Form No. 3328–625

Reelmaster® 5200–D

2 Wheel Drive Traction Unit

Model No. 03540—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.

© The TORO Company — 2002
All Rights Reserved

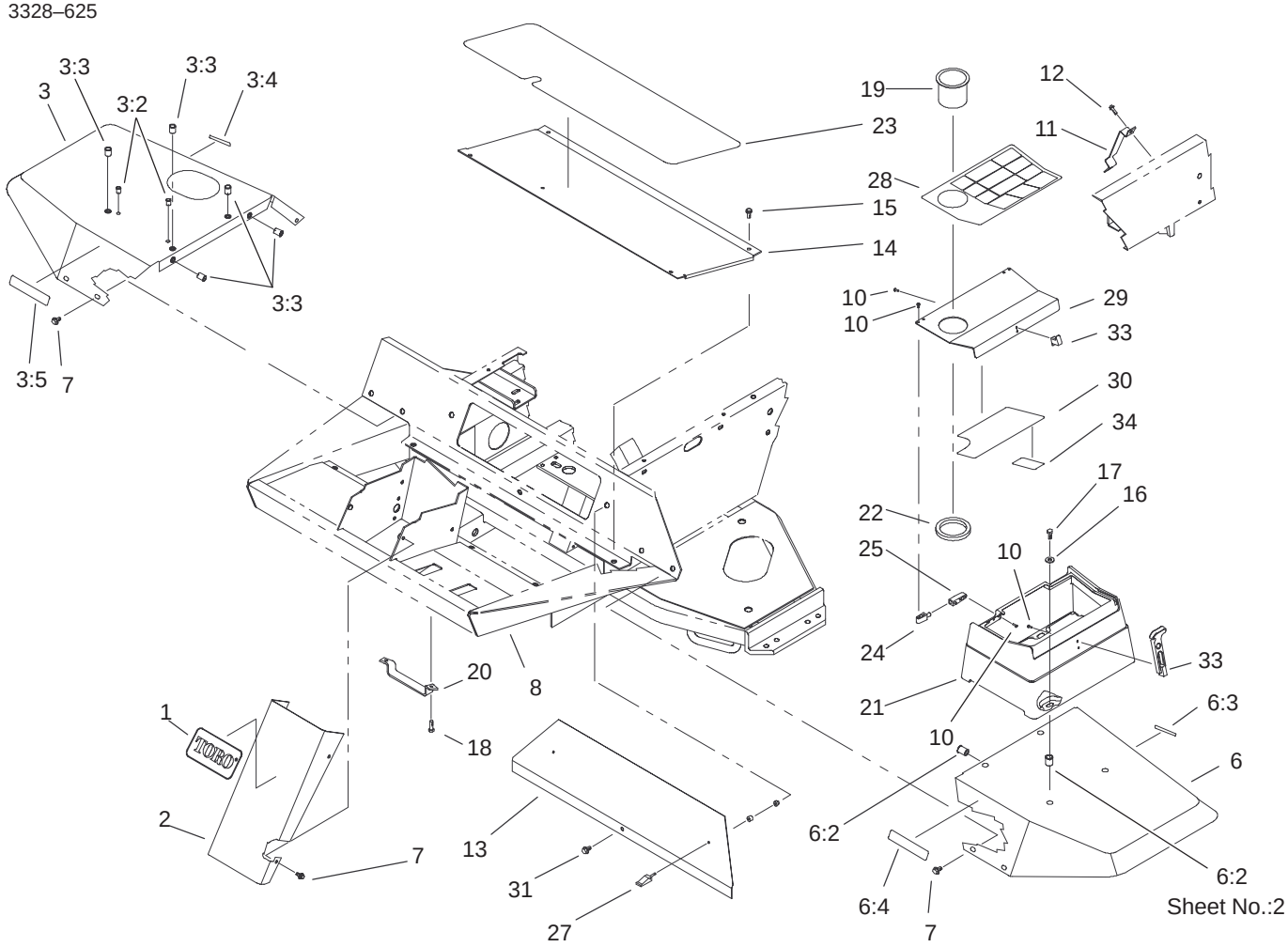
Contents

Description	Page
Frame and Body Assembly	4
Frame Assembly No. 100–3870	5
Steering Tower Assembly	6
Power Steering Unit No. 75–0600	7
Traction and Brake Pedals Assembly	8
Seat Frame and Throttle Assembly	9
Seat and Suspension Assembly	10
Seat Suspension Assembly No. 75–3000	11
Control Console Assembly	12
Hydraulic Filter and Reservoir Assembly	14
Fuel Tank Assembly	16
Front Axle Assembly	17
Transmission Assembly	18
Transmission Assembly No. 75–0012	19
Traction Control Assembly	21
Gear Pump Installation Assembly	22
Gear Pump Assembly No. 98–9796	23
Engine Installation Assembly	24
Muffler and Pump Drive Assembly	25
Engine Components Assembly	26
Air Cleaner Assembly No. 98–4517	27
Water/Fuel Separator Assembly No. 98–9305	28
Fan Drive Assembly	29
Radiator Assembly	30
Oil Cooler/Radiator Assembly	31
Hood Assembly	32
Hydraulic Control Block and Hoses Assembly	33
Hydraulic Manifold Assembly No. 98–4579	34
Front Hydraulic Manifold Assembly	35
Rear Hydraulic Manifold Assembly	36
Reel Motors Assembly	37
Reel Motor Assembly No. 100–6426	38
Front Lift Circuit Assembly	39
Hydraulic Cylinder Assembly No. 93–9310	40
Hydraulic Cylinder Assembly No. 99–6986	41
Front Lift Arm Assembly	42
Rear Lift Circuit Assembly	43
Hydraulic Cylinder Assembly No. 93–9311	44
Rear Lift Arm Assembly	45
Rear Axle Support Assembly	46
2 Wheel Drive Axle Assembly	47
Rear Axle Assembly	48
Hydraulic Cylinder No. 75–1200	49
Axle Assembly No. 99–6981–03	50
Brake Assembly	52
Hydraulic Schematic	53
Electrical Schematic	54
Electrical Schematic – Turfdefender	55
Crankcase Assembly	56
Oil Pan Assembly	57
Cylinder Head Assembly	58
Grease and Oil Filter Assembly	59
Head Cover Assembly	60
Dipstick and Guide Assembly	61
Main Bearing Case Assembly	62
Camshaft Assembly	63
Piston and Crankshaft Assembly	64
Flywheel Assembly	65
Fuel Camshaft Assembly	66
Engine Stop Lever Assembly	67
Stop Solenoid and Fuel Pump Assembly	68
Injection Pump Assembly	69
Injection Pump Assembly No. 98–9643	70
Governor Assembly	71
Speed Control Plate Assembly	72
Nozzle Holder and Glow Plug Assembly	73
Nozzle Holder Assembly 98–9468	74
Alternator and Pulley Assembly	75
Alternator Assembly No. 98–9474	76
Starter Mount Assembly	77
Starter Assembly No. 98–9705	78
Water Flange and Thermostat Assembly	79
Water Pump Assembly	80
Valve and Rocker Arm Assembly	81
Exhaust Manifold and Gasket Assembly	82
Special Tools	83

Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

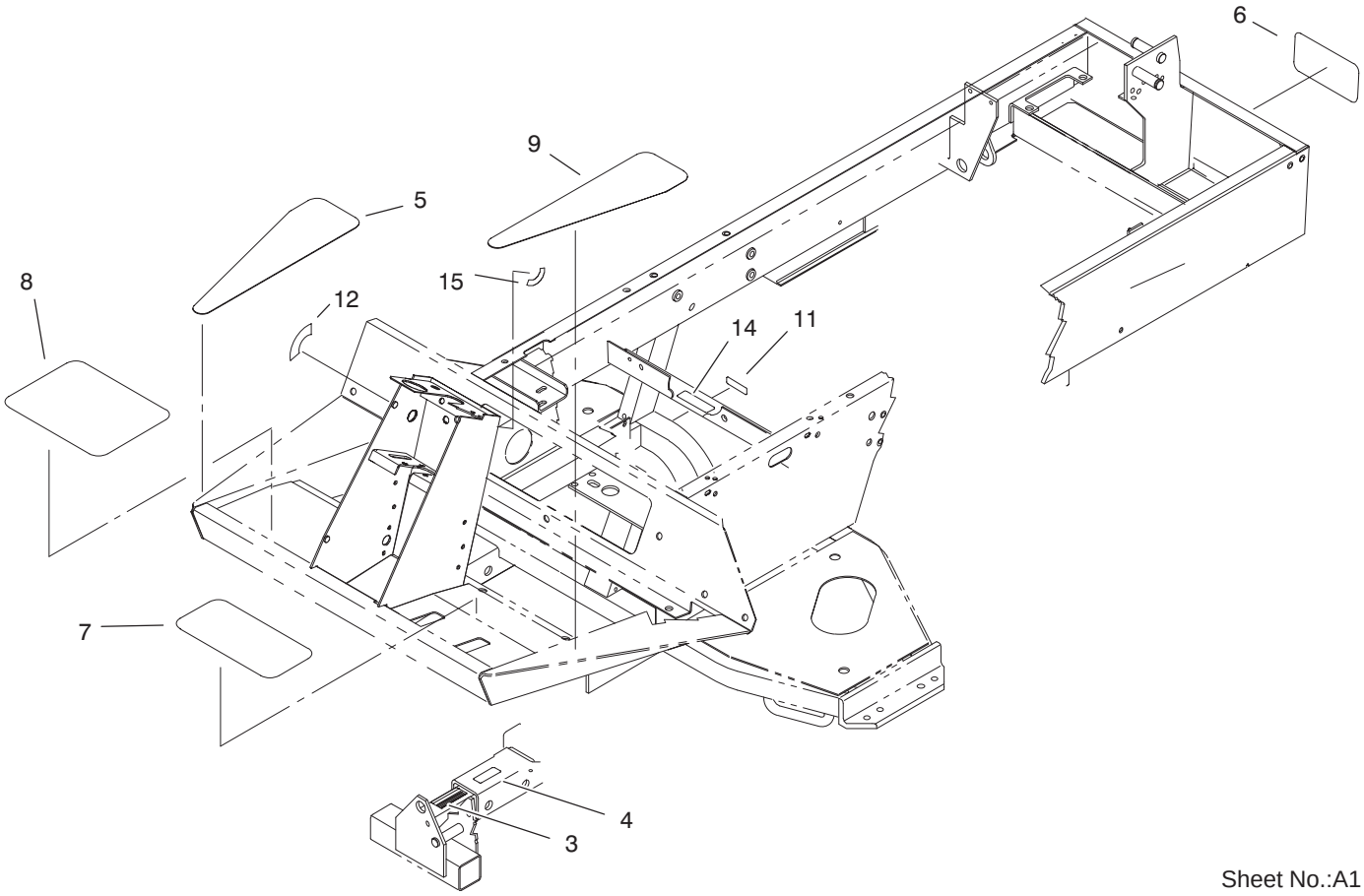
Abbreviation	Meaning
AR	as required
ASM	assembly
CARR	carriage
DEG	degrees
FH	flat head
GA	gauge
HF	hex flange
HH	hex head
HHF	hex head flange
HLH	hex lag head
HJ	hex jam
HOC	height-of-cut
HS	hex socket
HSBH	hex socket button head
HSFH	hex socket flat head
HSH	hex socket head
HWH	hex washer head
HWHTF	hex washer head thread forming
HYD	hydraulic
INC	incorporated
LH	left hand
NI	nylon insert
PPH	Phillips pan head
PTH	Phillips truss head
PTO	power take off
RH	right hand
SFH	slotted fillister head
SHH	slotted hex head
SQH	square head
SHWH	slotted hex washer head
SPH	slotted pan head
SRH	slotted round head
STD	standard
TAP	self tapping
TTH	Torx truss head
WH	wing head



Frame and Body Assembly

Ref. No.	Part No.	Qty.	Description
1	62–5550	1	Decal–Toro
2	93–7996–01	1	Cover–Tower
3	106–5950	1	RH Fender ASM
3:2	32148–6	2	Insert–Nut
3:3	32148–7	5	Insert–Nut
3:4	93–6686	1	Decal–Oil, HYD
3:5	93–6689	1	Decal–No Riders
6	106–5951	1	LH Fender ASM
6:2	32148–7	6	Insert–Nut
6:3	93–6680	1	Decal–Diesel
6:4	93–6689	1	Decal–No Riders
7	3234–14	14	Screw–HHF
8	100–3870	1	Frame Assembly
10	32144–1	11	Screw–Taptite
11	98–4572	1	Bracket–Clamp, Hose
12	32144–14	2	Screw–HWH
13	75–1390–01	1	Cover–Access, Front
14	75–1410–01	1	Plate–Access, Floor
15	3234–7	1	Screw–HHF
15	75–6840	4	Knob–Knurled
16	3256–3	4	Washer–Flat
17	322–5	4	Screw–HH
18	322–4	2	Screw–HH
19	94–1410	1	Holder–Can, Beverage
20	93–3626	1	Bracket–Hose
21	104–0026	1	Toolbox

Ref. No.	Part No.	Qty.	Description
22	104–1476	1	Ring–Rubber
23	75–0630	1	Tread–Foot, Center
24	104–1496	2	Hinge–Pin
25	104–1497	2	Hinge–Receiver
27	74–5950	2	Latch–Swell
28	104–9294	1	Decal–Warning
28	104–9295	1	Decal–Warning, Ce
29	104–1489–03	1	Cover–Toolbox
30	105–7515	1	Decal–Service
30	104–1434	1	Decal–Service, Blank
31	3234–5	1	Screw
32	93–6680	1	Decal–Diesel
33	94–5626	1	Latch–Draw, Flexible
33:1	100–5806	1	Handle–Latch
33:2	100–5807	1	Keeper–Latch
34	105–7527	1	Decal–Filter Numbers



