description
10	98-9474	1	Alternator ASM
20	98-9453	1	Pulley-Dynamo
30	98-7708	1	Nut
40	98-7709	1	Collar
50	107-0136	1	Rotor ASM
60	98-7711	1	Cover-Bearing
70	107-0138	1	Bearing-Ball
80	98-7713	1	Washer-Thrust
90	107-0139	1	Drive End Frame ASM
100	98-7715	1	Plate-Retainer
110	98-7716	4	Screw-Head, Round
120	98-7717	2	Bolt-Through
130	107-0137	1	Bearing-Ball
140	107-9087	1	Frame-End

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



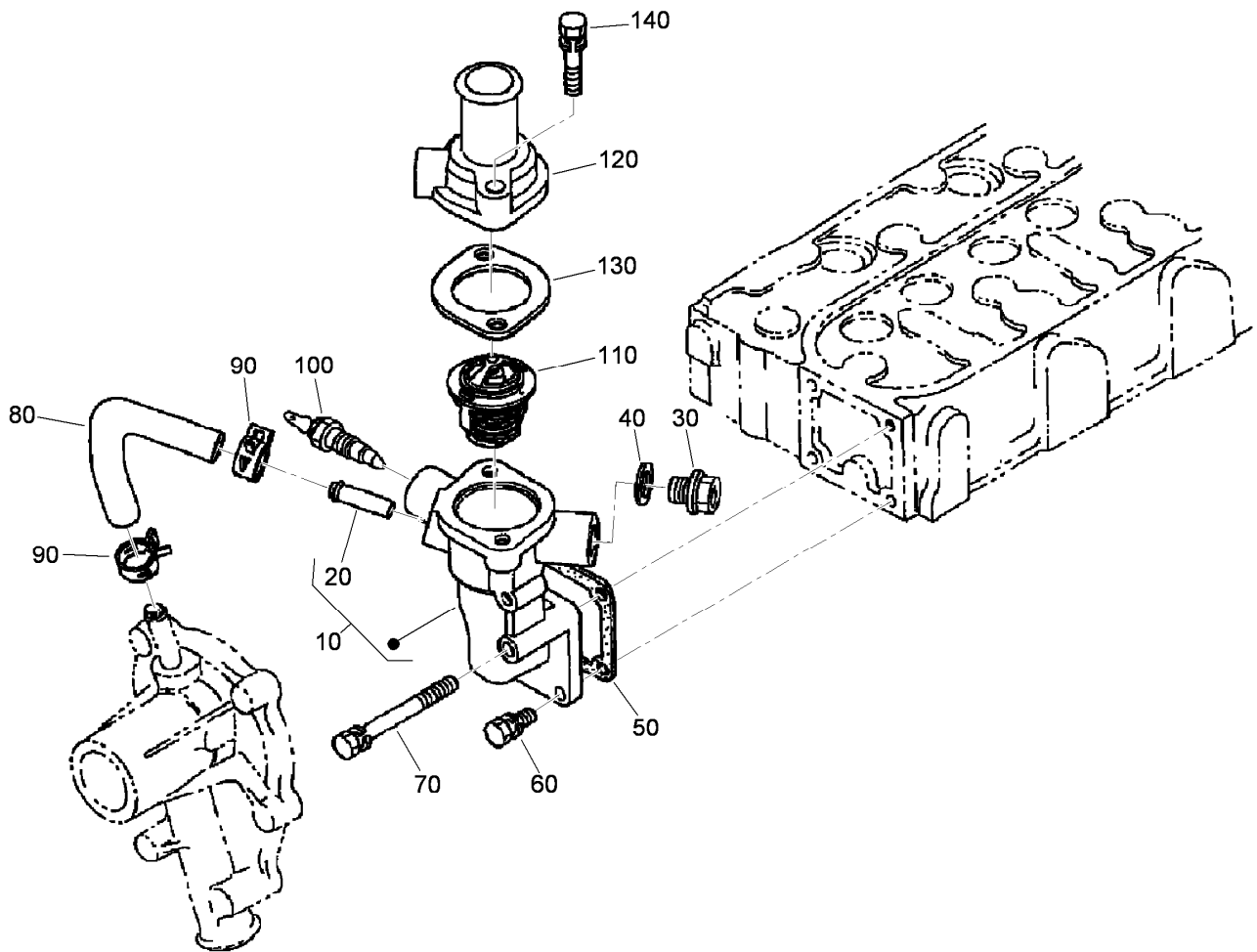
## Starter Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9705	1	Starter ASM
20	98-7697	2	Bolt



