



## Groundsmaster<sup>®</sup> 328-D 4-Wheel Drive Traction Unit

Model No. 30631 - 280000201 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

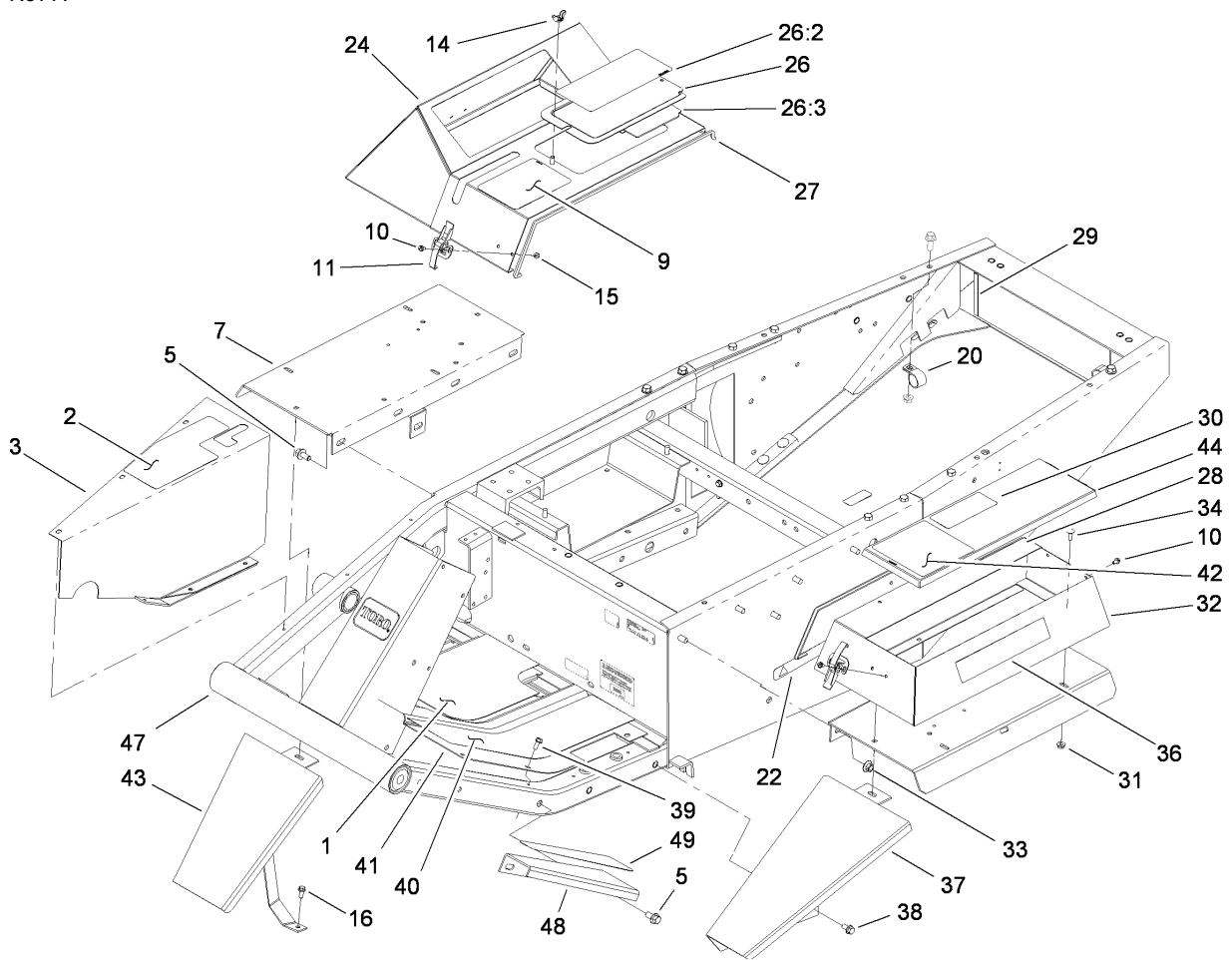
Part descriptions in this catalog may include the following abbreviations.

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

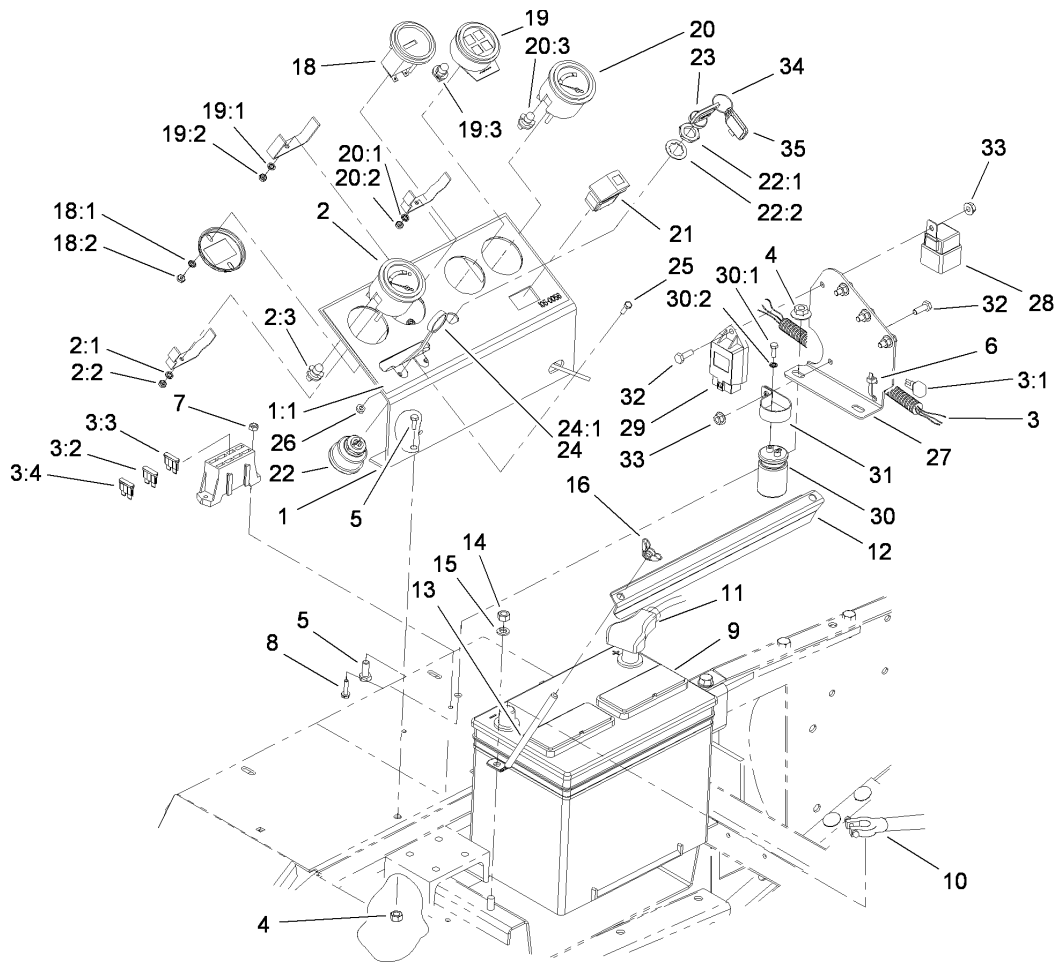


### Frame Assembly

Ref	Part No.	Qty.	Description
1	21-2770	1	Pad-Floor Plate, RH
2	105-7823	1	Decal-Caution
3	21-2660-01	1	Plate-Side
5	3234-12	5	Screw-HHF
7	105-2596-01	2	Fender ASM
9	107-2918	1	Decal-Danger
10	3290-144	9	Screw-SHWH
11	249-21	3	Clamp-Slotted
14	32103-2	1	Nut-Wing
15	3296-2	9	Nut-Lock
16	3234-33	1	Screw-HHF
20	2412-39	2	R-Clamp
22	37-9650	1	Trim-Box, Tool
24	38-4550-03	1	Cover-Instruments
26	105-2565	1	Battery Cover ASM
26:2	107-2927	1	Decal-Starting Instructions
26:3	92-7801	1	Shield-Cover, Battery
27	39-8020	1	Trim-Cover, Instrument
28	114-9600	1	Decal-Low Sulfur
29	43-4300	2	Trim-Frame, Rear
30	93-7822	1	Decal-Refueling
31	32128-33	5	Nut-HF
32	93-3182-03	1	Box-Tool
33	3290-357	6	Nut-HHF, Whiz

Ref	Part No.	Qty.	Description
34	3229-1	5	Screw-CARR
36	72-3560	2	Decal
37	68-8610-01	1	Extension-Fender
38	3234-14	2	Screw-HHF
39	9266714	11	Screw-HWH
40	21-2760	1	Pad-Plate Floor, LH
41	88-0070-01	1	Plate-Floor
42	93-7839	1	Decal-Danger
43	93-7626-01	1	Fender-RH
44	93-3177-03	1	Cover-Box, Tool
47	98-3879	1	Frame ASM
48	93-7410-01	1	Panel-Footrest
49	66-3200	1	Tread-Footrest, LH



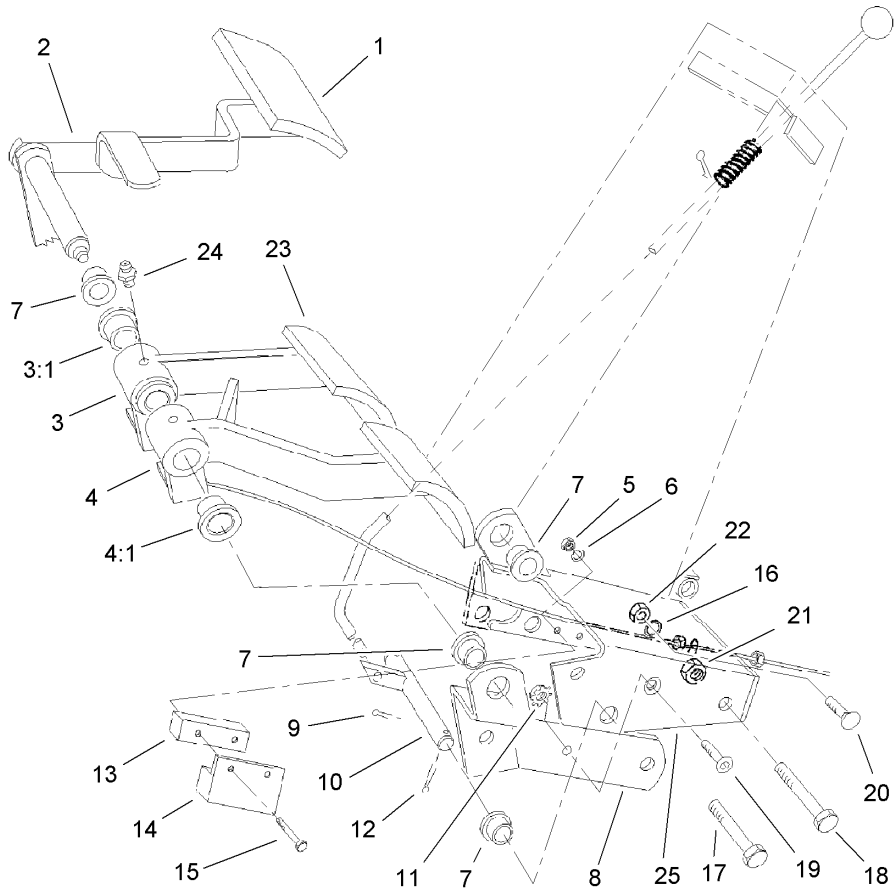


## Control Panel and Battery Assembly

Ref	Part No.	Qty.	Description
1	105-2917	1	Instrument Panel ASM
1:1	105-0056	1	Decal-Panel, Instrument
2	98-9339	1	Gauge-Fuel
2:1	3254-1	3	Washer-Lock, Int
2:2	3217-27	3	Nut-Hex
2:3	105-9265	1	Bulb And Lamp ASM
3	114-9722	1	Harness-Wire
3:1	100-4918	2	Diode
3:2	114241	1	Fuse-7.5 Amp
3:3	109355	1	Fuse-15 Amp
3:4	218-578	1	Fuse-10 Amp
4	32128-44	4	Nut
5	322-3	4	Screw-HH
6	3290-379	2	Tie-Cable
7	3296-2	2	Nut-Lock
8	32105-13	2	Screw-HWH
9	106-5190	1	Battery
10	104-9497	1	Cable-Battery, Negative
11	95-8853	1	Cable-Battery, Positive
12	24-6420-03	1	Holddown-Battery
13	24-6390	2	Stud-Holddown, Battery
14	3217-6	2	Nut-Hex
15	3253-4	2	Washer-Lock
16	32103-2	2	Nut-Wing

Ref	Part No.	Qty.	Description
18	66-2950	1	Gauge-Hourmeter
18:1	3255-20	2	Washer-Lock
18:2	3217-25	2	Nut-Hex
19	112-6561	1	Warning Light ASM
19:1	3254-1	1	Washer-Lock, Int
19:2	3217-27	1	Nut-Hex
19:3	105-9264	4	Bulb And Lamp ASM
20	98-9308	1	Gauge-Temperature
20:1	3254-1	3	Washer-Lock, Int
20:2	3217-27	3	Nut-Hex
20:3	105-9265	1	Bulb And Lamp ASM
21	100-8072	1	Switch
22	104-2541	1	Switch ASM
22:1	218-461	1	Nut-HH
22:2	3254-5	1	Washer-Tooth
23	63-8360	2	Key-Ignition
24	43-3990	1	Control-Throttle
24:1	233-35	1	Knob
25	3290-134	2	Screw
26	3296-12	2	Nut-Lock
27	105-0002-01	1	Bracket-Relay
28	99-7430	4	Relay
29	98-7611	1	Controller-Glow
30	37-2690	1	Capacitor



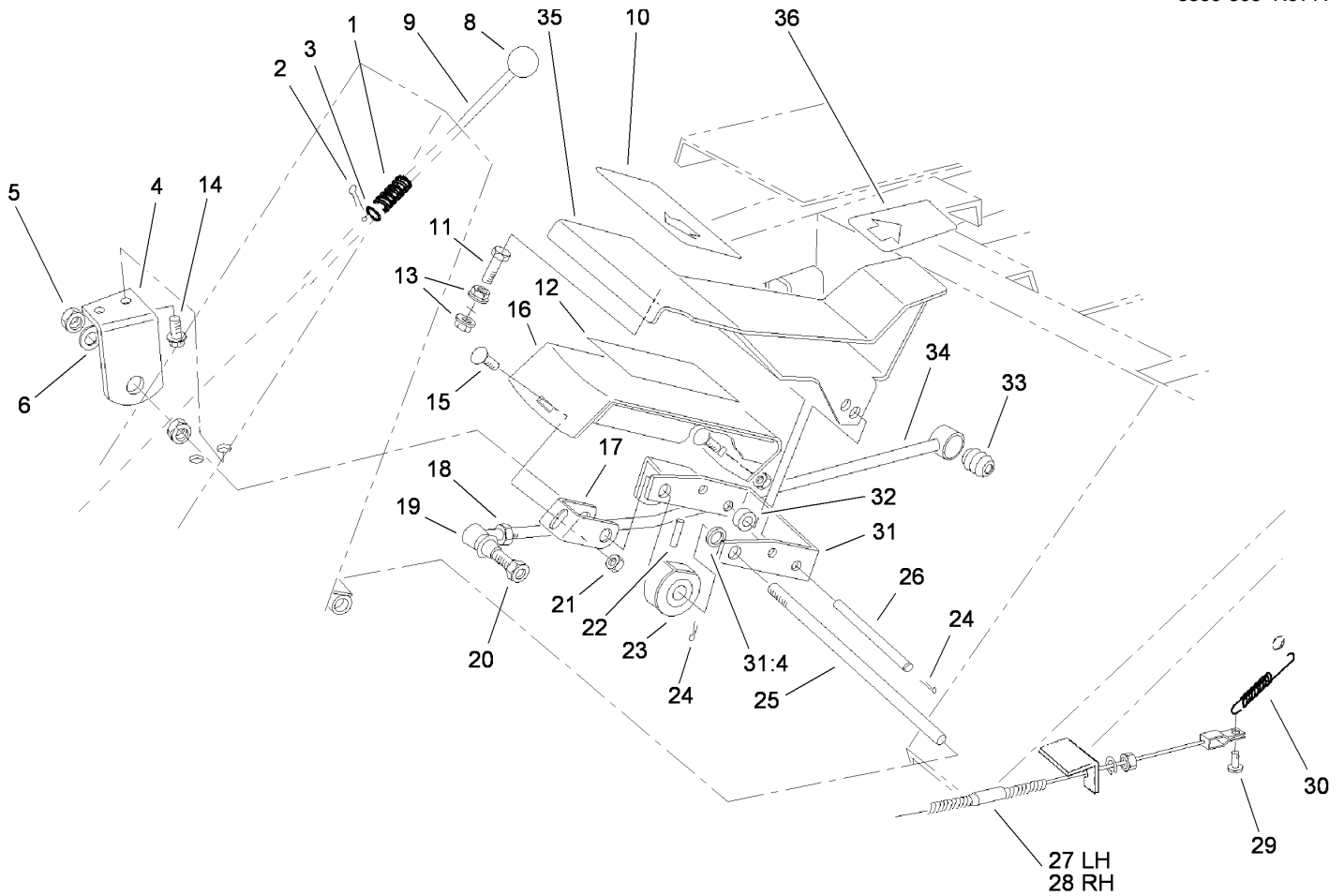


### Brake Pedal Assembly

Ref	Part No.	Qty.	Description
1	93-8742	1	Footpad-Brake
2	27-8550-01	1	Parking Brake Pedal ASM
3	27-7510	1	RH Brake Pedal ASM
3:1	256-10	2	Bushing-Flange
4	27-7490	1	LH Brake Pedal ASM
4:1	256-10	2	Bushing-Flange
5	3296-2	2	Nut-Lock
6	3256-51	4	Washer-Flat
7	256-156	4	Bushing-Flange
8	27-9270-01	1	Pivot Shaft Mount ASM
9	3272-5	2	Pin-Cotter
10	105-0065	1	Parking Brake Shaft ASM
11	32149-2	1	Nut-Keps
12	3272-6	2	Pin-Cotter
13	105-0064	1	Spacer-Switch
14	100-1270	1	Switch-Proximity
15	3290-360	2	Screw-HH
16	3253-21	2	Washer-Lock
17	323-13	1	Screw-HH
18	323-14	1	Screw-HH
19	3274-47	1	Screw-HSFH
20	3231-21	2	Screw-CARR
21	32153-2	2	Nut-Lock, Side
22	3217-7	2	Nut-Hex

Ref	Part No.	Qty.	Description
23	93-8743	2	Footpad-Turn
24	302-5	2	Fitting-Grease
25	105-0066-01	1	Brake Pedal Mount ASM

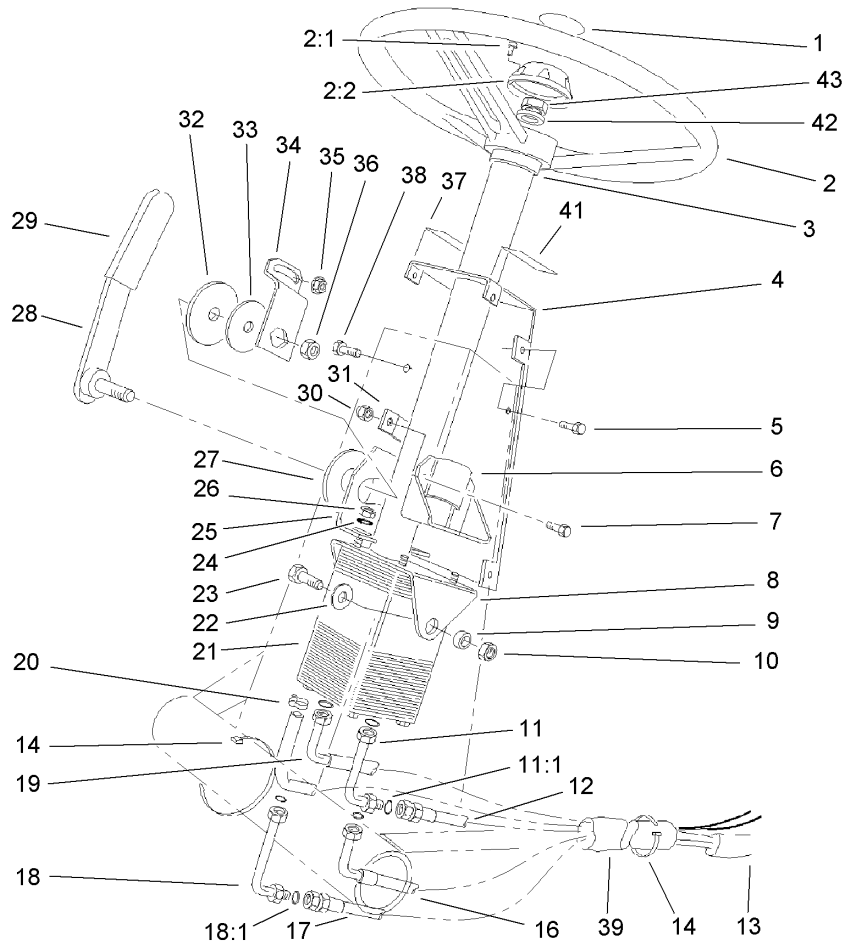




## Traction Pedal Assembly

Ref	Part No.	Qty.	Description
1	95-1821	1	Spring-Compression
2	3272-5	1	Pin-Cotter
3	3256-22	1	Washer-Flat
4	21-2850-01	1	Mount-Pedal, RH
5	3218-5	2	Nut-Jam
6	3256-26	1	Washer-Flat
8	233-17	1	Knob
9	82-8670	1	Rod-Latch, Brake
10	94-3307	1	Pad-Pedal, Traction
11	323-15	1	Screw-HH
12	88-1720	1	Pad-Footrest
13	32128-43	2	Nut-Flange
14	11-0590	2	Screw-HWHTF
15	3230-1	2	Bolt-CARR
16	88-1710-01	1	Footrest ASM
17	88-1680-01	1	Bracket-Footrest
18	3220-5	1	Nut-Jam
19	21-0141-03	1	RH Ball Joint ASM
20	3220-3	2	Nut-HJ
21	32128-20	2	Nut-HF
22	32121-6	1	Pin-Roll, Slotted
23	28-5220	1	Friction Wheel ASM
24	3272-6	4	Pin-Cotter
25	88-1650	1	Shaft-Pedal, Traction

