Form No. 3328-910

580-D

Groundsmaster® Traction Unit

Model No. 30581—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.

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Injection Pump Assembly	85
Governor Assembly	87
Feed Pump Assembly	89
Fuel Filter Assembly	90
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Accessories

Description	Model / Part No.
Road Light Kit	30594
Left Cutting Unit	30591
92” Triflex Cutting Unit	30592
Right Cutting Unit	30593
Extra Traction Drive Tire	231-140
Foam Filled 12” Caster Tire	98-7329
Foam Filled 10.5 Caster Tire	93-5973

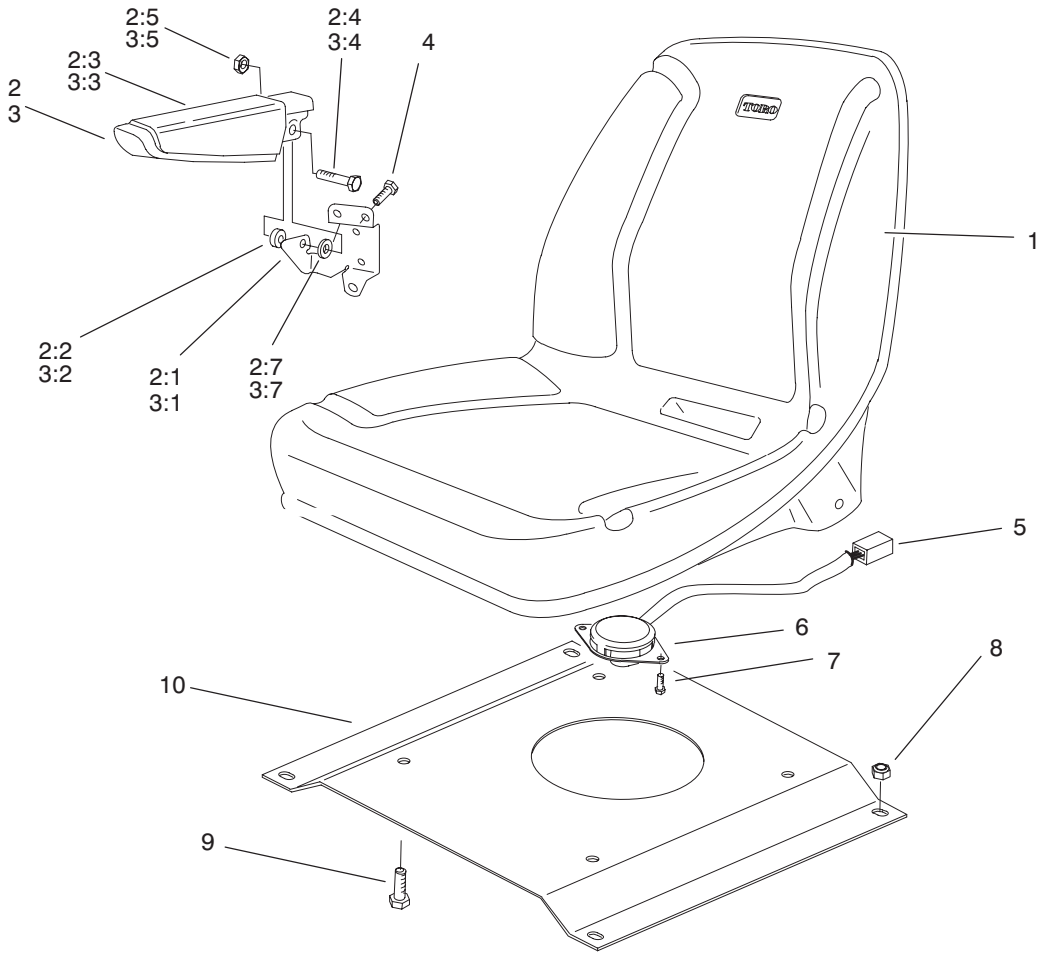
Description	Model / Part No.
Shipping Bracket (for cutting unit)	30587
Air Conditioner	30597
Cold Start Kit	30590
Flow Combiner	30586
Mulcher Kit	30588
4WD Assist Kit	30598
CE Kit	94-9800

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
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

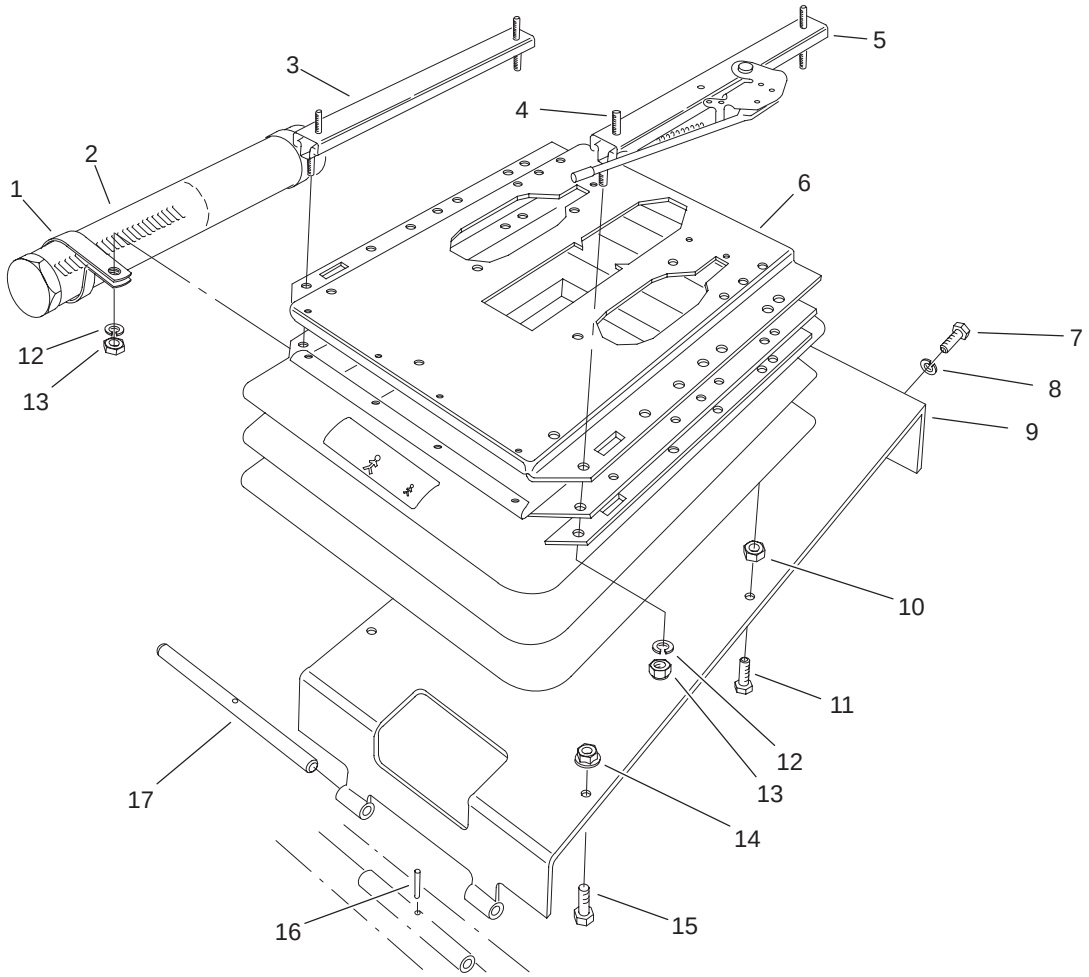


Sheet No.:2

Seat Assembly

Ref. No.	Part No.	Qty.	Description
1	104-4620	1	Seat-Olympic, Toro
2	92-7306	1	RH Armrest ASM
2:1	69-0770	1	Bracket-Arm, RH
2:2	92-7301	1	Spacer
2:3	69-1180	1	Armrest
2:4	323-9	1	Screw-HH
2:5	32128-19	1	Nut-HF
2:7	3256-24	1	Washer-Flat
3	92-7307	1	LH Armrest ASM
3:1	69-0760	1	Bracket-Arm, LH
3:2	92-7301	1	Spacer
3:3	69-1180	1	Armrest
3:4	323-9	1	Screw-HH
3:5	32128-19	1	Nut-HF
3:7	3256-24	1	Washer-Flat
4	3234-14	6	Screw-HHF
5	98-7326	1	Harness-Wire, Seat
6	92-6282	1	Switch-Seat
7	32144-10	2	Screw-HWH
8	3296-29	4	Nut-Lock, NI
9	3234-5	4	Screw
10	98-3048-03	1	Plate-Seat

Ref. No.	Part No.	Qty.	Description



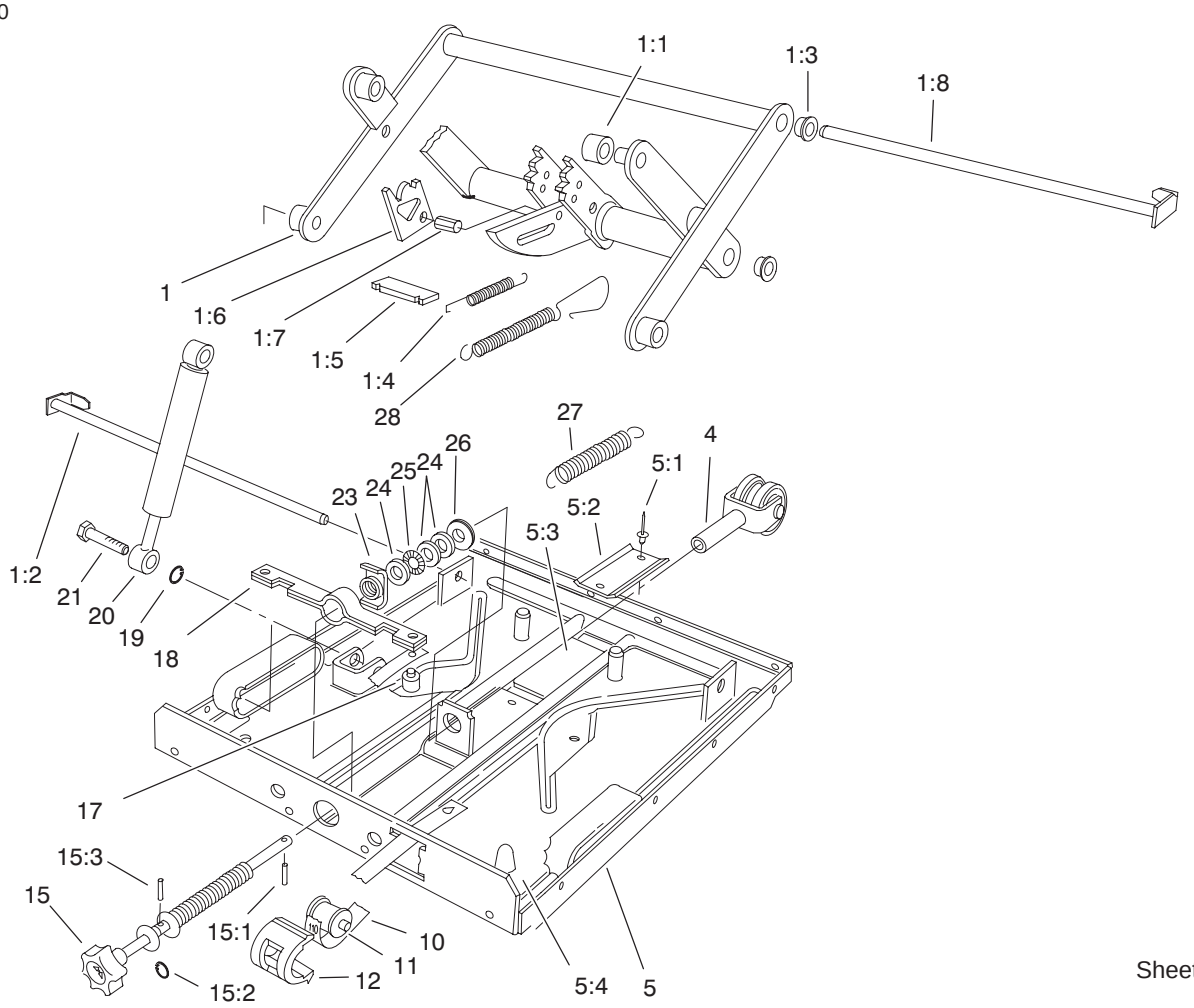
Sheet No.:3

T-1279

Seat Pivot and Bellow Assembly

Ref. No.	Part No.	Qty.	Description
1	2412-133	2	R-Clamp
2	74-0720	1	Tube-Manual
3	66-8530	1	Adjuster
4	3230-22	1	Screw-CARR
5	82-9060	1	Adjuster W/Handle
6	71-0480	1	Seat-Suspension
7	323-6	2	Screw-HH
8	3253-21	2	Washer-Lock
9	83-6660-03	1	Bracket-Support, Seat
10	33015-00	2	Nut-Hex
11	33115-025	2	Screw-HH
12	3256-23	4	Washer-Flat
13	3296-29	4	Nut-Lock, NI
14	33004-00	2	Nut-HF
15	33104-020	2	Screw-HHF
16	32121-4	1	Pin-Roll
17	27-4720	1	Shaft-Seat Pivot

Ref. No.	Part No.	Qty.	Description

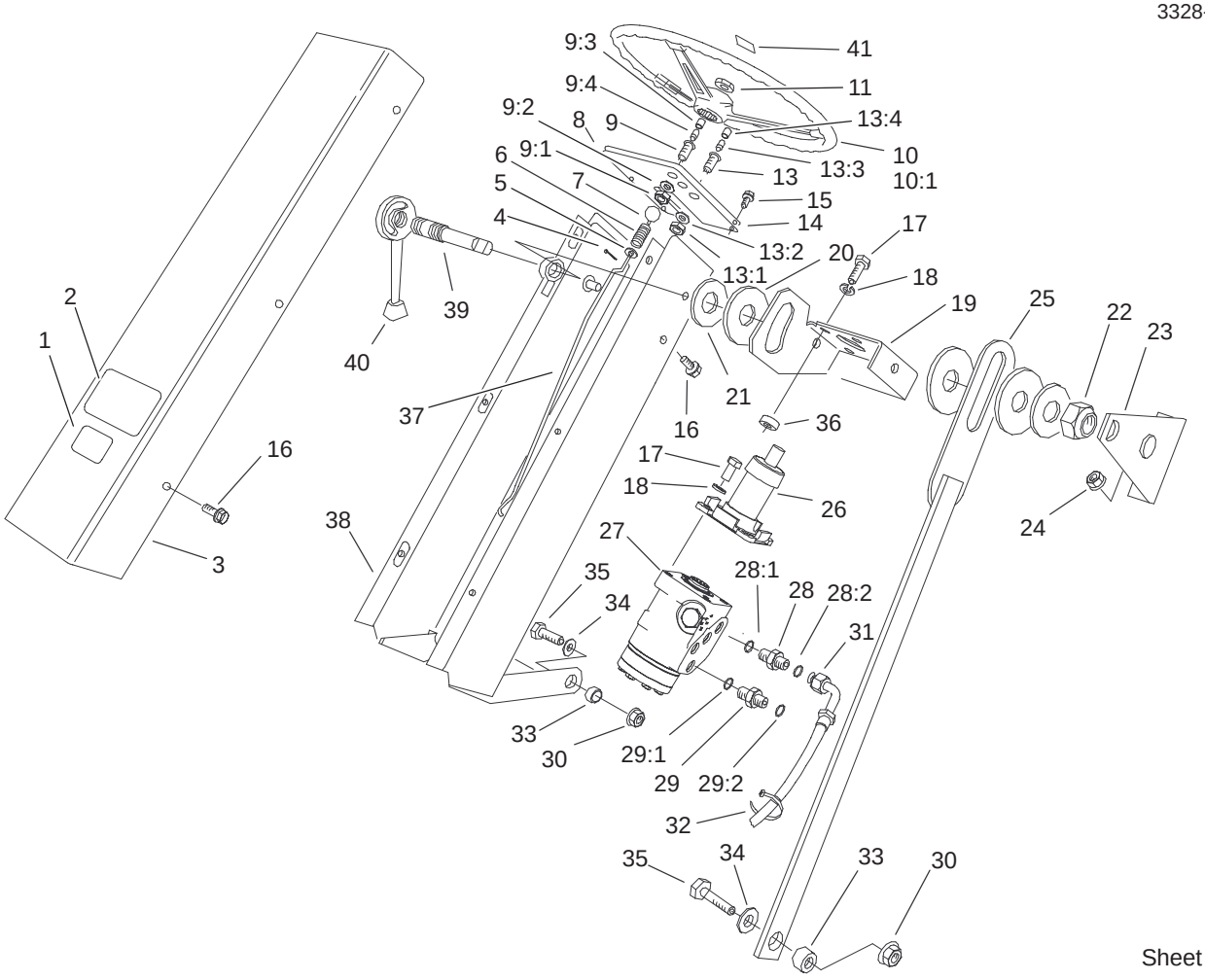


Sheet No.:A1
T-0483

Seat Suspension Assembly

Ref. No.	Part No.	Qty.	Description
1	71-2200	1	Swing Arm ASM
1:1	40-4010	4	Roller
1:2	71-2170	1	Pin
1:3	71-2180	4	Bearing
1:4	40-4350	2	Spring-Coil
1:5	40-4360	1	Plate
1:6	40-4380	2	Bracket-Release
1:7	40-4370	1	Bolt
1:8	71-2190	1	Pin
4	71-2290	1	Fork And Triple Bearing ASM
5	71-2310	1	Plate-Suspension, Lower
5:1	40-4090	2	Rivet
5:2	40-4080	1	U-T rack
5:3	40-4120	1	Rubber
5:4	71-2300	2	Bumper-Rubber
10	71-2280	1	Band-Indicator , Weight
11	40-4150	1	Roller
12	40-4160	1	Guide-Sleeve
15	71-2240	1	Knob ASM
15:1	71-2210	1	Pin
15:2	71-2230	1	Ring-Snap
15:3	71-2220	1	Pin
17	40-4230	1	Plug

Ref. No.	Part No.	Qty.	Description
18	71-2250	1	Bracket-Spring
19	71-2330	2	Ring-Snap
20	71-2340	1	Absorber-Shock
21	71-2320	2	Pin
23	71-2270	1	Nut-Special
24	40-4070	3	Washer
25	40-4310	1	Bearing-Thrust, Needle
26	40-4060	1	Washer-Rubber
27	71-2260	2	Spring
28	40-4340	1	Spring-Coil



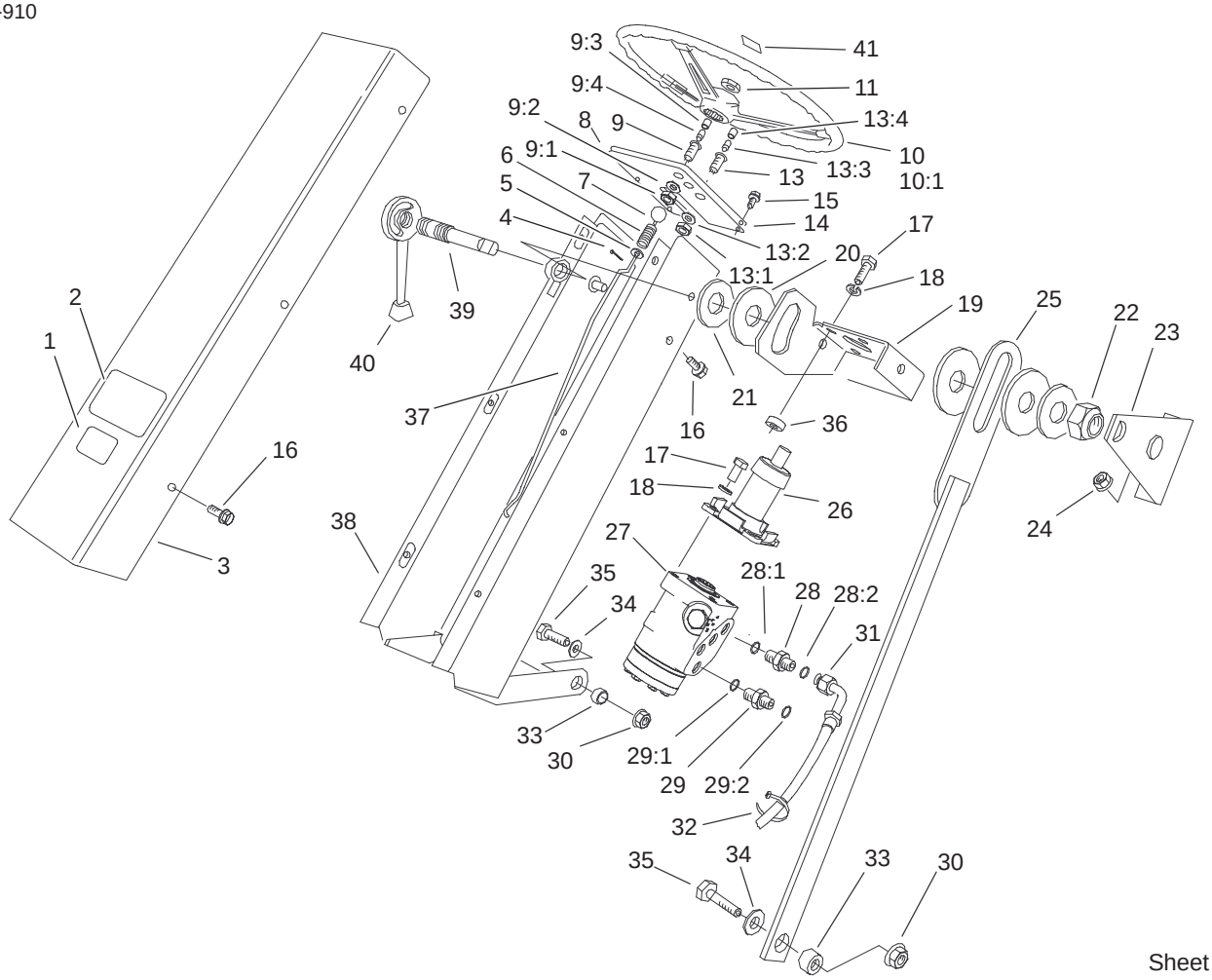
Sheet No.:4

Steering Tower Assembly

Ref. No.	Part No.	Qty.	Description
1	93-7252	1	Decal-International
2	62-5550	1	Decal-Toro
3	69-8510-01	1	Cover-Tower, Steering
4	3272-5	1	Pin-Cotter
5	3256-22	1	Washer-Flat
6	95-1821-03	1	Spring-Compression
7	233-17	1	Knob
8	69-9440-03	1	Panel-Tower, Steering
9	44-2210	1	Light-Indicator , Red
9:1	218-535	1	Nut-Hex
9:2	218-536	1	Washer-Lock
9:3	218-533	1	Lens
☆9:4		1	Bulb
10	98-1471	1	Wheel-Steering
10:1	98-1468	1	Cover-Wheel, Steering
11	94-9952	1	Nut-Hex
13	44-2212	2	Amber Indicator Light ASM
13:1	218-535	1	Nut-Hex
13:2	218-536	1	Washer-Lock
☆13:3		1	Bulb
13:4	218-562	1	Lens
14	95-0825	1	Panel-Tower, Steering
15	32144-64	4	Screw
16	3234-14	7	Screw-HHF

Ref. No.	Part No.	Qty.	Description
17	106-0276	4	Screw-HH
18	48-9590	4	Washer-Lock
19	69-9540-03	1	Bracket-Gear , Steering
20	31-0390	3	Disc-Friction
21	20-9500	2	Washer
22	3296-49	1	Nut-Lock, NI
23	69-7740-03	1	Support-Gear , Steering
24	32128-20	2	Nut-HF
25	69-7760-03	1	Link-Gear , Stearing
26	106-0271	1	Column-Steering
27	106-0270	1	Valve-Steering
28	340-133	3	Adapter
28:1	237-79	1	O-Ring
28:2	237-21	1	O-Ring
29	69-6980	1	Valve-Check
29:1	237-79	1	O-Ring
29:2	237-21	1	O-Ring
30	32128-23	3	Nut-HF
31	69-5500	4	Hose ASM
32	3290-378	8	Tie-Cable
33	28-0380	3	Spacer-Front Axle
34	3256-26	3	Washer-Flat
35	325-5	3	Screw-HH
36	46-1600	4	Spacer-Engine

☆ Not serviced separately

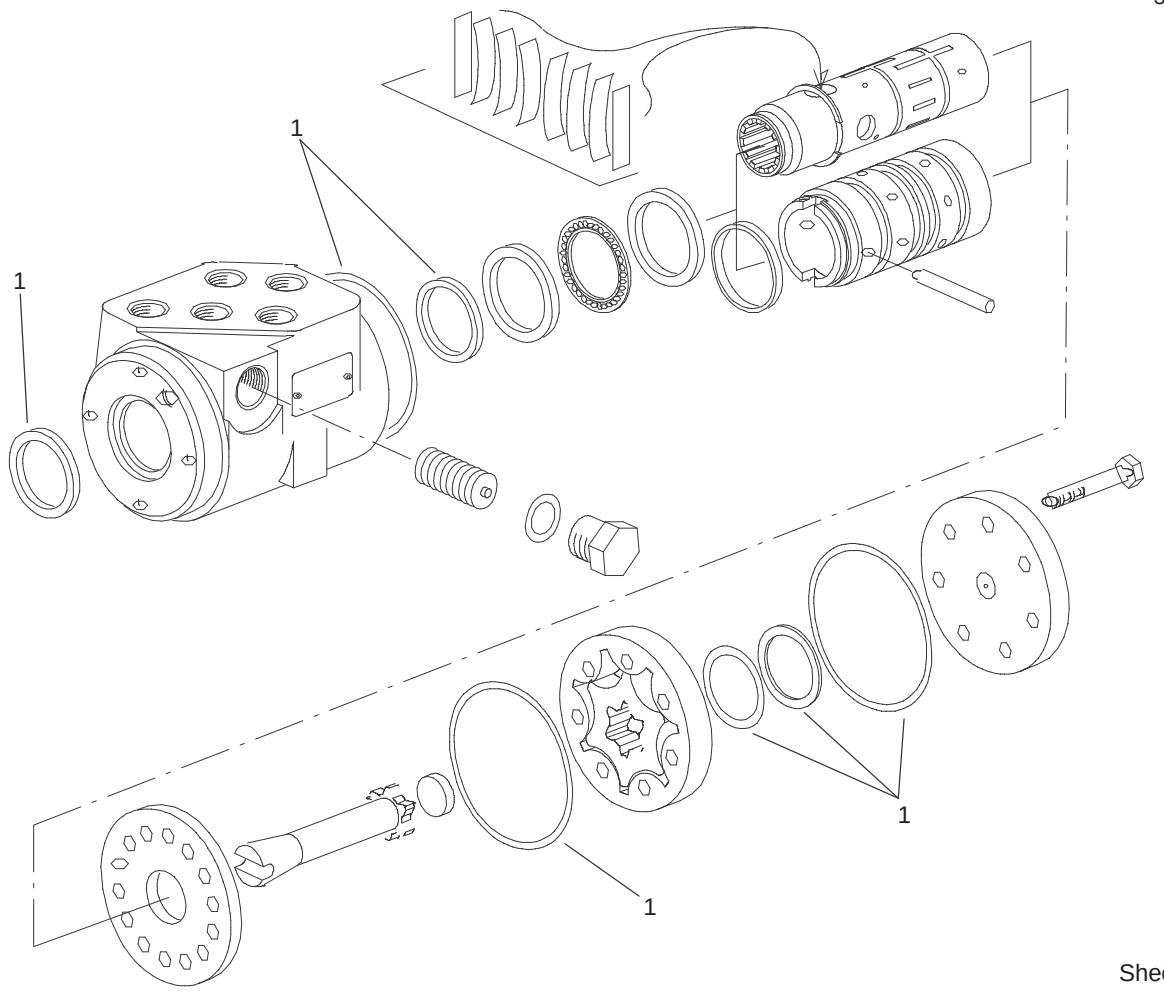


Sheet No.:4

Steering Tower Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
37	71-4060-03	1	Rod-Latch, Brake
38	69-8160-01	1	Tower-Steering
39	69-9230	1	Shaft-Pivot, Steering
40	69-1560-03	1	Lever-Lock
41	98-1459	1	Decal-Toro

Ref. No.	Part No.	Qty.	Description

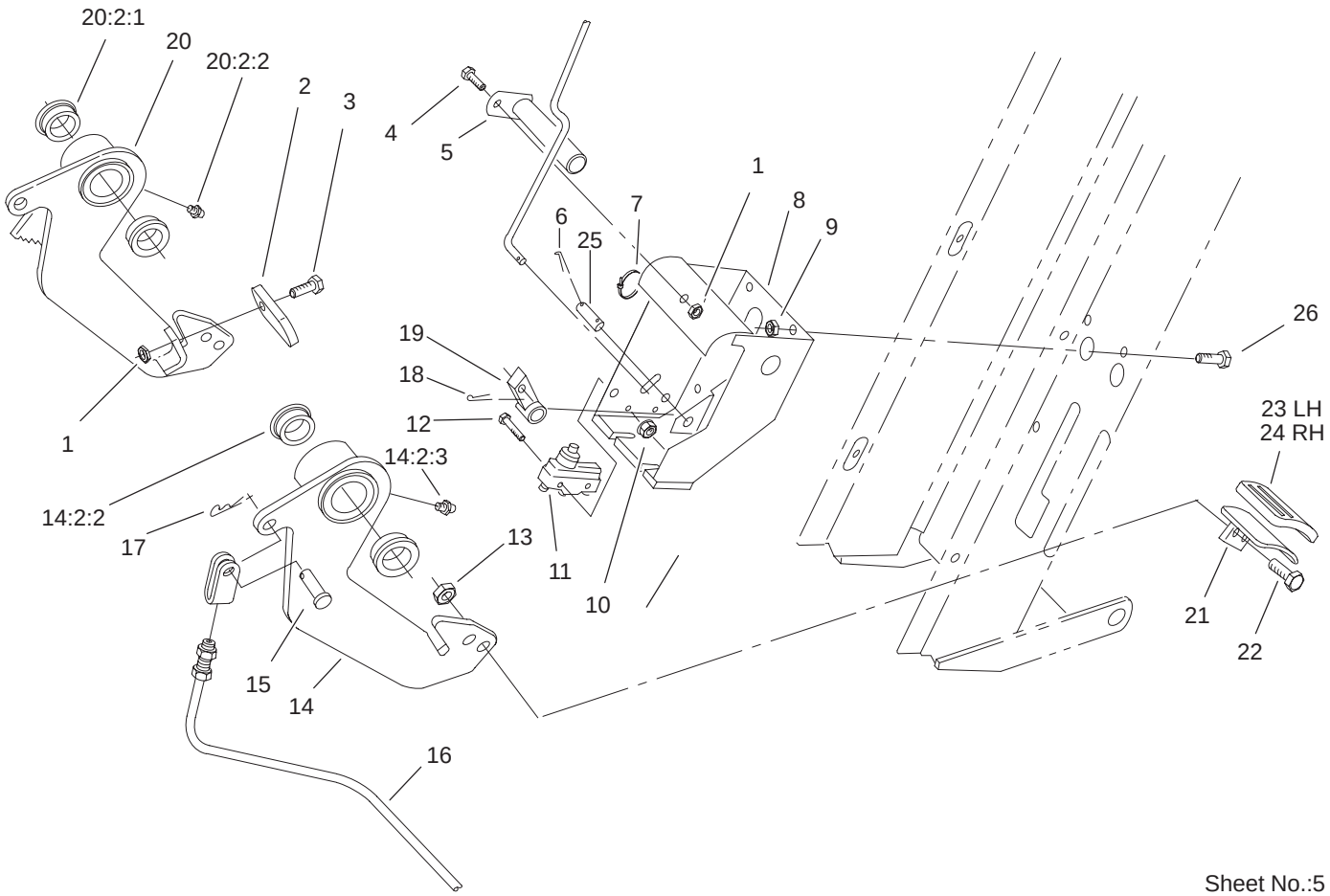


Sheet No.:A2

Steering Valve Assembly No. 106-0270

Ref. No.	Part No.	Qty.	Description
1	94-4099	1	Seal Kit

Ref. No.	Part No.	Qty.	Description

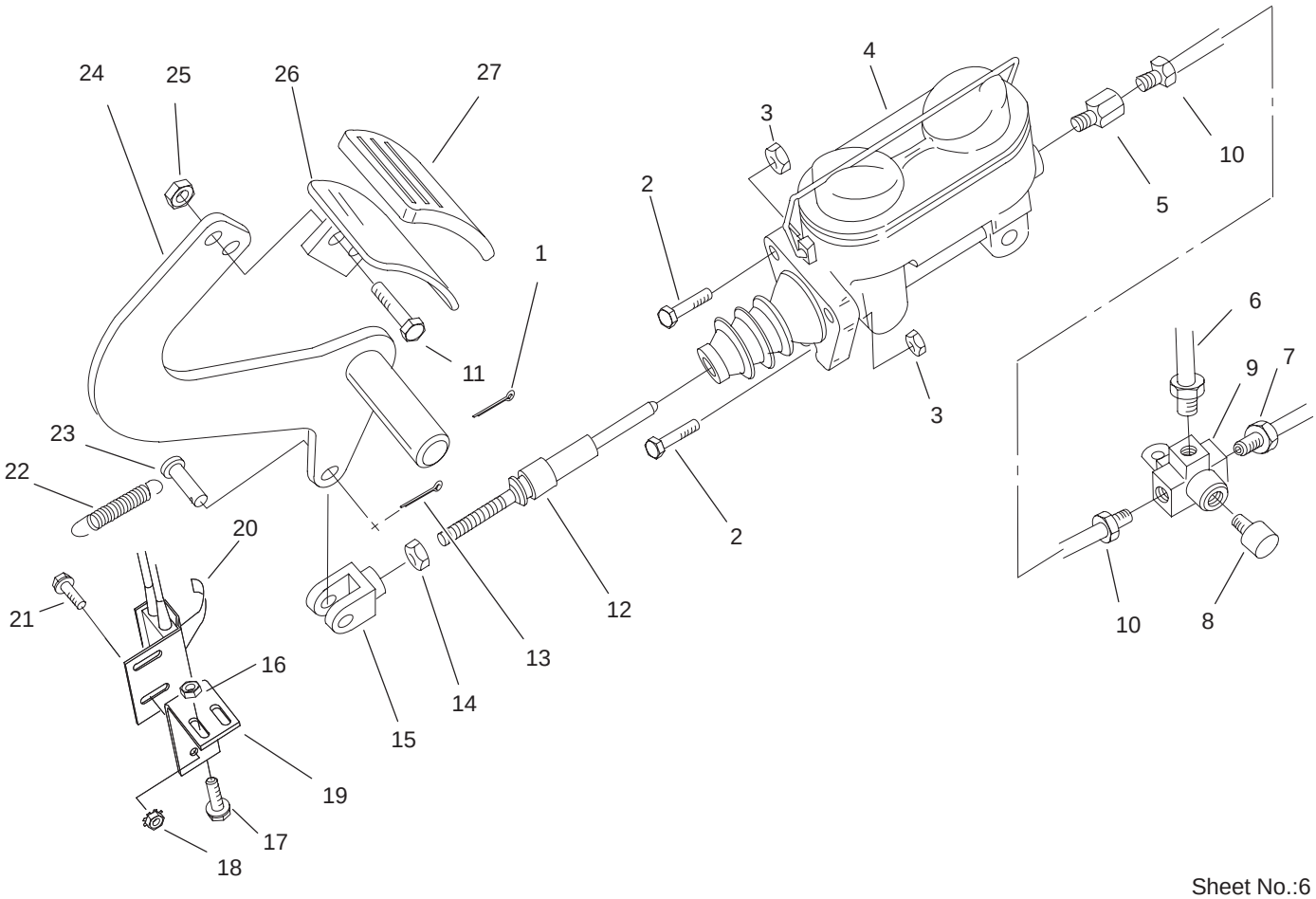


Sheet No.:5

Steering Brake Assembly

Ref. No.	Part No.	Qty.	Description
1	32152-4	2	Nut-Conelock
2	69-9210-03	1	Lever-Latch, Brake
3	321-4	1	Screw-HH
4	321-2	1	Screw-HH
5	69-7790-03	1	Pin
6	3272-6	2	Pin-Cotter
7	3290-378	1	Tie-Cable
8	69-7840-03	1	Mount-Brake
9	32128-20	3	Nut-HF
10	3296-9	2	Nut-Lock, NI
11	29-6163	1	Switch-Micro
12	3249-11	2	Screw
13	32152-1	4	Nut-Lock, NI
14	69-7880-03	1	Arm-Brake, LH
14:2:2	256-247	2	Bushing-Flange
14:2:3	302-5	1	Fitting-Grease
15	283-1	2	Pin-Yoke
16	69-5670	2	Cable-Brake
17	3290-307	2	Pin-Hair
18	3272-5	1	Pin-Cotter
19	69-7720-03	1	Pawl-Brake
20	69-7890-03	1	Arm-Brake, RH
20:2:1	256-247	2	Bushing-Flange
20:2:2	302-5	1	Fitting-Grease
21	69-7700-03	2	Pedal
22	322-4	4	Screw-HH

Ref. No.	Part No.	Qty.	Description
23	49-6171	1	Pad-Brake, LH
24	49-6172	1	Pad-Brake, RH
25	69-9200	1	Pin-Pawl, Brake
26	3234-14	4	Screw-HHF

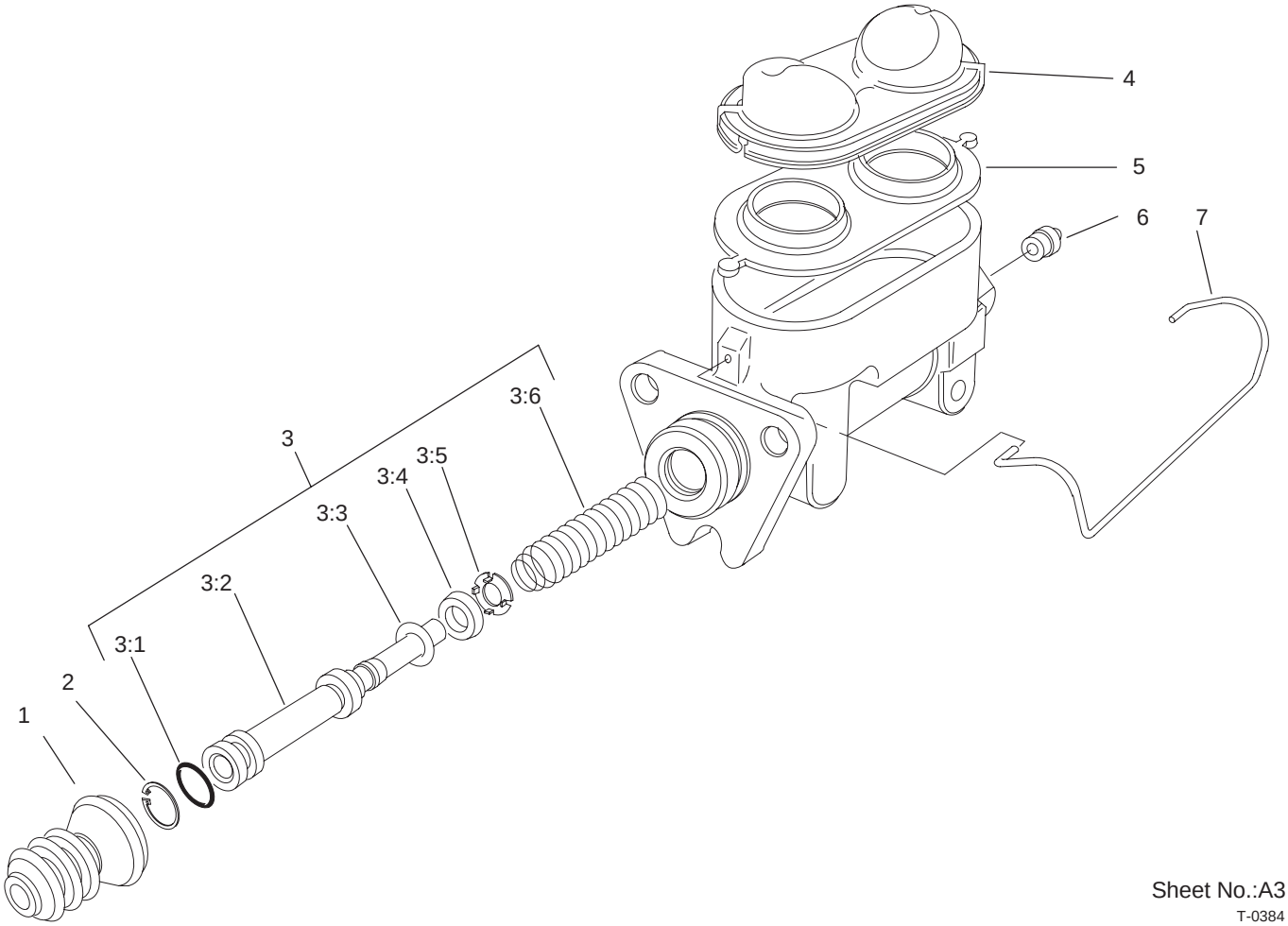


Sheet No.:6

Service Brake Assembly

Ref. No.	Part No.	Qty.	Description
1	3272-12	1	Pin-Cotter
2	323-7	3	Screw-HH
3	32128-21	3	Nut-HF
4	69-2640	1	Cylinder-Master
5	353-994	1	Adapter-W eatherhead
6	74-2530	1	Front Brake Tube ASM
7	74-2510	1	LH Brake Tube ASM
8	218-242	1	Switch-Light, Stop
9	218-243	1	Tee
10	74-2520	1	RH Brake Tube ASM
11	322-4	2	Screw-HH
12	69-9340	1	Shaft-Cylinder , Master
13	3272-10	1	Pin-Cotter
14	3220-2	1	Nut
15	282-2	1	Yoke
16	32149-2	2	Nut
17	3234-13	2	Screw-HHF
18	32127-11	2	Nut-Lock
19	93-7039-01	1	Bracket-Brake
20	93-7037	1	Switch
21	32144-1	2	Screw-T aptite
22	21-1830	1	Spring-PT O, Tension
23	283-1	1	Pin-Y oke
24	69-8750-03	1	Brake
25	32152-1	2	Nut-Lock, NI

Ref. No.	Part No.	Qty.	Description
26	69-7700-03	1	Pedal
27	49-6170	1	Pad-Brake



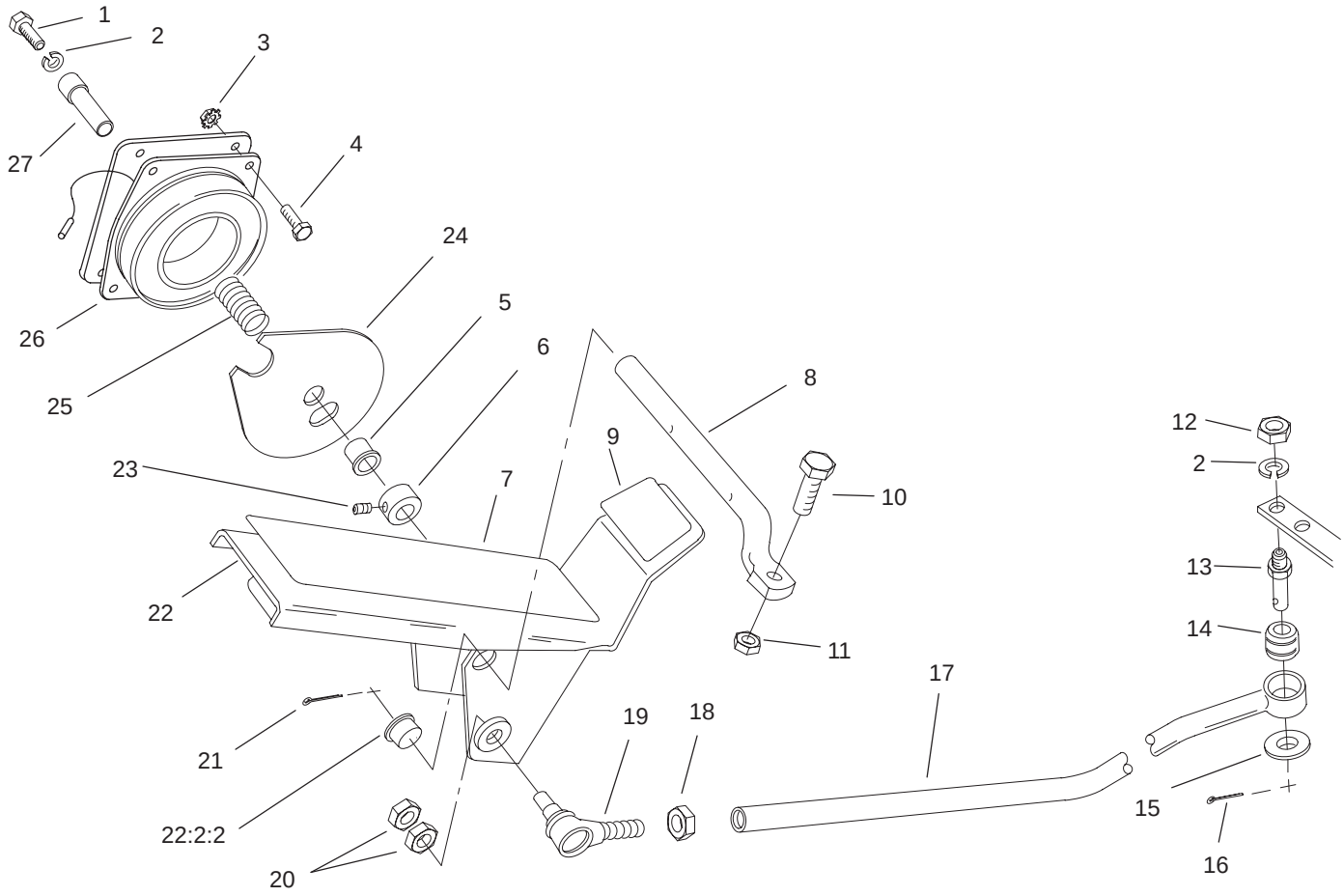
Sheet No.:A3
T-0384

Brake System Master Cylinder No. 69-2640

Ref. No.	Part No.	Qty.	Description
1	69-2650	1	Boot-Cylinder , Master
2	69-2660	1	Ring-Snap
3	69-2730	1	Piston ASM
☆3:1		1	Seal-Lip
☆3:2		1	Piston
☆3:3		1	Protector-Cup
☆3:4		1	Cup-Pumping
☆3:5		1	Retainer-Cup
☆3:6		1	Spring-Return
4	69-2750	1	Cover-Reservoir
5	69-2760	1	Gasket-Diaphragm
6	69-2770	1	Seat-T ube
7	69-2740	1	Bail

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

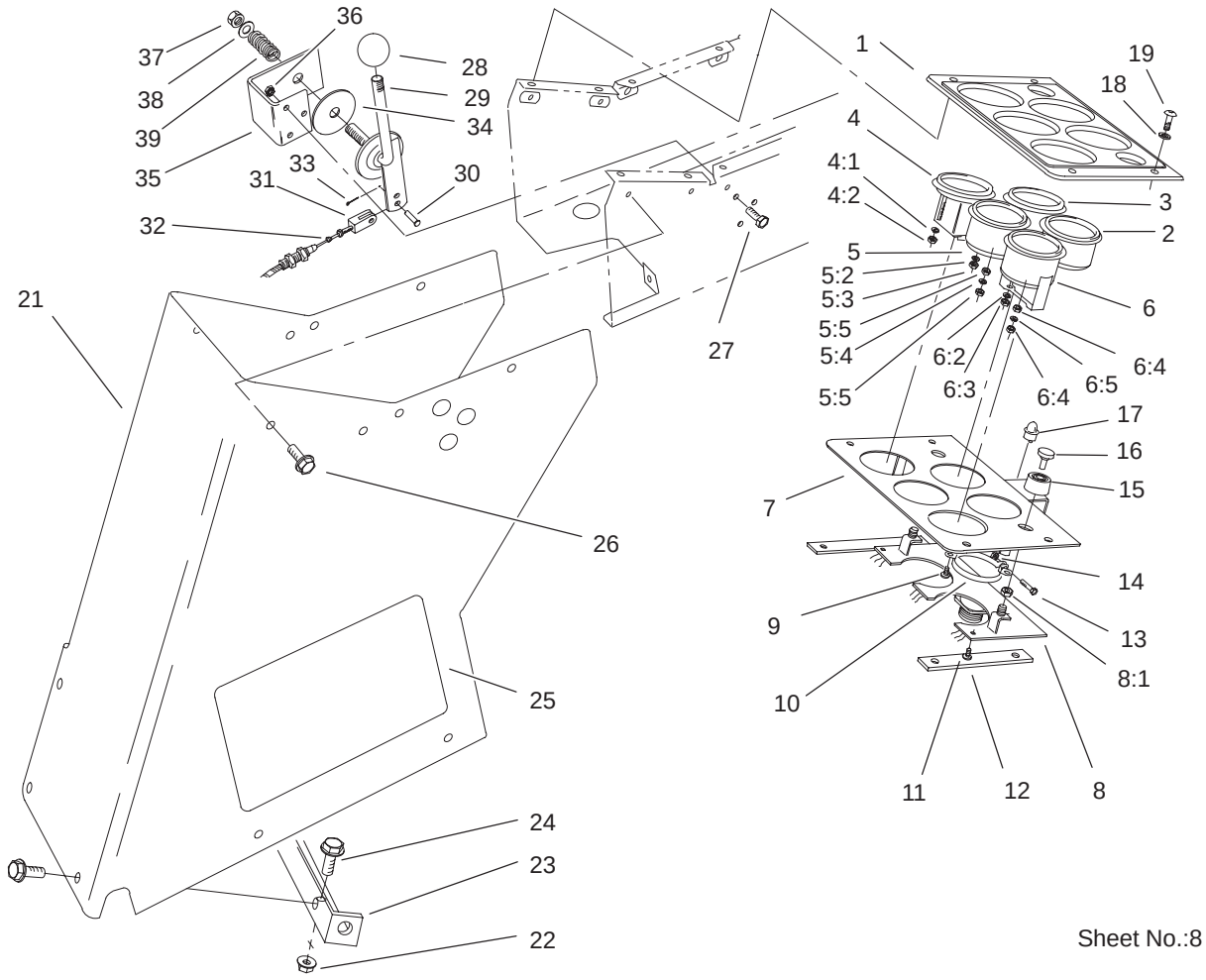


Sheet No.:7

Traction Pedal and Cruise Control Assembly

Ref. No.	Part No.	Qty.	Description
1	323-6	1	Screw-HH
2	3253-21	2	Washer-Lock
3	32149-2	4	Nut
4	321-3	4	Screw-HH
5	256-273	1	Bushing-Flange
6	43-6320	1	Collar
7	71-0440	1	Abrasive-Pedal
8	69-9390	1	Shaft-Pedal
9	71-0450	1	Abrasive-Pedal, Rear
10	3234-14	1	Screw-HHF
11	32128-20	1	Nut-HF
12	3217-7	1	Nut-Hex
13	69-9030	1	Post-Device, Neutral
14	23-2270	1	Bushing-Rubber
15	3256-6	1	Washer-Flat
16	3272-10	1	Pin-Cotter
17	74-2700-03	1	Rod-Control
18	3220-5-01	1	Nut-HJ
19	21-0141-03	1	RH Ball Joint ASM
20	3220-3	2	Nut-Jam
21	3272-7	2	Pin-Cotter
22	99-5347-01	1	Pedal-T raction
22:2:2	256-156	2	Bushing-Flange
23	3245-32	1	Screw-HS
24	99-5348	1	Plate-Clutch
25	43-6200	1	Spring-Compression

Ref. No.	Part No.	Qty.	Description
26	100-8016	1	Field Core Coil ASM
27	92-9701	1	Shaft-Cruise