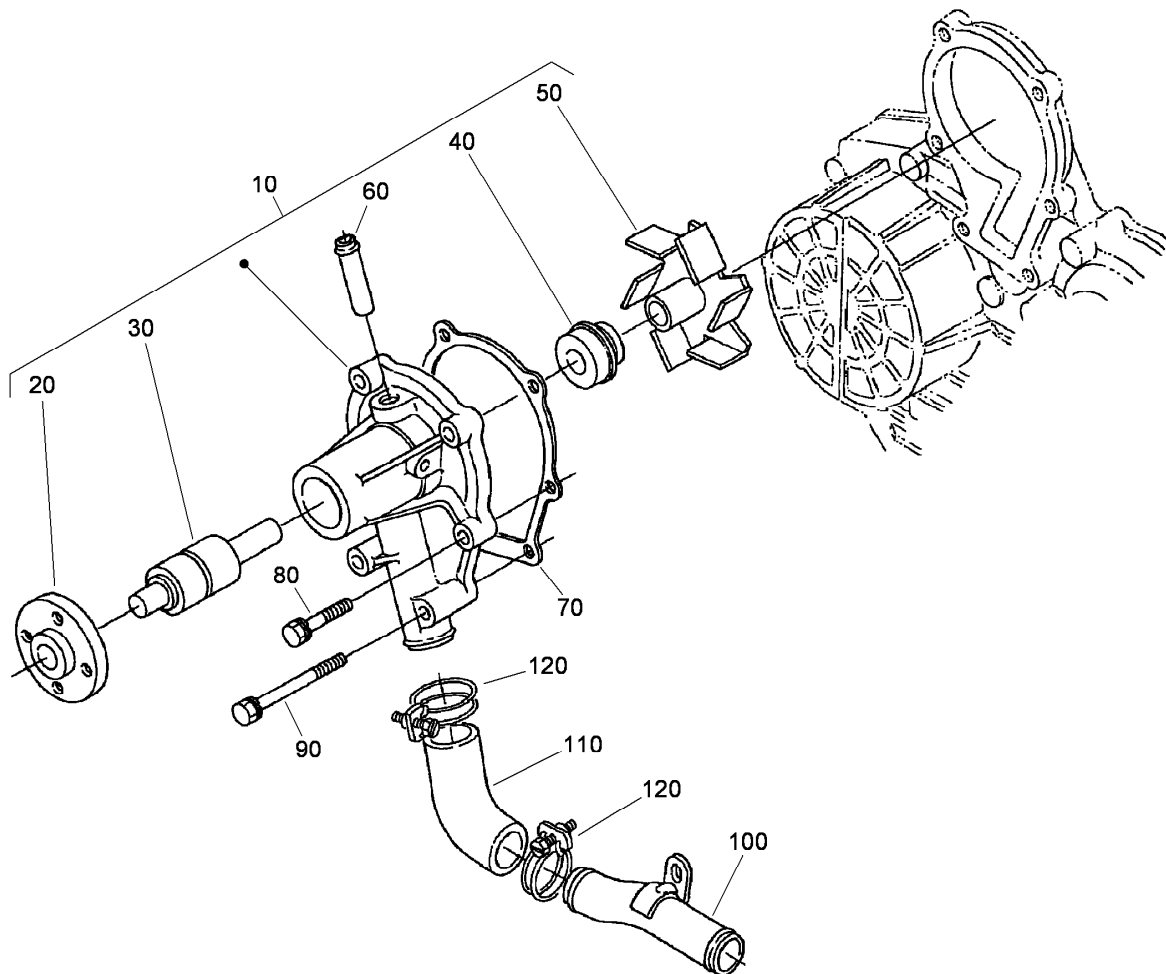
## Starter (Component Part) Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
10	98-9705	1	Starter ASM	150	98-7754	1	Spring
20	104-8608	1	Yoke ASM	160	98-7755	1	Ball
30	98-7742	1	Armature ASM	170	98-7756	2	Bolt
40	98-7744	1	Bearing	180	98-7757	2	O-Ring
50	98-7743	1	Bearing	190	100-9240	2	Bolt
60	99-8373	1	Clutch-Running, Over	200	98-7758	2	Bolt ASM
70	99-8374	1	Frame-End, Drive	210	99-8375	1	Cover
80	105-3746	1	Magnetic Switch ASM	220	99-8371	1	Nut-Hex
90	98-7748	1	Frame-End	230	98-9711	1	Cord-Solenoid, Stop
100	98-7749	1	Brush Holder ASM	240	99-8376	1	Nut-Hex
110	98-7750	4	Spring-Brush	250	98-7759	1	Pipe-Drain
120	98-7751	1	Gear	260	98-9712	1	Band-Cover
130	98-7752	1	Retainer	270	105-2886	1	Cover ASM
140	98-7753	5	Roller				



