



## Groundsmaster<sup>®</sup> 4500-D

Model No. 30856 - 270000001 and up.

### Parts Catalog

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#### **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 illustrations and in part lists.

#### **Reference Numbers Indicating Quantity**

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

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

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## Part Description Abbreviations

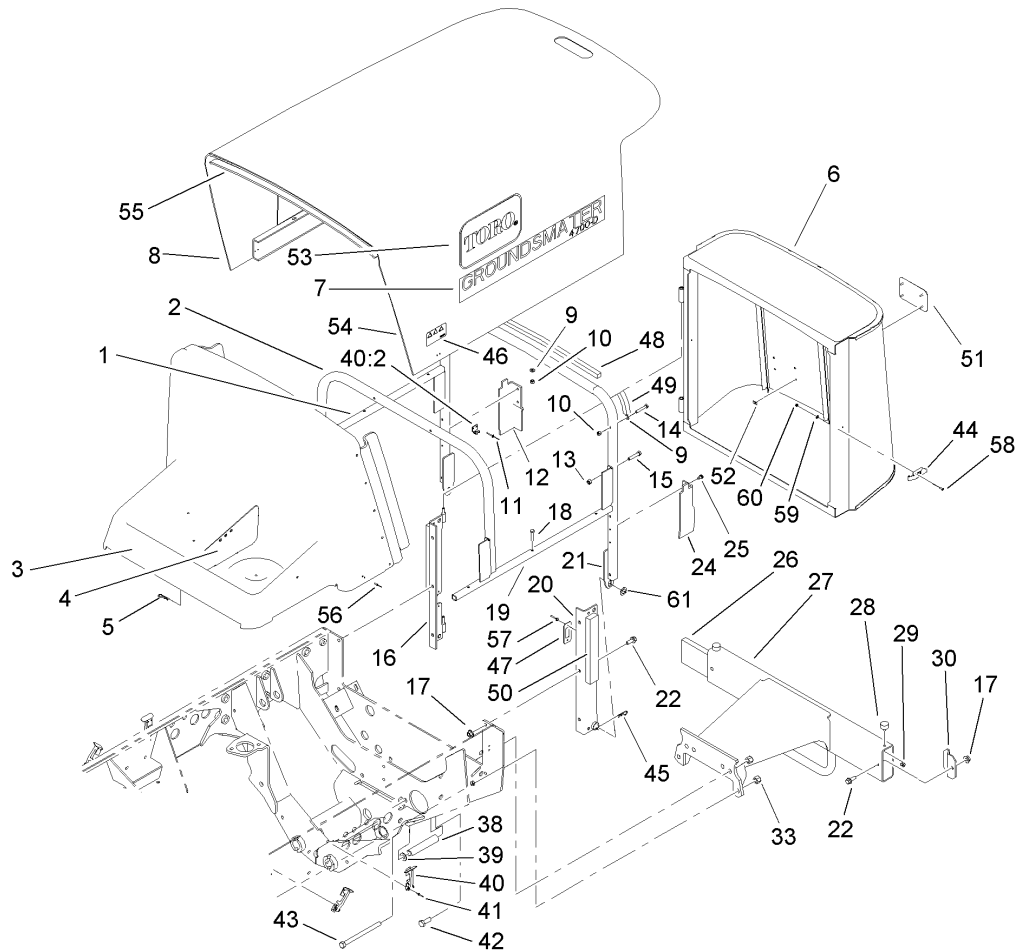
Part descriptions in this catalog may include the following abbreviations.

AR. ....	as required	HYD. ....	hydraulic
ASM. ....	assembly	LH. ....	left hand
BBC. ....	blade brake clutch	NI. ....	nylon insert
CARR. ....	carriage	NPTF. ....	national pipe thread fine
DEG. ....	degrees	PFH. ....	phillips flat head
EXT. ....	external	PPH. ....	phillips pan head
FH. ....	flat head	PPHTF. ....	phillips pan head thread forming
GA. ....	gauge	PRH. ....	phillips round head
HD. ....	heavy-duty	PTH. ....	phillips truss head
HF. ....	hex flange	PTO. ....	power-take-off
HH. ....	hex head	RH. ....	right hand
HHF. ....	hex head flange	ROPS. ....	roll-over protection system
HHFTF. ....	hex head flange thread forming	SFH. ....	slotted fillister head
HJ. ....	hex jam	SHH. ....	slotted hex head
HLH. ....	hex lag head	SHWH. ....	slotted hex washer head
HOC. ....	height-of-cut	SPH. ....	slotted pan head
HSBH. ....	hex socket button head	SQH. ....	square head
HSFH. ....	hex socket flat head	SRH. ....	slotted round head
HSH. ....	hex socket head	STD. ....	standard
HWH. ....	hex washer head	TAP. ....	self tapping
HWHTF. ....	hex washer head thread forming	TTH. ....	torx truss head

## Footnotes

❶ Not illustrated

❷ Not serviced separately

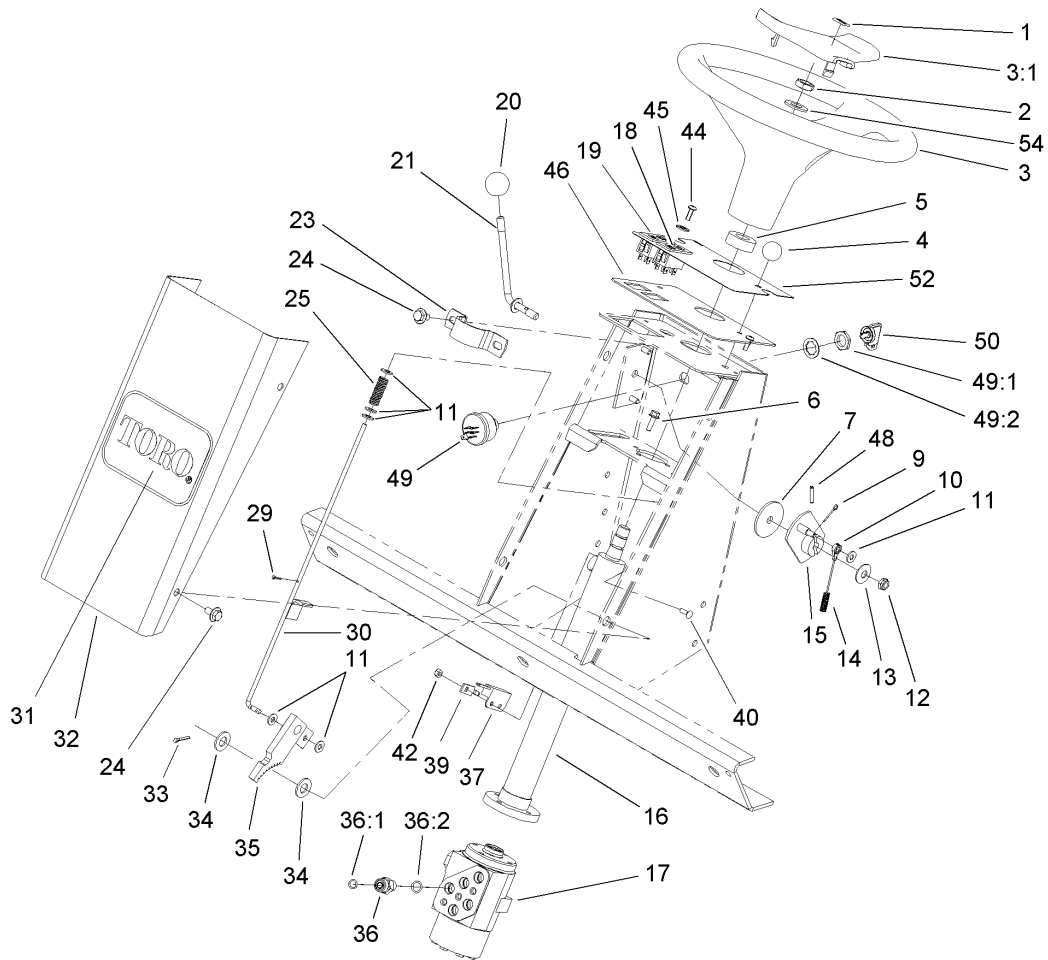


## Hood Screen and Bumper Assembly

Ref	Part No.	Qty.	Description
1	107-1975-03	1	RH Hood Frame ASM
2	107-1973-03	1	Tube-Front, Hood
3	104-5430	1	Shroud-Front
4	104-5446-03	1	Divider-Shroud
5	3290-467	2	Pin-Hair
6	104-5454-03	1	Screen ASM
7	105-9877	2	Decal
8	104-5419	1	Hood
①8:1	106-8116	1	Heat Tape Repair Kit
9	3256-22	12	Washer-Flat
10	3296-42	12	Nut-Lock, NI
11	3269-17	4	Rivet-Pop
12	104-5431	1	Cover-Tube, RH
13	3296-29	8	Nut-Lock, NI
14	321-10	6	Screw-HH
15	322-9	8	Screw-HH
16	104-5445-03	1	RH Support ASM
17	32128-43	6	Nut-Flange
18	321-13	6	Screw-HH
19	107-1974-03	1	LH Hood Frame ASM
20	104-5444-03	1	LH Support ASM
21	110-0465-03	1	Rear Tube ASM
22	3234-11	6	Screw-HHF
24	104-5432	1	Cover-Tube, LH

Ref	Part No.	Qty.	Description
25	32104-17	4	Screw-HWH
26	105-9199-03	1	Weight-Bumper
27	105-9221-03	1	Rear Bumper ASM
28	240-14	2	Bumper-Rubber
29	32128-33	2	Nut-HF
30	105-9200-03	2	Clamp-Weight, Bumper
33	3296-23	4	Nut-Lock, NI
38	76-8350	2	Stop-Axle
39	3256-26	2	Washer-Flat
40	59-9740	4	Flex Draw Latch ASM
40:2	249-40	1	Keeper
41	3290-55	8	Rivet-Pop
42	325-6	2	Screw-HH
43	325-33	2	Screw-HH
44	105-3912	1	Latch-Draw
45	3290-467	2	Pin-Hair
46	106-6754	2	Decal-Danger
47	104-5459	1	Plate-Latch
48	105-9234	1	Seal-Foam
49	105-9237	2	Seal-Foam
50	105-9235	2	Seal-Foam
51	93-6028	1	Plate-Logo
52	94-2638	4	Nut-Tinnerman
53	66-1210	2	Decal

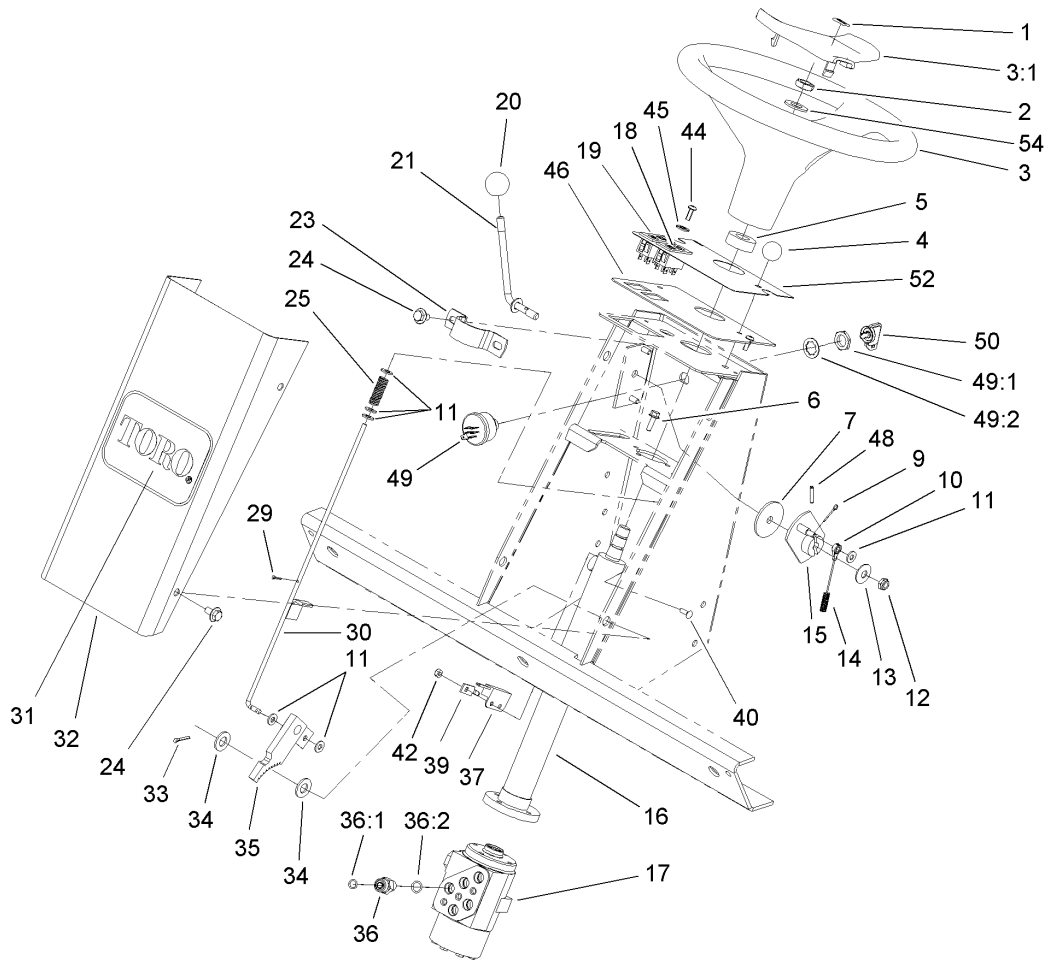




## Steering Tower Assembly

Ref	Part No.	Qty.	Description
1	98-1459	1	Decal
2	110-8816	1	Nut-Hex
3	98-1471	1	Wheel-Steering
3:1	98-1468	1	Cover-Wheel, Steering
4	233-17	1	Knob
5	21-9260	1	Cover-Dust
6	33103-016	3	Screw-HHF
7	75-6550	1	Disc-Friction
9	3272-2	1	Pin-Cotter
10	75-6580	1	Cable-Pedal
11	3256-22	6	Washer-Flat
12	3296-59	1	Nut-Lock, NI
13	3290-461	1	Washer-Spring
14	95-7151	1	Tube-Convolutd
15	75-6510	1	Bracket-Lever
16	94-9951	1	Column-Steering
17	114-5074	1	Steering Control ASM
18	100-8071	1	Lamp-Warning
19	100-8070	1	Lamp-Warning
20	233-42	1	Knob
21	75-6490	1	Lever ASM
23	75-2810	1	Bracket-Column, Steering
24	3234-7	6	Screw-HHF
25	95-1821-03	1	Spring-Compression

Ref	Part No.	Qty.	Description
29	3272-5	3	Pin-Cotter
30	104-1492	1	Rod ASM
31	62-5550	1	Decal
32	93-7996-01	1	Cover-Tower
33	3272-10	1	Pin-Cotter
34	3256-26	2	Washer-Flat
35	63-7900-03	1	Rack ASM
36	340-2	5	Fitting-HYD, Straight
36:1	237-22	1	O-Ring
36:2	237-42	1	O-Ring
37	100-1270	1	Switch-Proximity
39	100-4872	1	Plate-Switch, Neutral
40	3229-34	1	Bolt-CARR
42	3296-2	1	Nut-Lock
44	87-6620	2	Screw
45	3256-1	2	Washer-Flat
46	105-9232-03	1	Plate-Instrument
48	32121-45	1	Pin-Spring
49	104-2541	1	Switch ASM
49:1	218-461	1	Nut-HH
49:2	3254-5	1	Washer-Tooth
50	63-8360	1	Key-Ignition
52	105-3888	1	Decal-Tower
54	3256-27	1	Washer-Flat

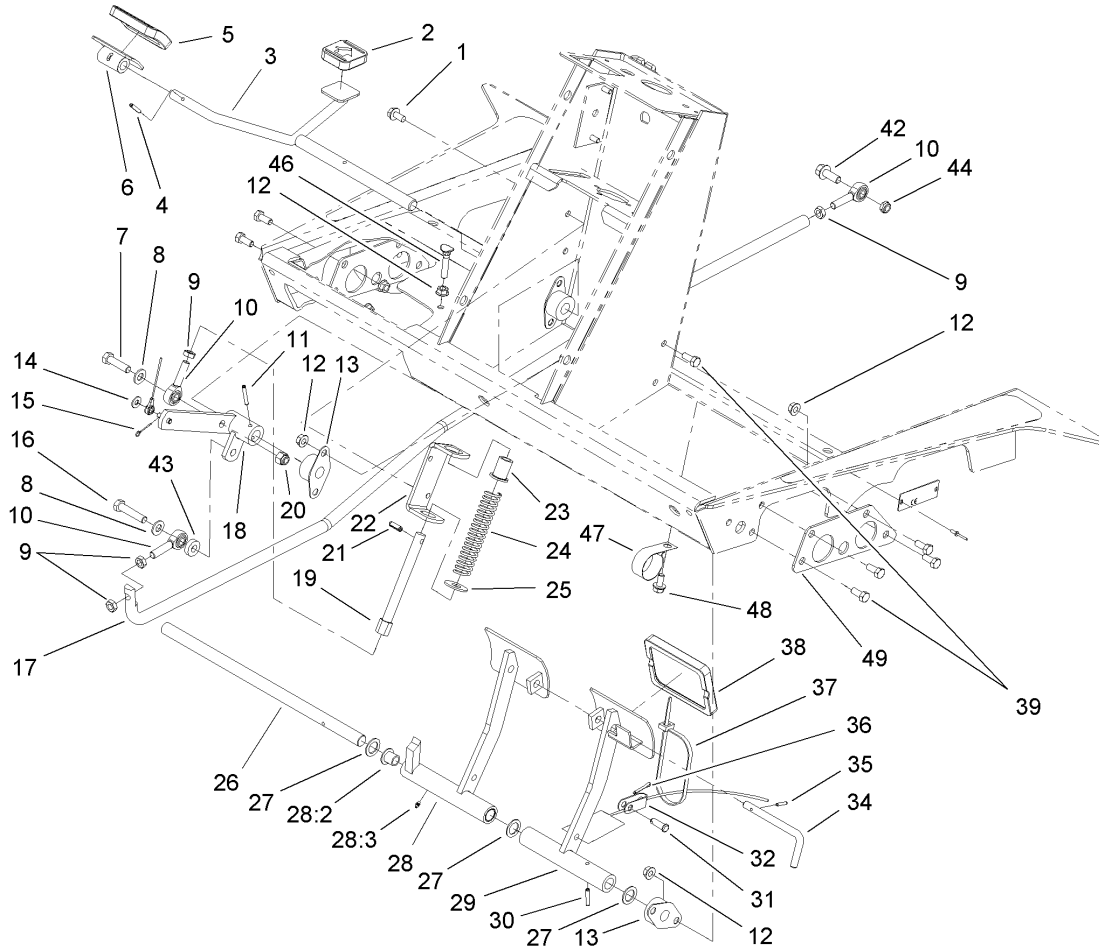


### Steering Tower Assembly (continued)

Ref	Part No.	Qty.	Description
●99	3290-379	1	Tie-Cable

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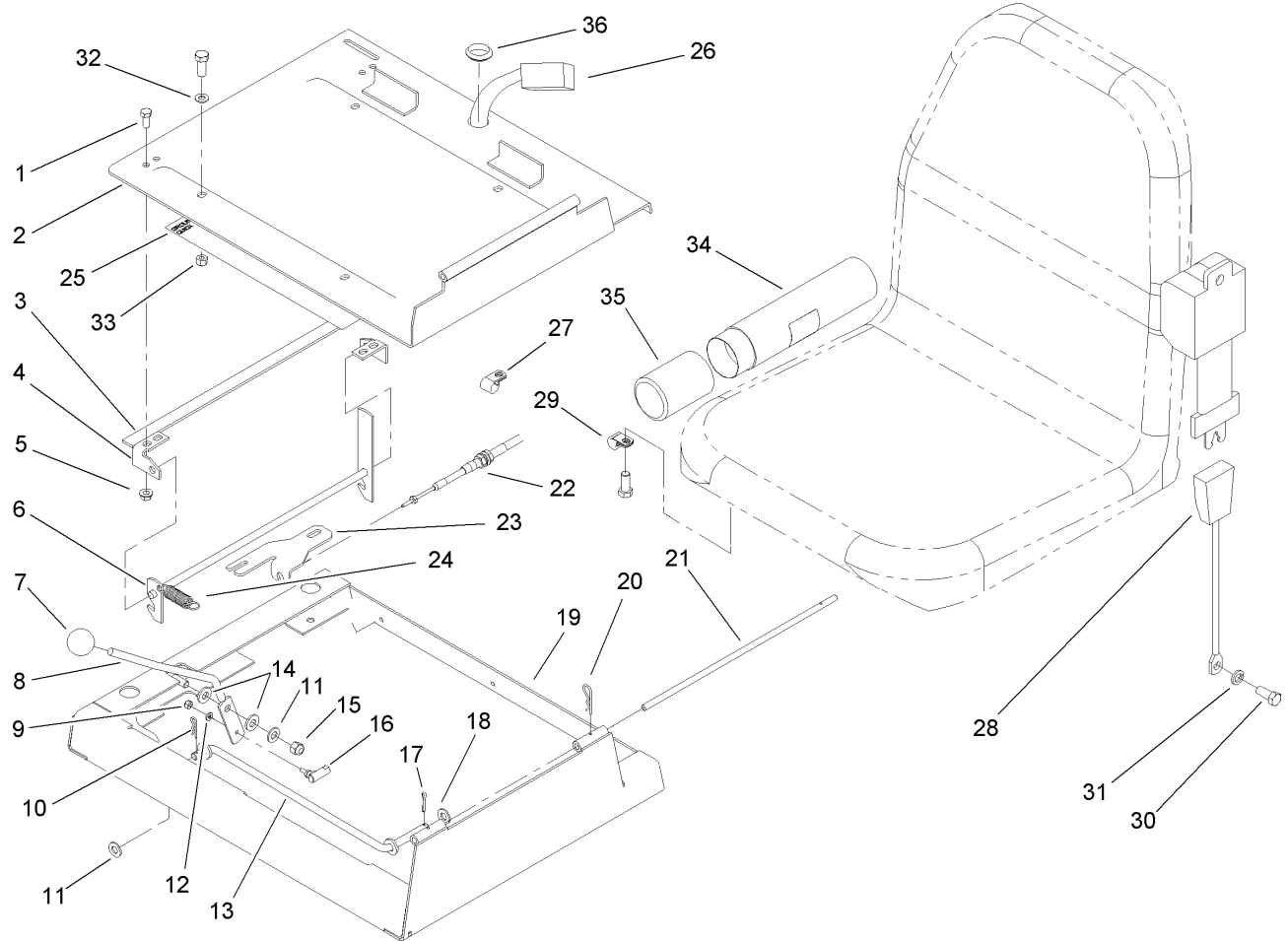




## Traction and Brake Pedal Assembly

Ref	Part No.	Qty.	Description
1	32144-14	2	Screw-HWHTF
2	74-9110	1	Pad-Pedal, Reverse
3	75-2970	1	Pedal-Traction
4	32121-45	1	Pin-Spring
5	74-9100	1	Pad-Pedal, Forward
6	49-6440-03	1	Pedal-Forward
7	323-29	1	Screw-HH
8	3256-24	2	Washer-Flat
9	3220-3	4	Nut-HJ
10	2411-36	3	Bearing-End, Rod
11	32121-6	1	Pin-Roll, Slotted
12	32128-20	12	Nut-HF
13	256-236	4	Bearing-Mount, Flange
14	3256-22	1	Washer-Flat
15	3272-2	1	Pin-Cotter
16	323-9	1	Screw-HH
17	104-5632-03	1	Rod-Control, Pump
18	75-3270-03	1	Hub-Pivot, Traction
19	92-7609	1	Shaft-Spring
20	3296-39	2	Nut-Lock, NI
21	32121-11	1	Pin-Roll
22	92-7608-03	1	Bracket-Spring
23	92-7610	1	Retainer-Spring
24	84-9100	1	Spring

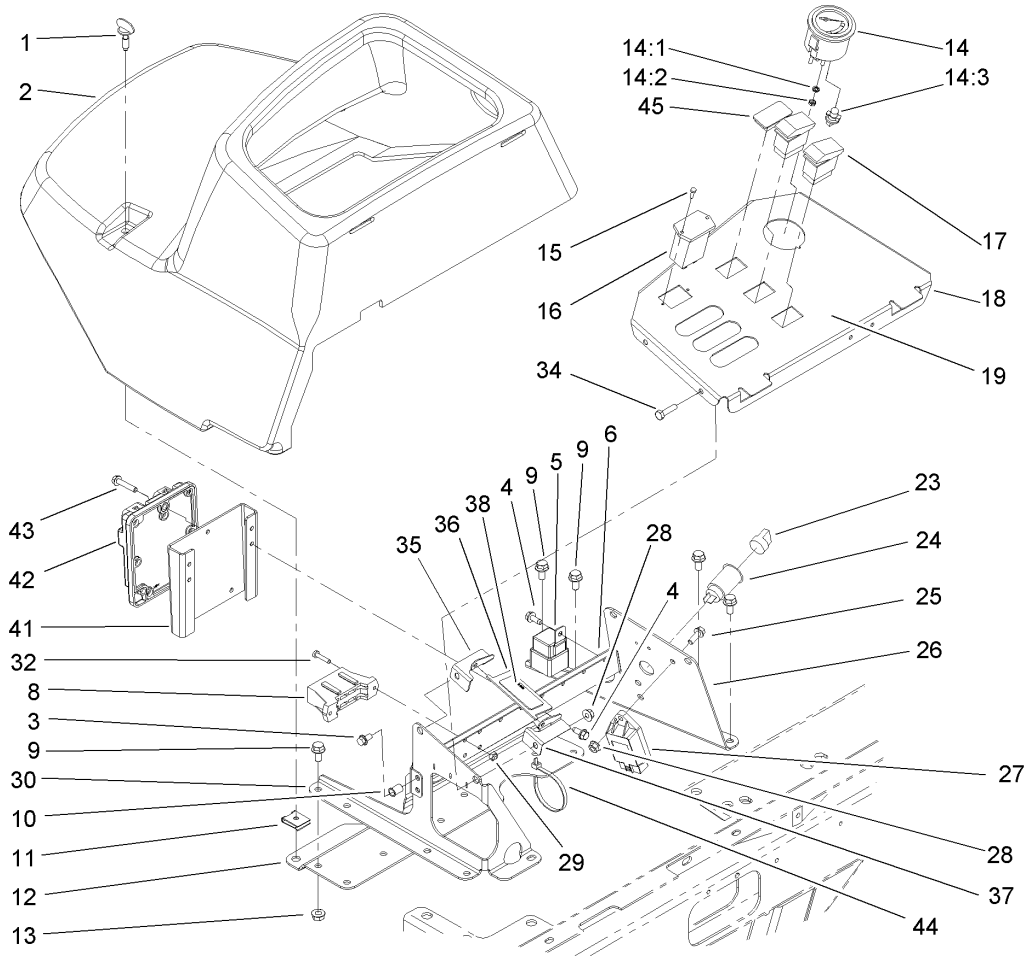
Ref	Part No.	Qty.	Description
25	3256-5	1	Washer-Flat
26	75-1470	1	Pin-Pivot, Brake
27	3256-69	3	Washer-Flat
28	75-1430	1	Pedal-Brake, RH
28:2	256-42	2	Bushing
28:3	302-5	1	Fitting-Grease
29	75-1440-03	1	LH Brake Pedal ASM
30	32121-16	1	Pin-Spring
31	283-58	2	Pin-Clevis
32	92-7530	1	LH Brake Cable ASM
33	92-7529	1	RH Brake Cable ASM
34	63-7880	1	Pin-Latch, Brake
35	32121-50	1	Pin-Spring
36	3272-10	2	Pin-Cotter
37	3290-378	1	Tie-Cable
38	93-8742	2	Footpad-Brake
39	322-3	8	Screw-HH
42	3234-11	1	Screw-HHF
43	5-0652	1	Spacer
44	3296-59	1	Nut-Lock, NI
46	3274-83	2	Screw-HSH
47	2412-150	1	Clip-J
48	3234-14	1	Screw-HHF
49	106-7794-01	2	Plate-Mount, HYD Fitting



## Throttle and Seat Frame Assembly

Ref	Part No.	Qty.	Description
1	322-3	8	Screw-HH
2	110-0453-03	1	Seat Plate ASM
3	94-8146	1	Strip-Foam
4	98-2353	2	Bracket-Latch, Seat
5	32128-25	4	Nut-HF
6	98-2354-03	1	Latch-Seat
7	233-42	1	Knob
8	93-7598	1	Lever-Throttle
9	3296-21	1	Nut-Lock, NI
10	3290-307	1	Pin-Hair
11	3256-24	3	Washer-Flat
12	3256-51	1	Washer-Flat
13	75-3680-03	1	Rod-Seat
14	66-2920	2	Washer-Friction
15	3296-39	1	Nut-Lock, NI
16	2411-38	1	Joint-Ball
17	3272-10	1	Pin-Cotter
18	52-2900	2	Washer-Plastic
19	98-2352-03	1	Frame-Seat
20	3290-467	1	Pin-Hair
21	75-3400	1	Shaft-Pivot, Seat
22	104-7547	1	Cable-Throttle
23	105-3929-03	1	Bracket-Cable, Throttle
24	66-4190	1	Spring-Idler, Clutch

Ref	Part No.	Qty.	Description
25	105-9895	1	Decal-Quick Reference
26	105-9189	1	Harness-Wire, Seat Switch
27	2412-133	2	R-Clamp
28	100-4928	1	Belt-Seat
29	2412-93	1	Clamp-R
30	3212-4	2	Screw-HH
31	3253-6	2	Washer-Lock
32	3256-23	4	Washer-Flat
33	3296-29	8	Nut-Lock, NI
34	104-7050	1	Housing-Manual
35	104-7048	1	Cap-Housing
36	240-5	1	Grommet-Rubber



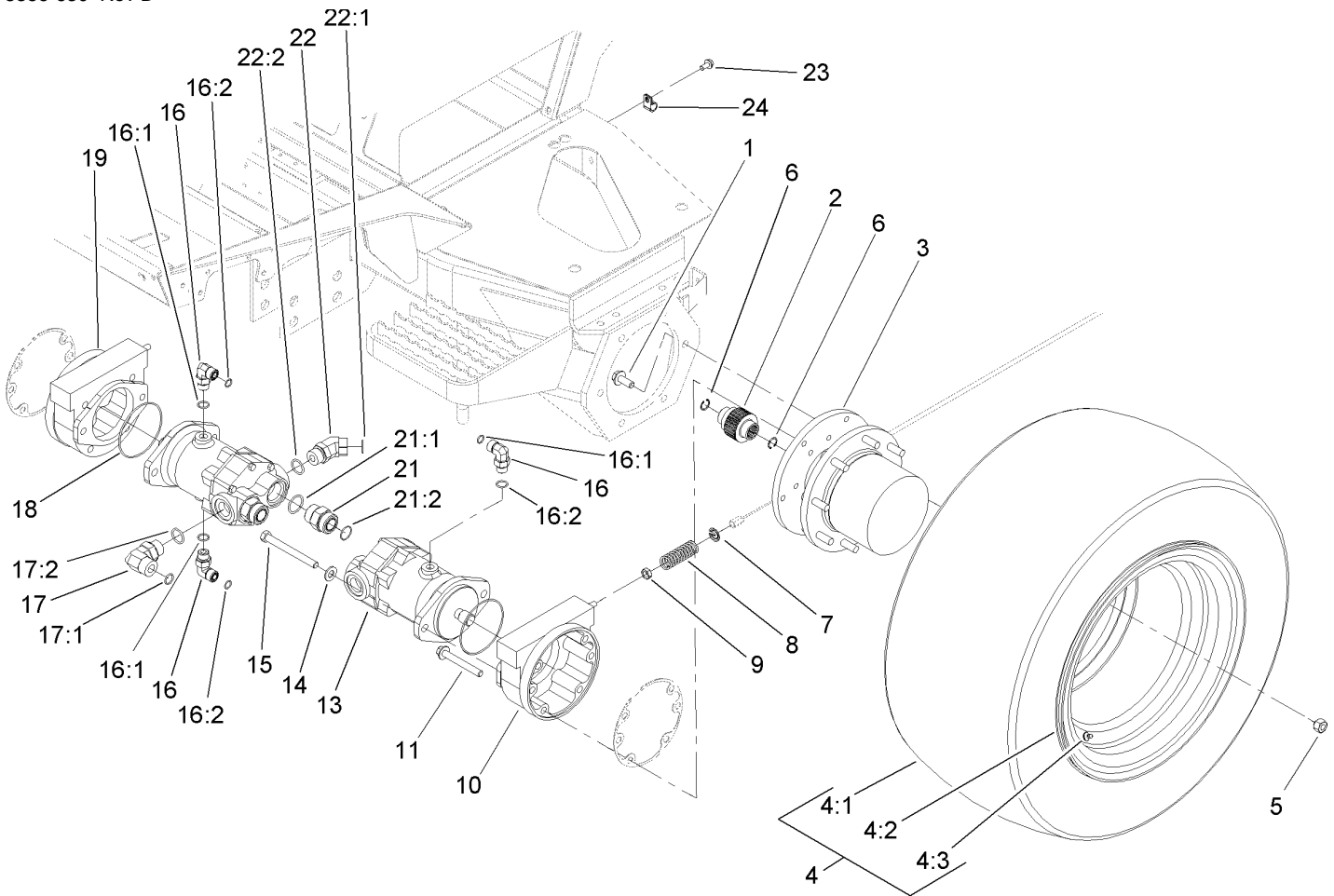
## Control Console Assembly

Ref	Part No.	Qty.	Description
1	105-9208	2	Screw-Head, Wing
2	104-5599	1	Cover-Console
3	3234-13	4	Screw-HHF
4	32144-10	7	Screw-HWH
5	99-7430	3	Relay
6	104-5613-03	1	Panel-Relay
8	110-0486	1	Harness-Wire, Console
●8:2	218-578	4	Fuse-10 Amp
●8:3	109355	1	Fuse-15 Amp
●8:4	100-4918	1	Diode
●8:5	92-3188	1	Diode-Board, Circuit
●8:6	94-6710	1	Fuse-Blade, 2 Amp
9	3234-14	9	Screw-HHF
10	32148-6	6	Insert-Nut
11	105-9209	2	Receptacle-Clip On
12	104-5612-03	1	Support-Cover
13	32128-20	4	Nut-HF
14	98-9308	1	Gauge-Temperature
14:1	3254-1	3	Washer-Lock, Int
14:2	3217-27	3	Nut-Hex
14:3	105-9265	1	Bulb And Lamp ASM
15	32144-18	2	Screw-HH
16	75-6820	1	Hourmeter
17	95-8999	2	Switch

Ref	Part No.	Qty.	Description
18	108-4043-03	1	Dash
19	108-4044	1	Decal-Console
●19	105-9223	1	Decal-Console, Ce
23	99-7416	1	Cap
24	99-7411	1	Point-Power
25	3234-4	1	Screw-HHF
26	104-5610-03	1	Panel-Dash, Rear
27	98-7611	1	Controller-Glow
28	32128-33	3	Nut-HF
29	3296-2	6	Nut-Lock
30	104-5609-03	1	Panel-Dash, Front
●31	105-3986	1	Module-Control, Deck
32	32105-13	6	Screw-HWH
34	321-6	2	Screw-HH
35	105-9840	1	Bracket-Latch, RH
36	105-9842	1	Plate-Latch, Ce
37	105-9841	1	Bracket-Latch, LH
38	105-9830	1	Decal-Lever Lock, Ce
41	105-9873-03	1	Bracket-Module
42	106-9277	1	Module-Control, Standard
43	32144-110	3	Screw-HWH
44	3290-379	5	Tie-Cable
45	99-7420	1	Plug-Hole



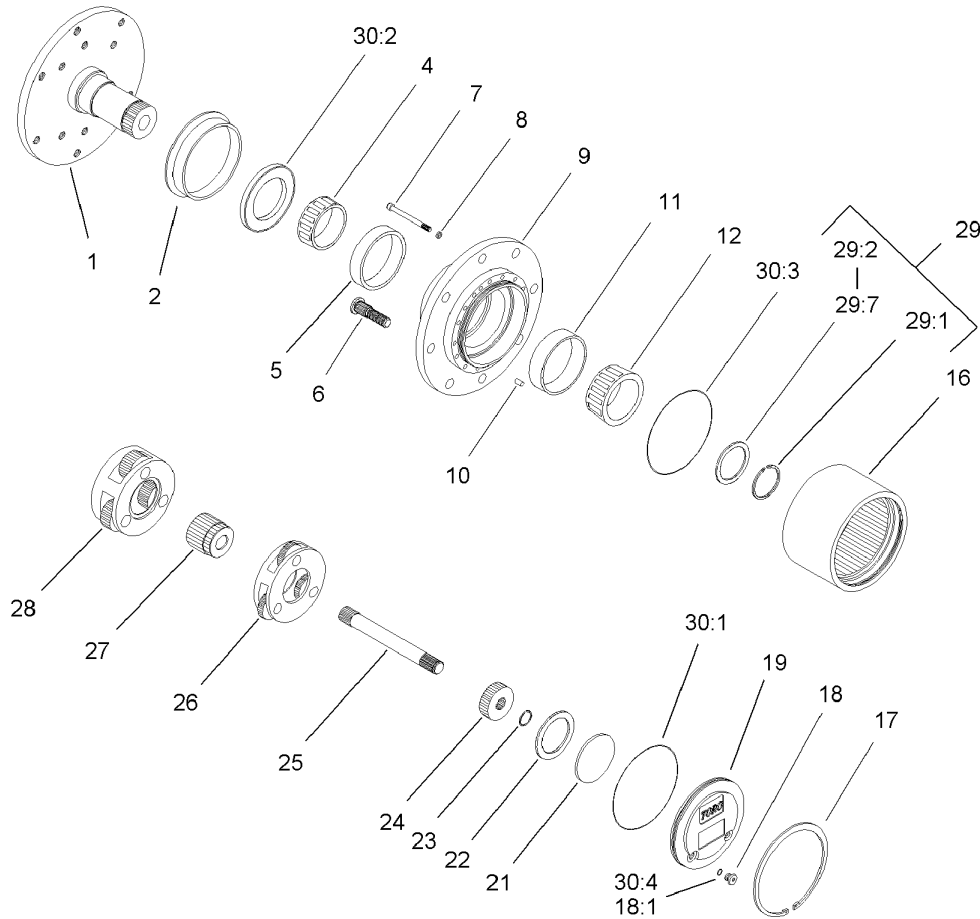




## Front Drive and Brake Assembly

Ref	Part No.	Qty.	Description
1	33106-030	12	Screw-HHF
2	100-3046	2	Shaft-Brake, Splined
3	105-4500-03	2	Planetary ASM
4		2	Wheel And Tire ASM
4:1	95-3465	1	Tire
4:2	95-3464	1	Rim
4:3	232-24	1	Stem-Valve
5	92-7483	16	Nut-Lug
6	93-7972	4	Ring-Retaining, Internal
7	94-3050	2	Plate-Spring
8	94-3088	2	Spring-Compression
9	3218-4	2	Nut-Jam
10	100-3070-03	1	Brake ASM
11	33106-090	8	Screw-HHF
13	105-1218	2	Motor-Piston
14	3256-26	4	Washer-Flat
15	33116-120	4	Screw-HH
16	340-98	3	Fitting-HYD, 90 DEG
16:1	237-79	1	O-Ring
16:2	237-30	1	O-Ring
17	340-142	2	Fitting-HYD, 90 DEG
17:1	237-58	1	O-Ring
17:2	237-81	1	O-Ring
18	237-166	2	O-Ring

Ref	Part No.	Qty.	Description
19	100-3069-03	1	Brake ASM
21	104-3797	4	Fitting-HYD, Straight
21:1	237-146	1	O-Ring
21:2	340-65	1	O-Ring
22	100-5530	2	Fitting-HYD, 45 DEG
22:1	237-58	1	O-Ring
22:2	237-81	1	O-Ring
23	32144-14	2	Screw-HWHTF
24	2412-93	2	Clamp-R



