



Groundsmaster[®] 228–D

2 and 4 Wheel Drive Traction Units

Model No. 30241—230000001 and Up

Model No. 30242—230000001 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.

Contents

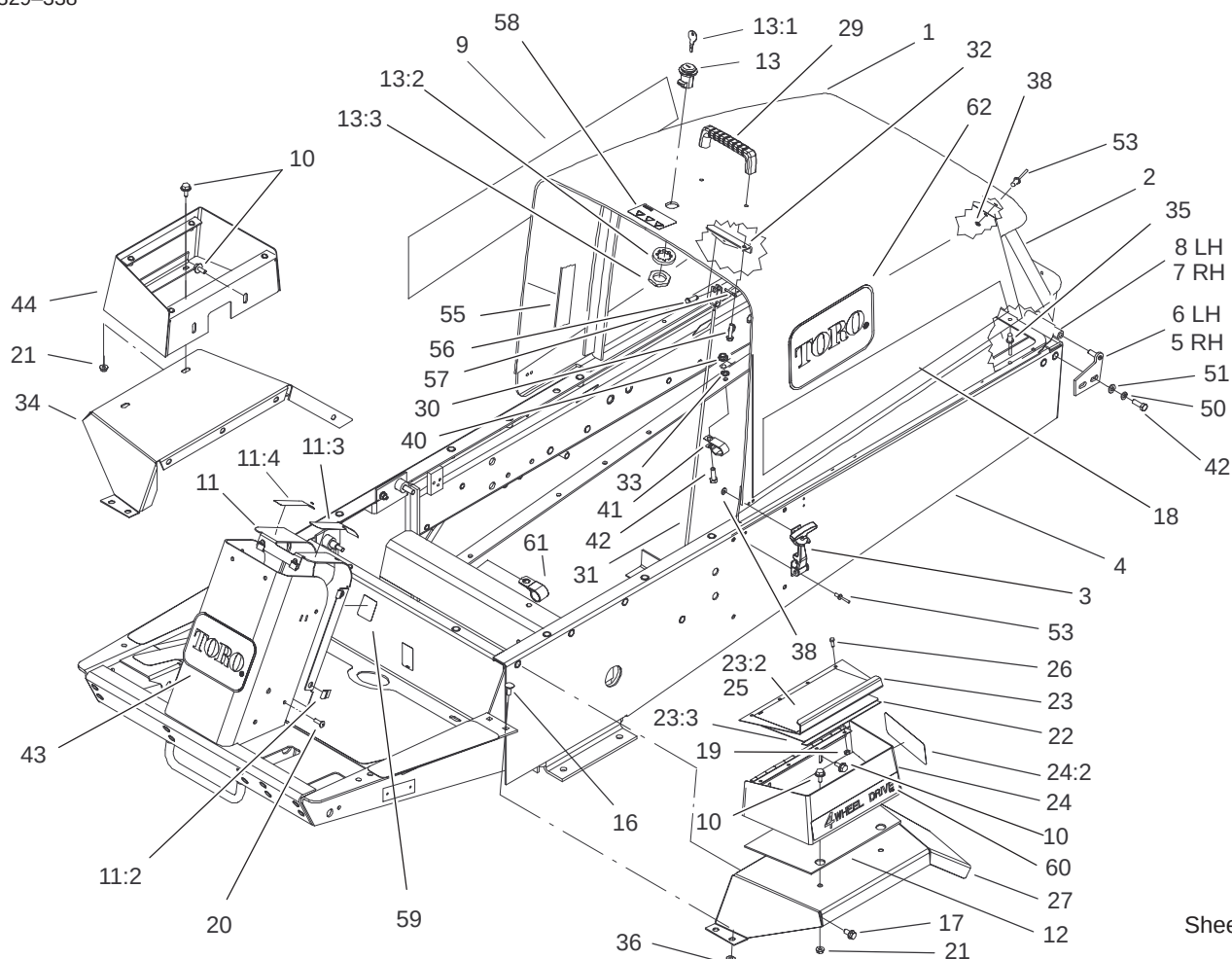
Description	Page	Description	Page
Frame and Hood Assembly	4	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Frame Assembly No. 105–7165	6	Bevel Pinion Shaft Assembly (only on: 30242)	50
Control Panel Assembly	7	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Power Steering and Brake Pedal Assembly ...	8	Differential Assembly (only on: 30242)	51
Power Steering Unit Assembly No. 92–7308 ..	10	4 Wheel Drive Rear Axle Assembly No. 95–7501	
2 WD Traction Pedal Assembly (only on: 30241)	11	Axle Support Assembly (only on: 30242) ...	52
4 WD Traction Pedal Assembly (only on: 30242)	12	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Battery and Engine Mount Assembly	13	Bevel Gear Case Assembly (only on: 30242)	53
PTO Shaft and Assembly	14	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Hydraulic Lift and Throttle Assembly	15	Bevel Gear Shaft Assembly (only on: 30242)	54
Lift Valve Assembly No. 63–7960	17	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Connector Fitting Assembly No. 63–6760	18	Axle Case Assembly (only on: 30242)	55
Radiator Assembly	19	4 Wheel Drive Rear Axle Assembly No. 95–7501	
Fuel Tank Assembly	20	Axle Assembly (only on: 30242)	56
Water and Fuel Filter Assembly No. 98–9305 ..	22	Engine and Mounting Components Assembly .	57
Transmission and Drive Coupling Assembly ...	23	Electric Clutch/Brake Assembly No. 100–6565	59
Transmission Assembly No. 92–5513	25	Crankcase Assembly	60
Transmission Interlock Assembly	27	Oil Pan Assembly	61
(ROPS) Roll–Over–Protection–System Assembly		Cylinder Head Assembly	62
(only on: 30242)	28	Gear Case, Oil Filter and Cover Assembly	63
Seat Frame Assembly	29	Head Cover Assembly	64
4 WD Rear Axle Assembly (only on: 30242) ...	34	Dipstick and Guide Assembly	65
Rear Axle Assembly (only on: 30242)	35	Main Bearing Case Assembly	66
Bi–Directional Clutch Assembly No. 95–6296		Camshaft and Idler Gear Shaft Assembly	67
(only on: 30242)	36	Piston and Crankshaft Assembly	68
Tie Rod Assembly No. 98–3871		Flywheel Assembly	69
(only on: 30242)	37	Fuel, Camshaft and Governor Shaft Assembly	70
Cylinder Assembly No. 99–2415		Idle Apparatus and Stop Solenoid Assembly ..	71
(only on: 30242)	38	Injection Pump Assembly	72
Driveshaft Assembly No. 98–5009		Injection Pump Assembly No. 98–9643	73
(only on: 30242)	39	Governor Assembly	74
Engine Installation Assembly	40	Speed Control Plate Assembly	75
Air Cleaner Assembly No. 104–3427	41	Nozzle Holder Glow Plug Assembly	76
Electrical Schematic	42	Nozzle Holder Assembly No. 98–9468	77
Hydraulic Schematic	43	Alternator and Pulley Assembly	78
Differential Assembly	44	Alternator Assembly	79
Differential Carrier Assembly No. 92–4909		Starter Mount Assembly	80
(Only On: 30241)	45	Starter Assembly No. 98–9705	81
Brake Assembly	47	Water Flange and Thermostat Assembly	82
Differential Carrier Assembly No. 92–4907		Water pump and Water Pipe Assembly	83
(Only on: 30242)	48	Valve and Rocker Arm Assembly	84
Differential Carrier Assembly No. 92–4907		Inlet and Exhaust Manifold Assembly	85
(Only On: 30242)	49		

Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

Abbreviation	Meaning
AR	as required
ASM	assembly
CARR	carriage
DEG	degrees
FH	flat head
GA	gauge
HF	hex flange
HH	hex head
HHF	hex head flange
HLH	hex lag head
HJ	hex jam
HOC	height-of-cut
HS	hex socket
HSBH	hex socket button head
HSFH	hex socket flat head
HSH	hex socket head
HWH	hex washer head
HWHTF	hex washer head thread forming

Abbreviation	Meaning
HYD	hydraulic
INC	incorporated
LH	left hand
NI	nylon insert
PPH	Phillips pan head
PTH	Phillips truss head
PTO	power take off
RH	right hand
SFH	slotted fillister head
SHH	slotted hex head
SQH	square head
SHWH	slotted hex washer head
SPH	slotted pan head
SRH	slotted round head
STD	standard
TAP	self tapping
TTH	Torx truss head
WH	wing head



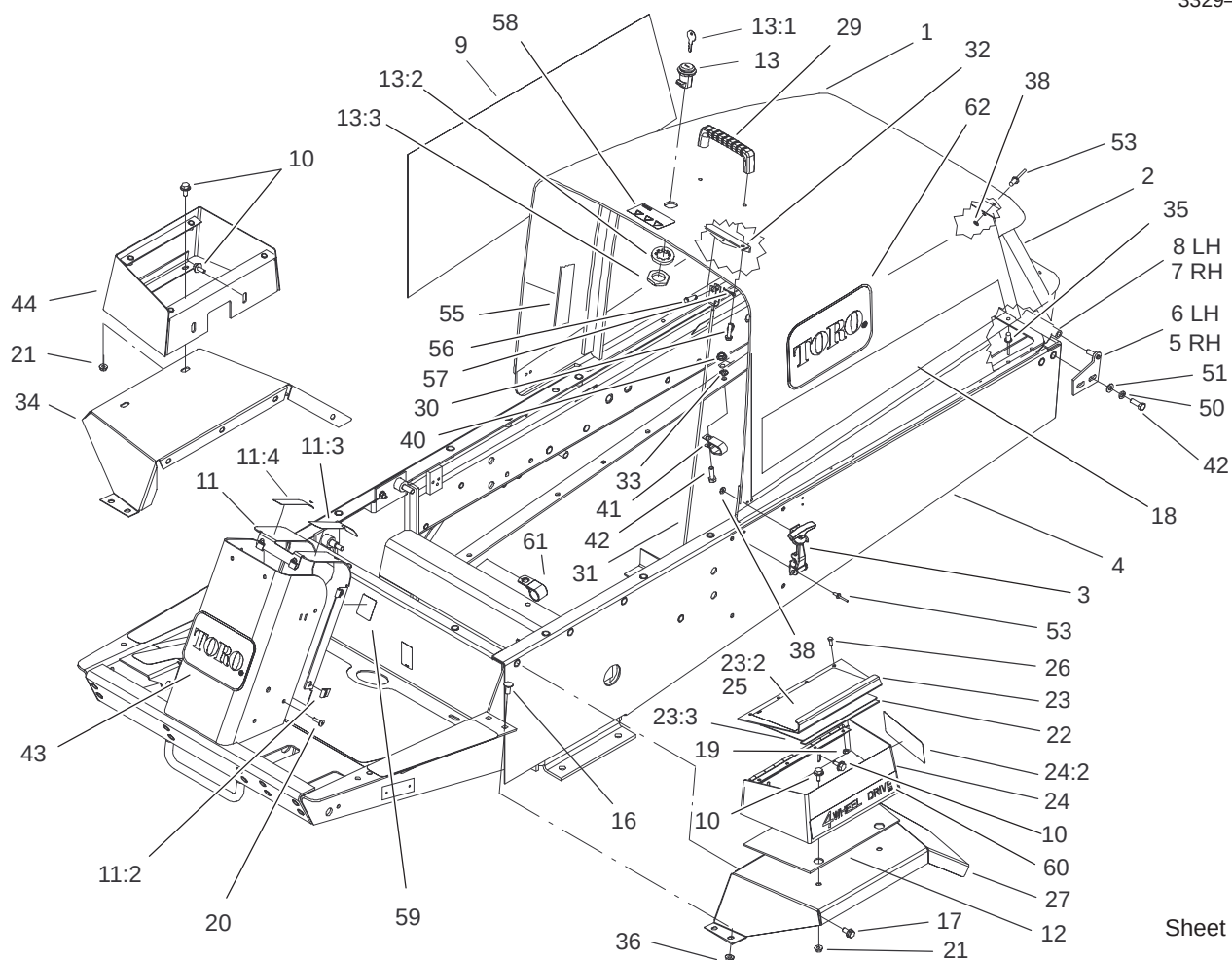
Sheet No.:2

Frame and Hood Assembly

Ref. No.	Part No.	Qty.	Description
1	104-3485	1	Hood
2	105-0006-03	1	Screen-Hood
3	95-6339	2	Latch
4	105-7165	1	Frame ASM
5	105-0003-01	1	RH Hinge Pin ASM
6	105-0004-01	1	LH Hinge Pin ASM
7	105-4277-03	1	RH Hood Hinge ASM
8	105-4278-03	1	LH Hood Hinge ASM
9	106-4392	1	Decal-RH
10	3234-13	8	Screw-HHF
11	105-7180	1	Tower Panel ASM
11:2	105-7170	6	Nut-Retainer
11:3	105-7179	1	Decal-Brake, Parking
11:4	82-8940	1	Decal-Steering, Tilt
12	76-4790	1	Pad-Rubber
13	98-9315	1	Latch-Locking
13:1	99-8350	2	Key-Latch, Locking
★13:2		1	Washer-Switch
★13:3		1	Nut-Switch
16	3230-23	4	Screw-CARR
17	3234-14	8	Screw-HHF
18	106-4393	1	Decal-LH
19	3296-12	4	Nut-Lock
20	3250-32	6	Screw-PPH
21	32128-33	4	Nut-HF
22	66-3050	1	Latch-Box, Tool

Ref. No.	Part No.	Qty.	Description
23	106-8067	1	Tool Box Cover ASM
23:2	92-5774	1	Decal-Danger
23:3	106-4389	1	Decal-Service
24	92-6501	1	Tool Box ASM
24:2	93-7822	1	Decal-Refueling
25	93-7804	1	Decal-Danger
26	3290-359	4	Screw-HWH
27	63-7310-01	1	Fender-LH
29	65-5100	1	Handle-Door
30	46-8092	2	Screw-Plastite
31	105-3650	1	Cable-Hood
32	105-0088-03	1	Bracket-Cable, Hood
33	3255-8	1	Washer-Lock
34	63-7300-01	1	Fender-RH
35	3290-412	12	Rivet
36	32128-20	4	Nut-HF
38	3256-14	14	Washer-Flat
40	32128-44	1	Nut (only on: 30241)
40	32128-44	3	Nut (only on: 30242)
41	92-5753	2	Clamp-Hose (only on: 30242)
42	322-5	6	Screw-HH (only on: 30241)
42	322-5	7	Screw-HH (only on: 30242)

★ Not serviced separately

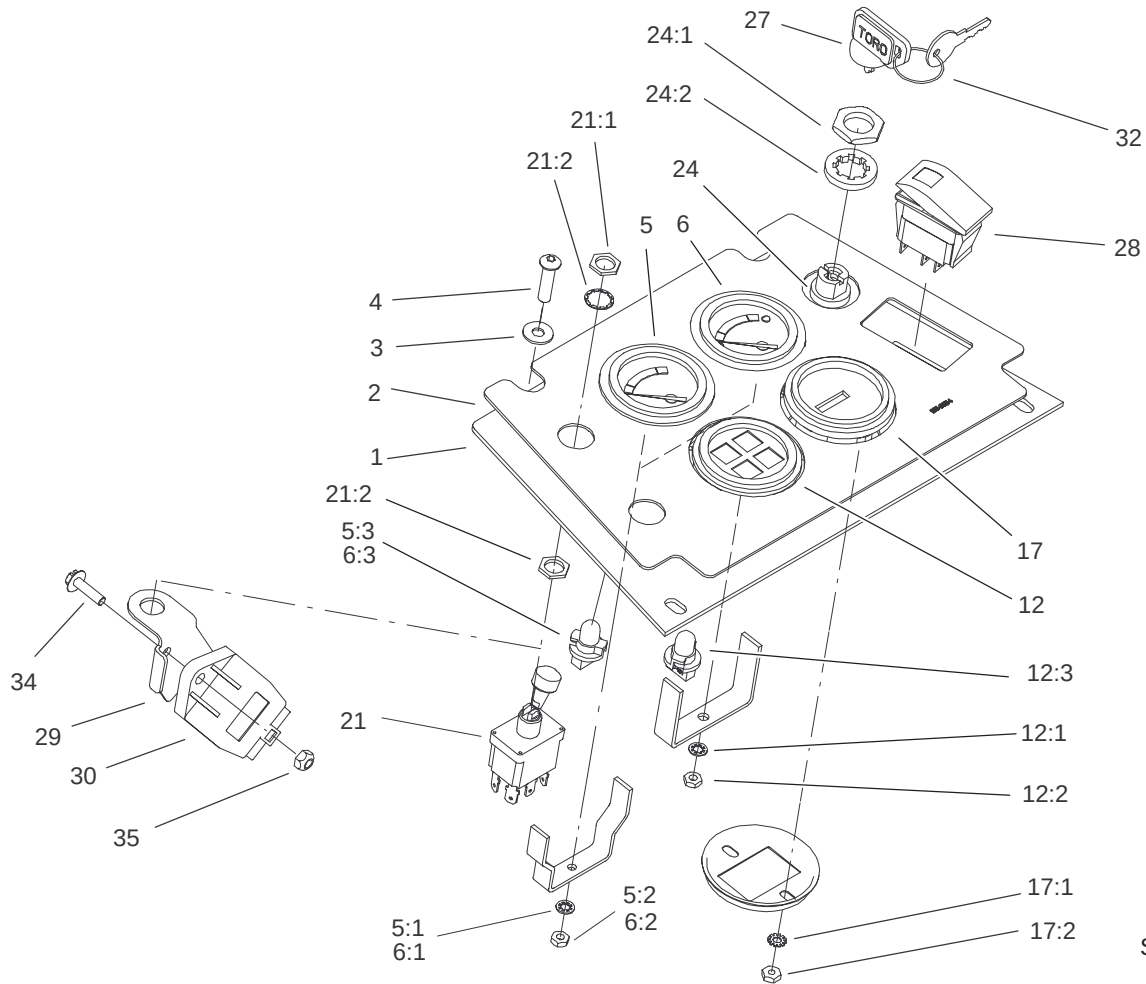


Sheet No.:2

Frame and Hood Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
43	104-3989	1	Decal-Logo, Toro
44	63-8050	1	Box-Control
50	3253-4	4	Washer-Lock
51	3256-23	4	Washer-Flat
53	3269-4	18	Rivet-Pop
55	105-3651	1	Strip-Foam
56	283-58	2	Pin-Clevis
57	3272-10	2	Pin-Cotter
58	100-6574	1	Decal-Warning
60	72-3560	2	Decal-4wd (only on: 30242)
61	2412-74	1	R-Clamp (only on: 30242)
61	2412-4	1	Clamp (only on: 30241)
62	66-6140	2	Decal-Logo, Toro

Ref. No.	Part No.	Qty.	Description

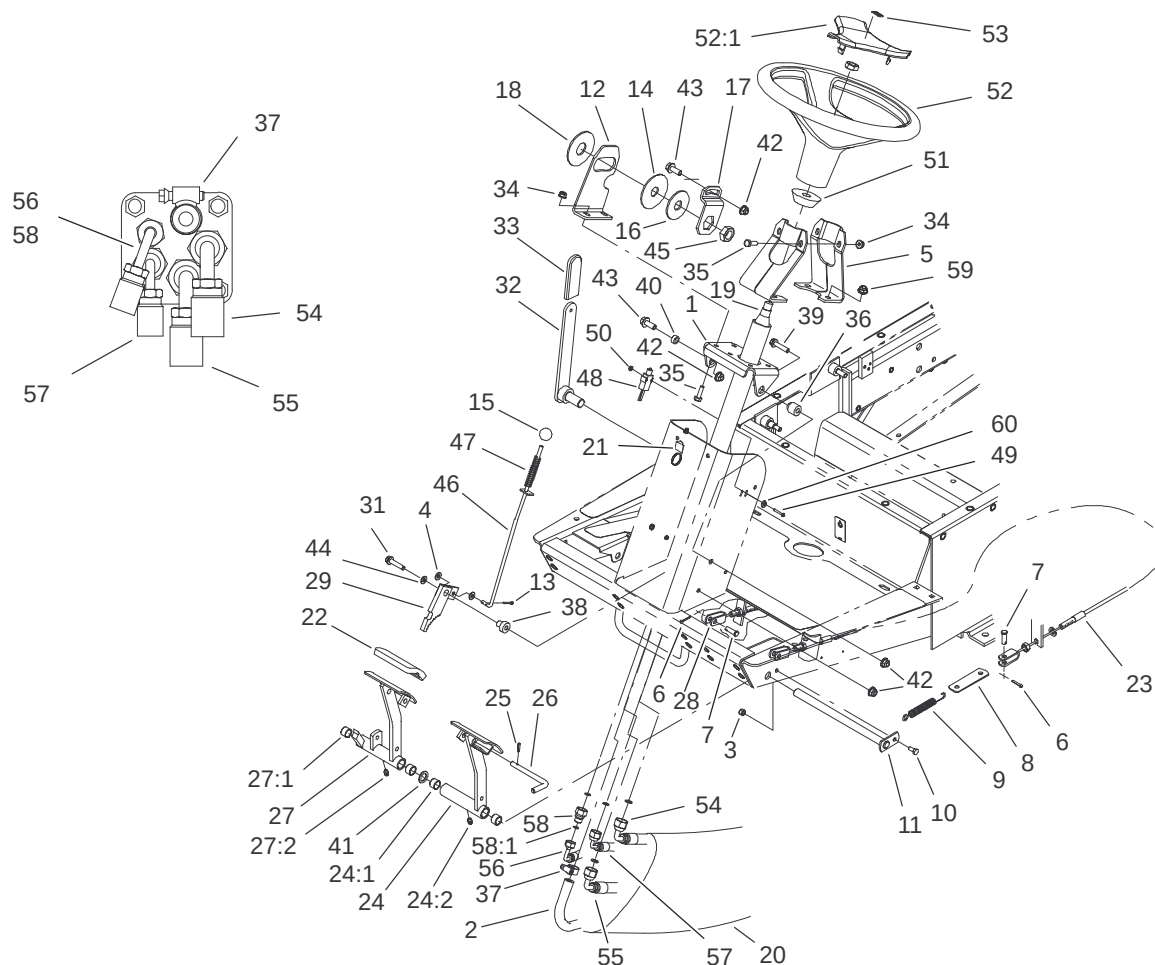


Sheet No.:3

Control Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	104-3436-03	1	Plate-Control
2	105-0054	1	Decal-Panel, Control
3	3256-1	4	Washer-Flat
4	3274-65	4	Screw-HSBH
5	98-9308	1	Gauge-Temperature
5:1	3254-1	3	Washer-Lock, Internal
5:2	3217-27	3	Nut-Hex
5:3	105-9265	1	Bulb And Lamp ASM
6	98-9339	1	Gauge-Fuel
6:1	3254-1	3	Washer-Lock, Internal
6:2	3217-27	3	Nut-Hex
6:3	105-9265	1	Bulb And Lamp ASM
12	98-9306	1	Light-Warning
12:1	3254-1	1	Washer-Lock, Internal
12:2	3217-27	1	Nut-Hex
12:3	105-9264	4	Bulb And Lamp ASM
17	66-2950	1	Gauge-Hourmeter
17:1	3255-20	2	Washer-Lock
17:2	3217-25	2	Nut-Hex
21	85-4980	1	Switch-PTO
21:1	3218-19	2	Nut-HJ
21:2	3254-20	1	Washer-Lock, Internal
24	104-2541	1	Switch-Key
24:1	218-461	1	Nut-HH
24:2	3254-5	1	Washer-Lock, Internal
27	63-8360	1	Key-Ignition

Ref. No.	Part No.	Qty.	Description
28	100-8072	1	Switch
29	105-0029	1	Bracket-Controller
30	98-7611	1	Controller-Glow
32	98-9321	1	Ring-Key
34	32105-13	1	Screw-SHH
35	3296-12	1	Nut-Lock

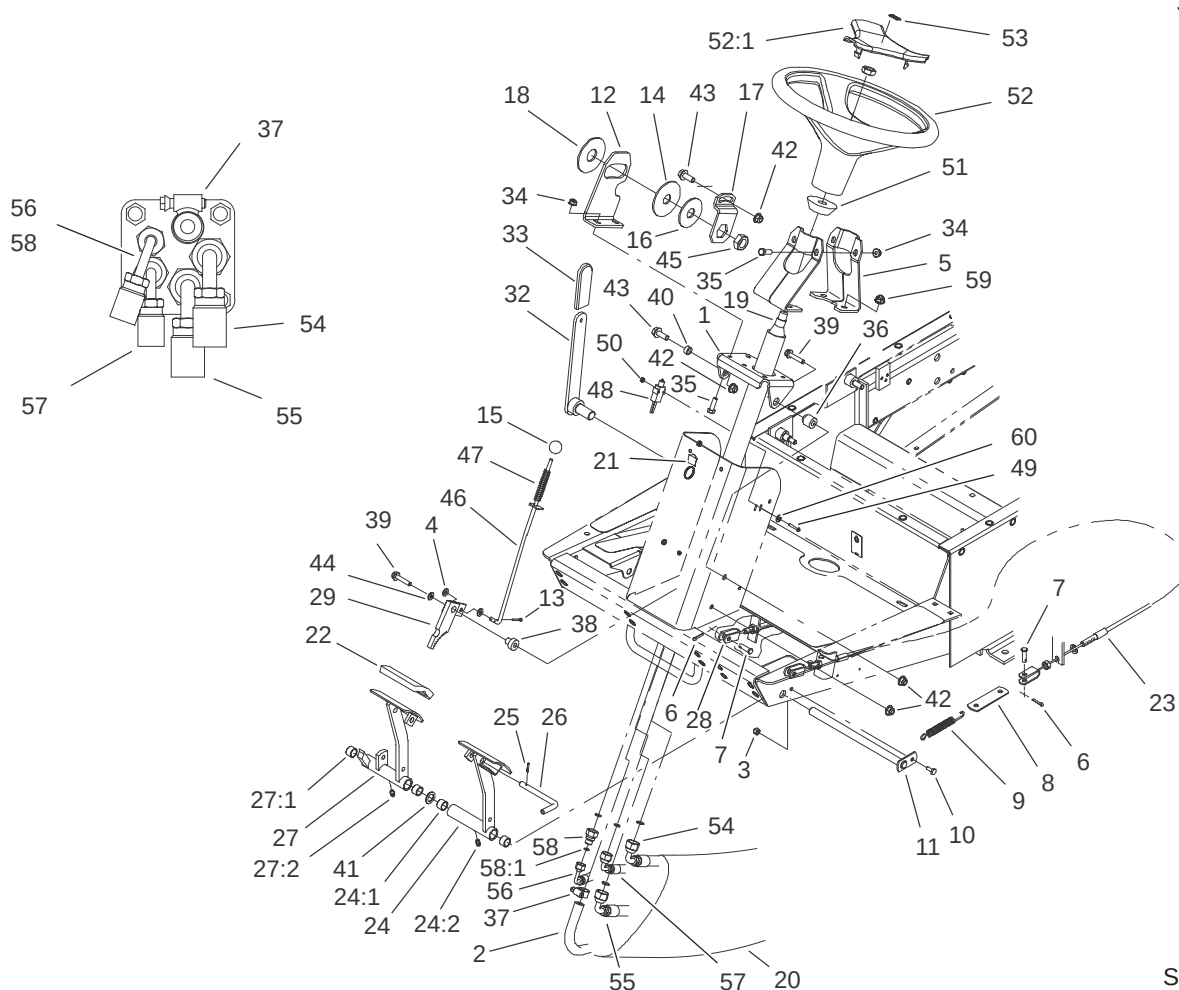


Sheet No.:4

Power Steering and Brake Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	105-7155-03	1	Bracket-Pivot
2	66-8140	1	Hose-Hydraulic
3	3296-42	1	Nut-Lock, NI
4	3256-22	2	Washer-Flat
5	105-7191-03	2	Support-Column
6	3272-10	4	Pin-Cotter
7	283-58	4	Pin-Clevis
8	63-6750	2	Link-Cable, Brake
9	3-7243	2	Spring-Extension
10	321-3	1	Screw-HH
11	63-6210-03	1	Pin-Brake
12	105-7181-03	1	Plate-Pivot
13	3272-5	2	Pin-Cotter
14	82-9010	1	Disc-Friction
15	233-17	1	Knob
16	80-2930	1	Washer-Flat
17	80-2880	1	Bracket-Tilt
18	31-0390	1	Disc-Friction
19	92-7308	1	Power Steering Unit ASM
20	44-8530	1	Protector-Sleeve
21	105-7188	2	Clamp-Adhesive Backed
22	93-8742	2	Footpad-Brake
23	63-7731	1	Cable-Brake
24	63-6180	1	Pedal-Brake, LH

Ref. No.	Part No.	Qty.	Description
24:1	256-42	2	Bushing
24:2	302-5	1	Fitting-Grease
25	32121-50	1	Pin-Spring
26	63-7880	1	Pin-Latch, Brake
27	63-6190	1	Pedal-Brake, RH
27:1	256-42	2	Bushing
27:2	302-5	1	Fitting-Grease
28	63-7730	1	Cable-Brake
29	63-7900-03	1	Rack ASM
31	322-7	1	Screw-HH
32	93-1353-03	1	Lever-Steering, Tilt
33	21-1880	1	Grip-Handle
34	104-8300	5	Nut-Flange, NI
35	322-5	4	Screw-HH
36	105-7166	1	Spacer
37	2412-36	1	Clamp-Hose
38	105-7156	1	Spacer
39	3234-18	1	Screw-HHF
40	80-2960	1	Spacer-Tower
41	3256-69	2	Washer-Flat
42	104-8301	3	Nut-Flange, NI
43	3234-42	2	Screw-HHF
44	3256-23	1	Washer-Flat
45	3218-7	1	Nut-Jam
46	105-7168	1	Rod ASM

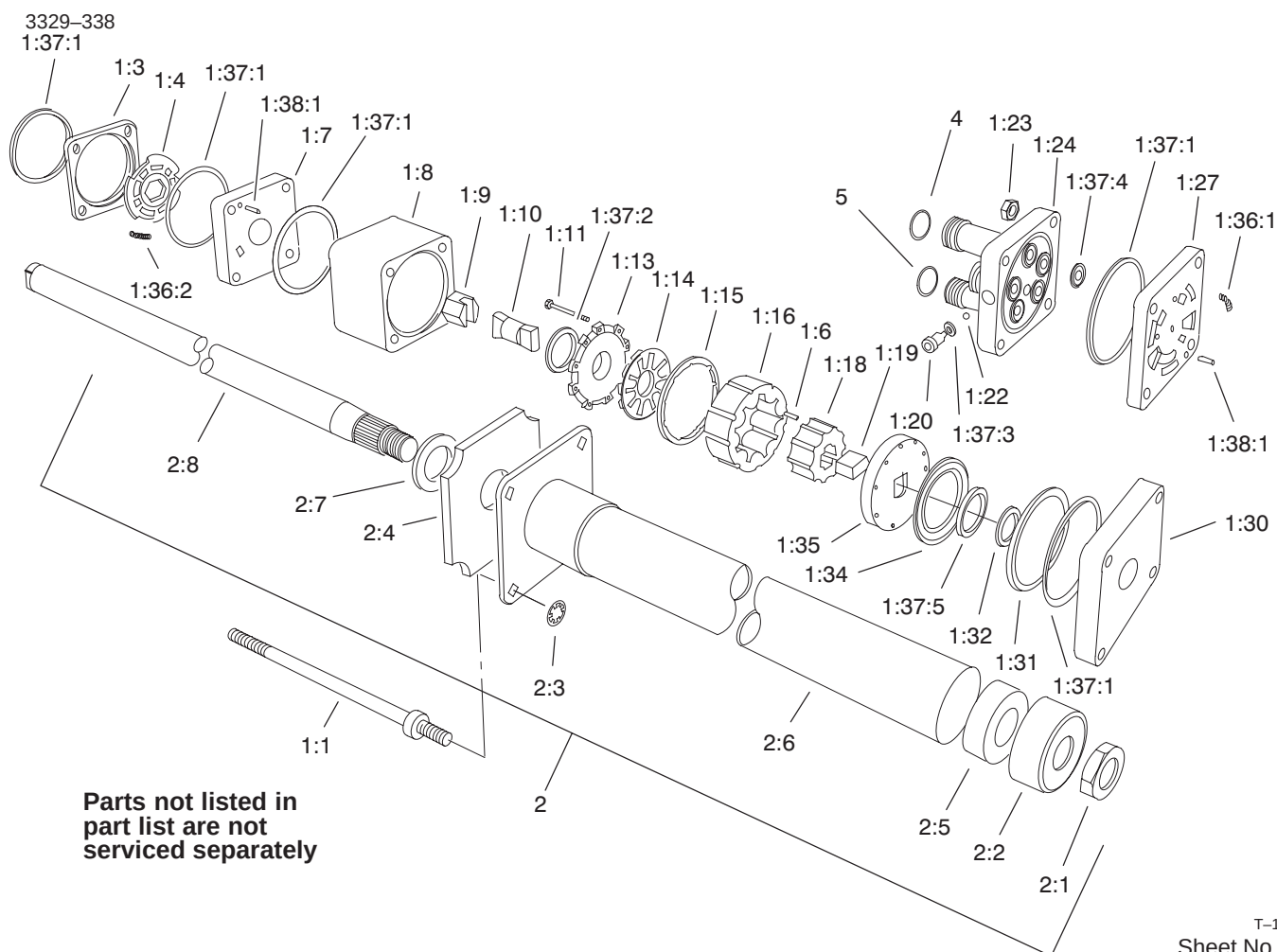


Sheet No.:4

Power Steering and Brake Pedal Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
47	71-8310	1	Spring-Compression
48	99-3410	1	Switch
49	3250-35	2	Screw-PPH
50	32149-6	2	Nut-Keps
51	93-5429	1	Collar-Foam
52	98-1471	1	Wheel-Steering
52:1	98-1468	1	Cover-Wheel, Steering
53	98-1459	1	Decal-Toro
54	105-7173	1	HYD Hose ASM
55	105-7174	1	HYD Hose ASM
56	105-7196	1	Hose ASM-HYD (only on: 30242)
56	105-7175	1	HYD Hose ASM (only on: 30241)
57	105-7176	1	HYD Hose ASM (only on: 30241)
57	105-7177	1	Hose ASM-HYD (only on: 30242)
58	340-145	1	Fitting-Reducer
58:1	237-21	1	O-Ring
59	32128-16	4	Nut-HHF
60	3256-53	2	Washer-Flat

Ref. No.	Part No.	Qty.	Description



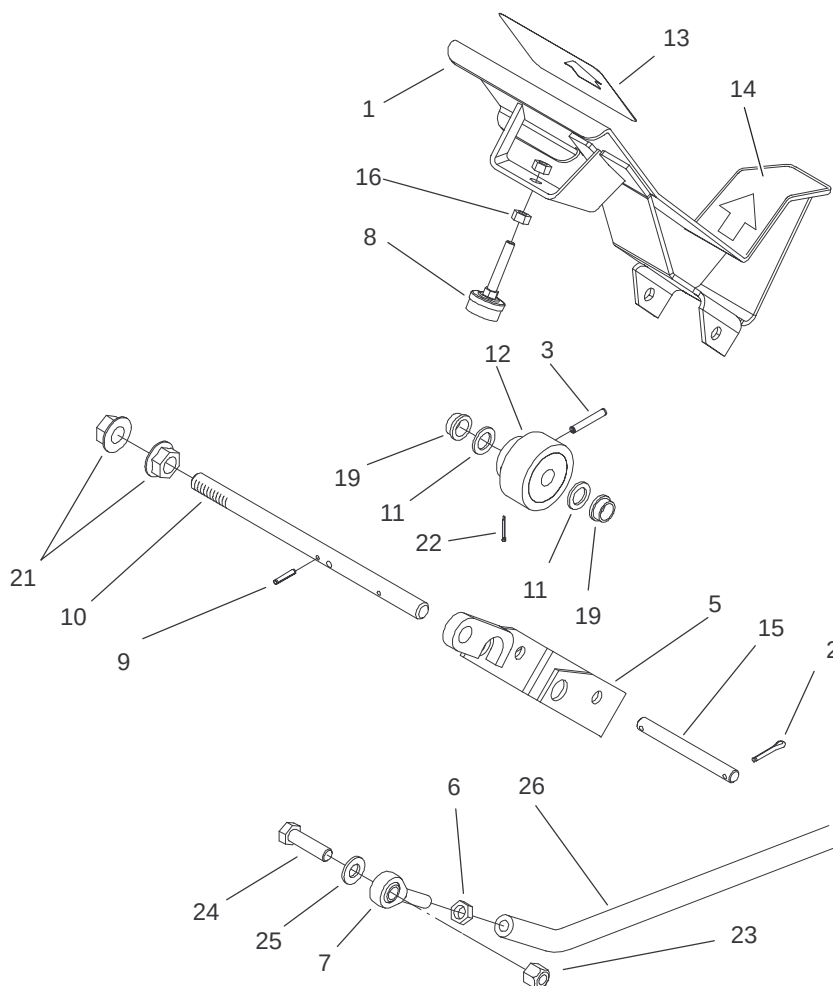
T-1760
Sheet No.:A2

Power Steering Unit Assembly No. 92-7308

Ref. No.	Part No.	Qty.	Description
☆1	92-7310	1	Power Steering Unit
1:1		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	92-7311	1	Spacer-Seal
☆1:34		1	Bearing-Thrust

Ref. No.	Part No.	Qty.	Description
☆1:35	66-9970	1	Plate-Drive
*1:36		1	Spring Kit
☆1:36:1		3	Spring
☆1:36:2	66-9980	3	Spring
*1:37		1	Seal Kit
☆1:37:1		5	Ring-Seal
☆1:37:2	66-9990	1	Seal-Commutator
☆1:37:3		1	O-Ring
☆1:37:4		5	O-Ring
☆1:37:5	92-7314	1	Seal-Face
*1:38		1	Needle Roller Kit
☆1:38:1		9	Pin-Alignment
2	3220-6	1	Column ASM
2:1		1	Nut-Jam
2:2		1	Seal-Upper
2:3	92-7315	4	Nut-Push On
2:4		1	Seal-Foam, Upper Cover
2:5		1	Bushing
☆2:6	66-9780	1	Cover-Upper
☆2:7		1	Washer-Retaining
☆2:8		1	Shaft-Input
4	237-30	2	O-Ring
5		2	O-Ring

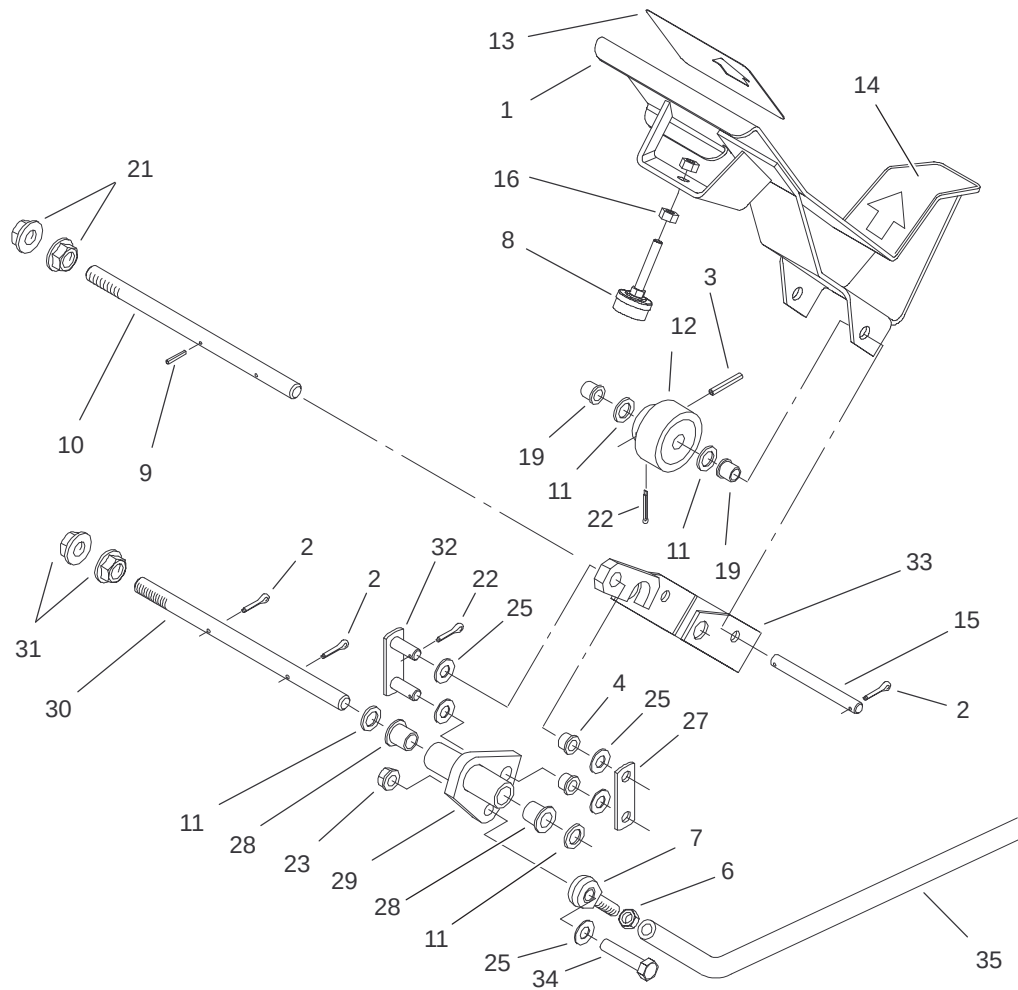
☆ Not serviced separately
* Not illustrated