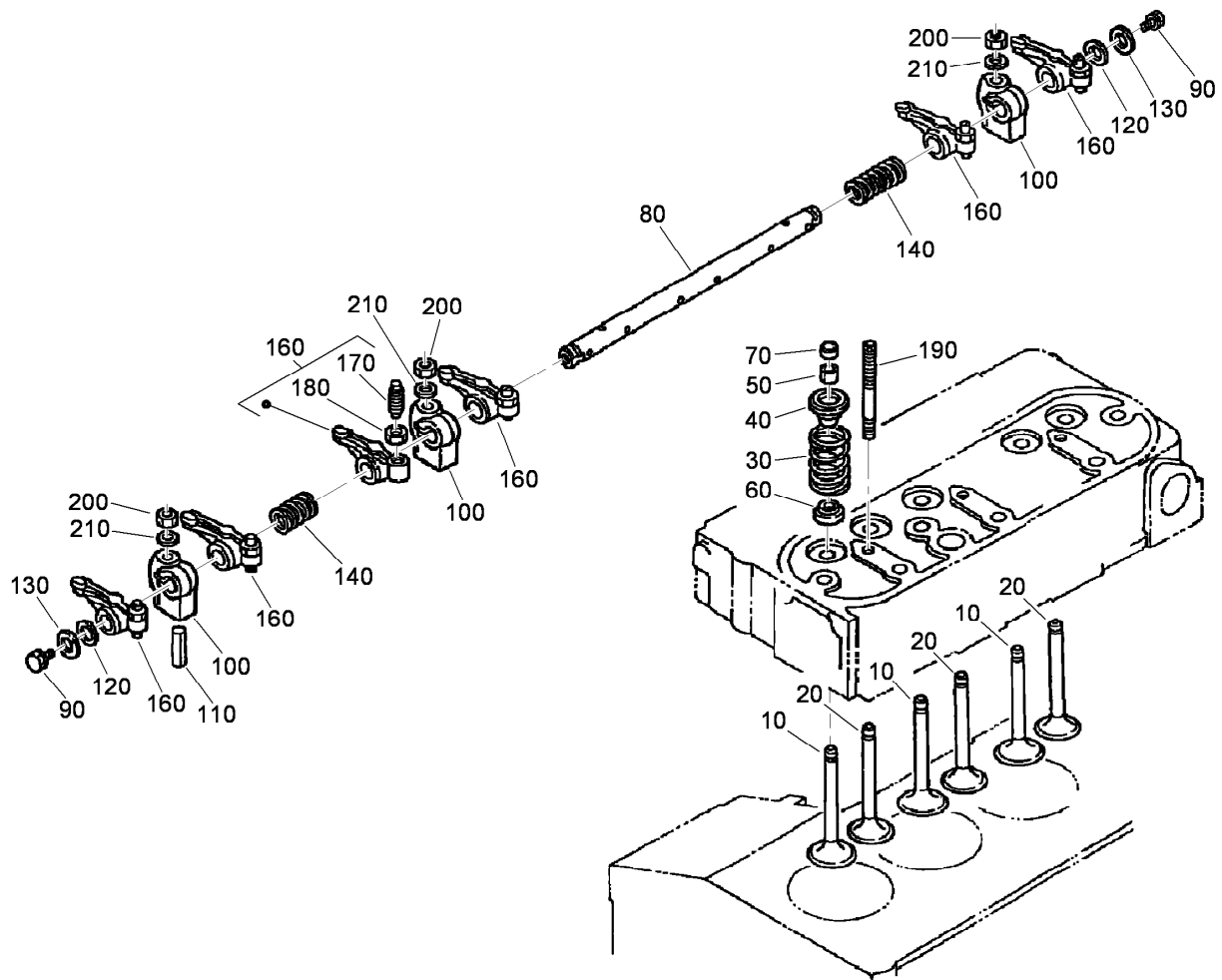
## Water Flange and Thermostat Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9713	1	Water Flange ASM
20	98-9580	1	Pipe-Return, Water
30	105-3747	1	Plug
40	99-3583	1	Gasket
50	98-9638	1	Gasket-Flange, Water
60	98-7692	3	Bolt
70	98-9356	1	Bolt
80	98-9578	1	Pipe-Return, Water
90	98-9579	2	Band-Pipe
100	98-9719	1	Thermoswitch
110	98-7778	1	Thermostat ASM
120	98-9471	1	Cover-Thermostat
130	105-3748	1	Gasket-Thermostat
140	98-7777	2	Bolt