## Planetary Assembly No. 105-4500-03

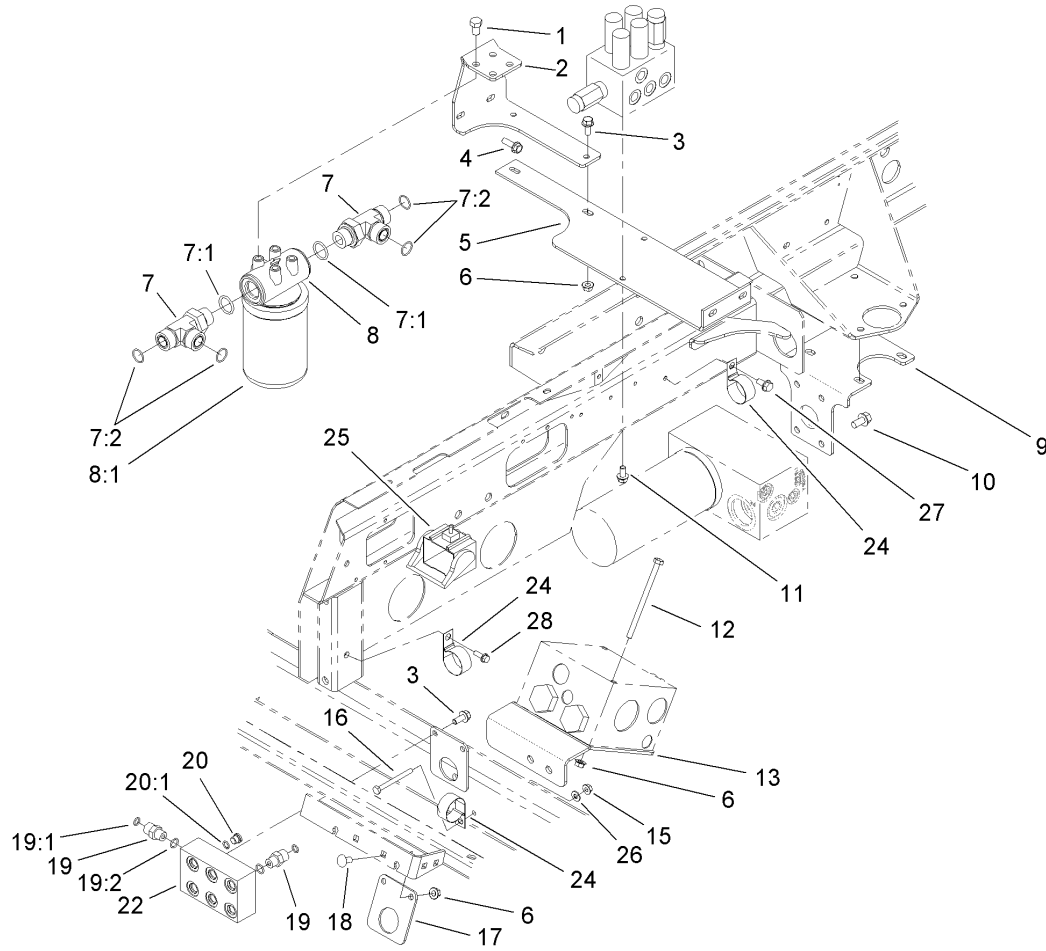
Ref	Part No.	Qty.	Description
②1		1	Spindle
2	105-8122	1	Seal-Boot
4	105-8120	1	Bearing-Cone
5	105-8119	1	Bearing-Cup
6	105-8124	8	Stud-Wheel
7	105-8125	16	Bolt-Head, Socket
8	3253-18	16	Washer-Lock
②9		1	Housing
10	105-8121	1	Pin-Dowel
11	105-8117	1	Bearing-Cup
12	105-8118	1	Bearing-Cone
16	105-8113	1	Gear-Ring
17	105-8132	1	Ring-Retaining
18	353-990	2	Plug
18:1	237-78	1	O-Ring
19	105-8138	1	Cap-End
21	105-8133	1	Plug-Thrust
22	105-8123	1	Washer-Thrust
23	105-8131	1	Ring-Retaining
24	105-8114	1	Gear-Primary
25	105-8115	1	Shaft-Drive
26	105-8129	1	Primary Carrier ASM
27	105-8139	1	Gear-Secondary
28	105-8130	1	Secondary Carrier ASM

Ref	Part No.	Qty.	Description
29	105-8136	1	Shim Kit
②29:1		1	Ring-Snap
②29:2		1	Shim-Bearing, 2.9Mm
②29:3		1	Shim-Bearing, 2.8Mm
②29:4		1	Shim-Bearing, 2.7Mm
②29:5		1	Shim-Bearing, 2.6Mm
②29:6		1	Shim-Bearing, 2.5Mm
②29:7		1	Shim-Bearing, 2.4Mm
①30	105-8137	1	Seal Kit
②30:1		1	O Ring-Flange Cap
②30:2		1	Seal-Oil
②30:3		2	O Ring-End Cap
30:4	237-78	2	O-Ring





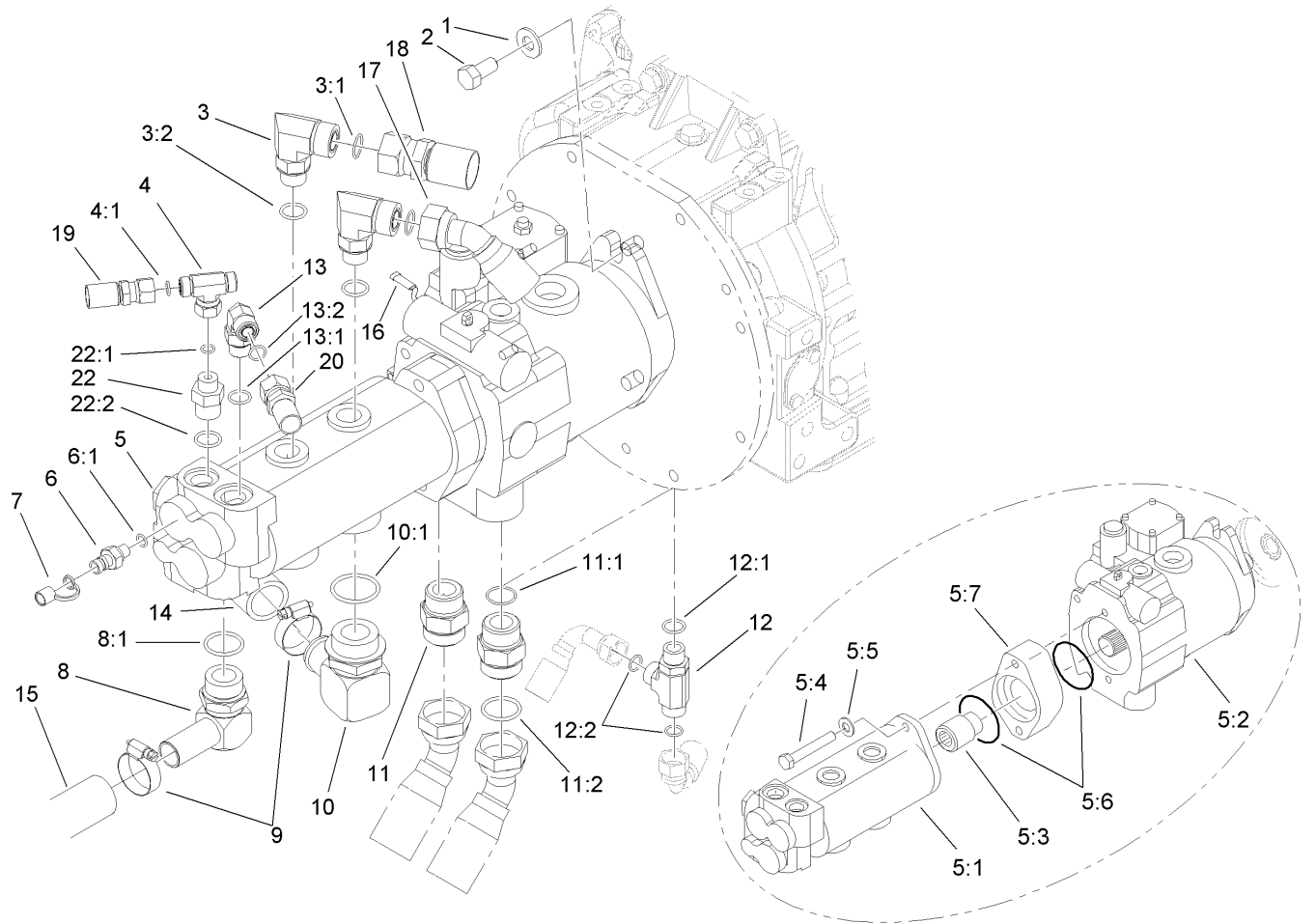




## Manifold Mounting and Fitting Assembly

Ref	Part No.	Qty.	Description
1	33115-016	4	Screw-HH
2	104-5492-03	1	Bracket-Mount, Filter
3	3234-5	4	Screw-HHF
4	3234-17	4	Screw-HHF
5	104-5493-03	1	Bracket-Mount, Valve
6	32128-20	6	Nut-HF
7	340-148	2	Fitting-Tee
7:1	237-81	1	O-Ring
7:2	237-58	2	O-Ring
8	93-2242	1	Oil Filter ASM
8:1	75-1310	1	Element-Filter
9	110-0472-03	1	Bracket-Manifold, Filter
10	3234-1	4	Screw-HHF
11	3234-14	2	Screw-HHF
12	322-48	2	Screw-HH
13	104-5467-03	1	Bracket-Mount, Valve
15	32128-33	2	Nut-HF
16	321-14	2	Screw-HH
17	104-5516-01	1	Support-Tube
18	3230-23	2	Screw-CARR
19	340-2	4	Fitting-HYD, Straight
19:1	237-22	1	O-Ring
19:2	237-42	1	O-Ring
20	353-990	1	Plug

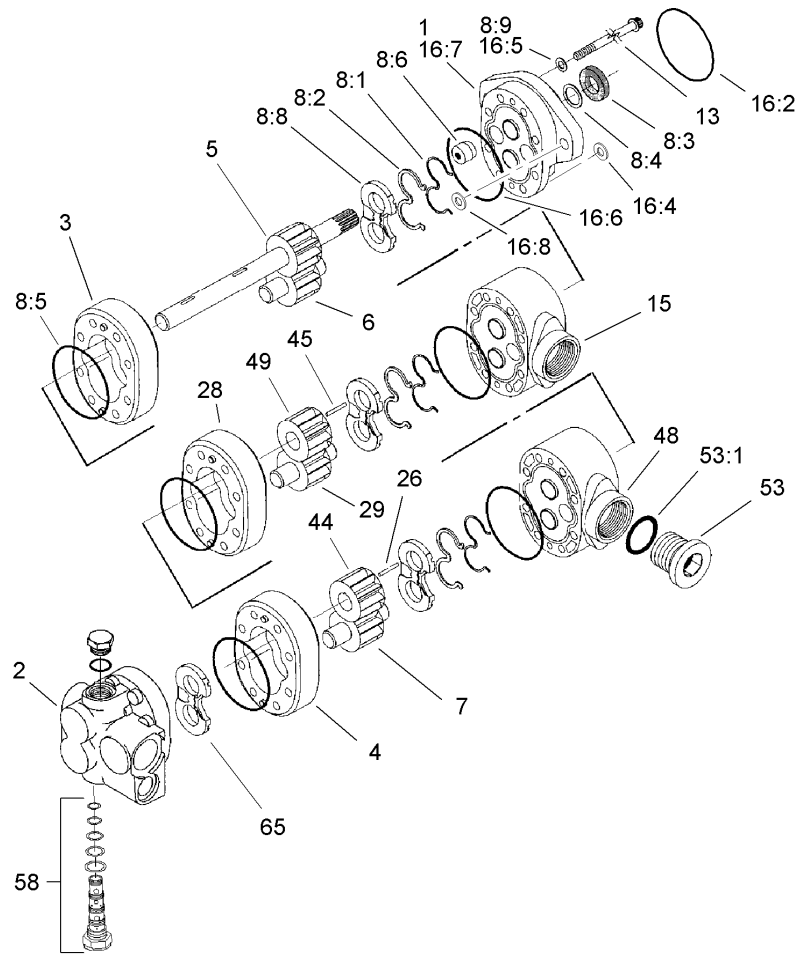
Ref	Part No.	Qty.	Description
20:1	237-78	1	O-Ring
22	104-5515	1	Manifold-Junction, Lift
24	2412-150	3	Clip-J
25	110-0488	1	Harness-Wire
25:1	100-4918	1	Diode
26	3256-22	2	Washer-Flat
27	32144-14	1	Screw-HWHTF
28	3234-4	1	Screw-HHF



## Hydraulic Pump Assembly

Ref	Part No.	Qty.	Description
1	87-7270	2	Washer-Thrust
2	3213-2	2	Screw-HH
3	340-16	2	Fitting-HYD, 90 DEG
3:1	237-80	1	O-Ring
3:2	237-58	1	O-Ring
4	340-166	1	Fitting-Tee, HYD
4:1	237-22	1	O-Ring
5		1	Pump ASM
5:1	105-9845	1	Triple Pump ASM
5:2	110-0464	1	Pump-Piston
5:3	74-9030	1	Coupler
5:4	323-32	2	Screw-HH
5:5	60-3540	2	Washer
5:6	60-3520	2	O-Ring
5:7	105-2869	1	Spacer
6	354-77	2	Fitting-Quick
6:1	237-78	1	O-Ring
7	354-79	2	Cap-Dust
8	56-9530	1	Fitting-HYD, 90 DEG
8:1	237-117	1	O-Ring
9	2412-130	2	Clamp-Hose
10	92-7526	1	Fitting-HYD, 90 DEG
10:1	237-101	1	O-Ring
11	104-3797	2	Fitting-HYD, Straight

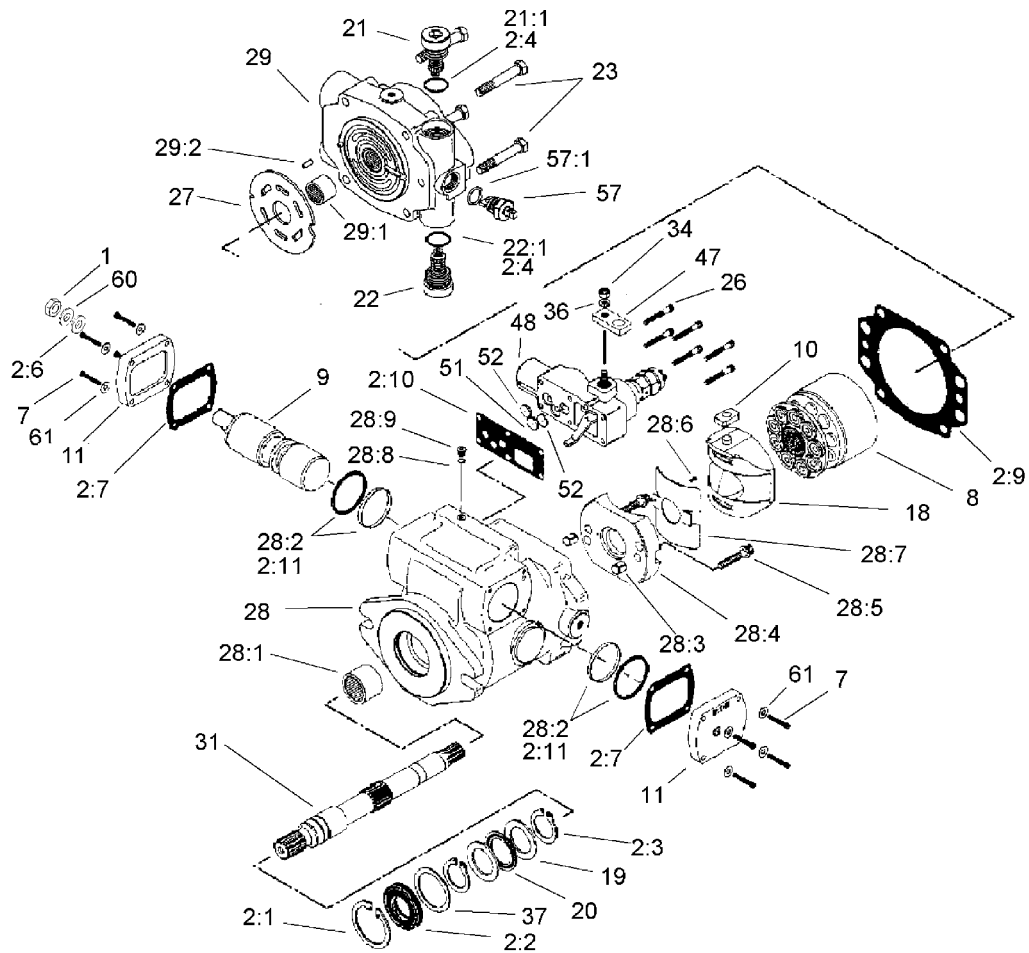
Ref	Part No.	Qty.	Description
11:1	237-146	1	O-Ring
11:2	340-65	1	O-Ring
12	340-109	1	Fitting-HYD, Tee
12:1	237-79	1	O-Ring
12:2	237-30	2	O-Ring
13	340-98	1	Fitting-HYD, 90 DEG
13:1	237-79	1	O-Ring
13:2	237-30	1	O-Ring
14	104-5482	1	Hose-Suction
15	104-5484	1	Hose-Suction
16	105-0122	1	Harness-Wire
17	105-3874	1	Hose ASM
18	105-3875	1	HYD Hose ASM
19	92-7595	1	Hose ASM
20	105-3869	1	Hose ASM
22	340-141	1	Fitting-HYD, Straight
22:1	237-22	1	O-Ring
22:2	237-80	1	O-Ring



## Triple Pump Assembly No. 105-9845

Ref	Part No.	Qty.	Description
1		1	Front Plate ASM
2		1	Back Plate ASM
3		1	Body
4		1	Body
5		1	Drive Gear ASM
6		1	Gear-Idler
7		1	Gear-Idler
8	94-3015	1	Seal Kit
8:1		3	Gasket-Back Up
8:2		3	Seal-Balance
8:3	49-2640	1	Seal-Shaft
8:4	60-5890	1	Washer
8:5		6	Seal-Dust
8:6		1	Plug
8:8		3	Plate-Wear
8:9		4	Washer
13	105-9849	8	Capscrew
15		1	Plate-Adaptor
16	107-4328	1	Front Plate Kit
16:2		1	Seal-Dust
16:4		4	Washer
16:5		4	Washer-Crush
16:6		1	Seal-Dust
16:7		1	Plate-Front

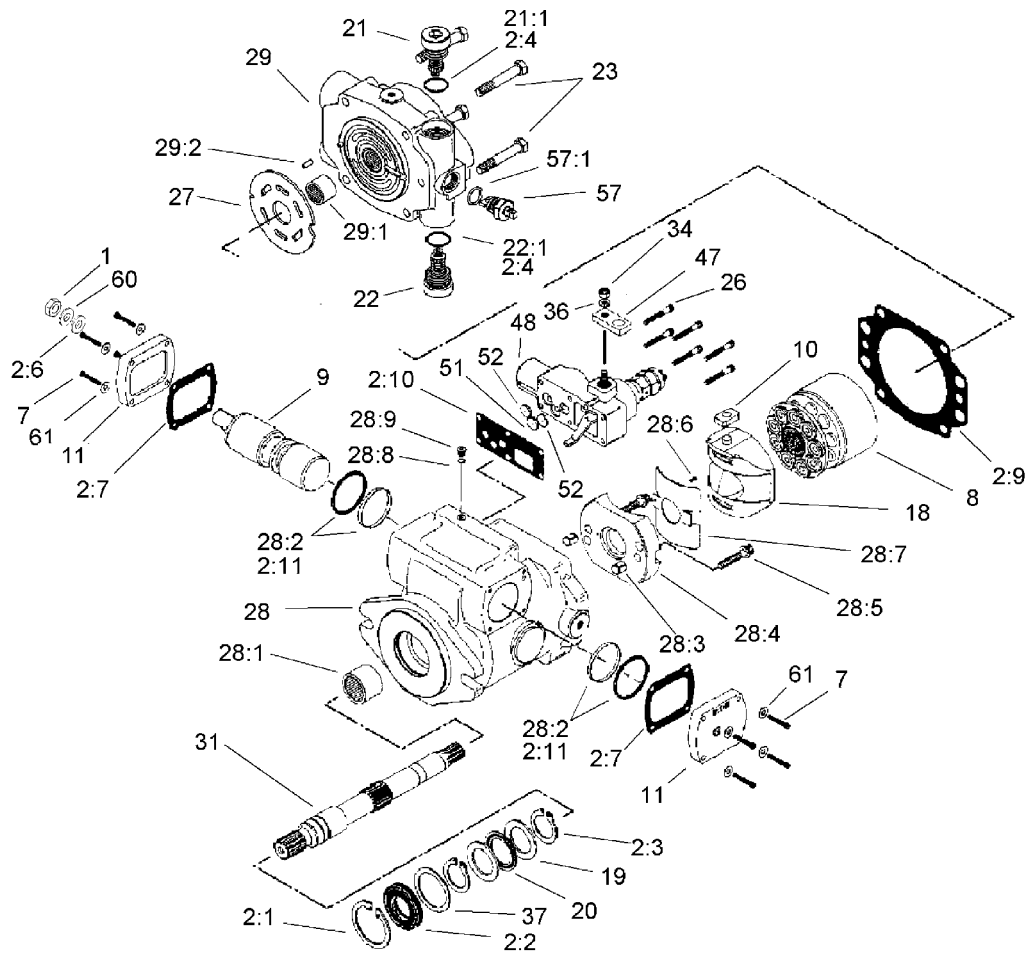
Ref	Part No.	Qty.	Description
16:8		2	Washer
26		1	Key
28		1	Body
29		1	Gear-Idler
44		1	Gear
45		1	Key
48		1	Plate-Adaptor
49		1	Gear
53	94-3013	1	Plug
53:1		1	Seal-Dust
58	107-1970	1	Valve-Proportional
65		1	Plate-Thrust



## Piston Pump Assembly No. 110-0464

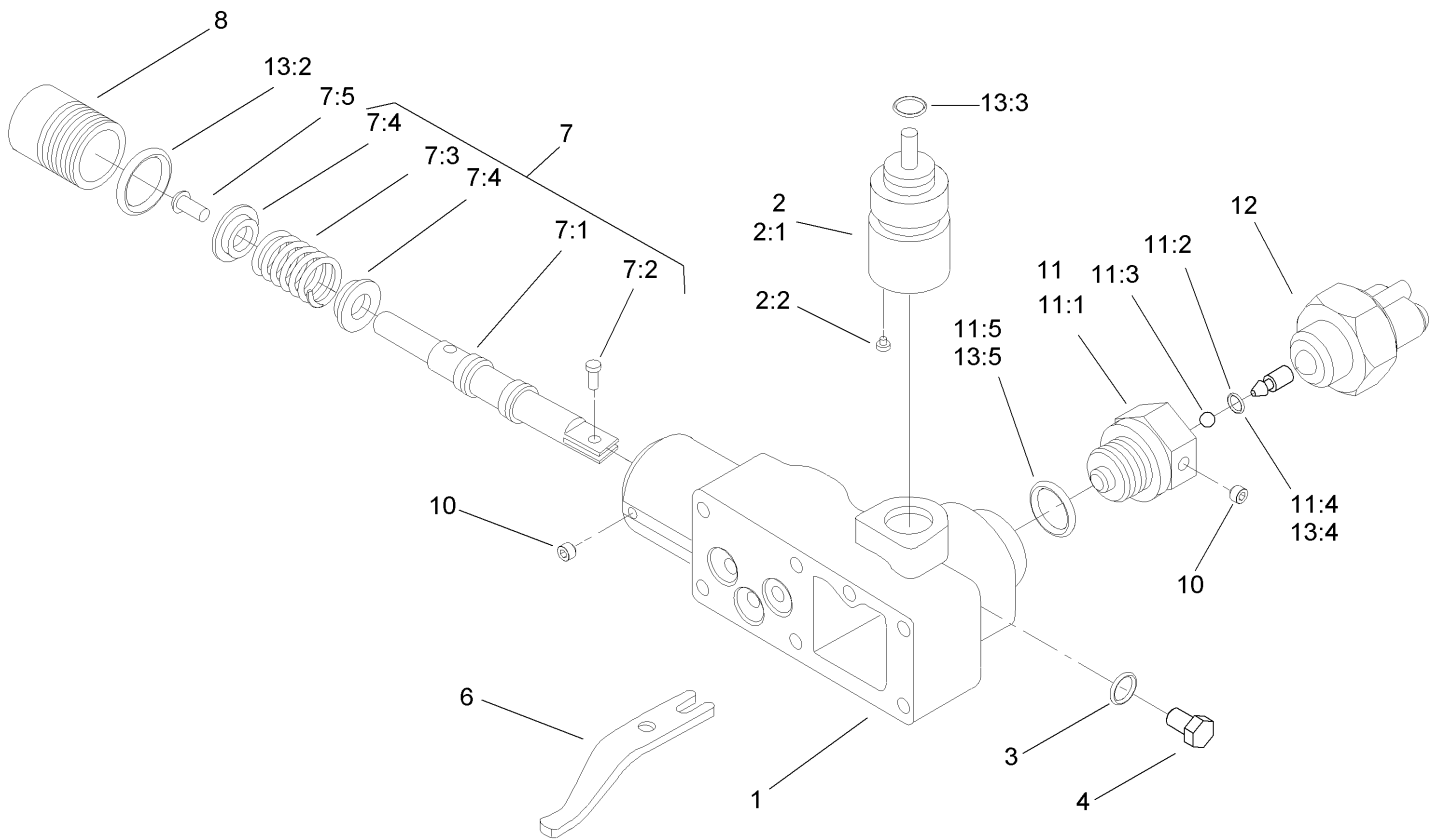
Ref	Part No.	Qty.	Description
1	3220-2	1	Nut-Jam
2	107-1561	1	Seal Kit
2:1	60-6260	1	Ring
2:2	105-3331	1	Seal-Shaft
2:3	76-7000	2	Ring-Retaining
2:4		2	Seal-Dust
2:5	93-6314	2	O-Ring
2:6	94-3027	1	Washer-Seal
2:7	93-6339	2	Gasket
2:8	105-2905	1	O-Ring
2:9	105-2900	1	Gasket-Housing
2:10	105-2901	1	Gasket-Housing, Control
2:11		2	Seal ASM
2:12	74-9380	1	O-Ring
7	3274-81	8	Screw-HSH
8	105-9851	1	Rotating Kit
9	105-4572	1	Servo Piston ASM
10	94-3032	1	Follower-Piston
11	105-9853	1	Plate-Cover
18	94-3026	1	Camplate ASM
19	76-6950	2	Race-Thrust
20	76-6960	1	Bearing-Thrust
21	105-2857	1	Valve-Relief
21:1		1	Seal-Dust

Ref	Part No.	Qty.	Description
22	105-2857	1	Valve-Relief
22:1		1	Seal-Dust
23	323-45	4	Screw-HH
26	3274-59	6	Screw-HSH
27	105-9854	1	Plate-Valve
28	105-9855	1	Housing ASM
28:1		1	Bearing
28:2		2	Seal ASM
28:3		2	Dowel-Bushing
28:4		1	Cradle ASM
28:5		2	Washer
28:6		1	Washer
28:7		1	Bushing
28:8		1	Seal-Dust
28:9		1	Plug
29	105-9856	1	Backplate ASM
29:1		1	Bearing
29:2		1	Pin-Roll
31	105-2861	1	Shaft-Drive
34	3217-5	1	Nut-Hex
36	3253-3	1	Washer-Lock
37	60-6240	1	Washer
47	110-0036	1	Arm-Control
48	108-1503	1	Manual Servo Control ASM



### Piston Pump Assembly No. 110-0464 (continued)

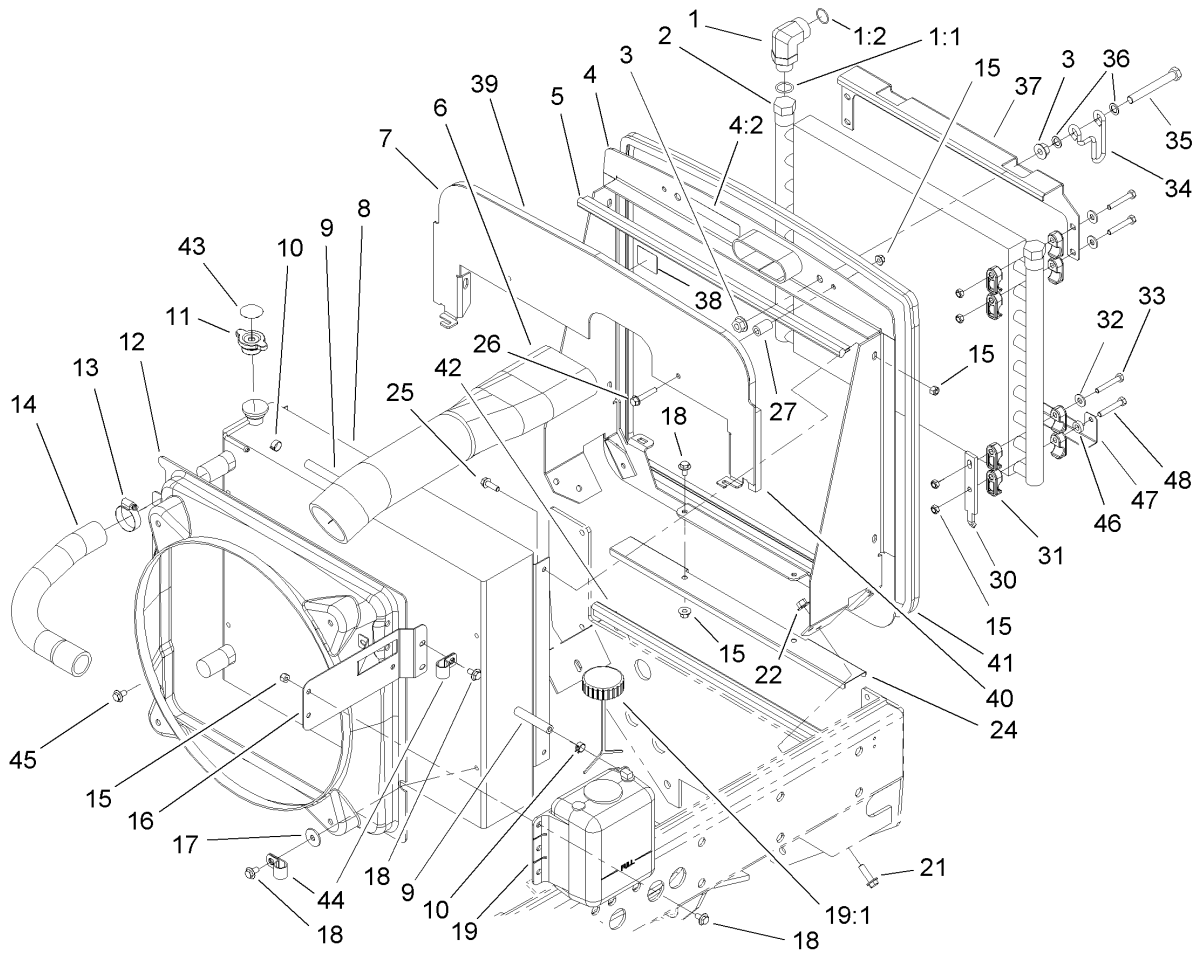
Ref	Part No.	Qty.	Description
51	105-2909	1	Orifice-Control
52	94-3041	2	Orifice-Control
57	105-2864	1	Valve-Bypass
●57:1		1	Seal-Dust
60	94-3030	1	Washer
61	3256-77	8	Washer-Flat

### Control Assembly No. 108-1503

Ref	Part No.	Qty.	Description
1		1	Housing-Control
2	108-7099	1	Input Control Shaft ASM
2:1		1	Shaft
2:2		1	Pin
3		1	Seal-Dust
4		1	Plug
6		1	Link-Feedback
7	108-7098	1	Valve Spool ASM
7:1		1	Valve-Spool
7:2		1	Pin-Dowel
7:3		1	Spring
7:4		2	Retainer
7:5		1	Screw
8		1	Plug
10		2	Screw-Set
11	108-8003	1	Adaptor ASM
11:1		1	Adaptor-Neutral Lockout
11:2		1	Pin
11:3		1	Ball
11:4		1	Seal-Dust
11:5		1	Seal-Dust
12	94-3043	1	Switch-Safety, Neutral
13	94-3044	1	Seal Kit
13:1		1	Seal-Dust

Ref	Part No.	Qty.	Description
13:2		1	Seal-Dust
13:3		1	Seal-Wiper
13:4		1	Seal-Dust
13:5		1	Seal-Dust

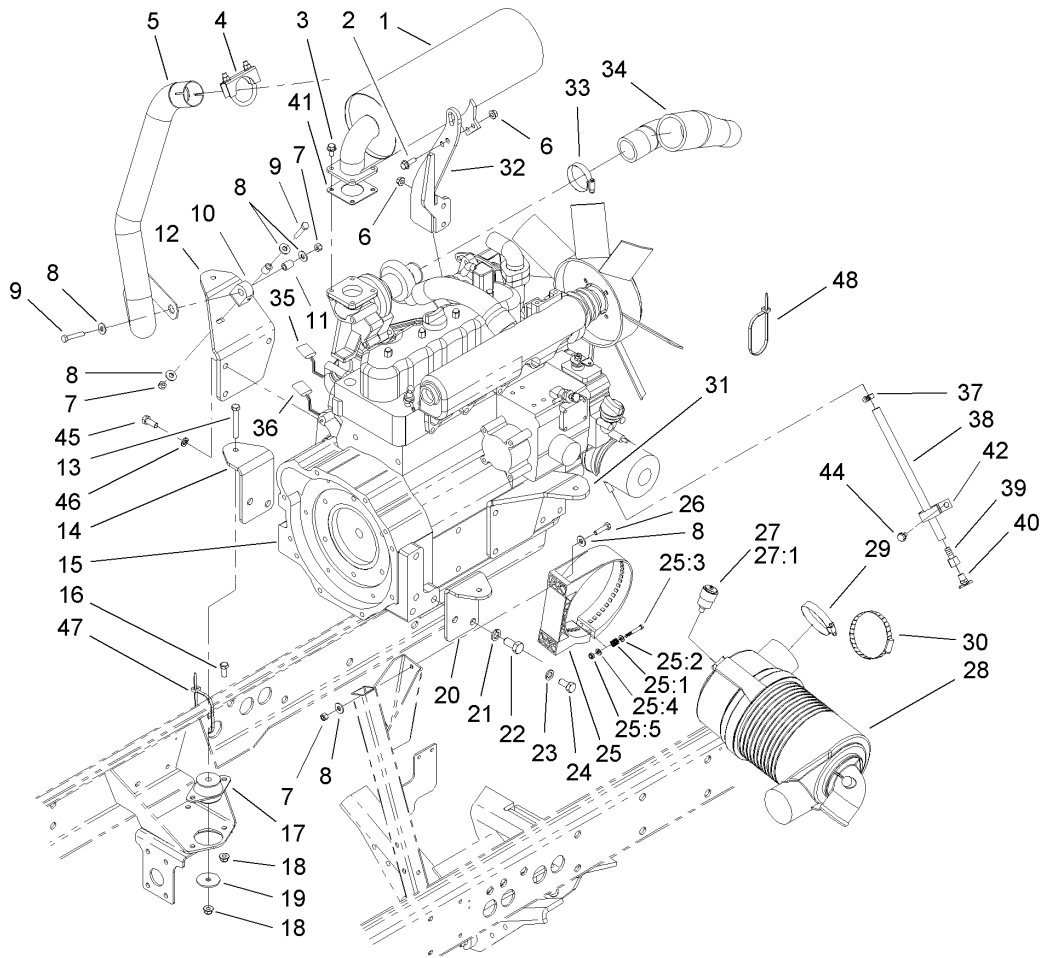


## Radiator Assembly

Ref	Part No.	Qty.	Description
1	104-3796	2	Fitting-HYD, 90 DEG
1:1	237-81	1	O-Ring
1:2	340-65	1	O-Ring
2	108-4008	1	Cooler-Oil
3	32128-49	4	Nut-HHF
4	105-3994	1	Bracket-Radiator
4:2	93-7272	1	Decal-Warning
5	104-2223	1	Seal-Bulb
6	100-5550	1	Hose-Cleaner, Air
7	105-3934-03	1	Bracket-Seal, Hood
8	107-0244	1	Radiator
9	110-3258	2	Hose-Fuel
10	92-2379	3	Clamp-Hose
11	93-5957	1	Cap-Radiator
12	99-5428	1	Shroud-Radiator
13	2412-111	4	Clamp
14	100-5547	2	Hose-Radiator
15	104-8300	19	Nut-Flange, NI
16	100-5505-03	1	Bracket-Tank
17	99-2900	4	Washer-Flat
18	3234-7	9	Screw-HHF
19	104-2276	1	Reservoir-Coolant
19:1	87-7050	1	Cap-Reservoir
21	3234-11	4	Screw-HHF

Ref	Part No.	Qty.	Description
22	32128-43	4	Nut-Flange
24	104-5426-03	1	Cover-Bottom
25	3234-17	4	Screw-HHF
26	94-5780	2	Screw-HWH
27	93-6981	2	Spacer
30	104-5460-03	2	Plate-Mount, Oil Cooler
31	105-3943	16	Clamp-Cooler, Oil
32	3256-23	12	Washer-Flat
33	322-10	6	Screw-HH
34	104-5429	2	Clamp-Form, Wire
35	325-17	2	Screw-HH
36	41-8440	4	Washer
37	104-5428	1	Bracket-Oil Cooler, Top
38	93-7275	1	Decal-Fluid, Starting
39	105-9233	1	Seal-Foam
40	105-9236	2	Seal-Foam
41	105-9814	1	Seal-Bulb
42	105-9858	1	Seal-Bulb
43	106-6755	1	Decal-Cap, Radiator
44	2412-81	2	Clamp-R
45	3234-28	2	Screw-HHF
46	104-1156	2	Spacer
47	108-4019-03	1	Bracket-Cooler, Oil
48	322-11	2	Screw-HH



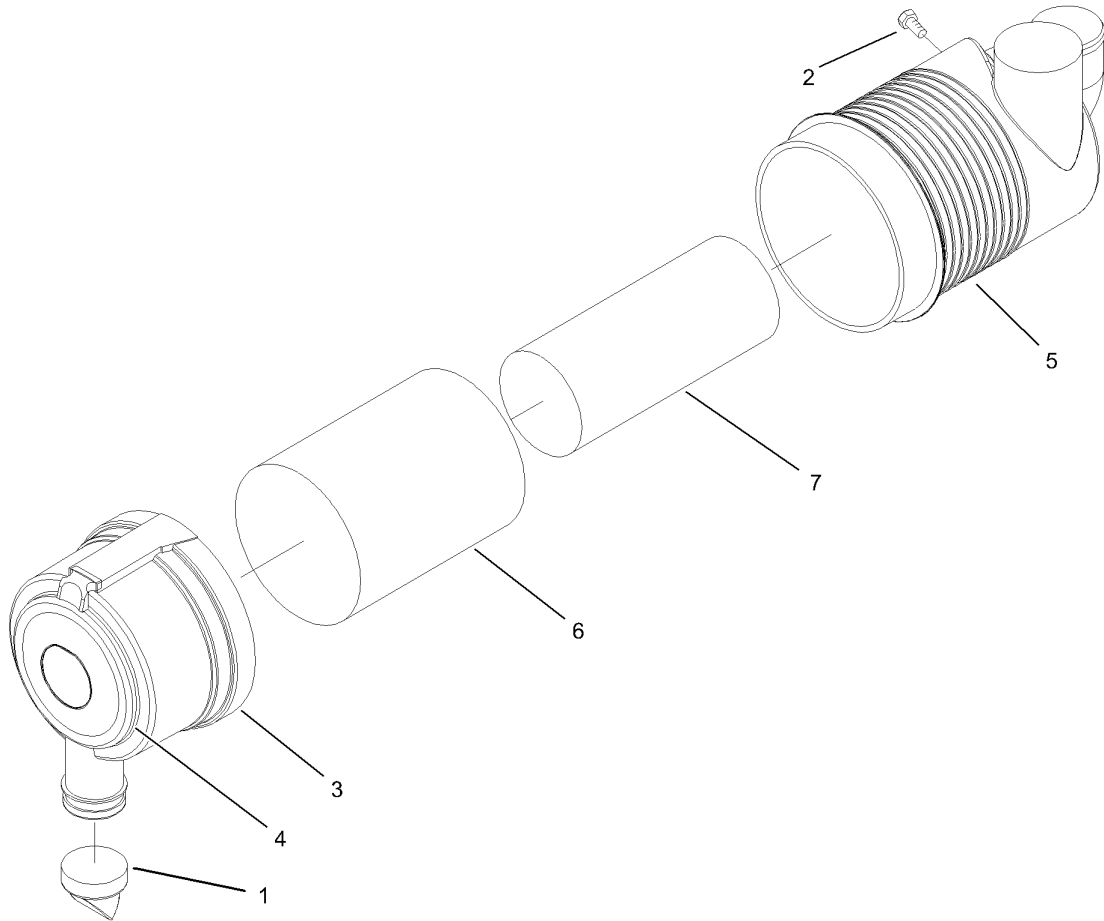


## Engine Installation Assembly

Ref	Part No.	Qty.	Description
1	99-5424	1	Muffler-Turbo
2	33104-025	2	Screw-HHF
3	33104-016	4	Screw-HHF
4	18-2130	1	Clamp ASM
5	104-5461	1	Pipe-Exhaust
6	33004-00	4	Nut-HF
7	3296-29	4	Nut-Lock, NI
8	3256-3	8	Washer-Flat
9	322-9	2	Screw-HH
10	95-5622	1	Hanger-Rubber
11	93-5023	2	Spacer
12	106-2048-03	1	Mount-Engine, RH
13	323-13	4	Screw-HH
14	100-3148-03	1	Mount-Engine, RH
15	107-4302	1	Engine-Turbo, Kubota
16	3234-11	10	Screw-HHF
17	53-9682	4	Support-Engine, Rubber
18	104-8301	14	Nut-Flange, NI
19	63-7400	4	Washer-Rebound
20	100-3147-03	1	Mount-Engine, LH
21	43-5950	4	Washer-Lock, Spring
22	43-3210	4	Screw-HH
23	48-8070	5	Washer-Lock
24	42-9250	5	Bolt