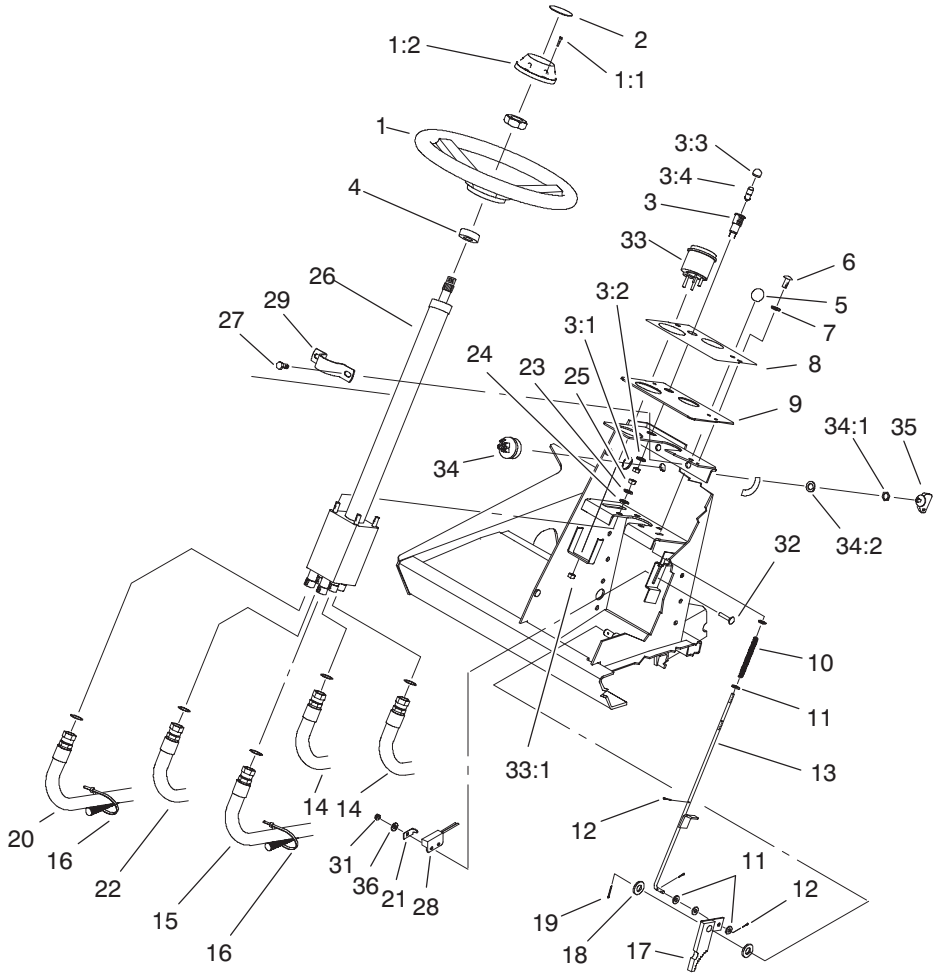
Sheet No.:A1

T–3730

Frame Assembly No. 100–3870

Ref. No.	Part No.	Qty.	Description
3	93–6693	1	Decal–Plate, Floor
4	93–6686	1	Decal–Oil, HYD
5	75–0640	1	Tread–Footrest, RH
6	62–7400	1	Decal–Logo, Toro
7	75–0620	1	Tread–Foot, LH
8	75–0610	1	Tread–Foot, RH
9	75–0650	1	Tread–Footrest, LH
11	93–6691	1	Decal–Bolt, Eccentric
12	93–6699	1	Decal–Fast/Slow
14	104–2052	1	Decal–Ansi
15	105–7506	1	Decal–Key Switch

Ref. No.	Part No.	Qty.	Description



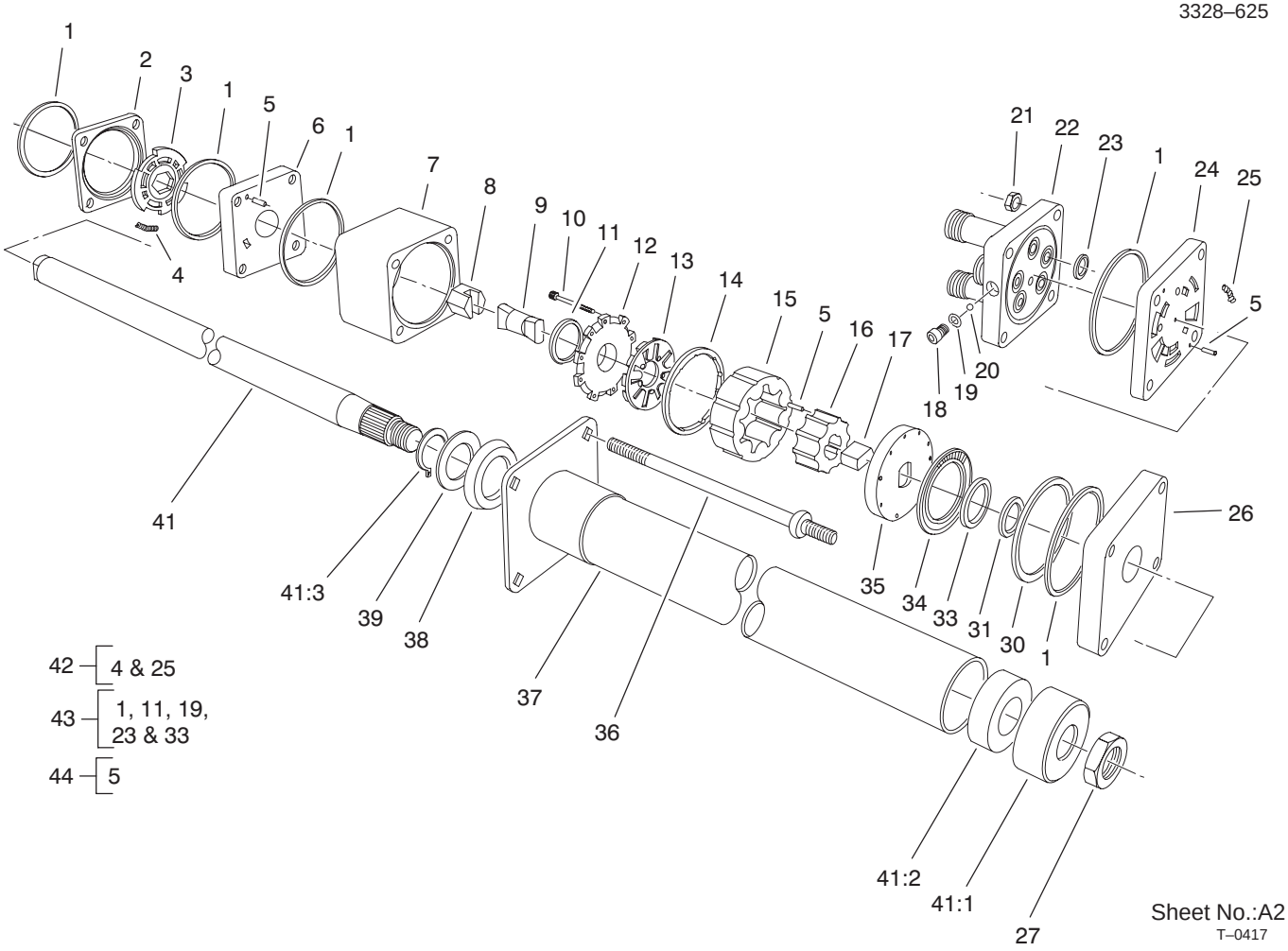
Sheet No.:3

Steering Tower Assembly

Ref. No.	Part No.	Qty.	Description
1	75–0560	1	Wheel–Steering
1:1	32144–21	1	Screw
1:2	68–5140	1	Cap–Wheel, Steering
2	68–5370	1	Decal–Toro
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	21–9260	1	Cover–Dust
5	233–17	1	Knob
6	87–6620	2	Screw
7	3256–1	2	Washer–Flat
8	93–1263	1	Decal–Tower
9	93–7998–03	1	Plate–Instrument
10	95–1821–03	1	Spring–Compression
11	3256–22	5	Washer–Flat
12	3272–5	3	Pin–Cotter
13	104–1492	1	Rod ASM
14	75–6230	2	Hose
15	75–6240	1	Hose
16	3290–378	4	Tie–Cable
17	63–7900–03	1	Rack ASM
18	3256–26	2	Washer–Flat
19	3272–10	1	Pin–Cotter
20	75–5940	1	Hose

Ref. No.	Part No.	Qty.	Description
21	100–4872	1	Plate–Switch, Neutral
22	75–6250	1	Hose
23	3256–23	4	Washer–Flat
24	3255–8	1	Washer–Lock
25	3296–20	4	Nut–Lock, NI
26	75–0600	1	Unit–Steering, Power
27	32144–11	2	Screw–TAP
28	100–1270	1	Switch–Proximity
29	75–2810	1	Bracket–Column, Steering
31	3296–2	1	Nut–Lock
32	104–1450	1	Bolt–CARR
33	104–9324	1	Speedometer
33:1	3296–1	4	Nut–Lock NI
34	99–2319	1	Key–Switch
34:1	218–446	1	Nut–Hex
34:2	218–447	1	Washer–Lock
35	63–8360	1	Key–Ignition
36	3256–14	1	Washer–Flat

☆ Not serviced separately

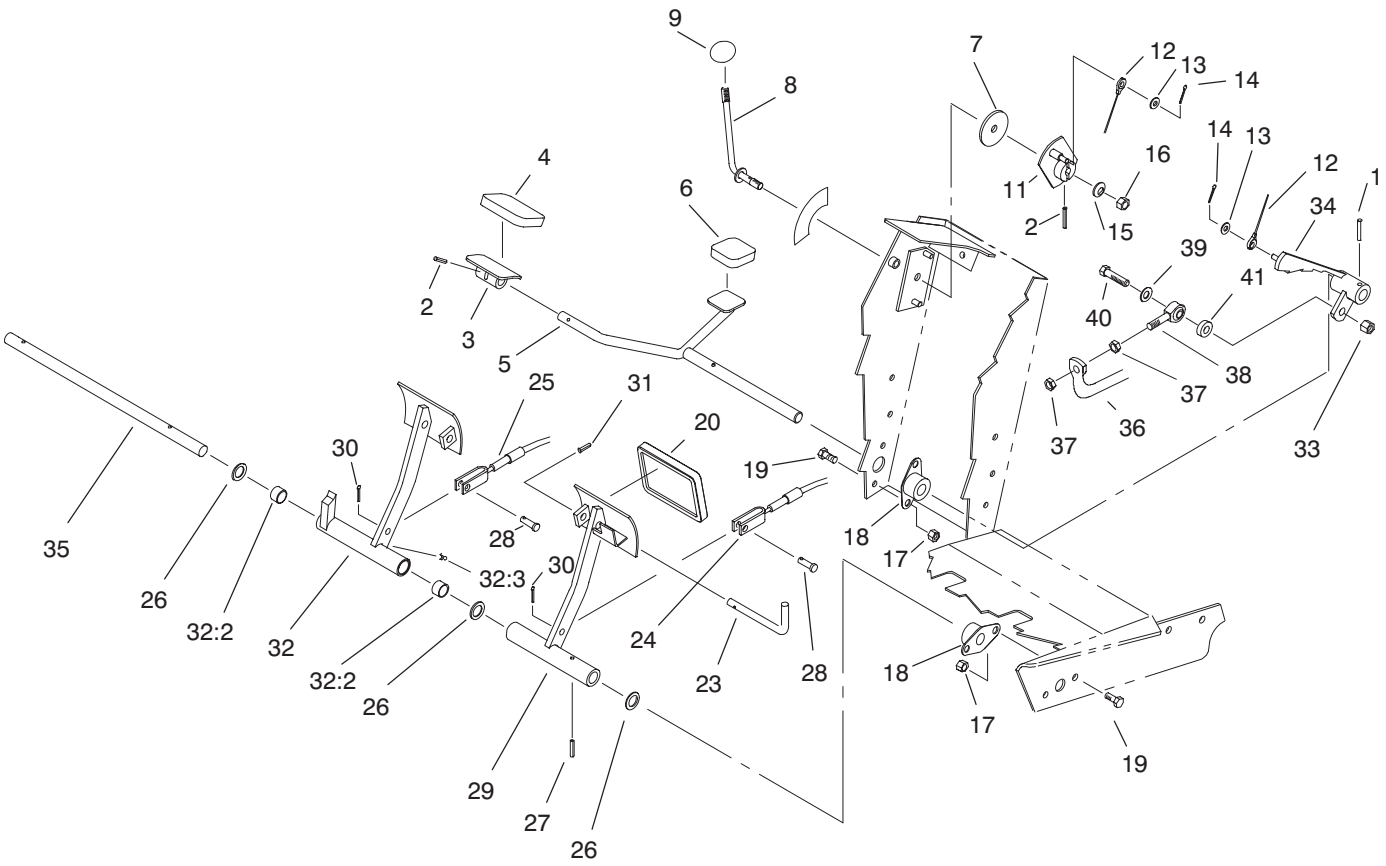


Power Steering Unit No. 75–0600

Ref. No.	Part No.	Qty.	Description
☆1		5	Ring–Seal
☆2		1	Ring–Valve
☆3		1	Plate–Valve
☆4		3	Spring
☆5		9	Pin–Alignment
☆6		1	Manifold–Isolation
☆7		1	Ring–Metering
☆8		1	Hex Drive ASM
☆9		1	Link–Drive
☆10		11	Screw–HSH
☆11		1	Seal–Commutator
☆12		1	Cover–Commutator
☆13		1	Commutator
☆14		1	Ring–Commutator
☆15		1	Stator
☆16		1	Rotor
☆17		1	Spacer–Drive Link
☆18		1	Plug
☆19		1	O–Ring
☆20		1	Ball
☆21		4	Nut–Hex
☆22		1	Cover–Port
☆23		5	O–Ring
☆24		1	Manifold–Port
☆25		3	Spring
☆26		1	Plate–Cover, Upper