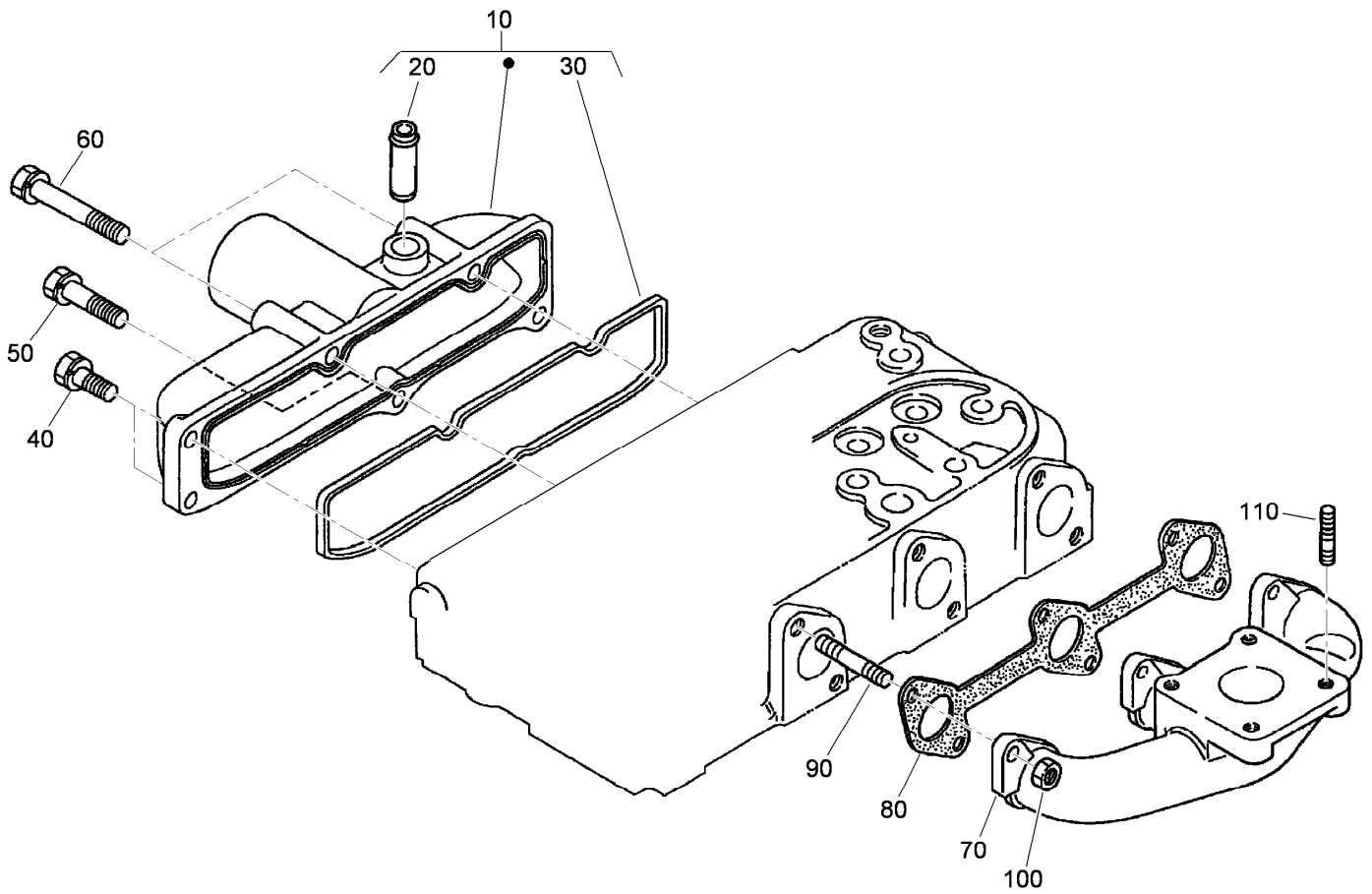
## Water Pump Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-9089	1	Water Pump ASM
20	99-3516	4	Flange-Pump, Water
30	99-3517	1	Bearing-Pump, Water
40	105-3750	1	Mechanical Seal ASM
50	112-8403	1	Impeller ASM
60	100-1932	1	Pipe-Return, Water
70	99-3454	1	Gasket-Pump, Water
80	98-9353	4	Bolt
90	107-9090	2	Bolt
100	98-9716	1	Pipe-Water
110	107-9091	1	Pipe-Water
120	98-9717	2	Clamp