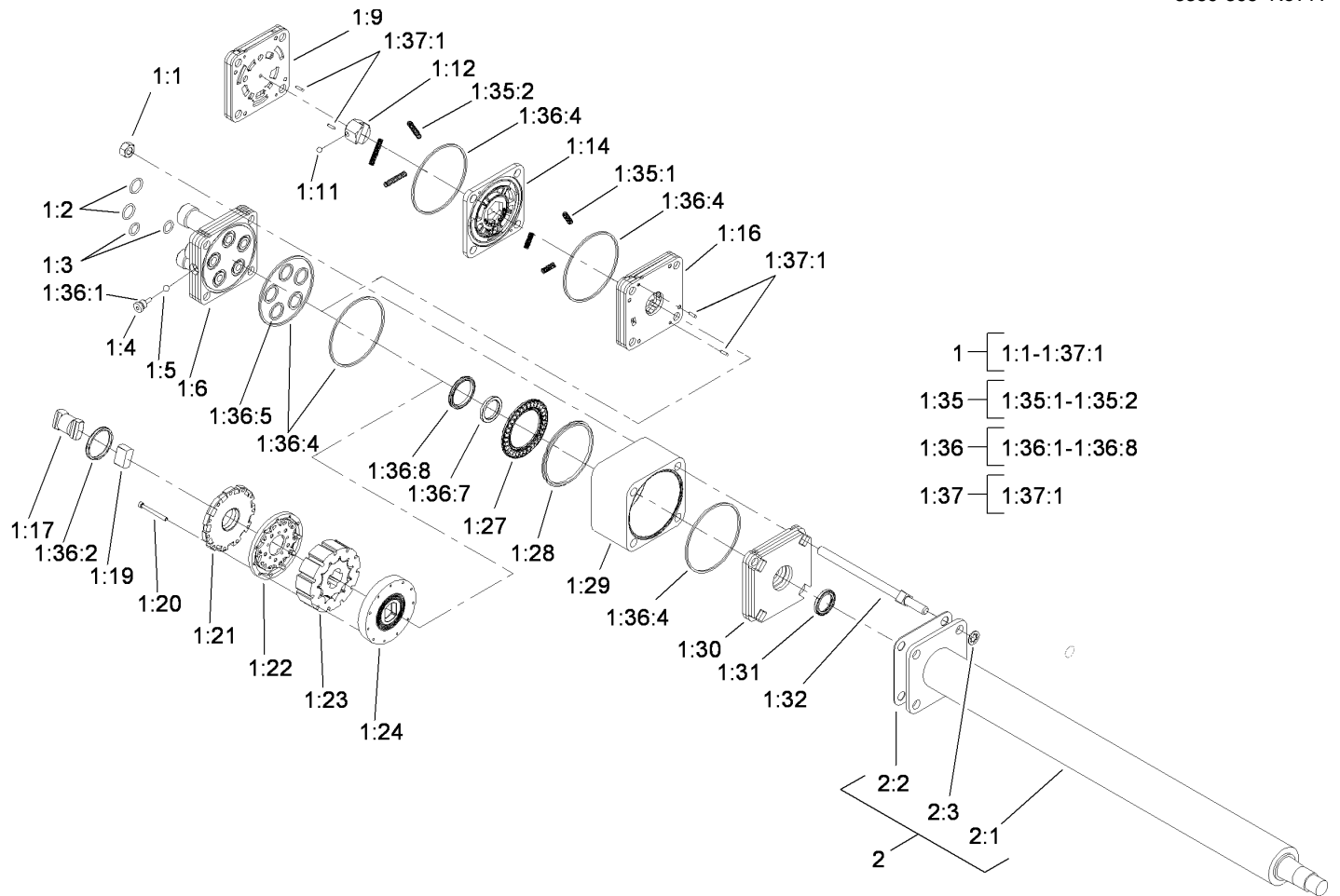
Ref	Part No.	Qty.	Description
26	88-1640	1	Pin-Pedal, Traction
27	108-1380	1	LH Brake Cable ASM
28	108-1379	1	RH Brake Cable ASM
29	283-58	2	Pin-Clevis
30	3-7243	2	Spring-Extension
31	88-1670	1	Pivot Bracket ASM
31:4	256-156	2	Bushing-Flange
32	88-0470	1	Tube-Spacer, Pedal
33	23-2270	1	Bushing-Rubber
34	23-2240-03	1	Pump Control Tube ASM
35	94-3304-01	1	Support-Pedal
36	94-3308	1	Pad-Pedal, Traction



## Power Steering Assembly

Ref	Part No.	Qty.	Description
1	68-5370	1	Decal
2	75-0560	1	Wheel-Steering
2:1	32144-21	1	Screw
2:2	68-5140	1	Cap-Wheel, Steering
3	21-9260	1	Cover-Dust
4	82-8660-01	1	Cover-Tower
5	32144-10	6	Screw-HWH
6	67-8690-03	1	Support-Column
7	322-5	2	Screw-HH
8	77-3120-01	1	Bracket-Mounting, Column
9	80-2960	2	Spacer-Tower
10	3296-39	2	Nut-Lock, NI
11	82-8760	1	Elbow-HYD
11:1	237-30	1	O-Ring
12	63-8970	1	Hose-HYD
13	70-1390	1	Sleeve-Protective
14	3290-379	4	Tie-Cable
16	68-9730	1	Hose-Steering, HYD
17	68-9720	1	Hose-Steering, HYD
18	82-8770	1	Elbow-HYD
18:1	237-22	1	O-Ring
19	63-8980	1	Hose-HYD
20	2412-36	1	Clamp-Hose
21	108-6557	1	Steer Valve And Column ASM

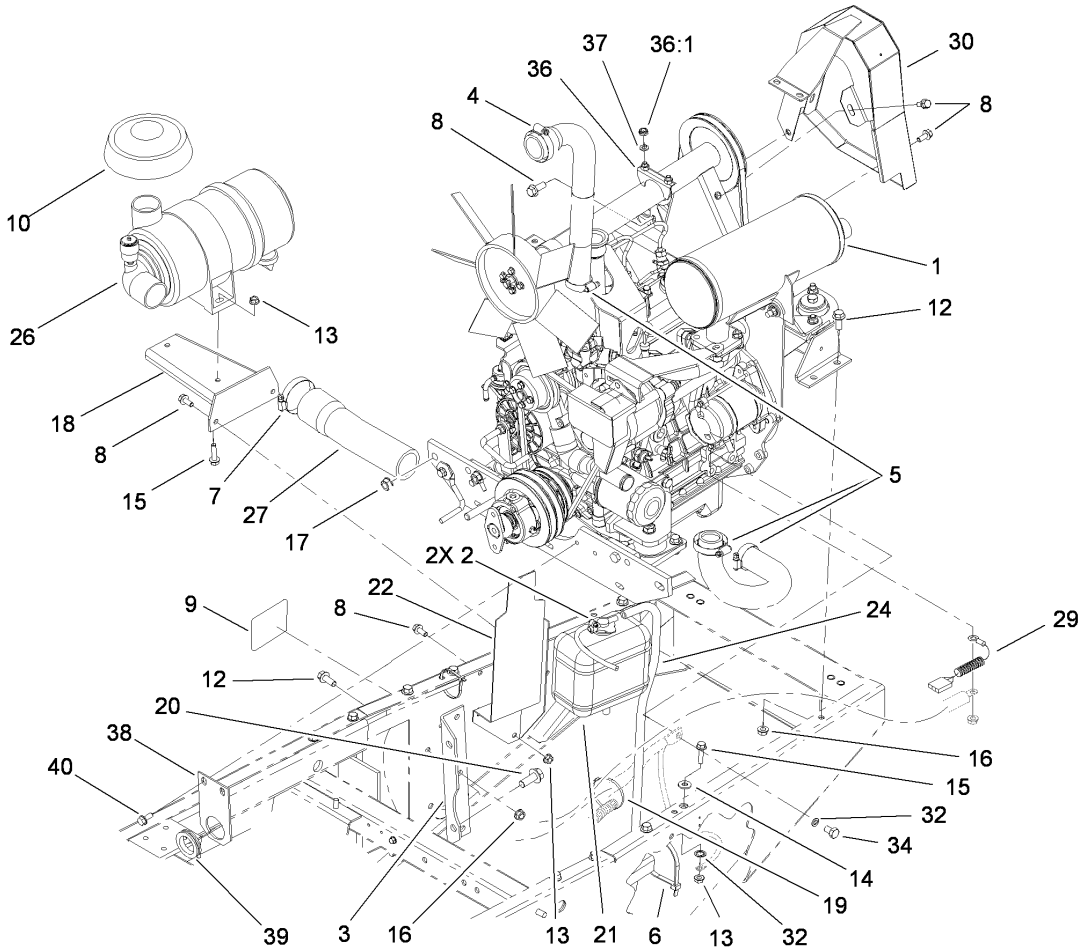
Ref	Part No.	Qty.	Description
22	3256-46	2	Washer-Flat
23	323-6	2	Screw-HH
24	3256-3	4	Washer-Flat
25	80-2940-03	1	Plate-Pivot
26	3296-20	4	Nut-Lock, NI
27	31-0390	1	Disc-Friction
28	108-6092	1	Lever-Steering, Tilt
29	21-1880	1	Grip-Handle
30	3296-29	2	Nut-Lock, NI
31	82-8650	1	Clamp-Column
32	82-9010	1	Disc-Friction
33	80-2930	1	Washer-Flat
34	80-2880	1	Bracket-Tilt
35	32128-20	1	Nut-HF
36	3218-7	1	Nut-Jam
37	82-8940	1	Decal-Steering, Tilt
38	322-4	1	Screw-HH
39	70-1380	1	Sleeve-Protective
41	93-7831	1	Decal-Brake, Parking
42	3256-27	1	Washer-Flat
43	3296-33	1	Nut-Lock, NI



## Steer Valve and Column Assembly No. 108-6557

Ref	Part No.	Qty.	Description
1		1	Power Steering Unit ASM
②1:1		4	Nut-Hex
1:2	237-30	2	O-Ring
1:3	237-22	2	O-Ring
②1:4		1	Plug And O-Ring ASM
②1:5		1	Ball-Steel
②1:6		1	Port-Cover
②1:9		1	Manifold-Port
②1:11		1	Ball-Nylon
②1:12		1	Hex Drive ASM
②1:14		1	Valve And Ring ASM
②1:16		1	Manifold-Isolation
②1:17		1	Link-Drive
②1:19		1	Spacer-Link, Drive
②1:20		11	Screw-HSH
②1:21		1	Cover-Commutator
②1:22		1	Commutator And Ring ASM
②1:23		1	Gerotor ASM
②1:24		1	Plate-Drive
②1:27		1	Bearing
②1:28		1	Spacer-Bearing
②1:29		1	Ring-Metering
②1:30		1	Cover-Upper
1:31	114-2879	1	Seal-Lip

Ref	Part No.	Qty.	Description
1:32	92-7310	4	Bolt-Special
①1:35	66-9970	1	Spring Kit
②1:35:1		3	Gv-Spring
②1:35:2		3	Spring
①1:36	66-9980	1	Seal Kit
②1:36:1		1	O-Ring
②1:36:2		1	Seal
②1:36:4		5	Seal Ring
②1:36:5		5	O-Ring
②1:36:7		1	Seal Spacer
②1:36:8		1	Seal Face
①1:37	66-9990	1	Needle Roller Kit
②1:37:1		9	Needle-Roller
2	108-6560	1	Column ASM
②2:1		1	Column ASM
2:2	114-2881	1	Upper Cover Gasket
2:3	92-7316	4	Nut-Push On

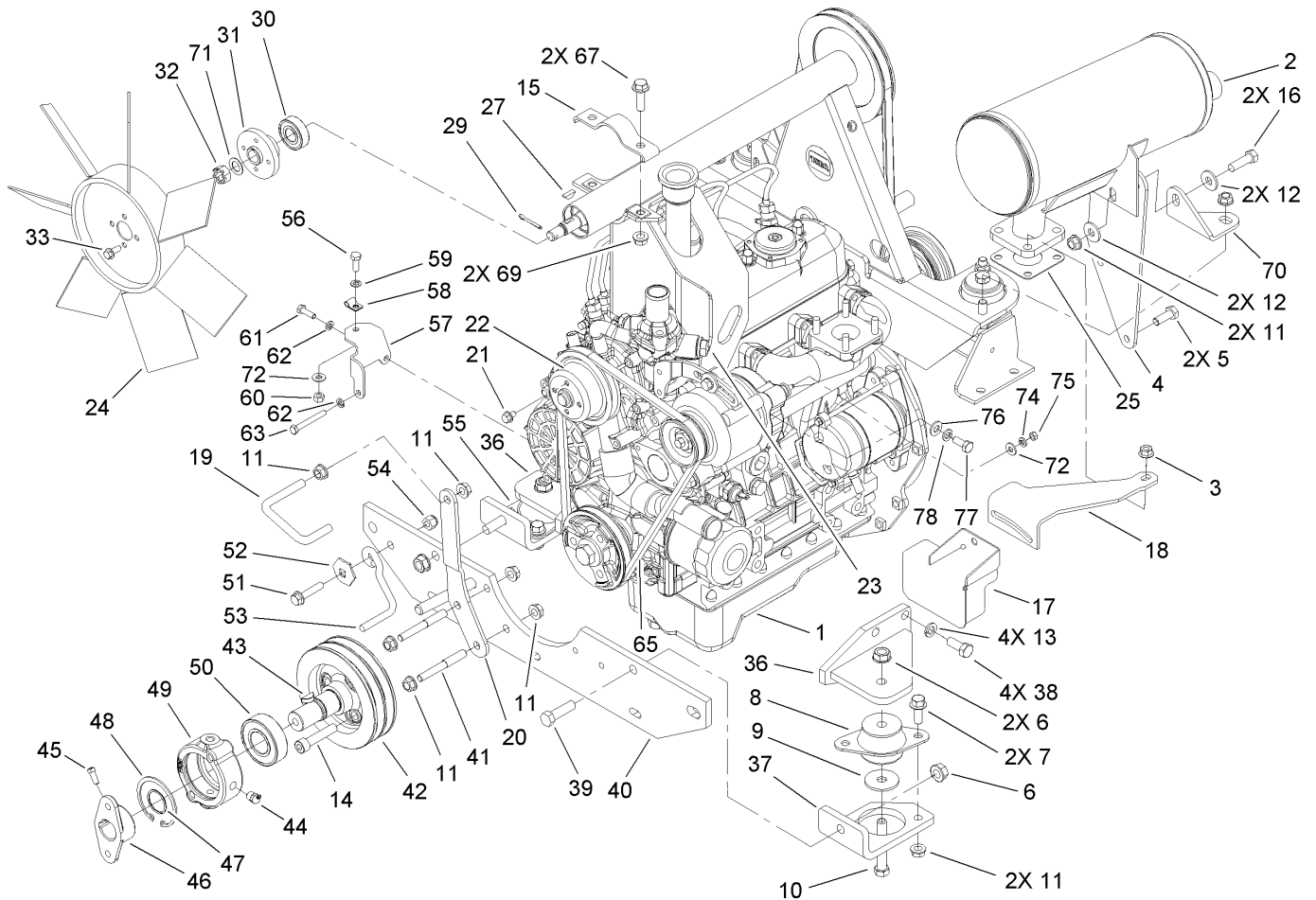


## Engine Installation Assembly

Ref	Part No.	Qty.	Description
1		1	Engine ASM
2	2412-108	2	Clamp-Worm
3	67-8190-01	2	Bracket-Support, Engine
4	2412-3	1	Clamp-Hose
5	2412-111	3	Clamp
6	3334-945	1	Tie-Cable
7	2412-130	2	Clamp-Hose
8	3234-5	9	Screw-HHF
9	93-7275	1	Decal-Fluid, Starting
10	105-2539	1	Cap ASM
12	3234-11	10	Screw-HHF
13	32128-20	6	Nut-HF
14	3256-3	1	Washer-Flat
15	3234-36	3	Screw-HHF
16	3290-357	10	Nut-HHF, Whiz
17	32128-23	2	Nut-HF
18	98-4518-03	1	Bracket-Cleaner, Air
19	3290-378	1	Tie-Cable
20	3234-32	2	Screw-HHF
21	104-9318	1	Bottle-Overflow
22	105-0050-03	1	Reservoir Bracket ASM
24	110-3257	1	Hose-Fuel
26	104-3428	1	Air Cleaner ASM
27	104-3434	1	Hose-Inlet, Air

Ref	Part No.	Qty.	Description
29	99-3441	1	Harness-Wire, Fusible Link
30	105-7807-03	1	Guard-Belt, Fan
32	3254-6	2	Washer-Lock, Internal
34	70-8470	1	Screw-HH
36	2112-6	1	Clamp-Muffler
36:1	3218-2	2	Nut-Jam
37	3253-4	2	Washer-Lock
38	104-3774-03	1	Bracket-Bulkhead
39	240-7	1	Grommet-Rubber
40	32144-11	2	Screw-HWHTF

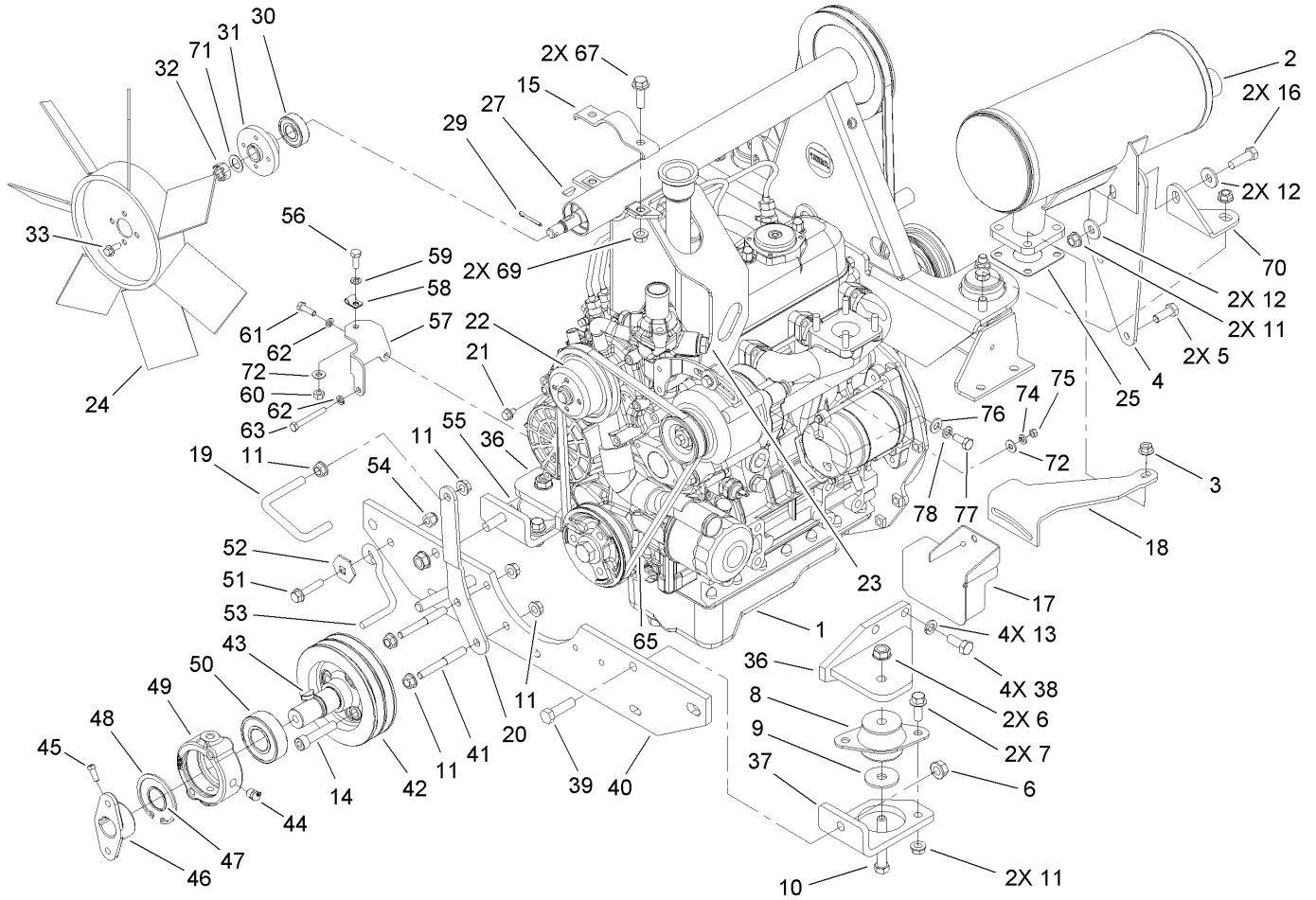




## Engine Mounting and Component Assembly

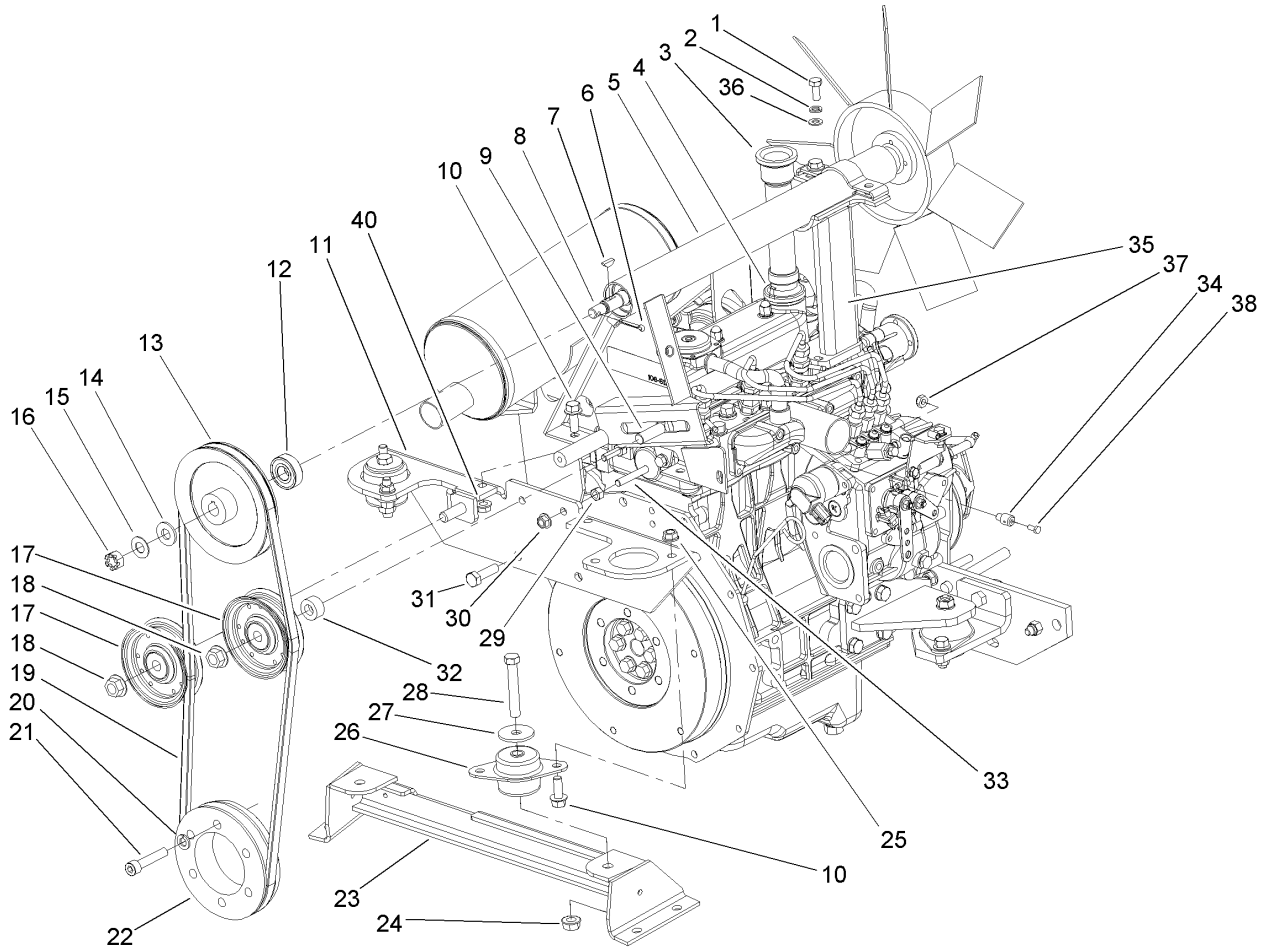
Ref	Part No.	Qty.	Description
1	114-2890	1	Engine ASM
2	106-8069	1	Muffler-Exhaust
3	33004-00	4	Nut-HF
4	105-2523-03	1	Bracket-Muffler
5	33114-016	2	Screw-HH
6	3296-48	6	Nut-Lock, NI
7	3234-11	4	Screw-HHF
8	53-9680	2	Mount-Engine
9	53-9480	2	Washer-Snubber
10	324-11	2	Screw-HH
11	3290-357	12	Nut-HHF, Whiz
12	80-6990	4	Washer-Hardened
13	42-9600	8	Washer-Lock, Spring
14	3274-106	3	Screw-HSH
15	105-2519-03	1	Clamp-Cradle
16	323-44	2	Screw-HH
17	110-9679-03	1	Guard-Alternator
18	105-2556-03	1	Brace-Alternator, Upper
19	105-4276	1	Guide-Belt, PTO
20	105-0052-03	1	Bracket-Guide, Belt
21	81-1280	4	Screw-HHF
22	98-9584	1	Pulley-Fan
23	98-9346	1	Sender-Temperature
24	107-9096	1	Fan-Cooling

Ref	Part No.	Qty.	Description
25	98-9611	1	Gasket
27	3257-30	1	Key-Woodruff
29	3272-16	1	Pin-Cotter
30	38-7820	1	Bearing-Ball
31	104-3408-03	1	Hub-Fan
32	32136-3	1	Nut-SHH
33	3234-33	4	Screw-HHF
36	104-3463-03	2	Front Mount ASM
37	104-3464-03	1	Mount-Frame, Front (LH)
38	43-0090	8	Screw-HH
39	324-6	4	Screw-HH
40	75-9900-01	1	Support-Engine, Front
41	105-0057	2	Stud-Retainer, Belt
42	104-3406-03	1	Pulley-Fan
43	3257-33	1	Key-Woodruff
44	302-10	1	Fitting-Grease
45	3241-5	2	Screw-Set
46	110-5236	1	Hub-Engine
47	32120-69	1	Ring-Snap
48	32120-22	1	Ring-Snap, Internal
49	43-3720	1	Collar-Bearing
50	251-252	1	Bearing
51	3234-18	1	Screw-HHF
52	3290-224	1	Lockwasher-Pyramid



