Form Number 3353-511 Rev B

Groundsmaster® 328-D
4-Wheel Drive

Model No. 30631 - 250000001 and up.

Parts Catalog

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.

© The Toro Company - 2008
All Rights Reserved

Register your product at www.Toro.com

Contents

Description	Page
Frame Assembly	4
Frame Assembly No. 98-3879	5
Control Panel Assembly	6
Brake Pedal Assembly	8
Traction Pedal Assembly	9
Power Steering Assembly	10
Power Steering Unit Assembly No. 108-6557	11
Engine Insatllation Assembly	12
Power-Take-Off and Shaft Assembly	13
Power-Take-Off Assembly	14
Valve and Cylinder Assembly	15
Hydraulic Cylinder Assembly No. 100-6586 (2-1/2in Bore)	16
Hydraulic Cylinder Assembly No. 100-6591 (3in Bore) (Optional)	17
Valve Assembly No. 106-8071-01	18
Radiator and Hood Assembly	19
Hydrostatic Transmission Assembly	21
Transmission Assembly No. 92-8947	23
Neutral Centering Device Assembly	25
4 Wheel Drive Rear Axle Assembly	26
Driveshaft Assembly No. 98-5009	28
Bi-Directional Clutch Assembly No. 95-6296	29
Hydraulic Cylinder Assembly No. 99-2415	30
Tie Rod Assembly No. 98-3871-03	31
Push Arm and Roll-Over-Protection-System Assembly	32
Water and Fuel Filter Assembly	34
Water / Fuel Filter Assembly No. 98-9305	35
Fuel Tank and Front Axle Assembly	36
Bevel Pinion Shaft Assembly Rear Axle Assembly No. 106-1120	37
Differential Assembly Rear Axle Assembly No. 106-1120	38
Axle Support Assembly Rear Axle Assembly No. 106-1120	39
Bevel Gear Case Assembly Rear Axle Assembly No. 106-1120	40
Bevel Gear Shaft Assembly Rear Axle Assembly No. 106-1120	41
Axle Case Assembly Rear Axle Assembly No. 106-1120	42
Axle Assembly RearAxle Assembly No. 106-1120	43
Front Axle Assembly No. 86-9630-03	44
Brake Assembly	46
Engine and Mounting Component Assembly	47
Engine Pulley System Assembly	49
Fan Support Assembly No. 106-4399	50
Crankcase Assembly	51
Oil Pan Assembly	52
Cylinder Head Assembly	53
Gear Case Assembly	54
Head Cover Assembly	55
Dipstick and Guide Assembly	56
Main Bearing Case Assembly	57
Camshaft and Idle Gear Shaft Assembly	58
Piston and Crankshaft Assembly	59
Flywheel Assembly	60
Fuel Camshaft and Governor Shaft Assembly	61
Idle Apparatus Assembly	62
Injection Pump Assembly	63
Injection Pump Assembly No. 98-9643	64
Governor Assembly	65
Speed Control Plate Assembly	66
Nozzle Holder and Glow Plug Assembly	67
Nozzle Holder Assembly	68
Alternator and Pulley Assembly	69
Alternator (Component Part) Assembly	70
Starter Assembly	71
Starter (Component Part) Assembly	72
Water Flange and Thermostat Assembly	73
Water Pump and Pipe Assembly	74
Valve and Rocker Arm Assembly	75
Inlet Manifold Assembly	76
Miscellaneous Parts Assembly	77
Gasket Kit	78
Attachments and Accessories List	79

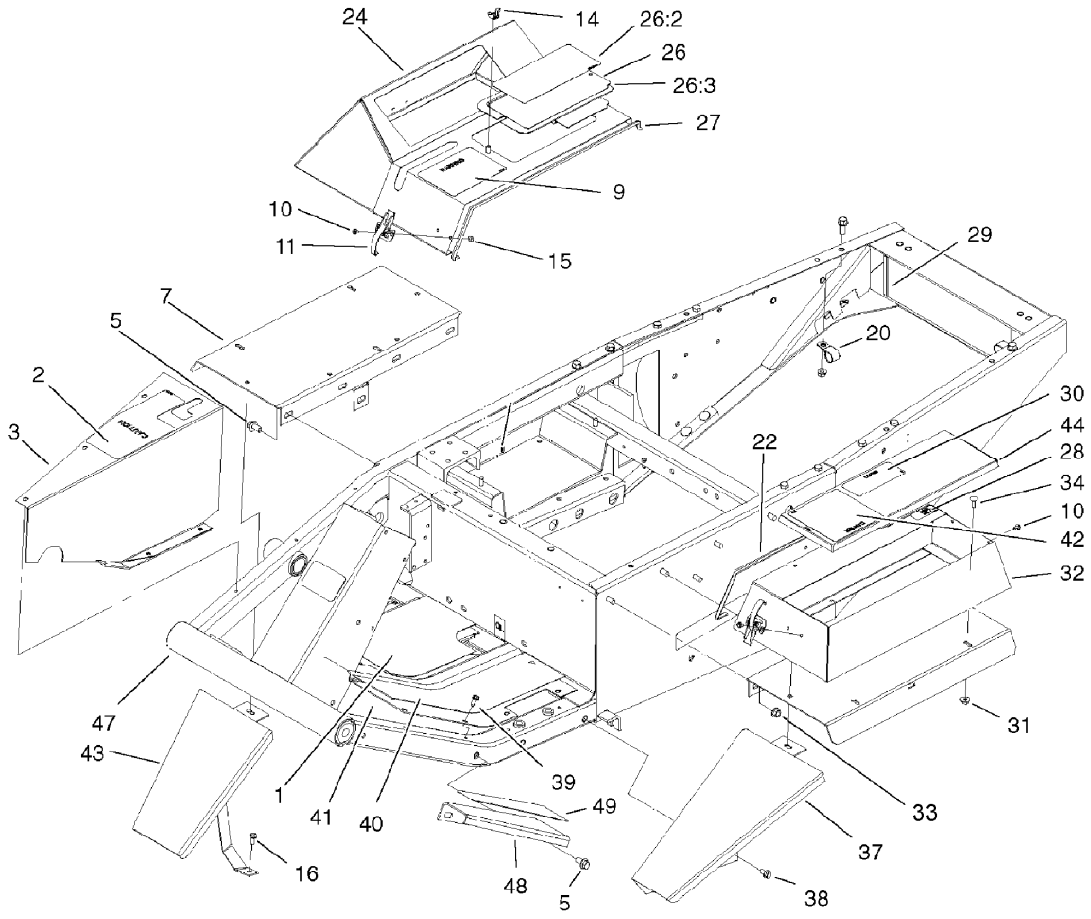
Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

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

Footnotes

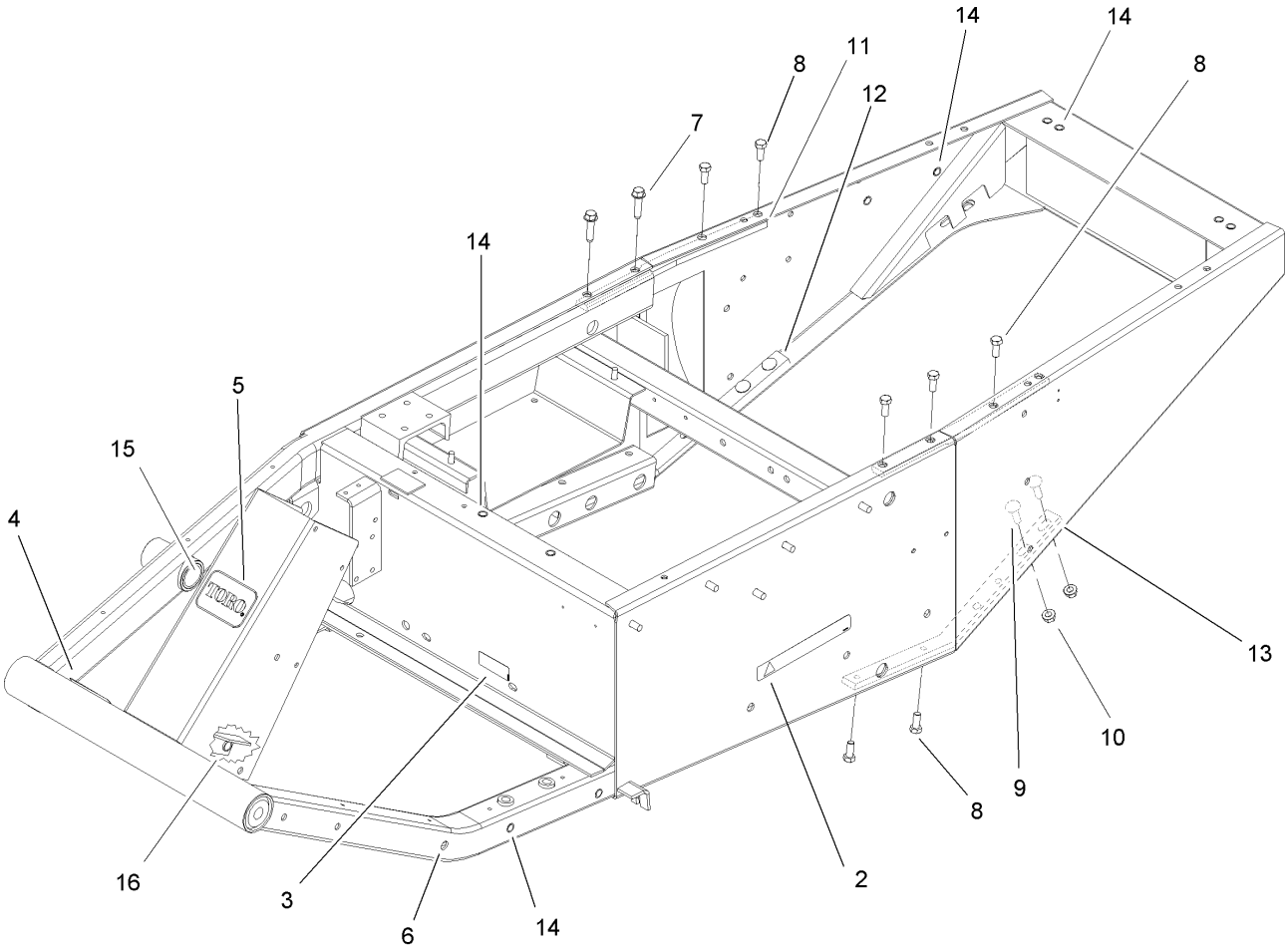
❶ Not illustrated
❷ Not serviced separately
❸ Optional Equipment



Frame Assembly

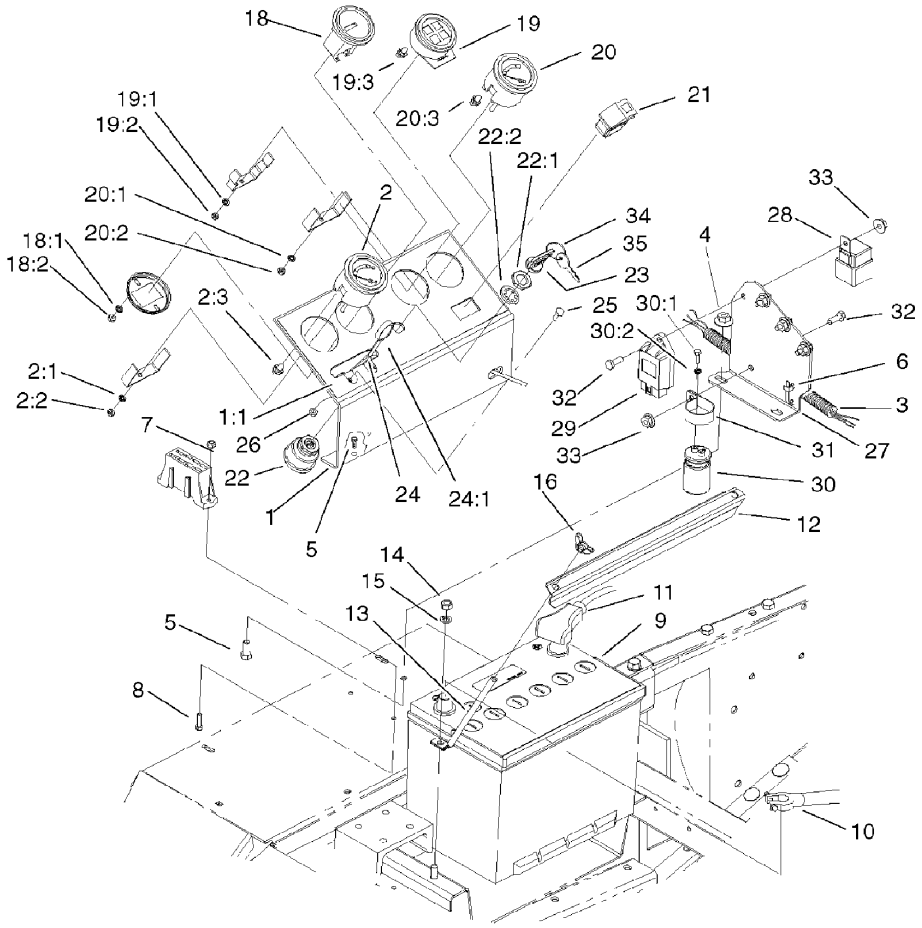
Ref	Part No.	Qty.	Description
1	21-2770	1	Pad-Floor Plate, RH
2	105-7823	1	Decal-Caution
3	21-2660-01	1	Plate-Side
5	3234-12	5	Screw-HHF
7	105-2596-01	2	Fender ASM
9	107-2918	1	Decal-Danger
10	3290-144	9	Screw-SHWH
11	249-21	3	Clamp-Slotted
14	32103-2	1	Nut-Wing
15	3296-2	9	Nut-Lock
16	3234-33	1	Screw-HHF
20	2412-4	2	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	93-6680	1	Decal-Diesel
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
37	68-8610-01	1	Extension-Fender
38	3234-14	2	Screw-HHF
39	32144-10	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



Frame Assembly No. 98-3879

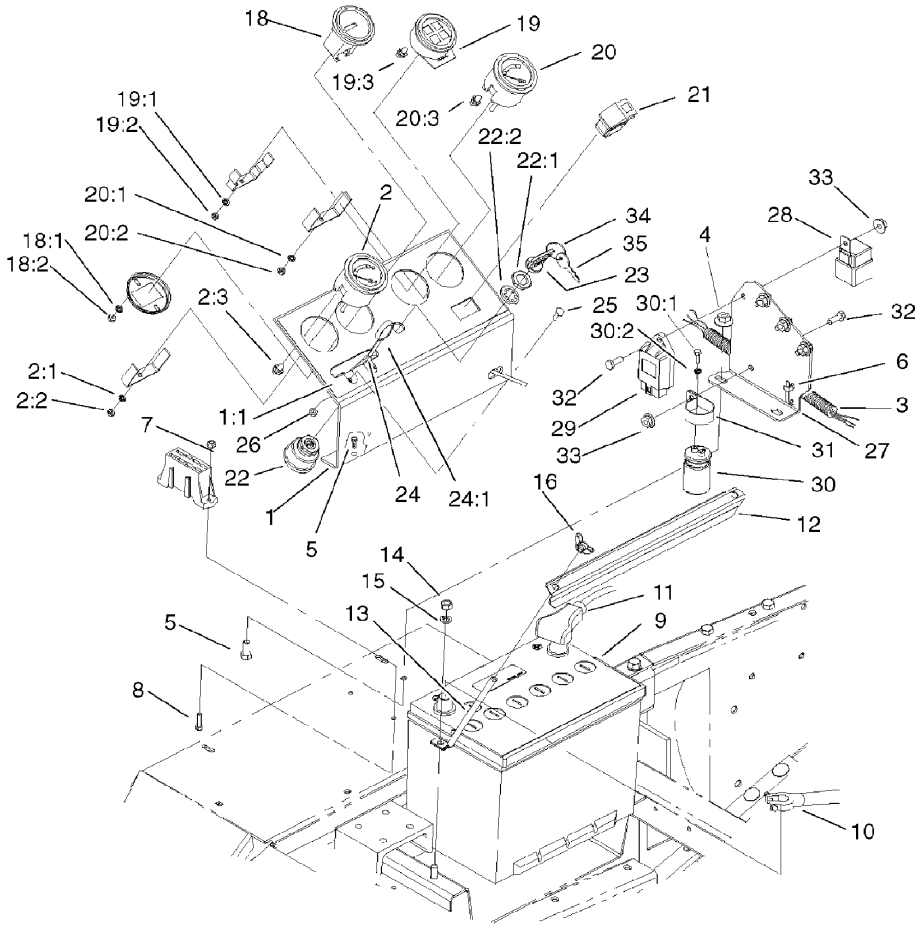
Ref	Part No.	Qty.	Description
2	93-7830	2	Decal-Torque
3	93-6686	1	Decal-Oil, HYD
4	93-7836	1	Decal-Pedal, Traction
5	70-2200	1	Decal
6	32148-9	1	Insert-Nut
7	11-0590	2	Screw-HWHTF
8	3234-25	9	Screw-HHF
9	3231-25	4	Screw-CARR
10	32128-21	4	Nut-HF
11	98-3866-01	2	Brace-Upper
12	98-3865-01	1	Brace-Right, Lower
13	98-3864-01	1	Brace-Left, Lower
14	3290-472	10	Insert-Threaded
15	256-126	2	Bushing
16	256-156	1	Bushing-Flange



Control Panel Assembly

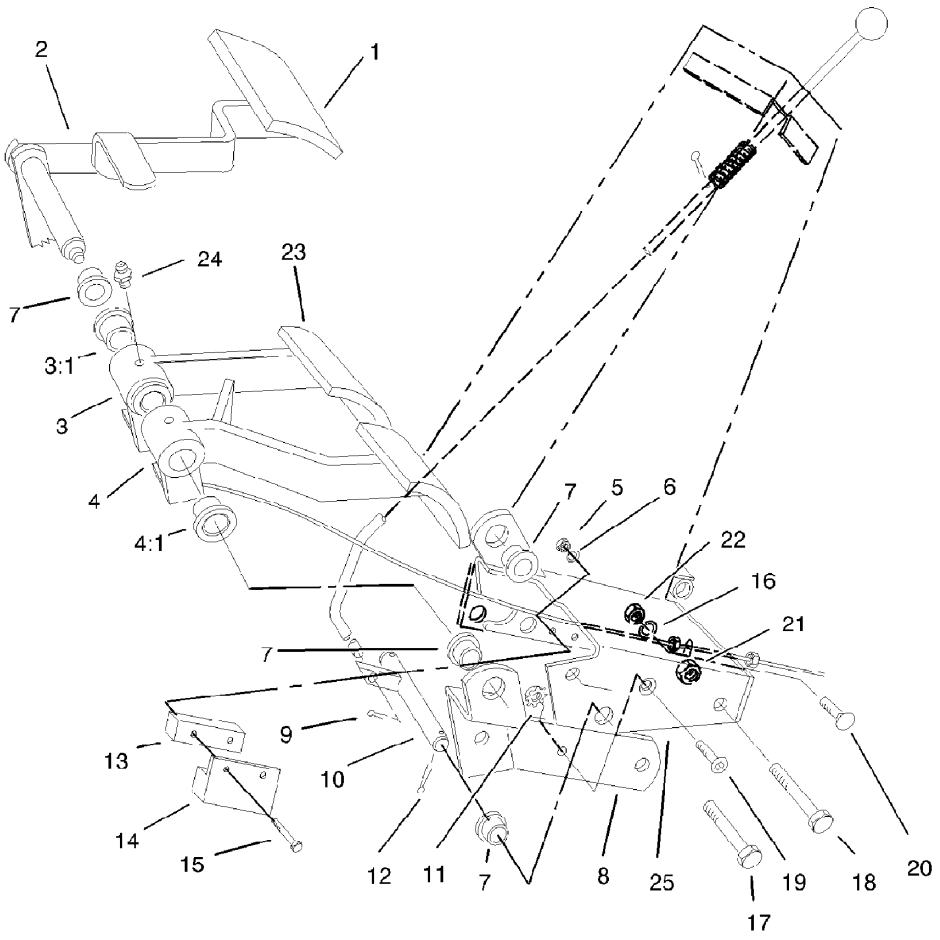
Ref	Part No.	Qty.	Description
1	105-2917	1	Instrument Panel ASM
1:1	105-0056	1	Decal-Panel, Instrument
2	98-9339	1	Gauge-Fuel
2:1	3254-1	3	Washer-Lock, Int
2:2	3217-27	3	Nut-Hex
2:3	105-9265	1	Bulb And Lamp ASM
3	104-4065	1	Harness-Wire, Main
4	32128-30	4	Nut
5	322-3	4	Screw-HH
6	3290-379	2	Tie-Cable
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
18	66-2950	1	Gauge-Hourmeter
18:1	3255-20	2	Washer-Lock
18:2	3217-25	2	Nut-Hex
19	98-9306	1	Light-Warning

Ref	Part No.	Qty.	Description
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	1	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	70-1480	4	Relay
29	107-9097	1	Controller-Glow
30	37-2690	1	Capacitor
30:1	3252-18	2	Screw
30:2	3254-1	2	Washer-Lock, Int
31	2412-74	1	R-Clamp
32	321-4	5	Screw-HH



Control Panel Assembly (continued)

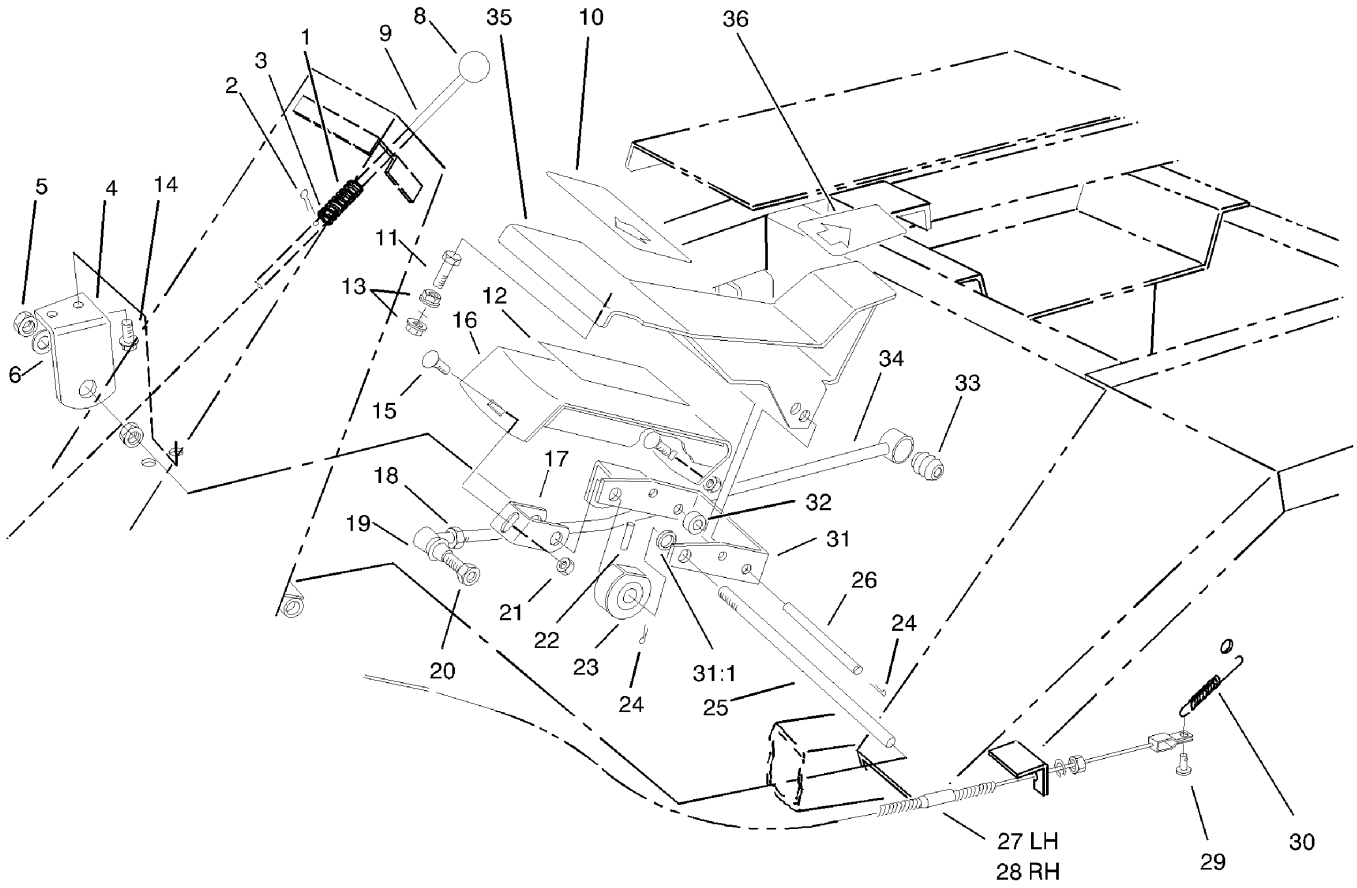
Ref	Part No.	Qty.	Description
33	32128-33	5	Nut-HF
34	98-9321	1	Ring-Key
35	99-8970	1	Key-Latch, Hood



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

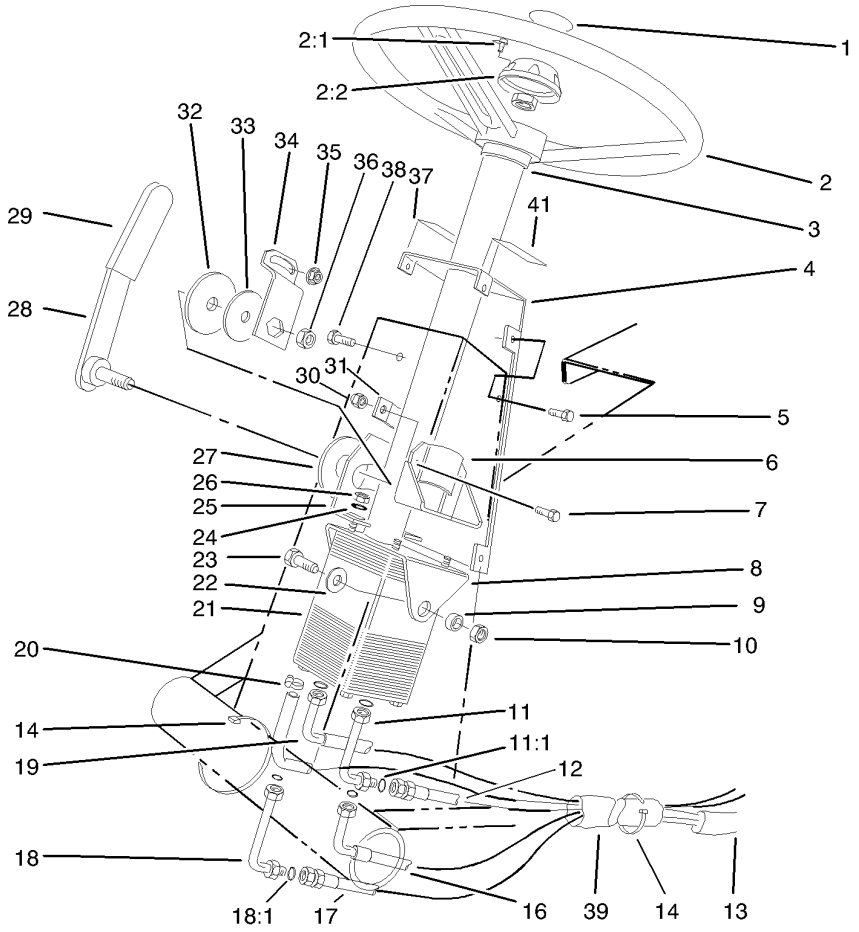
Ref	Part No.	Qty.	Description
23	93-8743	2	Footpad-Turn
24	302-5	2	Fitting-Grease
25	105-0066-01	1	Brake Pedal Mount ASM



Traction Pedal Assembly

Ref	Part No.	Qty.	Description
1	95-1821-03	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	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

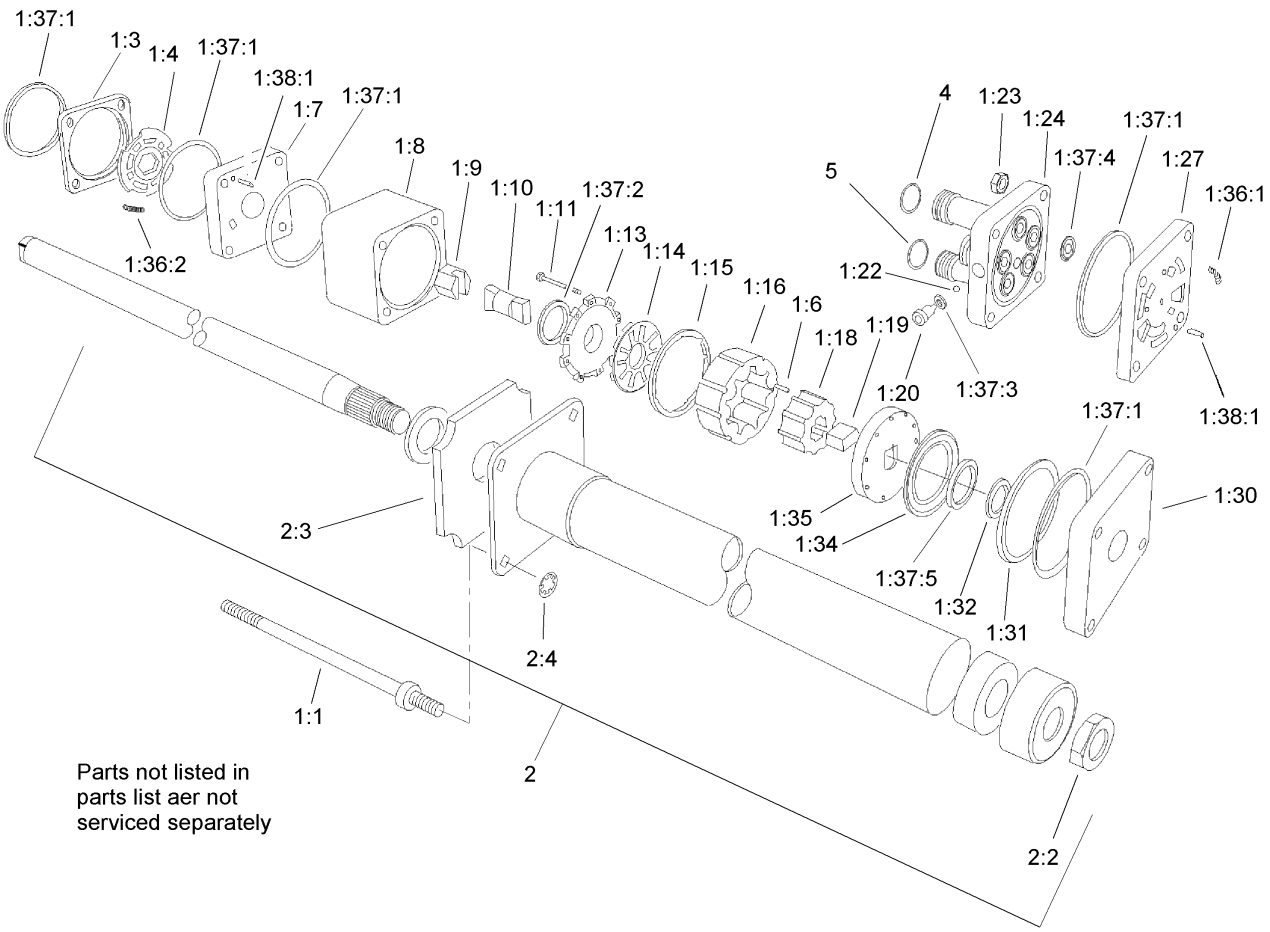
Ref	Part No.	Qty.	Description
26	88-1640	1	Pin-Pedal, Traction
27	108-1380	1	LH Brake Cable ASM
28	108-1379	1	RH Brake Cable ASM
29	283-58	2	Pin-Clevis
30	3-7243	2	Spring-Extension
31	88-1670	1	Pivot Bracket ASM
31:1	256-156	2	Bushing-Flange
32	88-0470	1	Tube-Spacer, Pedal
33	23-2270	1	Bushing-Rubber
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

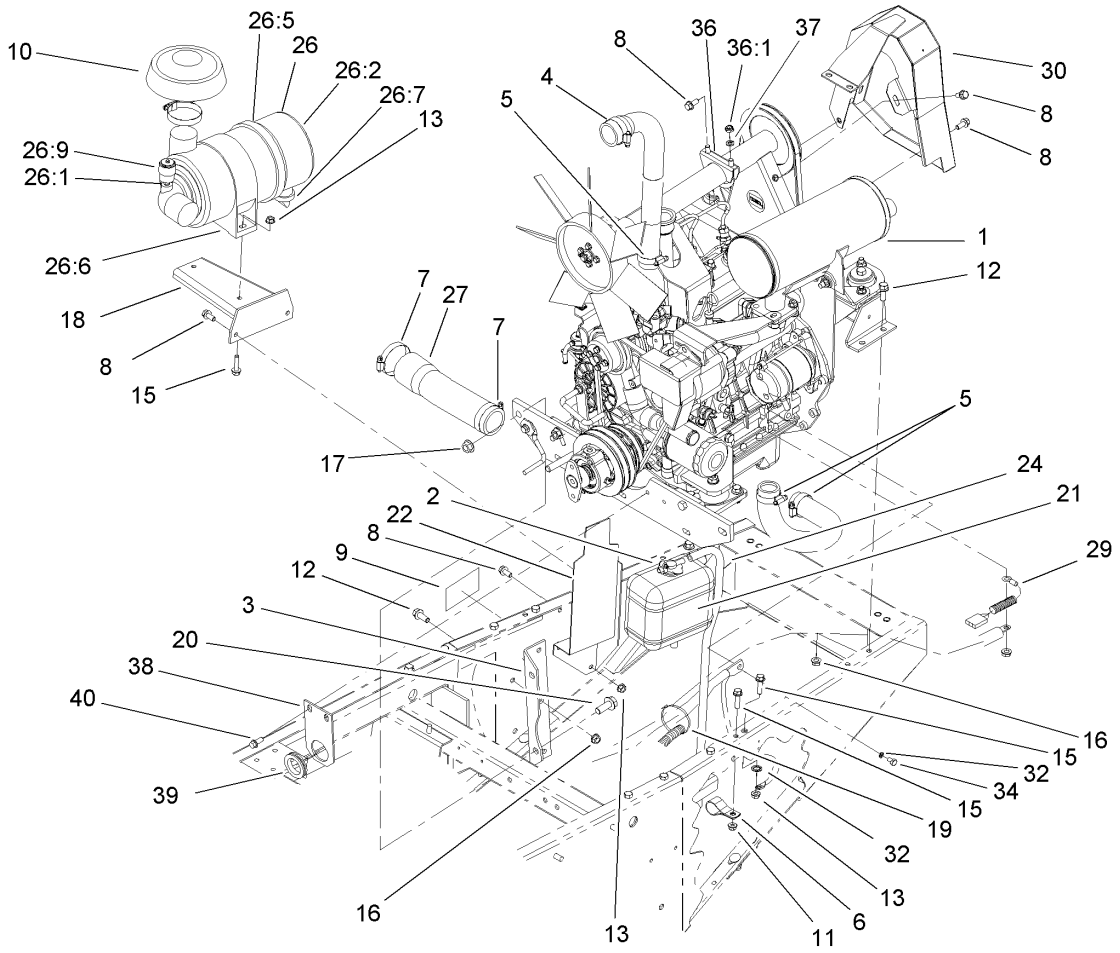
Ref	Part No.	Qty.	Description
22	3256-46	2	Washer-Flat
23	323-6	2	Screw-HH
24	3256-3	4	Washer-Flat
25	80-2940-03	1	Plate-Pivot
26	3296-20	4	Nut-Lock, NI
27	31-0390	1	Disc-Friction
28	93-1353-03	1	Lever-Steering, Tilt
29	21-1880	2	Grip-Handle
30	3296-29	2	Nut-Lock, NI
31	82-8650	1	Clamp-Column
32	82-9010	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



Power Steering Unit Assembly No. 108-6557

Ref	Part No.	Qty.	Description
1		1	Steer Valve ASM
1:1	92-7310	4	Bolt-Special
1:3		1	Ring-Valve
1:4		1	Plate-Valve
1:6		9	Pin-Alignment
1:7		1	Manifold-Isolation
1:8		1	Ring-Metering
1:9		1	Hex Drive ASM
1:10		1	Link-Drive
1:11		11	Screw-HSH
1:13		1	Cover-Commutator
1:14		1	Commutator
1:15		1	Ring-Commutator
1:16		1	Stator
1:18		1	Rotor
1:19		1	Spacer-Link, Drive
1:20		1	Plug
1:22		1	Ball
1:23		4	Nut-Hex
1:24		1	Cover-Port
1:27		1	Manifold-Port
1:30		1	Plate-Cover, Upper
1:31		1	Spacer-Bearing, Thrust
1:32		1	Spacer-Seal
1:34		1	Bearing-Thrust