Ref. No.	Part No.	Qty.	Description
27	3220–6	1	Nut–Jam
☆30		1	Spacer–Bearing, Thrust
☆31		1	Spacer–Seal
☆33		1	Seal–Face
☆34		1	Bearing–Thrust
☆35		1	Plate–Drive
36	93–3609	4	Bolt–Special
37	66–9860	1	Cover And Jacket–Upper
38	66–9870	1	Plate–Retaining
39	66–9880	1	Washer–Plate, Retaining
41	66–9900	1	Shaft–Input
41:1	92–7315	1	Seal–Upper
41:2	104–9327	1	Bushing–Column
41:3	66–9890	1	Ring–Retaining
42	66–9970	1	Spring Kit
43	66–9980	1	Seal Kit
44	66–9990	1	Needle Roller Kit

☆ Not serviced separately

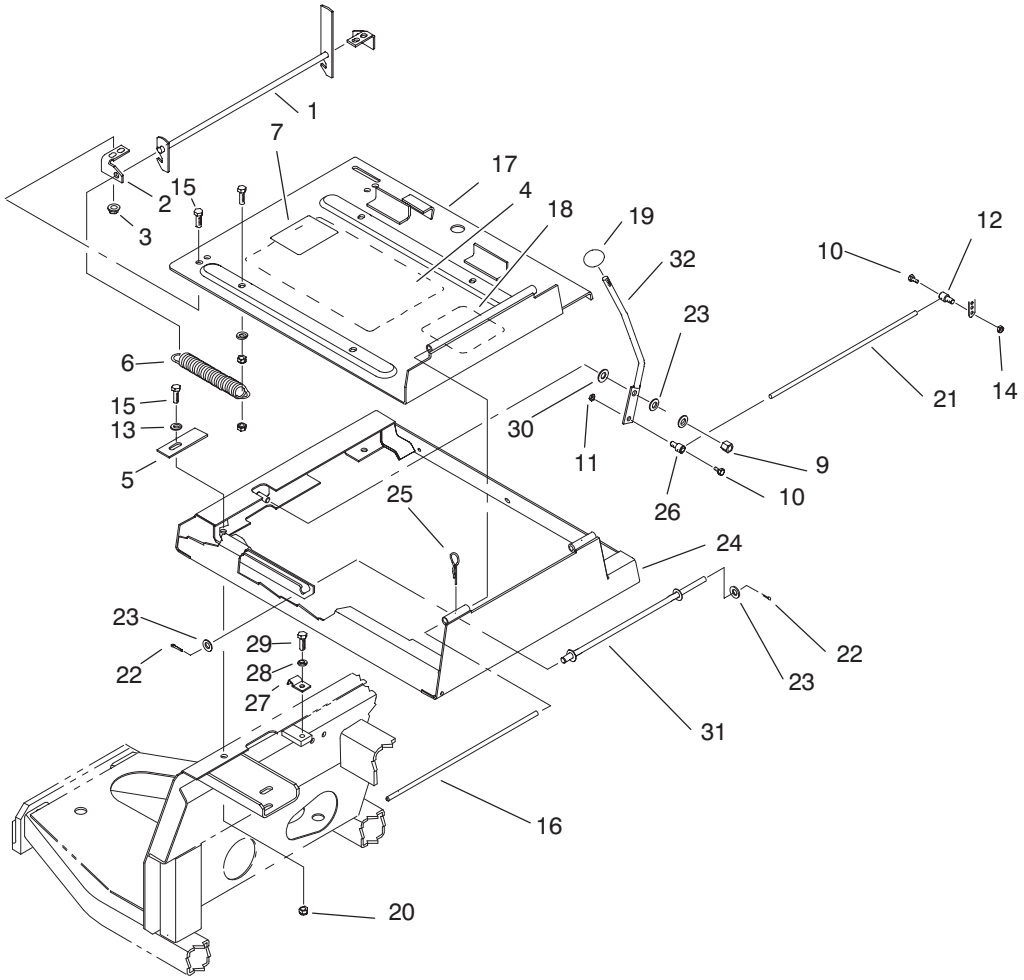


Sheet No.:4

Traction and Brake Pedals Assembly

Ref. No.	Part No.	Qty.	Description
1	32121–6	1	Pin–Roll
2	32121–45	2	Pin–Spring
3	49–6440–03	1	Pedal–Forward
4	74–9100	1	Pad–Pedal, Forward
5	75–2970	1	Pedal–Traction
6	74–9110	1	Pad–Pedal, Reverse
7	75–6550	1	Disc–Friction
8	75–6490	1	Lever
9	233–42	1	Knob
11	75–6510	1	Bracket–Lever
12	75–6580	1	Cable–Pedal
13	3256–22	2	Washer–Flat
14	3272–2	2	Pin–Cotter
15	3290–461	1	Washer–Spring
16	3296–59	1	Nut–Lock, NI
17	3296–29	8	Nut–Lock, NI
18	256–236	4	Bearing–Mount, Flange
19	322–3	8	Screw–HH
20	93–8742	2	Footpad–Brake
23	63–7880	1	Pin–Latch, Brake
24	63–7733	1	LH Brake Cable ASM
25	63–7732	1	RH Brake Cable ASM
26	3256–69	3	Washer–Flat
27	32121–16	1	Pin–Spring
28	283–58	2	Pin–Clevis

Ref. No.	Part No.	Qty.	Description
29	75–1440–03	1	Pedal–Brake, LH
30	3272–10	2	Pin–Cotter
31	32121–50	1	Pin–Spring
32	75–1430	1	Pedal–Brake, RH
32:2	256–42	2	Bushing
32:3	302–5	1	Fitting–Grease
33	3296–39	1	Nut–Lock, NI
34	75–3270–03	1	Hub–Pivot, Traction
35	75–1470	1	Pin–Pivot, Brake
36	75–2170–03	1	Tube–Control, Pump
37	3220–3	2	Nut–Jam
38	2411–36	1	Bearing–End, Rod
39	3256–24	1	Washer–Flat
40	323–9	1	Screw–HH
41	5–0652	1	Spacer

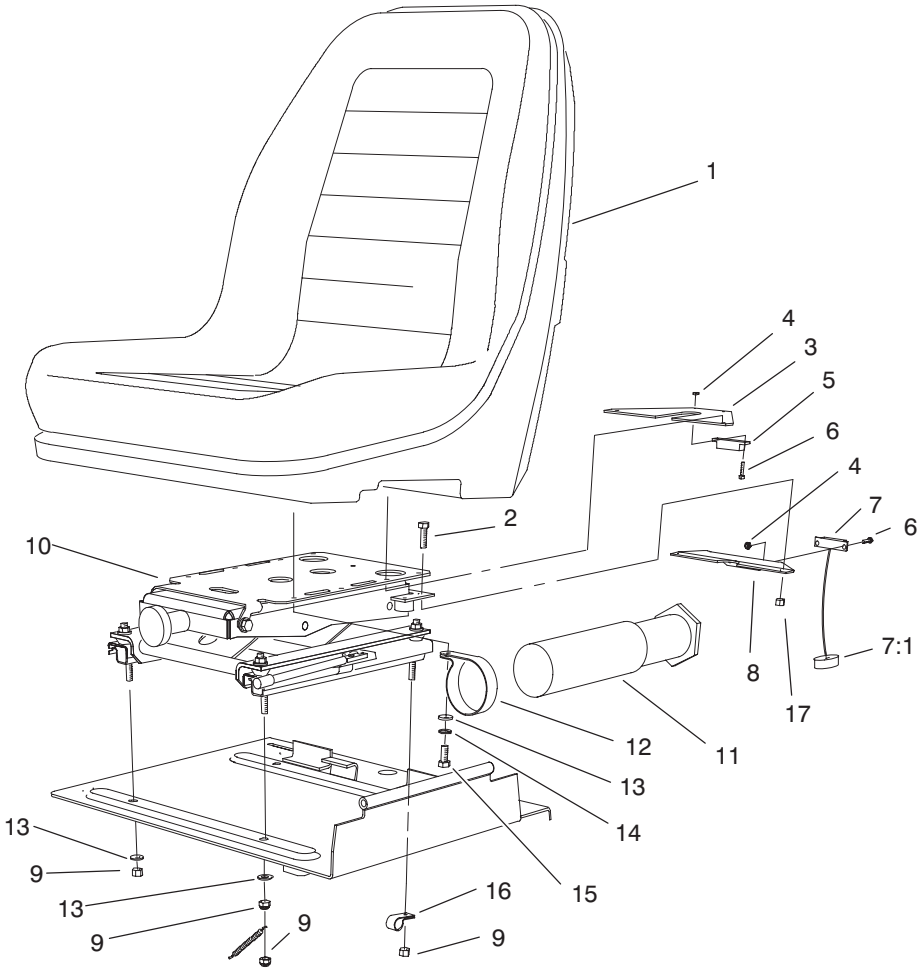


Sheet No.:5

Seat Frame and Throttle Assembly

Ref. No.	Part No.	Qty.	Description
1	98–2354–03	1	Latch–Seat
2	98–2353	2	Bracket–Latch, Seat
3	32128–25	4	Nut–Flange
4	98–9342	1	Decal
5	98–9302	1	Plate–Stop, Idler
6	66–4190–03	1	Spring–Idler, Clutch
7	105–4674	1	Decal–Noise, Ce
9	3296–39	1	Nut–Lock, NI
10	25–8640	2	Screw–HH
11	3296–3	1	Nut–Lock NI
12	98–9311	1	Swivel–Throttle
13	3256–23	1	Washer–Flat
14	3296–20	1	Nut–Lock, NI
15	322–3	8	Screw–HH
16	75–3400	1	Shaft–Pivot, Seat
17	98–2350–03	1	Plate–Seat
18	93–8060	1	Decal–Reels
19	233–42	1	Knob
20	3296–29	4	Nut–Lock, NI
21	98–9303	1	Cable–Throttle
22	3272–10	2	Pin–Cotter
23	3256–24	3	Washer–Flat
24	98–2352–03	1	Frame–Seat
25	3290–467	1	Pin–Hair
26	93–0021	1	Swivel–Cable, Throttle
27	3–6657	1	Clip–Skid

Ref. No.	Part No.	Qty.	Description
28	3253–3	1	Washer–Lock
29	321–4	1	Screw–HH
30	66–2920	2	Washer–Friction
31	75–3680–03	1	Rod–Seat
32	75–3430–03	1	Lever–Throttle