Ref	Part No.	Qty.	Description
25	99-5414	1	Strap-Cleaner, Air
25:1	108-1512	2	Spring
25:2	3256-22	2	Washer-Flat
25:3	33113-050	2	Screw-HH
25:4	33093-00	2	Washer-Flat
25:5	33023-00	2	Nut-Lock
26	322-6	2	Screw-HH
27	104-3563	1	Indicator
27:1	94-1416	1	Indicator Adapter ASM
28	99-5410	1	Cleaner-Air
29	2412-125	1	Clamp-Hose
30	2412-110	1	Clamp-Hose
31	106-2049-03	1	Mount-Engine, LH
32	99-5421-03	1	Bracket-Mounting
33	2412-92	1	Clamp-Hose
34	99-5415	1	Hose-Cleaner, Air
35	99-3441	1	Harness-Wire, Fusible Link
36	105-9869	1	Harness-Wire, Engine
37	2412-108	2	Clamp-Worm
38	99-7376	1	Hose-Breather
39	354-94	1	Fitting-Female, Barbed
40	93-5528	1	Fitting-Cock, Drain
41	100-9333	1	Gasket-Muffler
42	2412-150	1	Clip-J

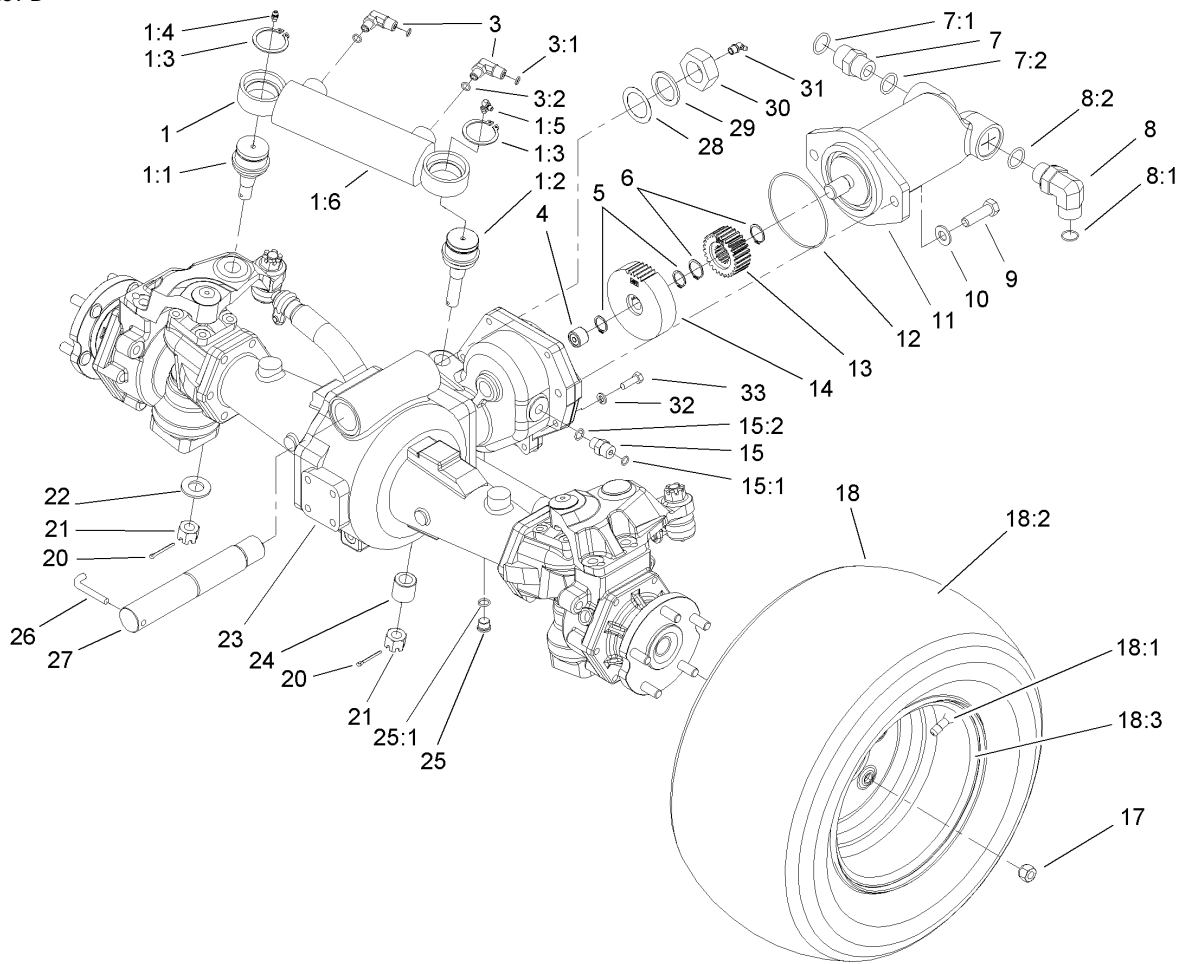




### Air Cleaner Assembly No. 99-5410

Ref	Part No.	Qty.	Description
1	104-4258	1	Valve-Vacuator
2		1	Plug-Pipe
3	104-4259	1	Cover ASM
4		1	Marking
5		1	Body ASM
6	108-3814	1	Filter-Air
7	108-3816	1	Filter-Air

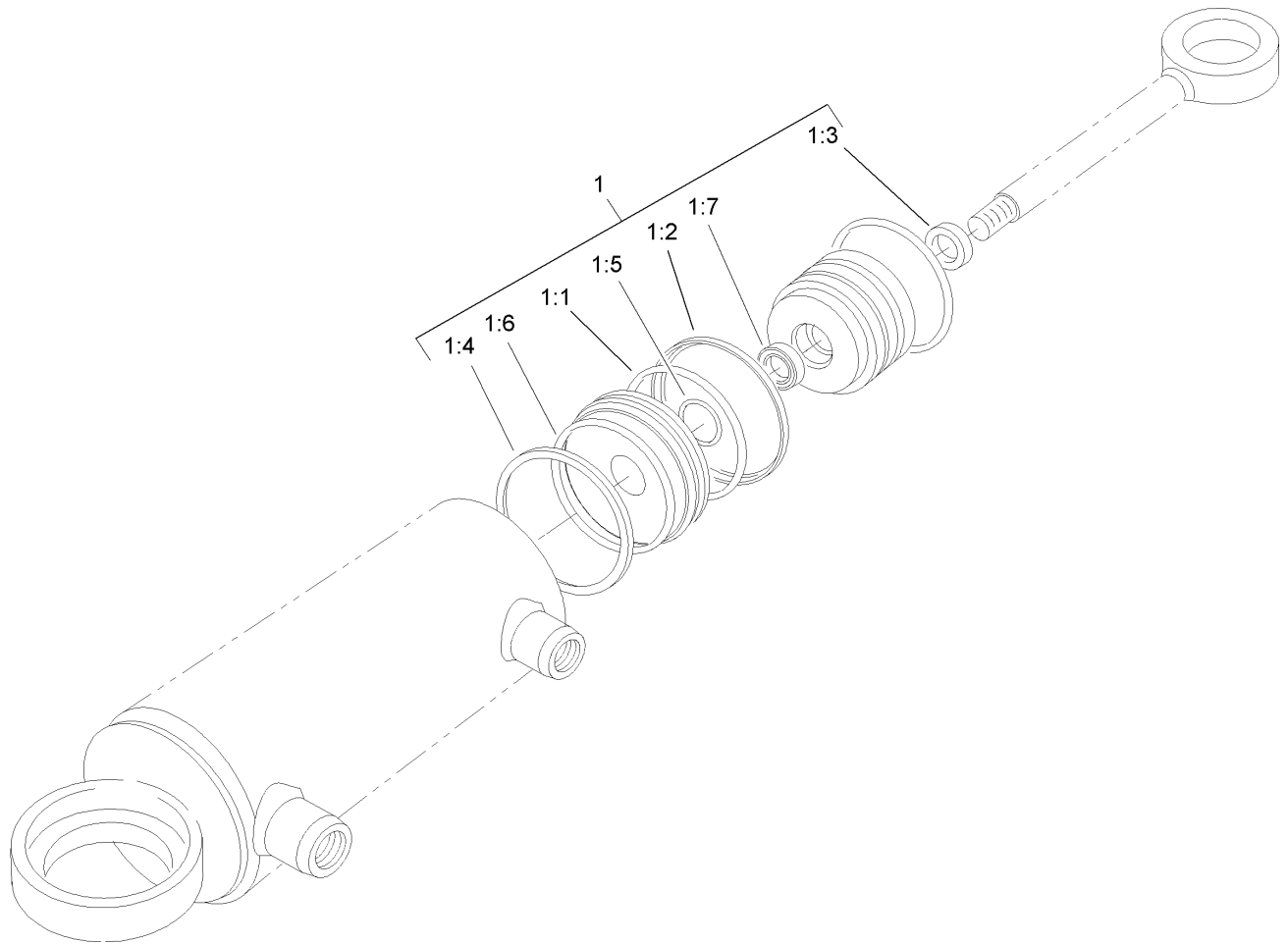
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## Rear Axle Assembly

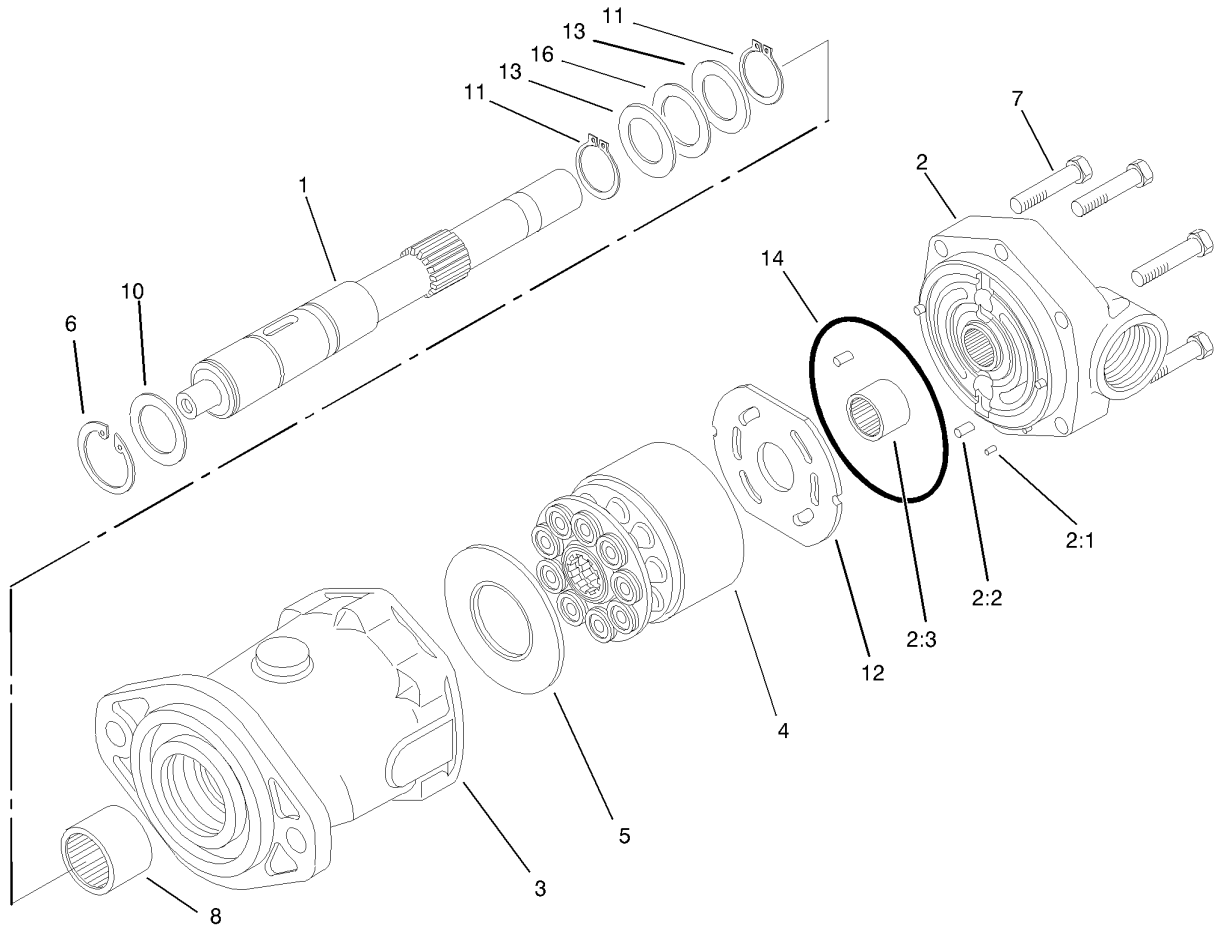
Ref	Part No.	Qty.	Description
1	105-9861	1	Steering Cylinder ASM
1:1	106-6774	1	Joint-Ball
1:2	100-3795	1	Joint-Ball
1:3	32151-104	2	Ring-Retaining, External
1:4	302-5	1	Fitting-Grease
1:5	302-60	1	Fitting-Grease, 90 DEG
1:6	107-1976	1	Cylinder-Steering, HYD
3	340-97	2	Fitting-HYD, 90 DEG
3:1	237-22	1	O-Ring
3:2	237-78	1	O-Ring
4	74-5700	1	Bearing-Needle, Roller
5	32120-15	2	Ring-Snap, EXT
6	32120-76	2	Ring-Snap, EXT
7	340-9	1	Fitting-Straight
7:1	237-58	1	O-Ring
7:2	237-81	1	O-Ring
8	340-142	1	Fitting-HYD, 90 DEG
8:1	237-58	1	O-Ring
8:2	237-81	1	O-Ring
9	325-7	2	Screw-HH
10	3256-26	2	Washer-Flat
11	105-1219	1	Motor-Piston
12	237-166	1	O-Ring
13	104-5663	1	Pinion-28T

Ref	Part No.	Qty.	Description
14	104-5664	1	Gear-44T
15	340-2	1	Fitting-HYD, Straight
15:1	237-22	1	O-Ring
15:2	237-42	1	O-Ring
17	93-5268	10	Nut-Lug
18		2	Tire And Wheel ASM
18:1	232-27	1	Stem-Valve
18:2	104-0451	1	Tire-Turf, Trac
18:3	105-9219	1	Wheel
20	3272-11	2	Pin-Cotter
21	32136-14	2	Nut-SHH
22	92-5836	1	Washer
23	110-4750	1	Drive Axle ASM
24	100-3796	1	Spacer-Joint, Ball
25	353-989	1	Plug-Hex, Hollow
25:1	237-42	1	O-Ring
26	100-3771	1	Pin-Stop
27	100-3770	1	Pin-Axle, Pivot
28	92-1765	1	Washer-Thrust
29	98-3867	2	Washer-Thrust
30	3296-68	1	Nut-Lock, NI
31	302-33	1	Fitting-Grease
32	3253-4	6	Washer-Lock
33	33114-025	6	Screw-HH



## Hydraulic Cylinder Assembly No. 107-1976

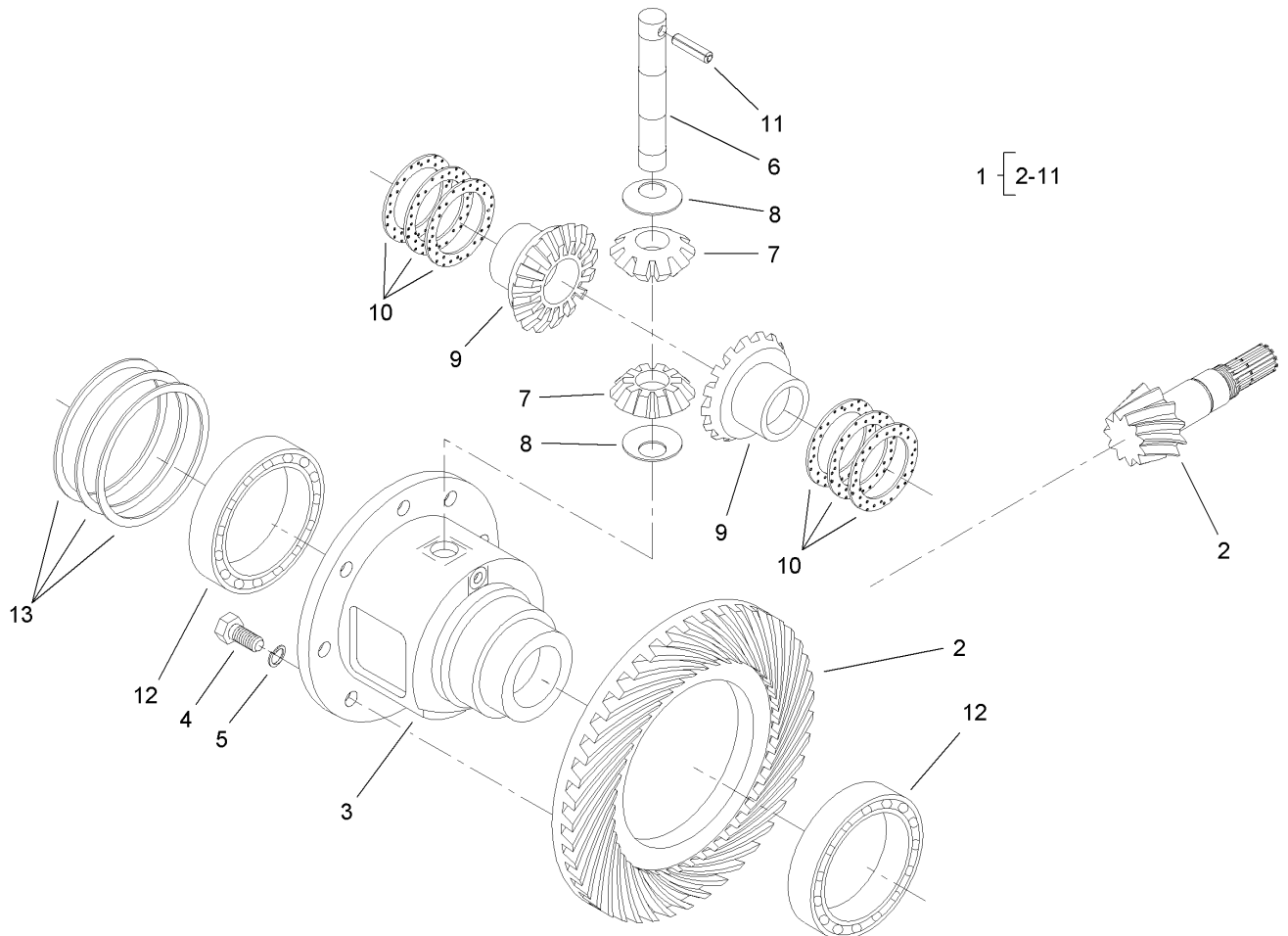
Ref	Part No.	Qty.	Description
1	107-0245	1	Seal Kit
②1:1		1	O-Ring
②1:2		1	Back-Up
②1:3		1	Wiper
②1:4		1	Seal
②1:5		1	O-Ring
②1:6		1	O-Ring
②1:7		1	Seal



### Piston Motor Assembly No. 105-1219

Ref	Part No.	Qty.	Description
1	105-2853	1	Shaft-Drive
2	100-2551	1	Backplate
2:1		3	Pin-Dowel
2:2		1	Pin-Dowel
2:3		1	Bearing-Needle
3		1	Housing
4	76-6910	1	Rotating Kit
5	76-6970	1	Insert-Plate, Cam
6	60-6260	1	Ring
7	94-3002	6	Capscrew
8	63-4390	1	Bearing-Needle
10	76-7020	1	Spacer
11	76-7000	2	Ring-Retaining
12	94-3003	1	Plate-Valve
13	76-6950	2	Race-Thrust
14	76-6980	1	O-Ring
16	76-6960	1	Bearing-Thrust

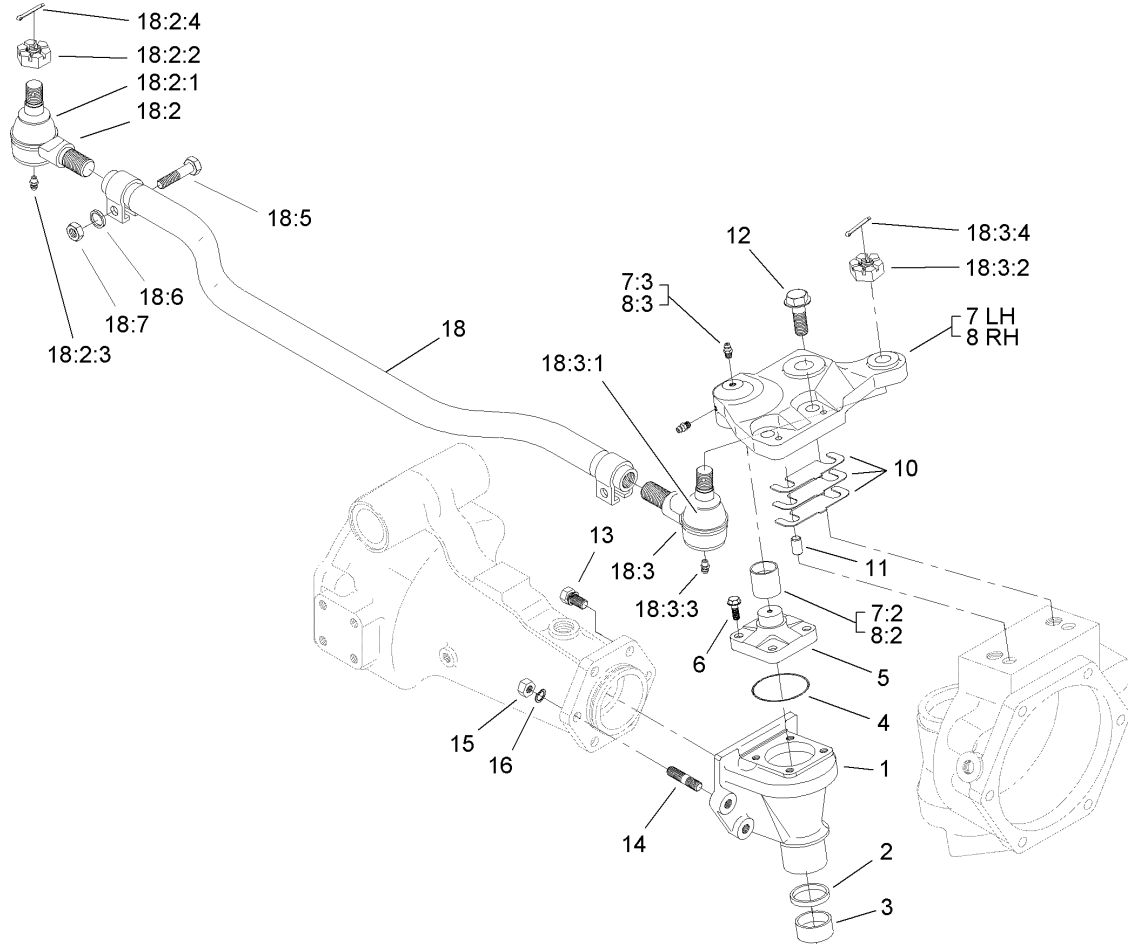


## Differential Assembly Rear Axle Assembly No. 110-4750

Ref	Part No.	Qty.	Description
1	95-7503	1	Differential ASM
2	100-2555	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

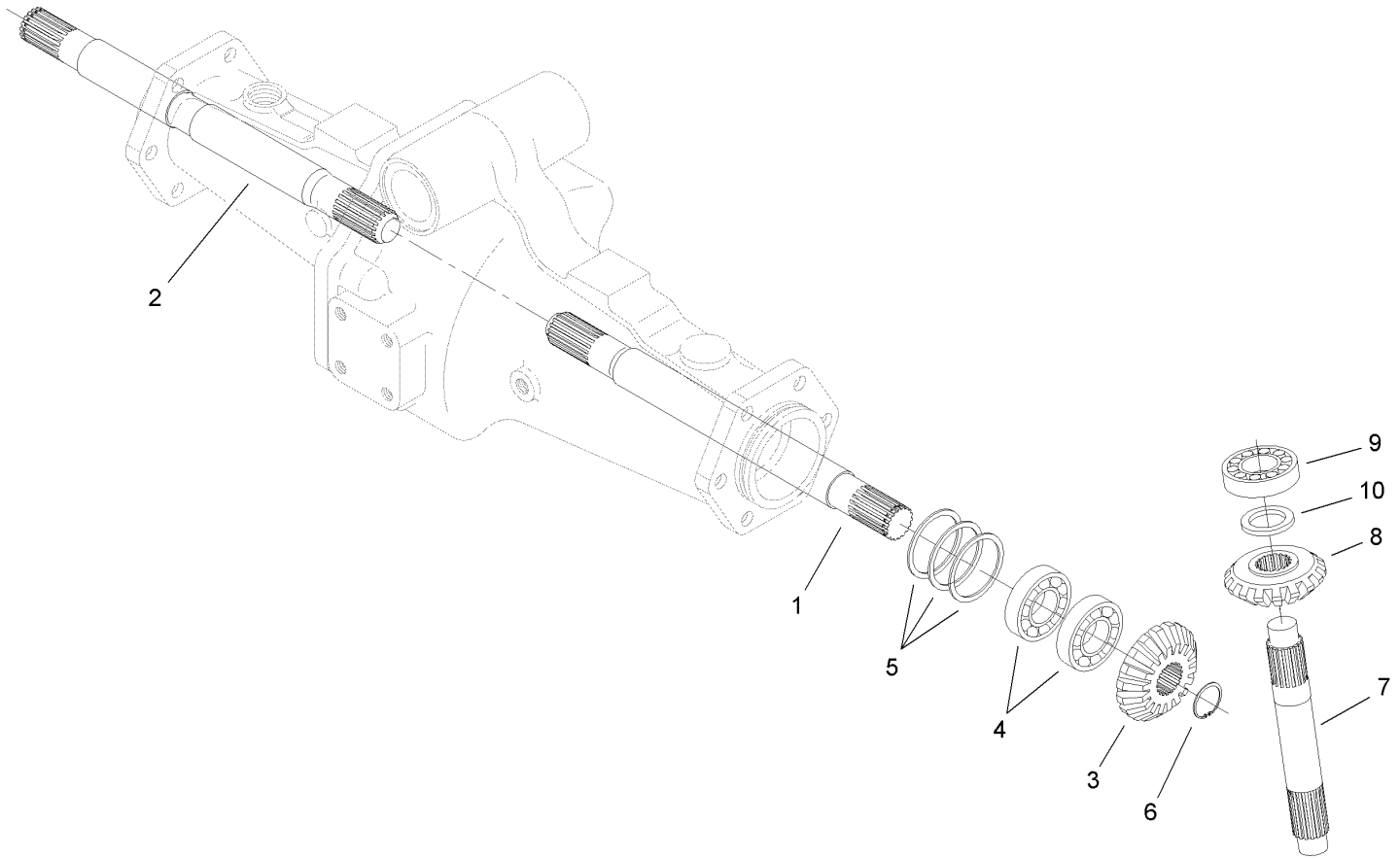




## Bevel Gear Case Assembly Rear Axle Assembly No. 110-4750

Ref	Part No.	Qty.	Description
1	110-4752	2	Case-Gear, Bevel
2	110-4754	2	Seal-Oil
3	104-2378	2	Bushing
4	106-1069	2	O-Ring
5	104-2373	2	Knuckle
6	104-2374	8	Bolt
7	100-3768	1	LH Steering Arm ASM
7:2	104-8634	1	Bushing
7:3	106-1104	2	Fitting-Grease
8	100-3766	1	RH Steering Arm ASM
8:2	104-8634	1	Bushing
8:3	106-1104	2	Fitting-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	104-2375	4	Bolt
13	99-7599	8	Bolt
14	99-7525	4	Stud
15	99-7526	4	Nut
16	99-7527	4	Washer-Spring
18	106-1111	1	Steering Tie Rod ASM
18:2	106-1113	1	Tie Rod End ASM - RH Thread
18:2:1	100-3853	1	Cover-Dust

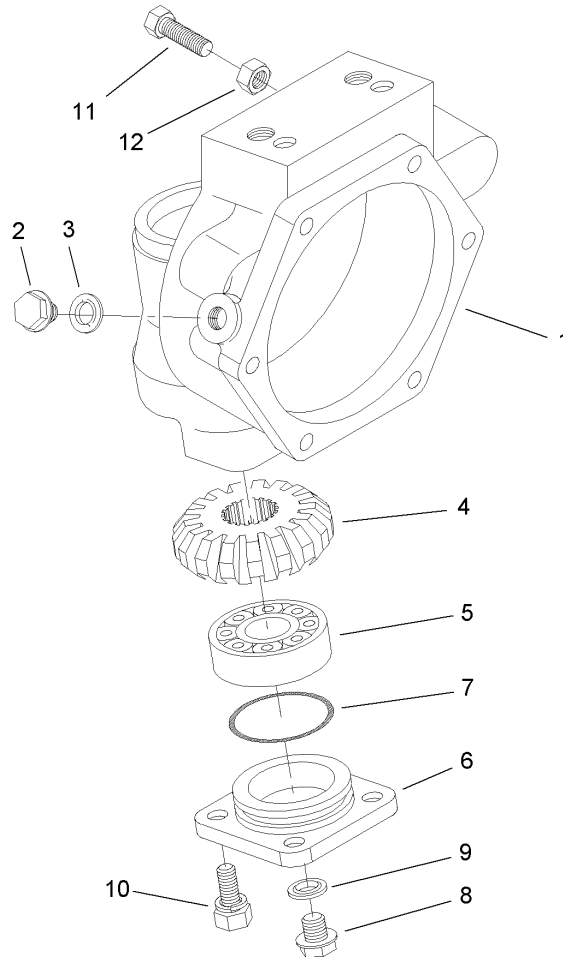
Ref	Part No.	Qty.	Description
18:2:2	100-3854	1	Nut-Castle
18:2:3	110-4755	1	Fitting-Grease
18:2:4	3272-11	1	Pin-Cotter
18:3	106-1112	1	Tie Rod End ASM - LH Thread
18:3:1	100-3853	1	Cover-Dust
18:3:2	100-3854	1	Nut-Castle
18:3:3	110-4755	1	Fitting-Grease
18:3:4	3272-11	1	Pin-Cotter
18:5	100-3855	2	Bolt
18:6	99-7527	2	Washer-Spring
18:7	99-7526	2	Nut



## Bevel Gear Shaft Assembly Rear Axle Assembly No. 110-4750

Ref	Part No.	Qty.	Description
1	95-7509	1	Shaft-Gear, Differential
2	95-7512	1	Shaft-Gear, Differential
3	95-7517	2	Gear-Bevel, 15 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	110-4753	2	Shaft-Gear, Bevel
8	95-7519	2	Gear-Bevel, 17 Tooth
9	99-7532	2	Bearing-Roller, Taper
10	99-7558	2	Collar

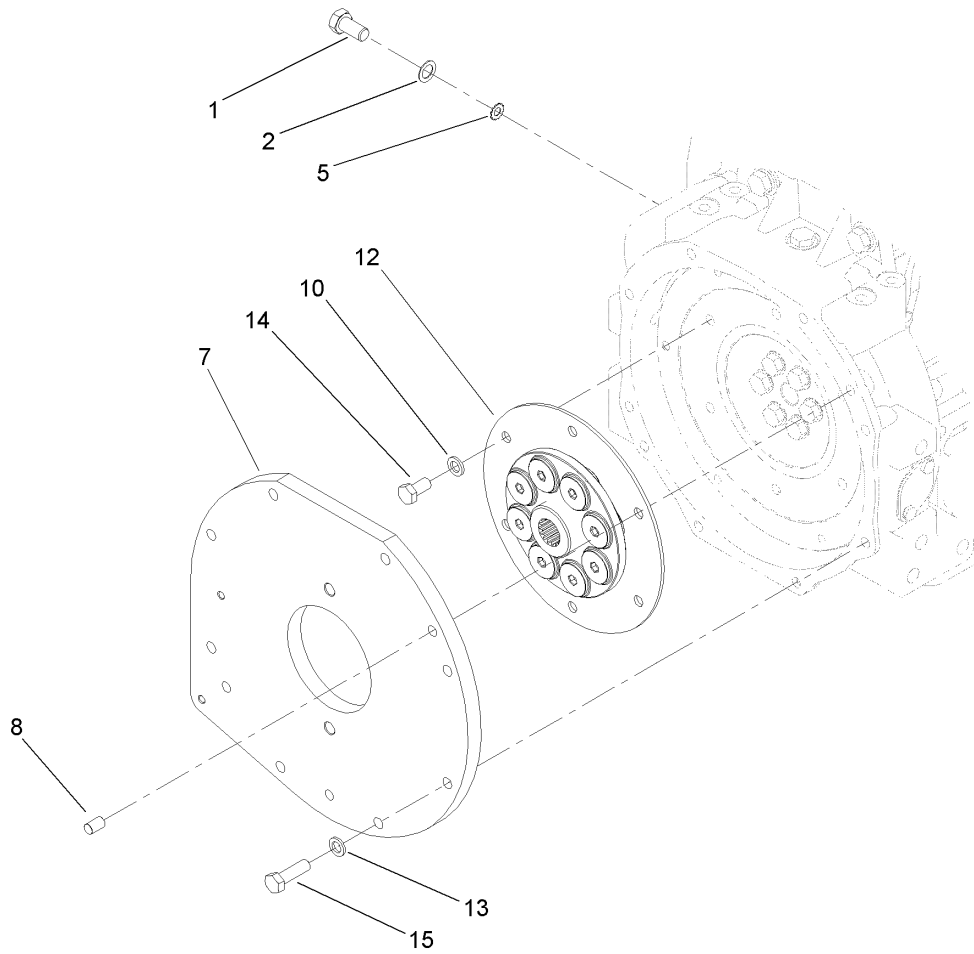
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## Axle Case Assembly Rear Axle Assembly No. 110-4750

Ref	Part No.	Qty.	Description				
1	110-4751	2	Case-Axle				
2	99-7535	2	Plug				
3	99-7536	2	Washer-Seal				
4	95-7527	2	Gear-Bevel, 17 Tooth				
5	99-7532	2	Bearing-Roller, Taper				
6	100-2560	2	Cover				
7	106-1070	2	O-Ring				
8	99-7589	2	Plug				
9	99-7590	2	Washer-Seal				
10	100-2562	8	Bolt				
11	106-1102	2	Bolt-Stop				
12	106-1103	2	Nut				

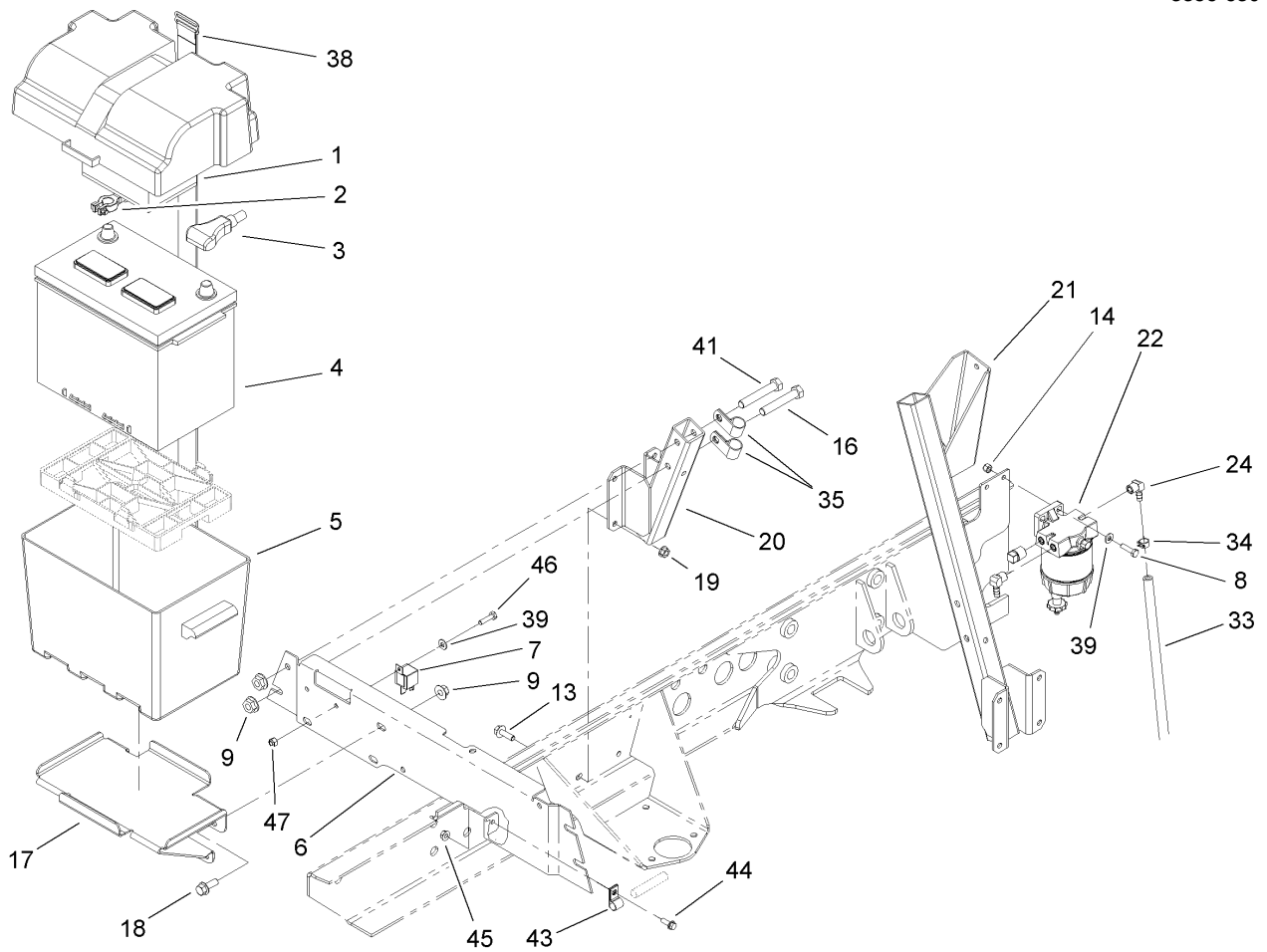




## Coupler and Adapter Plate Assembly

Ref	Part No.	Qty.	Description
1	42-9250	1	Bolt
2	3255-2	1	Washer-Lock / EXT
5	3255-9	1	Washer-Lock
7	108-1544-03	1	Plate-Adapter
8	98-1212	2	Pin-Plate, Pump
10	107-1413	6	Washer-Hardened
12	110-6179	1	Coupler-Flywheel
13	48-9590	8	Washer-Lock
14	63-7790	6	Screw-Cap
15	56-2140	8	Bolt