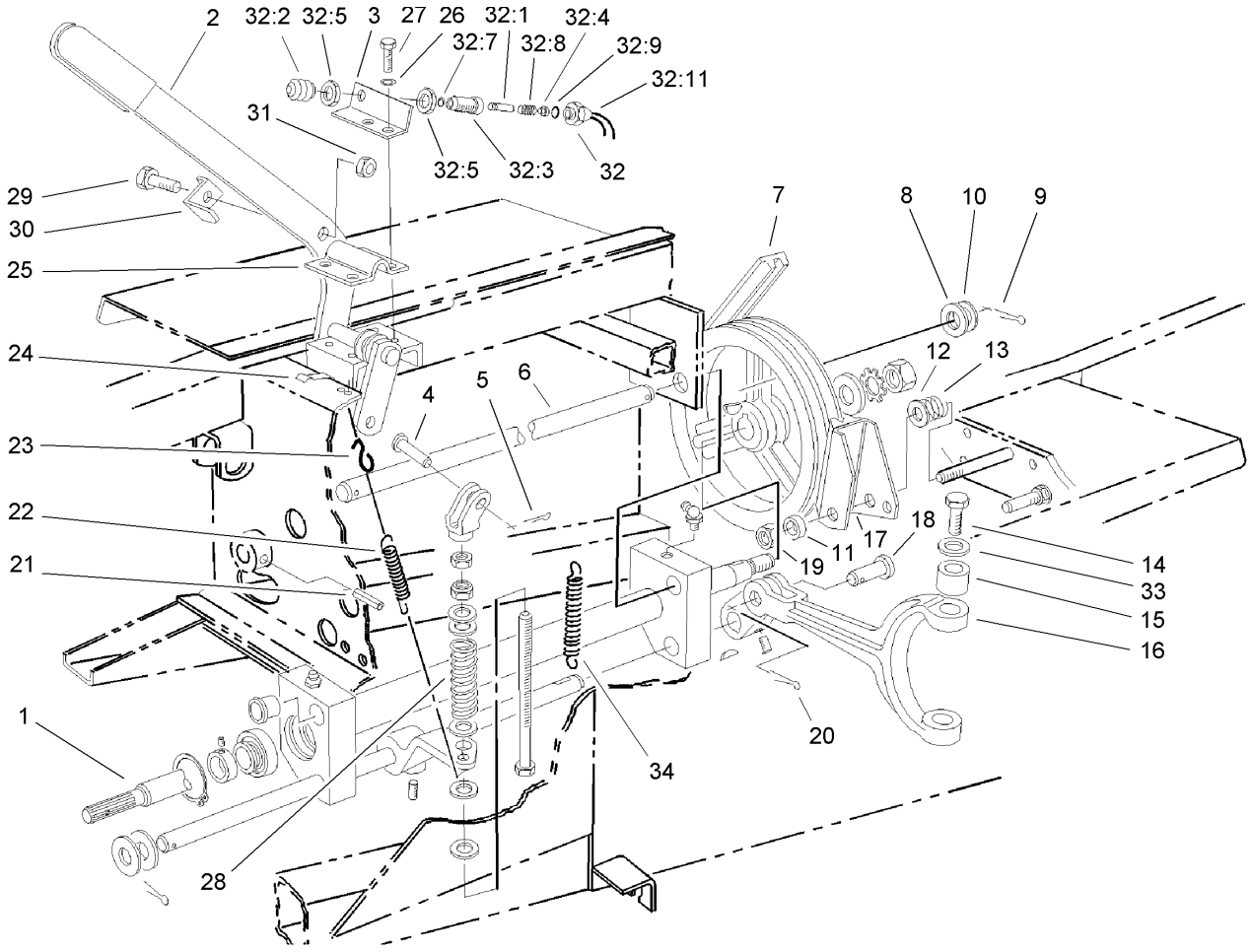
Ref	Part No.	Qty.	Description
1:35		1	Plate-Drive
1:36	66-9970	1	Spring Kit
1:36:1		3	Spring
1:36:2		3	Spring
1:37	66-9980	1	Seal Kit
1:37:1		5	Ring-Seal
1:37:2		1	Seal-Commutator
1:37:3		1	Seal-Dust
1:37:4		5	Seal-Dust
1:37:5		1	Seal-Face
1:38	66-9990	1	Needle Roller Kit
1:38:1		9	Pin-Alignment
2	108-6560	1	Column ASM
2:2	3220-6	1	Nut-Jam
2:3	92-7317	1	Seal-Foam, Upper Cover
2:4	92-7316	4	Nut-Push On
4	237-30	2	O-Ring
5	237-22	2	O-Ring



Engine Insatllation Assembly

Ref	Part No.	Qty.	Description
❷1		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	98-3883	1	Clamp-Wire
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
11	104-8300	1	Nut-Flange, NI
12	3234-11	10	Screw-HHF
13	32128-20	6	Nut-HF
15	3234-36	4	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	63-7630	1	Hose-Fuel
26	104-3428	1	Air Cleaner ASM
26:1	105-4292	1	Nipple-Pipe

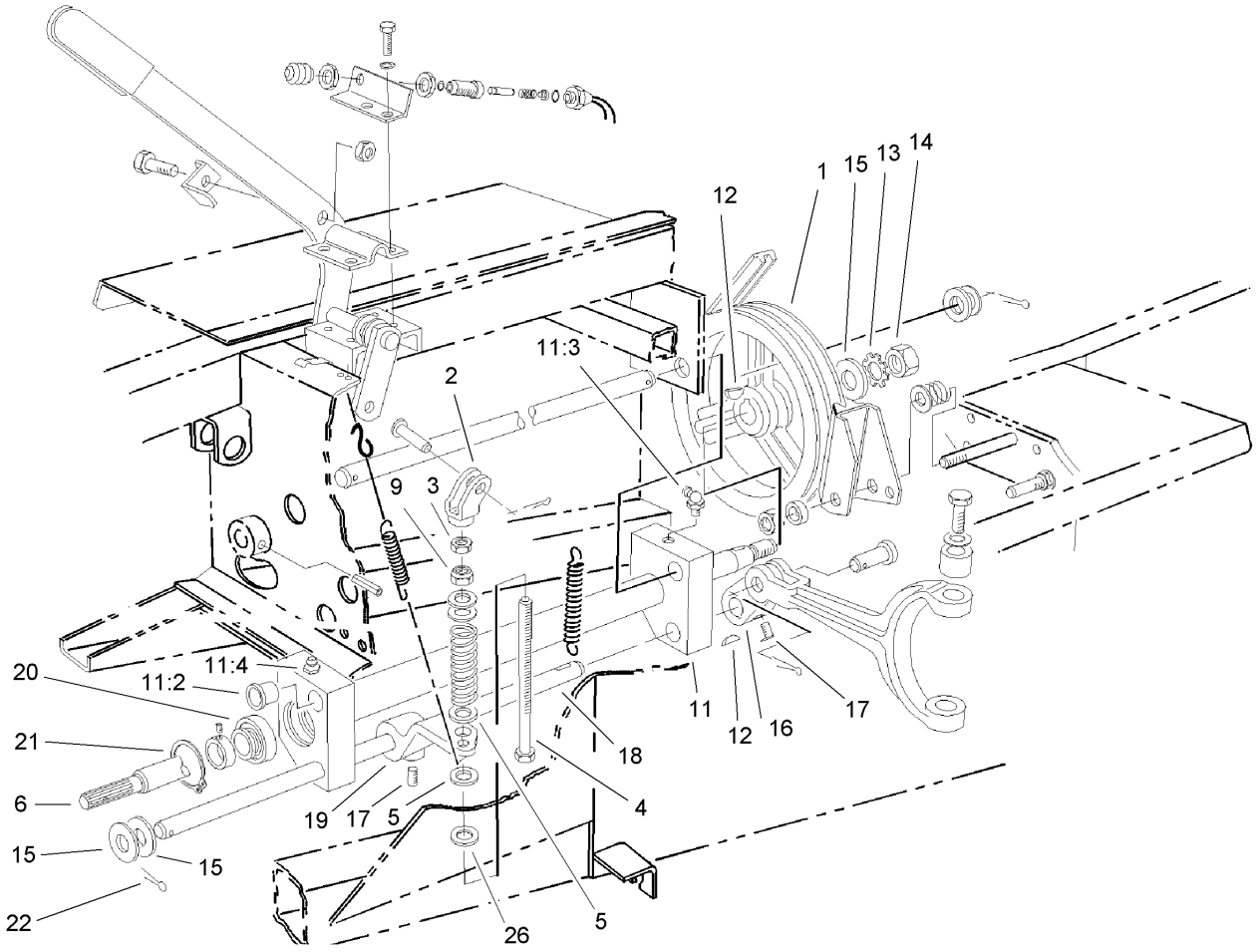
Ref	Part No.	Qty.	Description
26:2	104-0497	1	Cover ASM
26:5	104-4897	1	Gasket
26:6	98-4525	1	Bracket-Cleaner, Air
26:7	104-0498	1	Valve-Vacuator
❶26:8	108-3810	1	Filter-Air
26:9	93-9164	1	Indicator-Mini
27	104-3434	1	Hose-Inlet, Air
29	99-3441	1	Harness-Wire, Fusible Link
30	105-7807-03	1	Guard-Belt, 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



Power-Take-Off and Shaft Assembly

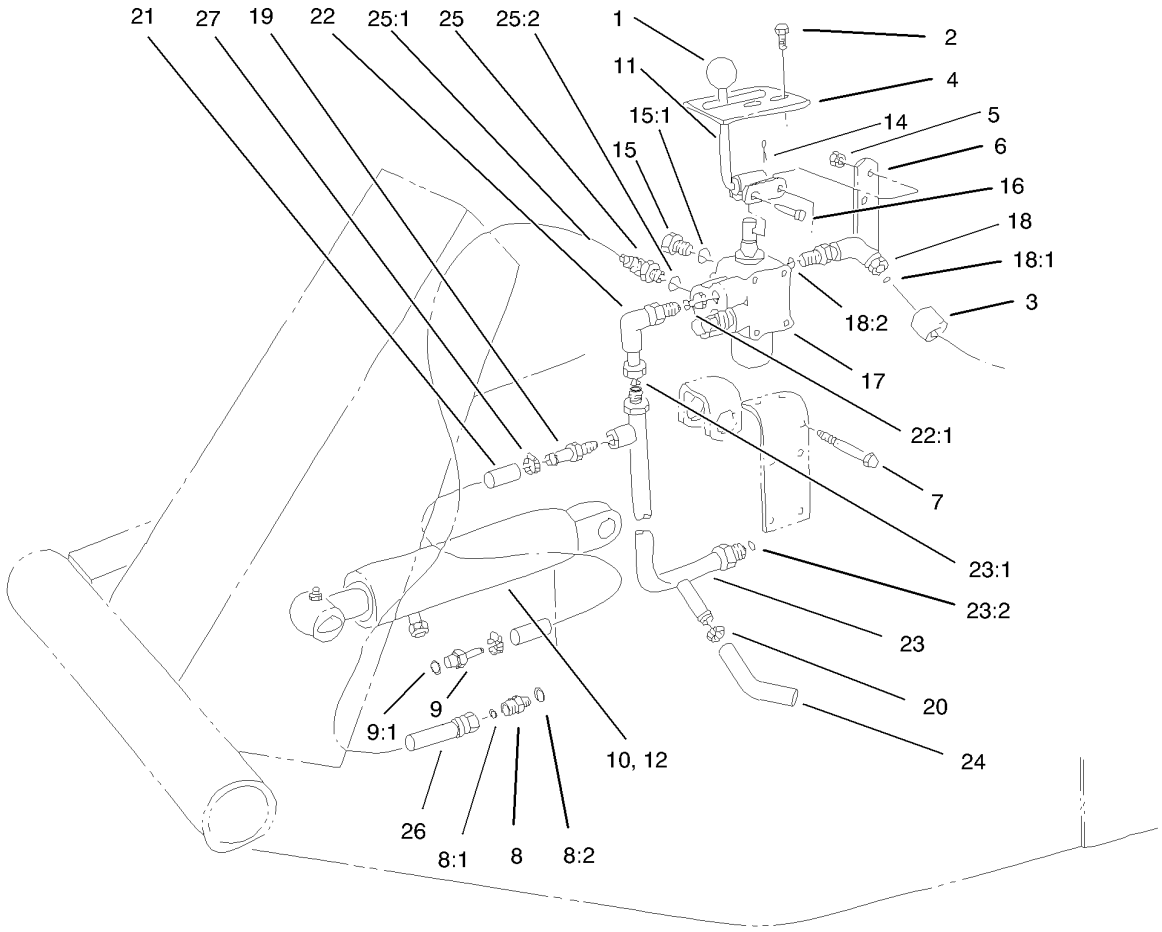
Ref	Part No.	Qty.	Description
❷1		1	PTO ASM
2	84-8500-01	1	Lever-PTO
3	84-8520-01	1	Bracket-Switch, PTO
4	283-42	1	Pin-Clevis
5	3272-6	1	Pin-Cotter
6	43-3860	1	Shaft-Pivot, PTO
7	106-4383	1	V-Belt
8	3256-28	1	Washer-Flat
9	3272-22	1	Pin-Cotter
10	3-6498	3	Washer-Thrust
11	3-8812	1	Spacer-Spring, Anchor
12	3256-6	1	Washer-Flat
13	5-1747	1	Spring-Adjustment
14	92-5727	2	Screw-Lock, Patch
15	92-5723	2	Bushing-Fork, PTO
16	92-4060-03	1	Fork-PTO
17	27-7370	1	PTO Brake ASM
18	93-3769	1	Pin-Clevis
19	3296-28	1	Nut-Lock, NI
20	3272-11	1	Pin-Cotter
21	32121-9	1	Pin-Roll, Slotted
22	21-1830	1	Spring-Extension
23	5-0701	1	Anchor
24	212-93	3	Clamp-Casing

Ref	Part No.	Qty.	Description
25	21-1600	1	Clamp-Lever, PTO
26	3253-21	4	Washer-Lock
27	32104-6	4	Screw-HH
28	21-0400-01	1	Spring-Compression
29	321-4	1	Screw-HH
30	86-7050	1	Bracket-Switch, Actuator
31	3296-16	1	Nut-Lock, NI
32	43-9071	1	Limit Switch ASM
32:1	43-8860	1	Plunger-Switch
32:2	43-8870	1	Boot-Switch
32:3	43-8620	1	Pin-Guide, Switch
32:4	43-8610	1	Guide
32:5	218-461	2	Nut-HH
32:7	237-7	1	O-Ring
32:8	43-8600	1	Spring-Compression
32:9	237-30	1	O-Ring
32:11	72-4320	1	Switch-Ball
33	75-9890	2	Washer-Shim
34	108-1368	1	Spring-Extension



Power-Take-Off Assembly

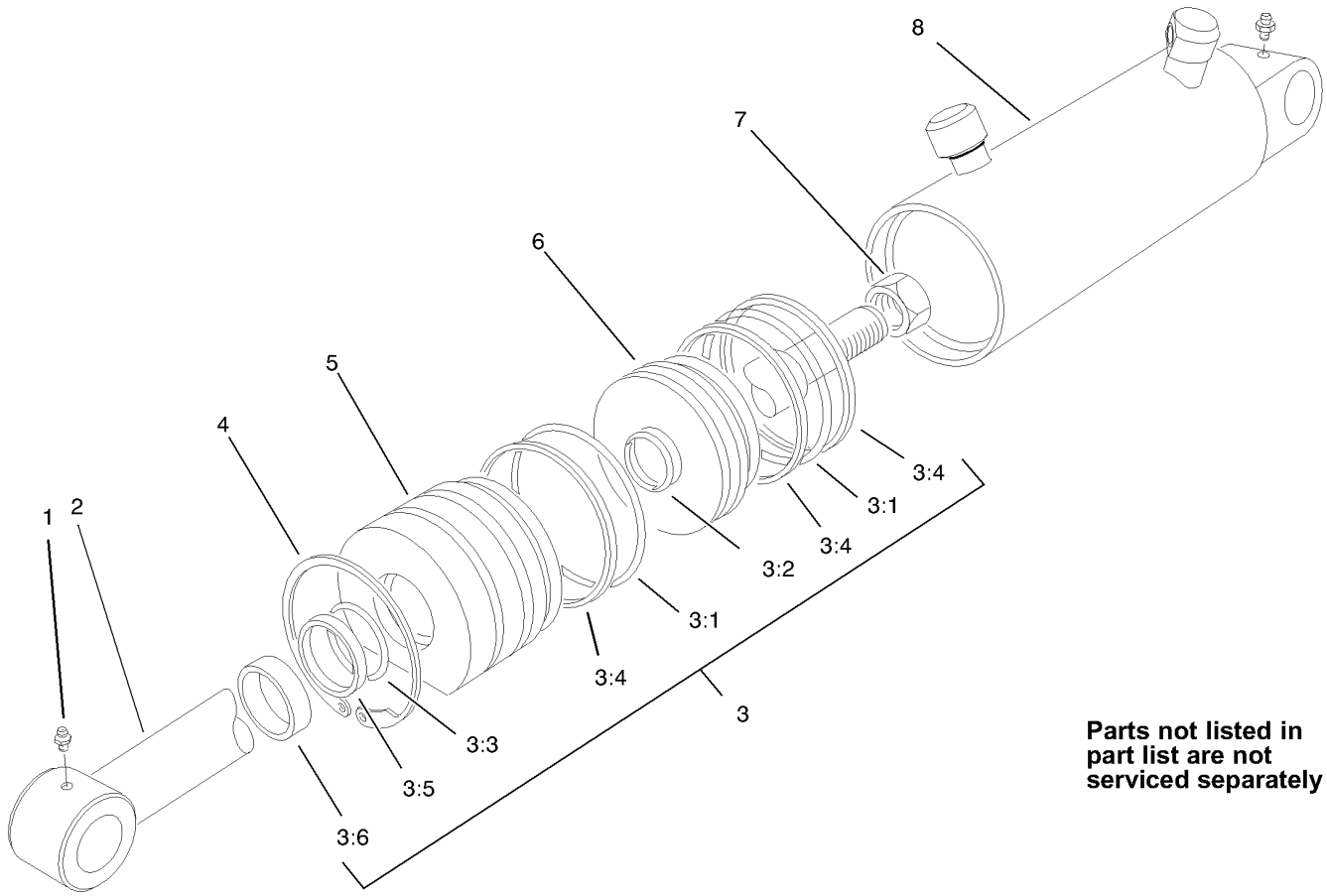
Ref	Part No.	Qty.	Description
1	21-0230	1	Pulley-PTO
2	43-5630	1	Yoke-PTO
3	3219-3	1	Nut-Hex
4	27-7900	1	Screw-Adjusting
5	3256-41	4	Washer
6	43-5540	1	Shaft-PTO
9	3296-6	1	Nut-Lock
11	100-6599	1	PTO Pivot ASM
11:2	256-113	4	Bushing-Flange
11:3	302-10	1	Fitting-Grease
11:4	302-2	1	Fitting-Grease
12	3257-5	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
21	32120-22	2	Ring-Snap, Internal
22	3272-22	1	Pin-Cotter
26	5-0652	1	Spacer



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	95-8849	1	Fitting-Straight, HYD
9:1	237-78	1	O-Ring
10	100-6586	1	Cylinder-HYD, 2.5 Inch
11	105-7839-03	1	Valve Lever ASM
❸12	100-6591	1	Cylinder-HYD, 3 Inch
14	3272-6	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

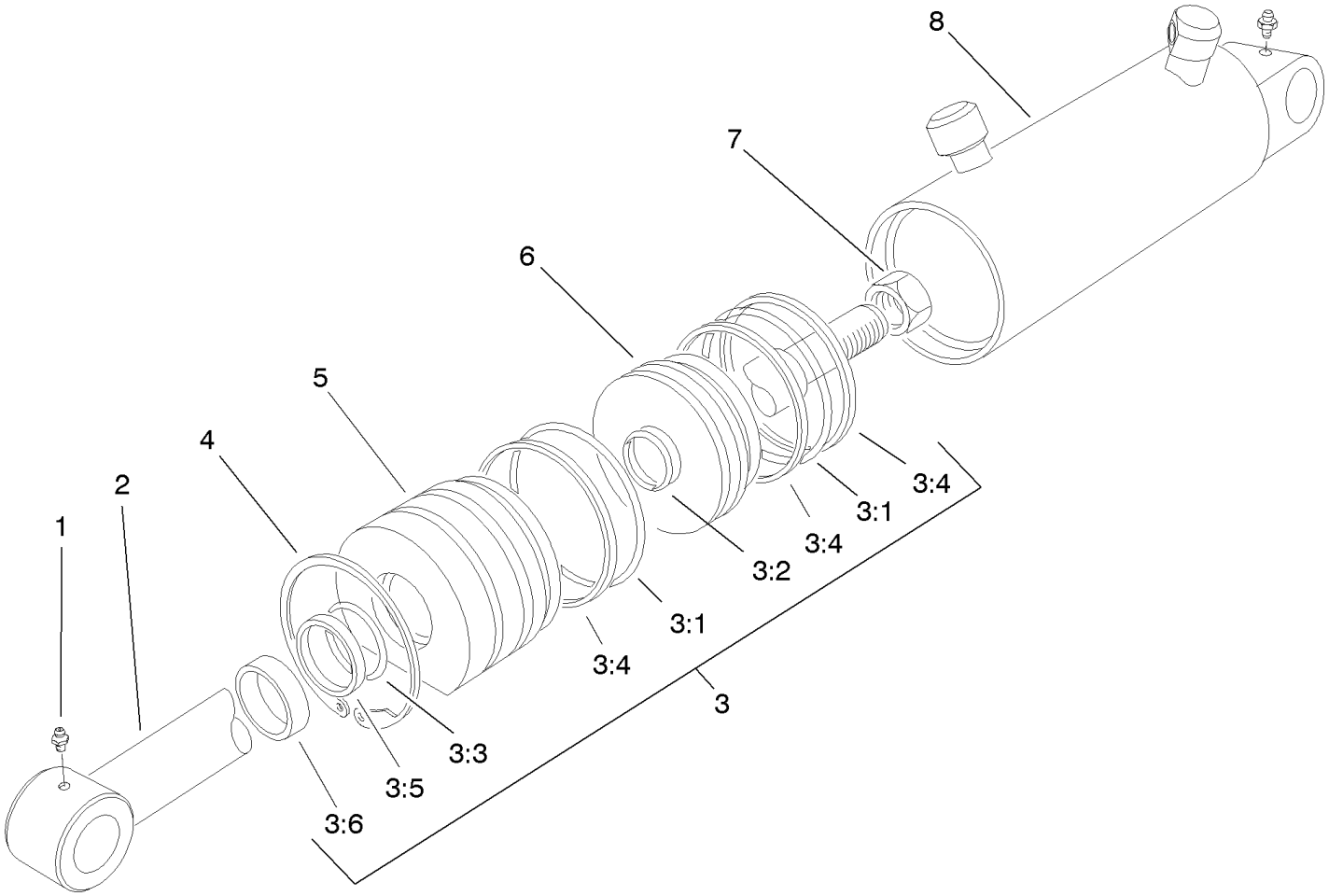
Ref	Part No.	Qty.	Description
20	2412-36	1	Clamp-Hose
21	92-7834	1	Hose-HYD
22	340-110	1	Fitting-Swivel, 90 DEG
22:1	237-42	1	O-Ring
23	63-9260	1	Manifold Valve ASM
23:1	237-22	1	O-Ring
23:2	237-30	1	O-Ring
24	63-8990	1	Hose-HYD
25	340-97	1	Fitting-HYD, 90 DEG
25:1	237-22	1	O-Ring
25:2	237-78	1	O-Ring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



Parts not listed in part list are not serviced separately

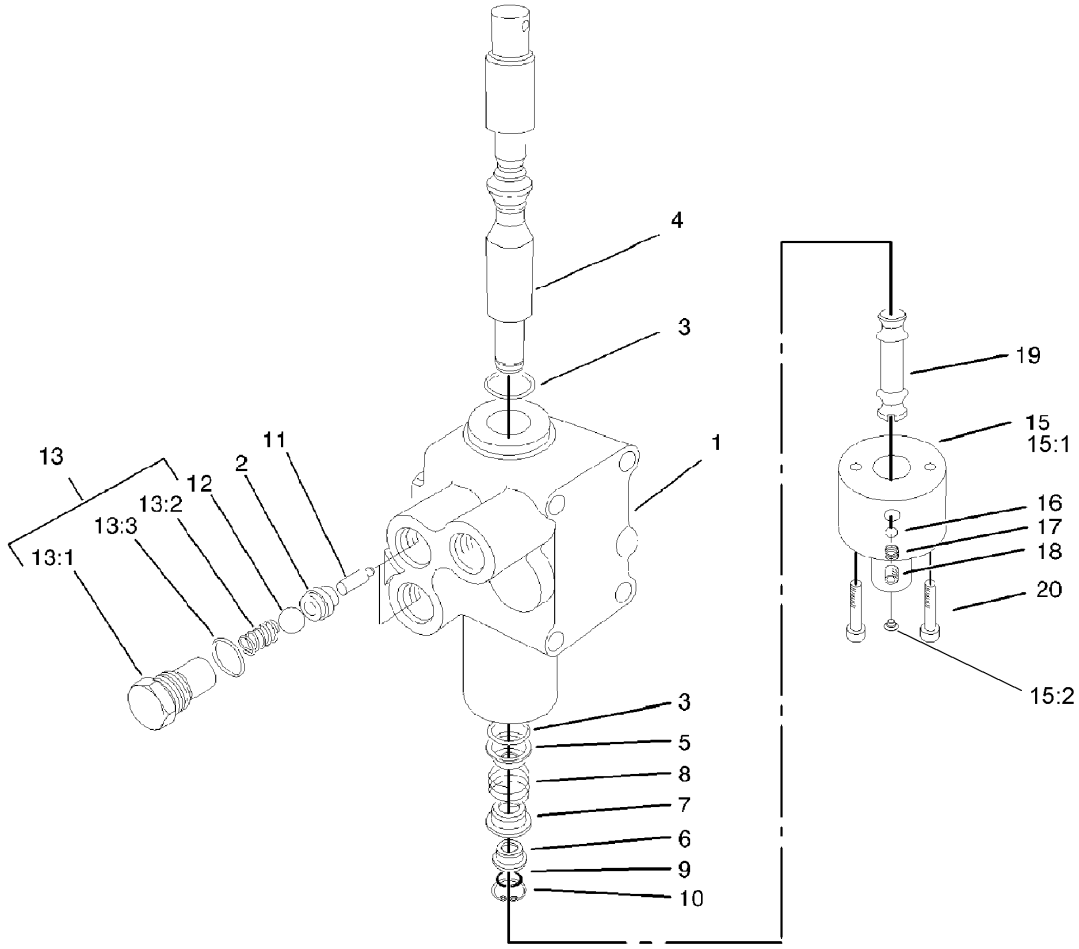
Hydraulic Cylinder Assembly No. 100-6586 (2-1/2in Bore)

Ref	Part No.	Qty.	Description
1	302-55	2	Fitting-Grease
❷2		1	Shaft
3	61-4960	1	Seal Kit
❷3:1		2	Seal-Dust
❷3:2		1	Seal-Dust
❷3:3		1	Seal-Dust
❷3:4		3	Backup
❷3:5		1	Backup
❷3:6		1	Seal-Dust
4	61-4990	1	Ring-Retaining
❷5		1	Head
❷6		1	Piston
❷7		1	Nut
❷8		1	Barrel



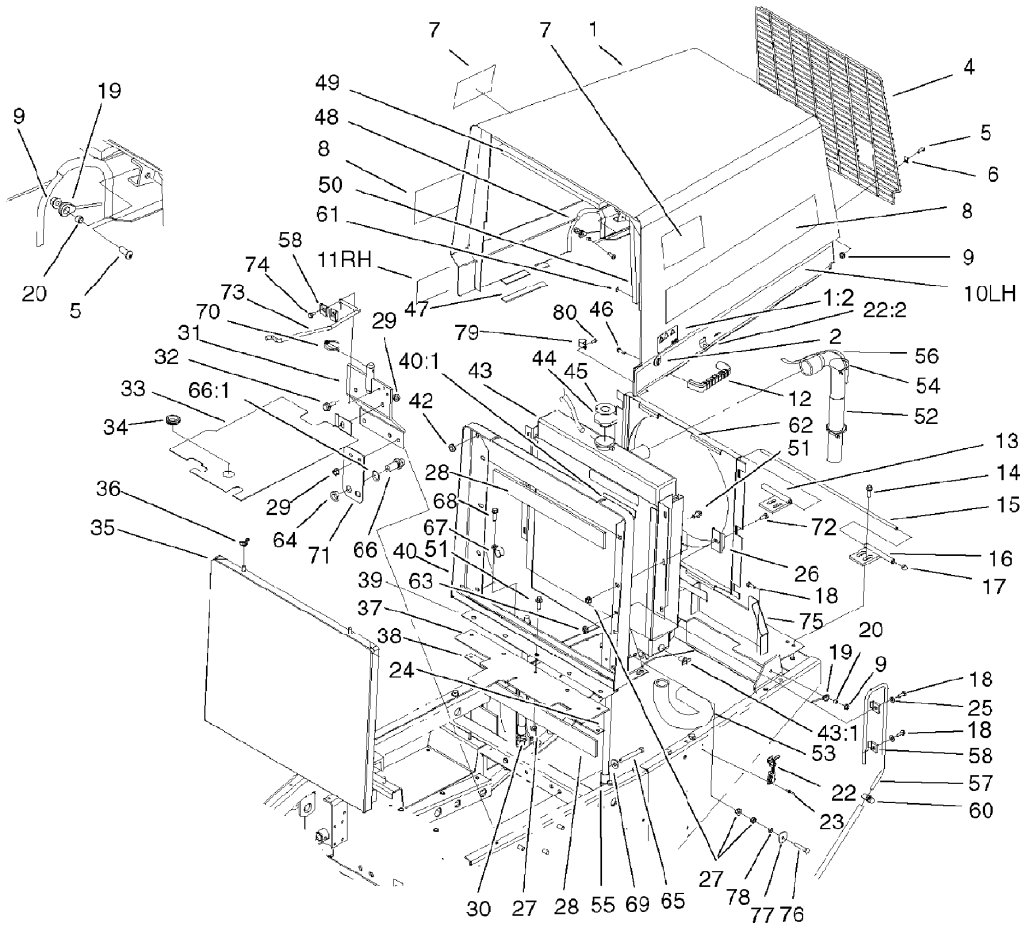
Hydraulic Cylinder Assembly No. 100-6591 (3in Bore) (Optional)

Ref	Part No.	Qty.	Description
1	302-55	2	Fitting-Grease
❷2		1	Shaft
3	67-5500	1	Seal Kit
❷3:1		2	Seal-Dust
❷3:2		1	Seal-Dust
❷3:3		1	Seal-Dust
❷3:4		3	Backup
❷3:5		1	Backup
❷3:6		1	Seal-Dust
4	67-5470	1	Ring-Snap
❷5		1	Head
❷6		1	Piston
❷7		1	Nut
❷8		1	Barrel



Valve Assembly No. 106-8071-01

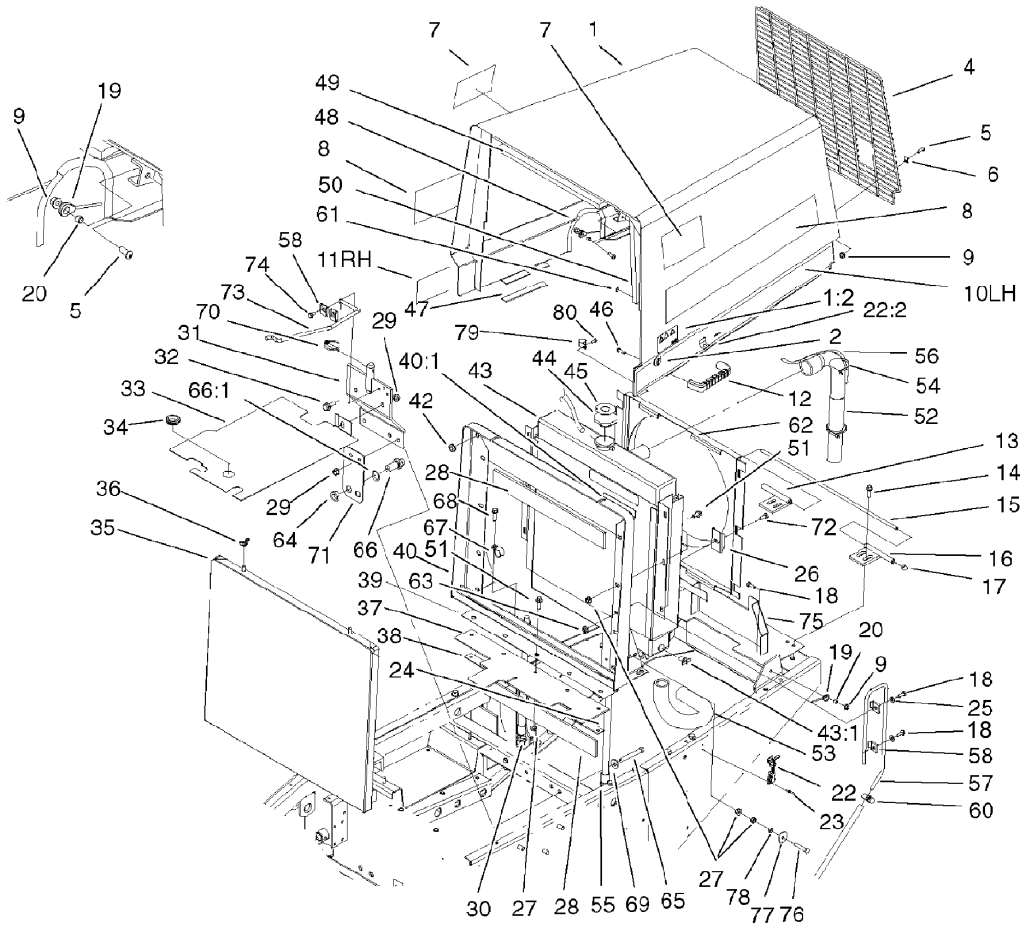
Ref	Part No.	Qty.	Description
❷1		1	Body
2	22-8370	2	Seat-Valve
3	22-8500	2	O-Ring
4	105-7826	1	Spool
5	22-8380	1	Retainer
6	22-8400	1	Spacer
7	22-8390	1	Retainer
8	22-8410	1	Spring
9	22-8480	1	Ring-Snap
10	22-8490	1	Ring-Snap
11	22-8360	2	Pin
12	22-8350	2	Ball
13	105-7827	2	Plug ASM
13:1	22-8330	1	Plug
13:2	22-8340	1	Spring
13:3	237-42	1	O-Ring
15	106-8070	1	Detent Barrel ASM
❷15:1		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

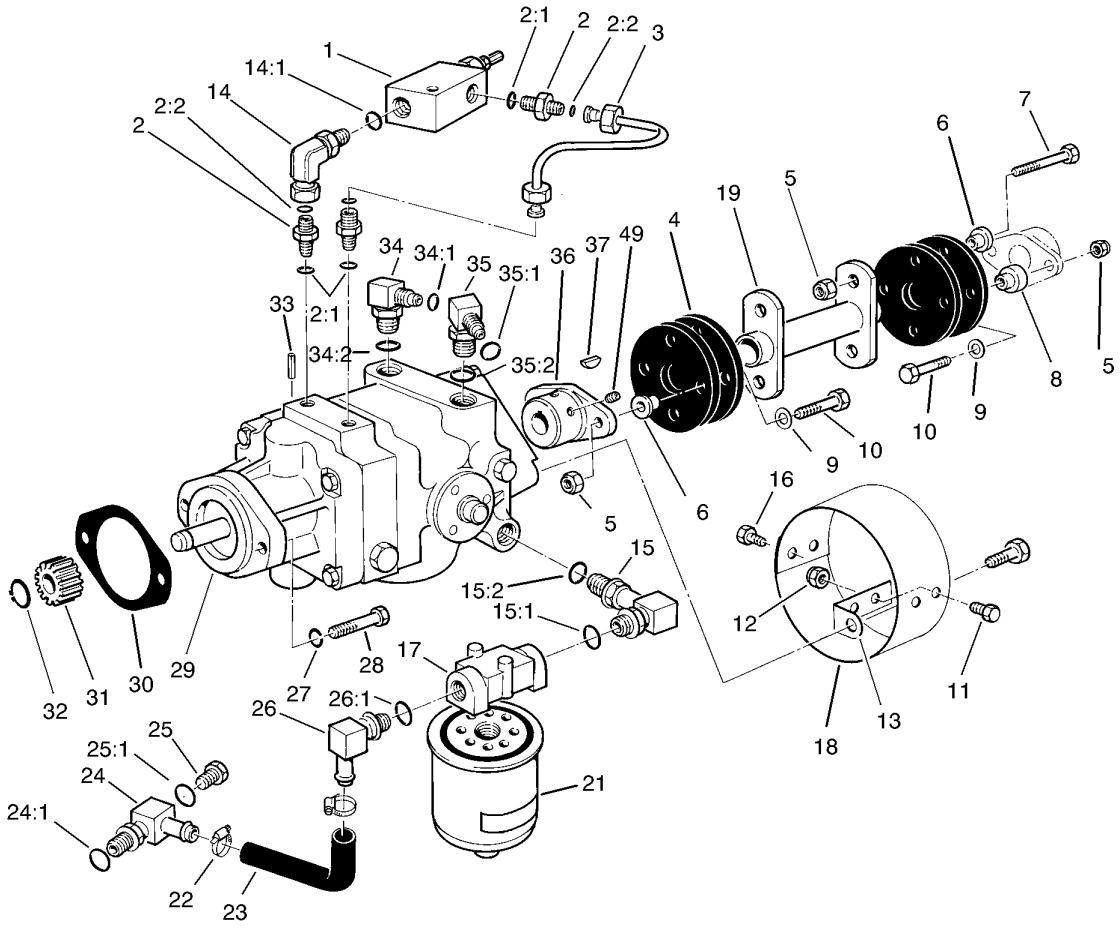
Ref	Part No.	Qty.	Description
25	3256-22	2	Washer-Flat
26	105-0012-03	6	Clip-Mounting, Fan Shroud
27	32128-20	15	Nut-HF
28	43-3320	2	Foam-Radiator
29	32128-21	4	Nut-HF
30	63-8960	1	Hose
31	105-2542-01	1	Bracket-Support, Seat
32	3234-11	1	Screw-HHF
33	105-2544-01	1	Plate-Sealing
34	240-5	1	Grommet-Rubber
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	104-0076	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