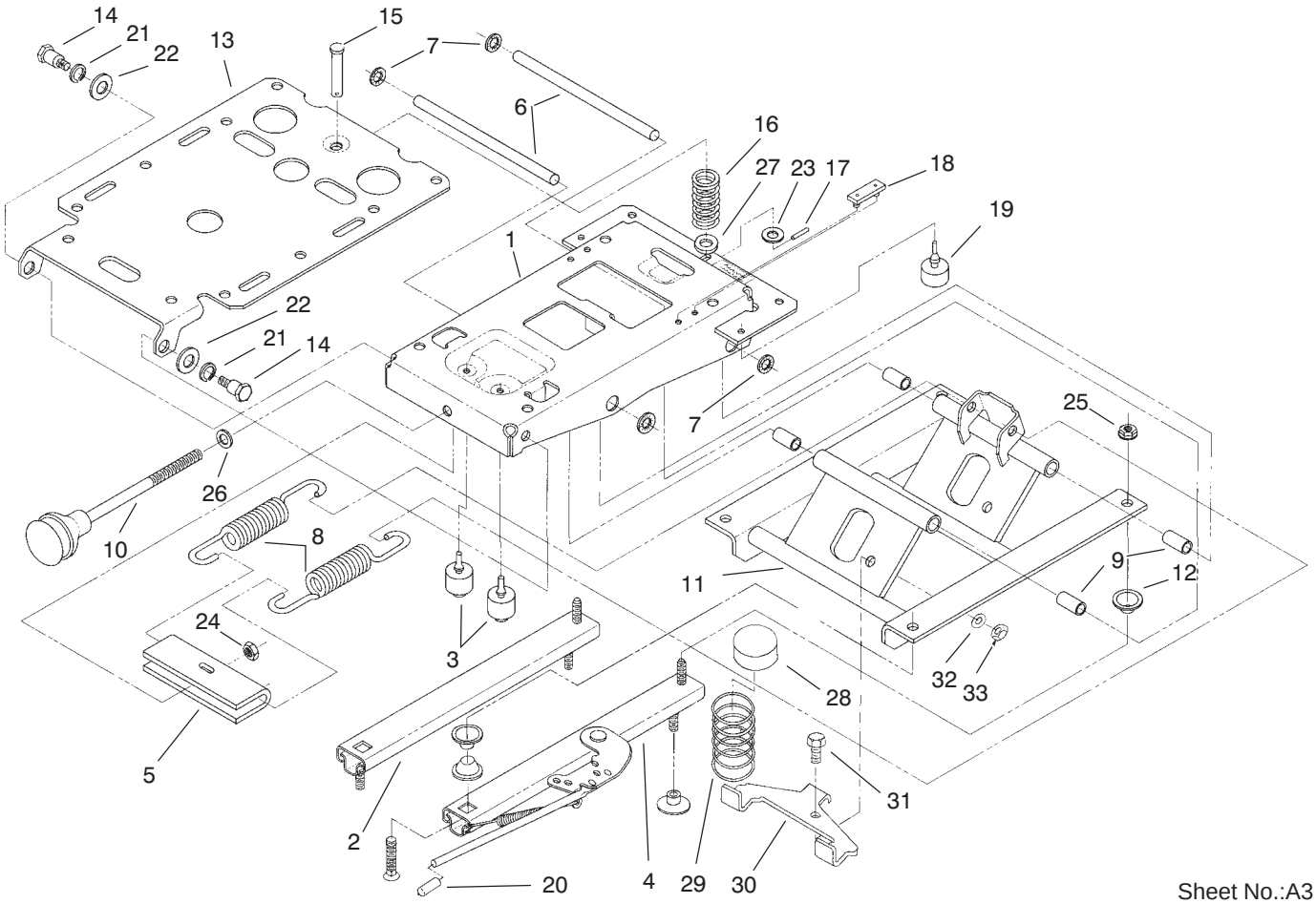


Sheet No.:6

Seat and Suspension Assembly

Ref. No.	Part No.	Qty.	Description
1	104–4620	1	Seat–Olympic, Toro
2	323–4	2	Screw–HH
3	75–4370–03	1	Bracket–Seat
4	3296–54	4	Nut–Lock NI
5	92–8753	1	Magnet–Switch, Reed
6	3250–29	4	Screw–PPH
7	92–8001	1	Sensor–Switch, Reed
7:1	93–0140	1	Grommet–Rubber
8	75–4360–03	1	Bracket–Suspension, Seat
9	3296–29	5	Nut–Lock, NI
10	75–3000	1	Suspension–Seat
11	74–0720	1	Tube–Manual
12	2412–133	2	R–Clamp
13	3256–23	8	Washer–Flat
14	3253–4	4	Washer–Lock
15	322–3	4	Screw–HH
16	2412–93	1	Clamp–R
17	3296–39	2	Nut–Lock, NI

Ref. No.	Part No.	Qty.	Description

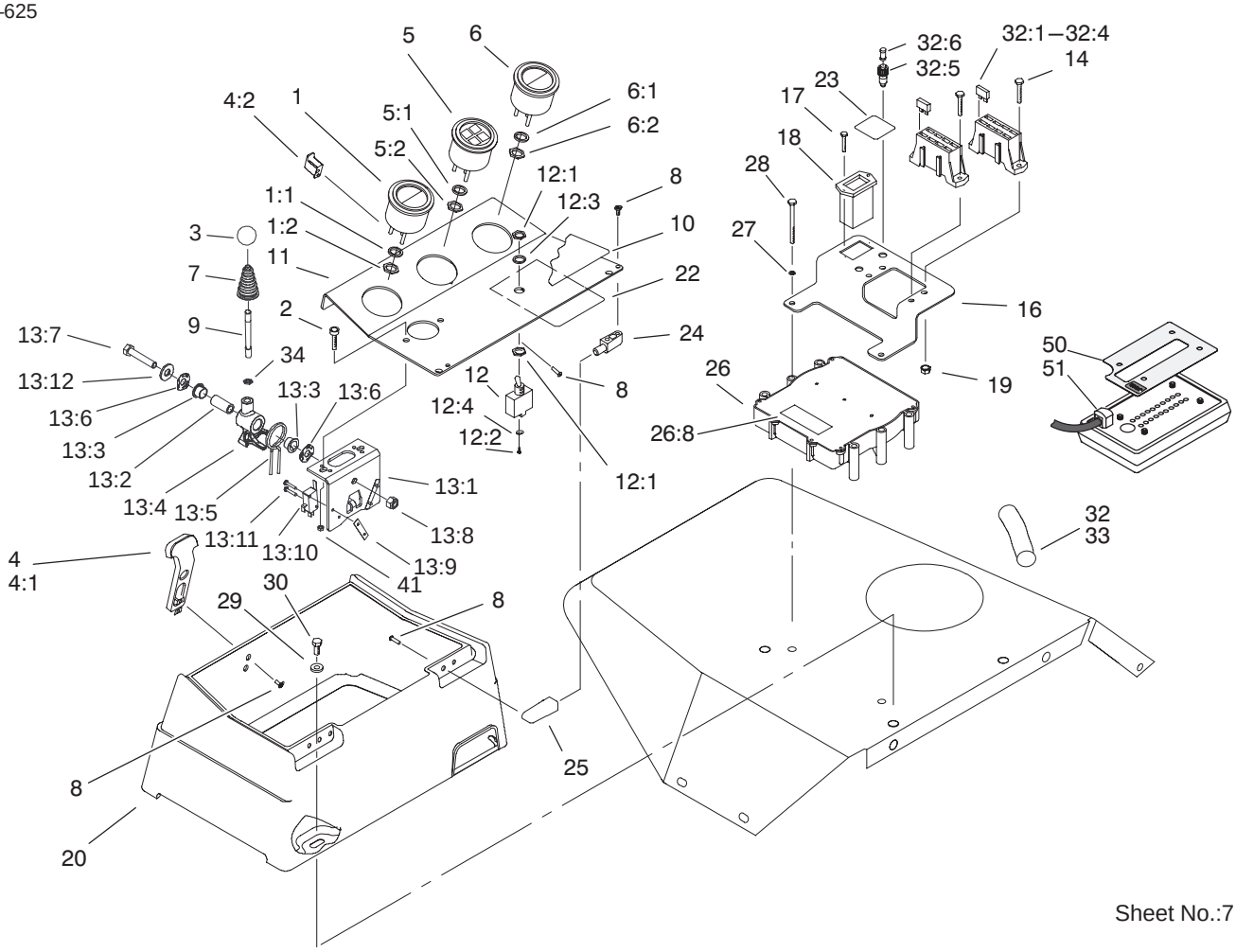


Sheet No.:A3
T–3437

Seat Suspension Assembly No. 75–3000

Ref. No.	Part No.	Qty.	Description
1	75–3480	1	Frame–Upper
2	66–8530	1	Adjuster
3	66–8520	2	Bumper–Downstop
4	82–9060	1	Adjuster W/Handle
5	77–2870	1	Hanger–Spring
6	76–1910	2	Shaft–Pivot
7	66–8560	4	Nut–Push
8	76–1940	2	Spring–Extension
9	76–1920	4	Sleeve–Bearing
10	76–1930	1	Knob–Adjuster, Tension
11	66–8610	1	Frame–Lower
12	66–9290	6	Spacer–Suspension
13	75–3580	1	Plate–Seat
14	75–3510	2	Bolt–Shoulder
15	80–4860	1	Pin–Clevis
16	75–3530	1	Spring–Compression
17	75–3540	1	Pin–Roll
18	75–3550	2	Bumper–Seat
19	76–2940	2	Bumper
20	75–3570	1	Tip–Vinyl
21	3253–6	2	Washer–Lock
22	3256–26	2	Washer–Flat
23	3256–24	1	Washer–Flat
24	3296–44	1	Nut–Lock, NI
25	32128–26	4	Nut–Flange

Ref. No.	Part No.	Qty.	Description
26	3256–46	1	Washer–Flat
27	3256–5	1	Washer–Flat
28	93–3164	2	Cap
29	93–3163	2	Spring
30	93–3165	1	Bracket
31	322–6	1	Screw–HH
32	3253–33	1	Washer–Lock
33	3217–6	1	Nut–Hex

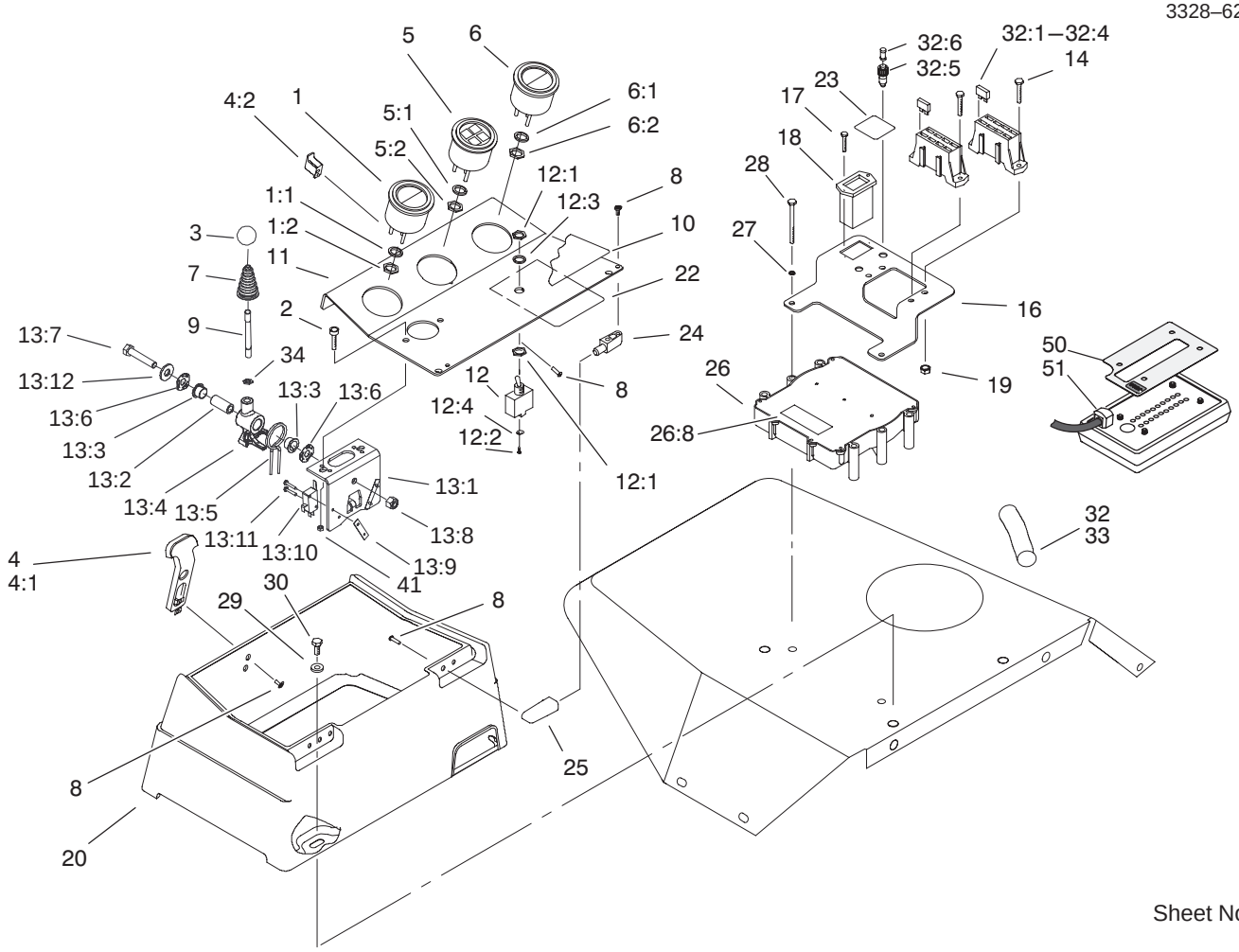


Sheet No.:7

Control Console Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9339	1	Gauge–Fuel
1:1	3254–1	3	Washer–Lock, Internal
1:2	3217–27	3	Nut–Hex
1:3	105–9265	1	Bulb And Lamp ASM
2	3258–166	2	Screw
3	233–42	1	Knob
4	94–5626	1	Latch–Draw, Flexible
4:1	100–5806	1	Handle–Latch
4:2	100–5807	1	Keeper–Latch
5	98–9306	1	Light–Warning
5:1	3254–1	1	Washer–Lock, Internal
5:2	3217–27	1	Nut–Hex
5:3	105–9264	4	Bulb And Lamp ASM
6	98–9308	1	Gauge–Temperature
6:1	3254–1	3	Washer–Lock, Internal
6:2	3217–27	3	Nut–Hex
6:3	105–9265	1	Bulb And Lamp ASM
7	93–5961	1	Boot–Lever
8	32144–1	11	Screw–Taptite
9	105–7508	1	Lever–Joystick
10	104–9296	1	Decal–Control
11	104–9251–03	1	Plate–Instrument
12	99–8352	1	Switch–Backlap, Master
12:1	218–498	2	Locknut
12:2	218–588	3	Screw