## Engine Mounting and Component Assembly (continued)

Ref	Part No.	Qty.	Description
53	63-1400	1	Rod-Belt
54	3296-39	1	Nut-Lock, NI
55	104-3465-03	1	Mount-Frame, Front (RH)
56	321-4	1	Screw-HH
57	104-3421-03	1	Bracket-Throttle
58	2412-31	1	Clamp-Boden
59	3253-3	1	Washer-Lock
60	3217-5	1	Nut-Hex
61	33113-050	1	Screw-HH
62	48-8020	2	Washer-Spring
63	48-7630	1	Screw
65	98-9676	1	V-Belt
67	3234-24	2	Screw-HHF
69	3296-39	2	Nut-Lock, NI
70	105-2598-03	1	Bracket-Muffler
71	18-9810	1	Washer-Thrust
72	3256-22	2	Washer-Flat
74	43-5930	1	Washer-Spring
75	33013-00	1	Nut-Hex
76	33094-00	1	Washer-Plain
77	92-1374	1	Screw-HH
78	3253-4	1	Washer-Lock

## Engine Pulley System Assembly

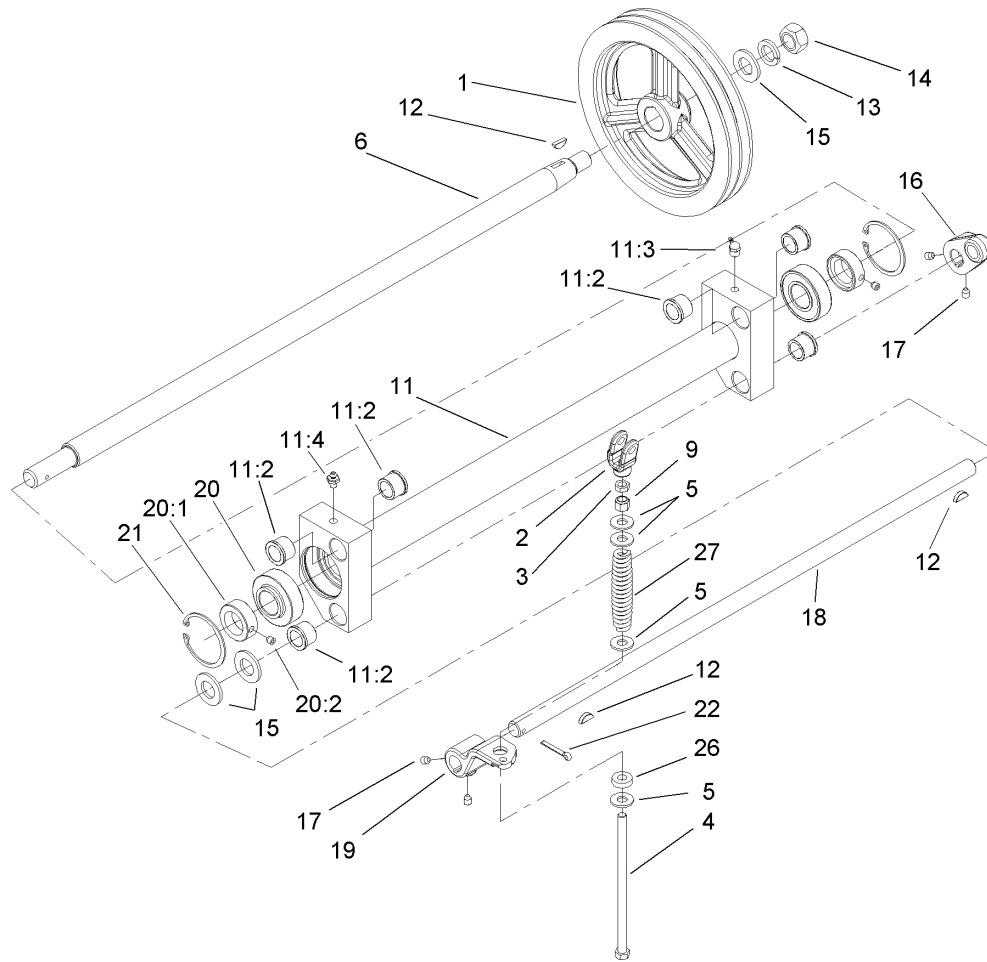
Ref	Part No.	Qty.	Description
1	93-7773	2	Screw-HHF
2	3253-4	2	Washer-Lock
3	105-0087	1	Flange-Filler, Oil
4	98-7430	1	O-Ring
5	106-4399	1	Fan-Support ASM
6	3272-16	1	Pin-Cotter
7	3257-30	1	Key-Woodruff
8	43-3690	1	Shaft-Fan
9	3233-14	1	Screw-CARR
10	3234-11	6	Screw-HHF
11	105-2501-03	1	Engine Mount ASM
12	38-7820	1	Bearing-Ball
13	105-2524	1	Pulley
14	18-9810	2	Washer-Thrust
15	29-8910	1	Washer
16	32136-3	1	Nut-SHH
17	105-3699	2	Pulley-Idler, Flat
18	32128-23	2	Nut-HF
19	105-3693	1	Belt-Fan
20	42-9600	6	Washer-Lock, Spring
21	3274-106	6	Screw-HSH
22	104-3407	1	Pulley-Engine, Rear
23	105-2520-03	1	Engine Mount ASM
24	3296-48	2	Nut-Lock, NI

Ref	Part No.	Qty.	Description
25	3290-357	4	Nut-HHF, Whiz
26	53-9680	2	Mount-Engine
27	53-9480	2	Washer-Snubber
28	324-11	2	Screw-HH
29	33014-00	2	Nut-Hex
30	33004-00	2	Nut-HF
31	56-2140	2	Bolt
32	105-0058	1	Spacer-Idler, Fan
33	105-2502	2	Stud
34	105-4263	1	Swivel-Cable, Throttle
35	105-2507-03	1	Cradle-Support, Tube
36	68-0020	2	Spacer-Pivot, Idler
37	3296-20	1	Nut-Lock, NI
38	25-8640	1	Screw-HH,
40	32128-21	2	Nut-HF





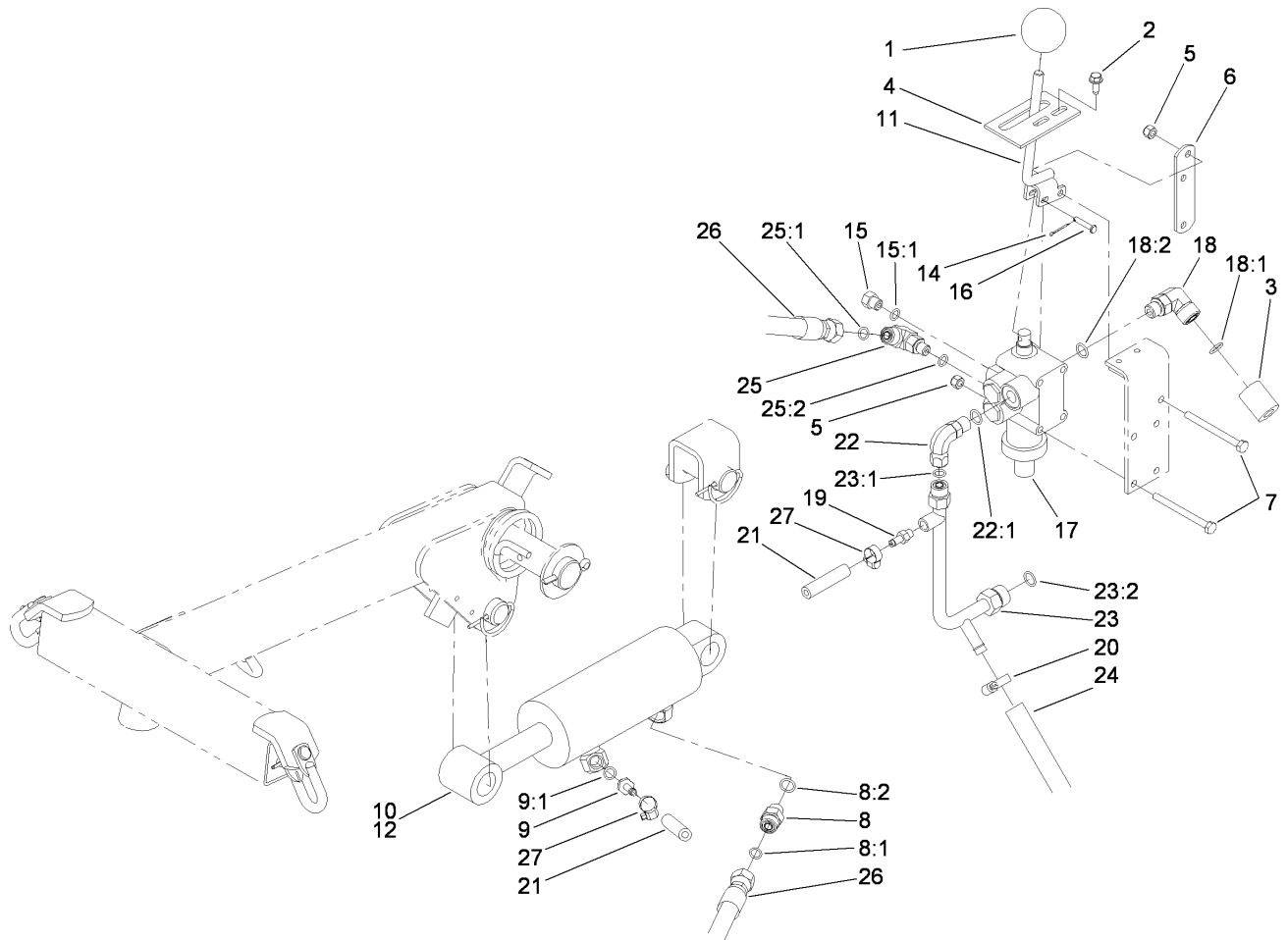




## Power-Take-Off Assembly

Ref	Part No.	Qty.	Description
1	21-0230	1	Pulley-PTO
2	43-5630	1	Yoke-PTO
3	3219-3	1	Nut-Hex
4	27-7900	1	Screw-Adjusting
5	3256-41	4	Washer
6	43-5540	1	Shaft-PTO
9	3296-6	1	Nut-Lock
11	100-6599	1	PTO Pivot ASM
11:2	256-113	6	Bushing-Flange
11:3	302-10	1	Fitting-Grease
11:4	302-2	1	Fitting-Grease
12	3257-5	3	Key-Woodruff
13	3254-7	1	Washer-Lock, Int
14	3219-7	1	Nut-Hex
15	3256-28	3	Washer-Flat
16	92-4058	1	Arm-PTO
17	3246-3	4	Screw-HSH
18	43-5550	1	Shaft-Actuator, PTO
19	43-5570	1	Arm-Actuator
20	251-252	2	Bearing
20:1	251-234	1	Collar-Locking
20:2	106-9662	1	Screw-Set, HSH
21	32120-22	2	Ring-Snap, Internal
22	3272-22	1	Pin-Cotter

Ref	Part No.	Qty.	Description
26	5-0652	1	Spacer
27	21-0400-01	1	Spring-Compression



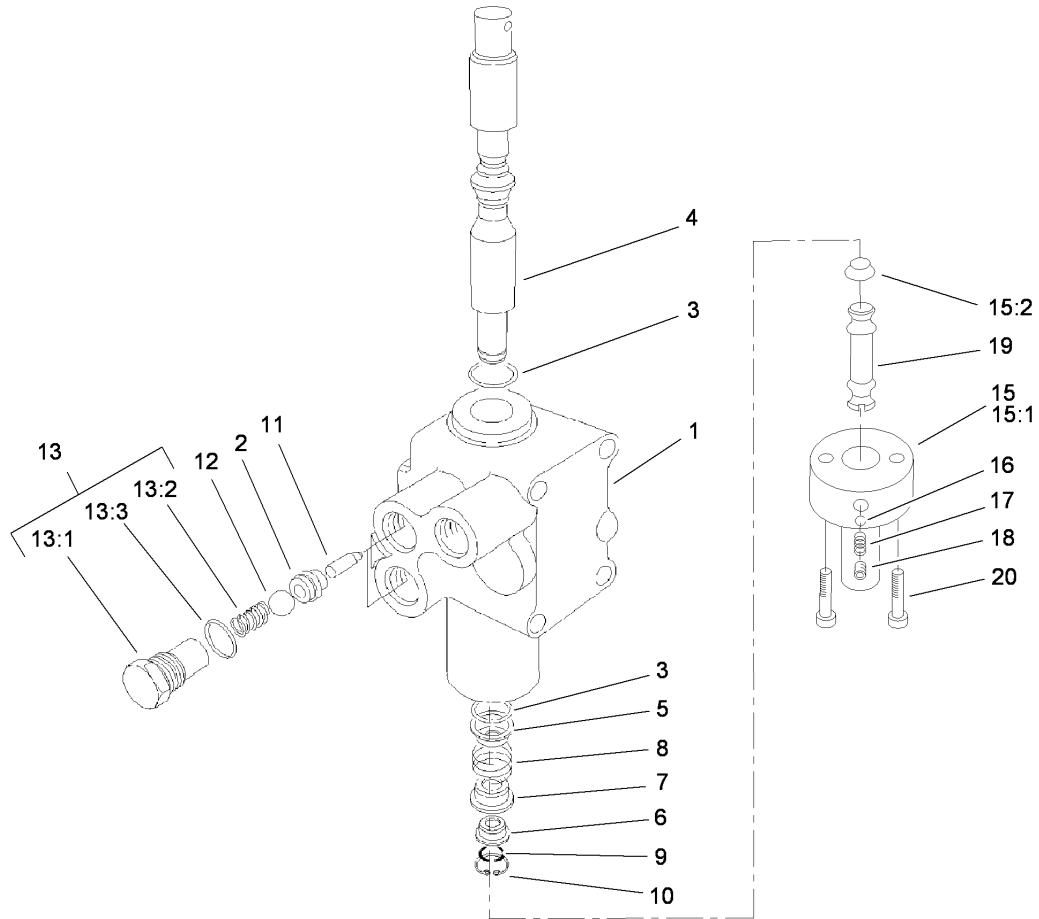
## Valve and Cylinder Assembly

Ref	Part No.	Qty.	Description
1	233-21	1	Knob
2	32144-10	2	Screw-HWH
3	38-3400	1	Guard-Rubber
4	105-7806	1	Latch-Lever, Valve
5	3296-42	5	Nut-Lock, NI
6	21-9010	1	Lever-Valve, Pivot Mount
7	321-23	5	Screw-HH
8	340-2	1	Fitting-HYD, Straight
8:1	237-22	1	O-Ring
8:2	237-42	1	O-Ring
9	92-5512	1	Fitting-Hose, Barbed
9:1	237-78	1	O-Ring
10	100-6586	1	Cylinder-HYD, 2.5 Inch
11	105-7839-03	1	Valve Lever ASM
12	100-6591	1	Cylinder-HYD, 3 Inch
14	3272-4	1	Pin-Cotter
15	353-512	1	Plug
15:1	237-78	1	O-Ring
16	283-17	1	Pin-Clevis
17	106-8071-01	1	Valve ASM
18	340-99	1	Fitting-HYD, 90 DEG
18:1	237-30	1	O-Ring
18:2	237-42	1	O-Ring
19	304-73	1	Connector-Hose

Ref	Part No.	Qty.	Description
20	2412-36	1	Clamp-Hose
21	92-7834	1	Hose-HYD
22	340-110	1	Fitting-Swivel, 90 DEG
22:1	237-42	1	O-Ring
23	63-9260	1	Manifold Valve ASM
23:1	237-22	1	O-Ring
23:2	237-30	1	O-Ring
24	63-8990	1	Hose-HYD
25	340-97	1	Fitting-HYD, 90 DEG
25:1	237-22	1	O-Ring
25:2	237-78	1	O-Ring
26	92-7833	1	Hose ASM
27	2412-108	2	Clamp-Worm

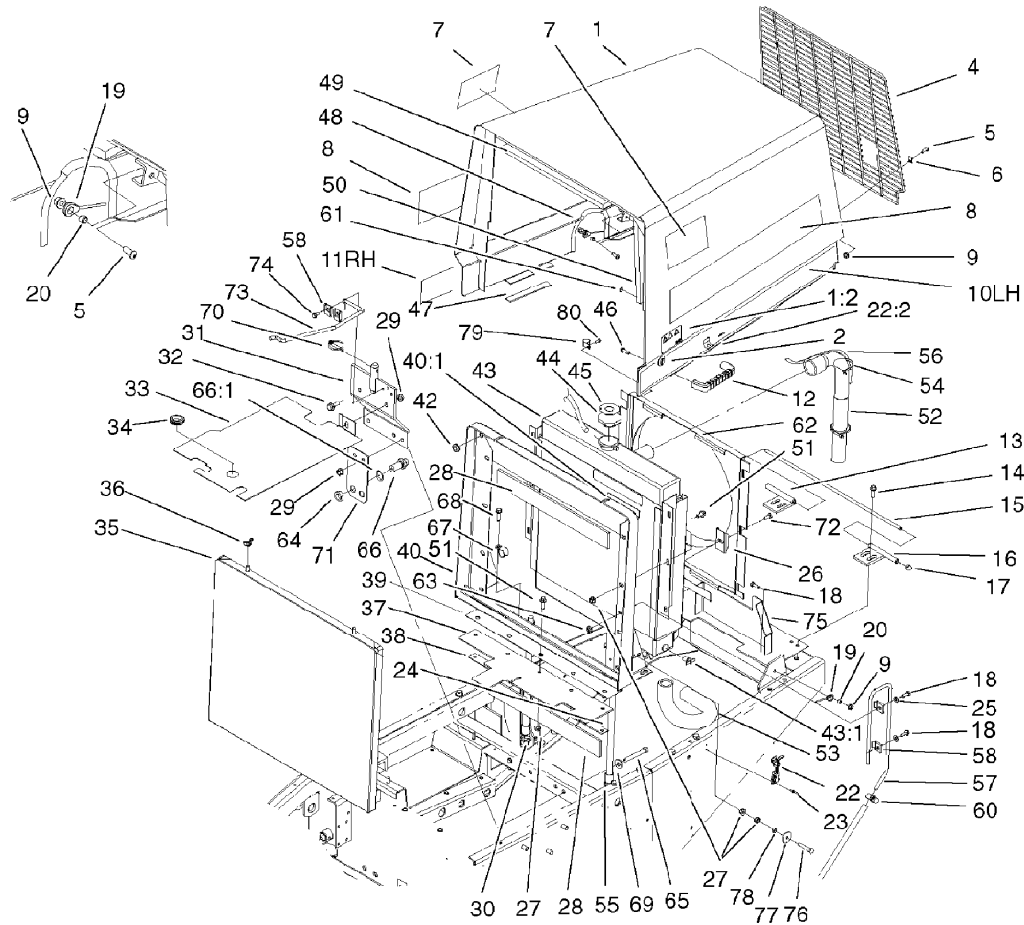






### Valve Assembly No. 106-8071-01

Ref	Part No.	Qty.	Description
1		1	Body
2	22-8370	2	Seat-Valve
3	22-8500	2	O-Ring
4	105-7826	1	Spool
5	22-8380	1	Retainer
6	22-8400	1	Spacer
7	22-8390	1	Retainer
8	22-8410	1	Spring
9	22-8480	1	Ring-Snap
10	22-8490	1	Ring-Snap
11	22-8360	2	Pin
12	22-8350	2	Ball
13	105-7827	2	Plug ASM
13:1	22-8330	1	Plug
13:2	22-8340	1	Spring
13:3	237-42	1	O-Ring
15	106-8070	1	Detent Barrel ASM
15:1		1	Barrel-Detent
15:2	106-8068	1	Plug-Dust
16	105-7829	2	Ball-Steel
17	105-7830	2	Spring
18	105-7831	2	Screw-Set
19	105-7832	1	Stud-Detent
20	105-7833	2	Screw-HSH

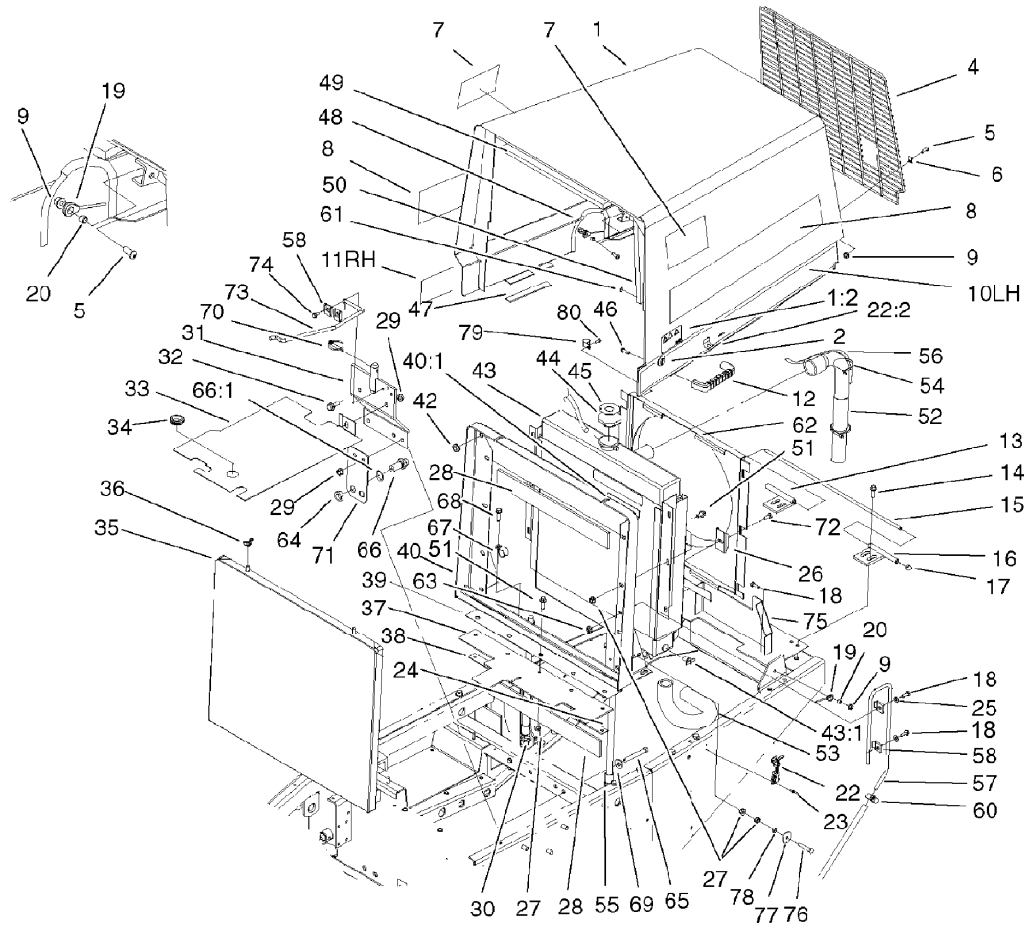



## Radiator and Hood Assembly

Ref	Part No.	Qty.	Description
1	105-4282	1	Hood
1:2	106-6754	1	Decal-Danger
2	98-5398	1	Latch
4	105-0059-03	1	Hood-Screen, Rear
5	3274-69	6	Screw-HSBH
6	2412-127	4	Clamp-R
7	66-6140	2	Decal
8	106-4394	2	Decal
9	32128-32	8	Nut-HHF
10	77-5140	1	Decal-Hood, LH
11	77-5150	1	Decal-Hood, RH
12	65-5100	1	Handle-Door
13	67-8820-01	1	RH Hinge ASM
14	3234-17	4	Screw-HHF
15	67-8840	1	Hinge-Rod
16	67-8810-01	1	LH Hinge ASM
17	32111-8	2	Nut-Lock, Cap
18	321-4	4	Screw-HH
19	77-3170	2	Cable-Hood
20	77-5250	4	Spacer-Cable, Hood
22	59-9740	1	Flex Draw Latch ASM
22:2	249-40	1	Keeper
23	3290-55	4	Rivet-Pop
24	63-9010	1	Hose-Coolant, Transmission