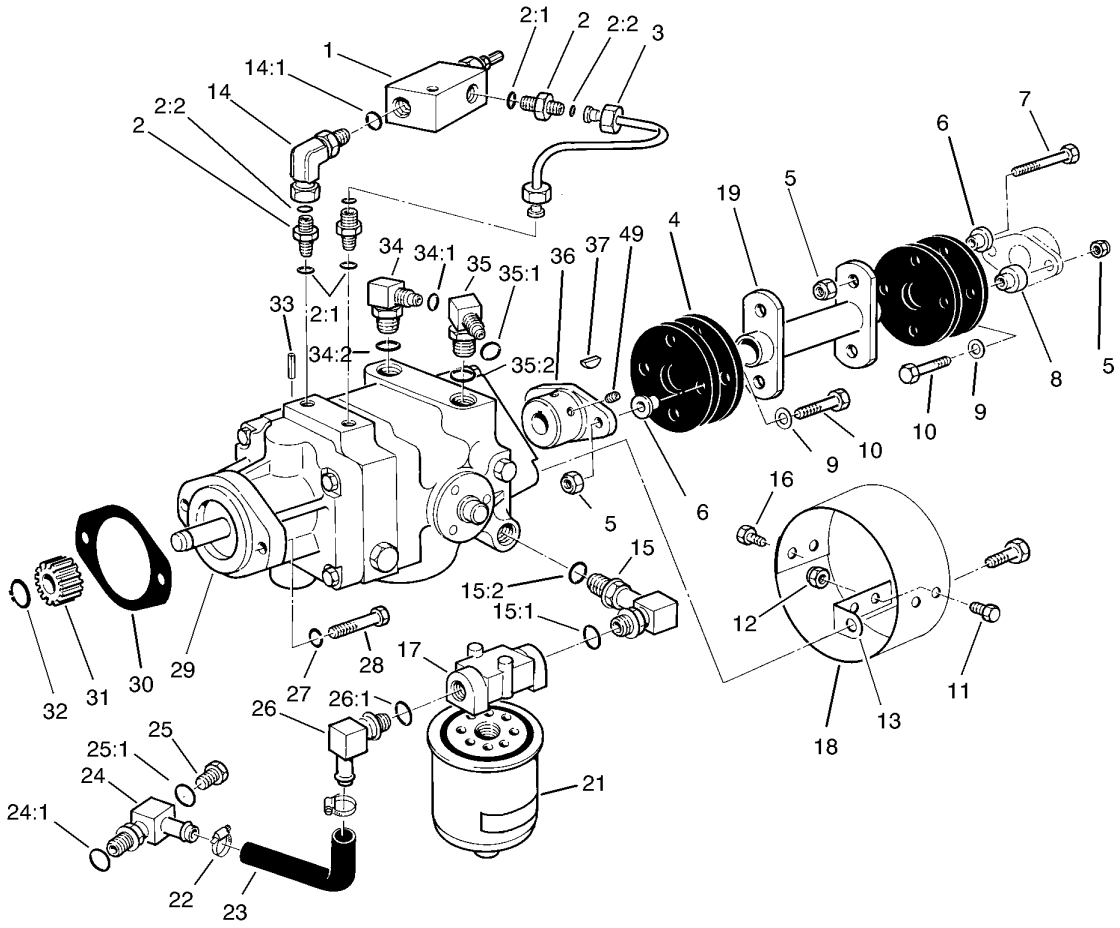
Ref	Part No.	Qty.	Description
72	3234-33	6	Screw-HHF
73	86-7040	1	Rod-Prop, Seat
74	32144-10	2	Screw-HWH
75	105-4255-01	1	Pulley Guard ASM
76	322-41	1	Screw-HH
77	3256-57	1	Washer-Flat
78	3296-47	1	Nut-Lock, NI
79	2412-83	1	Clamp-Cable
80	32144-1	1	Screw-Taptite



Hydrostatic Transmission Assembly

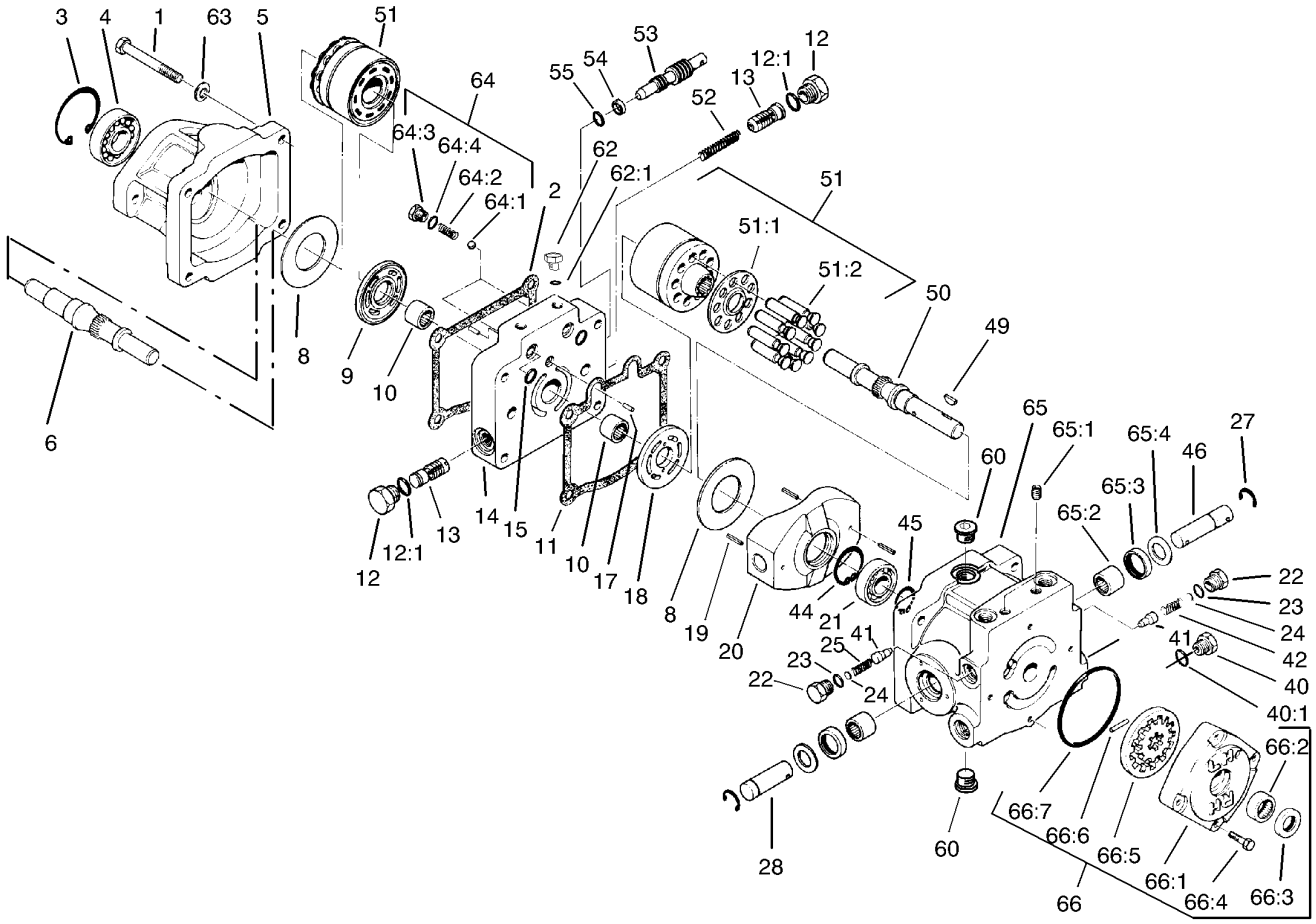
Ref	Part No.	Qty.	Description
1	72-3540	1	Valve-Relief
2	340-92	3	Fitting-HYD, Straight
2:1	237-78	1	O-Ring
2:2	237-21	1	O-Ring
3	72-3550	1	Tube
4	44-2230	4	Coupling-Rubber
5	32152-1	8	Nut-Lock, Cone
6	71-4411	4	Spacer
7	322-8	4	Screw-HH
8	71-4410	4	Spacer
9	3256-3	4	Washer-Flat
10	322-10	4	Screw-HH
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	2412-34	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	33-4380	1	Hub-Pump
37	3257-32	1	Key-Woodruff



Hydrostatic Transmission Assembly (continued)

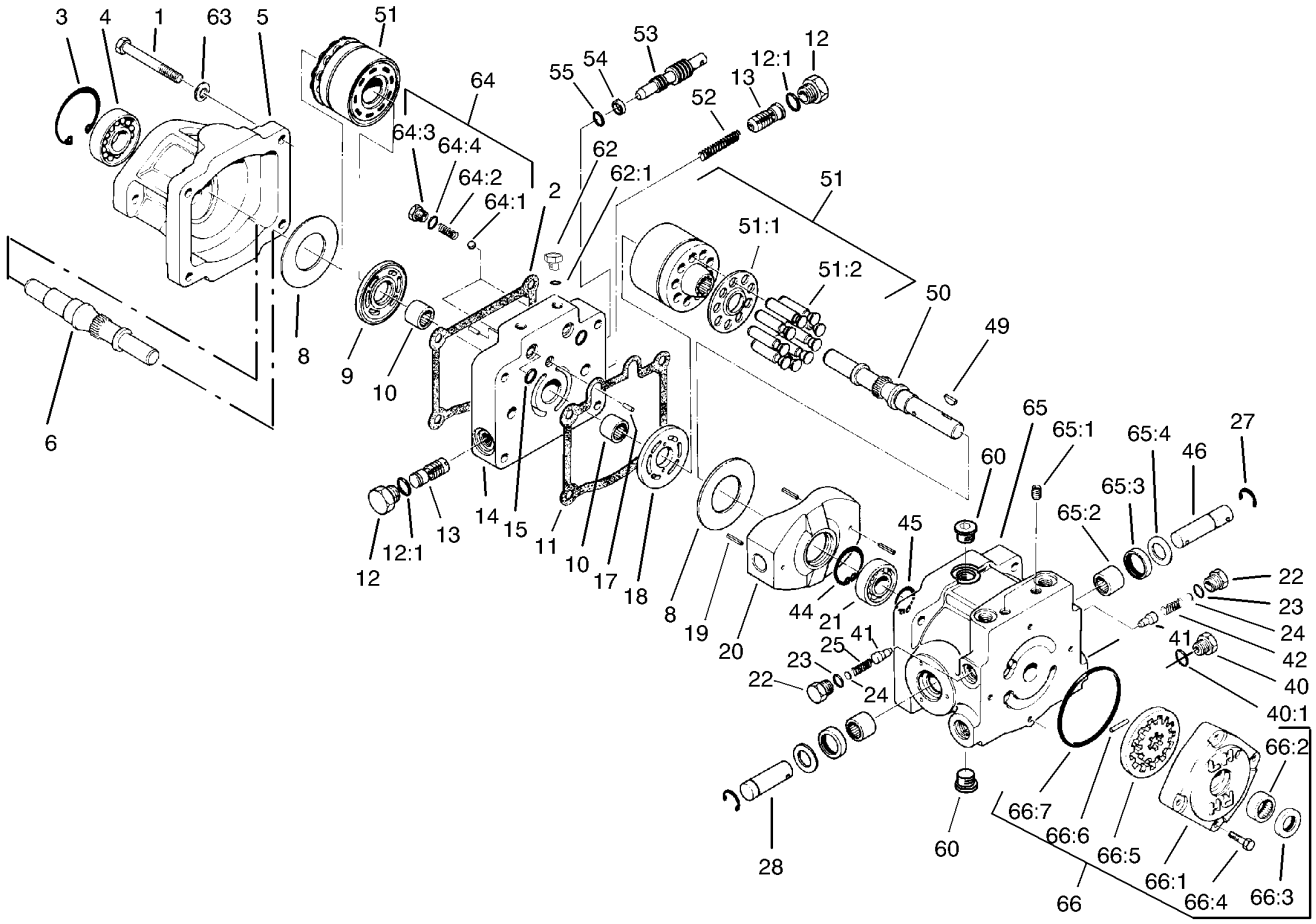
Ref	Part No.	Qty.	Description
49	3241-5	2	Screw-Set



Transmission Assembly No. 92-8947

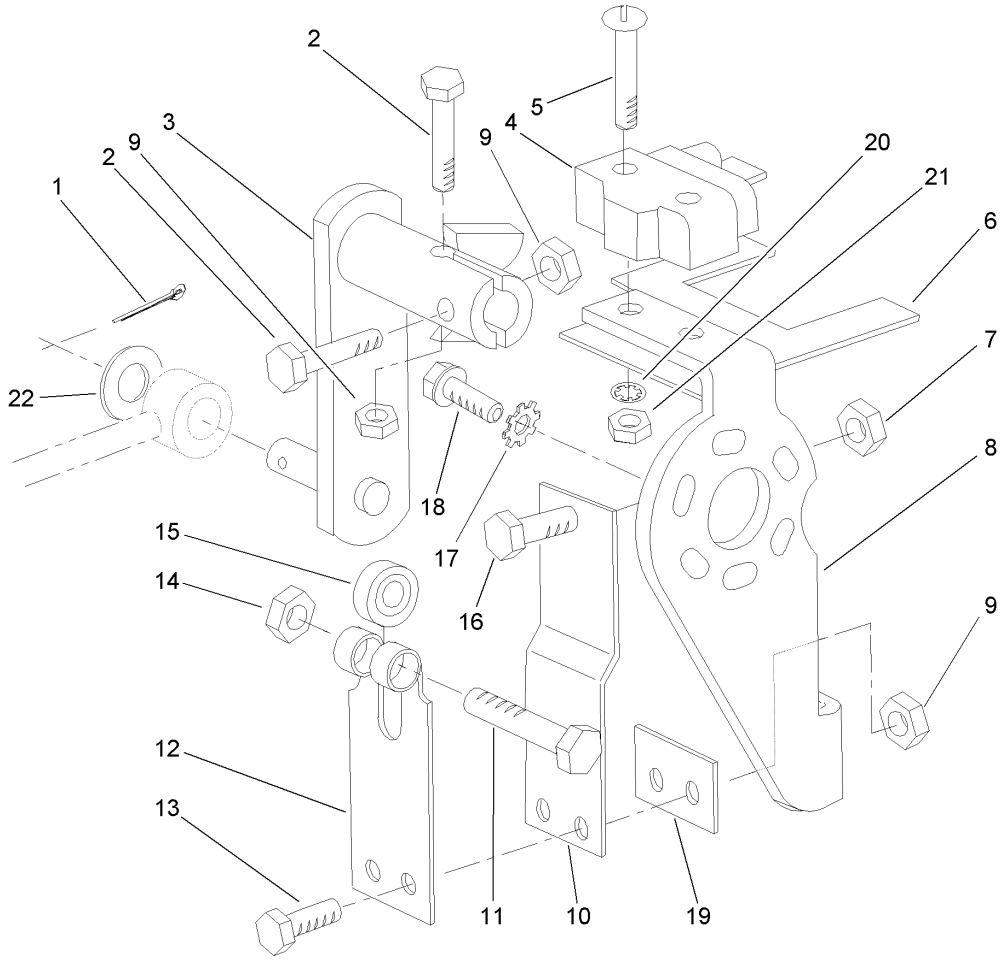
Ref	Part No.	Qty.	Description
1	323-56	4	Screw-HH
2	67-9100	1	Gasket
3	32120-8	1	Ring-Snap
4	72-3750	1	Bearing-Roller
5	67-9080	1	Housing-Motor
6	46-8410	1	Shaft-Motor
8	25-2380	2	Plate-Thrust
9	25-2390	1	Plate-Valve, Motor
10	46-8400	2	Bearing-Shaft
11	25-2400	1	Gasket
12	353-550	2	Plug-HYD, HH
12:1	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
❷51:1		1	Retainer-Slipper
❷51:2		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	92-8776	4	Plug-HSH
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



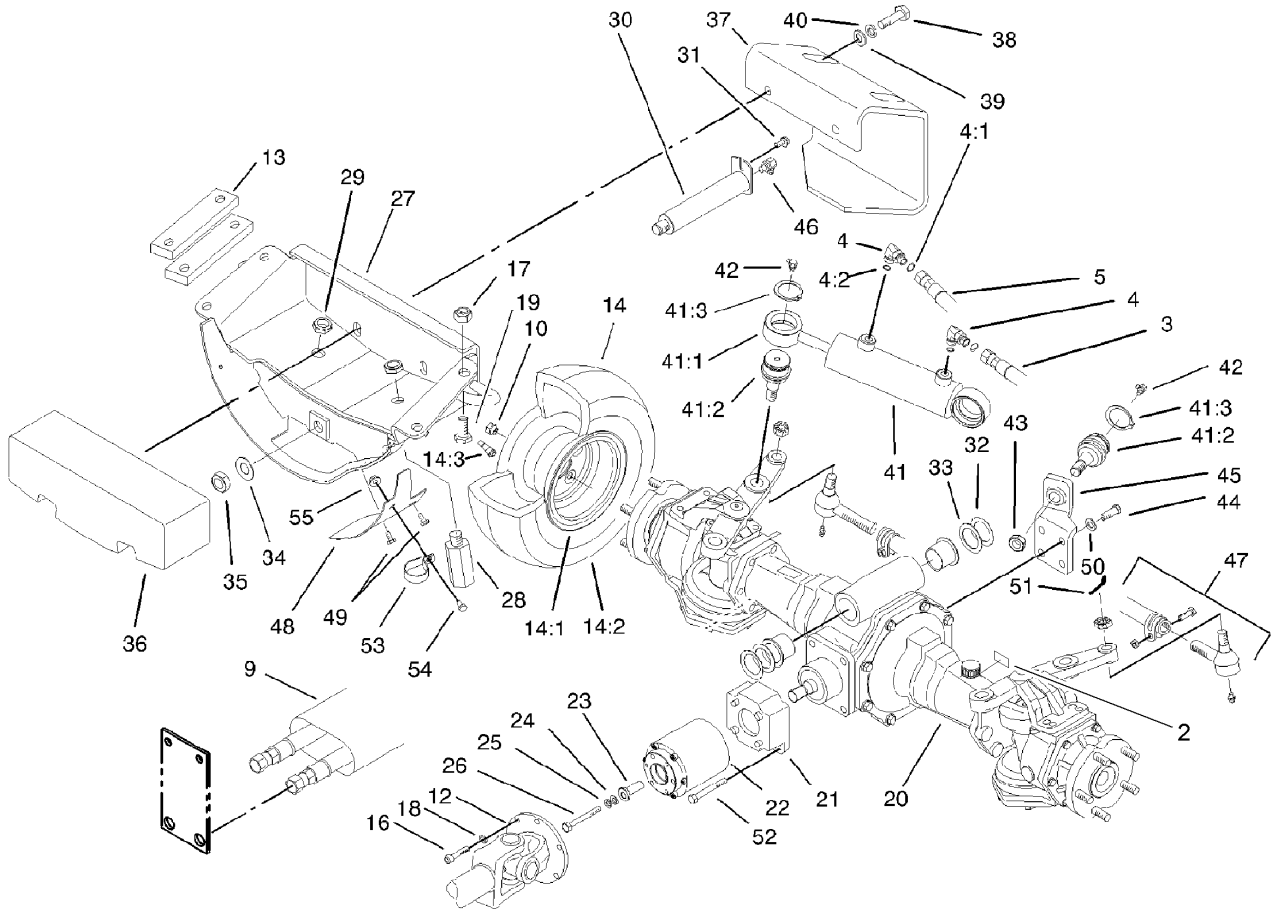
Transmission Assembly No. 92-8947 (continued)

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



Neutral Centering Device Assembly

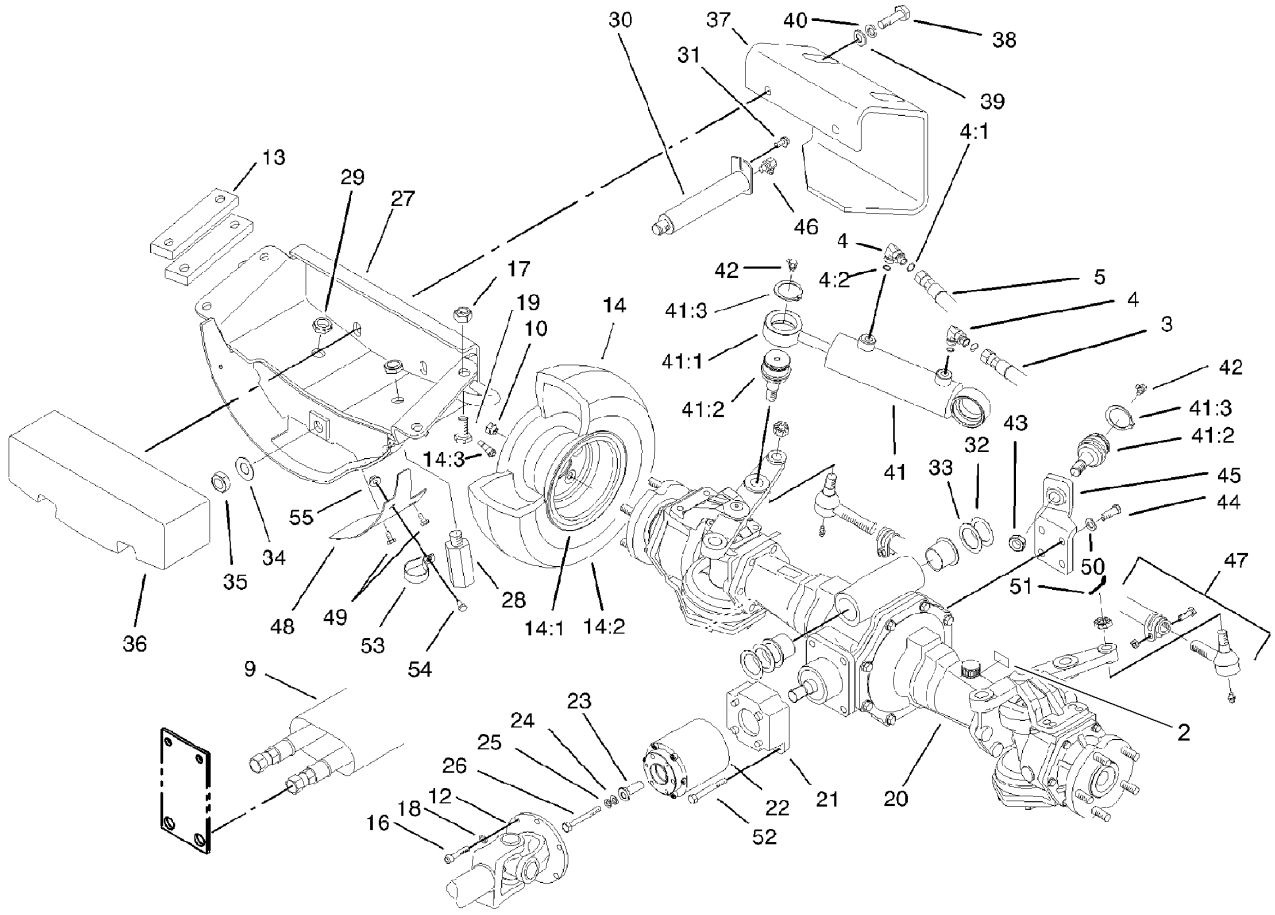
Ref	Part No.	Qty.	Description
1	3272-10	1	Pin-Cotter
2	321-9	2	Screw-HH
3	108-6555-03	1	Pump Lever ASM
4	29-6163	1	Switch-Micro
5	3249-11	2	Screw-Machine
6	46-8810	1	Stop-Spring, Leaf
7	3219-2	1	Nut-Hex
8	29-6120-03	1	Pump Plate ASM
9	3296-42	4	Nut-Lock, NI
10	29-6170	1	Extended Leaf Spring ASM
11	322-17	1	Screw-HH
12	29-6150	1	Spring-Leaf
13	321-6	2	Screw-HH
14	3296-29	1	Nut-Lock, NI
15	251-259	1	Bearing-Ball
16	3210-7	1	Screw-HH
17	3255-7	3	Washer-Lock/EXT
18	49-2040	3	Screw-HWHTF
19	51-3150	1	Shim-Arm, Spring
20	3254-9	2	Washer-Lock, Internal
21	3217-16	2	Nut-Hex
22	3256-6	1	Washer-Flat



4 Wheel Drive Rear Axle Assembly

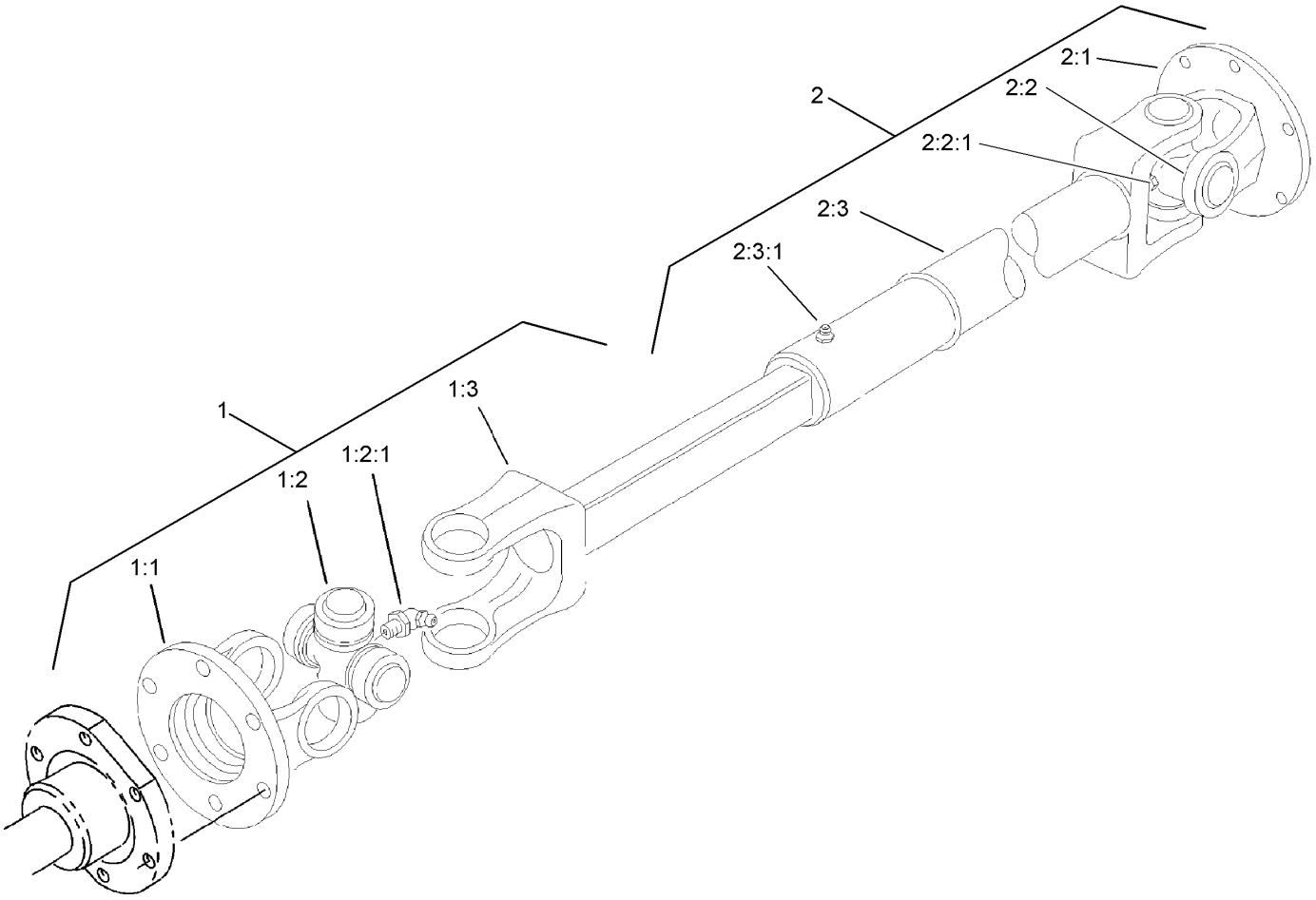
Ref	Part No.	Qty.	Description
2	93-6697	1	Decal-Lube
3	99-2407	1	Hose ASM
4	340-97	2	Fitting-HYD, 90 DEG
4:1	237-22	1	O-Ring
4:2	237-78	1	O-Ring
5	99-2408	1	Hose ASM
9	56-7985	1	Sleeve-Protective
10	93-5268	10	Nut-Lug
12	98-5009	1	Driveshaft ASM
13	105-0073-01	4	Spacer-Frame
14	105-7845	2	Tire And Wheel 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
❷41		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	95-8812	4	Screw-HH
45	98-3862-03	1	Bracket-Support, Cylinder
46	302-33	1	Fitting-Grease



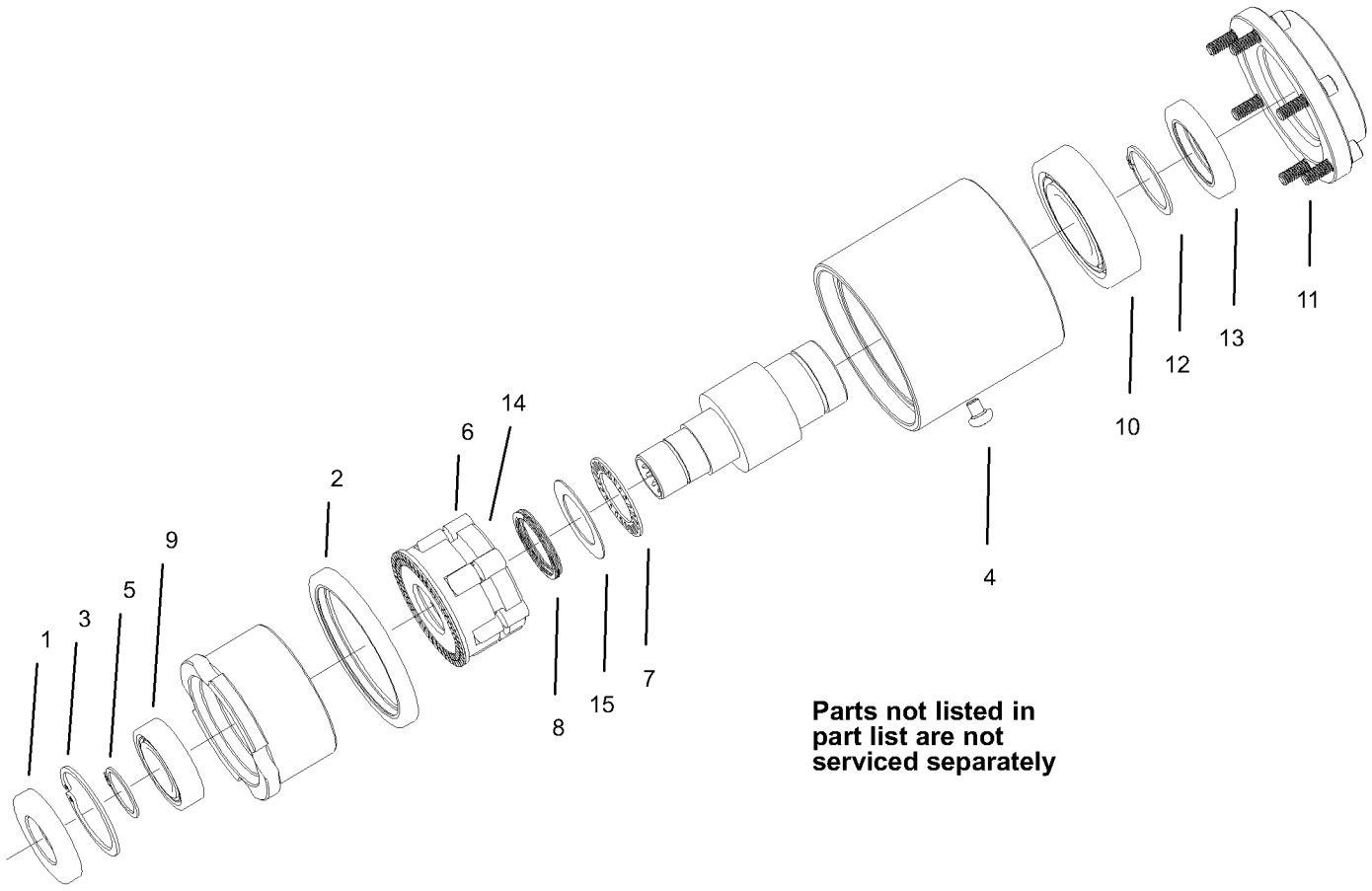
4 Wheel Drive Rear Axle Assembly (continued)

Ref	Part No.	Qty.	Description
47	98-3871-03	1	Tie Rod ASM
48	99-2413-01	1	Cover-Guard, Flywheel
49	32144-10	2	Screw-HWH
50	48-9220	4	Washer
51	3272-12	2	Pin-Cotter
52	87-3700	2	Screw-Cap, HH
53	2412-74	1	R-Clamp
54	321-2	1	Screw-HH
55	32128-14	1	Nut-Hex, Flange



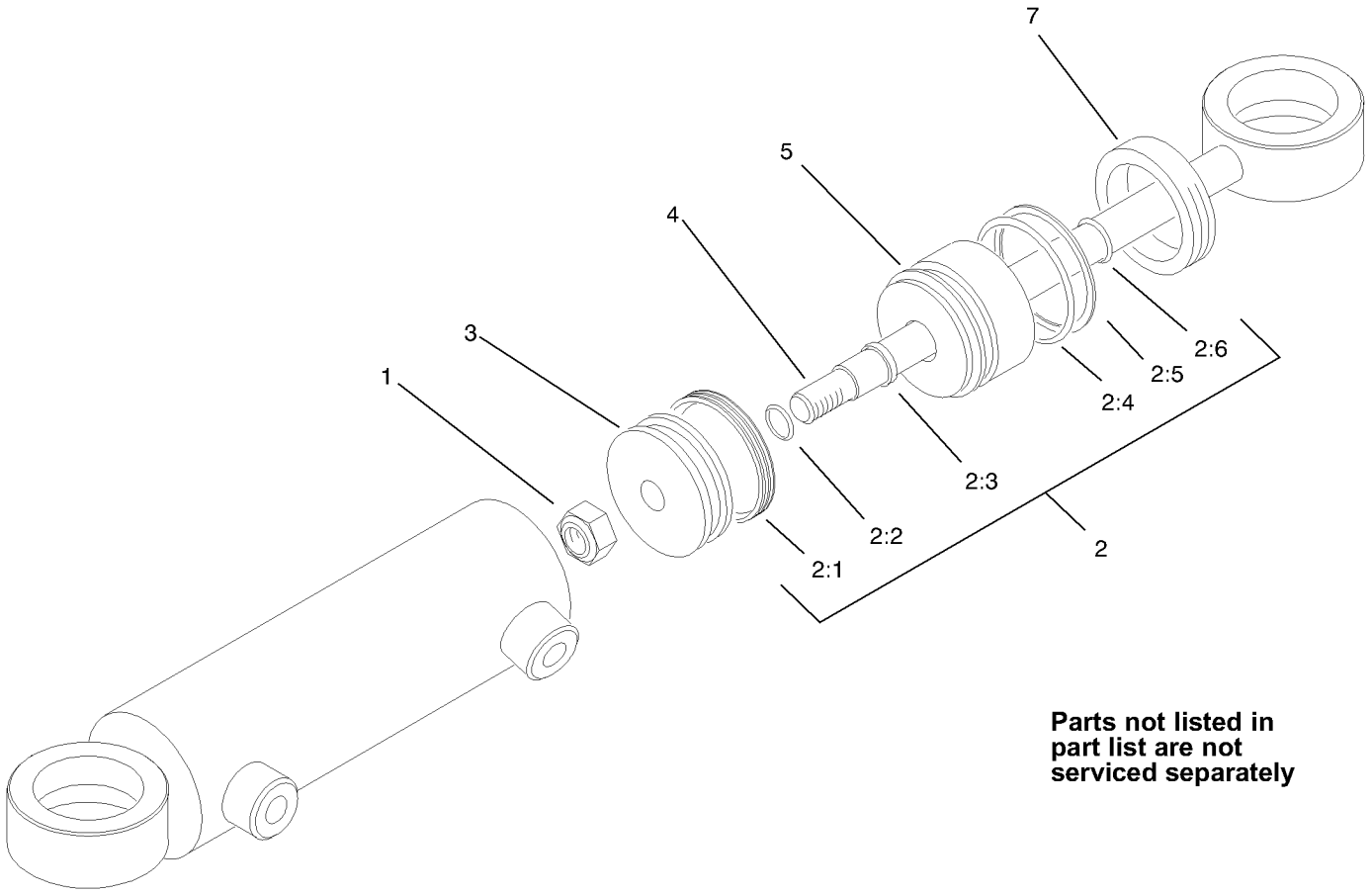
Driveshaft Assembly No. 98-5009

Ref	Part No.	Qty.	Description
1	92-5096	1	Joint And Shaft ASM
1:1	72-3410	1	Yoke-Flange
1:2	54-9180	1	U-Joint Kit
1:2:1	62-3820	1	Fitting-Grease
1:3	72-3420	1	Yoke And Shaft ASM
2	98-3882	1	Joint And Tube ASM
2:1	72-3410	1	Yoke-Flange
2:2	54-9180	1	U-Joint Kit
2:2:1	62-3820	1	Fitting-Grease
2:3	72-3431	1	Yoke And Tube ASM
2:3:1	302-58	1	Fitting-Straight



Bi-Directional Clutch Assembly No. 95-6296

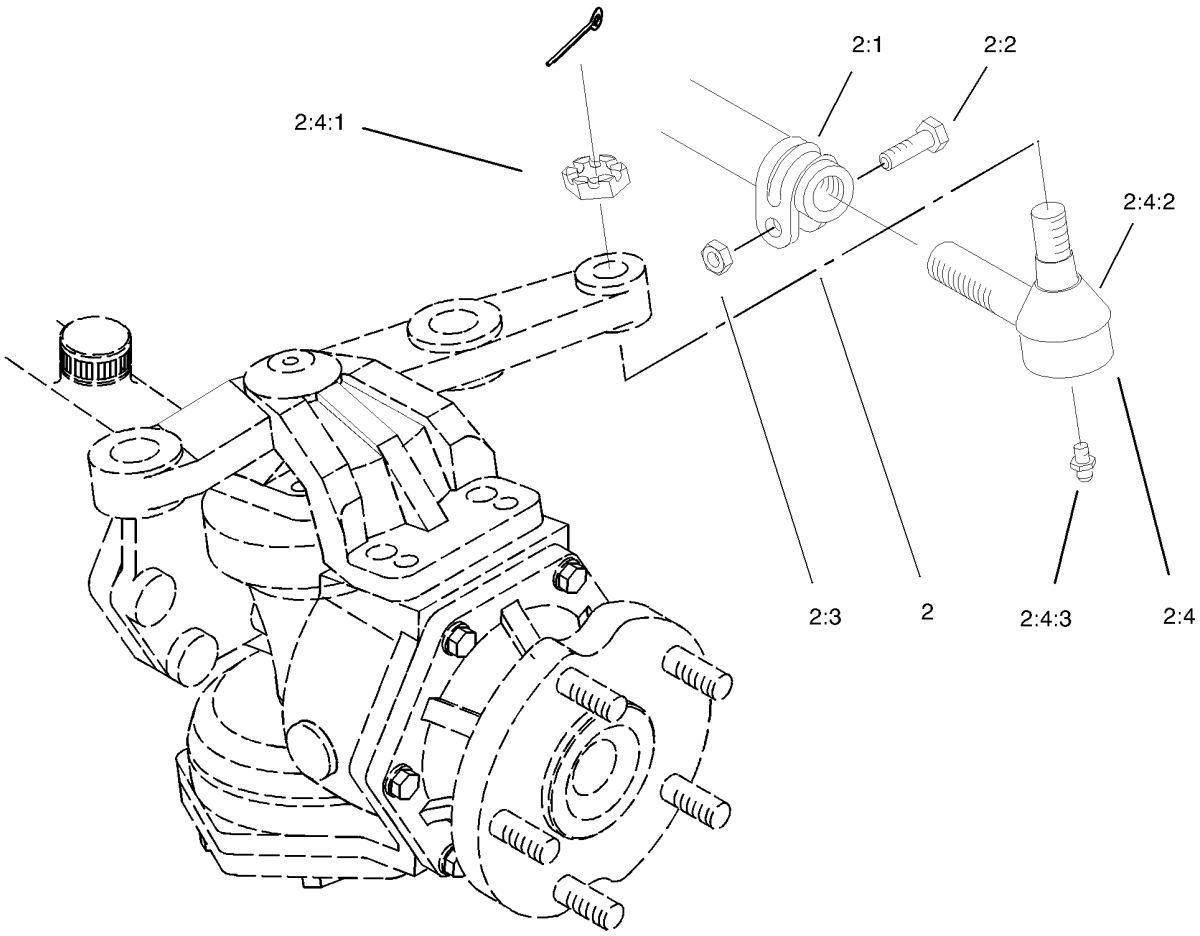
Ref	Part No.	Qty.	Description
1	100-6589	1	Seal-Oil
2	100-6593	1	Seal-Oil
3	32151-75	1	Ring-Retaining
4	100-6596	1	Screw-PPH
5	100-6597	1	Ring-Snap, External
6	93-8925	6	Roller
7	93-8919	1	Bearing-Needle, Thrust
8	93-8923	1	Spring-Wave
9	99-2902	1	Bearing
10	92-9705	1	Bearing
11	3245-6	6	Screw-HSH
12	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