Ref. No.	Part No.	Qty.	Description
12:3	218–589	1	Nut/Lockwasher
12:4	3253–19	3	Washer–Lock
13	106–4167	1	Joystick Bracket ASM
13:1	106–4168–03	1	Bracket–Joystick
13:2	106–4192	1	Spacer
13:3	93–5547	2	Bushing–Nylon
13:4	105–7507	1	Hub–Pivot, Joystick
13:5	105–8289	1	Spring–Torsion
13:6	106–4193	2	Washer–Finger, Spring
13:7	322–9	1	Screw–HH
13:8	3296–29	1	Nut–Lock, NI
13:9	3290–354	2	Nut–Speed
13:10	111332	2	Switch
13:11	147665	4	Screw–HH
13:12	3256–3	1	Washer–Flat
14	32105–13	4	Screw–SHH
16	104–1499–03	1	Bracket–Fuse Block
17	32144–18	2	Screw–HH
18	75–6820	1	Hourmeter
19	3296–2	4	Nut–Lock
20	104–0027	1	Box–Control
22	94–6767	1	Decal–Fuses
23	104–9298	1	Decal–Controller
24	104–1496	2	Hinge–Pin
25	104–1497	2	Hinge–Receiver
26	92–5720	1	Controller–Electronic

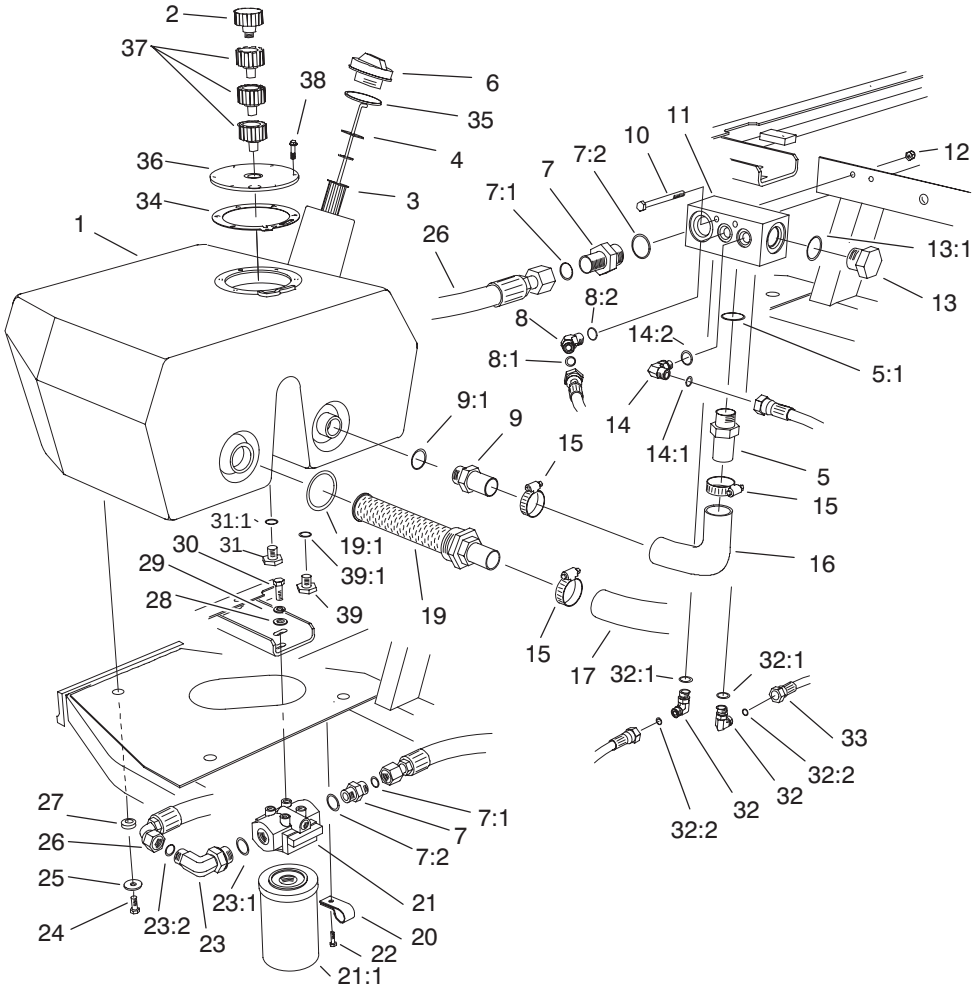


Sheet No.:7

Control Console Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
27	3253–3	2	Washer–Lock
28	321–14	2	Screw–HH
29	3256–3	3	Washer–Flat
30	322–5	3	Screw–HH
32	106–5970	1	Harness–Wire
32:1	94–9157	1	Fuse–Blade, 4 Amp
32:2	114241	1	Fuse–7.5 Amp
32:3	218–578	3	Fuse–10 Amp
32:4	109101	1	Fuse–20 Amp
32:5	85–4490	1	Light–Indicator
32:6	219–19	1	Lamp–Green
33	94–6343	1	Decal–Identification, Wire
34	3218–3	1	Nut–Jam
41	32128–33	2	Nut–HF
50	104–9270	1	Decal–Diagnostics
51	85–4750	1	Box–Display, Diagnostic

Ref. No.	Part No.	Qty.	Description

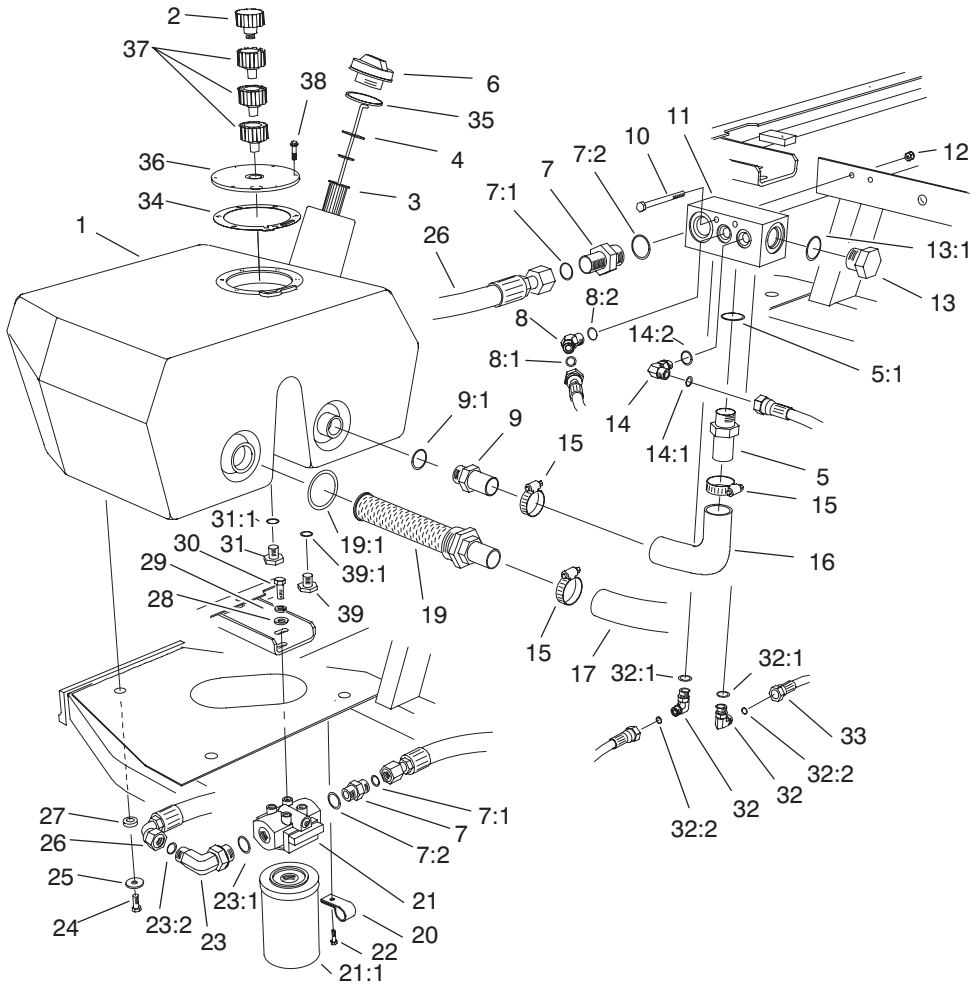


Sheet No.:8

Hydraulic Filter and Reservoir Assembly

Ref. No.	Part No.	Qty.	Description
1	104–9254	1	Tank–Oil
2	68–6150	1	Breather–Air
3	61–2790	1	Filter–Screen
4	94–9411	1	Dipstick
5	354–73	1	Fitting
5:1	237–81	1	O–Ring
6	93–7498	1	Plug–Plastic
7	340–8	2	Adapter
7:1	237–65	1	O–Ring
7:2	237–81	1	O–Ring
8	340–87	1	Fitting–HYD, 45°
8:1	237–22	1	O–Ring
8:2	237–42	1	O–Ring
9	99–6932	1	Fitting–Barb, Hose
9:1	237–117	1	O–Ring
10	321–23	2	Screw–HH
11	92–9098	1	Manifold–Tank
12	3296–42	2	Nut–Lock, NI
13	354–74	1	Fitting
13:1	237–81	1	O–Ring
14	340–77	1	Fitting–HYD, 90°
14:1	237–22	1	O–Ring
14:2	237–42	1	O–Ring
15	2412–34	3	Clamp–Hose
16	75–5720	1	Hose–Return
17	75–6870	1	Hose–Inlet, Pump

Ref. No.	Part No.	Qty.	Description
19	104–7546	1	Strainer–Tank
19:1	340–136	1	O–Ring
20	2412–93	2	Clamp–R
21	75–1300	1	Oil Filter ASM
21:1	75–1310	1	Element–Filter
22	32144–10	2	Screw–HWH
23	340–139	1	Fitting–HYD, 90°
23:1	237–81	1	O–Ring
23:2	237–65	1	O–Ring
24	33105–025	3	Screw–HHF
25	63–8410	3	Washer
26	75–6130	1	Hose
27	240–11	3	Grommet–Mount, Tank
28	3256–24	2	Washer–Flat
29	3253–21	2	Washer–Lock
30	323–4	2	Screw–HH
31	353–550	1	Plug–HYD
31:1	237–79	1	O–Ring
32	340–82	2	Adapter
32:1	237–42	1	O–Ring
32:2	237–21	1	O–Ring
33	100–3739	1	Return Drain Hose ASM
34	93–7499	1	Gasket
35	237–101	1	O–Ring

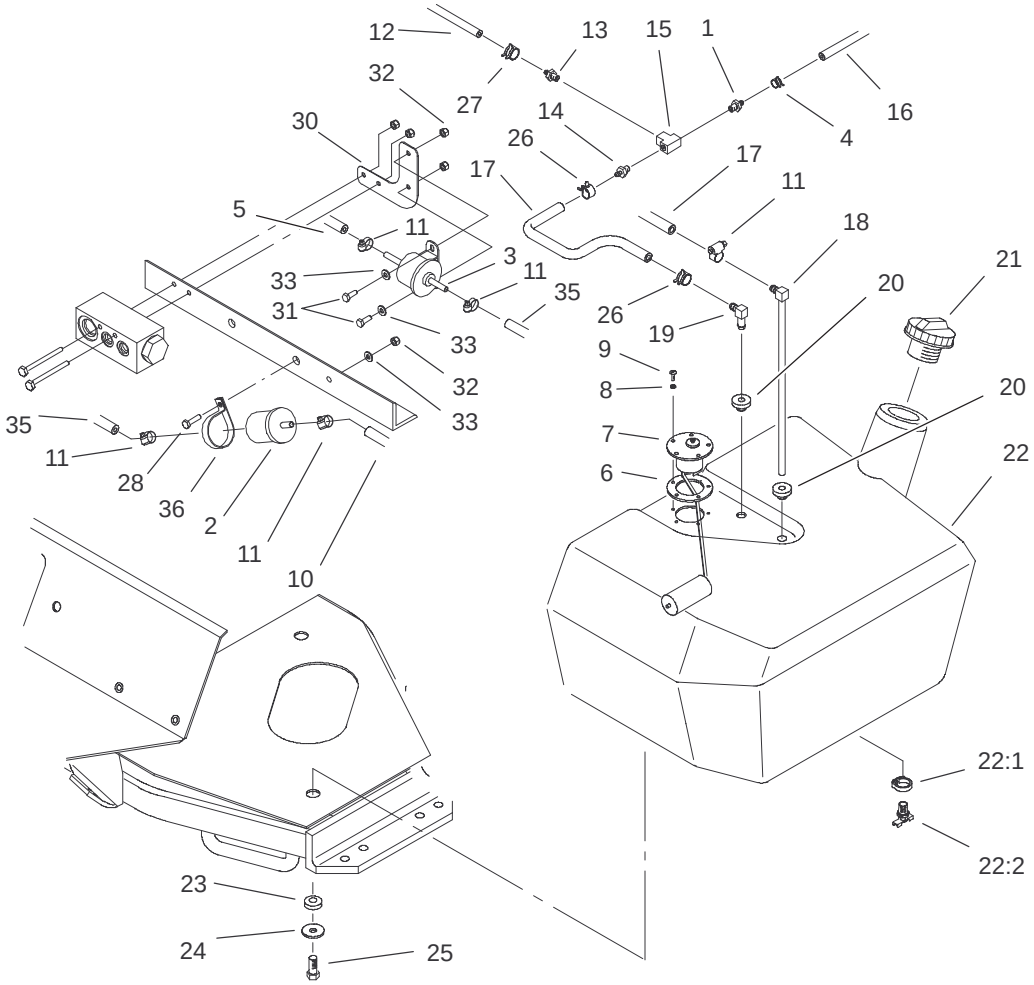


Sheet No.:8

Hydraulic Filter and Reservoir Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
36	93–7588	1	Cover–Tank
37	92–8020	3	Adapter–Breather
38	33104–020	6	Screw–HHF
39	353–508	1	Plug
39:1	237–42	1	O–Ring