Ref	Part No.	Qty.	Description
25	3256-22	2	Washer-Flat
26	105-0012-03	6	Clip-Mounting, Fan Shroud
27	32128-20	15	Nut-HF
28	43-3320	2	Foam-Radiator
29	32128-21	4	Nut-HF
30	63-8960	1	Hose
31	105-2542-01	1	Bracket-Support, Seat
32	3234-11	1	Screw-HHF
33	105-2544-01	1	Plate-Sealing
34	240-5	1	Grommet-Rubber
35	67-9030-03	1	Grille ASM
36	32103-2	2	Nut-Wing
37	67-8570	1	Strip-Sealing
38	67-8470-03	1	Strip-Retainer
39	105-4264-03	1	Grill-Plate, Sealing
40	105-4293	1	Radiator Support ASM
40:1	93-7272	3	Decal-Warning
42	237-141	2	Grommet-Rubber
43	108-8699	1	Radiator ASM
43:1	304-46	1	Draincock
44	66-3240	1	Cap-Radiator
45	106-5976	1	Decal-Warning
46	46-8091	2	Screw-HWH
47	82-8950	2	Foam

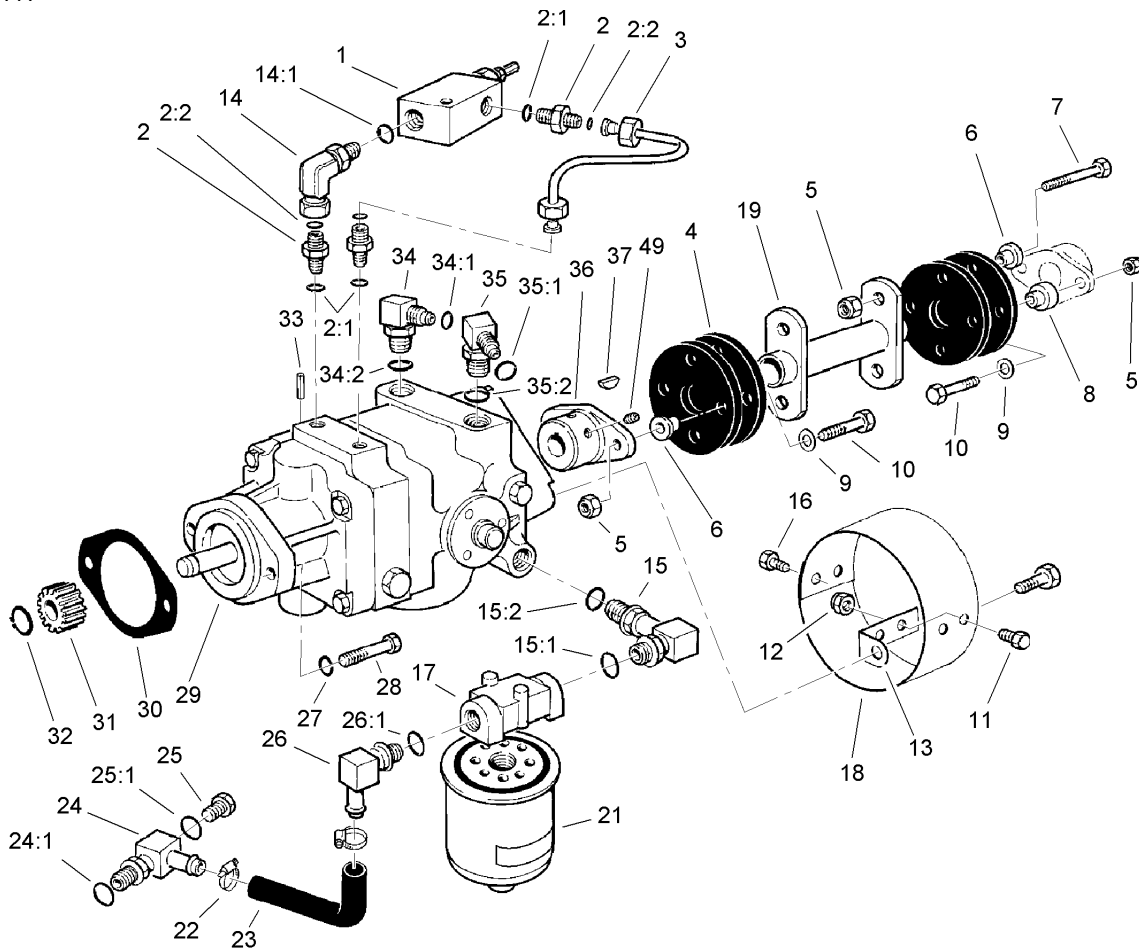




### Radiator and Hood Assembly (continued)

Ref	Part No.	Qty.	Description
48	66-8111	1	Trim-Hood
49	77-5170	1	Foam-Top
50	77-5160	1	Foam-Side, LH
51	3234-14	13	Screw-HHF
52	104-3433	1	Hose-Radiator, Top
53	104-3432	1	Hose-Radiator, Bottom
54	3290-379	6	Tie-Cable
55	38-3400	1	Guard-Rubber
56	110-4109	1	Hose-Fuel
57	105-4265	1	Tube-Vent
58	3-6657	4	Clip-Skid
60	2412-108	1	Clamp-Worm
61	3269-10	2	Washer-Back
62	105-0007-03	1	Fan Shroud ASM
63	32128-33	1	Nut-HF
64	340-70	2	Nut-Lock
65	323-14	3	Screw-HH
66	340-71	2	Fitting-Straight, Bulkhead
66:1	237-22	2	O-Ring
67	2412-4	1	Clamp
68	11-0590	1	Screw-HWHTF
69	5-0838	3	Washer
70	283-76	1	Pin-Lynch
71	68-9160	1	Bracket

Ref	Part No.	Qty.	Description
72	3234-33	6	Screw-HHF
73	86-7040	1	Rod-Prop, Seat
74	32144-10	2	Screw-HWH
75	105-4255-01	1	Pulley Guard ASM
76	322-41	1	Screw-HH
77	3256-57	1	Washer-Flat
78	3296-47	1	Nut-Lock, NI
79	2412-83	1	Clamp-Cable
80	32144-1	1	Screw-Taptite

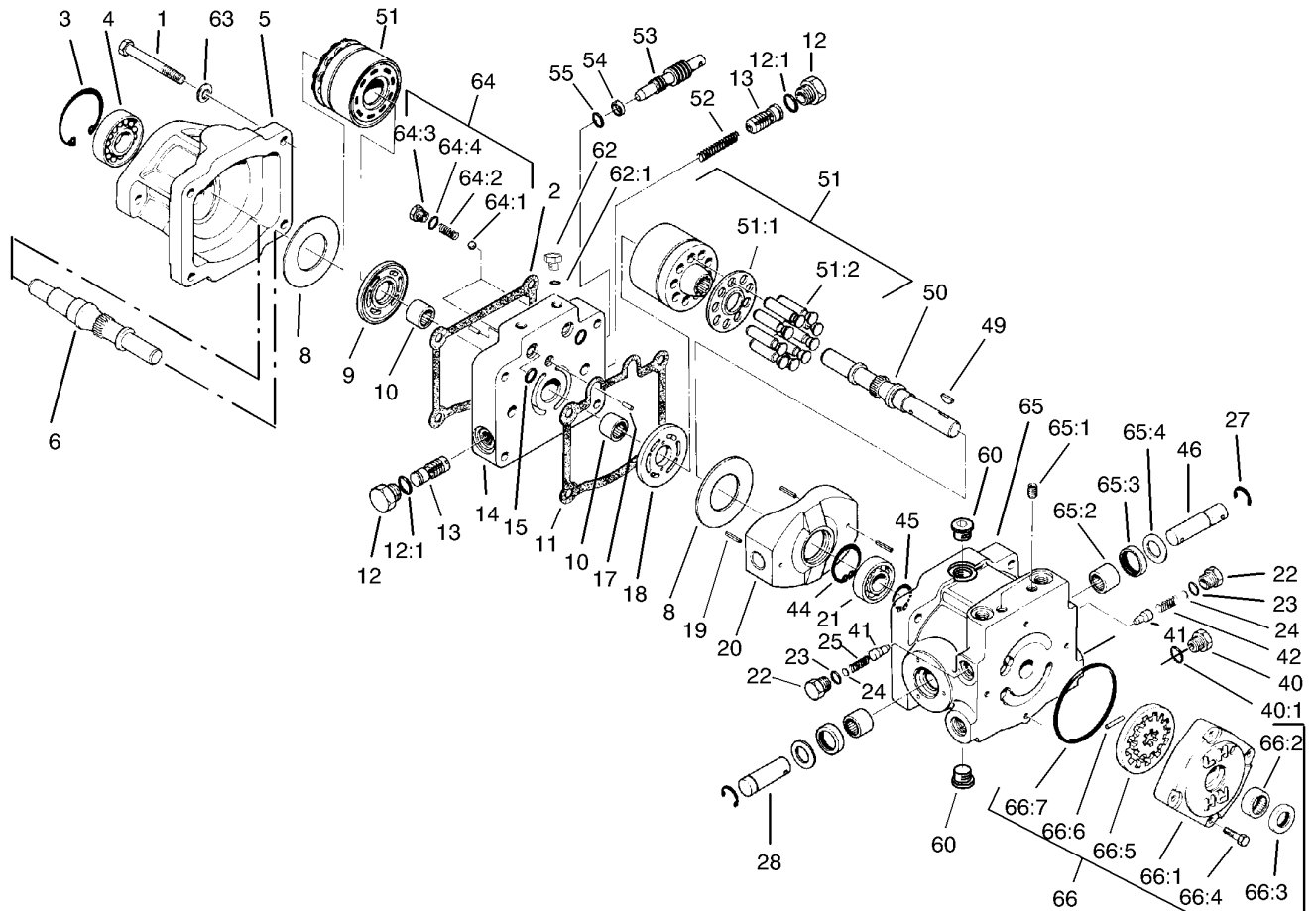


## Hydrostatic Transmission Assembly

Ref	Part No.	Qty.	Description
1	72-3540	1	Valve-Relief
2	340-92	3	Fitting-HYD, Straight
2:1	237-78	1	O-Ring
2:2	237-21	1	O-Ring
3	72-3550	1	Tube
4	44-2230	4	Coupling-Rubber
5	32152-1	8	Nut-Lock, Cone
6	71-4411	4	Spacer
7	322-8	4	Screw-HH
8	71-4410	4	Spacer
9	3256-3	4	Washer-Flat
10	322-10	4	Screw-HH
11	321-2	2	Screw-HH
12	3296-42	4	Nut-Lock, NI
13	54-9290	2	Bracket-Mounting
14	340-143	1	Elbow-Swivel, 90 DEG
14:1	237-78	1	O-Ring
15	68-8660	1	Fitting-HYD, 90 DEG
15:1	237-80	1	O-Ring
15:2	237-81	1	O-Ring
16	321-4	2	Screw-HH
17	68-8990	1	Filter Head ASM
18	54-9300-03	1	Cover-Shaft, Pump
19	105-0033-03	1	Drive Shaft ASM

Ref	Part No.	Qty.	Description
21	23-9740	1	Filter-Oil
22	2412-129	2	Clamp-Hose
23	68-9650	1	Hose-Axle
24	70-2620	1	Fitting-HYD, 90 DEG
24:1	237-81	1	O-Ring
25	353-508	1	Plug
25:1	237-42	1	O-Ring
26	353-987	1	Fitting-HYD, 90
26:1	237-81	1	O-Ring
27	3253-21	2	Washer-Lock
28	323-7	2	Screw-HH
29	92-8947	1	Transmission ASM
30	41-8760	1	Gasket
31	86-7220	1	Gear-Pinion
32	32120-72	1	Ring-Snap
33	32121-6	1	Pin-Roll, Slotted
34	340-77	1	Fitting-HYD, 90 DEG
34:1	237-22	1	O-Ring
34:2	237-42	1	O-Ring
35	340-99	1	Fitting-HYD, 90 DEG
35:1	237-30	1	O-Ring
35:2	237-42	1	O-Ring
36	110-9695	1	Hub-Pump
37	3257-32	1	Key-Woodruff

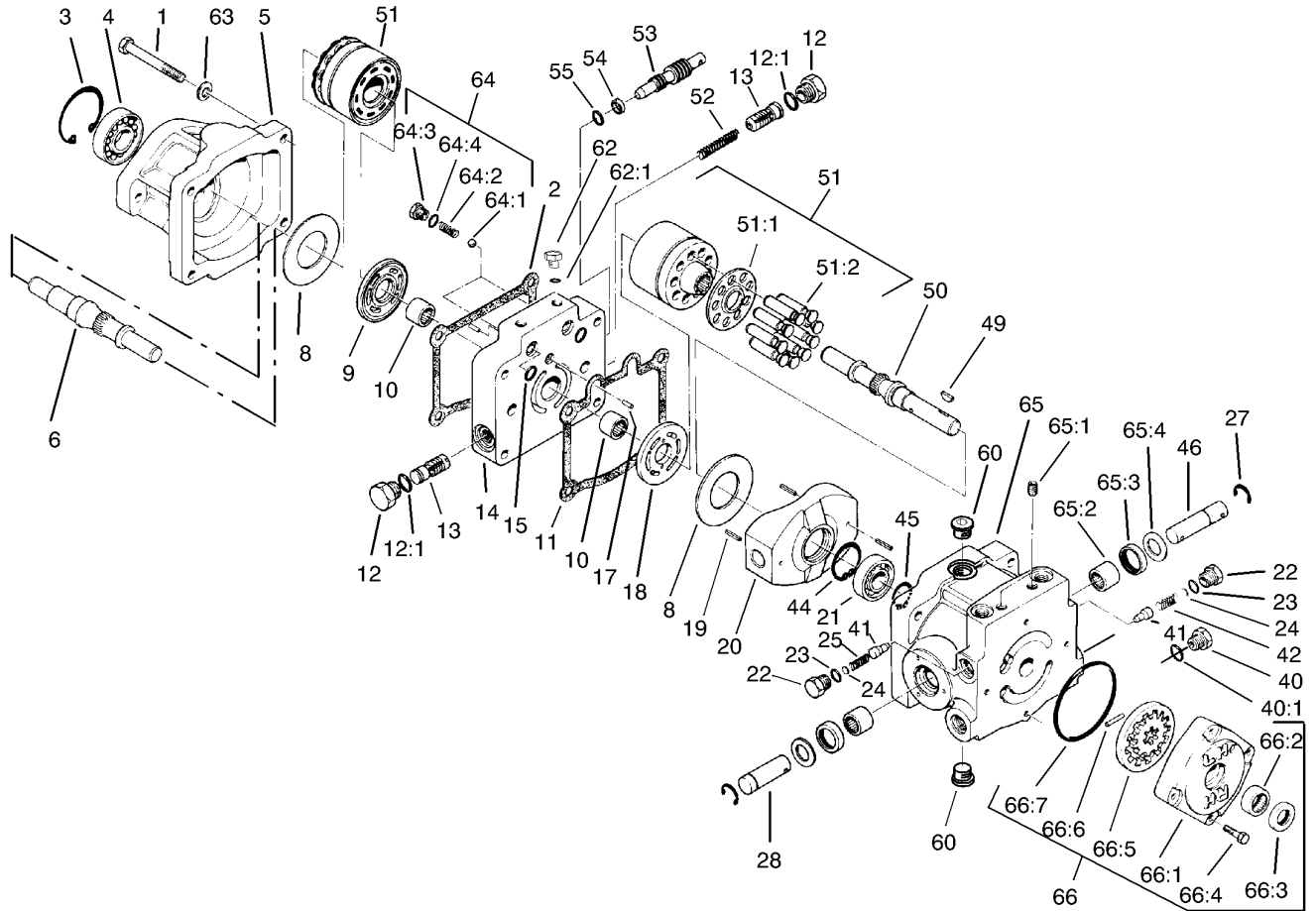




## Transmission Assembly No. 92-8947

Ref	Part No.	Qty.	Description
1	323-56	4	Screw-HH
2	67-9100	1	Gasket
3	32120-8	1	Ring-Snap
4	72-3750	1	Bearing-Roller
5	67-9080	1	Housing-Motor
6	46-8410	1	Shaft-Motor
8	25-2380	2	Plate-Thrust
9	25-2390	1	Plate-Valve, Motor
10	46-8400	2	Bearing-Shaft
11	25-2400	1	Gasket
12	353-550	2	Plug-HYD, HH
12:1	237-79	1	O-Ring
13	25-2410	2	Valve ASM
14	92-8918	1	Section-Center
15	93-4132	2	O-Ring
17	25-2430	2	Pin-Dowel
18	25-2440	1	Plate-Valve, Pump
19	32121-91	3	Pin-Spring
20	25-2450	1	Plate-Swash, Variable
21	251-8	1	Bearing-Ball
22	25-2460	2	Plug-HH
23	237-86	4	O-Ring
24	25-2470	2	Pack-Shim
25	25-2480	1	Spring-Valve

Ref	Part No.	Qty.	Description
27	32151-46	2	Ring-Retaining
28	25-2500	1	Shaft-Trunnion
40	353-551	1	Plug-HH
40:1	237-80	1	O-Ring
41	83-7260	2	Cone-Relief, Charge
42	25-2570	1	Spring-Valve
44	32151-75	1	Ring-Retaining
45	32120-15	1	Ring-Snap, EXT
46	25-2580	1	Shaft-Trunnion
49	3257-32	1	Key-Woodruff
50	67-8020	1	Shaft-Pump
51	48-1800	2	Cylinder Block Kit
51:1		1	Retainer-Slipper
51:2		9	Piston ASM
52	25-2610	1	Spring-Valve
53	88-8220	1	Valve-By Pass
54	25-2630	1	Ring-Back Up
55	237-22	1	O-Ring
60	67-9090	1	Plug ASM
62	75-0170	4	Plug-Thread, Straight
62:1	92-8777	1	O-Ring
63	93-0312	4	Washer-Hardened
64	99-5689	1	Check Valve ASM
64:1	25-2490	1	Ball

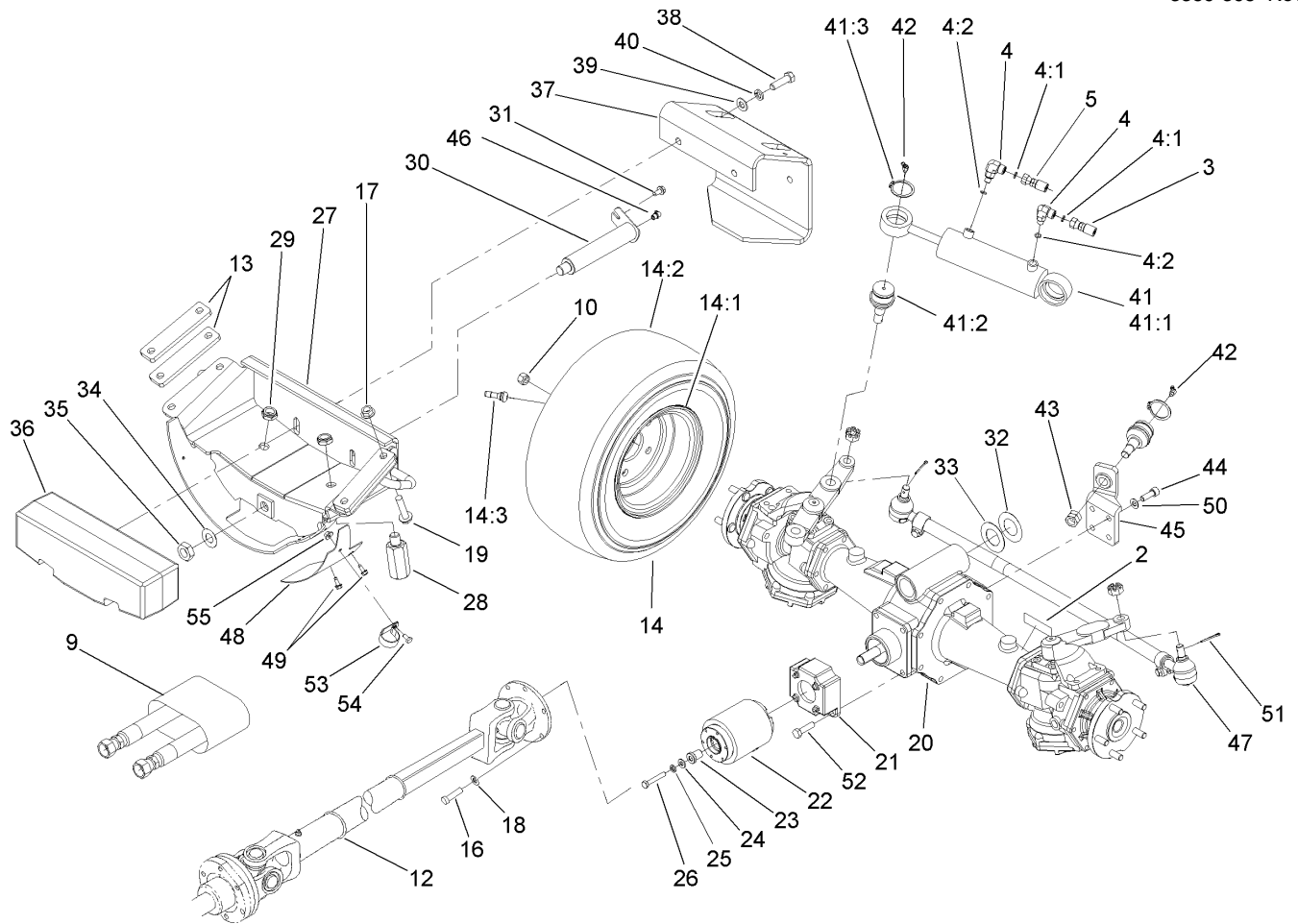


### Transmission Assembly No. 92-8947 (continued)

Ref	Part No.	Qty.	Description
64:2	25-2640	1	Spring-Valve
64:3	25-2650	1	Plug-Valve, Check
64:4	237-86	1	O-Ring
65	54-7890	1	Housing Kit
65:1	285-17	2	Plug-Pipe
65:2	252-82	2	Bearing-Needle
65:3	25-3210	2	Seal-Lip
65:4	25-2510	2	Washer-Flat
66	25-3190	1	Charge Pump Kit
66:1	25-2550	1	Housing-Pump, Charge
66:2	67-8050	1	Bearing-Needle
66:3	93-4133	1	Seal-Lip
66:4	322-4	4	Screw-HH
66:5	25-2540	1	Gerotor ASM
66:6	25-2530	1	Pin-Straight, Headless
66:7	237-95	1	O-Ring

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## 4 Wheel Drive Rear Axle Assembly