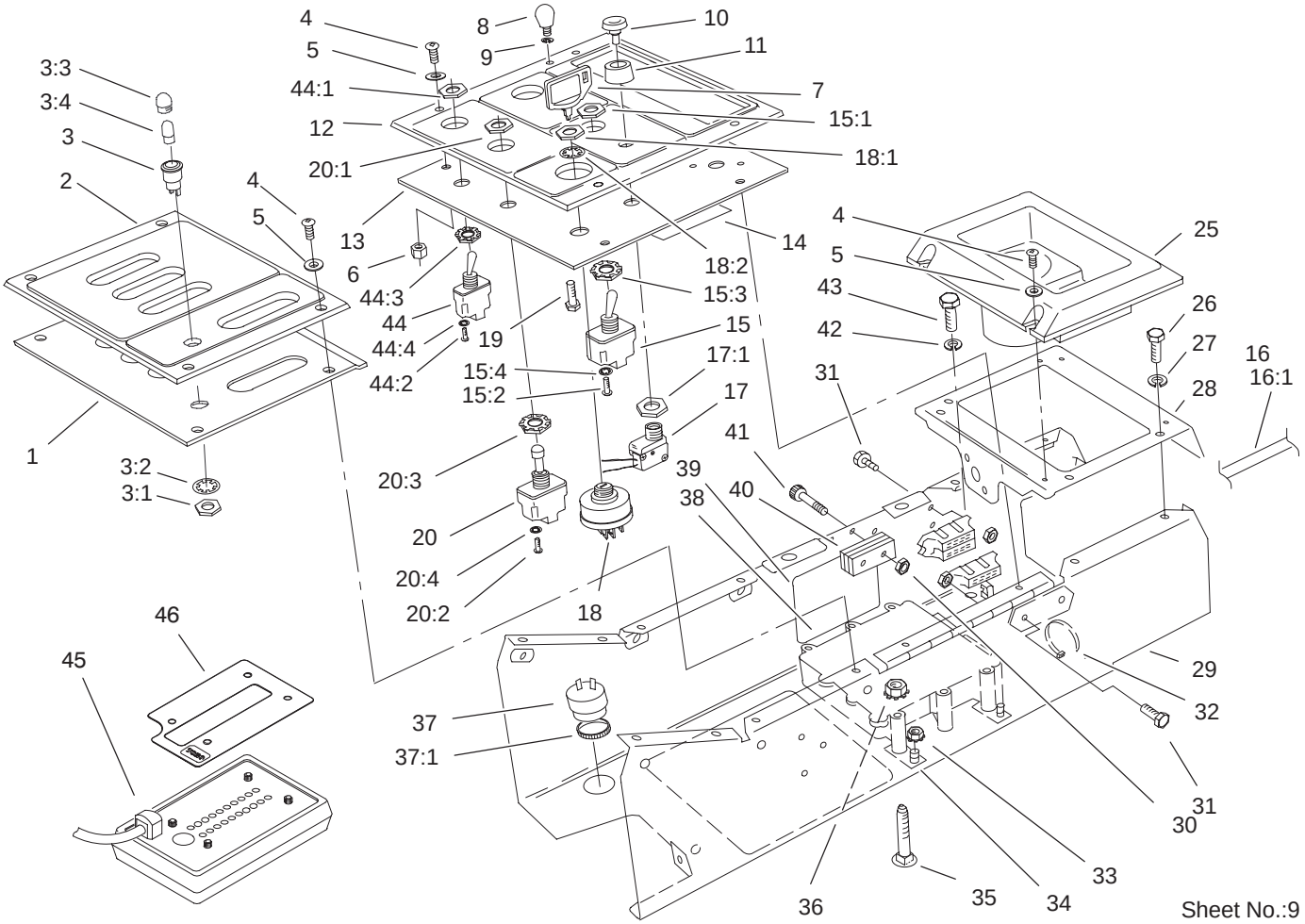


Sheet No.:8

Housing, Throttle and Upper Control Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	95-0827	1	Panel-Gauge
2	71-4210	1	Cluster-Light, Warning
3	71-4200	1	Cluster-Light, Warning
4	66-2950	1	Gauge-Hourmeter
4:1	3255-20	2	Washer-Lock
4:2	3217-25	2	Nut-Hex
5	66-2940	1	Gauge-Fuel
5:2	3254-1	2	Washer-Lock, Internal
5:3	3217-27	2	Nut-Hex
5:4	3255-24	3	Washer-Lock/Ext
5:5	3217-16	3	Nut-Hex
6	63-7430	1	Gauge-Temperature
6:2	3254-1	2	Washer-Lock, Internal
6:3	3217-27	2	Nut-Hex
6:4	3217-16	3	Nut-Hex
6:5	3255-24	3	Washer-Lock/Ext
7	86-7410-03	1	Plate-Gauge
8	92-1771	1	Board-Instrument
8:1	218-498	2	Locknut-Hex
9	32144-19	4	Screw-Forming, Thread
10	69-4780	2	Clamp-Gauge
11	32104-16	4	Screw-PPH
12	71-4250-03	2	Spacer-Panel
13	32105-12	2	Screw
14	3296-2	2	Nut-Lock

Ref. No.	Part No.	Qty.	Description
15	43-6420	2	Bezel
16	43-6280	2	Button-Push
17	219-17	8	Bulb
18	3256-22	4	Washer-Flat
19	3290-133	4	Screw
21	69-9560-01	1	Housing-Control
22	32128-20	2	Nut-HF
23	69-8210-03	1	Support-Cover
24	3234-14	2	Screw-HHF
25	99-4416	1	Decal-Service
26	3234-7	11	Screw-HHF
27	321-3	3	Screw-HH
28	233-48	1	Knob
29	69-8040	1	Lever-Throttle
30	283-67	1	Pin-Clevis
31	282-28	1	Clevis-Adjustable
32	77-2990	1	Cable-Throttle
33	3272-1	1	Pin-Cotter
34	3-2858	1	Disc-Friction
35	69-9130-01	1	Bracket-Throttle
36	3296-42	3	Nut-Lock, NI
37	3296-23	1	Nut-Lock, NI
38	3256-26	1	Washer-Flat
39	3-8596	1	Spring-Compression



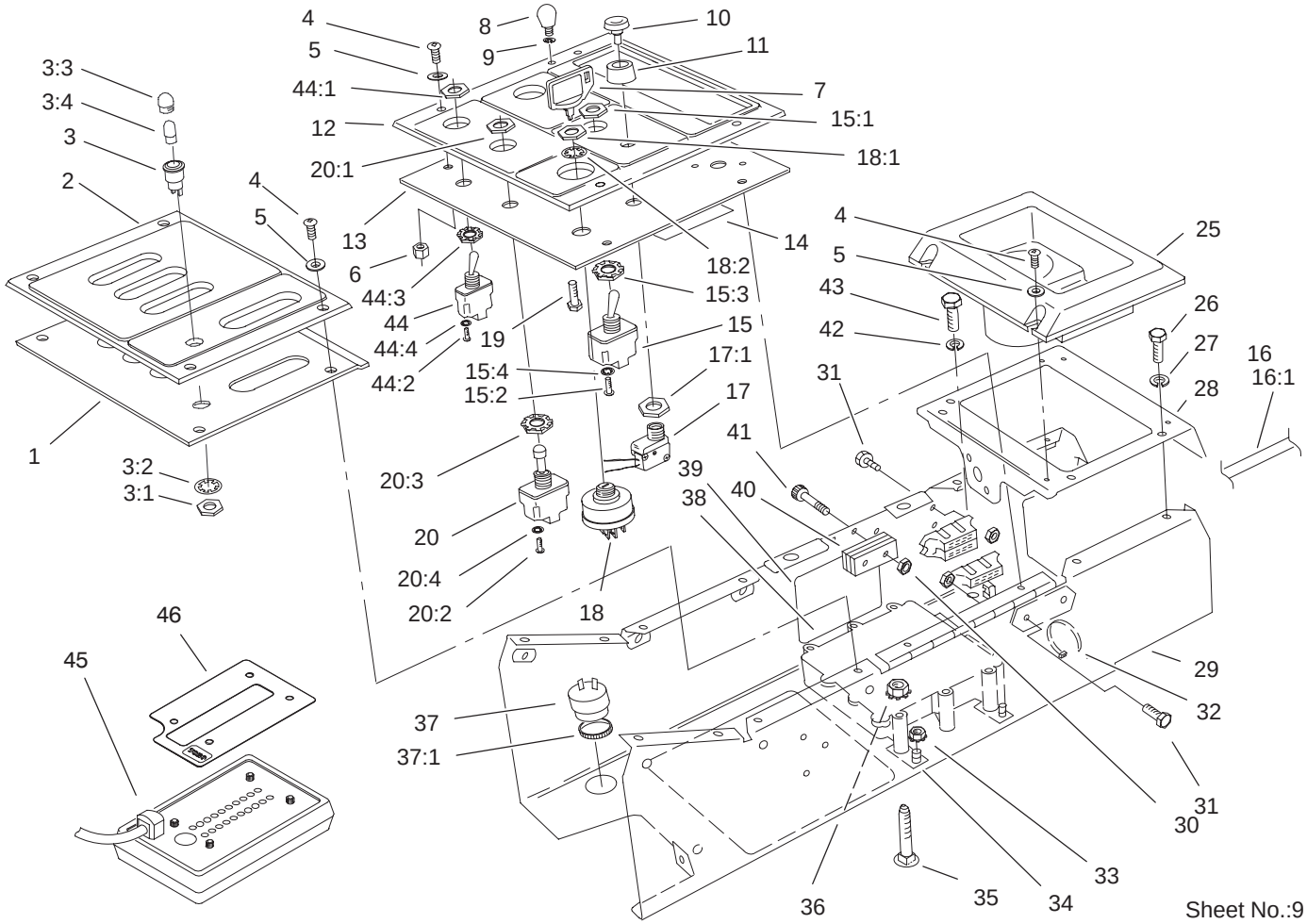
Sheet No.:9

Control Box and Lower Control Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	100-3393-03	1	Plate-Lever , Lift
2	100-3394	1	Panel-Lift, Deck
3	44-2210	1	Light-Indicator , Red
3:1	218-535	1	Nut-Hex
3:2	218-536	1	Washer-Lock
3:3	218-533	1	Lens
☆3:4		1	Bulb
4	3290-133	12	Screw
5	3256-22	8	Washer-Flat
6	3296-42	4	Nut-Lock, NI
7	63-8360	1	Key-Ignition
8	233-66	1	Knob-Plastic
9	3253-15	1	Washer-Lock/Sp
10	43-6280	2	Button-Push
11	43-6420	2	Bezel
12	100-3395	1	Panel-Control
13	100-3392-03	1	Plate-Control
14	95-0831	1	Decal-Fuse
15	69-9740	1	Switch
15:1	218-498	2	Locknut-Hex
15:2	218-588	3	Screw
15:3	218-589	1	Nut/Lockwasher
15:4	3253-19	3	Washer-Lock/Sp
16	98-7309	1	Harness-Wire

Ref. No.	Part No.	Qty.	Description
16:1	106-0065	2	Link-Fusible
17	72-9760	2	Switch
17:1	218-498	1	Locknut-Hex
18	99-2319	1	Key-Switch
18:1	218-446	1	Nut-Hex
18:2	218-447	1	Washer-Lock
19	3290-392	1	Screw-HHF
20	69-9730	1	Switch-PT O
20:1	218-498	2	Locknut-Hex
20:2	218-588	3	Screw
20:3	218-589	1	Nut/Lockwasher
20:4	3253-19	3	Washer-Lock/Sp
25	69-7040	1	Holder-Cup
26	321-3	4	Screw-HH
27	3253-3	4	Washer-Lock
28	71-2430-03	1	Plate-Rear
29	71-4130	1	Support-Control
30	3296-2	4	Nut-Lock
31	32105-13	4	Screw-SHH
32	3290-378	2	Tie-Cable
33	32149-7	3	Nut-Keps
34	92-8661	3	Tab
35	3229-8	3	Screw-CARR
36	32149-2	3	Nut

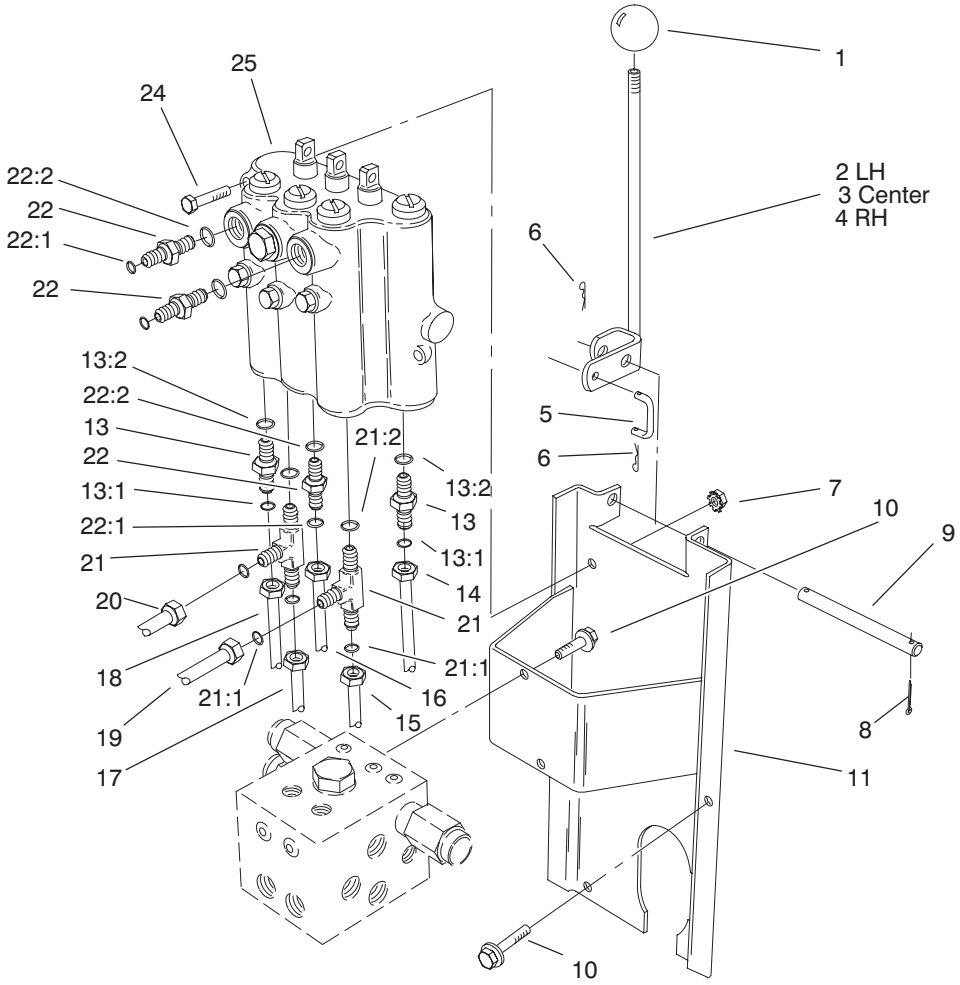
☆ Not serviced separately



Control Box and Lower Control Panel Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
37	80-9330	1	Alarm-Audio
37:1	104-5107	1	Nut-Plastic, Knurled
38	92-5720	1	Controller-Electronic
39	98-1487	1	Decal-Fuses
40	69-6260	1	Magnet
41	32105-1	2	Screw-SHH
42	3253-21	4	Washer-Lock
43	323-4	4	Screw-HH
44	71-4170	1	Switch
44:1	218-498	2	Locknut-Hex
44:2	218-588	3	Screw
44:3	218-589	1	Nut/Lockwasher
44:4	3253-19	3	Washer-Lock/Sp
45	85-4750	1	Box-Display, Diagnostic
46	92-4087	1	Decal-Display

Ref. No.	Part No.	Qty.	Description

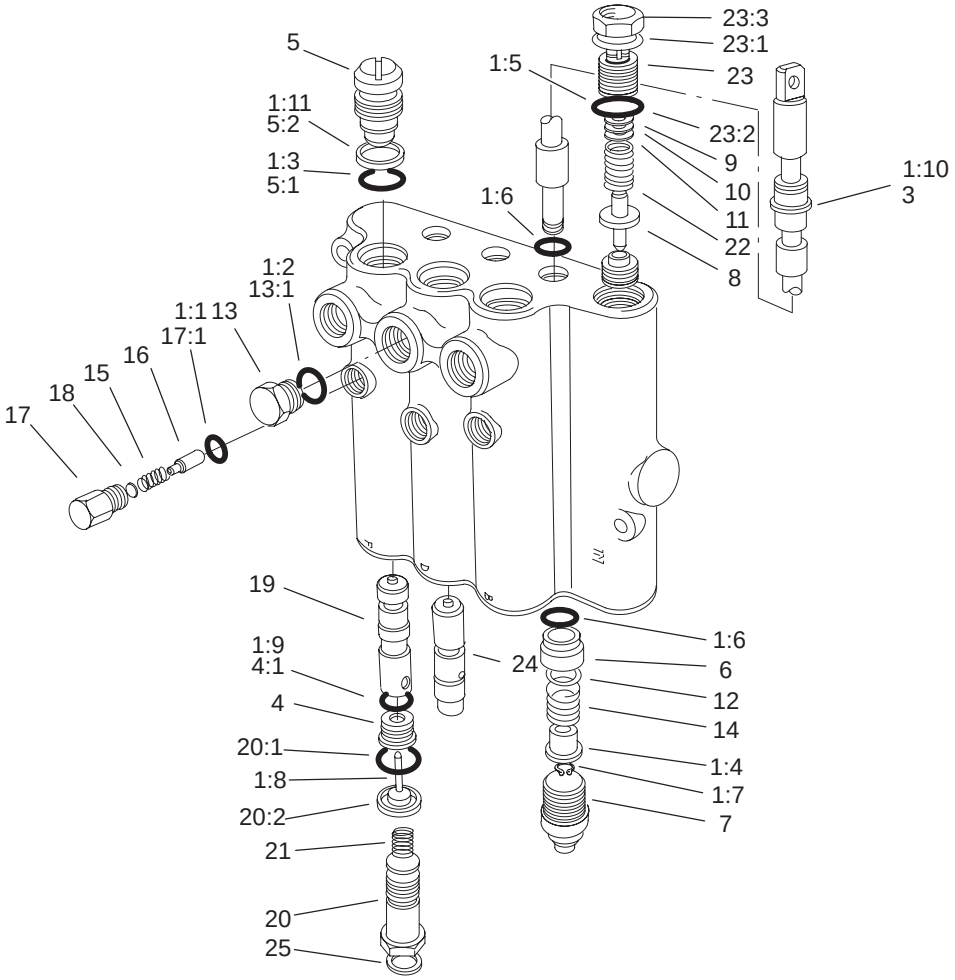


Sheet No.:10

Lift Valve Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	233-42	3	Knob
2	69-7010	1	Lever-V alve, LH
3	69-6990	1	Lever-V alve, Center
4	69-7000	1	Lever-V alve, RH
5	69-9140	3	Link-Lever , Valve
6	3272-1	6	Pin-Cotter
7	32149-2	2	Nut
8	3272-6	2	Pin-Cotter
9	69-9150	1	Shaft-Lever , Valve
10	3234-14	6	Screw-HHF
11	69-7810-03	1	Bracket-V alve
13	340-3	2	Adapter
13:1	237-22	1	O-Ring
13:2	237-79	1	O-Ring
14	69-5860	1	Tube-HYD
15	69-5700	1	Tube-HYD
16	69-5720	1	Tube-HYD
17	69-5740	1	Tube-HYD
18	69-5870	1	Tube-HYD
19	69-5680	1	Tube-HYD
20	69-5890	1	Tube-HYD
21	340-86	2	Fitting-HYD, Tee
21:1	237-22	2	O-Ring
21:2	237-42	1	O-Ring
22	340-2	3	Fitting-HYD, Straight
22:1	237-22	1	O-Ring

Ref. No.	Part No.	Qty.	Description
22:2	237-42	1	O-Ring
24	321-10	2	Screw-HH
25	69-1780	1	Control Valve ASM



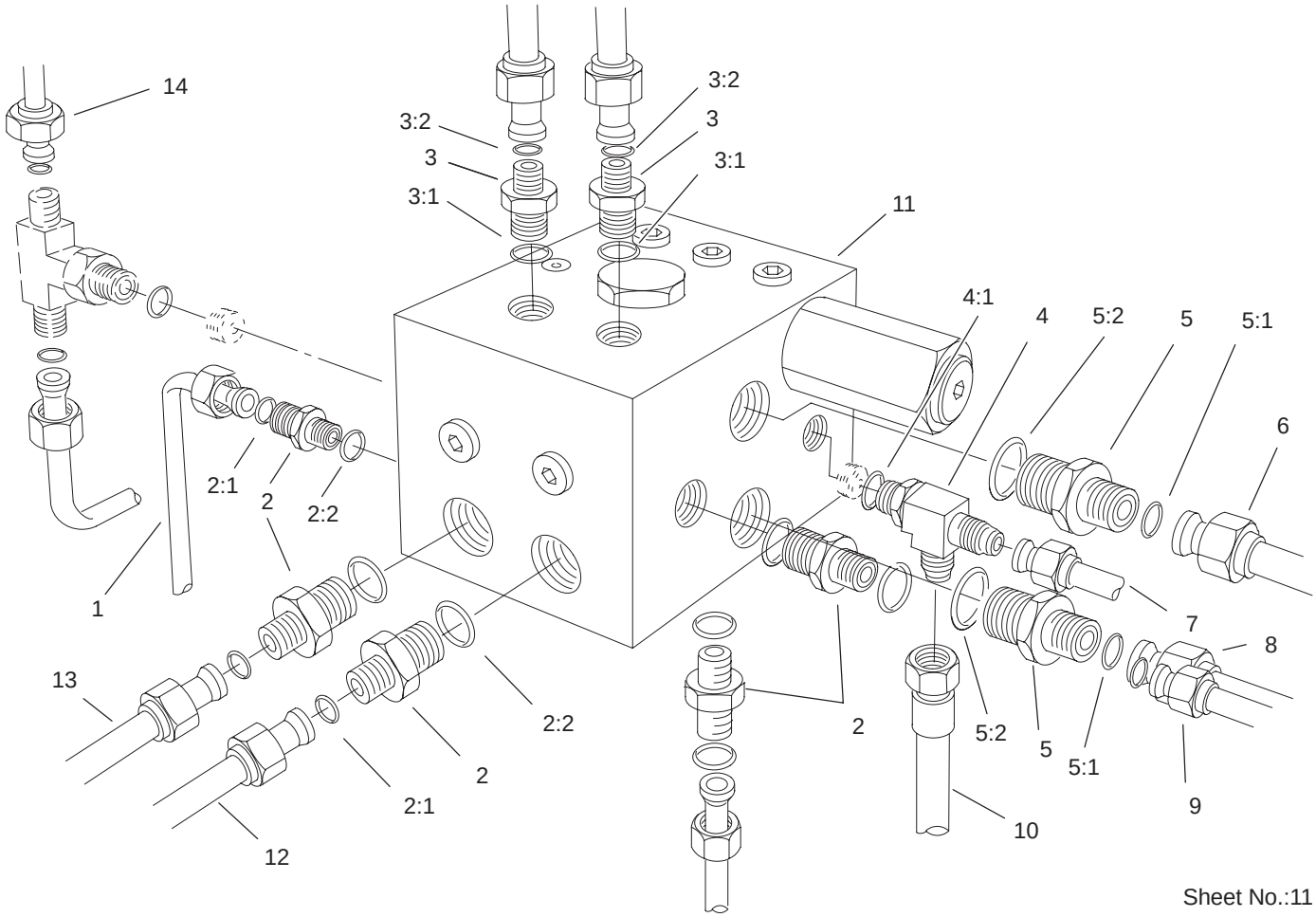
T-3765
Sheet No.:A4

Lift Valve Assembly No. 69-1780

Ref. No.	Part No.	Qty.	Description
1	60-3780	1	Seal Kit
1:1	58-6790	3	O-Ring
1:2	58-6720	3	O-Ring
1:3	60-5720	6	O-Ring
1:4	58-6310	6	Spacer
1:5	58-6750	1	O-Ring
1:6	58-6450	6	O-Ring
1:7	58-6460	3	Ring
1:8	58-6290	3	Poppet
1:9	58-6340	3	O-Ring
1:10	58-6320	3	Wiper
1:11	58-6370	1	Washer
3	106-6750	1	Spool
4	58-6330	3	Seat
4:1	58-6340	1	O-Ring
5	58-6350	3	Plug
5:1	60-5720	1	O-Ring
5:2	58-6370	1	Washer
6	58-6400	3	Bushing
7	58-6420	3	Cap
8	92-2568	1	Poppet
9	58-6470	1	Washer
10	58-6480	1	Washer
11	58-6490	1	Washer
12	65-2770	3	Washer
13	58-6710	1	Plug

Ref. No.	Part No.	Qty.	Description
13:1	58-6720	1	O-Ring
14	58-6730	3	Spring
15	58-6760	3	Spring
16	58-6770	3	Plunger
17	58-6780	3	Plug
17:1	58-6790	1	O-Ring
18	60-6450	1	Disc
19	84-6420	2	Plunger
20	69-1800	3	Plug ASM
20:1	58-6360	1	O-Ring
20:2	58-6370	1	Washer
21	69-1810	3	Spring
22	106-0267	1	Spring
23	69-1830	1	Plug ASM
☆23:1		1	Washer
23:2	58-6750	1	O-Ring
☆23:3		1	Nut-Lock
24	69-1840	1	Plunger
25	105-4565	2	Plate-Orifice

☆ Not serviced separately



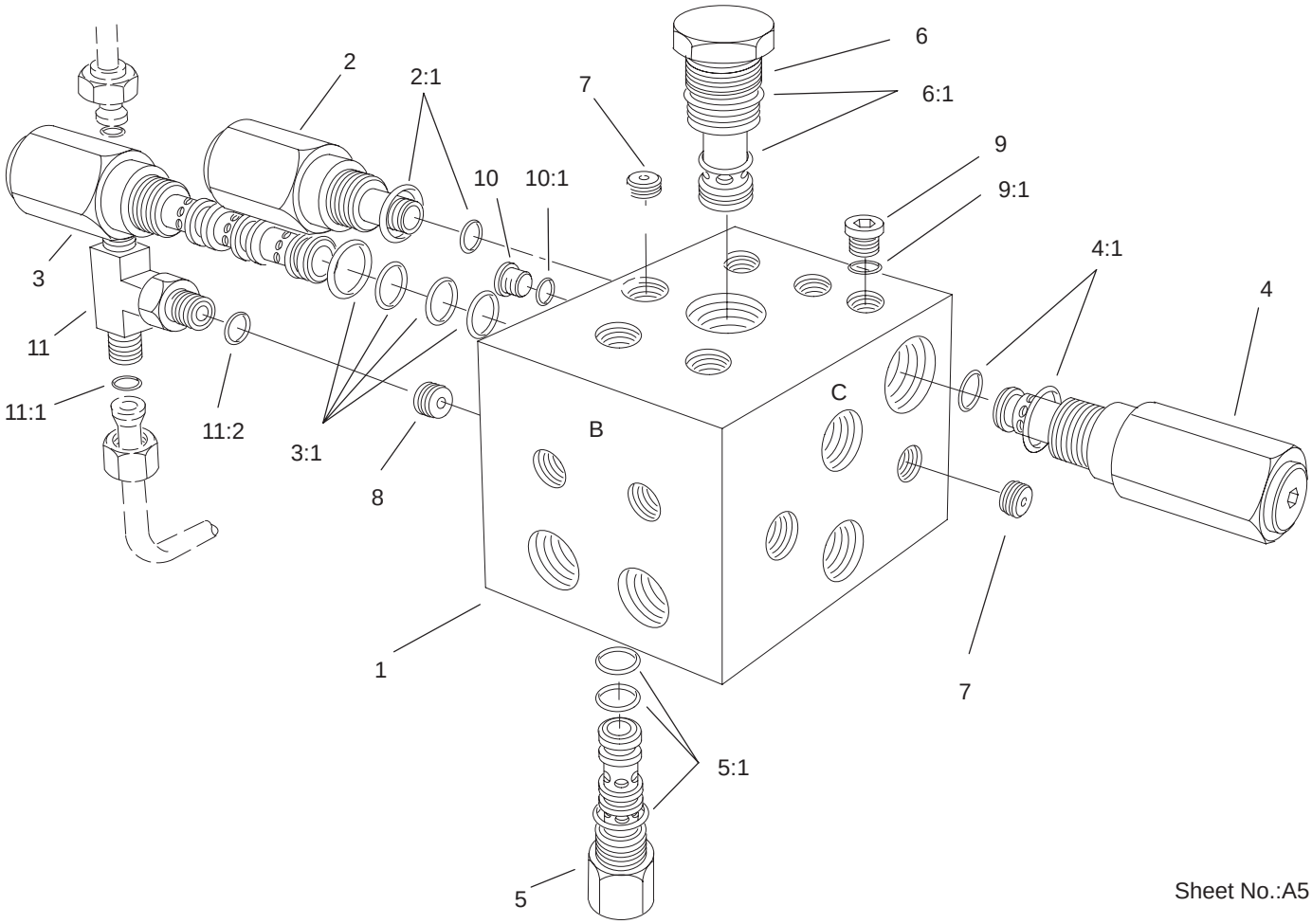
Sheet No.:11

Counterbalance Manifold Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	69-5730	1	Tube-HYD
2	340-2	5	Fitting-HYD, Straight
2:1	237-22	1	O-Ring
2:2	237-42	1	O-Ring
3	340-92	2	Fitting-HYD, Straight
3:1	237-78	1	O-Ring
3:2	237-21	1	O-Ring
4	353-566	1	Fitting-Tee, Adj.
4:1	237-78	1	O-Ring
5	340-4	2	Adapter
5:1	237-30	1	O-Ring
5:2	237-79	1	O-Ring
6	92-4967	1	Return Tube ASM
7	69-5910	1	Tube-HYD
8	69-5850	1	Tube-HYD
9	69-5710	1	Tube-HYD
10	93-7192	1	Hose ASM
11	95-5907	1	Manifold-Counter Balance
12	69-5820	1	Tube-HYD
13	69-5830	1	Tube-HYD
14	69-5920	1	Tube-HYD

Ref. No.	Part No.	Qty.	Description

3328-910



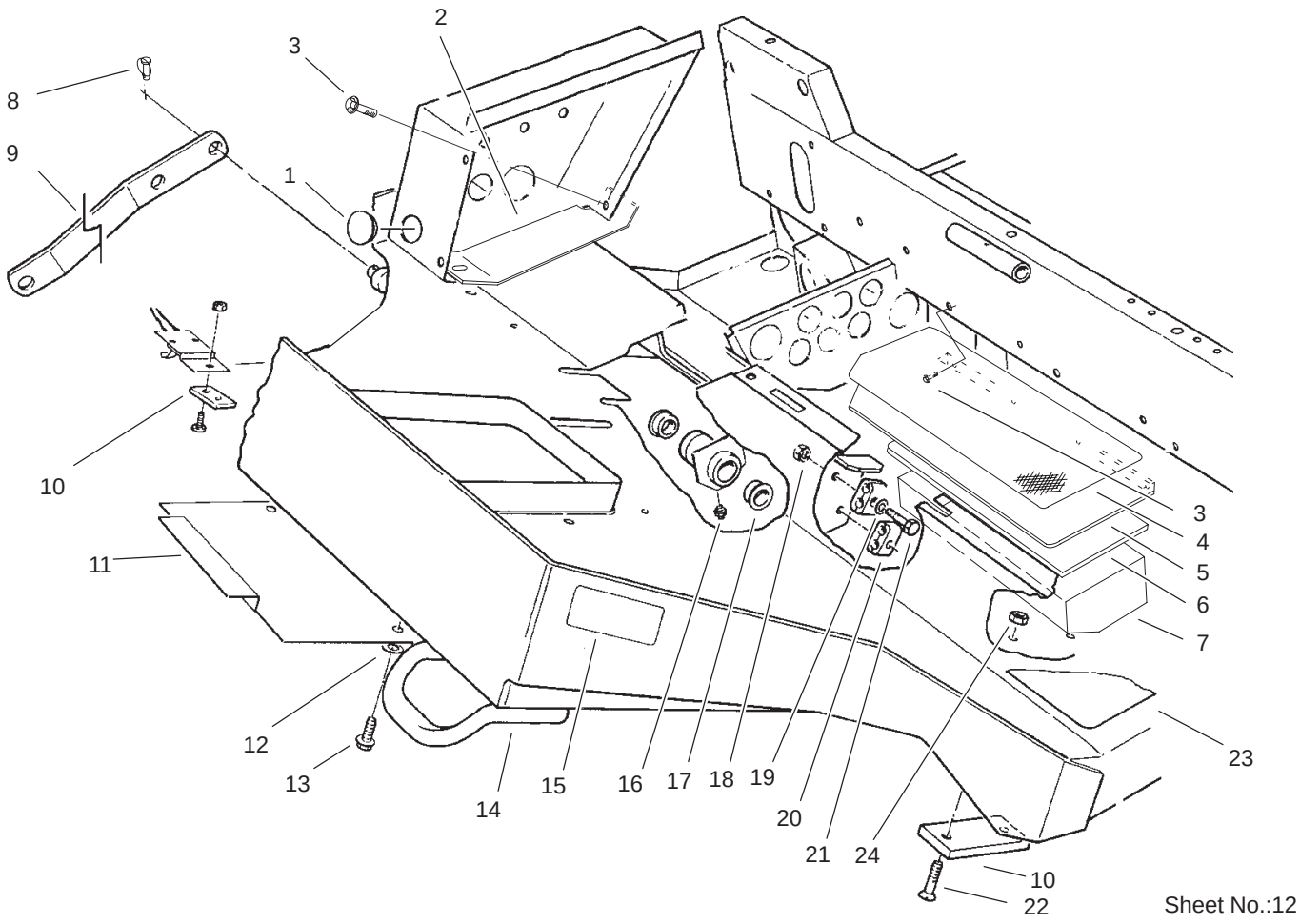
Sheet No.:A5

Counterbalance Manifold Assembly No. 95-5907

Ref. No.	Part No.	Qty.	Description
☆1		1	Body
2	95-5630	1	Relief-Pilot Operated
2:1	95-5645	1	Seal Kit
3	95-5631	1	Valve-Sequence
3:1	95-5642	1	Seal Kit
4	95-5632	1	Relief-Pilot Operated
4:1	95-5645	1	Seal Kit
5	95-5633	2	Valve-Pilot Directional
5:1	95-5642	1	Seal Kit
6	95-5634	1	Cartridge-Logic, Spool
6:1	95-5641	1	Seal Kit
7	69-4130	2	Orifice Plug - 0.047
8	69-4140	1	Orifice Plug - .120
9	353-991	8	Plug-Hex, Hollow
9:1	237-156	1	O-Ring
10	353-990	1	Plug
10:1	237-78	1	O-Ring
11	340-94	1	Adapter
11:1	237-22	2	O-Ring
11:2	237-42	1	O-Ring

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

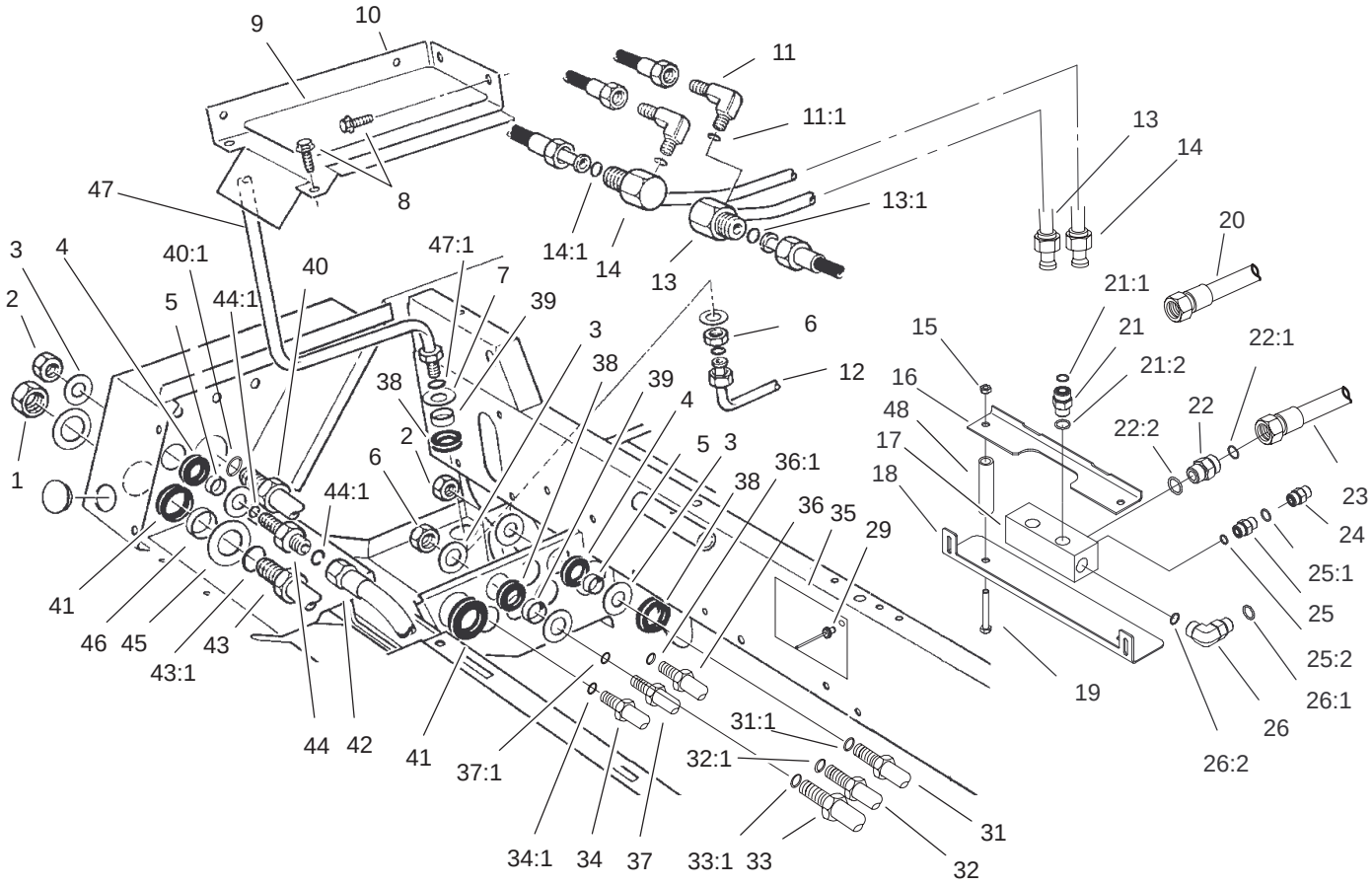


Sheet No.:12

Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	2410-10	1	Button-Plug
2	69-9330-01	1	Cover
3	3234-14	6	Screw-HHF
4	71-0410	1	Abrasive-Cover , Toolbox
5	69-8080-01	1	Cover-Toolbox
6	69-9430	1	Foam-Toolbox
7	69-8110-03	1	Toolbox
8	3290-495	2	Pin-Klik
9	85-6190-01	1	Link-Deck, Tilt
10	69-9300	2	Pad-Bumper
11	69-9470-01	1	Cover-Access
12	3256-23	2	Washer-Flat
13	3234-28	2	Screw-HHF
14	69-0100-01	1	Frame
15	72-4080	2	Decal-Danger
16	302-5	1	Fitting-Grease
17	256-247	2	Bushing-Flange
18	32152-4	2	Nut-Conelock
19	3256-56	2	Washer-Flat
20	56-7973	4	Clamp-Tube
21	321-9	2	Screw-HH
22	32108-103	4	Screw-FH
23	71-0420	1	Abrasive-Floor
24	32152-1	4	Nut-Lock, NI

Ref. No.	Part No.	Qty.	Description

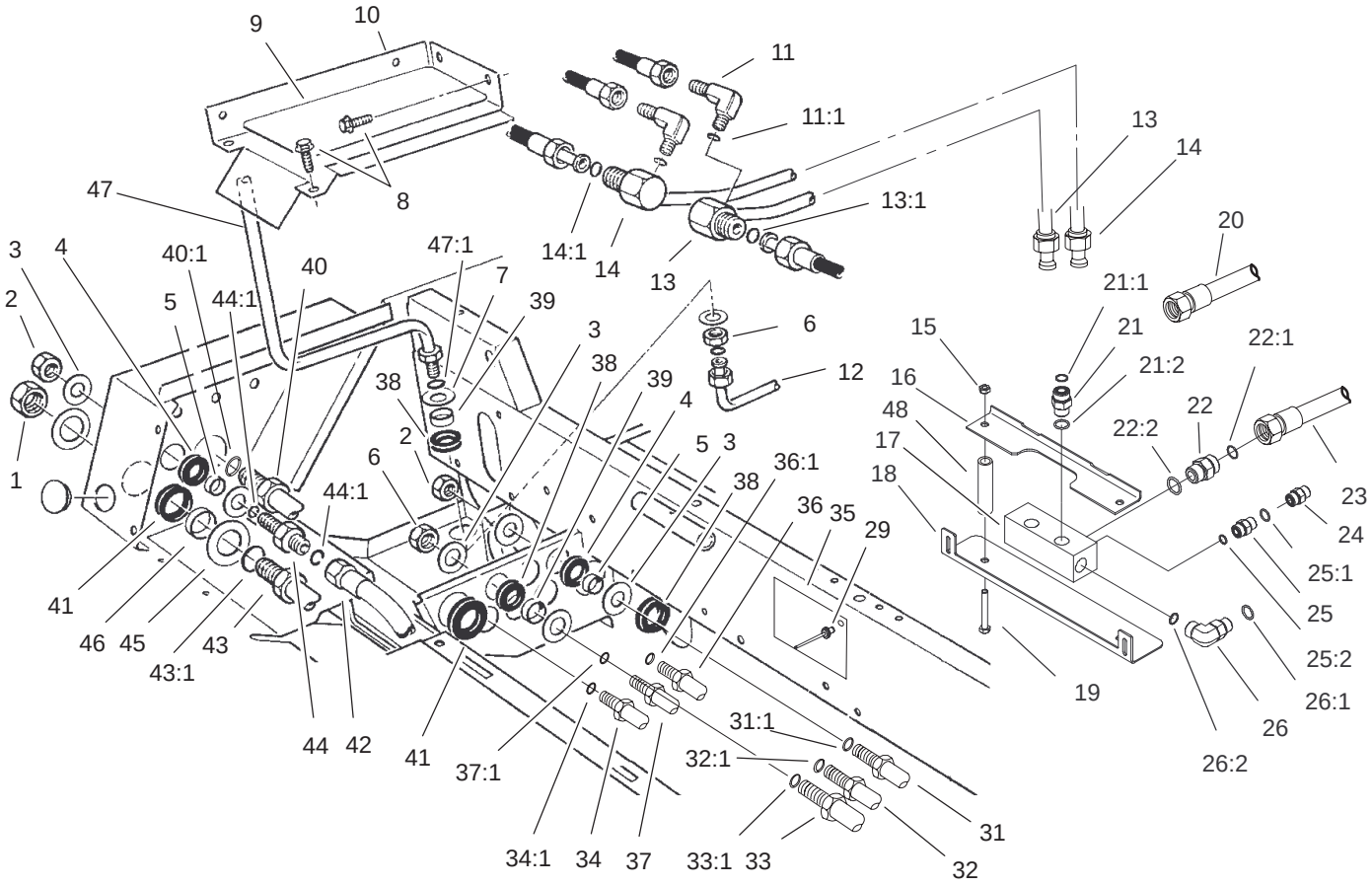


Sheet No.:13

Hydraulic Compartment Assembly

Ref. No.	Part No.	Qty.	Description
1	340-126	2	Nut-Bulkhead
2	340-70	6	Nut-Lock
3	69-8940	12	Washer
4	240-4	6	Grommet-Rubber
5	69-8970	6	Spacer
6	340-127	2	Nut-Bulkhead
7	69-8930	4	Washer
8	3234-14	4	Screw-HHF
9	71-0430	1	Abrasive-Floor
10	71-2450-01	1	Cover-Access
11	353-375	2	Fitting-HYD, 90°
11:1	237-78	1	O-Ring
12	85-6150	1	Tube
13	106-0067	1	Tube ASM-Tration LH
13:1	237-65	1	O-Ring
14	106-0066	1	Tube ASM-Traction RH
14:1	237-65	1	O-Ring
15	3296-39	2	Nut-Lock, NI
16	106-0199-03	1	Bracket-Support, Upper
17	105-0682	1	Block-HYD
18	106-0185-03	1	Bracket-Support, Lower
19	323-13	2	Screw-HH
20	106-0195	1	HYD Hose ASM

Ref. No.	Part No.	Qty.	Description
21	340-7	2	Adapter
21:1	237-65	1	O-Ring
21:2	237-80	1	O-Ring
22	340-9	2	Fitting-Straight
22:1	237-58	1	O-Ring
22:2	237-81	1	O-Ring
23	106-0196	1	HYD Hose ASM
24	340-152	2	Cap-HYD
25	340-4	2	Adapter
25:1	237-30	1	O-Ring
25:2	237-79	1	O-Ring
26	340-17	2	Fitting-HYD, 90°
26:1	237-65	1	O-Ring
26:2	237-80	1	O-Ring
29	3269-27	4	Rivet-Snap
31	69-6040	1	Tube-HYD
31:1	237-22	2	O-Ring
32	69-6030	1	Hydraulic Tube
32:1	237-22	2	O-Ring
33	69-5790	1	Tube-HYD
33:1	237-30	2	O-Ring
34	93-7426	1	HYD Tube ASM
34:1	237-22	1	O-Ring
35	72-4090	1	Plate-Signature
36	69-6050	1	Tube-HYD
36:1	237-22	2	O-Ring

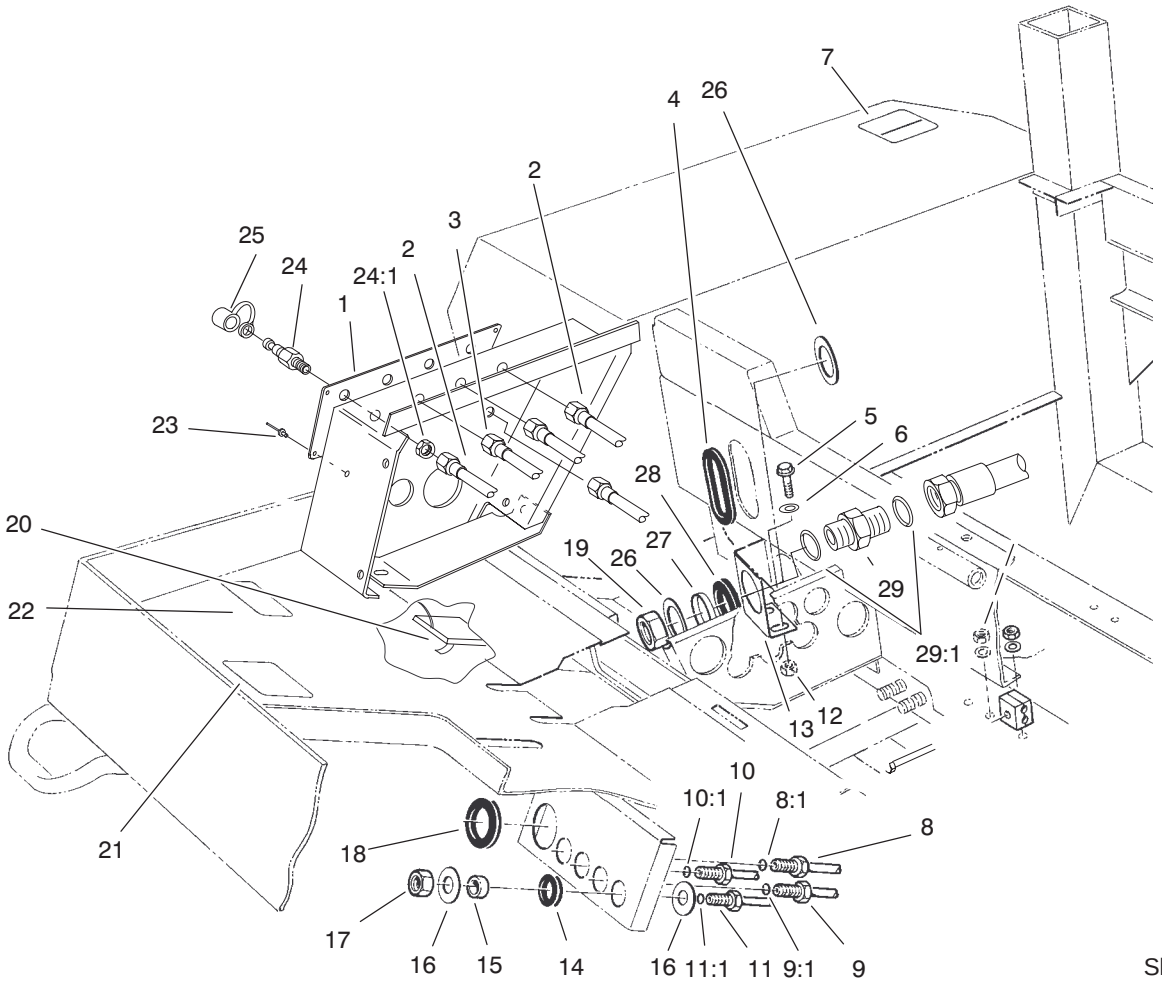


Sheet No.:13

Hydraulic Compartment Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
37	69-6060	1	Tube-HYD
37:1	237-22	2	O-Ring
38	240-5	2	Grommet
39	69-8960	2	Spacer
40	69-5810	1	Tube-HYD
40:1	237-58	1	O-Ring
41	240-7	4	Grommet-Rubber
42	92-4970	1	Hose ASM
43	69-6100	1	Tube-HYD
43:1	237-58	1	O-Ring
44	340-71	1	Fitting-Straight, Bulkhead
44:1	237-22	2	O-Ring
45	69-8910	4	Washer
46	69-8900	2	Spacer
47	92-4967	1	Return Tube ASM
47:1	237-30	1	O-Ring
48	88-5470	2	Spacer-Front, Axle

Ref. No.	Part No.	Qty.	Description



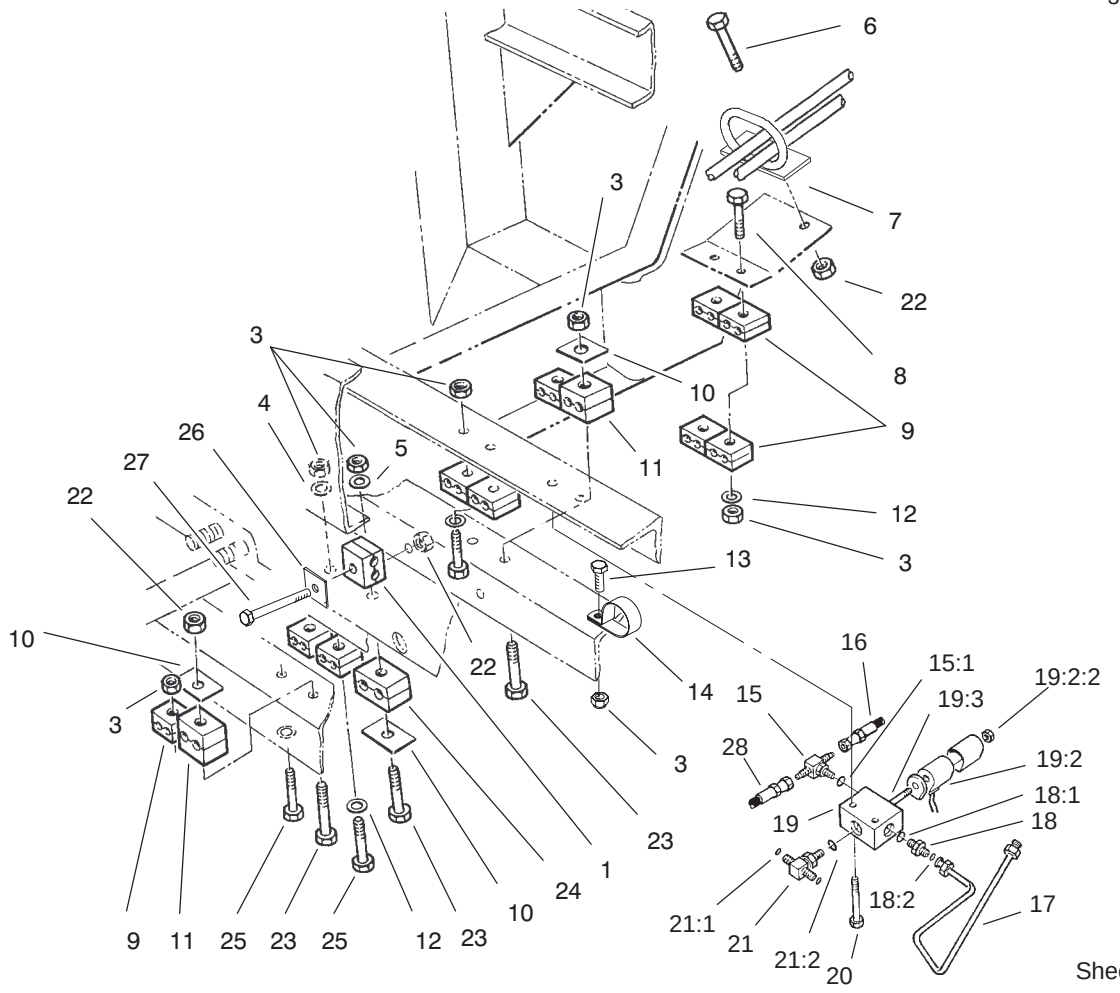
Sheet No.:14

Hydraulic Line Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1900	1	Panel-Ports, Test
2	93-7422	2	Hose ASM
3	93-7193	1	Hose ASM
4	237-164	1	Grommet
5	3234-14	4	Screw-HHF
6	3256-23	4	Washer-Flat
7	95-0821	1	Decal-Hydraulic Oil
8	69-6070	1	Tube-HYD
8:1	237-21	1	O-Ring
*8:2	237-22	1	O-Ring
9	106-0062	1	Tube-HYD
9:1	237-21	1	O-Ring
*9:2	237-22	1	O-Ring
10	69-6080	1	Tube-HYD
10:1	237-21	1	O-Ring
*10:2	237-22	1	O-Ring
11	69-5800	1	Tube-HYD
11:1	237-21	1	O-Ring
12	32152-1	4	Nut-Lock, NI
13	71-2560-03	2	Support-Bulkhead
14	240-6	4	Grommet-Rubber
15	69-8990	4	Spacer
16	69-8980	8	Washer
17	340-78	4	Locknut-Bulkhead
18	240-7	1	Grommet-Rubber
19	340-128	2	Nut-Bulkhead