Sheet No.:5

2 WD Traction Pedal Assembly (only on: 30241)

Ref. No.	Part No.	Qty.	Description
1	105-7150-03	1	Pedal ASM
2	3272-10	2	Pin-Cotter
3	32121-6	1	Pin-Roll
5	92-8854-03	1	Bracket-Pivot
6	3220-3	1	Nut-Jam
7	2411-36	1	Bearing-End, Rod
8	32141-36	1	Screw-Adjustment, Level
9	32121-50	1	Pin-Spring
10	92-5534	1	Shaft-Pedal, Traction
11	5-7570	2	Washer-Flat
12	28-5220	1	Friction Wheel ASM
13	94-3307	1	Pad-Pedal, Traction
14	94-3308	1	Pad-Pedal, Traction
15	92-5537	1	Pin-Pedal, Traction
16	3217-6	2	Nut-Hex
19	256-156	2	Bushing-Flange
21	32128-56	2	Nut-HF
22	3272-6	1	Pin-Cotter
23	3296-39	1	Nut-Lock, NI
24	323-29	1	Screw-HH
25	3256-24	1	Washer-Flat
26	63-6410-03	1	Tube-Pump, Control

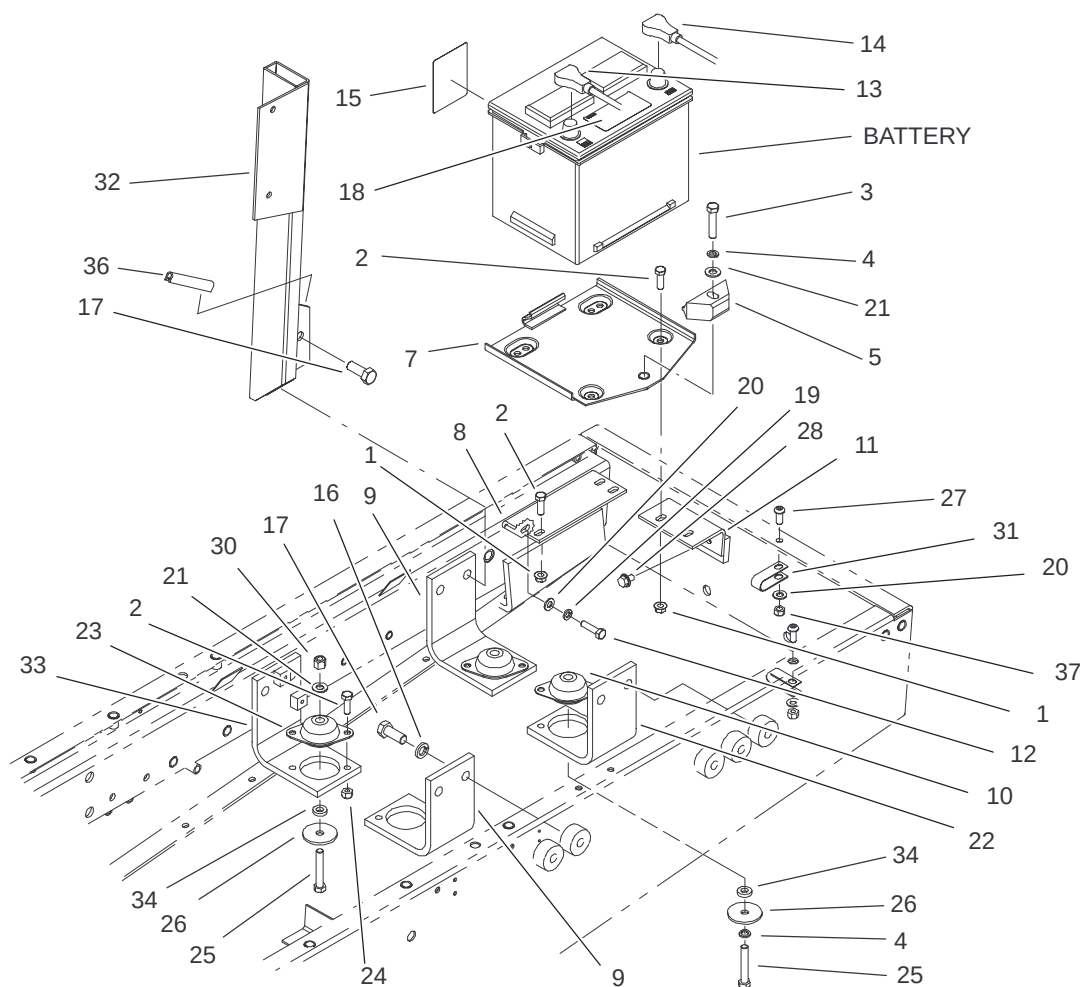


Sheet No.:6

4 WD Traction Pedal Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description
1	105-7150-03	1	Pedal ASM
2	3272-10	4	Pin-Cotter
3	32121-6	1	Pin-Roll
4	256-116	2	Bushing-Flange
6	3220-3	1	Nut-Jam
7	2411-36	1	Bearing-End, Rod
8	32141-36	1	Screw-Adjustment, Level
9	32121-50	1	Pin-Spring
10	92-5534	1	Shaft-Pedal, Traction
11	5-7570	4	Washer-Flat
12	28-5220	1	Friction Wheel ASM
13	94-3307	1	Pad-Pedal, Traction
14	94-3308	1	Pad-Pedal, Traction
15	92-5537	1	Pin-Pedal, Traction
16	3217-6	2	Nut-Hex
19	256-156	2	Bushing-Flange
21	32128-56	2	Nut-HF
22	3272-6	3	Pin-Cotter
23	3296-39	1	Nut-Lock, NI
25	3256-24	5	Washer-Flat
27	92-5721	1	Link-Traction
28	256-219	2	Bushing
29	92-5094-03	1	Arm-Traction
30	92-5075	1	Shaft-Pedal, Traction
31	32128-49	2	Nut-HHF

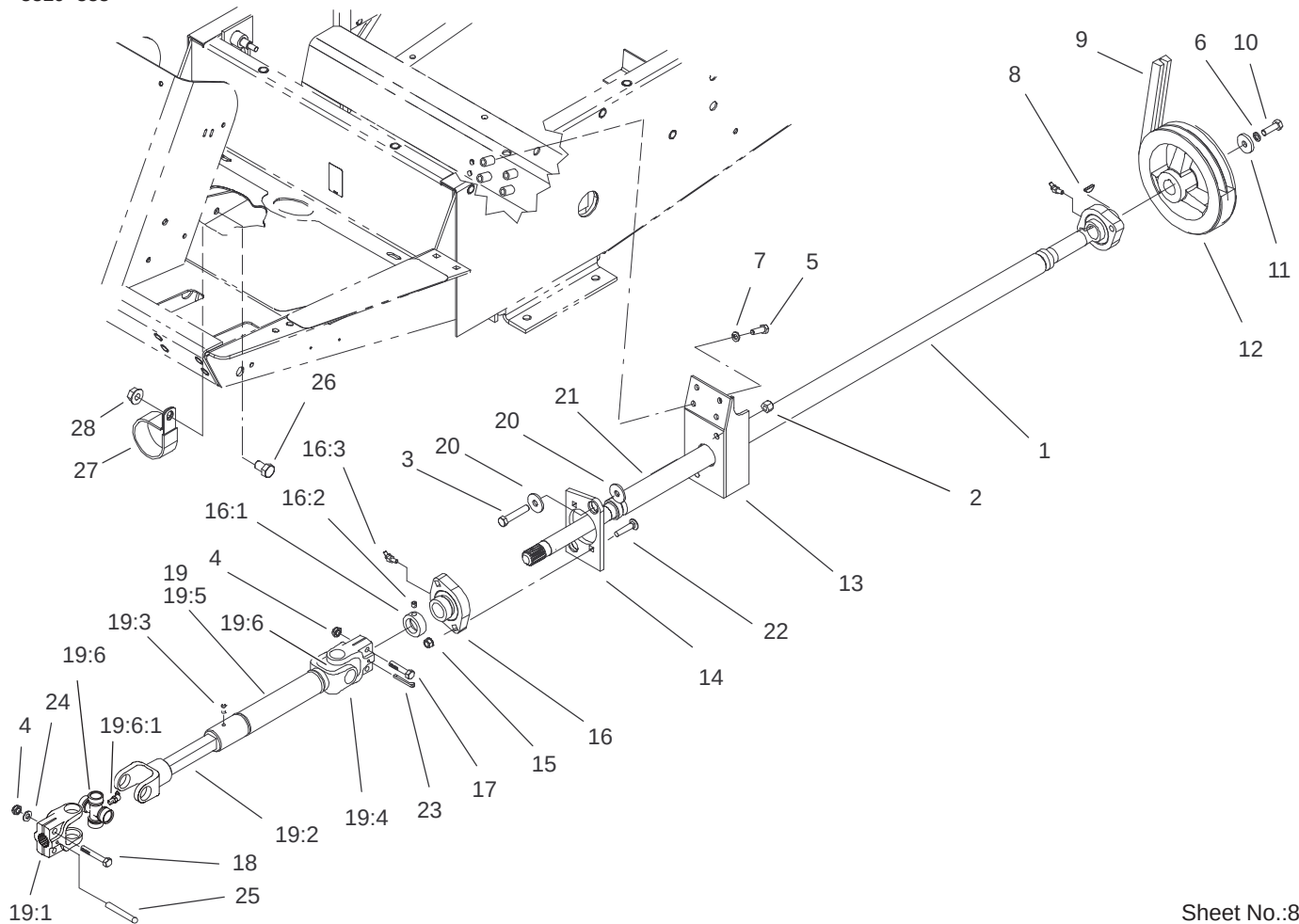
Ref. No.	Part No.	Qty.	Description
32	92-5532	1	Link-Traction
33	92-5093-03	1	Arm-Pivot
34	323-9	1	Screw-HH
35	92-5536-03	1	Tube-Control, Pump



Sheet No.:7

Battery and Engine Mount Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	32128-20	3	Nut-HF	24	3296-29	8	Nut-Lock, NI
2	322-5	11	Screw-HH	25	323-11	4	Screw-HH
3	323-9	1	Screw-HH	26	63-7400	4	Washer-Rebound
4	3253-21	2	Washer-Lock	27	3274-96	3	Screw
5	66-2490	1	Retainer-Battery	28	3234-30	2	Screw-HHF
7	94-7343	1	Battery Base ASM	30	3296-39	3	Nut-Lock, NI
8	95-1592-03	1	Bracket-Base, Battery	31	98-3883	3	Clamp-Wire
9	95-6270-03	2	Bracket-Mount, Engine	32	105-2513-03	1	Air Cleaner Mount ASM
10	63-7141	1	Mount-Shock, Engine	33	105-7848-03	1	Engine Bracket ASM
11	95-1599-03	1	Bracket-Base, Battery	34	80-7730	4	Spacer
12	322-6	2	Screw-HH	36	43-4300	1	Trim-Frame, Rear
13	104-0086	1	Cable-Battery, Positive	37	33024-00	3	Nut-Lock
14	105-0040	1	Cable-Battery, Negative				
15	93-6668	1	Decal-Battery				
16	3253-7	8	Washer-Lock				
17	3213-2	8	Screw-HH				
18	93-7276	1	Decal-Danger				
19	3253-4	2	Washer-Lock				
20	3256-23	5	Washer-Flat				
21	3256-24	4	Washer-Flat				
22	95-6271-03	1	Bracket-Mount, Engine				
23	63-7142	3	Mount-Shock, Engine				

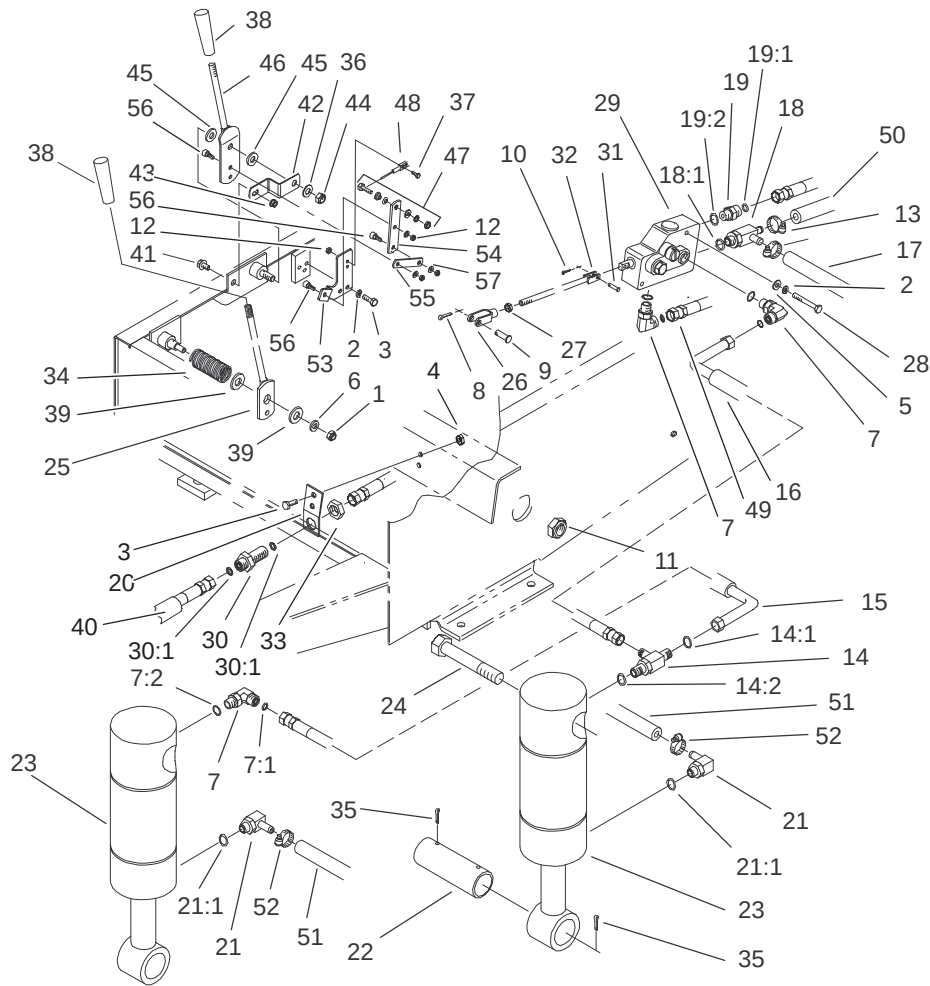


Sheet No.:8

PTO Shaft and Assembly

Ref. No.	Part No.	Qty.	Description
1	92-8855-03	1	Shaft-PTO
2	3296-39	2	Nut-Lock, NI
3	323-10	2	Screw-HH
4	3296-29	5	Nut-Lock, NI
5	322-5	4	Screw-HH
6	3253-21	1	Washer-Lock
7	3253-4	4	Washer-Lock
8	3257-5	1	Key-Woodruff
9	63-6240	1	V-Belt, PTO
10	323-18	1	Screw-HH
11	29-4730	1	Washer-Flat
12	43-5320-03	1	Pulley-PTO
13	92-8751-03	1	Bracket-Bearing, PTO
14	84-7580	1	Plate-Support, Bushing
15	32149-1	2	Nut
16	92-8799	1	Bearing-Flange
16:1	251-77	1	Lockcollar-Bearing
16:2	3246-1	1	Screw-Set
16:3	302-40	1	Fitting-Grease
17	322-9	4	Screw-HH
18	322-14	1	Screw-HH
19	54-7950	1	Shaft-Universal
19:1	54-9040	1	Yoke-End
19:2	54-9050	1	Shaft-Yoke, Slip
19:3	302-58	1	Fitting-Grease

Ref. No.	Part No.	Qty.	Description
19:4	54-9090	1	Yoke-End
19:5	54-9170-01	1	Tube-Yoke, Slip
19:6	54-9180	2	U-Joint Kit
19:6:1	62-3820	1	Fitting-Grease
20	63-8410	4	Washer
21	63-9750	2	Mount
22	3230-4	2	Screw-CARR
23	3272-15	1	Pin-Cotter
24	3256-23	1	Washer-Flat
25	32121-34	1	Pin-Roll
26	46-3380	1	Bolt-Shoulder
27	2412-102	1	R-Clamp
28	3296-39	1	Nut-Lock, NI

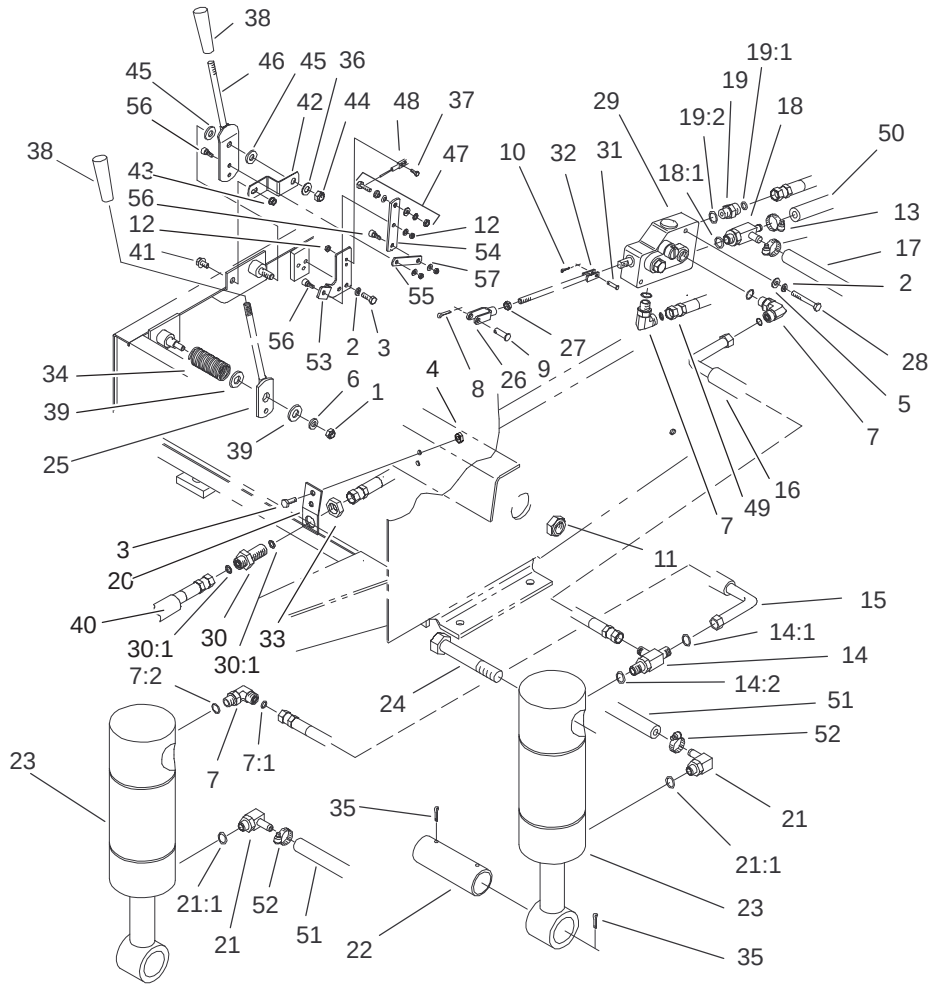


Sheet No.:9

Hydraulic Lift and Throttle Assembly

Ref. No.	Part No.	Qty.	Description
1	3296-29	1	Nut-Lock, NI
2	3253-3	4	Washer-Lock
3	321-4	4	Screw-HH
4	3296-42	2	Nut-Lock, NI
5	3256-22	2	Washer-Flat
6	3256-23	1	Washer-Flat
7	340-77	3	Fitting-HYD, 90°
7:1	237-22	1	O-Ring
7:2	237-42	1	O-Ring
8	3272-10	1	Pin-Cotter
9	283-58	1	Pin-Clevis
10	3272-5	1	Pin-Cotter
11	3296-15	2	Nut-Lock NI
12	3296-12	4	Nut-Lock
13	2412-36	2	Clamp-Hose
14	340-86	1	Fitting-HYD, Tee
14:1	237-22	2	O-Ring
14:2	237-42	1	O-Ring
15	66-8190	1	Hydraulic Hose ASM
16	66-8640	1	Hydraulic Hose ASM
17	66-8150	1	Hose-Hydraulic
18	66-3130	1	Fitting-Special
18:1	237-65	1	O-Ring
19	340-2	1	Fitting-HYD, Straight
19:1	237-22	1	O-Ring
19:2	237-42	1	O-Ring

Ref. No.	Part No.	Qty.	Description
20	63-7410	1	Bracket-Bulkhead
21	304-99	2	Stem-Hose
21:1	237-78	1	O-Ring
22	27-4240	2	Pin-Cylinder
23	63-6630	2	Cylinder-Hydraulic
24	3216-3	2	Screw-HH
25	66-2720-03	1	Lever-Valve
26	282-27	1	Clevis
27	3220-2	1	Nut
28	321-11	2	Screw-HH
29	63-7960	1	Valve-Lift
30	340-71	1	Fitting-Straight, Bulkhead
30:1	237-22	2	O-Ring
31	283-16	1	Pin-Clevis
32	76-4830-03	1	Rod-Valve
33	340-70	1	Nut-Lock
34	70-7530	1	Spring-Compression
35	3272-23	4	Pin-Cotter
36	3256-24	1	Washer-Flat
37	32105-12	1	Screw
38	233-39	2	Knob-Control
39	3256-26	2	Washer-Flat
40	56-7984	1	Protective Sleeve
41	3234-13	1	Screw-HHF
42	66-2670	1	Bracket-Throttle



Sheet No.:9

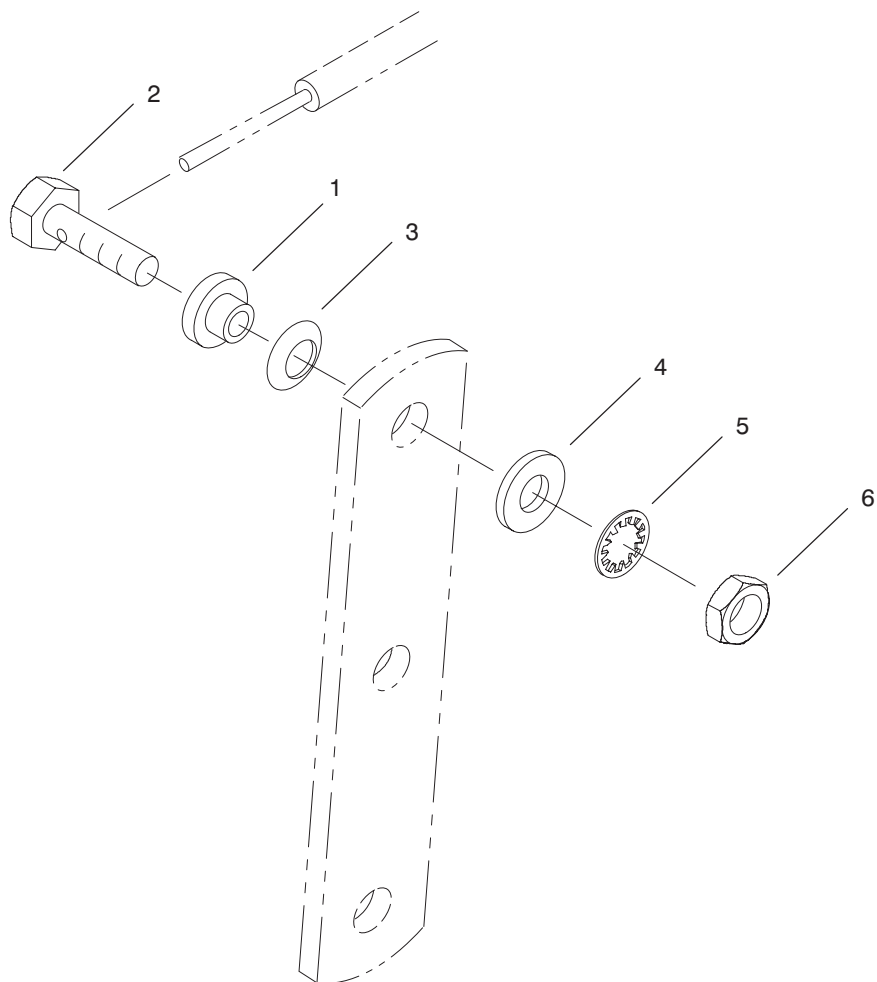
Hydraulic Lift and Throttle Assembly (Continued)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
43	32128-33	1	Nut-HF				
44	3296-39	1	Nut-Lock, NI				
45	66-2920	2	Washer-Friction				
46	71-3500-03	1	Throttle Lever ASM				
47	63-6760	1	Fitting-Connector				
48	105-4288	1	Cable-Throttle				
49	105-0018	1	Hydraulic Hose ASM				
50	105-0019	1	Hydraulic Hose ASM				
51	92-5082	2	Hose-Hydraulic				
52	2412-108	2	Clamp-Worm				
53	94-6968	1	Bracket-Bellcrank, Throttle				
54	94-9421	1	Bellcrank-Throttle				
55	94-9420	1	Link-Throttle				
56	94-9422	3	Screw-Shoulder				
57	3256-51	3	Washer-Flat				

Lift Valve Assembly No. 63-7960

Ref. No.	Part No.	Qty.	Description

17

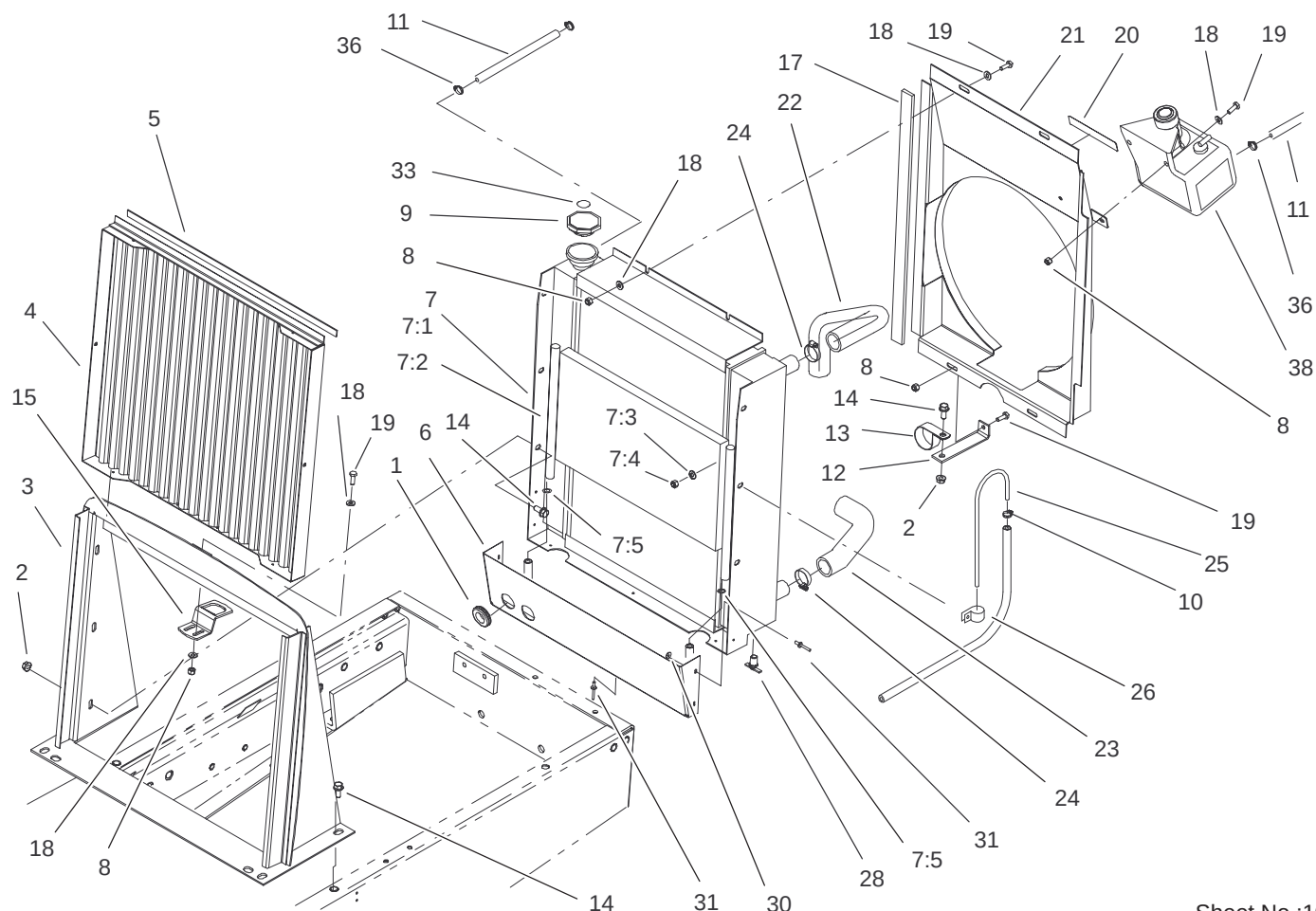


T-3791
Sheet No.:A4

Connector Fitting Assembly No. 63-6760

Ref. No.	Part No.	Qty.	Description
1	67-5100	1	Sleeve-Connector
2	67-5110	1	Screw-Special
3	67-5120	1	Washer-Spring
4	67-5130	1	Washer-Flat
5	67-5140	1	Washer-Lock, Int
6	67-5150	1	Nut-Hex

Ref. No.	Part No.	Qty.	Description

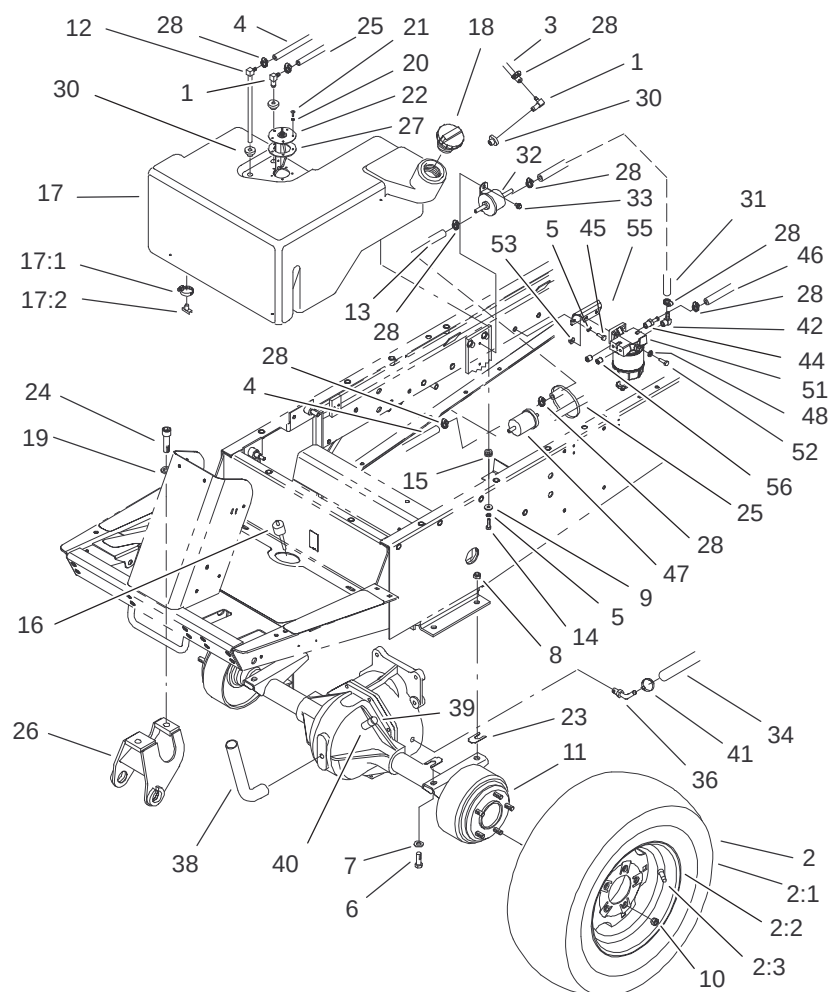


Sheet No.:10

Radiator Assembly

Ref. No.	Part No.	Qty.	Description
1	240-4	2	Grommet-Rubber
2	32128-20	7	Nut-HF
3	104-3489-03	1	Radiator Support ASM
4	104-1727-03	1	Screen ASM
5	63-7710	1	Strip-Magnetic
6	105-0041-03	1	Shield-Radiator, Bottom
7	104-3449	1	Radiator/Oil Cooler ASM
7:1	105-4289	1	Radiator
7:2	105-4290	1	Cooler-Oil
7:3	3253-4	4	Washer-Lock
7:4	3217-6	4	Nut-Hex
7:5	237-22	2	O-Ring
8	3296-42	8	Nut-Lock, NI
9	66-3240	1	Cap-Radiator
10	2412-108	1	Clamp-Worm
11	93-5484	2	Hose
12	105-7847-03	1	Bracket-Filter
13	2412-147	1	Clamp
14	3234-5	9	Screw
15	98-9316	1	Latch-Hood
17	106-4356	2	Strip-Foam
18	3256-22	13	Washer-Flat
19	321-4	8	Screw-HH
20	93-7272	1	Decal-Warning

Ref. No.	Part No.	Qty.	Description
21	105-4261-03	1	Fan Shroud ASM
22	104-3443	1	Hose-Radiator, Upper
23	104-3442	1	Hose-Radiator, Lower
24	2412-34	4	Clamp-Hose
25	66-3180	1	Tube-Vent
26	2412-103	2	Clamp
28	304-46	1	Draincock
30	3269-10	2	Washer-Back
31	3269-13	5	Rivet-Pop
33	106-5976	1	Decal-Cap, Radiator
36	92-2379	3	Clamp-Hose
38	93-5642	1	Reservoir-Coolant

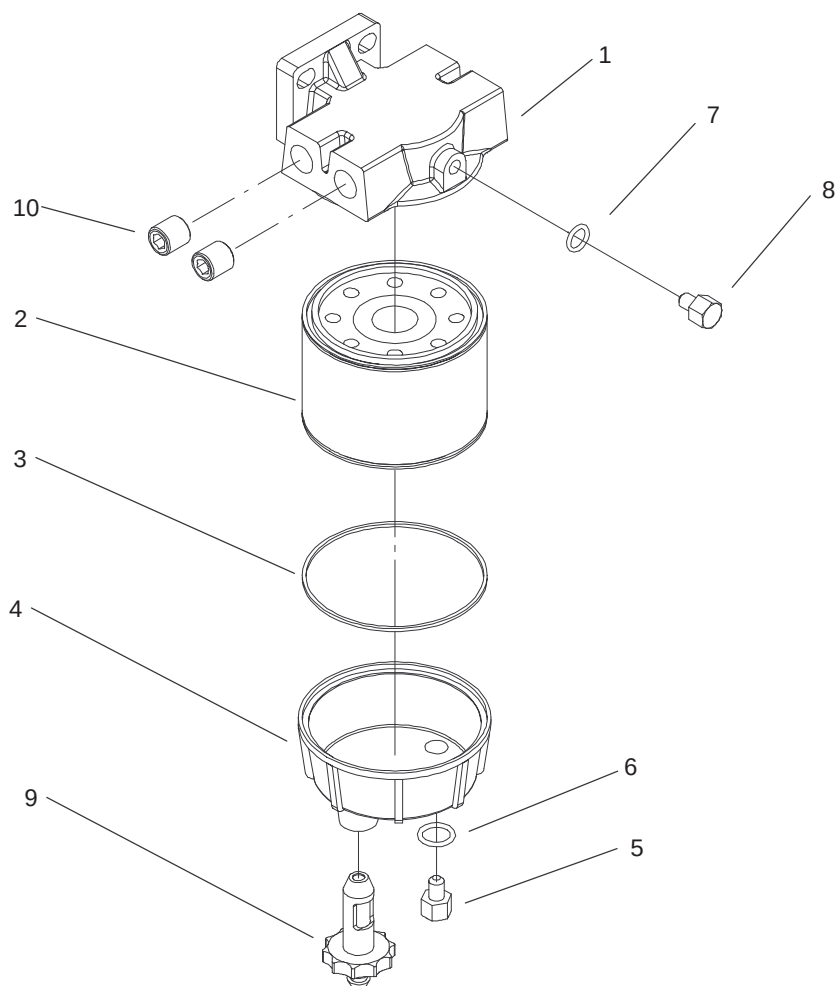


Sheet No.:11

Fuel Tank Assembly

Ref. No.	Part No.	Qty.	Description
1	94-6765	2	Fitting-90°, Barbed
2		2	Tire ASM
2:1	95-3348	1	Tire
2:2	217-117	1	Wheel ASM
2:3	232-27	1	Stem-Valve
3	94-4522	1	Hose-Fuel
4	63-7630	1	Hose-Fuel
5	3253-3	5	Washer-Lock
6	324-5	4	Screw-HH
7	3256-25	4	Washer-Flat
8	3296-48	4	Nut-Lock NI
9	3256-67	3	Washer-Flat
10	23-7270	10	Nut-Wheel
11	92-2377-03	1	Front Axle ASM (only on: 30242)
11	86-9640-03	1	Front Axle ASM (only on: 30241)
12	66-8120	1	Pipe-Stand
13	63-7622	1	Hose-Fuel
14	321-5	3	Screw-HH
15	237-136	3	Grommet
16	105-7172	1	Dipstick ASM
17	98-5001	1	Tank-Fuel
17:1	2412-36	1	Clamp-Hose
17:2	304-46	1	Draincock

Ref. No.	Part No.	Qty.	Description
18	93-3102	1	Cap-Fuel
19	3253-8	4	Washer-Lock
20	3253-15	5	Washer-Lock/Sp
21	32122-24	5	Screw-Pth
22	63-7640	1	Sender-Fuel
23	42-6080	1	Shim-Axle
24	3273-38	4	Screw-HSH
25	105-0020	1	Hose-Fuel
26	98-2328-03	2	Bracket-Carrier
27	62-7650	1	Gasket
28	2412-108	7	Clamp-Worm
30	46-6560	3	Bushing
31	63-7620	1	Hose-Fuel
32	104-5215	1	Pump-Fuel, Electric
33	3234-26	2	Screw
34	92-5083	1	Hose-Hydraulic
36	92-5088	1	Fitting-45°, Barbed
38	105-7169	1	Tube-Oil Fill
39	2810-1	1	Coupling
40	289-6	1	Nipple-Pipe
41	2412-34	1	Clamp-Worm
42	353-781	1	Fitting
44	353-783	1	Fitting
45	321-4	2	Screw-HH
46	63-7627	1	Hose-Fuel