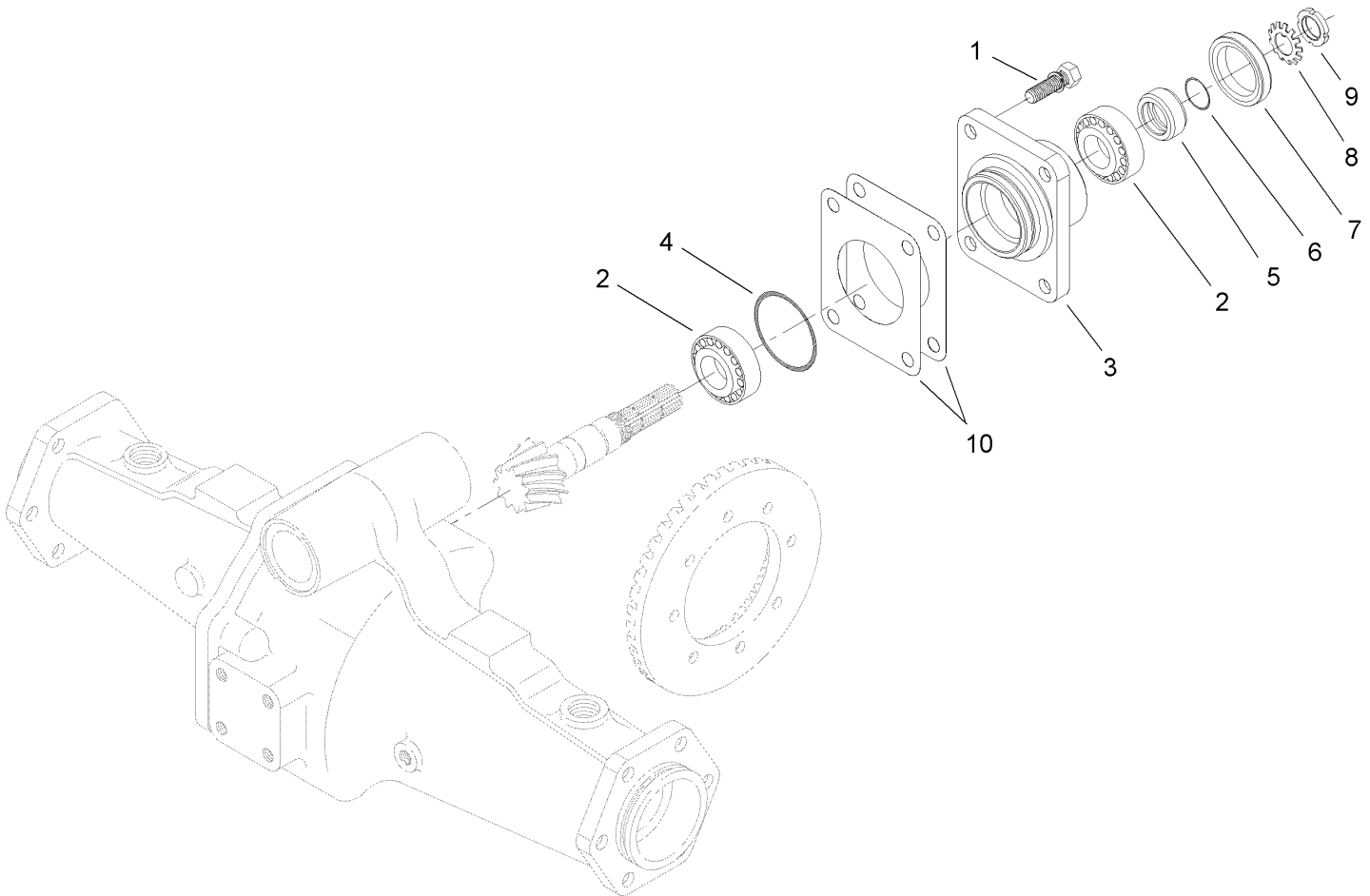
Ref	Part No.	Qty.	Description
2	93-6697	1	Decal-Lube
3	99-2407	1	Hose ASM
4	340-97	2	Fitting-HYD, 90 DEG
4:1	237-22	1	O-Ring
4:2	237-78	1	O-Ring
5	99-2408	1	Hose ASM
9	56-7985	1	Sleeve-Protective
10	93-5268	10	Nut-Lug
12	98-5009	1	Driveshaft ASM
13	105-0073-01	4	Spacer-Frame
14		2	Tire And Wheel ASM
14:1	105-7846	1	Wheel
14:2	231-122	1	Tire (18X6.5-8) 4-Ply
14:3	232-27	1	Stem-Valve
16	3274-8	12	Screw-HSH
17	32128-23	4	Nut-HF
18	3253-3	12	Washer-Lock
19	3234-46	4	Screw-HHF
20	106-1120	1	Rear Axle ASM
21	98-3860-03	1	Adaptor-Locator, Clutch
22	95-6296	1	Clutch-Bidirectional
23	98-1823	1	Spacer
24	33094-00	1	Washer-Plain
25	3253-4	1	Washer-Lock

Ref	Part No.	Qty.	Description
26	33114-050	1	Screw-HH
27	100-6570-01	1	Axle Support ASM
28	98-3863	2	Stop-Oscillation
29	3296-15	2	Nut-Lock, NI
30	99-8434-03	1	Rear Axle Pin ASM
31	32144-14	1	Screw-HWHTF
32	99-8431	1	Washer-Thrust
33	99-8432	1	Washer-Thrust
34	71-4540	1	Washer-Thrust
35	32146-20	1	Nut-Jam
36	98-3869-01	1	Weight-Rear
37	98-3880-03	1	Bumper
38	325-7	2	Screw-HH
39	3256-26	2	Washer-Flat
40	3253-7	2	Washer-Lock
41		1	Steering Cylinder ASM
41:1	99-2415	1	Cylinder-HYD
41:2	106-6774	2	Joint-Ball
41:3	32151-104	2	Ring-Retaining, External
42	302-11	2	Fitting-Lube, 45 DEG
43	3220-6	4	Nut-Jam
44	108-1420	4	Screw-HSH
45	98-3862-03	1	Bracket-Support, Cylinder
46	302-33	1	Fitting-Grease





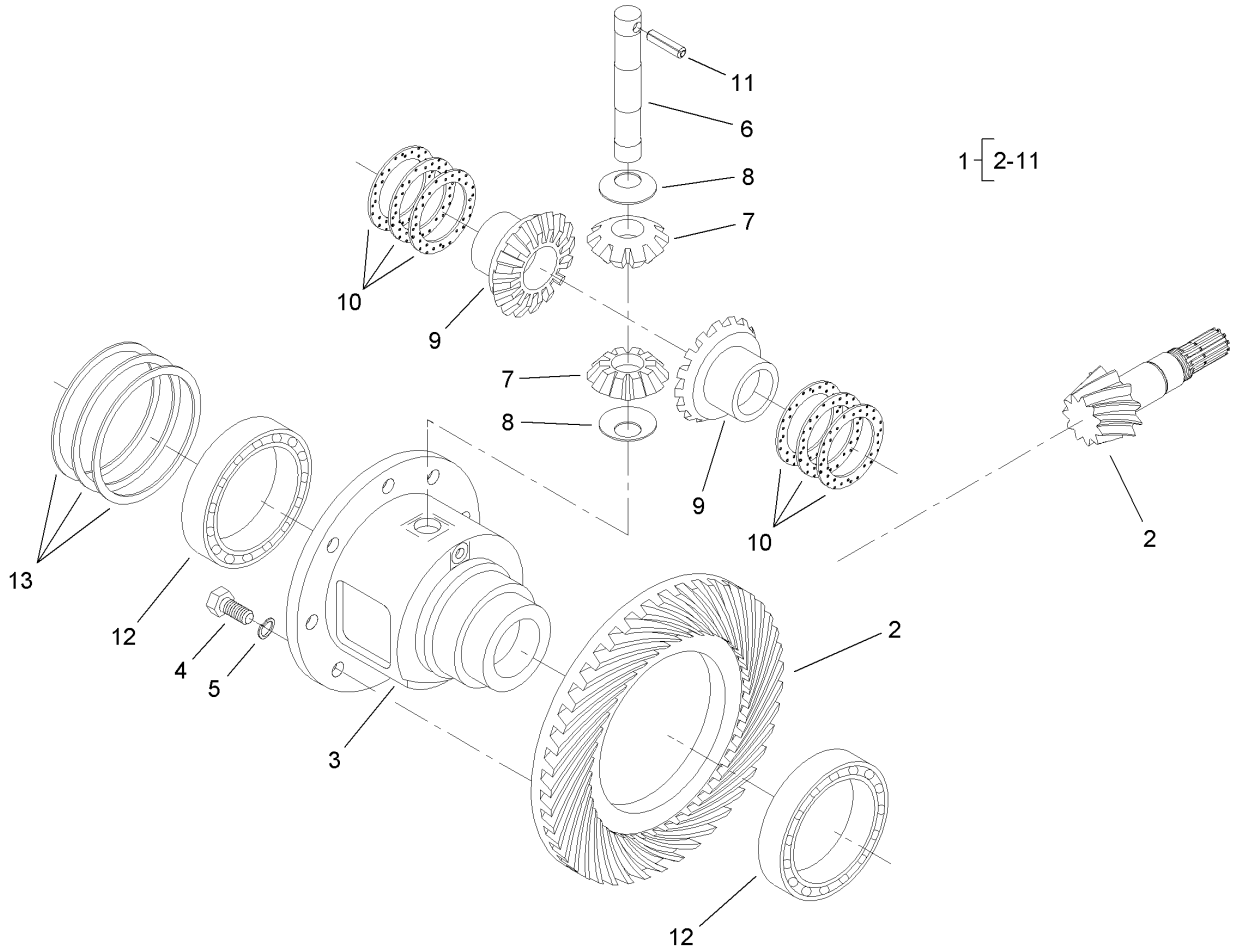




## Bevel Pinion Shaft Assembly Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description
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

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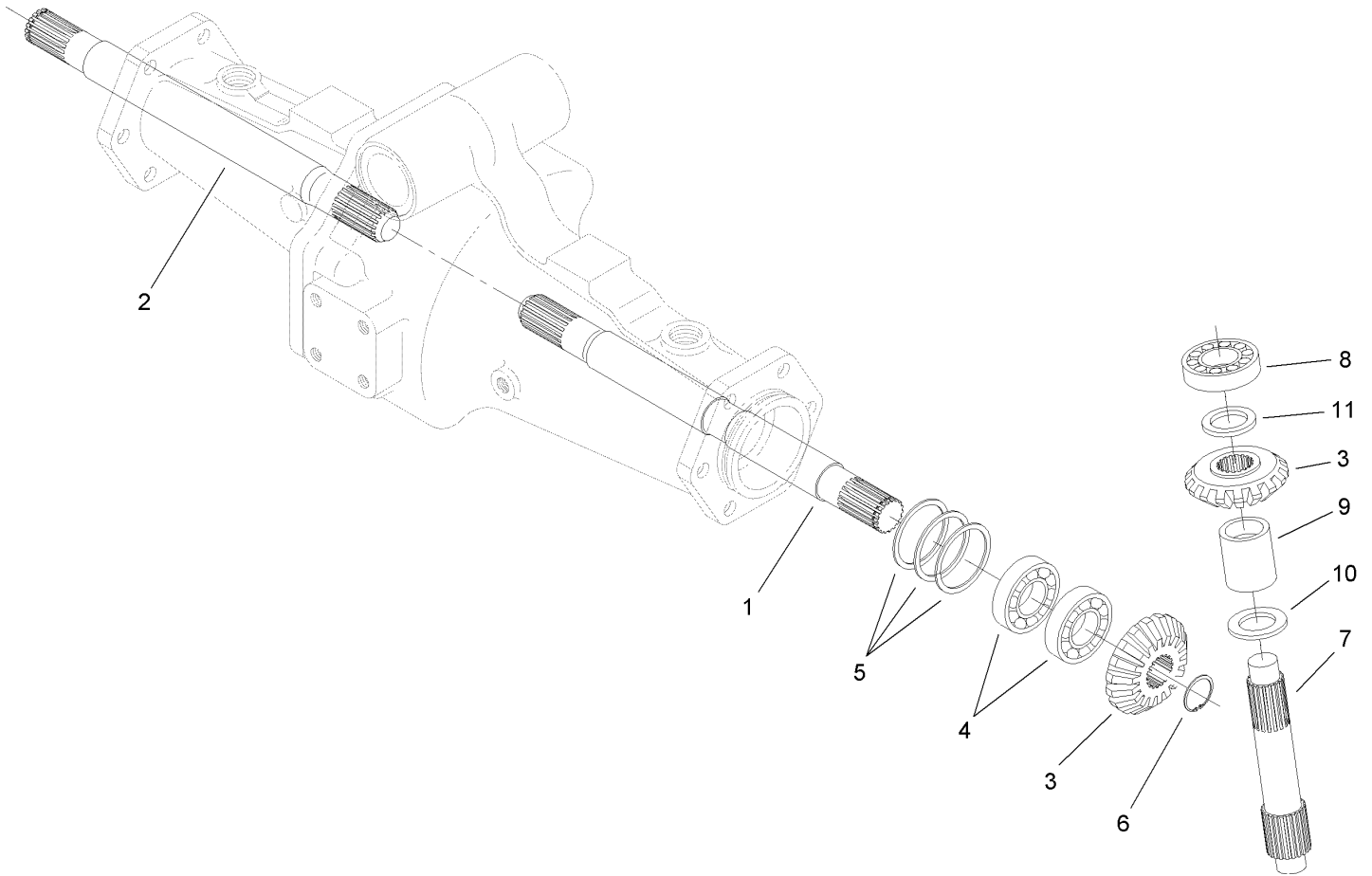
## Differential Assembly Rear Axle Assembly No. 106-1120

Ref	Part No.	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

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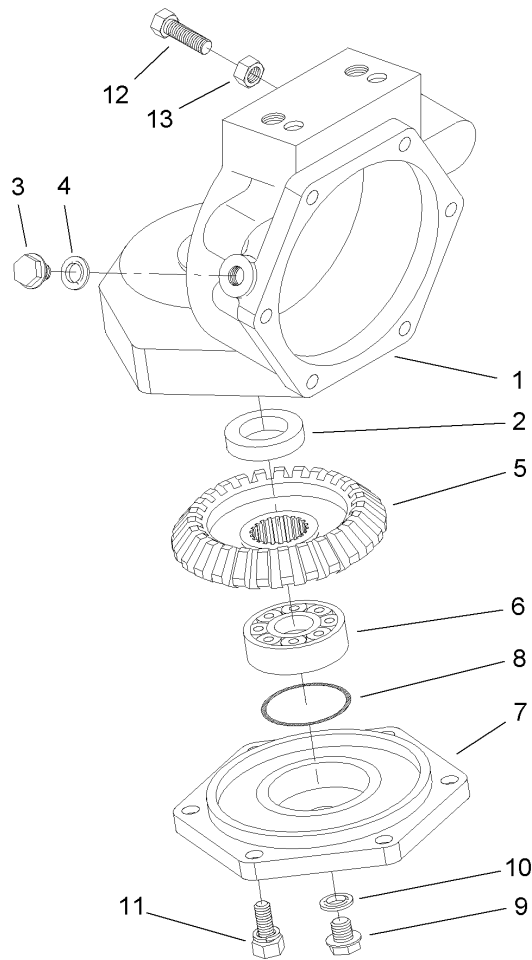




## Bevel Gear Shaft Assembly Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description
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

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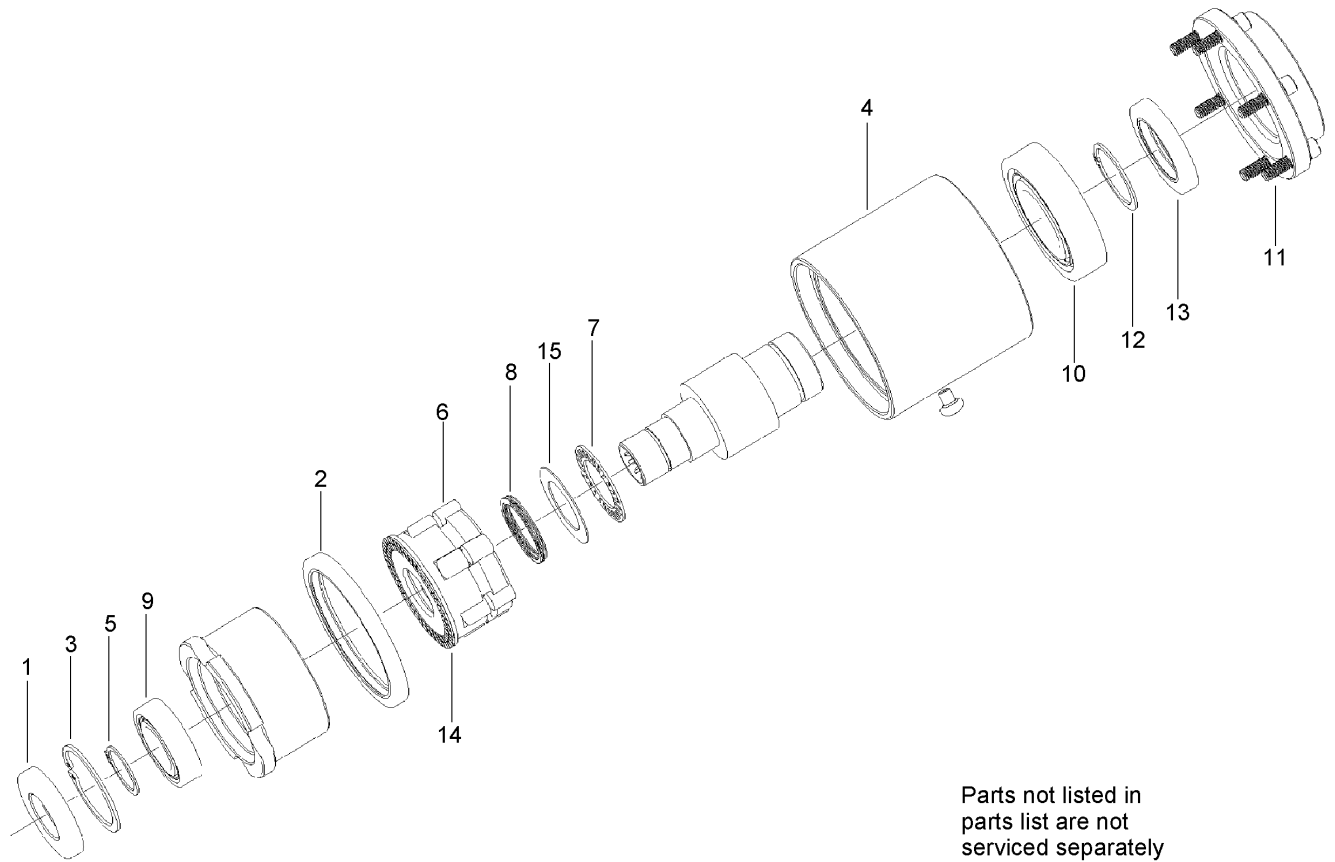


### Axle Case Assembly Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description				
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				





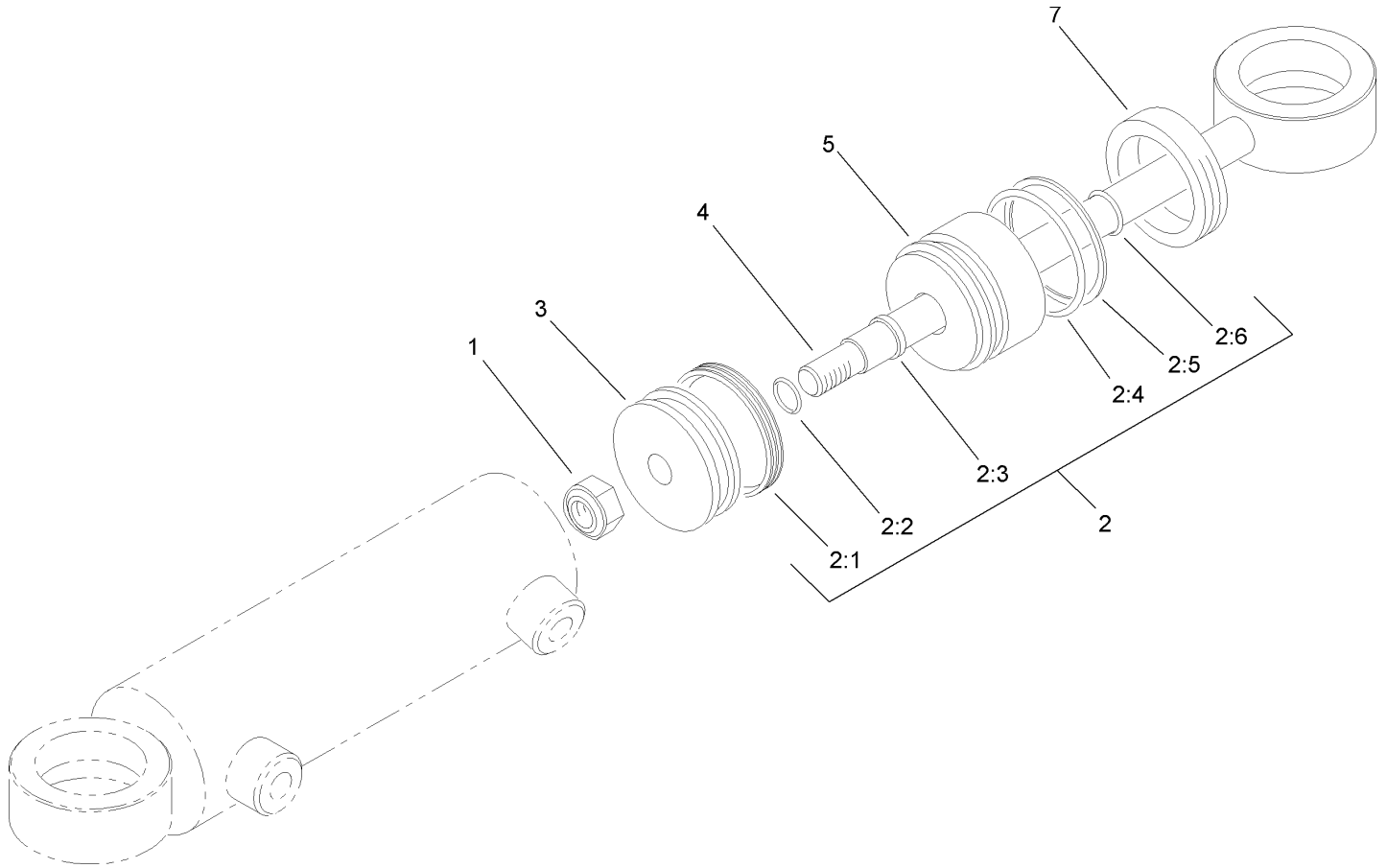


Parts not listed in parts list are not serviced separately

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

Ref	Part No.	Qty.	Description
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

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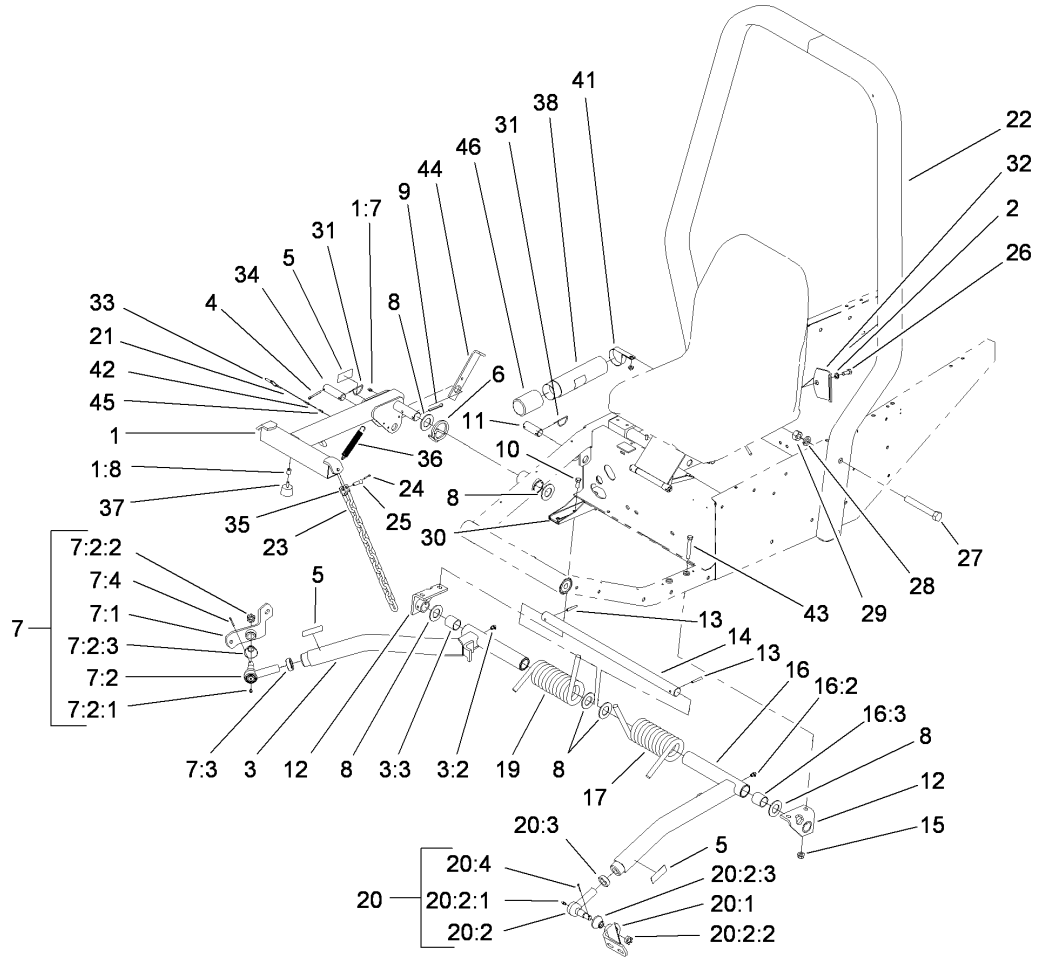