Ref. No.	Part No.	Qty.	Description
20	93-7038	1	Switch-T ransport
21	69-0940	1	Decal-Caution
22	98-4387	1	Decal-Protection, Ear
23	3269-25	4	Rivet-Pop
24	353-997	5	Fitting
24:1	3220-4	1	Nut-Jam
25	354-79	5	Cap-Dust, Yellow
26	69-8920	2	Washer
27	69-8950	2	Spacer
28	240-2	2	Grommet-Rubber
29	106-0060	2	Adapter-HYD
29:1	340-65	2	O-Ring
32	105-0739	1	Decal-Driveshaft

* Not illustrated



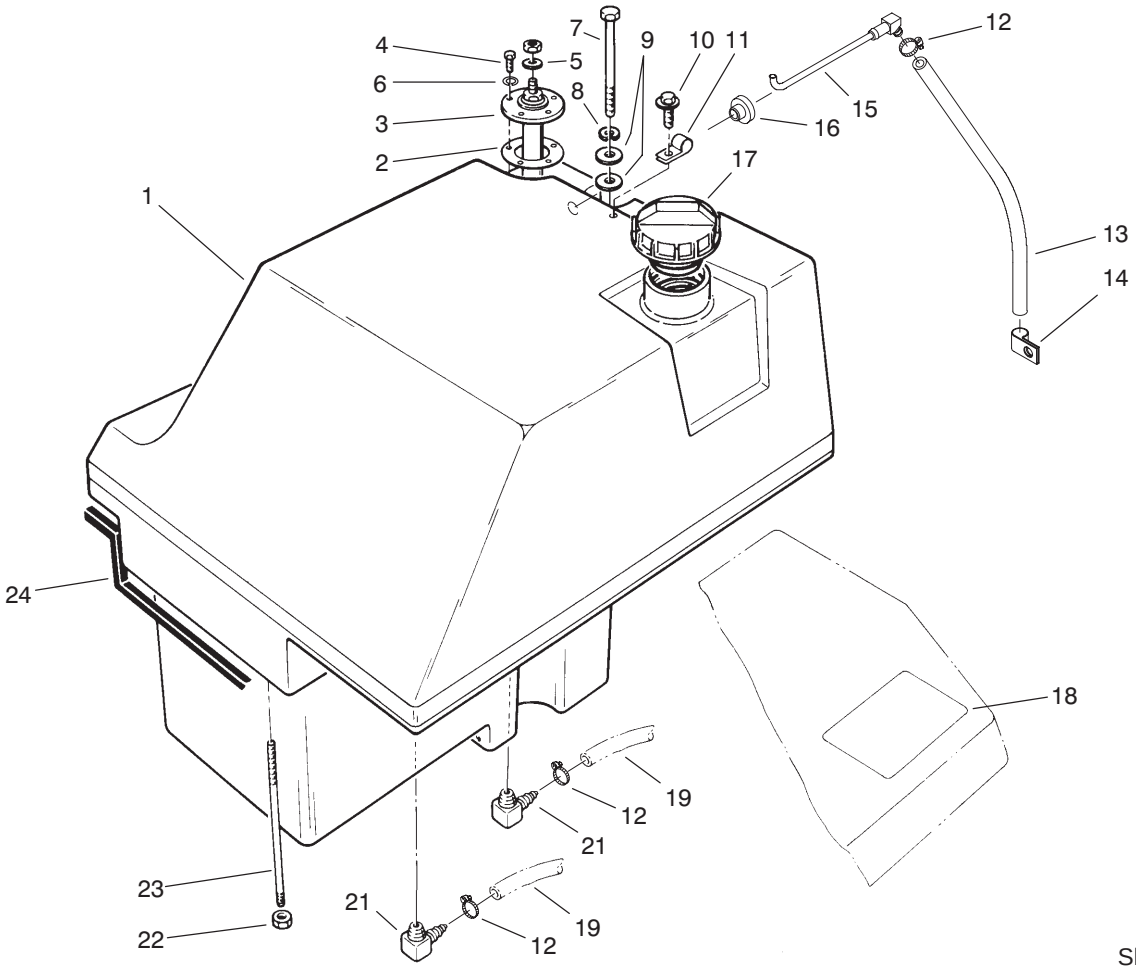
Sheet No.:15

Hydraulic Line Clamp Assembly

Ref. No.	Part No.	Qty.	Description
1	56-7978	8	Clamp-T ube
3	32152-4	9	Nut-Conelock
4	3256-22	2	Washer-Flat
5	3256-23	1	Washer-Flat
6	322-4	1	Screw-HH
7	104-0028	1	Guide-Hose
8	321-15	2	Screw-HH
9	56-7973	20	Clamp-T ube
10	69-9760	3	Coverplate
11	56-7972	4	Clamp-T ube
12	3256-56	8	Washer-Flat
13	321-6	1	Screw-HH
14	2412-72	1	Clip-Closed, Insulated
15	93-9988	1	Adapter
15:1	237-78	1	O-Ring
16	100-4150	1	Hose
17	69-5950	1	Tube-HYD
18	340-92	1	Fitting-HYD, Straight
18:1	237-78	1	O-Ring
18:2	237-21	1	O-Ring
19	95-5916	1	Solenoid Valve ASM
19:2	95-5638	1	Valve-Solenoid
*19:2:1	95-5917	1	Seal Kit
19:2:2	3220-4	1	Nut-Jam
19:3	105-7340	1	Coil ASM
20	321-11	2	Screw-HH

Ref. No.	Part No.	Qty.	Description
21	340-125	1	Adapter
21:1	237-21	2	O-Ring
21:2	237-78	1	O-Ring
22	104-8300	6	Nut-Flange, NI
23	322-10	3	Screw-HH
24	56-7971	2	Clamp-T ube
25	321-9	6	Screw-HH
26	69-9761	2	Coverplate
27	322-38	2	Screw-HH
28	93-7193	1	Hose ASM

* Not illustrated

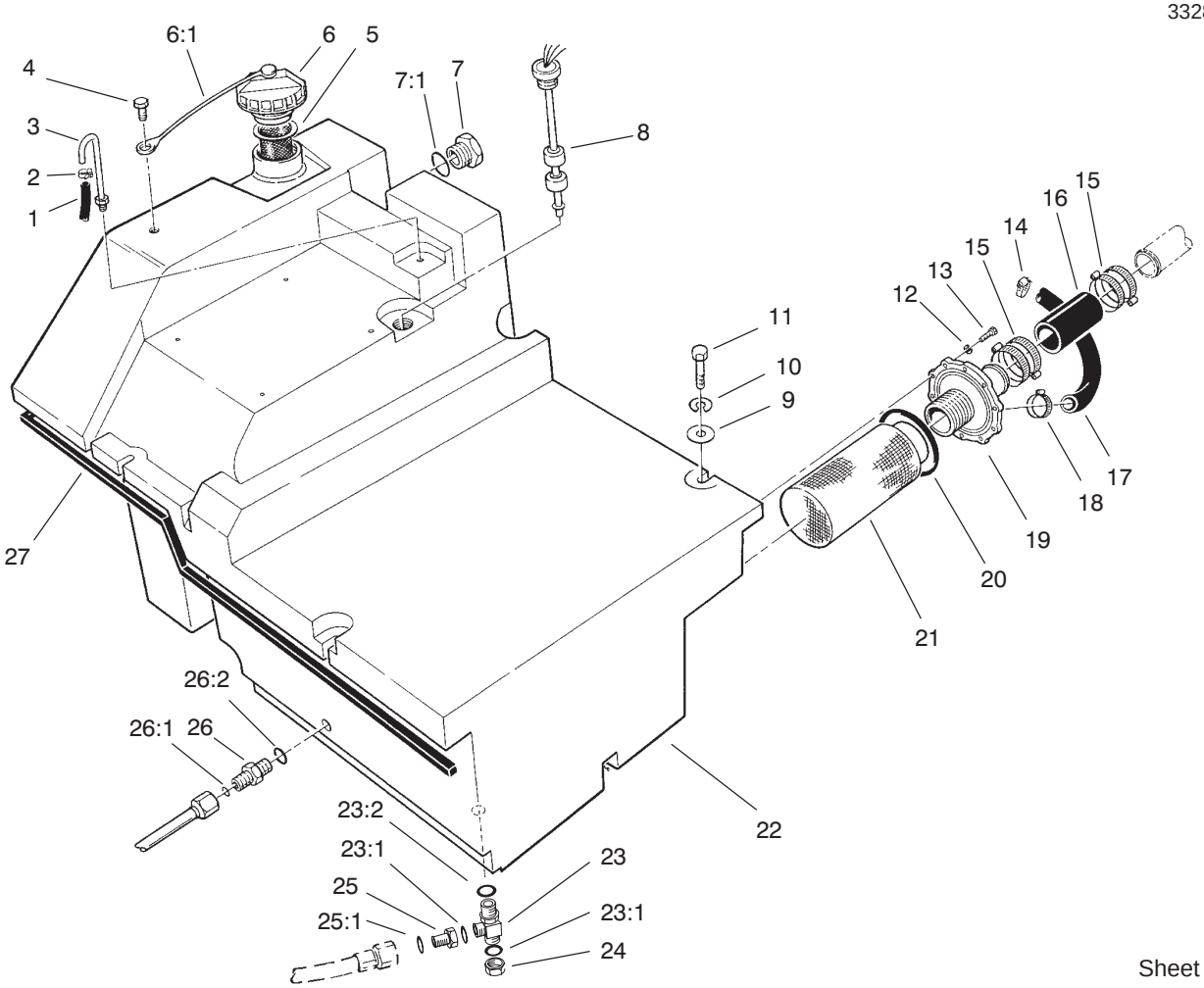


Sheet No.:16

Fuel Tank Assembly

Ref. No.	Part No.	Qty.	Description
1	94-2865	1	Tank-Fuel
2	62-7650	1	Gasket
3	70-6990	1	Level-Sender , Fuel
4	32122-24	5	Screw-Pth
5	5-3637	1	Spacer
6	3253-15	5	Washer-Lock/Sp
7	323-39	1	Screw-HH
8	3253-21	1	Washer-Lock
9	3256-5	2	Washer-Flat
10	3234-13	1	Screw-HHF
11	2412-89	1	Clamp
12	2412-108	3	Clamp-W orm
13	94-331 1	1	Hose-Fuel
14	2412-138	1	R-Clamp
15	94-3310	1	Tube-V ent
16	46-6560	1	Bushing
17	93-3102	1	Cap-Fuel
18	95-0822	1	Decal-W arning, Fuel Tank
19	37-9560	1	Hose-Fuel
21	353-536	2	Fitting-Elbow , 90°
22	3296-39	1	Nut-Lock, NI
23	72-9550	1	Stud
24	68-7574	1	Strip-Sealing
25	105-0739	1	Decal-Driveshaft

Ref. No.	Part No.	Qty.	Description



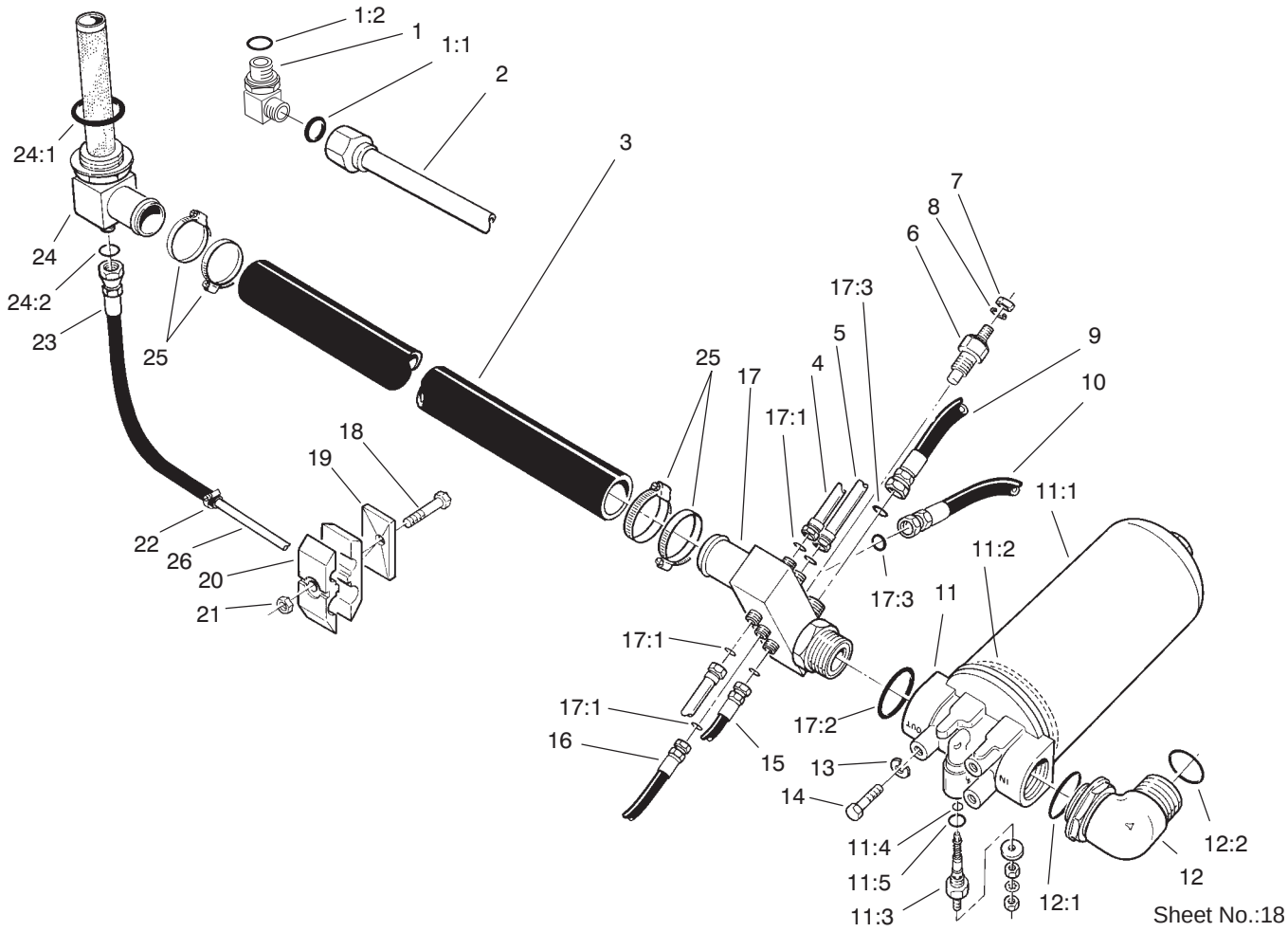
Sheet No.:17

Hydraulic Tank Assembly

Ref. No.	Part No.	Qty.	Description
1	71-2680	1	Hose-Fuel
2	2412-108	1	Clamp-W orm
3	69-4280	1	Tube-HYD
4	321-2	1	Screw-HH
5	61-2790	1	Filter-Screen
6	93-3103	1	Cap-Oil, HYD
6:1	75-0540	1	Tether And Button Kit
7	69-1 170	1	Glass-Sight
7:1	237-81	1	O-Ring
8	85-6260	1	Switch ASM
9	5-3177	4	Washer
10	3253-21	4	Washer-Lock
11	323-10	4	Screw-HH
12	3253-3	10	Washer-Lock
13	321-5	10	Screw-HH
14	2412-34	1	Clamp-Hose
15	2412-42	4	Clamp-Hose
16	69-5640	1	Hose-Return
17	94-1892	1	Hose ASM
18	2412-3	1	Clamp-Hose
19	69-1610	1	Adapter-Hose, Suction
20	237-157	1	O-Ring
21	69-1650	1	Screen-Suction
22	94-1893	1	Tank-HYD
23	340-22	1	Adapter

Ref. No.	Part No.	Qty.	Description
23:1	237-65	2	O-Ring
23:2	237-80	1	O-Ring
24	340-150	1	Cap
25	98-7067	1	Fitting-HYD
25:1	237-22	1	O-Ring
26	340-3	1	Adapter
26:1	237-22	1	O-Ring
26:2	237-79	1	O-Ring
27	68-7574	1	Strip-Sealing

3328-910

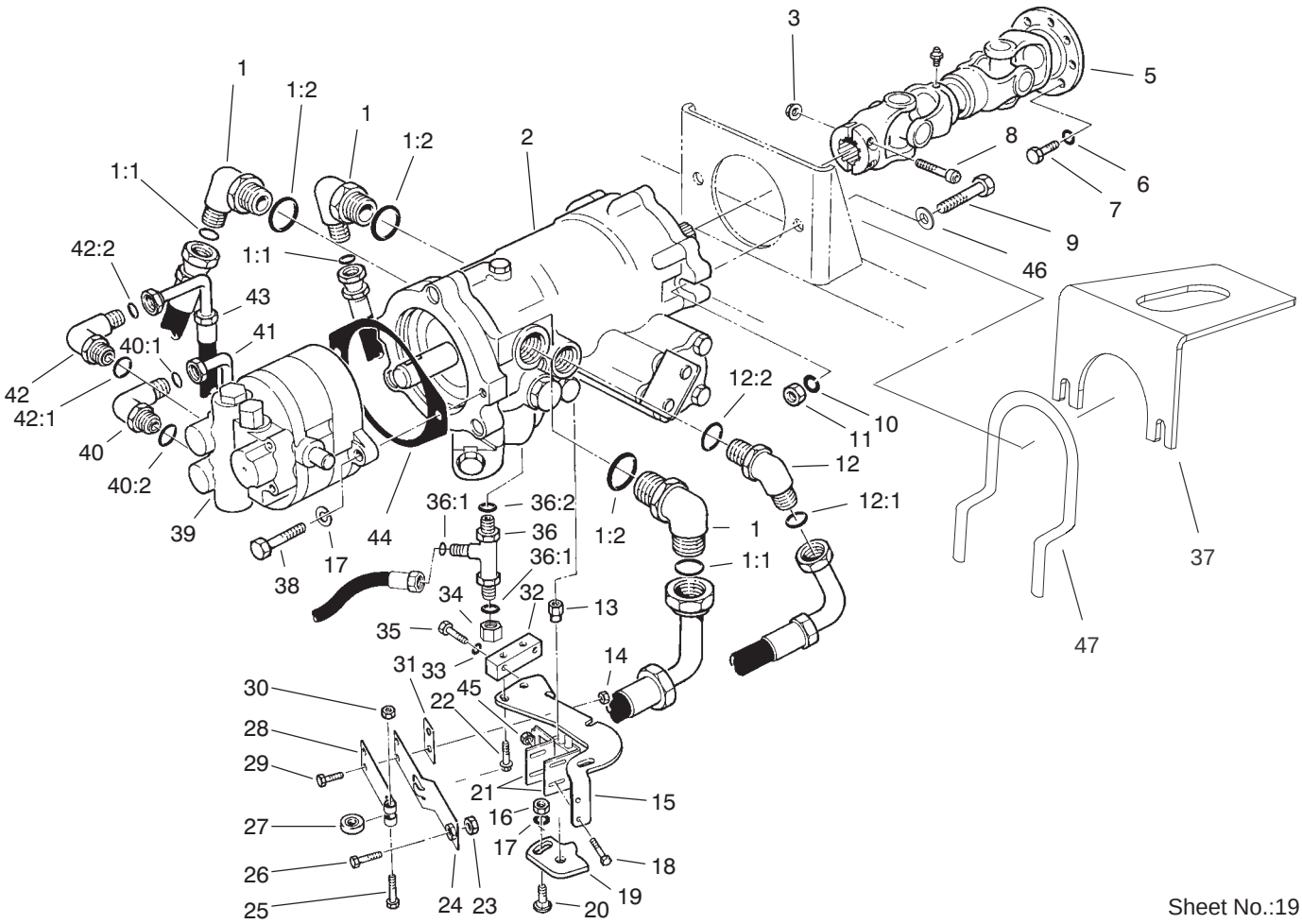


Hydraulic Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	340-17	1	Fitting-HYD, 90°
1:1	237-65	1	O-Ring
1:2	237-80	1	O-Ring
2	92-4807	1	Tube ASM
3	74-2660	1	Hose
4	69-6000	1	Tube-HYD
*4:1	237-22	1	O-Ring
5	69-5990	1	Tube ASM
*5:1	237-22	1	O-Ring
6	39-7593	1	Thermo Switch ASM
7	3219-14	1	Nut-Hex
8	3253-2	1	Washer-Lock/Sp
9	69-5460	1	Hose ASM
10	69-5650	1	Hose ASM
11	69-1700	1	Filter-Oil
11:1	69-1720	1	Element-Filter
11:2	237-155	1	O-Ring
11:3	69-1710	1	Indicator ASM
☆11:4		1	O-Ring
☆11:5		1	O-Ring
12	340-79	1	Adapter
12:1	237-101	1	O-Ring
12:2	340-65	1	O-Ring
13	3253-21	3	Washer-Lock
14	323-4	3	Screw-HH
15	104-0051	1	HYD Hose ASM

Ref. No.	Part No.	Qty.	Description
16	69-8440	1	Hose ASM
17	69-5410	1	Fitting
17:1	237-22	5	O-Ring
17:2	237-101	1	O-Ring
17:3	237-30	2	O-Ring
18	322-12	3	Screw-HH
19	69-9761	3	Coverplate
20	56-7978	6	Clamp-T ube
21	32152-1	3	Nut-Lock, NI
22	2412-129	1	Clamp-Hose
23	92-2352	1	Hose ASM
24	92-2351	1	Fitting-Return, Tank
24:1	340-136	1	O-Ring
24:2	237-58	1	O-Ring
25	2412-92	4	Clamp-Hose
26	92-1742	1	Tube ASM

* Not illustrated
☆ Not serviced separately

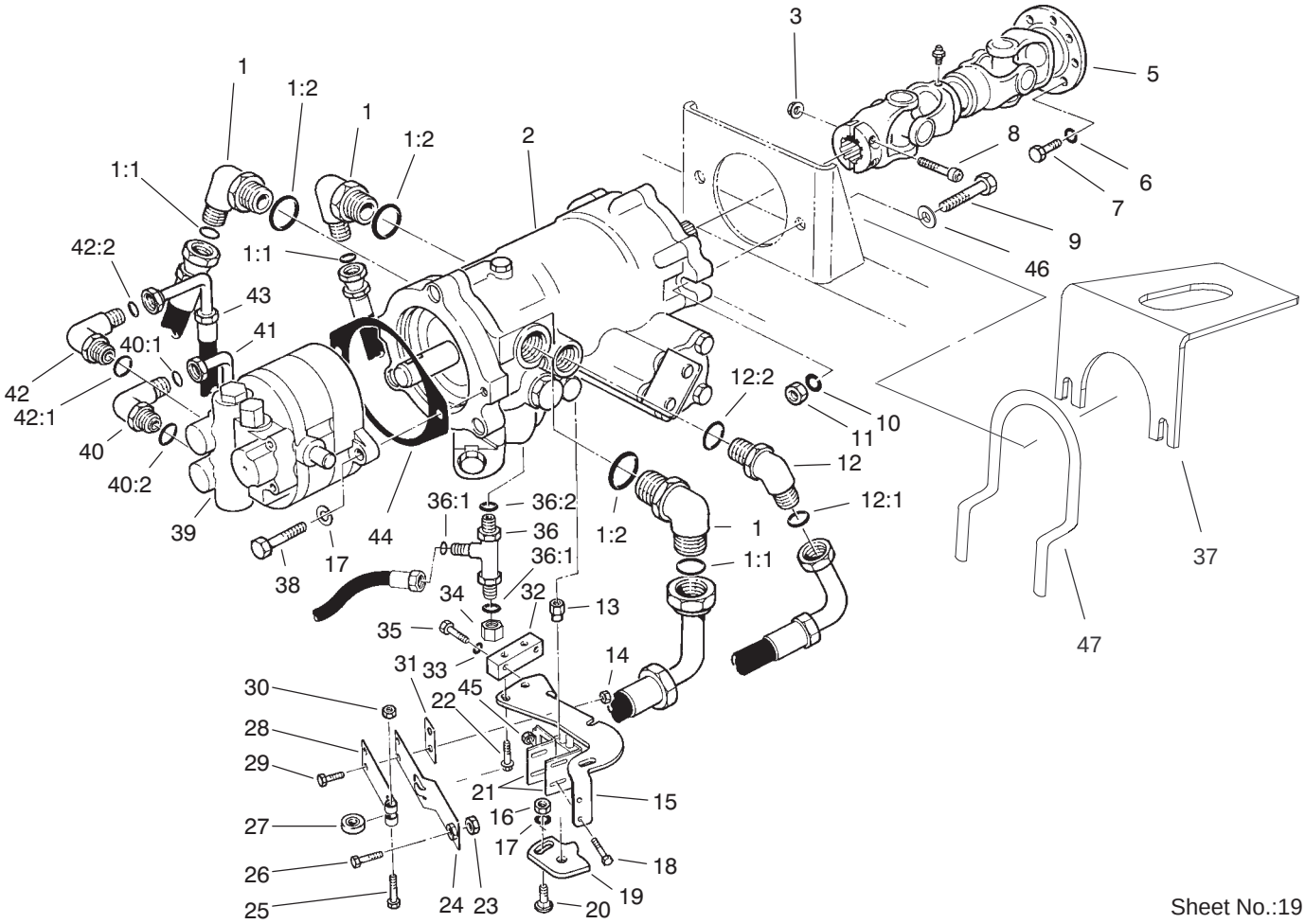


Sheet No.:19

Variable Displacement Pump Installation

Ref. No.	Part No.	Qty.	Description
1	340-15	3	Fitting-HYD, 90°
1:1	237-58	1	O-Ring
1:2	237-146	1	O-Ring
2	93-9322	1	Pump-HYD
3	106-0327	2	Hex-Nut
5	98-0819	1	Driveshaft
6	48-9590	6	Washer-Lock
7	99-6058	6	Screw-Cap
8	26-0670	2	Screw-Blade
9	325-9	2	Screw-HH
10	3253-7	2	Washer-Lock
11	3217-9	2	Nut-HH
12	340-131	1	Elbow-90 °
12:1	237-30	1	O-Ring
12:2	237-81	1	O-Ring
13	69-9020	1	Nut
14	32152-4	2	Nut-Conelock
15	69-9480-03	1	Bracket-Device, Neutral
16	3217-7	1	Nut-Hex
17	3253-21	3	Washer-Lock
18	32144-1	2	Screw-Taptite
19	69-9040-03	1	Cam-Device, Neutral
20	3231-30	1	Screw-CARR

Ref. No.	Part No.	Qty.	Description
21	93-7037	1	Switch
22	3234-13	2	Screw-HHF
23	3219-2	1	Nut-Hex
24	29-6170	1	Leaf Spring ASM
25	322-17	1	Screw-HH
26	3210-7	1	Screw-HH
27	251-307	1	Bearing-Ball
28	29-6150	1	Spring-Leaf
29	321-4	2	Screw-HH
30	3296-29	1	Nut-Lock, NI
31	51-3150	2	Shim
32	69-9050	1	Bar-Device, Neutral
33	3253-3	2	Washer-Lock
34	340-117	1	Cap
35	321-10	2	Screw-HH
36	340-86	1	Fitting-HYD, Tee
36:1	237-22	2	O-Ring
36:2	237-42	1	O-Ring
37	105-0583-03	1	Guard-Draiveshaft
38	323-7	2	Screw-HH
39	69-2220	1	Pump-Gear
40	340-130	1	Fitting-Elbow , 90°
40:1	237-30	1	O-Ring
40:2	237-80	1	O-Ring

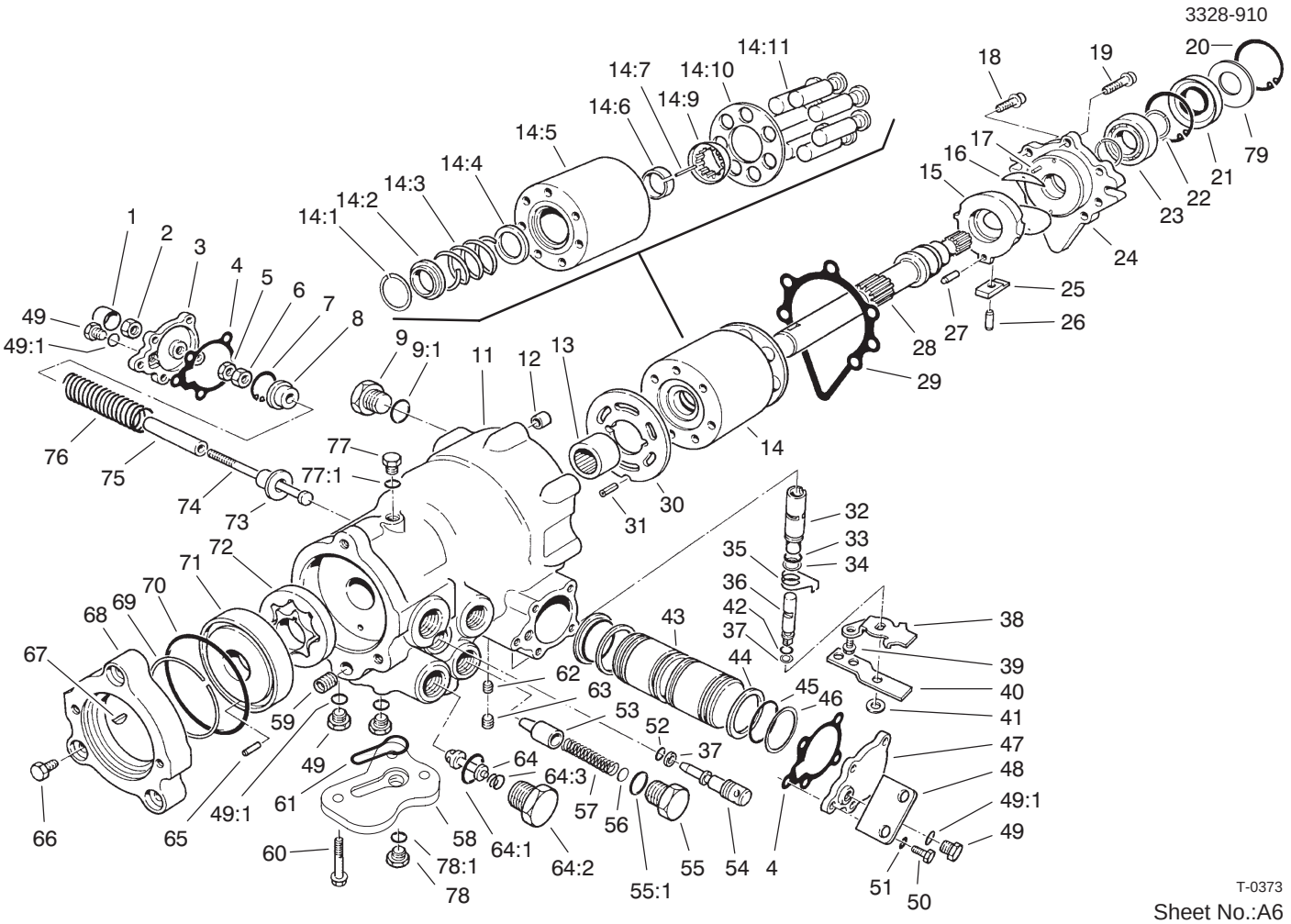


Sheet No.:19

Variable Displacement Pump Installation (Continued)

Ref. No.	Part No.	Qty.	Description
41	104-0051	1	HYD Hose ASM
42	340-105	1	Fitting-HYD, 90°
42:1	237-80	1	O-Ring
42:2	237-30	1	O-Ring
43	69-5450	1	Hose ASM
44	41-8760	1	Gasket
45	32127-11	2	Nut-Lock
46	3256-26	2	Washer-Flat
47	85-6270	1	Guard-Shaft, Drive

Ref. No.	Part No.	Qty.	Description

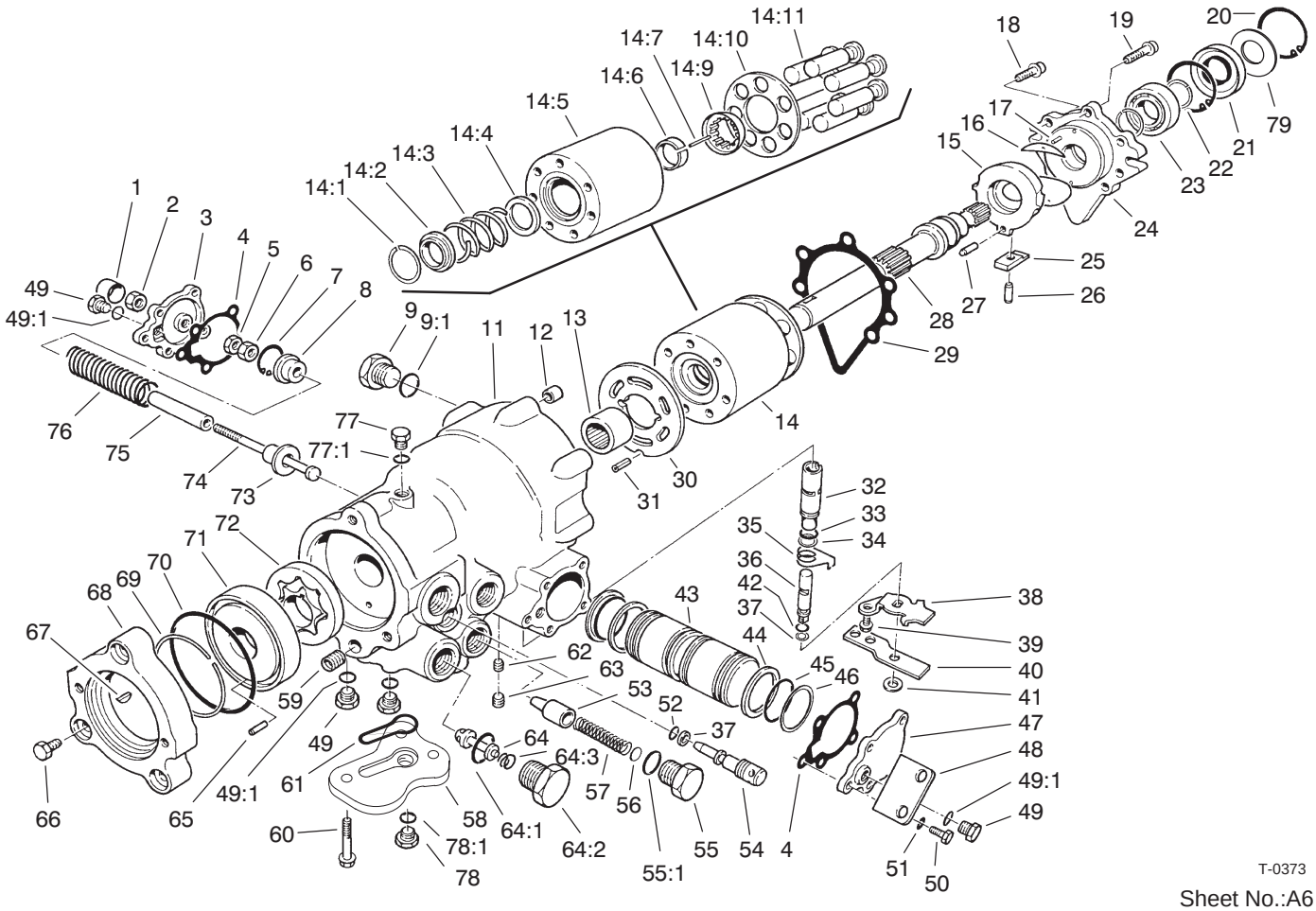


Hydraulic Pump Assembly No. 93-9322

Ref. No.	Part No.	Qty.	Description
1	69-3620	1	Cover-Adjustor , Servo
2	69-3630	1	Nut
3	69-3640	1	Cover-Servo
4	69-3710	2	Gasket-Servo
5	69-3610	1	Nut-Hex
6	69-3600	1	Nut-Hex
7	69-3590	1	Ring-Retaining
8	69-3580	1	Guide-Spring
9	69-3130	1	Plug
☆9:1		1	O-Ring
☆11		1	Housing
12	69-3230	1	Pin-Spring
13	69-3370	1	Bearing-Needle
14	69-3910	1	Cylinder Block Kit
☆14:1		1	Ring-Retaining
☆14:2		1	Washer
☆14:3		1	Spring-Compression
☆14:4		1	Washer
☆14:5		1	Block-Cylinder
☆14:6		1	Retainer
☆14:7		3	Pin-Down, Hold
☆14:9		1	Guide-Retainer
☆14:10		1	Guide-Slipper
☆14:11		7	Piston ASM
15	69-3250	1	Swashplate-V ariable
16	69-3240	2	Bearing-Journal

Ref. No.	Part No.	Qty.	Description
17	94-2878	2	Pin
18	76-4590	6	Screw
19	69-3220	1	Screw
20	69-3200	2	Ring-Retaining
21	69-3190	1	Seal-Lip
22	69-3170	2	Ring-Retaining
23	69-3210	1	Bearing-Ball
24	76-4610	1	Cover-Front
25	69-3500	1	Bearing-Sleeve
26	69-3510	1	Pin
27	69-3470	1	Pin
28	69-3180	1	Shaft-Pump
29	76-4600	1	Gasket-Cover , Front
30	93-9320	1	Plate-V alve, LH
31	69-3450	1	Pin
32	69-3820	1	Sleeve-V alve, Control
33	28-3590	1	O-Ring
34	28-3580	1	Ring-Back Up
35	69-3880	1	Spring-Return, Neutral
36	69-3830	1	Spool-V alve, Rotary
37	25-2630	2	Ring-Back-Up
38	69-3890	1	Bracket-Neutral Return
39	69-3860	1	Screw
40	69-3870	1	Handle-V alve, Control

☆ Not serviced separately



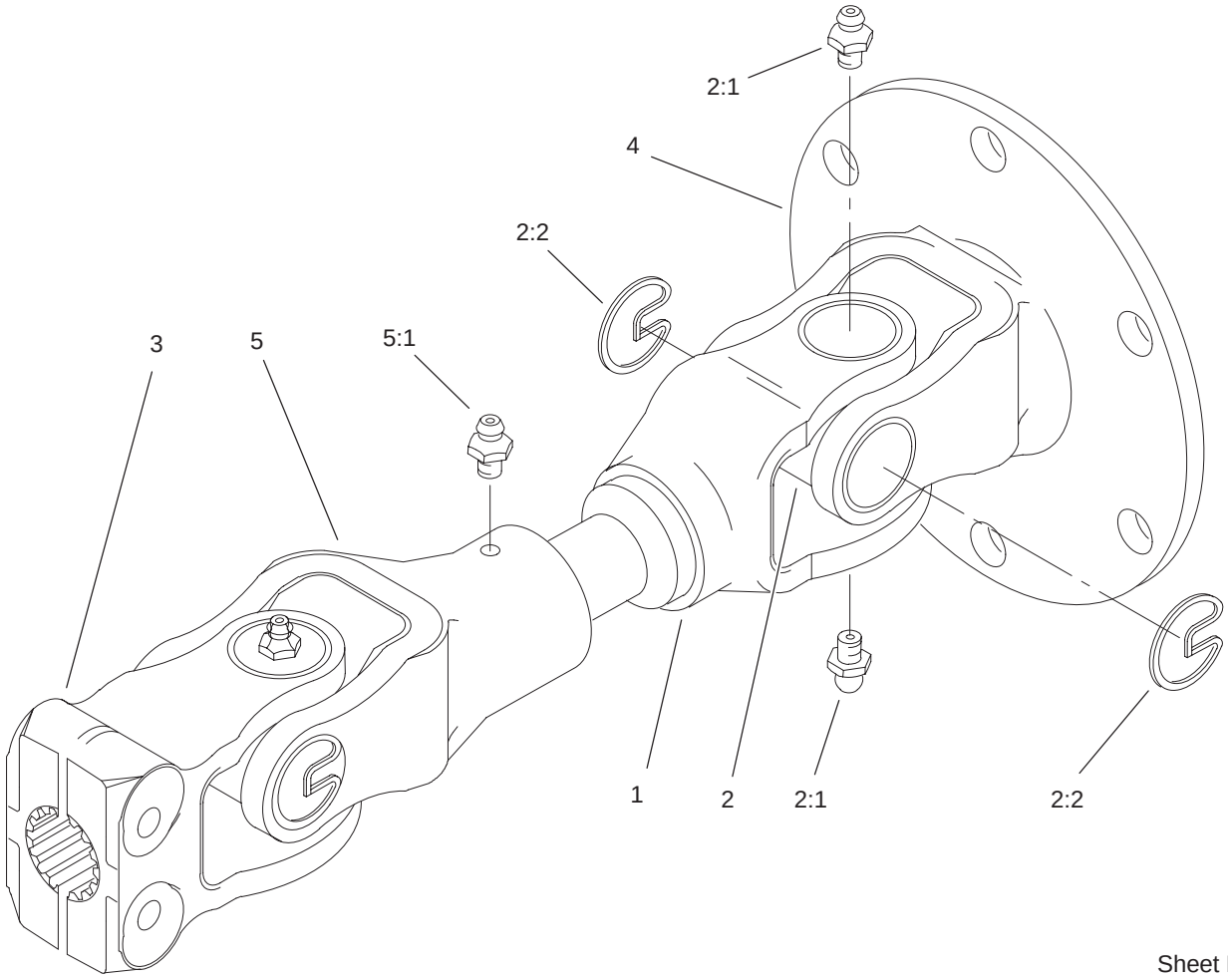
Sheet No.:A6

Hydraulic Pump Assembly No. 93-9322 (Continued)

Ref. No.	Part No.	Qty.	Description
41	69-3900	1	Washer
42	69-3840	1	O-Ring
43	69-3650	1	Piston-Servo
44	69-3690	2	Bearing
45	69-3560	2	O-Ring
46	69-3570	2	Ring-Piston
47	69-3720	1	Cover-Servo
48	69-3140	1	Bracket
49	69-3080	4	Plug
☆49:1		1	O-Ring
50	69-3150	10	Screw
51	69-3070	10	Washer
52	237-22	1	O-Ring
53	69-3800	1	Valve
54	69-3810	1	Valve-By Pass
55	69-3780	1	Plug
55:1	237-80	1	O-Ring
56	69-3770	1	Shim
57	69-3790	1	Spring
58	94-9414	1	Adapter-Suction
59	69-3460	1	Plug-Expansion
60	94-9413	3	Screw
61	94-9412	1	Seal-Adapter , Suction
62	93-9321	1	Plug ASM
63	285-17	2	Plug-Pipe
64	69-3730	2	Relief Valve Kit

Ref. No.	Part No.	Qty.	Description
64:1	69-3750	1	O-Ring
☆64:2		1	Plug
☆64:3		1	Spring
65	69-3550	1	Pin
66	69-3400	3	Screw
67	69-3430	1	Key-W oodruff
68	69-3410	1	Adapter-A Flange
69	69-3420	1	Ring-Load, Temper
70	69-3440	1	O-Ring
71	69-3540	1	Cover-Gerotor
72	69-3390	1	Gerotor ASM
73	69-3700	1	Guide-Spring
74	69-3660	1	Screw
75	69-3680	1	Stop
76	69-3670	1	Spring-Servo
77	69-3120	1	Plug
☆77:1		1	O-Ring
78	94-9415	1	Plug
☆78:1		1	O-Ring
79	95-4400	1	Washer-Backup

☆ Not serviced separately



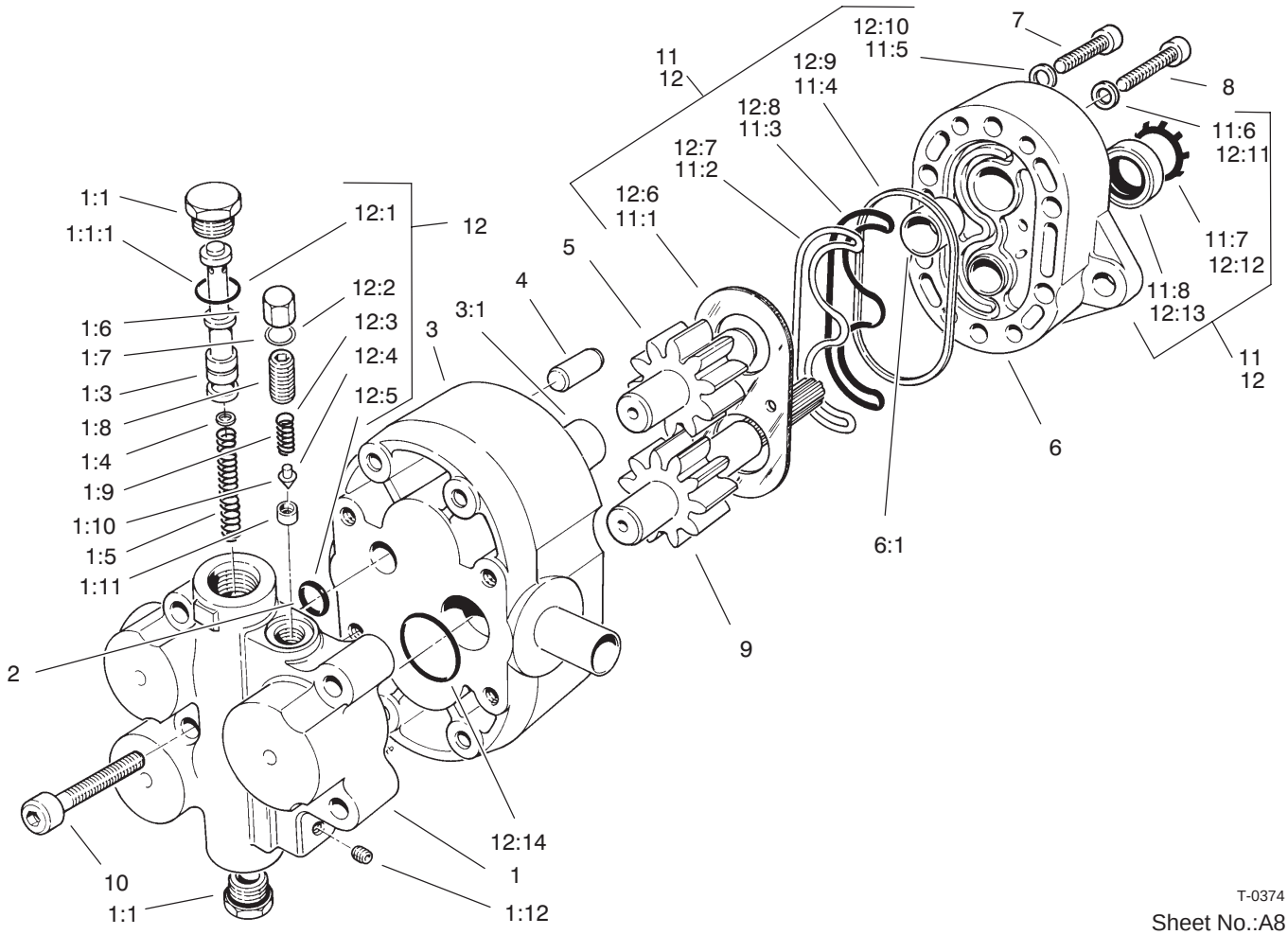
T-3897

Sheet No.:A7

Driveshaft Assembly No. 98-0819

Ref. No.	Part No.	Qty.	Description
1	93-7188	1	Yoke-Shaft, Slip
2	92-4187	2	Cross And Bearing Kit
2:1	302-58	2	Fitting-Grease
2:2	92-4188	2	Ring-Snap
3	93-7189	1	Yoke-Clamp, Splined
4	98-0835	1	Yoke-Flanged
5	98-0836	1	Yoke-T ube, Slip
5:1	302-2	1	Fitting-Grease

Ref. No.	Part No.	Qty.	Description



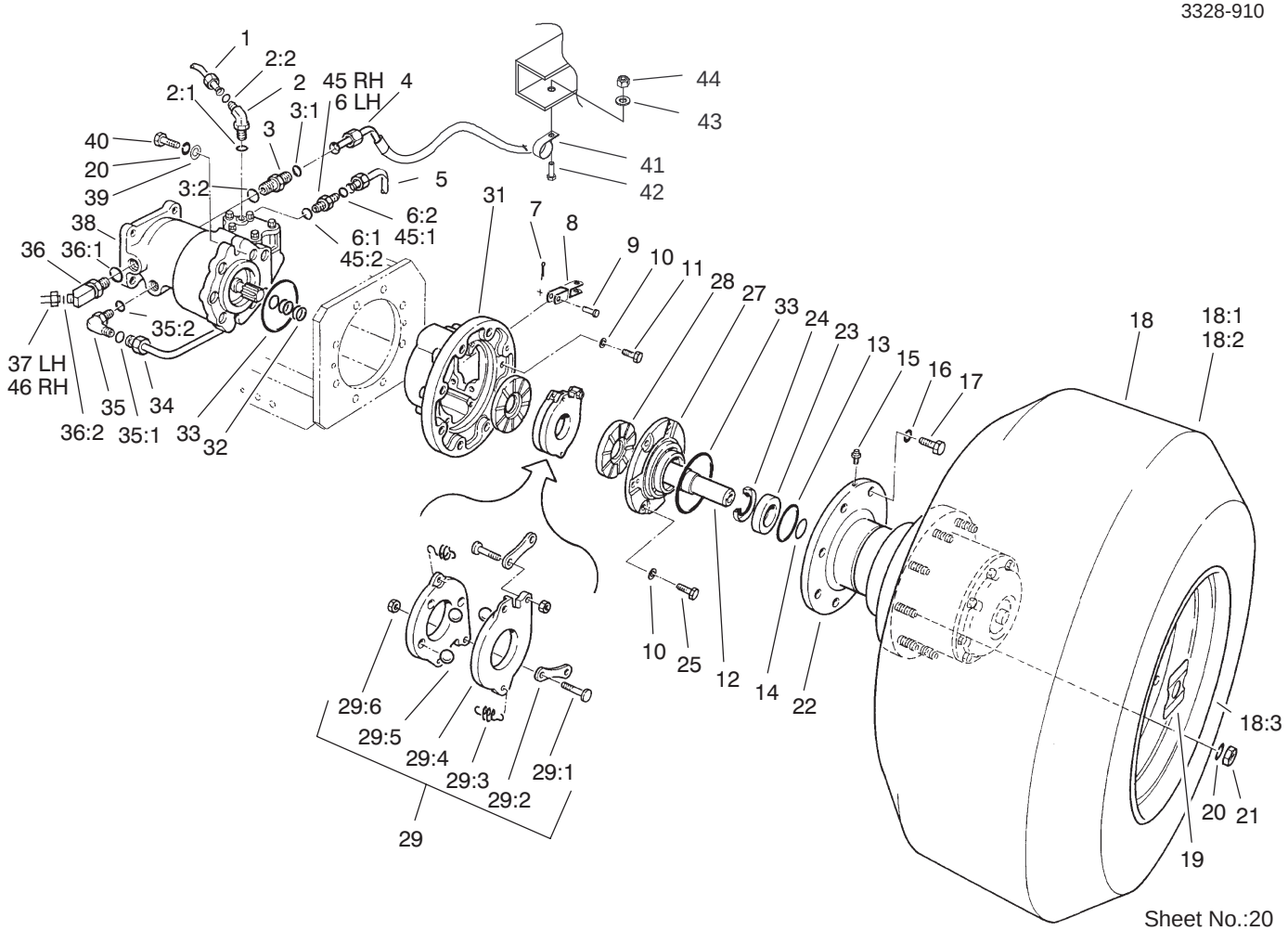
T-0374

Sheet No.:A8

Hydraulic Gear Pump Assembly No. 69-2220

Ref. No.	Part No.	Qty.	Description
1	69-2230	1	Flow Divider ASM
1:1	69-2410	1	Plug
1:1:1	69-2420	1	O-Ring
1:3	69-2450	1	Piston
1:4	69-2440	1	Orifice
1:5	69-2430	1	Spring
1:6	69-2460	1	Cap
1:7	69-2470	1	Gasket
1:8	69-2480	1	Screw
1:9	69-2490	1	Spring
1:10	69-2500	1	Poppet
1:11	69-2510	1	Seat
1:12	69-2520	1	Plug-Pipe
2	69-2530	1	O-Ring
3	69-2540	1	Cover ASM
3:1	69-2250	2	Sleeve-Bearing
4	69-2340	2	Pin-Dowel
5	69-2280	1	Idler Shaft ASM
6	69-2330	1	Body ASM
6:1	69-2250	2	Sleeve-Bearing
7	69-2360	4	Screw
8	69-2380	4	Screw
9	69-2290	1	Drive Shaft ASM
10	69-2240	4	Screw
11	69-2550	1	Repair Kit
11:1	69-2320	1	Plate-W ear