## Valve and Rocker Arm Assembly

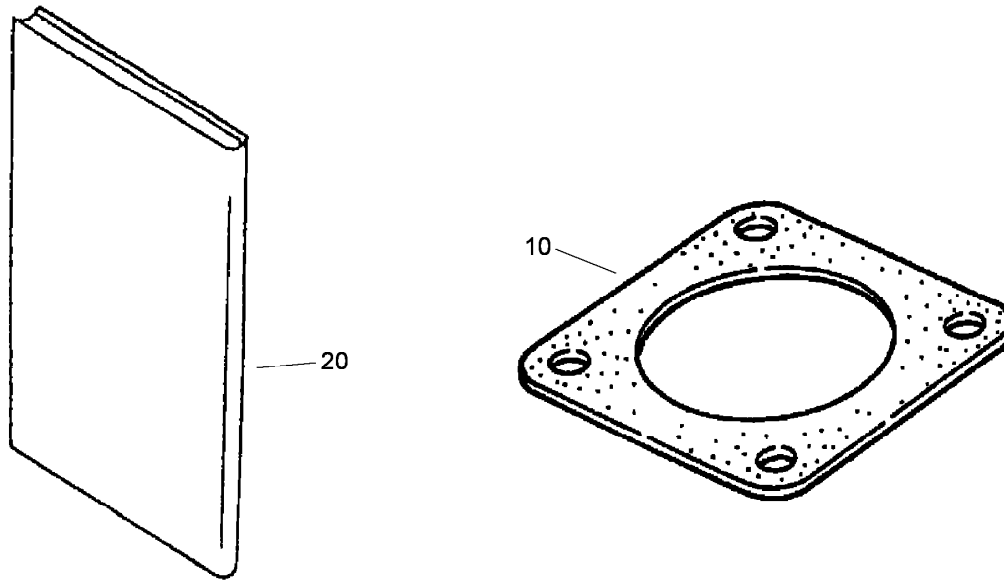
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7018	3	Valve-Inlet
20	98-9495	3	Valve-Exhaust
30	98-9648	6	Spring-Valve
40	107-9092	6	Retainer-Spring
50	98-9390	6	Collet-Spring, Valve
60	99-8385	6	Seal-Stem, Valve
70	98-9497	6	Cap-Valve
80	105-3790	1	R-Arm Shaft ASM
90	100-9265	2	Bolt
100	98-9505	3	Bracket-Arm, Rocker
110	105-3758	1	Pin-Spring
120	98-9507	2	Washer-Shaft, R-Arm
130	3256-1	2	Washer-Flat
140	98-9504	2	Spring-Arm, Rocker
160	98-9501	6	Rocker Arm ASM