## Hydraulic Cylinder Assembly No. 99-2415

Ref	Part No.	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

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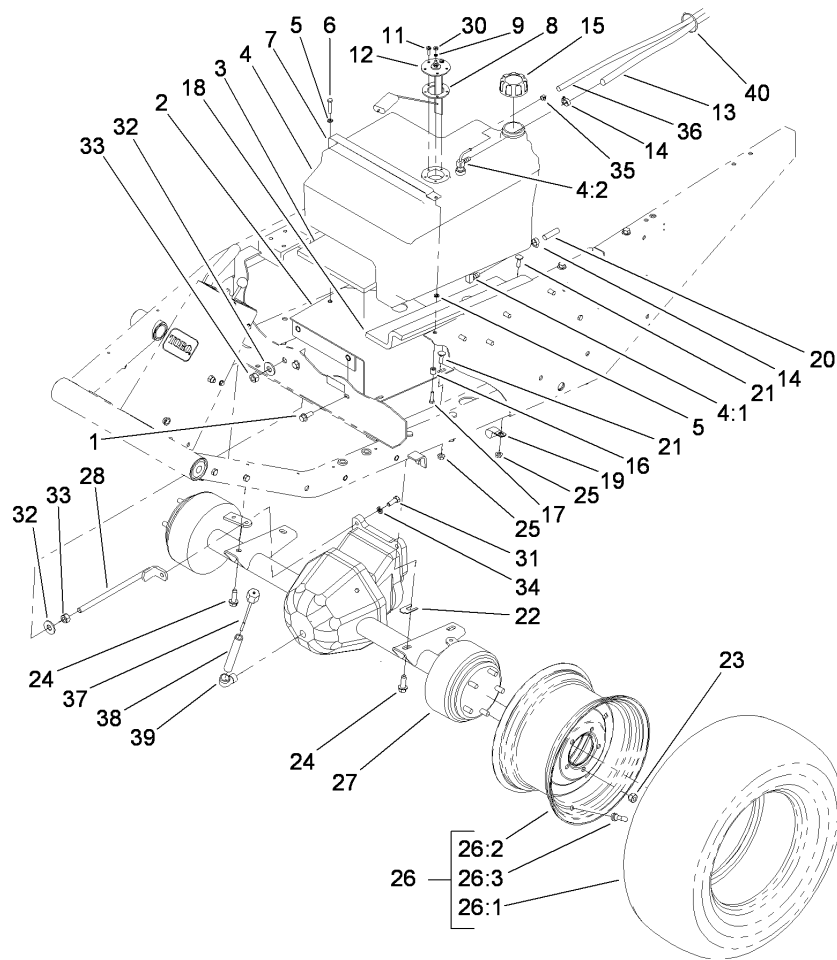
## Push Arm and Roll-Over Protection System Assembly

Ref	Part No.	Qty.	Description
1	66-6370	1	Lift Arm ASM
1:7	302-5	1	Fitting-Grease
1:8	3290-472	1	Insert-Threaded
2	3253-6	2	Washer-Lock
3	66-7150	1	Arm-Push, RH
3:2	302-33	1	Fitting-Grease
3:3	256-126	2	Bushing
4	3272-24	1	Pin-Cotter
5	93-6696	3	Decal-Warning
6	46-8840-01	1	Spring-Lift Arm
7		1	RH Ball Joint ASM
7:1	21-3020-01	1	Mount-Balljoint, RH
7:2	86-8100-01	1	Ball Joint ASM
7:2:1	302-5	1	Fitting-Grease
7:2:2	32136-2	1	Nut-SHH
7:2:3	114-2874	1	Seal-Ball Joint
7:3	21-3000	1	Nut-HJ
7:4	3272-11	1	Pin-Cotter
8	5-1754	6	Washer-Flat
9	3272-33	1	Pin-Cotter
10	110-9672	2	Screw-HH
11	3-7292	1	Pin-Clevis
12	21-2860-01	2	Push Arm Bracket ASM
13	32121-84	2	Pin-Spiral

Ref	Part No.	Qty.	Description
14	21-2990	1	Shaft-Pivot
15	110-9671	4	Nut-HF
16	21-2960	1	Arm-Push, LH
16:2	302-33	1	Fitting-Grease
16:3	256-126	2	Bushing
17	21-2900-01	1	Spring-Torsion, LH
17	105-9550-01	1	Spring-Torsion, LH (Light)
19	21-2890-01	1	Spring-Torsion, RH
20		1	LH Ball Joint ASM
20:1	21-3050-01	1	LH Ball Joint Mount ASM
20:2	86-8100-01	1	Ball Joint ASM
20:2:1	302-5	1	Fitting-Grease
20:2:2	32136-2	1	Nut-SHH
20:2:3	114-2874	1	Seal-Ball Joint
20:3	21-3000	1	Nut-HJ
20:4	3272-11	1	Pin-Cotter
21	28-8070	1	Lanyard
22	99-1299-03	1	ROPS-2 Post
23	3-1365	3	Chain
24	3272-10	6	Pin-Cotter
25	283-10	6	Pin-Clevis
26	3212-4	2	Screw-HH
27	328-12	4	Screw-HH
28	3253-9	4	Washer-Lock







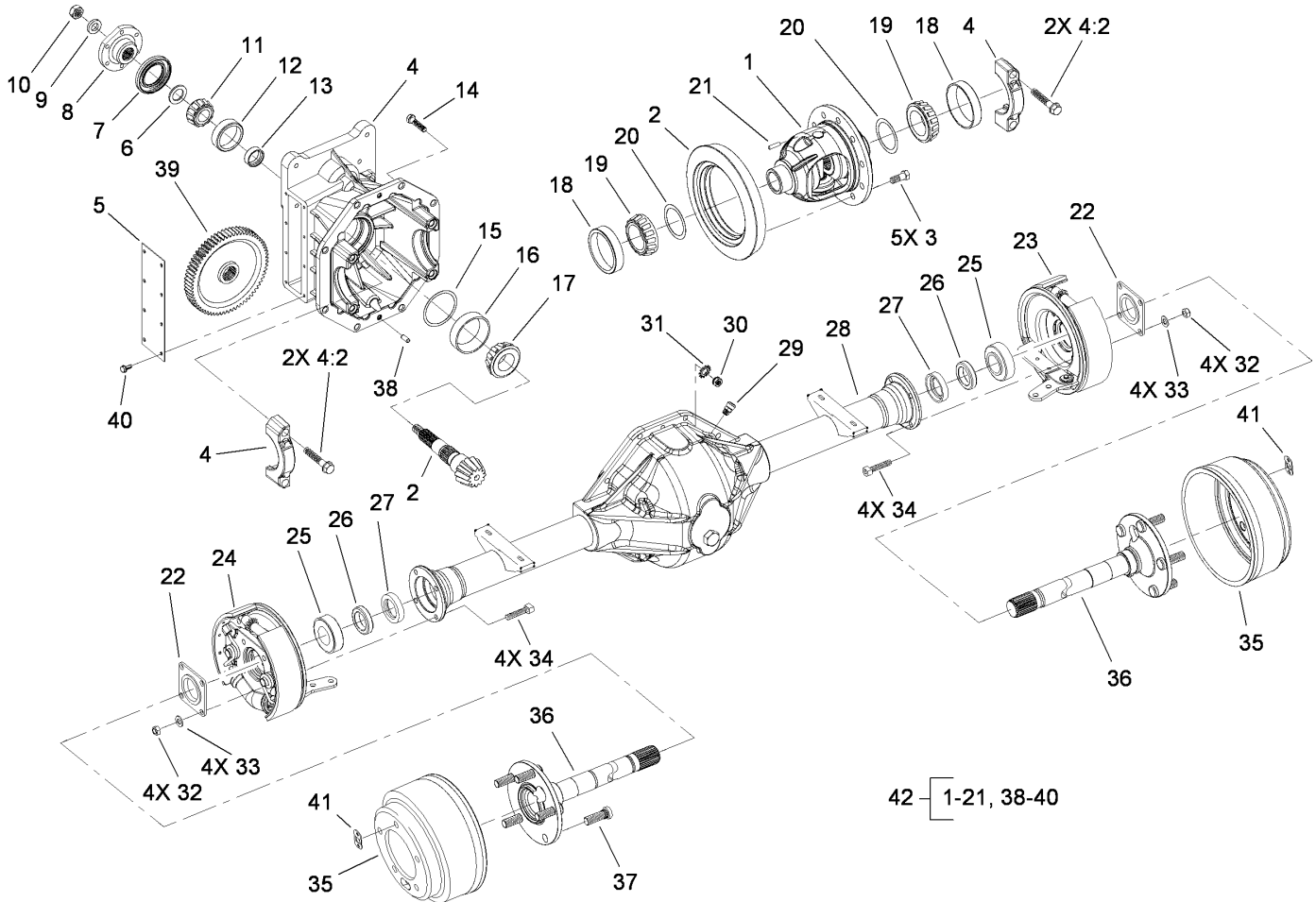
## Fuel Tank and Front Axle Assembly

Ref	Part No.	Qty.	Description
1	3234-11	2	Screw-HHF
2	68-9760	1	Fuel Tank Base ASM
3	21-3600	1	Foam-Support, Tank
4	115-4519	1	Fuel Tank ASM
4:1	115-4518	1	Pipe-Stand
4:2	43-4160	1	Fitting-Return And Vent
5	3253-3	2	Washer-Lock
6	32104-96	1	Screw-HH
7	37-9550	1	Strap-Tank, Fuel
8	62-7650	1	Gasket
9	3253-17	1	Washer-Lock
11	32144-53	5	Screw-SHWH
12	105-2563	1	Sender-Fuel
13	110-4109	1	Hose-Fuel
14	2412-108	2	Clamp-Worm
15	55-3572	1	Fuel Cap ASM
16	22-7810	1	Spacer
17	321-6	1	Screw-HH
18	21-3610	1	Foam-Support, Tank
19	2412-4	1	Clamp
20	109-0274	1	Hose-Fuel
21	3230-2	3	Bolt-CARR
22	42-6080	1	Shim-Axle
23	23-7270	10	Nut-Wheel

Ref	Part No.	Qty.	Description
24	32144-67	4	Screw
25	32128-20	3	Nut-HF
26		2	Wheel And Tire ASM
26:1	95-3348	1	Tire
26:2	217-117	1	Wheel
26:3	232-27	1	Stem-Valve
27	86-9630-03	1	Axle ASM
28	24-9830-01	1	Axle Support ASM
30	3219-14	1	Nut-Hex
31	323-6	1	Screw-HH
32	3256-6	2	Washer-Flat
33	3217-9	2	Nut-HH
34	3253-21	1	Washer-Lock
35	2412-80	2	Clamp-Line, Fuel
36	110-5688	1	Hose-Fuel
37	23-5180	1	Dipstick ASM
38	289-37	1	Nipple-Pipe
39	2811-9	1	Fitting-Elbow, Street
40	3290-379	1	Tie-Cable





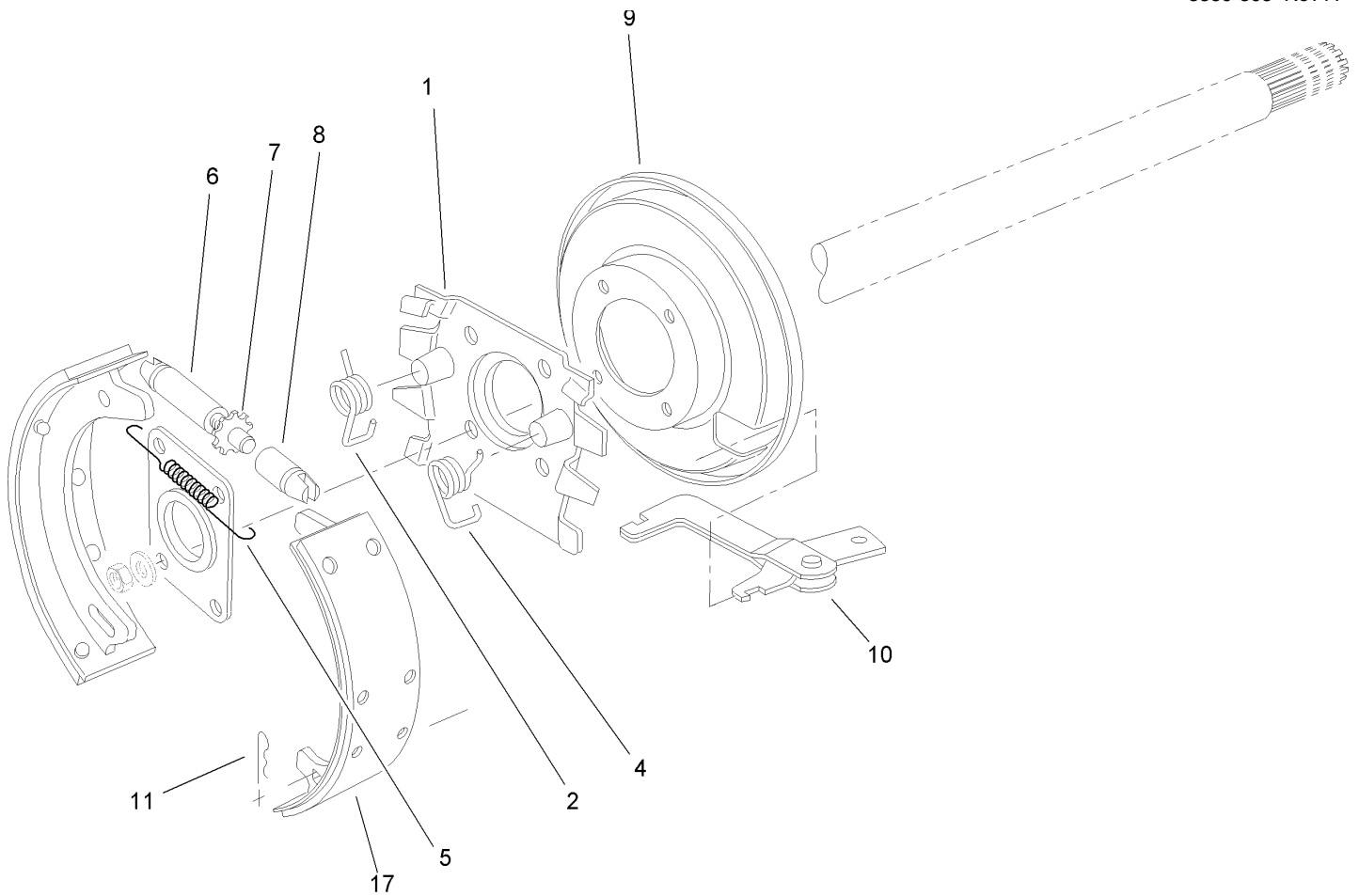


### Front Axle Assembly No. 86-9630-03 (continued)

Ref	Part No.	Qty.	Description
18	254-66	2	Cup-Bearing, Roller
19	254-65	2	Cone-Bearing, Roller
20	21-8090	1	Shim-Bearing, Differential (.003)
20	21-8100	1	Shim-Bearing, Differential (.005)
20	21-8110	1	Shim-Bearing, Differential (.010)
20	21-8120	1	Shim-Bearing, Differential (.030)
21	32121-15	1	Pin-Roll
22	28-0670	2	Seal-Grease
23		1	LH Brake ASM
24		1	RH Brake ASM
25	21-8180	2	Bearing ASM
26	99-6969	2	Seal-Oil, Wheel End
27	24-8840	2	Ring-Retaining, Wheel Bearing
28	43-6840	1	Housing-Lower
29	72-9420	1	Vent
30	3219-2	8	Nut-Hex
31	3255-8	8	Washer-Lock
32	94-6935	8	Locknut
33	94-6936	8	Washer-Hardened
34	94-6934	8	Screw-HH
35	28-0680-03	2	Drum-Brake
36	28-0650	2	Shaft-Axle, Flanged
37	242-34	10	Stud-Drive
38	21-8270	2	Pin-Dowel

Ref	Part No.	Qty.	Description
39	86-7230	1	Gear-Input, Transmission
40	32144-112	8	Screw-HWH
41	21-8360	2	Clip-Retaining
42	92-4902	1	Differential Carrier ASM

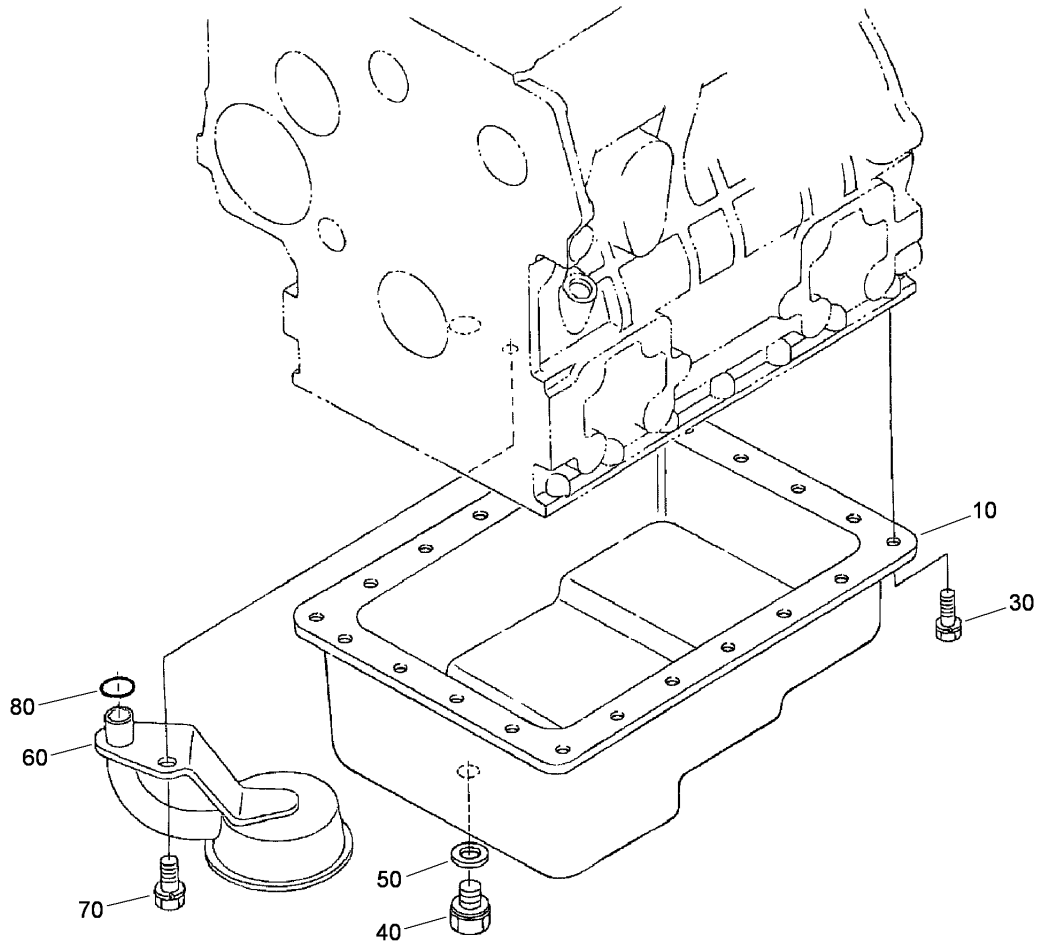




## Front Axle Brake Assembly

Ref	Part No.	Qty.	Description
1	43-6810	1	Spider-Torque
2	21-9420	1	Spring-Return, LH
4	21-9430	1	Spring-Return, RH
5	21-9440	1	Spring-Screw, Adjusting
6	21-9380	1	Nut-Pivot
7	21-9370	1	Screw-Adjusting
8	21-9390	1	Socket-Screw, Adjusting
9	21-9450	1	Shield-Dust
10	24-9180	1	Strut And Lever ASM
11	21-9460	2	Retainer-Lever, Brake
17	84-8600	1	Set-Shoes, Lined
18	92-8775	1	Liquid Gasket Kit

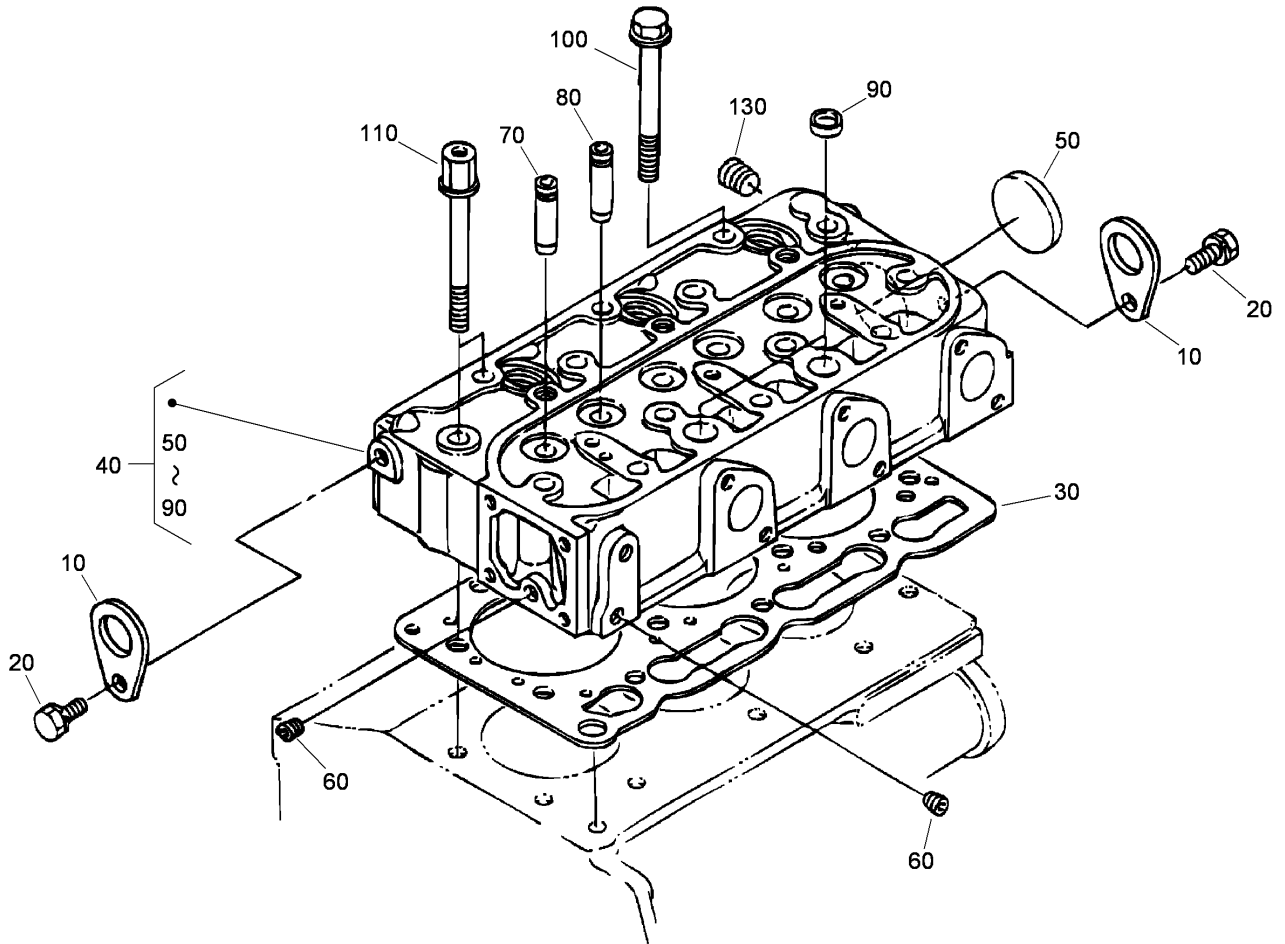




### Oil Pan Assembly

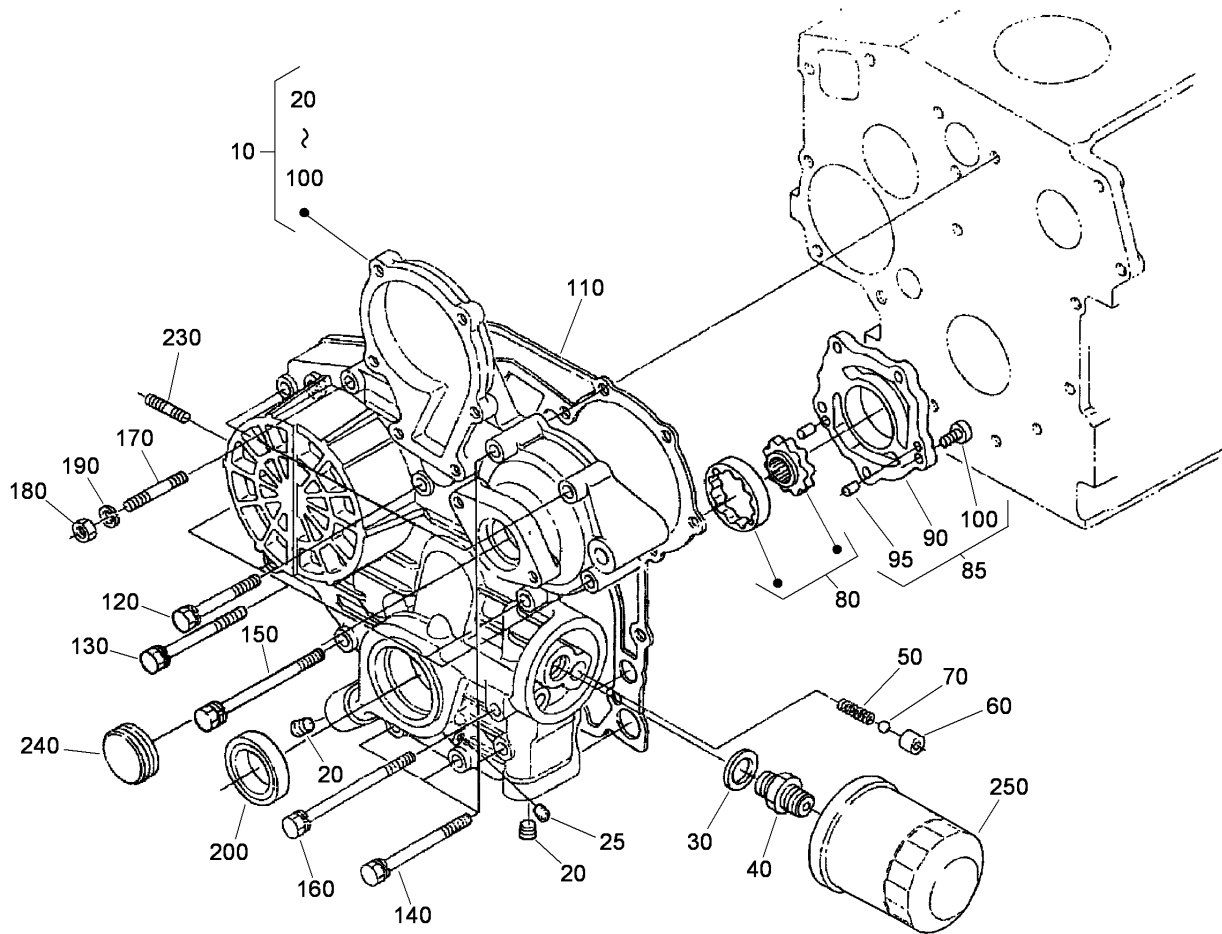
Ref	Part No.	Qty.	Description
10	104-3495	1	Pan-Oil
30	107-9065	22	Bolt
40	114-8151	1	Plug-Drain
50	98-7524	1	Gasket
60	104-3496	1	Filter-Pickup, Oil
70	98-7526	1	Bolt
80	105-3776	1	O-Ring