Ref. No.	Part No.	Qty.	Description
11:2	69-2260	1	Seal-Load
11:3	69-2270	1	Seal-Load, Pre
11:4	69-2350	1	Ring-Sealing
11:5	69-2370	4	Washer
11:6	69-2390	4	Washer
11:7	69-2300	1	Ring-Retaining
11:8	69-2310	1	Seal-Shaft
12	69-2560	1	Repair Kit
12:1	69-2420	2	O-Ring
12:2	69-2470	1	Gasket
12:3	69-2490	1	Spring
12:4	69-2500	1	Poppet
12:5	69-2530	1	O-Ring
12:6	69-2320	1	Plate-W ear
12:7	69-2260	1	Seal-Load
12:8	69-2270	1	Seal-Load, Pre
12:9	69-2350	1	Ring-Sealing
12:10	69-2370	4	Washer
12:11	69-2390	4	Washer
12:12	69-2300	1	Ring-Retaining
12:13	69-2310	1	Seal-Shaft
12:14	69-2400	1	O-Ring

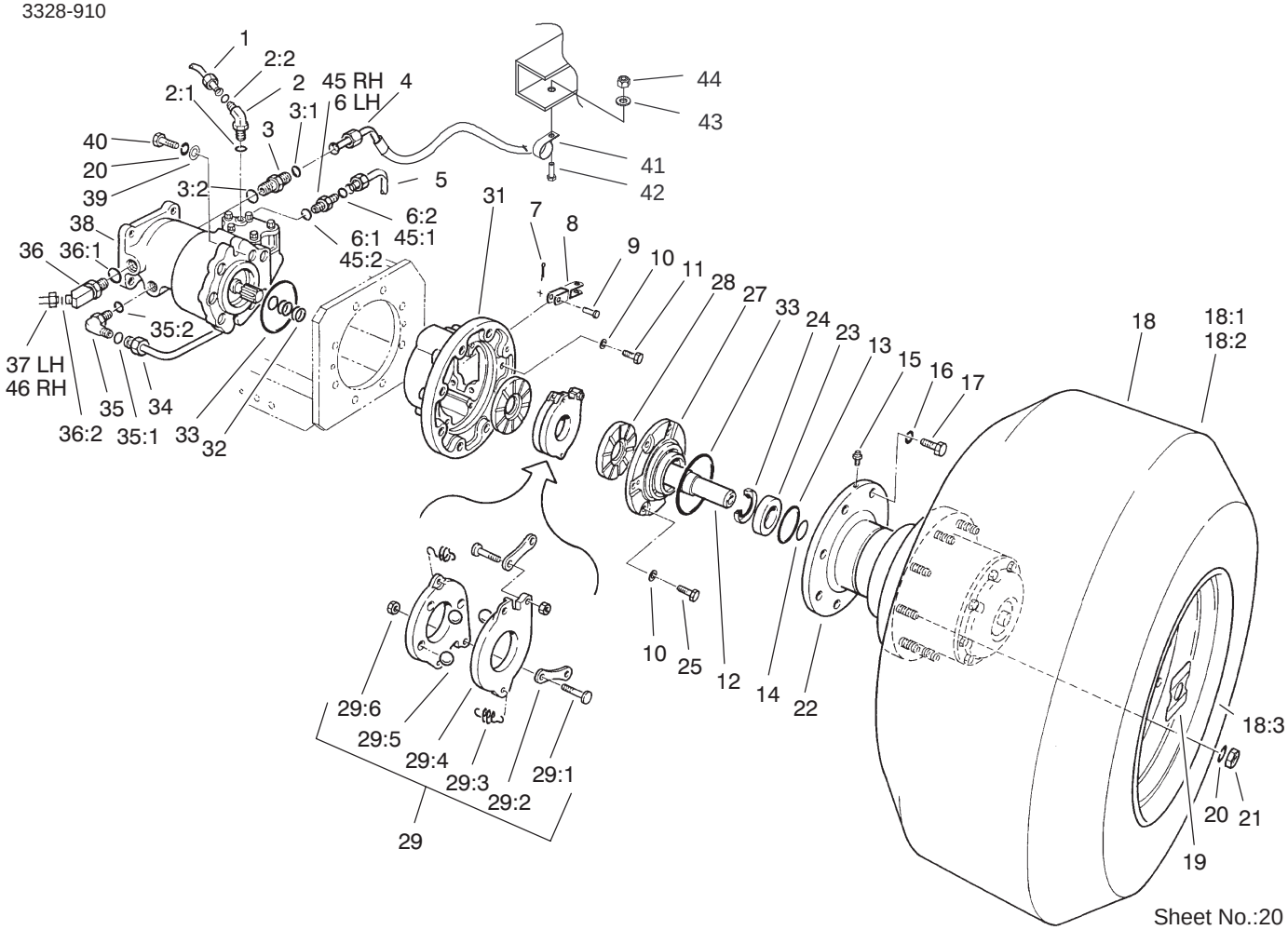


Sheet No.:20

Front Wheel Assembly

Ref. No.	Part No.	Qty.	Description
1	69-5930	1	Tube-HYD, RH
1	69-5940	1	Tube-HYD, LH
2	340-82	2	Adapter
2:1	237-42	1	O-Ring
2:2	237-21	1	O-Ring
3	340-91	2	Adapter
3:1	237-58	1	O-Ring
3:2	237-146	1	O-Ring
4	106-0211	2	HYD Hose ASM
5	92-1742	1	Tube ASM
6	340-9	1	Fitting-Straight
6:1	237-81	1	O-Ring
6:2	237-58	1	O-Ring
7	3272-10	4	Pin-Cotter
8	71-3880	2	Clevis
9	283-2	4	Pin-Clevis
10	3253-21	14	Washer-Lock
11	323-6	4	Screw-HH
12	71-3810	2	Coupling-Motor, HYD
13	32120-22	2	Ring-Snap, Internal
14	32120-84	2	Ring-Snap, External
15	302-39	2	Vent
16	3253-8	16	Washer-Lock
17	327-22	16	Screw-HH
18	69-9790	2	Front Wheel ASM
18:1	69-9800	1	Tire

Ref. No.	Part No.	Qty.	Description
18:2	58-5620	1	Tube
18:3	71-2470	1	Rim
19	72-4070	2	Decal-Danger
20	3253-7	22	Washer-Lock
21	3219-5	18	Nut-Hex
22	69-1730-03	2	Drive-Gear, Planetary
23	251-340	2	Bearing-Ball
24	253-156	2	Seal-Oil
25	323-6	10	Screw-HH
27	71-3990	2	Cap-Housing, Brake
28	71-0470	4	Middle Disc ASM
29	71-0460	2	Actuating Disc ASM
29:1	69-9970	4	Stud
29:2	69-9960	4	Link
29:3	69-9950	4	Spring-Extension
29:4	69-9990	4	Disc-Actuating
29:5	69-9980	6	Ball
29:6	69-9940	4	Nut-HJ
31	71-4010-03	2	Housing-Brake
32	253-157	6	Seal-U Cup
33	237-158	4	O-Ring
34	92-1741	1	Tube ASM
35	340-142	2	Fitting-HYD, 90°
35:1	237-58	1	O-Ring
35:2	237-81	1	O-Ring
36	106-0054	2	Fitting-Elbow, 45°

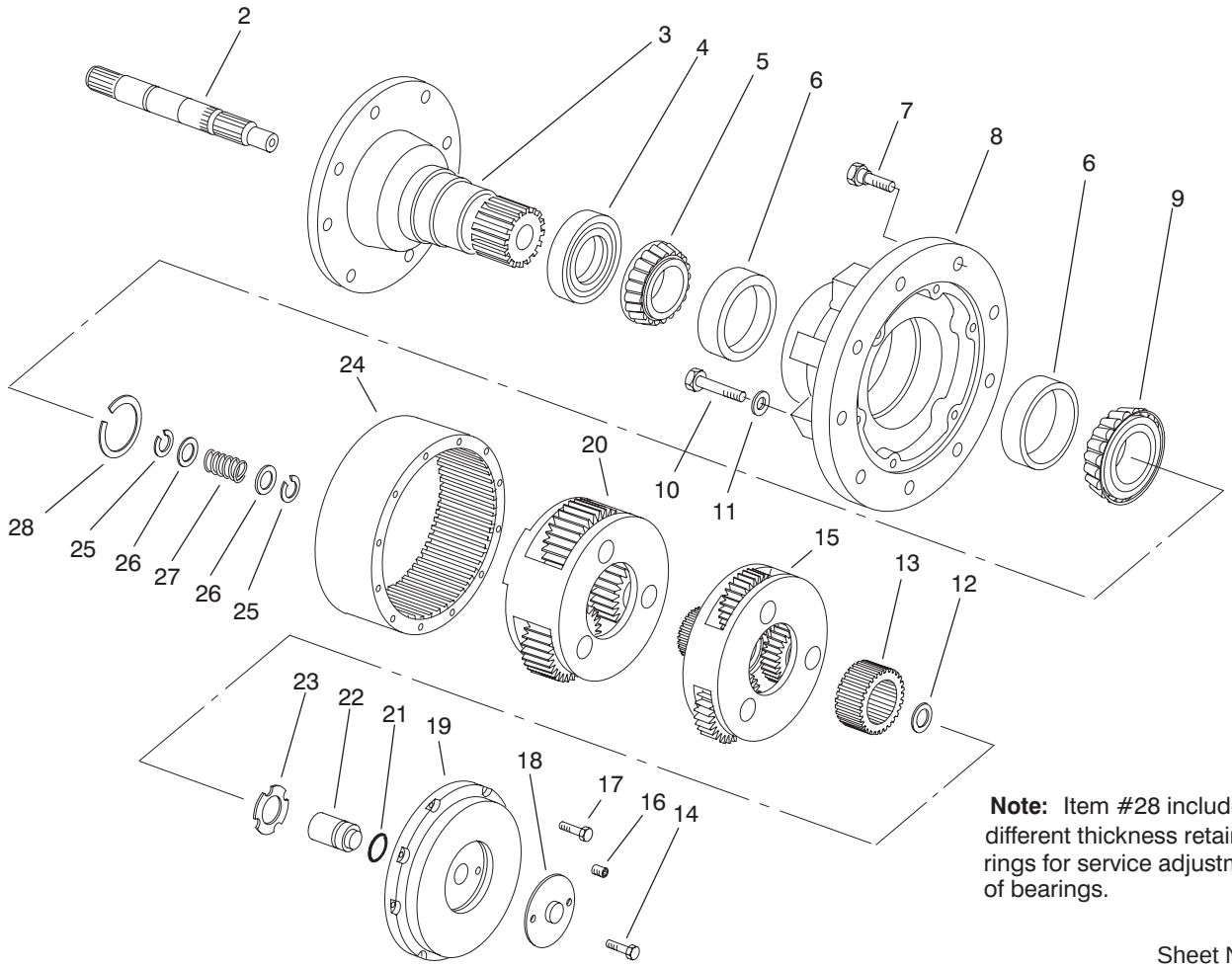


Sheet No.:20

Front Wheel Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
36:1	237-146	1	O-Ring
36:2	237-58	1	O-Ring
37	106-0076	1	Tube-HYD, Traction LH
38	69-3050	2	Motor ASM
39	3256-26	4	Washer-Flat
40	325-7	4	Screw-HH
41	2412-104	2	R-Clamp
42	322-5	2	Screw-HH
43	3256-23	2	Washer-Flat
44	3296-29	2	Nut-Lock, NI
45	340-148	1	Fitting-Tee
45:1	237-58	1	O-Ring
45:2	237-81	1	O-Ring
46	106-0077	1	Tube-HYD, Traction RH

Ref. No.	Part No.	Qty.	Description



Note: Item #28 includes 7 different thickness retaining rings for service adjustment of bearings.

T-0140

Sheet No.:A9

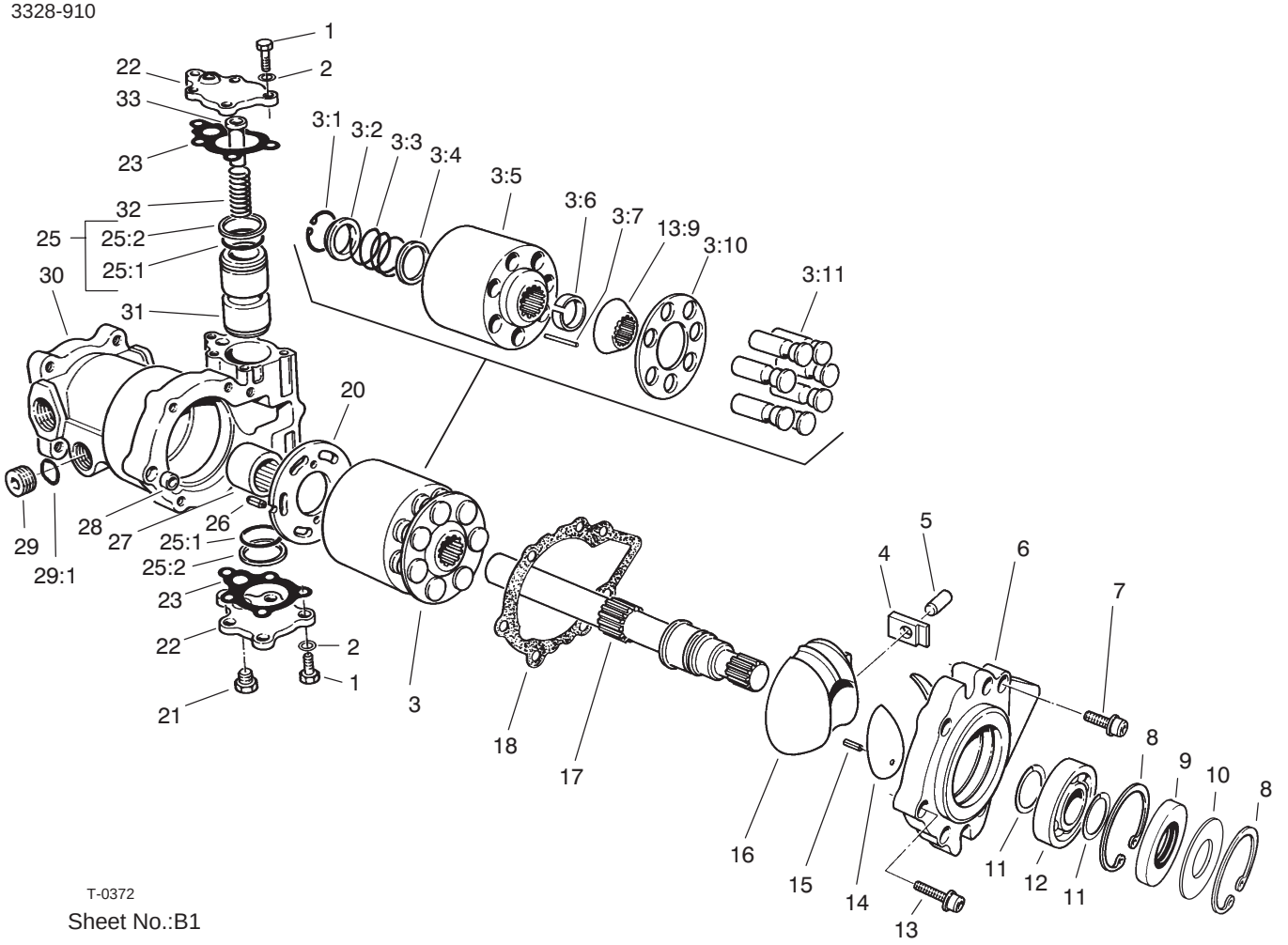
Planetary Gear Drive Assembly No. 69-1730-03

Ref. No.	Part No.	Qty.	Description
2	60-3810	1	Shaft
3	69-1740	1	Spindle
4	60-3830	1	Seal
5	60-3840	1	Cone
6	60-3850	2	Cup
7	60-3860	9	Bolt
8	60-3870	1	Hub
9	60-3880	1	Cone
10	60-3890	6	Bolt
11	60-3910	6	Washer
12	60-3980	1	Washer
13	60-3970	1	Gear
14	60-4070	2	Bolt
15	60-3960	1	Primary Carrier ASM
16	60-4040	1	Plug
17	60-4030	8	Bolt
18	60-4060	1	Cover
19	60-4050	1	Cover
20	60-4000	1	Secondary Carrier ASM
21	60-4020	1	Ring
22	60-4010	1	Plunger
23	60-3990	1	Washer
24	60-3900	1	Gear
25	60-3930	2	Ring
26	60-3940	2	Washer

Ref. No.	Part No.	Qty.	Description
27	60-3950	1	Spring
28	62-6450	1	Retaining Rings Kit
*99	62-6460	1	Sealant-R T V (Tube)

* Not illustrated

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T-0372

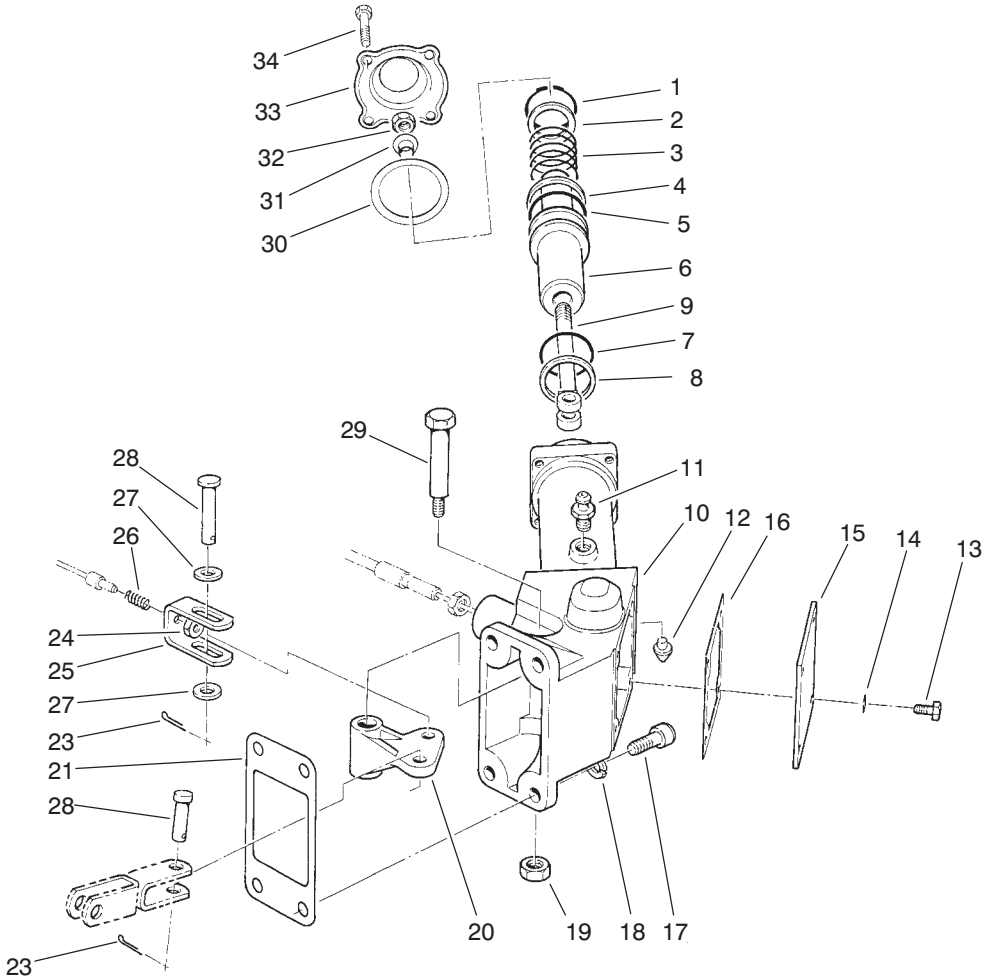
Sheet No.:B1

Hydraulic Motor Assembly No. 69-3050

Ref. No.	Part No.	Qty.	Description
1	69-3150	10	Screw
2	69-3070	10	Washer
3	69-3910	1	Cylinder Block Kit
☆3:1		1	Ring-Retaining
☆3:2		1	Washer
☆3:3		1	Spring-Compression
☆3:4		1	Washer
☆3:5		1	Block-Cylinder
☆3:6		1	Retainer
☆3:7		3	Pin-Down, Hold
☆3:9		1	Guide-Retainer
☆3:10		1	Guide-Slipper
☆3:11		7	Piston ASM
4	69-3500	1	Bearing-Sleeve
5	69-3510	1	Pin
6	76-4610	1	Cover-Front
7	76-4590	6	Screw
8	69-3200	2	Ring-Retaining
9	69-3190	1	Seal-Lip
10	95-4400	1	Washer-Backup
11	69-3170	2	Ring-Retaining
12	69-3210	1	Bearing-Ball
13	69-3960	1	Screw
14	69-3970	2	Bearing-Journal
15	69-3520	2	Pin
16	69-3980	1	Swashplate

Ref. No.	Part No.	Qty.	Description
17	69-3950	1	Shaft-Motor
18	76-4600	1	Gasket-Cover , Front
20	69-3990	1	Plate-V alve, Motor
21	69-3940	1	Plug-Threaded, Straight
22	69-3720	2	Cover-Servo
23	69-3710	2	Gasket-Servo
25	69-3920	1	Piston Ring And O-Ring Kit
25:1	69-3560	1	O-Ring
25:2	69-3570	2	Ring-Piston
26	69-3450	1	Pin
27	69-3370	1	Bearing-Needle
28	69-3230	1	Pin-Spring
29	69-3130	1	Plug
☆29:1		1	O-Ring
☆30		1	Housing
31	69-4020	1	Piston-Servo
32	69-4030	1	Spring-Servo
33	69-4040	1	Stop

☆ Not serviced separately

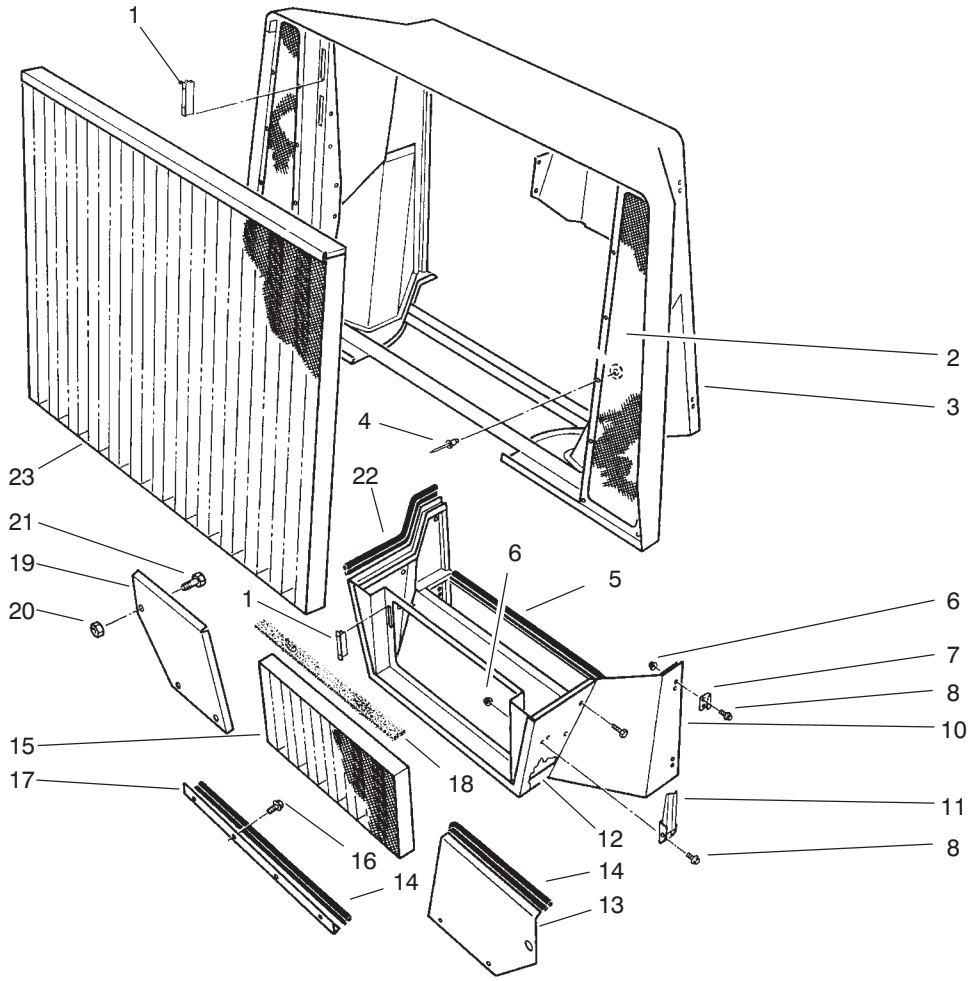


Sheet No.:21

Wheel Brake Assembly

Ref. No.	Part No.	Qty.	Description
1	32151-100	2	Ring-Retaining
2	69-8910	2	Washer
3	82-7850	2	Spring-Compression
4	354-104	2	Back-Up Ring
5	237-175	2	O-Ring
6	82-7840	2	Piston-Brake
7	237-174	2	O-Ring
8	354-105	2	Back-Up Ring
9	21-2070-03	2	End-Y oke
10	105-0605	1	Housing-LH
10	105-0606	1	Housing-RH
11	82-7830	2	Screw-Bleeder , Brake
12	82-7820	2	Seat-T ube, Brake
13	321-2	8	Screw-HH
14	3253-3	8	Washer-Lock
15	71-3850-03	2	Cover-Actuator , Brake
16	71-3870	2	Gasket
17	3274-7	8	Screw-HSH
18	3253-21	8	Washer-Lock
19	32128-25	2	Nut-Flange
20	71-3830-03	2	Bellcrank-Brake
21	71-3900	2	Gasket
23	3272-10	2	Pin-Cotter
24	3296-3	2	Nut-Lock NI
25	71-3860	2	Clevis
26	69-0030	2	Spring-Compression

Ref. No.	Part No.	Qty.	Description
27	3256-24	4	Washer-Flat
28	283-15	2	Pin-Clevis
29	12-8900	2	Bolt
30	93-7417	2	Gasket
31	71-3910	2	Collar
32	3296-59	2	Nut-Lock, NI
33	93-7418	2	Cap-Actuator , Brake
34	321-6	8	Screw-HH

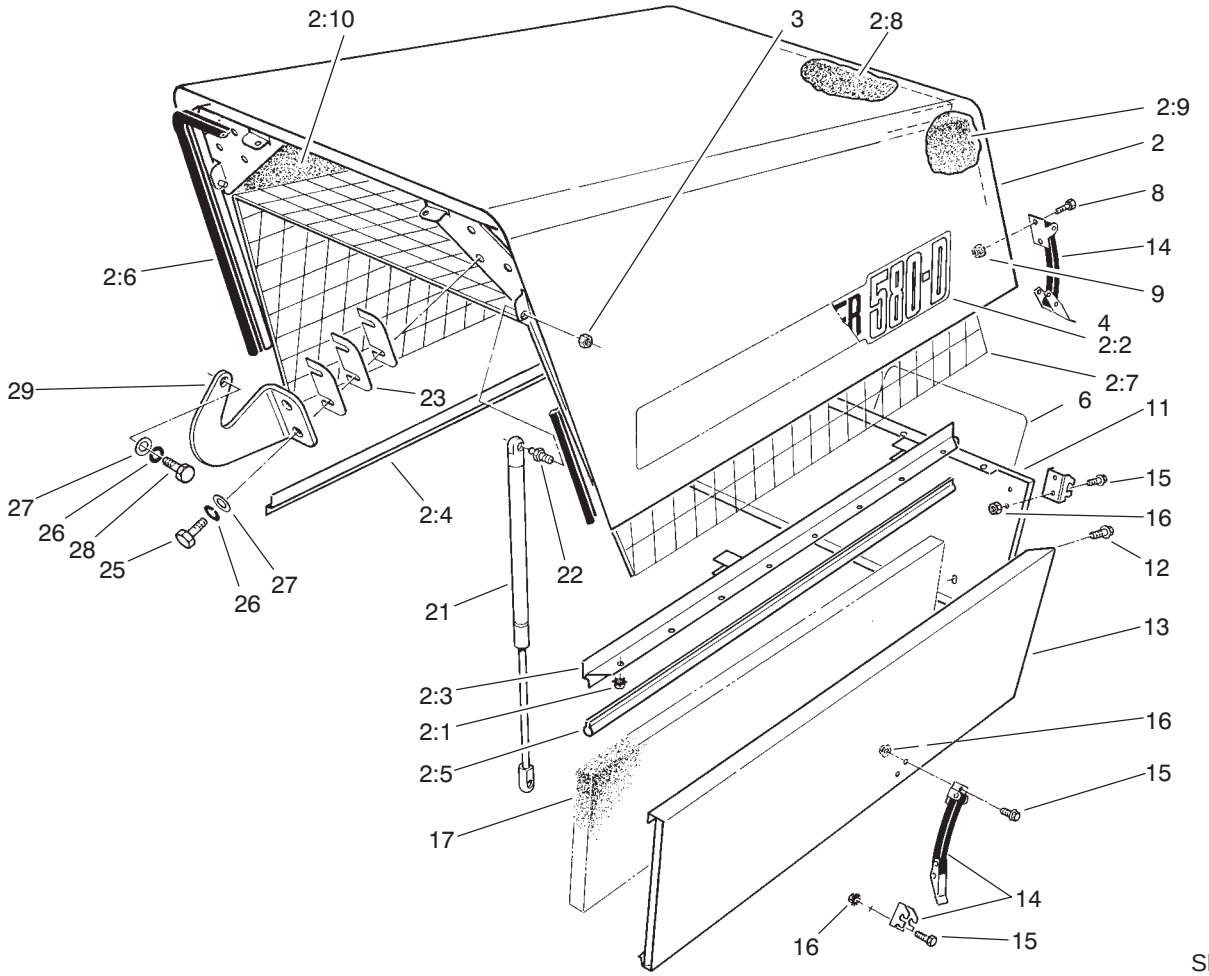


Sheet No.:22

Cowl Assembly

Ref. No.	Part No.	Qty.	Description
1	58-4250	6	Catch-Magnetic
2	69-9650-03	2	Screen
3	98-2365-01	1	Cowl ASM
4	3269-15	22	Rivet
5	69-9722	1	Trim-Seal
6	3296-2	28	Nut-Lock
7	69-3030	8	Strike-Camloc
8	3290-321	28	Screw-HWH
10	69-8690-03	1	Support-Grille
11	105-9296	2	Latch-Draw
12	71-0300	1	Foam-Lower Front Cowl, LH
12	71-0310	1	Foam-Lower Front Cowl, RH
13	75-9460-03	1	Bracket-Seal, LH
14	69-9721	3	Trim-Seal
15	69-7150-03	1	Grille-Lower
16	32144-11	8	Screw-T AP
17	75-9480-03	1	Bracket-Seal, Bottom
18	69-0040	1	Strip-Sealing, Grille
19	75-9470-03	1	Bracket-Seal, RH
20	32153-6	2	Locknut
21	328-11	2	Screw-HH
22	69-9720	2	Trim-Seal
23	69-7120-03	1	Grille-Upper

Ref. No.	Part No.	Qty.	Description

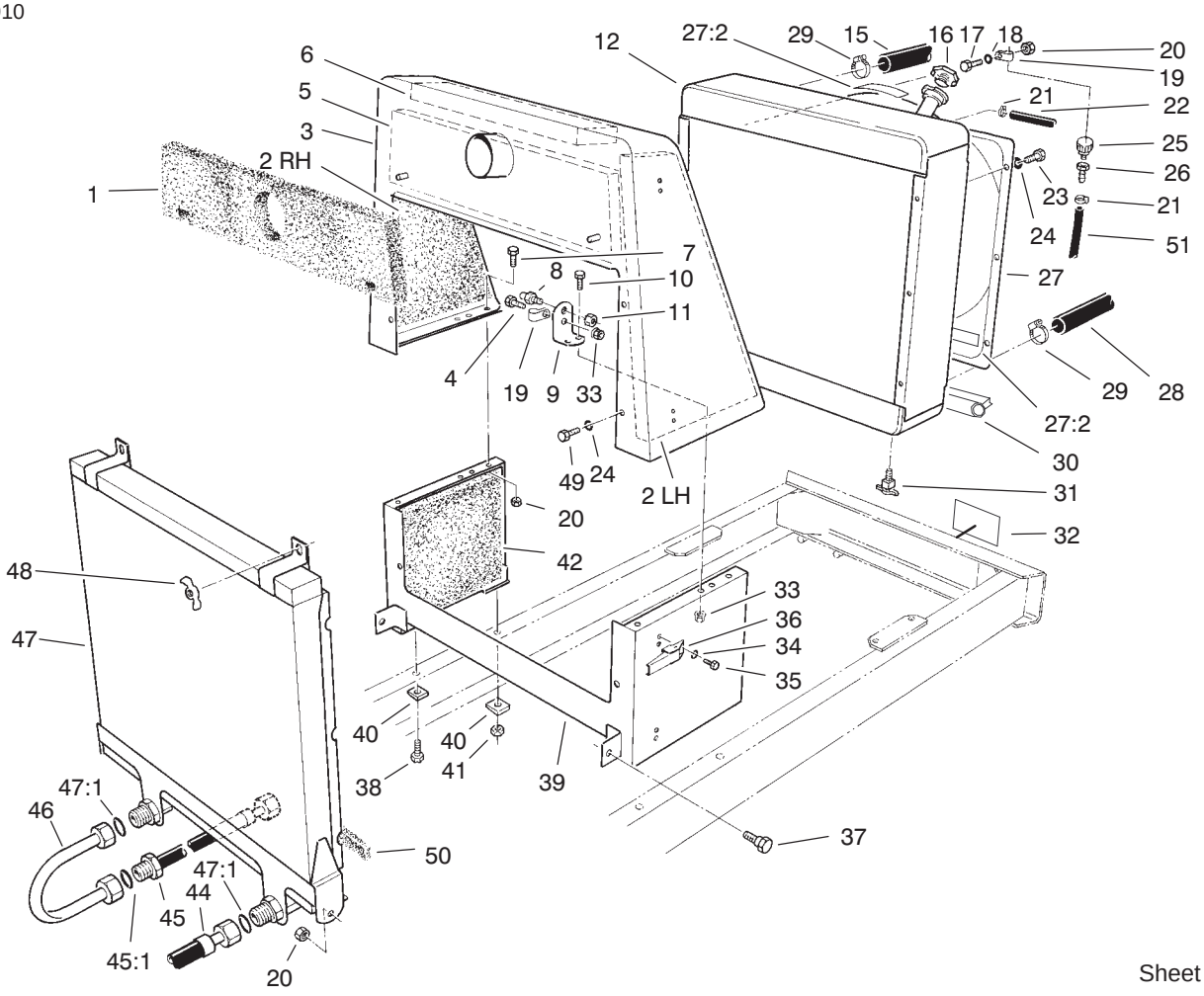


Sheet No.:23

Hood Assembly

Ref. No.	Part No.	Qty.	Description
2	92-1772	1	Hood ASM
2:1	32149-2	16	Nut
2:2	106-0269	2	Decal-580D
2:3	69-8230-03	1	Bracket-T rim
2:4	69-8250-03	1	Bracket-T rim, Bottom
2:5	69-9723	2	Trim-Seal
2:6	69-9724	1	Trim-Seal
2:7	71-0060-03	1	Support
2:8	71-0250	1	Foam-Hood, Top
2:9	71-0260	1	Foam-Hood, LH
2:10	71-0270	1	Foam-Hood, RH
3	32152-1	2	Nut-Lock, NI
6	66-1210	3	Decal-Logo, Toro
8	3290-321	4	Screw-HWH
9	3296-2	4	Nut-Lock
11	69-9520-03	1	Panel-Rear
12	3234-14	6	Screw-HHF
13	69-1390-03	1	Panel-LH
13	69-1380-03	1	Panel-RH
14	69-3010	4	Latch
15	3290-134	4	Screw
16	32149-7	4	Nut-Keps
17	71-0400	2	Foam-Panel, Side
21	88-6760	2	Spring-Gas
22	88-6770	2	Stud-Ball
23	69-8500	8	Shim-Pivot, Hood

Ref. No.	Part No.	Qty.	Description
25	323-6	4	Screw-HH
26	3253-21	6	Washer-Lock
27	3256-24	6	Washer-Flat
28	323-4	2	Screw-HH
29	98-3026-03	2	Arm-Pivot, Hood
4	106-0269	2	Decal-580D
6	66-1210	3	Decal-Logo, Toro
8	3290-321	4	Screw-HWH
9	3296-2	4	Nut-Lock
11	69-9520-03	1	Panel-Rear
12	3234-14	6	Screw-HHF
13	69-1380-03	1	Panel-RH
13	69-1390-03	1	Panel-LH
14	69-3010	4	Latch
15	3290-134	4	Screw
16	32149-7	4	Nut-Keps
17	71-0400	2	Foam-Panel, Side
21	88-6760	2	Spring-Gas
22	88-6770	2	Stud-Ball
23	69-8500	8	Shim-Pivot, Hood
25	323-6	4	Screw-HH
26	3253-21	6	Washer-Lock
27	3256-24	6	Washer-Flat
28	323-4	2	Screw-HH
29	98-3026-03	2	Arm-Pivot, Hood

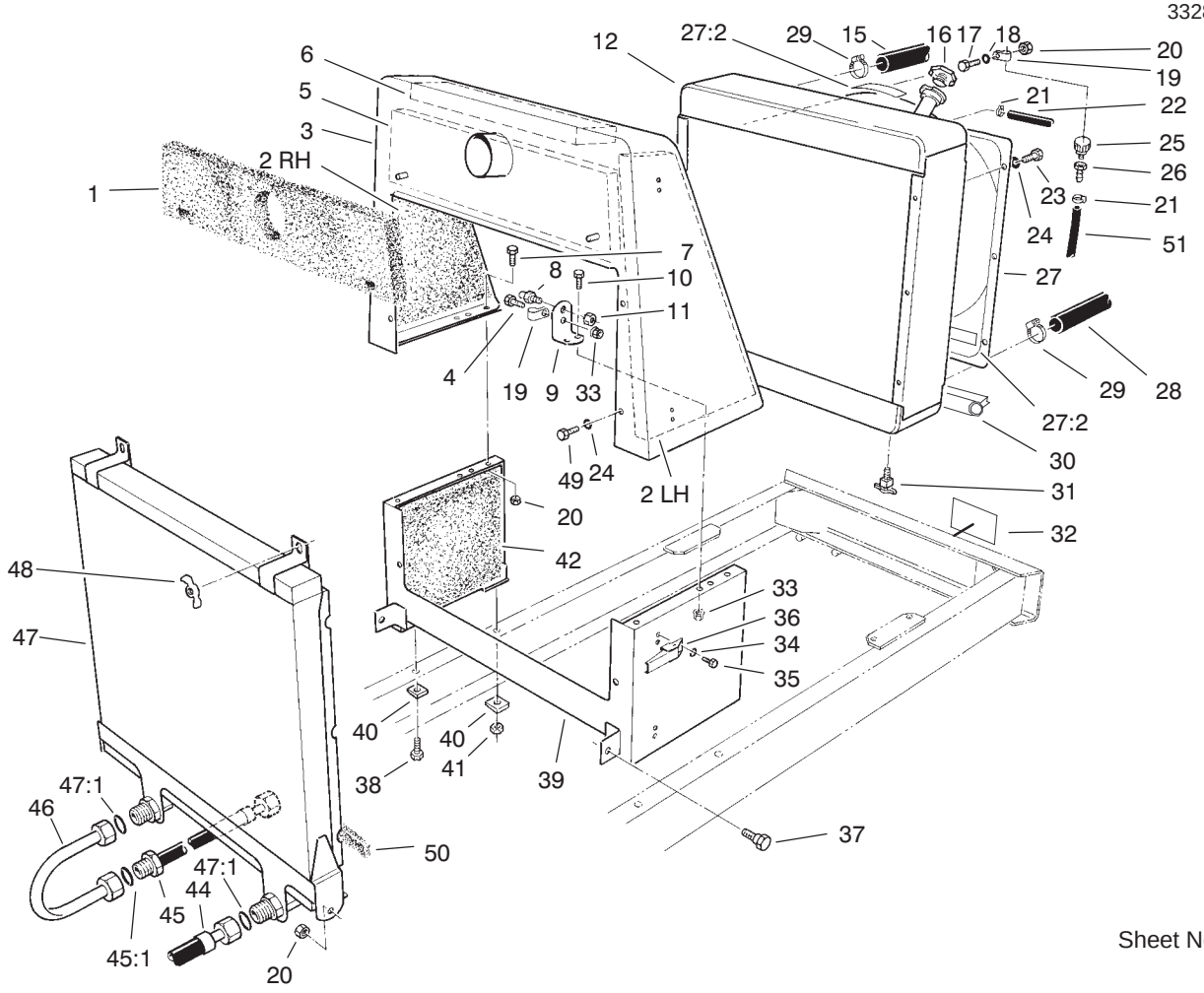


Sheet No.:24

Radiator and Oil Cooler Assembly

Ref. No.	Part No.	Qty.	Description
1	71-0380	1	Foam-Cowl, Right Rear
2	71-0350	1	Foam-Radiator Support, RH
2	71-0340	1	Foam-Radiator Support, LH
3	69-8590-03	1	Support-Radiator , Top
4	322-5	1	Screw-HH
5	71-0390	1	Foam-Radiator Suppor, Rear
6	71-0360	1	Foam-Radiator Support, Top
7	323-7	4	Screw-HH
8	88-6770	2	Stud-Ball
9	98-7349-01	2	Bracket-Cylinder
10	322-6	4	Screw-HH
11	32152-1	2	Nut-Lock, NI
12	98-731 1	1	Radiator
15	98-7320	1	Hose-Upper
16	105-0599	1	Radiator Cap ASM
17	323-4	1	Screw-HH
18	3256-56	2	Washer-Flat
19	2412-41	2	Clamp
20	32152-2	7	Nut-Conelock
21	2412-108	2	Clamp-W orm
22	23-2140	1	Hose-Fuel

Ref. No.	Part No.	Qty.	Description
23	323-34	6	Screw-HH
24	3253-21	12	Washer-Lock
25	68-6150	1	Breather-Air
26	354-95	1	Fitting-Female, Barbed
27	106-0041	1	Shroud ASM
27:2	93-6681	4	Decal-W arning, Fan
28	95-6456	1	Hose-Lower
29	2412-92	4	Clamp-Hose
30	105-0586	2	Strip-Sealing
31	304-46	1	Draincock
32	72-4080	1	Decal-Danger
33	32128-20	5	Nut-HF
34	3253-2	16	Washer-Lock/Sp
35	3290-321	16	Screw-HWH
36	105-9296	8	Latch-Draw
37	46-3380	2	Bolt-Shoulder
38	325-6	4	Screw-HH
39	69-7100-03	1	Support-Radiator , Lower
40	3290-216	4	Washer
41	32153-5	2	Nut-Lock
42	71-0370	2	Foam-Radiator Support, Lower
44	69-5620	1	Hose ASM
45	69-8450	1	Hose ASM

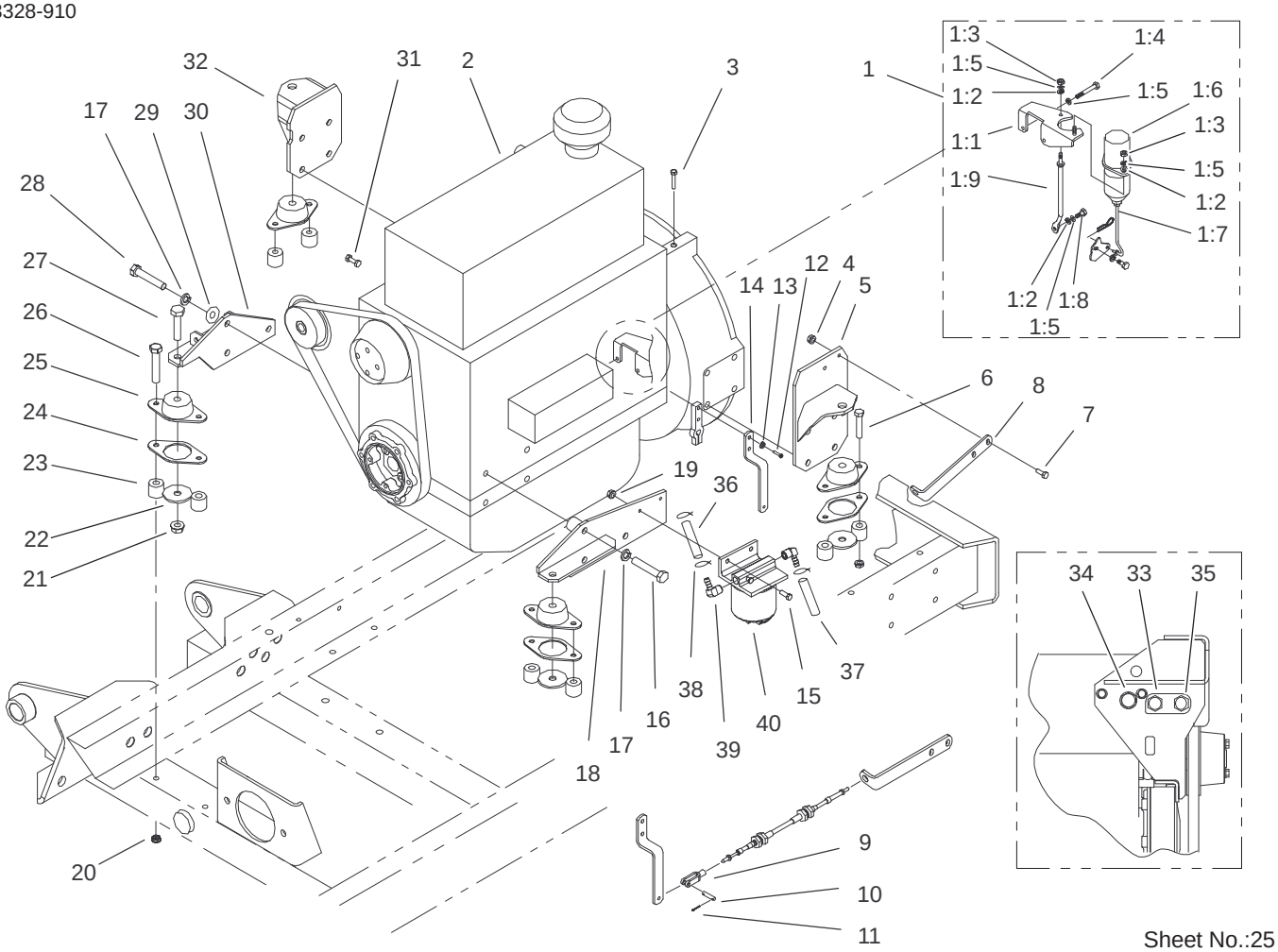


Sheet No.:24

Radiator and Oil CoolerAssembly (Continued)

Ref. No.	Part No.	Qty.	Description
45:1	340-65	2	O-Ring
46	69-5900	1	Tube ASM
47	69-1670	1	Oil Cooler ASM
47:1	340-65	2	O-Ring
48	32103-3	2	Nut-Wing
49	32144-69	6	Screw-HH
50	71-0210	1	Foam-Seal, Radiator
51	71-2680	1	Hose-Fuel

Ref. No.	Part No.	Qty.	Description

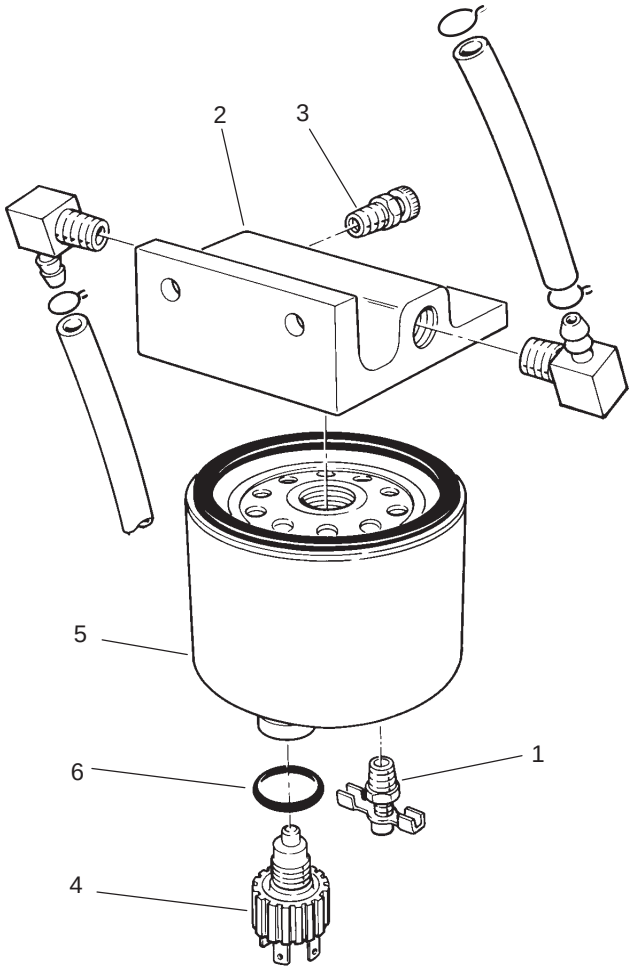


Sheet No.:25

Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	98-7327	1	Solenoid-Run
1:1	99-1928	1	Bracket-Mounting
1:2	33093-00	3	Washer-Flat
1:3	33013-00	2	Nut-Hex
1:4	33103-050	2	Screw-HHF
1:5	3253-3	5	Washer-Lock
1:6	99-1929	1	Solenoid ASM
1:7	99-1930	1	Rod-Connecting
1:8	33103-016	1	Screw-HHF
1:9	99-1931	1	Rod-Support
2	95-6499	1	Engine ASM
3	33115-025	1	Screw-HH
4	32149-2	2	Nut
5	95-6454-03	1	LH Rear ASM
6	323-10	4	Screw-HH
7	321-6	2	Screw-HH
8	69-8490-03	1	Bracket-Cable, Throttle
9	282-28	1	Clevis-Adjustable
10	69-0090	1	Pin-Throttle
11	3272-1	1	Pin-Cotter
12	33113-016	2	Screw-HH
13	3253-3	2	Washer-Lock
14	95-6489-03	1	Bracket-Throttle
15	321-4	2	Screw-HH
16	33116-050	3	Screw-HH

Ref. No.	Part No.	Qty.	Description
17	3253-7	6	Washer-Lock
18	95-6470-03	1	LH Mount ASM
19	32149-2	2	Nut
20	32128-21	8	Nut-HF
21	32128-23	4	Nut-HF
22	98-3023	4	Washer
23	95-6486	8	Spacer-Mount
24	98-0830	4	Retainer-Mount
25	98-3024	4	Mount-Engine
26	323-38	4	Screw-HH
27	325-9	4	Screw-HH
28	33116-030	3	Screw-HH
29	3256-26	3	Washer-Flat
30	95-6467-03	1	RH Mount ASM
31	71-4280	1	Switch-Pressure
32	95-6465-03	1	Mount-Rear
33	51-5070	1	Switch
34	67-4510	1	Guage-Temp, Water
35	93-3526	1	Switch
36	71-2690	1	Hose-Fuel
37	37-9560	1	Hose-Fuel
38	2412-108	3	Clamp-Worm
39	353-781	2	Fitting
40	69-1750	1	Filter-Fuel