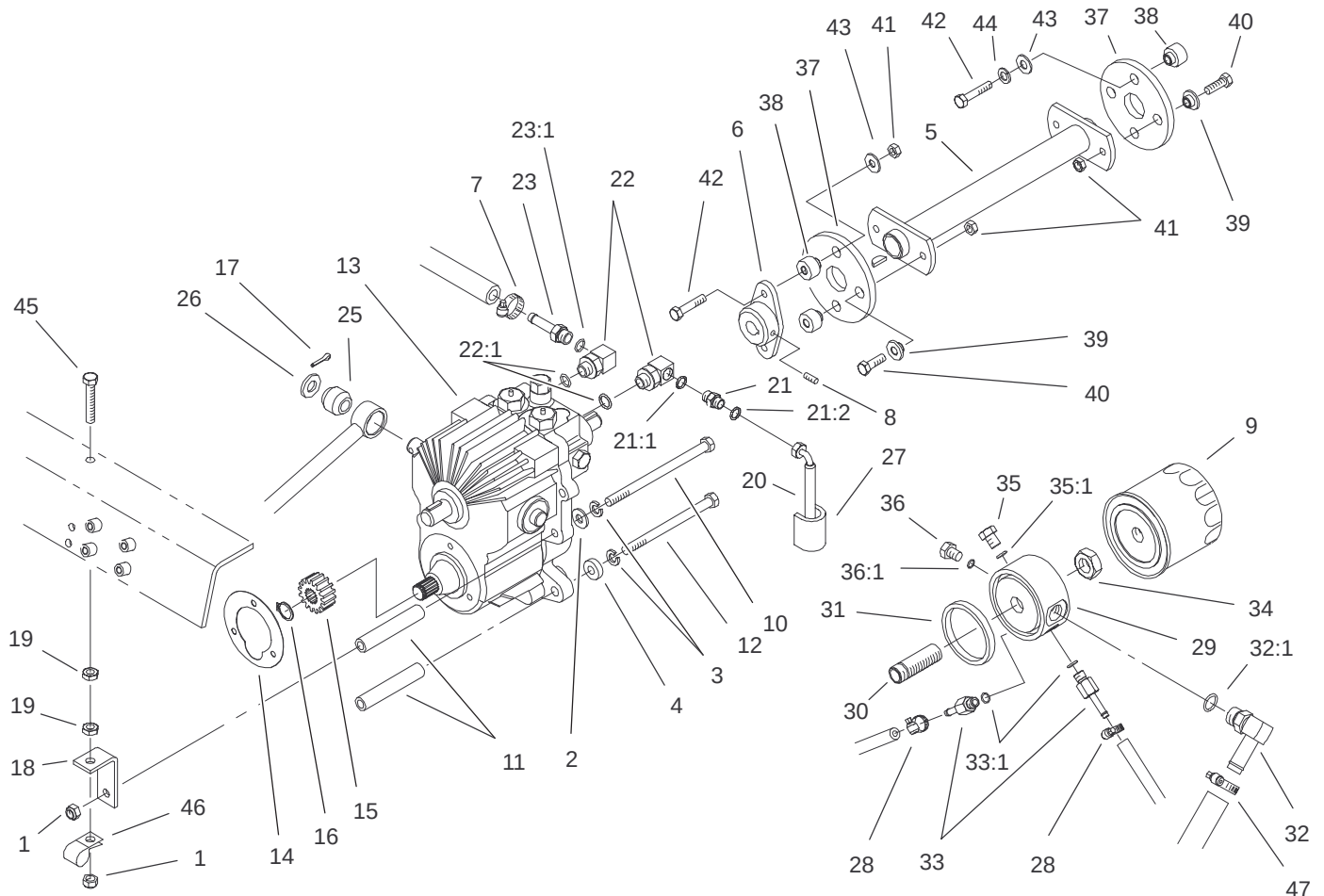


T-3330
Sheet No.:A6

Water and Fuel Filter Assembly No. 98-9305

Ref. No.	Part No.	Qty.	Description
1	98-9772	1	Head-Filter
2	98-9764	1	Element
3	98-9774	1	O-Ring-Base, Filter
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

Ref. No.	Part No.	Qty.	Description

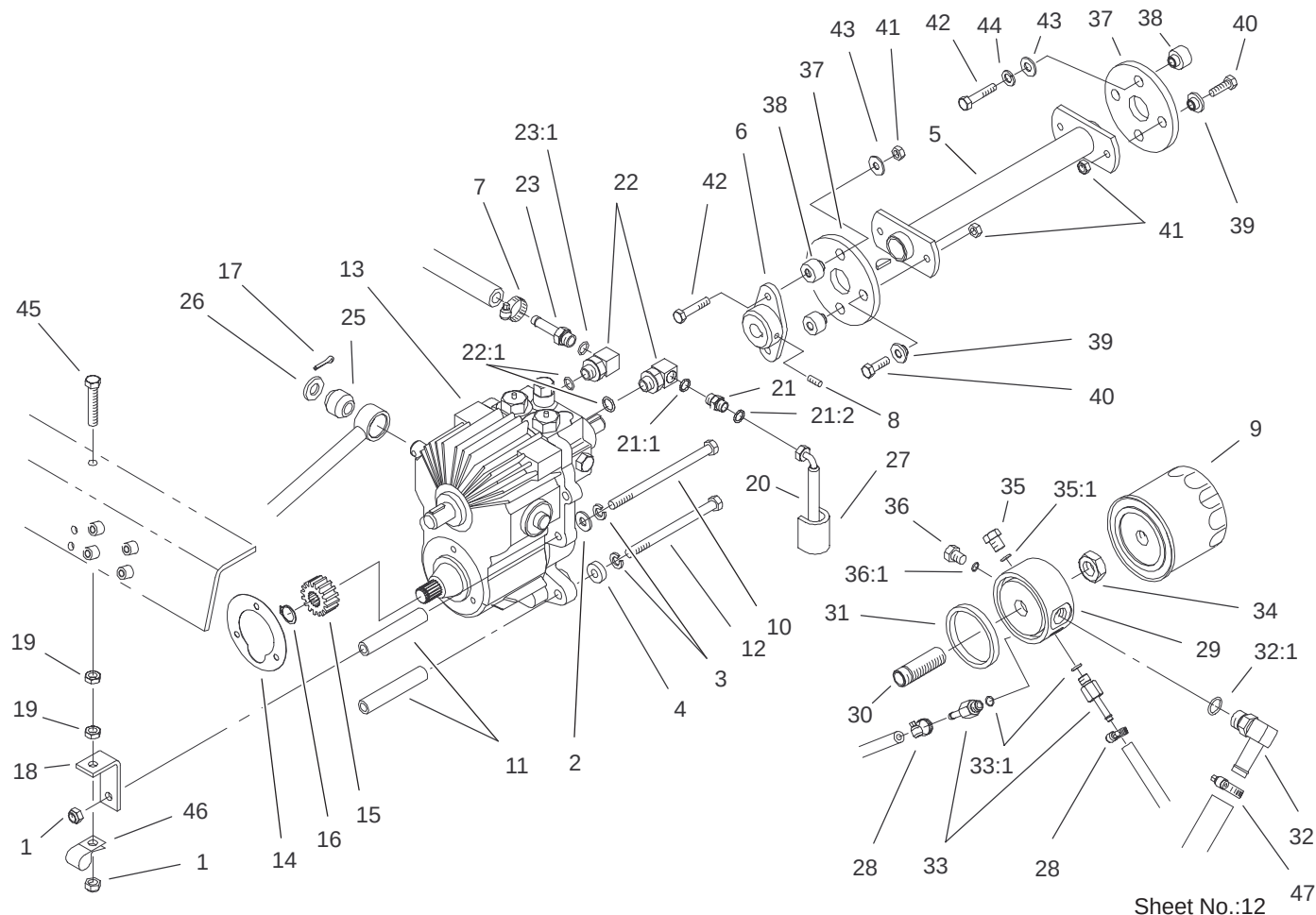


Sheet No.:12

Transmission and Drive Coupling Assembly

Ref. No.	Part No.	Qty.	Description
1	3296-39	2	Nut-Lock, NI
2	3256-24	1	Washer-Flat
3	3253-21	4	Washer-Lock
4	5-0652	1	Spacer
5	104-3401-03	1	Drive Shaft ASM
6	27-4370	1	Hub-Pump
7	2412-36	1	Clamp-Hose
8	3241-6	2	Screw-SQH
9	23-2300	1	Filter-Oil, Transmission
10	27-9620	1	Screw-HH
11	27-3680	4	Spacer-Mounting
12	323-39	3	Screw-HH
13	92-5513	1	Transmission
14	27-3690	1	Gasket-Transmission
15	86-7220	1	Gear-Pinion
16	32120-72	1	Ring-Snap
17	3272-10	1	Pin-Cotter
18	63-7170	1	Anchor-Transmission
19	3218-3	2	Nut-Jam
20	66-8490	1	HYD Hose ASM
21	82-8530	1	Fitting-HYD, Special
21:1	237-42	1	O-Ring
21:2	237-22	1	O-Ring
22	66-3110	2	Fitting-HYD, 90°
22:1	237-65	1	O-Ring

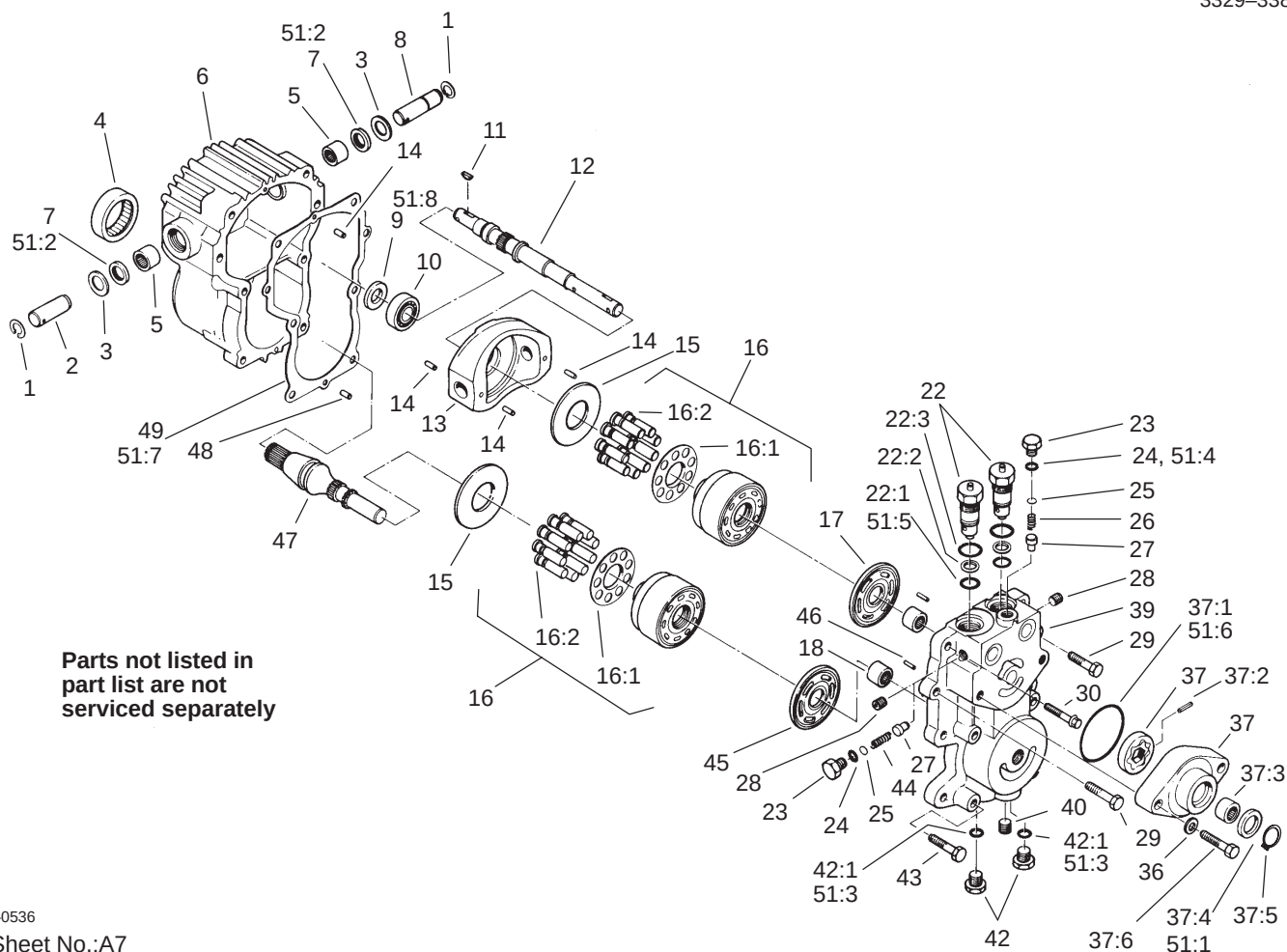
Ref. No.	Part No.	Qty.	Description
23	353-979	1	Fitting-Barbed, Straight
23:1	237-42	1	O-Ring
25	23-2270	1	Bushing-Rubber
26	3256-26	1	Washer-Flat
27	38-3400	1	Guard-Rubber
28	2412-108	2	Clamp-Worm
29	92-5076	1	Adapter-Filter
30	92-5085	1	Union-Filter
31	92-5087	1	Seal-Adapter, Filter
32	92-5086	1	Fitting-HYD, 90°
32:1	237-79	1	O-Ring
33	92-5512	2	Fitting-Hose, Barbed
33:1	237-78	1	O-Ring
34	3220-7	1	Nut-Jam
35	353-990	1	Plug
35:1	237-78	1	O-Ring
36	353-988	1	Plug-Hex, Hollow
36:1	237-79	1	O-Ring
37	44-2230	2	Coupling-Rubber
38	27-6590	4	Spacer-Coupling, Rubber
39	27-6600	4	Spacer-Coupling
40	3210-5	4	Screw-HH
41	32152-5	6	Nut-Conelock
42	3210-8	4	Screw-HH



Transmission and Drive Coupling Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
43	3256-71	4	Washer-Flat
44	42-9850	2	Washer-Lock, Spring
45	67-1900	1	Screw-HH
46	2412-4	1	Clamp
47	2412-119	1	Clamp-Worm

Ref. No.	Part No.	Qty.	Description



T-0536

Sheet No.:A7

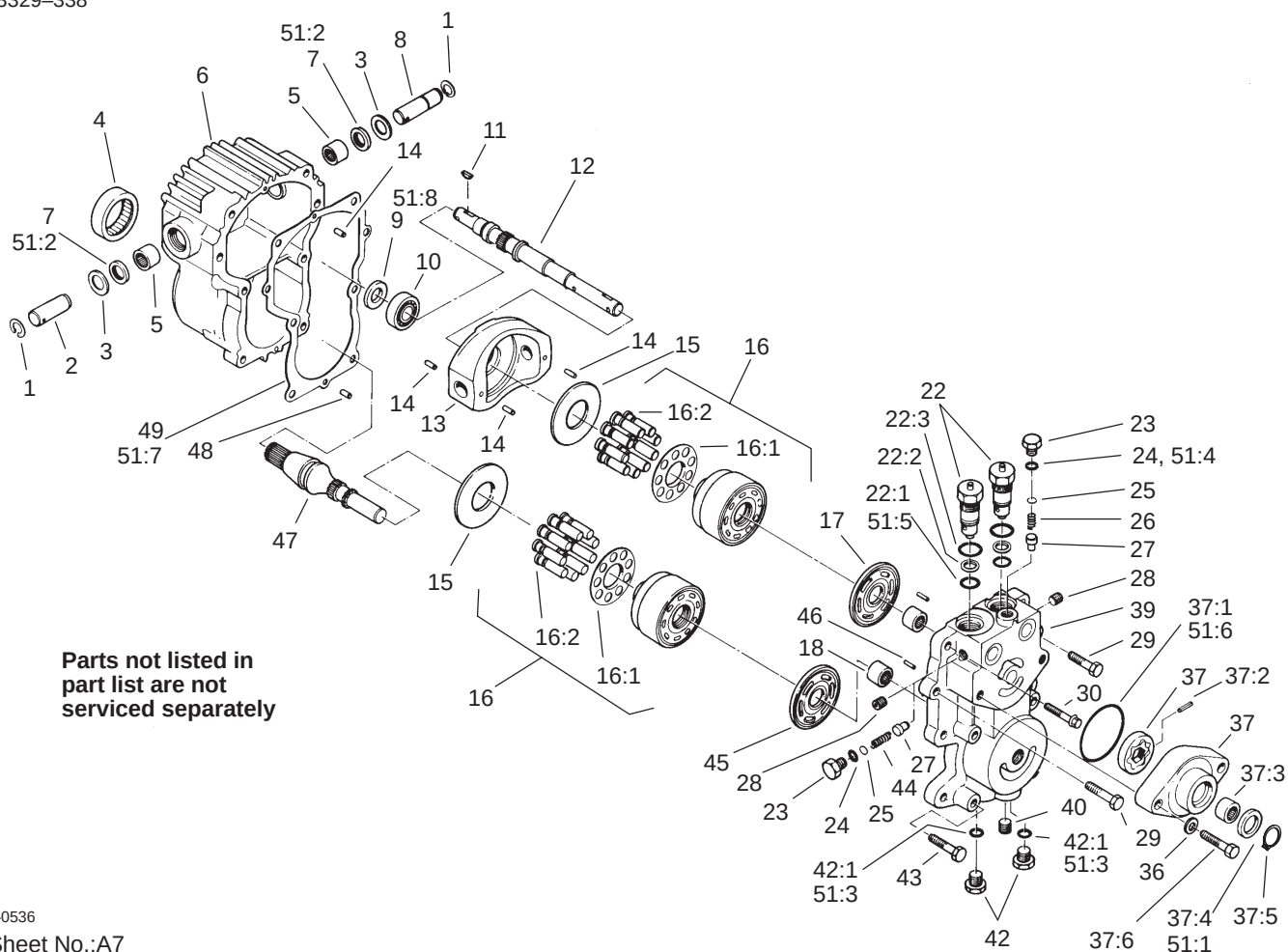
Transmission Assembly No. 92-5513

Ref. No.	Part No.	Qty.	Description
1	32151-46	2	Ring-Retaining
2	25-2500	1	Shaft-Trunnion
3	25-2510	2	Washer-Flat
4	28-3300	1	Bearing-Roller
5	252-82	2	Bearing-Needle
6	92-5709	1	Housing-Transmission
7	25-3210	2	Seal-Lip
8	28-3670	1	Shaft-Trunnion
9	93-4133	1	Seal-Lip
10	28-3650	1	Bearing-Ball
11	3257-5	2	Key-Woodruff
12	28-3640	1	Shaft-Pump
13	49-7820	1	Swashplate-Variable
14	32121-91	3	Pin-Spring, Coil
15	25-2380	2	Plate-Thrust
16	48-1800	2	Cylinder Block Kit
☆16:1		1	Retainer-Slipper
☆16:2		9	Piston ASM
17	46-7320	1	Plate-Valve, Pump
18	25-3300	2	Bearing-Needle
22	49-7830	2	Check Valve Kit
22:1	28-3590	2	O-Ring
22:2	28-3580	2	Ring-Back Up
22:3	28-3570	2	O-Ring
23	25-2460	2	Plug-HH
24	28-3400	2	O-Ring

Ref. No.	Part No.	Qty.	Description
25	25-2470	1	Pack-Shim
26	46-7310	1	Spring
27	83-7260	2	Cone-Relief, Charge
28	285-17	4	Plug-Pipe
29	323-8	2	Screw-HH
30	28-3530	2	Capscrew
36	28-3450	2	Washer
37	38-2670	1	Charge Pump Kit
37:1	28-3520	1	O-Ring
37:2	38-2680	1	Pin
37:3	28-3480	1	Bearing
37:4	94-2975	1	Seal-Shaft
37:5	94-2976	1	Ring-Retaining
37:6	324-23	2	Screw-HH
39	92-5716	1	Section-Center
40	92-5717	1	Plug-Pipe
42	28-3440	2	Plug-Threaded
42:1	75-0240	1	O-Ring
43	323-10	4	Screw-HH
44	25-2480	1	Spring-Valve
45	28-3380	1	Plate-Valve, Motor
46	25-2430	2	Pin-Dowel
47	49-8200	1	Shaft-Motor
48	353-599	2	Pin-Dowel
49	28-3340	1	Gasket
*51	106-4384	1	Seal Kit (15 Series)

☆ Not serviced separately

* Not illustrated



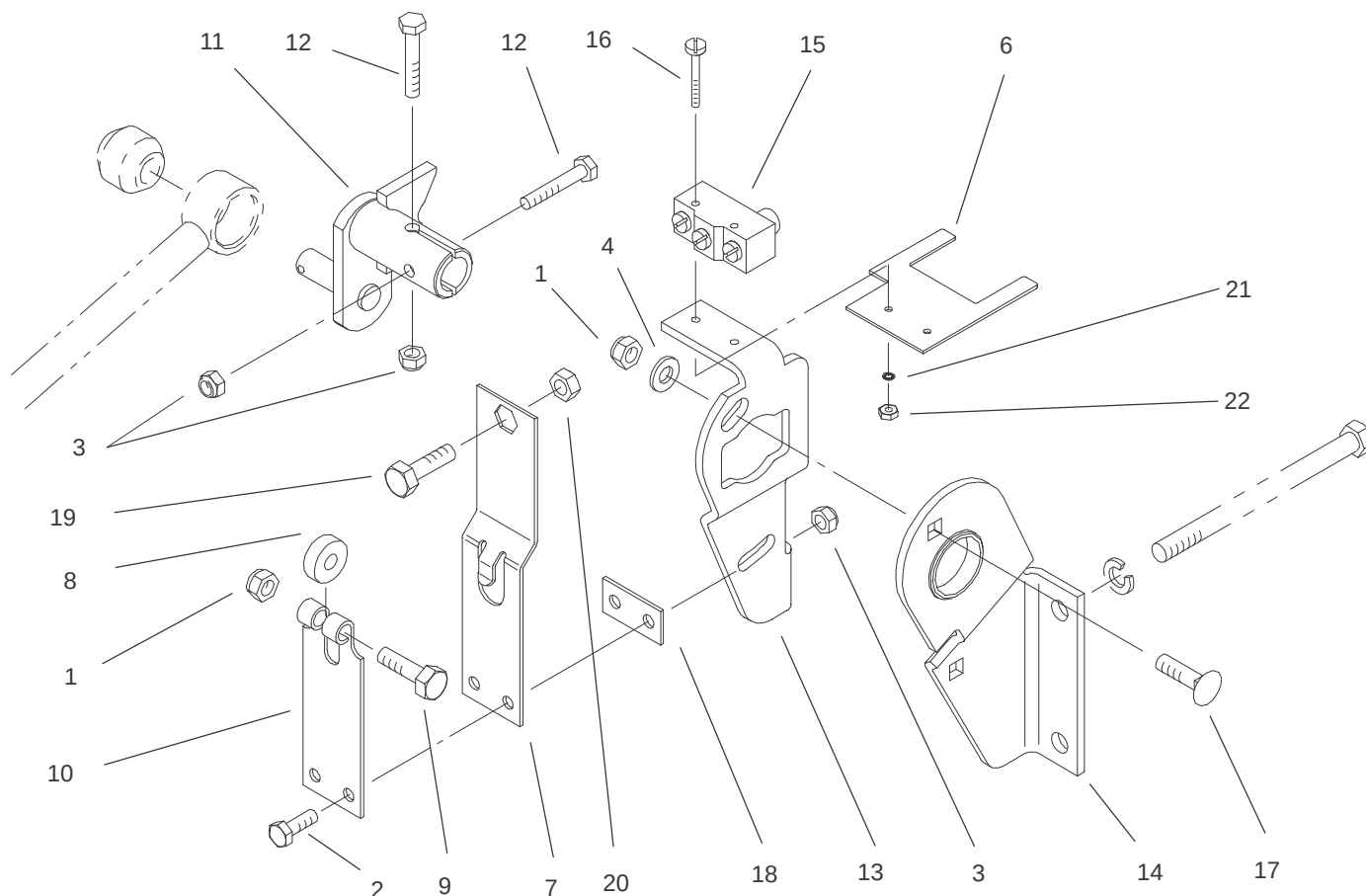
T-0536

Sheet No.:A7

Transmission Assembly No. 92-5513 (Continued)

Ref. No.	Part No.	Qty.	Description
51:1	94-2975	2	Seal-Shaft
51:2	25-3210	2	Seal-Lip
51:3	75-0240	2	O-Ring
51:4	28-3400	2	O-Ring
51:5	28-3590	2	O-Ring
51:6	28-3520	1	O-Ring
51:7	28-3340	1	Gasket
51:8	93-4133	1	Seal-Lip

Ref. No.	Part No.	Qty.	Description

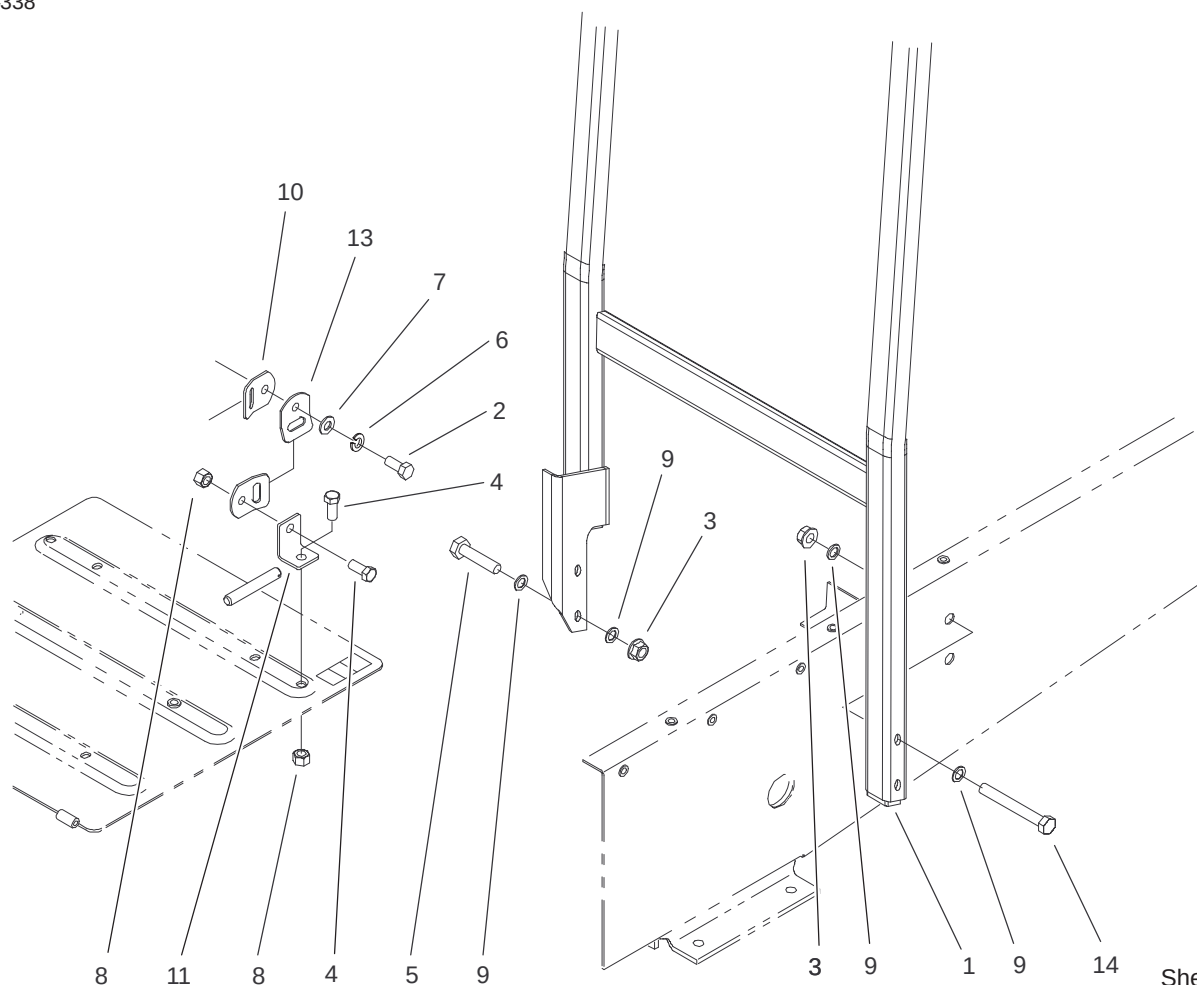


Sheet No.:13

Transmission Interlock Assembly

Ref. No.	Part No.	Qty.	Description
1	3296-29	3	Nut-Lock, NI
2	321-4	2	Screw-HH
3	3296-42	4	Nut-Lock, NI
4	3256-23	2	Washer-Flat
6	46-8810	1	Stop-Spring, Leaf
7	29-6170	1	Leaf Spring ASM
8	251-259	1	Bearing
9	322-17	1	Screw-HH
10	29-6150	1	Spring-Leaf
11	29-9790-03	1	Lever-Pump
12	321-9	2	Screw-HH
13	52-9070	1	Plate-Pump
14	52-8890-03	1	Bracket-Mounting
15	29-6163	1	Switch-Micro
16	3249-11	2	Screw
17	3230-2	2	Bolt-CARR
18	51-3150	1	Shim
19	3210-7	1	Screw-HH
20	3219-2	1	Nut-Hex
21	3254-9	2	Washer-Lock/Int
22	3217-16	2	Nut-Hex

Ref. No.	Part No.	Qty.	Description

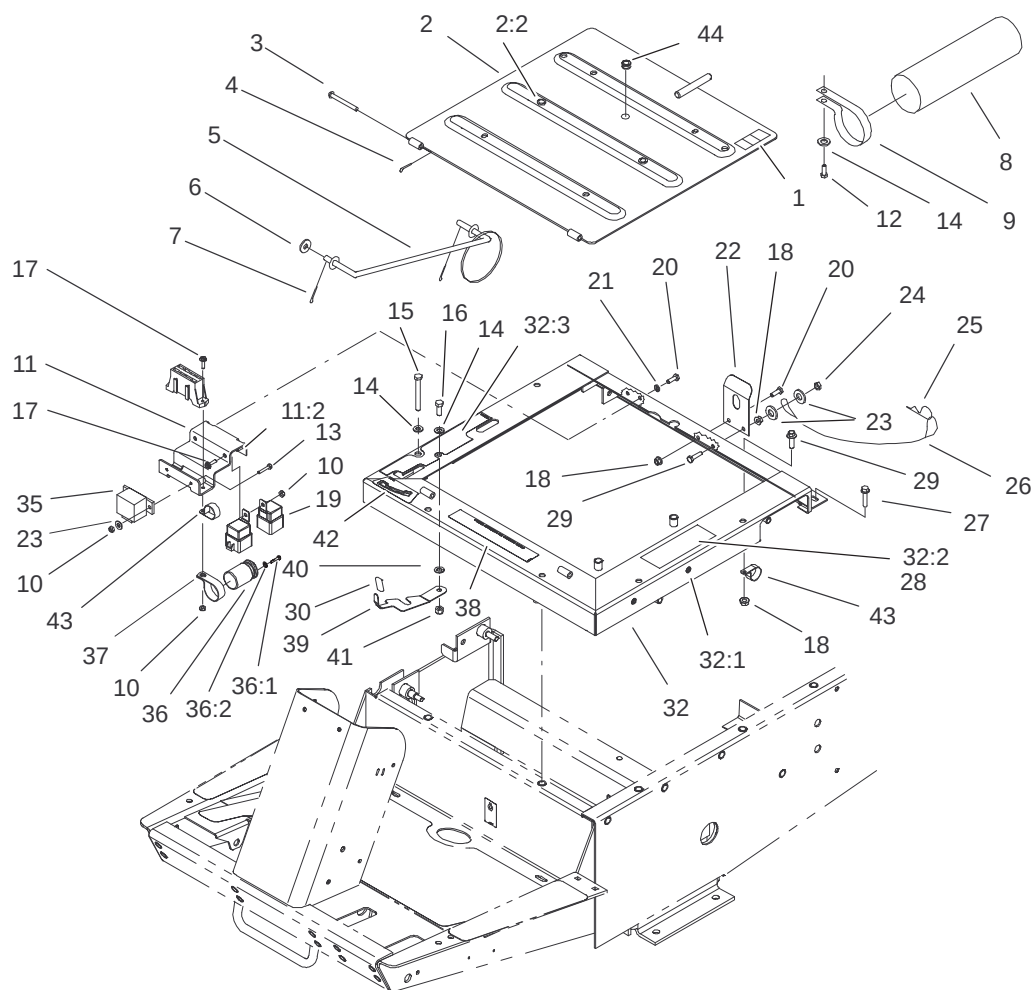


Sheet No.:14

**(ROPS) Roll-Over-Protection-System Assembly
(only on: 30242)**

Ref. No.	Part No.	Qty.	Description
1	100-6579-03	1	Roll Bar ASM
2	3212-4	2	Screw-HH
3	32128-23	4	Nut-HF
4	324-4	4	Screw-HH
5	325-9	2	Screw-HH
6	3253-6	2	Washer-Lock
7	3256-25	2	Washer-Flat
8	3296-48	4	Nut-Lock NI
9	41-8440	8	Washer
10	72-9390	1	Belt-Seat
11	92-5515	2	Mount-Strap, Tether
13	92-5521	2	Strap-Tether
14	325-17	2	Screw-HH

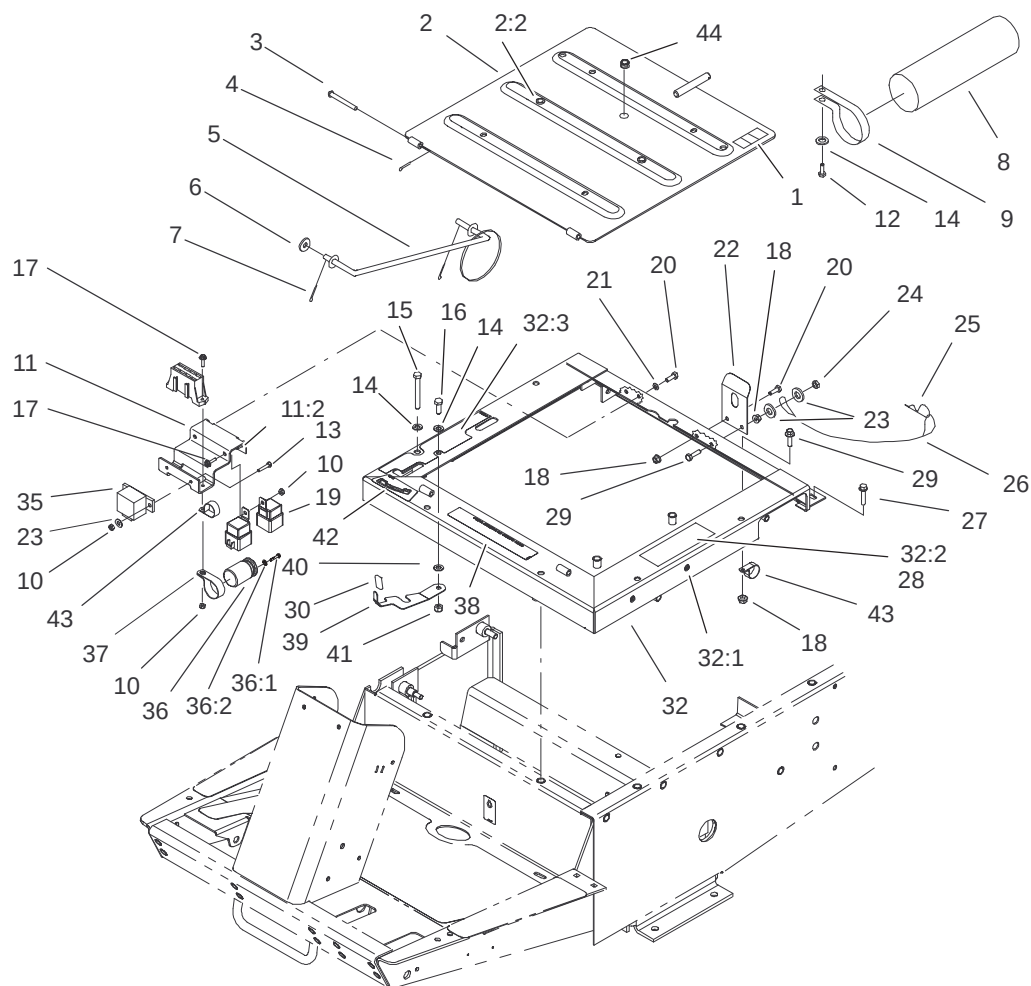
Ref. No.	Part No.	Qty.	Description



Sheet No.:15

Seat Frame Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	93-6680	1	Decal-Diesel	24	3296-56	1	Nut-Lock, NI
2	92-5759	1	Plate-Seat	25	3290-255	1	Pin-Hair
2:2	32148-9	2	Insert-Nut	26	28-8070	1	Lanyard
3	283-49	2	Pin-Clevis	27	3234-17	2	Screw-HHF
4	3272-4	2	Pin-Cotter	28	93-7841	1	Decal-Warning, Intl
5	66-2800-03	1	Rod-Support	29	321-5	2	Screw-HH
6	3256-24	1	Washer-Flat	30	100-6576	1	Grip-Handle
7	3272-11	2	Pin-Cotter	32	92-8877	1	Seat Frame ASM
8	74-0720	1	Tube-Manual	32:1	32148-6	4	Insert-Nut
9	2412-133	2	R-Clamp	32:2	67-1710	1	Decal-Warning
10	3296-12	6	Nut-Lock	32:3	93-7833	1	Decal-Throttle And Lift Control
11	105-0036	1	Fuse Block Bracket ASM	35	66-8800	1	Relay
11:2	32148-6	2	Insert-Nut	36	37-2690	1	Capacitor
12	322-5	2	Screw-HH	36:1	3252-18	2	Screw
13	32105-12	2	Screw	36:2	3254-1	2	Washer-Lock, Internal
14	3256-23	9	Washer-Flat	37	2412-74	1	R-Clamp
15	322-13	6	Screw-HH	38	105-2511	1	Decal-Instructions, Starting (Int'l)
16	322-4	1	Screw-HH	38	105-2509	1	Decal-Instructions, Starting
17	32105-13	4	Screw-SHH	39	100-6551	1	Latch-Spring
18	32128-33	3	Nut-HF	40	3256-2	1	Washer-Flat
19	70-1480	4	Relay	41	3296-29	1	Nut-Lock, NI
20	321-4	3	Screw-HH	42	100-6577	1	Decal-Lock, Lift
21	3253-3	2	Washer-Lock	43	2412-106	2	Clamp-R
22	66-2630	1	Latch-Seat				
23	3256-22	3	Washer-Flat				

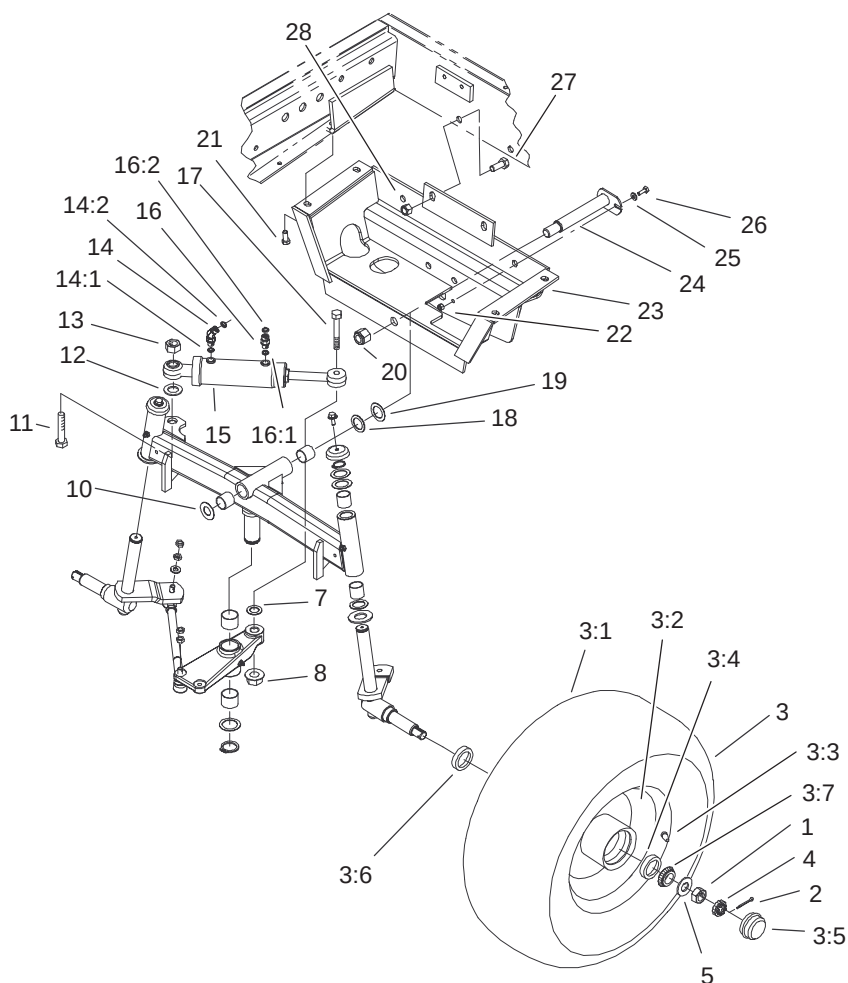


Sheet No.:15

Seat Frame Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
44	240-5	1	Grommet