Parts not listed in part list are not serviced separately

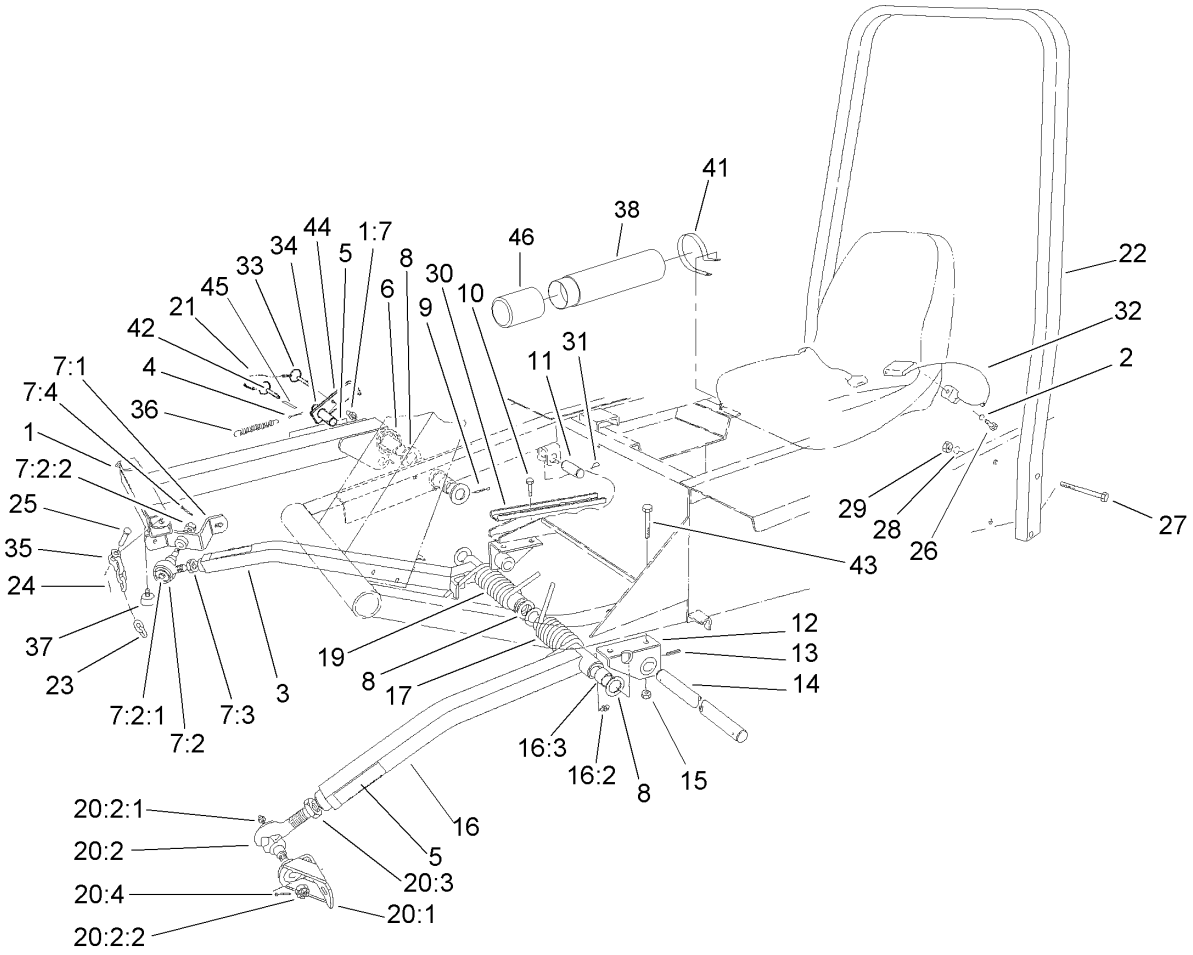
Hydraulic Cylinder Assembly No. 99-2415

Ref	Part No.	Qty.	Description
1:1	32152-10	1	Locknut
1:2	86-5390	1	Seal Kit
❷1:2:1		1	Uniring
❷1:2:2		1	Seal-Dust
❷1:2:3		1	Seal-Rod
❷1:2:4		1	Seal-Dust
❷1:2:5		1	Ring-Backup
❷1:2:6		1	Seal-Dust
❷1:3		1	Piston
❷1:4		1	Rod
❷1:5		1	Head
❷1:7		1	Collar-Internal



Tie Rod Assembly No. 98-3871-03

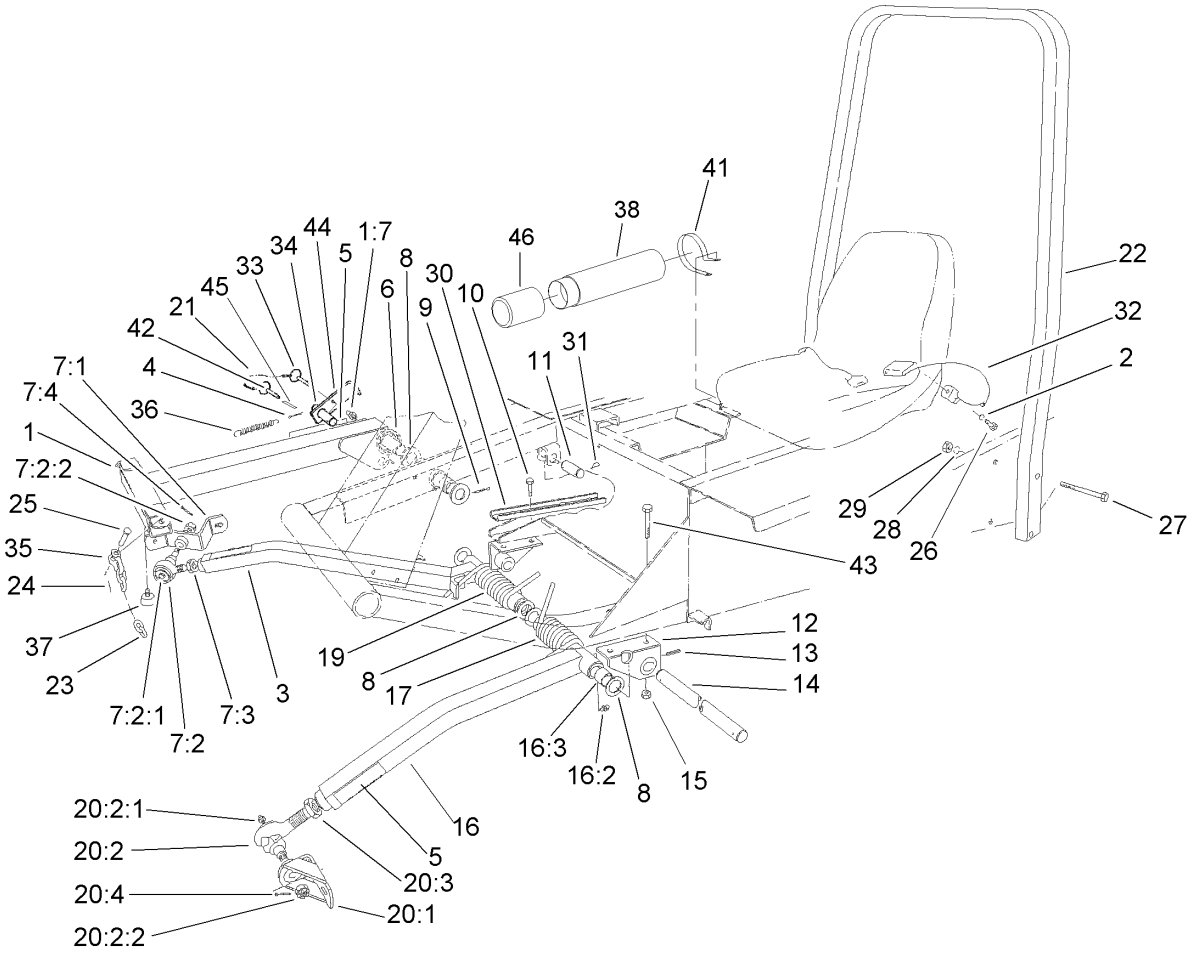
Ref	Part No.	Qty.	Description
❷2		1	Rod-Tie
2:1	99-2412-03	1	Rod And Clamp ASM
2:2	323-9	2	Screw-HH
2:3	3296-39	2	Nut-Lock, NI
2:4	71-4740	2	End-Rod, Tie (RH)
2:4:1	105-7941	1	Nut-Hex, Slotted
2:4:2	105-7835	1	Seal
2:4:3	302-5	1	Fitting-Grease



Push Arm and Roll-Over-Protection-System Assembly

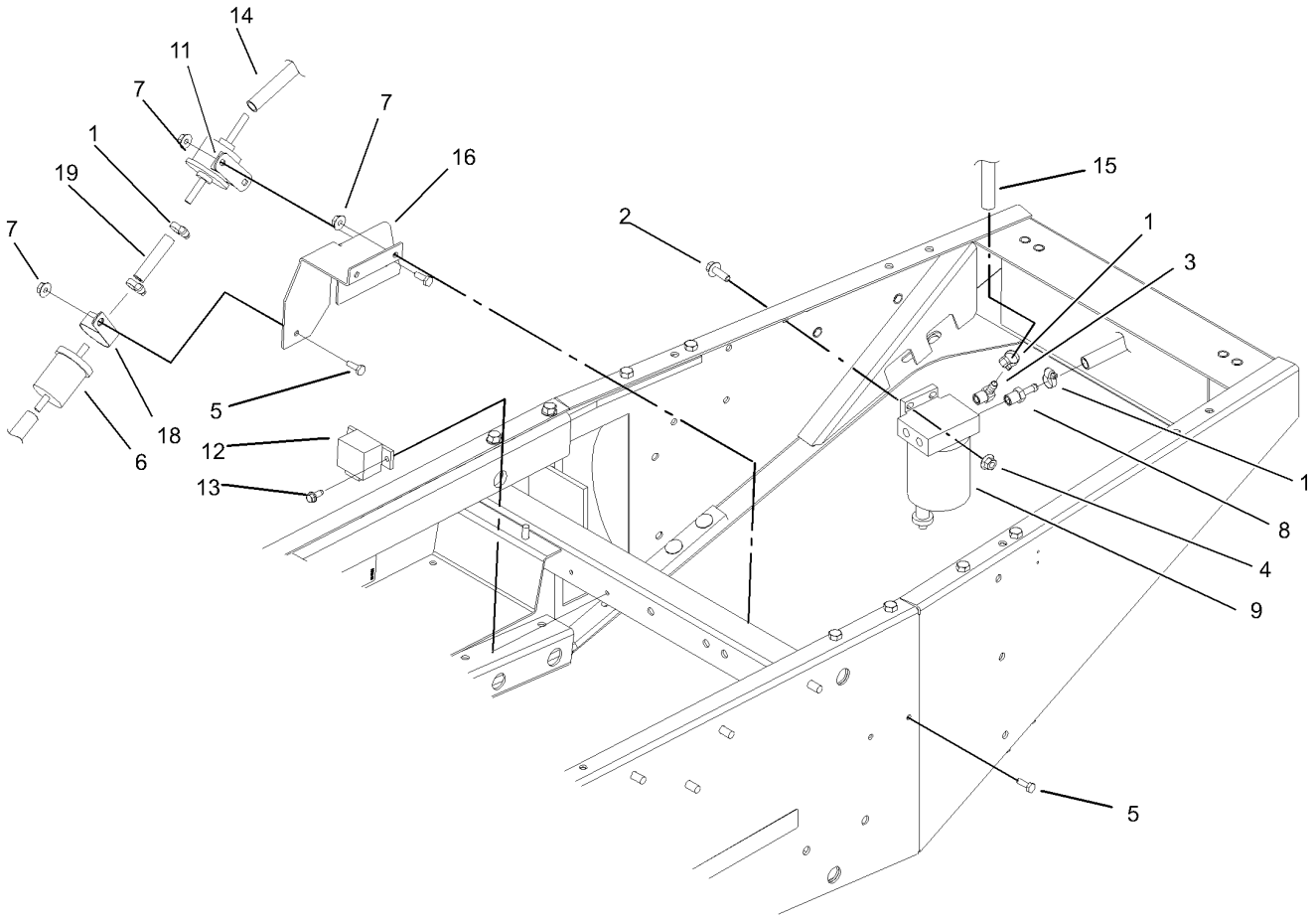
Ref	Part No.	Qty.	Description
1	66-6370	1	Lift Arm ASM
1:7	302-5	1	Fitting-Grease
❶1:8	3290-472	1	Insert-Threaded
2	3253-6	2	Washer-Lock
3	66-7150	1	Arm-Push, RH
❶3:2	302-33	1	Fitting-Grease
❶3:3	256-126	2	Bushing
4	3272-24	1	Pin-Cotter
5	93-6696	3	Decal-Warning
6	46-8840-01	1	Spring-Lift Arm
❷7		1	RH 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
❶7:2:3	105-7835	1	Seal
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	324-4	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	32128-42	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
❷20		1	LH Ball Joint ASM
20:1	21-3050-01	1	LH Ball Jount 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
❶20:2:3	105-7835	1	Seal
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



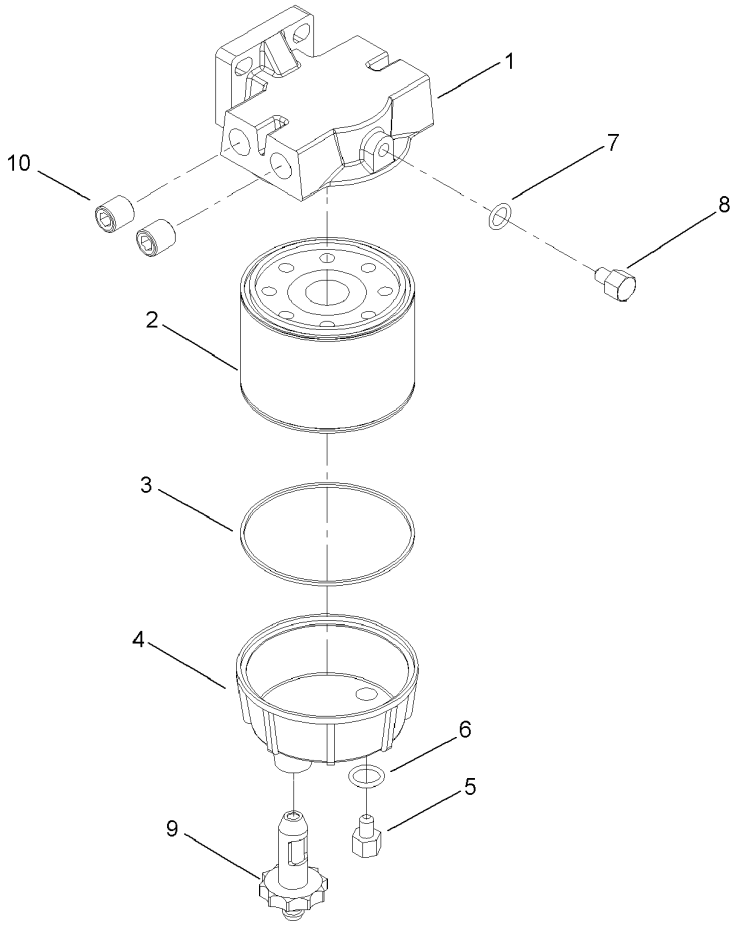
Push Arm and Roll-Over-Protection-System Assembly (continued)

Ref	Part No.	Qty.	Description
29	3217-12	4	Nut-Hex
30	93-7040-01	1	Support-Reinforcement
31	5-3126	3	Pin-Lynch
32	72-9390	1	Belt-Seat
33	93-7644	1	Pin-Hitch, Cotterless
34	24-9510	1	Pin
35	5-2942	6	Shackle
36	21-1830	1	Spring-Extension
37	68-3270	1	Bumper-Rubber
38	104-7050	1	Housing-Manual
41	2412-133	2	R-Clamp
42	3272-7	1	Pin-Cotter
43	324-12	2	Screw-HH
44	93-7650-01	1	Lever-Locking
45	32121-2	1	Pin-Roll, Slotted
46	104-7048	1	Cap-Housing



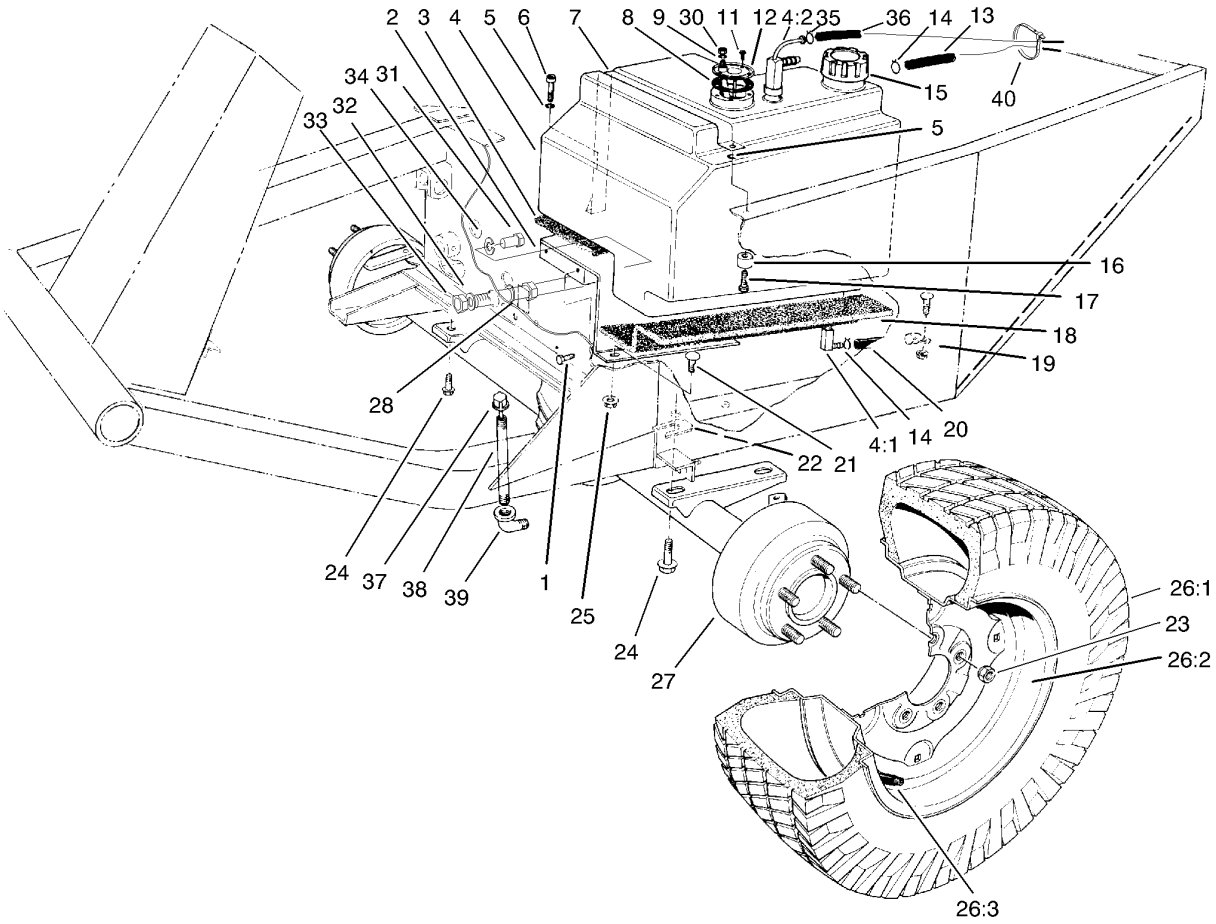
Water and Fuel Filter Assembly

Ref	Part No.	Qty.	Description
1	2412-108	7	Clamp-Worm
2	3234-29	2	Screw-HHF
3	353-781	1	Fitting-Elbow
4	32128-20	2	Nut-HF
5	321-4	5	Screw-HH
6	98-7612	1	Filter-Fuel
7	32128-33	5	Nut-HF
8	353-783	1	Fitting-Straight
9	98-9305	1	Water / Fuel Filter ASM
11	104-5215	1	Pump-Fuel, Electric
12	66-8800	1	Relay
13	32144-10	2	Screw-HWH
14	95-4274	1	Hose-Fuel
15	63-9640	1	Hose
16	105-2561-03	1	Bracket-Pump, Fuel
18	2412-147	1	Clamp
19	105-2599	1	Hose-Fuel



Water / Fuel Filter Assembly No. 98-9305

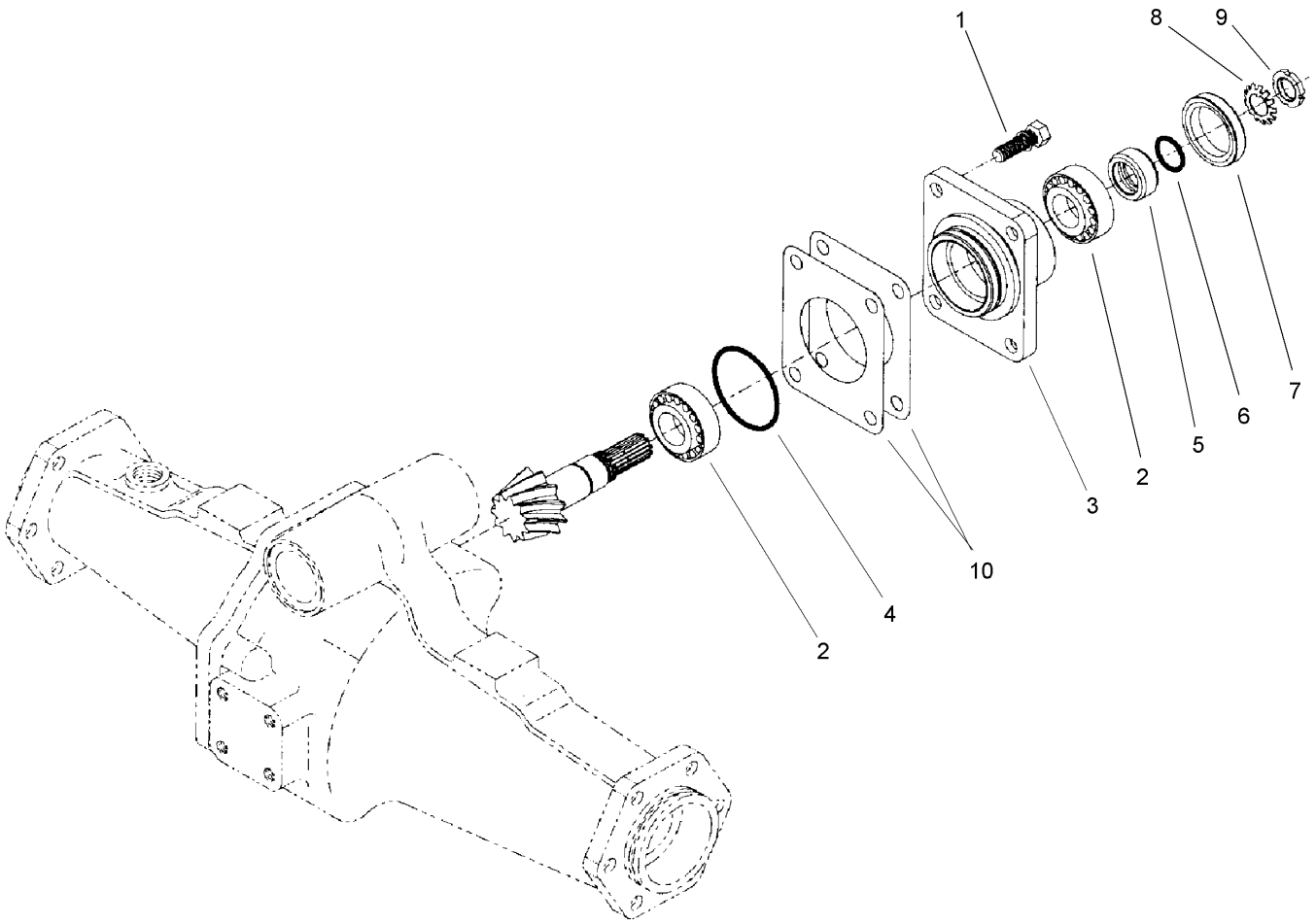
Ref	Part No.	Qty.	Description
1	98-9772	1	Head-Filter
2	98-9764	1	Element
3	98-9774	1	O-Ring
4	98-9775	1	Base-Filter
5	98-9773	1	Plug-Base, Filter
6	237-42	1	O-Ring
7	237-78	1	O-Ring
8	98-9776	1	Plug-Head, Filter
9	98-9777	1	Drain Valve ASM
10	285-22	2	Plug-Pipe



Fuel Tank and Front Axle Assembly

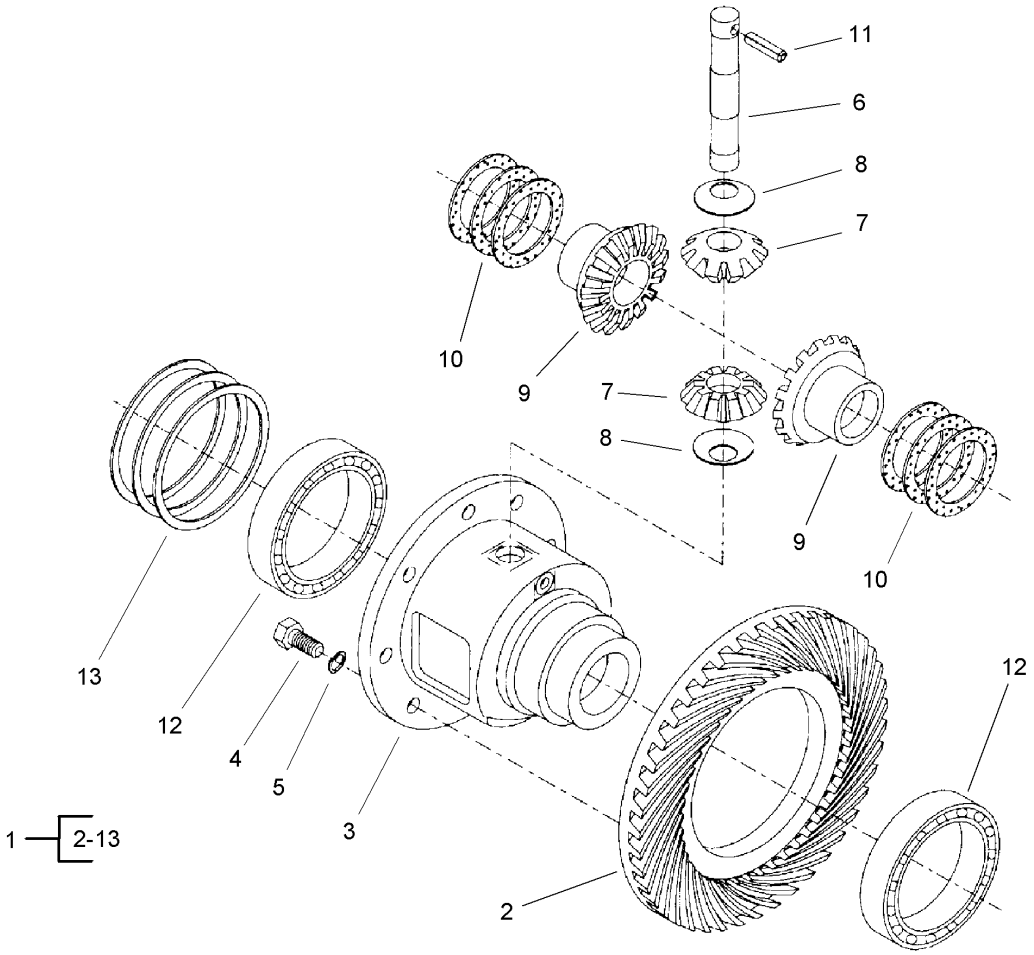
Ref	Part No.	Qty.	Description
1	3234-11	2	Screw-HHF
2	68-9760	1	Fuel Tank Base ASM
3	21-3600	1	Foam-Support, Tank
4	43-4150	1	Fuel Tank ASM
4:1	43-4190	1	Fitting ASM
4:2	43-4160	1	Fitting-Return And Vent
5	3253-3	2	Washer-Lock
6	32104-96	1	Screw-HH
7	37-9550	1	Strap-Tank, Fuel
8	62-7650	1	Gasket
9	3253-17	1	Washer-Lock
11	32144-53	5	Screw-SHWH
12	105-2563	1	Sender-Fuel
13	104-0076	1	Hose-Fuel
14	2412-6	2	Clamp-Hose
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	27-5360	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
❷26		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	2412-79	2	Clamp-Hose
36	43-4230	1	Hose-Return
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



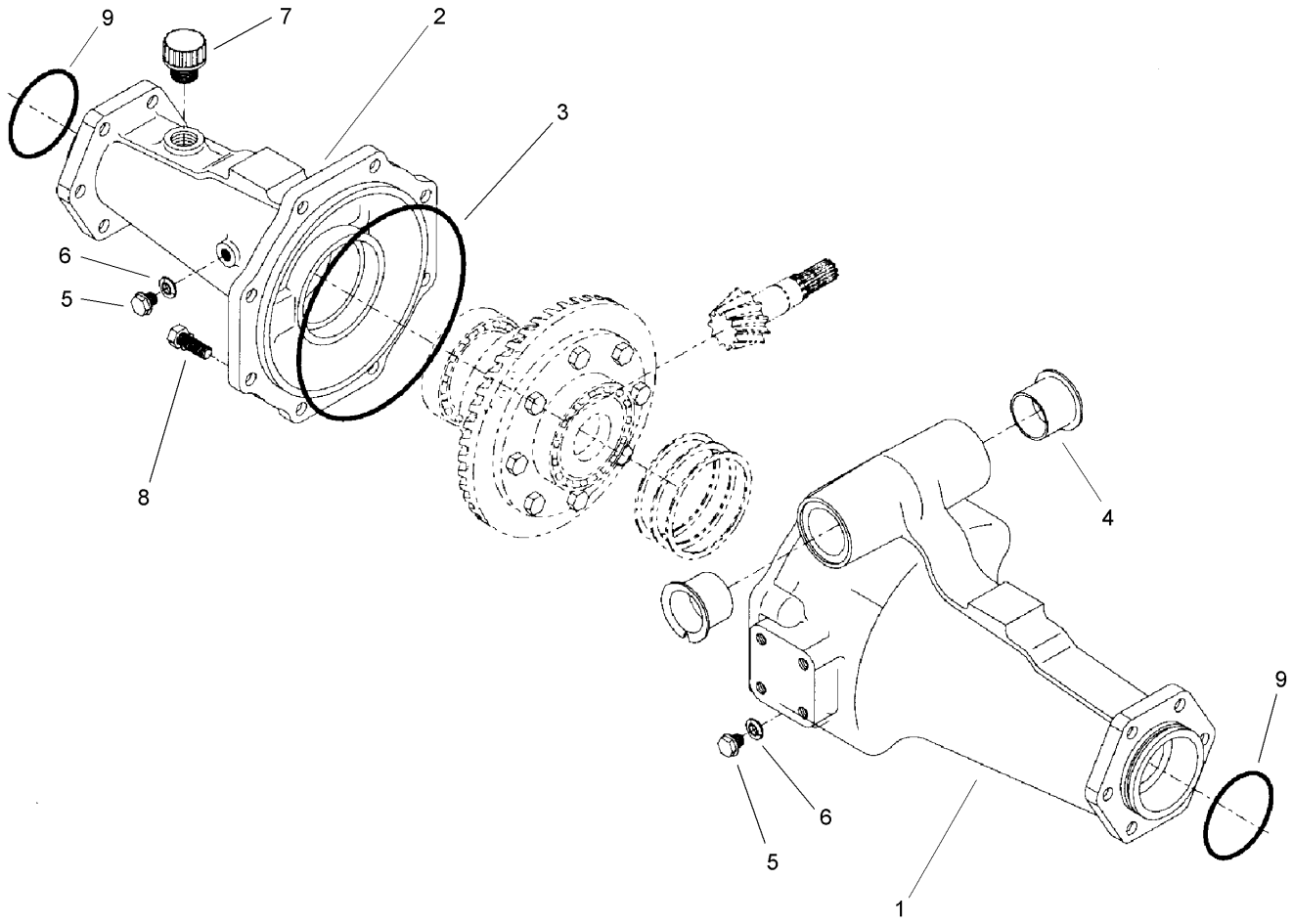
Bevel Pinion Shaft Assembly
Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description
1	99-7575	4	Bolt
2	99-7570	2	Bearing-Roller, Taper
3	95-7535	1	Case-Bearing
4	99-7571	1	O-Ring
5	99-7572	1	Collar-Seal, Oil
6	99-7573	1	O-Ring
7	99-7574	1	Seal-Oil
8	99-7559	1	Washer-Lock
9	99-7560	1	Nut-Lock
10	99-7550	2	Shim 0.1
10	99-7551	2	Shim 0.2



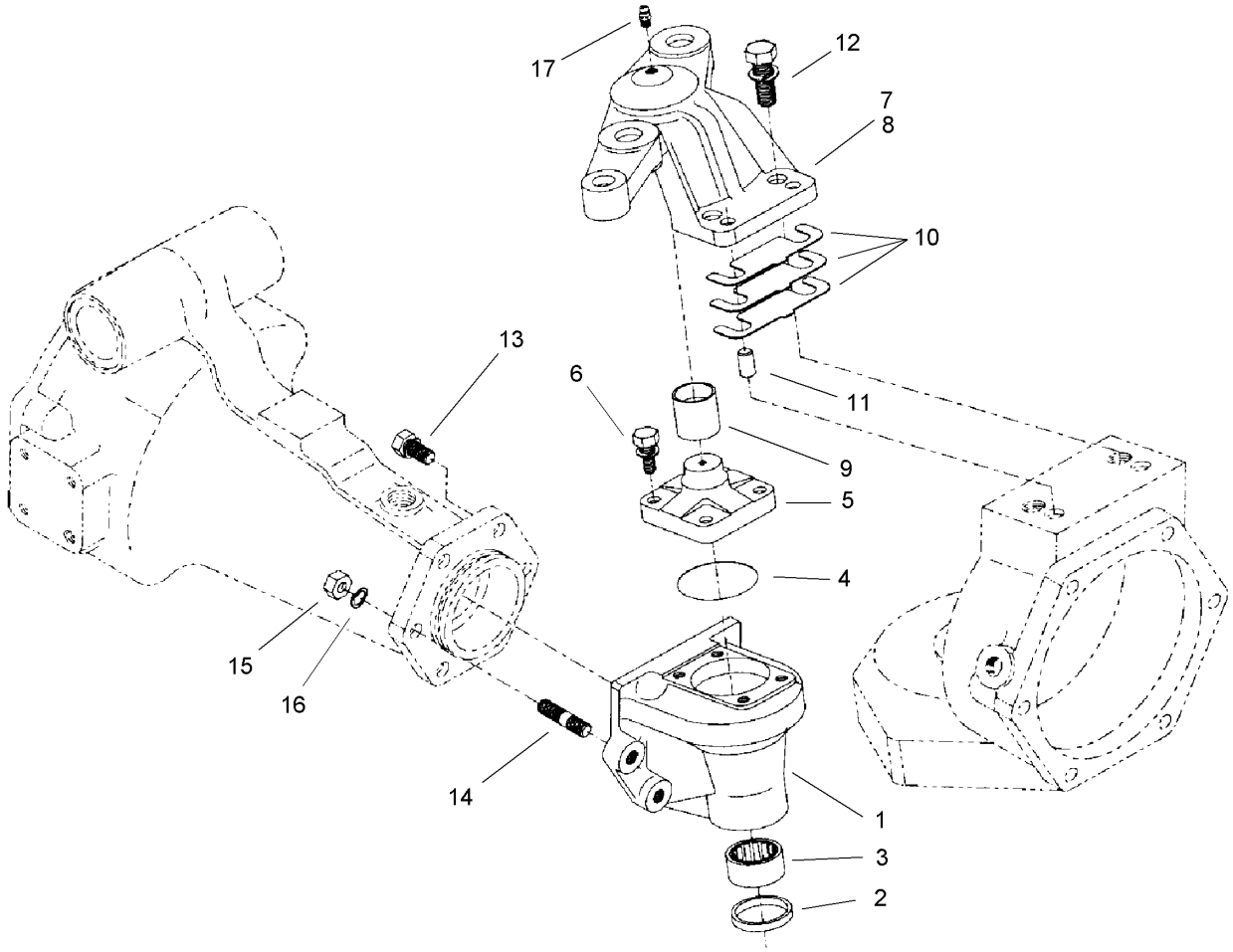
Differential Assembly
Rear Axle Assembly No. 106-1120