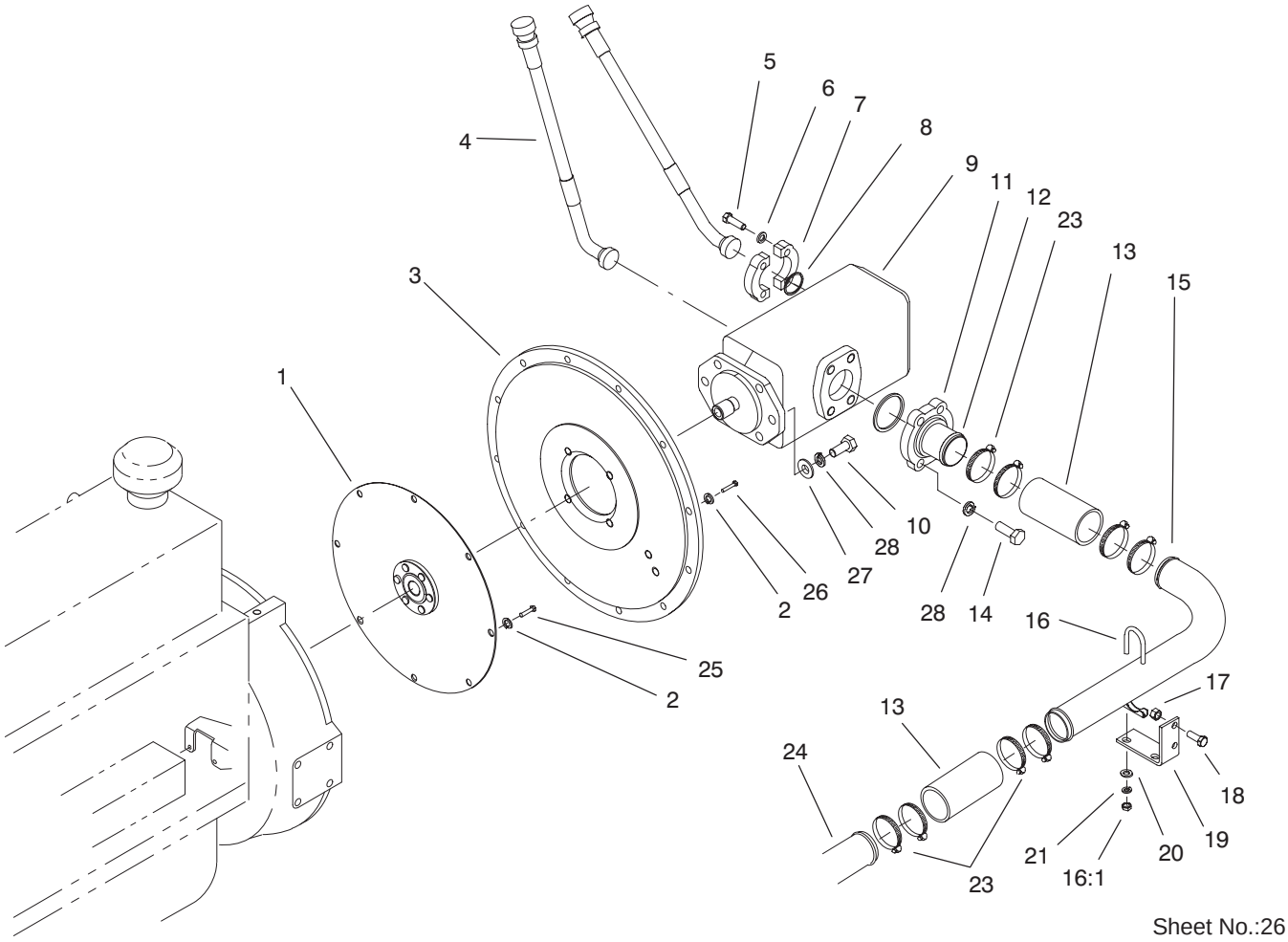
T-0376

Sheet No.:B2

Fuel Filter Assembly No. 69-1750

Ref. No.	Part No.	Qty.	Description
1	63-8310	1	Valve-Drain
2	63-8280	1	Head ASM
3	63-8290	1	Vent-Air
4	69-1760	1	Probe-Sensor , Water
5	69-1770	1	Element-Spin On
6	237-154	1	O-Ring

Ref. No.	Part No.	Qty.	Description

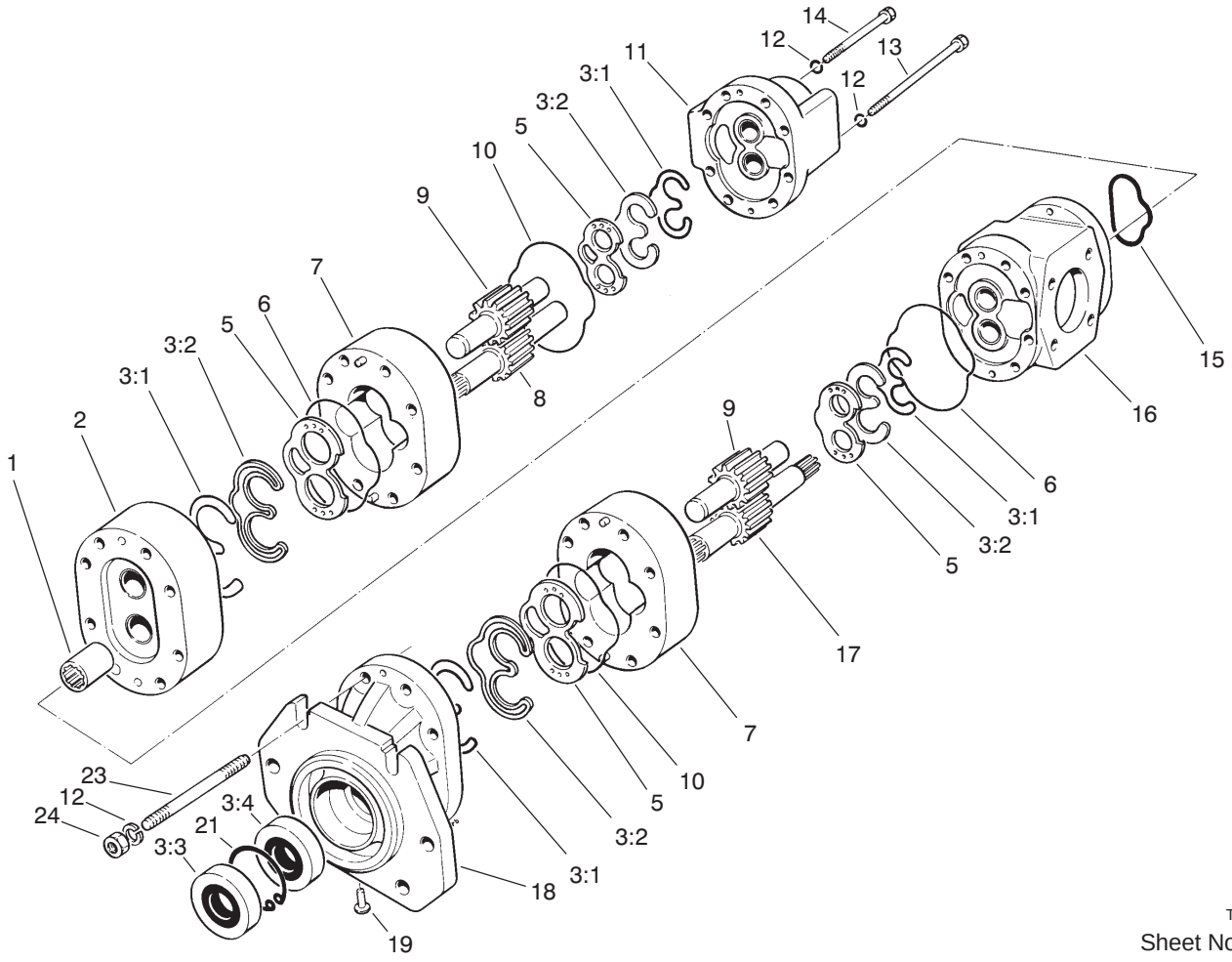


Sheet No.:26

Double Gear Pump Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	99-8879	1	Coupling-Spring, Center
2	3253-6	20	Washer-Lock
3	95-6481-03	1	Plate-Adapter , Pump
4	98-0655	2	HYD Hose ASM
5	323-7	8	Screw-HH
6	3253-21	8	Washer-Lock
7	353-992	4	Flange-Split
8	340-135	2	O-Ring
9	69-2050-03	1	Pump-Gear , Double
10	3213-2	4	Screw-HH
11	354-42	2	Flange-Half, Split
12	74-2270	1	Fitting-Suction
13	69-5640	2	Hose-Return
14	325-6	8	Screw-HH
15	99-4969	1	Tube-Suction
16	20-4840	2	Clamp-Muf fler
16:1	3217-6	2	Nut-Hex
17	32152-2	4	Nut-Conelock
18	323-6	4	Screw-HH
19	69-9220-03	2	Bracket-T ube, Suction
20	3256-23	4	Washer-Flat
21	3253-4	4	Washer-Lock
23	2412-42	8	Clamp-Hose
24	99-4968	1	Tube-Suction
25	33115-025	8	Screw-HH

Ref. No.	Part No.	Qty.	Description
26	33115-030	12	Screw-HH
27	87-7270	4	Washer-Thrust
28	3253-7	8	Washer-Lock



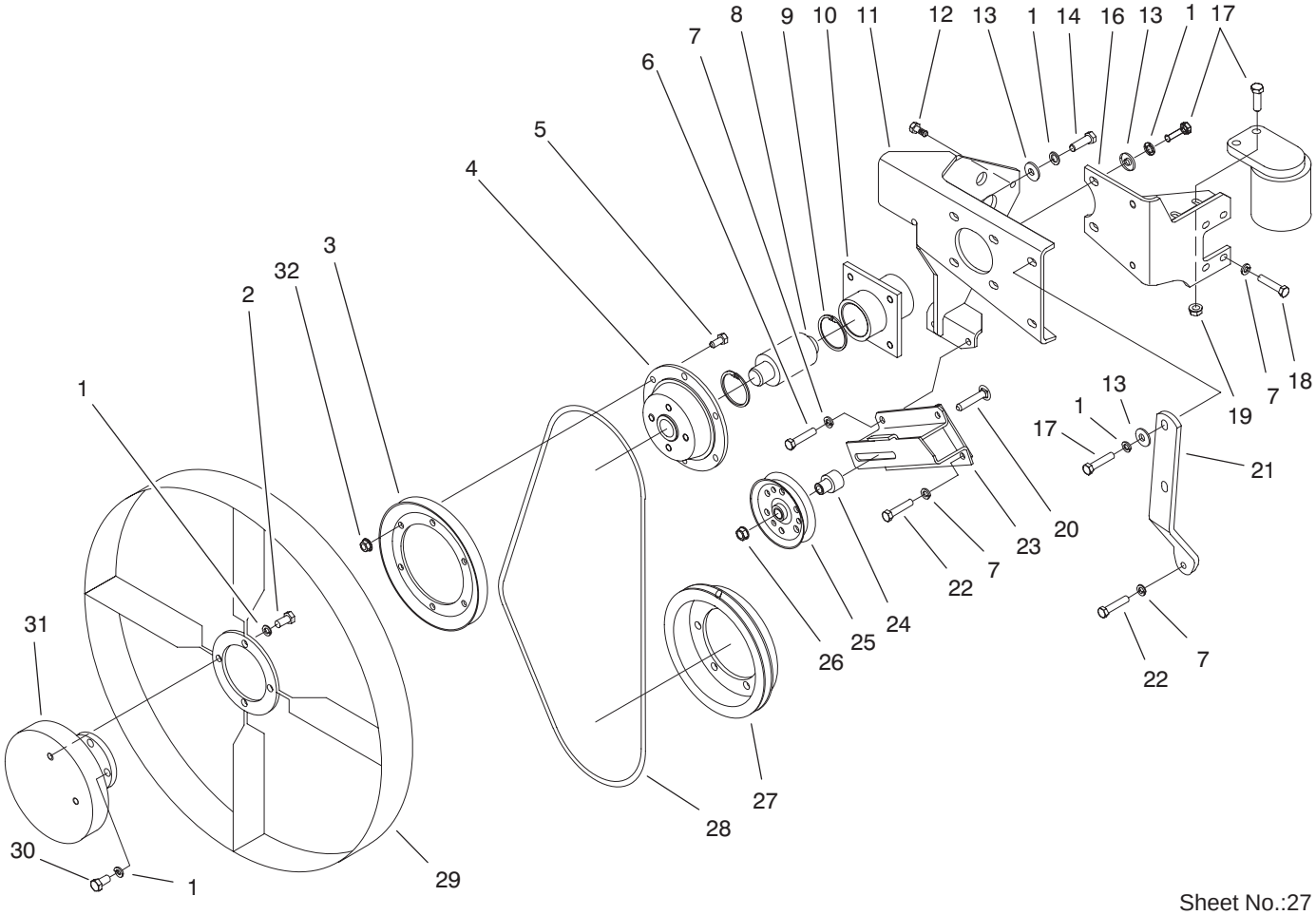
T-0382

Sheet No.:B3

Double Gear Pump Assembly No. 69-2050-03

Ref. No.	Part No.	Qty.	Description
1	69-21 10	1	Coupling
2	69-2170	1	Adapter Section ASM
3	59-8610	1	Seal Kit
3:1	59-7990	4	Seal
3:2	59-8470	4	Retainer
3:3	59-8570	1	Seal
3:4	59-8590	1	Seal
5	69-2070	4	Plate-Flex
6	69-2200	2	O-Ring
7	69-2080	2	Section-Center
8	69-2090	1	Gear-Drive, Rear
9	59-8600	2	Gear
10	69-2120	2	O-Ring
11	69-2100	1	Rear Cover ASM
12	59-7590	16	Lockwasher
13	69-2150	4	Capscrew
14	69-2140	4	Capscrew
15	69-2210	1	O-Ring
16	69-2160	1	Port Section ASM
17	59-8500	1	Gear
18	69-2060	1	Shaft End Cover ASM
19	69-2130	1	Plug
21	59-8580	1	Ring-Retaining
23	59-7970	8	Stud
24	59-7580	8	Nut

Ref. No.	Part No.	Qty.	Description

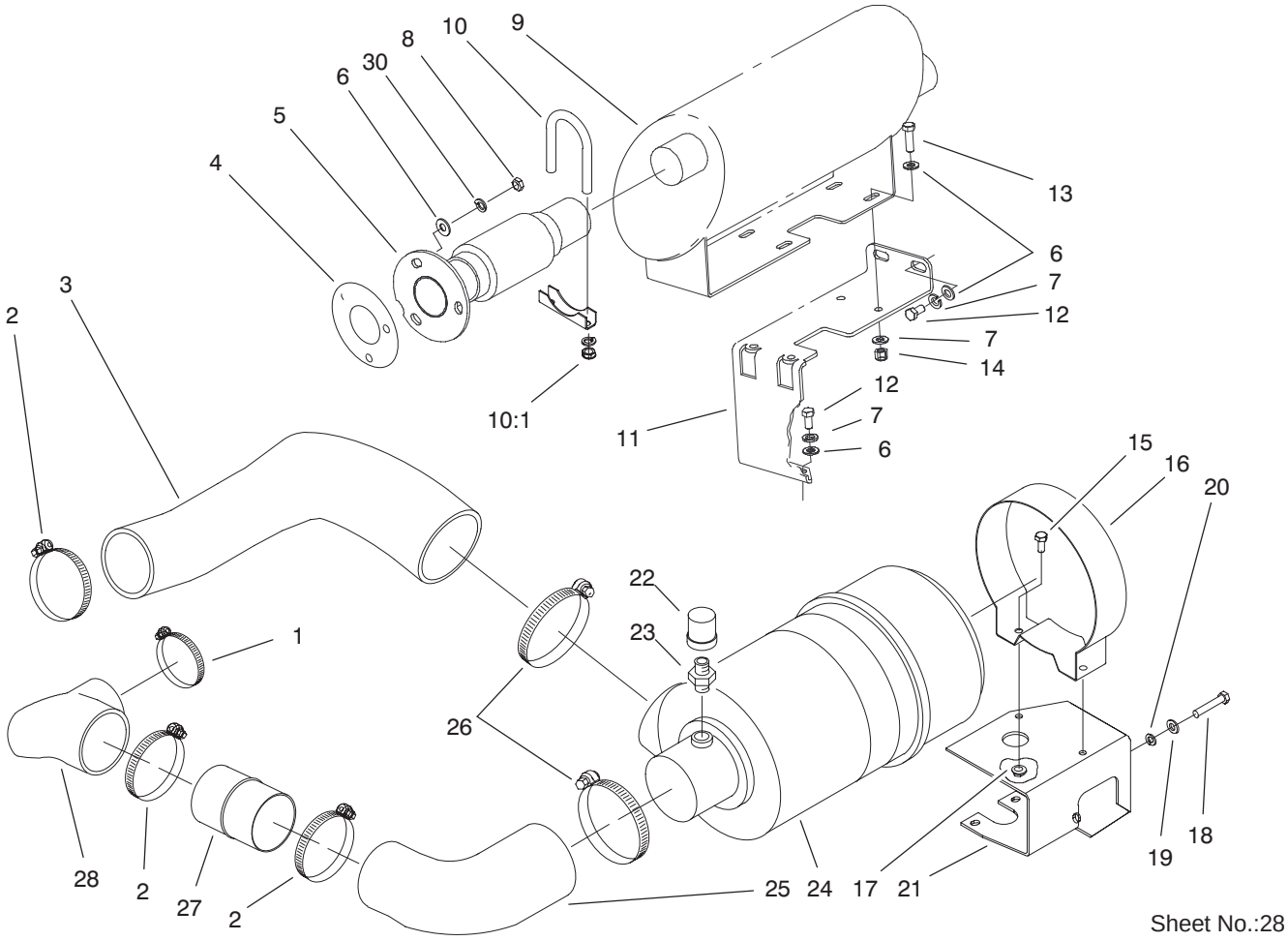


Sheet No.:27

Fan Drive Assembly

Ref. No.	Part No.	Qty.	Description
1	3253-21	14	Washer-Lock
2	323-4	4	Screw-HH
3	96-1267-03	1	Pulley-Fan
4	98-3008-03	1	Hub-Fan
5	322-3	6	Screw-HH
6	33114-070	1	Screw-HH
7	3253-4	7	Washer-Lock
8	98-0831	1	Bearing-Fan
9	32120-11	2	Ring-Retaining
10	95-6495-03	1	Housing-Bearing
11	105-0585-03	1	Support-Fan ASM
12	33104-020	2	Screw-HHF
13	5-0838	6	Washer
14	323-6	2	Screw-HH
16	95-6480-03	1	Bracket
17	323-7	6	Screw-HH
18	33114-045	4	Screw-HH
19	3296-39	2	Nut-Lock, NI
20	3231-6	1	Screw-CARR
21	98-3013-03	1	Support-Fan
22	33114-060	4	Screw-HH
23	99-5915-01	1	Bracket-Idler
24	99-4419	1	Spacer-Idler
25	66-5310-03	1	Pulley-Idler , V
26	32128-21	1	Nut-HF
27	95-6477-03	1	Pulley-Drive, Fan

Ref. No.	Part No.	Qty.	Description
28	98-9008	1	V-Belt
29	98-0809	1	Fan
30	323-5	4	Screw-HH
31	98-7321	1	Clutch-Fan, Modulating
32	32128-25	6	Nut-Flange



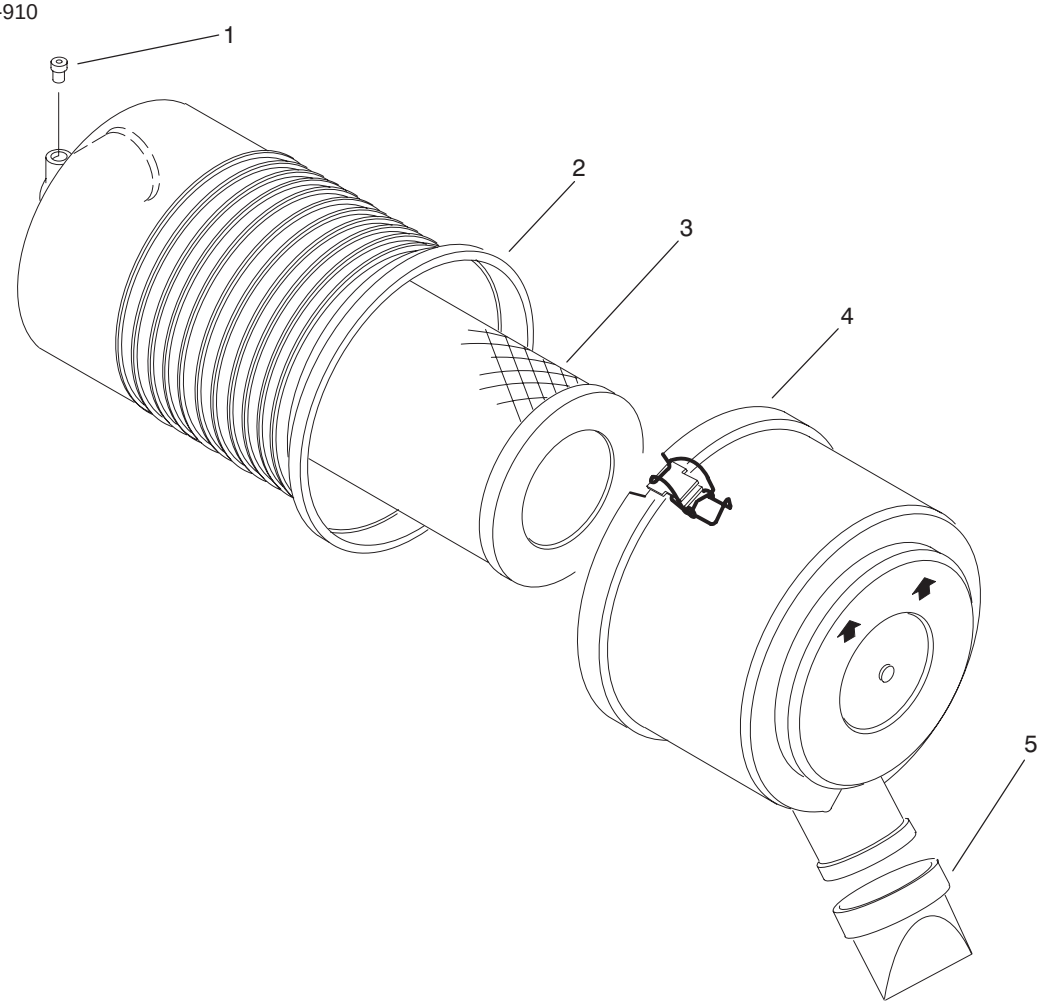
Sheet No.:28

Muffler and Air Cleaner Assembly

Ref. No.	Part No.	Qty.	Description
1	2412-42	1	Clamp-Hose
2	2412-1 10	3	Clamp-Hose
3	95-6459	1	Hose-Inlet, Air
4	99-2277	1	Gasket
5	105-0560	1	Exhaust Tube ASM
6	3256-24	11	Washer-Flat
7	3253-21	8	Washer-Lock
8	69-9710	3	Nut
9	105-0578	1	Muffler
10	20-4840	1	Clamp-Muf fler
10:1	3217-6	2	Nut-Hex
11	105-0579-03	1	Mount-Frame
12	323-4	4	Screw-HH
13	323-6	4	Screw-HH
14	3296-39	4	Nut-Lock, NI
15	322-3	2	Screw-HH
16	98-0833	1	Band-Cleaner , Air
17	32128-25	2	Nut-Flange
18	33114-020	4	Screw-HH
19	3256-23	4	Washer-Flat
20	3253-4	4	Washer-Lock
21	95-6462-03	1	Bracket-Cleaner , Air
22	69-1940	1	Indicator-Electrical
23	94-1416	1	Indicator Adapter ASM
24	98-0800	1	Air Cleaner ASM
25	95-6457	1	Hose-Outlet, Air

Ref. No.	Part No.	Qty.	Description
26	98-7347	2	Clamp-Hose
27	95-6461	1	Tube-Intake
28	95-6458	1	Hose-Outlet, Air
30	42-9600	3	Lockwasher-Spring

3328-910



T-2252

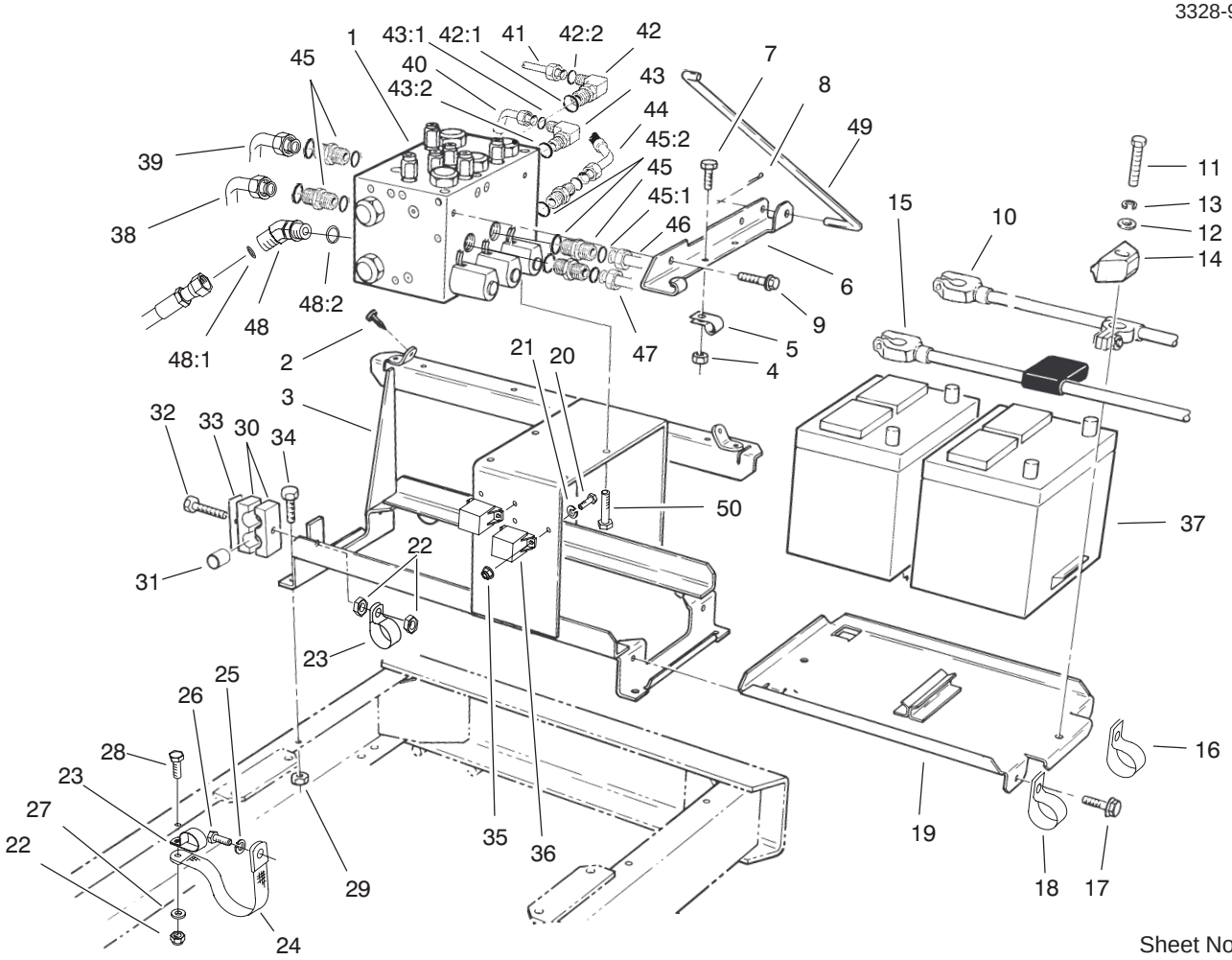
Sheet No.:B4

Air Cleaner Assembly No. 98-0800

Ref. No.	Part No.	Qty.	Description
☆1		1	Plug
☆2		1	Body ASM
3	98-0801	1	Element ASM
4	98-0802	1	Cover
5	98-0803	1	Valve

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

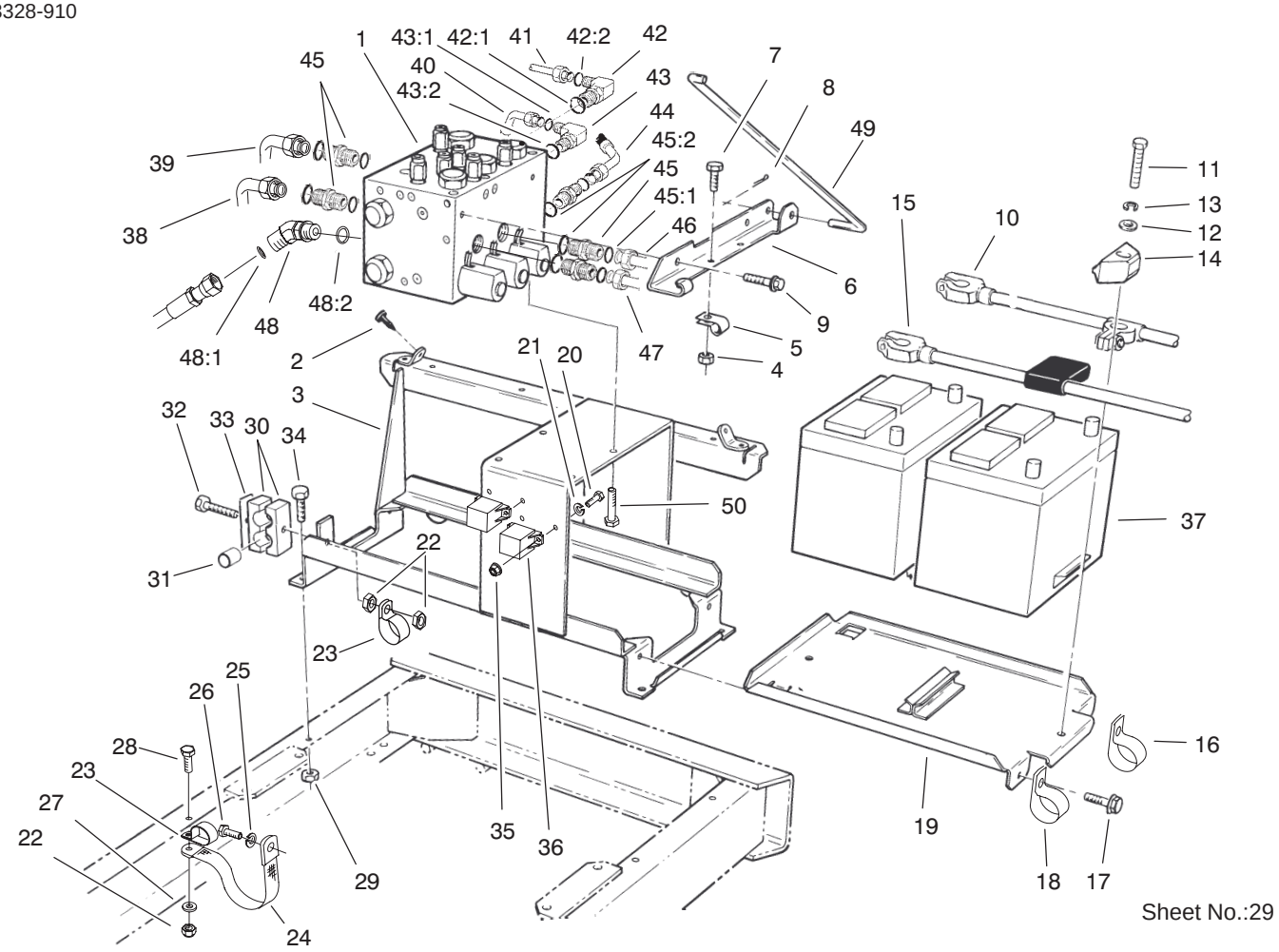


Sheet No.:29

Battery Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	95-5908	1	Manifold-Control, Deck
2	237-37	4	Grommet
3	69-8290-03	1	Base-Battery
4	32149-2	3	Nut
5	2412-73	3	Clamp-R
6	69-9350-03	1	Support-Prop, Hood
7	321-3	3	Screw-HH
8	3272-6	1	Pin-Cotter
9	3234-14	2	Screw-HHF
10	95-1839	1	Cable-Negative
11	323-9	2	Screw-HH
12	3256-24	2	Washer-Flat
13	3253-21	2	Washer-Lock
14	66-2490	2	Retainer-Battery
15	98-7308	1	Positive Cable ASM
16	2412-41	1	Clamp
17	3234-17	2	Screw-HHF
18	2412-39	1	R-Clamp
19	80-0160-03	1	Tray-Battery
20	32105-13	4	Screw-SHH
21	3253-2	4	Washer-Lock/Sp
22	32152-1	4	Nut-Lock, NI
23	2412-104	2	R-Clamp
24	18-2770	1	Cable-Ground
25	3253-7	1	Washer-Lock

Ref. No.	Part No.	Qty.	Description
26	33116-020	1	Screw-HH
27	3254-2	1	Washer-Lock, Internal
28	322-5	1	Screw-HH
29	32152-2	4	Nut-Conelock
30	56-7974	2	Clamp-T ube
31	23-7250	1	Spacer-Idler
32	322-11	1	Screw-HH
33	69-9761	1	Coverplate
34	323-6	4	Screw-HH
35	3296-2	4	Nut-Lock
36	66-8800	2	Relay
37	93-0306	2	Battery (Wet)
38	98-0806	1	Tube ASM
39	98-0805	1	Tube ASM
40	106-0061	1	Hose ASM
41	69-6160	1	Tube-HYD
42	340-129	1	Fitting-HYD, 90°
42:1	237-146	1	O-Ring
42:2	340-65	1	O-Ring
43	340-142	1	Fitting-HYD, 90°
43:1	237-58	1	O-Ring
43:2	237-81	1	O-Ring
44	106-0059	1	Hose-ASM
45	340-9	5	Fitting-Straight
45:1	237-58	1	O-Ring
45:2	237-81	1	O-Ring



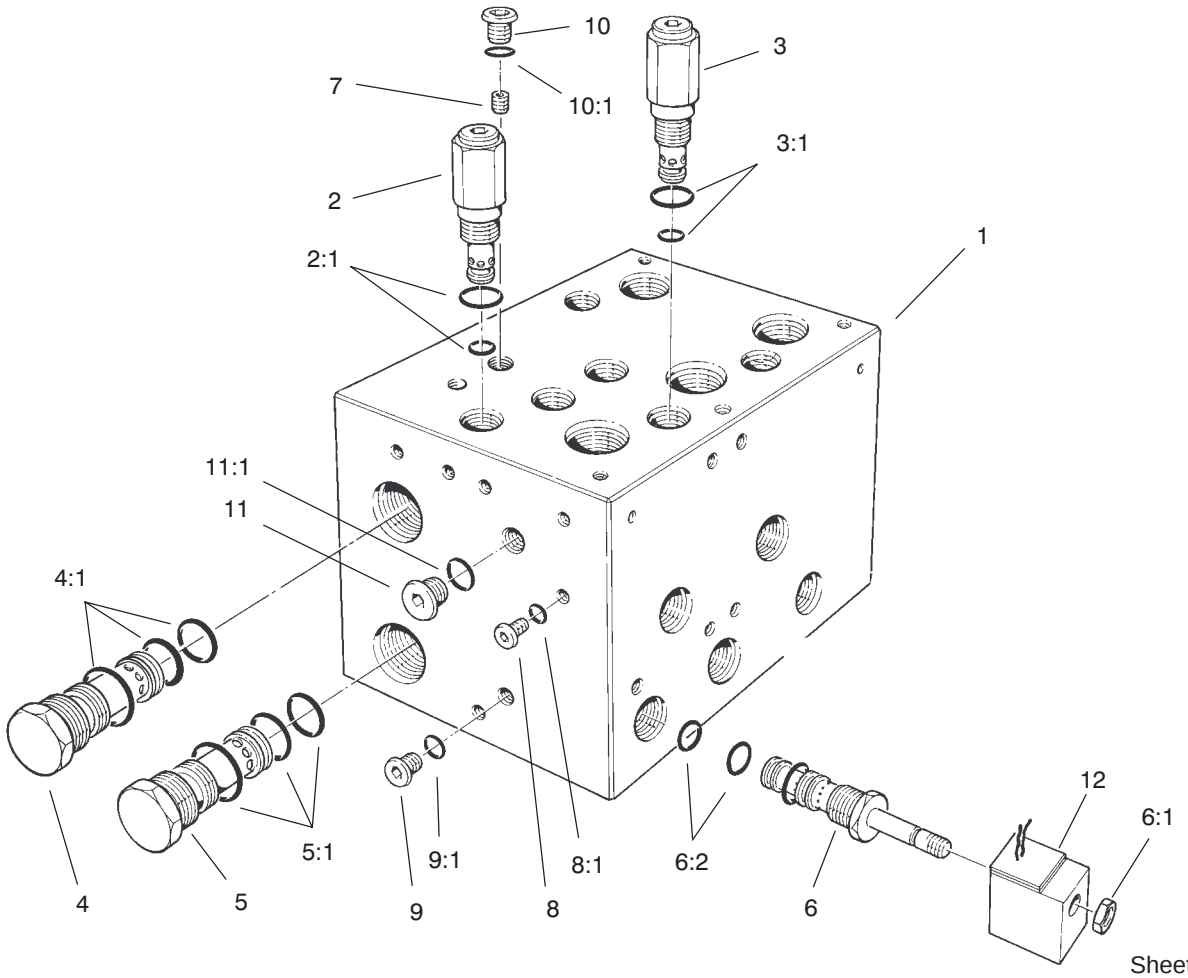
Sheet No.:29

Battery Frame Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
46	69-6180	1	Tube-HYD
*46:1	237-65	1	O-Ring
47	69-6170	1	Tube-HYD
*47:1	237-65	1	O-Ring
48	98-0657	2	Fitting-HYD
48:1	237-58	1	O-Ring
48:2	237-81	1	O-Ring
49	69-9120-03	1	Prop-Hood
50	323-4	4	Screw-HH

Ref. No.	Part No.	Qty.	Description

* Not illustrated



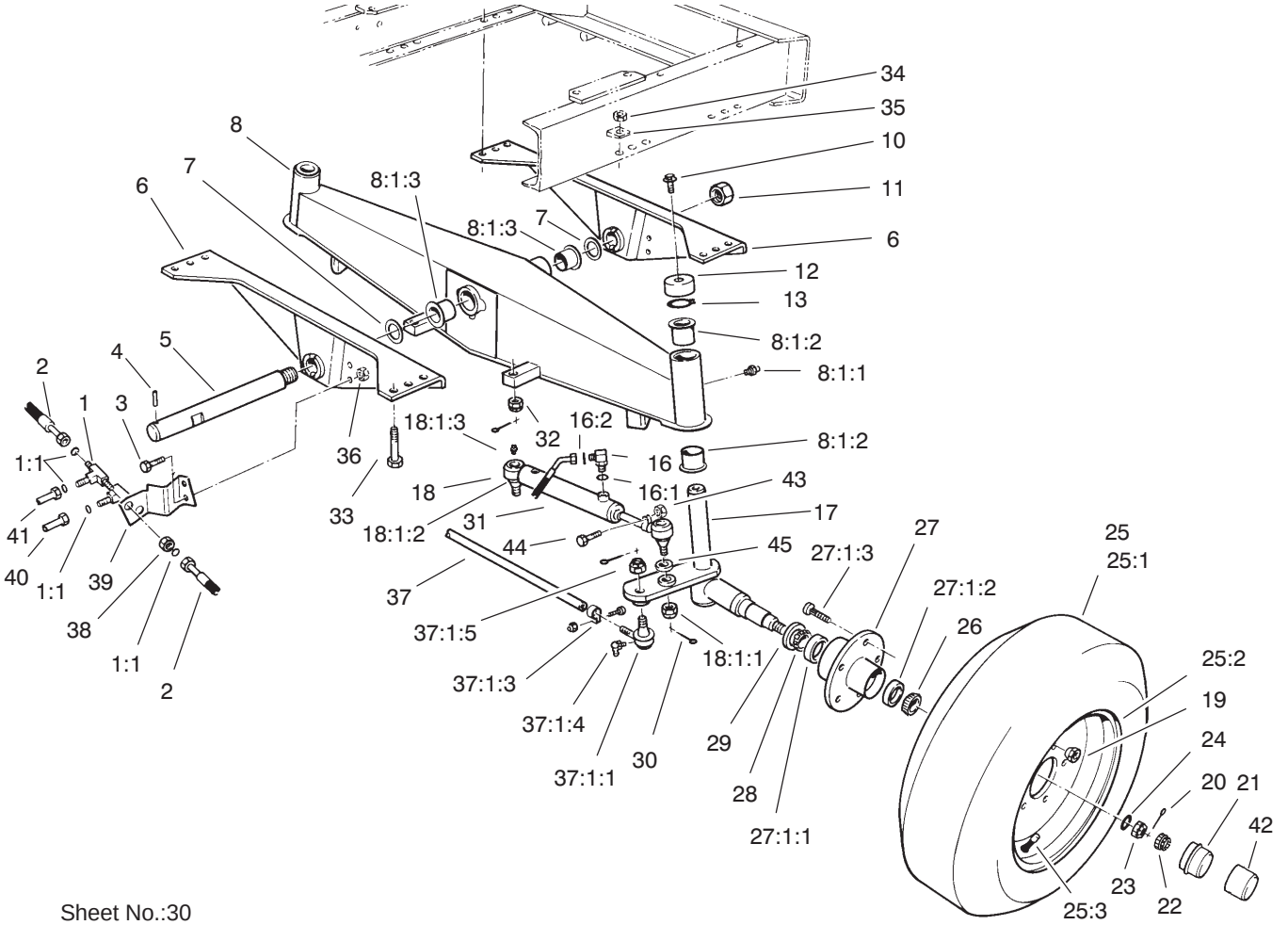
Sheet No.:B5

Deck Manifold Assembly No. 95-5908

Ref. No.	Part No.	Qty.	Description
☆1		1	Body-Manifold
2	95-5640	3	Valve-Relief
2:1	95-5645	1	Seal Kit
3	95-5635	3	Valve-Relief
3:1	95-5645	1	Seal Kit
4	95-5636	3	Cartridge-Logic, Spool
4:1	95-5644	1	Seal Kit
5	95-5637	3	Cartridge-Logic, Spool
5:1	95-5644	1	Seal Kit
6	95-5639	3	Valve-Solenoid
6:1	3219-10	1	Nut-Hex
6:2	95-5643	1	Seal Kit
7	69-4220	1	Plug-Orifice
8	353-991	30	Plug-Hex, Hollow
8:1	237-156	1	O-Ring
9	353-990	1	Plug
9:1	237-78	1	O-Ring
10	353-989	1	Plug-Hex, Hollow
10:1	237-42	1	O-Ring
11	353-988	4	Plug-Hex, Hollow
11:1	237-79	1	O-Ring
12	88-9190	3	Solenoid Coil Kit

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

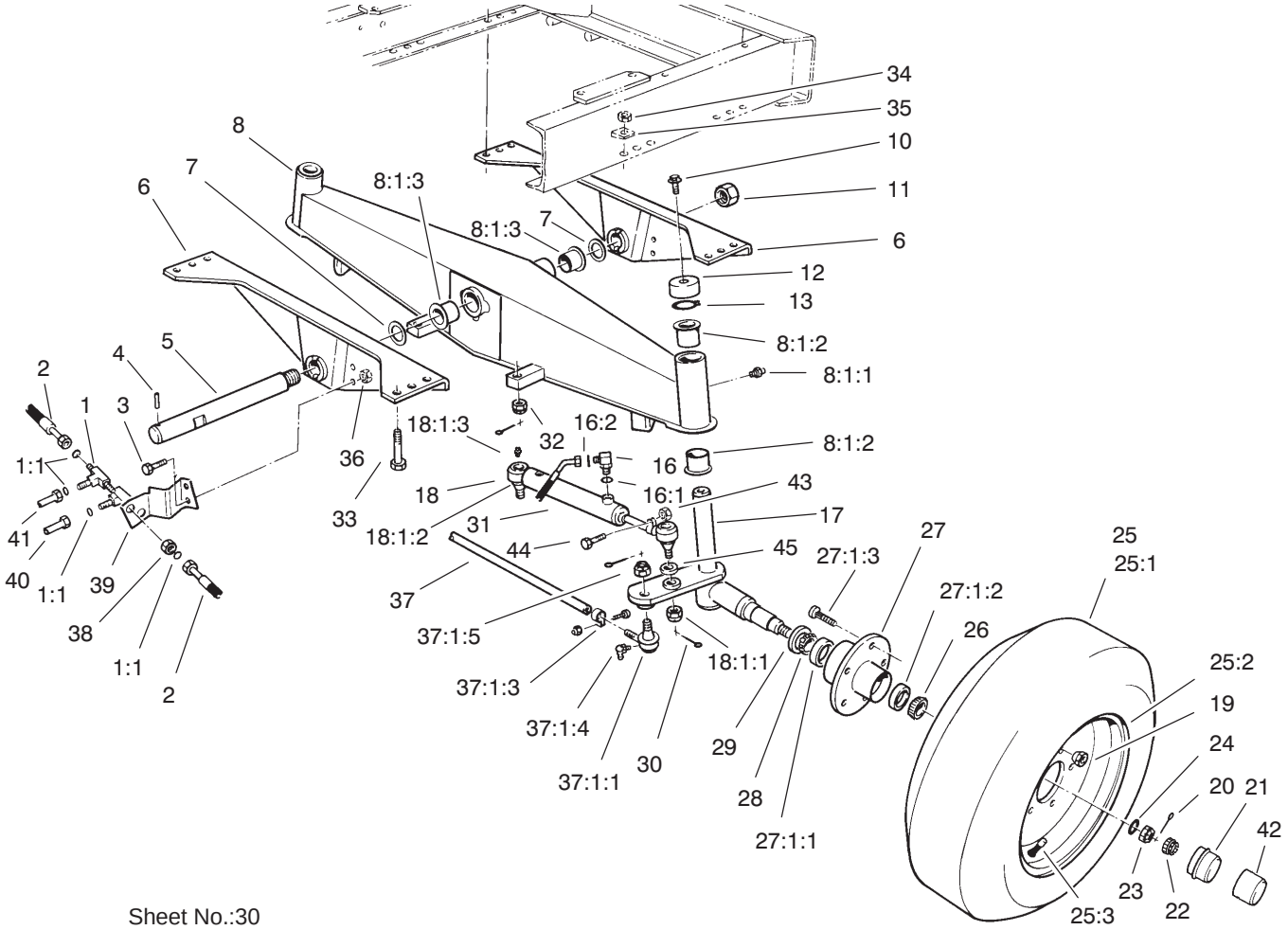


Sheet No.:30

Rear Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	340-68	2	Fitting-Tee, Bulkhead
1:1	237-22	3	O-Ring
2	69-5510	4	Hose ASM
3	323-6	2	Screw-HH
4	32121-110	1	Pin-Roll, Slotted
5	71-2590	1	Shaft-Pivot
6	69-7960-01	2	Support-Axle
7	98-1452	2	Washer-Thrust
8	100-3364-01	1	Rear Axle ASM
8:1:1	302-5	3	Fitting-Grease
8:1:2	100-2506	4	Bushing-Castor
8:1:3	69-6470	2	Bushing-Castor
10	3234-12	2	Screw-HHF
11	3296-68	1	Nut-Lock, NI
12	100-3362	2	Cap-Spindle
13	100-4196	2	Ring-Retaining
16	340-132	4	Fitting-HYD, 90°
16:1	237-78	1	O-Ring
16:2	237-21	1	O-Ring
17	100-3359-01	1	Spindle-Wheel, RH
17	100-3358-01	1	Spindle-Wheel, LH
18	69-9810-03	2	Ball Joint ASM
18:1:1	105-7941	1	Nut-Hex, Slotted
18:1:2	106-5984	1	Seal
18:1:3	302-5	1	Fitting-Grease
19	23-7270	10	Nut-Wheel

Ref. No.	Part No.	Qty.	Description
20	3272-13	2	Pin-Cotter
21	100-3769	2	Buddy-Bearing
22	93-0307	2	Nut-Lock, Retainer
23	3220-7	2	Nut-Jam
24	93-0309	2	Washer-Tab
25	69-9870	2	Wheel ASM
25:1	69-9880	1	Tire
25:2	217-116	1	Rim-Wheel
25:3	232-27	1	Stem-Valve
26	254-92	2	Cone-Bearing, Outer
27	69-2960-01	2	Hub ASM
27:1:1	254-107	1	Bearing-Cup, Tapered
27:1:2	254-72	1	Bearing-Cup, Tapered
27:1:3	69-2990	5	Stud-Wheel
28	254-106	2	Cone-Bearing, Tapered
29	69-2980	2	Seal
30	3272-12	6	Pin-Cotter
31	98-0661	2	Cylinder-Steering
32	32136-13	2	Nut-SHH
33	325-6	12	Screw-HH
34	32128-23	12	Nut-HF
35	3290-216	12	Washer
36	32152-2	2	Nut-Conelock
37	3-3710-01	1	Tie Rod ASM
37:1:1	2116-4	1	End-Rod, Tie



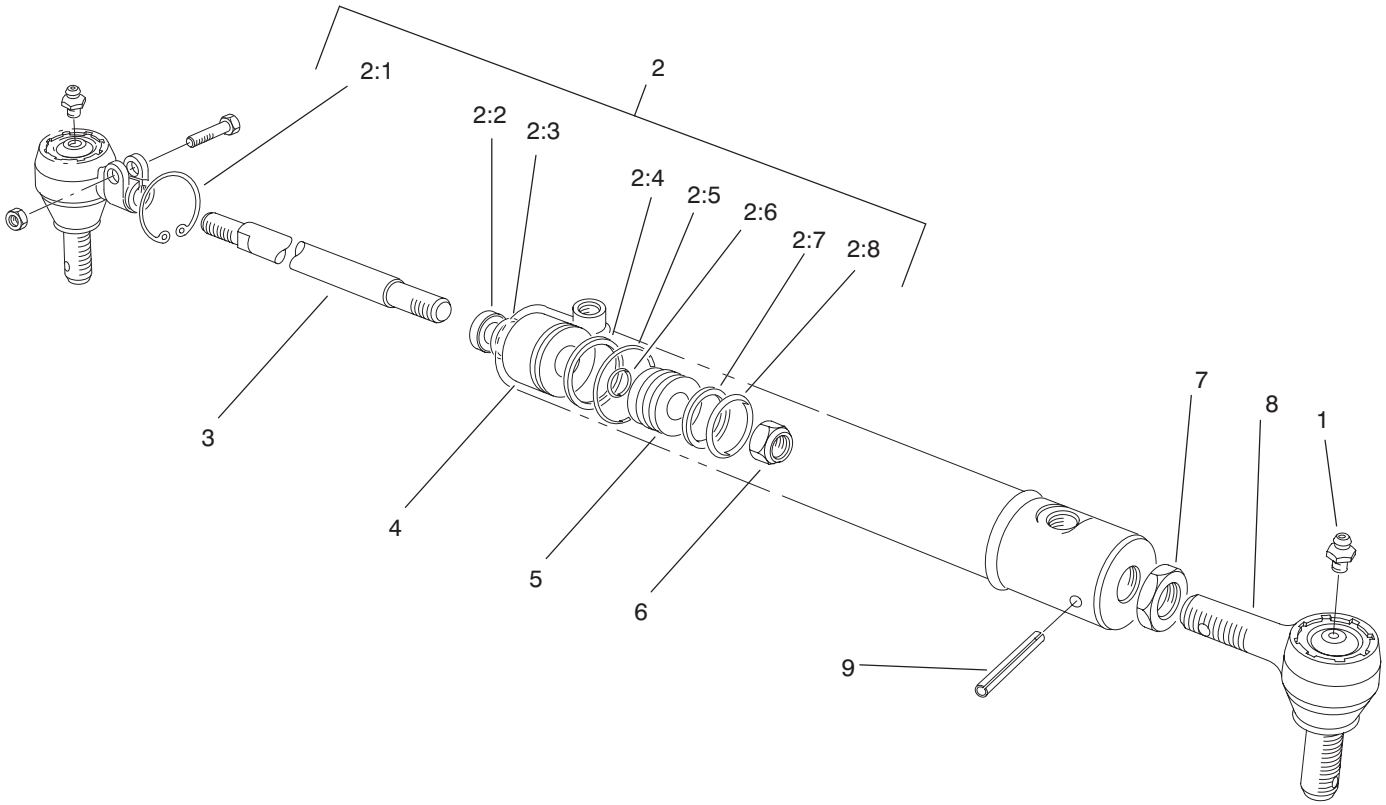
Sheet No.:30

Rear Axle Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
*37:1:2	2116-3	1	End-Rod, Tie
37:1:3	2412-7	2	Clamp ASM
37:1:4	302-33	2	Fitting-Grease
37:1:5	32136-2	2	Nut-SHH
38	340-70	2	Nut-Lock
39	95-6487-03	1	Bracket-Hose
40	69-6010	1	Tube-HYD
41	69-6020	1	Tube-HYD
42	100-3809	2	Cap-Protector , Bearing
43	32152-5	2	Nut-Conelock
44	3210-7	2	Screw-HH
45	3256-6	6	Washer-Flat