Ref. No.	Part No.	Qty.	Description

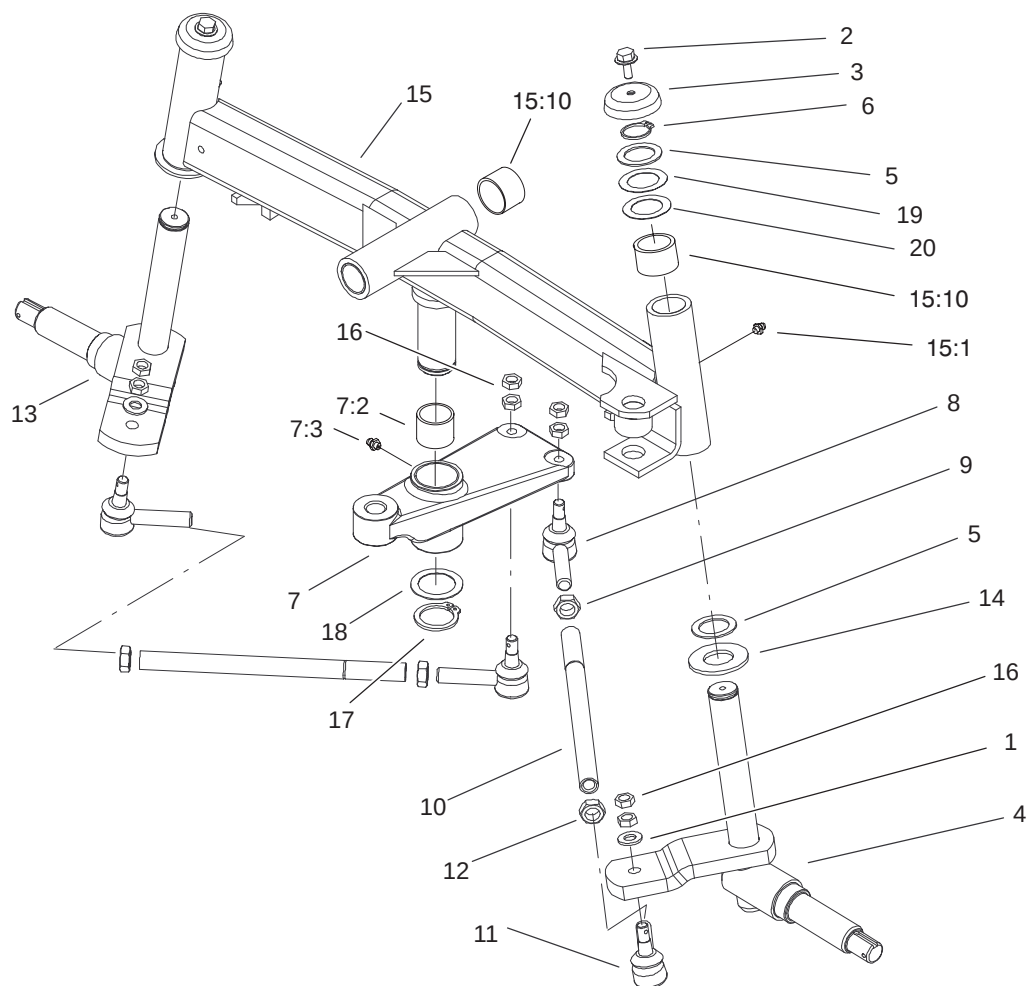


Sheet No.:16

2 WD Rear Axle Assembly (only on: 30241)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	3220-7	2	Nut-Jam	18	10-8110	1	Washer-Thrust
2	3272-13	2	Pin-Cotter	19	56-2460	2	Washer-Flat
☆3		2	Wheel And Tire ASM	20	3296-51	1	Nut-Lock, NI
3:1	231-105	1	Tire	21	3234-25	4	Bolt-HF
3:2	217-118	1	Rim	22	3296-42	1	Nut-Lock, NI
3:3	232-35	1	Stem-Valve	23	63-6430-03	1	Frame-Rear
3:4	254-72	2	Bearing-Cup, Tapered	24	63-6770-03	1	Pin-Masked
3:5	241-119	1	Cap-Dust	25	3256-22	1	Washer-Flat
3:6	253-129	1	Seal	26	321-4	1	Screw-HH
3:7	254-94	2	Bearing-Cone, Taper	27	325-5	2	Screw-HH
4	93-0307	2	Nut-Lock, Retainer	28	3296-25	2	Nut-Lock, NI
5	93-0309	2	Washer-Tab				
7	67-9410	1	Washer				
8	32128-45	1	Locknut-Flange				
10	71-4540	1	Washer-Thrust				
11	67-7300	1	Screw-HH				
12	67-7250	1	Spacer-Ring				
13	32153-6	1	Locknut				
14	340-103	1	Fitting-HYD, 45°				
14:1	237-78	1	O-Ring				
14:2	237-21	1	O-Ring				
15	76-2070	1	Cylinder-Steering				
16	340-92	1	Fitting-HYD, Straight				
16:1	237-78	1	O-Ring				
16:2	237-21	1	O-Ring				
17	328-25	1	Screw-HH				

☆ Not serviced separately

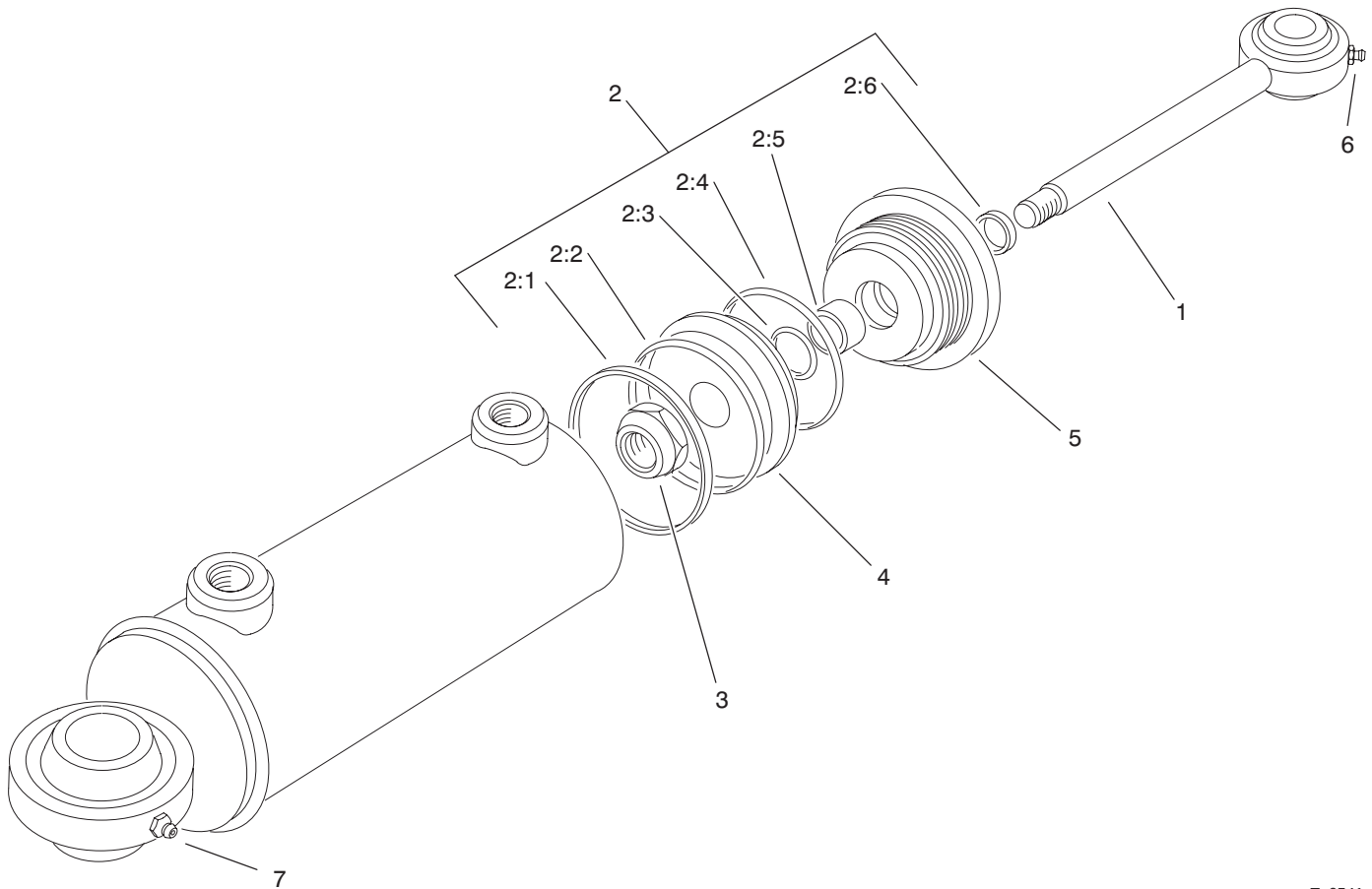


Sheet No.:A8

Axle Assembly (only on: 30241)

Ref. No.	Part No.	Qty.	Description
1	3256-24	2	Washer-Flat
2	3234-13	2	Screw-HHF
3	66-2990	2	Cap-Spindle
4	93-3196	1	RH Spindle ASM
5	10-8110	4	Washer-Thrust
6	32151-36	2	Ring-Retaining
7	100-6598	1	Steering Pivot ASM
7:2	76-2970	2	Bushing-Straight
7:3	302-5	1	Fitting-Grease
8	21-0151	2	LH Ball Joint ASM
9	3220-12	2	Nut-HJ, LH Thread
10	63-6880	2	Tie Rod-Steering
11	21-0141	2	RH Ball Joint ASM
12	3220-5	2	Nut-Jam
13	93-3195	1	LH Spindle ASM
14	256-121	2	Washer-Thrust
15	76-3000	1	Axle-Rear
15:1	302-5	3	Fitting-Grease
15:10	67-1750	6	Bushing
16	3220-3	8	Nut-Jam
17	32151-77	1	Ring-Retaining, Ext
18	76-2980	1	Washer-Thrust
19	56-2460	2	Washer-Flat
20	5-1226	2	Washer

Ref. No.	Part No.	Qty.	Description



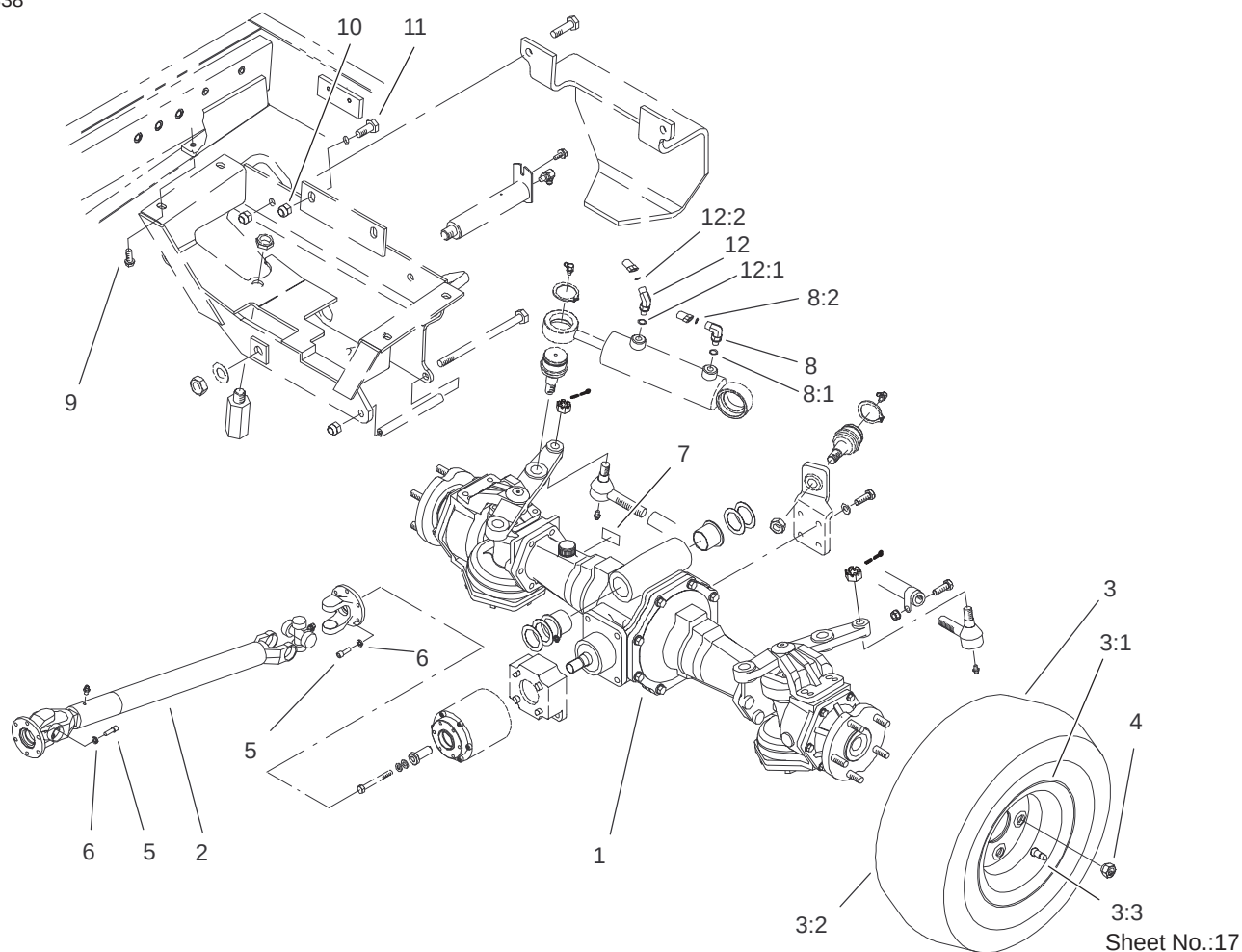
T-0541
Sheet No.:A9

Steering Cylinder Assembly No. 76-2070 (only on: 30241)

Ref. No.	Part No.	Qty.	Description
☆1	76-2090	1	Rod-Piston
2		1	Seal Kit
☆2:1		1	Seal
☆2:2		1	O-Ring
☆2:3		1	O-Ring
☆2:4		1	O-Ring
☆2:5		1	U-Cup
☆2:6		1	Wiper
☆3		1	Nut-Lock
☆4		1	Piston
☆5	302-40	1	Gland
6		1	Fitting-Grease
7	302-5	1	Fitting-Grease

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

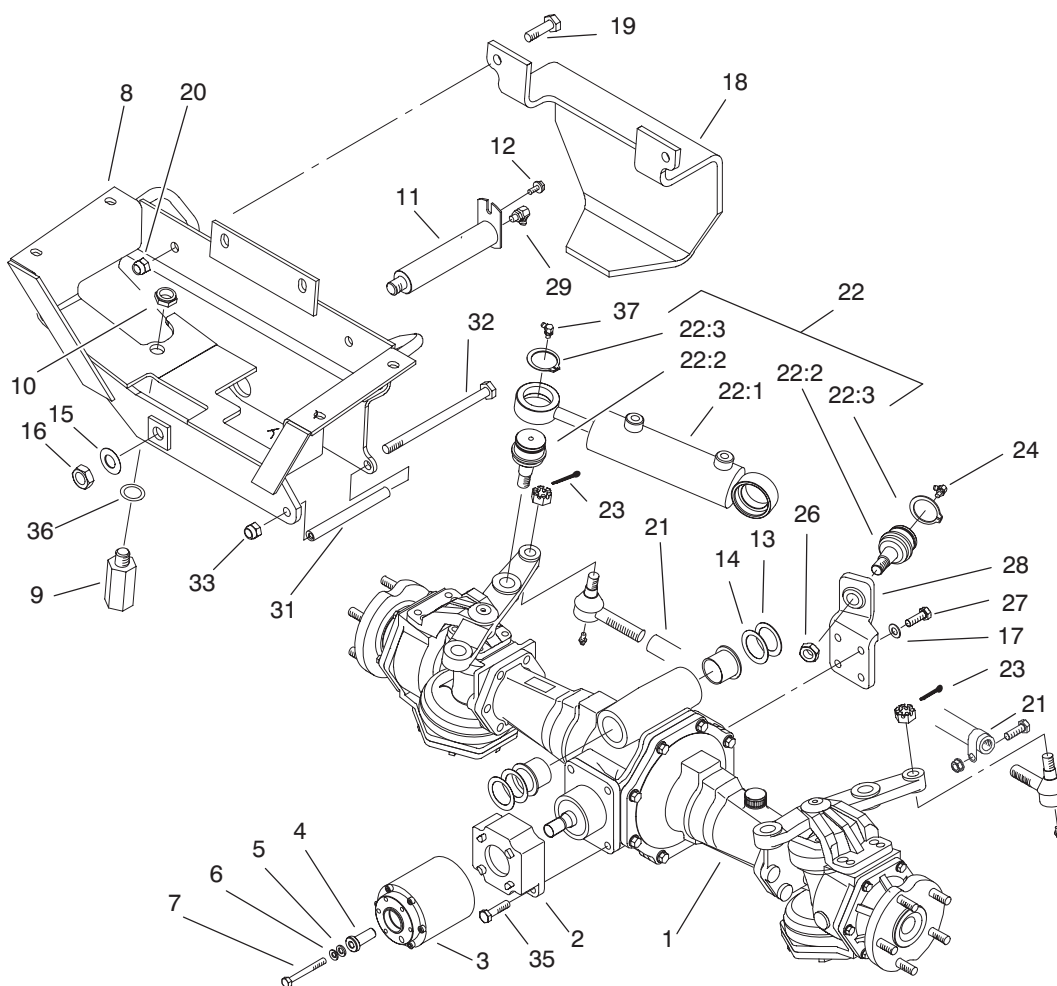


4 WD Rear Axle Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description
☆1		1	Rear Axle ASM
2	98-5009	1	Driveshaft ASM
☆3		2	Tire And Wheel ASM
3:1	105-7846	1	Wheel
3:2	231-122	1	Tire
3:3	232-27	1	Stem-Valve
4	93-5268	10	Nut-Lug
5	3274-64	12	Screw-HSH
6	3253-3	12	Washer-Lock
7	93-6697	1	Decal-Lube
8	340-132	1	Fitting-HYD, 90°
8:1	237-78	1	O-Ring
8:2	237-21	1	O-Ring
9	3234-25	4	Bolt-HF
10	3296-25	2	Nut-Lock, NI
11	325-5	2	Screw-HH
12	340-103	1	Fitting-HYD, 45°
12:1	237-78	1	O-Ring
12:2	237-21	1	O-Ring

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

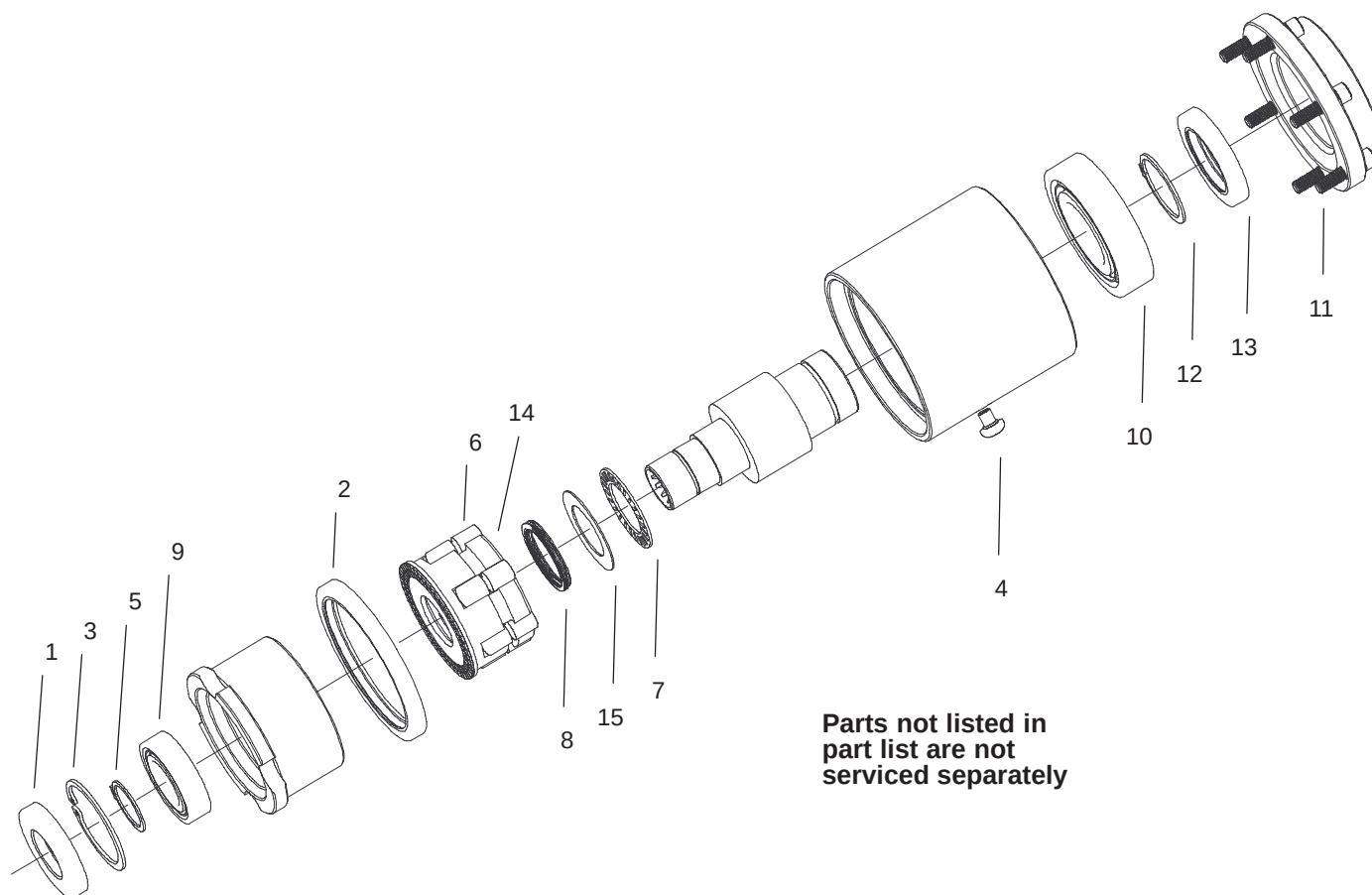


Sheet No.:B6

Rear Axle Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	95-7501	1	Rear Axle ASM	23	3272-11	2	Pin-Cotter
2	98-3860-03	1	Adaptor-Locator, Clutch	24	302-11	1	Fitting-Lube, 45°
3	95-6296	1	Clutch-Bidirectional	26	3220-6	4	Nut-Jam
4	99-8436	1	Spacer-Clutch	27	95-8812	4	Screw-HH
5	33094-00	1	Washer-Flat	28	98-3862-03	1	Bracket-Support, Cylinder
6	3253-4	1	Washer-Lock	29	302-33	1	Fitting-Grease
7	33114-070	1	Screw-HH	31	99-2404-03	1	Stop-Rear Axle, LH
8	105-4295-03	1	Axle Support ASM	32	325-36	1	Screw-HH
9	98-3863	1	Stop-Oscillation	33	3296-23	1	Nut-Lock, NI
10	3296-15	1	Nut-Lock NI	35	87-3700	2	Screw-HH
11	99-8434-03	1	Rear Axle Pin ASM	36	3256-28	1	Washer-Flat
12	32144-14	1	Screw-HWH	37	302-5	1	Fitting-Grease
13	99-8431	1	Washer-Thrust				
14	99-8432	1	Washer-Thrust				
15	71-4540	1	Washer-Thrust				
16	32146-20	1	Nut-Jam				
17	48-9220	4	Washer				
18	99-2405	1	Bumper-Rear				
19	325-5	2	Screw-HH				
20	3296-25	2	Nut-Lock, NI				
21	98-3871	1	Tie Rod ASM				
★22		1	Steering Cylinder ASM				
22:1	99-2415	1	Cylinder-Hydraulic				
22:2	92-5838-01	2	Joint-Ball				
22:3	32151-104	2	Ring-Retaining, Ext				

★ Not serviced separately



**Parts not listed in
part list are not
serviced separately**

T-3802
Sheet No.:B7

Bi-Directional Clutch Assembly No. 95-6296 (only on: 30242)

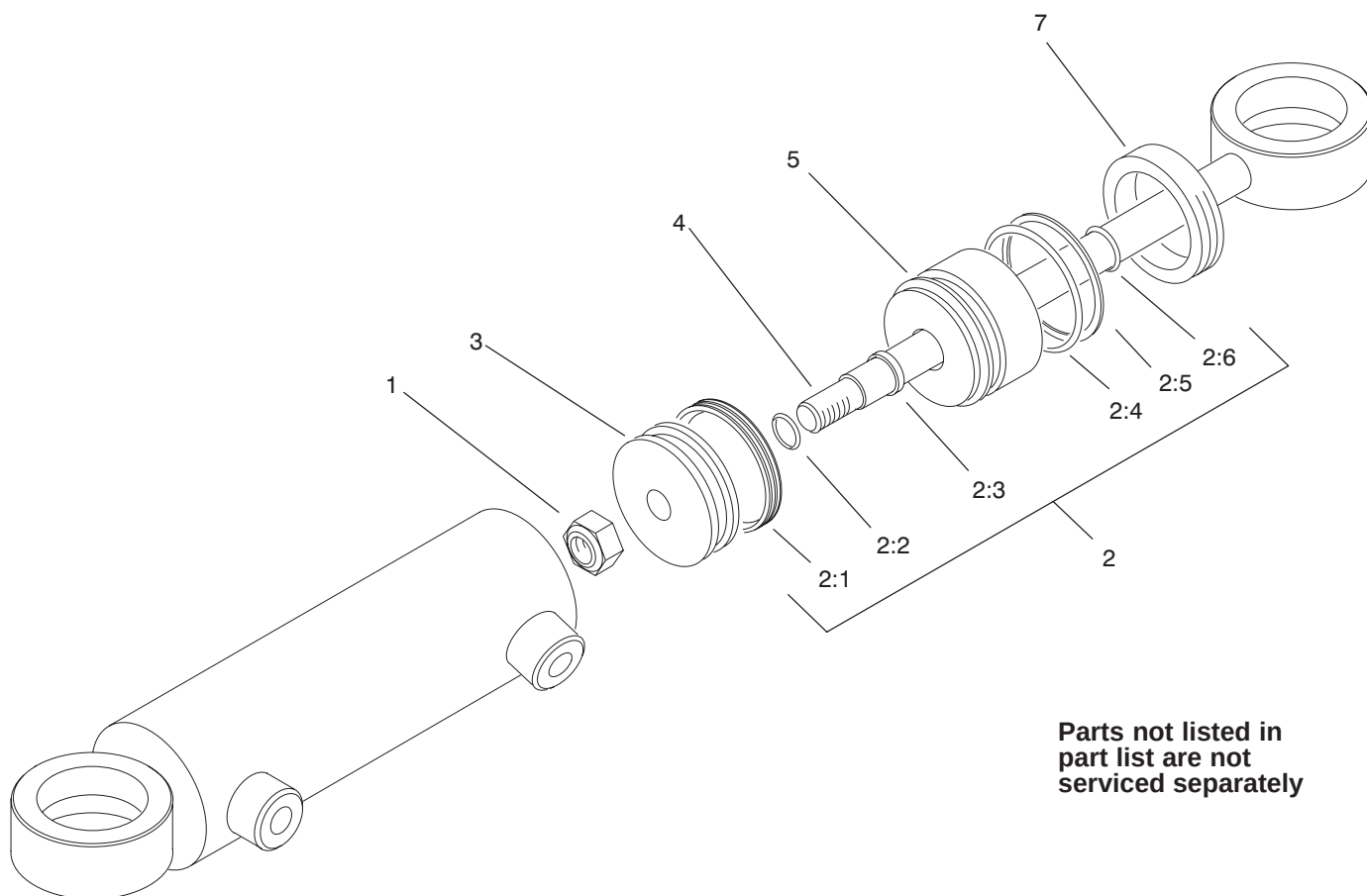
Ref. No.	Part No.	Qty.	Description
1	100-6589	1	Seal-Oil
2	100-6593	1	Seal-Oil
3	100-6594	1	Ring-Snap, Internal
4	100-6596	1	Screw-PPH
5	100-6597	1	Ring-Snap, External
6	93-8925	6	Roller
7	93-8919	1	Bearing-Needle, Thrust
8	93-8923	1	Spring-Wave
9	99-2902	1	Bearing
10	92-9705	1	Bearing
11	3245-6	6	Screw-HSH
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

Ref. No.	Part No.	Qty.	Description

Tie Rod Assembly No. 98-3871 (only on: 30242)

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

Ref. No.	Part No.	Qty.	Description



**Parts not listed in
part list are not
serviced separately**

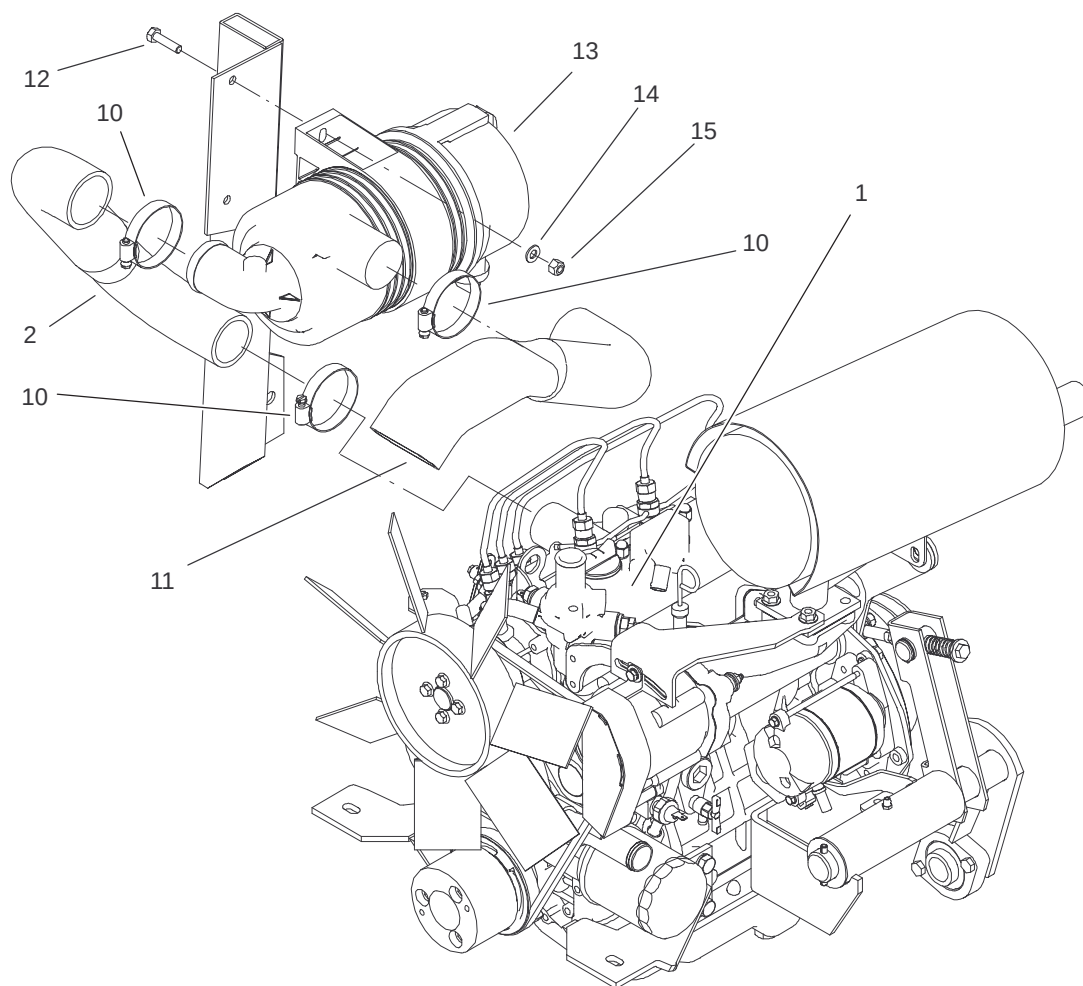
T-3111
Sheet No.:B9

Cylinder Assembly No. 99-2415 (only on: 30242)

Ref. No.	Part No.	Qty.	Description
1	32152-10	1	Locknut
2	86-5390	1	Seal Repair 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

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

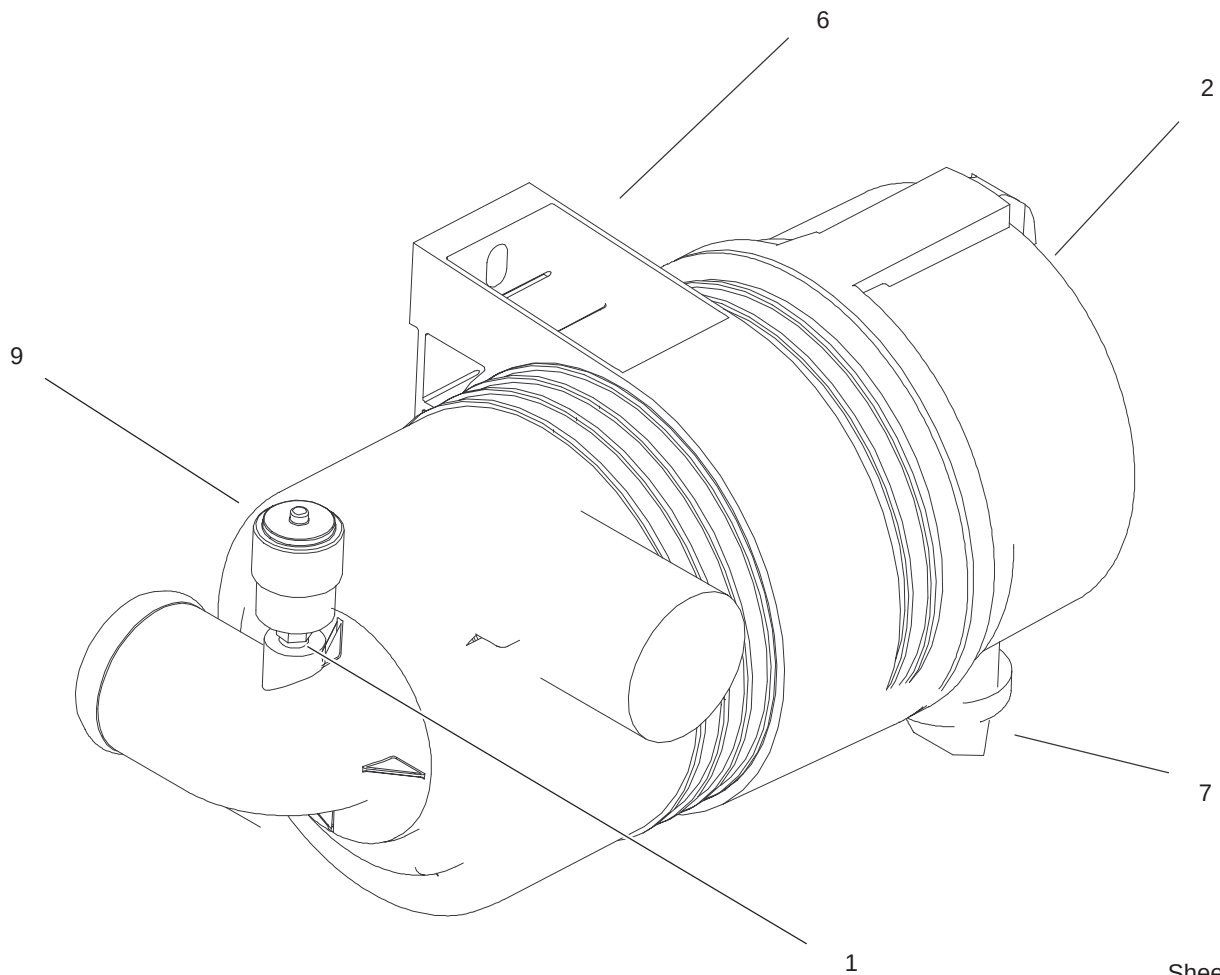


Sheet No.:18

Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	104-1701	1	Engine ASM
2	104-3446	1	Hose-Outlet, Air
10	2412-42	3	Clamp-Hose
11	104-3444	1	Hose-Inlet, Air
12	322-6	2	Screw-HH
13	104-3427	1	Air Cleaner ASM
14	3256-23	2	Washer-Flat
15	3296-29	2	Nut-Lock, NI

Ref. No.	Part No.	Qty.	Description



Sheet No.:B5

Air Cleaner Assembly No. 104-3427

Ref. No.	Part No.	Qty.	Description
1	105-4292	1	Nipple-Pipe
2	104-0497	1	Cover ASM
6	98-4525	1	Bracket-Cleaner, Air
7	104-0498	1	Valve-Vacuator
*8	98-9763	1	Element ASM
9	93-9164	1	Indicator-Mini