Ref. No.	Part No.	Qty.	Description



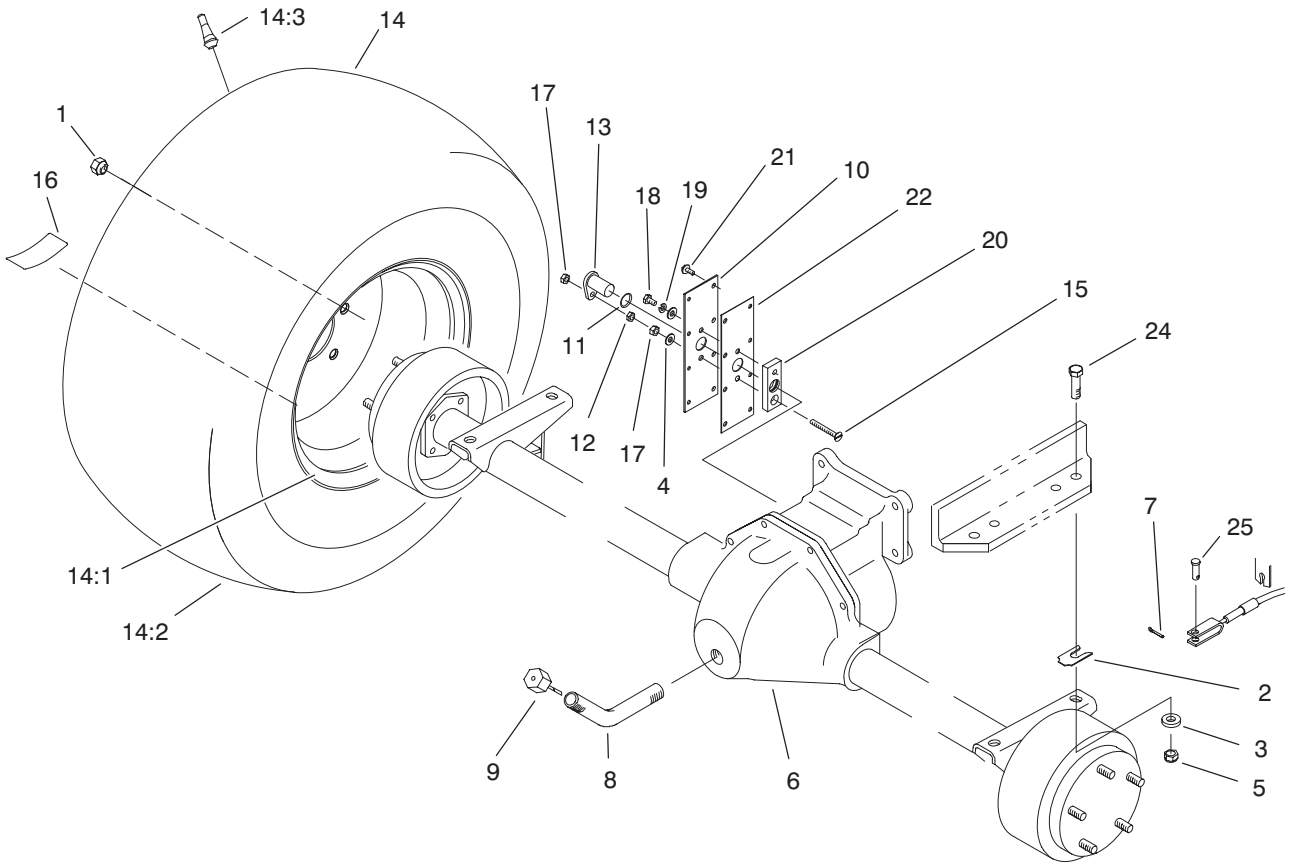
Sheet No.:9

Fuel Tank Assembly

Ref. No.	Part No.	Qty.	Description
1	304–73	1	Connector–Hose
2	98–7612	1	Filter–Fuel
3	104–5215	1	Pump–Fuel, Electric
4	2412–98	1	Clamp
5	23–2140	1	Hose–Fuel
6	62–7650	1	Gasket
7	63–7640	1	Sender–Fuel
8	3253–15	5	Washer–Lock/Sp
9	32122–24	5	Screw–Pth
10	27–5370	1	Hose–Fuel
11	2412–108	6	Clamp–Worm
12	75–4700	1	Hose–Fuel
13	354–22	1	Fitting–Barb
14	354–21	1	Fitting–Barb
15	354–20	1	Fitting–Tee
16	98–9338	1	Hose–Fuel
17	27–5340	1	Hose–Fuel
18	66–8121	1	Standpipe
19	46–6550	1	Fitting–HYD, 90°
20	46–6560	2	Bushing
21	93–3102	1	Cap–Fuel
22	105–7933	1	Tank–Fuel
22:1	2412–36	1	Clamp–Hose
22:2	304–46	1	Draincock
23	240–11	3	Grommet–Mount, Tank

Ref. No.	Part No.	Qty.	Description
24	63–8410	3	Washer
25	33105–025	3	Screw–HHF
26	92–2379	2	Clamp–Hose
27	2412–146	2	Clamp–Hose
28	321–6	1	Screw–HH
30	104–9333	1	Bracket–Fuel Pump
31	321–4	2	Screw–HH
32	3296–42	3	Nut–Lock, NI
33	3256–22	3	Washer–Flat
*34	3290–378	1	Tie–Cable
35	27–5360	1	Hose–Fuel
36	2412–148	1	Clamp–R

* Not illustrated

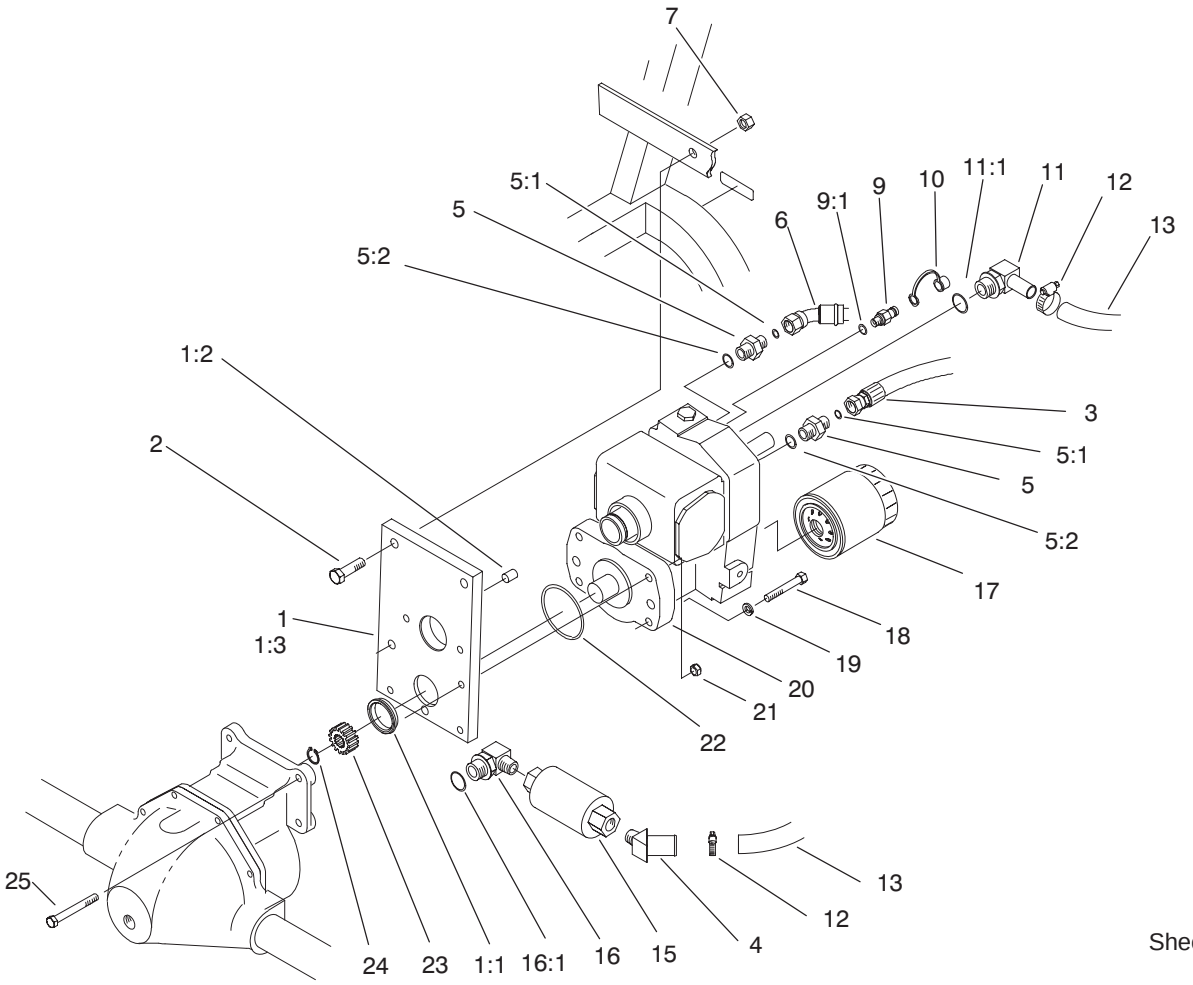


Sheet No.:10

Front Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	23–7270	10	Nut–Wheel
2	42–6080	5	Shim–Axle
3	66–6480	4	Washer
4	3256–22	2	Washer–Flat
5	3296–48	4	Nut–Lock NI
6	99–6981–03	1	Axle–Drive
7	3272–10	2	Pin–Cotter
8	75–6850	1	Tube–Fill, Oil
9	27–3710	1	Dipstick
10	85–4330	1	Cover–Gear
11	237–181	1	O–Ring
12	3218–1	1	Nut–Jam
13	85–4350	1	Sensor–Geartooth
☆14		2	Wheel And Tire ASM
14:1	99–6984	1	Wheel ASM
14:2	98–2373	1	Tire
14:3	232–27	1	Stem–Valve
15	32108–9	1	Screw–FH
16	76–8730	2	Decal–Torque, Wheel
17	3296–56	2	Nut–Lock, NI
18	321–2	1	Screw–HH
19	3253–3	1	Washer–Lock
20	85–4340	1	Plate–Sensor Mounting
21	32144–112	8	Screw–HWHTF
22	92–5797	1	Gasket–Axle
24	324–7	4	Screw–HH
25	283–58	2	Pin–Clevis

☆ Not serviced separately

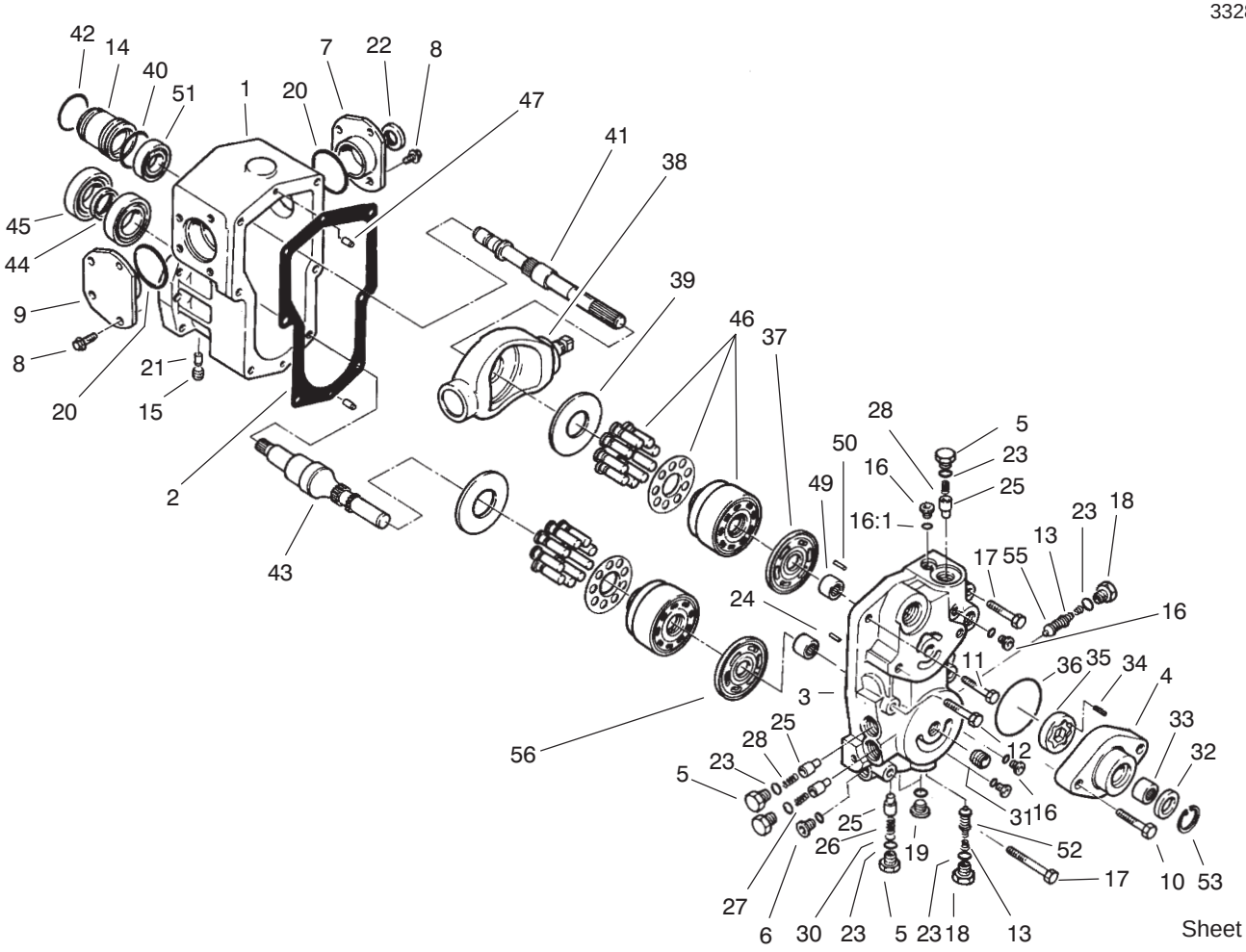


Sheet No.:11

Transmission Assembly

Ref. No.	Part No.	Qty.	Description
1	92–4846	1	Transmission Support ASM
1:1	75–3110	1	Collar–Transmission
1:2	92–4808	1	Sleeve–Transmission
1:3	92–4809	1	Support–Transmission
2	325–7	2	Screw–HH
3	93–0075	1	Hose ASM
4	354–72	1	Fitting
5	340–3	2	Adapter
5:1	237–22	1	O–Ring
5:2	237–79	1	O–Ring
6	93–0076	1	Hose ASM
7	3296–23	2	Nut–Lock, NI
9	354–77	1	Fitting–Quick
9:1	237–78	1	O–Ring
10	354–79	1	Cap–Dust, Yellow
11	75–4720	1	Fitting–Line, Suction
11:1	237–81	1	O–Ring
12	2412–129	2	Clamp–Hose
13	75–6350	1	Hose
15	75–6340–03	1	Filter
16	354–75	1	Fitting
16:1	237–81	1	O–Ring
17	75–1330	1	Element–Filter
18	323–12	2	Screw–HH
19	3253–21	2	Washer–Lock