Ref. No.	Part No.	Qty.	Description

* Not illustrated



T-3339

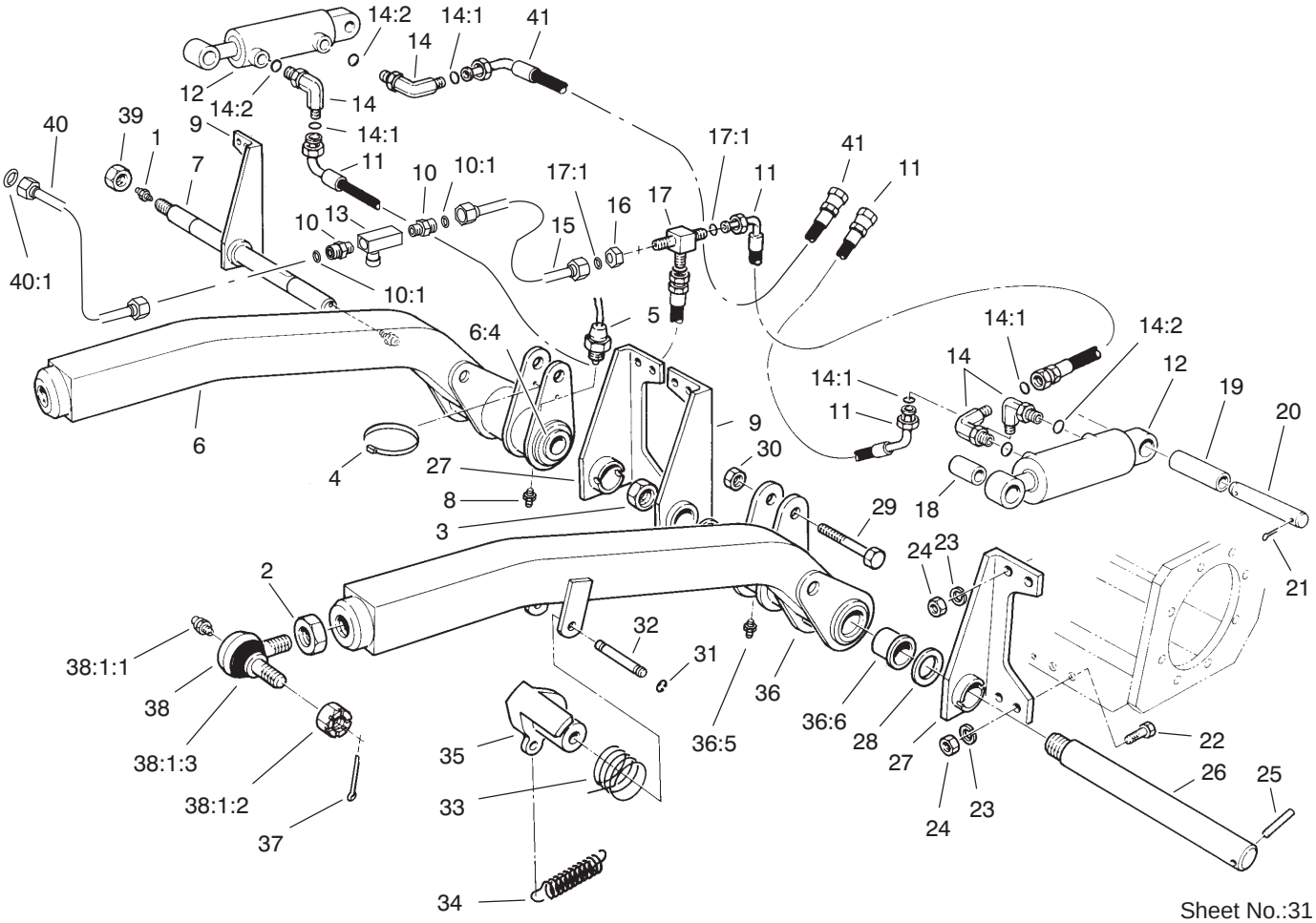
Sheet No.:B6

Hydraulic Cylinder Assembly No. 98-0661

Ref. No.	Part No.	Qty.	Description
1	302-5	1	Fitting-Grease
2	98-0667	1	Repair Kit
☆2:1		1	Ring-Retaining
☆2:2		1	Wiper-Rod
☆2:3		1	Seal-U Cup
☆2:4		1	Ring-Back Up
☆2:5		1	O-Ring
☆2:6		1	O-Ring
☆2:7		1	Ring-Piston
☆2:8		1	O-Ring
☆3		1	Rod-Piston
☆4		1	Ring-Head
☆5		1	Piston
☆6		1	Nut-Lock
7	69-1980	1	Nut-Jam
8	69-1970	1	Joint-Ball
9	32121-34	1	Pin-Roll

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

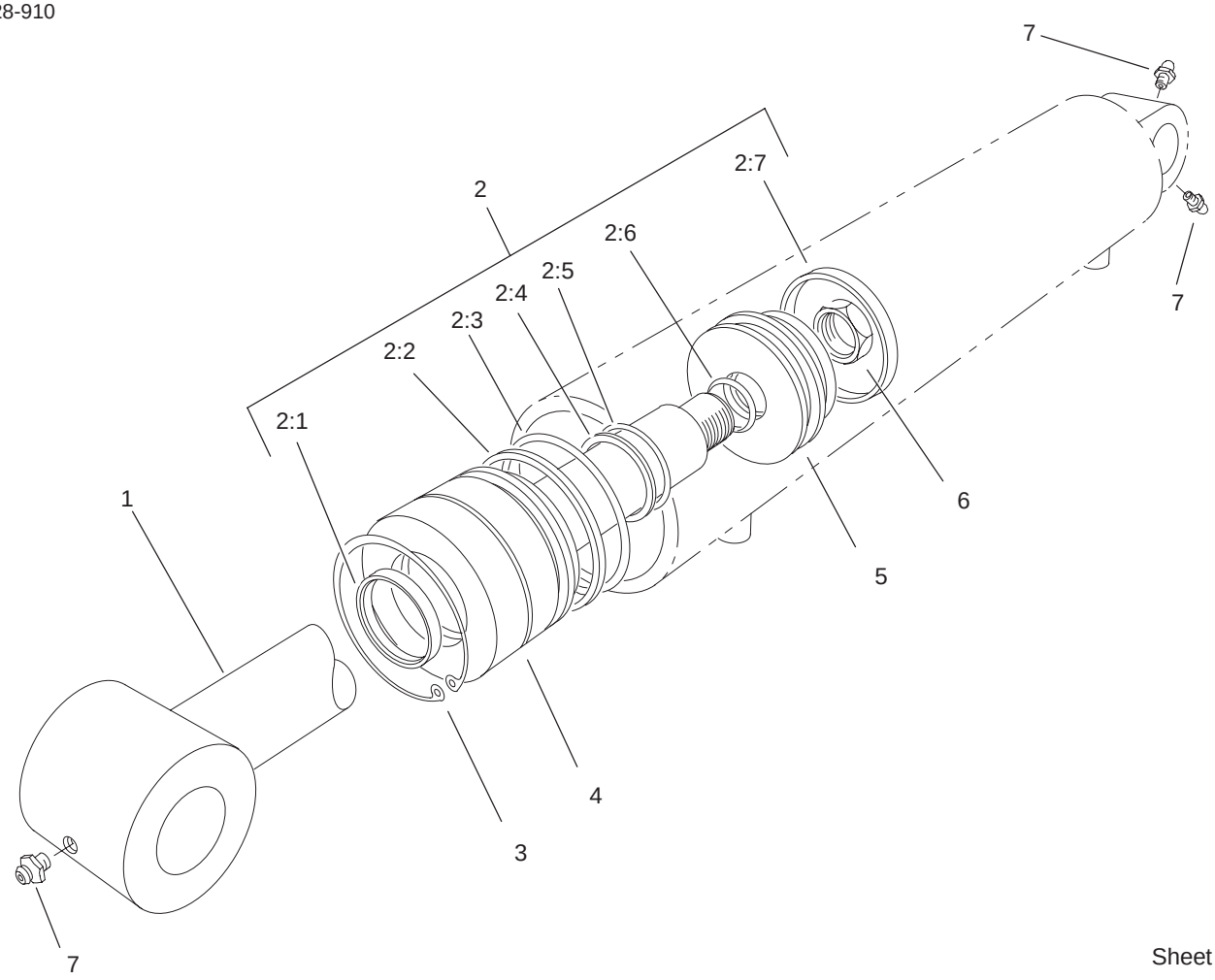


Sheet No.:31

Front Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	302-2	4	Fitting-Grease
2	21-3000-01	2	Nut-Jam, Push Arm
3	3296-68	2	Nut-Lock, NI
4	3290-378	1	Tie-Cable
5	72-4310	1	Switch
6	69-9570	1	RH Front Lift Arm ASM
6:4	69-6470	2	Bushing-Castor
7	71-2570	1	Shaft-Pivot
8	302-5	2	Fitting-Grease
9	69-7940-01	2	Support-Lift Arm, RH
10	340-57	2	Fitting-HYD
10:1	237-22	1	O-Ring
11	69-5440	3	Hose ASM
12	92-4971	2	Cylinder-HYD
13	93-1397	1	Valve-Control, Flow
14	340-77	4	Fitting-HYD, 90°
14:1	237-22	1	O-Ring
14:2	237-42	1	O-Ring
15	93-7427	1	Tube ASM
16	340-70	1	Nut-Lock
17	340-68	1	Fitting-Tee, Bulkhead
17:1	237-22	3	O-Ring
18	98-7346	2	Spacer
19	20-4360-03	2	Spacer
20	69-9180	2	Pin-Cylinder
21	3272-23	4	Pin-Cotter

Ref. No.	Part No.	Qty.	Description
22	325-6	12	Screw-HH
23	3253-7	16	Washer-Lock
24	3217-9	16	Nut-HH
25	32121-110	2	Pin-Roll, Slotted
26	71-2590	1	Shaft-Pivot
27	69-7920-01	2	Support-Lift Arm, LH
28	98-1452	2	Washer-Thrust
29	328-5	2	Screw-HH
30	32153-6	2	Locknut
31	32120-47	2	Ring-Retaining, Ext.
32	92-4806	1	Pin-Latch
33	69-8470-03	1	Spring-Torsion
34	76-1670-03	1	Spring-Extension
35	69-1540-03	1	Pivot-Spring, Torsion
36	69-9580	1	LH Front Lift Arm ASM
36:5	302-5	1	Fitting-Grease
36:6	69-6470	2	Bushing-Castor
37	3272-12	2	Pin-Cotter
38	86-8100-01	2	Joint-Ball
38:1:1	302-5	1	Fitting-Grease
38:1:2	32136-2	1	Nut-SHH
38:1:3	105-7835	1	Seal
39	3296-68	2	Nut-Lock, NI
40	93-7426	1	HYD Tube ASM
40:1	237-22	1	O-Ring
41	69-8440	1	Hose ASM



T-0380

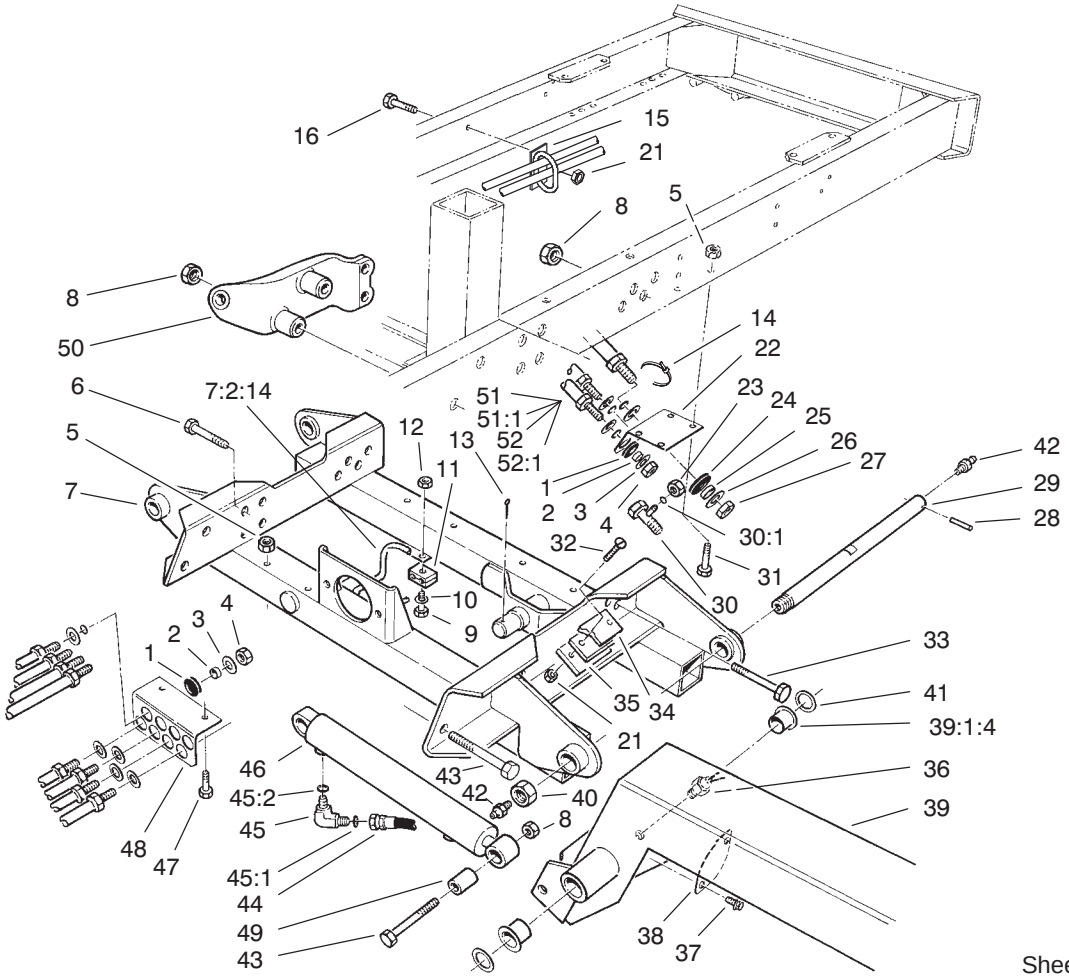
Sheet No.:B7

Hydraulic Cylinder Assembly No. 92-4971

Ref. No.	Part No.	Qty.	Description
☆1		1	Shaft
2	86-7350	1	Repair Kit
☆2:1		1	Seal-Rod
☆2:2		1	Ring-Backup
☆2:3		1	O-Ring
☆2:4		1	Ring-W ear
☆2:5		1	Wiper-Dust
☆2:6		1	O-Ring
☆2:7		1	Ring-W ear
3	61-4990	1	Ring-Retaining
☆4		1	Head
☆5		1	Piston
☆6		1	Nut
7	302-5	3	Fitting-Grease

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

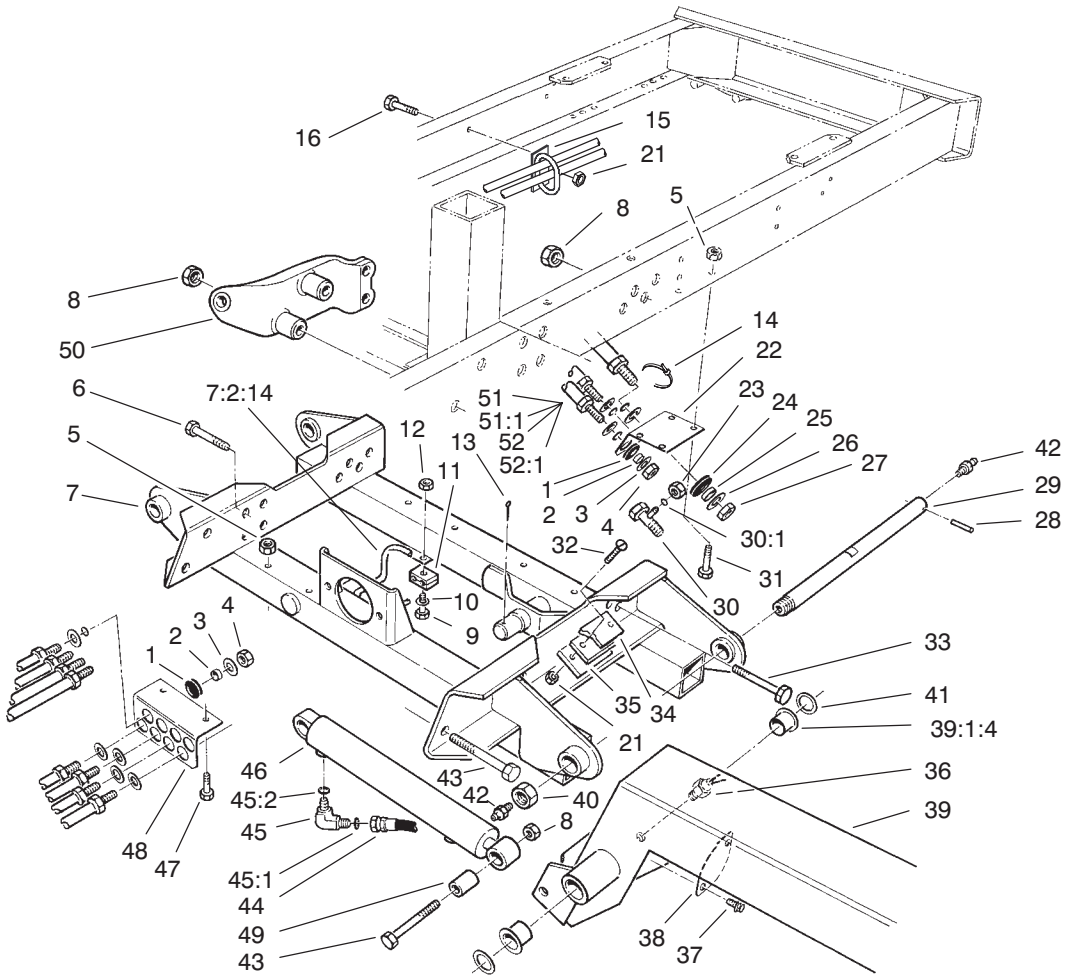


Sheet No.:32

Wing Deck Lift Assembly

Ref. No.	Part No.	Qty.	Description
1	240-4	10	Grommet-Rubber
2	69-8970	10	Spacer
3	69-8940	20	Washer
4	340-70	10	Nut-Lock
5	32152-2	2	Nut-Conelock
6	328-24	4	Screw-HH
7	69-4400-01	1	Carrier-Deck, Wing
7:2:14	85-6270	1	Guard-Shaft, Drive
8	32153-6	22	Locknut
9	321-9	3	Screw-HH
10	3256-56	3	Washer-Flat
11	56-7973	6	Clamp-Tube
12	32152-4	3	Nut-Conelock
13	3272-33	2	Pin-Cotter
14	3290-378	5	Tie-Cable
15	104-0028	2	Guide-Hose
16	322-6	2	Screw-HH
21	104-8300	2	Nut-Flange, NI
22	69-9460-03	1	Bracket-Hose, RH Wing
22	69-9450-03	1	Bracket-Hose, LH Wing
23	340-117	2	Cap
24	240-3	4	Grommet-Rubber
25	69-9000	4	Spacer
26	69-9010	8	Washer

Ref. No.	Part No.	Qty.	Description
27	340-74	4	Locknut-Bulkhead
28	32121-110	2	Pin-Roll, Slotted
29	99-5917	2	Shaft-Pivot, Lift Arm
30	340-115	2	Fitting-Tee
30:1	237-22	2	O-Ring
31	323-6	4	Screw-HH
32	32108-103	4	Screw-FH
33	328-26	12	Screw-HH
34	69-9300	2	Pad-Bumper
35	93-9922	2	Spacer
36	72-4310	2	Switch
37	32144-11	4	Screw-TAP
38	39-7650-01	2	Cover
39	93-9926-01	1	Arm-Lift, LH
39	93-9925-01	1	Arm-Lift, RH
39:1:4	69-6470	4	Bushing-Castor
40	3296-68	2	Nut-Lock, NI
41	98-1452	4	Washer-Thrust
42	302-2	4	Fitting-Grease
43	328-8	6	Screw-HH
44	69-5490	4	Hose ASM
45	340-77	4	Fitting-HYD, 90°
45:1	237-22	1	O-Ring
45:2	237-42	1	O-Ring
46	74-2170	2	Cylinder-HYD
47	323-15	2	Screw-HH

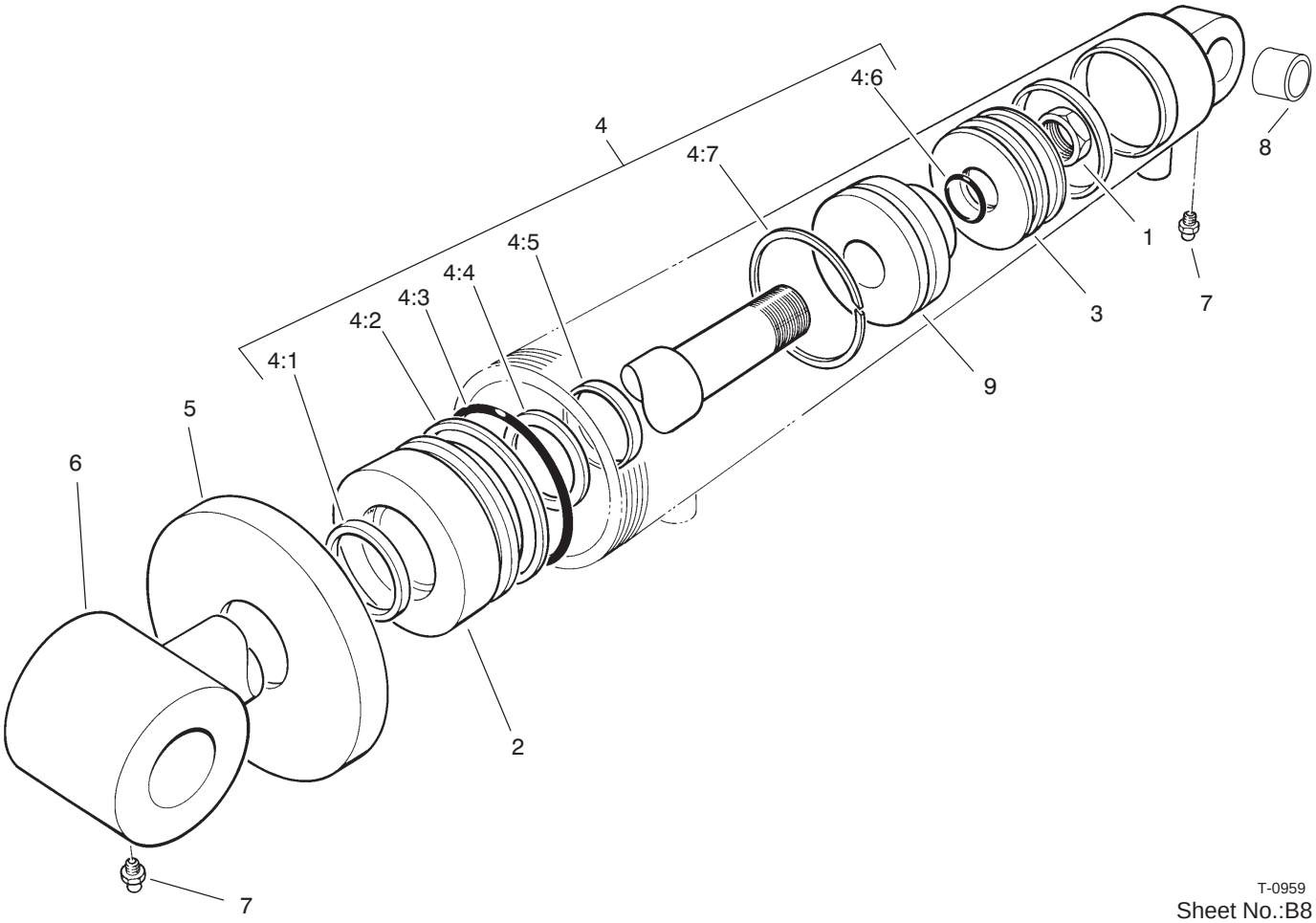


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Wing Deck Lift Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
48	74-2680-03	1	Bracket-Bulkhead
49	98-7346	2	Spacer
50	69-1600-03	1	Anchor-RH
50	69-1580-03	1	Anchor-LH
51	69-5970	1	Tube-HYD
51:1	237-22	1	O-Ring
52	95-6498	1	Tube ASM
52:1	237-22	1	O-Ring

Ref. No.	Part No.	Qty.	Description



T-0959
Sheet No.:B8

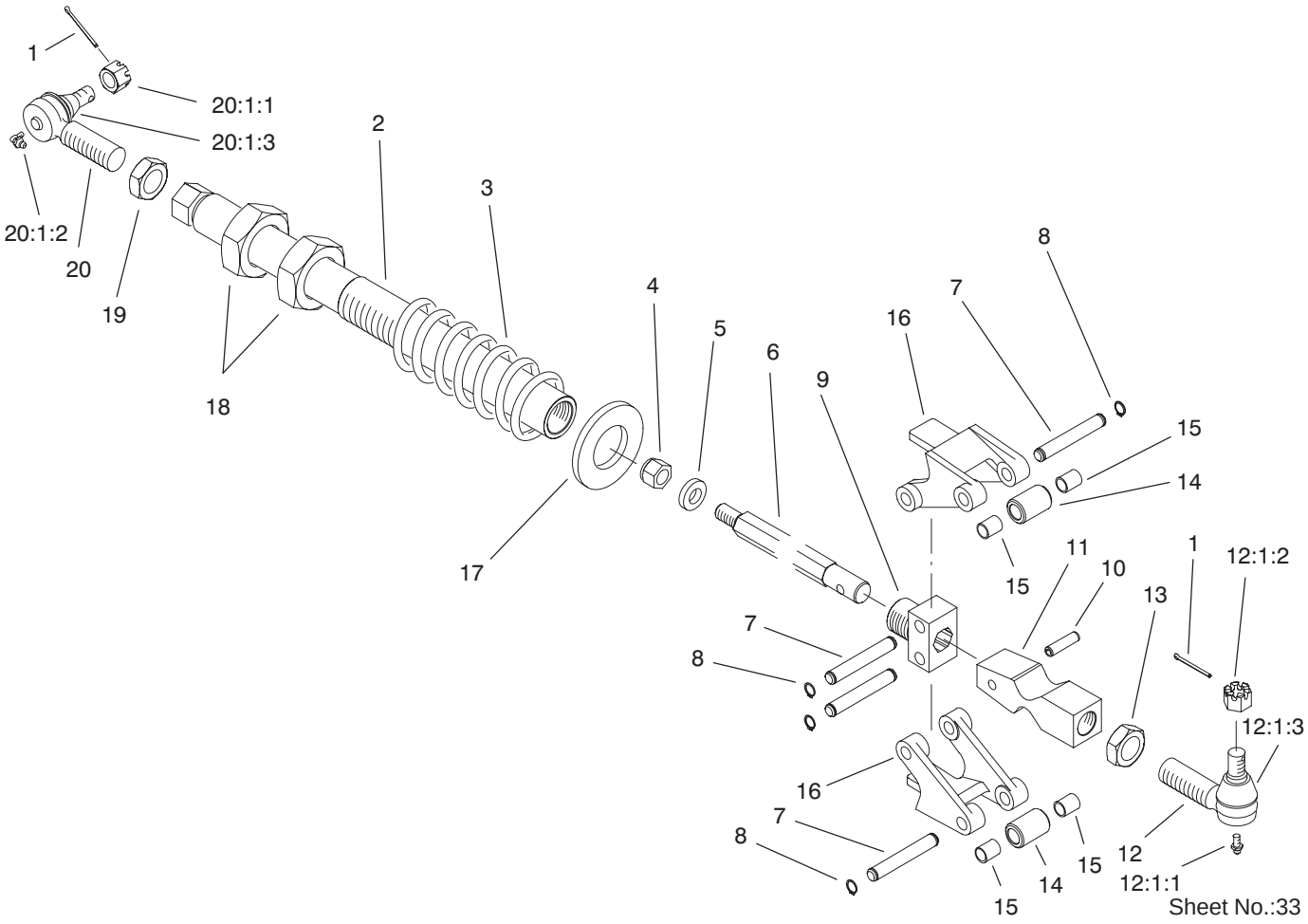
Hydraulic Cylinder Assembly No. 74-2170

Ref. No.	Part No.	Qty.	Description
☆1		1	Nut
☆2		1	Head
☆3		1	Piston
4	86-7350	1	Repair Kit
☆4:1		1	Seal-Rod
☆4:2		1	Ring-Backup
☆4:3		1	O-Ring
☆4:4		1	Ring-W ear
☆4:5		1	Wiper-Dust
☆4:6		1	O-Ring
☆4:7		1	Ring-W ear
☆5		1	Collar
☆6		1	Shaft
7	302-5	2	Fitting-Grease
8	95-1597	1	Bushing
☆9		1	Cushion

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

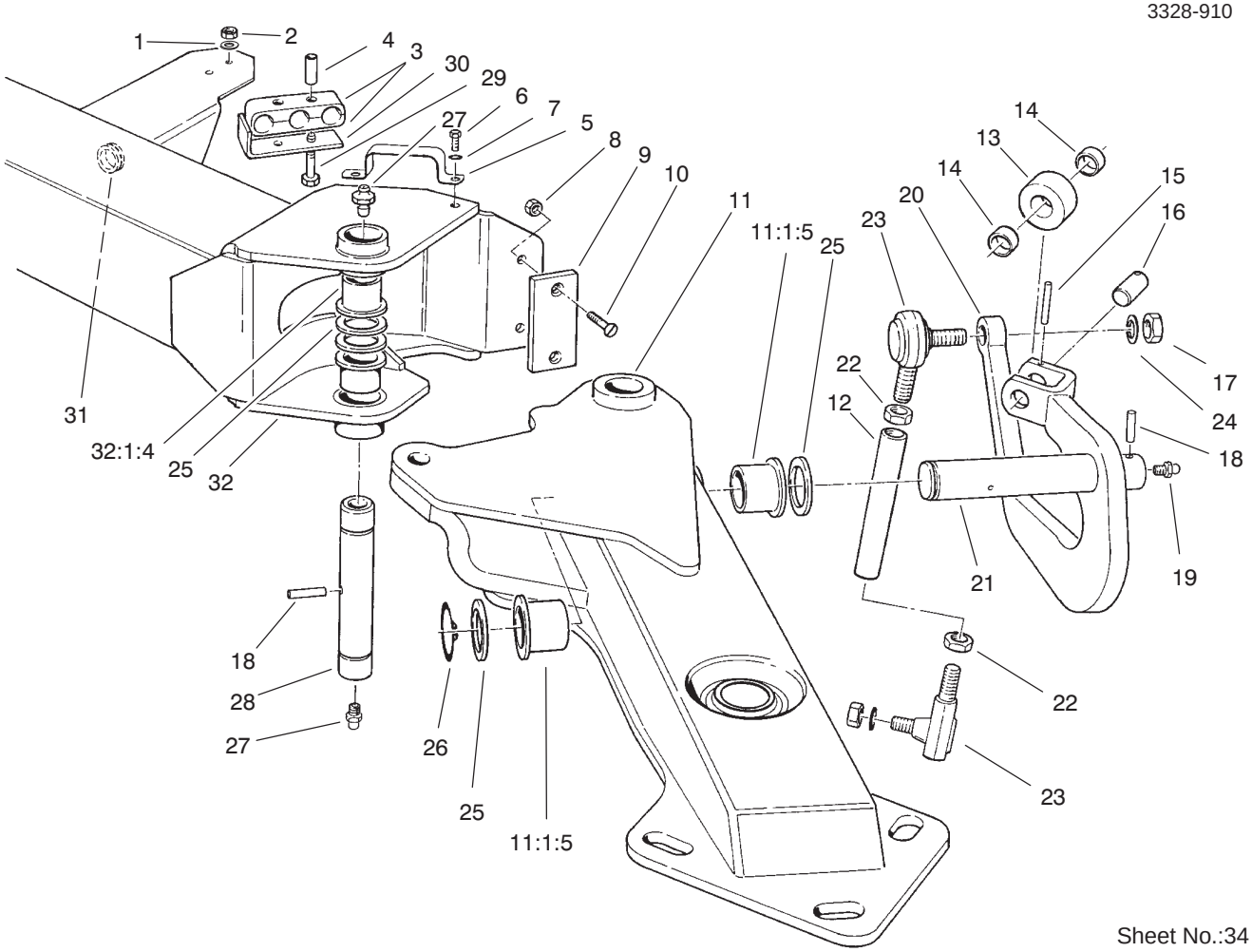
3328-910



Wing Deck Latch Assembly

Ref. No.	Part No.	Qty.	Description
1	3272-12	4	Pin-Cotter
2	69-7210-03	2	Tube-Latch
3	69-8480-03	2	Spring-Compression
4	3296-41	2	Nut-Lock NI
5	71-2550	2	Washer-Shaft, Latch
6	69-9680	2	Shaft-Latch
7	92-4806	8	Pin-Latch
8	32120-47	16	Ring-Retaining, External
9	92-4804	2	Block-Latch, Pivot
10	32121-49	2	Pin-Roll
11	92-4805	2	Cam-T rip, Spring
12	86-8100-01	2	Joint-Ball
12:1:1	302-5	1	Fitting-Grease
12:1:2	32136-2	1	Nut-SHH
12:1:3	105-7835	1	Seal
13	21-3000-01	2	Nut-Jam, Push Arm
14	92-4094	4	Roller-Latch
15	256-172	8	Bushing
16	69-1630-03	4	Arm-Pivot
17	69-9100	2	Washer-Latch
18	3220-22	4	Nut-Jam
19	21-3001-03	2	Nut-Jam, Push Arm
20	86-8101-03	2	Joint-Ball, LH
20:1:1	32136-2	1	Nut-SHH

Ref. No.	Part No.	Qty.	Description
20:1:2	302-40	1	Fitting-Grease
20:1:3	105-7835	1	Seal

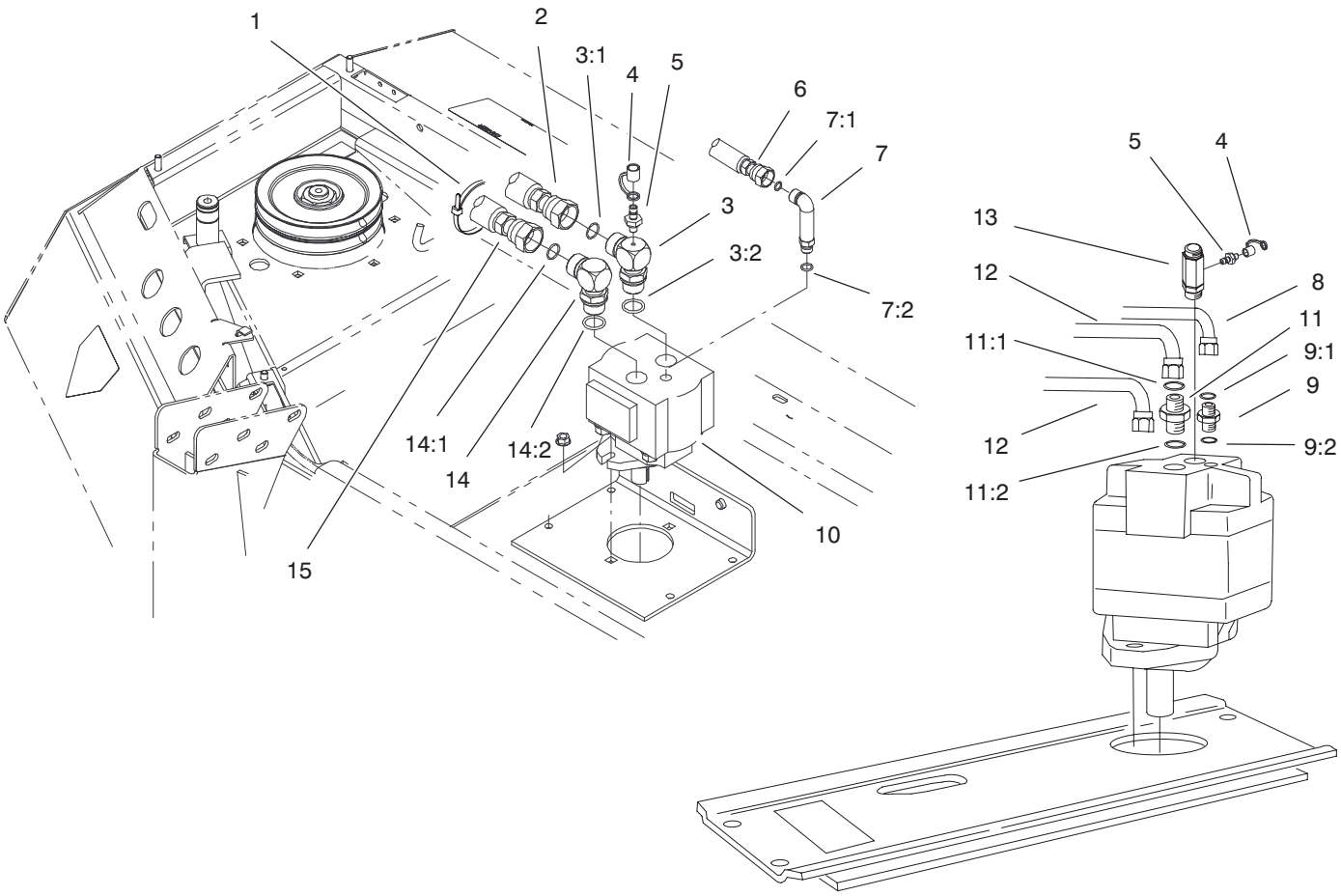


Sheet No.:34

Outer Wing Deck Lift Assembly

Ref. No.	Part No.	Qty.	Description
1	3256-22	4	Washer-Flat
2	32128-32	4	Nut-HHF
3	74-2710	4	Clamp-Hose
4	74-2730	4	Tube
5	93-9928	2	Clamp-Hose
6	322-3	4	Screw-HH
7	3253-4	4	Washer-Lock
8	32152-1	4	Nut-Lock, NI
9	69-9300	2	Pad-Bumper
10	32108-103	4	Screw-FH
11	93-9942-01	1	Arm-Outer Lift, LH
11	93-9941-01	1	Arm-Outer Lift, RH
11:1:5	69-6470	2	Bushing-Castor
12	71-2600	2	Tube-Antisway
13	69-9240	2	Roller-Cam
14	256-76	4	Bushing
15	32121-34	2	Pin-Roll
16	69-9250	2	Pin-Roller
17	3219-7	4	Nut-Hex
18	32121-110	4	Pin-Roll, Slotted
19	302-5	2	Fitting-Grease
20	98-3311-01	1	Arm-Anti Sway, LH
20	98-3312-01	1	Arm-Anti-Sway , RH
21	82-7900	2	Arm-Shaft
22	3220-7	4	Nut-Jam
23	2411-40	4	End-Rod, Superior

Ref. No.	Part No.	Qty.	Description
24	3253-9	4	Washer-Lock/Sp
25	98-1452	12	Washer-Thrust
26	32151-10	2	Ring-Snap
27	302-2	6	Fitting-Grease
28	71-2620	2	Shaft-Elbow , Lift Arm
29	321-15	4	Screw-HH
30	94-6772-01	2	Retainer
31	93-9912	2	Grommet
32	93-9926-01	1	Arm-Lift, LH
32	93-9925-01	1	Arm-Lift, RH
32:1:4	69-6470	4	Bushing-Castor

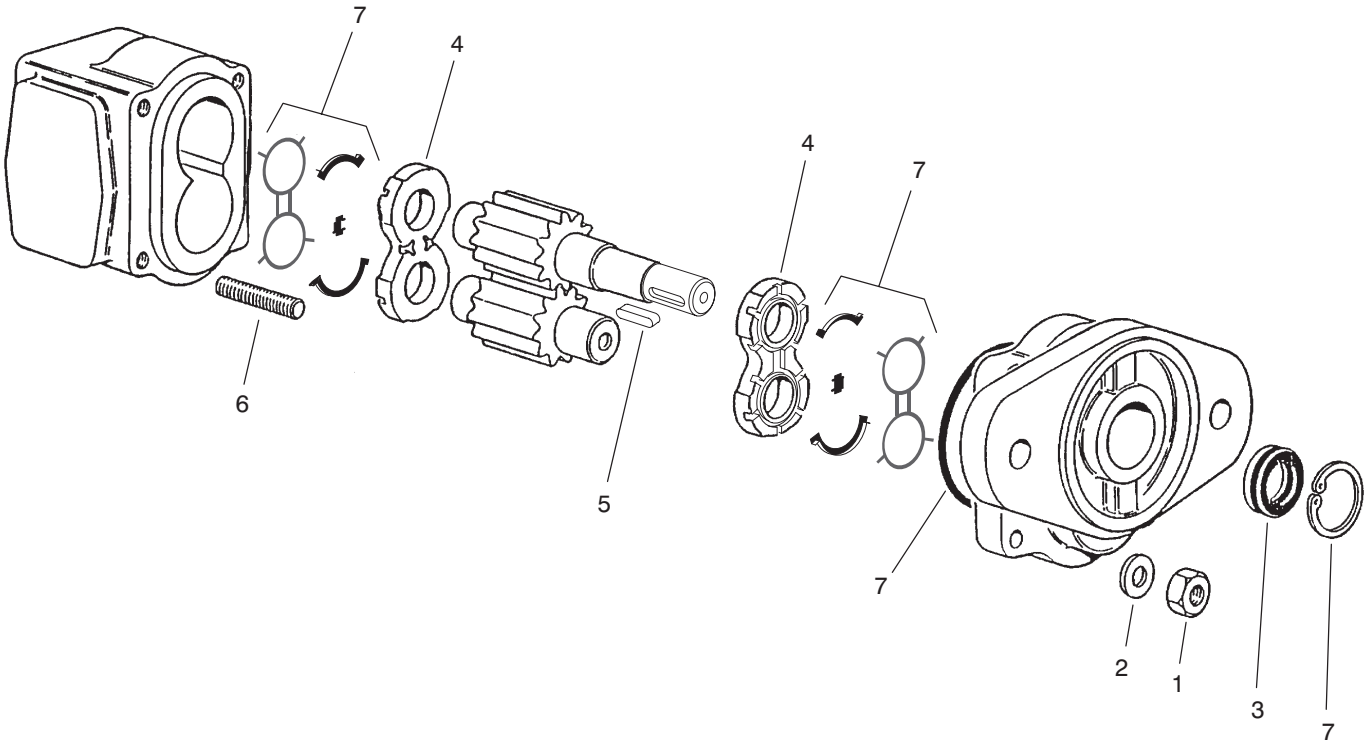


Sheet No.:35

Deck Motor Assembly

Ref. No.	Part No.	Qty.	Description
1	3290-378	2	Tie-Cable
2	106-0079	1	HYD Hose ASM
3	99-4444	1	Fitting
3:1	237-58	1	O-Ring
3:2	237-81	1	O-Ring
4	354-79	3	Cap-Dust, Yellow
5	99-4443	3	Fitting
6	76-2770	1	Hose ASM
7	69-4320	1	Fitting-90 °
7:1	237-22	1	O-Ring
7:2	237-42	1	O-Ring
8	93-9917	2	HYD Hose ASM
9	340-2	2	Fitting-HYD, Straight
9:1	237-22	1	O-Ring
9:2	237-42	1	O-Ring
10	94-4907	3	Motor-HYD
11	340-8	2	Adapter
11:1	237-65	1	O-Ring
11:2	237-81	1	O-Ring
12	93-9918	4	HYD Hose ASM
13	99-4442	2	Fitting
14	95-1692	1	Fitting
14:1	237-58	1	O-Ring
14:2	237-81	1	O-Ring
15	106-0078	1	HYD Hose ASM

Ref. No.	Part No.	Qty.	Description



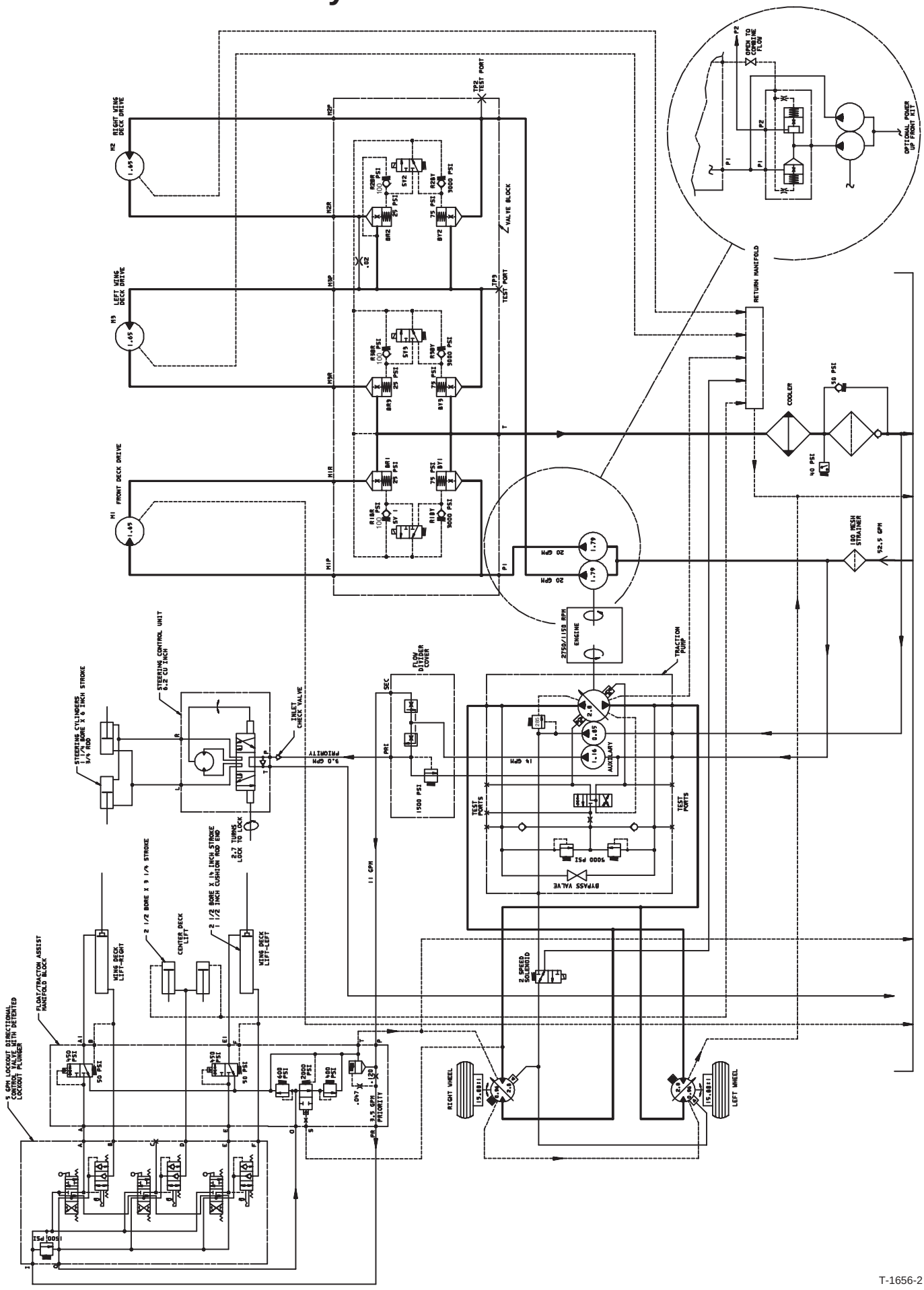
T-2313
Sheet No.:B9

Hydraulic Motor Assembly No. 94-4907

Ref. No.	Part No.	Qty.	Description
1	33016-00	4	Nut-Hex
2	33096-00	4	Washer-Flat
3	94-5391	1	Seal-Shaft
4	94-5390	2	Plate-Load
5	93-7637	1	Key-Square
6	99-5903	4	Stud
7	94-5392	1	Seal Kit