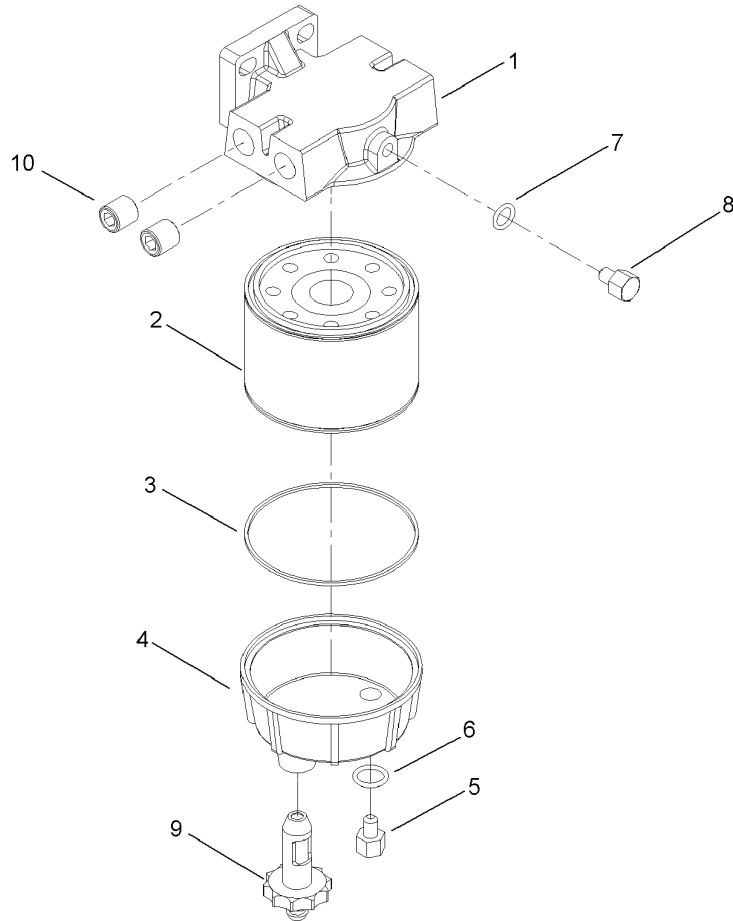
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## Battery Installation Assembly

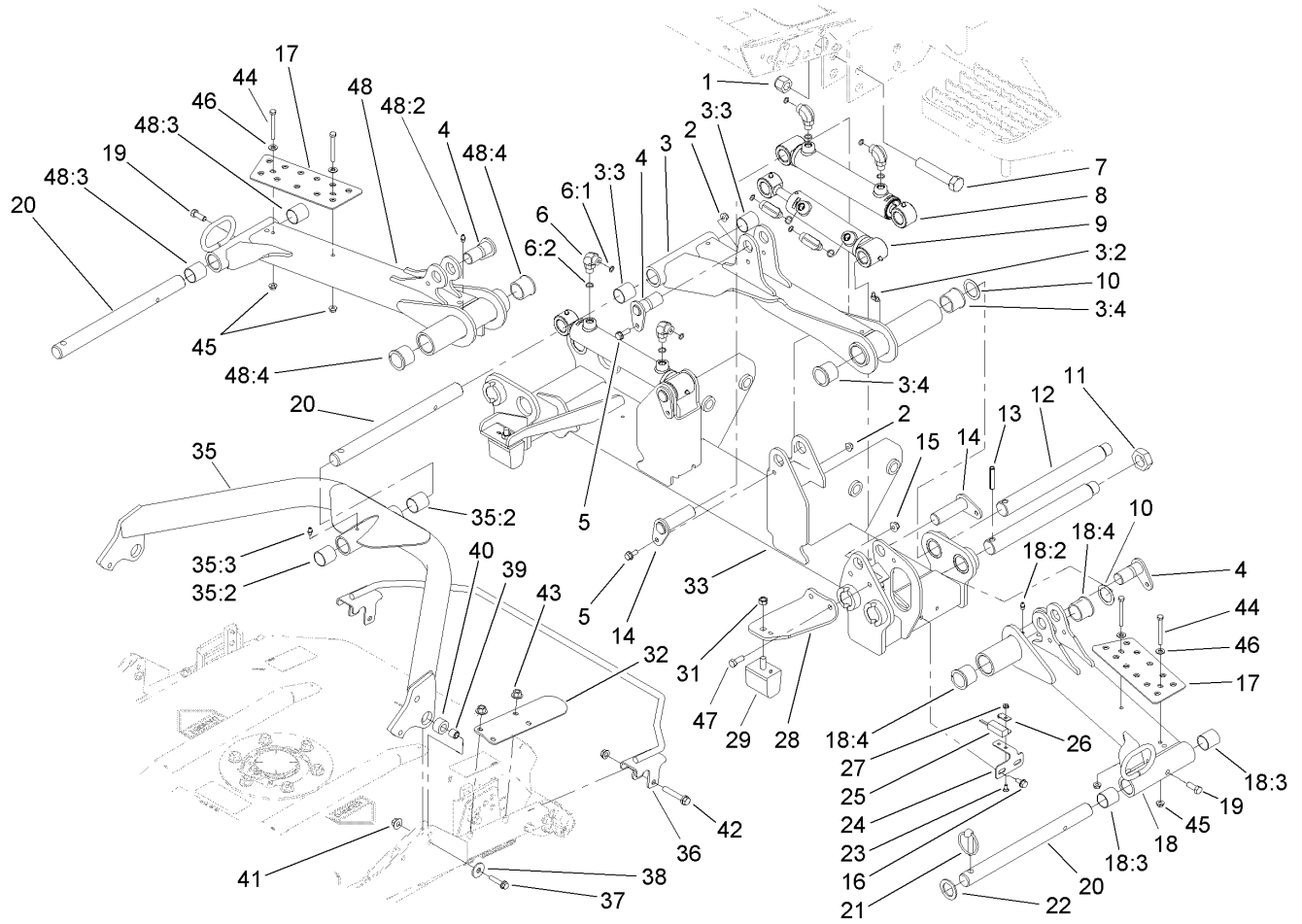
Ref	Part No.	Qty.	Description
1	93-7968	1	Pad-Foam
2	105-3880	1	Cable-Battery, Negative
3	105-0114	1	Cable-Battery, Positive
4	106-5190	1	Battery
5	93-7595	1	Battery Box ASM
6	104-5422-03	1	Bracket-Support, Battery
7	99-7435	1	Relay-Power
8	321-6	2	Screw-HH
9	32128-21	6	Nut-HF
13	3234-29	8	Screw-HHF
14	3296-42	2	Nut-Lock, NI
16	323-10	3	Screw-HH
17	104-5423-03	1	Tray-Battery
18	3234-11	2	Screw-HHF
19	32128-20	8	Nut-HF
20	104-5420-03	1	Battery Support ASM
21	104-5417-03	1	Bracket-Conditioner, Air
22	98-9305	1	Water / Fuel Filter ASM
24	353-781	2	Fitting-Elbow
33	110-4113	1	Hose-Fuel
34	92-2379	3	Clamp-Hose
35	2412-81	2	Clamp-R
38	94-1445	1	Strap-Battery
39	3256-22	4	Washer-Flat

Ref	Part No.	Qty.	Description
41	323-12	1	Screw-HH
43	2412-93	1	Clamp-R
44	3234-4	1	Screw-HHF
45	32128-33	1	Nut-HF
46	32105-13	1	Screw-HWH
47	32128-17	1	Nut-Lock, Flange



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

Ref	Part No.	Qty.	Description	
1	98-9772	1	Head-Filter	
2	98-9764	1	Element	
3	98-9774	1	O-Ring	
4	98-9775	1	Base-Filter	
5	98-9773	1	Plug-Base, Filter	
6	237-42	1	O-Ring	
7	237-78	1	O-Ring	
8	98-9776	1	Plug-Head, Filter	
9	98-9777	1	Drain Valve ASM	
10	285-22	2	Plug-Pipe	

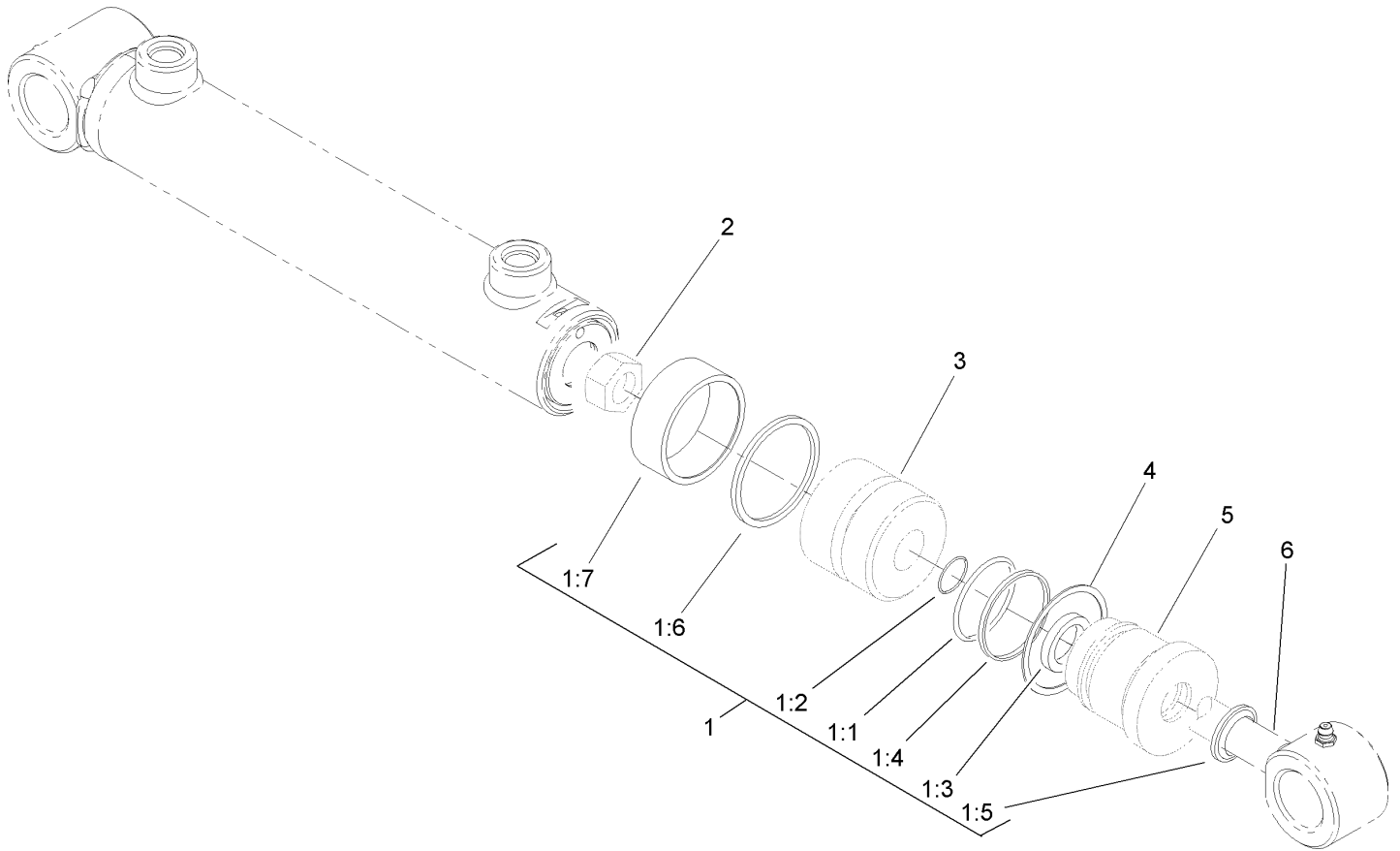


## Front Lift Arm Assembly

Ref	Part No.	Qty.	Description
1	3296-51	4	Nut-Lock, NI
2	104-8300	6	Nut-Flange, NI
3	108-4032	1	No. 1 Liftarm ASM
3:2	302-60	1	Fitting-Grease, 90 DEG
3:3	108-4000	2	Bushing
3:4	104-0015	2	Bushing-Flange
4	104-5525	3	Cylinder Pin ASM
5	3234-17	6	Screw-HHF
6	340-77	6	Fitting-HYD, 90 DEG
6:1	237-22	1	O-Ring
6:2	237-42	1	O-Ring
7	328-7	4	Screw-HH
8	107-1979	2	Cylinder-Lift
9	107-1980	1	Cylinder-Lift
10	76-2980	3	Washer-Thrust
11	3296-49	3	Nut-Lock, NI
12	95-7158	3	Pin-Pivot
13	32121-110	3	Pin-Roll, Slotted
14	105-9889	3	Cylinder Pin ASM
15	104-8301	2	Nut-Flange, NI
16	32144-14	4	Screw-HWHTF
17	105-3987-03	2	Plate-Skid
18	108-4033	1	No. 4 Liftarm ASM
18:2	302-5	1	Fitting-Grease

Ref	Part No.	Qty.	Description
18:3	108-4000	2	Bushing
18:4	104-0015	2	Bushing-Flange
19	323-6	3	Screw-HH
20	108-4023	3	Shaft-Carrier, Pivot
21	283-71	3	Pin-Lynch
22	3-6781	3	Washer-Thrust
23	104-1450	2	Bolt-CARR
24	104-5585	2	Bracket-Switch
25	106-9288	2	Sensor-Proximity, Ferrous
26	100-4872	2	Plate-Switch, Neutral
27	32149-7	2	Nut-Keps
28	104-5689-03	1	Bracket-Support, Bumper
29	87-3470	2	Bumper-Axle, Rear
31	33025-00	2	Nut-Lock
32	105-9831-03	2	Bracket-Bumper, No. 1
33	104-5680-03	1	Front Carrier Frame ASM
35	104-5656	5	Carrier Frame ASM
35:2	108-4000	2	Bushing
35:3	302-5	1	Fitting-Grease
36	112-9900-03	4	Foot Guard ASM
37	3234-18	10	Screw-HHF
38	93-8806	10	Washer-Hardened
39	105-9822	10	Spacer
40	105-9823	10	Bushing-Carrier

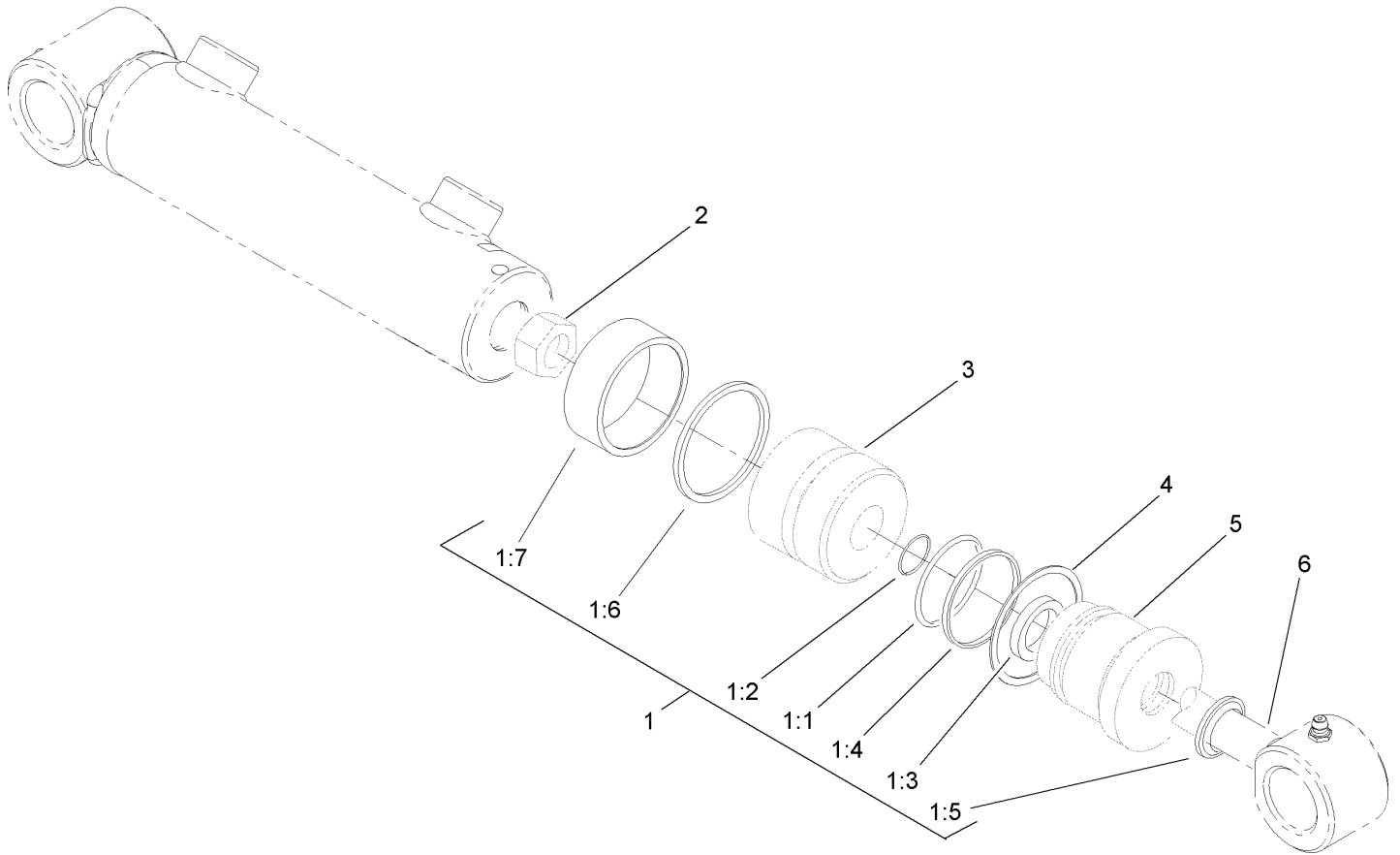




## Hydraulic Cylinder Assembly No. 107-1979

Ref	Part No.	Qty.	Description
1	107-1977	1	Seal Kit
1:1		1	O-Ring
1:2		1	O-Ring
1:3		1	Seal
1:4		1	Back-Up
1:5		1	Wiper
1:6		1	Seal W/O-Ring
1:7		1	Ring-Wear
2		1	Locknut
3		1	Piston
4		1	Ring-Retaining
5		1	Head
6		1	Rod ASM

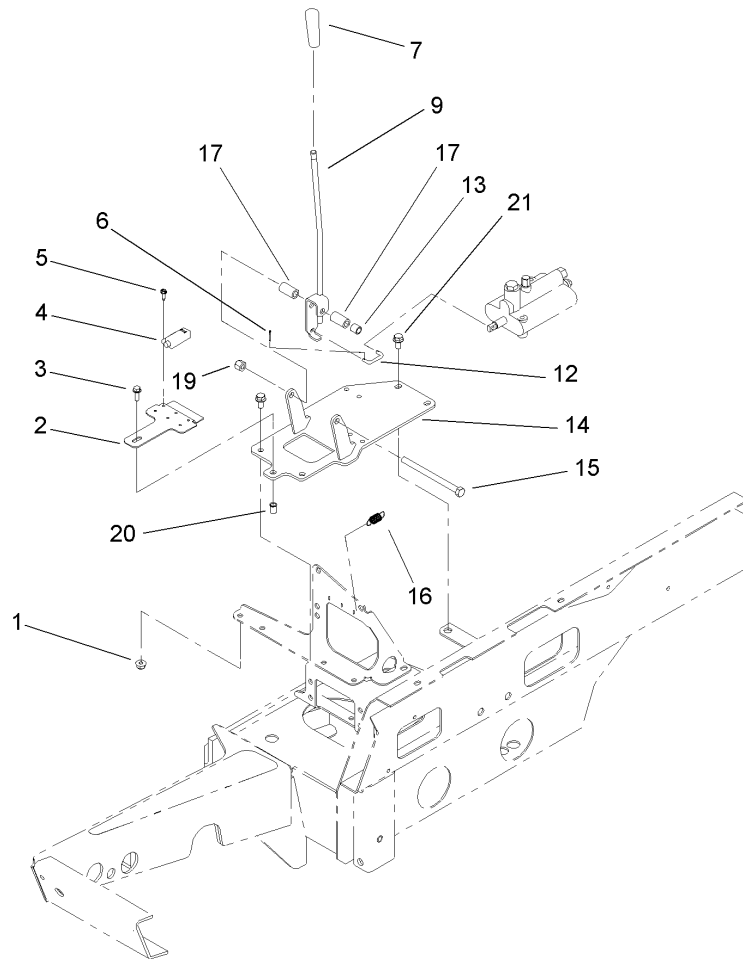
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## Hydraulic Cylinder Assembly No. 107-1980

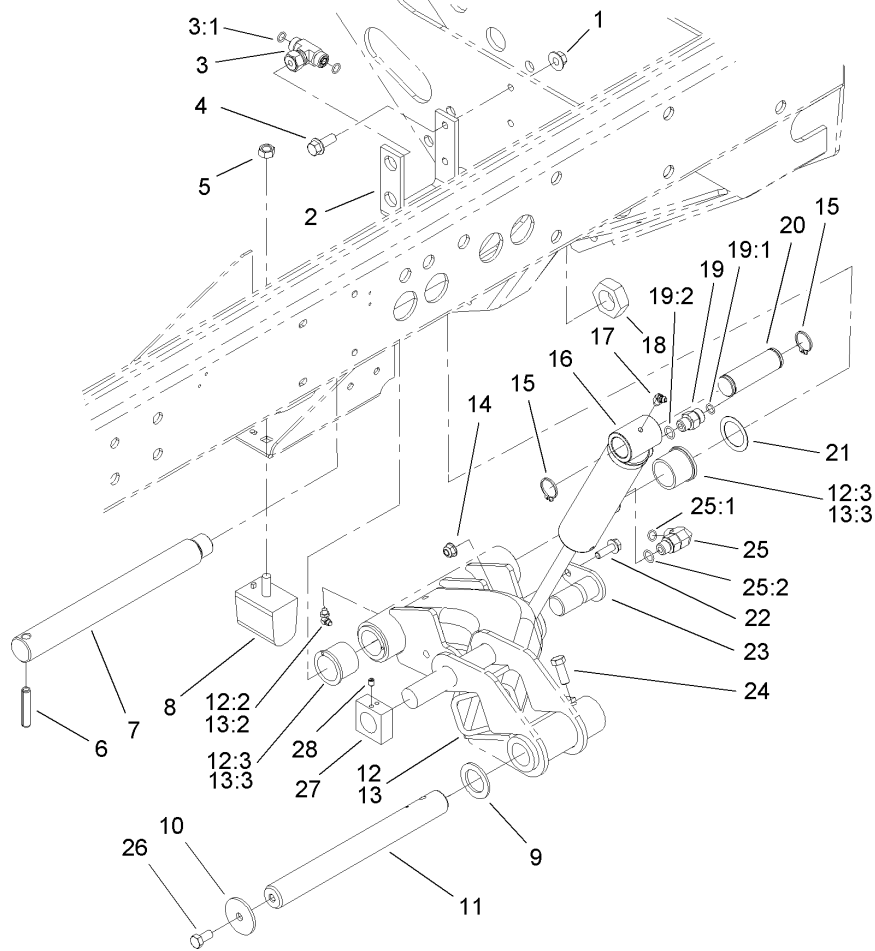
Ref	Part No.	Qty.	Description
1	107-1977	1	Seal Kit
②1:1		1	O-Ring
②1:2		1	O-Ring
②1:3		1	Seal
②1:4		1	Back-Up
②1:5		1	Wiper
②1:6		1	Seal W/O-Ring
②1:7		1	Ring-Wear
②2		1	Locknut
②3		1	Piston
②4		1	Ring-Retaining
②5		1	Head
②6		1	Rod ASM

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### Lift Lever Assembly

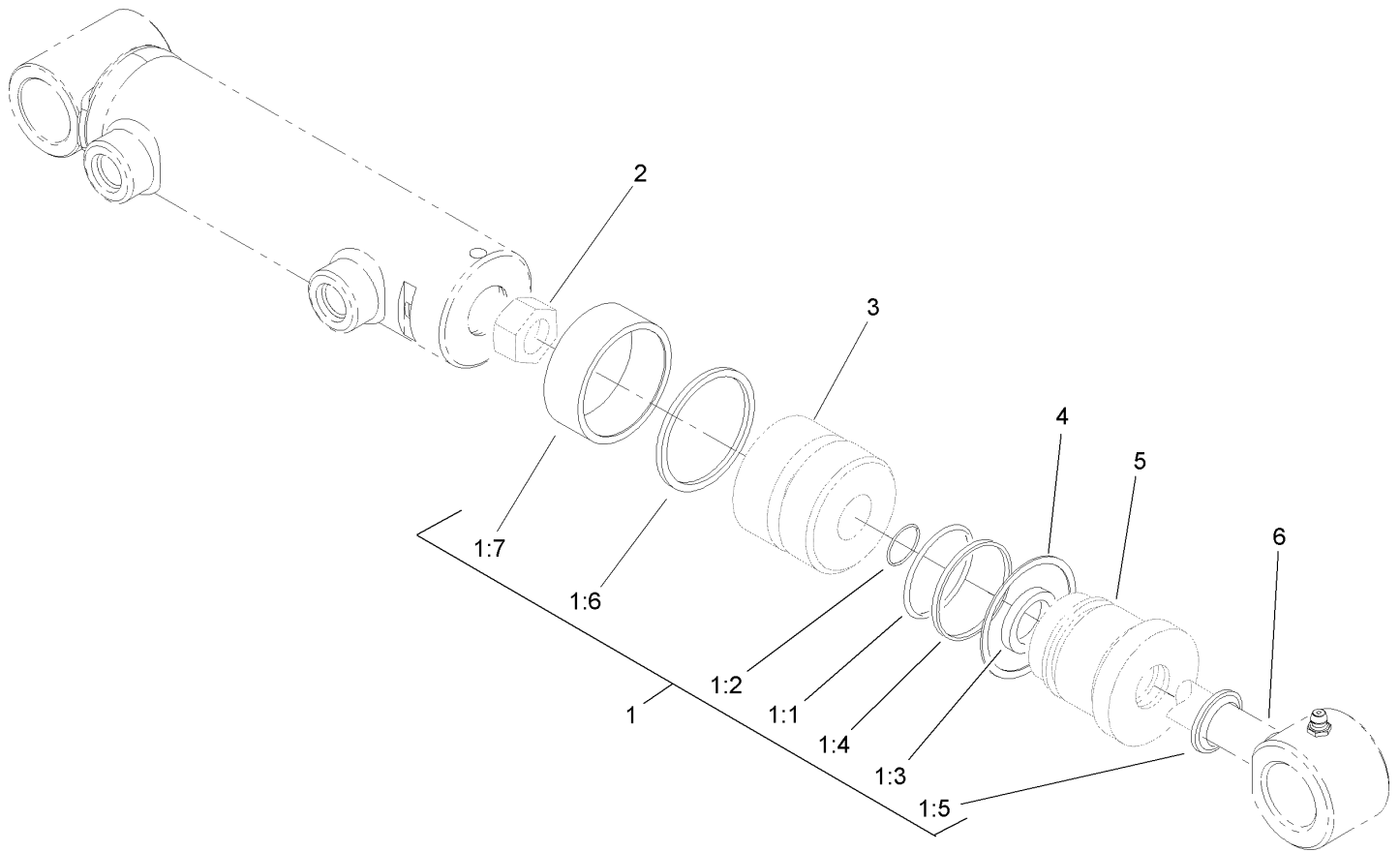
Ref	Part No.	Qty.	Description
1	104-8300	2	Nut-Flange, NI
2	104-5530	1	Plate-Switch
3	3234-4	1	Screw-HHF
4	105-0023	1	Switch-Proximity
5	32144-19	2	Screw-SHWH
6	3272-1	2	Pin-Cotter
7	233-39	1	Knob-Control
9	110-0480	1	Center Lever ASM
12	69-9140	1	Link-Lever, Valve
13	65-9980	1	Spacer
14	104-5606-03	1	Valve Support ASM
15	323-39	1	Screw-HH
16	112-5256	1	Spring-Extension
17	61-2780-03	2	Spacer-Tube
19	3296-39	1	Nut-Lock, NI
20	32148-6	1	Insert-Nut
21	3234-14	4	Screw-HHF



## No. 2 and 3 Lift Arm Assembly

Ref	Part No.	Qty.	Description
1	32128-20	2	Nut-HF
2	105-3992-03	1	Bracket-Bulkhead
3	340-166	2	Fitting-Tee, HYD
3:1	237-22	1	O-Ring
4	3234-17	2	Screw-HHF
5	33025-00	2	Nut-Lock
6	32121-110	2	Pin-Roll, Slotted
7	95-7158	2	Pin-Pivot
8	87-3470	2	Bumper-Axle, Rear
9	3-6781	2	Washer-Thrust
10	63-7400	2	Washer-Rebound
11	105-9827	2	Shaft
12	105-9202	1	No. 2 Lift Arm ASM
12:2	302-60	1	Fitting-Grease, 90 DEG
12:3	104-0015	2	Bushing-Flange
13	105-9203	1	No. 3 Lift Arm ASM
13:2	302-60	1	Fitting-Grease, 90 DEG
13:3	104-0015	2	Bushing-Flange
14	104-8300	2	Nut-Flange, NI
15	32151-36	4	Ring-Retaining
16	107-1978	2	Cylinder-Lift
17	302-11	2	Fitting-Lube, 45 DEG
18	3296-49	2	Nut-Lock, NI
19	340-2	2	Fitting-HYD, Straight

Ref	Part No.	Qty.	Description
19:1	237-22	1	O-Ring
19:2	237-42	1	O-Ring
20	92-7548	2	Pin-Cylinder
21	76-2980	2	Washer-Thrust
22	3234-17	2	Screw-HHF
23	104-5525	2	Cylinder Pin ASM
24	323-6	2	Screw-HH
25	340-77	2	Fitting-HYD, 90 DEG
25:1	237-22	1	O-Ring
25:2	237-42	1	O-Ring
26	323-4	2	Screw-HH
27	105-9839	2	Stop-Rotation, No. 2 And 3
28	3245-7	4	Screw-Set



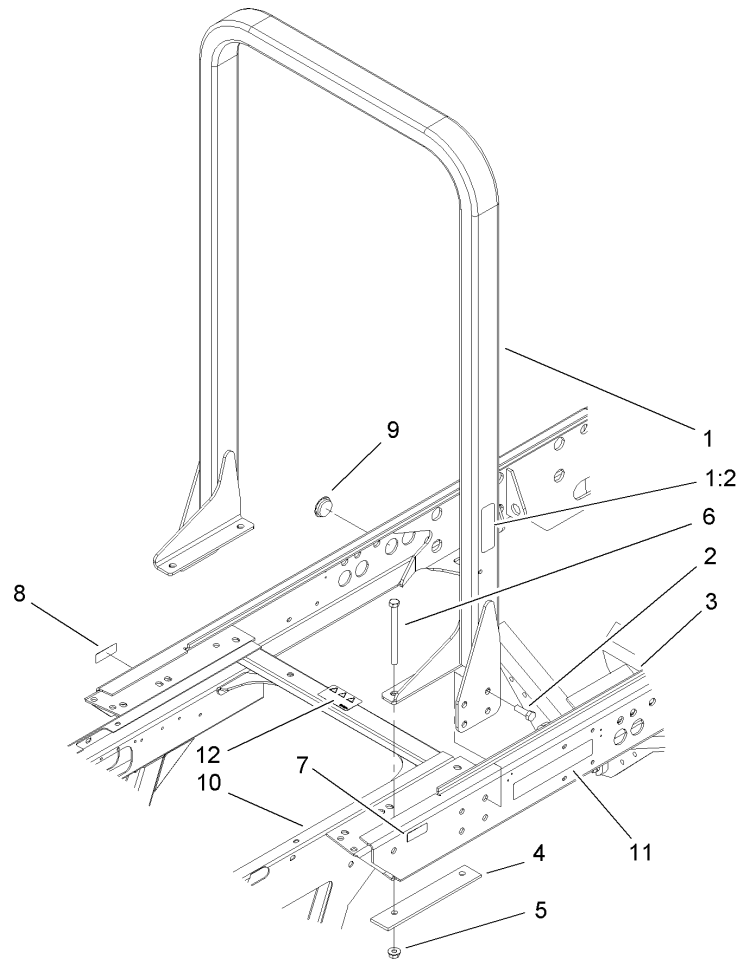
## Hydraulic Cylinder Assembly No. 107-1978

Ref	Part No.	Qty.	Description
1	107-1977	1	Seal Kit
②1:1		1	O-Ring
②1:2		1	O-Ring
②1:3		1	Seal
②1:4		1	Back-Up
②1:5		1	Wiper
②1:6		1	Seal W/O-Ring
②1:7		1	Ring-Wear
②2		1	Locknut
②3		1	Piston
②4		1	Ring-Retaining
②5		1	Head
②6		1	Rod ASM



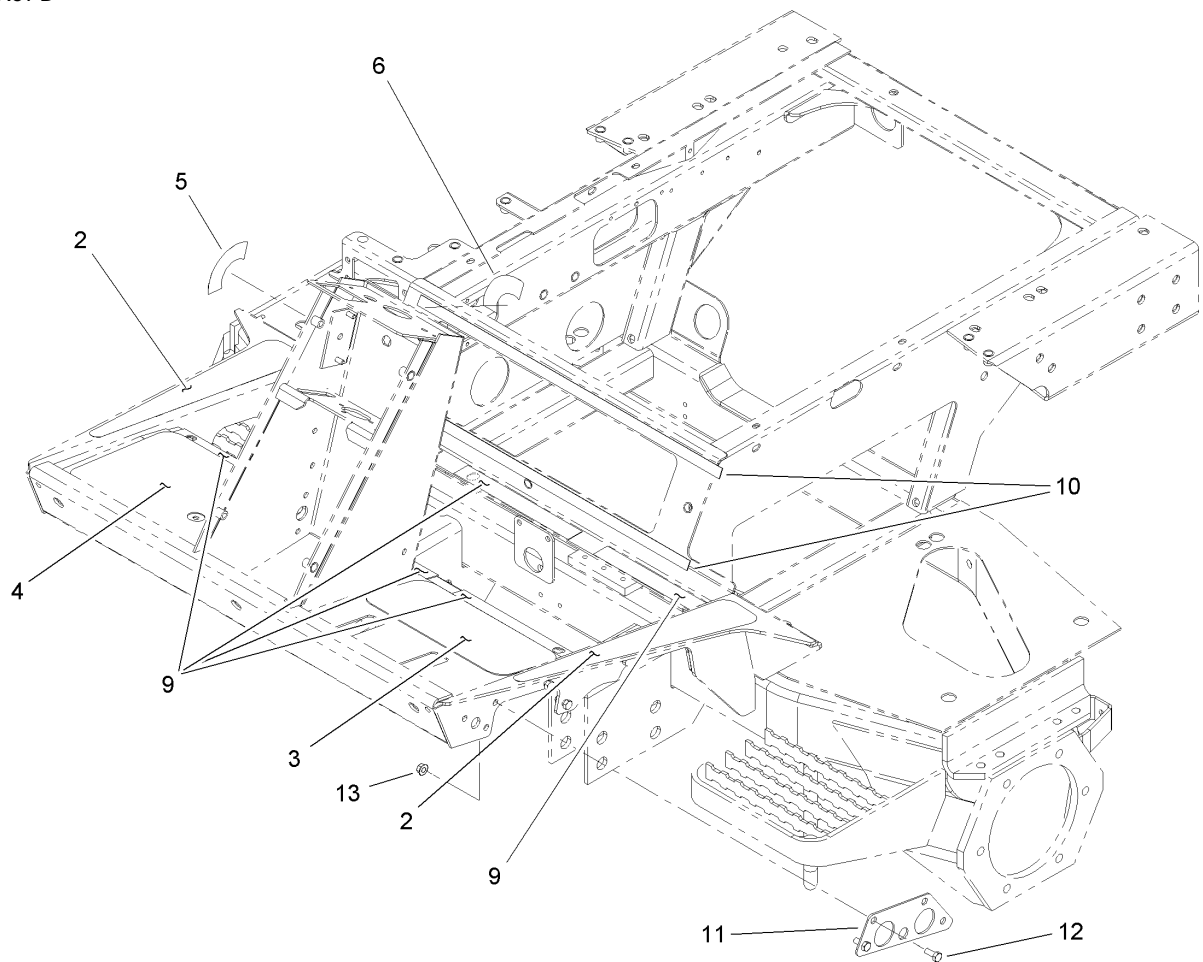






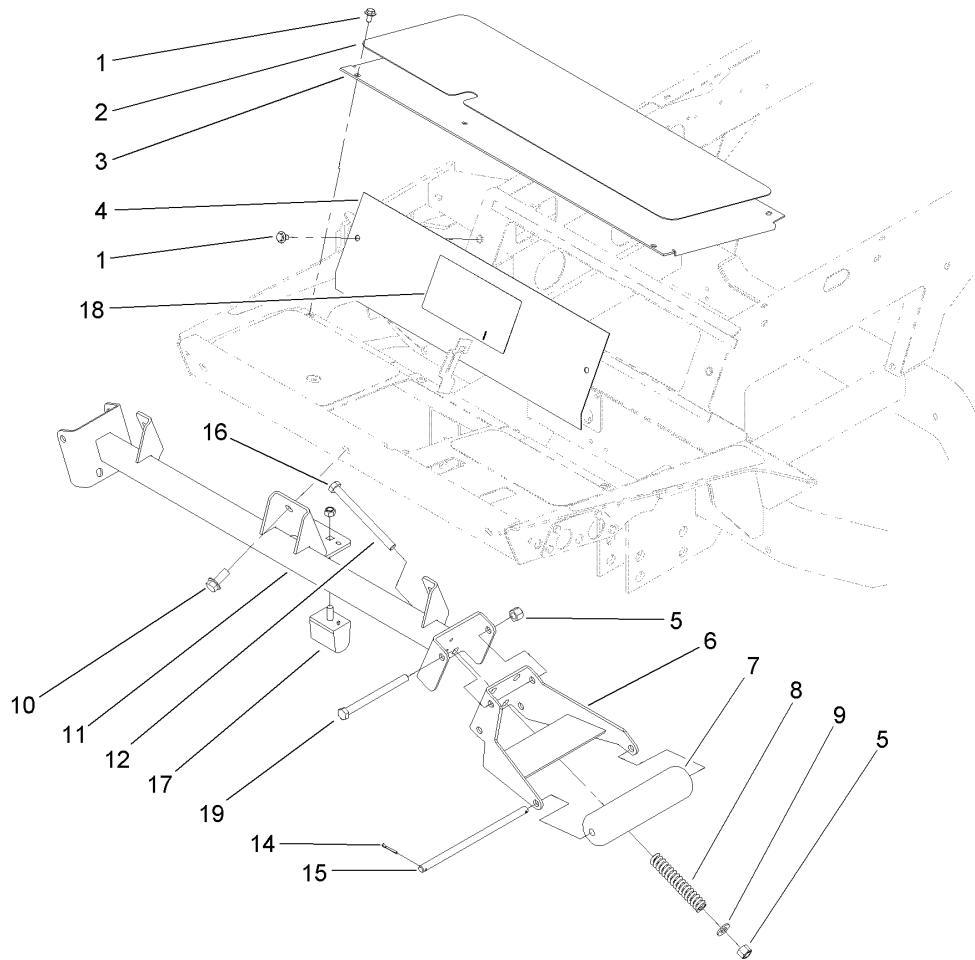
## Roll-Over Protection System and Frame Assembly

Ref	Part No.	Qty.	Description				
1	108-4018	1	ROPS ASM				
1:2	107-1999	1	Decal-ROPS				
2	3234-38	10	Screw-HHF				
3	104-5410-03	1	Frame-Rear				
4	104-5584-03	2	Plate-Reinforcement, ROPS				
5	32128-49	4	Nut-HHF				
6	325-20	4	Screw-HH				
7	93-6680	1	Decal-Diesel				
8	93-6686	1	Decal-Oil, HYD				
9	105-9194	4	Plug				
10	108-6051	1	Front Frame ASM				
11	72-3560	2	Decal				
12	106-6754	1	Decal-Danger				