Ref. No.	Part No.	Qty.	Description
20	75–0012	1	Transmission
21	3296–39	2	Nut–Lock, NI
22	237–161	1	O–Ring
23	86–7220	1	Gear–Pinion
24	32151–62	1	Ring–Retaining
25	323–20	2	Screw–HH



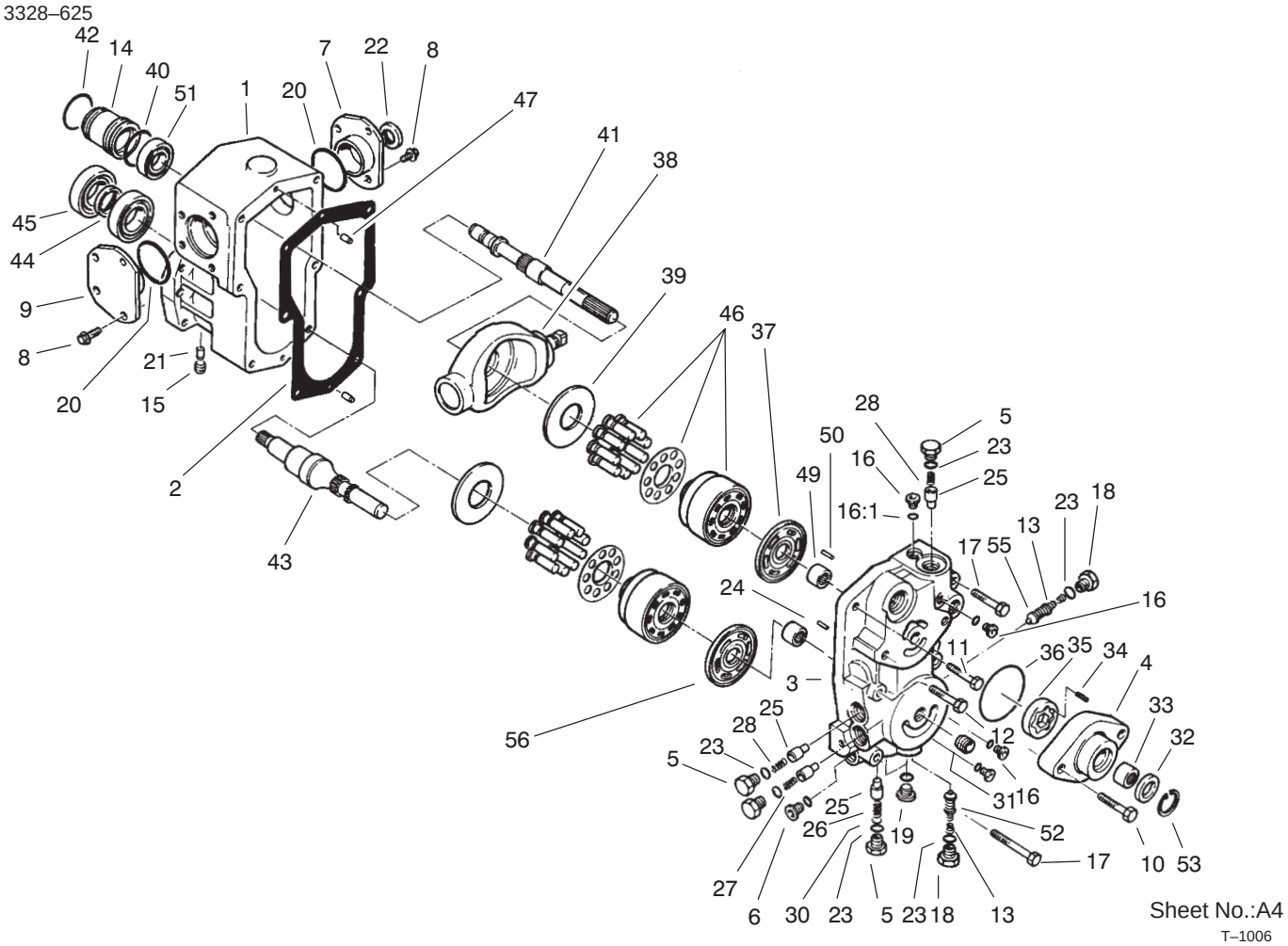
Sheet No.:A4

T–1006

Transmission Assembly No. 75–0012

Ref. No.	Part No.	Qty.	Description
1	75–0020	1	Housing
2	75–0030	1	Gasket–Housing
3	75–0040	1	Section–Center
4	83–4780	1	Housing–Pump, Charge
5	75–0060	4	Plug
6	75–0070	1	Plug
7	86–7520	1	RH Trunnion Cover ASM
8	75–0090	8	Capscrew–HH
9	86–7530	1	LH Trunnion Cover ASM
10	75–0110	2	Capscrew–HH
11	75–0120	1	Capscrew–HH
12	75–0130	3	Capscrew–HH
13	75–0140	1	Spring–Conical
14	75–0150	1	Guide–Seal
15	75–0160	1	Plug–Pipe
16	75–0170	4	Plug–Thread, Straight
16:1	92–8777	1	O–Ring
17	75–0180	2	Capscrew–HH
18	75–0190	2	Plug–Special
19	75–0200	2	Plug–Thread, Straight
20	75–0210	2	O–Ring
21	75–0220	2	Pin
22	75–0230	1	Seal–Lip

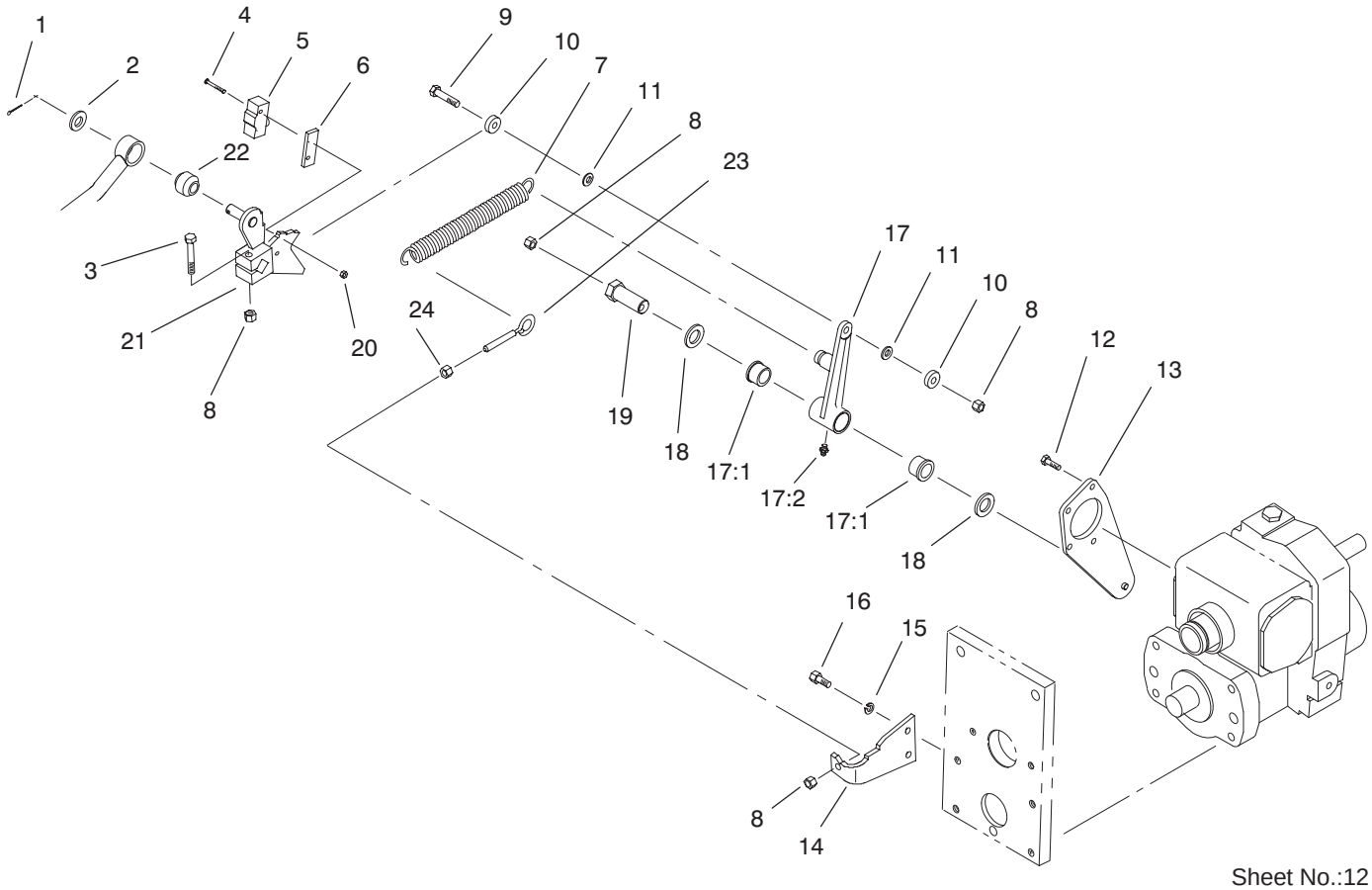
Ref. No.	Part No.	Qty.	Description
23	75–0240	6	O–Ring
24	75–0250	1	Spring
25	75–0260	4	Valve–Relief
26	75–0270	1	Spring
27	75–0280	1	Spring
28	75–0290	2	Spring
30	75–0310	1	Shim
31	75–0320	1	Nipple
32	75–0330	1	Seal–Lip
33	75–0340	1	Bearing–Needle
34	75–0350	1	Pin
35	75–0360	1	Gerotor
36	75–0370	1	O–Ring
37	75–0380	1	Plate–Valve
38	75–0390	1	Plate–Swash
39	75–0400	2	Plate–Thrust
40	75–0410	1	O–Ring
41	86–7540	1	Shaft–Pump
42	75–0430	1	Ring–Retaining
43	75–0440	1	Shaft–Motor
44	75–0450	1	Collar
45	75–0460	2	Bearing–Ball
46	75–0470	2	Cylinder Block Kit
47	75–0480	2	Pin
49	75–0500	2	Bearing–Needle
50	75–0510	1	Pin



Transmission Assembly No. 75–0012 (Continued)

Ref. No.	Part No.	Qty.	Description
51	75–0520	1	Bearing–Ball
52	75–6930	1	Valve–Screw
53	32120–74	1	Snap–Ring
55	93–0097	1	Valve–Screw
56	93–0083	1	Plate–Valve