Ref	Part 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	99-7577	8	Washer-Spring
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
❶10	99-7583	2	Washer-Differential
❶10	99-7584	2	Washer-Differential
11	99-7588	1	Pin-Spring
12	99-7562	2	Bearing-Ball
13	99-7585	2	Shim 0.1
❶13	99-7586	2	Shim 0.2
❶13	99-7587	2	Shim 0.4



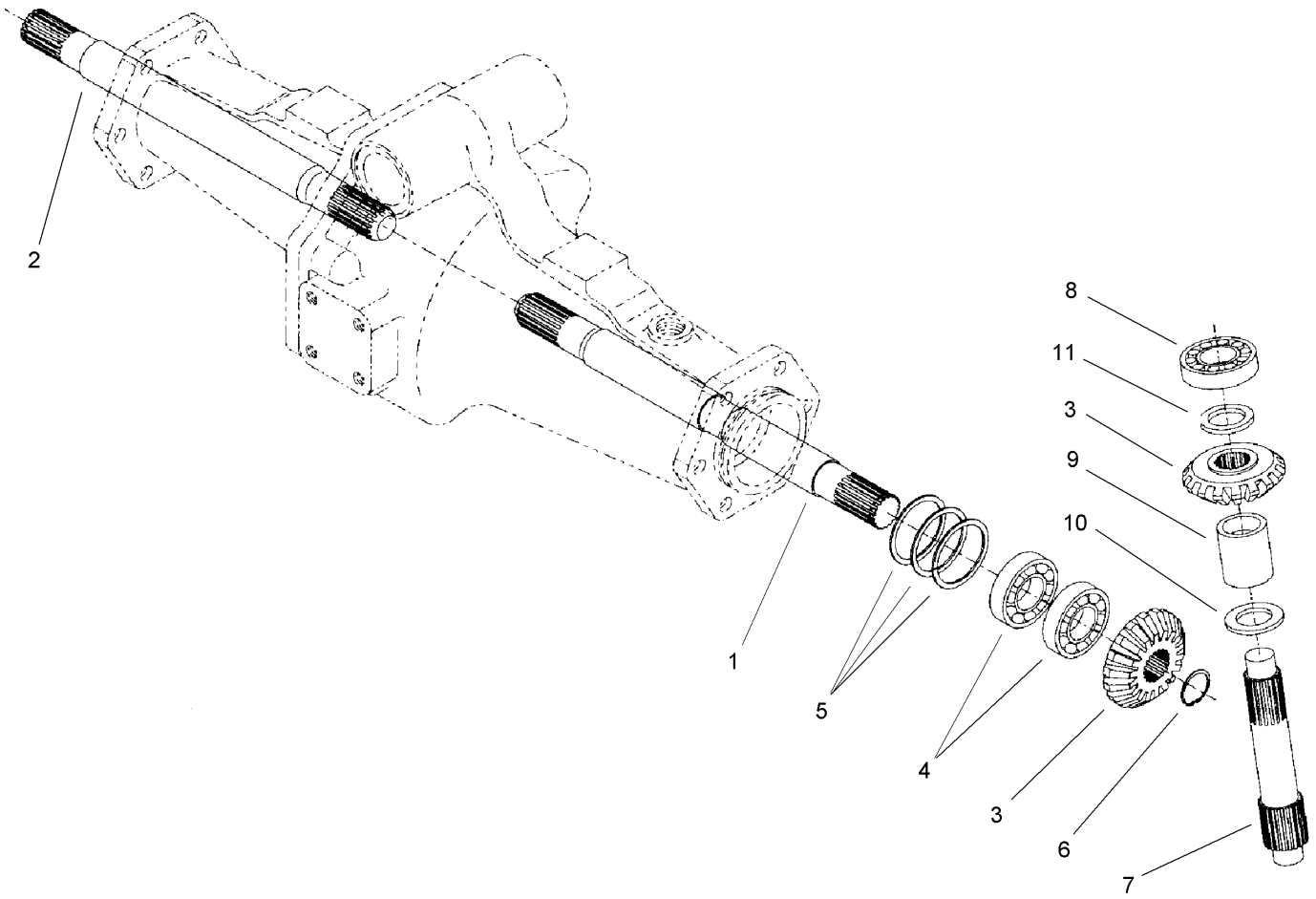
Axle Support Assembly
Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description
1	95-7508	1	Support-Axle
2	95-7506	1	Support-Axle
3	95-7507	1	O-Ring
4	95-7537	2	Bushing-Flanged
5	99-7589	2	Plug
6	99-7590	2	Washer-Seal
7	99-7591	1	Oil Plug ASM
8	99-7592	8	Bolt
9	99-7593	2	O-Ring



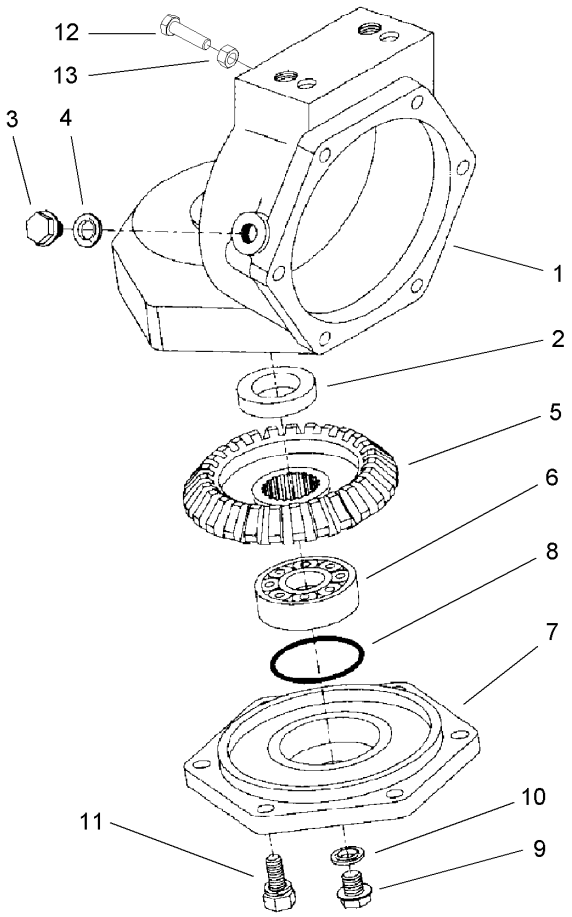
Bevel Gear Case Assembly
Rear Axle Assembly No. 106-1120

Ref	Part No.	Qty.	Description
1	106-1099	2	Case-Gear, Bevel
2	99-7594	2	Seal-Oil
3	99-7595	2	Bearing-Needle
4	104-2372	2	O-Ring
5	104-2373	2	Knuckle
6	104-2374	8	Bolt
7	95-7514	1	Support-Axle Case, LH
❶8	95-7516	1	Support-Axle Case, RH
9	99-7529	2	Bushing
10	95-7547	2	Shim 0.1
❶10	95-7548	2	Shim 0.2
❶10	95-7549	2	Shim 0.3
11	99-7597	4	Pin-Dowel
12	99-7598	4	Bolt
13	99-7599	8	Bolt
14	99-7525	4	Stud
15	99-7526	4	Nut
16	99-7527	4	Washer-Spring
17	99-7528	2	Nipple-Grease



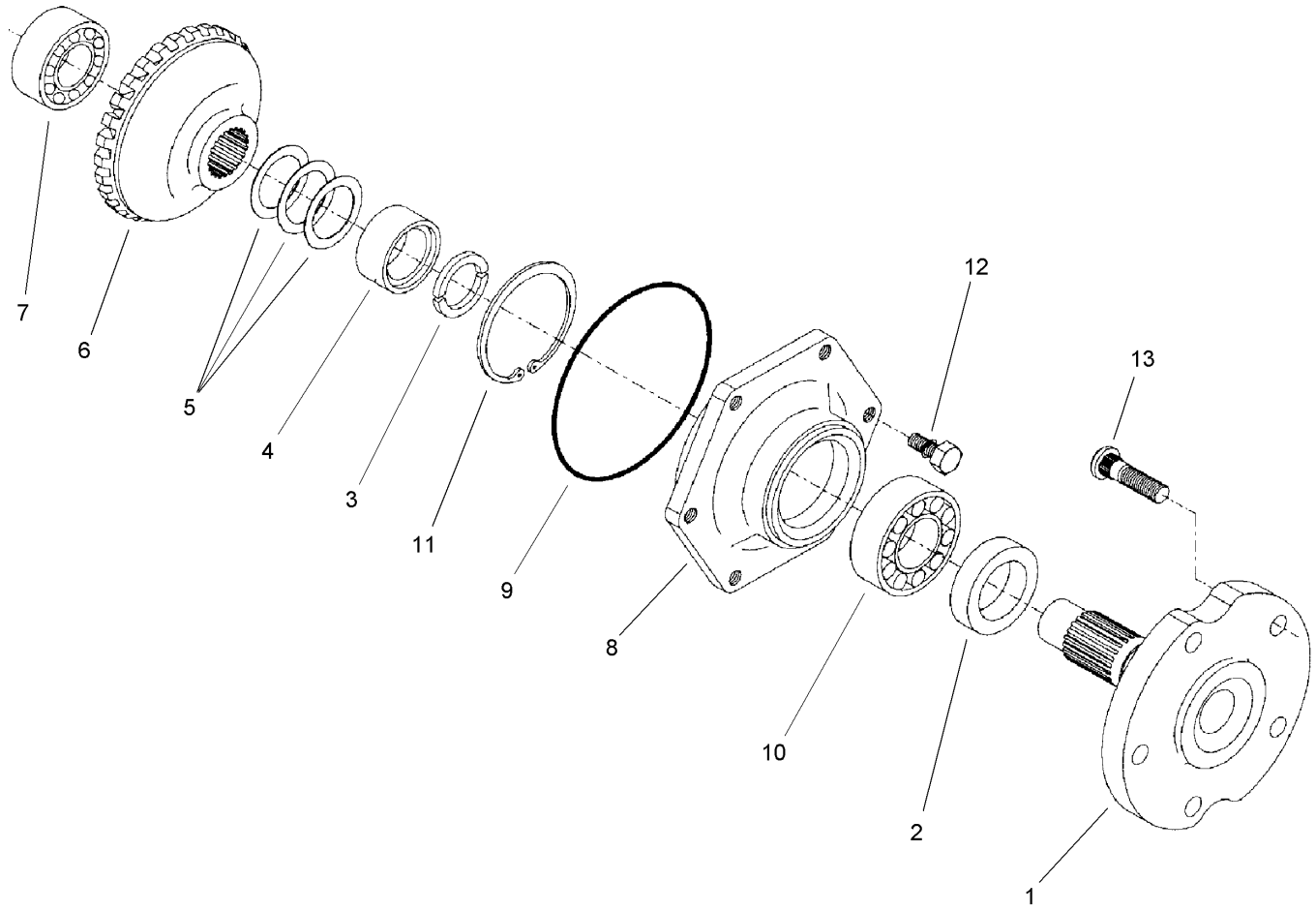
Bevel Gear Shaft Assembly
Rear Axle Assembly No. 106-1120

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
❶5	99-7553	2	Shim 0.2
❶5	99-7554	2	Shim 0.5
6	99-7531	2	Clip
7	106-1101	2	Shaft-Gear, Bevel
8	99-7532	2	Bearing-Roller, Taper
9	95-7543	2	Spacer
10	99-7533	2	Collar-Thrust
11	99-7558	2	Collar



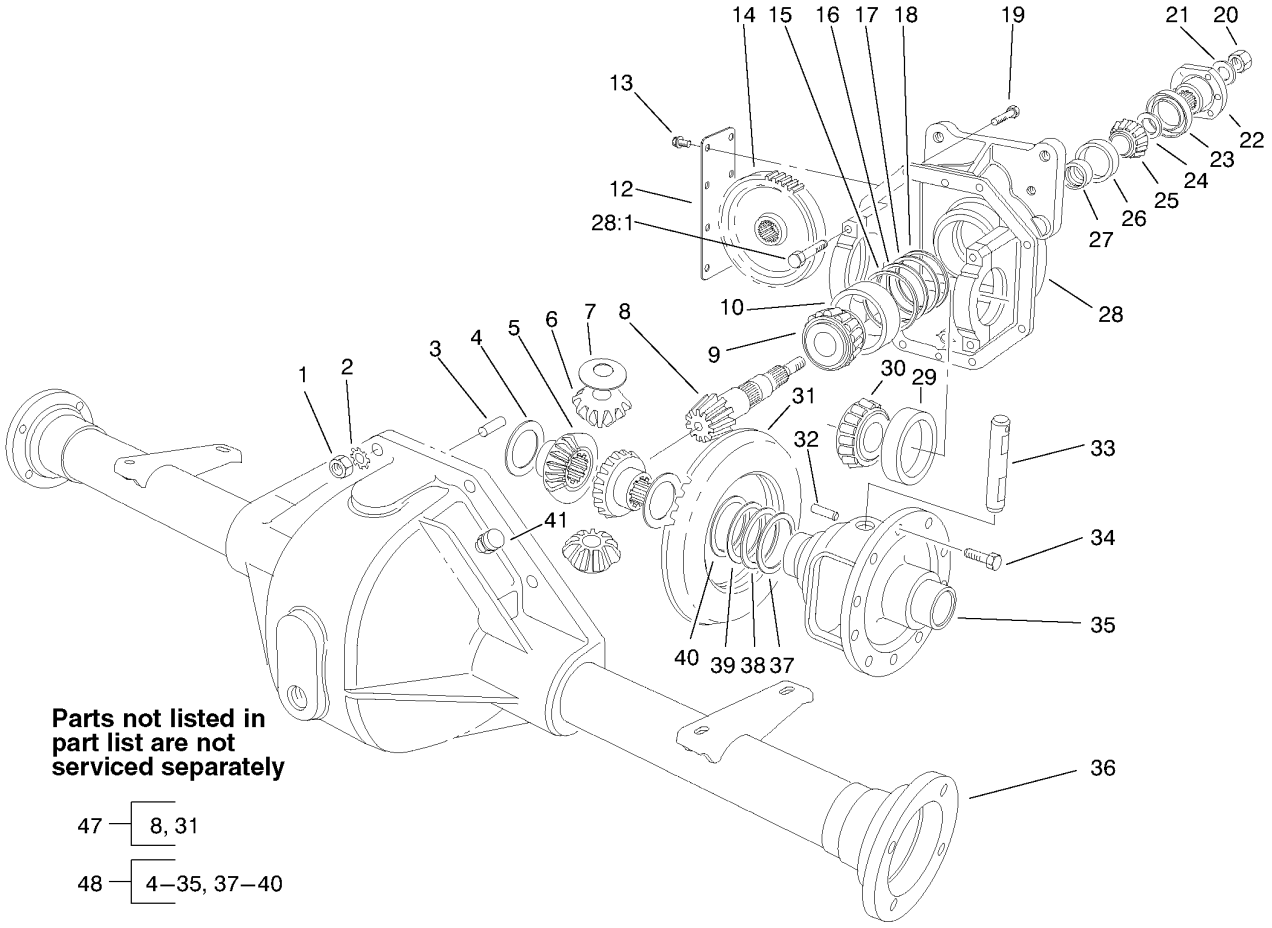
Axle Case Assembly
Rear Axle Assembly No. 106-1120

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	99-7537	2	O-Ring
9	99-7589	2	Plug
10	99-7590	2	Washer-Seal
11	99-7596	12	Bolt
12	106-1102	2	Bolt-Stop
13	106-1103	2	Nut



Axle Assembly
RearAxle Assembly No. 106-1120

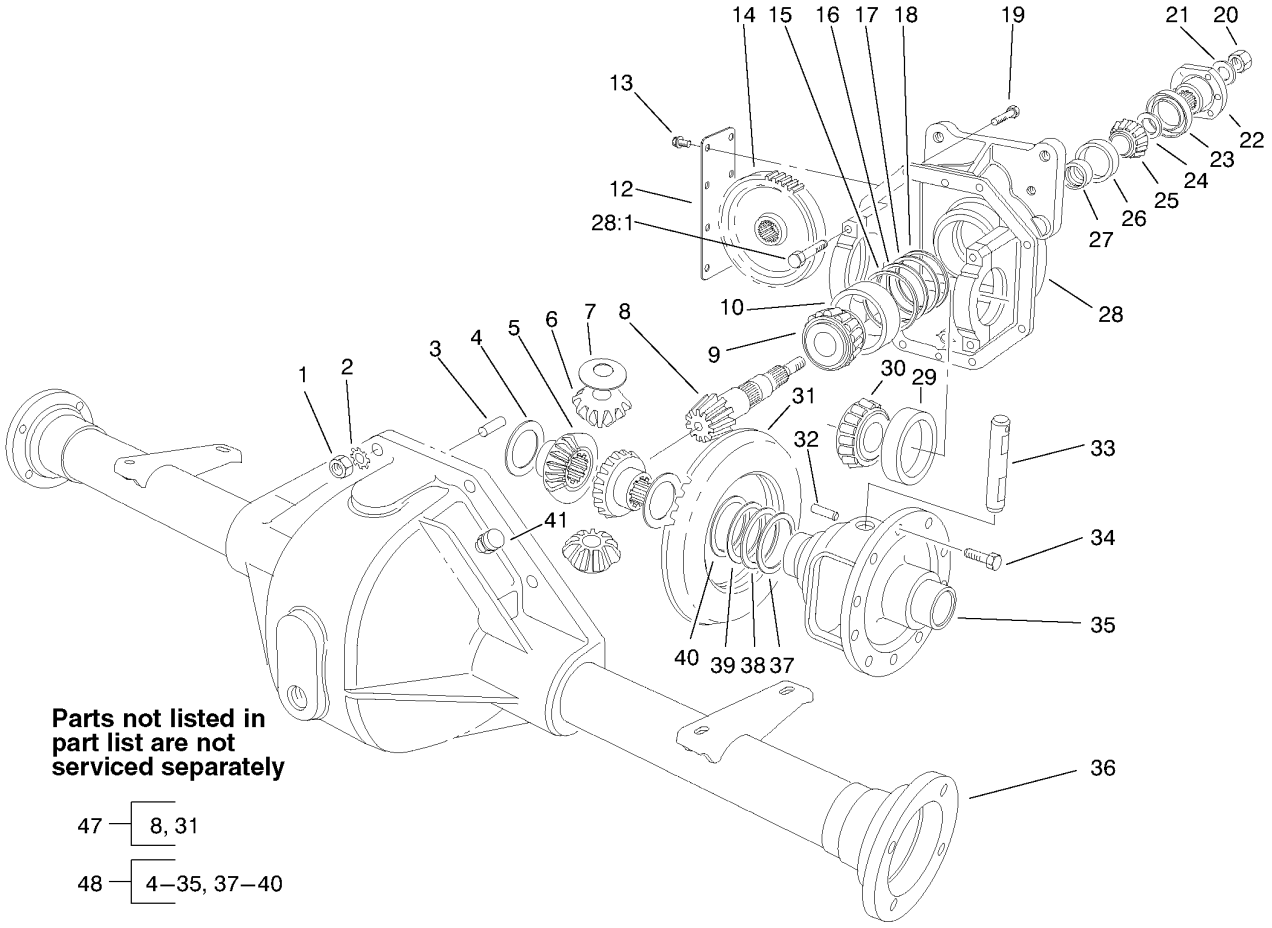
Ref	Part No.	Qty.	Description
1	95-7522	2	Axle
2	99-7564	2	Seal-Oil
3	95-7544	4	Clip
4	95-7523	2	Spacer
5	99-7555	2	Shim 0.3
5	99-7556	2	Shim 0.2
5	99-7557	2	Shim 0.5
6	95-7525	2	Gear-Bevel, 27 Tooth
7	99-7534	2	Bearing-Ball
8	95-7521	2	Cover-Axle
9	99-7538	2	O-Ring
10	99-7561	2	Bearing-Ball
11	99-7539	2	Clip
12	99-7596	12	Bolt
13	99-7563	10	Stud



Front Axle Assembly No. 86-9630-03

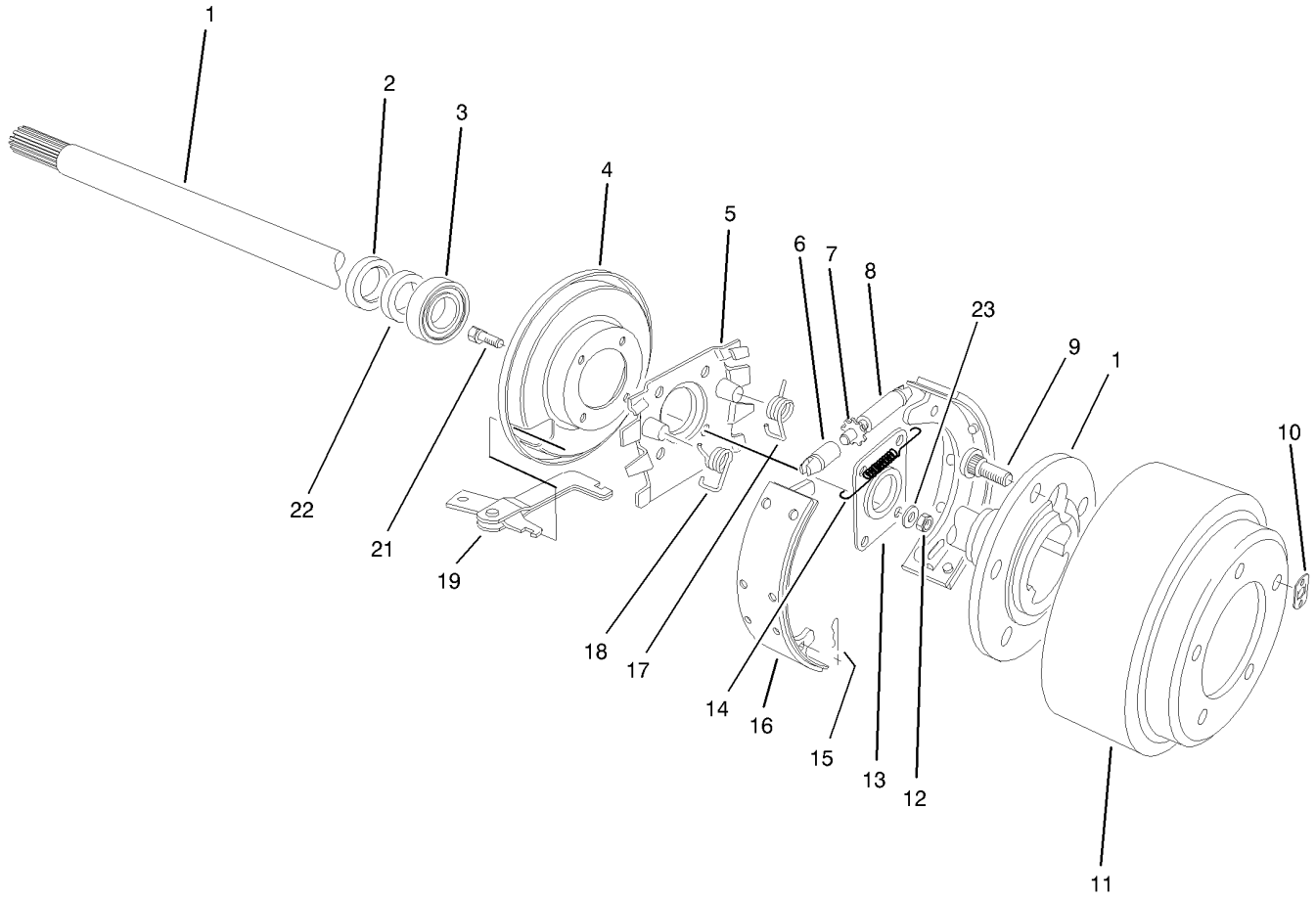
Ref	Part No.	Qty.	Description
1	3219-2	8	Nut-Hex
2	3255-8	8	Washer-Lock
3	21-8270	2	Pin-Dowel
4	21-7720	2	Washer-Thrust
5	24-8790	2	Gear-Differential
6	21-7690	2	Pinion-Differential
7	21-7730	2	Washer-Thrust, Pinion
❷8		1	Pinion-Drive
9	43-6760	1	Bearing-Roller, Cone Taper
10	43-6750	1	Bearing-Taper, Cup
12	21-7830	1	Cover-Gear
13	12-5450	8	Screw
14	86-7230	1	Gear-Input, Transmission
15	43-6710	0	Shim-Pinion (.003)
16	43-6711	0	Shim-Pinion (.005)
17	43-6712	0	Shim-Pinion (.010)
18	43-6713	0	Shim-Pinion (.030)
19	3210-7	8	Screw-HH
20	71-4350	1	Nut
21	71-4340	1	Washer
22	68-7010	1	Flange
23	71-4330	1	Seal
24	72-3570	0	Shim-Bearing, Front (.094)
❶	72-3571	0	Shim-Bearing, Front (.096)

Ref	Part No.	Qty.	Description
❶	72-3572	0	Shim-Bearing, Front (.098)
24	72-3573	0	Shim-Bearing, Front (.100)
❶	72-3574	0	Shim-Bearing, Front (.102)
❶	72-3575	0	Shim-Bearing, Front (.104)
❶	72-3576	0	Shim-Bearing, Front (.106)
❶	72-3577	0	Shim-Bearing, Front (.108)
❶	72-3578	0	Shim-Bearing, Front (.110)
❶	72-3580	0	Shim-Bearing, Front (.112)
❶	72-3581	0	Shim-Bearing, Front (.114)
❶	72-3582	0	Shim-Bearing, Front (.116)
❶	72-3583	0	Shim-Bearing, Front (.118)
❶	72-3584	0	Shim-Bearing, Front (.120)
❶	72-3585	0	Shim-Bearing, Front (.125)
❶	72-3586	0	Shim-Bearing, Front (.127)
❶	72-3587	0	Shim-Bearing, Front (.129)
❶	72-3588	0	Shim-Bearing, Front (.131)
❶	72-3590	0	Shim-Bearing, Front (.133)
❶	72-3591	0	Shim-Bearing, Front (.135)
❶	72-3592	0	Shim-Bearing, Front (.137)
❶	72-3593	0	Shim-Bearing, Front (.139)
❶	72-3594	0	Shim-Bearing, Front (.141)
❶	72-3595	0	Shim-Bearing, Front (.143)
❶	72-3596	0	Shim-Bearing, Front (.145)
❶	72-3597	0	Shim-Bearing, Front (.147)



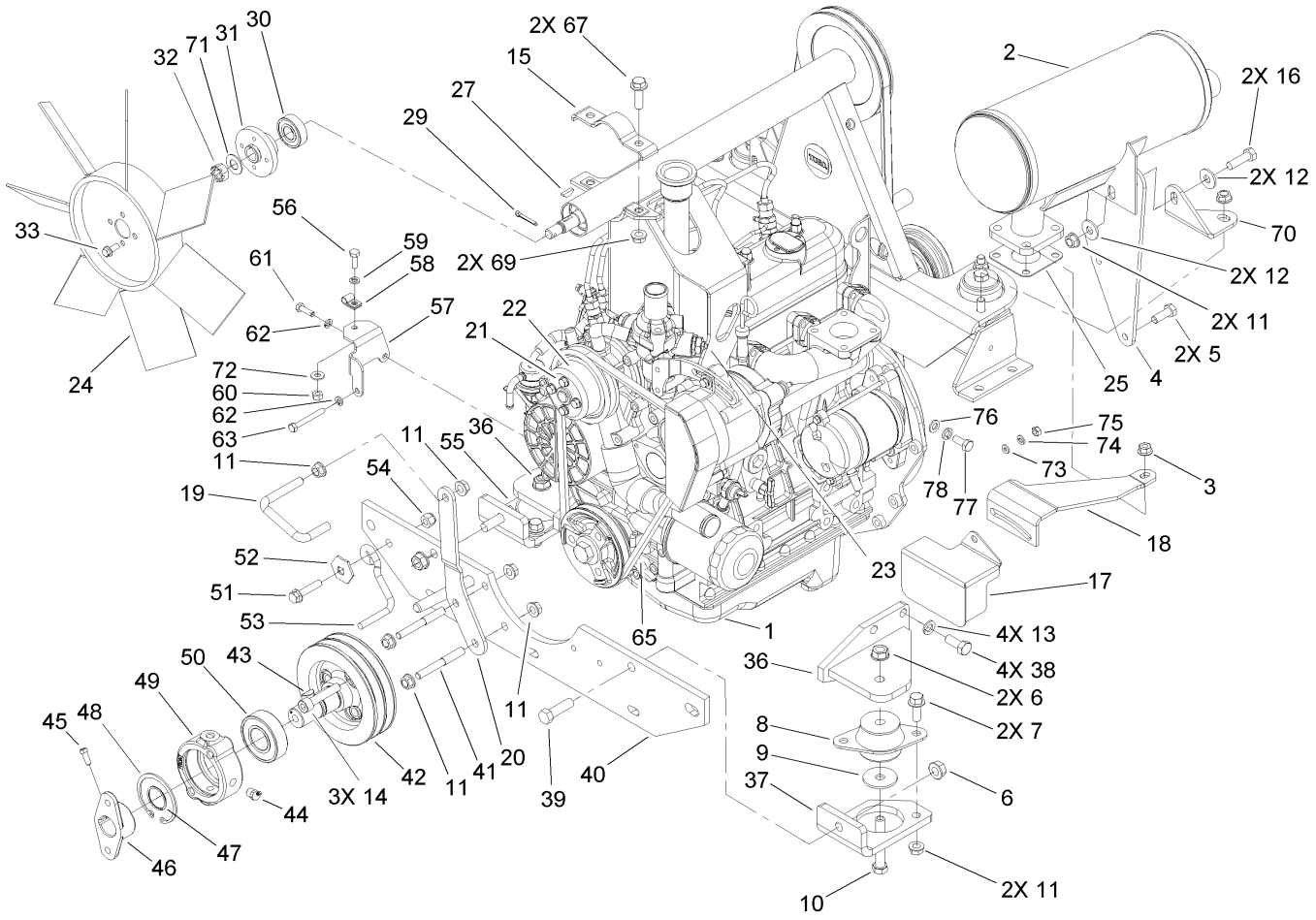
Front Axle Assembly No. 86-9630-03 (continued)

Ref	Part No.	Qty.	Description
❶	72-3598	0	Shim-Bearing, Front (.149)
❶	72-3600	0	Shim-Bearing, Front (.151)
25	254-91	1	Cone-Bearing
26	254-90	1	Bearing-Cup
27	21-8020	1	Spacer-Bearing
28	86-9610	1	Carrier Assy
28:1	92-1773	4	Screw-HHF
29	254-66	2	Cup-Bearing, Roller
30	254-65	2	Cone-Bearing, Roller
❷31		1	Gear-Ring
32	32121-15	1	Pin-Roll
33	21-7700	1	Shaft-Mate, Pinion
34	21-7770	5	Screw-Gear, Drive
35	21-7670	1	Case-Differential
36	43-6840	1	Housing-Lower
37	21-8120	0	Shim-Bearing, Differential (.030)
38	21-8110	0	Shim-Bearing, Differential (.010)
39	21-8100	0	Shim-Bearing, Differential (.005)
40	21-8090	0	Shim-Bearing, Differential (.003)
41	72-9420	1	Vent
❶	92-1676	1	Gear And Pinion ASM
❶	92-4902	1	Differential Carrier ASM



Brake Assembly

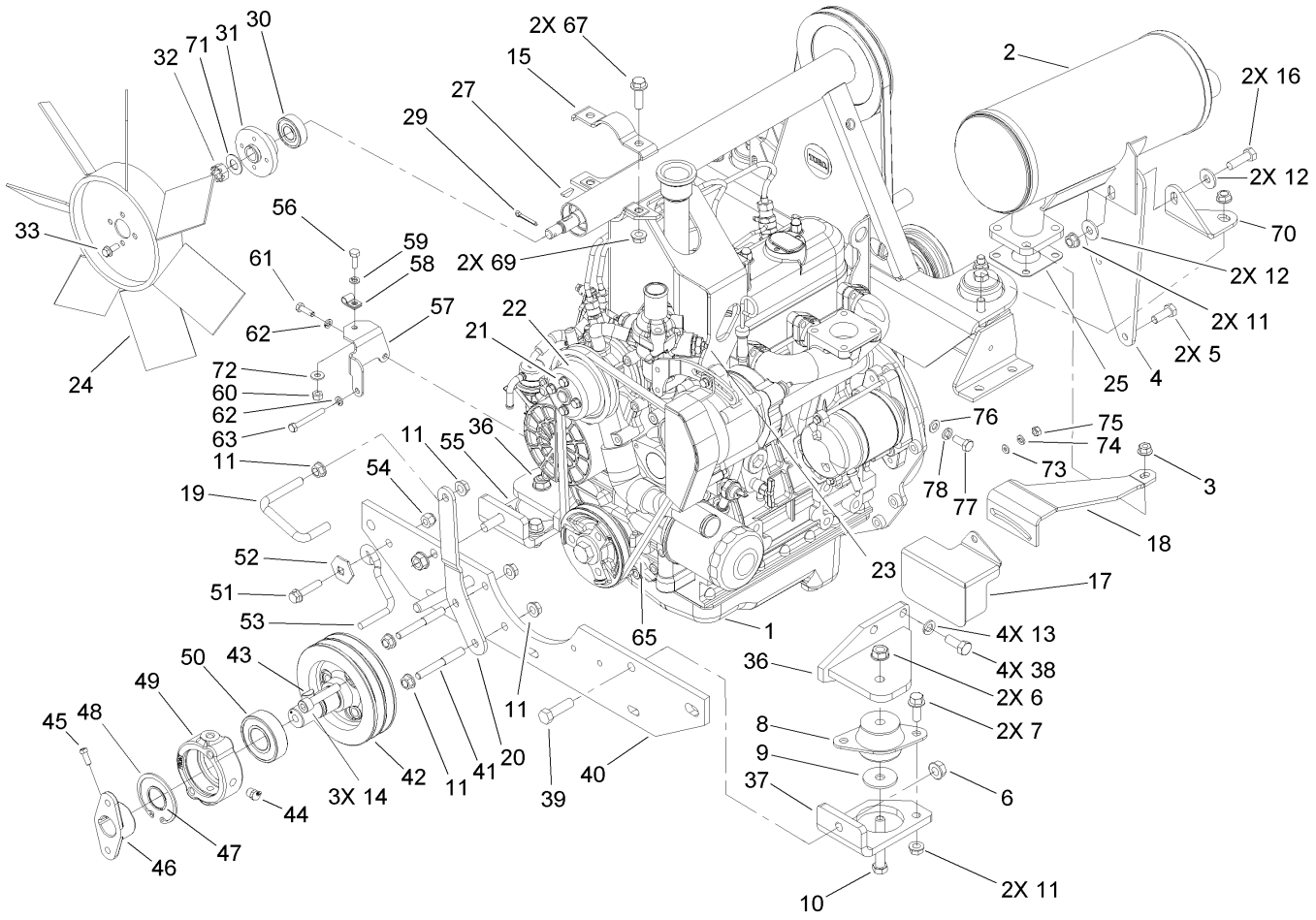
Ref	Part No.	Qty.	Description
1	28-0650	2	Shaft-Axle, Flanged
2	92-1774	2	Seal-Oil
3	21-8180	2	Bearing ASM
4	21-9450	2	Shield-Dust
5	43-6810	2	Spider-Torque
6	21-9390	2	Socket-Screw, Adjusting
7	21-9370	2	Screw-Adjusting
8	21-9380	2	Nut-Pivot
9	242-34	10	Stud-Drive
10	21-8360	2	Clip-Retaining
11	28-0680	2	Drum-Brake
12	94-6935	8	Locknut
13	28-0670	2	Seal-Grease
14	21-9440	2	Spring-Screw, Adjusting
15	21-9460	4	Retainer-Lever, Brake
16	84-8600	1	Set-Shoes, Lined
17	21-9430	2	Spring-Return, RH
18	21-9420	2	Spring-Return, LH
19	24-9180	2	Strut And Lever ASM
21	94-6934	8	Screw-HH
22	24-8840	2	Ring-Retaining, Wheel Bearing
23	94-6936	8	Washer-Hardened
❶24	92-8775	1	Liquid Gasket Kit



Engine and Mounting Component Assembly

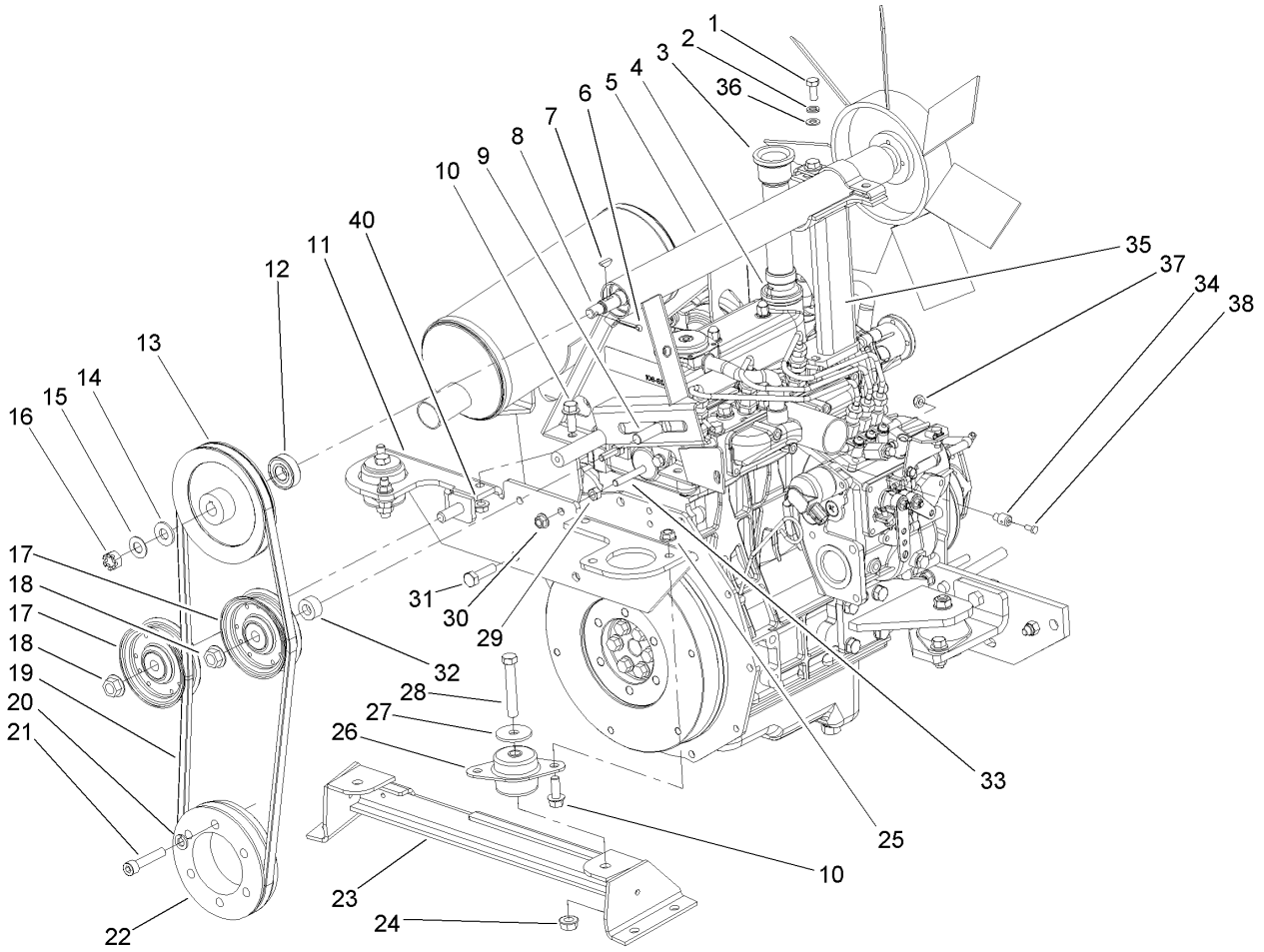
Ref	Part No.	Qty.	Description
1	108-1361	1	Engine-Kubota
2	106-8069	1	Muffler-Exhaust
3	33004-00	4	Nut-HF
4	105-2523-03	1	Bracket-Muffler
5	33114-016	2	Screw-HH
6	32128-37	4	Nut-HF
7	3234-11	4	Screw-HHF
8	53-9680	2	Mount-Engine
9	53-9480	2	Washer-Snubber
10	324-11	2	Screw-HH
11	3290-357	12	Nut-HHF, Whiz
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-Craddle
16	323-44	2	Screw-HH
17	105-2557-03	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	2	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	27-1960	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 and Mounting Component Assembly (continued)