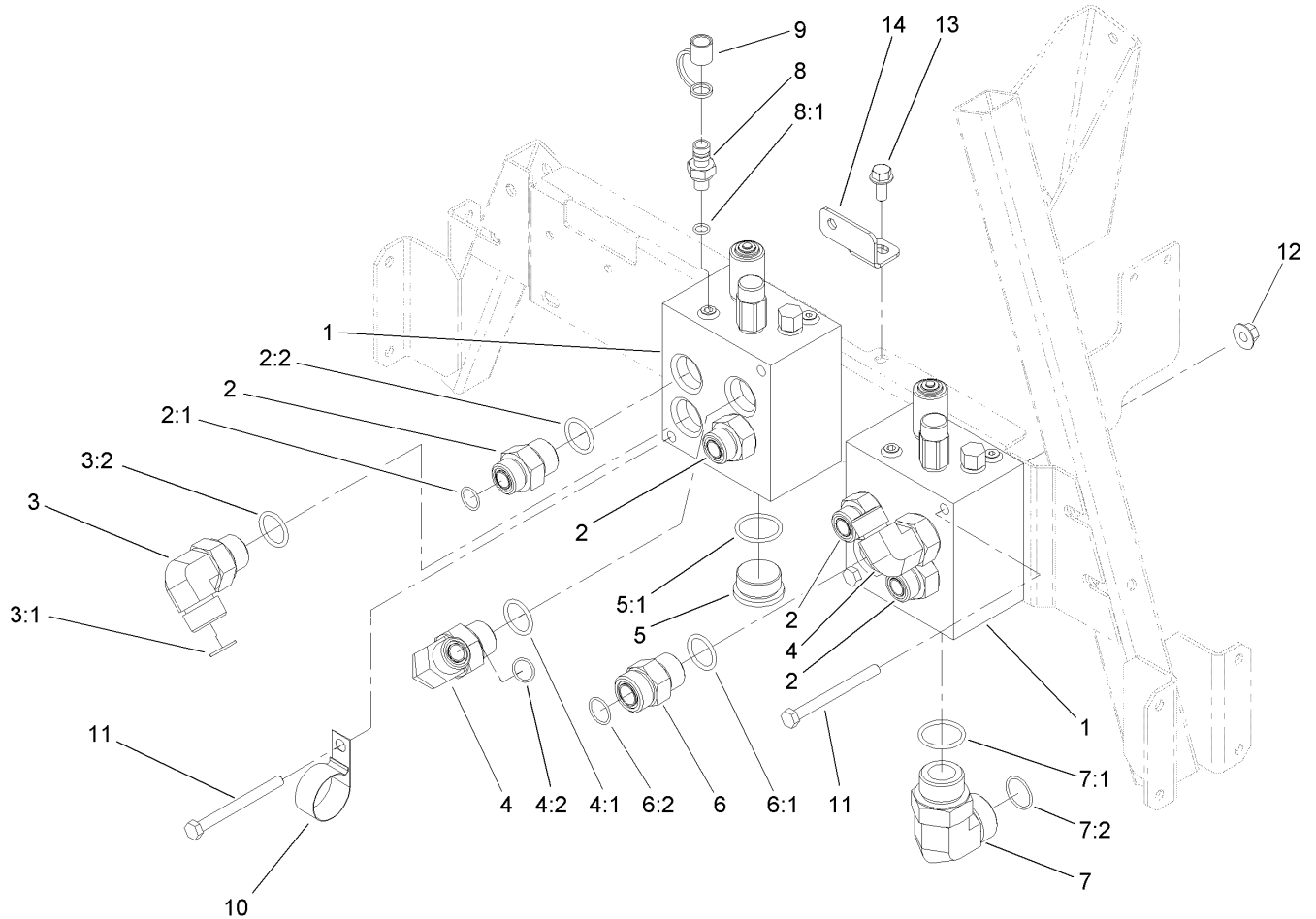
### Front Frame Assembly No. 108-6051

Ref	Part No.	Qty.	Description
2	93-7592	2	Tread-Rest, Foot
3	75-0620	1	Tread-Foot, LH
4	104-5223	1	Tread-Foot, RH
5	93-6699	1	Decal-Fast / Slow
6	105-7506	1	Decal-Switch, Key
9	105-9859	6	Seal-Foam
10	105-9860	2	Seal-Foam
11	106-7794-01	2	Plate-Mount, HYD Fitting
12	322-3	7	Screw-HH
13	32128-20	7	Nut-HF



## Roller Support and Access Panel Assembly

Ref	Part No.	Qty.	Description
1	3234-7	7	Screw-HHF
2	75-0630	1	Tread-Foot, Center
3	75-1410-01	1	Plate-Access, Floor
4	105-9243-01	1	Plate-Access
5	3296-23	4	Nut-Lock, NI
6	105-3996-01	2	Roller Support ASM
7	105-9816	2	Roller-Plastic
8	105-3970	2	Spring-Compression
9	3256-26	2	Washer-Flat
10	3234-38	3	Screw-HHF
11	104-5539-01	1	Roller Support ASM
12	325-22	2	Screw-HH
14	3272-11	4	Pin-Cotter
15	104-5545	2	Shaft-Roller
16	33025-00	1	Nut-Lock
17	87-3470	1	Bumper-Axle, Rear
18	105-3889	1	Decal-Danger
18	107-1983	1	Decal-Warning
19	325-20	2	Screw-HH

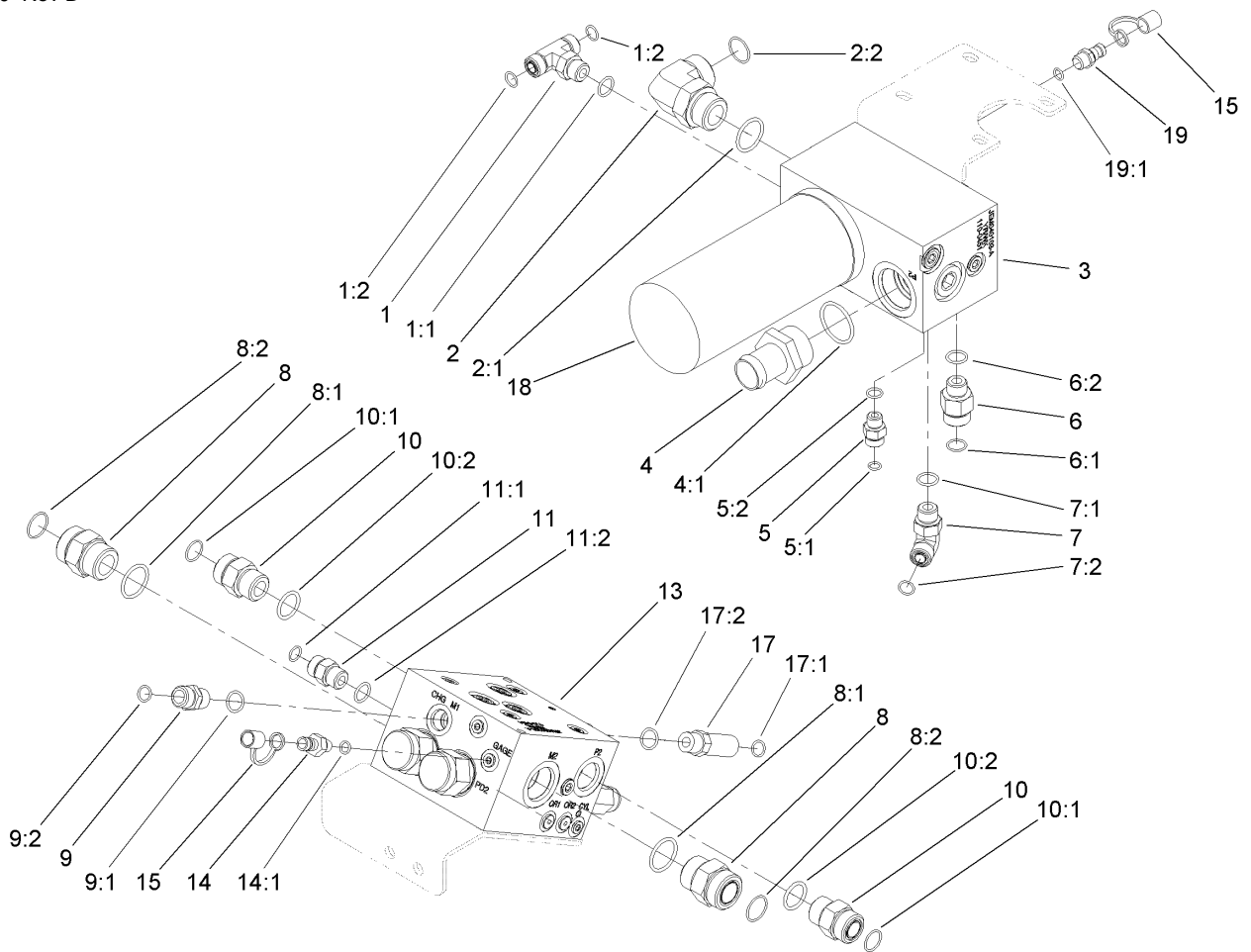


## Manifold Assembly

Ref	Part No.	Qty.	Description
1	104-5475	2	Manifold ASM
2	340-8	4	Adapter
2:1	237-65	1	O-Ring
2:2	237-81	1	O-Ring
3	340-142	1	Fitting-HYD, 90 DEG
3:1	237-58	1	O-Ring
3:2	237-81	1	O-Ring
4	340-139	2	Fitting-HYD, 90 DEG
4:1	237-81	1	O-Ring
4:2	237-65	1	O-Ring
5	105-3921	1	Fitting-Plug
5:1	237-146	1	O-Ring
6	340-9	1	Fitting-Straight
6:1	237-58	1	O-Ring
6:2	237-81	1	O-Ring
7	340-129	1	Fitting-HYD, 90 DEG
7:1	237-146	1	O-Ring
7:2	340-65	1	O-Ring
8	354-77	2	Fitting-Quick
8:1	237-78	1	O-Ring
9	354-79	2	Cap-Dust
10	2412-150	1	Clip-J
11	322-22	4	Screw-HH
12	32128-44	5	Nut

Ref	Part No.	Qty.	Description
13	3234-5	1	Screw-HHF
14	104-5487	1	Bracket-L

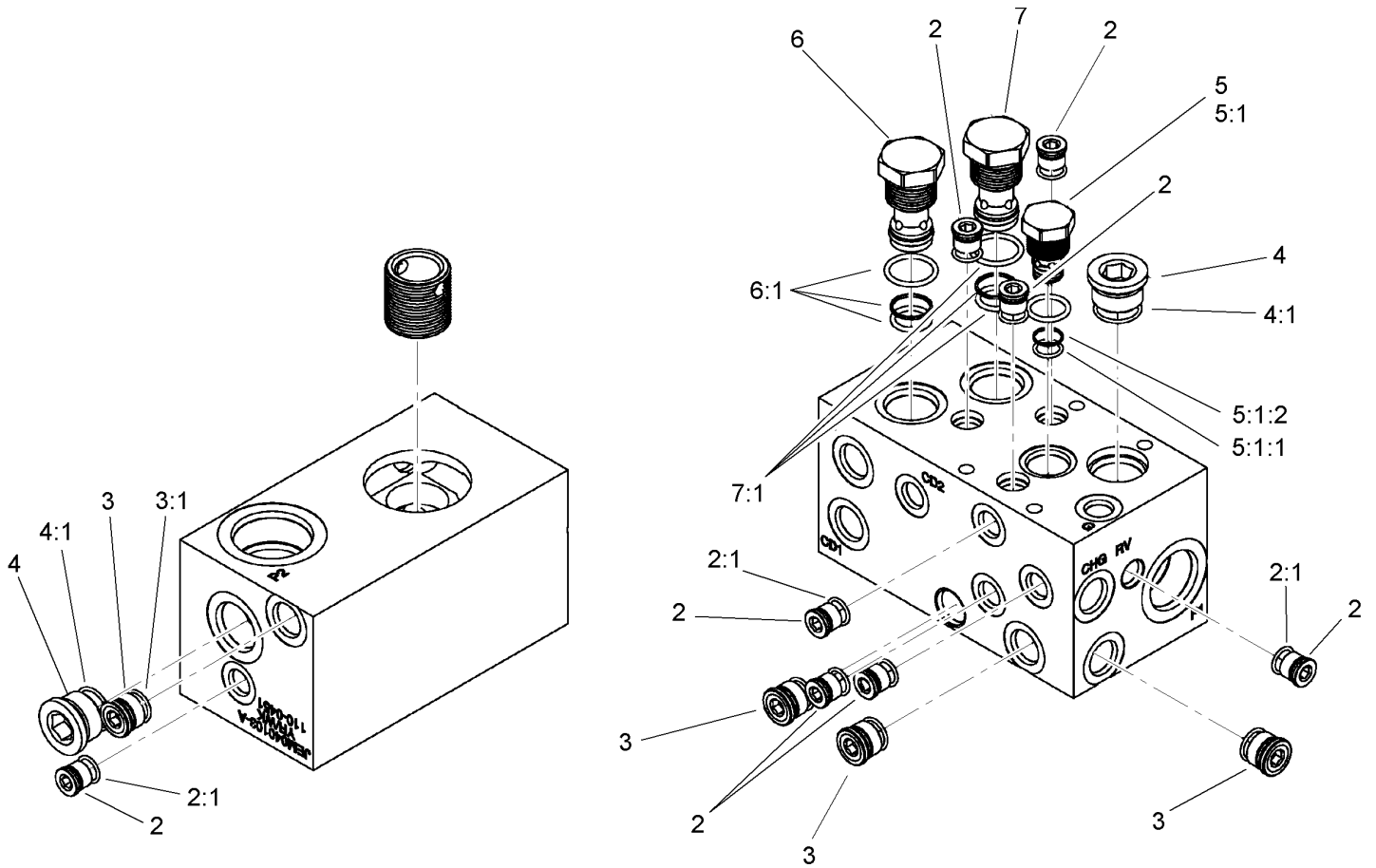




## 4WD Manifold and Filter Assembly

Ref	Part No.	Qty.	Description
1	340-157	1	Fitting-HYD, Tee
1:1	237-79	1	O-Ring
1:2	237-30	2	O-Ring
2	340-129	1	Fitting-HYD, 90 DEG
2:1	237-146	1	O-Ring
2:2	340-65	1	O-Ring
3	110-0451	1	Manifold-Filter
4	104-5480	1	Fitting-Hose, Straight
4:1	237-123	1	O-Ring
5	340-2	1	Fitting-HYD, Straight
5:1	237-22	1	O-Ring
5:2	237-42	1	O-Ring
6	340-155	1	Fitting-HYD, Straight
6:1	237-79	1	O-Ring
6:2	237-151	1	O-Ring
7	340-98	1	Fitting-HYD, 90 DEG
7:1	237-79	1	O-Ring
7:2	237-30	1	O-Ring
8	104-3797	2	Fitting-HYD, Straight
8:1	237-146	1	O-Ring
8:2	340-65	1	O-Ring
9	100-4890	1	Fitting-Check
9:1	237-79	1	O-Ring
9:2	237-30	1	O-Ring

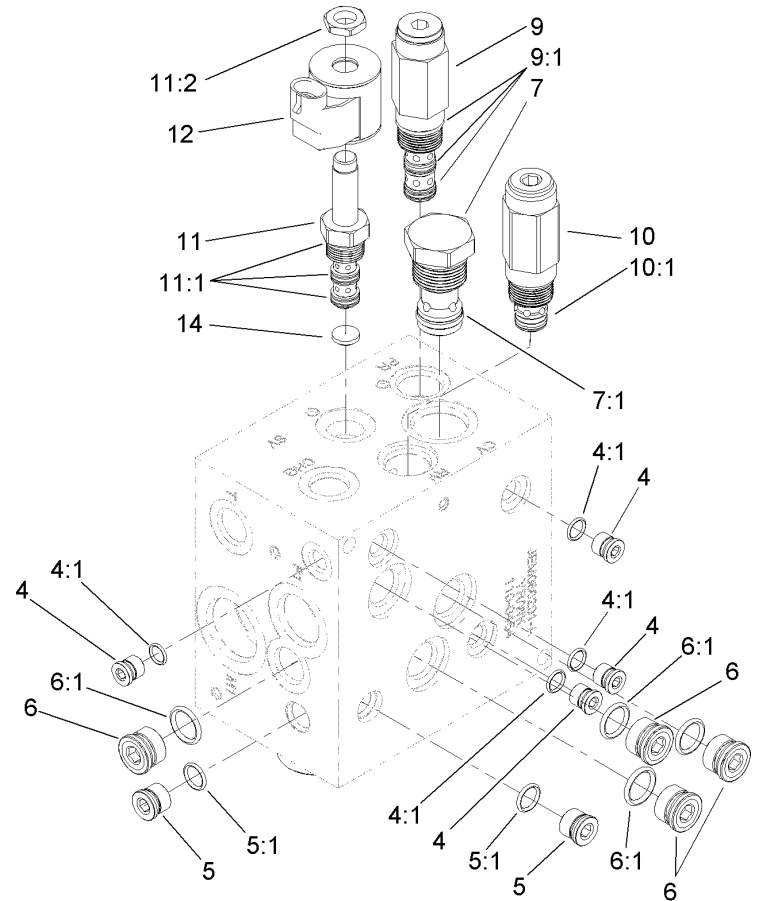
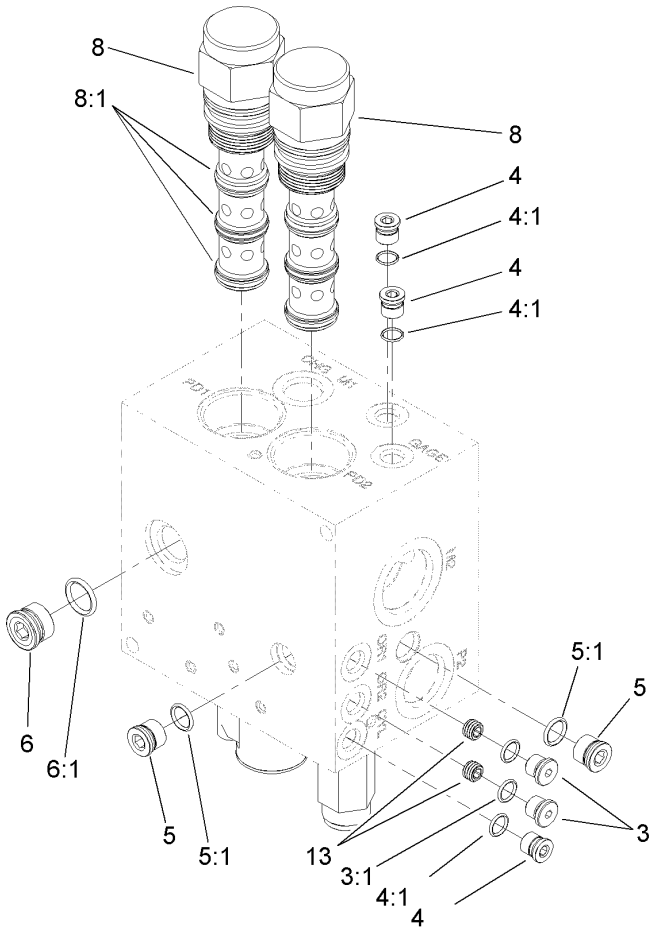
Ref	Part No.	Qty.	Description
10	340-9	2	Fitting-Straight
10:1	237-58	1	O-Ring
10:2	237-81	1	O-Ring
11	340-4	1	Fitting-HYD, Straight
11:1	237-30	1	O-Ring
11:2	237-79	1	O-Ring
13	110-0454	1	4-Wheel Drive Manifold ASM
14	354-77	1	Fitting-Quick
14:1	237-78	1	O-Ring
15	354-79	2	Cap-Dust
17	94-2628	1	Adapter-HYD
17:1	237-79	1	O-Ring
17:2	237-30	1	O-Ring
18	94-2621	1	Element-Filter
19	59-7410	1	Tip-Nipple, Diagnostic
19:1	237-42	1	O-Ring



### Filter Manifold Assembly No. 110-0451

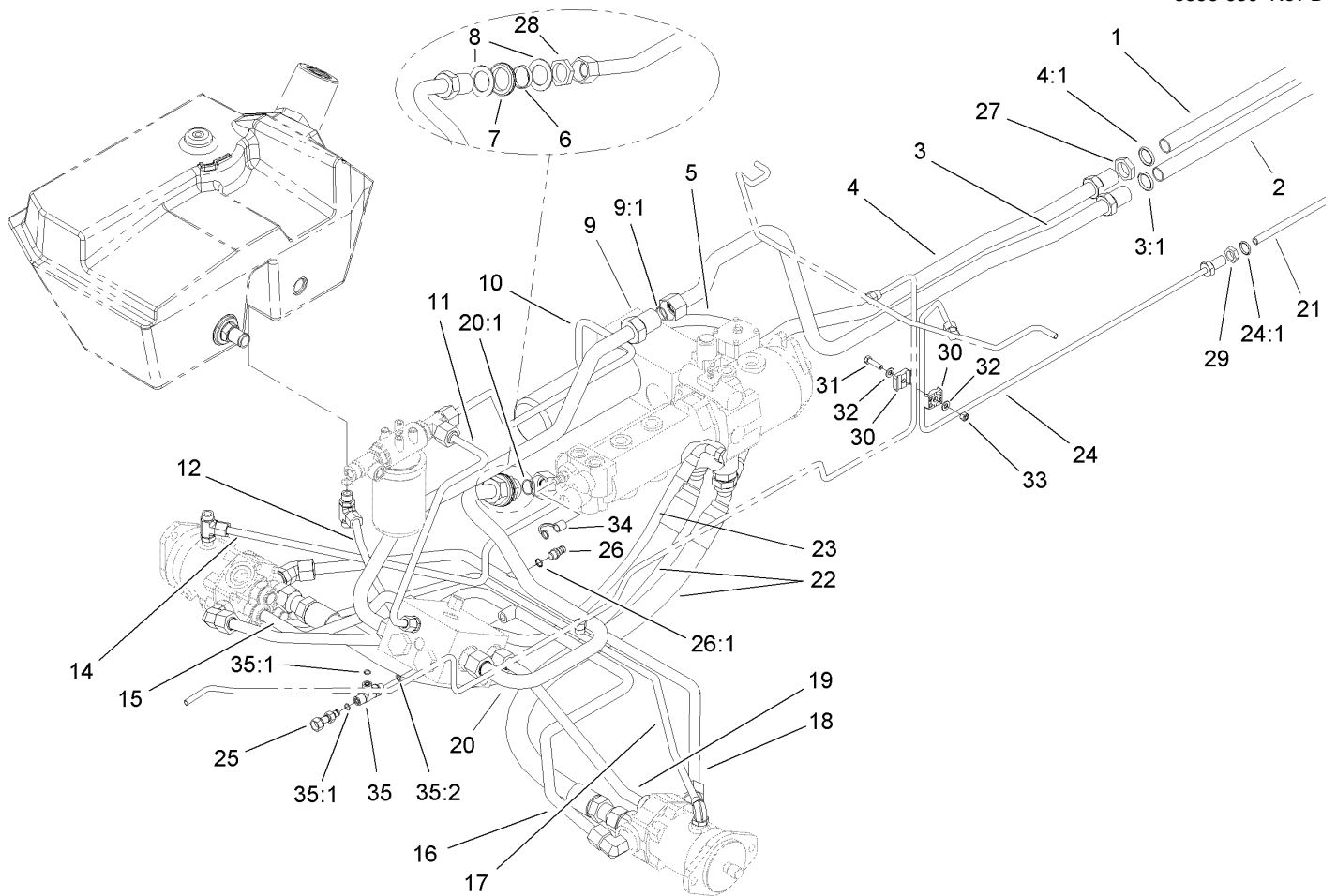
Ref	Part No.	Qty.	Description
2	106-1026	8	Plug-HYD
2:1	237-42	1	O-Ring
3	106-1027	4	Plug-HYD
3:1	237-79	1	O-Ring
4	106-1029	2	Plug-Leak, Zero
4:1	237-81	1	O-Ring
5	110-0469	1	Valve-Check, 180 Psi
5:1	105-9159	1	Seal Kit
5:1:1		1	O-Ring
5:1:2		1	Ring-Back Up
6	110-0468	1	Valve-Check, 5 Psi
6:1	110-0470	1	Seal Kit
7	110-0467	1	Valve-Check, 40 Psi
7:1	110-0470	1	Seal Kit

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## 4WD Manifold Assembly No. 110-0454

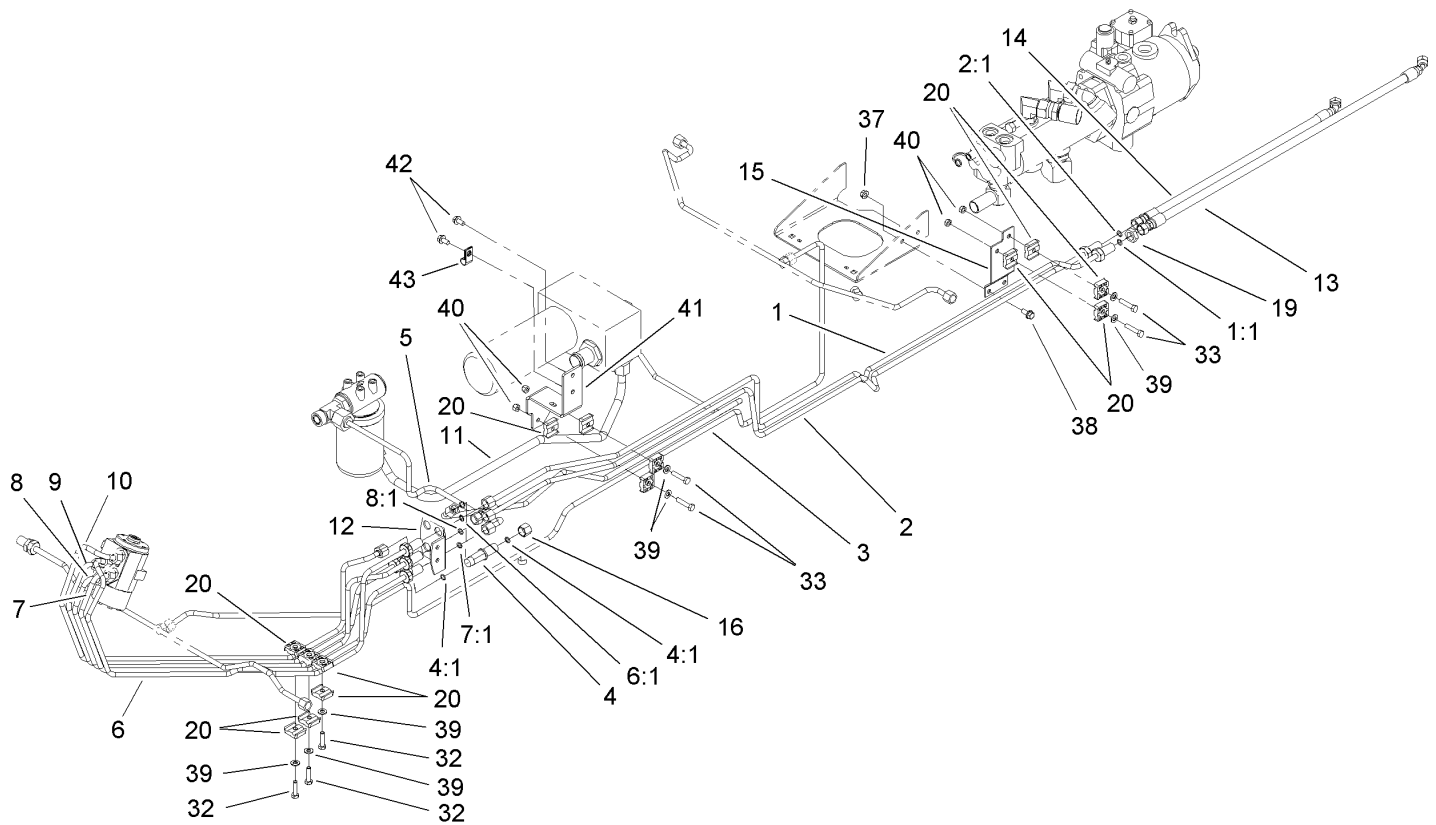
Ref	Part No.	Qty.	Description
3	353-512	2	Plug
3:1	237-78	1	O-Ring
4	106-1025	7	Plug-HYD
4:1	237-78	1	O-Ring
5	106-1026	4	Plug-HYD
5:1	237-42	1	O-Ring
6	106-1027	5	Plug-HYD
6:1	237-79	1	O-Ring
7	110-0468	1	Valve-Check, 5 Psi
7:1	110-0470	1	Seal Kit
8	110-0491	2	Valve-Directional
8:1	106-6775	1	Seal Kit
9	110-0496	1	Valve-Reducing, Pressure
9:1	105-9154	1	Seal Kit
10	110-0493	1	Valve-Relief
10:1	110-6316	1	Seal Kit
11	110-0494	1	Valve-Solenoid
11:1	110-8773	1	Seal Kit
11:2	110-2634	1	Nut-Coil
12	107-7521	1	Coil-E, 12V
13	110-0495	2	Orifice
14	110-0498	1	Orifice (.030)

## Traction Hydraulic Line Assembly

Ref	Part No.	Qty.	Description
1	92-7536	1	Hose ASM
2	105-9818	1	Hose ASM
3	104-5476	1	Tube ASM
3:1	340-65	1	O-Ring
4	104-5478	1	Tube ASM
4:1	340-65	1	O-Ring
5	105-3864	1	Hose ASM
6	69-8950	2	Spacer
7	240-2	2	Grommet-Rubber
8	69-8920	4	Washer
9	104-5472	1	Tube ASM
9:1	340-65	1	O-Ring
10	110-0475	1	Tube ASM
11	105-3915	1	Tube ASM
12	104-5489	1	Tube ASM
14	110-0476	1	Tube ASM
15	104-5470	1	Tube ASM
16	105-3984	1	Tube ASM
17	105-3865	1	Tube ASM
18	104-5462	1	Tube ASM
19	104-5468	1	Tube ASM
20	104-5473	1	Tube ASM
20:1	340-65	1	O-Ring
21	92-7534	1	Hose ASM

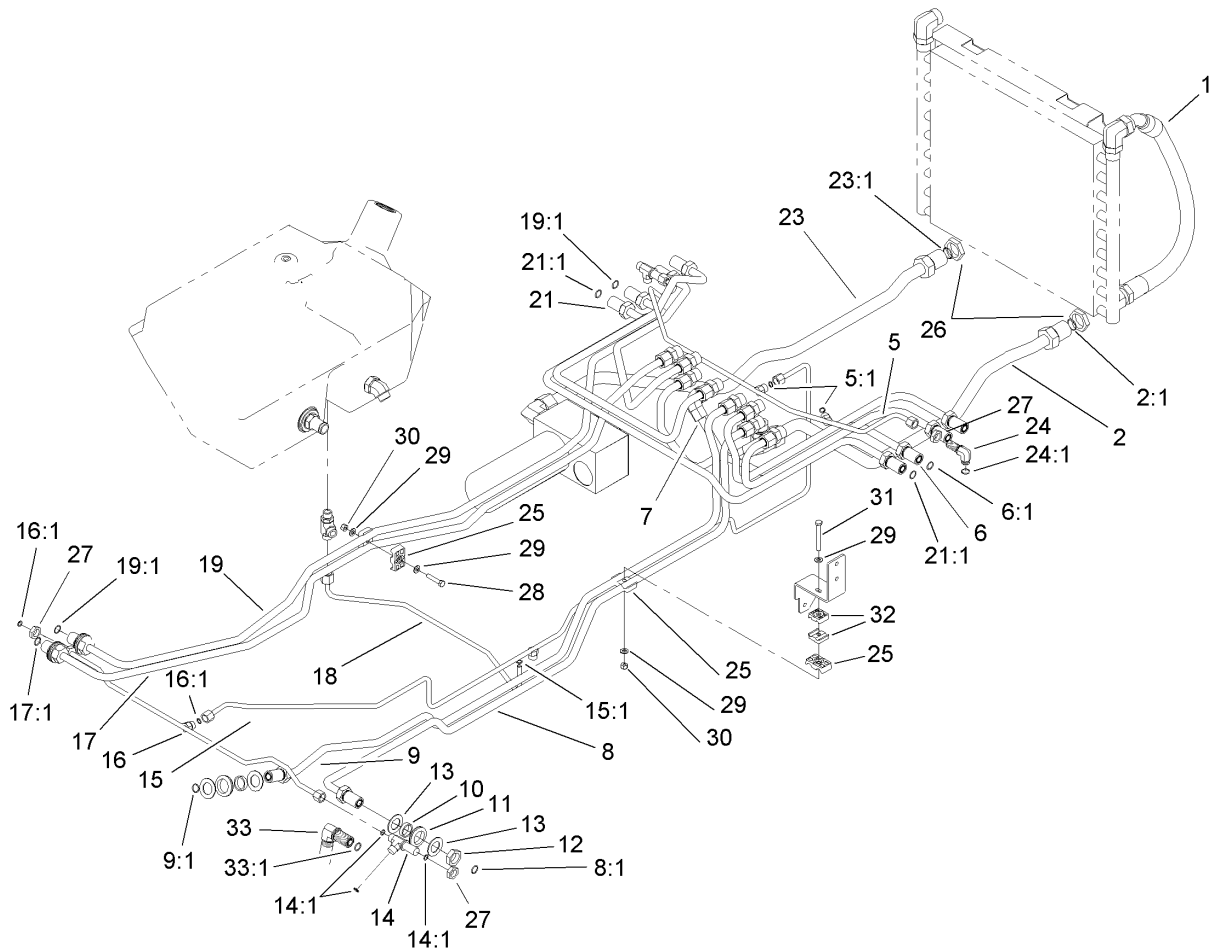
Ref	Part No.	Qty.	Description
22	104-5464	2	Hose ASM
23	105-3985	1	Hose ASM
24	105-9863	1	Tube-HYD
24:1	237-22	1	O-Ring
25	86-5480	1	Nipple-Test
26	59-7410	1	Tip-Nipple, Diagnostic
26:1	237-42	1	O-Ring
27	340-126	2	Nut-Bulkhead
28	340-128	2	Nut-Bulkhead
29	340-70	1	Nut-Lock
30	56-7973	2	Clamp-Tube
31	322-6	1	Screw-HH
32	3256-23	2	Washer-Flat
33	3296-29	1	Nut-Lock, NI
34	354-79	2	Cap-Dust
35	340-86	1	Fitting-Tee
35:1	237-22	2	O-Ring
35:2	237-42	1	O-Ring



## Hydraulic Steering Line Assembly

Ref	Part No.	Qty.	Description
1	105-3871	1	Tube ASM
1:1	237-22	1	O-Ring
2	105-3870	1	Tube ASM
2:1	237-22	1	O-Ring
3	110-0477	1	Tube ASM
4	340-68	1	Fitting-Tee, Bulkhead
4:1	237-22	3	O-Ring
5	105-3886	1	Tube ASM
6	94-3060	1	HYD Tube ASM
6:1	237-22	1	O-Ring
7	94-3071	1	HYD Tube ASM
7:1	237-22	1	O-Ring
8	94-3059	1	HYD Tube ASM
8:1	237-22	1	O-Ring
9	94-3061	1	HYD Tube ASM
9:1	237-22	1	O-Ring
10	94-3062	1	HYD Tube ASM
11	110-0474	1	Tube ASM
12	92-7606-03	1	Bracket-Bulkhead
13	105-9817	1	Hose ASM
14	92-7539	1	Hose ASM
15	105-3873-03	1	Bracket-Mount, Clamp
16	340-117	1	Cap
19	340-70	7	Nut-Lock

Ref	Part No.	Qty.	Description
20	56-7973	14	Clamp-Tube
32	322-6	3	Screw-HH
33	322-7	4	Screw-HH
37	32128-20	2	Nut-HF
38	3234-5	2	Screw-HHF
39	3256-23	7	Washer-Flat
40	3296-29	4	Nut-Lock, NI
41	105-3993-03	1	Bracket-Support, Tube
42	32144-14	2	Screw-HWHTF
43	2412-138	1	R-Clamp

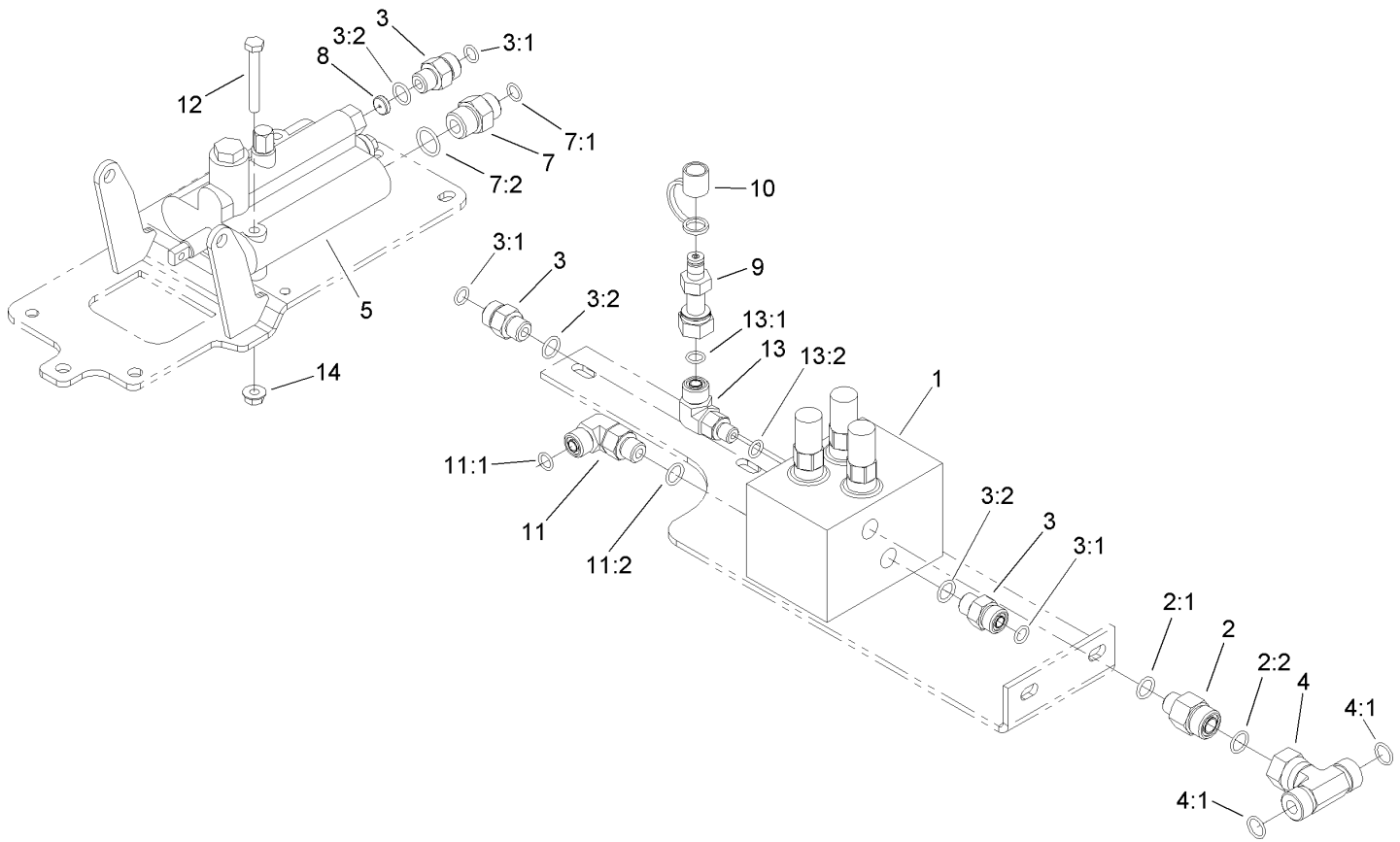


## Mow Block Hydraulic Line Assembly

Ref	Part No.	Qty.	Description
1	104-5483	2	Hose ASM
2	104-5488	1	Tube ASM
2:1	340-65	1	O-Ring
5	105-9862	1	Tube ASM
5:1	237-22	2	O-Ring
6	105-3895	1	Tube ASM
6:1	237-65	1	O-Ring
7	105-3885	1	Tube ASM
8	105-3893	1	Tube ASM
8:1	237-65	1	O-Ring
9	105-3894	1	Tube ASM
9:1	237-65	1	O-Ring
10	69-9000	9	Spacer
11	240-3	9	Grommet-Rubber
12	340-74	9	Locknut-Bulkhead
13	69-9010	18	Washer
14	340-68	1	Fitting-Tee, Bulkhead
14:1	237-22	3	O-Ring
15	105-3914	1	Tube ASM
15:1	237-22	1	O-Ring
16	108-6063	1	Front Drain Tube ASM
16:1	237-22	2	O-Ring
17	105-3902	1	Tube ASM
17:1	237-65	1	O-Ring

Ref	Part No.	Qty.	Description
18	105-3911	1	Tube ASM
19	105-3901	1	Tube ASM
19:1	237-65	2	O-Ring
21	105-3900	1	Tube ASM
21:1	237-65	2	O-Ring
23	110-0473	1	Tube ASM
23:1	340-65	1	O-Ring
24	340-154	2	Union-Bulkhead
24:1	237-22	2	O-Ring
25	56-7971	4	Clamp-Tube
26	340-128	2	Nut-Bulkhead
27	340-70	4	Nut-Lock
28	322-8	1	Screw-HH
29	3256-23	4	Washer-Flat
30	3296-29	2	Nut-Lock, NI
31	322-13	1	Screw-HH
32	56-7973	2	Clamp-Tube
33	340-72	1	Fitting-Bulkhead, 90 DEG
33:1	237-65	2	O-Ring