Ref. No.	Part No.	Qty.	Description

* Not illustrated

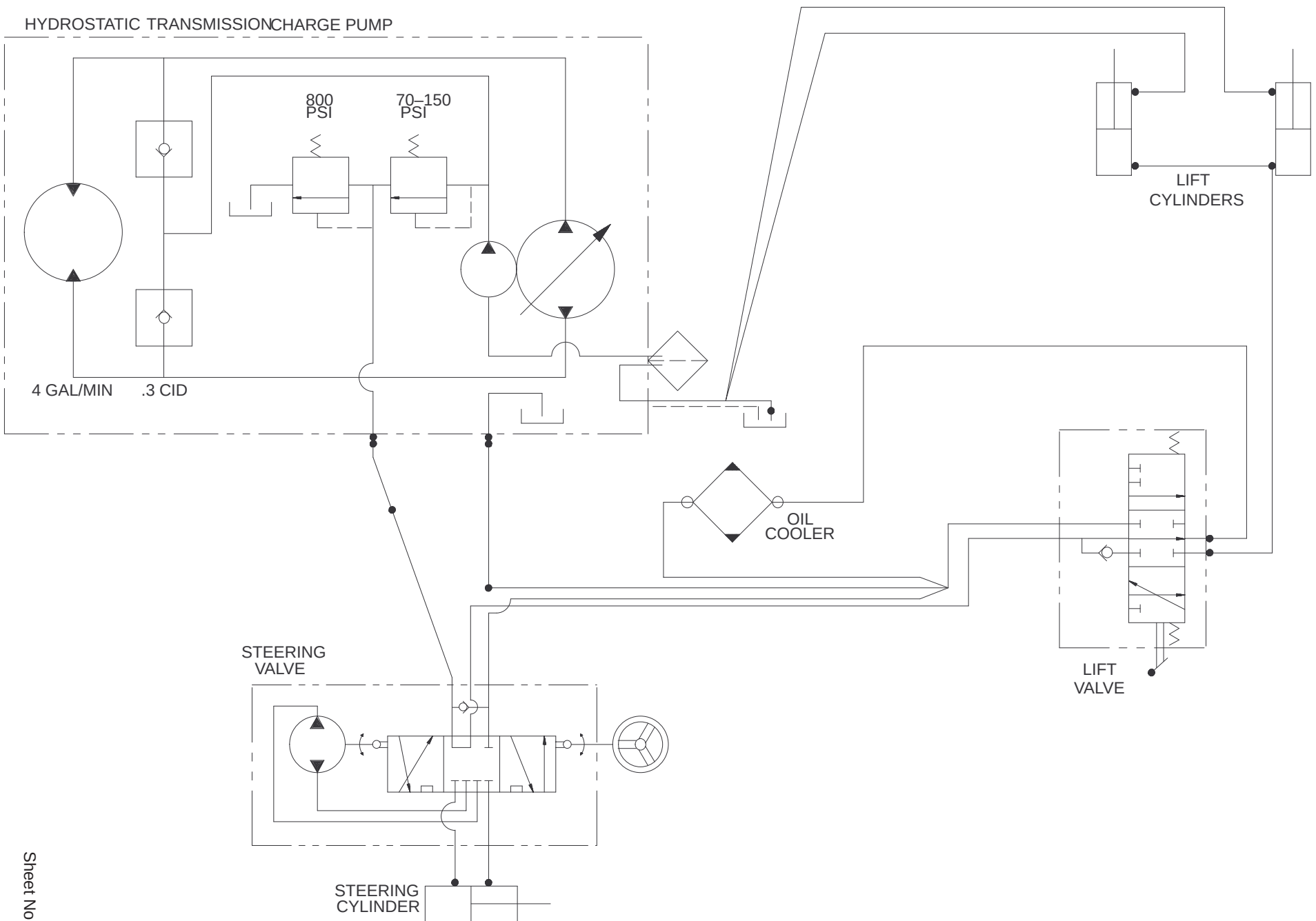


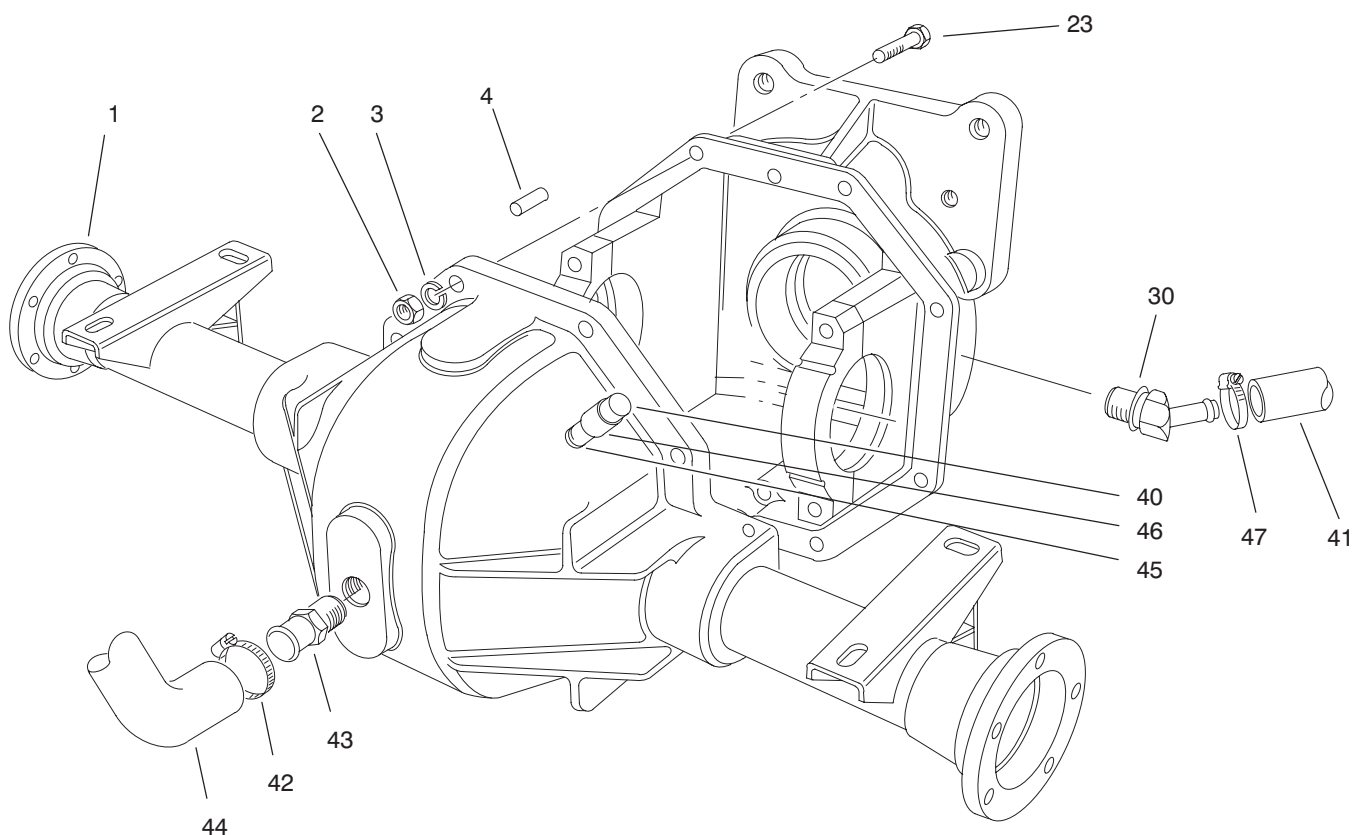
Electrical Schematic

Ref. No.	Part No.	Qty.	Description
1	106-4194	1	Wire Harness—Main
2	105-0024	1	Harness—Wire, Gauges
3	105-0025	1	Harness—Wire, Seat
4	218-581	2	Fuse—15 Amp, 32 Volt
5	218-574	2	Fuse 7.5 Amp (Blade Style)
6	219-17	4	Bulb
7	99-3441	1	Harness—Wire, Fusible Link
8	100-4918	3	Diode

Ref. No.	Part No.	Qty.	Description

Hydraulic Schematic





Sheet No.:1

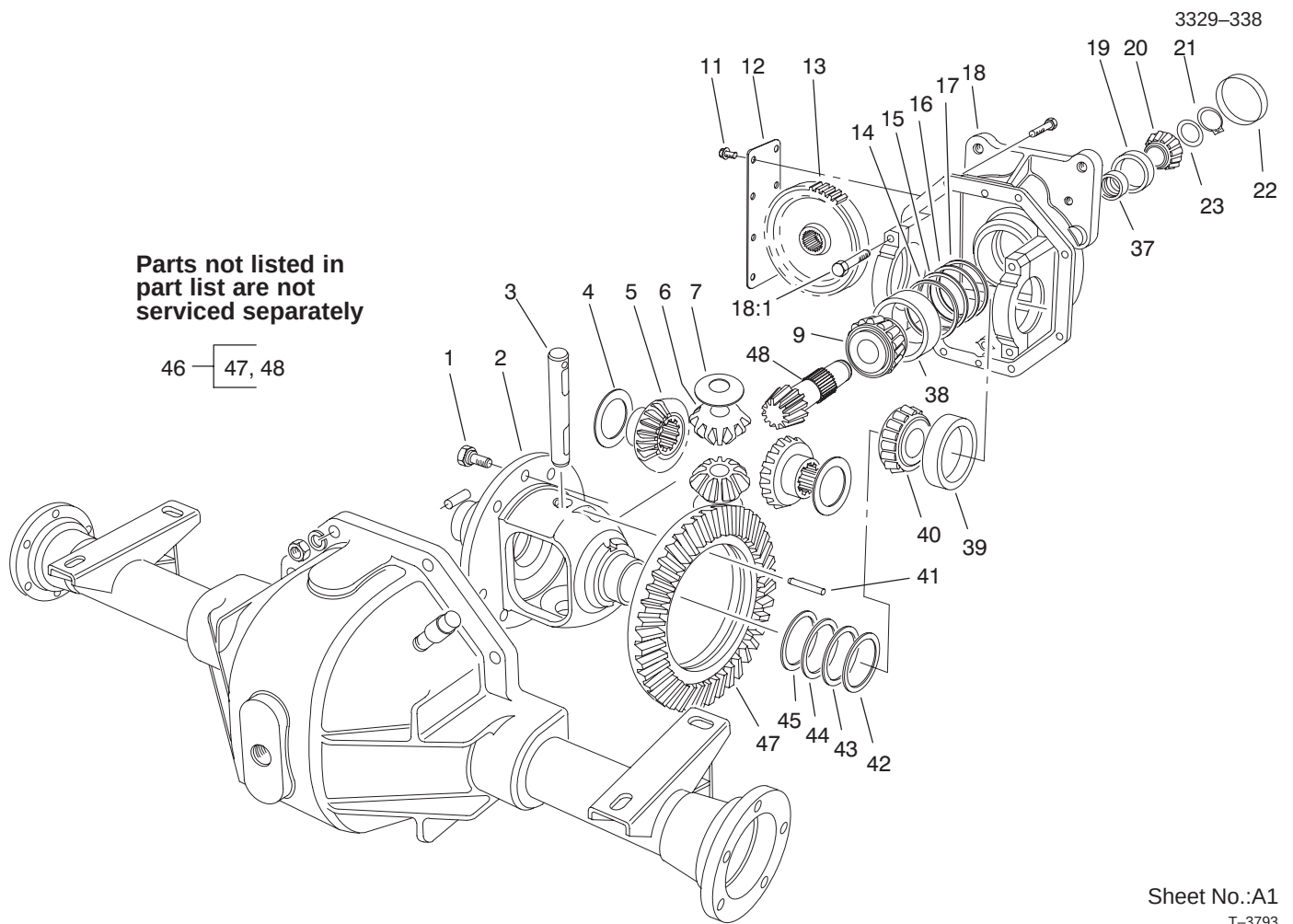
T-3792

Differential Assembly

Ref. No.	Part No.	Qty.	Description
1	63-8090-03	1	Lower Housing ASM
2	3219-2	8	Nut-Hex
3	3255-8	8	Washer-Lock/Ext
4	21-8270	2	Pin-Dowel
23	3210-7	8	Screw-HH
30	92-5088	1	Fitting-45°, Barbed
40	72-9420	1	Vent
41	92-5083	1	Hose-Hydraulic
42	2412-34	2	Clamp-Hose
43	354-71	1	Fitting-HYD, Barbed
44	77-0550	1	Hose-Differential Fill
45	289-6	1	Nipple-Pipe
46	2810-1	1	Coupling
47	2412-119	1	Clamp-Hose
*49	92-4909	1	Differential Carrier ASM (only on: 30241)
*50	92-4907	1	Differential Carrier ASM (only on: 30242)

Ref. No.	Part No.	Qty.	Description

* Not illustrated



Sheet No.:A1

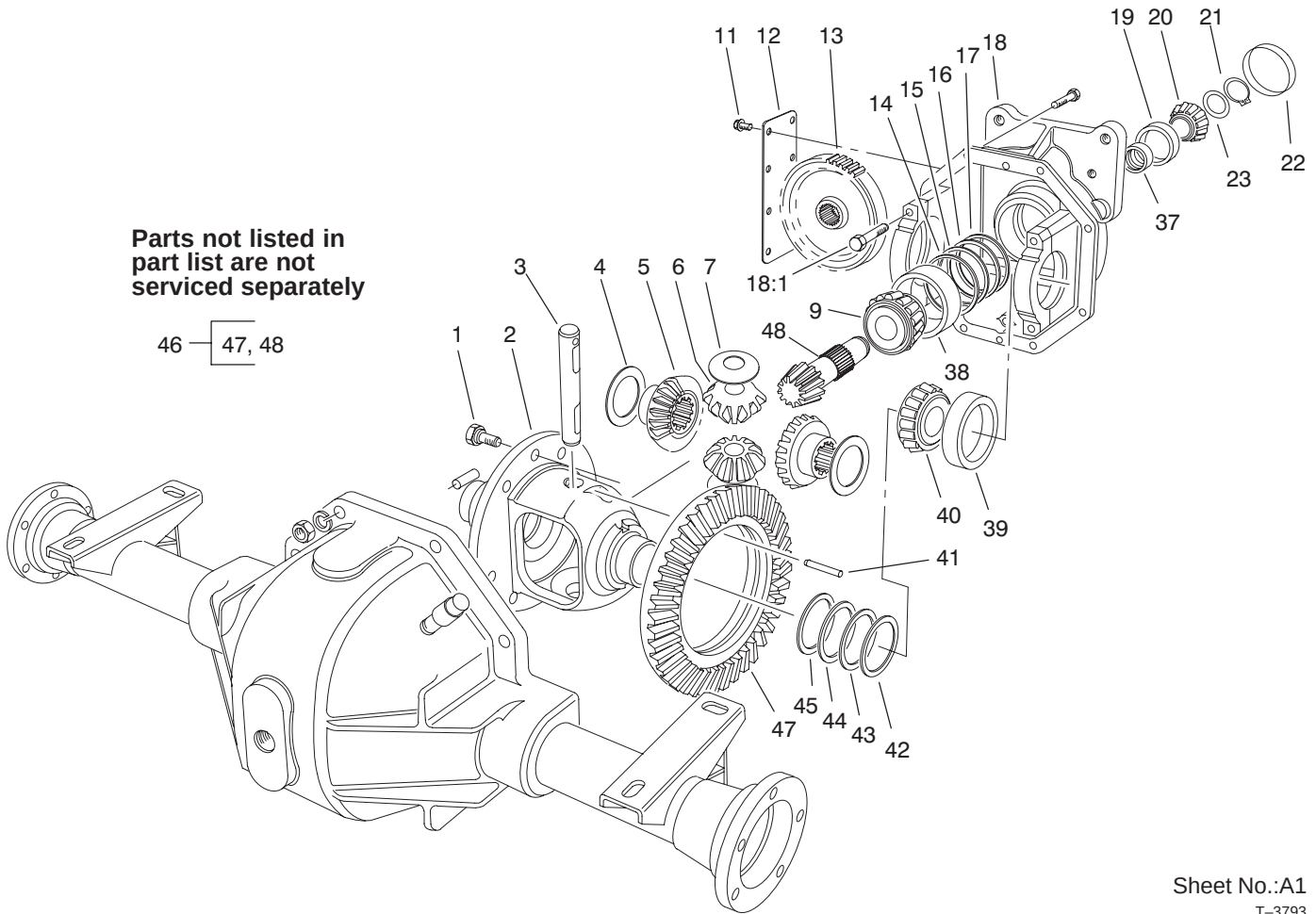
T-3793

Differential Carrier Assembly No. 92-4909(Only On: 30241)

Ref. No.	Part No.	Qty.	Description
1	21-7770	5	Screw—Gear, Drive
2	21-7670	1	Case—Differential
3	21-7700	1	Shaft—Pinion Mate
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
9	43-6760	1	Bearing—Roller, Cone Taper
11	12-5450	8	Screw
12	21-7830	1	Cover—Gear
13	86-7230	1	Gear—Input, Transmission
14	43-6710	1	Shim
15	43-6711	1	Shim
16	43-6712	1	Shim
17	43-6713	1	Shim
18	86-7930	1	Upper Housing ASM
18:1	92-1773	4	Screw—HHF
19	254-90	1	Bearing—Cup
20	254-91	1	Cone—Bearing
21	43-6550	1	Ring—Snap
22	21-7850	1	Cup Plug
23	46-2210	1	Shim—Front Bearing, .031

Ref. No.	Part No.	Qty.	Description
*24	46-2211	1	Shim—Front Bearing, .033
*25	46-2212	1	Shim—Front Bearing, .035
*26	46-2213	1	Shim—Front Bearing, .037
*27	46-2214	1	Shim—Front Bearing, .039
*28	46-2215	1	Shim—Front Bearing, .041
*29	46-2216	1	Shim—Front Bearing, .043
*30	46-2220	1	Shim—Front Bearing, .045
*31	46-2221	1	Shim—Front Bearing, .047
*32	46-2222	1	Shim—Front Bearing, .049
*33	46-2223	1	Shim—Front Bearing, .051
*34	46-2224	1	Shim—Front Bearing, .053
*35	46-2225	1	Shim—Front Bearing, .055

* Not illustrated

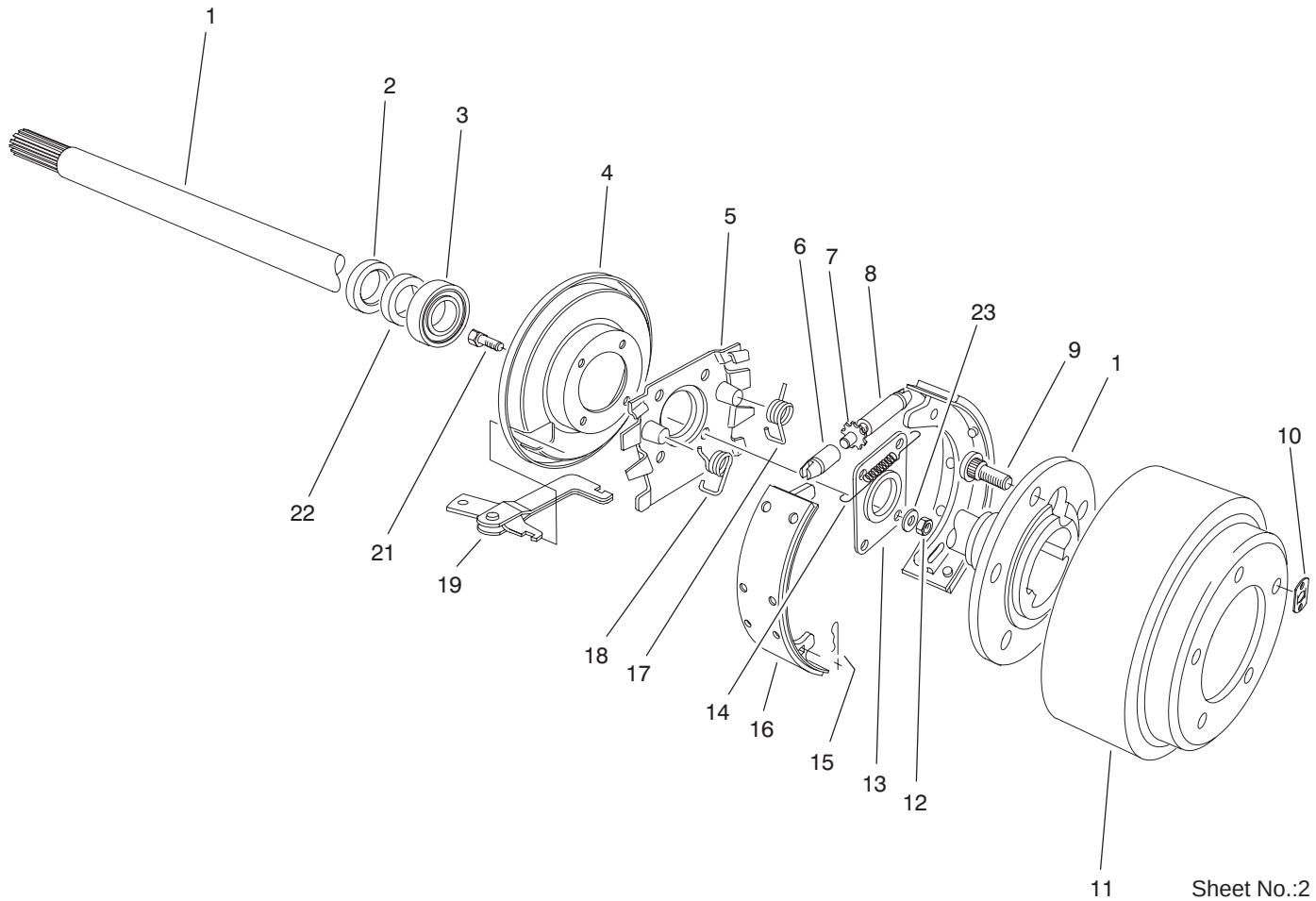


Differential Carrier Assembly No. 92-4909(Continued)
(Only On: 30241)

Ref. No.	Part No.	Qty.	Description
*36	46-2226	1	Shim-,Front Bearing, .057
37	21-8020	1	Spacer-Bearing
38	43-6750	1	Bearing-Taper, Cup
39	254-66	2	Cup-Bearing, Roller
40	254-65	2	Cone-Bearing, Roller
41	32121-15	1	Pin-Roll
42	21-8090	1	Shim-Bearing, Diff. (.003)
43	21-8100	1	Shim-Bearing, Diff. (.005)
44	21-8110	1	Shim-Bearing, Diff. (.010)
45	21-8120	1	Shim-Bearing, Diff. (.030)
46	92-4848	1	Gear And Pinion ASM

Ref. No.	Part No.	Qty.	Description

* Not illustrated



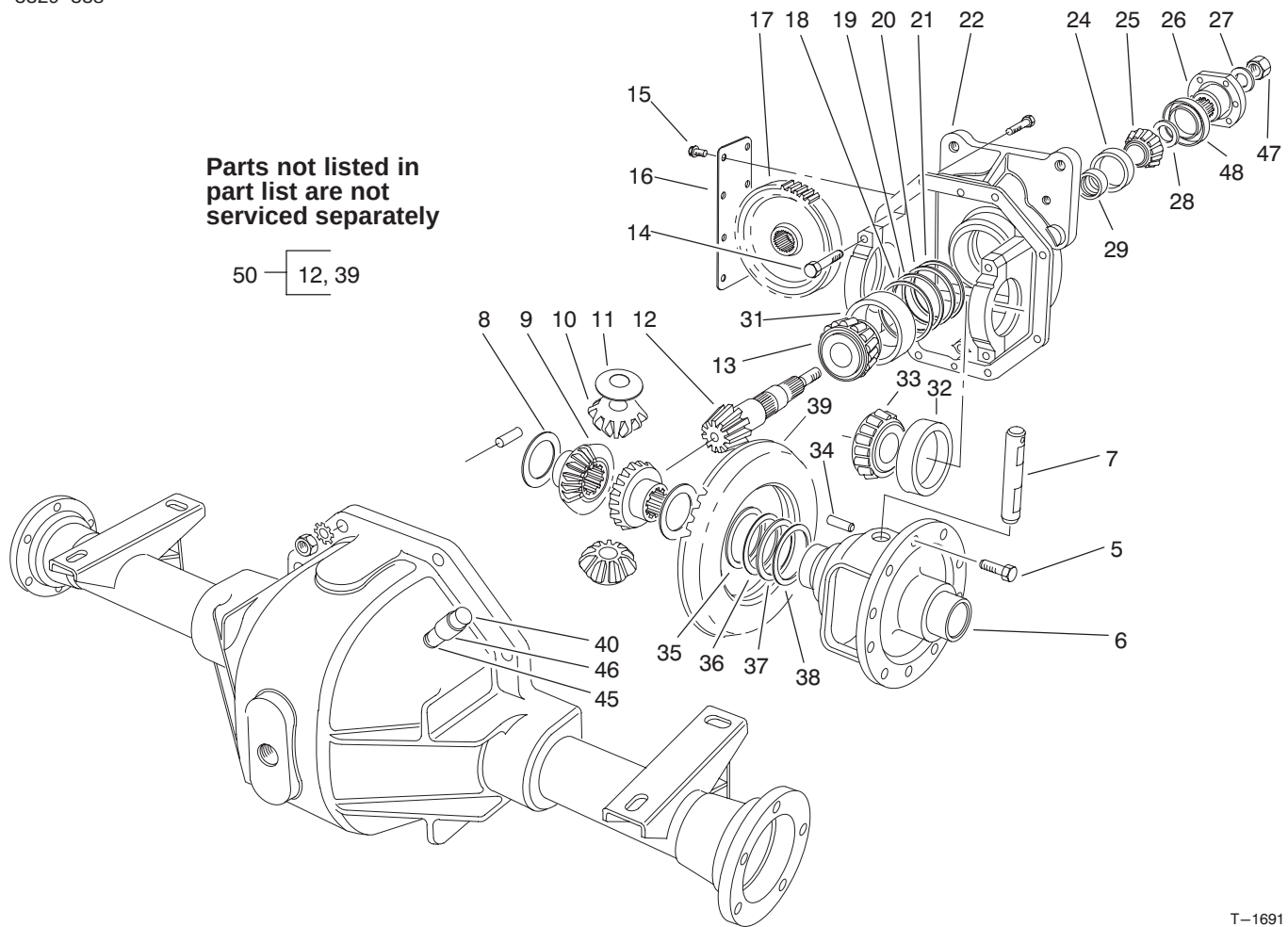
Sheet No.:2

T-2664

Brake Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
*1	27-6851	1	RH Flanged Axle Shaft	23	94-6936	8	Washer-Hardened
1	27-6861	1	LH Flanged Axle Shaft	*24	92-8775	1	Kit-Liquid Gasket
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-Adjusting, Screw				
7	21-9370	2	Screw-Adjusting				
8	21-9380	2	Nut-Pivot				
9	242-34	10	Stud-Drive				
10	21-8360	2	Locknut				
11	28-0680	2	Drum-Brake				
12	94-6935	8	Locknut				
13	28-0670	2	Seal-Grease				
14	21-9440	2	Spring-Adjusting Screw				
15	21-9460	4	Retainer-Lever, Brake				
16	84-8600	1	Set-4 Shoes, Brake				
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, Brake				
22	24-8840	2	Ring-Retaining, Wheel Bearing				

* Not illustrated



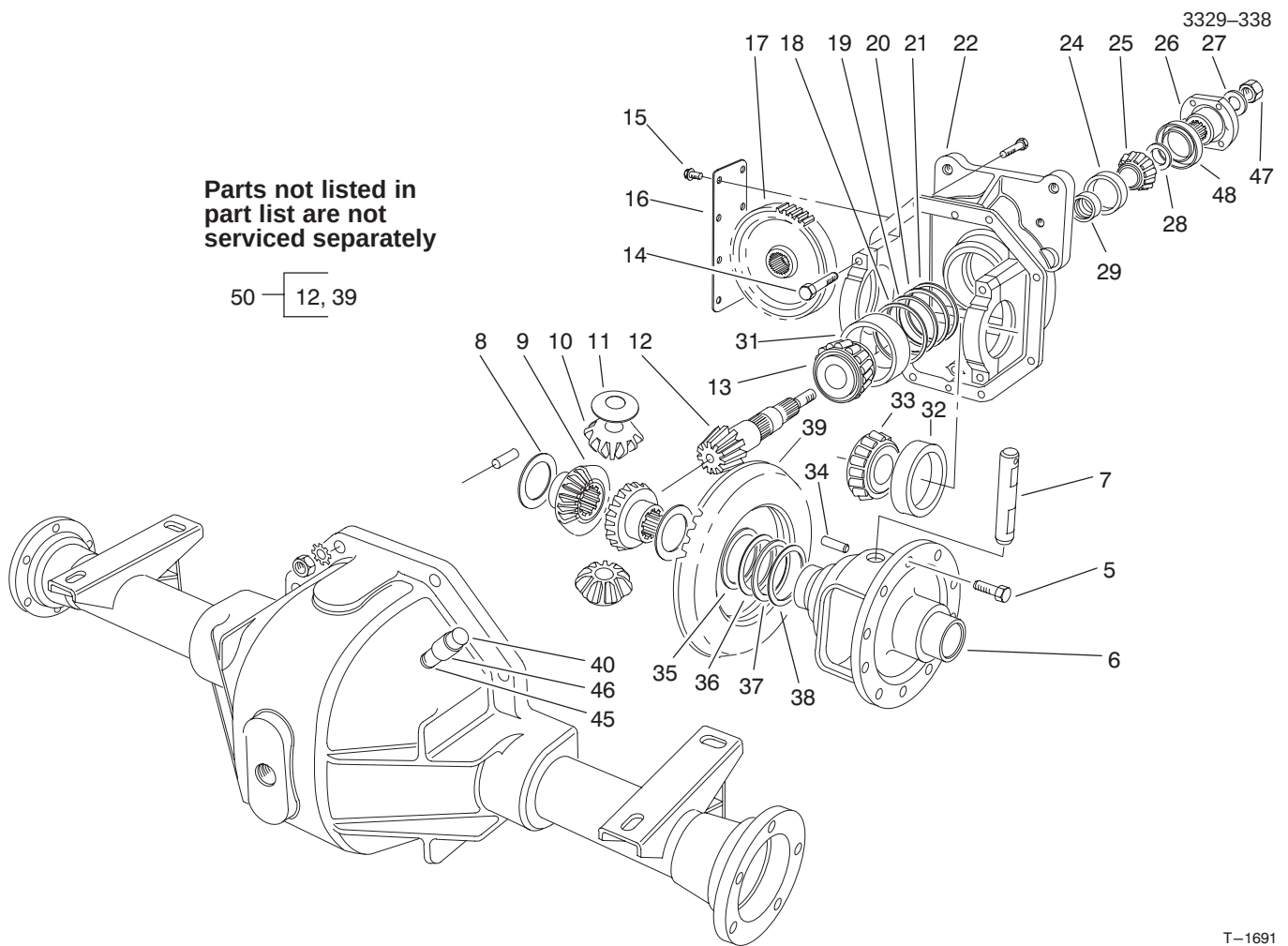
T-1691

Differential Carrier Assembly No. 92-4907(Only on: 30242)

Ref. No.	Part No.	Qty.	Description
5	21-7770	5	Screw-Drive Gear
6	21-7670	1	Differential Case
7	21-7700	1	Shaft-Pinion Mate
8	21-7720	2	Washer-Thrust
9	24-8790	2	Gear-Bevel, Differential
10	21-7690	2	Gear-Pinion
11	21-7730	2	Washer-Thrust
12		1	Drive Pinion
13	43-6760	1	Cone-Bearing, Tapered
14	92-1773	4	Screw-HH
15	12-5450	8	Screw-Thread Forming
16	21-7830	1	Cover-Gear
17	86-7230	1	Gear-Spur
18	43-6710	A/R	Shim Adjusting Differential Bearing .003
19	43-6711	A/R	Shim Adjusting Differential Bearing .005
20	43-6712	A/R	Shim Adjusting Differential Bearing .010
21	43-6713	A/R	Shim Adjusting Differential

Ref. No.	Part No.	Qty.	Description
22	86-7190	1	Bearing .030 Asm-Upper Housing (Incl. Ref. #14)
24	254-90	1	Cup-Bearing
25	254-91	1	Cone-Bearing
26	68-7010	1	Flange
27	71-4340	1	Washer
28	72-3570	A/R	Shim .094-Diff. Adjust.
*	72-3571	A/R	Shim .096-Diff. Adjust.
*	72-3572	A/R	Shim .098-Diff. Adjust.
*	72-3573	A/R	Shim .100-Diff. Adjust.
*	72-3574	A/R	Shim .102-Diff. Adjust.
*	72-3575	A/R	Shim .104-Diff. Adjust.
*	72-3576	A/R	Shim .106-Diff. Adjust.
*	72-3577	A/R	Shim .108-Diff. Adjust.
*	72-3578	A/R	Shim .110-Diff. Adjust.
*	72-3580	A/R	Shim .112-Diff. Adjust.
*	72-3581	A/R	Shim .114-Diff. Adjust.

*Not Illustrated

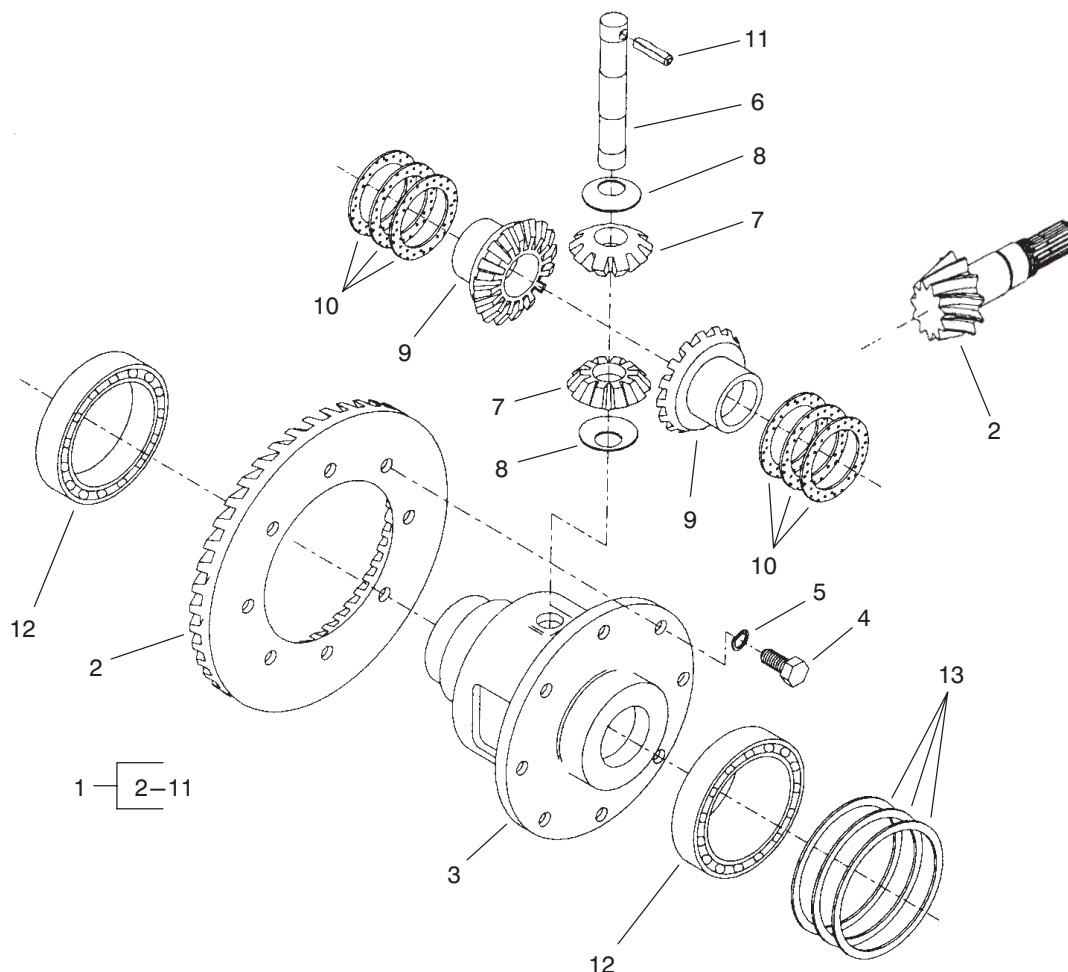


Differential Carrier Assembly No. 92-4907(Continued) (Only On: 30242)

Ref. No.	Part No.	Qty.	Description
* 28	72-3583	A/R	Shim .118-Diff. Adjust.
* 28	72-3584	A/R	Shim .120-Diff. Adjust.
* 28	72-3585	A/R	Shim .125-Diff. Adjust.
* 28	72-3586	A/R	Shim .127-Diff. Adjust.
* 28	72-3587	A/R	Shim .129-Diff. Adjust.
* 28	72-3588	A/R	Shim .131-Diff. Adjust.
* 28	72-3582	A/R	Shim .116-Diff. Adjust.
* 28	72-3590	A/R	Shim .133-Diff. Adjust.
* 28	72-3591	A/R	Shim .135-Diff. Adjust.
* 28	72-3592	A/R	Shim .137-Diff. Adjust.
* 28	72-3593	A/R	Shim .139-Diff. Adjust.
* 28	72-3594	A/R	Shim .141-Diff. Adjust.
* 28	72-3595	A/R	Shim .143-Diff. Adjust.
* 28	72-3596	A/R	Shim .145-Diff. Adjust.
* 28	72-3597	A/R	Shim .147-Diff. Adjust.
* 28	72-3598	A/R	Shim .149-Diff. Adjust.
* 28	72-3600	A/R	Shim .151-Diff. Adjust.
29	21-8020	1	Spacer-Bearing
31	43-6750	1	Cup-Bearing
32	254-66	2	Cup-Bearing
33	254-65	2	Cone-Bearing
34	32121-15	1	Pin-Roll
35	21-8090	A/R	Differential Adjust. Shim .003

Ref. No.	Part No.	Qty.	Description
36	21-8100	A/R	Differential Adjust. Shim .005
37	21-8110	A/R	Differential Adjust. Shim .010
38	21-8120	A/R	Differential Adjust. Shim .030
39		1	Gear-Ring
47	71-4350	1	Nut
48	71-4330	1	Seal
50	92-1676	1	Asm-Gear & Pinion

*Not Illustrated

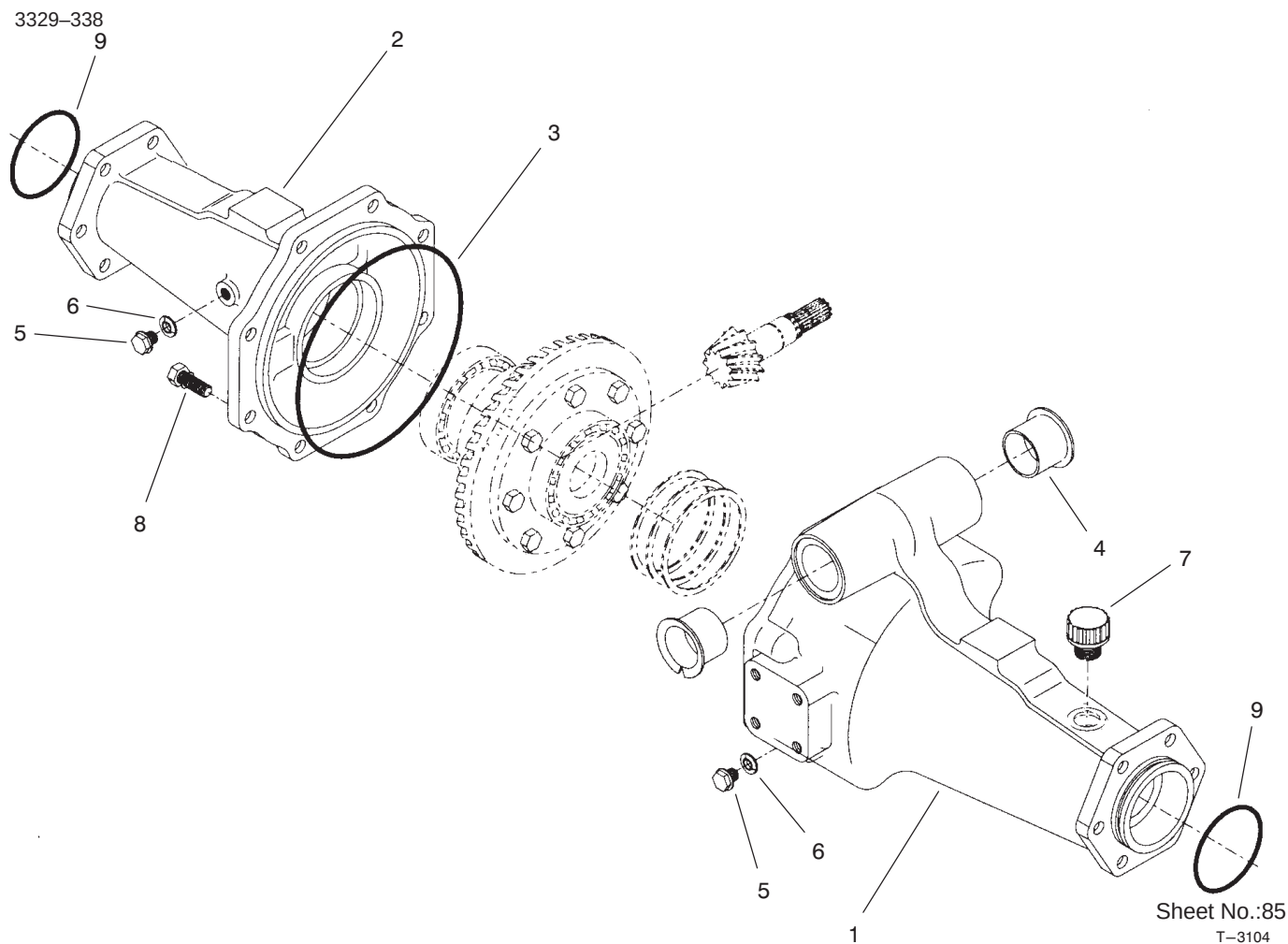


Sheet No.:84
T-3103

4 Wheel Drive Rear Axle Assembly No. 95-7501 (Continued) Differential Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	95-7503	1	Differential ASM				
2	100-2555	1	Ring And Pinion Matched Set				
3	95-7502	1	Case-Differential				
4	99-7576	8	Bolt				
5	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				
*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				