170	98-9502	6	Screw-Adjusting
180	98-9503	6	Nut
190	98-9506	3	Stud
200	98-9393	3	Nut
210	98-9385	3	Washer-Flat



## Inlet and Exhaust Manifold Assembly

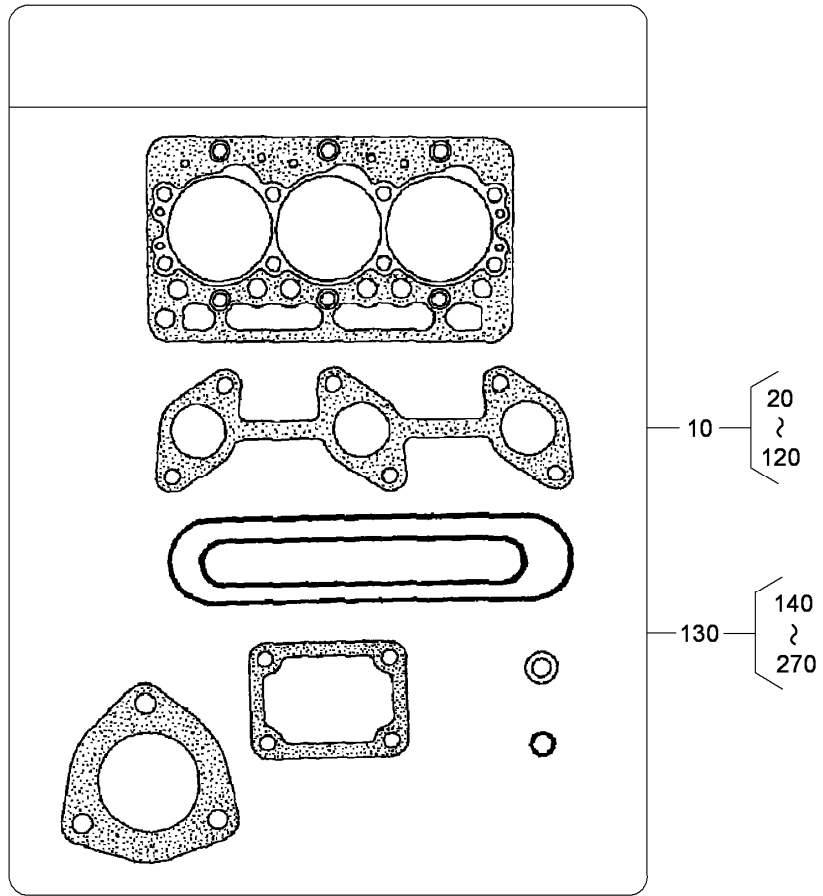
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6577	1	Inlet Manifold ASM
20	98-9492	1	Joint-Pipe, Breather
30	98-9609	1	Gasket-Manifold, Inlet
40	98-7605	3	Bolt
50	98-9353	1	Bolt
60	105-3797	2	Bolt
70	107-9093	1	Manifold-Exhaust
80	99-8327	1	Gasket-Manifold, Exhaust
90	98-9588	6	Stud
100	98-9665	6	Nut
110	98-7769	4	Stud