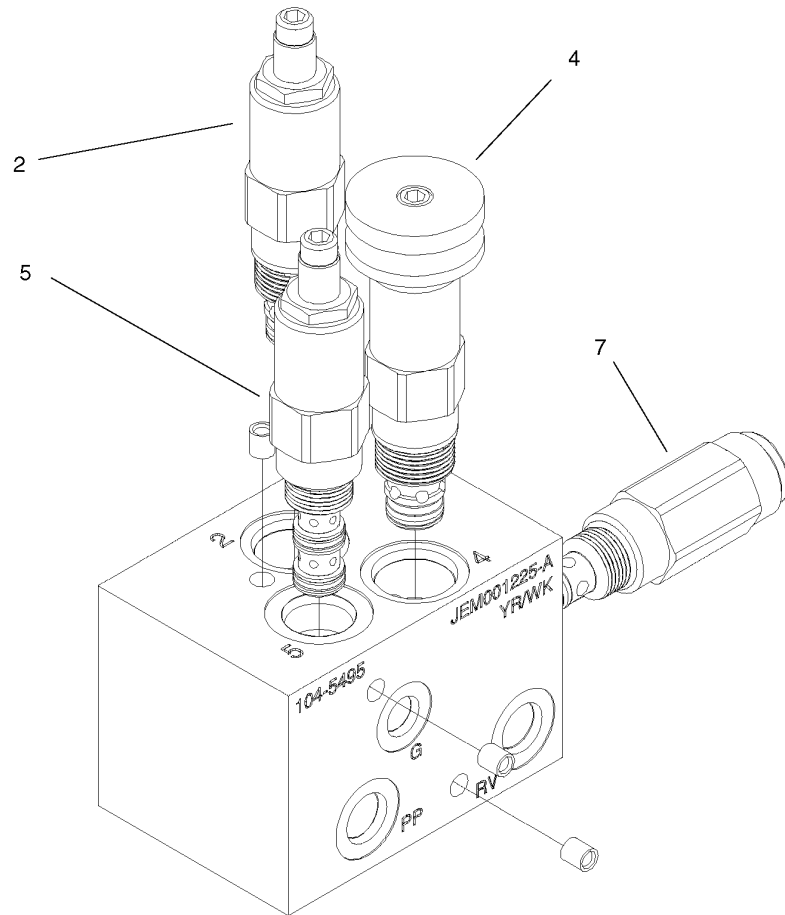




## Lift Valve and Counter Balance Assembly

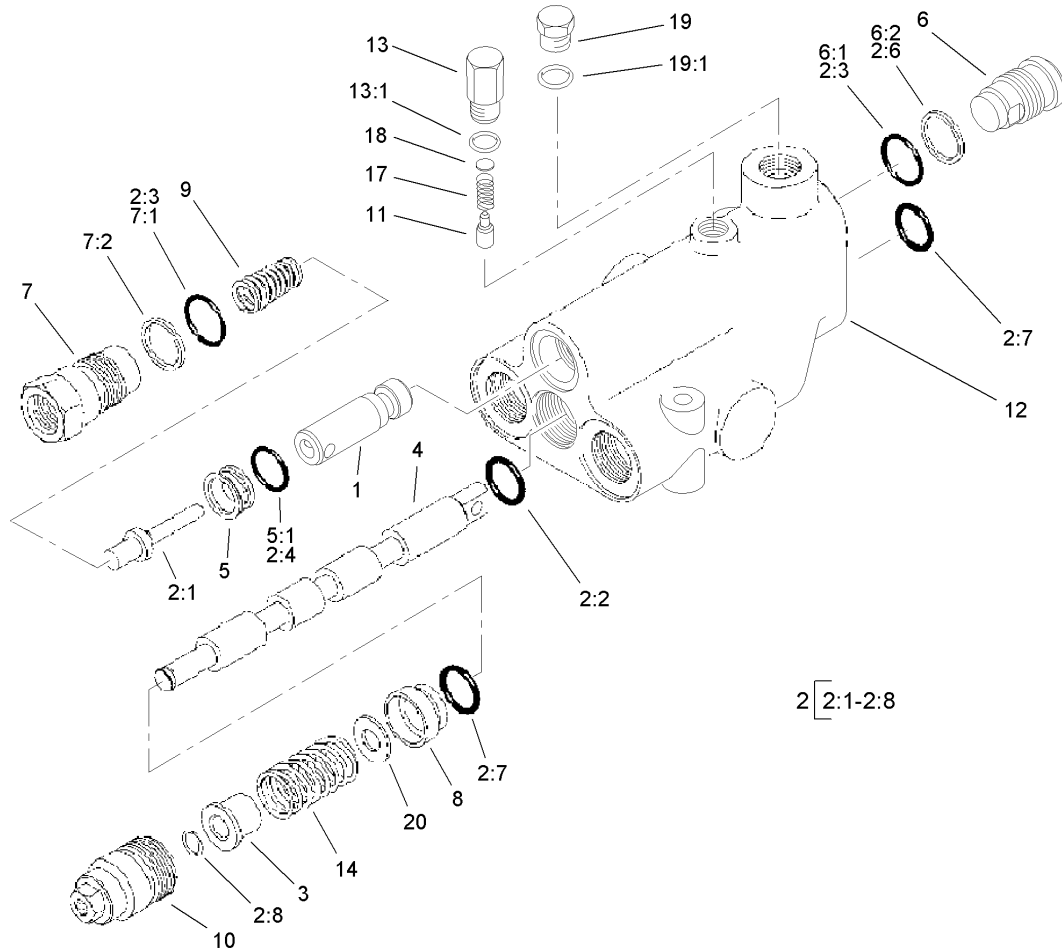
Ref	Part No.	Qty.	Description
1	104-5495	1	Manifold ASM
2	340-5	1	Fitting-Straight
2:1	237-42	1	O-Ring
2:2	237-30	1	O-Ring
3	340-2	3	Fitting-HYD, Straight
3:1	237-22	1	O-Ring
3:2	237-42	1	O-Ring
4	93-6810	1	Fitting-Tee
4:1	237-30	2	O-Ring
5	112-5254	1	Valve-Single Spool
7	340-3	2	Adapter
7:1	237-22	1	O-Ring
7:2	237-79	1	O-Ring
8	84-6402	1	Disc-Orifice
9	86-5480	1	Nipple-Test
10	354-79	1	Cap-Dust
11	340-77	1	Fitting-HYD, 90 DEG
11:1	237-22	1	O-Ring
11:2	237-42	1	O-Ring
12	321-11	2	Screw-HH
13	340-97	1	Fitting-HYD, 90 DEG
13:1	237-22	1	O-Ring
13:2	237-78	1	O-Ring
14	32128-33	2	Nut-HF

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### Manifold Assembly No. 104-5495

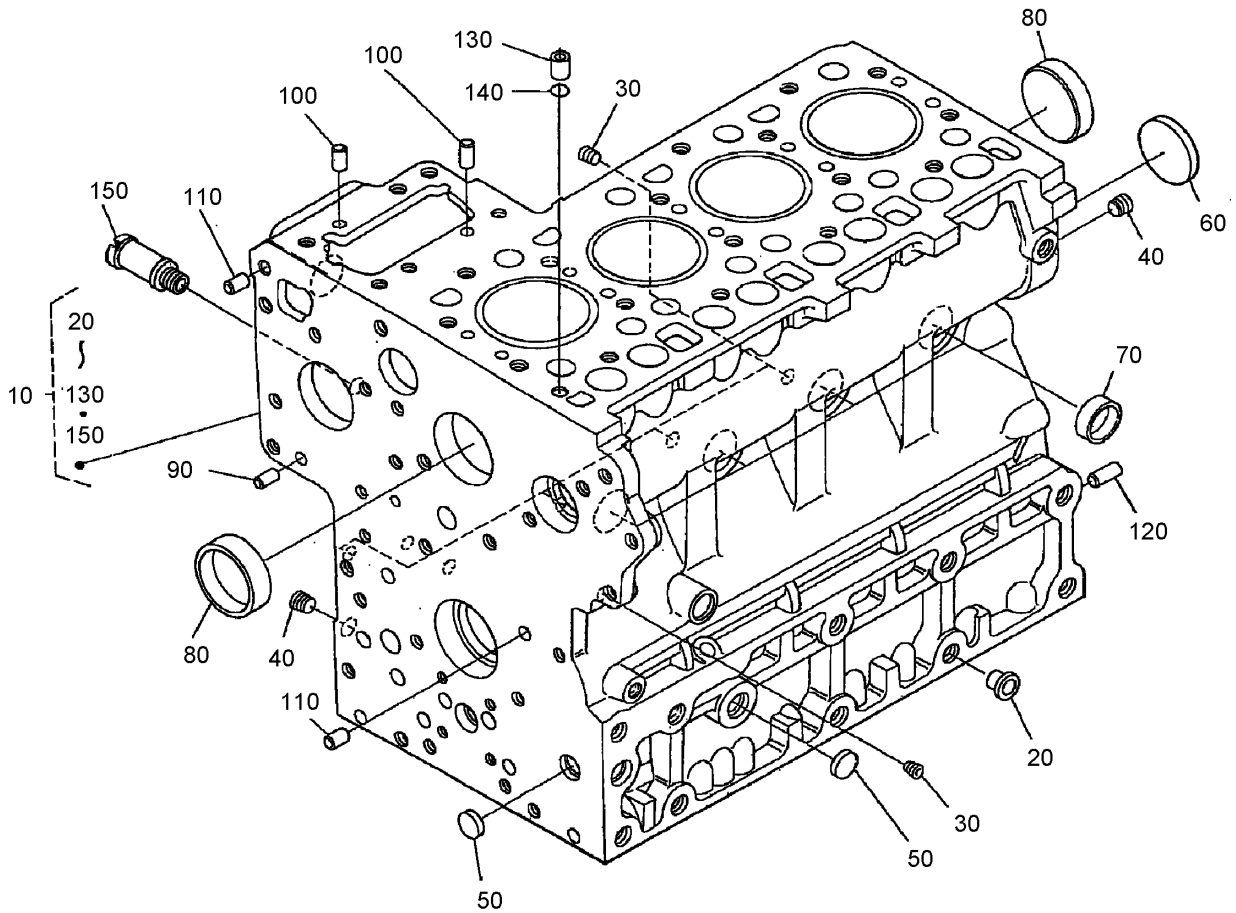
Ref	Part No.	Qty.	Description				
2	105-9161	1	Relief-Operated, Pilot				
①2:1	105-9151	1	Seal Kit				
4	105-9162	1	Relief-Operated, Pilot				
①4:1	105-9151	1	Seal Kit				
5	105-9163	1	Valve-Pilot Sequence, EXT				
①5:1	105-9164	1	Seal Kit				
7	105-9844	1	Valve-Relief				
①7:2	105-9156	1	Seal Kit				



## Single Spool Valve Assembly No. 112-5254

Ref	Part No.	Qty.	Description
1	84-6420	1	Plunger
2	99-3589	1	Seal Kit
2:1	58-6290	2	Poppet
2:2	58-6320	1	Wiper
2:3	60-5720	2	O-Ring
2:4	58-6340	2	O-Ring
2:5	93-6314	1	O-Ring
2:6	58-6370	2	Washer
2:7	58-6450	2	O-Ring
2:8	58-6460	1	Ring-Retaining
3	58-6310	1	Spacer
4		1	Spool
5	58-6330	1	Seat
5:1	58-6340	1	O-Ring
6	58-6350	1	Plug
6:1	60-5720	1	O-Ring
6:2	58-6370	1	Washer
7	69-1800	1	Plug ASM
7:1	60-5720	1	O-Ring
7:2	58-6370	1	Washer
8	58-6400	1	Bushing
9	69-1810	1	Spring
10	58-6420	1	Cap
11	58-6770	1	Plunger

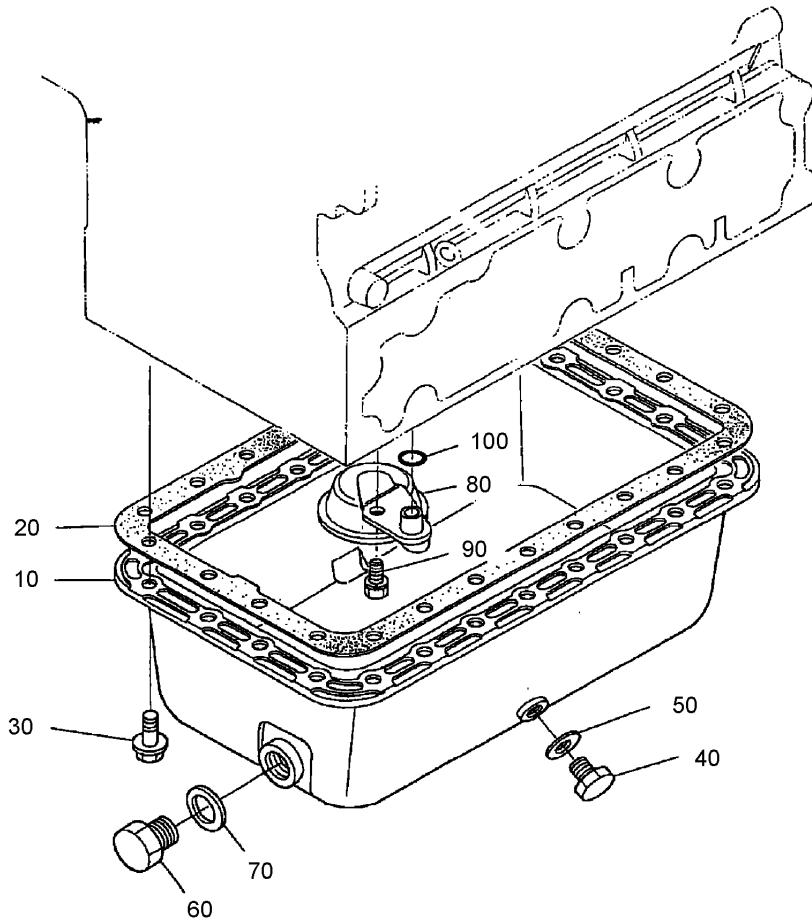
Ref	Part No.	Qty.	Description
12		1	Body
13	58-6780	1	Plug
13:1	58-6790	1	O-Ring
14	58-6730	1	Spring
17	58-6760	1	Spring
18	60-6450	1	Disc
19	353-508	1	Plug
19:1	237-42	1	O-Ring
20	65-2770	1	Washer



## Crankcase Assembly

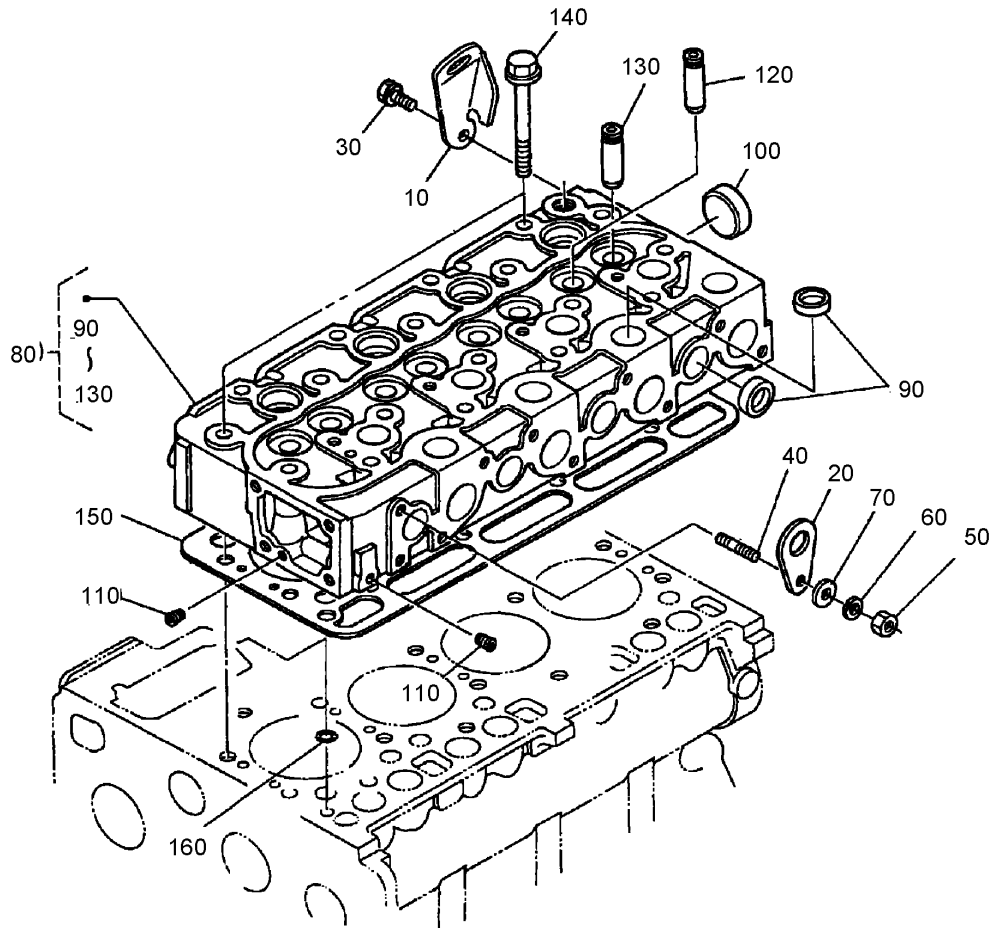
Ref	Part No.	Qty.	Description
10	108-7051	1	Crankcase
20	98-7486	2	Plug
30	98-7487	6	Plug
40	107-0107	2	Plug
50	98-7489	3	Plug
60	98-9668	1	Plug-Expansion
70	98-7500	6	Cap-Sealing
80	98-7501	2	Cap-Sealing
90	98-7502	2	Pin-Straight
100	98-7503	2	Pin-Straight
110	98-7504	2	Pin-Straight
120	98-7505	1	Pin-Straight
130	98-7506	1	Pin-Pipe
140	98-7509	1	O-Ring
150	100-9153	1	Pipe-Return, Water

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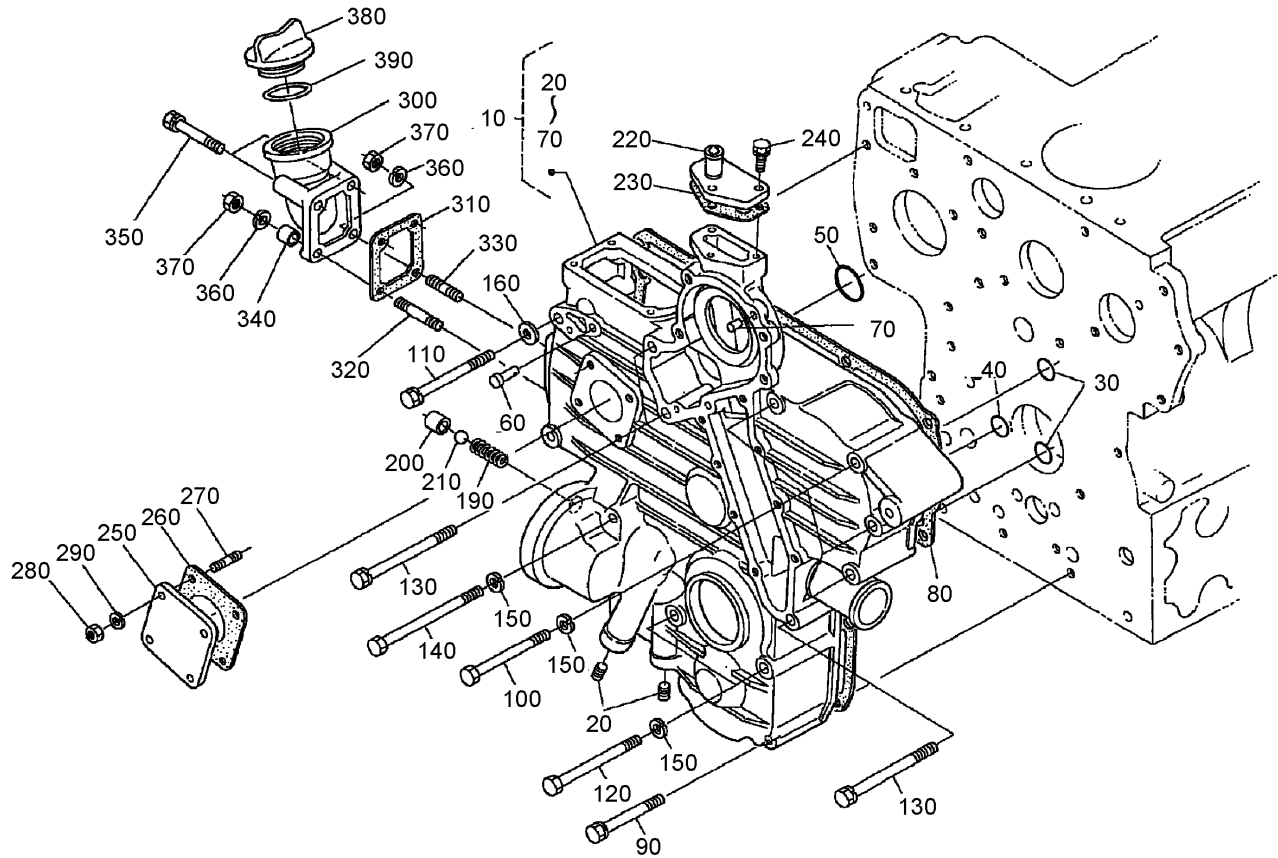
### Oil Pan Assembly

Ref	Part No.	Qty.	Description				
10	98-7520	1	Pan-Oil				
20	108-7053	1	Gasket-Pan, Oil				
30	110-6194	24	Bolt-Flange				
40	98-9386	1	Plug				
50	98-7524	1	Gasket				
60	98-7529	1	Plug-Drain				
70	98-7528	1	O-Ring				
80	98-7525	1	Filter-Oil				
90	98-7526	1	Bolt				
100	108-7054	1	O-Ring				



## Cylinder Head Assembly

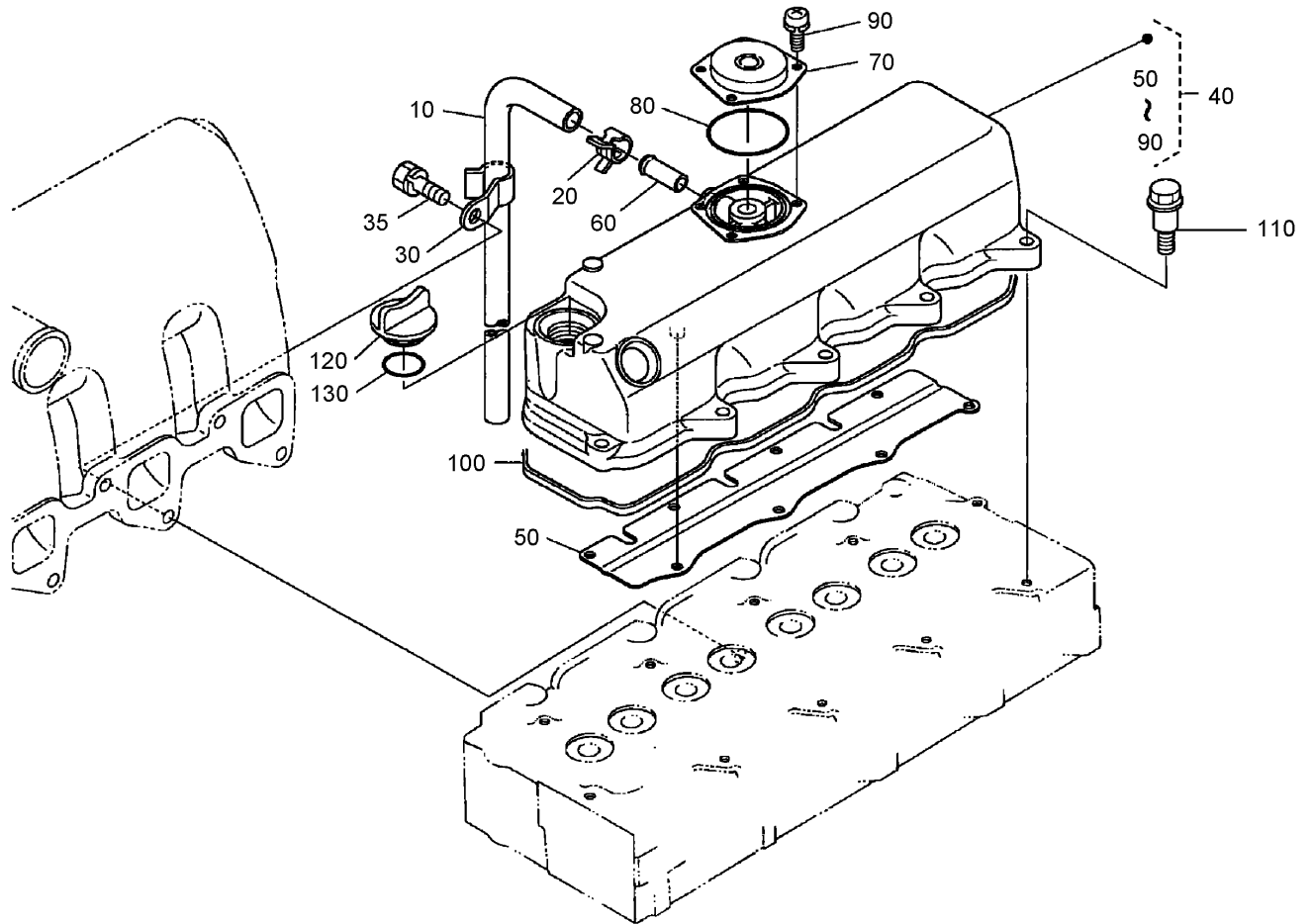
Ref	Part No.	Qty.	Description
10	98-7530	1	Hook-Engine
20	98-7531	1	Hook-Engine
30	98-7526	1	Bolt
40	98-7533	2	*obs* Stud
50	100-1559	1	Nut-Manifold, Exhaust
60	105-2893	1	Washer-Spring
70	98-7536	1	Washer-Plain
80	108-7055	1	Head-Cylinder
90	98-7538	12	Cap-Sealing
100	98-7539	1	Cap-Sealing
110	98-7540	2	Plug
120	98-7541	4	Guide-Valve, Intake
130	98-7542	4	Guide-Valve, Exhaust
140	98-7543	18	Bolt-Head, Cylinder
150	100-9160	1	Gasket-Head, Cylinder
160	98-7509	1	O-Ring



## Gear Case Assembly

Ref	Part No.	Qty.	Description
10	100-9161	1	Gearcase ASM
20	107-0108	2	Plug
30	107-0104	2	O-Ring
40	107-0105	1	O-Ring
50	107-0106	1	O-Ring
60	98-7550	1	Pin-Spring, Start
70	98-7504	2	Pin-Straight
80	98-7552	1	Packing-Case, Gear
90	98-7553	2	Bolt
100	99-8336	5	Bolt
110	98-7555	1	Bolt
120	98-7556	2	Bolt
130	98-7557	3	Bolt
140	98-7558	2	Bolt
150	105-2893	9	Washer-Spring
160	98-7536	1	Washer-Plain
190	98-7563	1	Spring
200	98-7564	1	Seat-Valve
210	98-7565	1	Ball
220	98-7566	1	Flange-Return, Water
230	98-7567	1	Gasket
240	98-7568	3	Bolt
250	98-7569	1	Cover
260	98-7570	1	Gasket-Meter, Hour

Ref	Part No.	Qty.	Description
270	98-7571	4	Stud
280	98-7572	4	Nut
290	98-7699	4	Washer-Spring
300	100-9162	1	Flange-Filter, Oil
310	100-9163	1	Gasket
320	98-7571	1	Stud
330	100-9164	1	Stud
340	100-9165	1	Collar
350	107-9073	2	Bolt
360	98-7699	2	Washer-Spring
370	98-7572	2	Nut
380	98-7429	1	Plug-Filter, Oil
390	108-7064	1	O-Ring

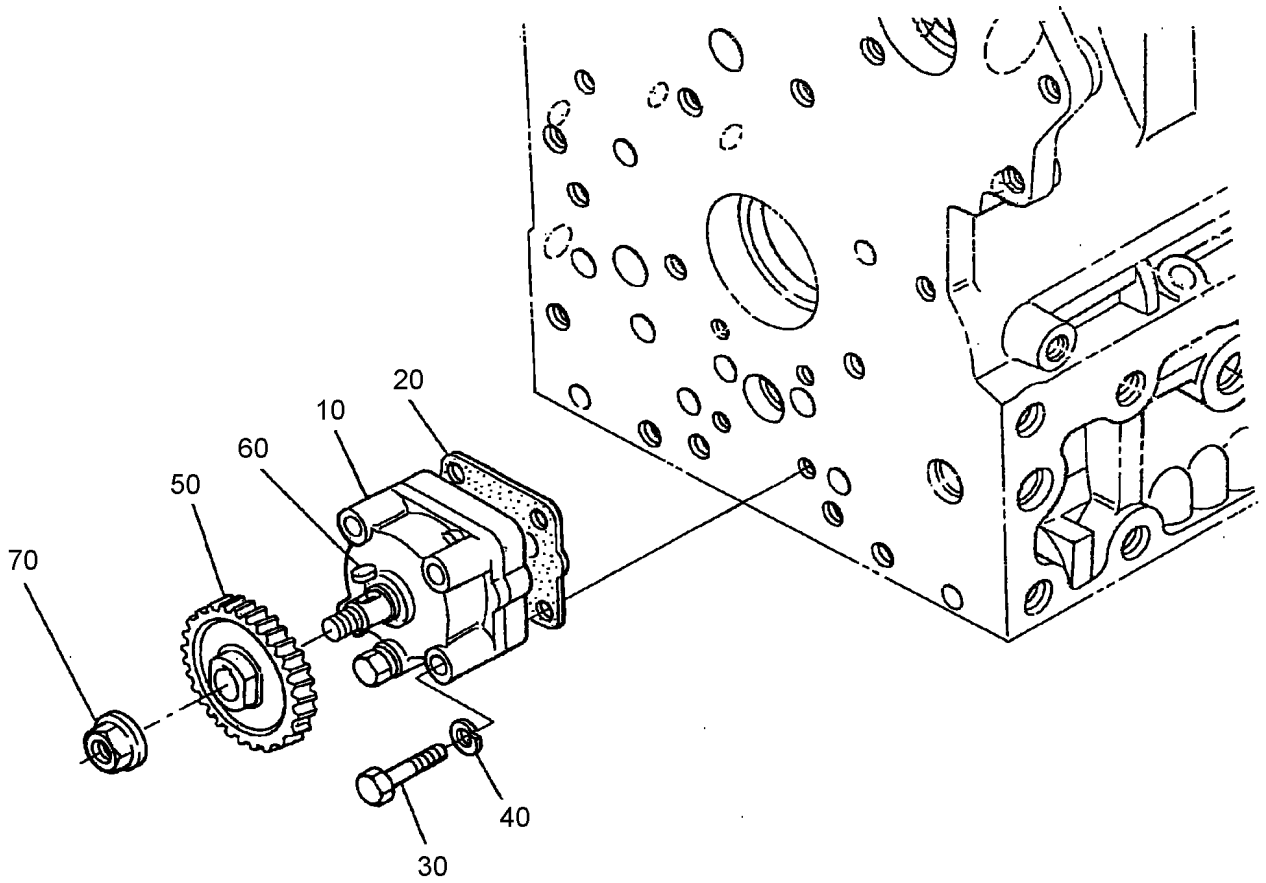


## Head Cover Assembly

Ref	Part No.	Qty.	Description
10	108-7056	1	Tube-Breather
20	108-2859	1	Clamp-Hose
30	108-7057	1	Clamp-Tube, Breather
35	98-7610	1	Bolt
40	108-7058	1	Cylinder Head Cover ASM
50	108-7059	1	Shield-Breather
60	98-7766	1	Pipe-Return, Water
70	108-7060	1	Cover-Breather
80	108-7061	1	O Ring-Breather
90	98-9364	4	Screw (With Washer)
100	108-7062	1	Gasket-Cover, Head
110	108-7063	10	Bolt
120	98-7429	1	Plug-Filter, Oil
130	108-7064	1	O-Ring



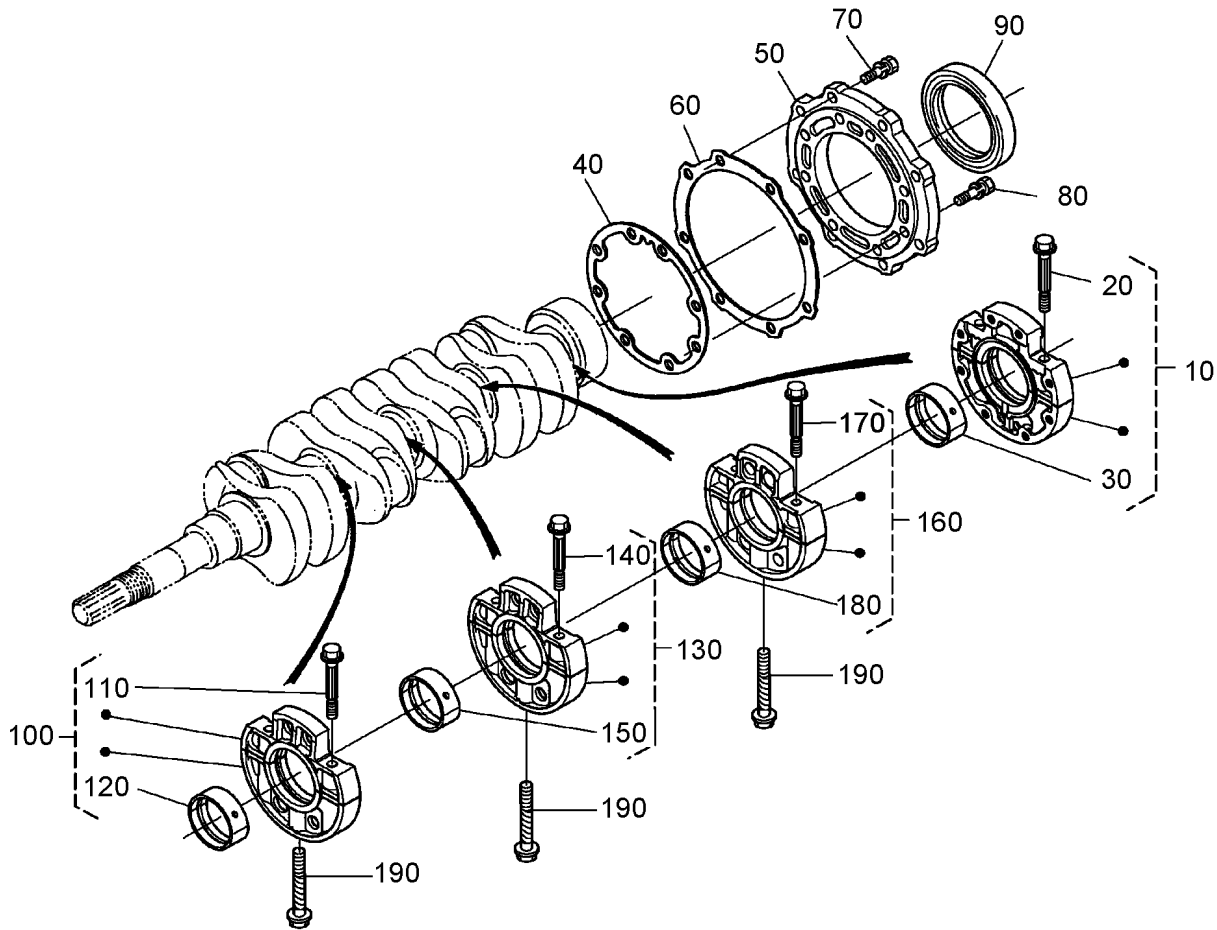




### Oil Pump Assembly

Ref	Part No.	Qty.	Description
10	100-9170	1	Oil Pump ASM
20	98-7513	1	Gasket-Pump, Oil
30	98-7514	4	Bolt
40	98-7699	4	Washer-Spring
50	98-7516	1	Gear-Drive, Oil Pump
60	98-7517	1	Key-Feather
70	98-7518	1	Nut-Flange

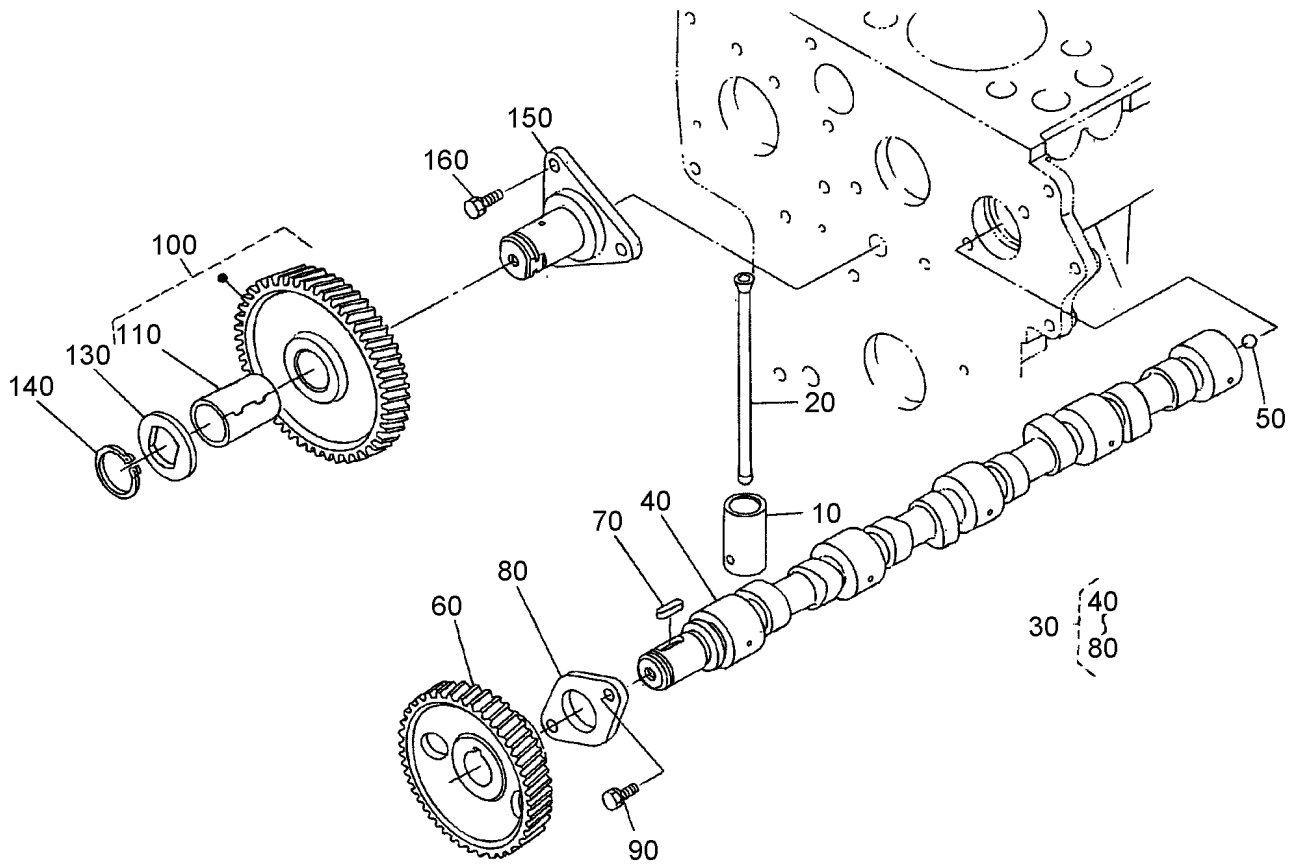
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## Main Bearing Case