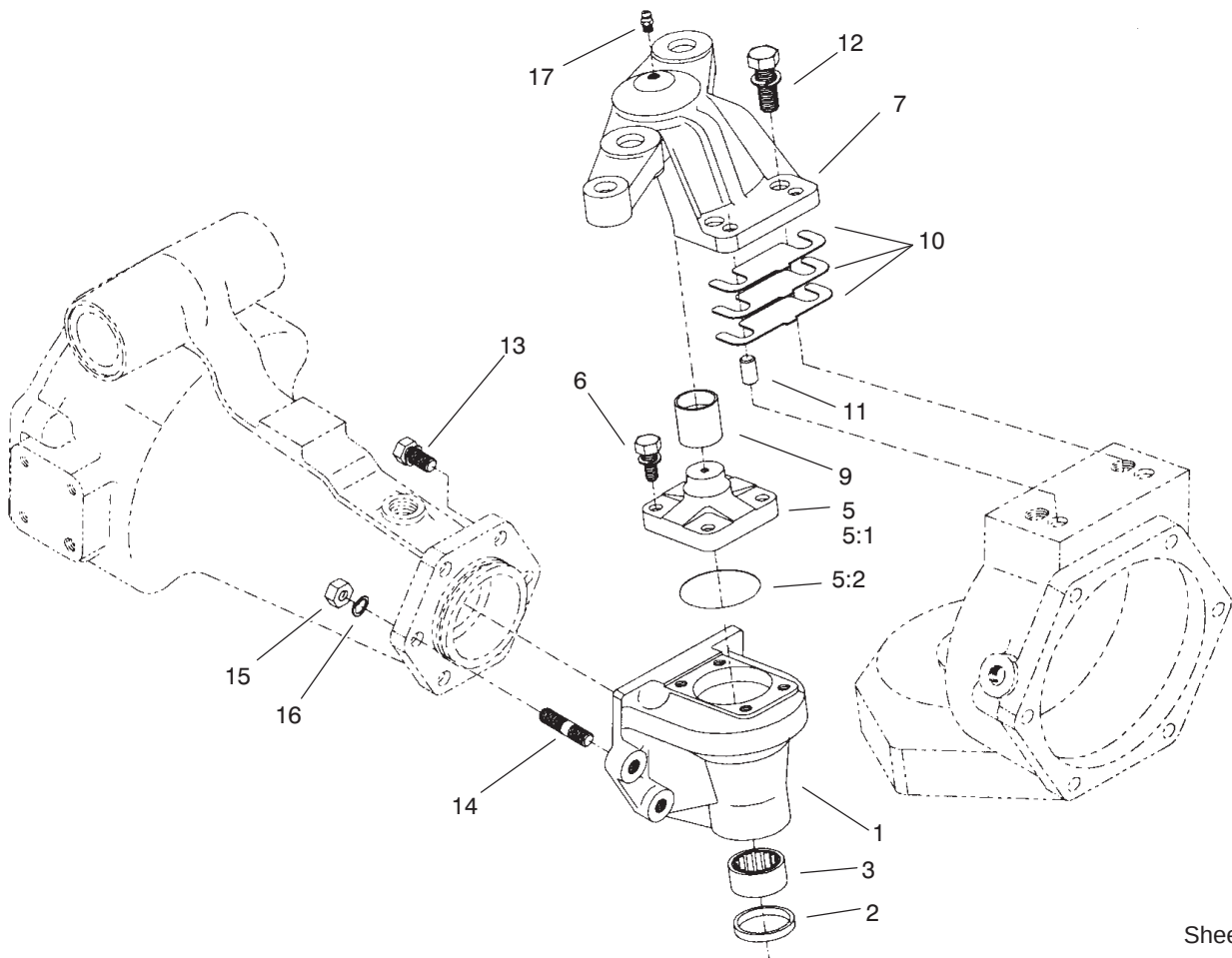
* Not illustrated



4 Wheel Drive Rear Axle Assembly No. 95-7501 (Continued) Axle Support Assembly (only on: 30242)

Ref. No.	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

Ref. No.	Part No.	Qty.	Description



Sheet No.:86

T-3105

4 Wheel Drive Rear Axle Assembly No. 95-7501 (Continued) Bevel Gear Case Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	95-7539	2	Case-Bevel Gear				
2	99-7594	2	Seal-Oil				
3	99-7595	2	Bearing-Needle				
5	104-2376	2	Pin-Knuckle				
5:1	104-2373	1	Knuckle				
5:2	104-2372	1	O-Ring				
6	104-2374	8	Bolt				
7	95-7514	1	Support-Axle Case, LH				
*8	95-7516	1	Support-Axle Case, RH				
9	99-7529	2	Bushing				
10	95-7547	2	Shim 0.1				
*10	95-7548	2	Shim 0.2				
*10	95-7549	2	Shim 0.4				
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				

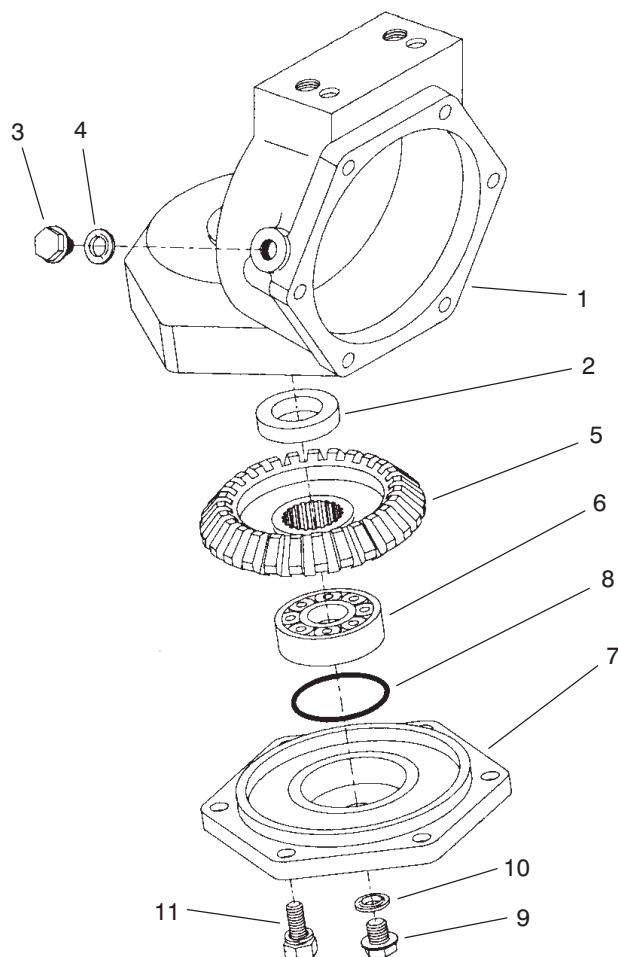
* Not illustrated

**4 Wheel Drive Rear Axle Assembly No. 95-7501
(Continued)
Bevel Gear Shaft Assembly (only on: 30242)**

Ref. No.	Part No.	Qty.	Description
1	95-7509	1	Shaft-Gear, Differential
2	95-7512	1	Shaft-Gear, Differential
3	95-7518	4	Gear-18 Bevel
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	95-7530	2	Shaft-Bevel Gear
8	99-7532	2	Bearing-Taper Roller
9	95-7543	2	Spacer
10	99-7533	2	Collar-Thrust
11	99-7558	2	Collar

Ref. No.	Part No.	Qty.	Description

* Not illustrated



Sheet No.:88
T-3107

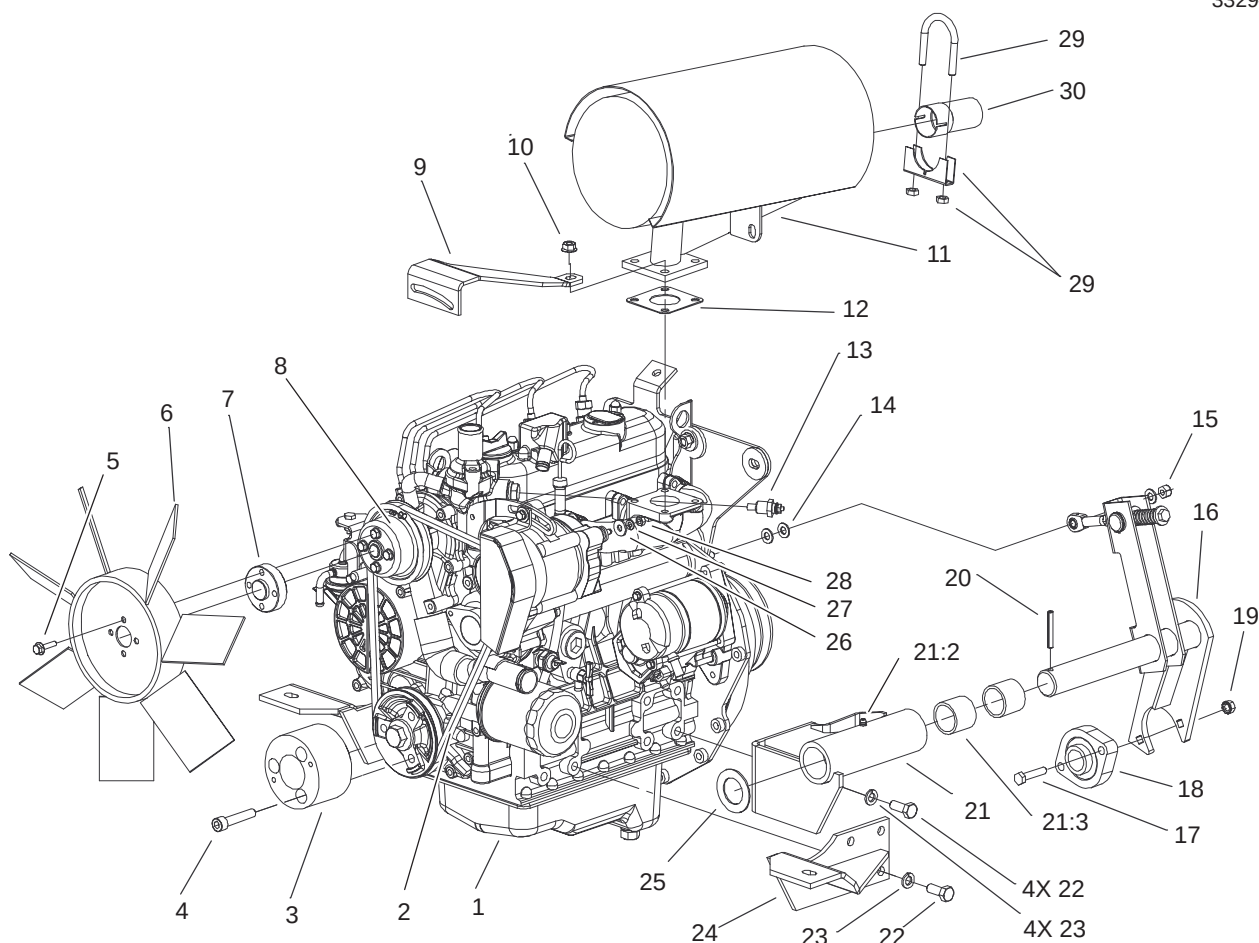
**4 Wheel Drive Rear Axle Assembly No. 95-7501
(Continued)
Axle Case Assembly (only on: 30242)**

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	95-7532	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-27 Bevel				
6	99-7532	2	Bearing-Taper Roller				
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				

4 Wheel Drive Rear Axle Assembly No. 95-7501 (Continued) Axle Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description

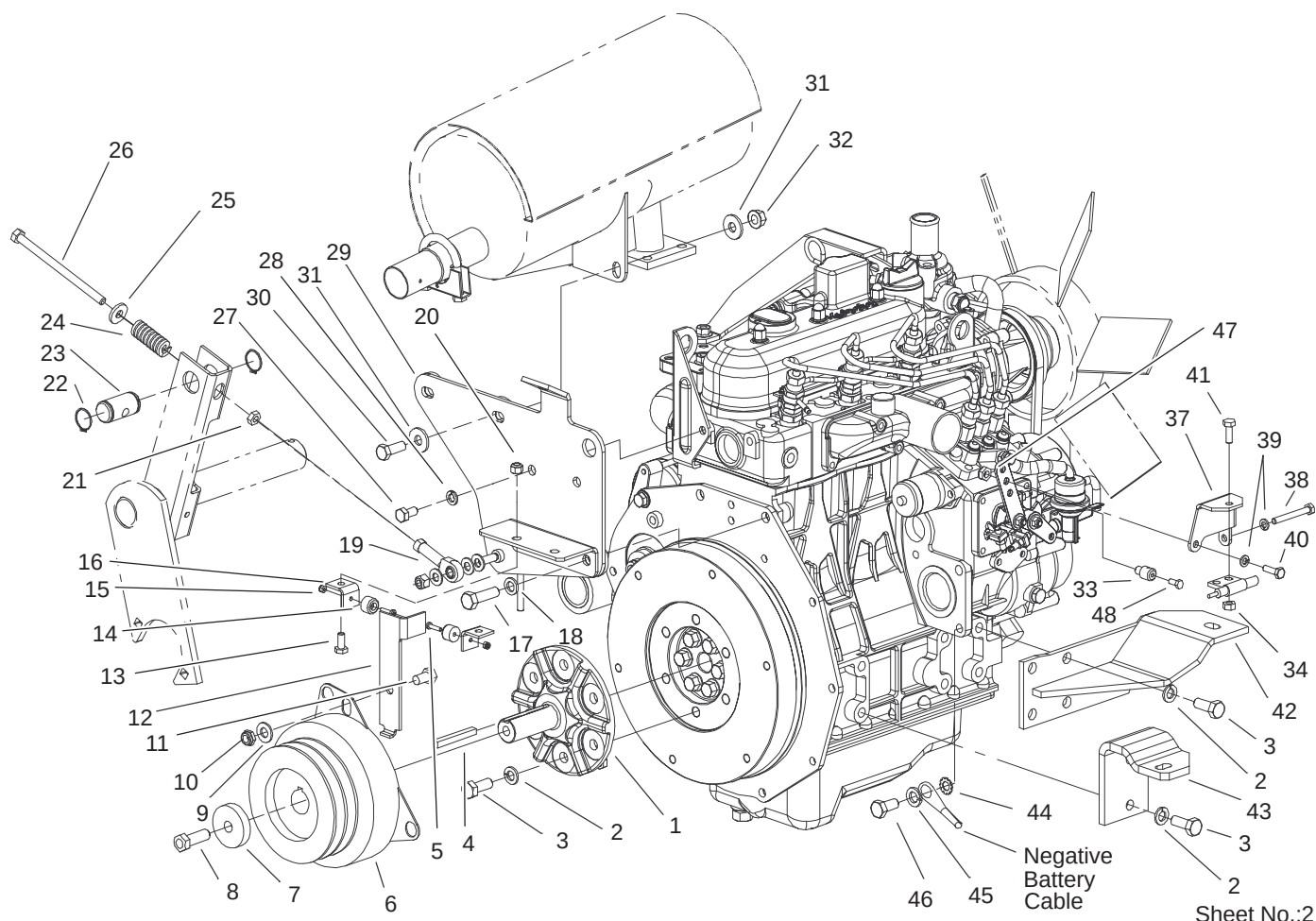
56



Sheet No.:1

Engine and Mounting Components Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	106-4385	1	Engine ASM-Kubota	21:3	256-299	2	Bushing-Straight
2	104-3494	1	Belt-V	22	43-0090	8	Screw-HH
3	104-1723-03	1	Adaptor-Front Drive	23	42-9600	8	Lockwasher-Spring
4	3274-106	3	Screw-HSH	24	104-1702-03	1	Engine Mount ASM
5	33103-025	4	Screw-HHF	25	3-4324	1	Washer-Flat
6	104-4246	1	Fan-Engine	26	3256-78	1	Washer-Flat
7	105-0000	1	Spacer-Fan	27	43-5930	1	Washer-Spring
8	104-3497	1	Pulley-Fan	28	48-7890	1	Nut
9	105-2556-03	1	Brace-Alternator, Upper	29	2112-9	1	Clamp
10	33004-00	4	Nut-HF	30	105-4269	1	Extension-Tailpipe
11	104-3426	1	Muffler-Exhaust				
12	98-9611	1	Gasket				
13	98-9346	1	Sender-Temperature				
14	3256-23	4	Washer-Flat				
15	3296-29	1	Nut-Lock, NI				
16	63-6250-03	1	Shaft-PTO Tension				
17	322-7	2	Screw-HH				
18	92-8799	1	Bearing-Flange				
18:1	251-77	1	Lockcollar-Bearing				
18:2	3246-1	1	Screw-Set				
18:3	302-40	1	Fitting-Grease				
19	32149-1	2	Nut				
20	32121-32	1	Pin-Roll				
21	104-3417	1	Lr Engine Mount ASM				
21:2	302-5	1	Fitting-Grease				

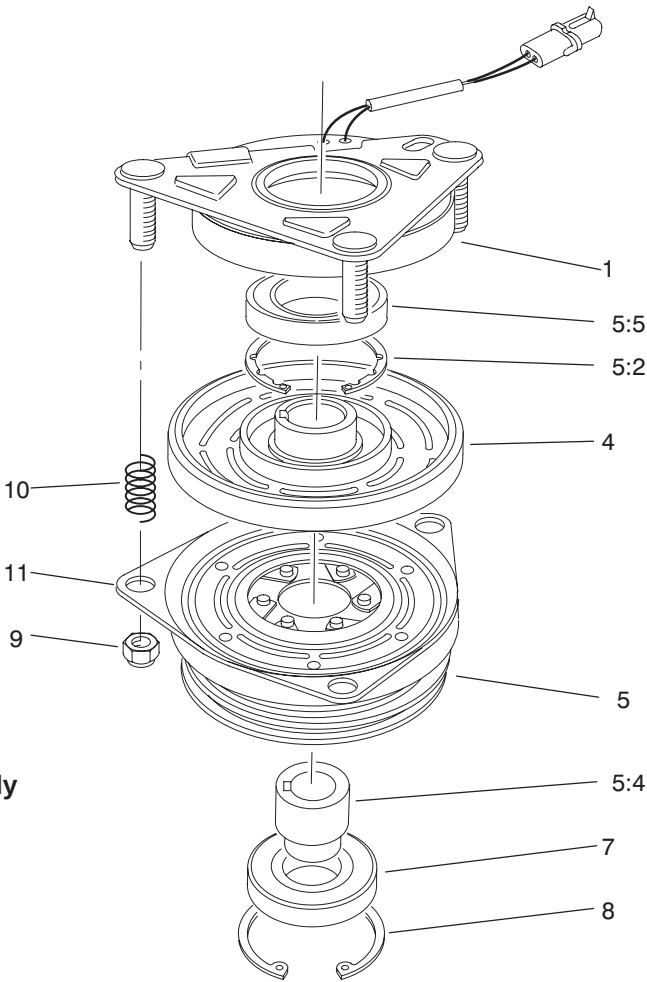


Engine and Mounting Components Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
1	104-1715	1	Hub-Clutch
2	42-9600	12	Lockwasher-Spring
3	43-0090	12	Screw-HH
4	18-6430	1	Key-Square
5	3250-39	2	Screw-PPH
6	100-6565	1	Electric Clutch/Brake ASM
7	105-3698	1	Spacer
8	3212-5	1	Screw-HH
9	3256-24	1	Washer-Flat
10	3296-59	1	Nut-Lock, NI
11	323-34	1	Screw-HH
12	63-6690-03	1	Lever-Clutch Anchor
13	321-3	2	Screw-HH
14	66-2910	2	Bumper
15	3296-9	2	Nut-Lock, NI
16	63-8230	2	Angle-Clutch Anchor
17	56-2140	2	Bolt
18	48-9590	2	Washer-Lock
19	66-2900	1	Ballend-Female
20	3296-42	2	Nut-Lock, NI
21	3220-2	1	Nut
22	32151-83	2	Ring-Snap
23	63-6290	1	Pin-PTO Tension
24	3-6624	1	Spring-Compression
25	4-2390	1	Washer-Flat

Ref. No.	Part No.	Qty.	Description
26	105-3692	1	Screw-HH
27	48-7700	2	Screw
28	48-9570	2	Washer-Lock
29	105-3673-03	1	Muffler Mount ASM
30	323-44	2	Screw-HH
31	80-6990	4	Washer-Hardened
32	32128-21	2	Nut-HF
33	105-4263	1	Swivel-Throttle Cable
34	3296-12	1	Nut-Lock
37	104-3421-03	1	Bracket-Throttle
38	60-6650	1	Screw-HH
39	48-8020	2	Washer-Spring
40	48-7630	1	Screw
41	32105-12	1	Screw
42	104-1710-03	1	Engine Mount ASM
43	104-1713-03	1	Mount-Engine
44	3255-9	1	Washer-Lock/Ext
45	3253-6	1	Washer-Lock
46	63-7790	1	Screw-Cap
47	3296-20	1	Nut-Lock, NI
48	25-8640	1	Screw-HH

Parts not listed in
part list are not
serviced separately

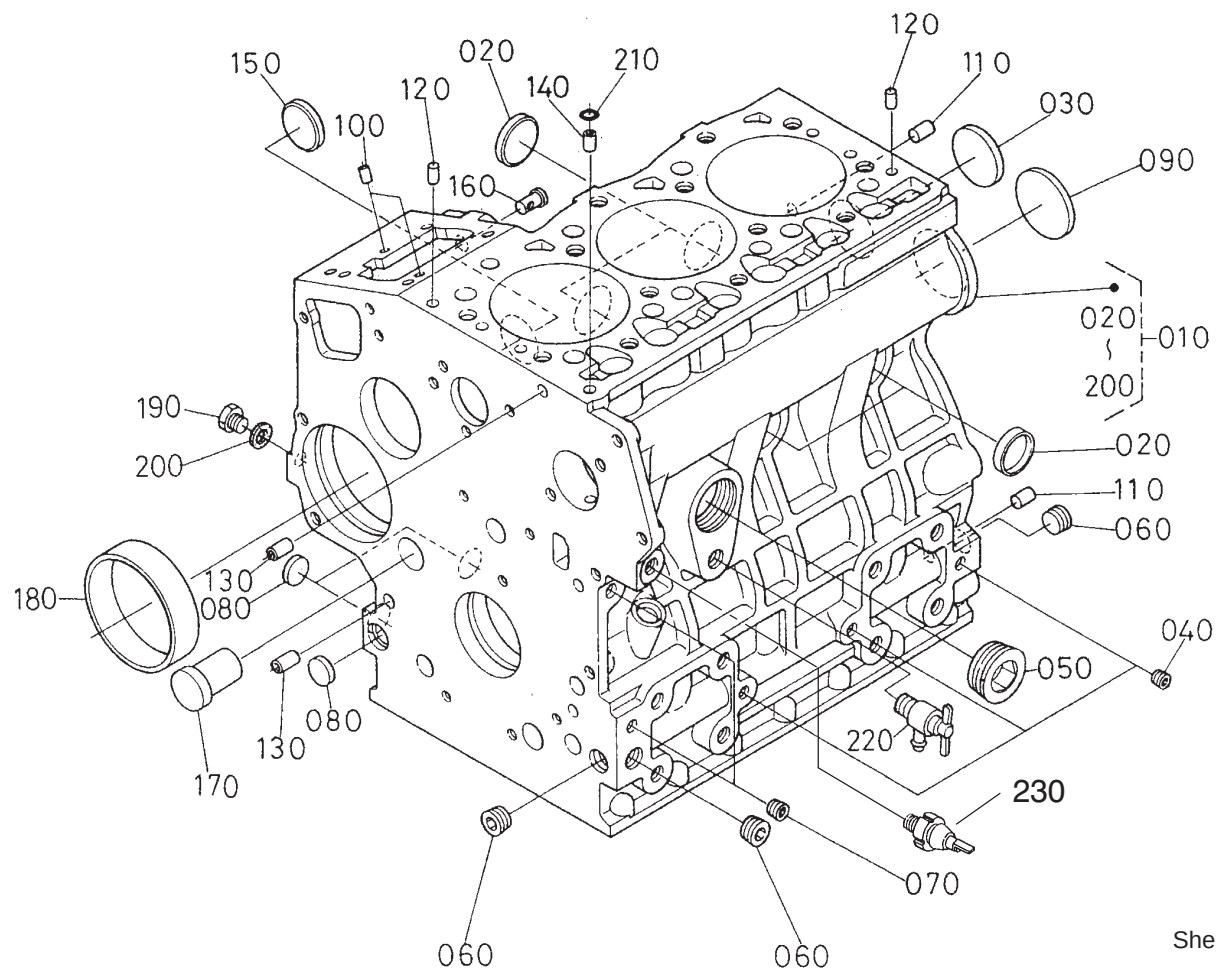


Sheet No.:A4
T-0544

Electric Clutch/Brake Assembly No. 100-6565

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	100-6563	1	Field And Rotor				
☆2		1	Bearing-Field				
☆3		1	Ring-Retaining				
☆4		1	Field Coil ASM				
5	67-7070	1	Armature And Pulley ASM				
5:2	67-7060	1	Ring-Retaining				
5:4	67-7080	1	Sleeve-Bearing, Armature				
5:5	67-7090	1	Bearing-Armature				
☆6		1	Collar-Bearing				
7	67-7090	1	Bearing-Armature				
8	67-7060	1	Ring-Retaining				
9	3296-6	3	Nut-Lock, NI				
10	44-8320	3	Spring				
11	67-7100	1	Plate-Brake				

☆ Not serviced separately

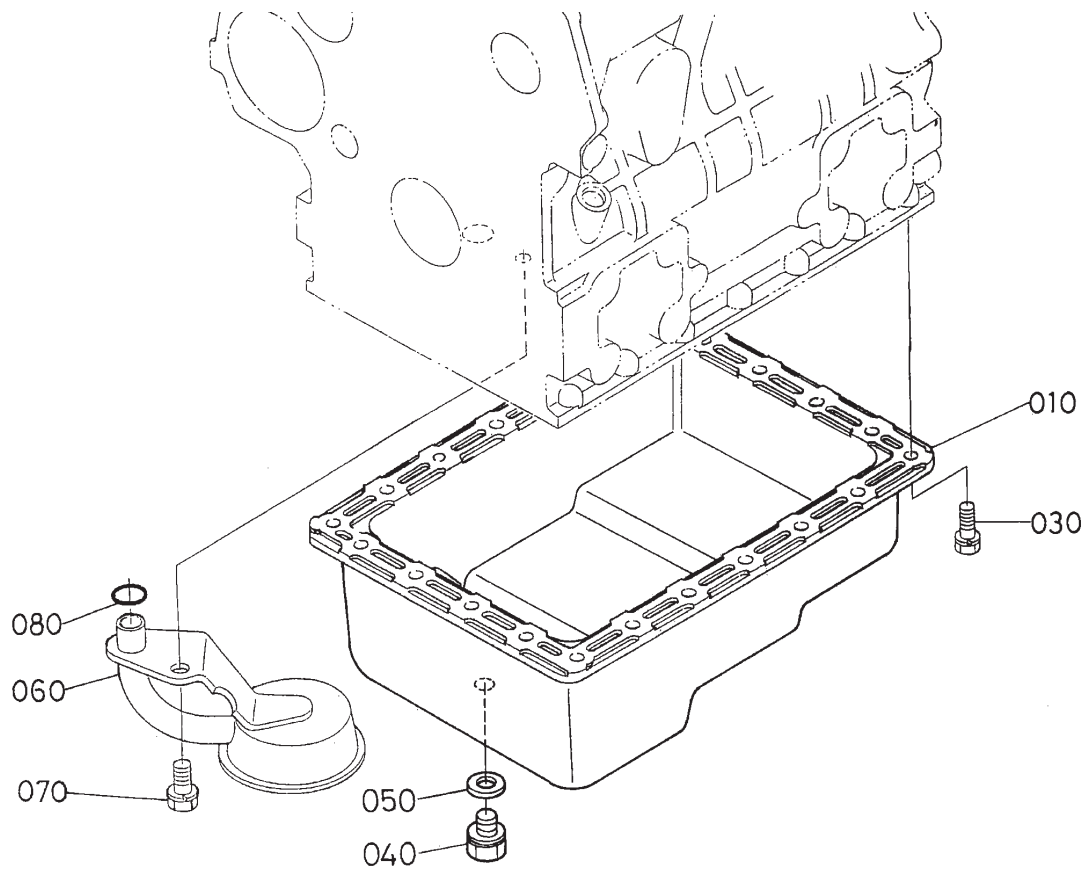


Sheet No.:53

Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
010	105-3778	1	Crankcase ASM
020	98-9398	4	Cap-Sealing
030	98-7539	1	Cap-Sealing
040	98-7540	3	Cap-Sealing
050	105-3779	1	Plug
060	98-9597	3	Plug
070	98-7487	2	Plug
080	98-7489	3	Plug
090	98-9668	1	Plug
100	105-3793	2	Pin-Straight
110	105-3794	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
210	98-7509	1	O-Ring
220	98-9436	1	Drain Cock ASM
230	98-9416	1	Switch-Oil

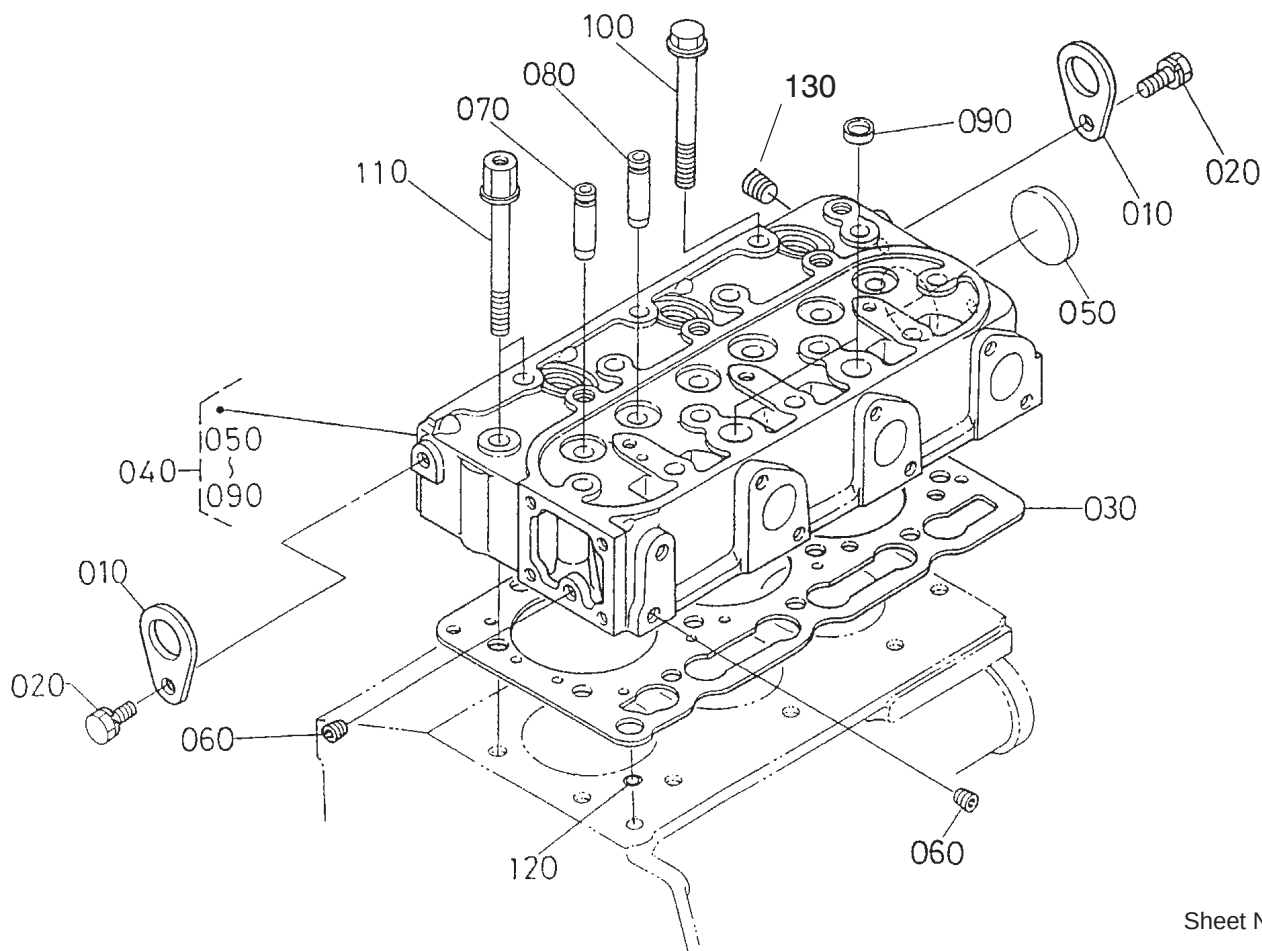
Ref. No.	Part No.	Qty.	Description



Sheet No.:54

Oil Pan Assembly

Ref. No.	Part No.	Qty.	Description
010	104-3495	1	Pan-Oil
030	98-9350	2	Bolt
040	98-9386	1	Plug
050	98-7524	1	Gasket
060	104-3496	1	Filter-Oil Pickup
070	98-9358	1	Bolt
080	105-3776	1	O-Ring

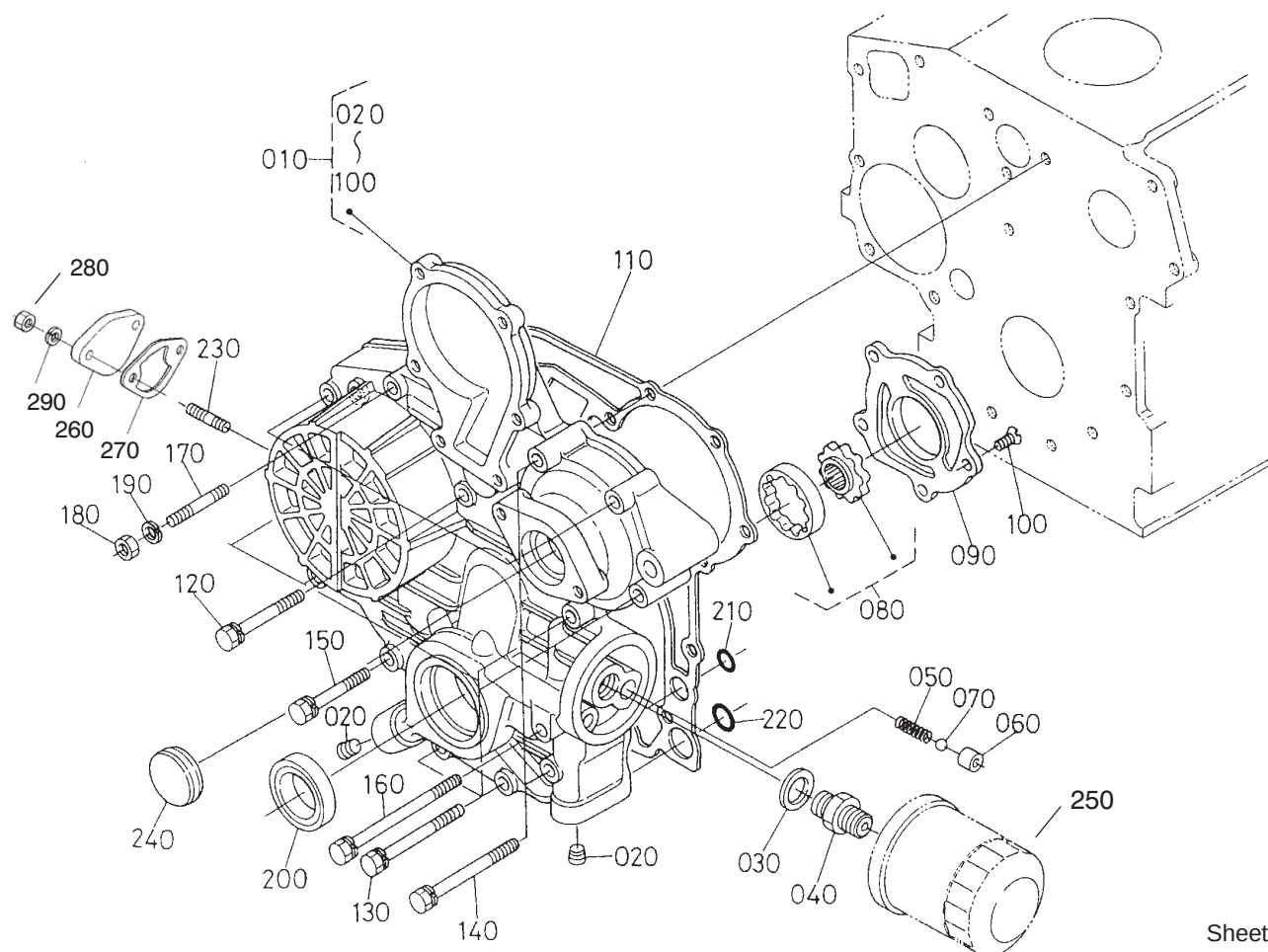


Sheet No.:55

Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
010	98-7531	2	Hook-Engine
020	100-9195	2	Bolt
030	105-3780	1	Gasket-Head, Cylinder
040	98-9460	1	Cylinder Head ASM
050	98-9395	1	Cap-Sealing
060	98-7540	2	Cap-Sealing
070	98-9499	3	Guide-Valve, Inlet
080	98-9500	3	Guide-Valve, Exhaust
090	98-9389	2	Cap-Sealing
100	98-9479	1	Bolt-Head, Cylinder
110	98-9647	2	Bolt-Head, Cylinder
120	98-7509	1	O-Ring
130	98-9444	1	Plug

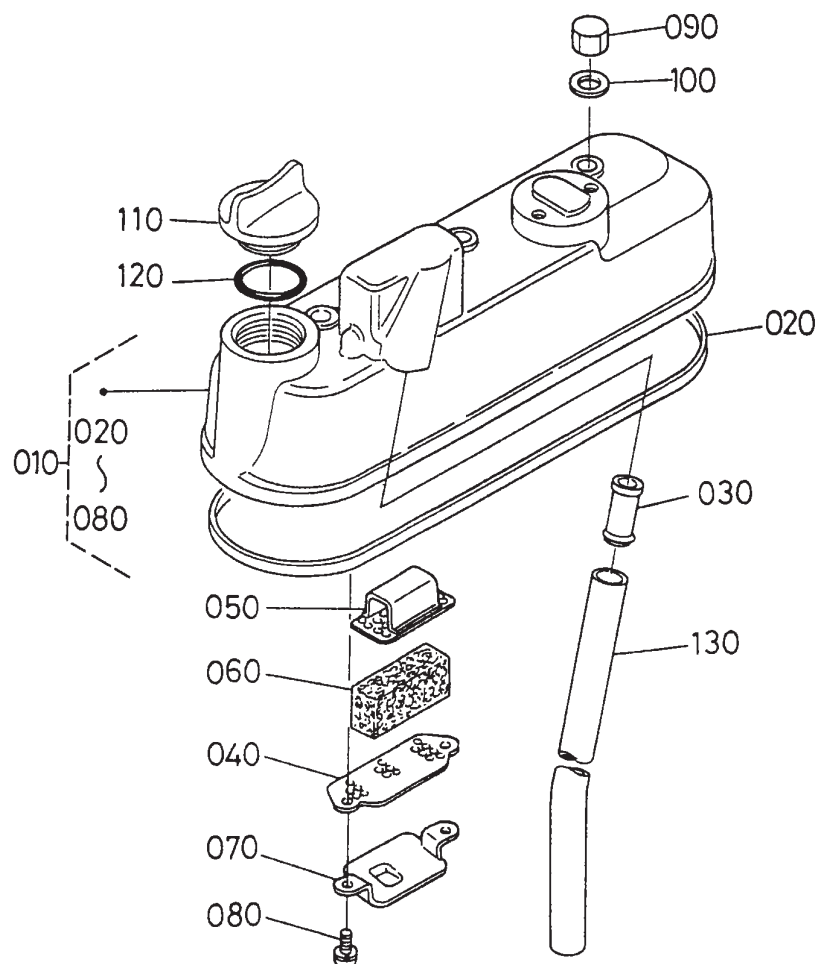
Ref. No.	Part No.	Qty.	Description



Sheet No.:56

Gear Case, Oil Filter and Cover Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
010	98-9481	1	Gear Case ASM	270	98-9636	1	Gasket-Pump, Fuel
020	98-9598	1	Plug	280	98-7572	2	Nut
030	98-7562	1	Washer-Plain	290	98-7699	2	Washer-Spring
040	98-9388	1	Joint-Pipe				
050	98-9544	1	Spring				
060	98-9543	1	Seat-Valve				
070	98-9380	1	Ball				
080	98-9540	1	Oil Pump Rotor ASM				
090	98-9541	1	Cover-Pump, Oil				
100	98-9592	5	Screw				
110	98-9633	1	Gasket-Case, Gear				
120	98-7496	3	Bolt				
130	105-3797	6	Bolt				
140	98-9356	2	Bolt				
150	98-9437	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	105-3781	2	O-Ring				
220	105-3777	2	O-Ring				
230	105-3710	2	Stud				
240	98-9641	1	Cover				
250	99-8384	1	Filter-Oil				
260	99-3514	1	Cover				