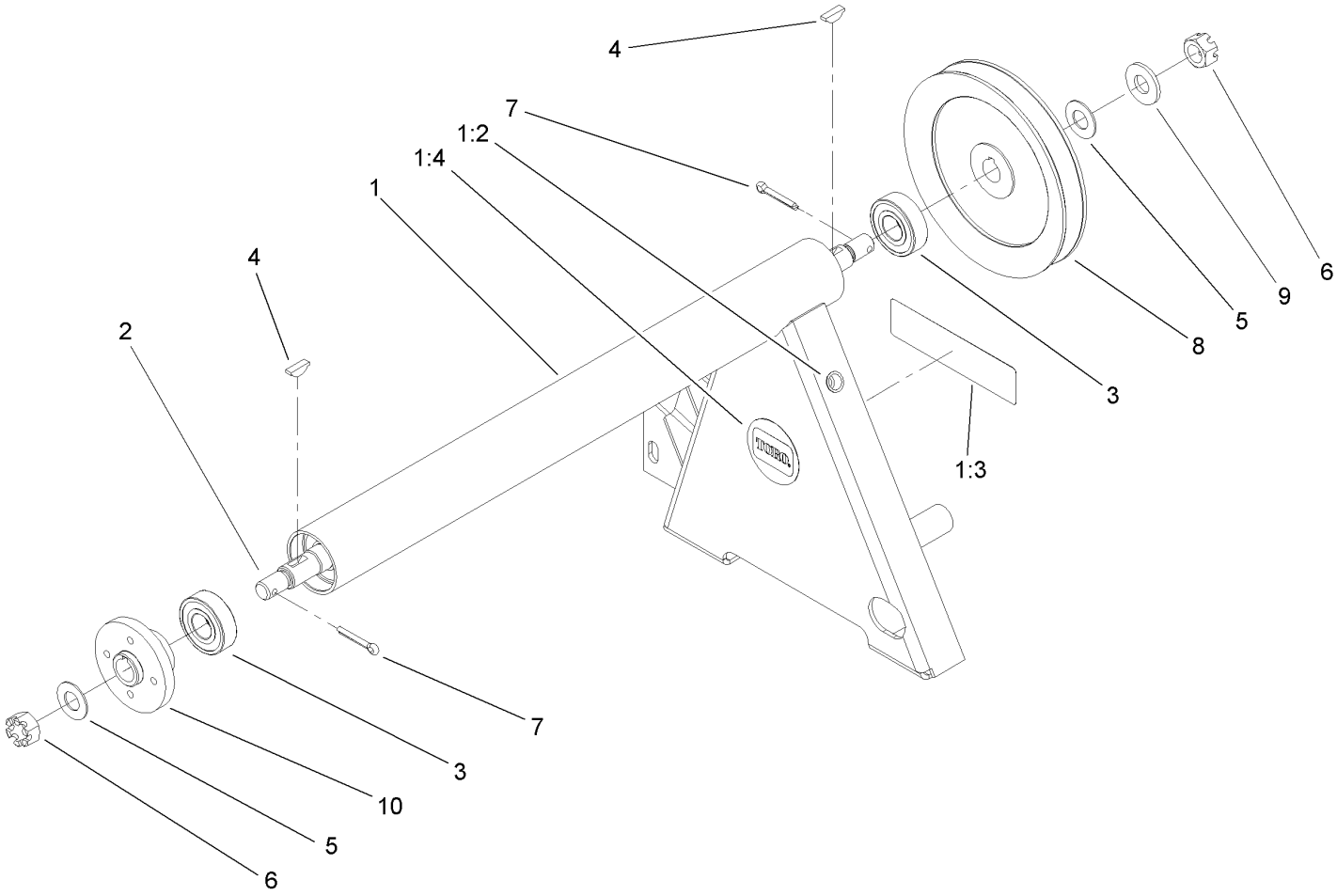
Ref	Part No.	Qty.	Description
53	63-1400	1	Rod-Belt
54	3296-39	1	Nut-Lock, NI
55	104-3465-03	1	Mount-Frame, Front (RH)
56	321-4	1	Screw-HH
57	104-3421-03	1	Bracket-Throttle
58	2412-31	1	Clamp-Boden
59	3253-3	1	Washer-Lock
60	3217-5	1	Nut-Hex
61	33113-050	1	Screw-HH
62	48-8020	2	Washer-Spring
63	48-7630	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	1	Washer-Flat
73	3256-78	1	Washer-Flat
74	43-5930	1	Washer-Spring
75	48-7890	1	Nut
76	33094-00	1	Washer-Plain
77	92-1374	1	Screw-HH
78	3253-4	1	Washer-Lock



Engine Pulley System Assembly

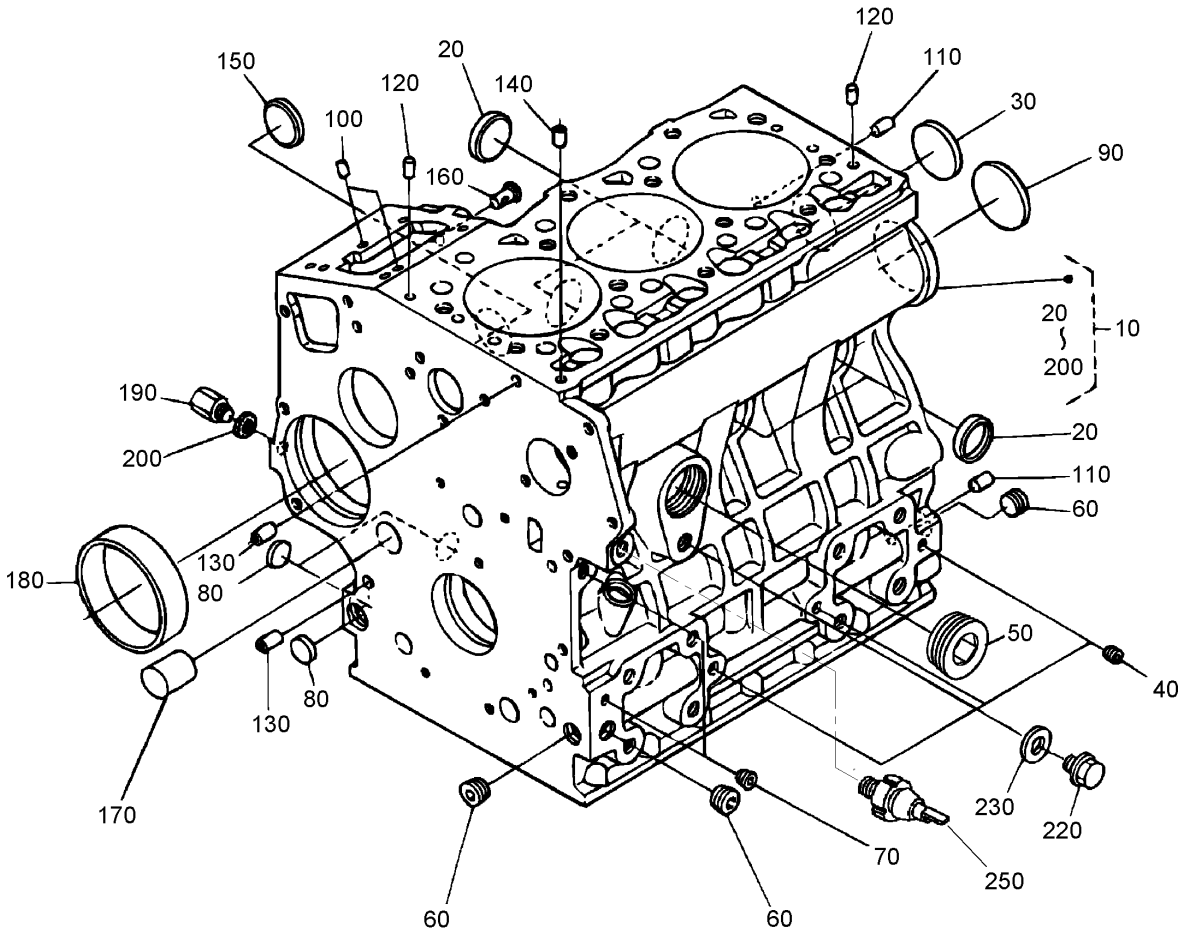
Ref	Part No.	Qty.	Description
1	93-7773	2	Screw-HHF
2	3253-4	2	Washer-Lock
3	105-0087	1	Flange-Filler, Oil
4	98-7430	1	O-Ring
5	106-4399	1	Fan-Support ASM
6	3272-16	1	Pin-Cotter
7	3257-30	1	Key-Woodruff
8	43-3690	1	Shaft-Fan
9	3233-14	1	Screw-CARR
10	3234-11	6	Screw-HHF
11	105-2501-03	1	Engine Mount ASM
12	38-7820	1	Bearing-Ball
13	105-2524	1	Pulley
14	3-6803	2	Washer-Adjusting
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	104-3407-03	1	Pulley-Flywheel
23	105-2520-03	1	Engine Mount ASM
24	32128-37	2	Nut-HF

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



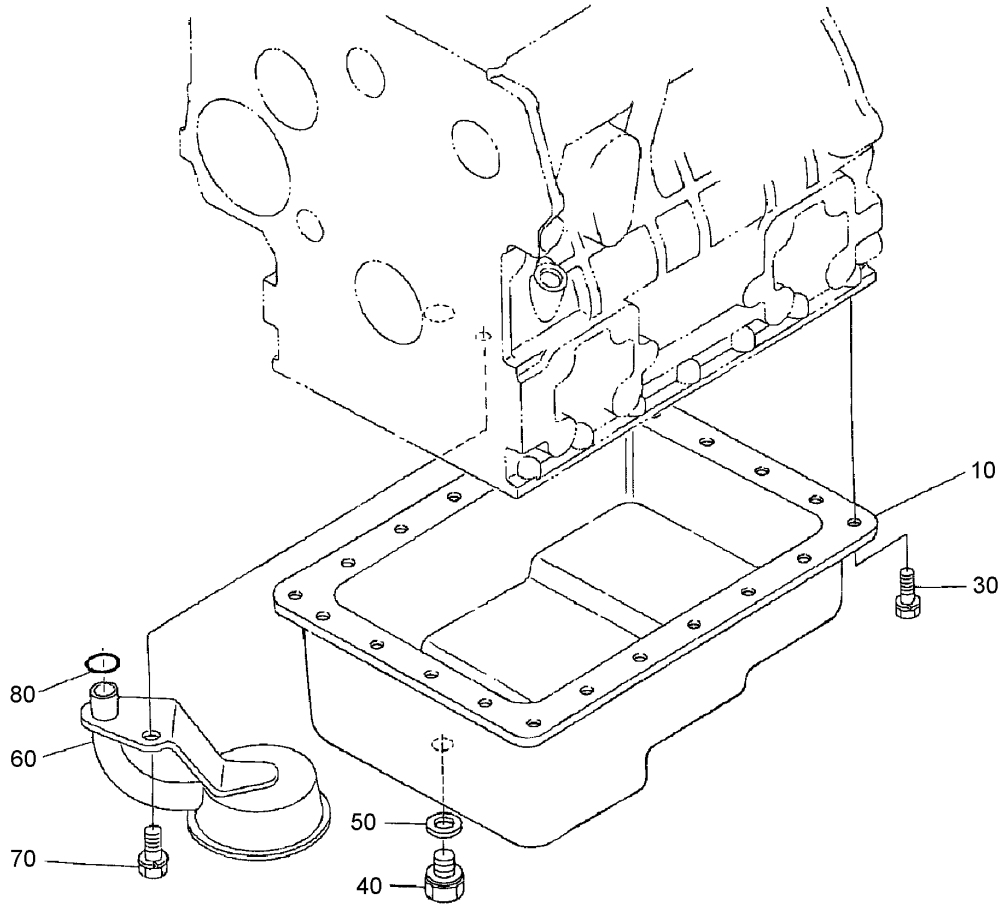
Fan Support Assembly No. 106-4399

Ref	Part No.	Qty.	Description
1	105-2592	1	Tube Support ASM
1:2	3290-472	2	Insert-Threaded
1:3	106-8120	1	Decal-Danger, Ce
1:4	68-5370	1	Decal
2	43-3690	1	Shaft-Fan
3	38-7820	2	Bearing-Ball
4	3257-30	2	Key-Woodruff
5	18-9810	2	Washer-Thrust
6	32136-3	2	Nut-SHH
7	3272-16	2	Pin-Cotter
8	105-2524	1	Pulley
9	29-8910	1	Washer
10	104-3408-03	1	Hub-Fan



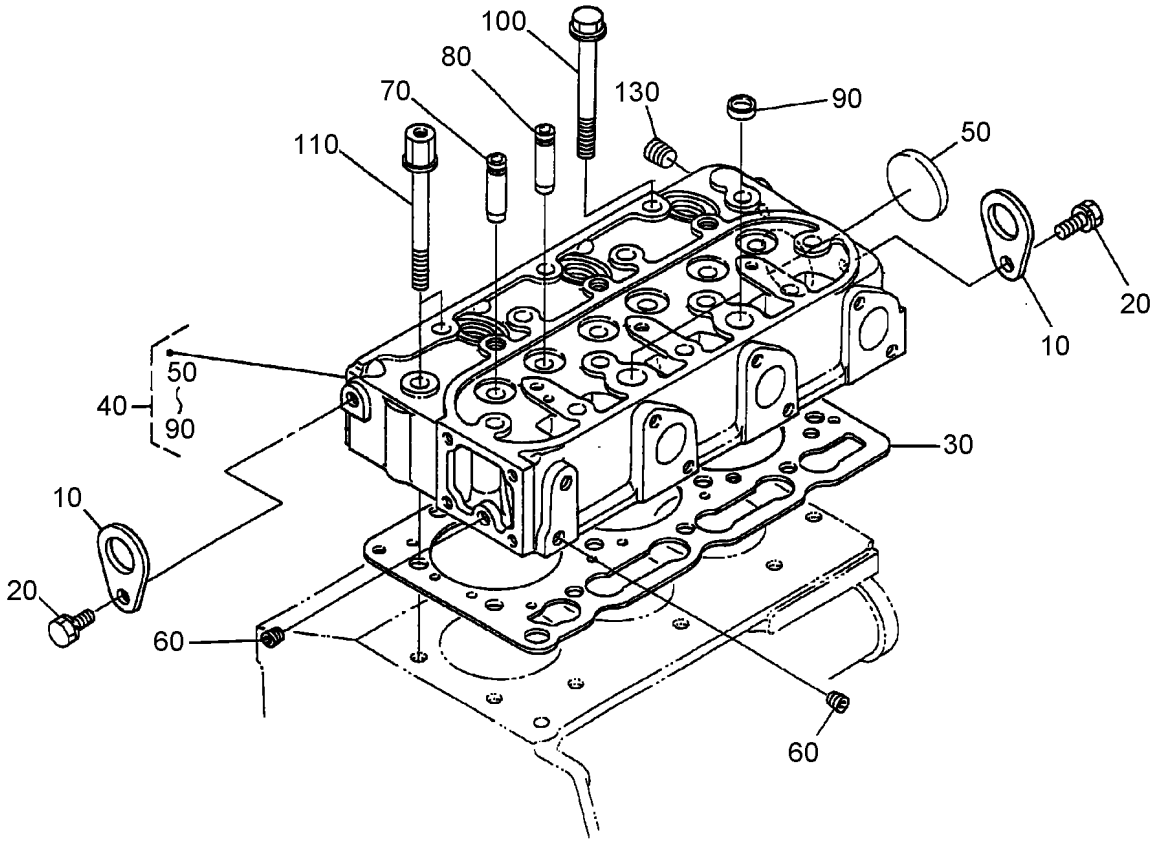
Crankcase Assembly

Ref	Part No.	Qty.	Description
10	108-6571	1	Crankcase ASM
20	98-9398	4	Cap-Sealing
30	98-7539	1	Cap-Sealing
40	98-7540	3	Plug
50	105-3779	1	Plug
60	98-9597	3	Plug
70	98-7487	2	Plug
80	98-7489	3	Plug
90	98-9668	1	Plug-Expansion
100	98-9375	2	Pin-Straight
110	98-9377	2	Pin-Straight
120	105-3795	2	Pin-Straight
130	98-9387	2	Pin-Pipe
140	98-9539	1	Pin-Pipe
150	98-9599	1	Plug
160	98-9630	1	Pin-Spring, Start
170	98-9675	1	Plug
180	98-9656	1	Bushing-Governor, Gear
190	98-7507	1	Plug
200	98-7428	1	Gasket
220	99-3447	1	Plug
230	106-7056	1	Gasket
250	98-9416	1	Switch-Oil



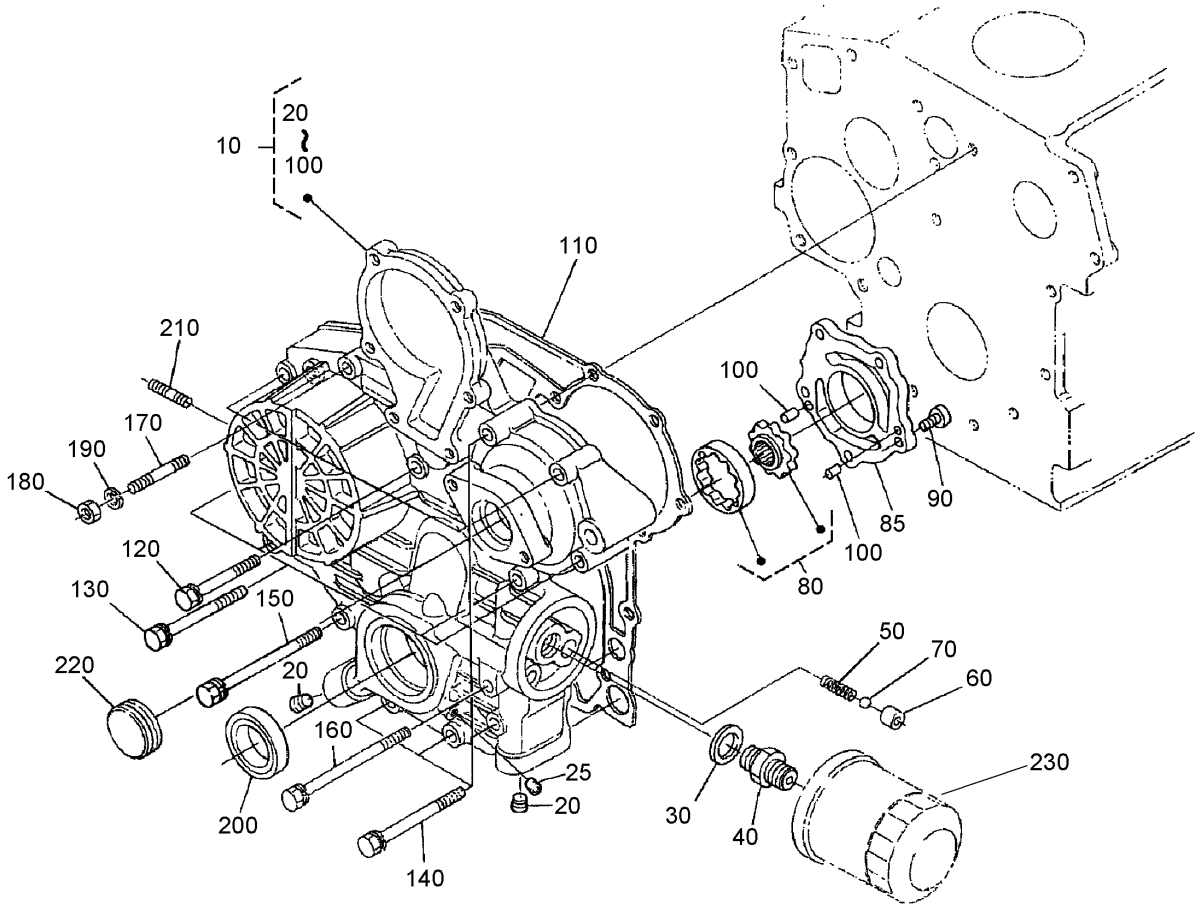
Oil Pan Assembly

Ref	Part No.	Qty.	Description
10	104-3495	1	Pan-Oil
30	107-9065	22	Bolt
40	108-6572	1	Plug-Drain
50	98-7524	1	Gasket
60	104-3496	1	Filter-Pickup, Oil
70	98-7526	1	Bolt
80	105-3776	1	O-Ring



Cylinder Head Assembly

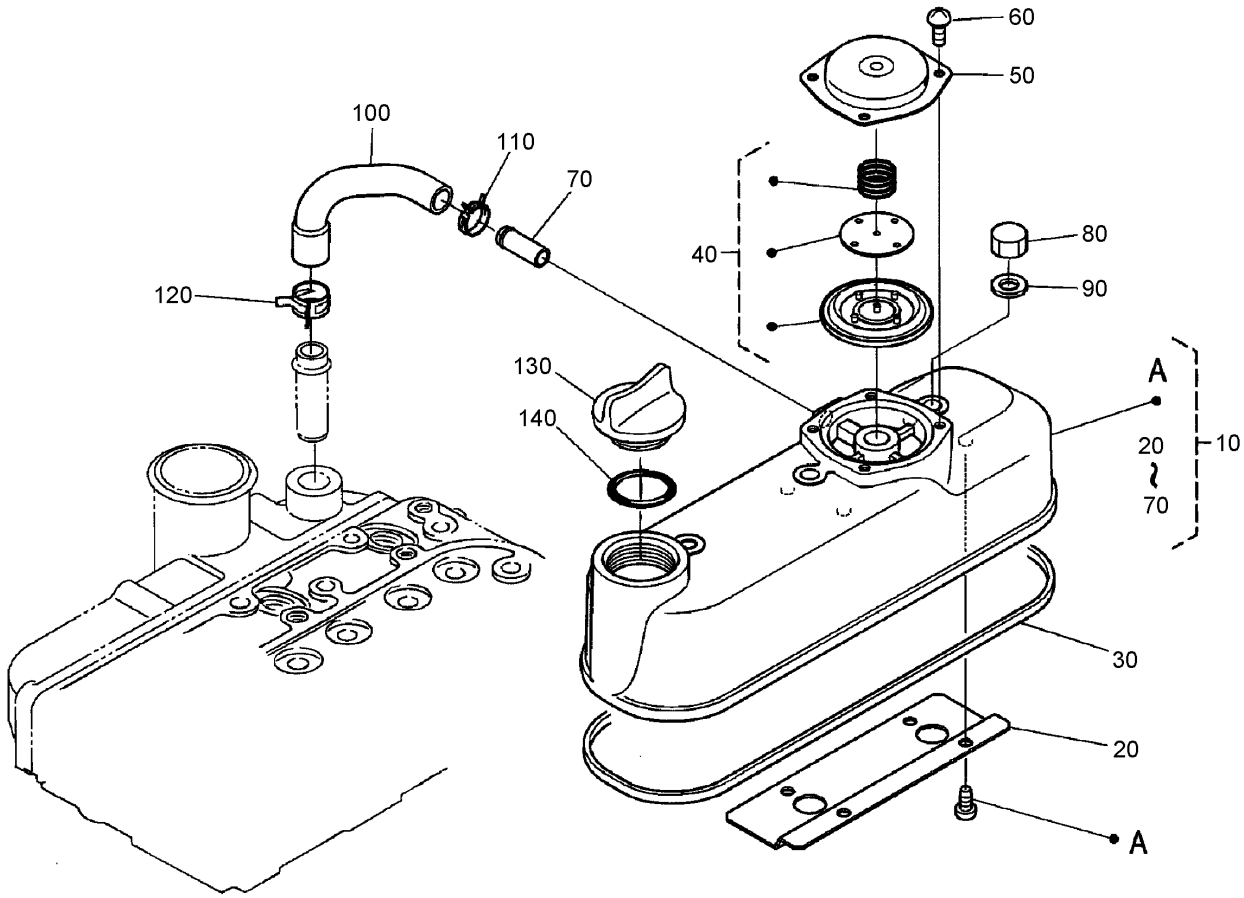
Ref	Part No.	Qty.	Description
10	98-7531	2	Hook-Engine
20	100-9195	2	Bolt
30	108-6573	1	Gasket-Head, Cylinder
40	108-6574	1	Cylinder Head ASM
50	98-9395	1	Cap-Sealing
60	98-7540	2	Plug
70	107-9066	3	Guide-Valve, Inlet
80	107-9067	3	Guide-Valve, Exhaust
90	98-9389	2	Cap-Sealing
100	98-9479	1	Bolt-Head, Cylinder
110	98-9647	2	Bolt-Head, Cylinder
130	98-9444	1	Plug



Gear Case Assembly

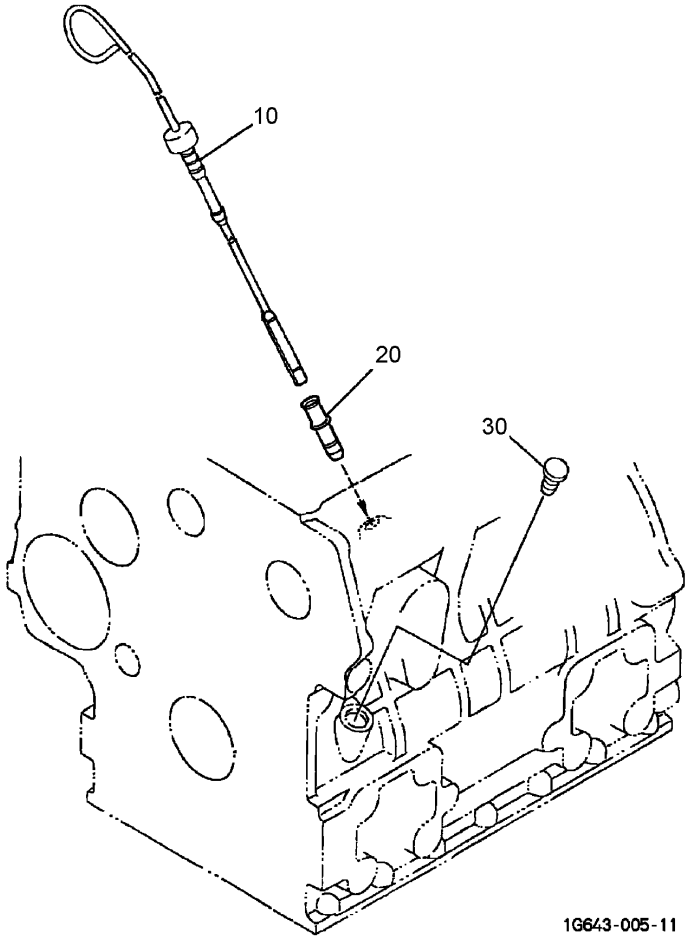
Ref	Part No.	Qty.	Description
10	107-9068	1	Gear Case ASM
20	98-9598	2	Plug
25	98-7487	1	Plug
30	98-7562	1	Washer-Plain
40	98-9388	1	Joint-Pipe
50	98-9544	1	Spring
60	98-9543	1	Seat-Valve
70	98-9380	1	Ball
80	98-9540	1	Oil Pump Rotor ASM
85	107-9069	1	Cover-Pump, Oil
90	107-9071	5	Screw
100	107-9072	2	Pin-Straight
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
210	105-3710	2	Stud
220	98-9641	1	Cover-Case, Gear

Ref	Part No.	Qty.	Description
230	104-5167	1	Filter-Oil



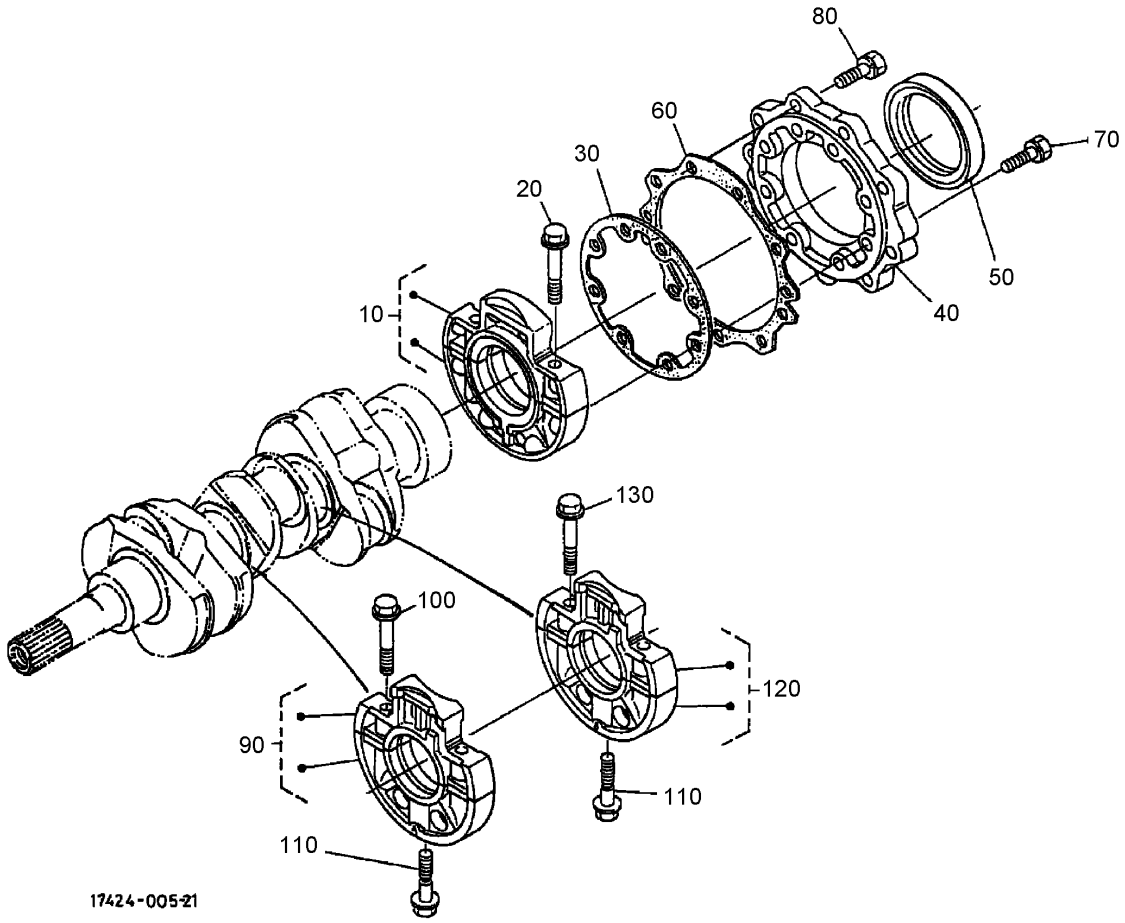
Head Cover Assembly

Ref	Part No.	Qty.	Description
10	108-6575	1	Cylinder Head Cover ASM
20	108-2857	1	Shield-Breather
30	98-9615	1	Gasket-Cover, Head
40	108-2861	1	*obs* Breather Valve ASM
50	108-2862	1	Cover-Breather
60	108-2863	4	Screw-PPH
70	98-7766	1	Pipe-Return, Water
80	98-9455	3	Nut-Cap
90	98-9454	3	Gasket
100	108-2858	1	Tube-Breather
110	108-2859	1	Clamp-Hose
120	108-2860	1	Clamp-Hose
130	107-9075	1	Plug-Filler, Oil
140	99-3446	1	O-Ring



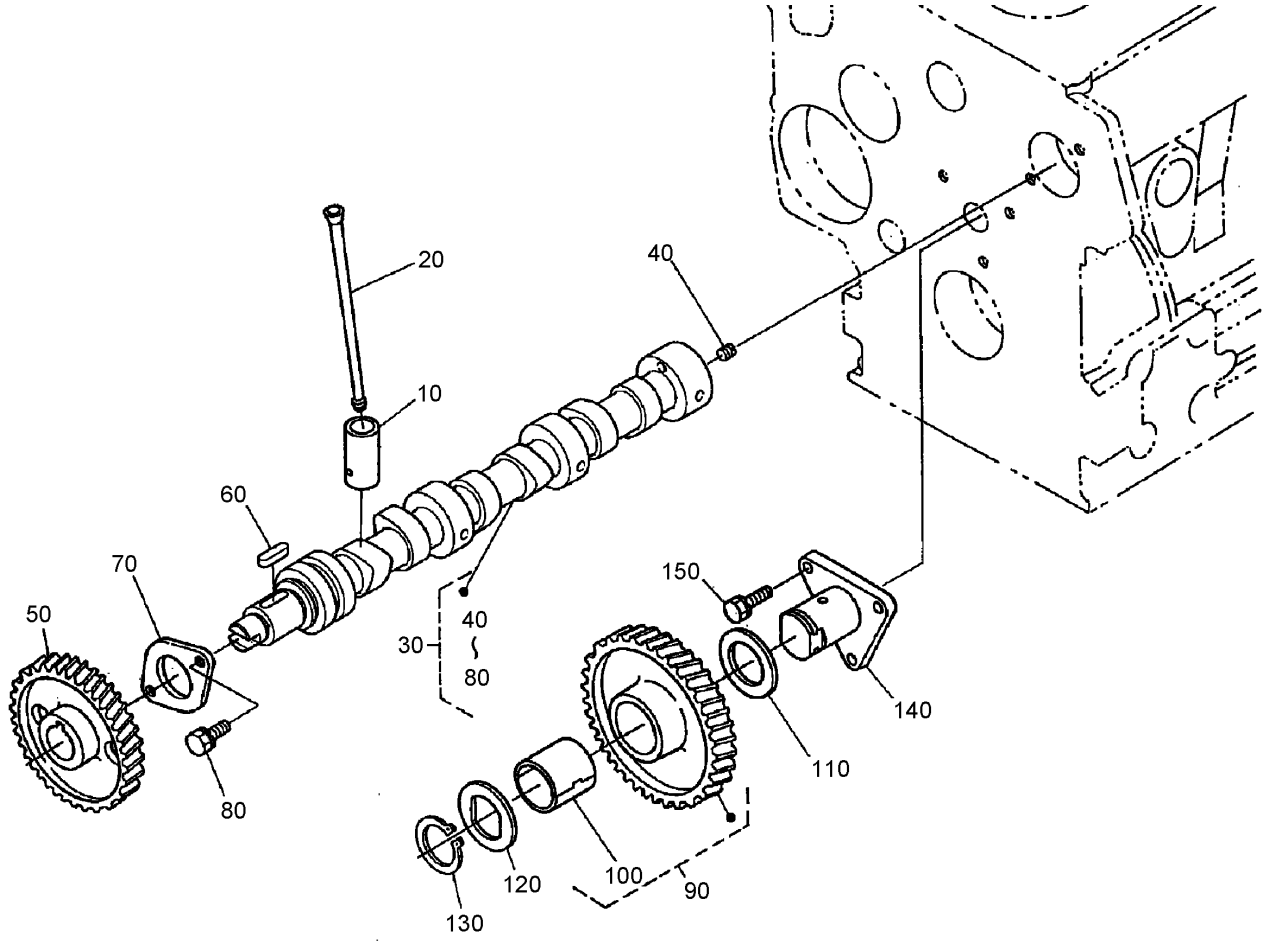
Dipstick and Guide Assembly

Ref	Part No.	Qty.	Description
10	107-9076	1	Gauge-Oil
20	105-3713	1	Guide-Gauge, Oil
30	105-3715	1	Plug-Gauge, Oil