## Muffler Gasket and Operator Manual

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	99-8343	1	Gasket-Muffler
20	99-8954	1	Manual-Kubota



## Upper and Lower Gasket Kits

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-7848	1	Upper Gasket Kit
130	107-9095	1	Lower Gasket Kit

# Attachments and Accessories

## For 30345 Groundsmaster 3280-D 4-Wheel Drive Traction Unit

<b>Product Name</b>	<b>Model/Part</b>
Premium Engine Oil, 10w30 (55 Gallon Drum) .....	108-1179
Premium Engine Oil, 10w30 (5 Gallon Pail) .....	108-1180
Premium Engine Oil, 15w40 (55 Gallon Drum) .....	108-1181
Premium Engine Oil, 15w40 (5 Gallon Pail) .....	108-1182
Premium Transmission/Hydraulic Tractor Fluid (55 Gallon Drum).....	108-1183
Premium Transmission/Hydraulic Tractor Fluid (5 Gallon Pail) .....	108-1184
Premium All Season Gear Lube (5 Gallon Pail) .....	108-1187
Premium All Purpose Grease (Tube) .....	108-1190
Premium All Season Gear Lube (Quart) .....	108-1590
65 lb. Weight Kit .....	108-9682
Armrest Adapter Kit .....	108-9687
Wheel Weight Kit .....	11-0440
Auxiliary Valve Kit .....	110-5670
Implement Flow Control Kit.....	110-5699
Blower Drive and Mounting Kit.....	110-8539
Attachment Frame Kit .....	110-8540
Rear Axle Skid Plate Kit.....	110-9694
5 Inch Air Cleaner Safety Element .....	114-4057
Snowthrower Drive and Mounting Kit.....	114-4140
V-Plow Mounting Kit.....	115-4917
Mounting Kit (for Model 30823).....	115-4929
Model 2670 Debris Blower Mounting Kit (2XX) .....	115-4932
Model 2670 Debris Blower Mounting Kit (3XX) .....	115-4935
Wheel .....	119-2863
Wheel and Tire ASM.....	119-2864
Tire .....	231-95
Rear Weight Kit.....	24-5780
400-Hour Filter Maintenance Kit .....	30051
Mechanical Seat Suspension Kit .....	30312
Pneumatic Seat Suspension Kit.....	30313
15 Cubic Foot Bagger Kit.....	30356
60 Inch Blower Kit.....	30357
Bimini Sunshade for 2-Post Roll-Over Protection System.....	30358
Hardtop Sunshade.....	30359
60 Inch Side Discharge Mower .....	30366
72 Inch Side Discharge Mower .....	30368
Auxiliary Power Unit.....	30382
Cab ASM .....	30391
Standard Seat Kit.....	30398
62 Inch Base Mower .....	30403
72 Inch Base Mower .....	30404
52 Inch Blower Kit.....	30502
62 Inch Blower Kit.....	30506
62 Inch Side Discharge Deck.....	30551
52 Inch Side Discharge Mower .....	30555
Arm Rest Kit.....	30707
48 Inch V-Plow.....	30750

Debris Blower .....	30823
Tire .....	69-9880
Spark Arrestor Screen .....	75-6880
Weight-Wheel.....	77-6700
Tire Chains (23 x 9.50-12) .....	82531
Drive Shaft Kit.....	92-9075

**Notes:**

**Notes:**

**Notes:**



**Count on it.**