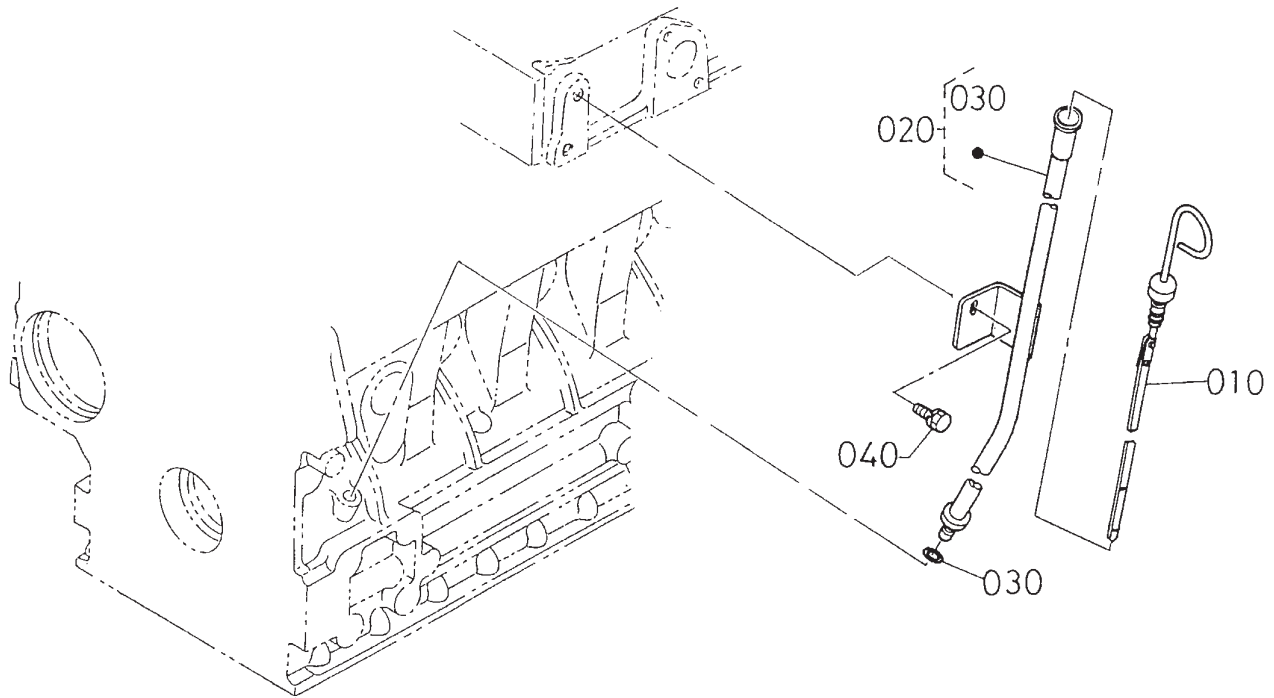


Sheet No.:57

Head Cover Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9614	1	Cylinder Head Cover ASM
020	98-9615	1	Gasket-Cover, Head
030	98-9492	1	Joint-Pipe, Breather
040	98-9488	1	Plate-Element, Breather
050	98-9489	1	Plate-Element, Breather
060	98-9493	1	Element-Breather
070	98-9490	1	Shield-Oil, Breather
080	105-3782	2	Screw W/Washer
090	98-9455	3	Nut-Cap
100	98-9454	3	Gasket
110	98-9449	1	Plug-Filler, Oil
120	99-3446	1	O-Ring
130	98-9491	1	Pipe-Breather

Ref. No.	Part No.	Qty.	Description

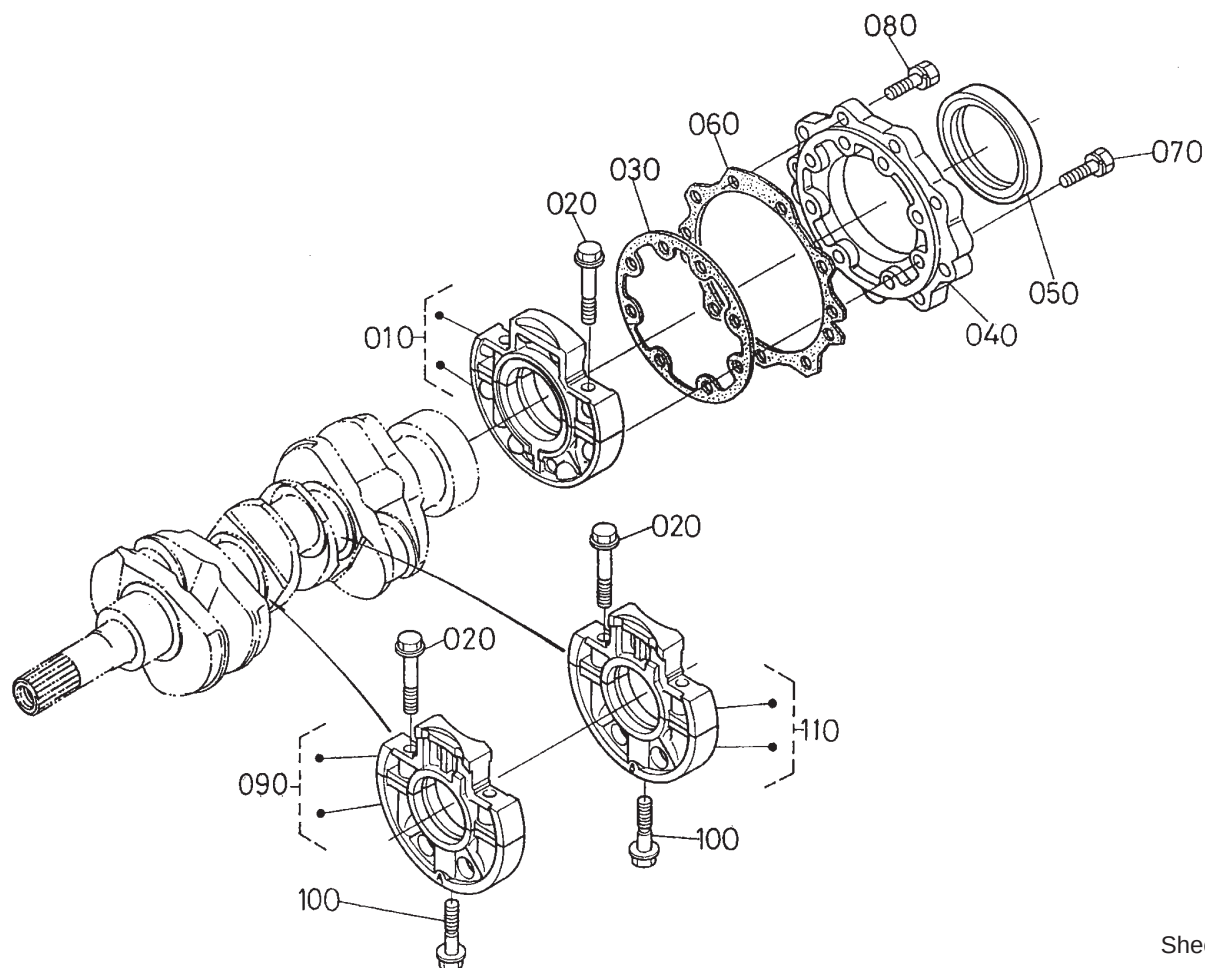


Sheet No.:58

Dipstick and Guide Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9670	1	Gauge-Oil
020	98-9672	1	Oil Gauge Guide ASM
030	98-9374	1	O-Ring
040	98-7453	1	Bolt

Ref. No.	Part No.	Qty.	Description

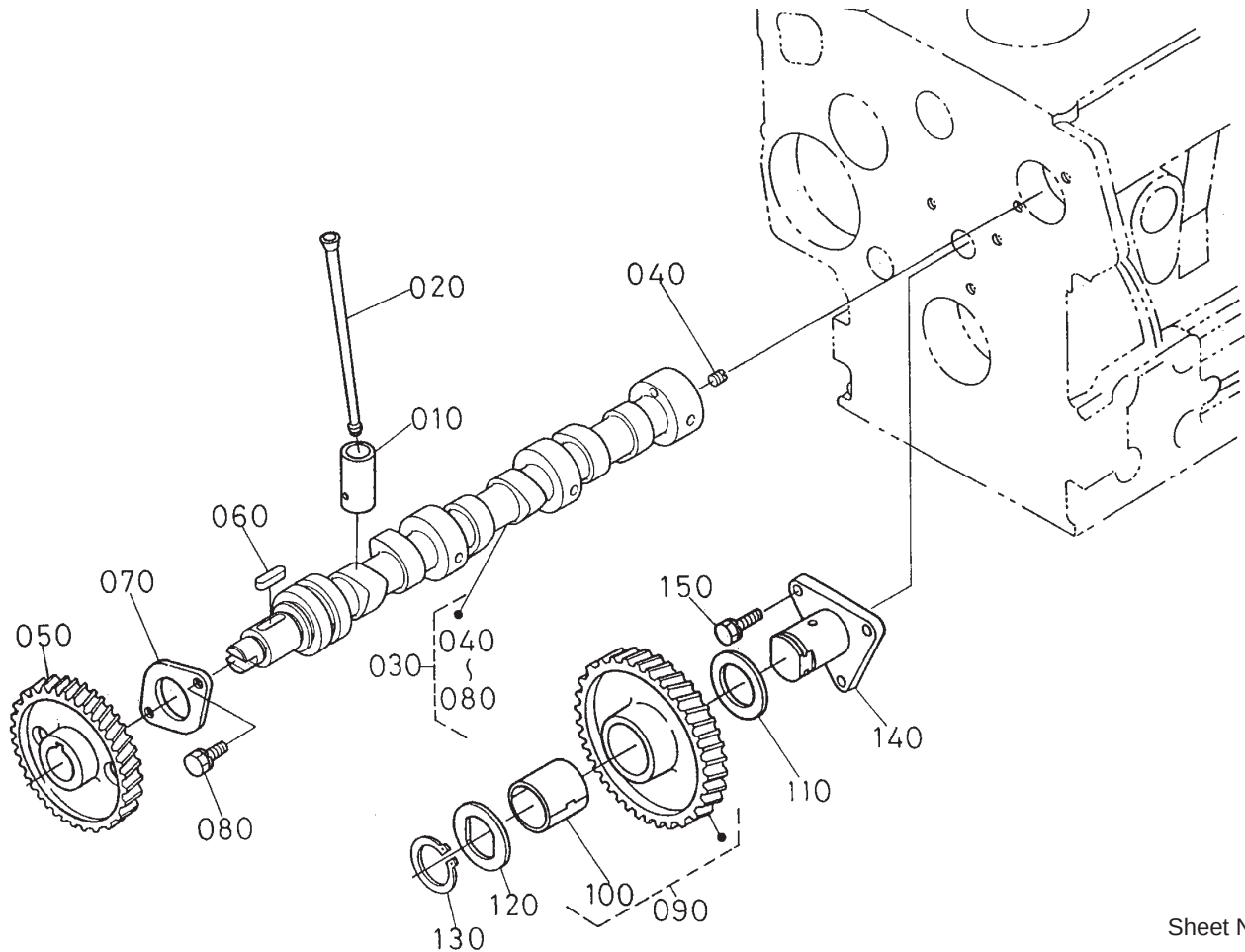


Sheet No.:59

Main Bearing Case Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9480	1	Main Bearing Case ASM
020	98-9484	6	Bolt-Case, Bearing
030	98-9634	1	Gasket-Case, Bearing
040	98-9487	1	Cover-Case, Bearing
050	98-9483	1	Seal-Oil
060	98-9635	1	Gasket-Cover, Bearing Case
070	98-9352	8	Bolt
080	98-7568	9	Bolt
090	98-9606	1	Main Bearing Case ASM
100	98-9485	2	Bolt-Case, Bearing
110	98-9607	1	Main Bearing Case ASM

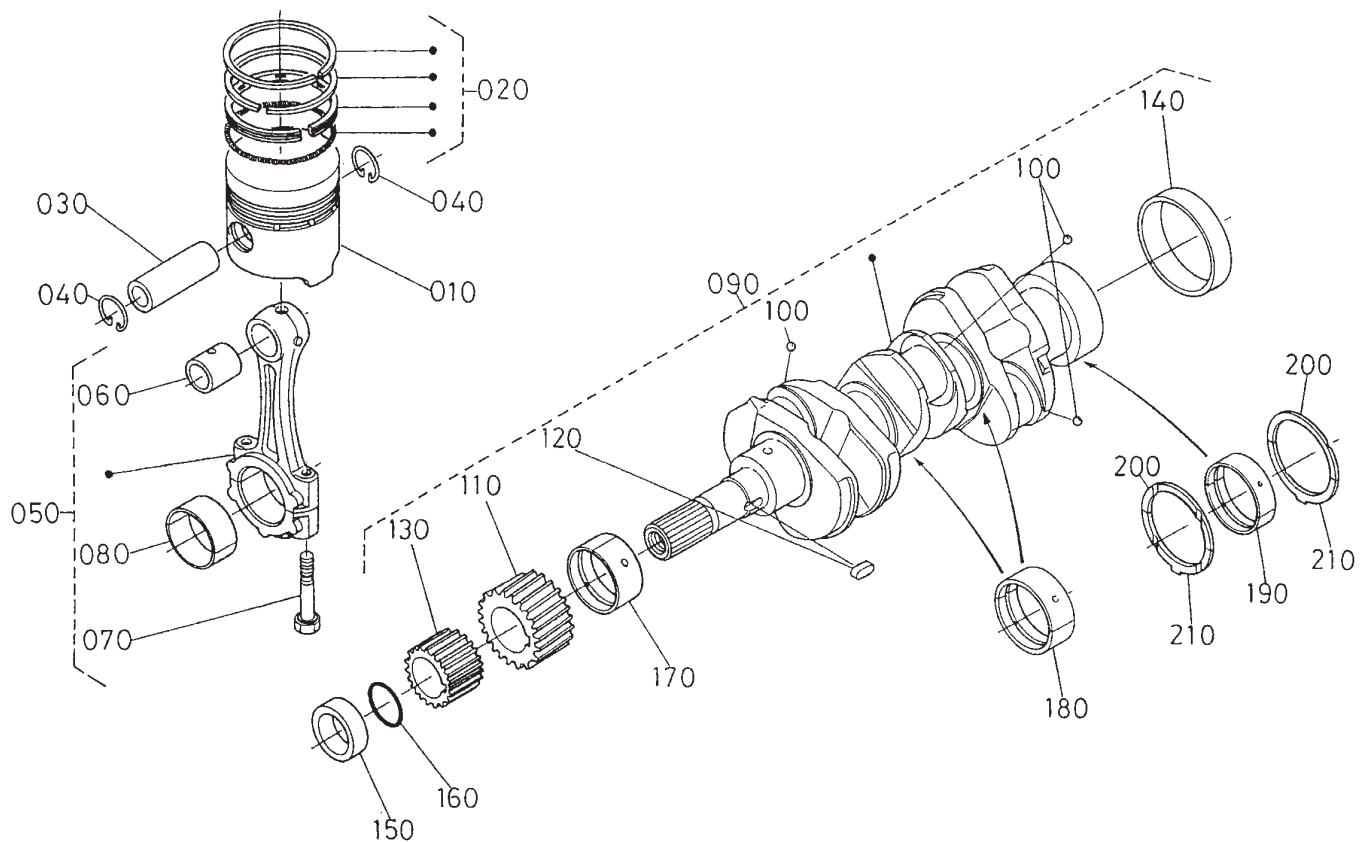
Ref. No.	Part No.	Qty.	Description



Sheet No.:60

Camshaft and Idler Gear Shaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9616	6	Tappet
020	98-9509	6	Rod-Push
030	98-9617	1	Camshaft ASM
040	98-7449	1	Screw-Set
050	98-9512	1	Gear-Cam
060	98-9378	1	Key-Feather
070	98-9510	1	Stopper-Camshaft
080	98-9351	2	Bolt
090	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

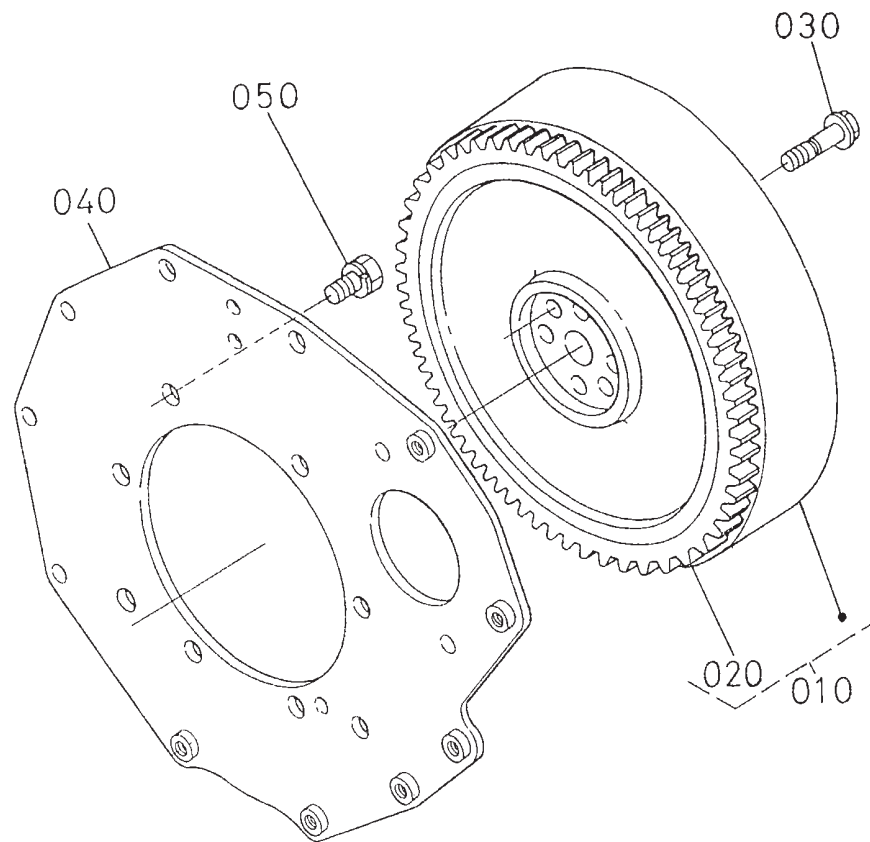


Sheet No.:61

Piston and Crankshaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9469	3	Piston (STD)
010	98-9470	3	Piston (0.5mm)
020	98-9618	3	Piston Ring ASM (STD)
020	98-9619	3	Piston Ring ASM (0.5mm)
030	98-9513	3	Pin-Piston
040	98-9514	6	Clip-Circular, Piston Pin
050	98-9516	3	Connecting Rod ASM
060	98-9515	3	Bushing-Pin, Piston
070	98-9517	6	Bolt-Rod, Connecting
080	98-9518	3	Metal-Crankpin (STD)
080	98-9519	3	Bearing-Rod (0.2mm)
080	98-9520	3	Bearing-Rod (0.4mm)
090	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	98-9529	1	Bearing-Main (0.4mm)
170	98-9528	1	Bearing-Main (0.2mm)
170	98-9523	1	Metal Crankshaft

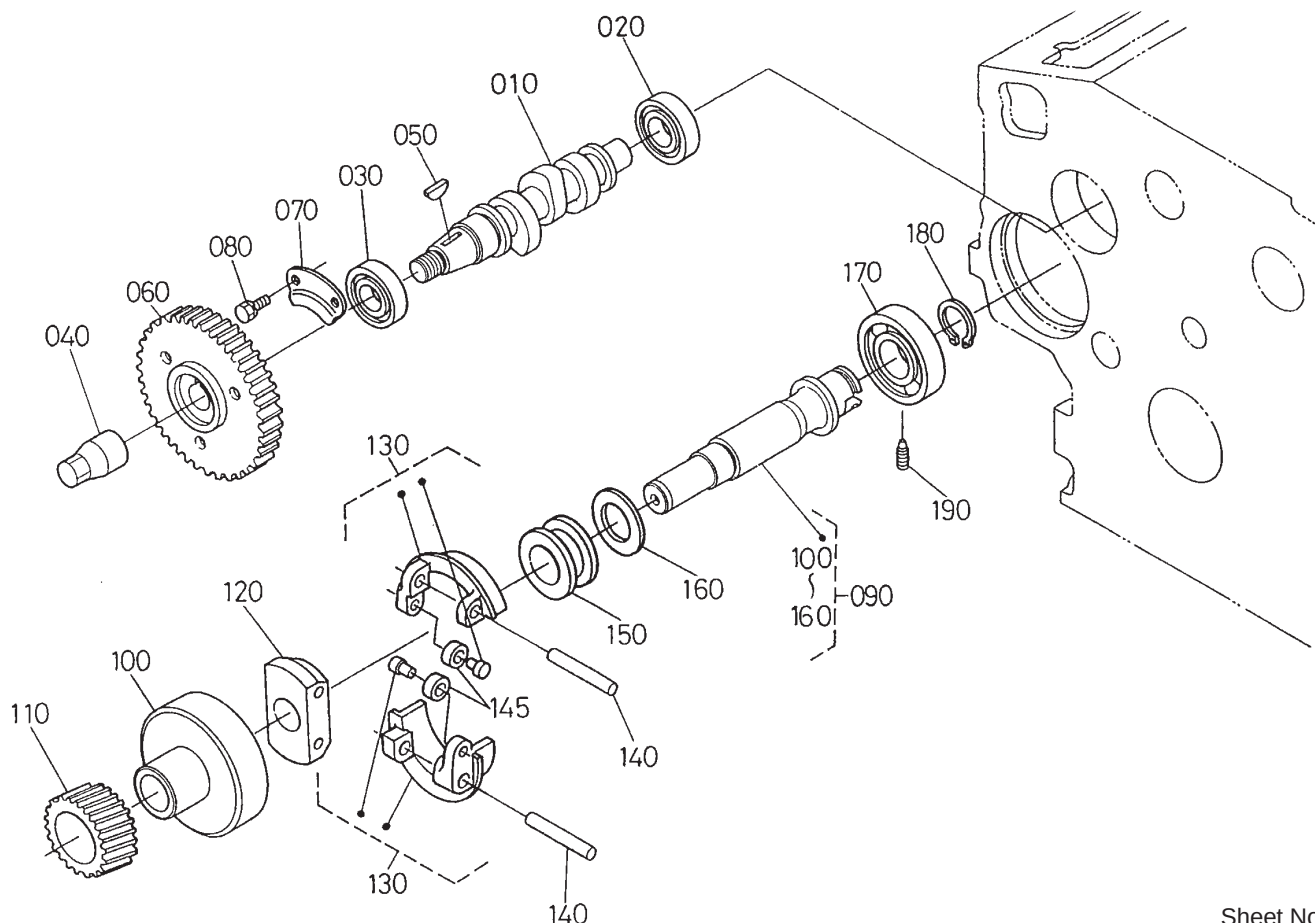
Ref. No.	Part No.	Qty.	Description
(STD)			
180	98-9531	2	Bearing-Main (0.4mm)
180	98-9530	2	Bearing-Main (0.2mm)
180	98-9524	2	Metal-Crankshaft (STD Set)
190	98-9527	1	Bearing-Main (0.4mm)
190	98-9526	1	Bearing-Main (0.2mm)
190	98-9525	1	Metal Crankshaft(STD Set)
200	98-9415	2	Bearing-Thrust (0.4mm)
200	98-9414	2	Bearing-Thrust (0.2mm)
200	98-9413	2	Bearing-Thrust (STD)
210	98-9690	2	Bearing-Thrust (0.4mm)
210	98-9689	2	Bearing-Thrust (0.2mm)
210	98-9688	2	Bearing-Thrust (STD)



Sheet No.:62

Flywheel Assembly

[illegible]

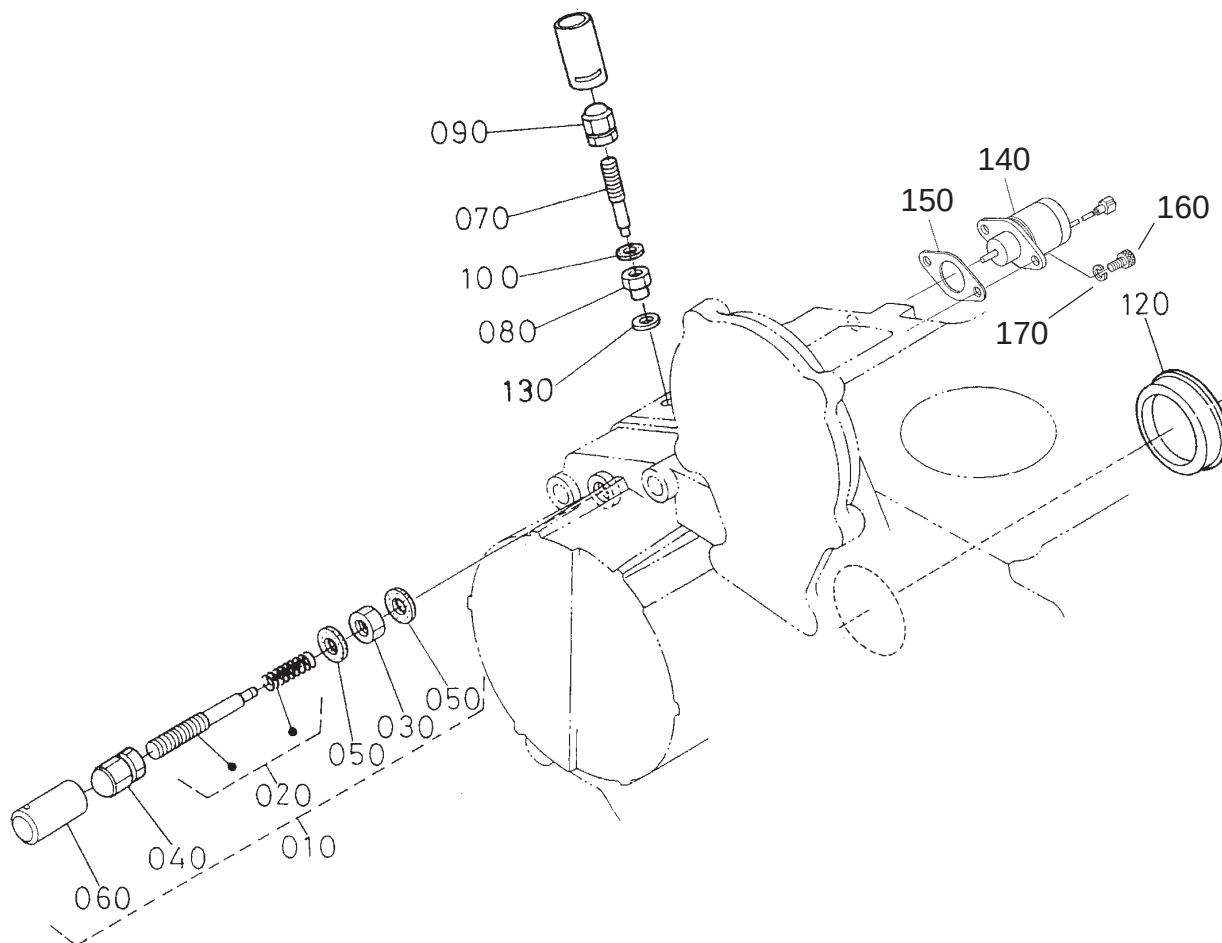


Sheet No.:63

Fuel, Camshaft and Governor Shaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9459	1	Camshaft-Fuel
020	98-9382	1	Bearing-Ball
030	98-9383	1	Bearing-Ball
040	98-9590	1	Nut-Cap
050	98-9595	1	Key-Woodruff
060	98-9669	1	Gear-Pump, Injection
070	98-9511	1	Stopper-Fuel, Camshaft
080	98-9350	2	Bolt
090	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	98-9381	1	Bearing-Ball
180	98-9657	1	Clip-Circular, Governor Shaft
190	98-9565	1	Screw-Set

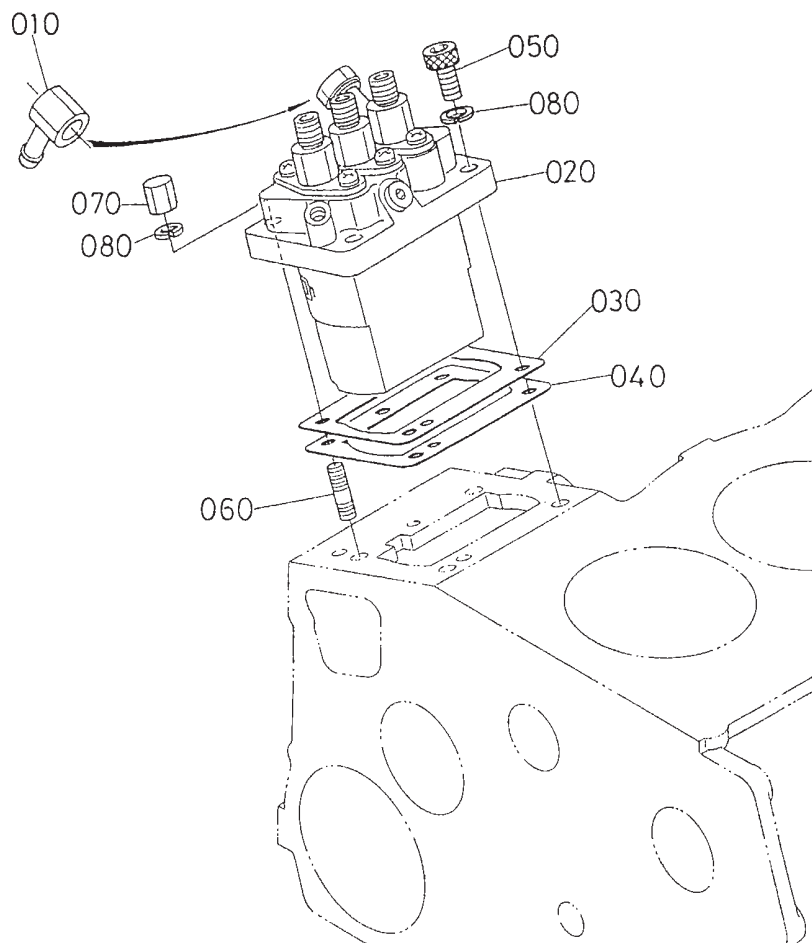
Ref. No.	Part No.	Qty.	Description



Sheet No.:64

Idle Apparatus and Stop Solenoid Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9678	1	Idle Apparatus ASM
020	98-9679	1	Adjusting Bolt ASM
030	98-9439	1	Nut
040	105-3785	1	Plug
050	98-7654	2	Gasket
060	98-7656	1	Cap
070	98-9557	1	Bolt-Adjusting
080	99-3512	1	Nut
090	105-3785	1	Plug
100	98-7654	1	Gasket
120	98-9640	1	Cover-Pump
130	99-8389	1	Gasket
140	104-5155	1	Solenoid-Stop
150	98-9683	1	Gasket-Cover, Solenoid
160	105-3799	2	Bolt-HSH
170	98-7699	2	Washer-Spring

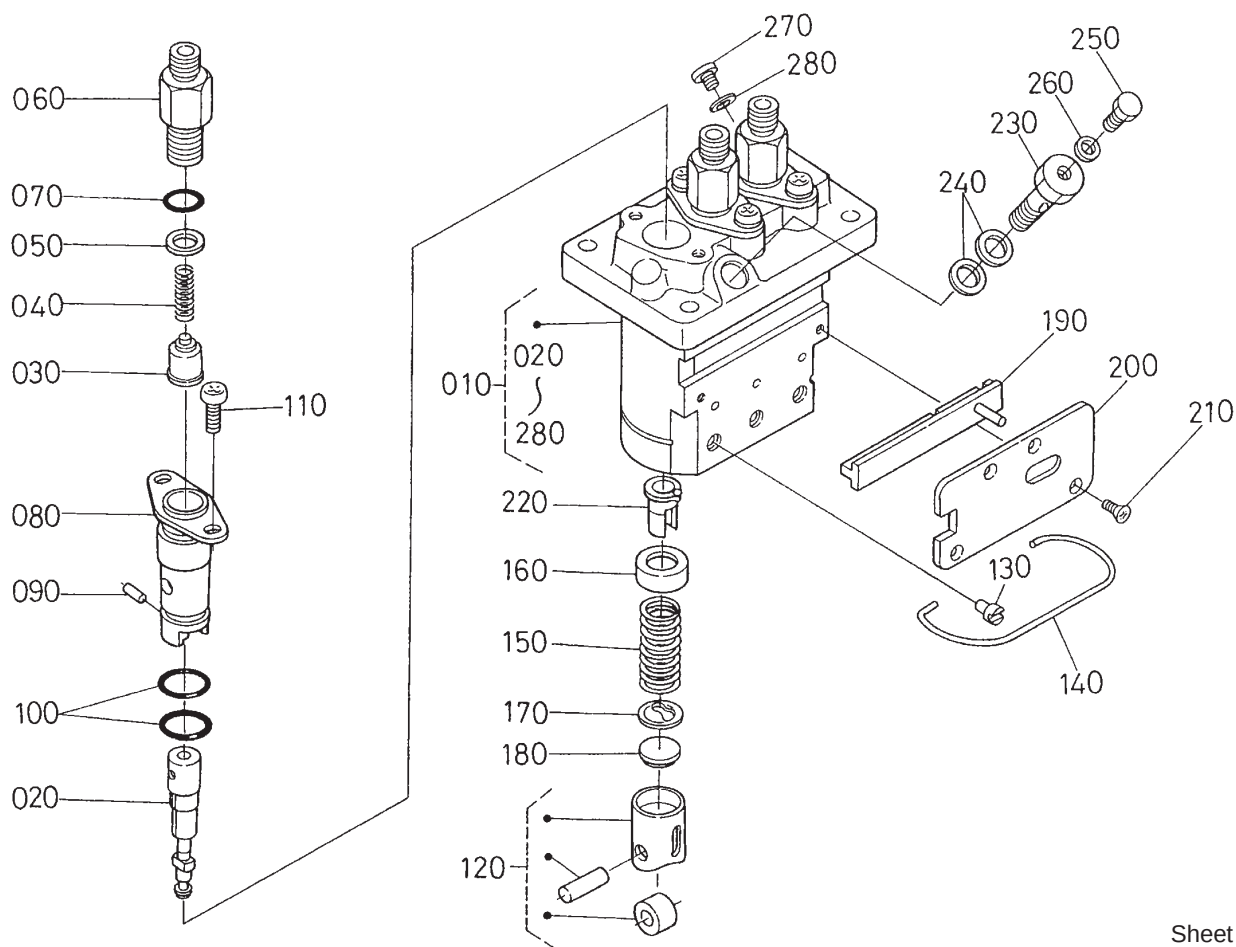


Sheet No.:65

Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9596	1	Joint-Eye
020	98-9643	1	Injection Pump ASM
030	98-9456	1	Shim (0.2mm)
030	98-9457	1	Shim-Injection (0.25mm)
040	98-9458	1	Shim-Injection (0.30mm)
050	98-9361	2	Bolt-HSH
060	98-9438	2	Stud
070	98-9440	2	Nut-Cap
080	98-7699	4	Washer-Spring

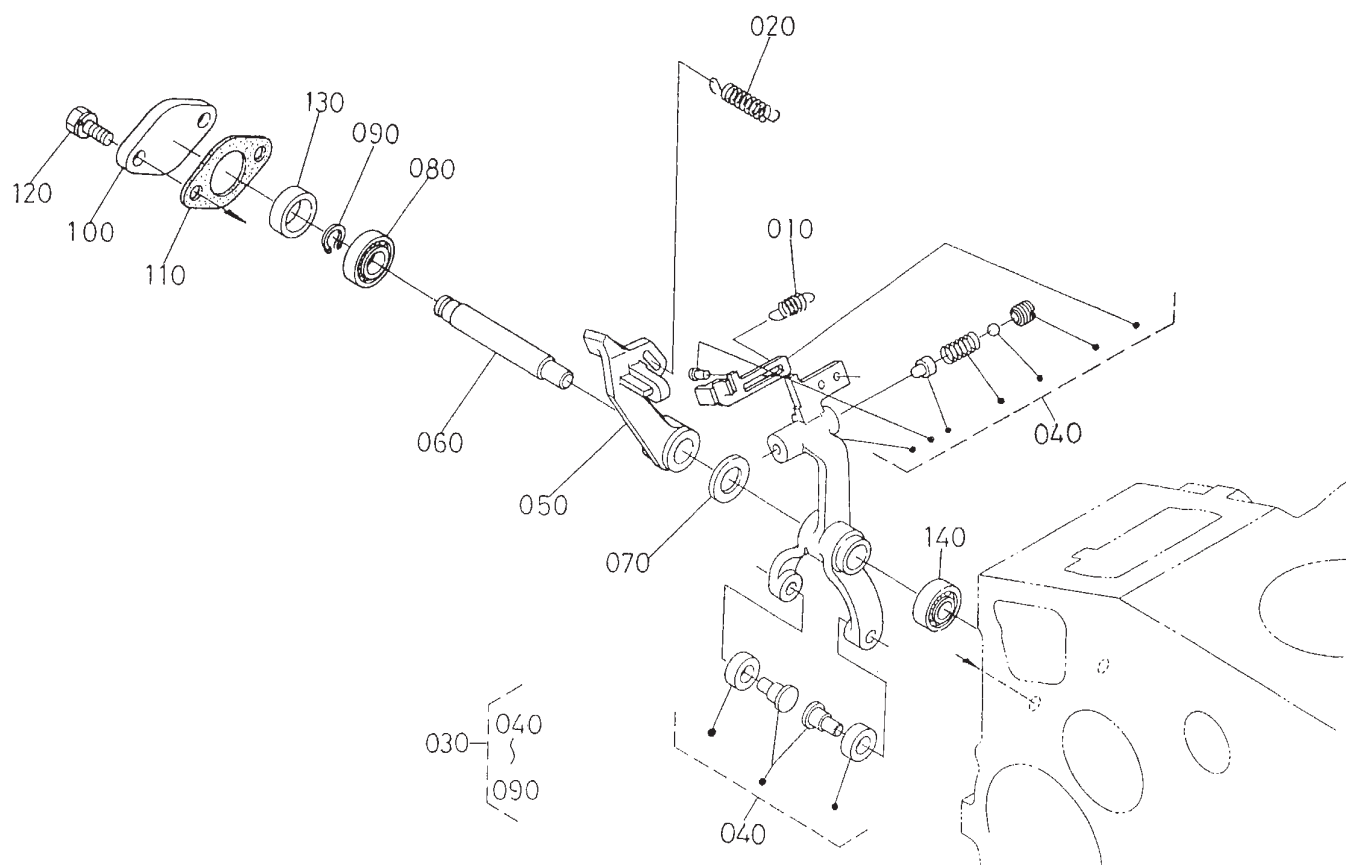
Ref. No.	Part No.	Qty.	Description



Sheet No.:66

Injection Pump Assembly No. 98-9643

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
010	98-9643	1	Injection Pump ASM	260	98-9446	1	Gasket
020	98-9462	3	Element-Pump	270	98-9466	1	Plug
030	98-9421	3	Valve-Delivery	280	98-9451	1	Gasket
040	98-9424	3	Spring-Valve, Delivery				
050	98-9425	3	Gasket-Valve, Delivery				
060	98-9652	3	Holder-Valve, Delivery				
070	98-9447	3	O-Ring				
080	98-9434	3	Flange-Sleeve				
090	98-9443	3	Pin-Joint				
100	98-9423	6	O-Ring				
110	105-2892	6	Screw				
120	98-9422	3	Tappet ASM				
130	98-9426	3	Pin-Guide, Tappet				
140	98-9450	1	Pin-Clamp				
150	98-9428	3	Spring-Plunger				
160	98-9427	3	Seat-Spring, Upper				
170	98-9429	3	Seat-Spring, Lower				
180	98-9433	3	Shim				
190	98-9463	1	Control-Rack				
200	98-9465	1	Plate				
210	98-9442	4	Screw				
220	98-9432	3	Sleeve-Control				
230	98-9464	1	Bolt-Joint				
240	98-9445	2	Gasket				
250	98-9430	1	Screw				