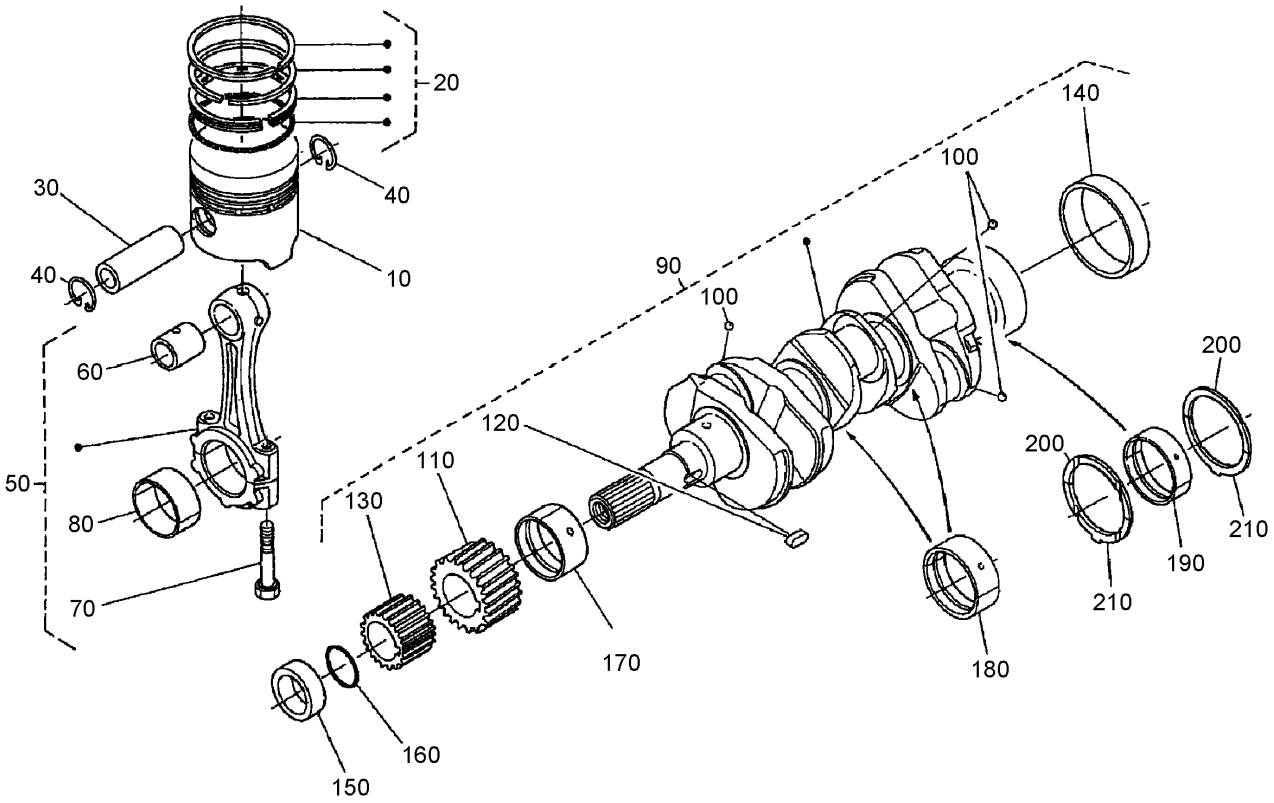
Main Bearing Case Assembly

Ref	Part No.	Qty.	Description
10	98-9480	1	Main Bearing Case ASM
20	98-9484	6	Bolt-Case, Bearing
30	98-9634	1	Gasket-Case, Bearing
40	98-9487	1	Cover-Case, Bearing
50	98-9483	1	Seal-Oil
60	98-9635	1	Gasket-Cover, Bearing Case
70	98-9352	8	Bolt
80	98-7568	9	Bolt
90	98-9606	1	Main Bearing Case ASM
100	98-9484	2	Bolt-Case, Bearing
110	98-9485	2	Bolt-Case, Bearing
120	98-9607	1	Main Bearing Case ASM
130	98-9484	2	Bolt-Case, Bearing



Camshaft and Idle Gear Shaft Assembly

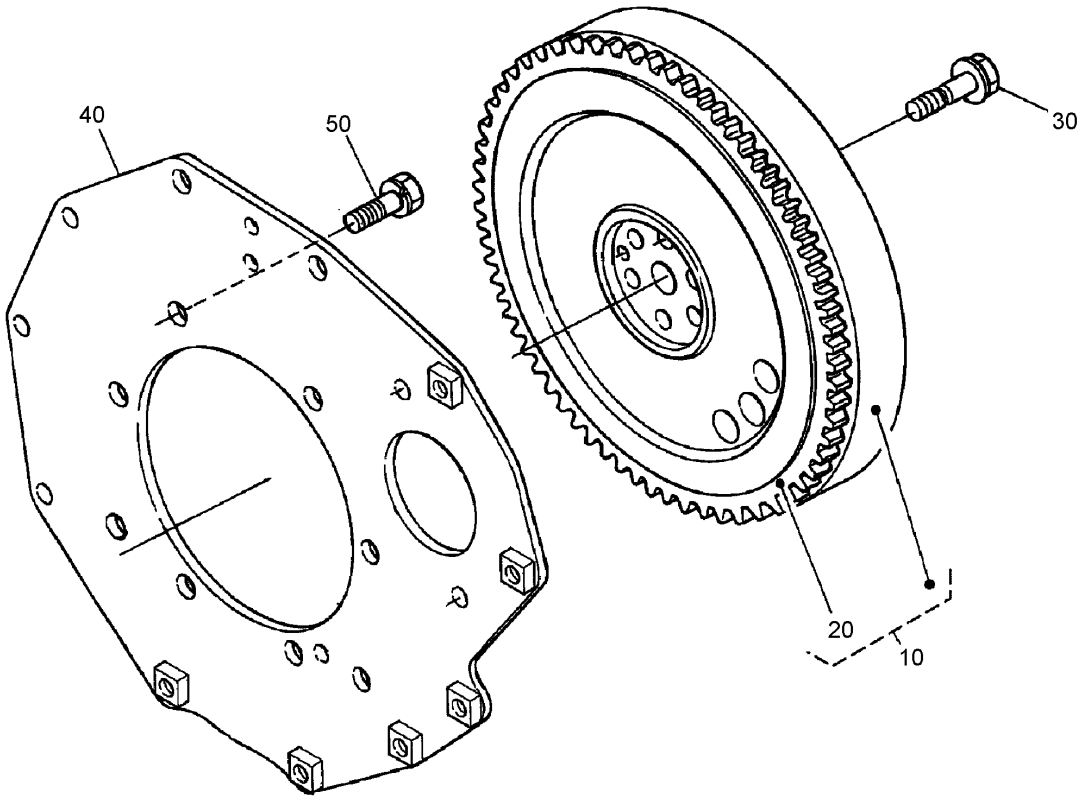
Ref	Part No.	Qty.	Description
10	98-9616	6	Tappet
20	98-9509	6	Rod-Push
30	108-6576	1	Camshaft ASM
40	98-7449	1	Screw-Set
50	98-9512	1	Gear-Cam
60	98-9378	1	Key-Feather
70	98-9510	1	Stopper-Camshaft
80	98-9351	2	Bolt
90	98-9649	1	Idle Gear ASM
100	98-9650	1	Bushing-Gear, Idle
110	98-9535	1	Collar-Gear, Idle
120	98-9536	1	Collar-Gear, Idle
130	98-9534	1	Circlip-Gear, Idle
140	98-9533	1	Shaft-Gear, Idle
150	98-7692	3	Bolt



Piston and Crankshaft Assembly

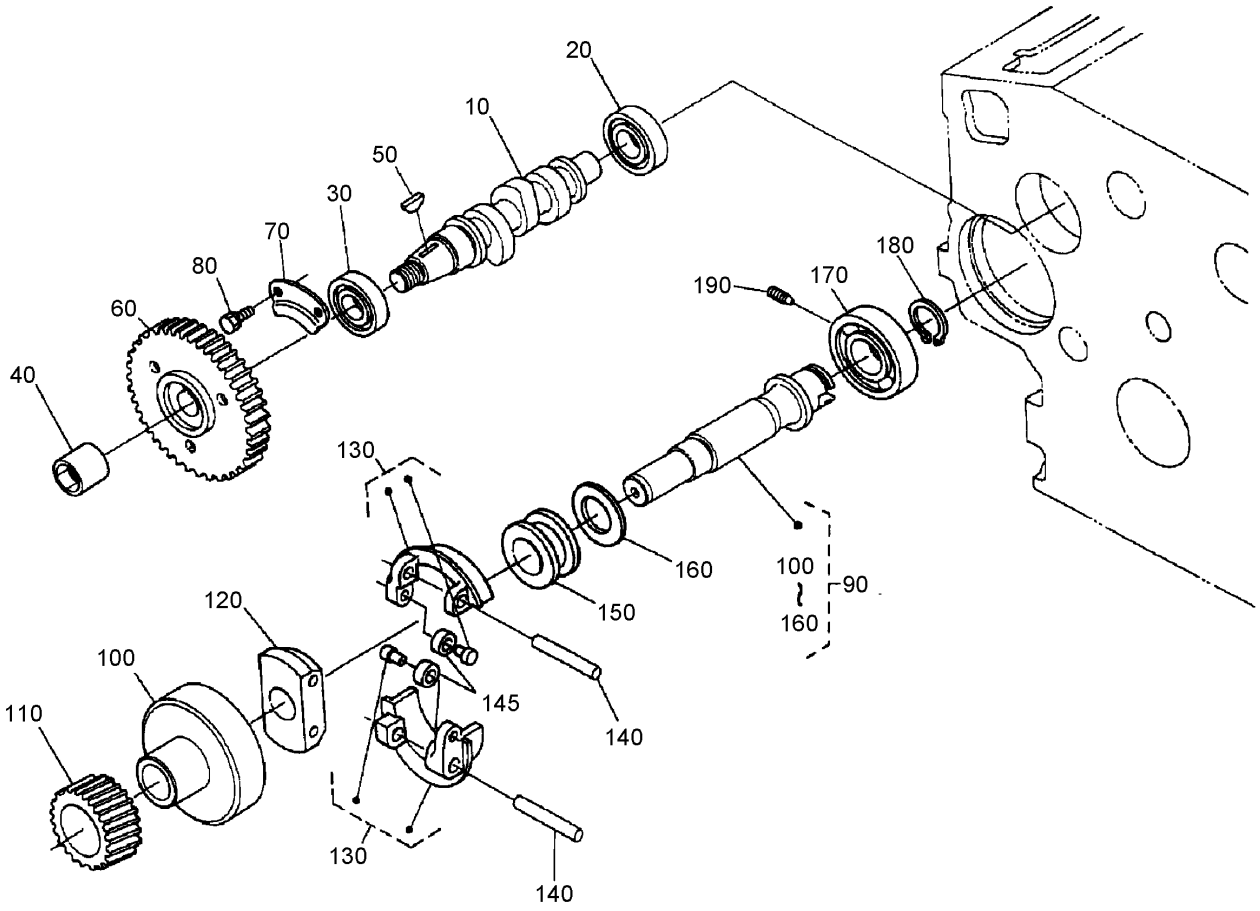
Ref	Part No.	Qty.	Description
10	98-9470	3	Piston (0.5Mm)
10	98-9469	3	*obs* Piston (STD)
20	98-9619	3	Piston Ring ASM (0.5Mm)
20	98-9618	3	Piston Ring ASM (STD)
30	98-9513	3	Pin-Piston
40	98-9514	6	Circlip-Pin, Piston
50	98-9516	3	Connecting Rod ASM
60	98-9515	3	Bushing-Pin, Piston
70	98-9517	6	Bolt-Rod, Connecting
80	98-9520	3	Bearing-Rod (0.4Mm)
80	98-9519	3	Bearing-Rod (0.2Mm)
80	98-9518	3	Metal-Crankpin (STD)
90	98-9642	1	Crankshaft ASM
100	98-7473	3	Ball
110	98-9532	1	Gear-Crankshaft
120	98-9666	1	Key
130	98-9542	1	Gear-Drive, Oil Pump
140	98-9522	1	Sleeve-Crankshaft
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)
180	98-9524	2	Metal-Crankshaft (STD Set)

Ref	Part No.	Qty.	Description
180	98-9530	2	Bearing-Main (0.2Mm)
180	98-9531	2	Bearing-Main (0.4Mm)
190	98-9556	1	Bearing-Main (STD)
190	105-3719	1	Metal-Crankshaft (.2Mm)
190	105-3720	1	Metal-Crankshaft (.4Mm)
200	98-9413	2	Bearing-Thrust (STD)
200	98-9414	2	Bearing-Thrust (0.2Mm)
200	98-9415	2	Bearing-Thrust (0.4Mm)
210	98-9688	2	Bearing-Thrust (STD)
210	98-9689	2	Bearing-Thrust (0.2Mm)
210	98-9690	2	Bearing-Thrust (0.4Mm)



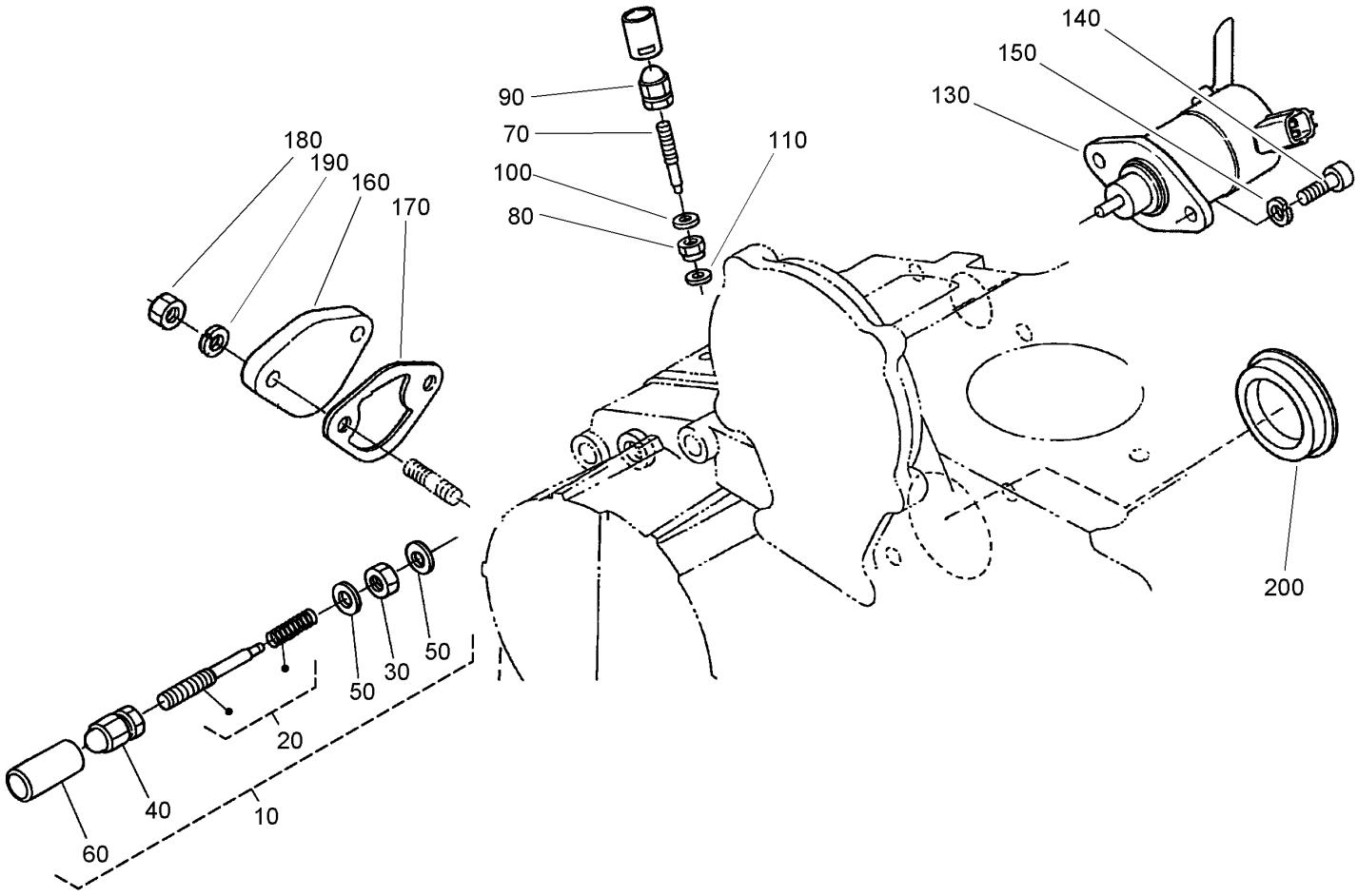
Flywheel Assembly

Ref	Part No.	Qty.	Description
10	105-3784	1	Flywheel ASM
20	105-3722	1	Gear-Ring
30	98-9537	6	Bolt-Flywheel
40	98-9486	1	Plate-End, Rear
50	98-9392	8	Bolt



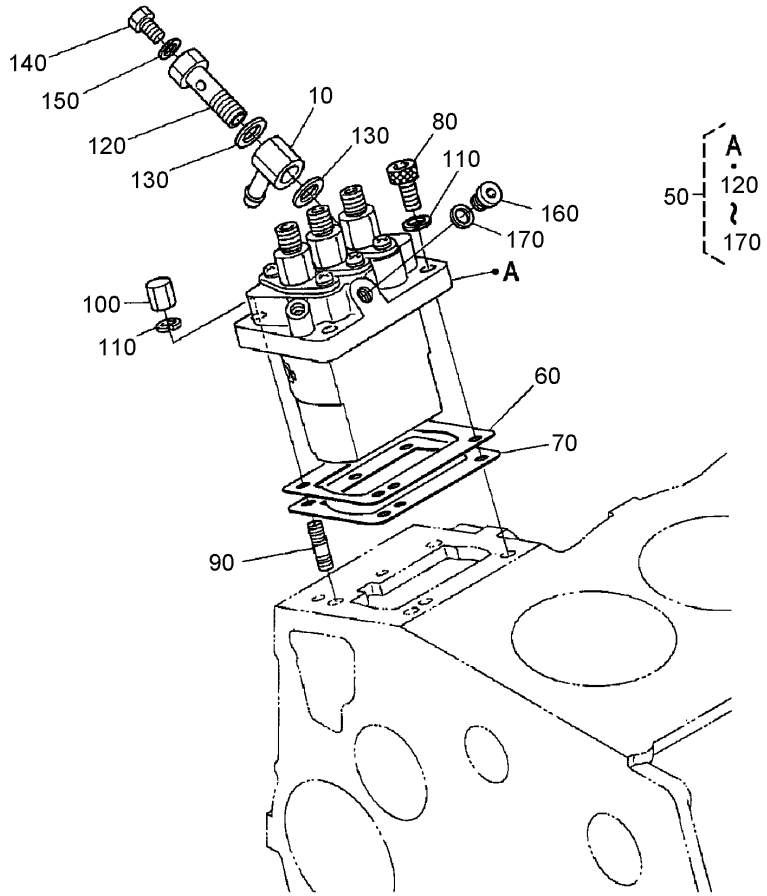
Fuel Camshaft and Governor Shaft Assembly

Ref	Part No.	Qty.	Description
10	98-9459	1	Camshaft-Fuel
20	107-9077	1	Bearing-Ball
30	107-9078	1	Bearing-Ball
40	98-9590	1	Nut-Cap
50	98-9595	1	Key-Woodruff
60	98-9669	1	Gear-Pump, Injection
70	98-9511	1	Stopper-Fuel, Camshaft
80	98-9350	2	Bolt
90	98-9644	1	Governor Shaft ASM
100	98-9562	1	Holder-Gear, Governor
110	98-9673	1	Gear-Governor
120	98-9561	1	Holder-Weight, Governor
130	98-9559	2	Governor Weight ASM
140	98-9560	2	Shaft-Weight, Governor
145	98-9692	2	Roller
150	98-9563	1	Sleeve-Governor
160	98-9564	1	Washer-Thrust
170	107-9079	1	Bearing-Ball
180	98-9657	1	Circlip-Shaft, Governor
190	98-9565	1	Screw-Set



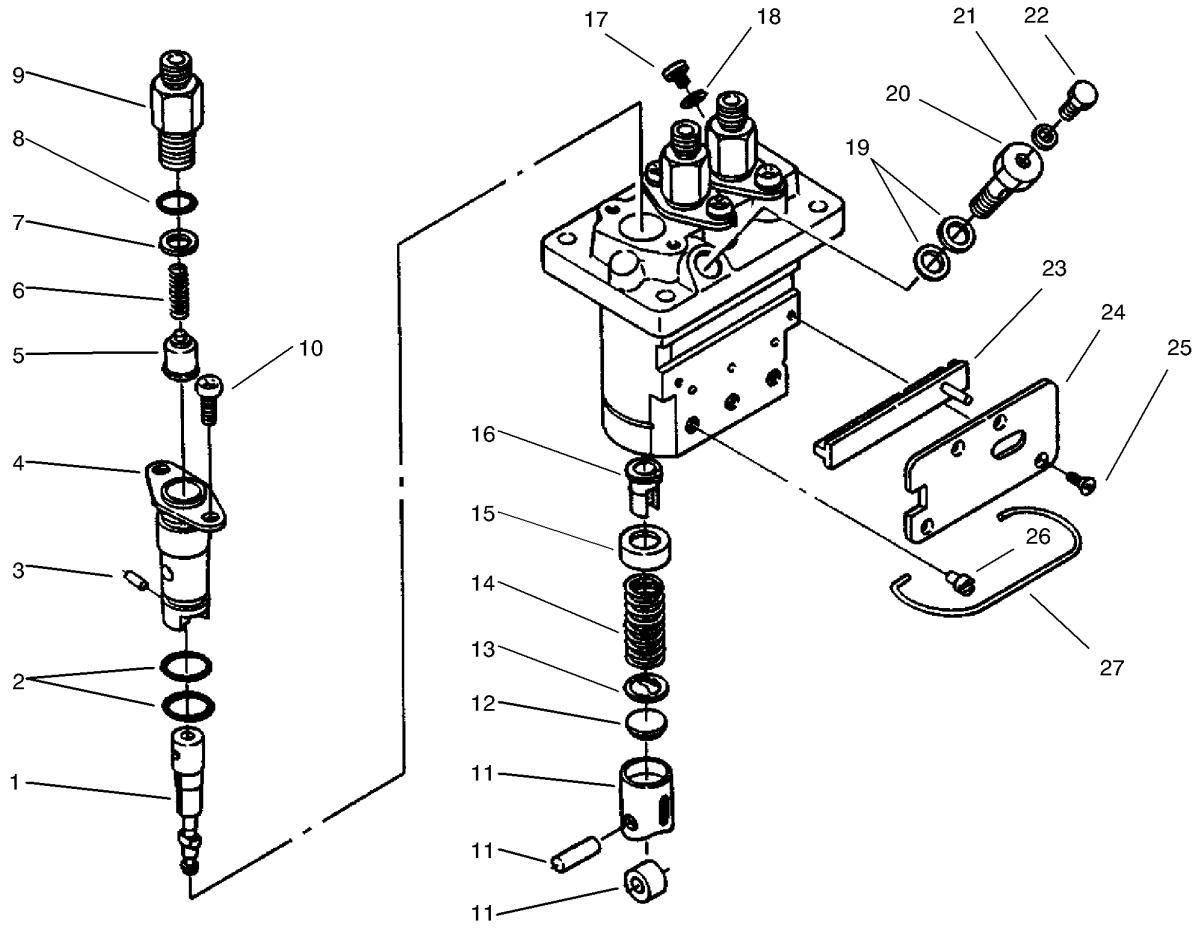
Idle Apparatus Assembly

Ref	Part No.	Qty.	Description
10	98-9678	1	Idle Apparatus ASM
20	98-9679	1	Adjusting Bolt ASM
30	98-9439	1	Nut
40	99-8387	1	Nut-Cap
50	98-7654	2	Gasket
60	98-7656	1	Cap
70	98-9557	1	Bolt-Adjusting
80	99-3512	1	Nut
90	99-8387	1	Nut-Cap
100	98-7654	1	Gasket
110	107-9081	1	Gasket
130	104-5155	1	Solenoid-Stop
140	105-3799	2	Bolt-HSH
150	98-7699	2	Washer-Spring
160	99-3514	1	Cover
170	98-9636	1	Gasket-Pump, Fuel
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring
200	98-9640	1	Cover-Pump



Injection Pump Assembly

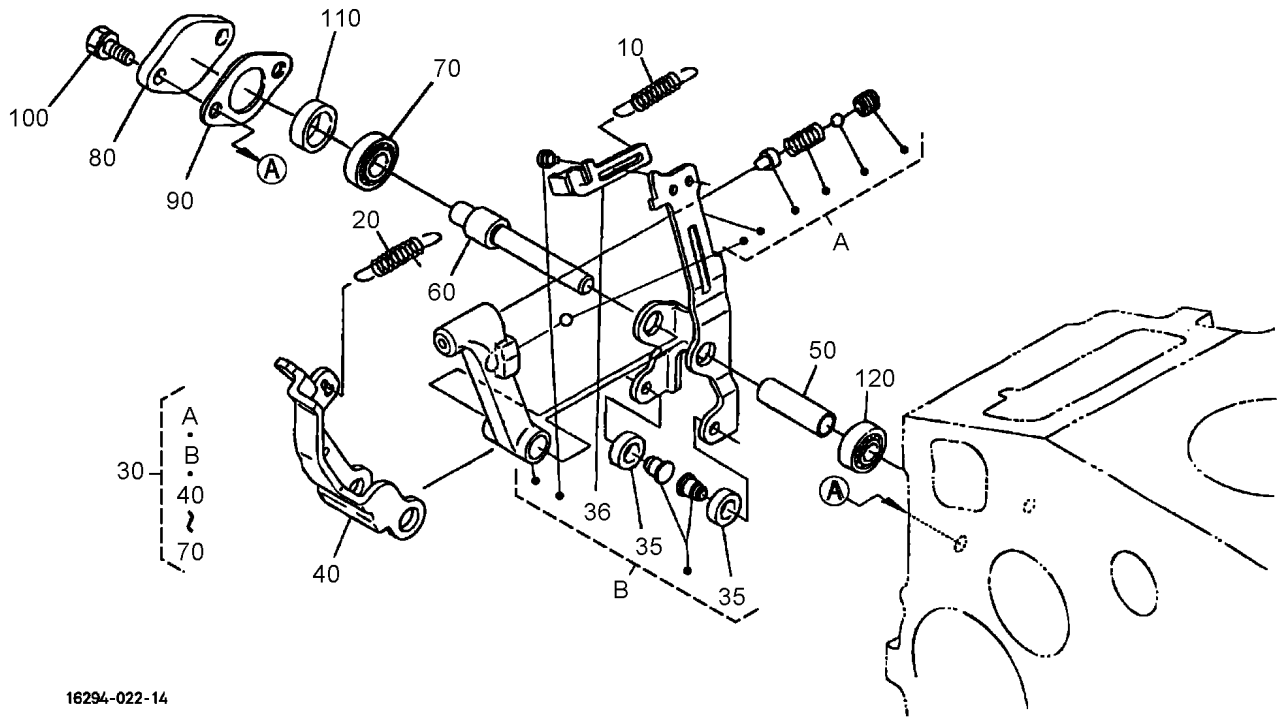
Ref	Part No.	Qty.	Description
10	98-9596	1	Joint-Eye
50	98-9643	1	Injection Pump ASM
60	98-9457	1	Shim-Injection (0.25Mm)
60	98-9456	1	Shim-Injection (0.20Mm)
70	98-9458	1	Shim-Injection (0.30Mm)
80	98-9361	2	Bolt-HSH
90	98-9438	2	Stud
100	98-9440	2	Nut-Cap
110	98-7699	4	Washer-Spring
120	98-9464	1	Bolt-Joint
130	98-9445	2	Gasket
140	98-9430	1	Screw
150	98-9446	1	Gasket
160	98-9466	1	Plug
170	98-9451	1	Gasket



Injection Pump Assembly No. 98-9643

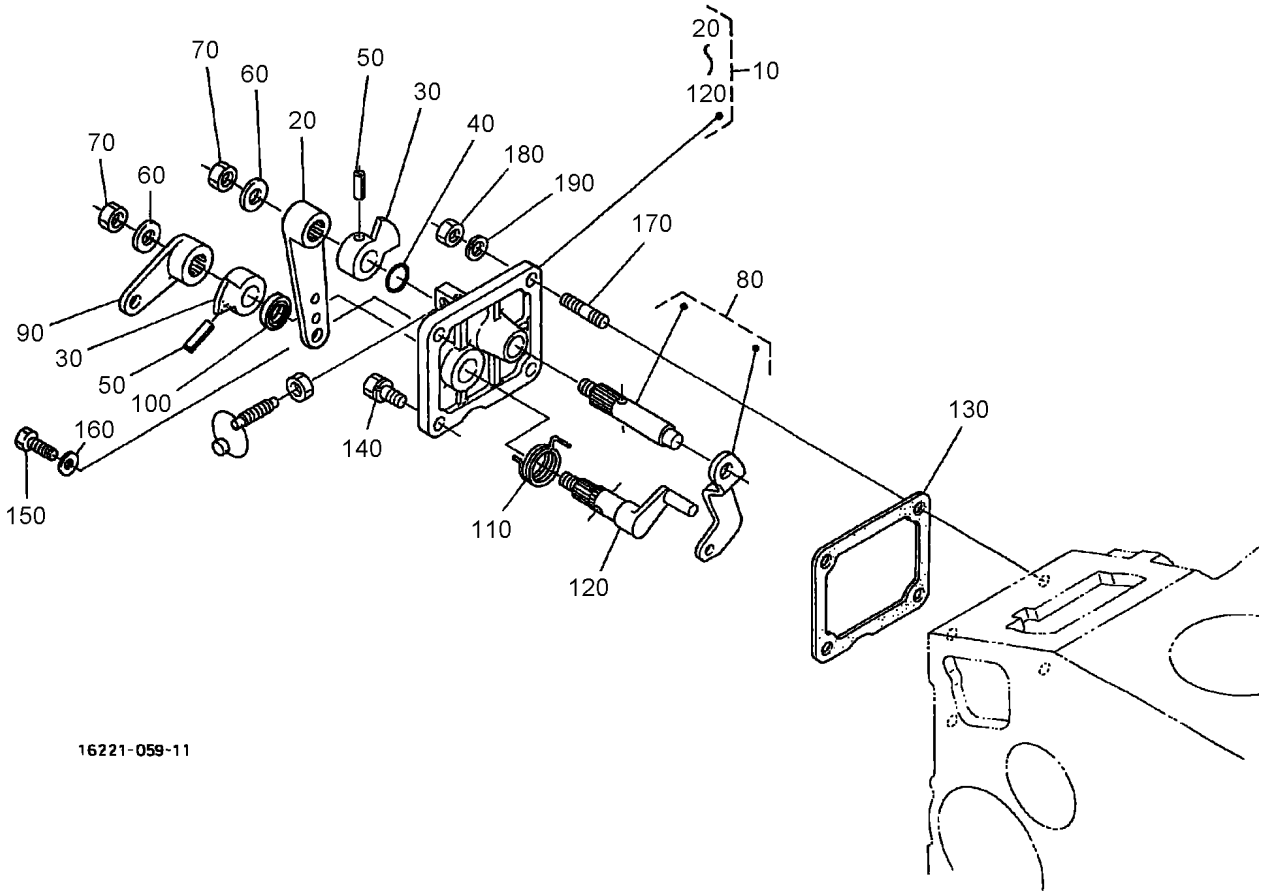
Ref	Part No.	Qty.	Description
1	98-9462	3	Element-Pump
2	98-9423	6	O-Ring
3	98-9443	3	Pin-Joint
4	98-9434	3	Flange-Sleeve
5	98-9421	3	Valve-Delivery
6	98-9424	3	Spring-Valve, Delivery
7	98-9425	3	Gasket-Valve, Delivery
8	98-9447	3	O-Ring
9	98-9652	3	Holder-Valve, Delivery
10	98-9452	6	Screw
11	98-9422	3	Tappet ASM
12	98-9433	3	Shim
13	98-9429	3	Seat-Spring, Lower
14	98-9428	3	Spring-Plunger
15	98-9427	3	Seat-Spring, Upper
16	98-9432	3	Sleeve-Control
17	98-9466	1	Plug
18	98-9451	1	Gasket
19	98-9445	1	Gasket
20	98-9464	1	Bolt-Joint
21	98-9446	1	Gasket
22	98-9430	1	Screw
23	98-9463	1	Control-Rack
24	98-9465	1	Plate

Ref	Part No.	Qty.	Description
25	98-9442	4	Screw
26	98-9426	3	Pin-Guide, Tappet
27	98-9450	1	Pin-Clamp



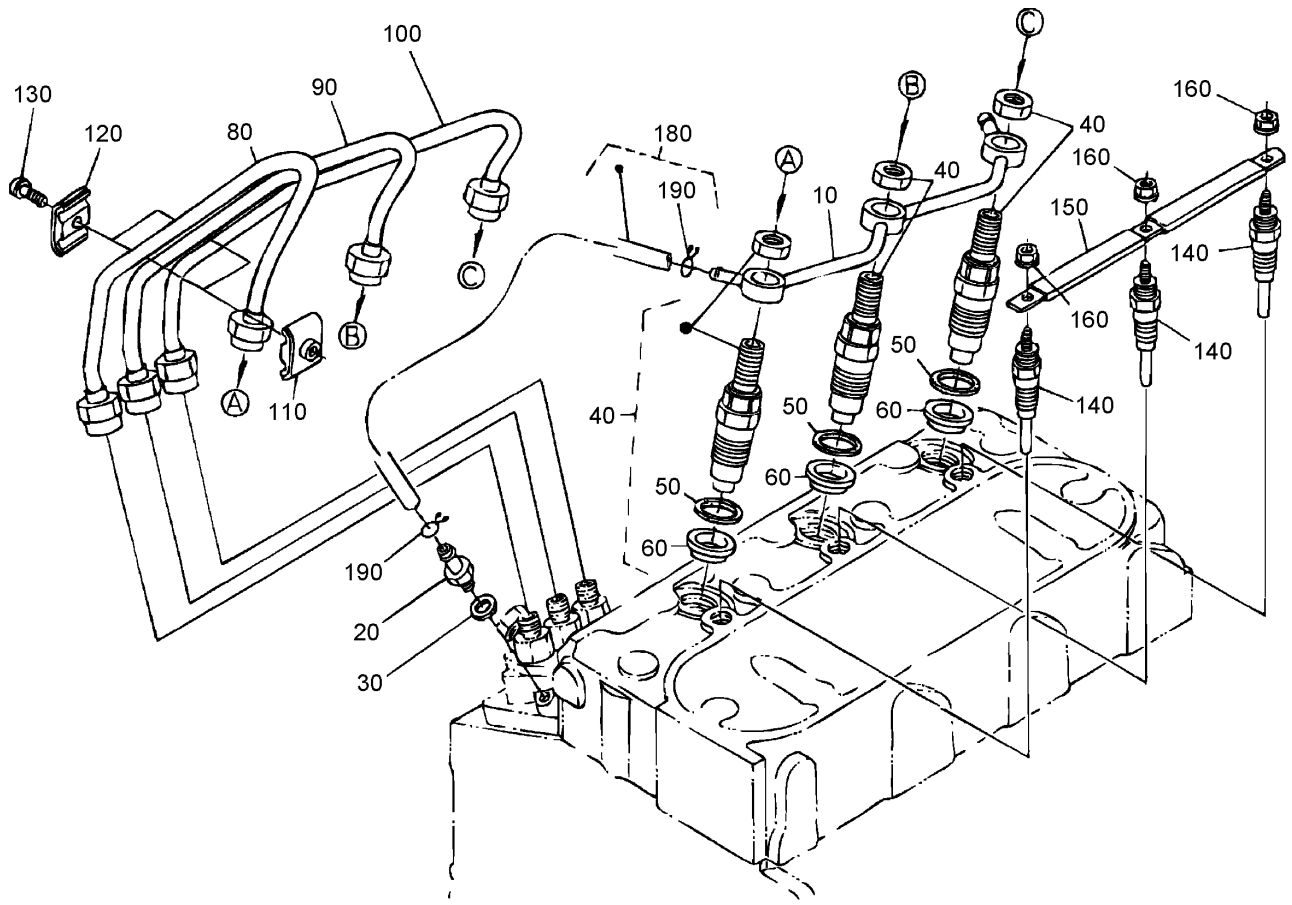
Governor Assembly

Ref	Part No.	Qty.	Description
10	105-3786	1	Spring-Start
20	98-9681	1	Spring-Governor
30	107-9082	1	Fork Lever ASM
35	98-9692	2	Roller
36	107-9083	1	Lever-Thrust
40	107-9084	1	Lever-Fork
50	107-9085	1	Shaft-Lever, Fork
60	107-9086	1	Shaft-Lever, Fork
70	98-9570	1	Bearing-Miniaturize
80	98-9569	1	Cover-Shaft, Fork Lever
90	98-9682	1	Gasket
100	98-9351	2	Bolt
110	98-9567	1	Collar
120	98-9571	1	Bearing-Miniaturize