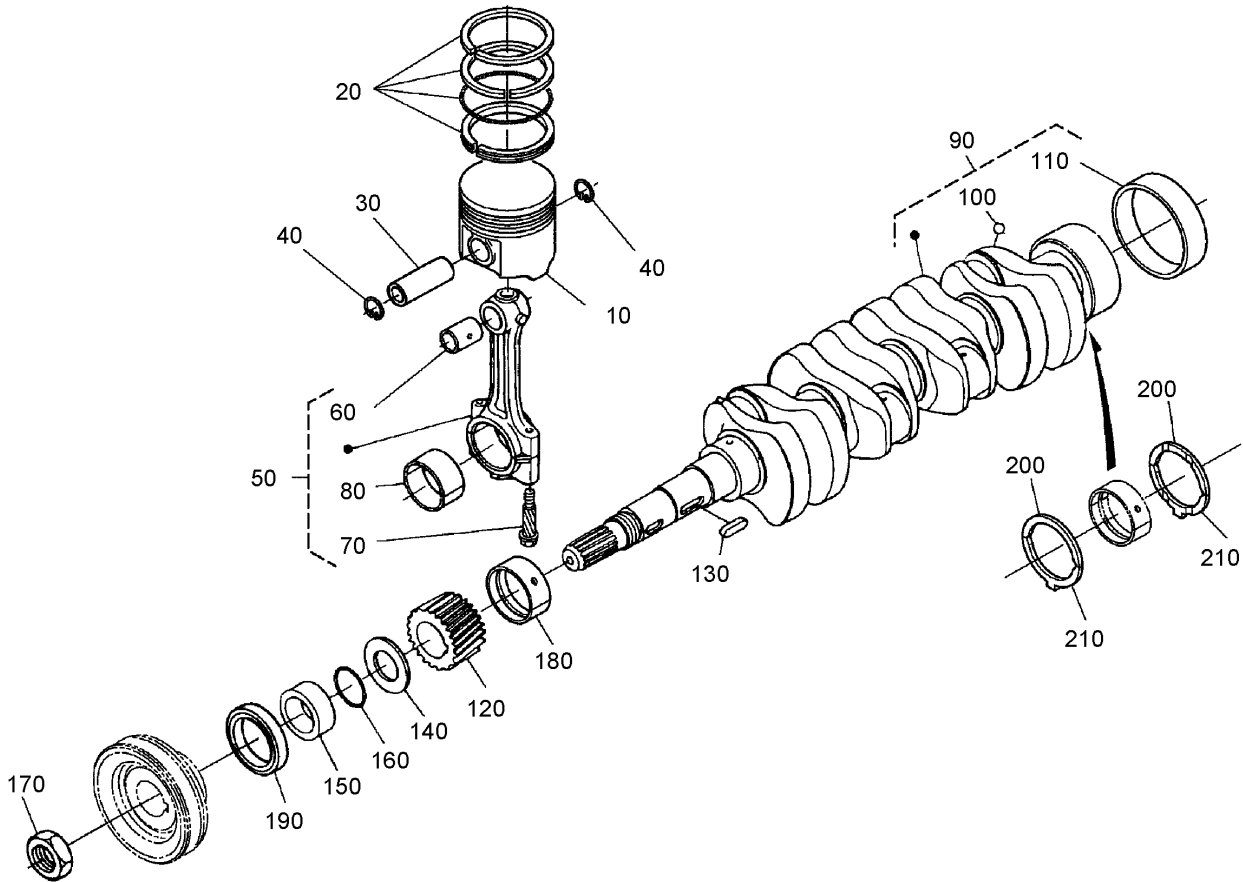
Ref	Part No.	Qty.	Description
10	108-7065	1	Wheel Bearing Case ASM
20	108-7066	2	Bolt-Case, Bearing
30	108-7069	1	Metal-Crankshaft (-0.40Mm)
30	108-7068	1	Metal-Crankshaft (-0.20Mm)
30	108-7067	1	Metal-Crankshaft (STD)
40	108-7070	1	Gasket-Case, Bearing
50	108-7071	1	Cover-Case, Bearing
60	98-7437	1	Gasket-Case Cover, Bearing
70	98-7438	8	Bolt
80	98-7439	8	Bolt
90	108-7072	1	Seal-Oil
100	108-7073	1	Main Bearing Case ASM
110	108-7066	2	Bolt-Case, Bearing
120	108-7069	1	Metal-Crankshaft (-0.40Mm)
120	108-7068	1	Metal-Crankshaft (-0.20Mm)
120	108-7067	1	Metal-Crankshaft (STD)
130	108-7074	1	Main Bearing Case ASM
140	108-7066	2	Bolt-Case, Bearing
150	108-7067	1	Metal-Crankshaft (STD)
150	108-7068	1	Metal-Crankshaft (-0.20Mm)
150	108-7069	1	Metal-Crankshaft (-0.40Mm)
160	108-7097	1	Main Bearing Case ASM
170	108-7066	2	Bolt-Case, Bearing
180	108-7069	1	Metal-Crankshaft (-0.40Mm)

Ref	Part No.	Qty.	Description
180	108-7068	1	Metal-Crankshaft (-0.20Mm)
180	108-7067	1	Metal-Crankshaft (STD)
190	98-7444	3	Bolt-Case, Bearing



## Camshaft and Idler Gear Shaft Assembly

Ref	Part No.	Qty.	Description
10	98-7445	8	Tappet
20	98-7446	8	Rod-Push
30	100-9179	1	Camshaft ASM
40		1	Camshaft
50	98-7473	1	Ball
60	98-7450	1	Gear-Camshaft
70	98-7451	1	Key-Feather
80	98-7452	1	Stopper-Camshaft
90	98-7453	2	Bolt
100	107-0109	1	Gear-Idler
110	98-7455	1	Bushing-Gear, Idler
130	107-0111	1	Collar
140	107-0112	1	Circlip-External
150	107-0113	1	Shaft-Gear, Idler
160	98-7453	3	Bolt

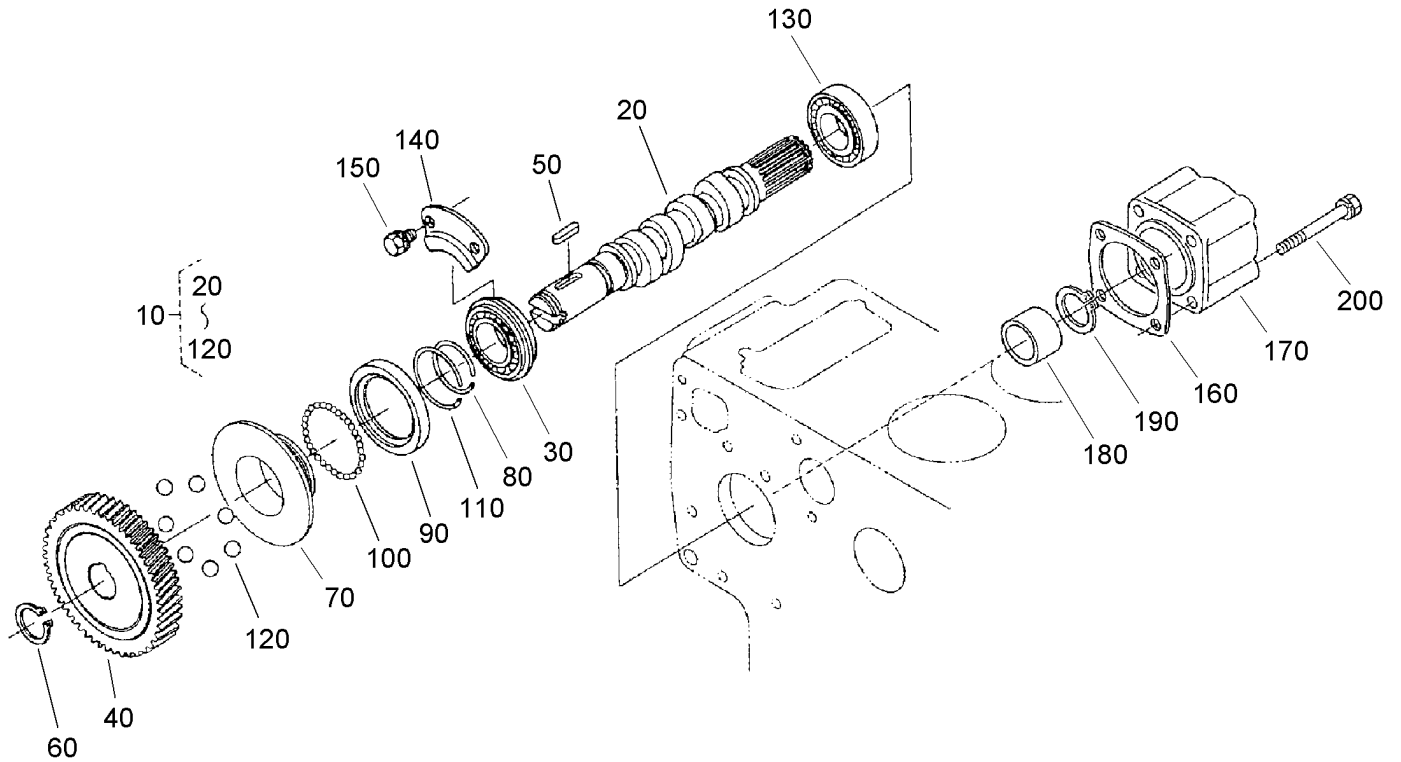



## Piston and Crankshaft Assembly

Ref	Part No.	Qty.	Description
10	112-7000	4	Piston ASM
10	99-5435	1	Piston (.50Mm)
20	99-5436	1	Piston Ring ASM (0.50Mm)
20	100-9182	4	Piston Ring ASM (STD)
30	98-7464	4	Pin-Piston
40	98-7465	8	Clip-Pin, Piston
50	98-7466	4	Connecting Rod ASM
60	98-7467	4	Bushing-Pin, Piston
70	98-7468	8	Bolt-Rod, Connecting
80	98-7471	4	Metal-Crankpin (-0.40Mm)
80	98-7470	4	Metal-Crankpin (-0.20Mm)
80	98-7469	4	Metal-Crankpin (STD)
90	110-6195	1	Crankshaft-Complete (350001 Or Newer)
90	98-7472	1	Crankshaft-Complete (Prior To 350001)
100	98-7473	4	Ball
110	98-7474	1	Sleeve-Crankshaft
120	98-7475	1	Gear-Crankshaft
130	98-7451	1	Key-Feather
140	98-7476	1	Slinger-Oil
150	98-7477	1	Collar-Crankshaft
160	98-7478	1	O-Ring
170	98-7479	1	Nut-Crankshaft

Ref	Part No.	Qty.	Description
180	108-7077	1	Metal-Crankshaft (-0.40Mm)
180	108-7075	1	Metal-Crankshaft (STD)
180	108-7076	1	Metal-Crankshaft (-0.20Mm)
190	98-7480	1	Seal-Oil
200	108-7080	2	Metal-Side (+0.40Mm)
200	108-7079	2	Metal-Side (+0.20Mm)
200	108-7078	2	Metal-Side (STD)
210	108-7083	2	Metal-Side (+0.40Mm)
210	108-7082	2	Metal-Side (+0.20Mm)
210	108-7081	2	Metal-Side (STD)

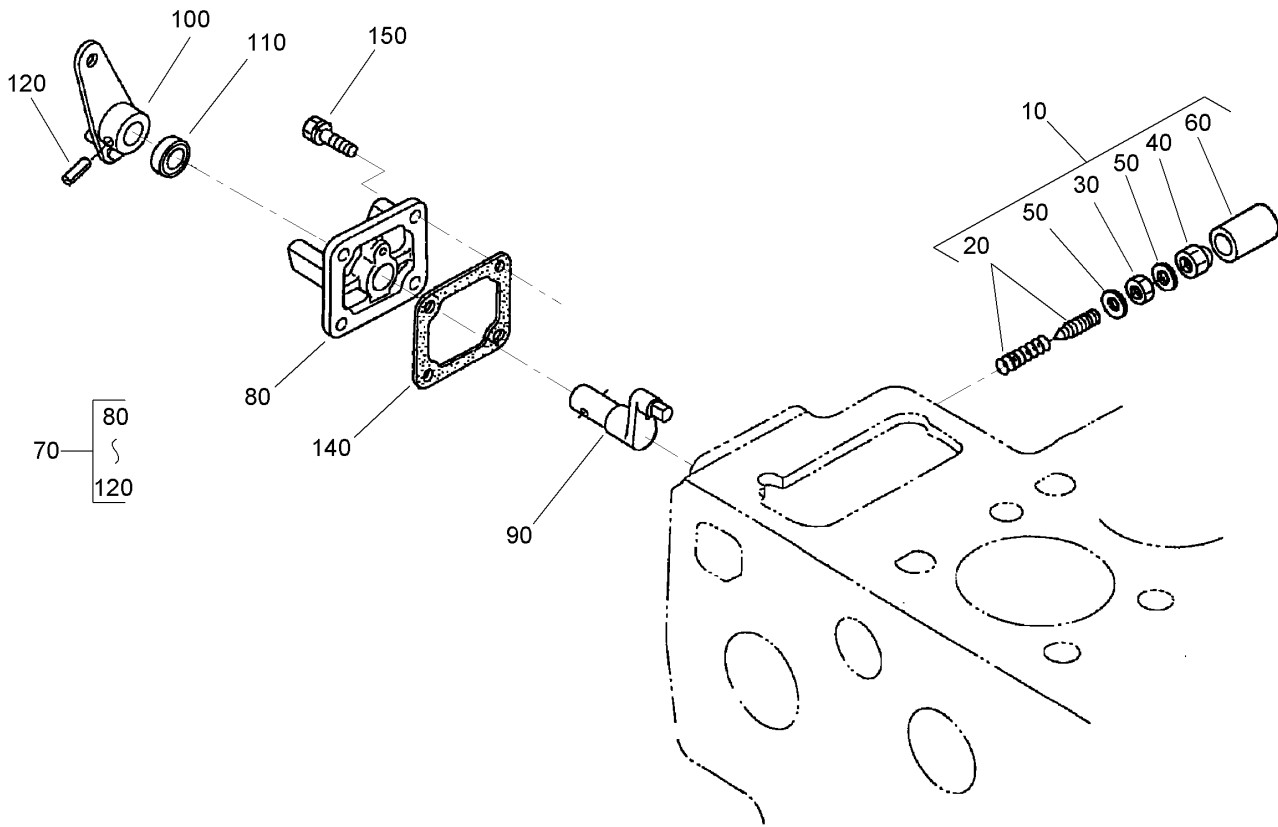




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## Fuel Camshaft and Governor Shaft Assembly

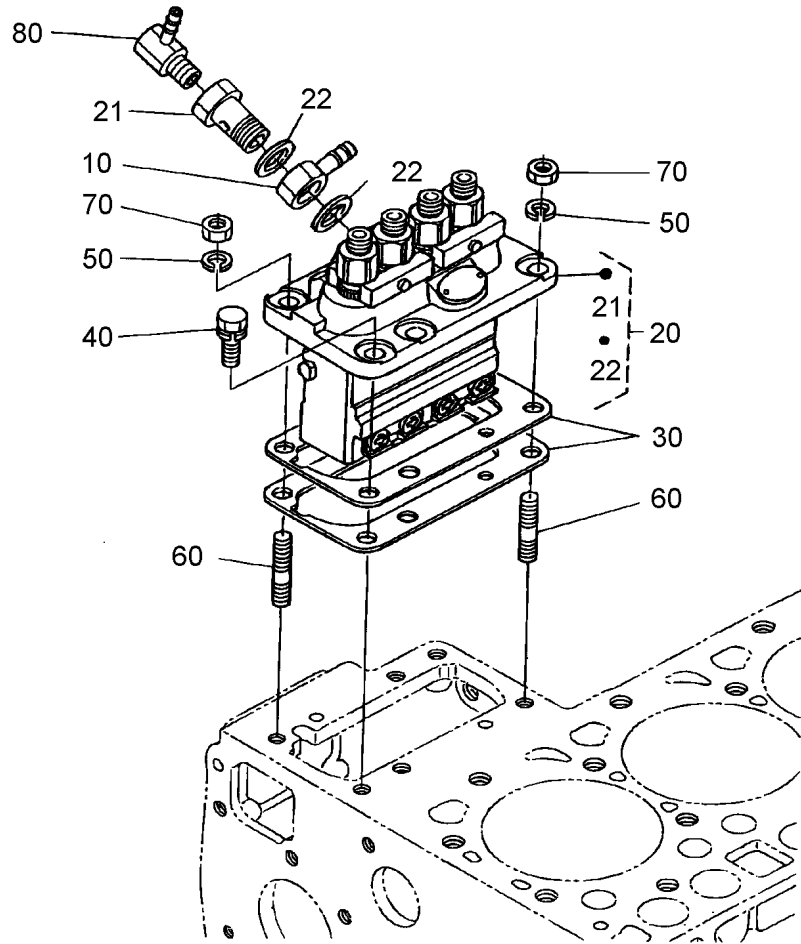
Ref	Part No.	Qty.	Description
10	98-7551	1	Fuel Camshaft ASM
20	98-7508	1	Camshaft-Fuel
30	98-7595	1	Bearing-Ball
40	98-7574	1	Gear-Pump, Injection
50	98-7575	1	Key-Feather
60	98-7576	1	Clip-Cir., External
70	98-7577	1	Sleeve-Governor
80	98-7578	1	Circlip-Sleeve, Governor
90	98-7579	1	Case-Ball, Governor
100	98-7580	39	Ball
110	98-7581	1	Circlip
120	98-7582	7	Ball
130	108-7084	1	Bearing-Ball
140	98-7584	1	Stopper
150	100-9195	2	Bolt
160	98-7588	1	Gasket
170	98-7586	1	Cover-Fuel, Camshaft
180	98-7587	1	Collar
190	98-7589	1	Circlip-External
200	98-7590	4	Bolt

## Engine Stop Lever Assembly

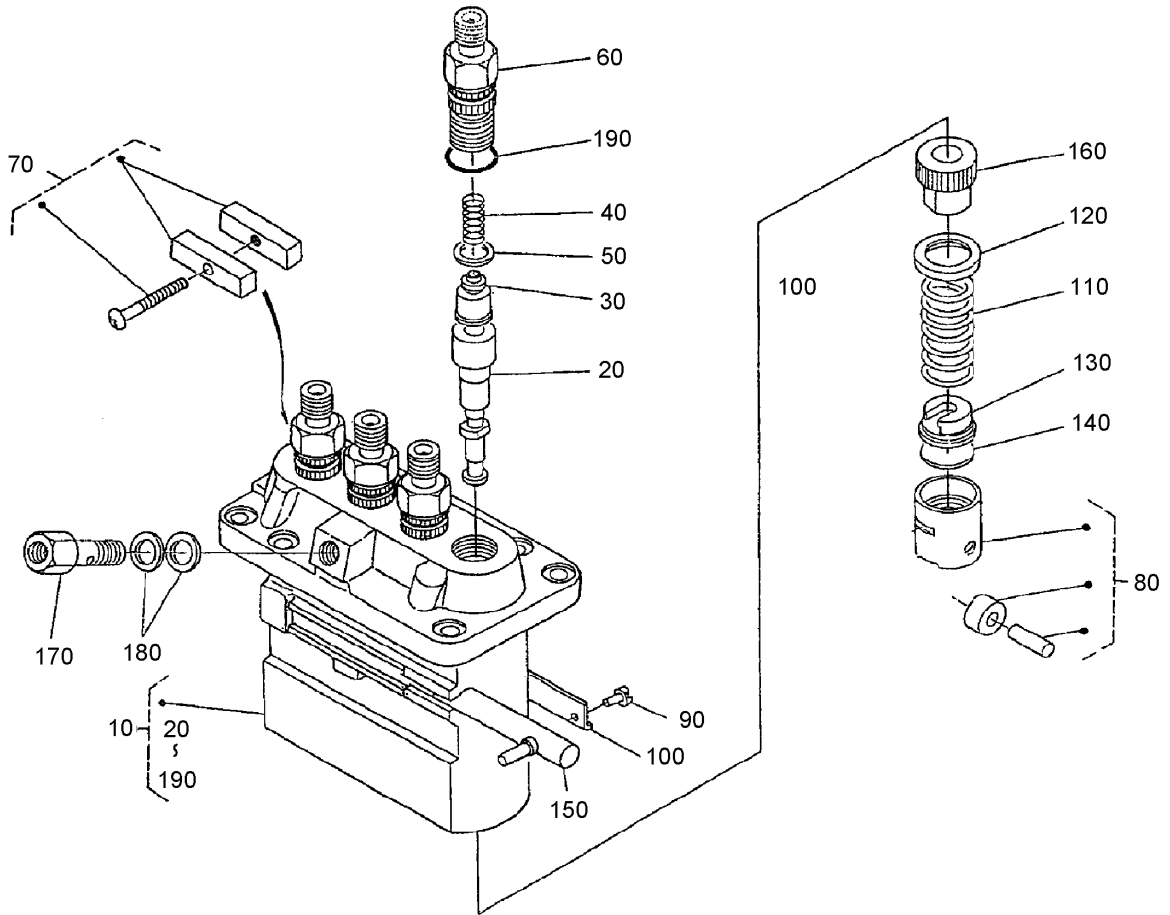
Ref	Part No.	Qty.	Description
10	98-7591	1	I/D Appartus ASM
20	98-7592	1	Adjusting Bolt ASM
30	98-7593	1	Nut
40	98-7594	1	Nut-Cap
50	98-7428	2	Gasket
60	98-7596	1	Cap
70	100-9198	1	Engine Stop Lever ASM
80	98-7598	1	Cover-Pump, Injection
90	100-9200	1	Shaft-Lever
100	98-7600	1	Lever-Stop, Engine
110	98-7601	1	Seal-Oil
120	98-7602	1	Pin-Spring
140	98-7604	1	Gasket-Cover, Pump
150	98-7605	4	Bolt

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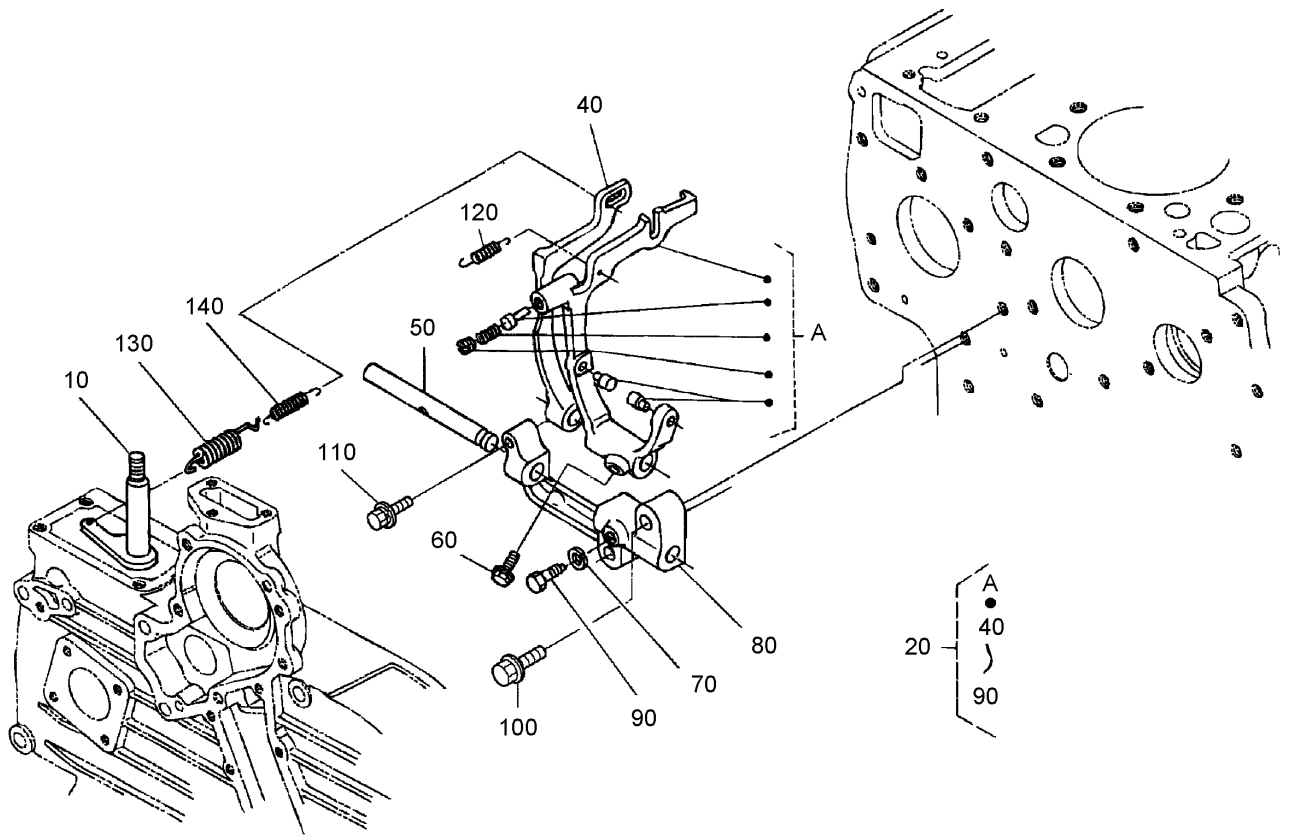
### Injection Pump Assembly

Ref	Part No.	Qty.	Description				
10	98-7617	1	Joint				
20	100-9201	1	Injection Pump ASM				
21	98-7635	1	Screw				
22	98-7636	2	Gasket				
30	98-7609	1	Shim-Pump, Injection				
30	98-7608	1	Shim				
30	98-7607	1	Shim				
40	98-7610	4	Bolt				
50	105-2893	2	Washer-Spring				
60	100-1558	2	Stud-Manifold, Exhaust				
70	98-7534	2	Nut				
80	107-4300	1	Orifice ASM				



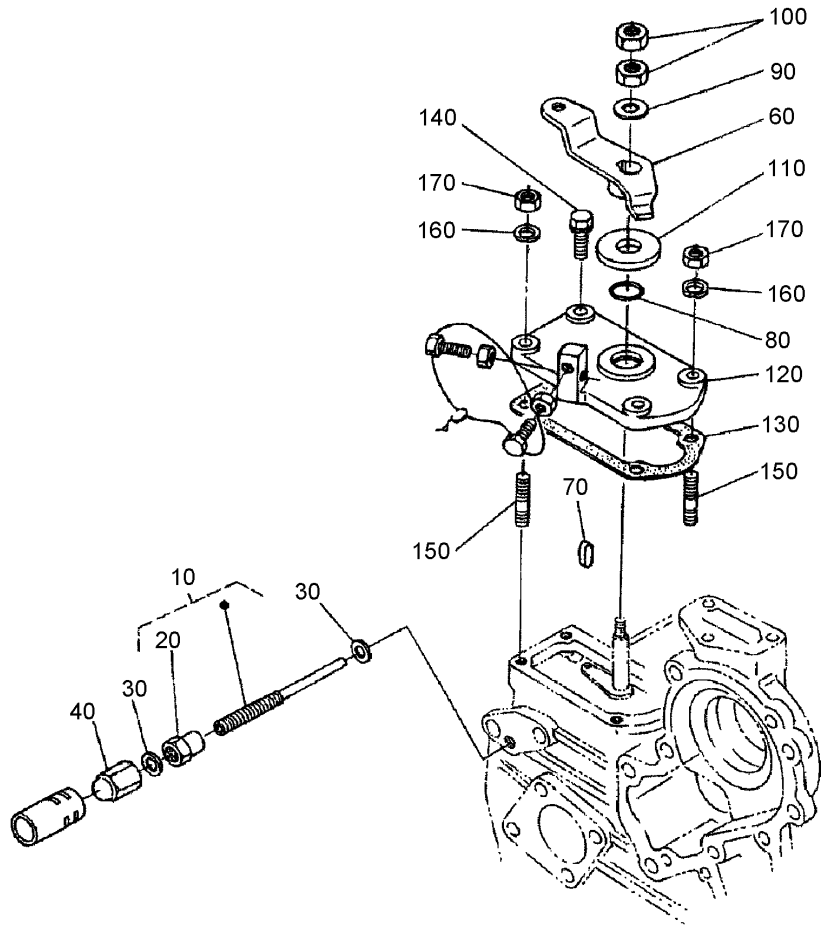
### Injection Pump (Component Part) Assembly

Ref	Part No.	Qty.	Description
10	100-9201	1	Injection Pump ASM
20	98-7619	4	Plunger-Pump
30	98-7620	4	Valve-Delivery
40	98-7621	4	Spring-Valve, Delivery
50	98-7622	4	Gasket-Valve, Delivery
60	98-7623	4	Holder-Valve, Delivery
70	98-7624	2	Lock Plate ASM
80	98-7625	4	Tappet ASM
90	98-7626	4	Pin-Guide, Tappet
100	98-7627	2	Plate
110	98-7628	4	Spring-Plunger
120	98-7629	4	Seat-Spring, Upper
130	98-7630	4	Seat-Spring, Lower
140	98-7631	4	Shim
150	98-7632	1	Rack-Control
160	98-7634	4	Sleeve-Control
170	98-7635	1	Screw
180	98-7636	2	Gasket
190	98-7637	4	O-Ring

### Governor Assembly

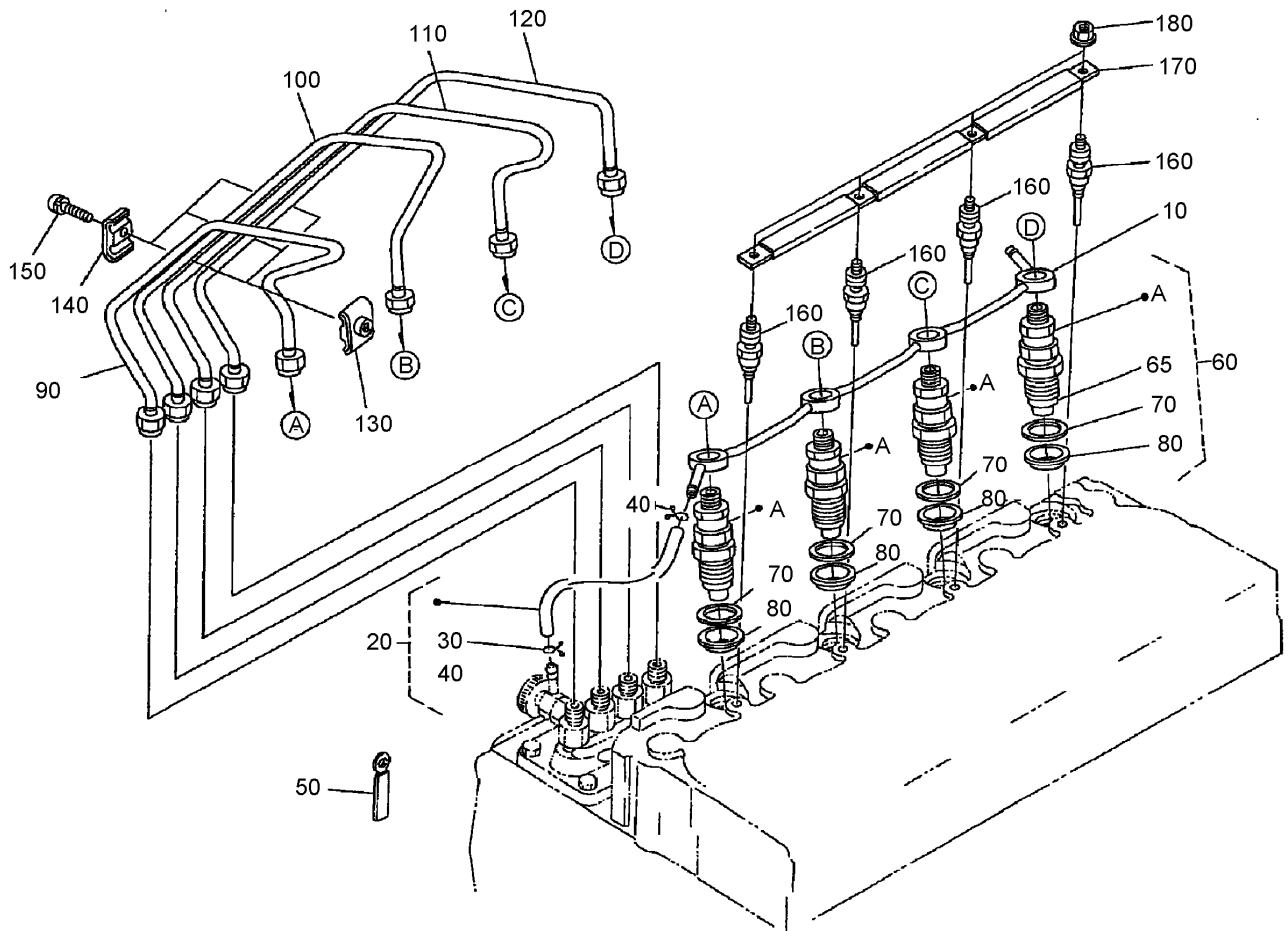
Ref	Part No.	Qty.	Description
10	98-7638	1	Lever-Governor
20	100-9204	1	Lever-Fork
40	100-9206	1	Lever-Fork
50	107-0120	1	Shaft-Lever, Fork
60	107-0116	1	Bolt-Flange
70	98-7699	1	Washer-Spring
80	98-7643	1	Holder-Lever, Fork
90	98-7644	1	Bolt
100	108-7085	2	Bolt-Flange
110	108-7086	1	Bolt
120	100-9207	1	Spring-Start
130	100-9208	1	Spring-Governor
140	98-7651	1	Spring-Governor

## Speed Control Plate Assembly

Ref	Part No.	Qty.	Description
10	107-0132	1	Adjustable Bolt ASM
20	98-7653	1	Nut
30	98-7654	2	Gasket
40	98-7655	1	Nut-Cap
60	98-7657	1	Lever-Control, Speed
70	98-7658	1	Key-Feather
80	108-7087	1	O Ring
90	98-7660	1	Washer-Plain
100	98-7661	2	Nut
110	98-7662	1	Collar
120	98-7663	1	Plate-Control, Speed
130	98-7664	1	Gasket
140	98-7568	2	Bolt
150	98-7571	2	Stud
160	98-7699	2	Washer-Spring
170	98-7572	2	Nut

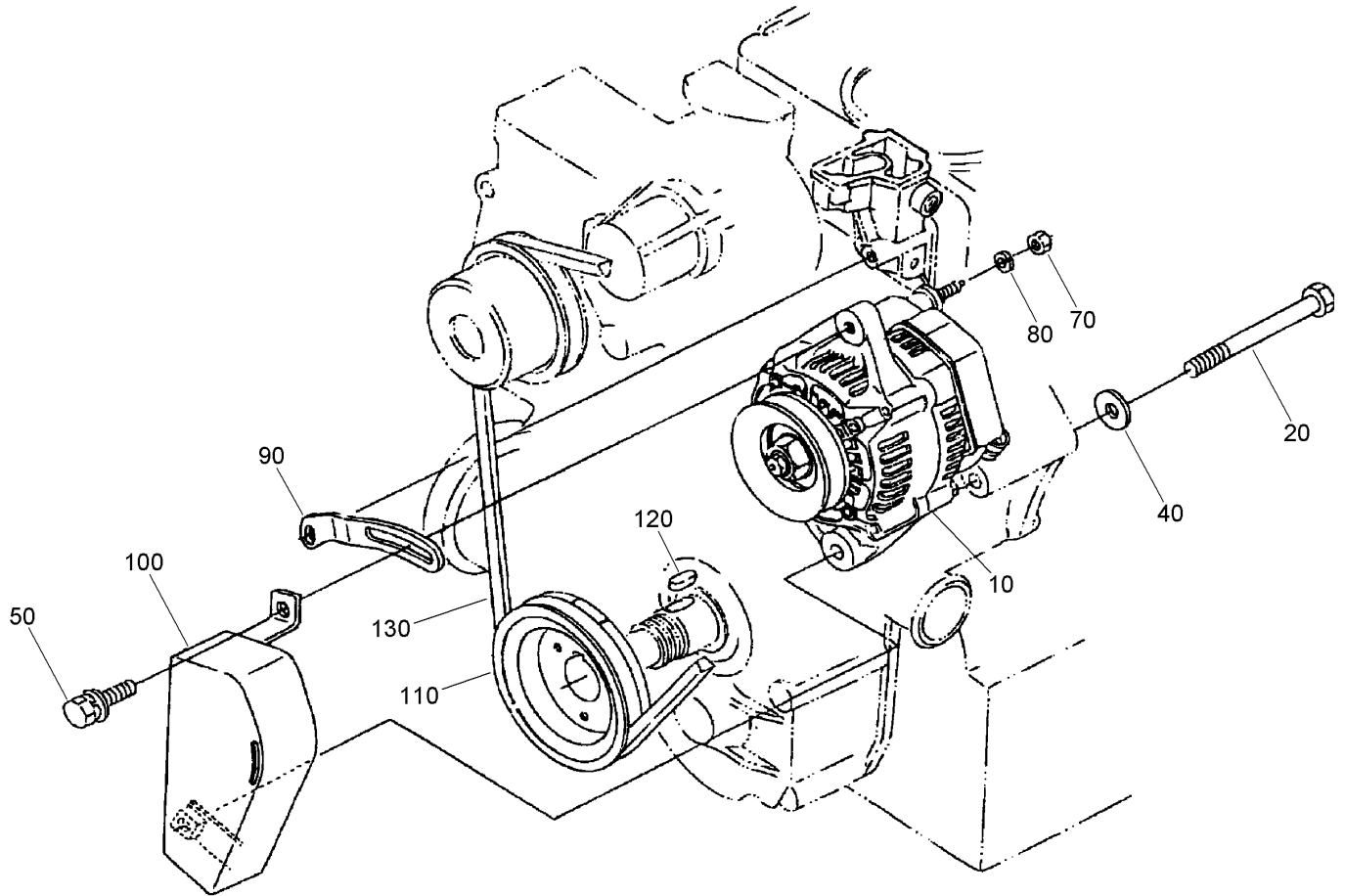
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## Nozzle Holder and Glow Plug Assembly

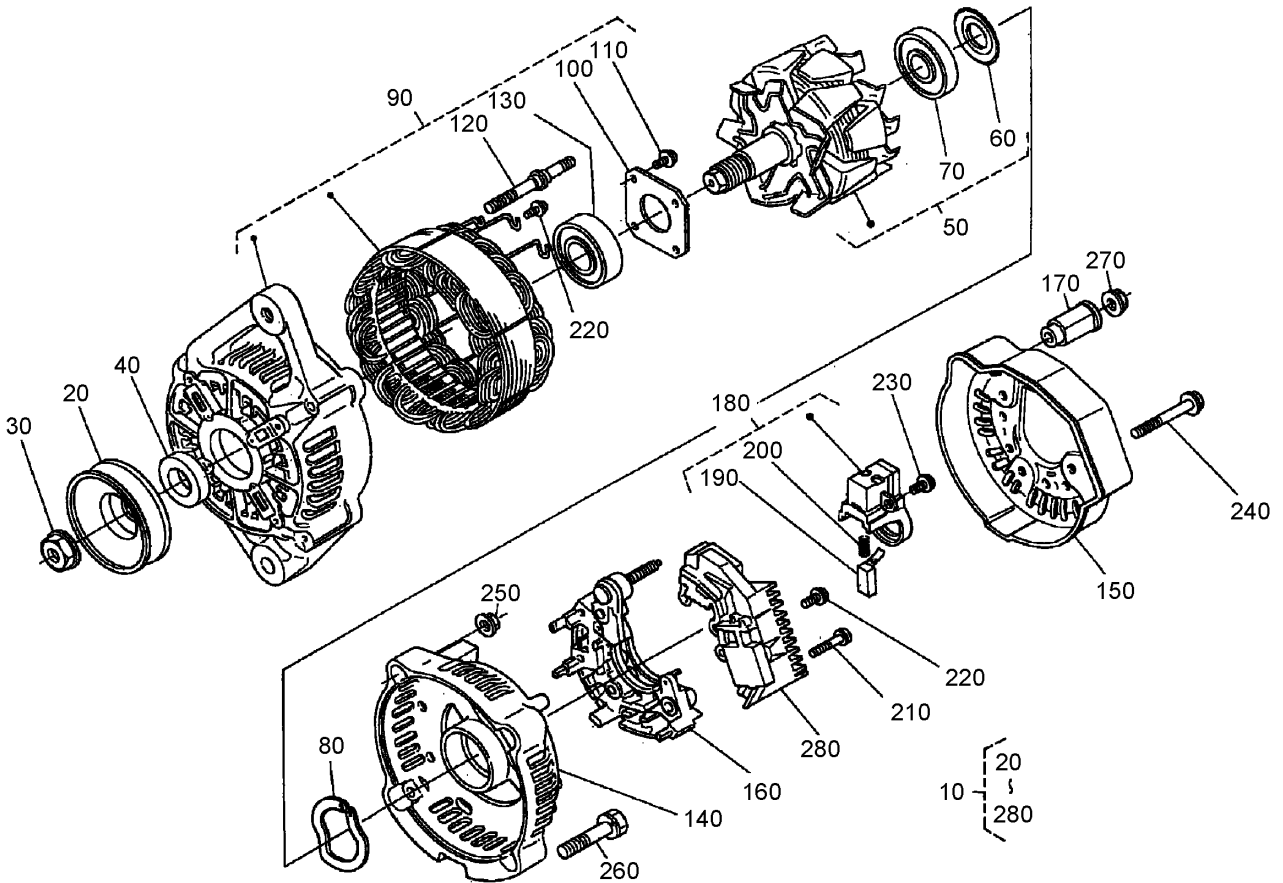
Ref	Part No.	Qty.	Description
10	100-9213	1	Overflow Pipe ASM
20	98-7670	1	Overflow Pipe ASM
30	98-7671	1	Clip-Pipe
40	98-7672	1	Clip-Pipe
50	98-7673	1	Clamp-Cord
60	100-9214	1	Nozzle Holder Kit
65	100-9215	4	Piece-Nozzle
70	98-7676	4	Gasket
80	98-7677	4	Seal-Heat
90	100-9216	1	Pipe-Injection
100	100-9217	1	Pipe-Injection
110	100-9218	1	Pipe-Injection
120	100-9219	1	Pipe-Injection
130	98-7682	3	Clamp-Pipe
140	98-7683	3	Clamp-Pipe
150	98-9364	3	Screw (With Washer)
160	98-7685	4	Plug-Glow
170	98-7686	1	Cord-Plug, Glow
180	99-8377	4	Nut-Flange