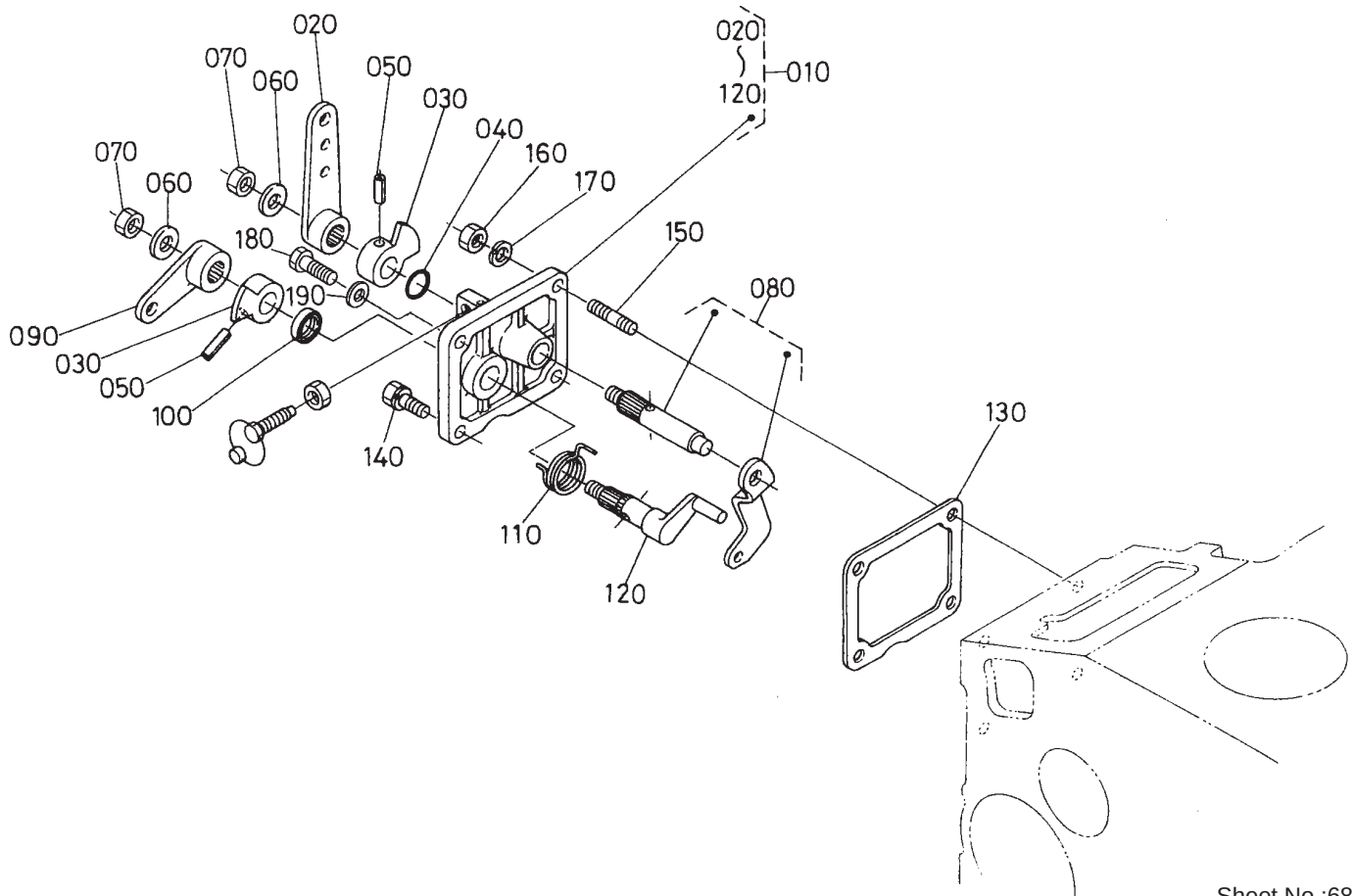


Sheet No.:67

Governor Assembly

Ref. No.	Part No.	Qty.	Description
010	105-3786	1	Spring-Start
020	98-9681	1	Spring-Governor
030	105-3787	1	Fork Lever ASM
040	99-8380	1	Fork Lever ASM
050	105-3743	1	Lever-Fork
060	98-9566	1	Shaft-Lever, Fork
070	98-9593	1	Washer-Plain
080	98-9570	1	Bearing-Miniaturize
090	98-9369	1	Clip-Circular, External
100	98-9569	1	Cover-Shaft, Fork Lever
110	98-9682	1	Gasket
120	98-9351	2	Bolt
130	98-9567	1	Collar
140	98-9571	1	Bearing-Miniaturize

Ref. No.	Part No.	Qty.	Description

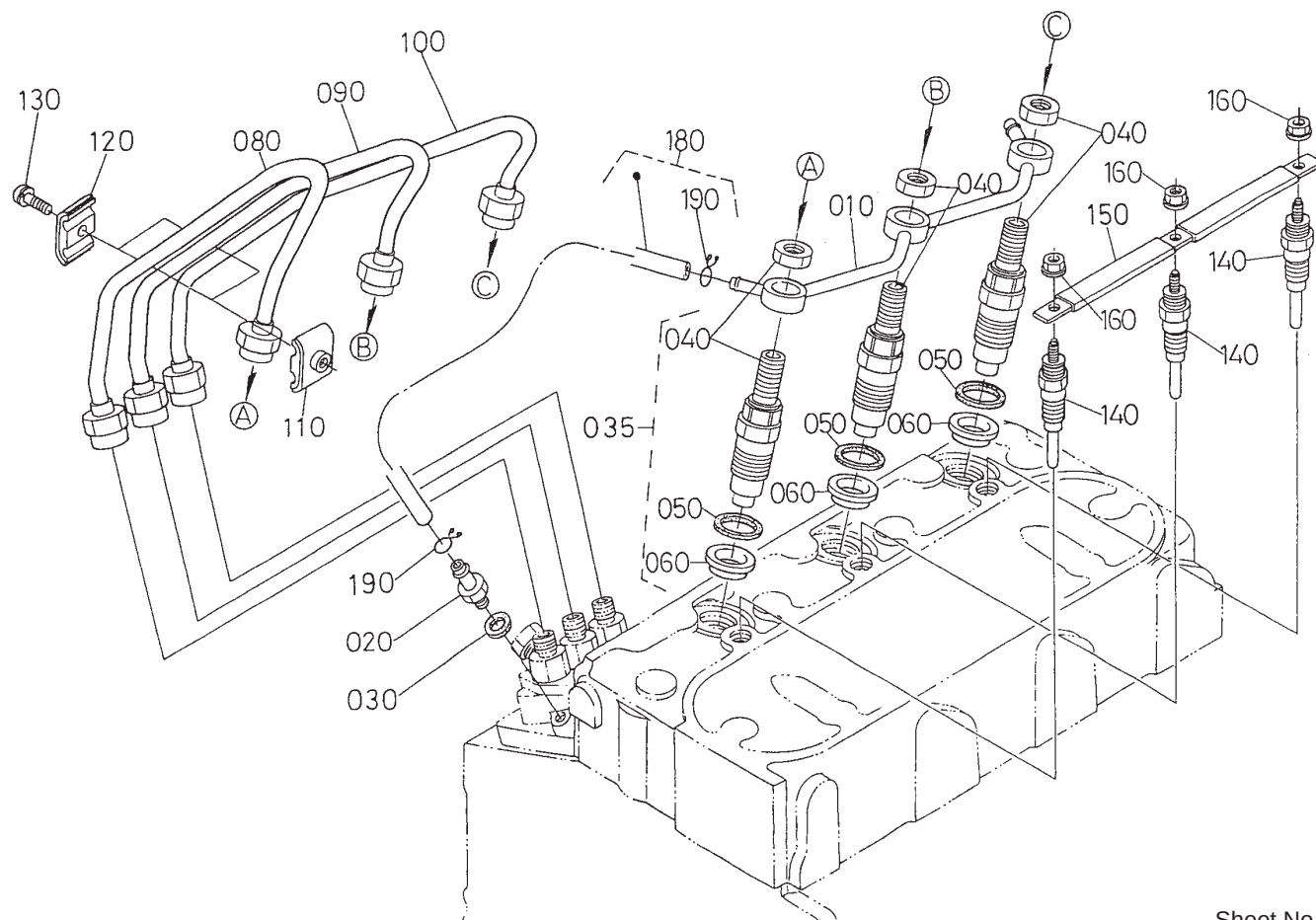


Sheet No.:68

Speed Control Plate Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9661	1	Control Plate ASM
020	98-9662	1	Lever-Control, Speed
030	98-9572	2	Lever-Control, Speed
040	105-3788	1	O-Ring
050	98-7602	2	Pin-Spring
060	98-9594	2	Washer-Plain
070	98-9589	2	Nut
080	98-9658	1	Governor Lever ASM
090	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	105-3710	2	Stud
160	98-7572	2	Nut
170	98-7699	2	Washer-Spring
180	99-8348	1	Bolt
190	98-7654	1	Gasket

Ref. No.	Part No.	Qty.	Description

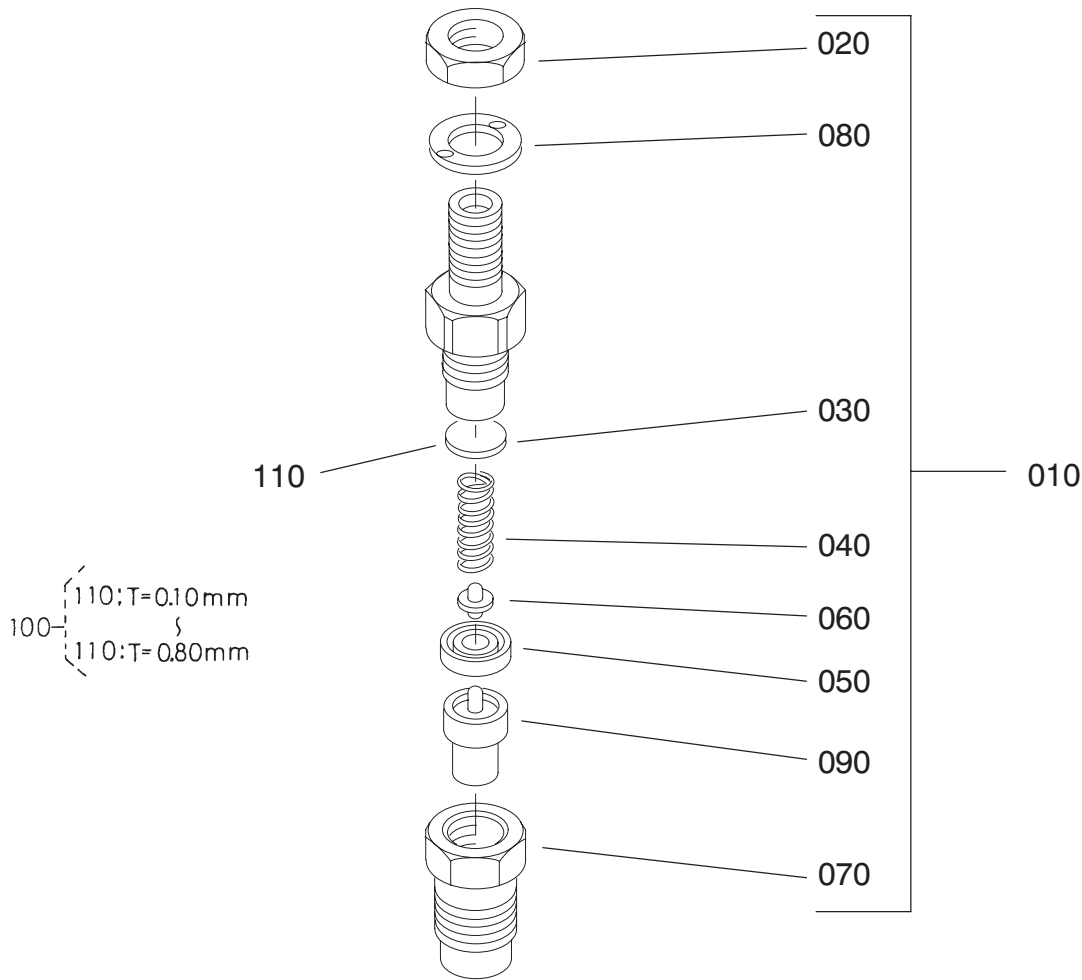


Sheet No.:69

Nozzle Holder Glow Plug Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9620	1	Over Flow Pipe ASM
020	98-9431	1	Screw-Bleeder
030	98-7654	1	Gasket
035	105-3740	3	Kit-Holder, Nozzle
040	98-9468	3	Nozzle Holder ASM
050	98-7676	3	Gasket
060	98-7677	3	Seal
080	98-9653	1	Pipe-Injection
090	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	Over Flow Pipe ASM
190	98-7671	2	Clip-Pipe

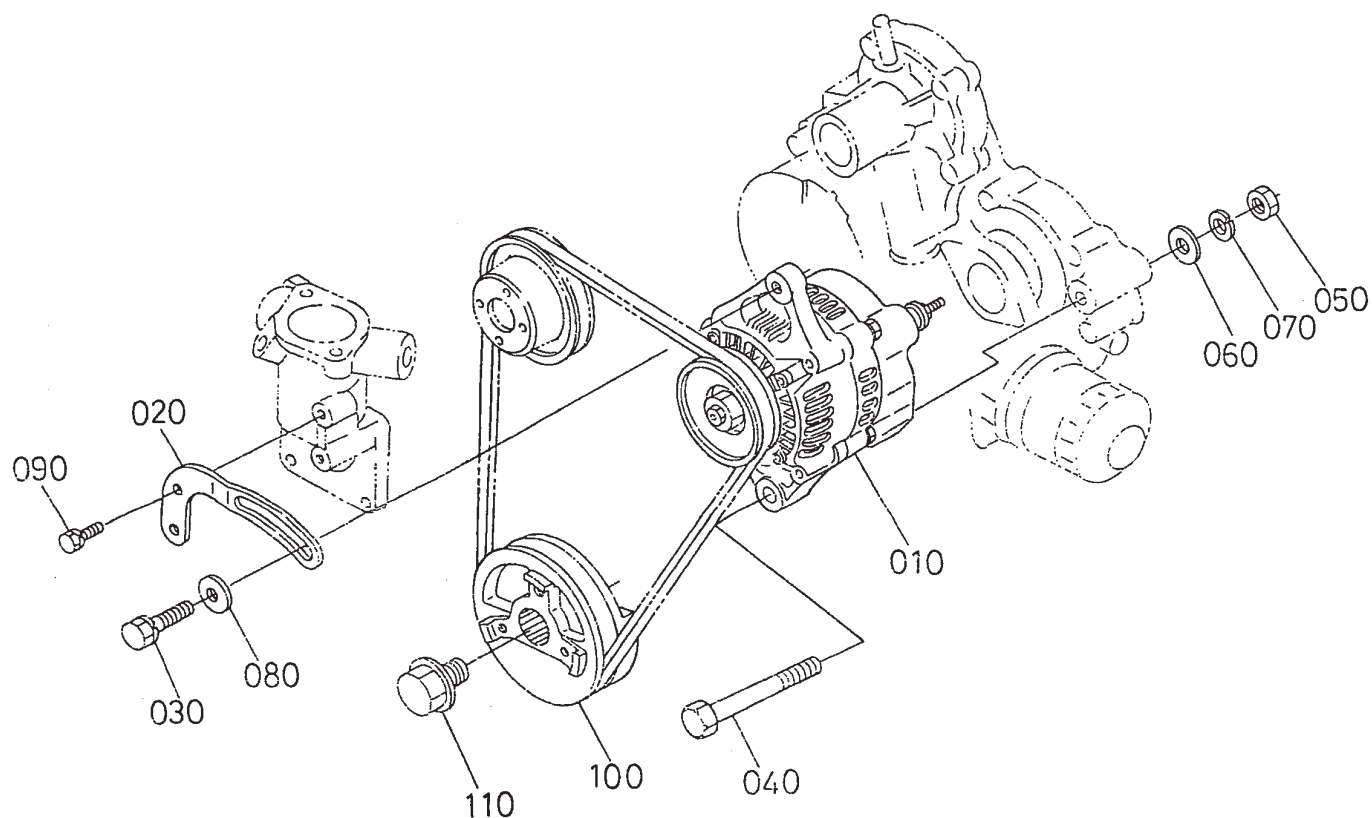
Ref. No.	Part No.	Qty.	Description



Sheet No.:70

Nozzle Holder Assembly No. 98-9468

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
010	98-9468	3	Nozzle Holder ASM	110	99-8313	3	Washer-Adjust (0.40mm)
020	99-8301	3	Nut	110	99-8314	3	Washer-Adjust (0.50mm)
030	99-8302	3	Washer-Adjusting				
040	99-8303	3	Spring-Nozzle				
050	99-8304	3	Spacer-Distance				
060	99-8305	3	Rod-Push				
070	99-8306	3	Nut-Nozzle				
080	99-8307	3	Washer-Plain				
090	99-8308	3	Piece-Nozzle				
100	99-8309	3	Adjusting Washer ASM				
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)				
110	99-8310	3	Washer-Adjust (0.10mm)				
110	99-8311	3	Washer-Adjust (0.20mm)				
110	99-8312	3	Washer-Adjust (0.30mm)				

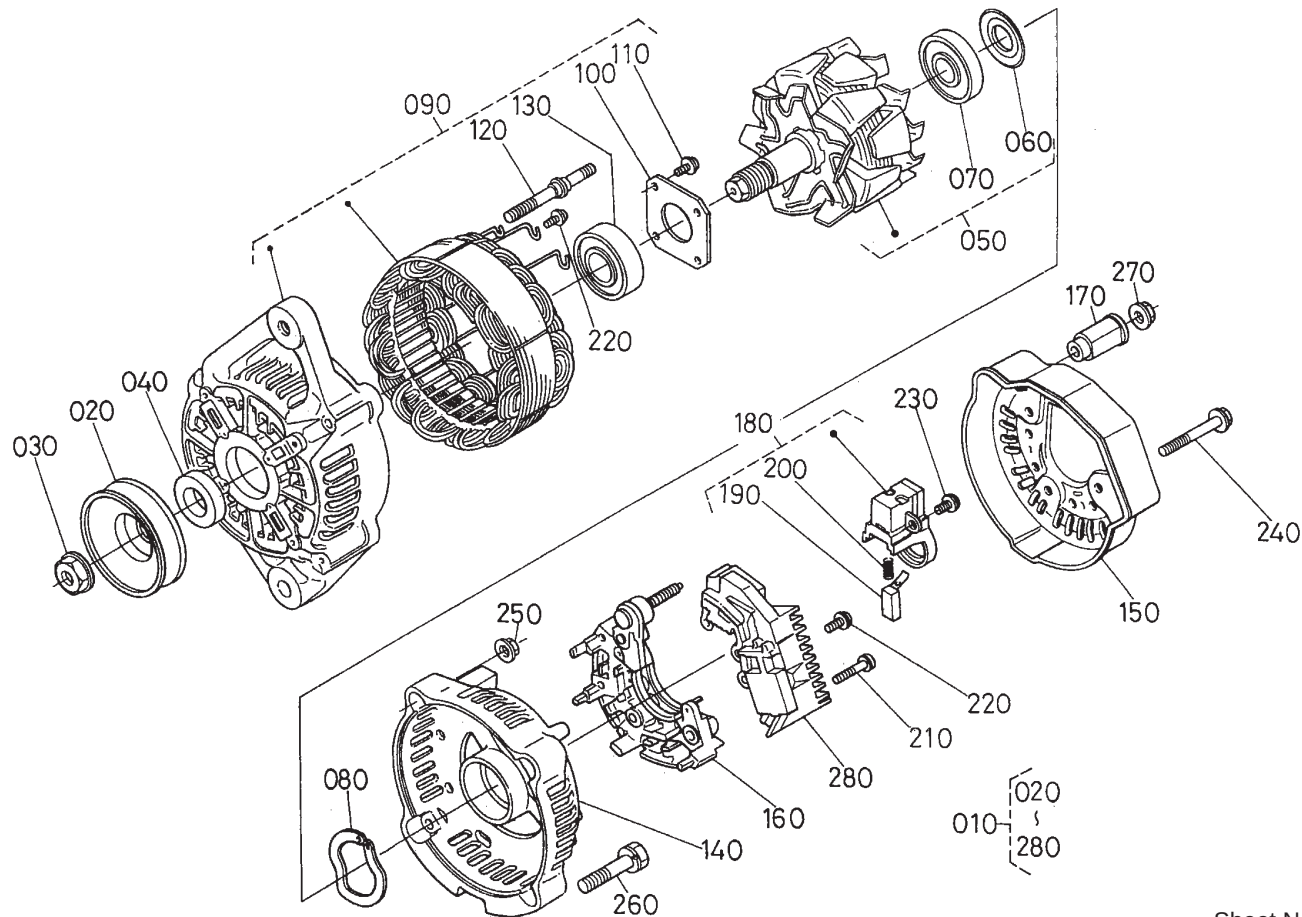


Sheet No.:71

Alternator and Pulley Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9474	1	Alternator ASM
020	98-9573	1	Stay-Dynamo
030	98-7697	1	Bolt
040	98-9360	1	Bolt
050	98-7737	1	Nut
060	3256-24	1	Washer-Flat
070	98-7738	1	Washer-Spring
080	100-9233	1	Washer-Plain
090	98-7692	1	Bolt
100	98-9473	1	Pulley-Drive, Fan
110	98-9585	1	Bolt

Ref. No.	Part No.	Qty.	Description

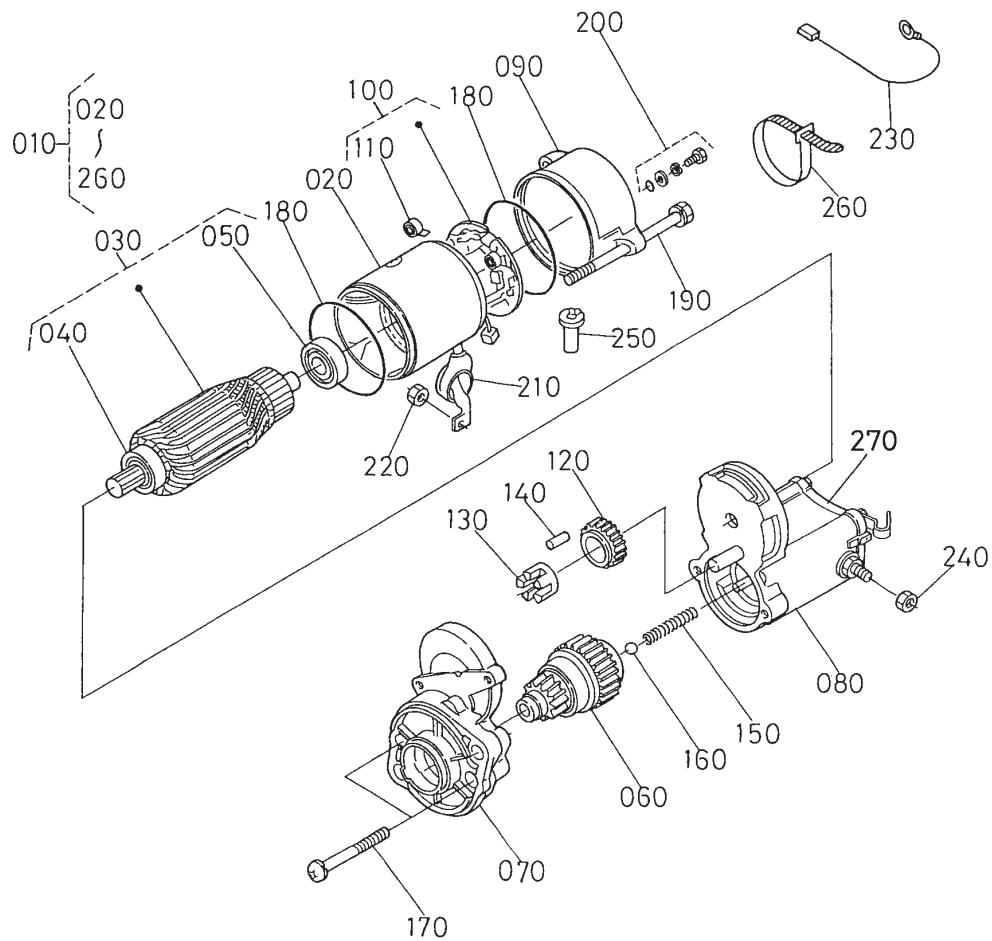


Sheet No.:72

Alternator Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9474	1	Alternator ASM
020	98-9453	1	Pulley-Dynamo
030	98-7708	1	Nut
040	98-7709	1	Collar
050	98-7710	1	Rotor
060	98-7711	1	Cover-Bearing
070	98-7712	1	Bearing-Ball
080	98-7713	1	Washer-Thrust
090	98-7714	1	Frame-End, Drive
100	98-7715	1	Plate-Retainer
110	98-7716	4	Screw-Head, Round
120	98-7717	2	Bolt-Through
130	98-7718	1	Bearing-Ball
140	98-7719	1	Frame-End
150	98-7720	1	Cover-End
160	98-7721	1	Rectifier ASM
170	98-7722	1	Bushing-Insulation
180	98-7723	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
250	98-7730	2	Nut
260	98-7731	2	Bolt

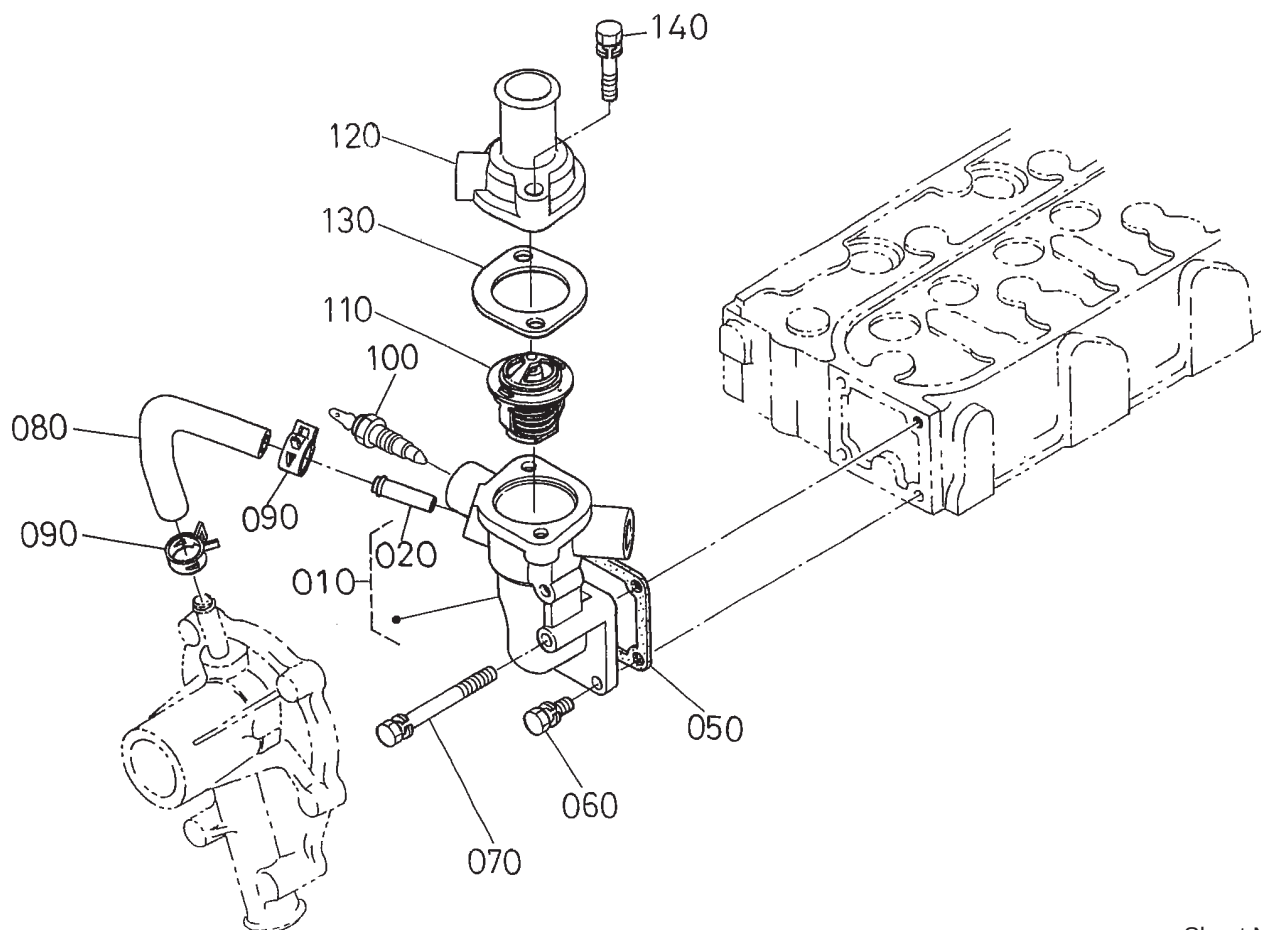
Ref. No.	Part No.	Qty.	Description
270	98-7732	1	Nut
280	98-7733	1	Regulator ASM



Sheet No.:74

Starter Assembly No. 98-9705

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
010	98-9705	1	Starter ASM	260	98-9712	1	Band-Cover
020	104-8608	1	Yoke ASM	270	105-2886	1	Cover ASM
030	98-7742	1	Armature ASM				
040	98-7744	1	Bearing				
050	98-7743	1	Bearing				
060	99-8373	1	Clutch-Running, Over				
070	99-8374	1	Frame-End, Drive				
080	105-3746	1	Magnetic Switch ASM				
090	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				
250	98-7759	1	Pipe-Drain				

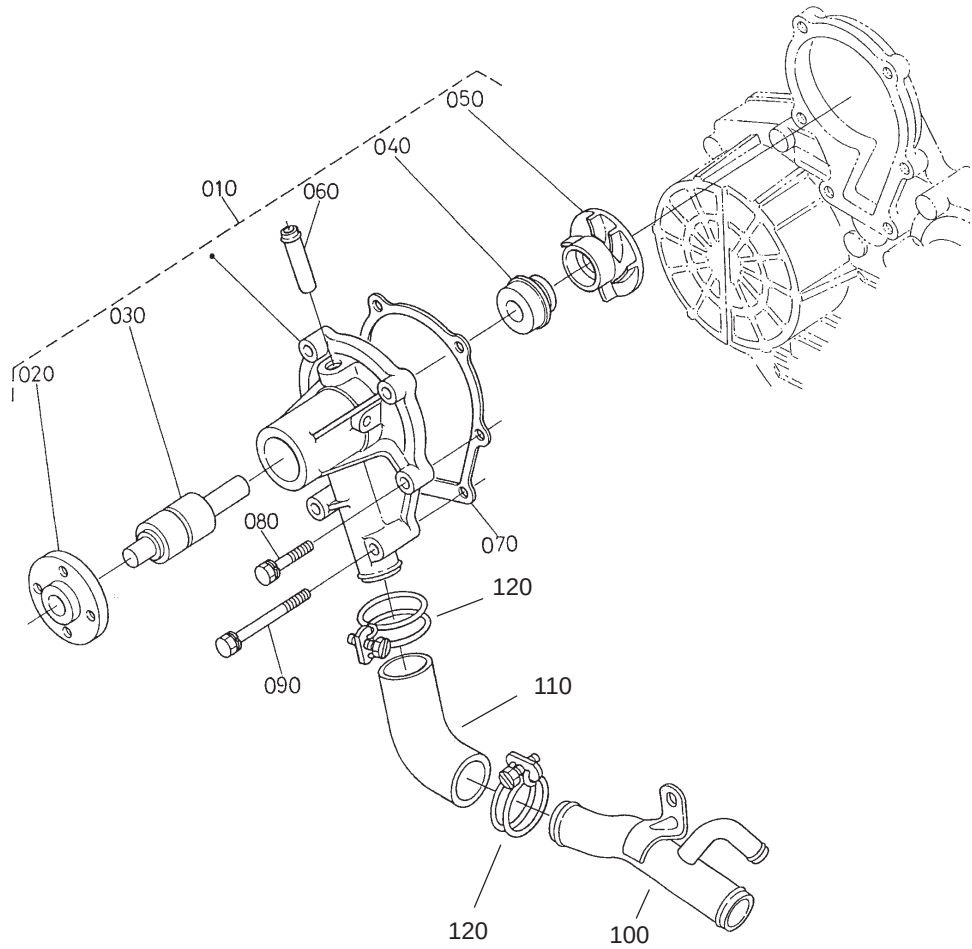


Sheet No.:75

Water Flange and Thermostat Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9713	1	Water Flange ASM
020	98-9580	1	Pipe-Return, Water
050	98-9638	1	Gasket-Flange, Water
060	98-7692	3	Bolt
070	98-9356	1	Bolt
080	98-9578	1	Pipe-Return, Water
090	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

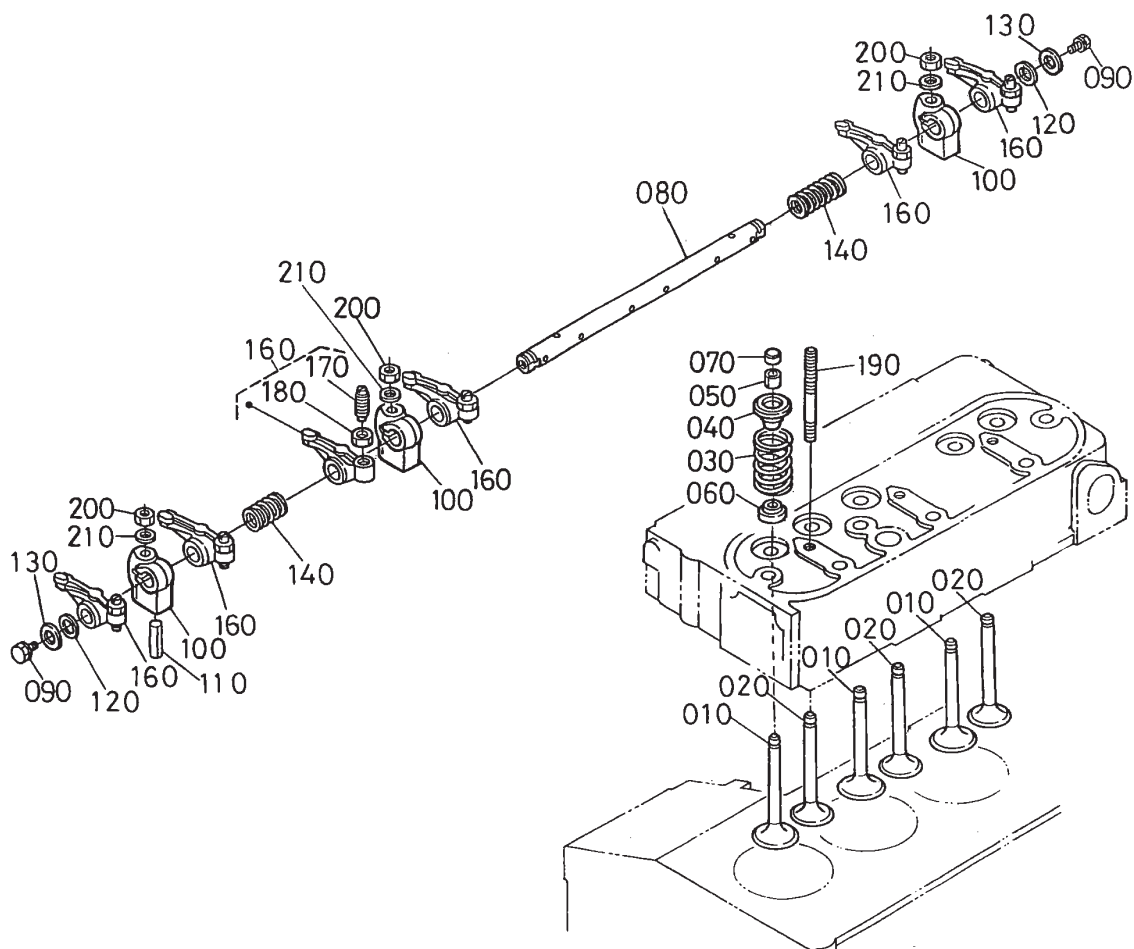
Ref. No.	Part No.	Qty.	Description



Sheet No.:76

Water pump and Water Pipe Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
010	98-9575	1	Water Pump ASM				
020	98-9582	1	Flange-Pump, Water				
030	98-9583	1	Bearing				
040	98-9576	1	Mechanical Seal ASM				
050	98-9581	1	Impeller-Pump, Water				
060	98-9577	1	Pipe-Return, Water				
070	98-9632	1	Gasket-Water Pump				
080	105-3789	1	Bolt				
090	98-9357	4	Bolt				
100	98-9716	1	Pipe-Water				
110	98-9574	1	Pipe-Water				
120	98-9717	2	Clamp				

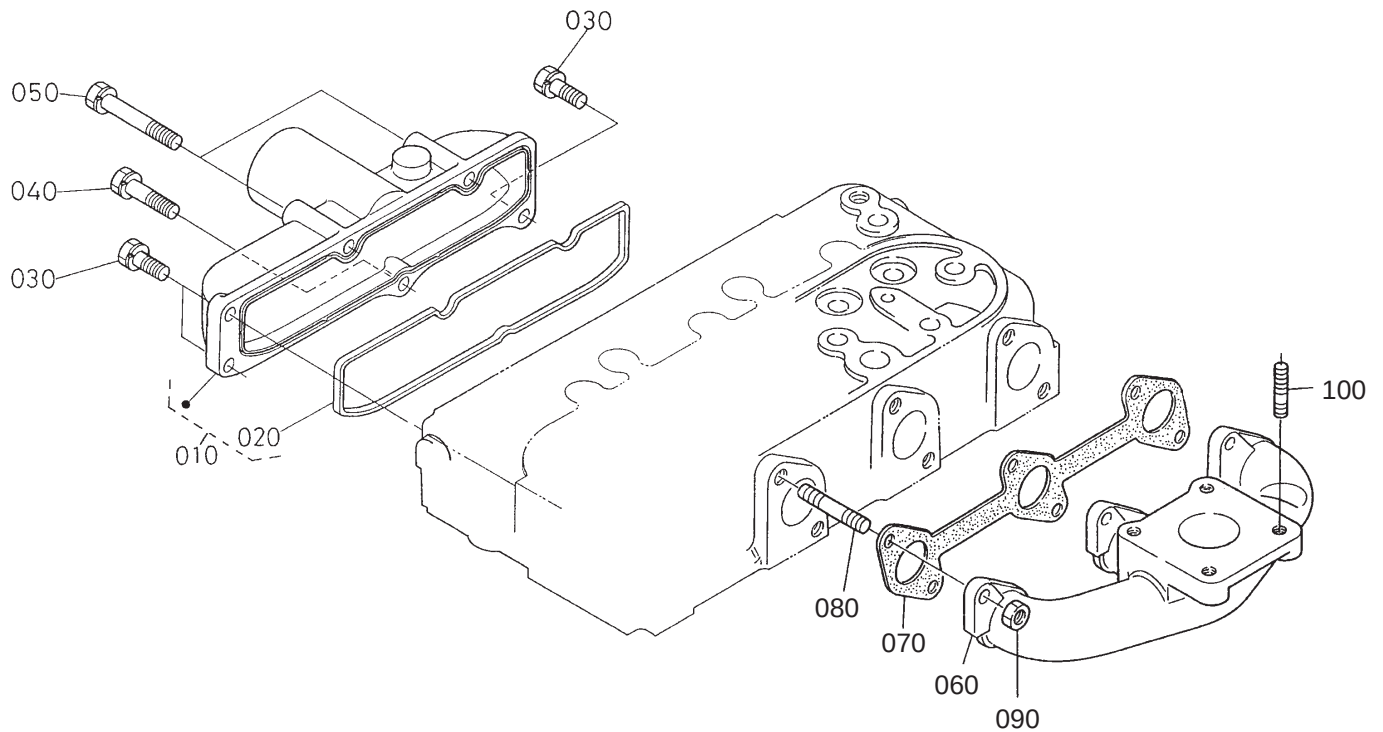


Sheet No.:77

Valve and Rocker Arm Assembly

Ref. No.	Part No.	Qty.	Description
010	98-9494	3	Valve-Inlet
020	98-9495	3	Valve-Exhaust
030	98-9648	6	Spring, Valve
040	98-9498	6	Retainer-Valve
050	98-9390	6	Collet-Set, Valve Spring
060	99-8385	6	Seat-Stem, Valve
070	98-9497	6	Cap-Valve
080	105-3790	1	R-Arm Shaft ASM
090	100-9265	2	Bolt
100	98-9505	3	Bracket-Arm, Rocker
110	98-7602	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

Ref. No.	Part No.	Qty.	Description



Sheet No.:78

Inlet and Exhaust Manifold Assembly

Ref. No.	Part No.	Qty.	Description
010	105-3791	1	Inlet Manifold ASM
020	98-9609	1	Gasket
030	98-7605	3	Bolt
040	98-9353	1	Bolt
050	105-3797	2	Bolt
060	98-9718	1	Manifold-Exhaust
070	98-9610	1	Gasket
080	98-9588	6	Stud
090	98-9665	6	Nut
100	98-7769	4	Stud

Ref. No.	Part No.	Qty.	Description

Maintenance Record

[illegible]

Maintenance Record

[illegible]