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### Cylinder Head Assembly

Ref	Part No.	Qty.	Description				
10	98-7531	2	Hook-Engine				
20	100-9195	2	Bolt				
30	108-6573	1	Gasket-Head, Cylinder				
40	108-6574	1	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

Ref	Part No.	Qty.	Description
10	115-4105	1	Gear Case ASM
20	98-9598	2	Plug
25	98-7487	1	Plug
30	98-7562	1	Washer-Plain
40	98-9388	1	Joint-Pipe
50	98-9544	1	Spring
60	98-9543	1	Seat-Valve
70	98-9380	1	Ball
80	98-9540	1	Oil Pump Rotor ASM
85	115-4501	1	Pump Cover ASM
90	107-9069	1	Cover-Pump, Oil
95	107-9072	2	Pin-Straight
100	107-9071	5	Screw
110	98-9633	1	Gasket-Case, Gear
120	107-9073	3	Bolt
130	105-3797	4	Bolt
140	98-9356	4	Bolt
150	107-9074	1	Bolt
160	98-9586	1	Bolt
170	105-3709	1	Stud
180	98-7572	1	Nut
190	98-7699	1	Washer-Spring
200	98-9482	1	Seal-Oil
230	105-3710	2	Stud

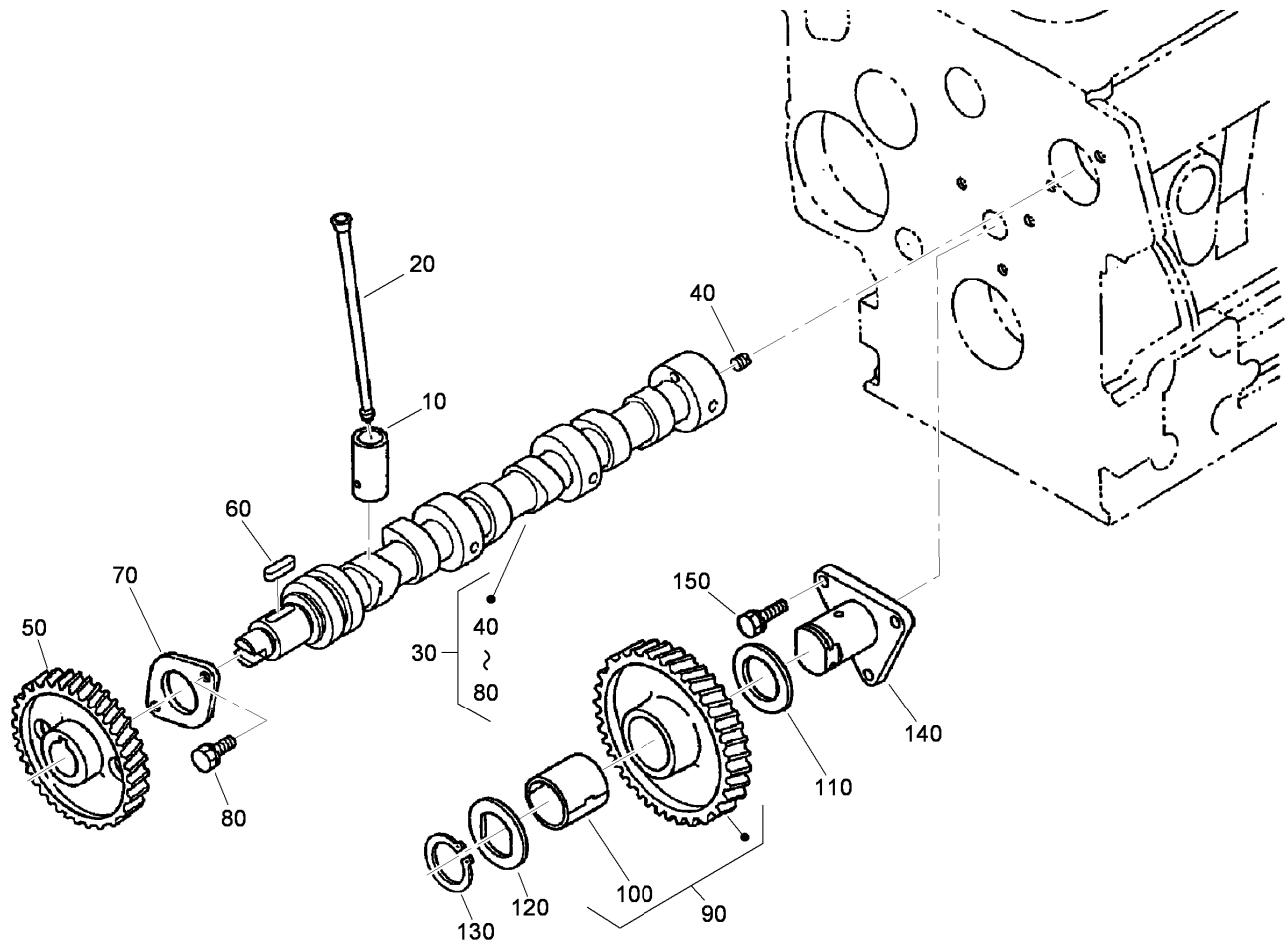
Ref	Part No.	Qty.	Description
240	98-9641	1	Cover
250	108-3841	1	Filter-Oil





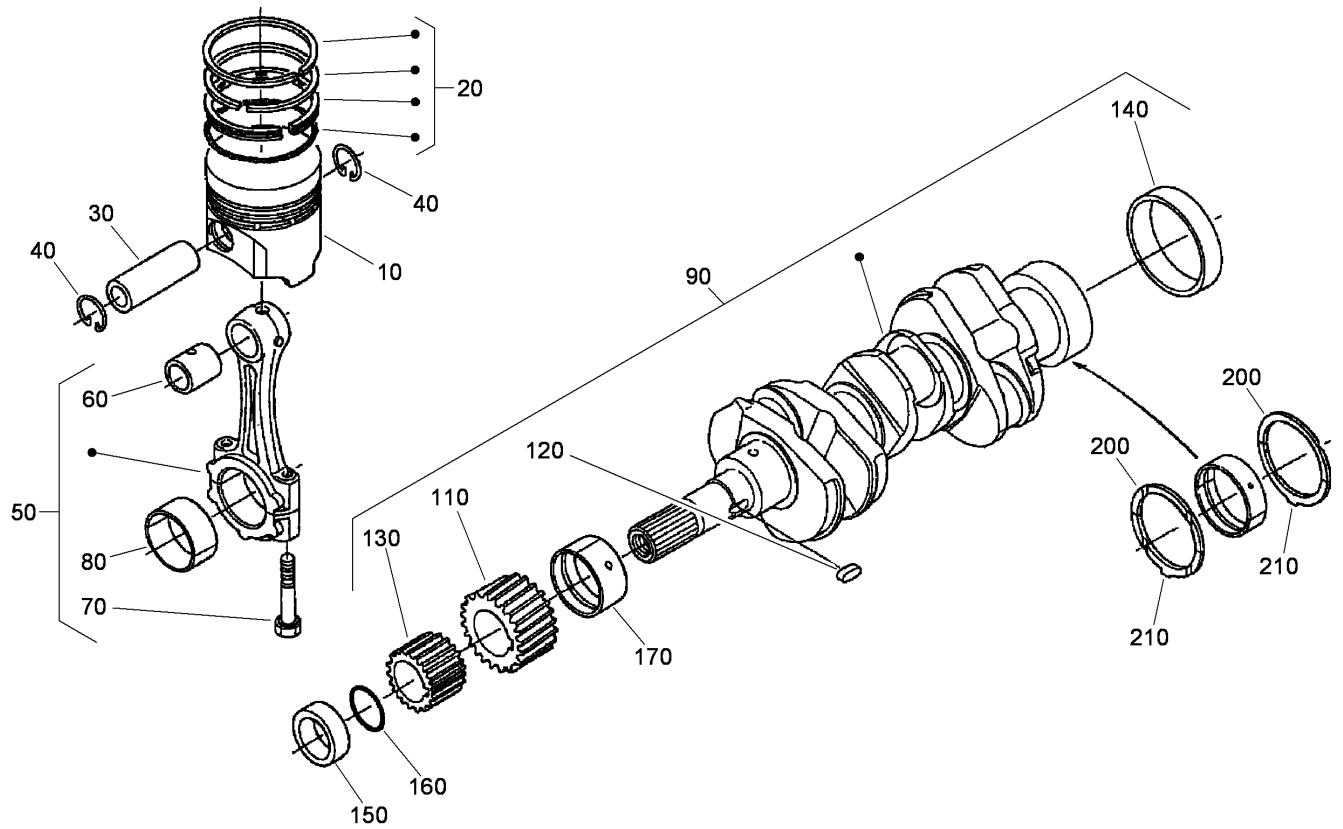






## Cam Shaft and Idle Gear Assembly

Ref	Part No.	Qty.	Description
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	Clip-Circular, Idle Gear
140	98-9533	1	Shaft-Gear, Idle
150	98-7692	3	Bolt

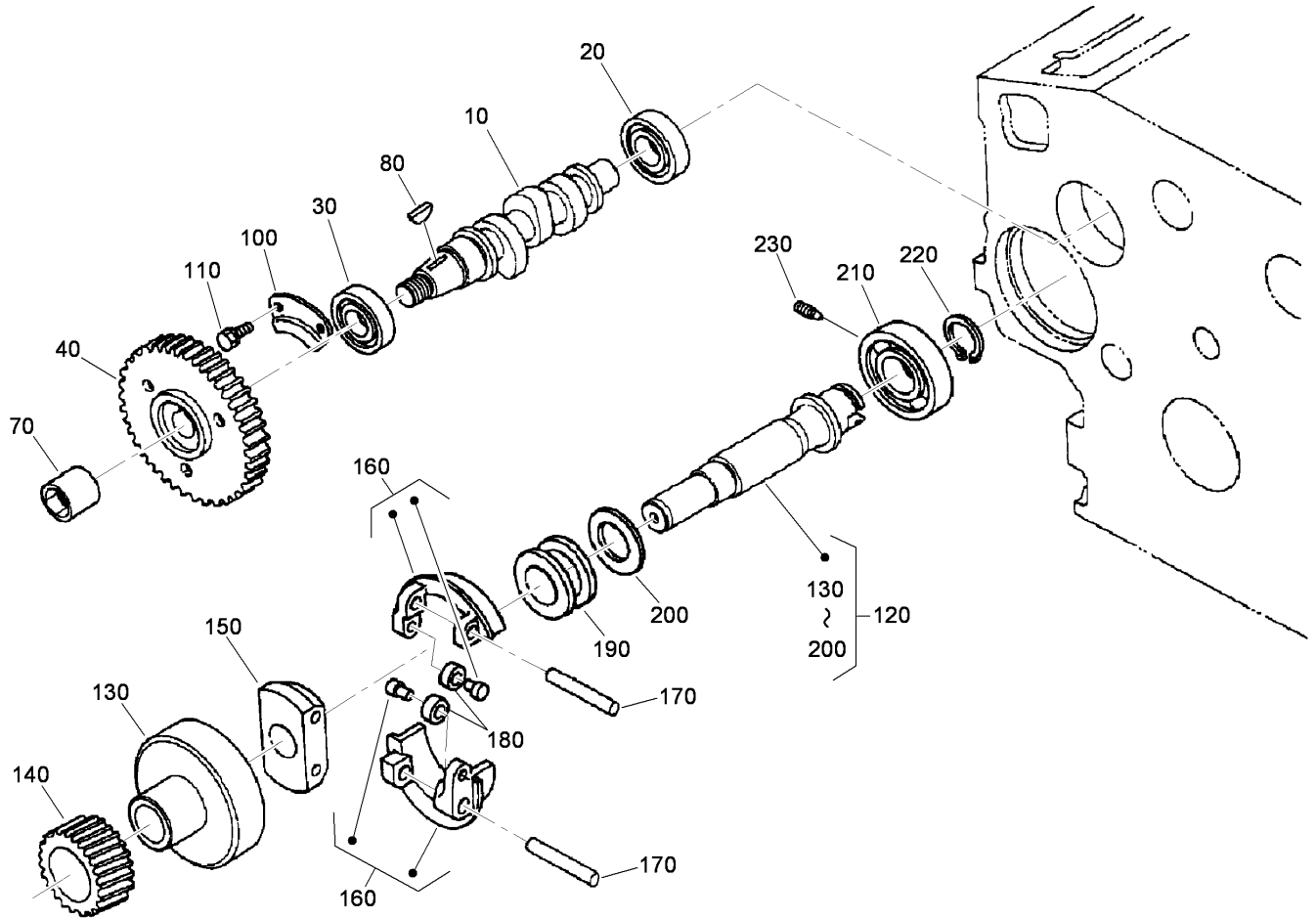


## Piston and Crankshaft Assembly

Ref	Part No.	Qty.	Description
10	112-8415	3	Piston ASM
10	112-8404	3	Piston
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	Clip-Circular, Piston Pin
50	115-3013	3	Connecting Rod ASM
60	115-3014	3	Bushing-Piston Pin
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
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)

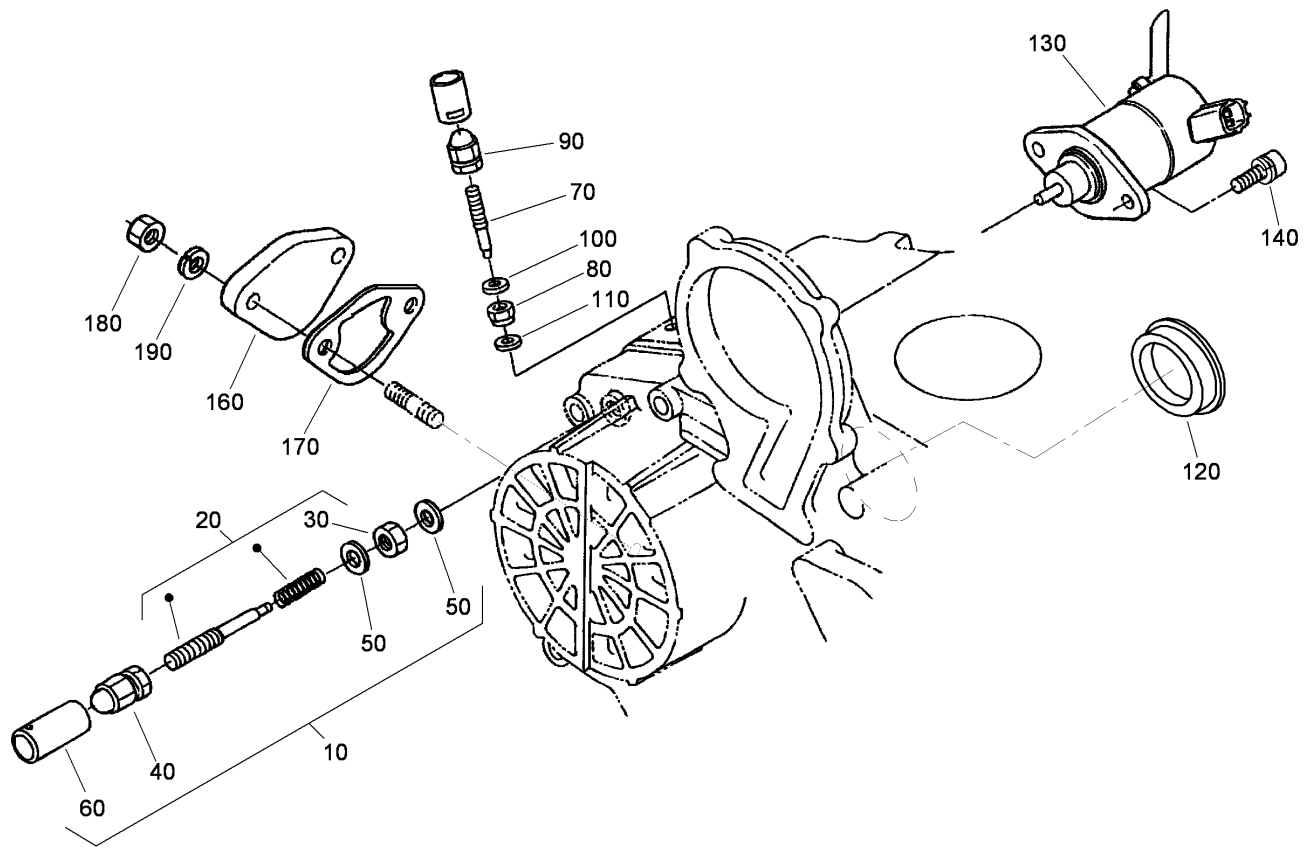
Ref	Part No.	Qty.	Description
200	98-9415	2	Bearing-Thrust (0.4Mm)
210	98-9688	2	Bearing-Thrust (STD)
210	98-9689	2	Bearing-Thrust (0.2Mm)
210	98-9690	2	Bearing-Thrust (0.4Mm)





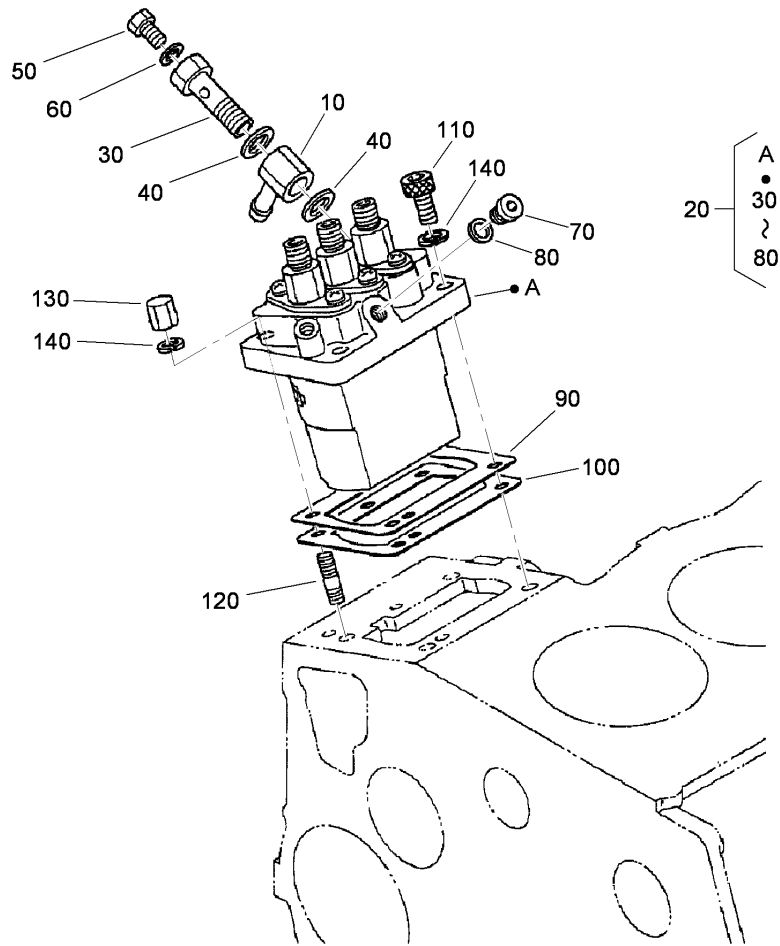
## Fuel Camshaft and Governor Shaft Assembly

Ref	Part No.	Qty.	Description
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	Clip-Circular, Governor Shaft
230	98-9565	1	Screw-Set

## Idle Apparatus and Stop Solenoid Assembly

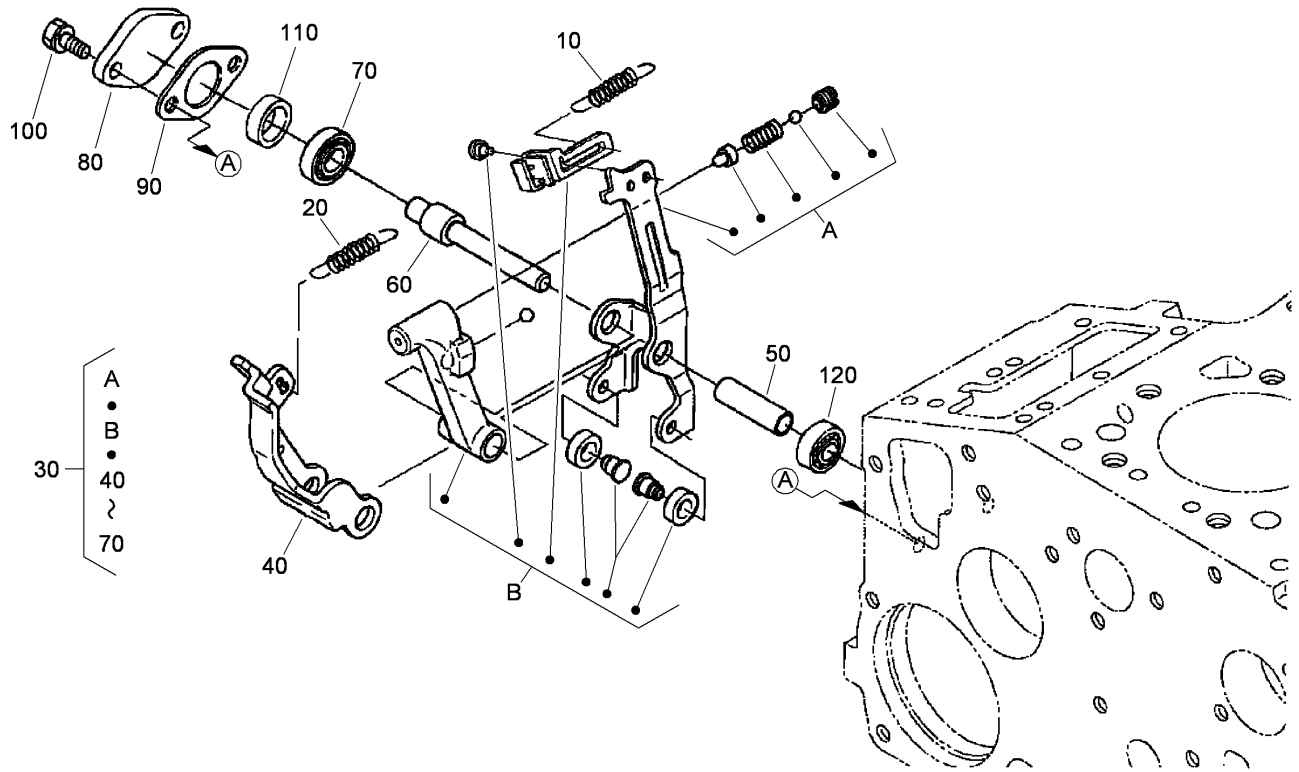
Ref	Part No.	Qty.	Description
10	98-9678	1	Idle Apparatus ASM
20	112-7014	1	Adjusting Bolt ASM
30	98-9439	1	Nut
40	112-0181	1	Nut
50	98-7654	2	Gasket
60	98-7656	1	Cap
70	112-7015	1	Bolt-Adjusting
80	99-3512	1	Nut
90	112-0181	1	Nut
100	98-7654	1	Gasket
110	107-9081	1	Gasket
120	112-7016	1	Cover-Pump
130	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