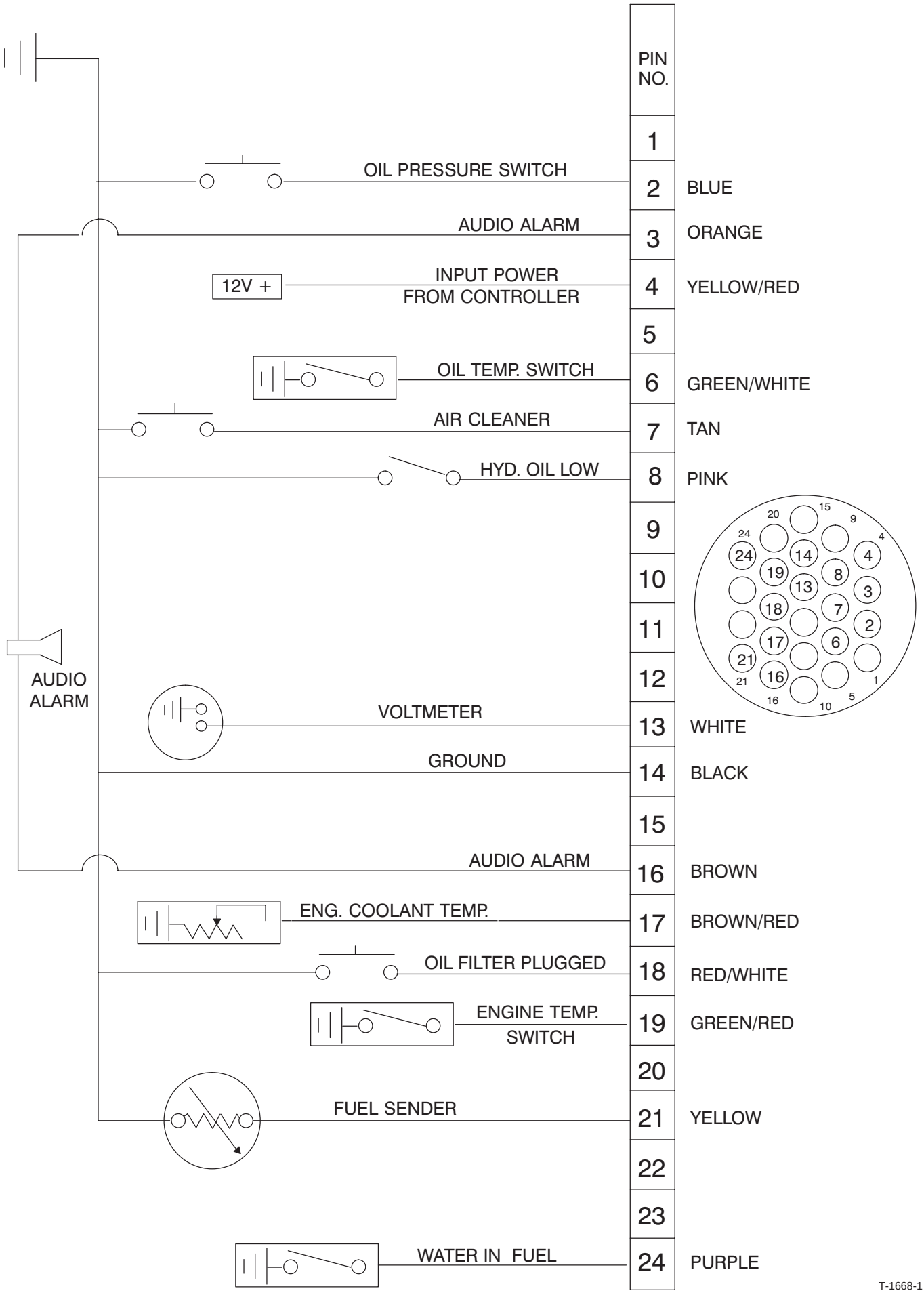
Ref. No.	Part No.	Qty.	Description

Hydraulic Schematic

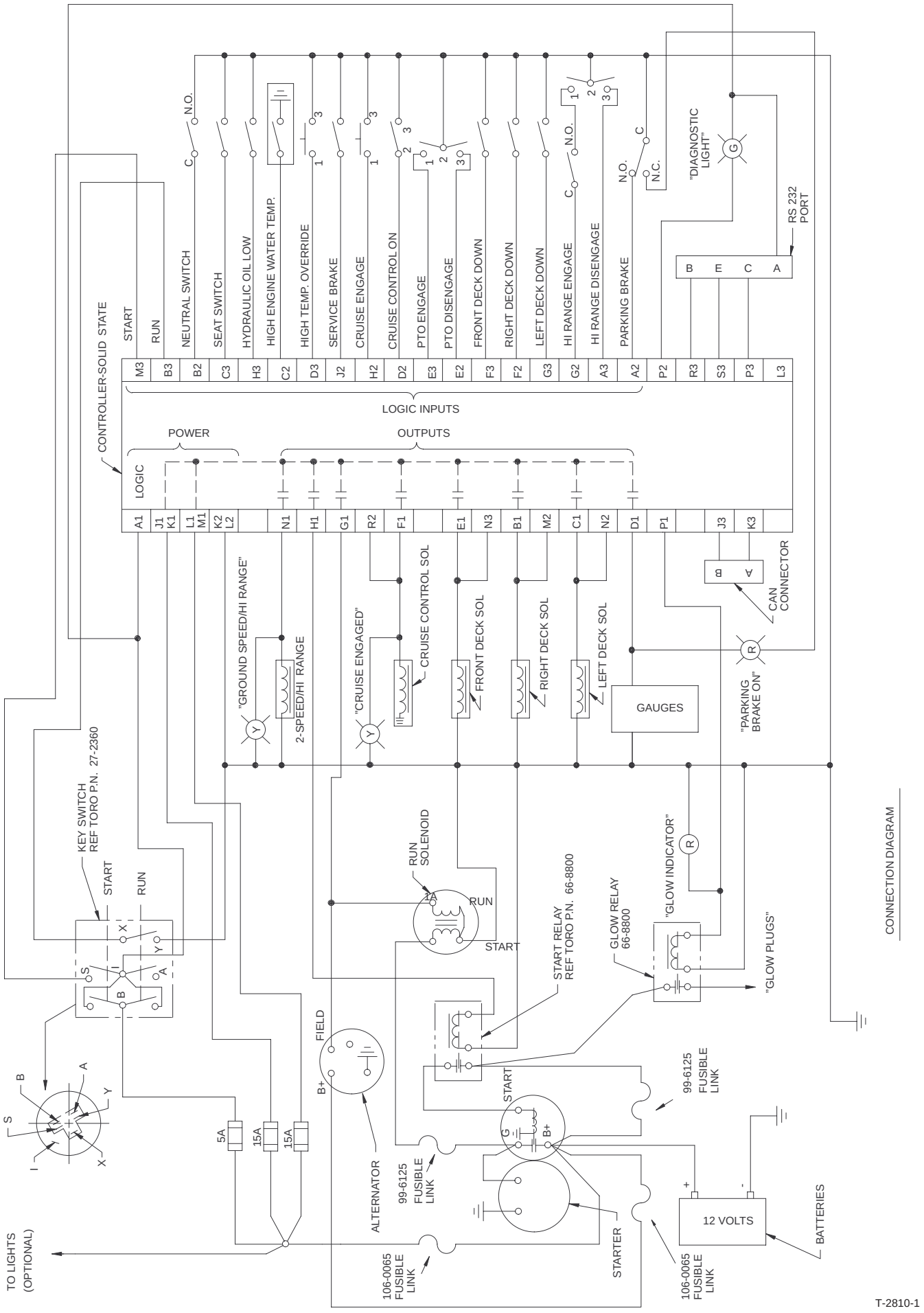


T-1656-2

Electrical Schematic

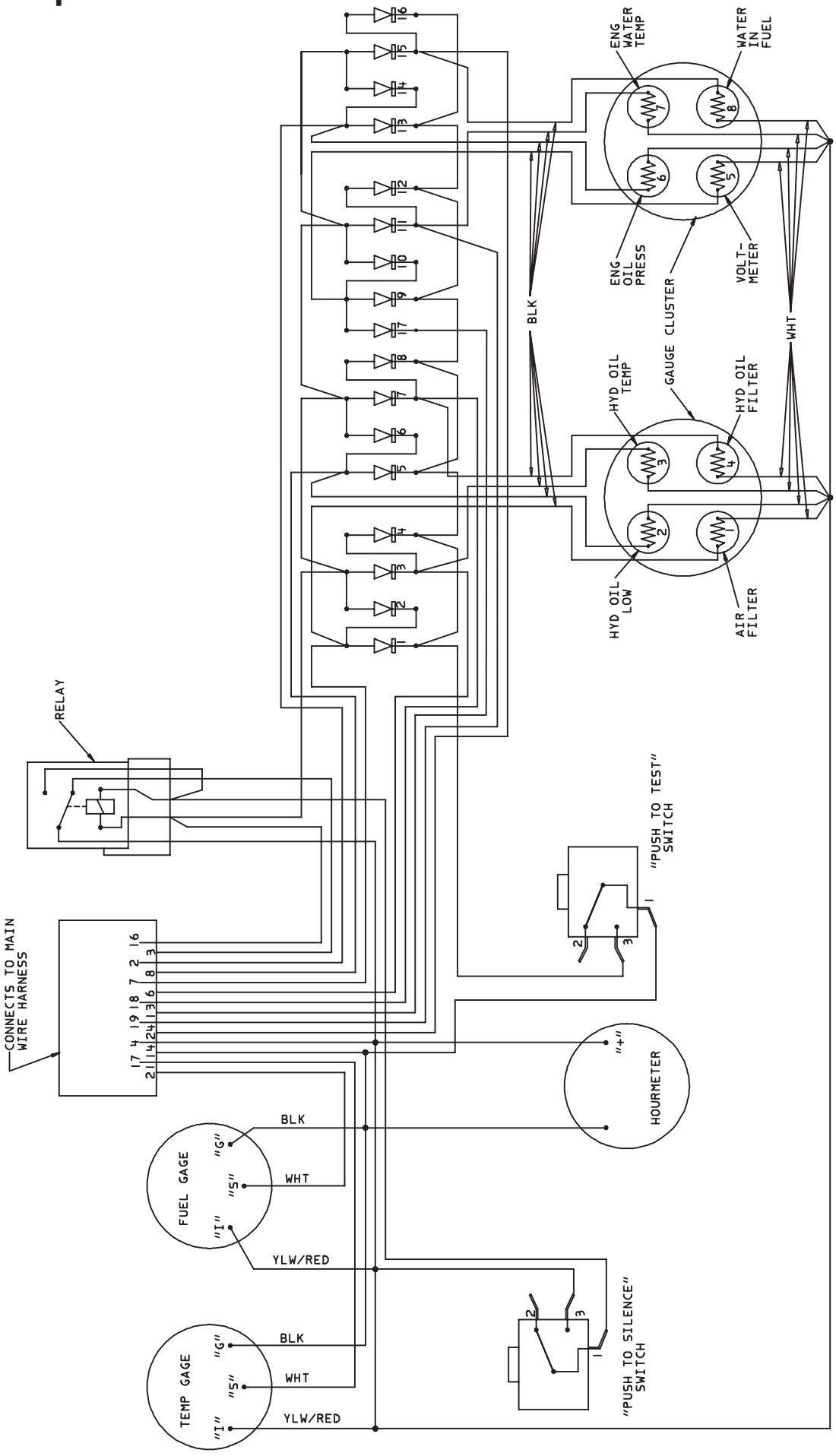


Controller Electrical Schematic

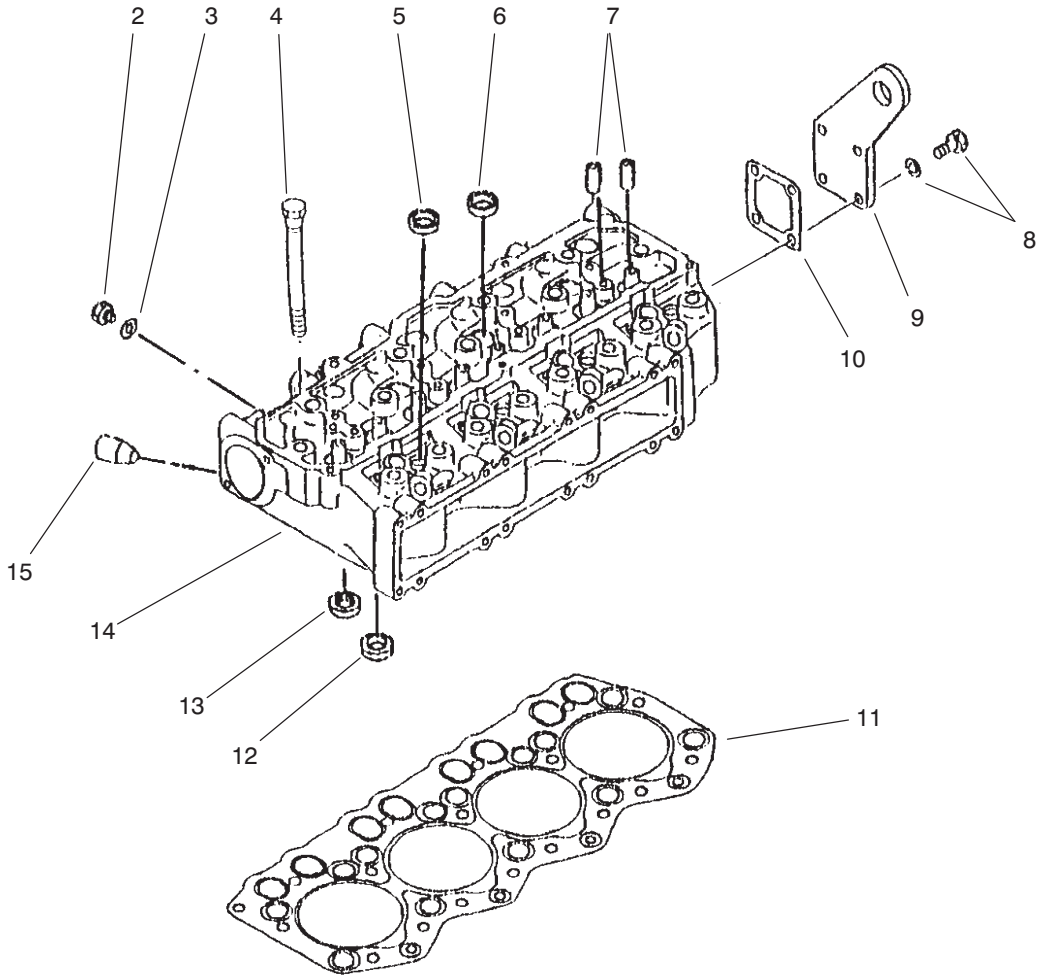


T-2810-1

Operators Control Panel Electrical Schematic



T-1655-1



T-2949

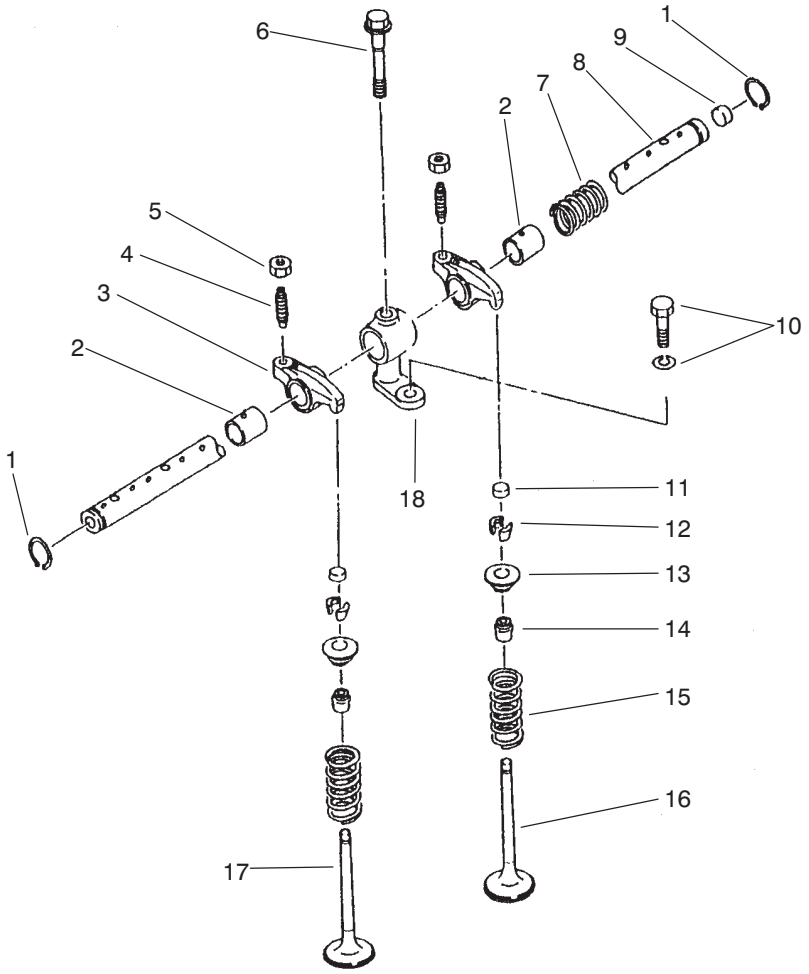
Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
2	99-1812	1	Plug-Drain
3	99-1813	1	Gasket
4	99-1806	17	Bolt-Head, Cylinder
5	99-1801	12	Cap-Sealing, 20mm
6	99-1802	7	Cap-Sealing, 25mm
7	99-1803	8	Guide-V alve
8	99-181 1	4	Bolt w/Washer
9	99-1808	1	Eye-Lifting, Rear
10	99-1809	1	Gasket-Head, Rear
11	99-1807	1	Gasket-Head, Cylinder
12	99-1804	4	Seat-V alve, Inlet
13	99-1805	4	Seat-V alve, Exhaust
☆14		1	Head-Cylinder
☆15		1	Plug
*	99-1800	1	Cylinder Head ASM (Incl. Ref. #2-3, 5-7 & 12-14)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2950

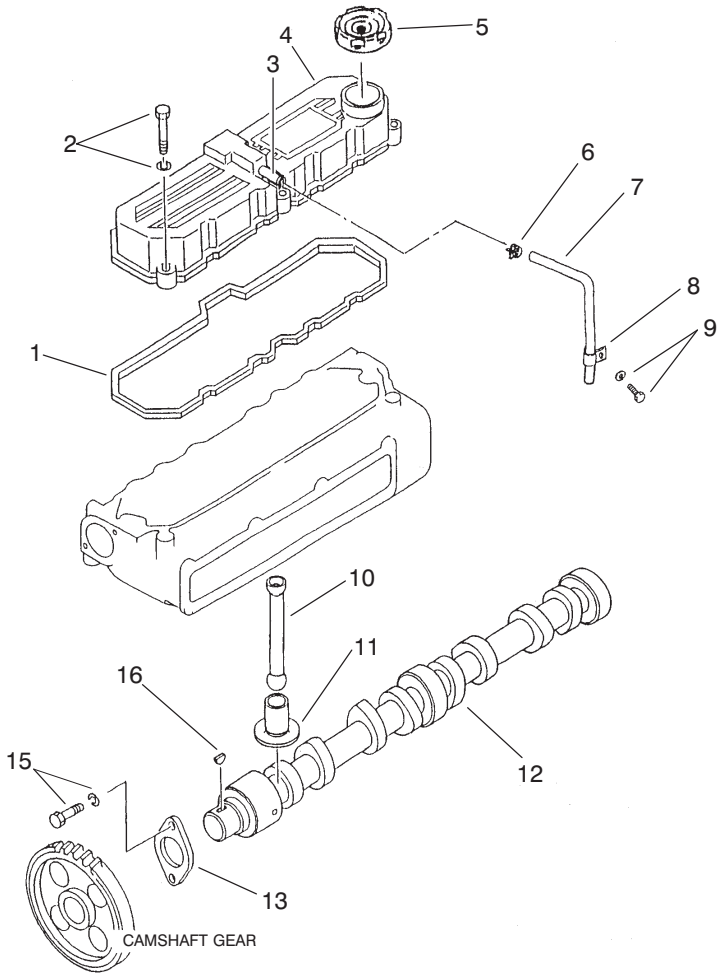
Valve Mechanism Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1822	2	Ring-Snap
☆2		8	Bushing-Rocker
☆3		8	Rocker
4	93-3401	8	Screw-Rocker
5	51-5210	8	Nut-Jam
6	99-1824	4	Bolt-Bracket, Rocker
7	99-1820	3	Spring-Rocker
☆8		1	Shaft-Rocker
☆9		2	Plug-Shaft, Rocker
10	99-1825	4	Bolt w/Washer
11	51-5280	8	Cap
12	60-7420	16	Cotter-V alve
13	99-1816	8	Retainer-Upper
14	99-1817	8	Seal-Stem, Valve
15	51-5320	8	Spring-V alve
16	99-1815	4	Valve-Exhaust
17	99-1814	4	Valve-Inlet
18	99-1823	4	Bracket-Shaft, Rocker
*	99-1818	1	Rocker & Shaft ASM (Incl. Ref. #1-9)
*	99-1819	8	Rocker ASM (Incl. Ref. #2-5)
*	99-1821	1	Rocker Shaft ASM (Incl. Ref. #8-9)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2951

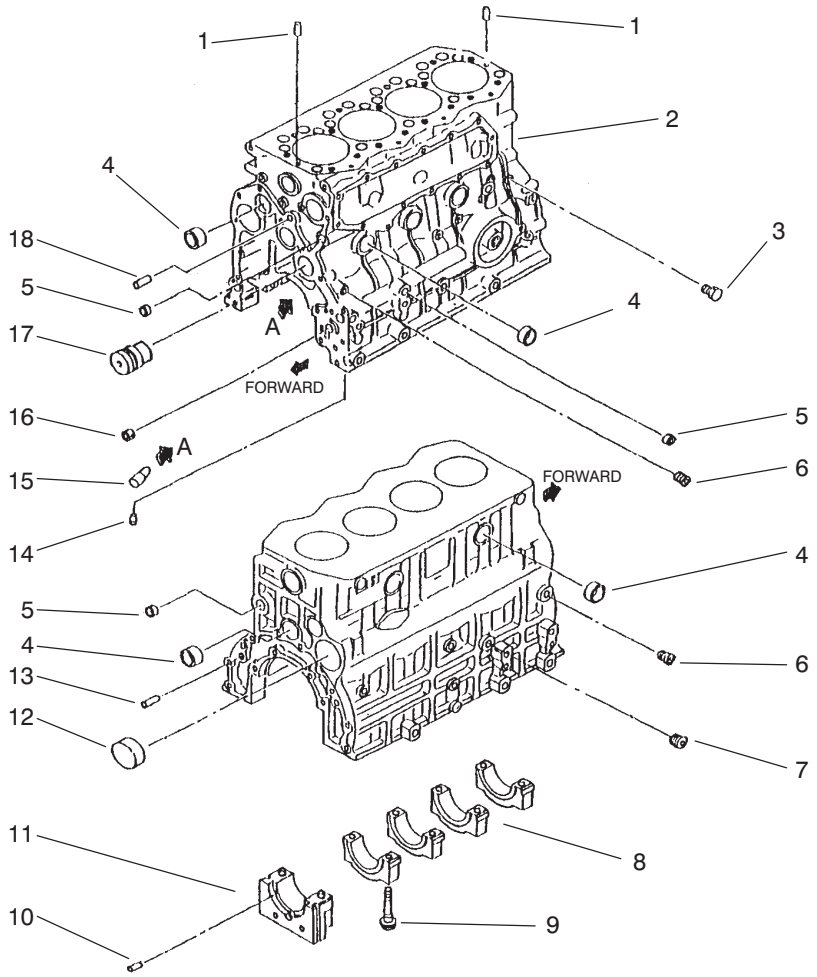
Rocker Cover and Camshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1827	1	Gasket-Rocker
2	99-1828	5	Bolt w/Washer
☆3		1	Pipe
☆4		1	Cover-Rocker
5	42-7420	1	Cap-Filter , Oil
6	99-1833	1	Clip-Hose
7	99-1834	1	Hose-Breather
8	99-1835	1	Clip
9	99-1836	1	Bolt w/Washer
10	99-1832	8	Rod-Push
11	99-1831	8	Tappet
12	99-1829	1	Camshaft
13	51-5470	1	Plate-Thrust
15	99-1830	2	Bolt w/Washer
16	51-5460	1	Key-W oodruff
*	99-1826	1	Rocker Cover ASM (Incl. Ref. #3-4)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2952

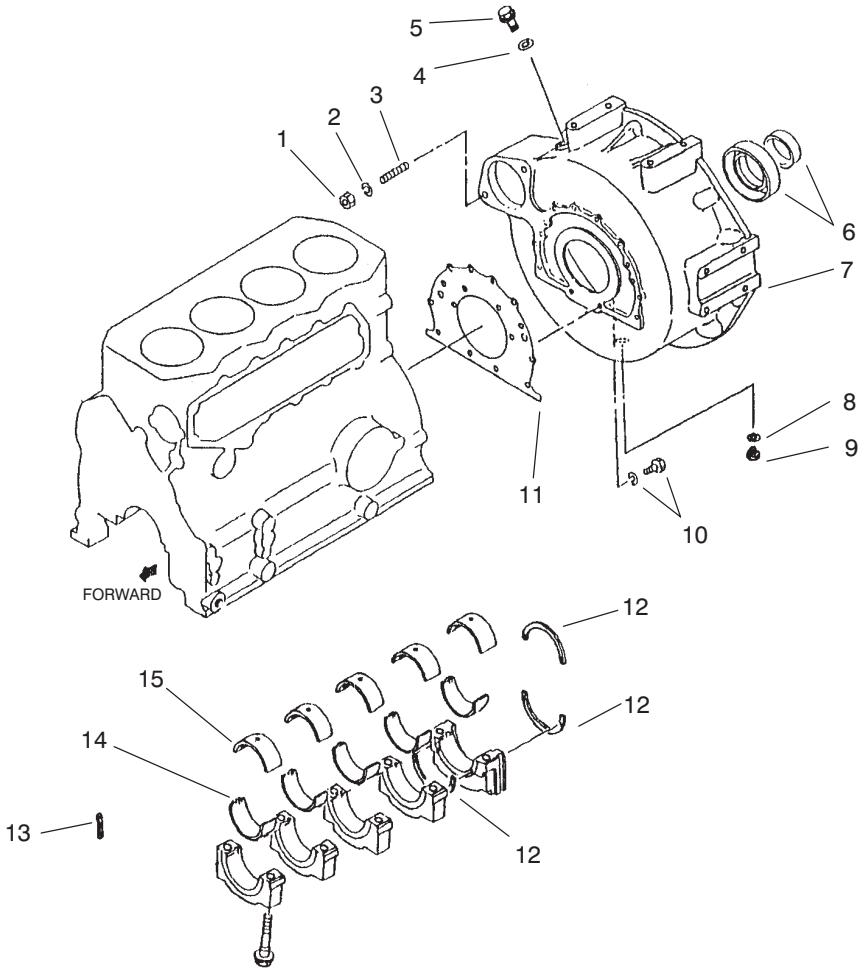
Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
1	93-3365	2	Pin-Dowel
☆2		1	Crankcase
3	99-1845	1	Plug-Taper
4	51-5600	10	Cap-Sealing
5	70-3370	6	Cap-Sealing
6	86-6240	5	Plug-Taper
7	56-0100	1	Plug-Taper
☆8		4	Cap-Bearing
9	99-1838	10	Bolt-Cap, Bearing
10	99-1842	6	Pin-Spring
☆11		1	Cap-Bearing
12	99-1840	1	Plug-Cam
13	70-3000	2	Pin-Dowel
☆14		3	Plug
15	99-1839	4	Valve-Check
16	99-1843	1	Bushing
17	99-1844	1	Shaft-Idler
18	99-1841	1	Pin-Dowel
*	99-1837	1	Crankcase ASM (Incl. Ref. #1-18)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



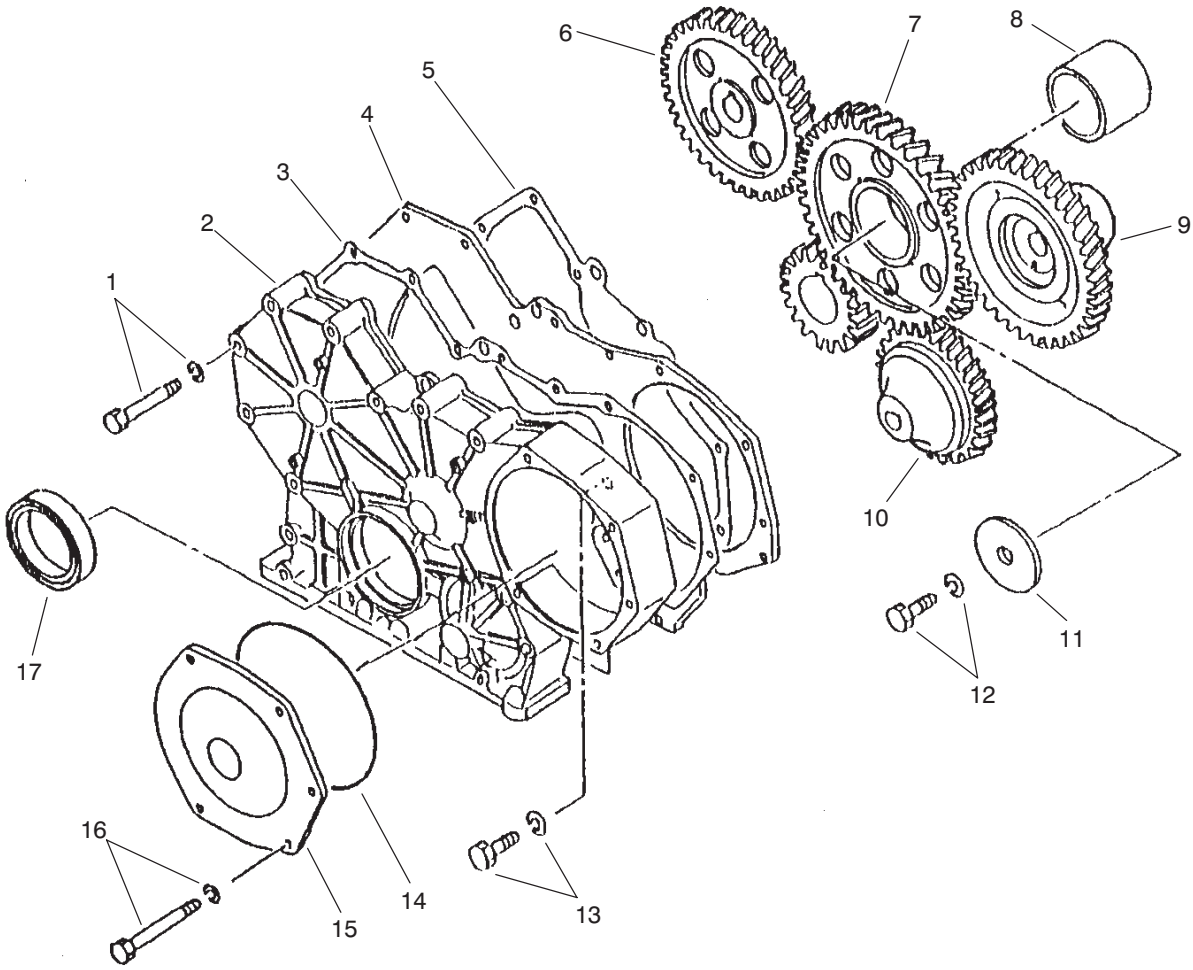
T-2953

Flywheel Housing and Main Metal Assembly

Ref. No.	Part No.	Qty.	Description
1	51-5970	2	Nut-Lock
2	51-6390	2	Washer-Spring
3	99-1858	2	Stud
4	99-1813	1	Gasket
5	99-1812	1	Plug-Drain
6	60-7430	1	Seal-Oil
7	99-1854	1	Housing-Flywheel
8	42-7290	1	Gasket
9	67-2520	1	Plug-Drain
10	99-1856	10	Bolt w/Washer
10	99-1857	2	Bolt w/Washer
11	99-1855	1	Gasket-Rear
12	99-1850	3	Plate-Thrust Std.
12	99-1851	1	Plate-Thrust O.S. 0.15
12	99-1852	1	Plate-Thrust O.S. 0.30
13	99-1853	2	Seal-Side
14		5	Set-Metal, Main
15		5	Set-Metal, Main
*	99-1846	1	Set-Metal, Main Std. (Incl. Ref. #14-15)
*	99-1847	1	Set-Metal, Main U.S. .25 (Incl. Ref. #14-15)
*	99-1848	1	Set-Metal, Main U.S. 0.50 (Incl. Ref. #14-15)
*	99-1849	1	Set-Metal, Main U.S. 0.75 (Incl. Ref. #14-15)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated



T-2954

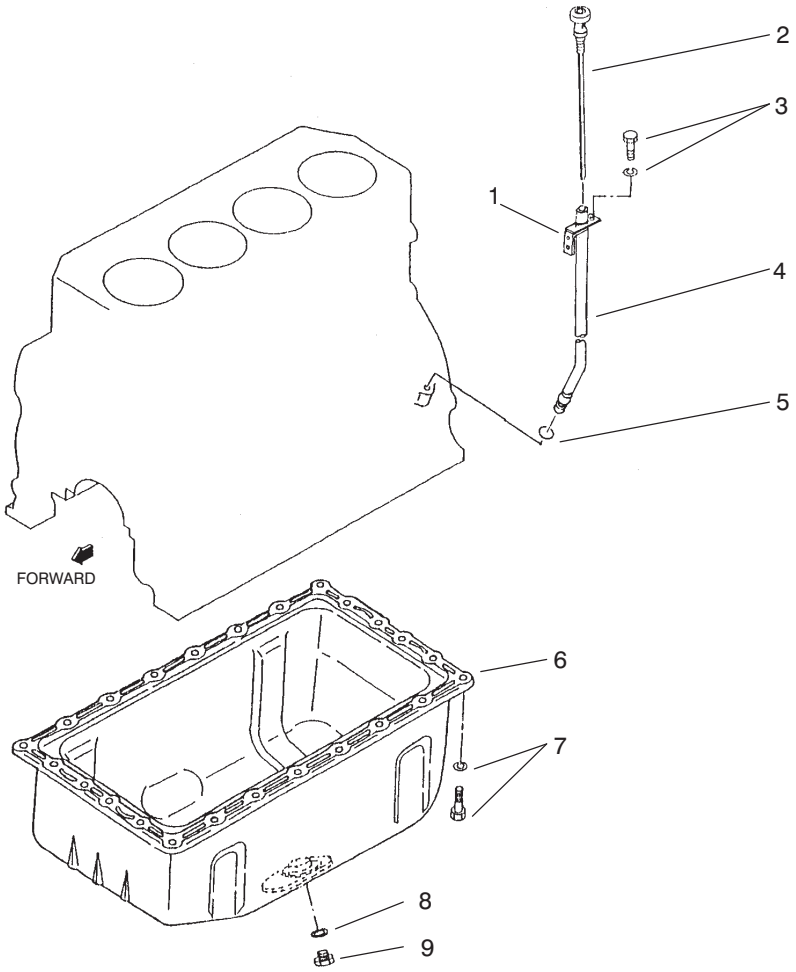
Timing Gear Case and Timing Gear Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1864	13	Bolt w/Washer
2	99-1861	1	Case-Gear , Timing
3	99-1862	1	Gasket-Gear
4	99-1859	1	Plate-Front
5	99-1860	1	Gasket-Plate, Front
6	99-1868	1	Gear-Camshaft
☆7		1	Gear-Idler
☆8		1	Bushing
9	99-1869	1	Gear-Pump, Injection
10	99-1873	1	Gear-Pump, Oil
11	99-1871	1	Plate-Thrust
12	99-1872	1	Bolt w/Washer
13	99-1810	5	Bolt w/Washer
14	99-1865	1	O-Ring
15	99-1863	1	Cover-Gear , Case
16	99-1866	5	Bolt w/Washer
17	99-1867	1	Seal-Oil
*	99-1870	1	Idler Gear ASM (Incl. Ref. #7-8)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2955

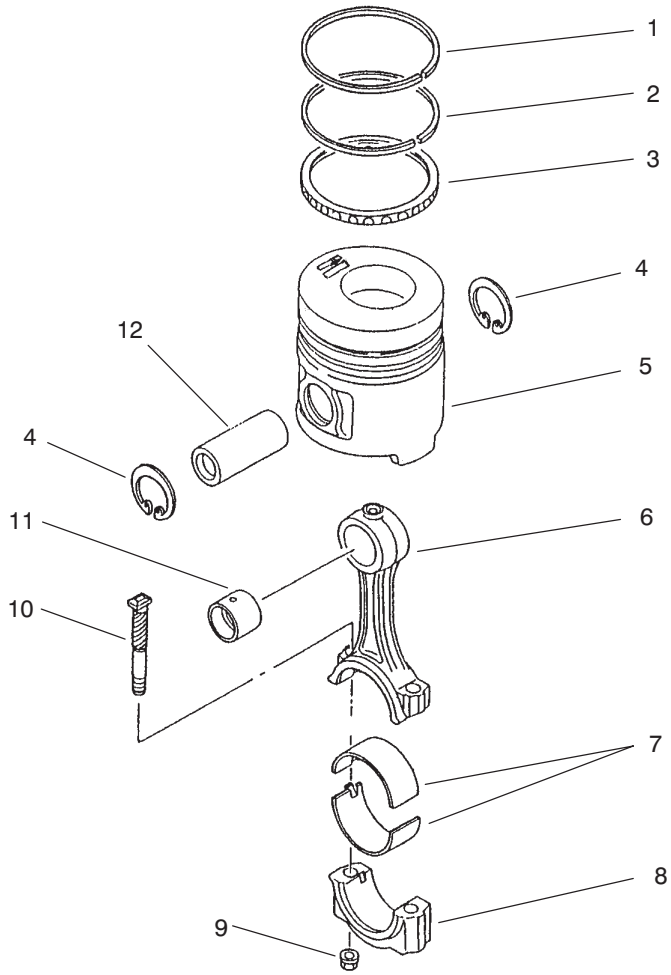
Oil Pan and Oil Level Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1877	1	Bracket-Guide, Gage
2	99-1875	1	Gage-Level, Oil
3	99-1811	1	Bolt w/Washer
4	99-1876	1	Guide-Gage, Oil Level
5	99-1878	1	O-Ring
☆6		1	Pan-Oil
7	99-1810	26	Bolt w/Washer
8	68-6430	1	Gasket
9	68-6420	1	Plug-Drain
*	99-1874	1	Oil Pan ASM (Incl. Ref. #6, 8 & 9)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2956

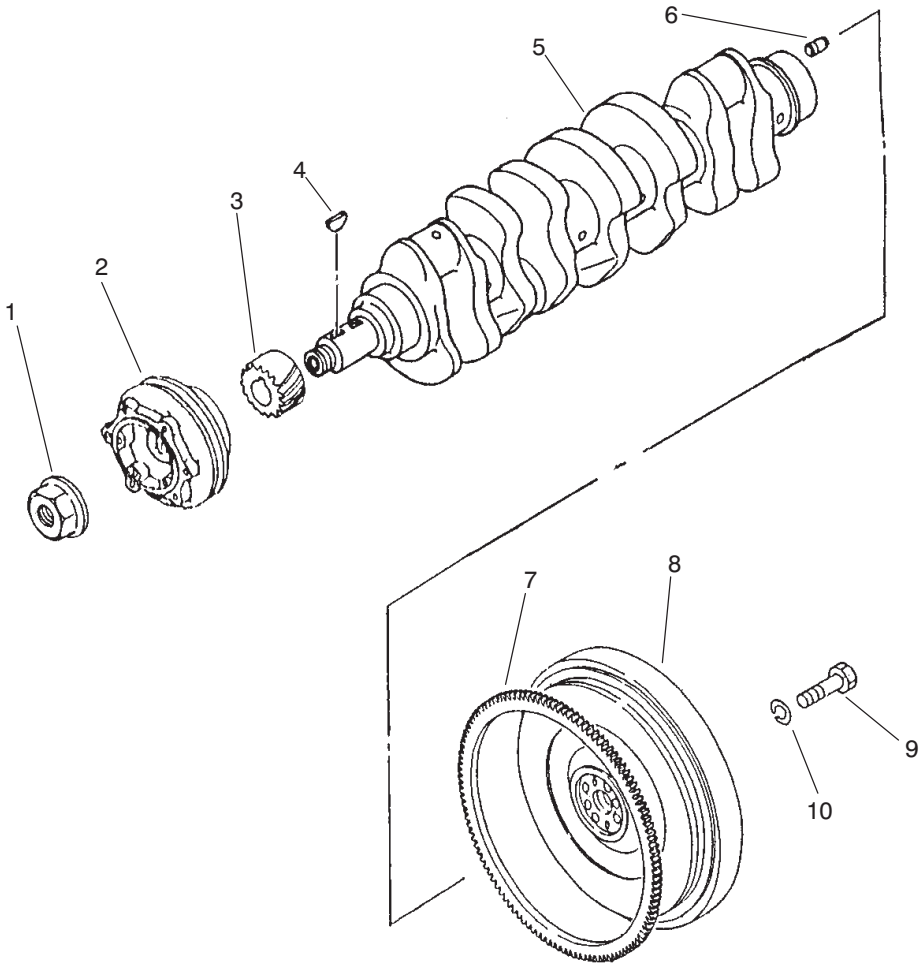
Piston and Connecting Rod Assembly

Ref. No.	Part No.	Qty.	Description
☆1		4	Ring-No. 1
*	99-1884	4	Ring-Piston O.S. 0.25 (Incl. Ref. #1-3)
☆2		4	Ring-No. 2
*	99-1885	4	Ring-Piston O.S. 0.50 (Incl. Ref. #1-3)
☆3		4	Ring-Oil
4	99-1887	8	Ring-Snap
5	99-1880	4	Piston-Std.
5	99-1881	4	Piston-O.S. 0.25
5	99-1882	4	Piston-O.S. 0.50
6		4	Rod-Connecting
7	99-1891	1	Set-Metal Std.
7	99-1892	1	Set-Metal O.S. 0.25
7	99-1893	1	Set-Metal O.S. 0.50
7	99-1894	1	Set-Metal O.S. 0.75
☆8		4	Cap-Rod, Connecting
9	51-6230	8	Nut
10	99-1889	8	Bolt-Connecting
11	99-1890	8	Bushing-Rod, Connecting
12	99-1886	4	Pin-Piston
*	99-1888	4	Connecting Rod ASM (Incl. Ref. #6-11)
*	99-1883	4	Set-Ring, Piston Std (Incl. Ref. #1-3)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately



T-2957

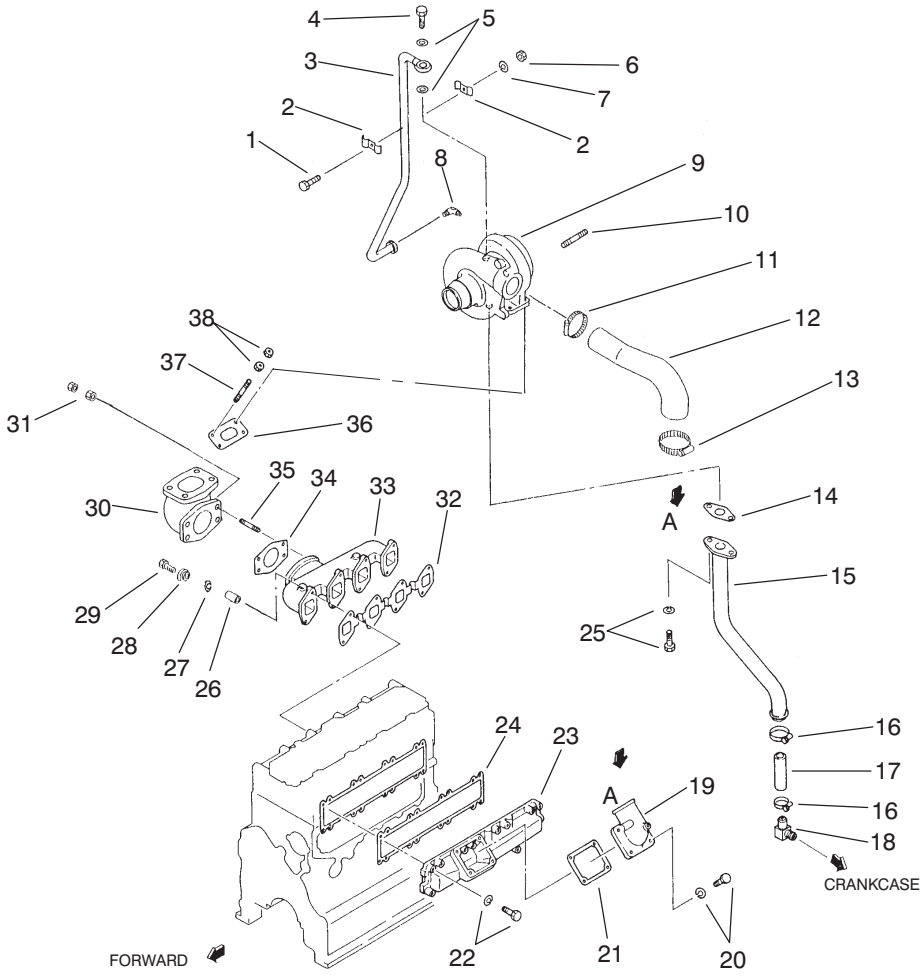
Crankshaft and Flywheel Assembly

Ref. No.	Part No.	Qty.	Description
1	99-1897	1	Nut-Crankshaft
2	99-1896	1	Pulley-Crankshaft
3	99-1898	1	Gear-Crankshaft
4	51-5460	2	Key-W oodruff
☆5		1	Crankshaft
6	51-6300	2	Pin-Dowel
7	99-2100	1	Gear-Ring
☆8		1	Flywheel
9	70-2880	4	Bolt
10	51-8610	4	Washer-Spring
*	99-1895	1	Crankshaft ASM (Incl. Ref. #1-6)
*	99-1899	1	Flywheel ASM (Incl. Ref. #7-8)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

☆ Not serviced separately

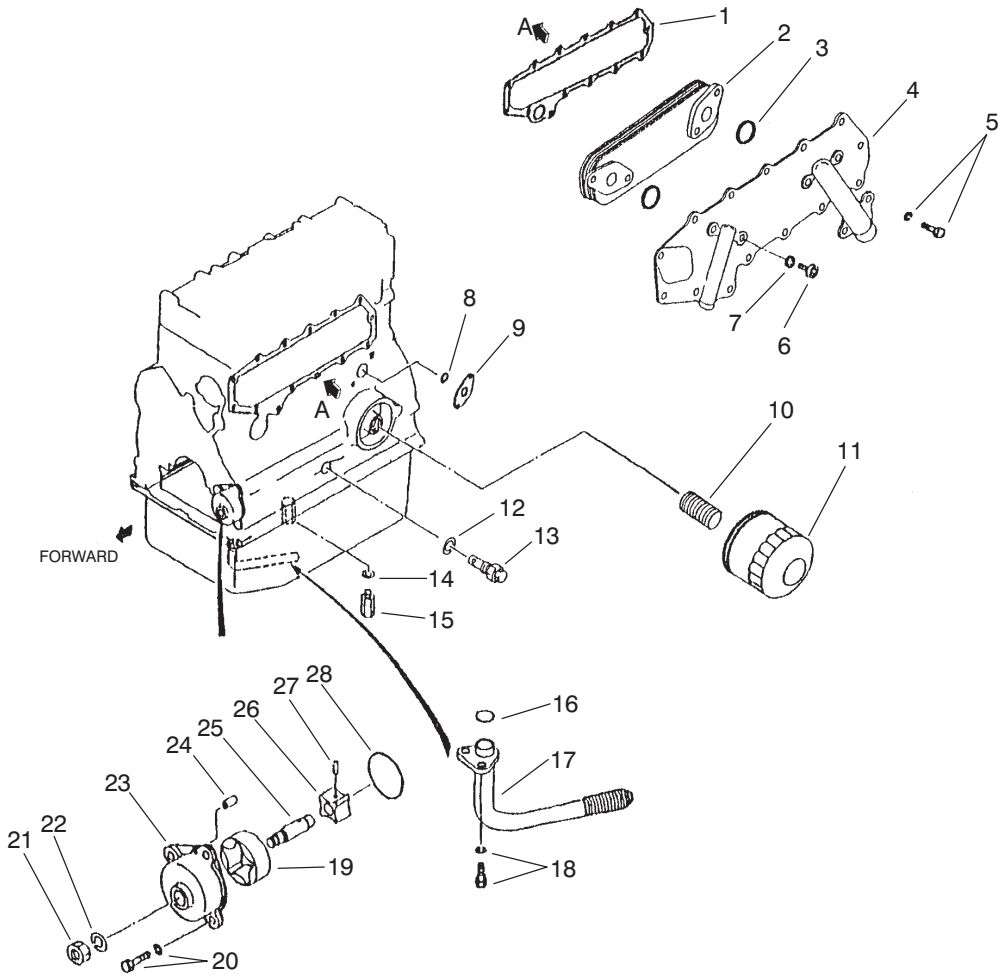


T-2958

Inlet and Exhaust Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	60-7290	1	Bolt
2	99-2125	2	Clamp
3	99-2119	1	Pipe-Oil
4	70-4980	1	Bolt-Eye
5	51-5060	2	Gasket
6	99-2126	1	Nut
7	51-7400	1	Washer-Spring
8	99-2120	1	Elbow
9	99-2124	1	Turbocharger ASM
10	99-2115	3	Stud
11	99-2117	1	Clamp
12	99-2116	1	Hose-Air
13	70-3440	1	Clamp
14	99-2121	1	Gasket-Pipe, Drain
15	99-2118	1	Pipe-Drain, Oil
16	70-3090	2	Clamp-Hose
17	99-2123	1	Hose-Oil
18	70-5310	1	Elbow
19	99-2103	1	Elbow-Inlet, Air
20	99-1811	4	Bolt w/Washer
21	99-2104	1	Gasket-Heater , Air
22	99-1828	16	Bolt w/Washer
23	99-2101	1	Manifold Inlet ASM
24	99-2102	1	Gasket-Manifold, Inlet
25	99-2122	2	Bolt w/Washer
26	99-2109	8	Spacer

Ref. No.	Part No.	Qty.	Description
27	51-7250	8	Washer-Spring
28	99-2110	8	Washer
29	99-2111	8	Bolt w/Washer
30	99-2106	1	Pipe-Exhaust
31	60-7120	8	Nut
32	99-2107	1	Gasket-Exhaust, Manifold
33	99-2108	1	Manifold Exhaust ASM
34	99-2105	1	Gasket-Exhaust
35	70-3480	4	Stud
36	99-2114	1	Gasket-Exhaust
37	99-2112	4	Stud
38	99-2113	8	Nut-Lock



T-2959

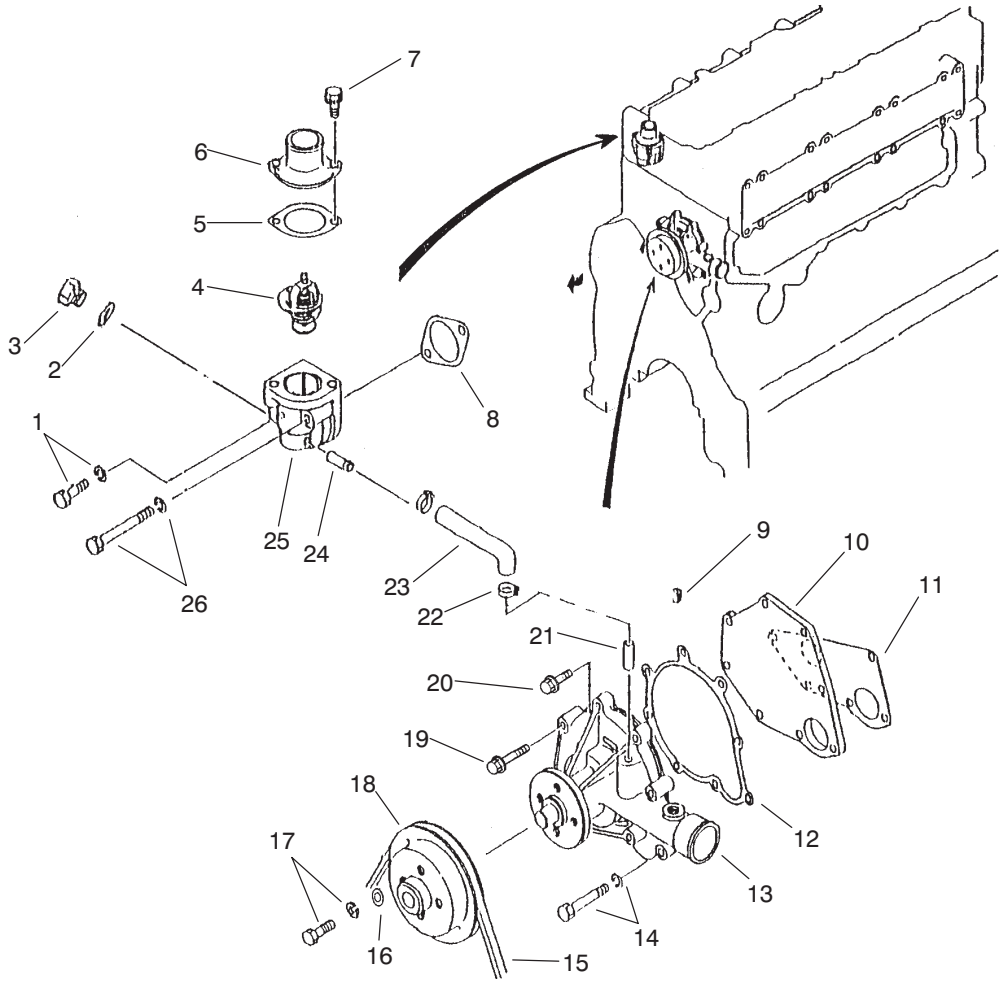
Oil System Assembly

Ref. No.	Part No.	Qty.	Description
1	99-2139	1	Gasket-Cover , Side
2	99-2136	1	Element ASM
3	99-2141	2	O-Ring
☆4		1	Case ASM
5	99-181 1	16	Bolt w/Washer
6	99-2138	4	Bolt-Cooler , Oil
7	99-2142	4	Gasket
8	99-2131	2	O-Ring
9	99-2140	1	Gasket
10	99-2144	1	Union-Filter , Oil
11	99-2143	1	Cartridge-Oil
12	93-3417	1	Gasket
13	99-2132	1	Valve
14	99-2134	1	Gasket
15	99-2133	1	Valve
16	99-2131	1	O-Ring
17	99-2130	1	Strainer-Oil
18	99-1830	2	Bolt w/Washer
☆19		1	Rotor-Outer
20	99-181 1	4	Bolt w/Washer
21	99-2129	1	Nut-Jam
22	51-6390	1	Washer-Spring
☆23		1	Case-Pump, Oil
☆24		2	Pin-Dowel
☆25		1	Shaft-Pump, Oil
☆26		1	Rotor-Inner

Ref. No.	Part No.	Qty.	Description
☆27		1	Pin
28	99-2128	1	O-Ring
*	99-2127	1	Oil Pump ASM (Incl. Ref.#19 & 23-27)
*	99-2137	1	Case ASM
*	99-2135	1	Oil Cooler ASM (Incl. Ref. #2-4 & 6-7)