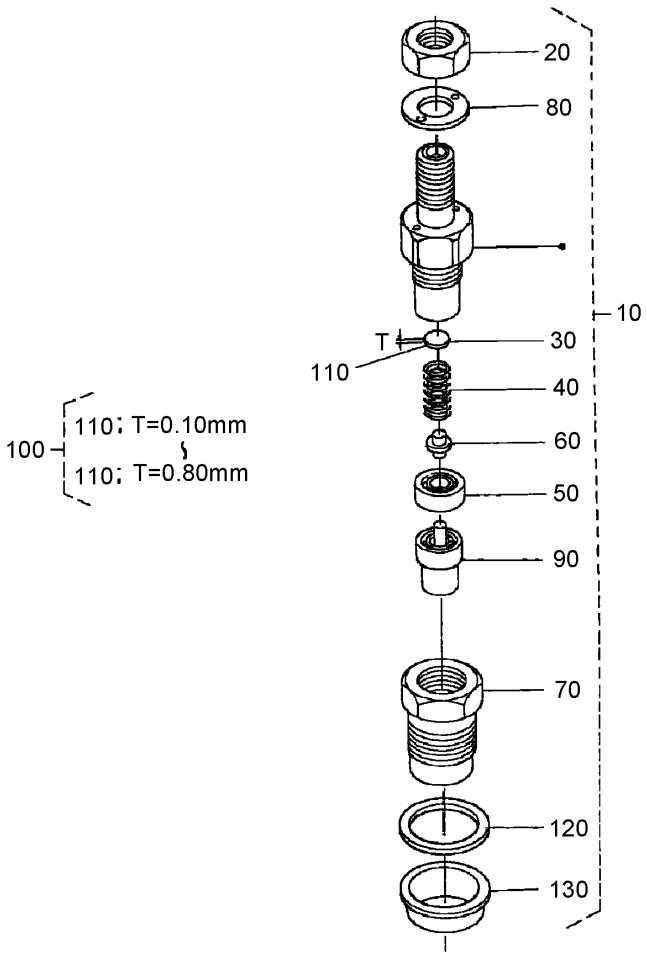
Speed Control Plate Assembly

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



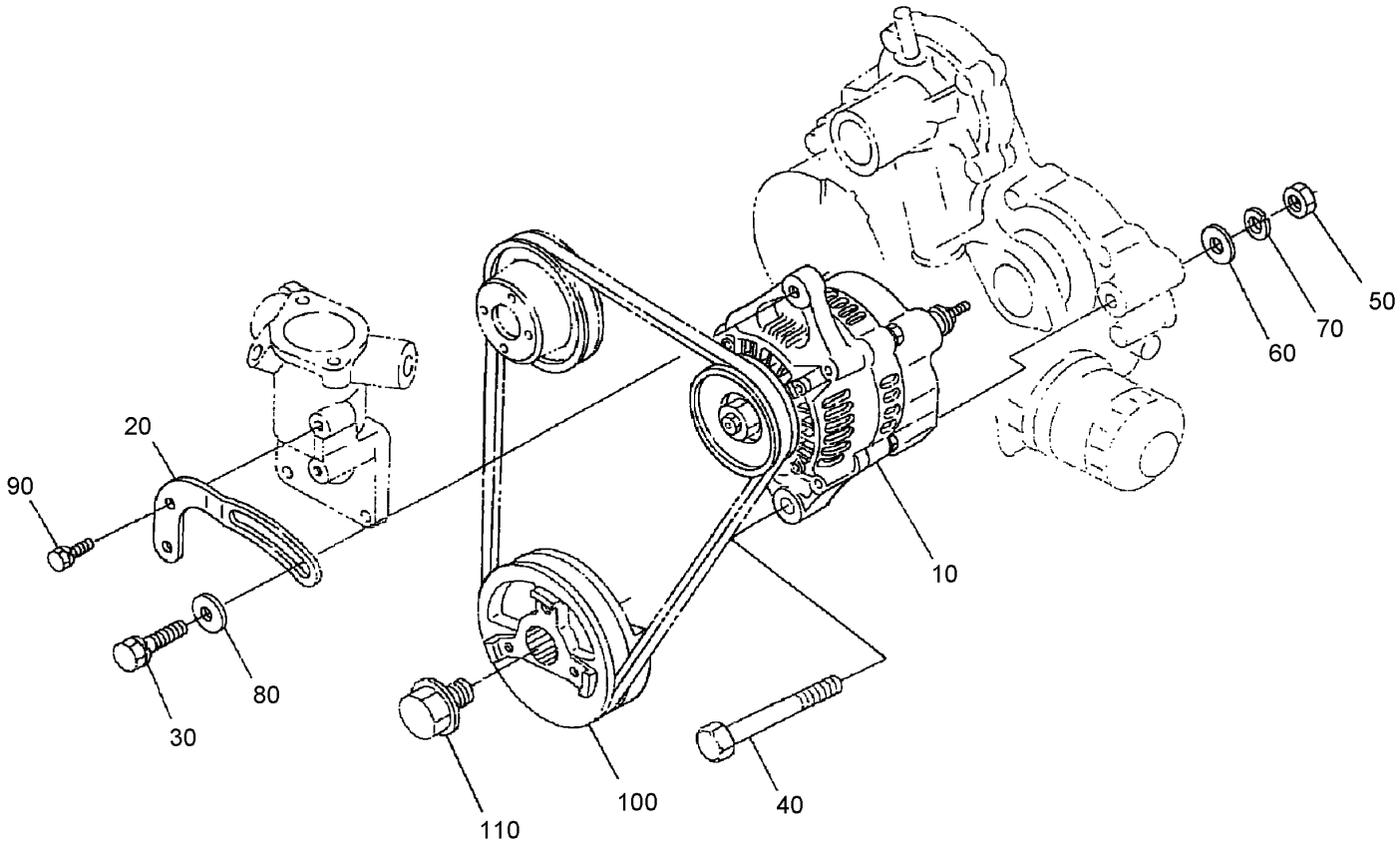
Nozzle Holder and Glow Plug Assembly

Ref	Part No.	Qty.	Description
10	98-9620	1	Overflow Pipe ASM
20	98-9431	1	Screw-Bleeder, Air
30	98-7654	1	Gasket
40	108-2866	3	Nozzle Holder Kit
50	98-7676	3	Gasket
60	98-7677	3	Seal-Heat
80	98-9653	1	Pipe-Injection
90	98-9654	1	Pipe-Injection
100	98-9655	1	Pipe-Injection
110	98-7682	2	Clamp-Pipe
120	98-7683	2	Clamp-Pipe
130	98-7684	2	Screw (W/Washer)
140	98-9695	3	Plug-Glow
150	98-9631	3	Cord-Plug, Glow
160	99-8377	3	Nut-Flange
180	98-9420	1	Overflow Pipe ASM
190	98-7671	2	Clip-Pipe



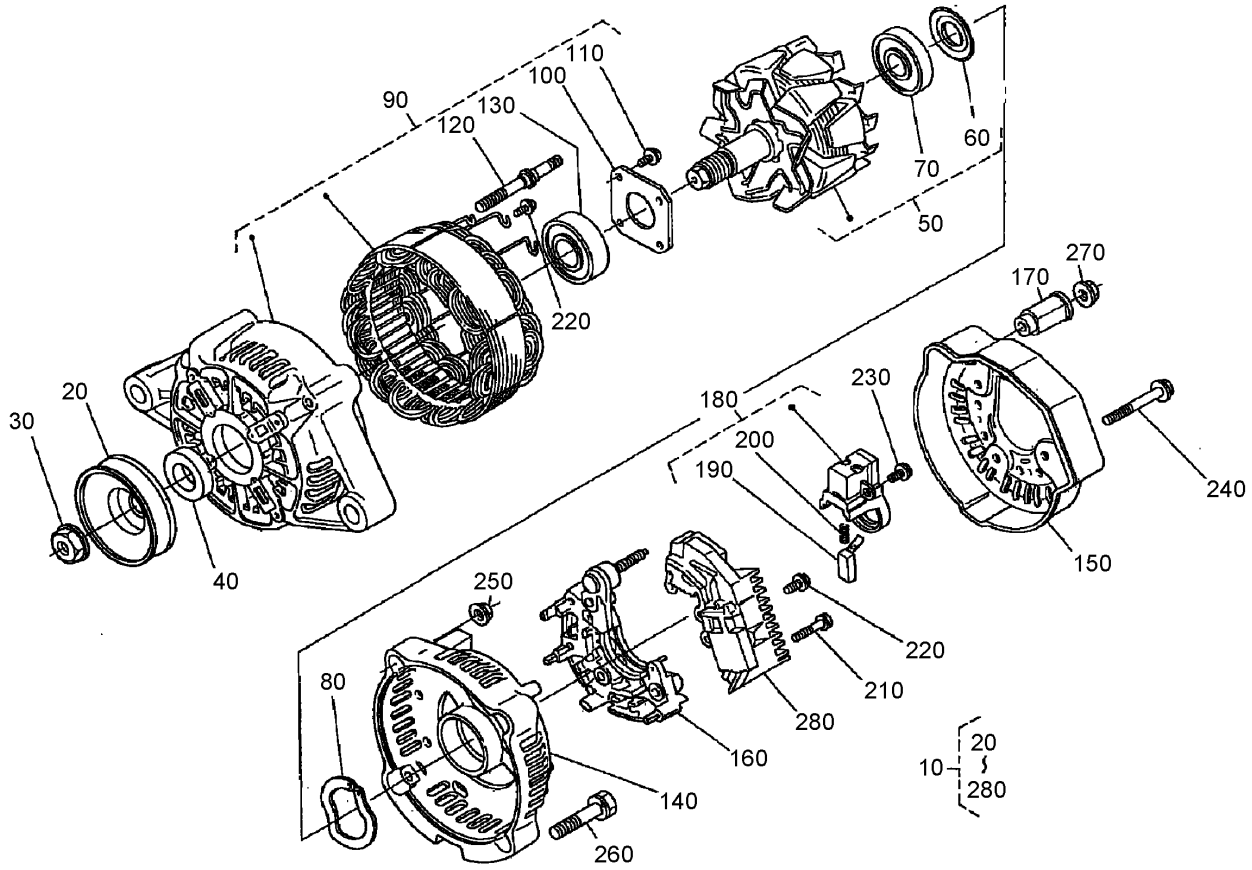
Nozzle Holder Assembly

Ref	Part No.	Qty.	Description
10	108-2866	3	Nozzle Holder Kit
20	99-8301	3	Nut
30	99-8302	3	Washer-Adjusting
40	99-8303	3	Spring-Nozzle
50	99-8304	3	Spacer-Distance
60	99-8305	3	Rod-Push
70	99-8306	3	Nut-Nozzle
80	99-8307	3	Washer-Plain
90	107-7826	3	Piece-Nozzle
100	99-8309	3	Adjusting Washer ASM
110	99-8310	3	Washer-Adjust (0.10Mm)
110	99-8311	3	Washer-Adjust (0.20Mm)
110	99-8312	3	Washer-Adjust (0.30Mm)
110	99-8313	3	Washer-Adjust (0.40Mm)
110	99-8314	3	Washer-Adjust (0.50Mm)
110	99-8315	3	Washer-Adjust (0.52Mm)
110	99-8316	3	Washer-Adjust (0.54Mm)
110	99-8317	3	Washer-Adjust (0.56Mm)
110	99-8318	3	Washer-Adjust (0.58Mm)
110	99-8319	3	Washer-Adjust (0.80Mm)
120	98-7676	3	Gasket
130	98-7677	3	Seal-Heat



Alternator and Pulley Assembly

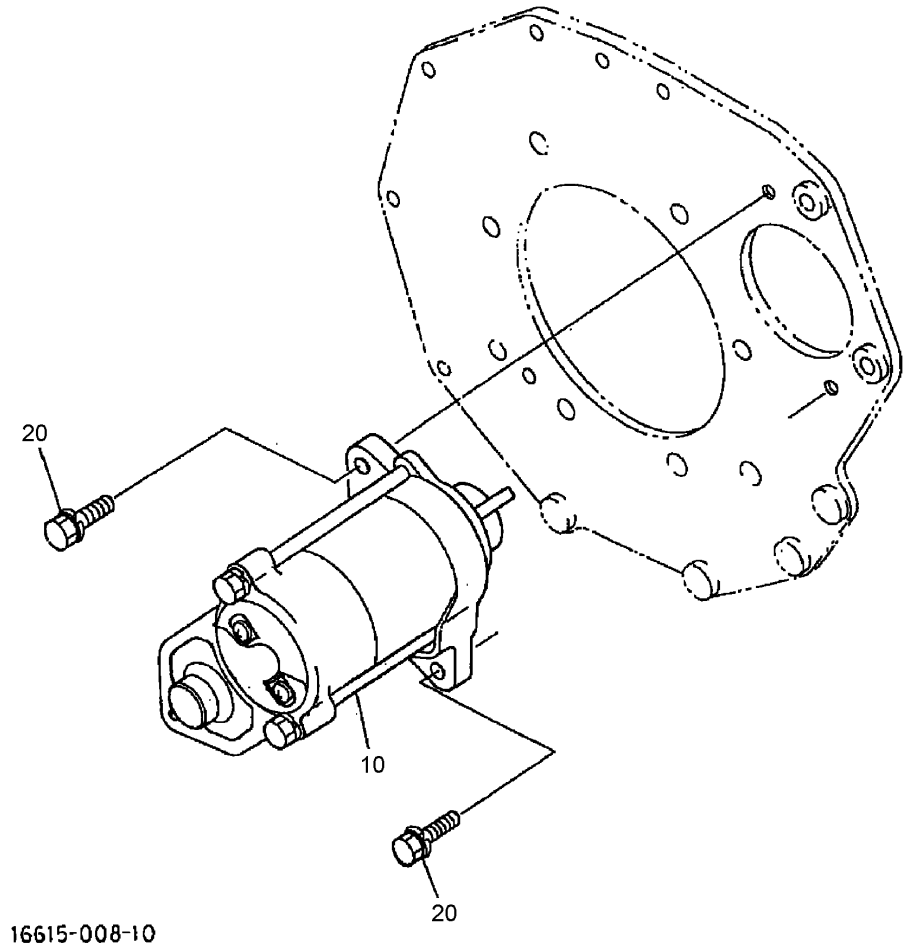
Ref	Part No.	Qty.	Description
10	98-9474	1	Alternator ASM
20	98-9573	1	Stay-Dynamo
30	108-7088	1	Bolt
40	98-9360	1	Bolt
50	98-7737	1	Nut
60	3256-24	1	Washer-Flat
70	98-7738	1	Washer-Spring
80	100-9233	1	Washer-Plain
90	98-7692	1	Bolt
100	98-9473	1	Pulley-Drive, Fan
110	98-9585	1	Bolt



Alternator (Component Part) Assembly

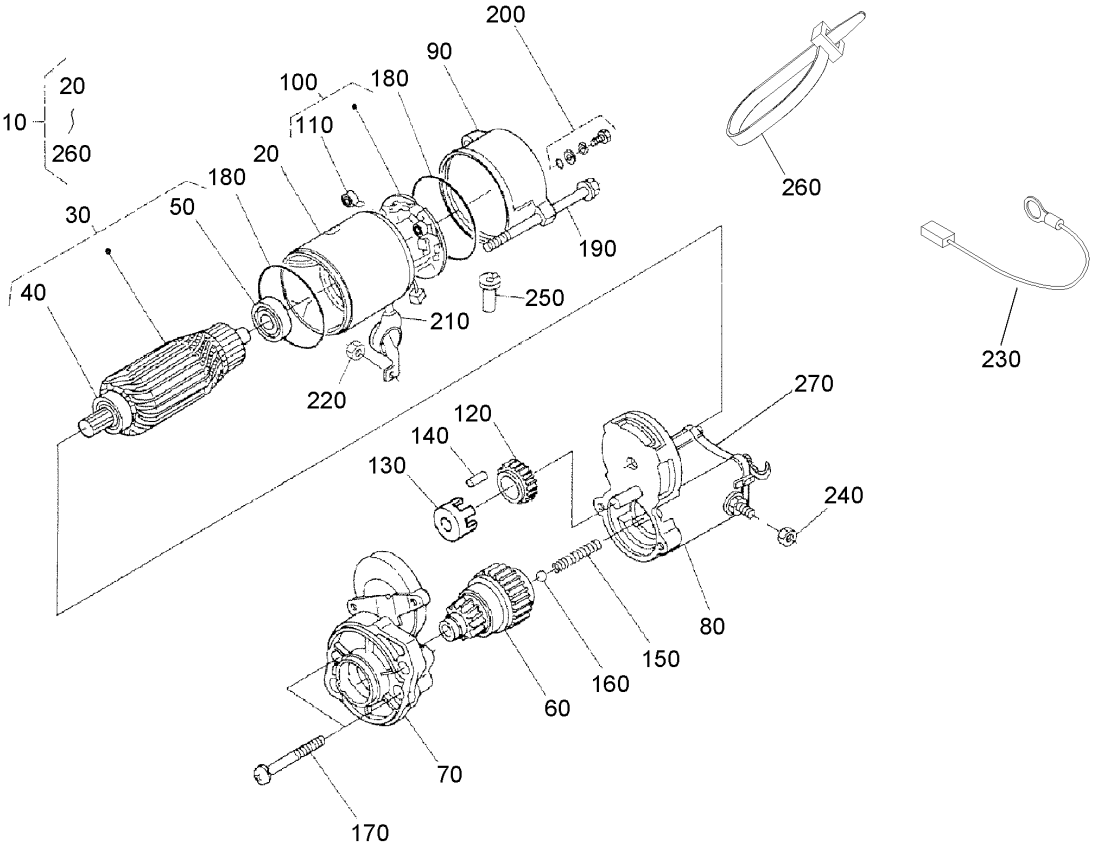
Ref	Part No.	Qty.	Description
10	98-9474	1	Alternator ASM
20	98-9453	1	Pulley-Dynamo
30	98-7708	1	Nut
40	98-7709	1	Collar
50	107-0136	1	Rotor
60	98-7711	1	Cover-Bearing
70	107-0138	1	Bearing-Ball
80	98-7713	1	Washer-Thrust
90	107-0139	1	Drive End Frame ASM
100	98-7715	1	Plate-Retainer
110	98-7716	4	Screw-Head, 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	98-9476	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

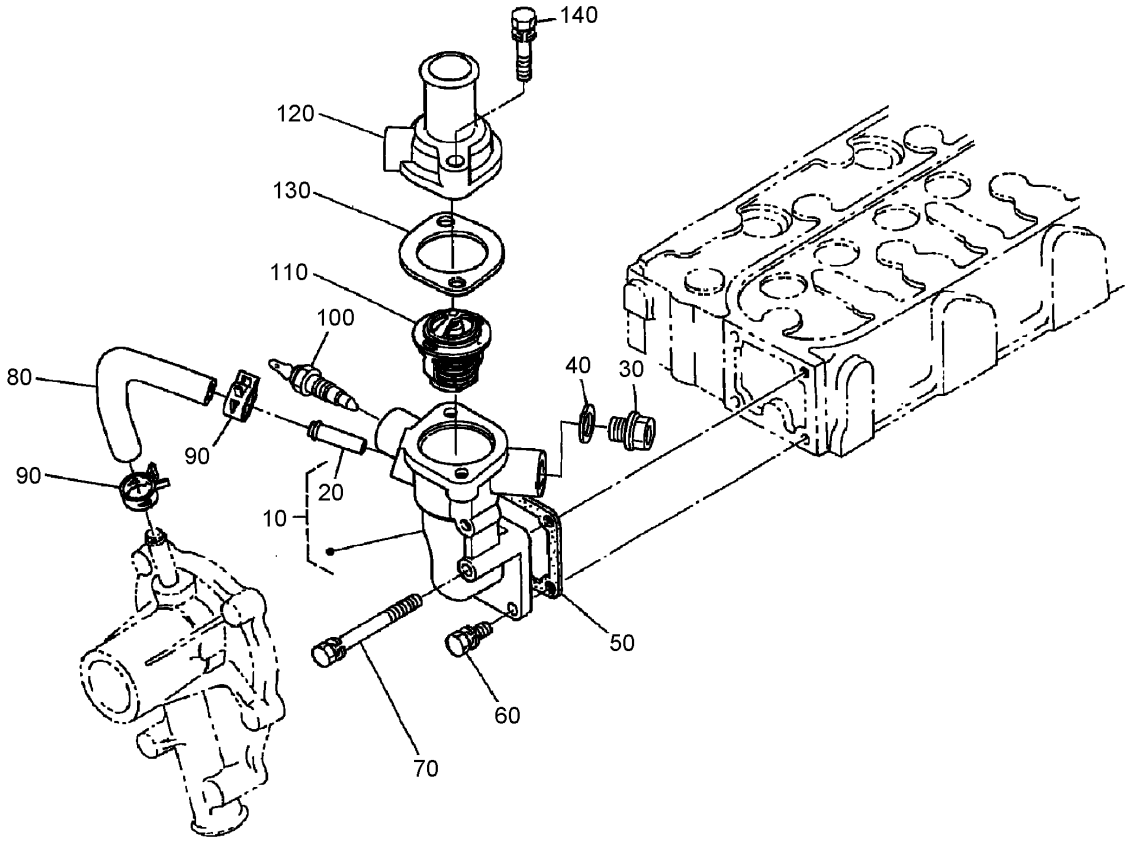
Ref	Part No.	Qty.	Description
10	98-9705	1	Starter ASM
20	98-7697	2	Bolt



Starter (Component Part) Assembly

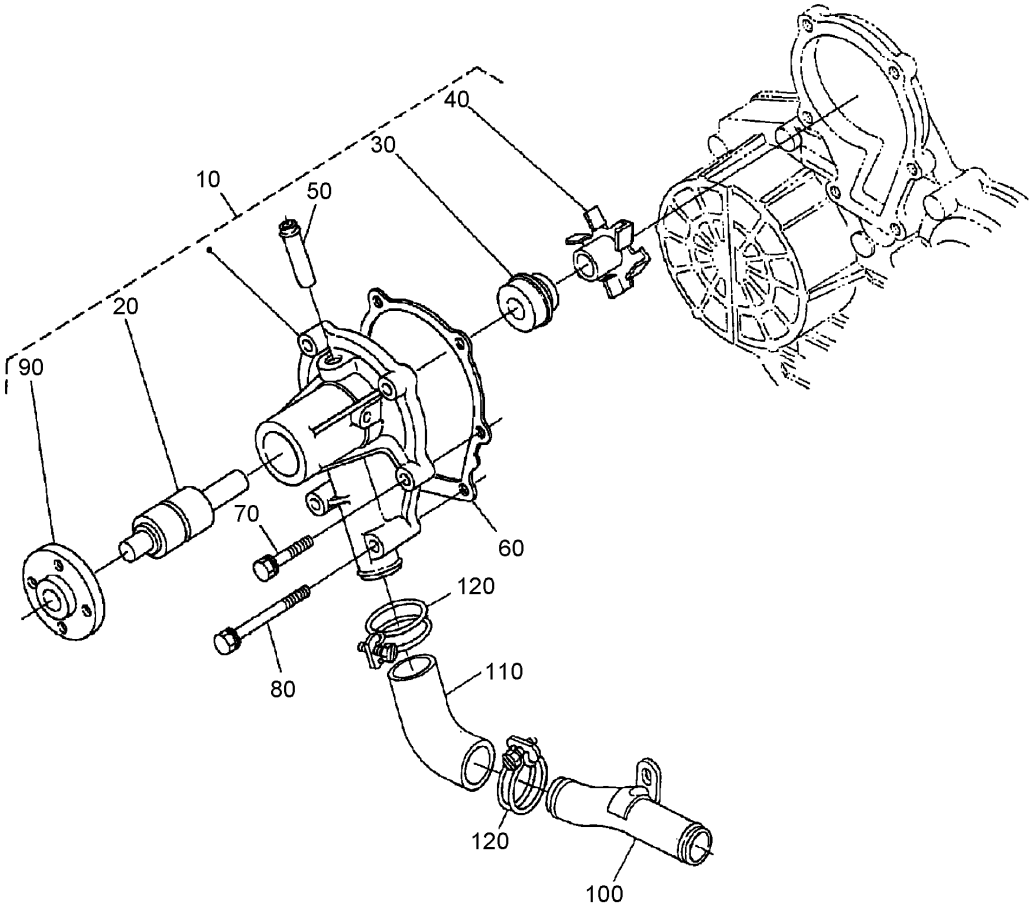
Ref	Part No.	Qty.	Description
10	98-9705	1	Starter ASM
20	104-8608	1	Yoke ASM
30	98-7742	1	Armature ASM
40	98-7744	1	Bearing
50	98-7743	1	Bearing
60	99-8373	1	Clutch-Running, Over
70	99-8374	1	Frame-End, Drive
80	105-3746	1	Magnetic Switch ASM
90	98-7748	1	Frame-End
100	98-7749	1	Brush Holder ASM
110	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



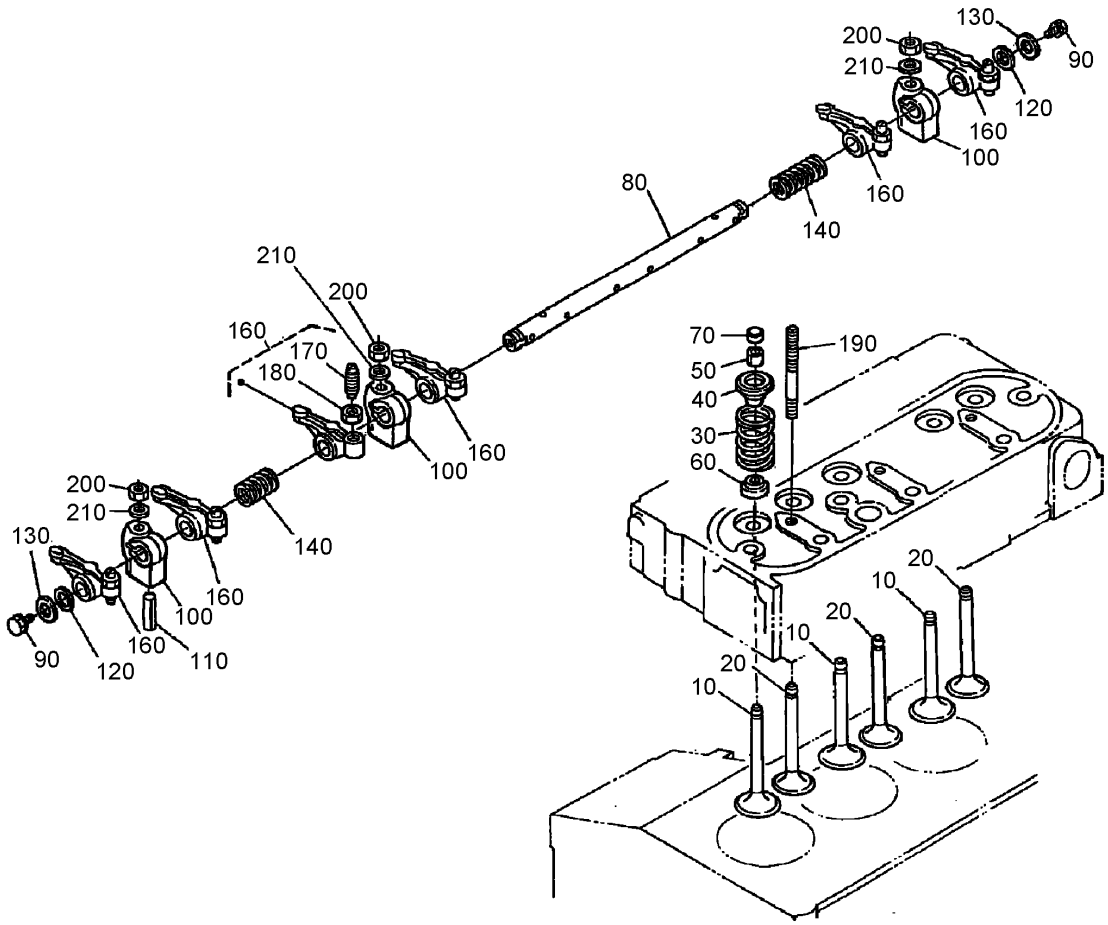
Water Flange and Thermostat Assembly

Ref	Part No.	Qty.	Description
10	98-9713	1	Water Flange ASM
20	98-9580	1	Pipe-Return, Water
30	105-3747	1	Plug
40	99-3583	1	Packing
50	98-9638	1	Gasket-Flange, Water
60	98-7692	3	Bolt
70	98-9356	1	Bolt
80	98-9578	1	Pipe-Return, Water
90	98-9579	2	Band-Pipe
100	98-9719	1	Thermoswitch
110	98-7778	1	Thermostat ASM
120	98-9471	1	Cover-Thermostat
130	105-3748	1	Gasket-Thermostat
140	98-7777	2	Bolt



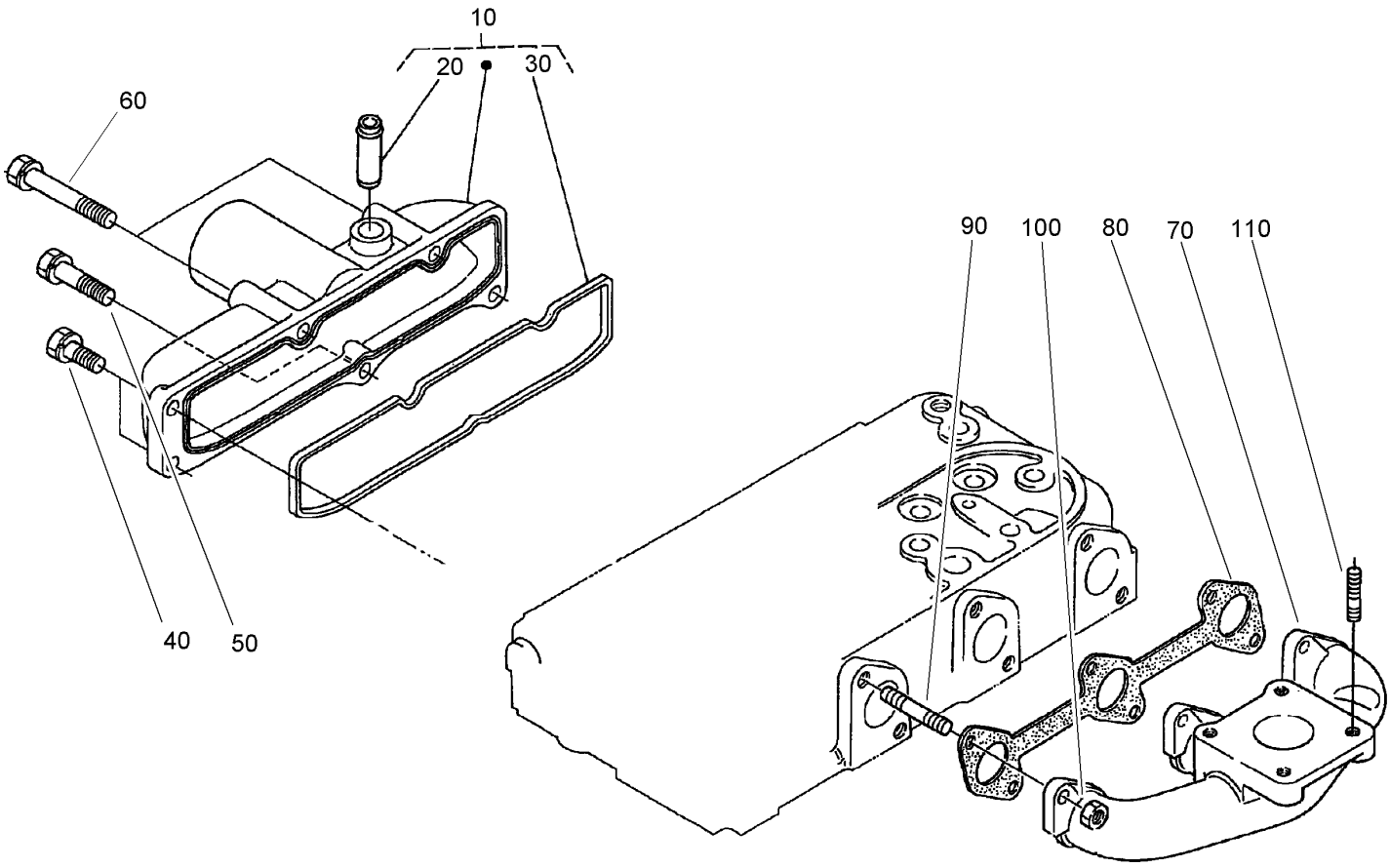
Water Pump and Pipe Assembly

Ref	Part No.	Qty.	Description
10	107-9089	1	Water Pump ASM
20	99-3517	1	Bearing-Pump, Water
30	105-3750	1	Mechanical Seal ASM
40	99-3519	1	Impeller-Pump, Water
50	98-9577	1	Pipe-Return, Water
60	99-3454	1	Gasket-Pump, Water
70	98-9353	4	Bolt
80	107-9090	2	Bolt
90	99-3516	4	Flange-Pump, Water
100	98-9716	1	Pipe-Water
110	107-9091	1	Pipe-Water
120	98-9717	2	Clamp



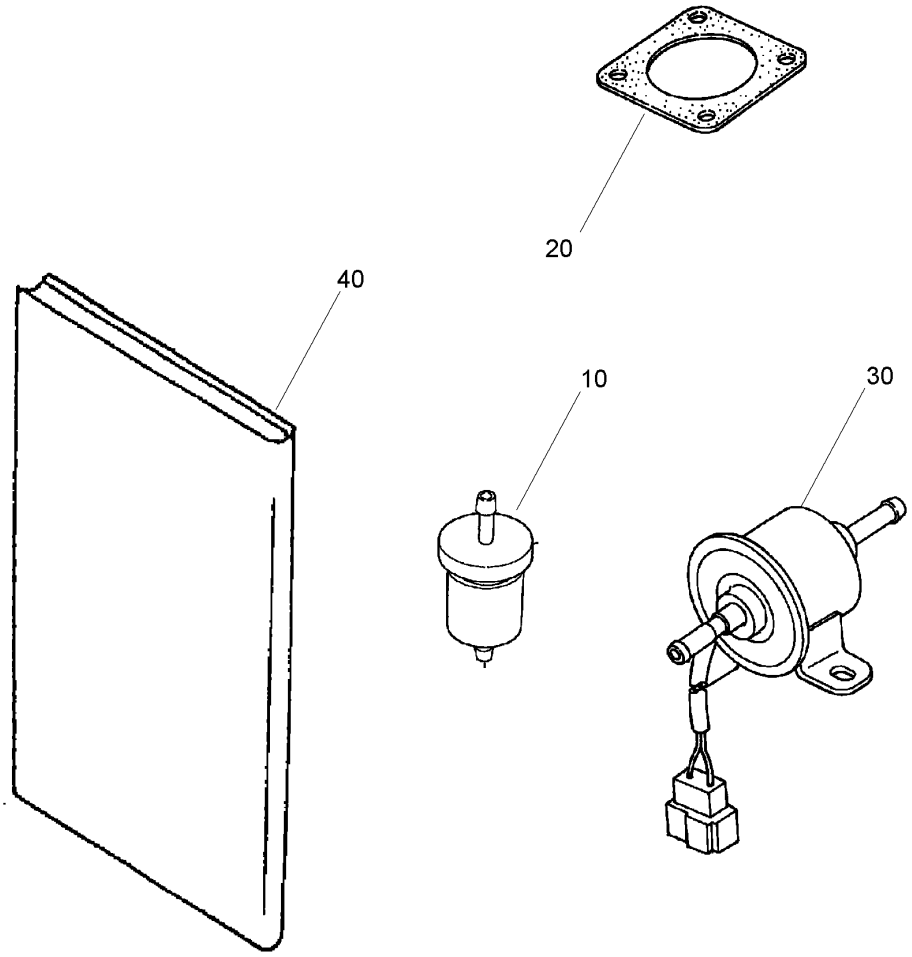
Valve and Rocker Arm Assembly

Ref	Part No.	Qty.	Description
10	98-9494	3	Valve-Inlet
20	98-9495	3	Valve-Exhaust
30	98-9648	6	Spring-Valve
40	107-9092	6	Retainer-Spring
50	98-9390	6	Collet-Set, Valve Spring
60	99-8385	6	Seat-Stem, Valve
70	98-9497	6	Cap-Valve
80	105-3790	1	R-Arm Shaft ASM
90	100-9265	2	Bolt
100	98-9505	3	Bracket-Arm, Rocker
110	105-3758	1	Pin-Spring
120	98-9507	2	Washer-Shaft, R-Arm
130	3256-1	2	Washer-Flat
140	98-9504	2	Spring-Arm, Rocker
160	98-9501	6	Rocker Arm ASM
170	98-9502	6	Screw-Adjusting
180	98-9503	6	Nut
190	98-9506	3	Stud
200	98-9393	3	Nut
210	98-9385	3	Washer-Flat



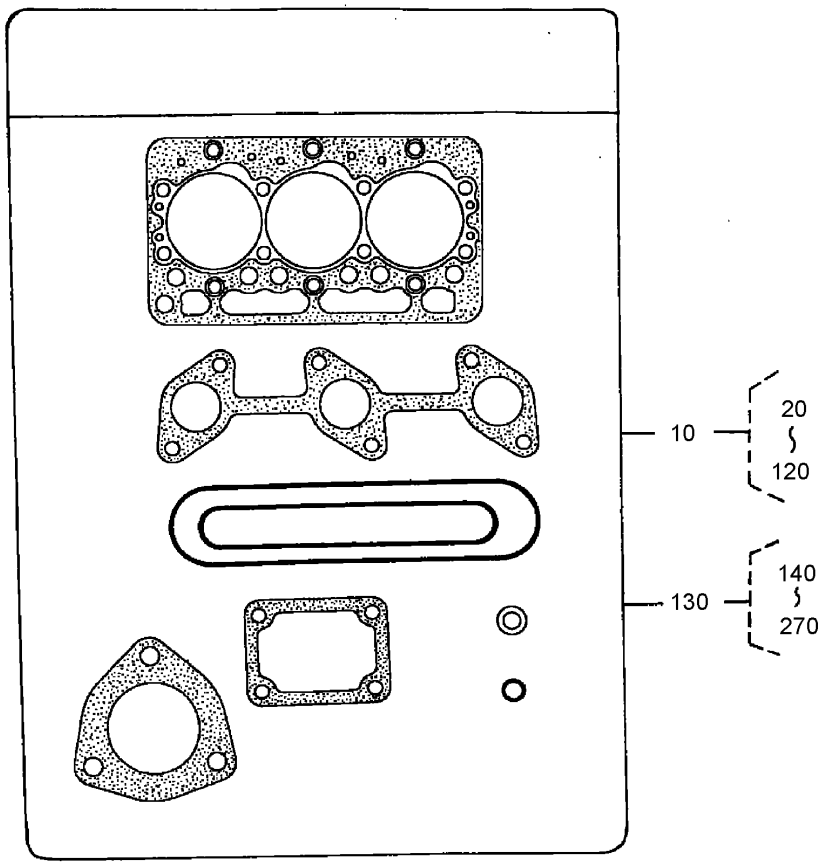
Inlet Manifold Assembly

Ref	Part No.	Qty.	Description
10	108-6577	1	Inlet Manifold ASM
20	98-9492	1	Joint-Pipe, Breather
30	98-9609	1	Gasket
40	98-7605	3	Bolt
50	98-9353	1	Bolt
60	105-3797	2	Bolt
70	107-9093	1	Manifold-Exhaust
80	98-9610	1	Gasket
90	98-9588	6	Stud
100	98-9665	6	Nut
110	98-7769	4	Stud



Miscellaneous Parts Assembly

Ref	Part No.	Qty.	Description
10	98-7612	1	Filter-Fuel
20	99-8343	1	Gasket-Muffler
30	107-0122	1	Pump-Fuel, Electric
40	99-8954	1	Manual-Kubota



19449-018-10

Gasket Kit

Ref	Part No.	Qty.	Description
10	107-7848	1	Upper Gasket Kit
130	107-9095	1	Lower Gasket Kit

Attachments and Accessories

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

Product Name	Model/Part
Jack Pad Kit	106-4386
Tire Chains (23 x 8.50-12)	11-0390
Wheel Weight Kit	11-0440
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
Quick Attach Adapter Kit	30711
72 Inch Guardian Recycler Mower	30716
Mowers and Boom Quick Attach Adapter Kit	30719
72 Inch Side Discharge Mower	30722
Recycler Mower Quick Attach Adapter Kit	30729
Rotary Broom	30743
48 Inch V-Plow	30750
48 Inch V-Plow Mounting Kit	30757
72 Inch Mower Mulching Kit	30799
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


TORO®