Ref	Part No.	Qty.	Description
10	98-9596	1	Joint-Eye
20	98-9643	1	Injection Pump ASM
30	98-9464	1	Bolt-Joint
40	98-9445	2	Gasket
50	98-9430	1	Screw
60	98-9446	1	Gasket
70	98-9466	1	Plug
80	98-9451	1	Gasket
90	98-9456	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

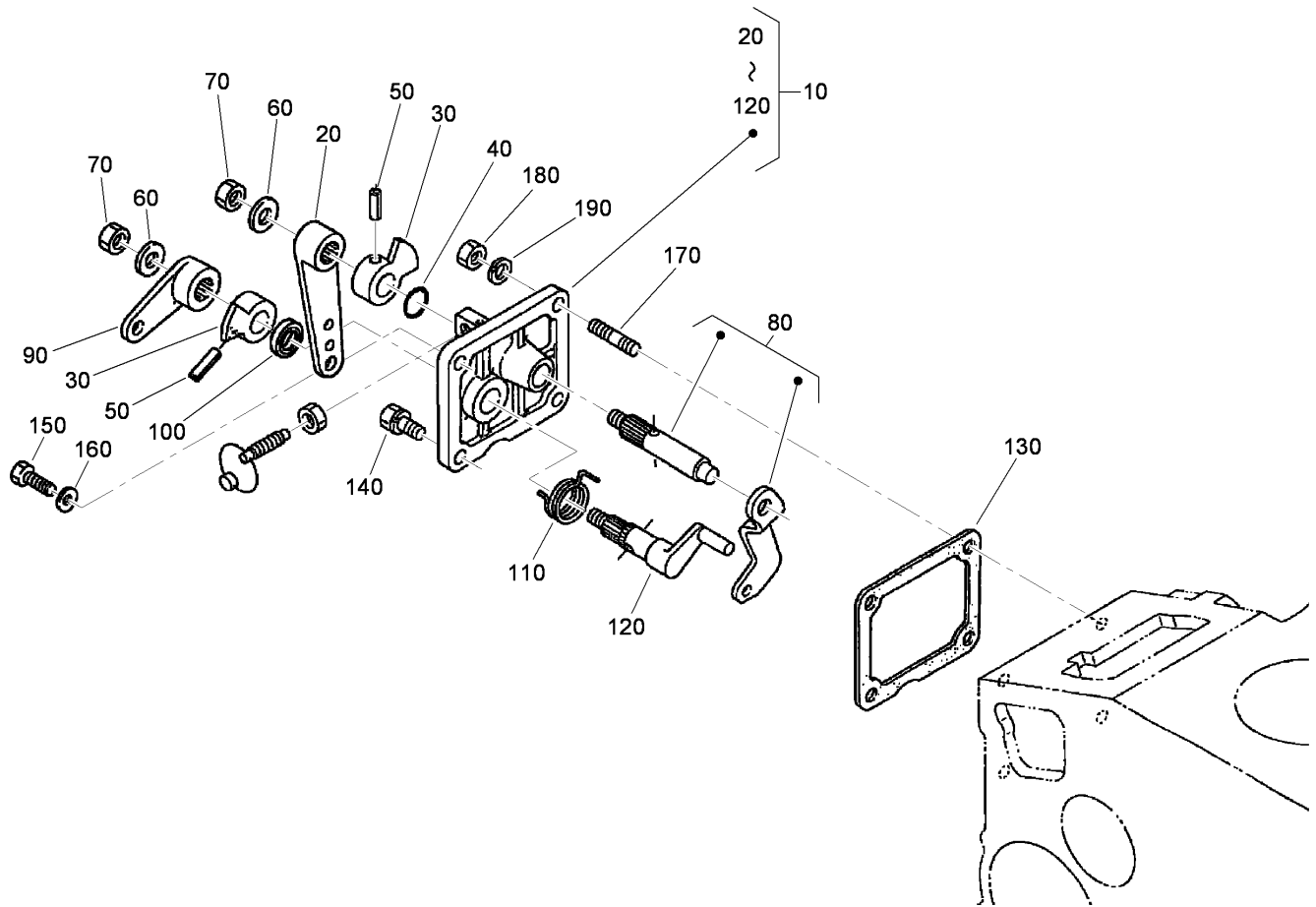




## Governor Assembly

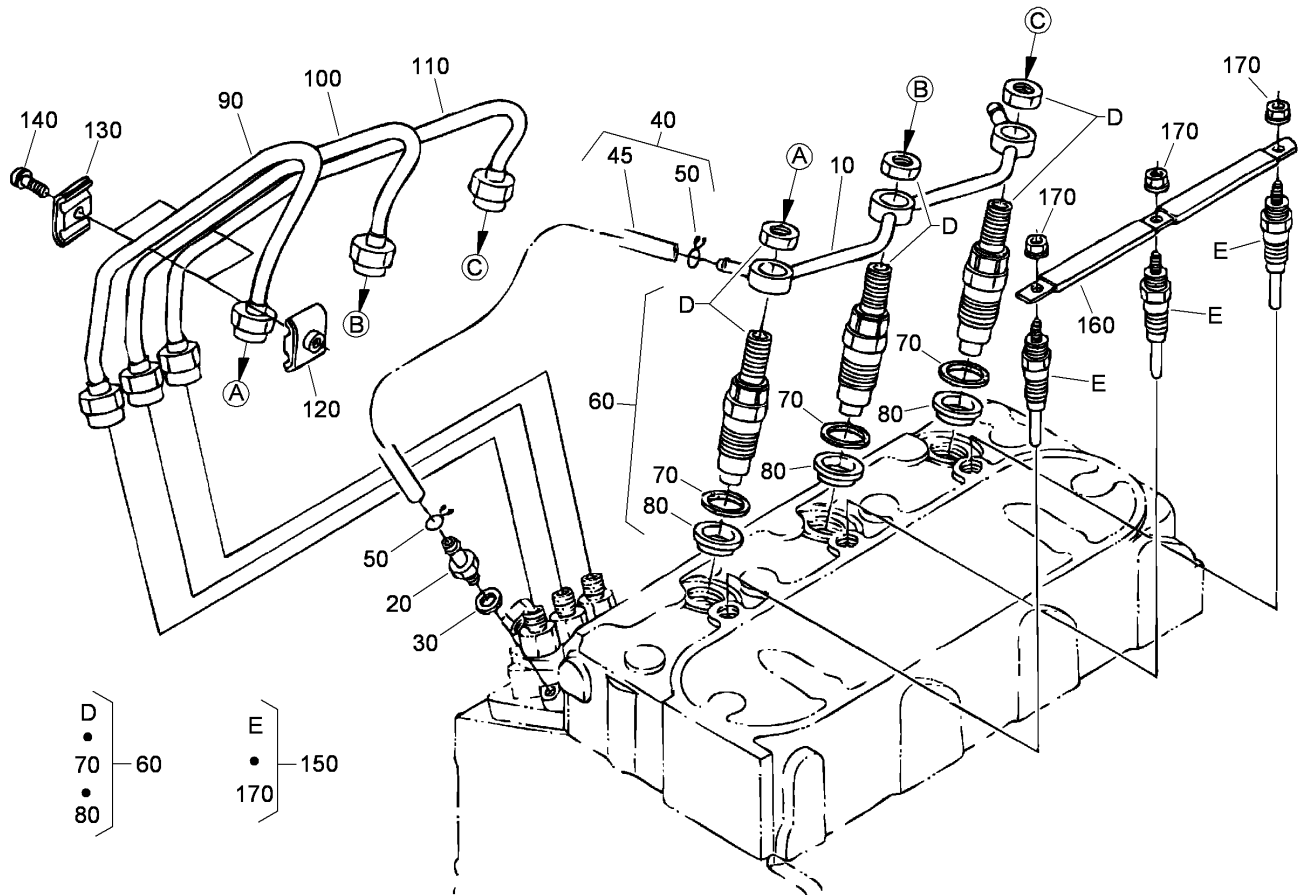
Ref	Part No.	Qty.	Description
10	105-3786	1	Spring-Start
20	98-9681	1	Spring-Governor
30	115-4502	1	Fork Lever ASM
40	107-9084	1	Lever-Fork
50	107-9085	1	Shaft-Lever, Fork
60	107-9086	1	Shaft-Lever, Fork
70	98-9570	1	Bearing-Miniaturize
80	98-9569	1	Cover-Shaft, Fork Lever
90	98-9682	1	Gasket
100	98-9351	2	Bolt
110	98-9567	1	Collar
120	98-9571	1	Bearing-Miniaturize

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## Speed Control Plate Assembly

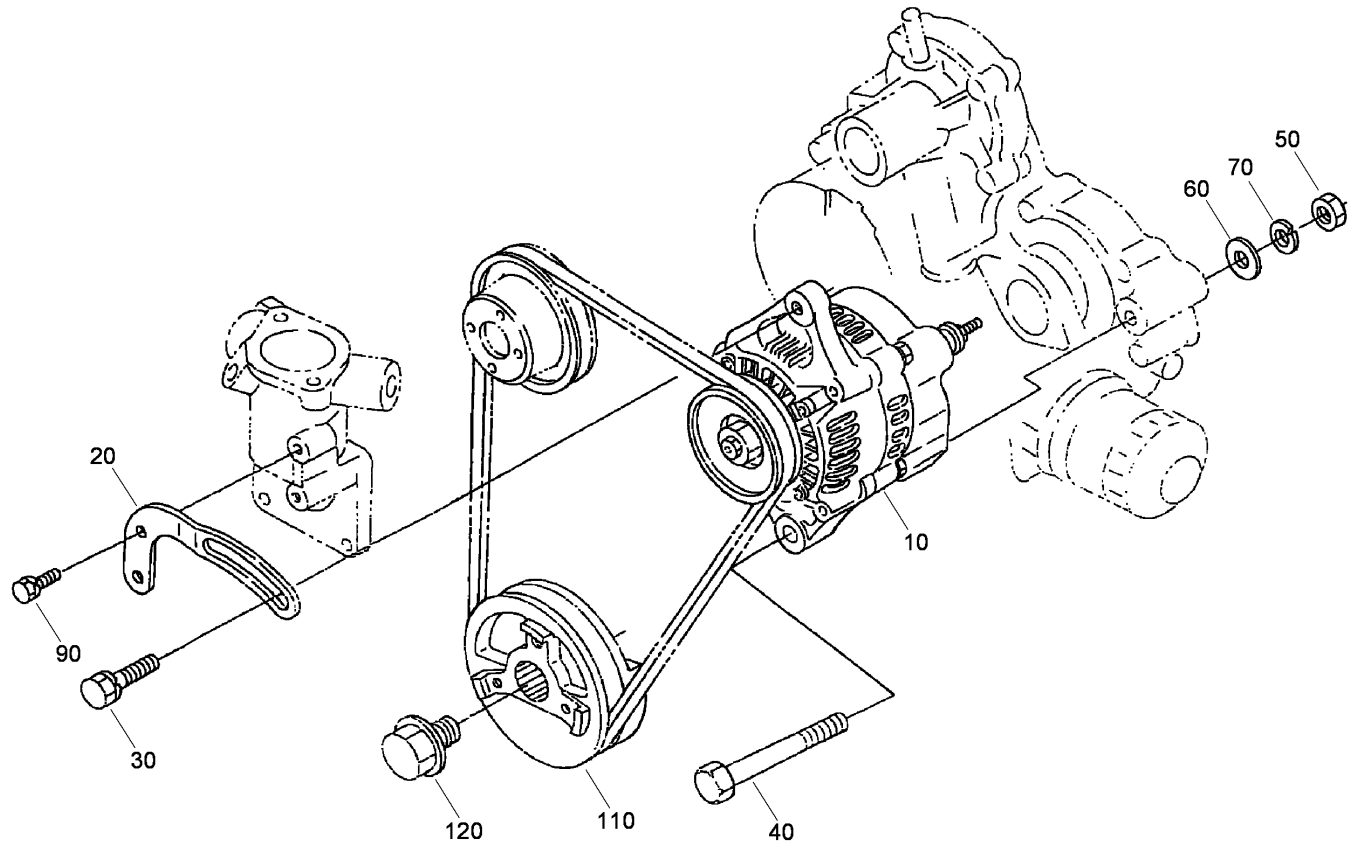
Ref	Part No.	Qty.	Description
10	105-3735	1	Control Plate ASM
20	98-9662	1	Lever-Control, Speed
30	98-9572	2	Lever-Control, Speed
40	105-3788	1	O-Ring
50	98-7602	2	Pin-Spring
60	98-9594	2	Washer-Plain
70	98-9589	2	Nut
80	98-9658	1	Governor Lever ASM
90	98-9663	1	Lever-Stop, Engine
100	98-7601	1	Seal-Oil
110	98-9472	1	Spring-Return
120	98-9664	1	Shaft-Lever, Stop
130	98-9637	1	Gasket
140	98-7692	1	Bolt
150	99-8348	1	Bolt
160	98-7654	2	Gasket
170	105-3710	2	Stud
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring

## Nozzle Holder and Glow Plug Assembly

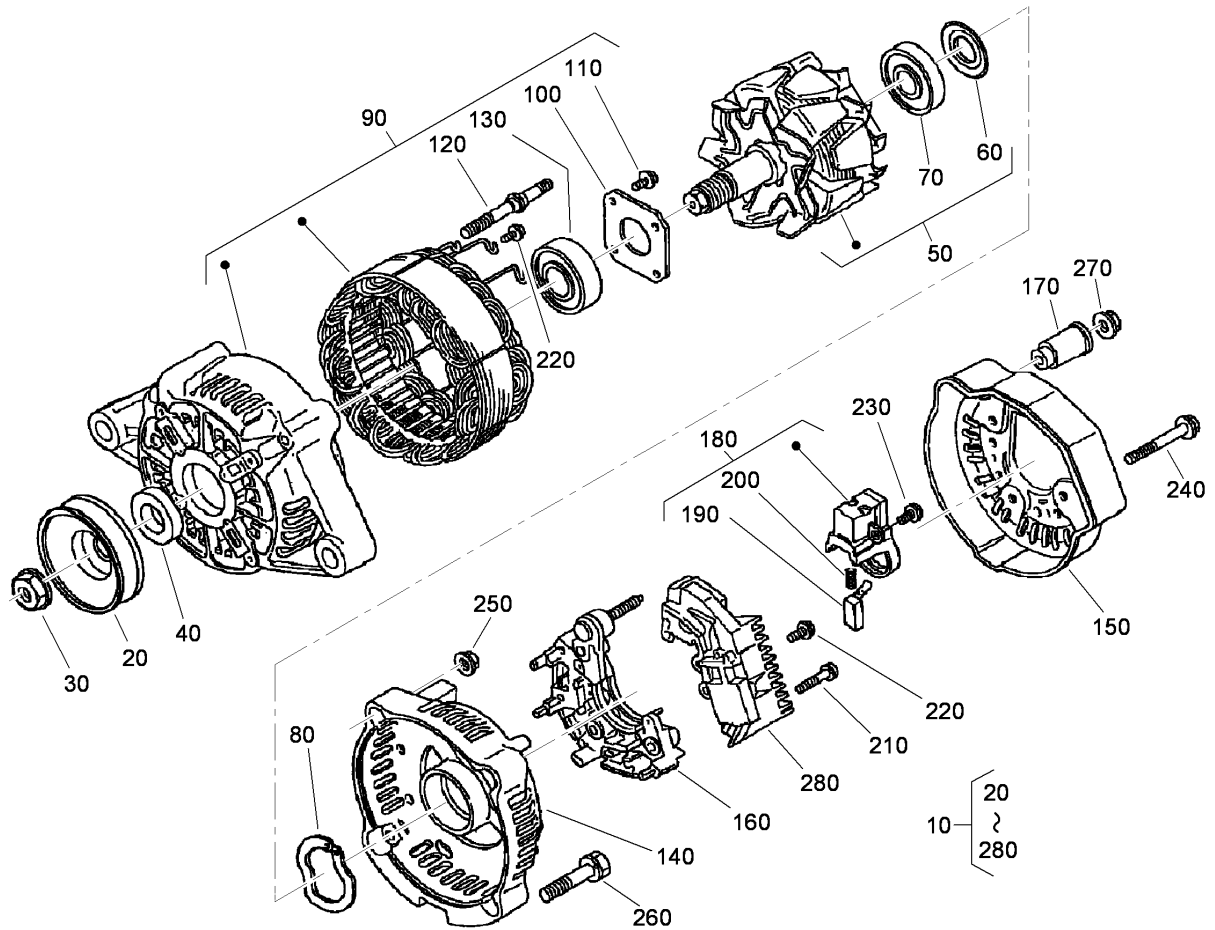
Ref	Part No.	Qty.	Description
10	98-9620	1	Over Flow Pipe ASM
20	98-9431	1	Screw-Bleeder
30	98-7654	1	Gasket
40	98-9420	1	Over Flow Pipe ASM
45	112-0182	1	Pipe-Over Flow
50	98-7671	2	Clip-Pipe
60	108-2866	3	Nozzle Holder Kit
70	98-7676	3	Gasket
80	98-7677	3	Seal-Heat
90	98-9653	1	Pipe-Injection
100	98-9654	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



## Alternator and Pulley Assembly

Ref	Part No.	Qty.	Description
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

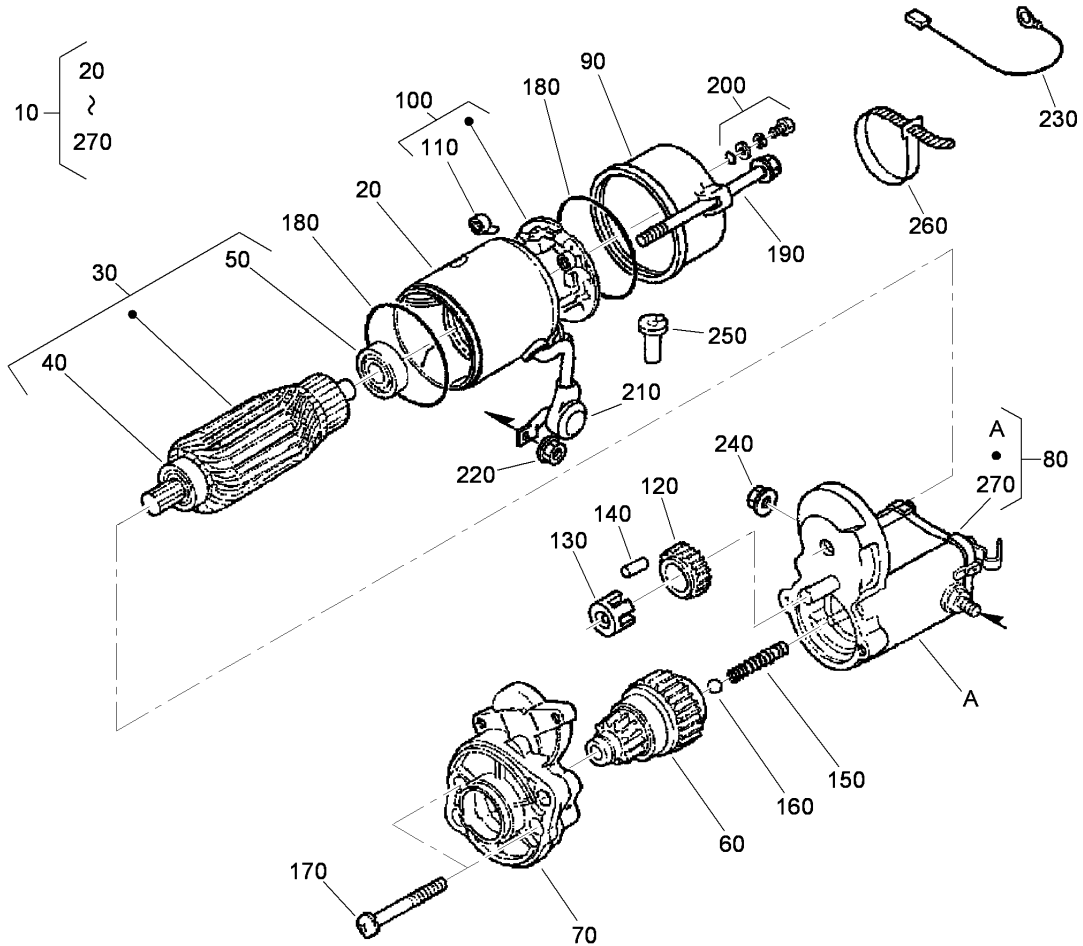


## Alternator Components

Ref	Part No.	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
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
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	110-3799	1	Regulator ASM





### Starter Assembly No. 98-9705

Ref	Part No.	Qty.	Description
10	98-9705	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	99-8373	1	Clutch-Running, Over
70	99-8374	1	Frame-End, Drive
80	105-3746	1	Magnetic Switch 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	98-7754	1	Spring
160	98-7755	1	Ball
170	98-7756	2	Bolt
180	98-7757	2	O-Ring
190	100-9240	2	Bolt
200	98-7758	2	Bolt ASM
210	99-8375	1	Cover
220	99-8371	1	Nut-Hex
230	98-9711	1	Cord-Solenoid, Stop
240	99-8376	1	Nut-Hex

Ref	Part No.	Qty.	Description
250	98-7759	1	Pipe-Drain
260	98-9712	1	Band-Cover
270	105-2886	1	Cover ASM















# Attachments and Accessories

## For 30631 - Groundsmaster 328-D 4-Wheel Drive Traction Unit

Product Name	Model/Part
GM328 4WD INT'L FINAL ASM .....	105-2921
Jack Pad Kit .....	106-4386
Premium Engine Oil, 10w30 (Drum) .....	108-1179
Premium Engine Oil, 10w30 (Pail) .....	108-1180
Premium Engine Oil, 15w40 (Drum) .....	108-1181
Premium Engine Oil, 15w40 (Pail) .....	108-1182
Premium Transmission/Hydraulic Tractor Fluid (Drum) .....	108-1183
Premium Transmission/Hydraulic Tractor Fluid (Pail) .....	108-1184
Premium All Season Gear Lube (Pail) .....	108-1187
Premium All Purpose Grease .....	108-1190
Premium All Season Gear Lube (Quart) .....	108-1590
Tire Chains (23 x 8.50-12) .....	11-0390
Wheel Weight Kit .....	11-0440
5 Inch Air Cleaner Safety Element .....	114-4057
Tube-Inner (23 x 8.50-12) .....	231-90
Rear Weight Kit .....	24-5780
Weight-Rear .....	24-5790-01
Standard Seat Kit .....	30623
Deluxe Seat Kit .....	30625
Seat Adapter Kit .....	30628
Cruise Control Kit .....	30677
Arm Rest Kit .....	30707
72 Inch Rear Discharge Mower .....	30710
72 Inch Guardian Recycler Mower .....	30716
72 Inch Side Discharge Mower .....	30722
Rotary Broom .....	30743
48 Inch V-Plow .....	30750
48 Inch V-Plow Mounting Kit .....	30757
Debris Blower .....	30855
Wide Wheel and 4-Ply Tire ASM .....	62-7020
Wheel and 6-Ply Tire ASM .....	69-9870
Spark Arrestor Screen .....	75-6880
Rear Tire Chains, 4 Wheel Drive .....	76-1840
Auxiliary Valve Kit .....	93-3169