### Alternator and Pulley Assembly

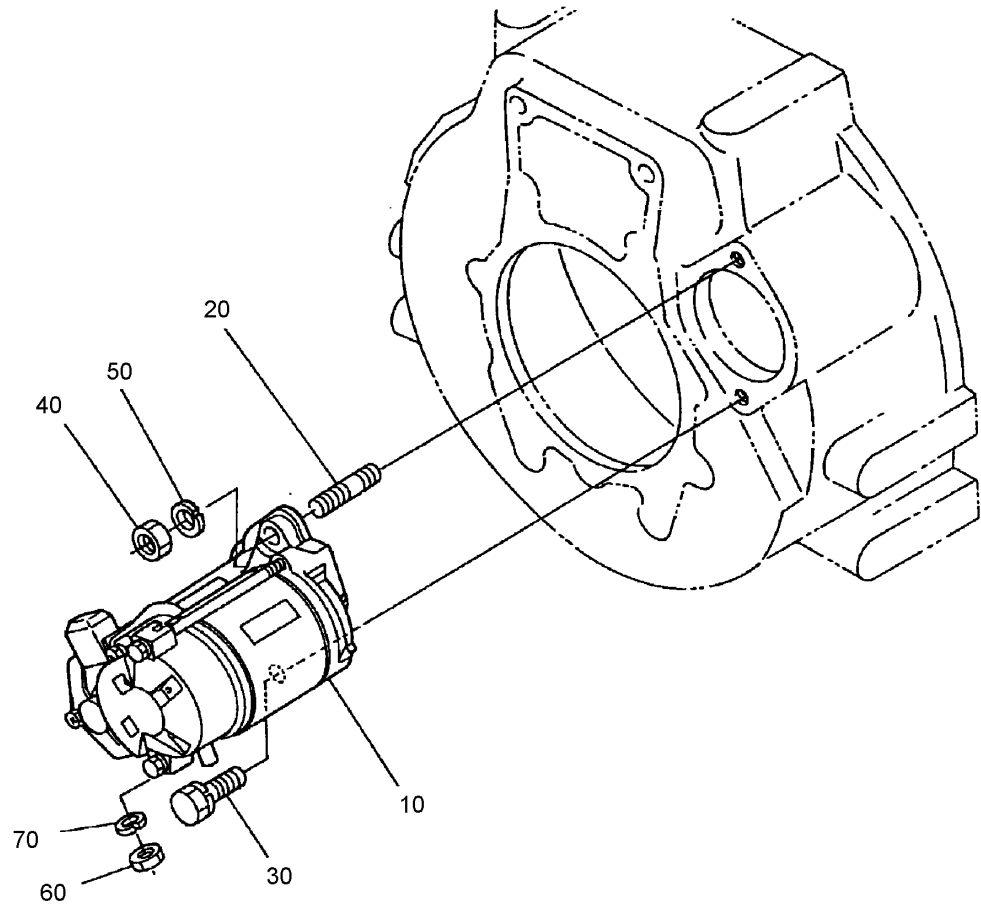
Ref	Part No.	Qty.	Description				
10	98-7693	1	Alternator ASM				
20	98-7695	1	Bolt				
40	98-9366	1	Washer-Plain				
50	108-7088	1	Bolt				
70	98-7572	1	Nut				
80	98-7699	1	Washer-Spring				
90	105-2872	1	Bracket-Alternator				
100	98-7701	1	Cover-Belt				
110	106-2044	1	Pulley-Drive, Fan				
120	98-7451	1	Key-Feather				
130	98-7705	1	V-Belt				



## Alternator (Component Part) Assembly

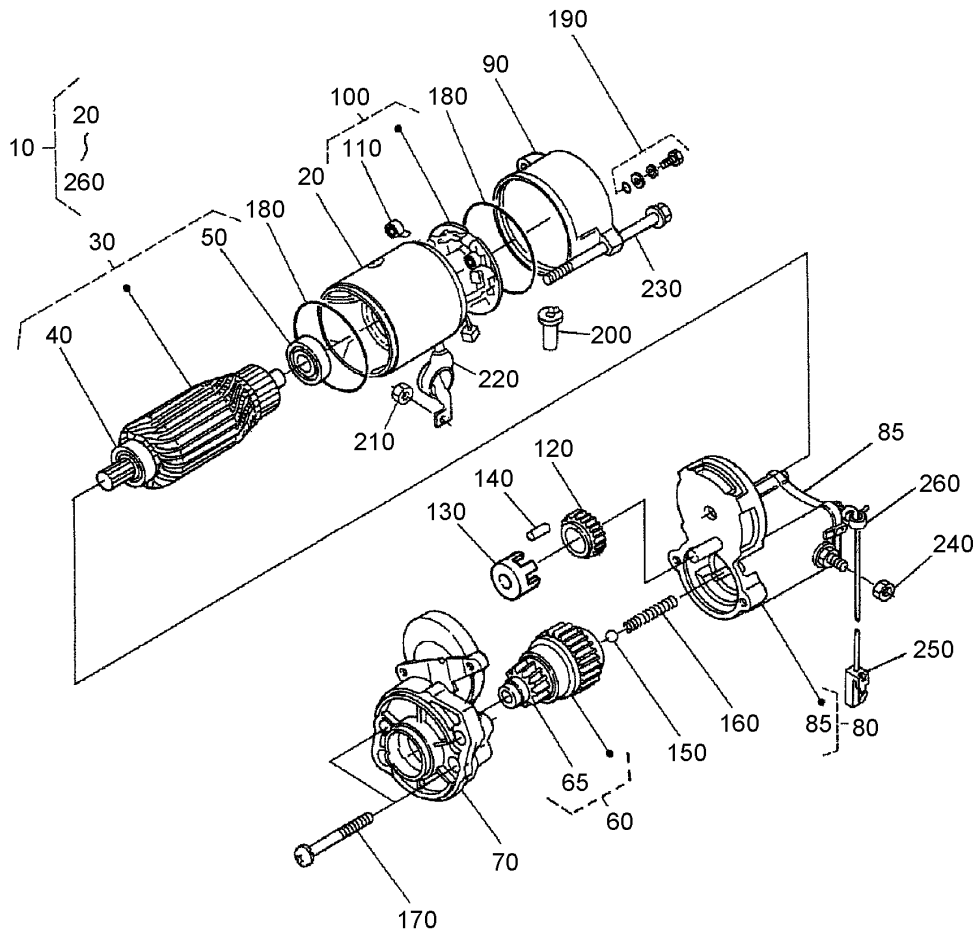
Ref	Part No.	Qty.	Description
10	98-7693	1	Alternator ASM
20	98-7707	1	Pulley-Alternator
30	98-7708	1	Nut
40	98-7709	1	Collar
50	107-0136	1	Rotor
60	98-7711	1	Cover-Bearing
70	107-0138	1	Bearing-Ball
80	98-7713	1	Washer-Thrust
90	107-0139	1	Drive End Frame ASM
100	98-7715	1	Plate-Retainer
110	98-7716	4	Screw-Head, Round
120	98-7717	2	Bolt-Through
130	107-0137	1	Bearing-Ball
140	98-7719	1	Frame-End
150	107-0140	1	Cover-End
160	98-7721	1	Rectifier ASM
170	98-7722	1	Bushing-Insulation
180	107-0141	1	Holder-Brush
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

Ref	Part No.	Qty.	Description
250	98-7730	2	Nut
260	98-7731	2	Bolt
270	98-7732	1	Nut
280	107-9088	1	Regulator ASM



### Starter Assembly

Ref	Part No.	Qty.	Description
10	100-9237	1	Starter ASM
20	98-7735	1	Stud
30	98-7736	1	Bolt
40	98-7737	1	Nut
50	98-7738	1	Washer-Spring
60	98-7739	1	Nut
70	105-2893	1	Washer-Spring

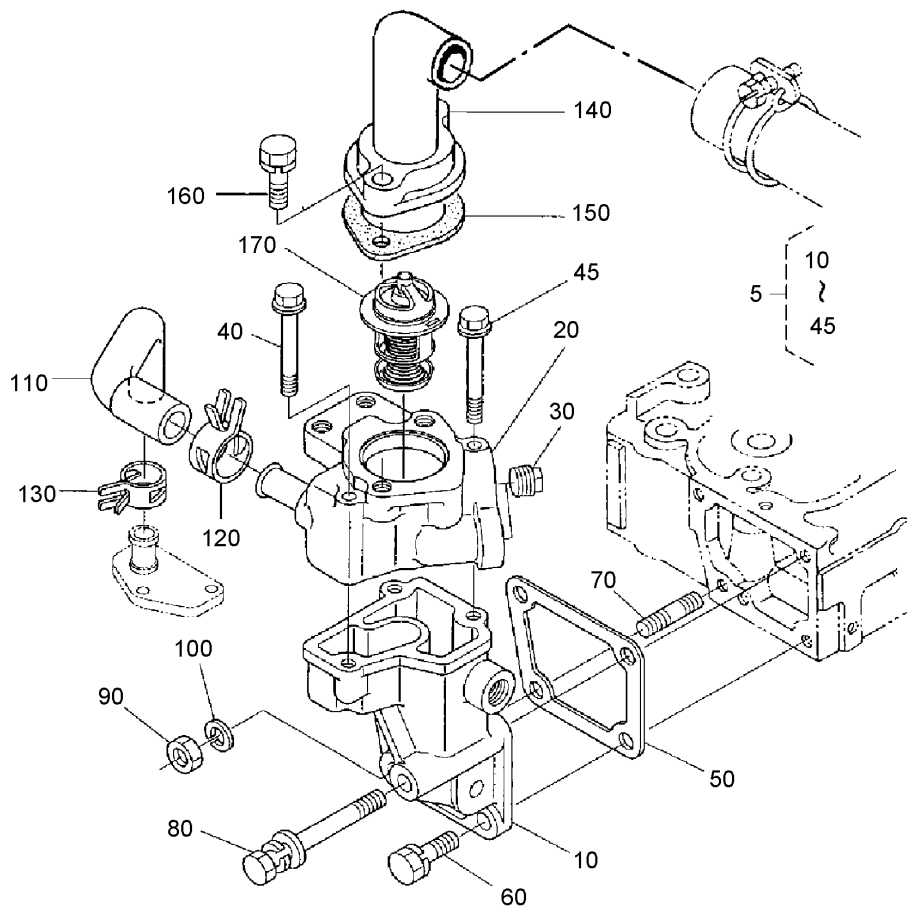


## Starter (Component Part) Assembly

Ref	Part No.	Qty.	Description
10	100-9237	1	Starter ASM
20	104-8608	1	Yoke ASM
30	98-7742	1	Armature ASM
40	98-7744	1	Bearing
50	98-7743	1	Bearing
60	98-7745	1	Clutch-Running, Over
65	105-2887	1	Pinion-Bevel
70	98-7746	1	Frame-End, Drive
80	100-9239	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
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
220	99-8375	1	Cover

Ref	Part No.	Qty.	Description
230	100-9240	2	Bolt
240	99-8376	1	Nut-Hex
250	98-9711	1	Cord-Solenoid, Stop
260	98-9712	1	Band-Cover

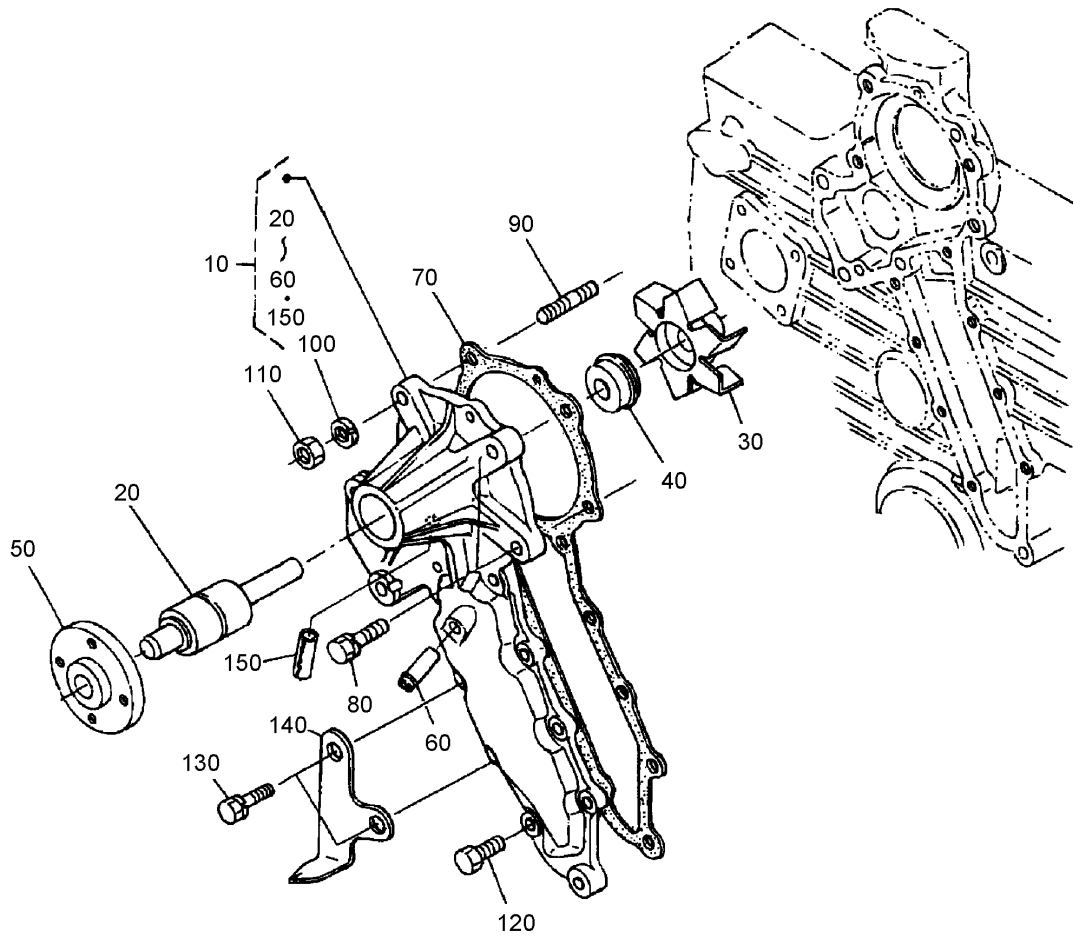




## Water Flange and Thermostat Assembly

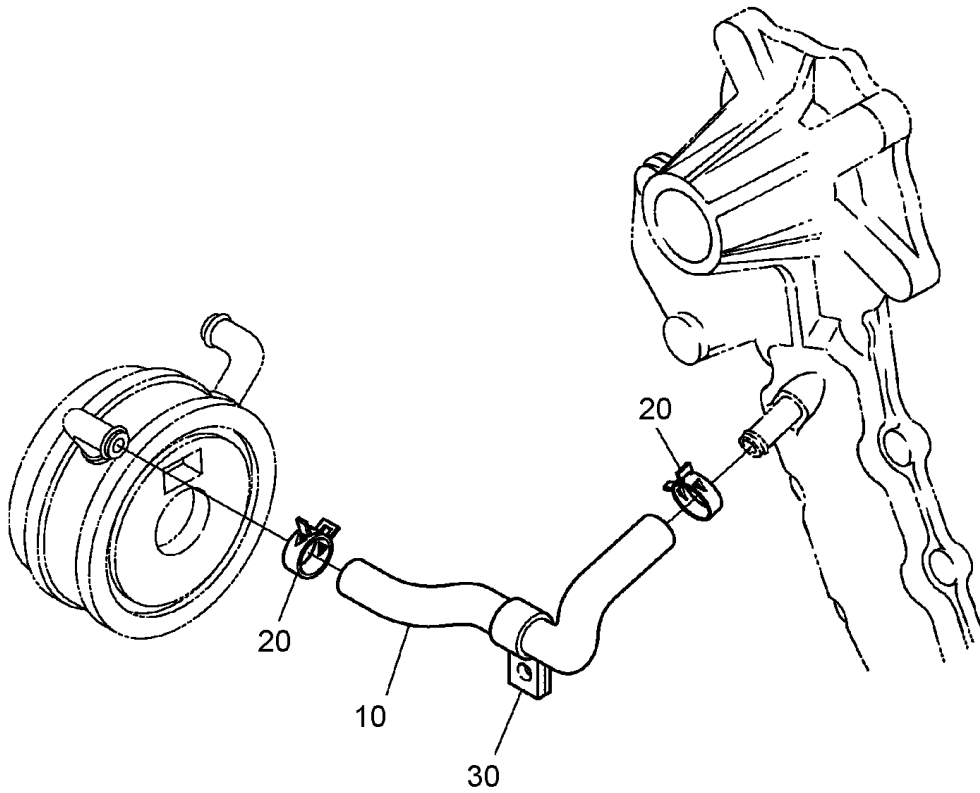
Ref	Part No.	Qty.	Description
5	105-4578	1	Water Flange ASM
10	107-0143	1	Flange-Water
20	107-0144	1	Flange-Water
30	105-2874	2	Plug
40	105-2875	3	Bolt-Flange
45	107-0117	1	Bolt-Flange
50	105-2876	1	Gasket-Flange, Water
60	98-7610	2	Bolt
70	100-1558	1	Stud-Manifold, Exhaust
80	107-0115	1	Bolt
90	98-7534	1	Nut
100	105-2893	1	Washer-Spring
110	105-2878	1	Pipe-Return, Water
120	98-9714	1	Clamp-Hose
130	105-2879	1	Clamp-Hose
140	100-9244	1	Cover-Thermostat
150	105-3748	1	Gasket-Thermostat
160	98-7777	2	Bolt
170	105-2881	1	Thermostat ASM

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## Water Pump Assembly

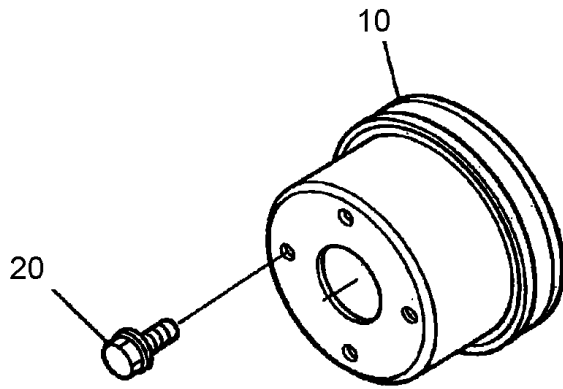
Ref	Part No.	Qty.	Description				
10	107-0129	1	Water Pump ASM				
20	98-7780	1	Bearing-Ball				
30	107-0130	1	Impeller-Pump, Water				
40	105-2882	1	Mechanical Seal ASM				
50	108-7089	1	Flange-Shaft, Water Pump				
60	98-9580	1	Pipe-Return, Water				
70	98-7784	1	Gasket-Pump, Water				
80	98-7439	2	Bolt				
90	108-7090	2	Stud				
100	105-2893	2	Washer-Spring				
110	98-7534	2	Nut				
120	98-7605	6	Bolt				
130	98-7568	2	Bolt				
140	100-9246	1	Indicator-Timing				
150	107-0131	1	Pin-Spring				



### Water Pipe Assembly

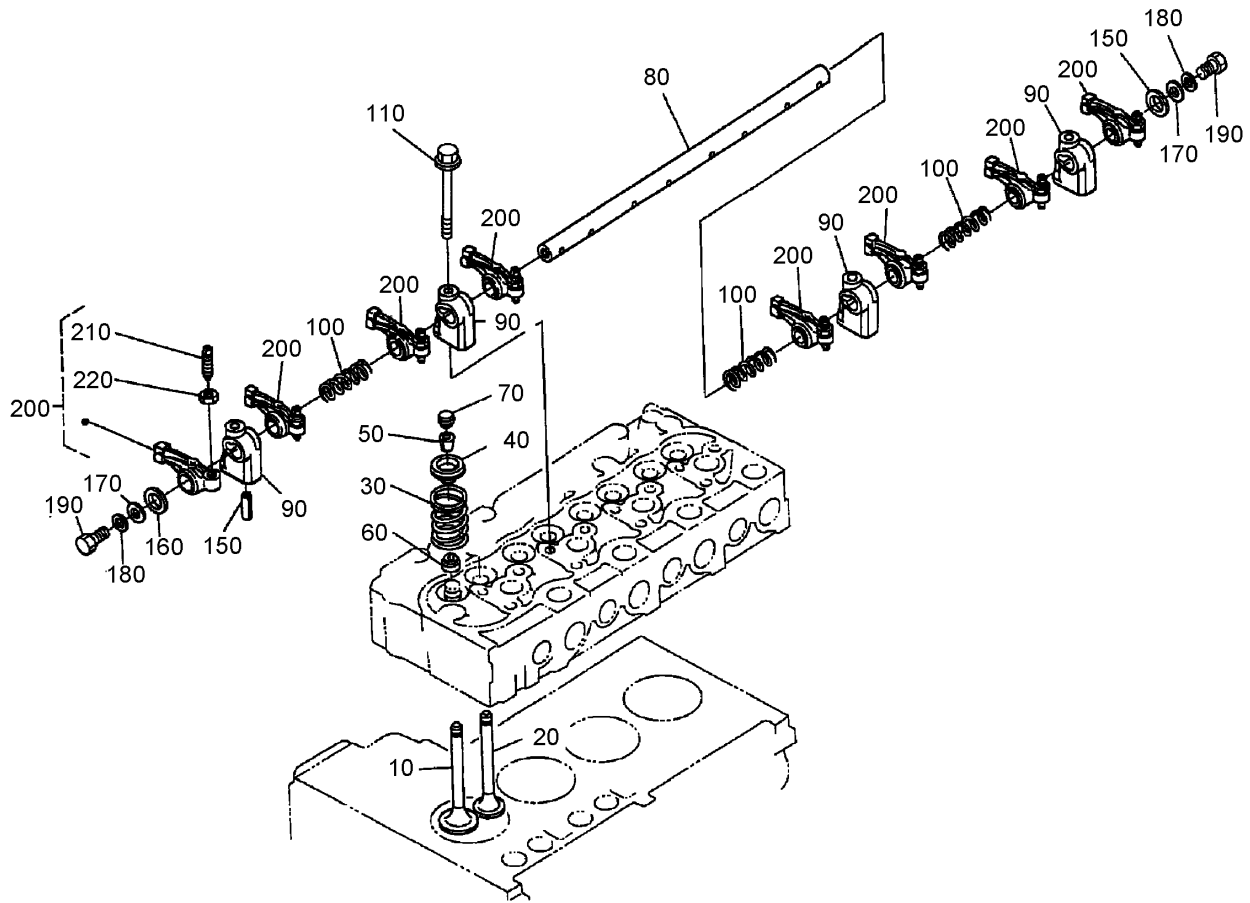
Ref	Part No.	Qty.	Description
10	107-0124	1	Pipe-Cooler, Oil
20	98-9579	2	Band-Pipe
30	107-0123	1	Clamp-Cord

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### Fan Assembly

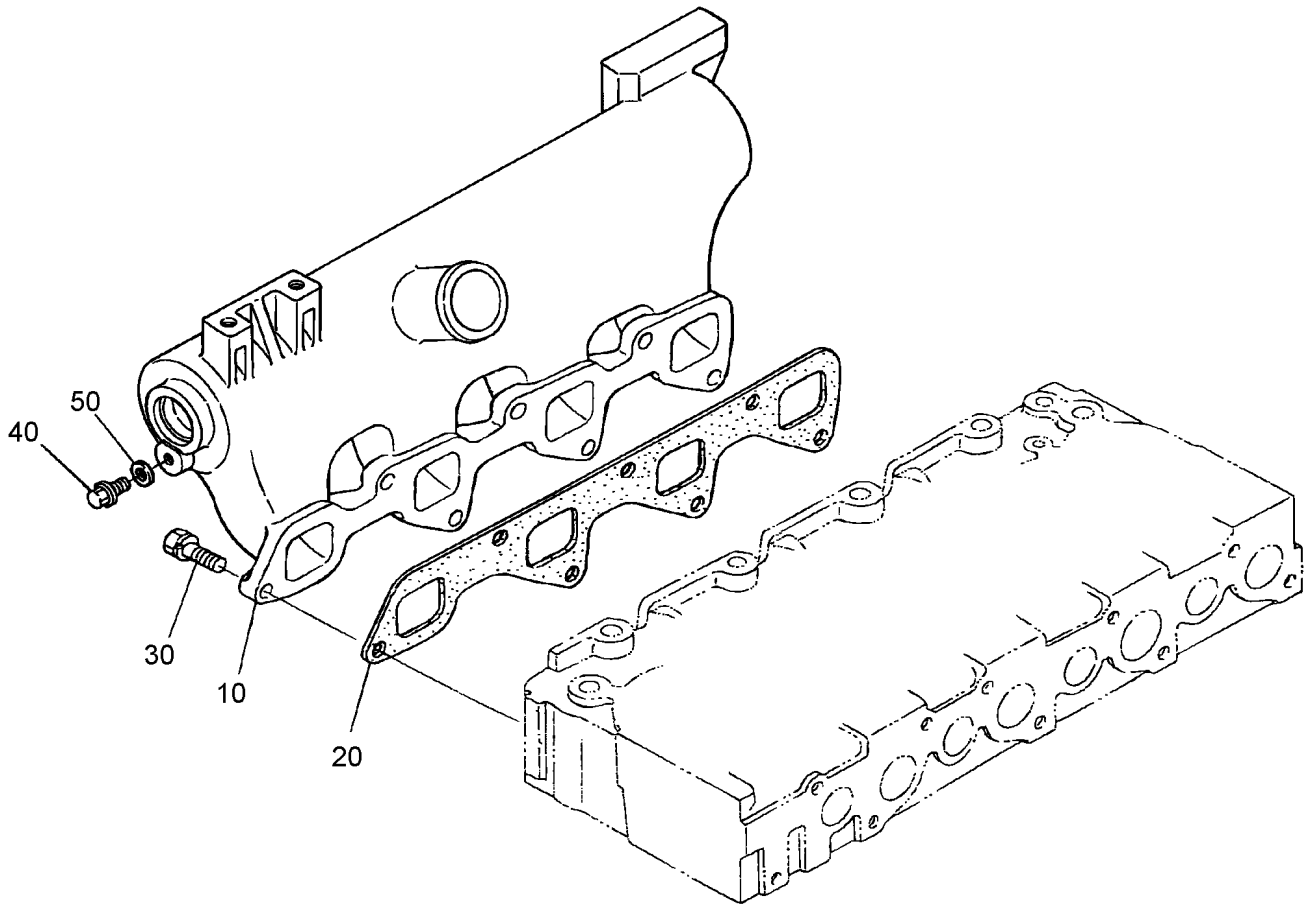
Ref	Part No.	Qty.	Description
10	98-7702	1	Pulley-Fan
20	107-4317	4	Bolt-Flange



## Valve and Rocker Arm Assembly

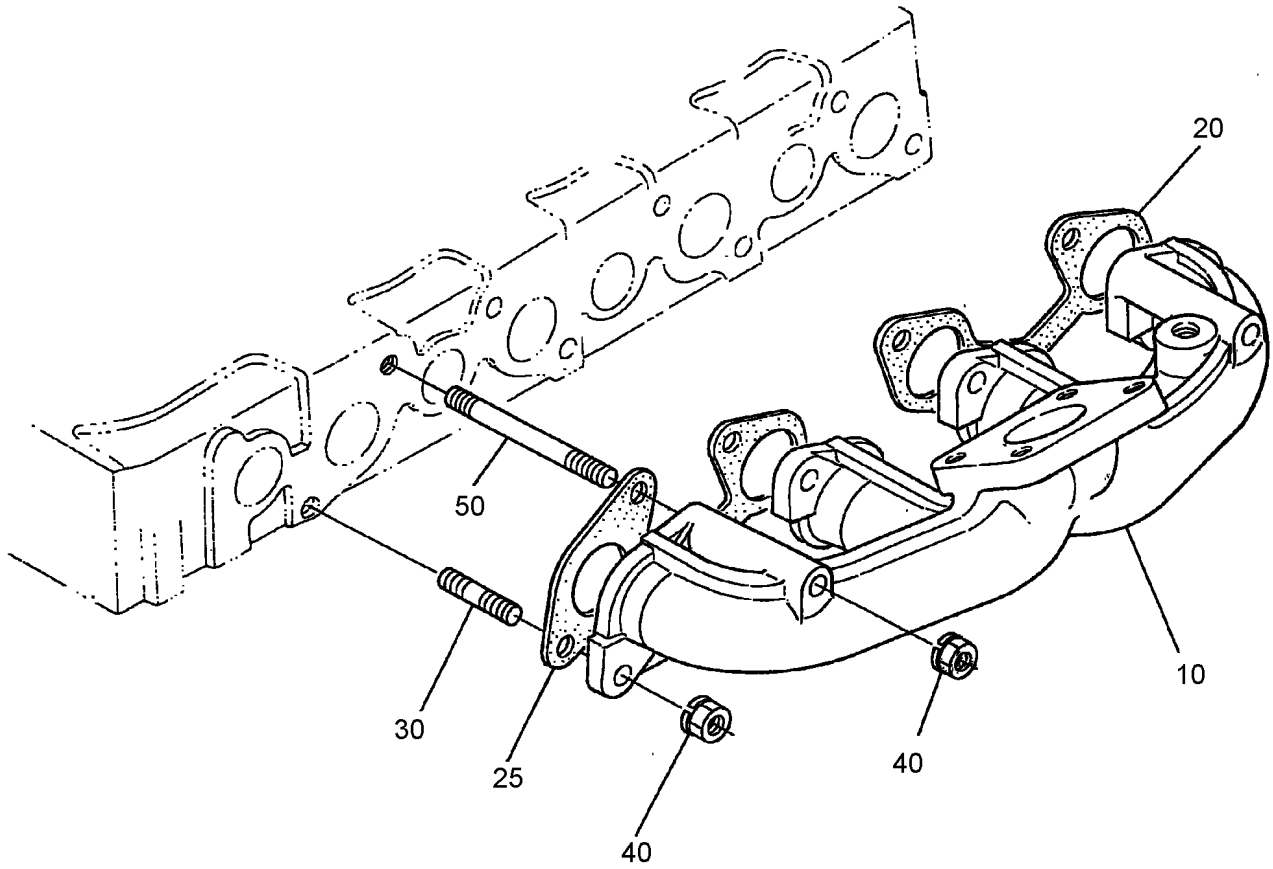
Ref	Part No.	Qty.	Description
10	98-7791	4	Valve-Inlet
20	100-9281	4	Valve-Exhaust
30	98-7793	8	Spring-Valve
40	98-7794	8	Retainer-Spring, Valve
50	98-7795	8	Collet-Spring, Valve
60	98-7796	8	Seal-Stem, Valve
70	98-7797	8	Cap-Valve
80	107-0134	1	Shaft-Arm, Rocker
90	98-7800	4	Bracket-Arm, Rocker
100	98-7807	3	Spring-Arm, Rocker
110	108-7091	4	Bolt-Flange
150	98-7805	1	Pin-Spring
160	98-7806	2	Washer
170	98-7660	2	Washer-Plain
180	105-2893	4	Washer-Spring
190	98-7884	2	Bolt
200	98-7809	8	Rocker Arm ASM
210	98-7810	8	Screw-Adjusting
220	98-7811	8	Nut

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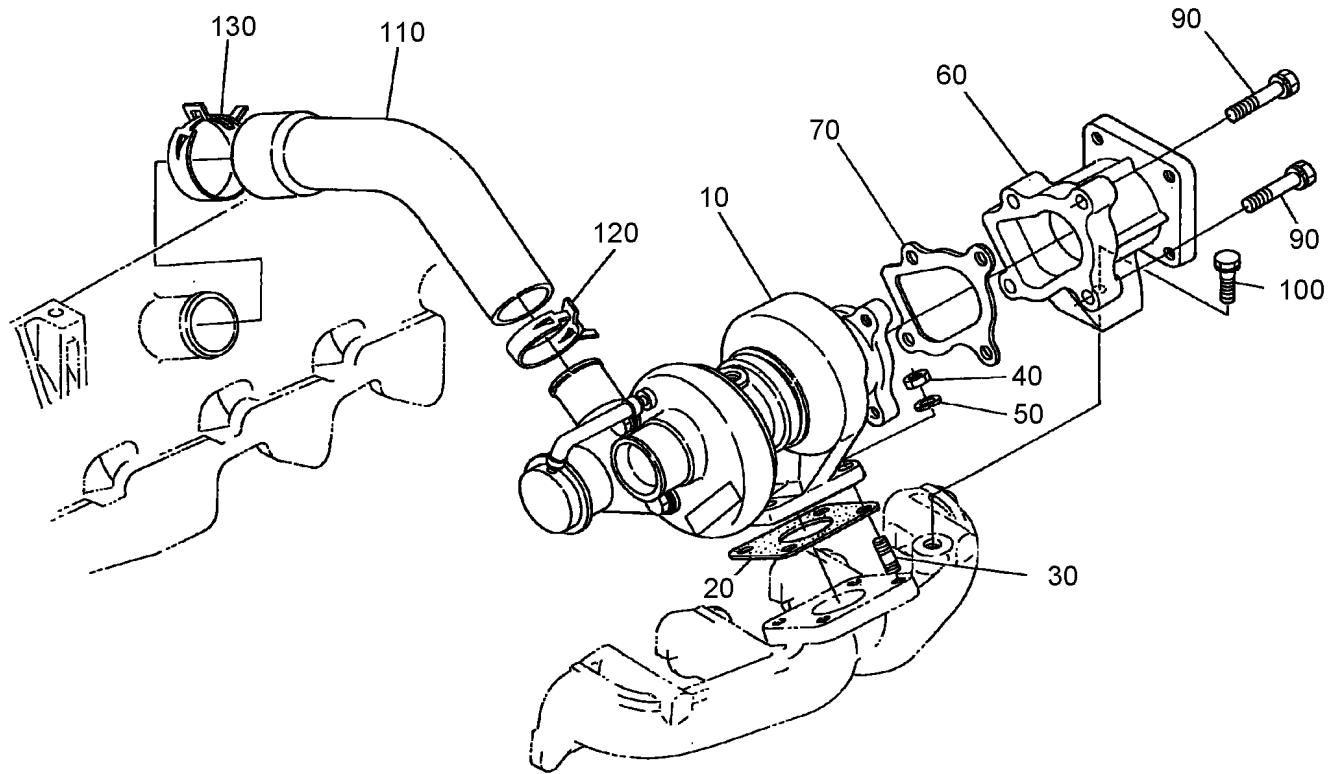
### Inlet Manifold Assembly

Ref	Part No.	Qty.	Description				
10	100-9283	1	Inlet-Manifold				
20	100-9284	1	Gasket-Manifold, Intake				
30	98-7610	7	Bolt				
40	107-4317	1	Bolt-Flange				
50	98-7654	1	Gasket				



### Exhaust Manifold Assembly

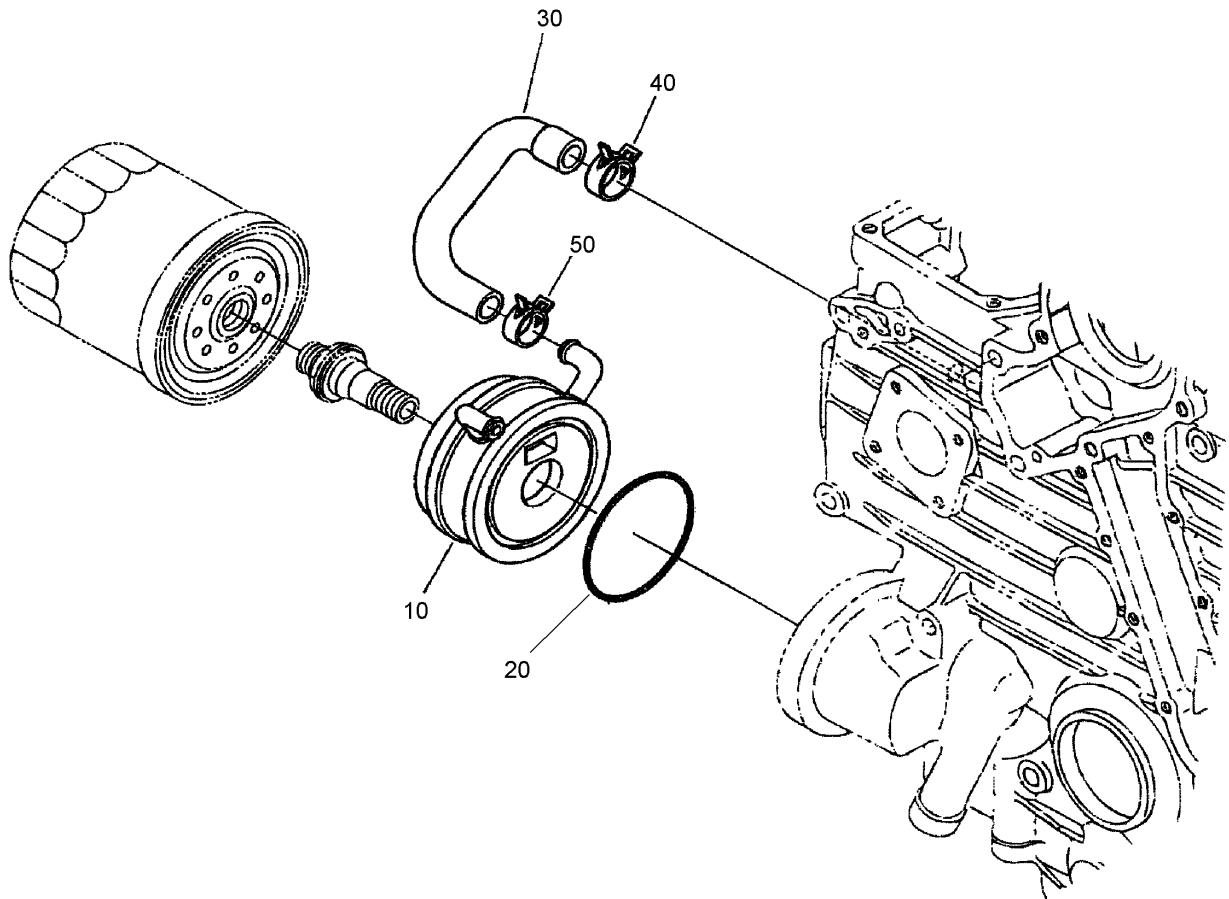
Ref	Part No.	Qty.	Description
10	108-7092	1	Manifold-Exhaust
20	98-7802	1	Gasket
25	98-7803	1	Gasket
30	100-1558	6	Stud-Manifold, Exhaust
40	100-9288	8	Nut
50	100-9289	2	Stud



### Turbo Charger Assembly

Ref	Part No.	Qty.	Description
10	108-7093	1	Turbo Charger ASM
20	100-9314	1	Gasket
30	99-8342	4	Stud
40	98-7534	4	Nut
50	105-2893	4	Washer-Spring
60	108-7094	1	Flange-Muffler
70	100-9316	1	Gasket
90	98-7697	4	Bolt
100	100-9230	1	Bolt
110	100-9318	1	Hose-Inlet
120	100-9319	1	Band-Pipe
130	99-8322	1	Band-Pipe

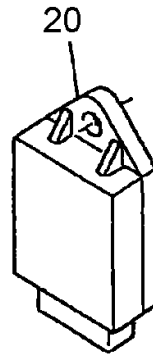
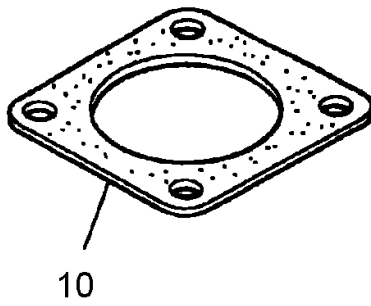




### Oil Cooler Assembly

Ref	Part No.	Qty.	Description
10	107-0125	1	Oil Cooler ASM
20	110-6181	1	O-Ring
30	107-0126	1	Hose-Cooler, Oil
40	105-2879	1	Clamp-Hose
50	98-9579	1	Band-Pipe

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### Muffler Gasket and Glow Controller

Ref	Part No.	Qty.	Description
10	100-9333	1	Gasket-Muffler
20	98-7611	1	Controller-Glow





# Attachments and Accessories

## For 30856 - Groundsmaster 4500-D Traction Unit

Product Name	Model/Part
Blade-Atomic .....	107-0235-03
Blade-Combo .....	108-9026-03
Mechanical Seat Suspension Kit .....	30312
Pneumatic Seat Suspension Kit .....	30313
Seat Suspension Kit .....	30395
Standard Seat Kit .....	30398
Arm Rest Kit .....	30707
Flow Divider Kit .....	30830
27 Inch Rotary Cutting Unit .....	30834
Leaf Mulching Kit .....	30836

# NOTES