* Not Illustrated

☆ Not serviced separately



T-2960

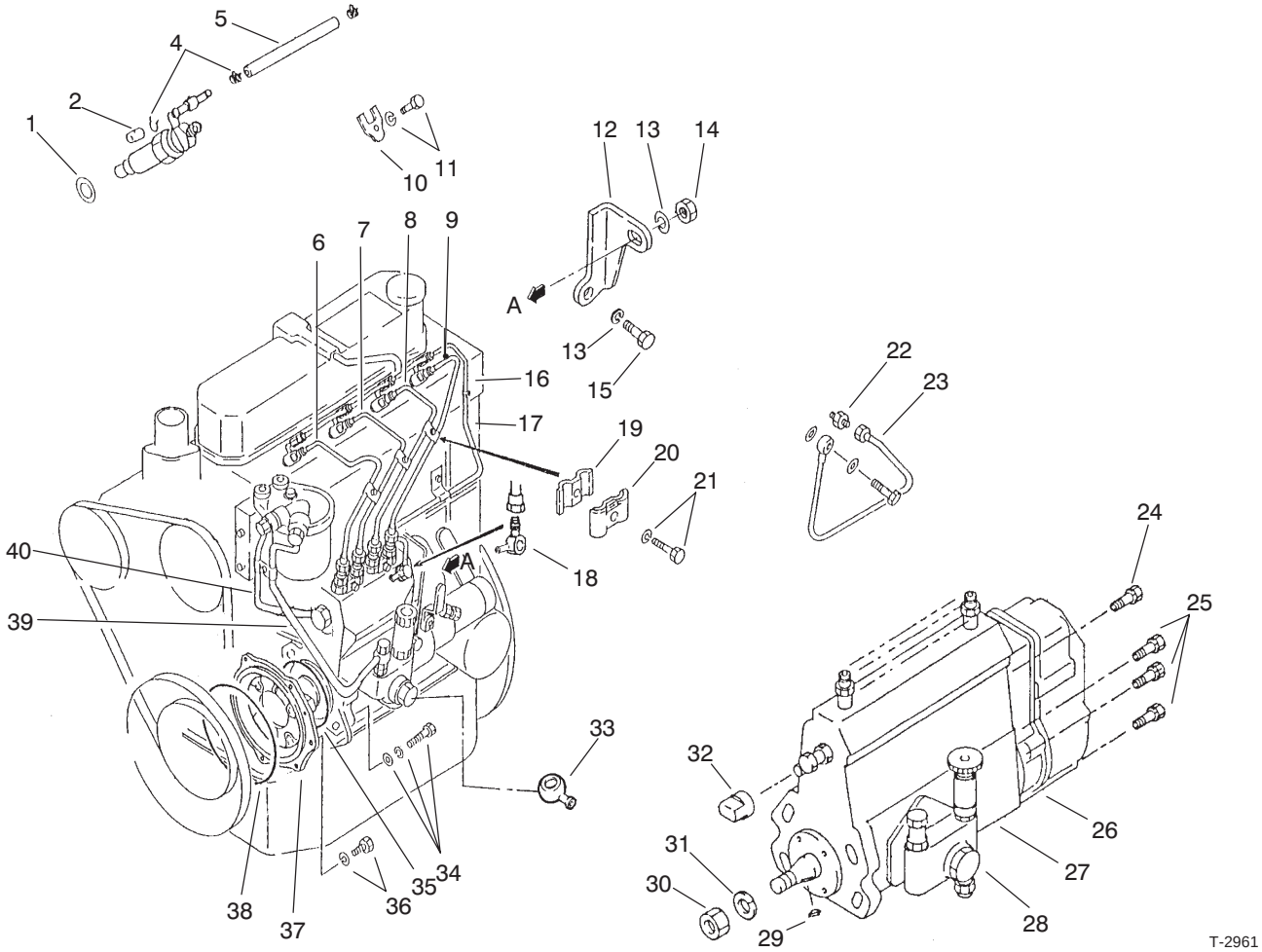
Cooling System Assembly

Ref. No.	Part No.	Qty.	Description
1	99-2150	1	Bolt w/Washer
2	99-1813	2	Gasket
3	99-1812	2	Plug-Drain
4	99-2155	1	Thermostat
5	99-2154	1	Gasket-Thermostat
6	99-2153	1	Cover-Thermostat
7	92-2133	2	Bolt-Flange
8	51-7210	1	Gasket
☆9		1	Plug-Tapered
10	99-2146	1	Cover-Pump, Water
11	99-2148	1	Gasket-Pump, Water
12	99-2147	1	Gasket-Cover , Pump
☆13		1	Case-Pump, Water
14	99-2150	5	Bolt w/Washer
15	99-2159	1	Belt-Edge, Raw
16	51-5160	4	Washer
17	99-2160	4	Bolt w/Washer
18	99-2149	1	Pulley-Pump, Water
19	99-2151	1	Bolt-Flange
20	92-2133	2	Bolt-Flange
☆21		1	Pipe-Water
22	93-4297	2	Clamp-Hose
23	99-2152	1	Hose-By-Pass
☆24		1	Pipe
☆25		1	Case
26	99-2158	1	Bolt w/Washer

Ref. No.	Part No.	Qty.	Description
*	99-2157	1	Thermostat ASM (Incl. Ref.# 4-7 & 24-25)
*	99-2145	1	Water Pump ASM (Incl. Ref. #9-10, 12-13 & 19-21)
*	99-2156	1	Thermostat Case ASM (Incl. Ref. #24-25)

* Not Illustrated

☆ Not serviced separately



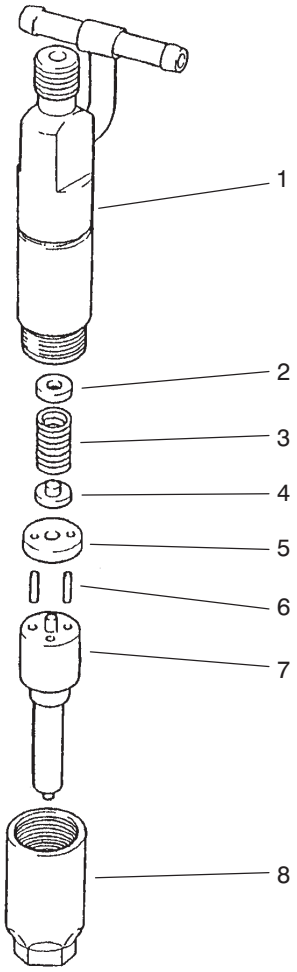
Fuel Injection Pump Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	98-7375	4	Gasket-Nozzle
2	99-2167	1	Cap
4	99-2169	7	Clip
*	99-2168	3	Oil Hose ASM (Incl. Ref. #4 & 5)
☆5		3	Hose-Fuel
6	99-2172	1	Pipe-Injection No. 1
7	99-2173	1	Pipe-Injection No. 2
8	99-2174	1	Pipe-Injection No. 3
9	99-2175	1	Pipe-Injection No. 4
10	99-2165	4	Support-Nozzle
11	99-2166	4	Bolt w/Washer
12	99-2170	1	Bracket-Pump
13	51-7250	2	Washer-Spring
14	60-7120	1	Nut
15	60-7280	1	Bolt
16	99-2178	1	Fuel Hose ASM
17	99-2176	1	Pipe-Return, Fuel
18	99-2177	1	Joint-Eye
19	56-0750	3	Clamp (B)
20	56-0760	3	Clamp (A)
21	99-2179	3	Bolt-w/W asher
22	99-2185	1	Connector
23	99-2184	1	Pipe-Oil
24	99-2164	1	Bolt-w/W asher
25	70-6530	6	Bolt-w/W asher

Ref. No.	Part No.	Qty.	Description
☆26		1	Governor ASM
☆27		1	Injection Body ASM
28	99-2163	1	Feed Pump ASM
29	70-6880	1	Key-W oodruff
30	70-6780	1	Nut-Hex
31	70-6680	1	Washer-Spring
32	99-2162	1	Cover-Control
33	99-2186	1	Color
34	99-2183	4	Bolt-w/W ashers
35	99-2182	1	O-Ring
36	99-181 1	1	Bolt-w/W asher
37	99-2171	1	Flange-Pimp, Injection
38	99-1865	1	O-Ring
39	99-2181	1	Hose
40	99-2180	1	Hose
*	99-2161	1	Injection Pump ASM (Incl. Ref. #24-32)

* Not illustrated

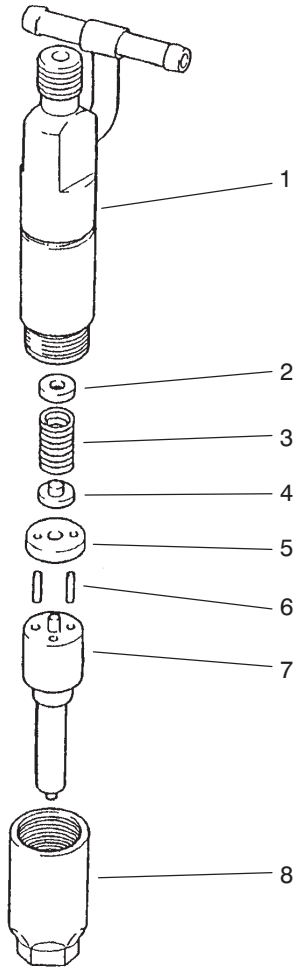
☆ Not serviced separately



T-2962

Nozzle Assembly

Ref. No.	Part No.	Qty.	Description
1	99-2779	4	Body ASM
2	70-4860	AR	Washer-1.000mm Thick
2	70-4870	AR	Washer-1.050mm Thick
2	70-4880	AR	Washer-1.100mm Thick
2	99-2190	AR	Washer-1.150mm Thick
2	99-2191	AR	Washer-1.200mm Thick
2	99-2192	AR	Washer-1.250mm Thick
2	99-2193	AR	Washer-1.300mm Thick
2	99-2194	AR	Washer-1.350mm Thick
2	99-2195	AR	Washer-1.400mm Thick
2	99-2196	AR	Washer-1.450mm Thick
2	99-2197	AR	Washer-1.500mm Thick
2	99-2198	AR	Washer-1.550mm Thick
2	99-2199	AR	Washer-1.600mm Thick
2	99-2200	AR	Washer-1.650mm Thick
2	99-2201	AR	Washer-1.700mm Thick
2	99-2202	AR	Washer-1.750mm Thick
2	99-2203	AR	Washer-1.800mm Thick
2	70-4890	AR	Washer-1.275mm Thick
2	70-4900	AR	Washer-1.325mm Thick
2	99-2204	AR	Washer-1.375mm Thick
2	99-2205	AR	Washer-1.425mm Thick
2	99-2206	AR	Washer-1.475mm Thick
2	70-4920	AR	Washer-0.950mm Thick
2	99-2207	AR	Washer-0.700mm Thick
2	99-2217	AR	Washer-0.750mm Thick



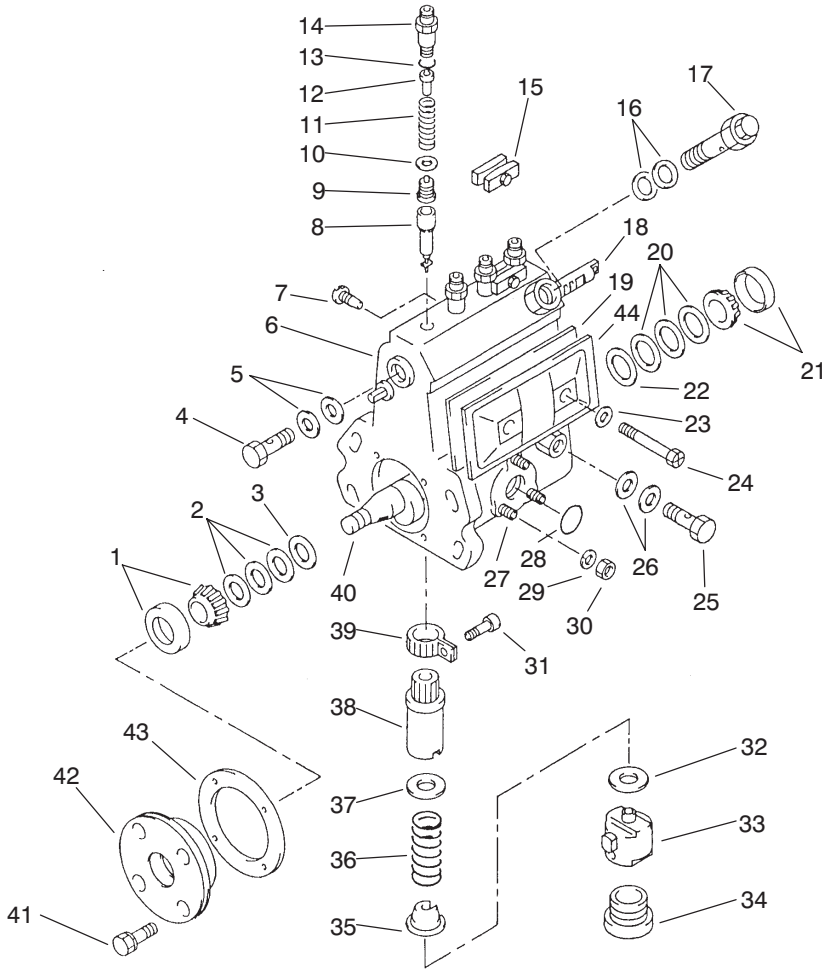
T-2962

Nozzle Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
2	99-2208	AR	Washer-0.800mm Thick
2	99-2209	AR	Washer-0.850mm Thick
2	99-2210	AR	Washer-0.900mm Thick
2	99-2211	AR	Washer-0.975mm Thick
2	99-2212	AR	Washer-1.025mm Thick
2	99-2213	AR	Washer-1.075mm Thick
2	99-2214	AR	Washer-1.125mm Thick
2	99-2215	AR	Washer-1.175mm Thick
2	99-2216	AR	Washer-1.225mm Thick
3	99-2281	4	Spring-Pressure
4	99-2280	4	Pin-Pressure
5	99-2218	4	Packing
6	70-6830	8	Pin-Straight
7	99-2189	4	Nozzle Tip ASM
8	70-4840	4	Nut-Retaining
*	99-2187	4	Nozzle ASM (Incl. Ref. #1-8)

Ref. No.	Part No.	Qty.	Description
*	99-2188	4	Holder ASM (Incl. Ref. #1-6 & 8)

* Not illustrated



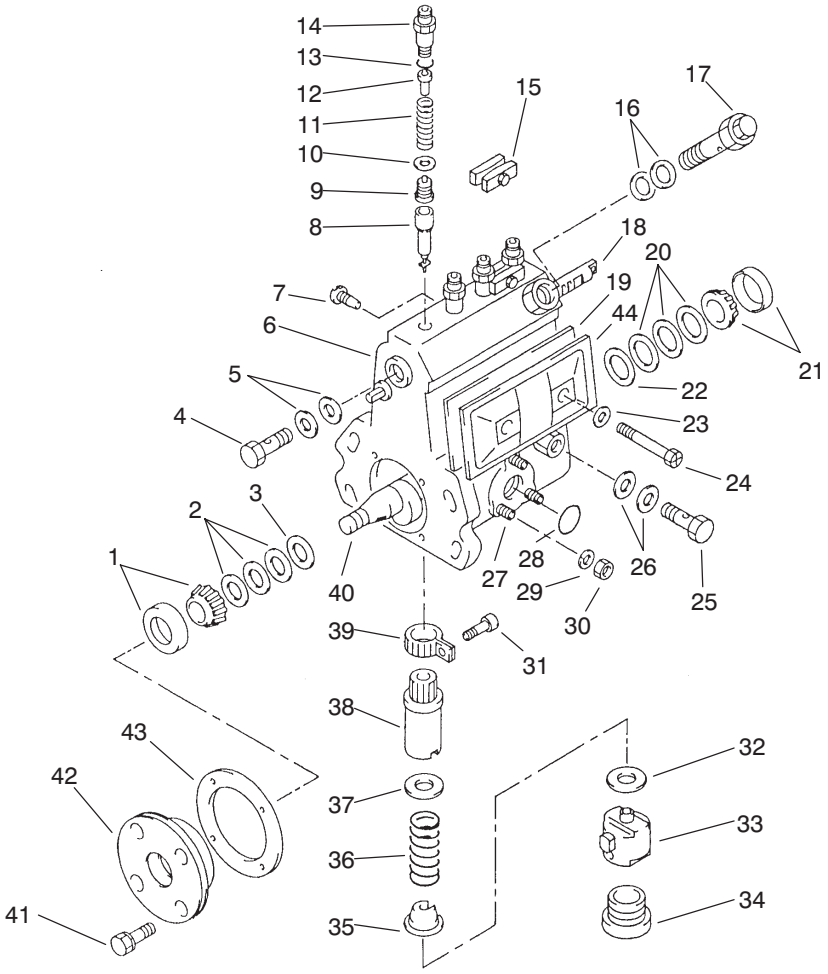
T-2963

Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	70-6840	1	Bearing-Roller
2	70-3780	AR	Shim-0.10mm Thick
2	70-3790	AR	Shim-0.15mm Thick
2	70-3800	AR	Shim-0.30mm Thick
2	70-3810	AR	Shim-0.50mm Thick
2	99-2240	AR	Shim-1.00mm Thick
2	99-2241	AR	Shim-1.50mm Thick
2	99-2242	AR	Shim-0.12mm Thick
2	99-2243	AR	Shim-0.14mm Thick
2	99-2244	AR	Shim-0.18mm Thick
2	99-2245	AR	Shim-0.03mm Thick
3	70-3700	1	Ring-Adjust
4	70-6940	1	Screw-Hollow
5	70-3870	2	Washer-Union
☆6		1	Housing-Pump
7	99-2234	1	Screw-Guide, Rack
8	99-2224	4	Element-Pump
9	99-2223	4	Valve-Delivery
10	70-3530	4	Gasket-V alve
11	99-2222	4	Spring-V alve
12	99-2221	4	Stopper-V alve
13	70-6910	4	O-Ring
14	99-2220	4	Holder-V alve
15	70-3880	2	Plate-Set
16	70-3860	2	Washer-Union
17	99-2239	1	Valve ASM

Ref. No.	Part No.	Qty.	Description
18	99-2233	1	Rack-Control
19	70-3930	1	Gasket-Plate, Cover
20	70-3710	AR	Shim-0.10mm Thick
20	70-3720	AR	Shim-0.12mm Thick
20	70-3730	AR	Shim-0.14mm Thick
20	70-3740	AR	Shim-0.16mm Thick
20	70-3750	AR	Shim-0.18mm Thick
20	70-3760	AR	Shim-0.50mm Thick
20	70-3770	AR	Shim-0.30mm Thick
20	99-2228	AR	Shim-1.00mm Thick
20	99-2229	AR	Shim-1.50mm Thick
20	99-2230	AR	Shim-2.00mm Thick
20	99-2231	AR	Shim-0.03mm Thick
21	70-6850	1	Bearing-Roller
22	70-3690	1	Ring-Adjusting
23	70-3900	2	Packing
24	70-3950	2	Screw
25	70-6930	1	Screw-Hollow
26	70-3910	2	Washer-Nipple
27	70-6720	3	Stud
28	70-6900	1	O-Ring
29	99-2238	3	Washer-Spring
30	99-2237	3	Nut-Hex
31	70-3570	4	Screw-Clamp, Pinion
32	70-3970	AR	Shim-0.60mm Thick
32	70-3980	AR	Shim-0.70mm Thick

☆ Not serviced separately



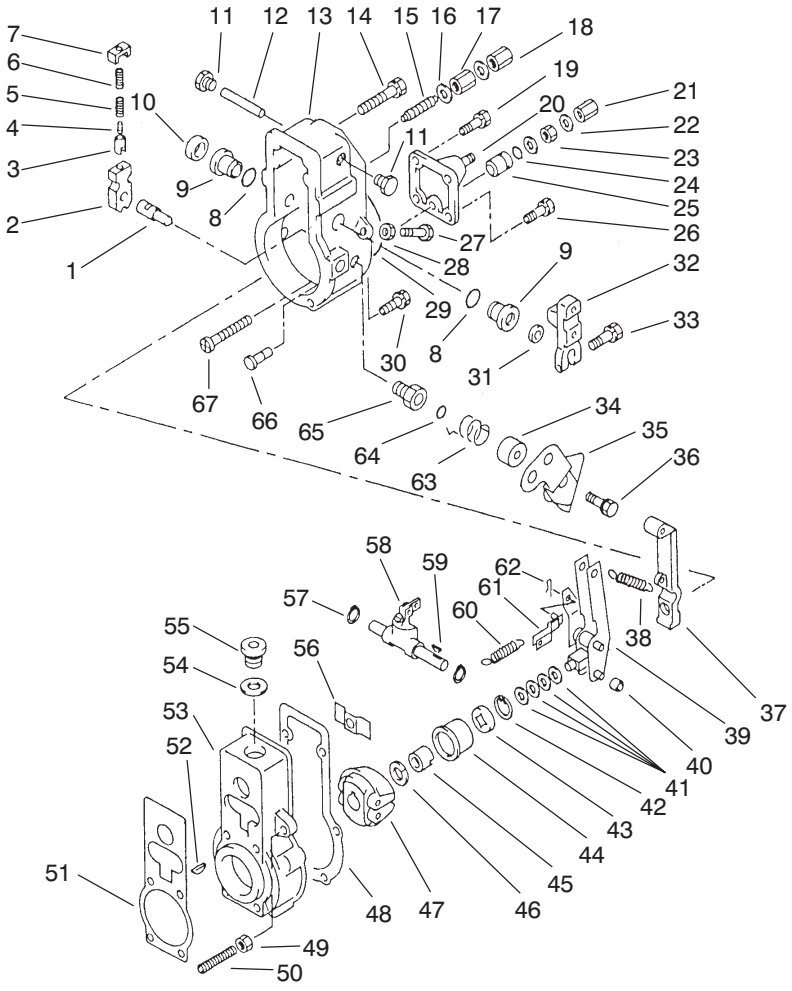
T-2963

Injection Pump Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
32	70-3990	AR	Shim-0.80mm Thick
32	70-4000	AR	Shim-0.90mm Thick
32	70-4010	AR	Shim-1.00mm Thick
32	70-4020	AR	Shim-1.10mm Thick
32	70-4030	AR	Shim-1.20mm Thick
32	70-4040	AR	Shim-1.30mm Thick
32	70-4050	AR	Shim-1.40mm Thick
32	70-4060	AR	Shim-0.10mm Thick
32	70-4070	AR	Shim-0.20mm Thick
32	70-4080	AR	Shim-0.30mm Thick
32	70-4090	AR	Shim-0.40mm Thick
32	70-4100	AR	Shim-0.50mm Thick
32	70-4110	AR	Shim-0.15mm Thick
32	99-2236	AR	Shim-0.13mm Thick
33	70-3630	4	Tappet
34	70-3670	4	Plug-Screw
35	70-3610	4	Sheet-Spring, Lower
36	99-2227	4	Spring-Plunger
37	99-2226	4	Sheet-Spring, Upper
38	99-2225	4	Sleeve-Control
39	70-3560	4	Pinion-Control
40	70-3680	1	Camshaft
41	70-6540	4	Bolt-w/Washer
42	70-3820	1	Cover-Bearing
43	99-2232	1	Gasket-Cover, Bearing
44	70-3940	1	Cover-Plate

Ref. No.	Part No.	Qty.	Description
*	99-2235	1	Pump Cover ASM (Incl. Ref.#23-24 &44)

* Not illustrated

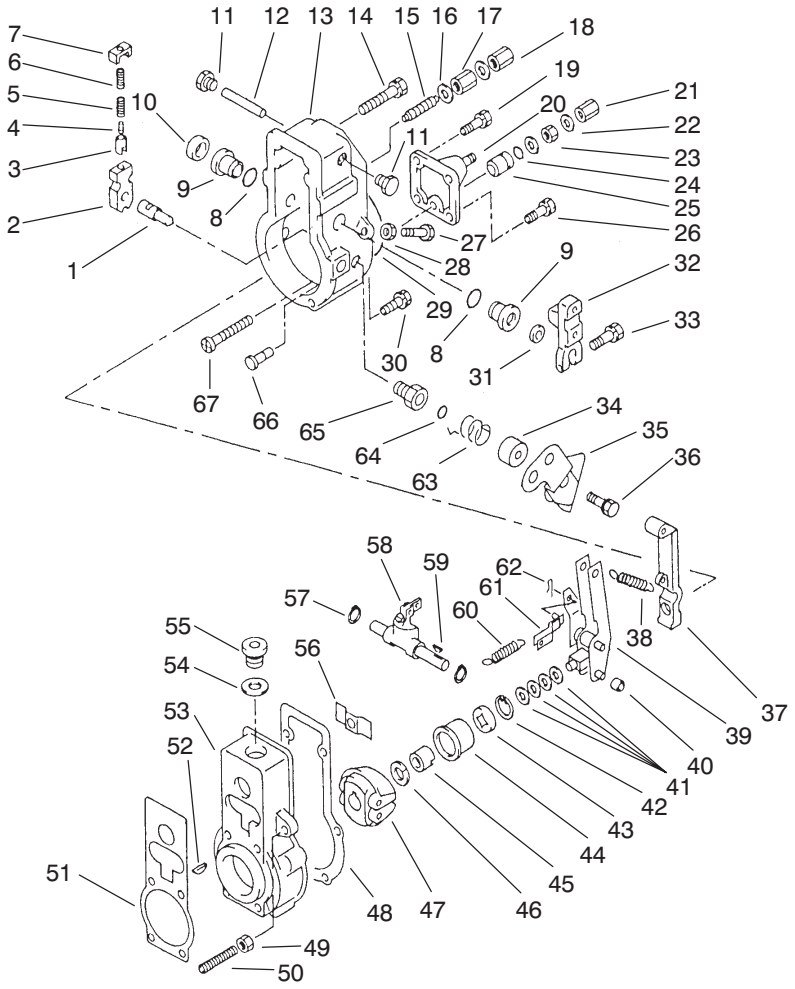


T-2964

Governor Assembly

Ref. No.	Part No.	Qty.	Description
1	70-4480	1	Shaft-Governor
2	70-4470	1	Lever-Support
3	70-4490	1	Cup-Spring
4	70-4510	1	Spring
5	70-4520	1	Spring
6	70-4500	1	Spring
7	70-4460	1	Plate-Cap
8	70-6510	2	O-Ring
9	70-4230	2	Bushing-Lever
10	70-4580	1	Cap-Lever
11	70-4360	2	Plug-Screw
12	70-4350	1	Shaft-Lever
13	70-4400	1	Cover-Governor
14	70-6740	2	Bolt w/Washer
15	99-2251	1	Capsule
16	70-3890	2	Washer-Nipple
17	70-4310	1	Nut-Lock, Adapter
18	70-4440	1	Nut-Cap
19	70-6540	2	Bolt w/Washer
20	99-2254	1	Plate-Cover
21	99-2248	1	Nut-Cap
22	70-6690	2	Washer-Plate
23	99-2260	1	Nut-Hex
24	70-6500	1	O-Ring
25	70-4330	1	Bushing
26	99-2255	2	Bolt w/Washer

Ref. No.	Part No.	Qty.	Description
27	70-4430	1	Screw-Adjusting
28	70-6560	1	Nut w/Hole
29	70-6790	1	Packing-Plate, Rubber
30	70-6750	4	Bolt w/Washer
31	70-6920	1	Seal-Oil
32	99-2253	1	Lever-Adjusting
33	70-6730	1	Bolt w/Washer
34	70-4530	1	Cover-Spring
35	70-4570	1	Lever-Stop
36	70-6520	1	Bolt w/Washer
37	99-2249	1	Lever-Tension
38	70-4370	1	Spring-Control
39	70-4320	1	Tension Control ASM
40	70-4540	1	Slider-Supporting
41	70-6610	AR	Washer-Plate 0.2mm Thick
41	70-6620	AR	Washer-Plate 0.3mm Thick
41	70-6630	AR	Washer-Plate 0.4mm Thick
41	70-6640	AR	Washer-Plate 0.1mm Thick
41	70-6650	AR	Washer-Plate 1.0mm Thick
42	70-6490	1	Ring-Snap
43	70-4200	1	Plate

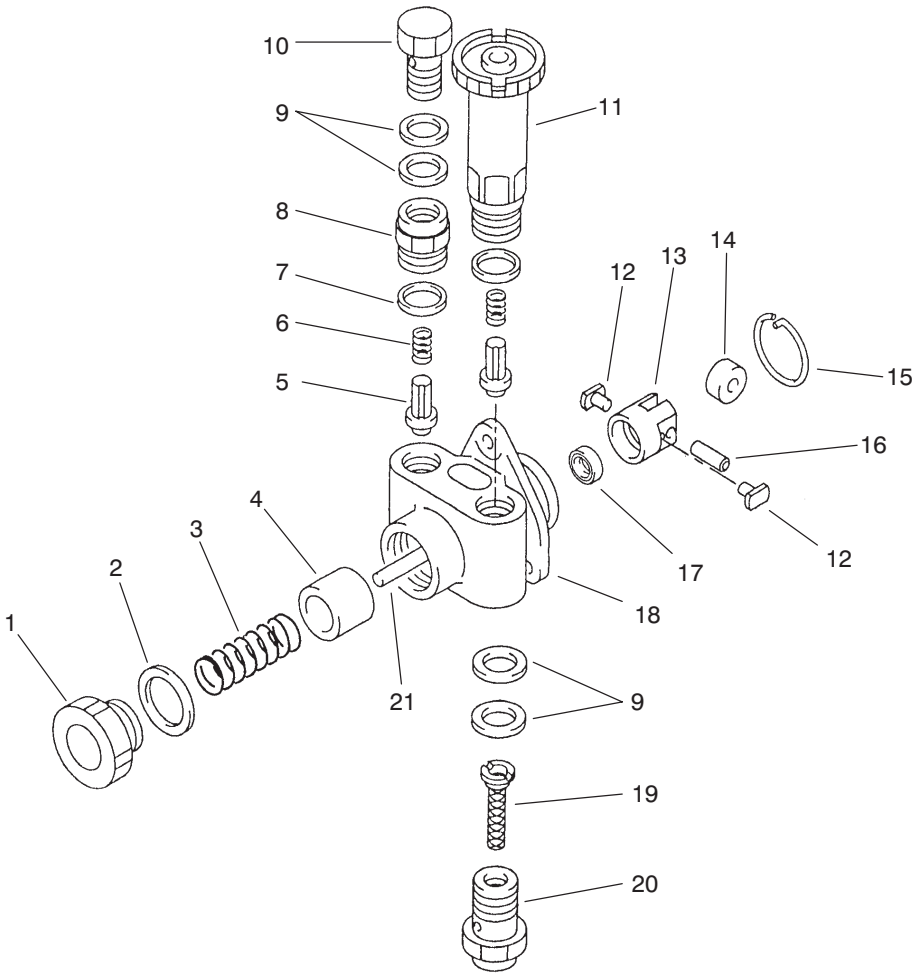


T-2964

Governor Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
44	70-4190	1	Sleeve-Governor (Incl. Ref. #42-43)
45	70-4180	1	Nut-Round
46	70-6670	1	Washer-Spring
47	70-4170	1	Flyweight ASM
48	99-2258	1	Gasket
49	99-2250	1	Nut-Hex
50	99-2247	1	Screw-Adjust
51	99-2259	1	Gasket
52	70-6870	1	Key-W oodruff
53	99-2246	1	Housing-Governor
54	70-6710	1	Washer-Plate, Copper
55	70-4590	1	Plug-Screw
56	70-4210	1	Plate
57	70-6810	2	Washer-Snap
58	99-2252	1	Lever-Swivelling
59	70-6860	1	Key-W oodruff
60	70-4380	1	Spring-Start
61	70-4340	1	Shackle
62	70-6480	1	Pin-Split
63	99-2257	1	Spring
64	70-6890	1	O-Ring
65	99-2256	1	Bushing-Bearing
66	70-4410	1	Pin-Stop
67	70-4390	1	Screw-Adjusting

Ref. No.	Part No.	Qty.	Description



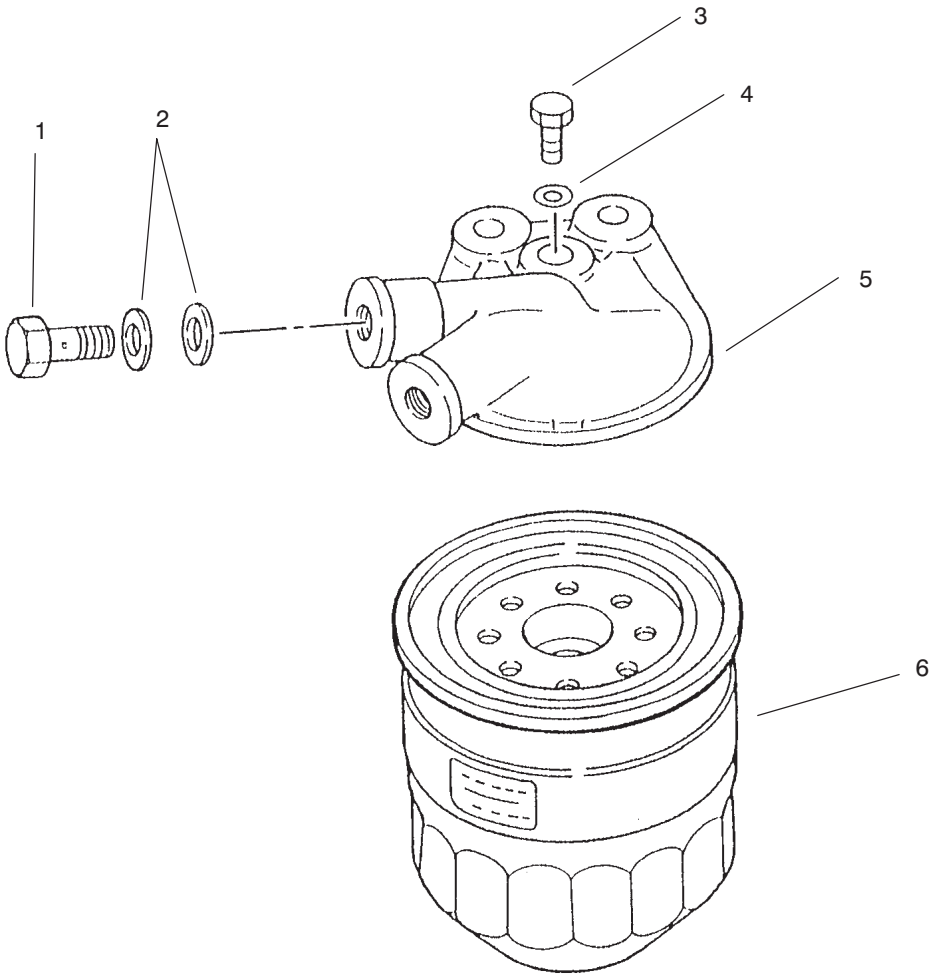
T-2965

Feed Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	70-4780	1	Plug-Chamber
2	70-6700	1	Washer
3	70-4770	1	Spring-Piston
4	99-2263	1	Piston
5	70-4610	2	Valve-Check
6	70-4620	2	Spring-Valve
7	70-4630	2	Gasket-Plug
8	70-4640	1	Support-Valve
9	99-2262	4	Washer-Union
10	70-6940	1	Screw-Hollow
11	70-4650	1	Pump-Priming
12	70-4760	2	Block-Sliding
13	70-4730	1	Tappet-Pump, Feed
14	70-4740	1	Roller-Tappet
15	70-6820	1	Ring-Snap
16	70-4750	1	Pin-Roller
17	99-2282	1	Seal-Oil
18	70-4600	1	Housing ASM (Incl. Ref. #17 & 20)
19	70-4790	1	Filter-Fuel
20	70-4800	1	Screw-Hollow
21	99-2261	1	Rod-Push
*	70-5700	1	Feed Pump ASM (Incl. Ref. #1-21)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated



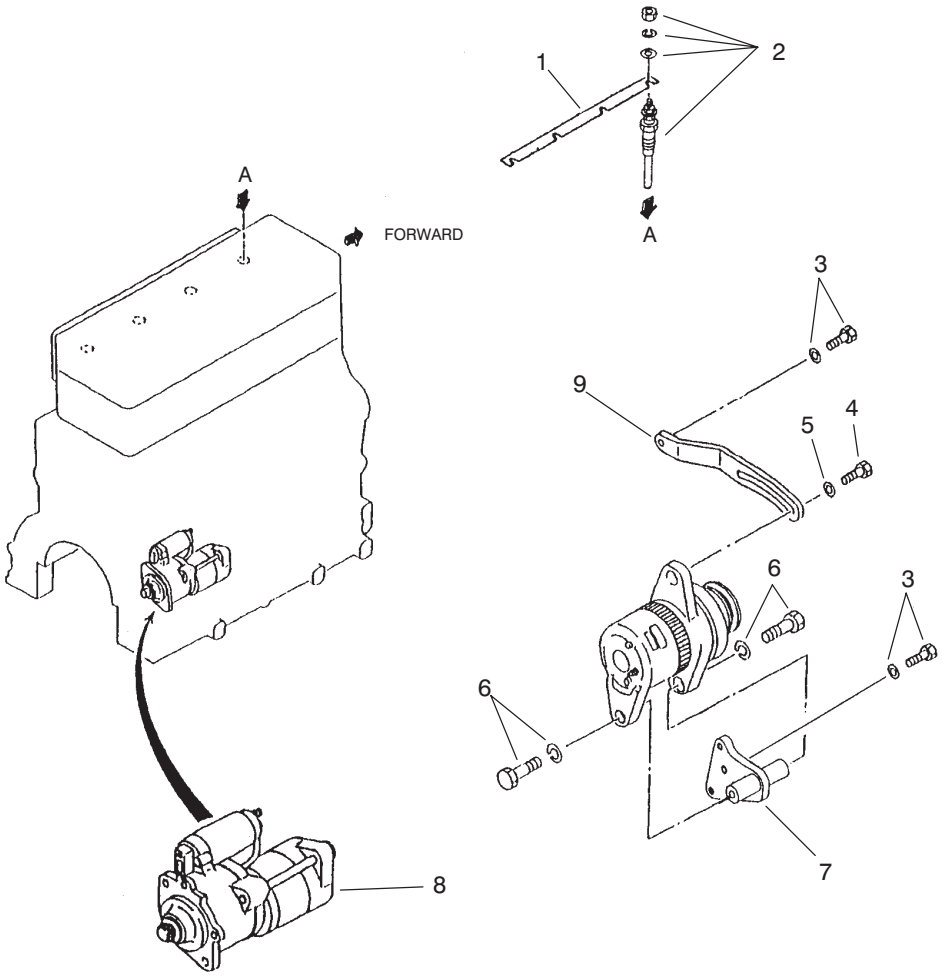
T-2966

Fuel Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	70-3250	2	Bolt-Connector
2	51-5390	4	Packing-Connector
3	70-3240	1	Plug-Air
4	51-5840	1	Washer-Sealing
5	70-5720	1	Bracket
6	70-5730	1	Cartridge ASM
*	70-5710	1	Fuel Filter ASM (Incl. Ref. #1-6)

Ref. No.	Part No.	Qty.	Description

* Not Illustrated

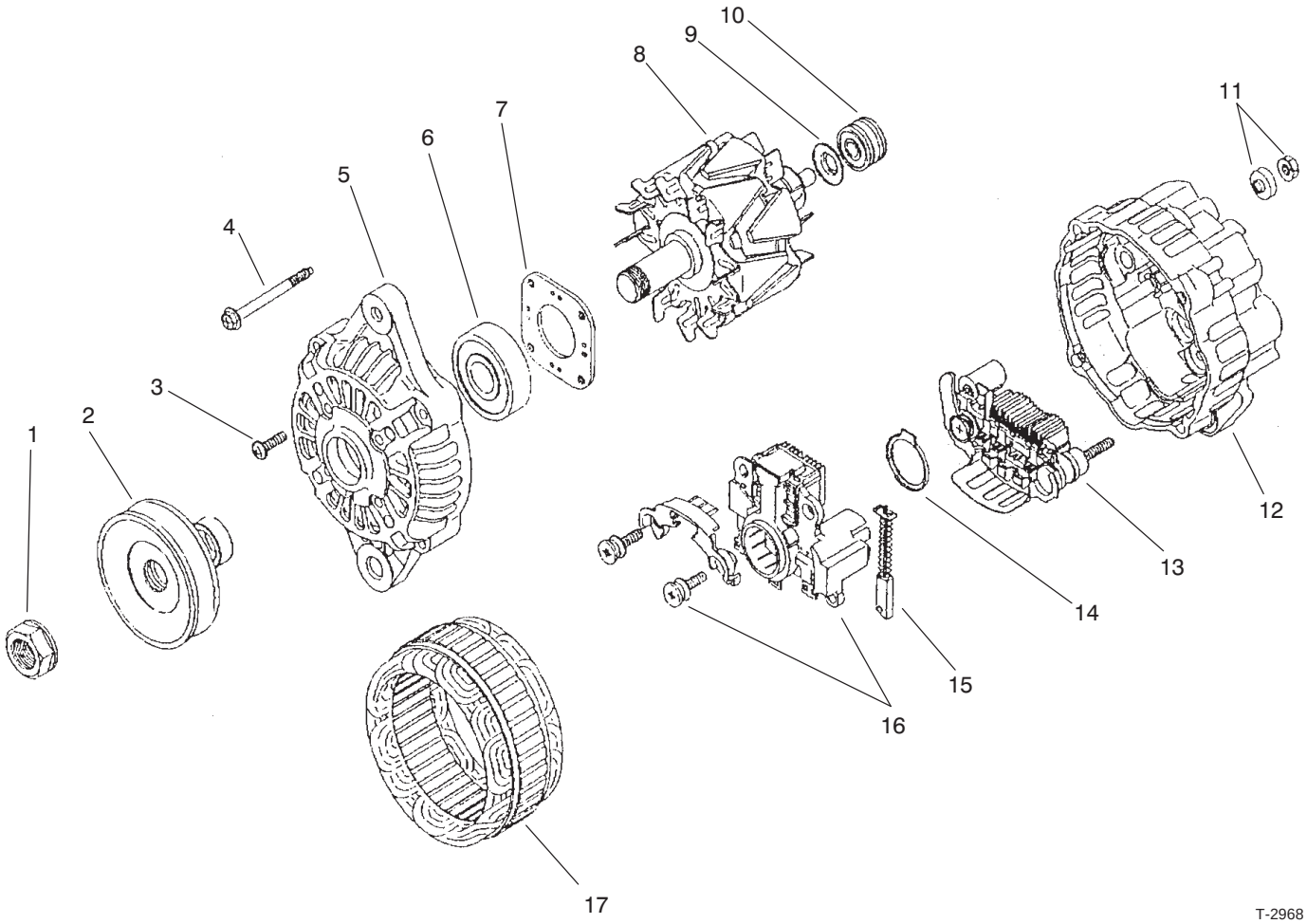


T-2967

Electrical Components Assembly

Ref. No.	Part No.	Qty.	Description
1	99-2265	1	Plate-Connection
2	99-2266	4	Plug-Glow
3	99-1811	2	Bolt w/Washer
4	67-4660	1	Bolt-Flange
5	54-8660	1	Washer
6	99-1857	2	Bolt w/Washer
7	99-2268	1	Bracket-Alternator
8	99-2267	1	Starter ASM
9	99-2270	1	Plate-Adjusting

Ref. No.	Part No.	Qty.	Description



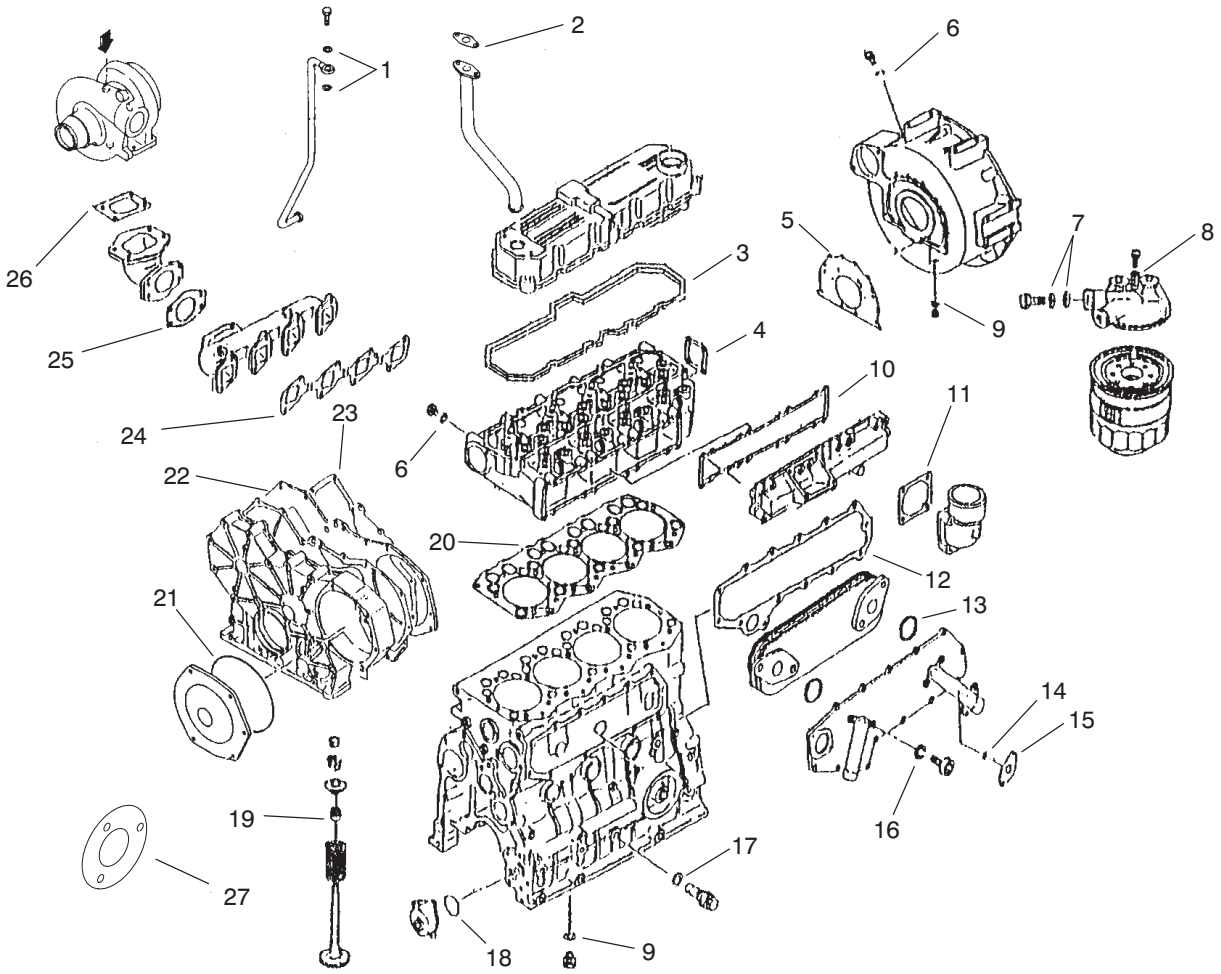
Alternator Assembly

Ref. No.	Part No.	Qty.	Description
1	93-3578	1	Nut
2	99-2271	1	Pulley ASM
3	93-3582	1	Set-Screw
4	93-3580	1	Set-Bolt
☆5		1	Front Cover ASM
6	93-3583	1	Bearing-Front
☆7		1	Plate
☆8		1	Rotor
☆9		1	Washer
10	93-3585	1	Bearing-Rear
11	99-2275	1	Set-Nut
☆12		1	Rear Cover ASM
13	99-2274	1	Rectifier ASM
☆14		1	Ring-Retaining
15	93-3589	2	Brush
☆16		1	Regulator ASM
17	93-3586	1	Stator ASM
*	99-2269	1	Alternator ASM (Incl. Ref. #1-17)
*	99-2272	1	Front Bracket ASM (Incl. Ref. #3 & 5-7)
*	93-3584	1	Rotor ASM (Incl. Ref. #8-10)
*	99-2273	1	Rear Bracket ASM (Incl. Ref. #11-16)

Ref. No.	Part No.	Qty.	Description
*	93-3588	1	Set-Regulator (Incl. Ref. #14-16)

* Not Illustrated

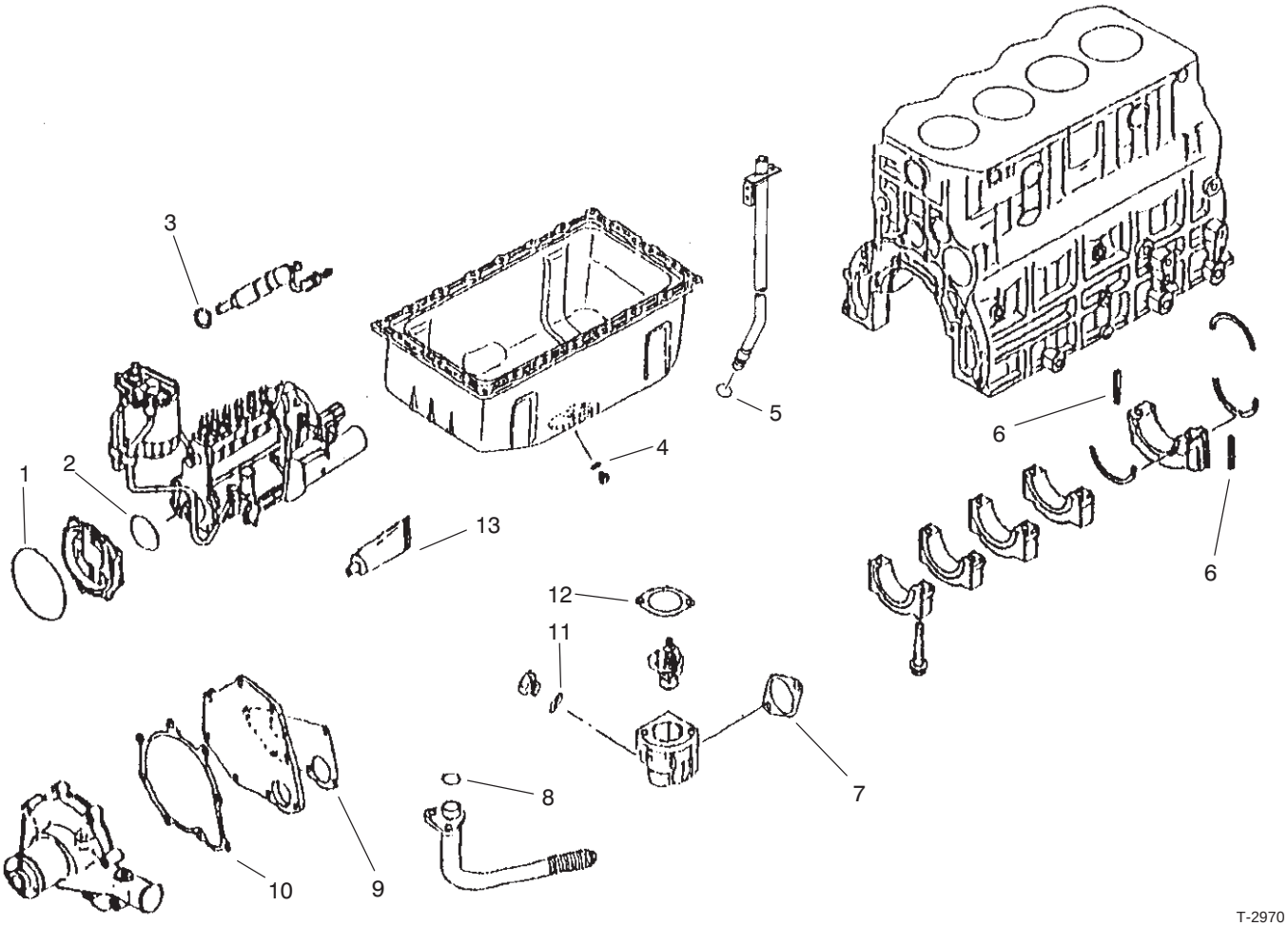
☆ Not serviced separately



T-2969

Overhaul Gasket Kit Assembly

Ref. No.	Part No.	Qty.	Description
1	51-5060	2	Gasket
2	99-2104	1	Gasket
3	99-1827	1	Gasket-Rocker
4	99-1809	1	Gasket-Head, Cylinder
5	99-1855	1	Gasket-Rear
6	99-1813	2	Gasket
7	51-5390	10	Washer-Sealing
8	51-5840	1	Washer-Sealing
9	99-2134	1	Gasket
10	99-2102	1	Gasket-Manifold, Inlet
11	99-2104	1	Gasket
12	99-2139	1	Gasket-Cover , Side
13	99-2141	2	O-Ring
14	99-2131	3	O-Ring
15	99-2140	1	Gasket
16	99-2142	4	Gasket
17	93-3417	1	Gasket
18	99-2128	1	O-Ring
19	99-1817	8	Seal-Stem, Valve
20	99-1807	1	Gasket-Head, Cylinder
21	99-1865	2	O-Ring
22	99-1862	1	Gasket-Rear
23	99-1837	1	Gasket-Plate, Front
24	99-2105	1	Gasket-Manifold, Exhaust
25	99-2107	1	Gasket-Exhaust
26	99-2114	1	Gasket-Exhaust
27	99-2277	1	Gasket



T-2970

Overhaul Gasket Kit Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
1	99-1865	2	O-Ring
2	99-2182	1	O-Ring
3	98-7375	4	Gasket-Nozzle
4	68-6430	1	Gasket
5	99-1878	1	O-Ring
6	99-1853	2	Seal-Side
7	51-7210	1	Gasket
8	99-2131	3	O-Ring
9	99-2148	1	Gasket-W ater
10	99-2147	1	Gasket-Cover , Pump
11	99-1813	2	Gasket
12	99-2154	1	Gasket-Thermostat
13	93-3599	1	Gasket-Liquid

Ref. No.	Part No.	Qty.	Description

Maintenance Record

Date								


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