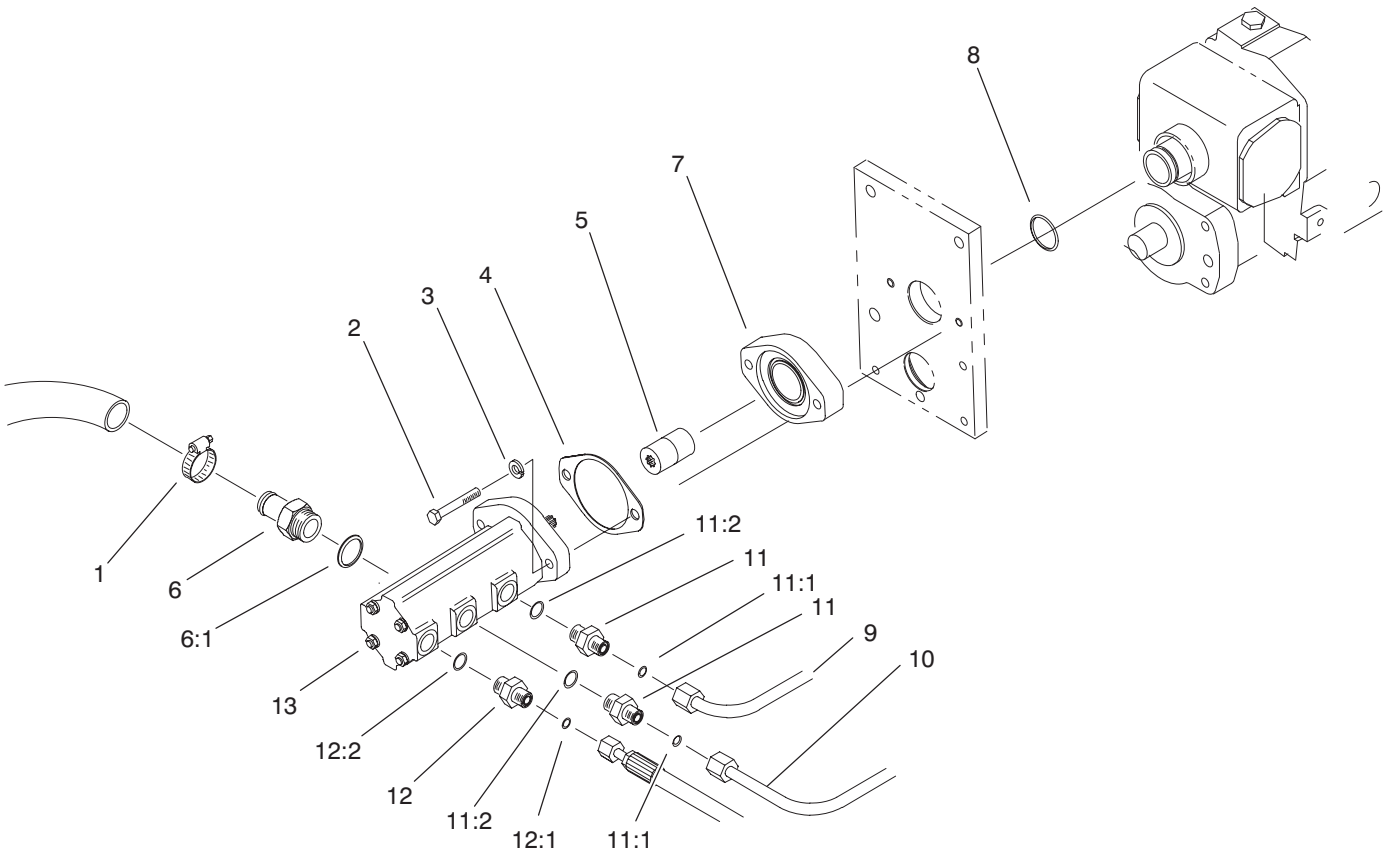
Ref. No.	Part No.	Qty.	Description



Sheet No.:12

Traction Control Assembly

Ref. No.	Part No.	Qty.	Description
1	3272–10	1	Pin–Cotter
2	3256–26	1	Washer–Flat
3	322–10	1	Screw–HH
4	32105–21	2	Screw–HH
5	29–6162	1	Switch–Micro
6	75–4130	1	Plate–Switch
7	76–9430–03	1	Spring–Extention
8	3296–29	4	Nut–Lock, NI
9	322–7	1	Screw–HH
10	251–307	2	Bearing–Ball
11	75–5470	2	Spacer–Bearing
12	321–5	4	Screw–HH
13	104–1480–03	1	Traction Plate ASM
14	85–9900–03	1	Plate–Anchor, Spring
15	3253–4	2	Washer–Lock
16	322–3	2	Screw–HH
17	92–2581	1	Neutral Switch Arm ASM
17:1	256–113	2	Bushing–Flange
17:2	302–5	1	Fitting–Grease
18	3–6498	2	Washer–Thrust
19	76–8640	1	Stud–Traction
20	3296–9	2	Nut–Lock, NI
21	75–4100–03	1	Control–Pump
22	23–2270	1	Bushing–Rubber
23	85–9910	1	Eyebolt
24	3217–6	1	Nut–Hex

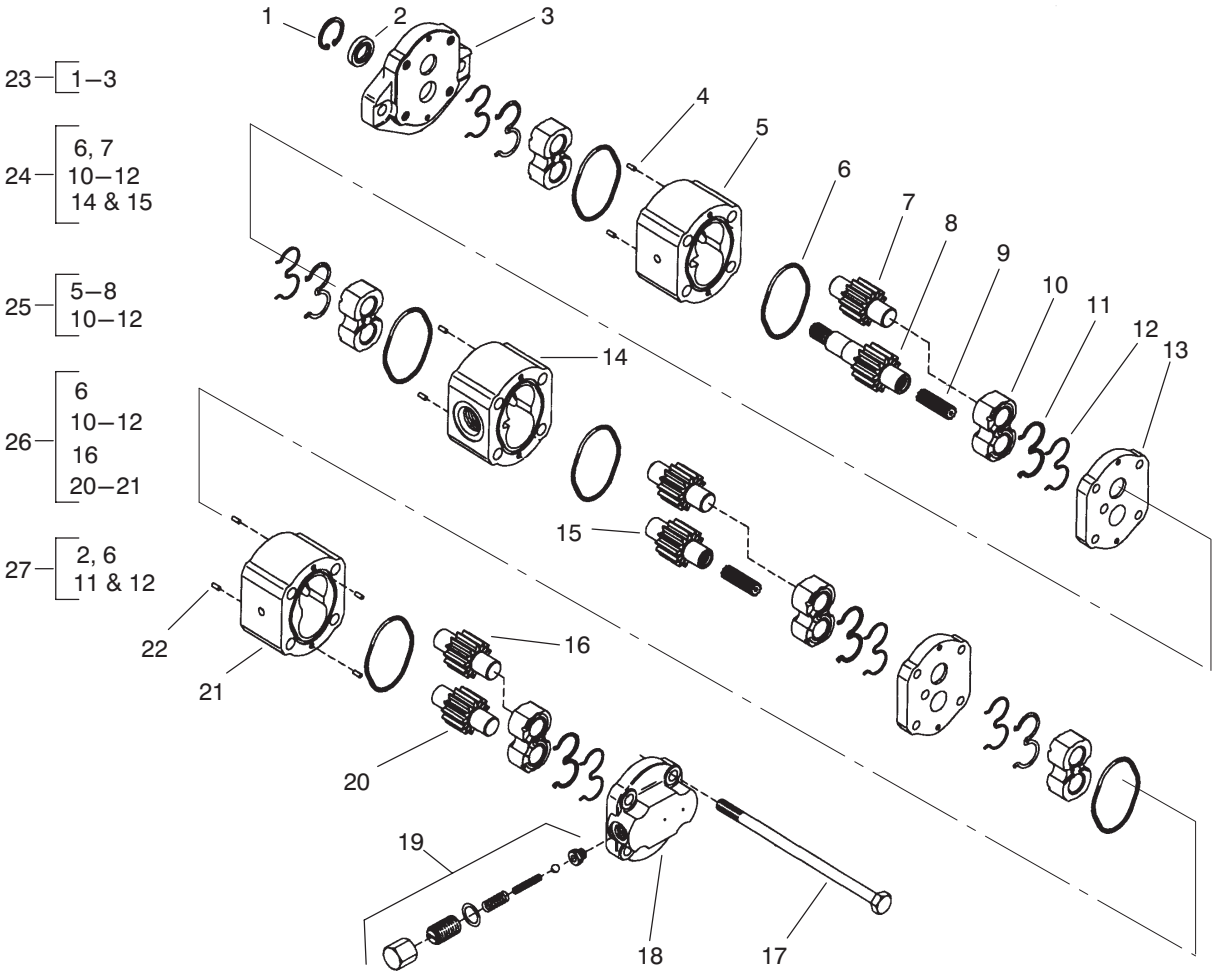


Sheet No.:13

Gear Pump Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	2412–34	1	Clamp–Hose
2	323–12	2	Screw–HH
3	3253–5	2	Washer–Lock
4	93–3604	1	Gasket
5	93–1396	1	Coupler
6	354–78	1	Connector–Hose
6:1	237–146	1	O–Ring
7	75–4400–03	1	Adaptor
8	237–163	1	O–Ring
9	93–3642	1	Tube–Pump, Port 1
10	93–3643	1	Tube–Pump, Port 2
11	340–4	2	Adapter
11:1	237–30	1	O–Ring
11:2	237–79	1	O–Ring
12	340–3	1	Adapter
12:1	237–22	1	O–Ring
12:2	237–79	1	O–Ring
13	98–9796	1	Pump–Gear

Ref. No.	Part No.	Qty.	Description

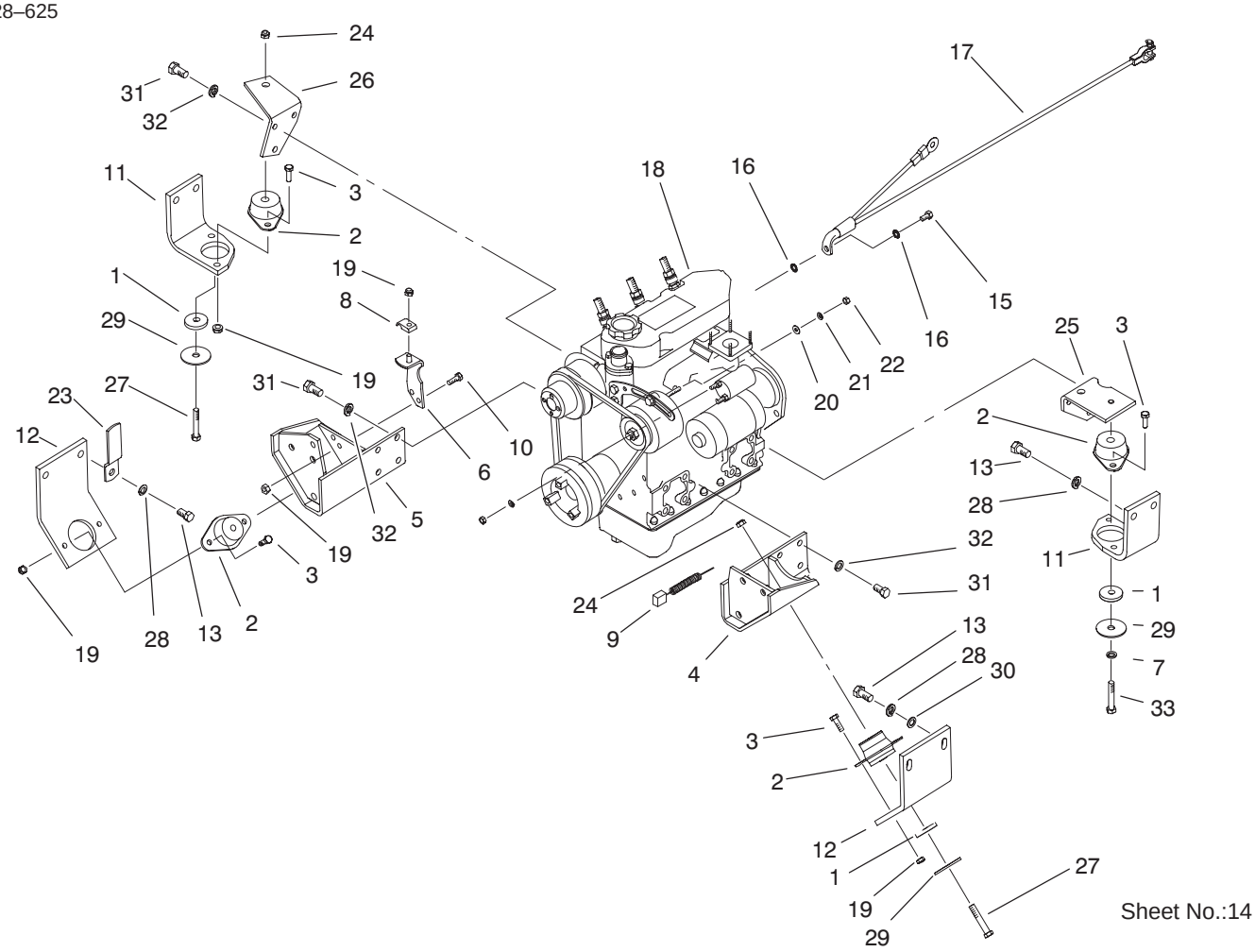


Sheet No.:A5
T–3514

Gear Pump Assembly No. 98–9796

Ref. No.	Part No.	Qty.	Description
☆1		1	Ring–Retaining
☆2		1	Seal–Shaft
☆3		1	Flange
4	93–4278	4	Pin–Dowel
☆5		1	Housing
☆6		2	O–Ring
☆7		1	Gear–Idler
☆8		1	Gear–Drive
9	93–4280	2	Coupling
☆10		2	Bearing
☆11		2	E–Seal
☆12		2	Ring–Backup
13	93–4279	2	Plate–Distance
☆14		1	Housing
☆15		1	Gear–Idler
☆16		1	Gear–Idler
17	93–4283	4	Bolt
18	93–4282	1	Block–Valve
19	93–4277	1	Kit–Valve
☆20		1	Gear–Idler
☆21		1	Housing
22	93–4281	4	Pin–Dowel
23	93–4268	1	Kit–Flange
24	98–9798	1	Kit–Housing, Section 1
25	98–9797	1	Kit–Housing, Section 2
26	98–9799	1	Kit–Housing, Section 3
27	99–8353	1	Kit–Individual Pieces

☆ Not serviced separately

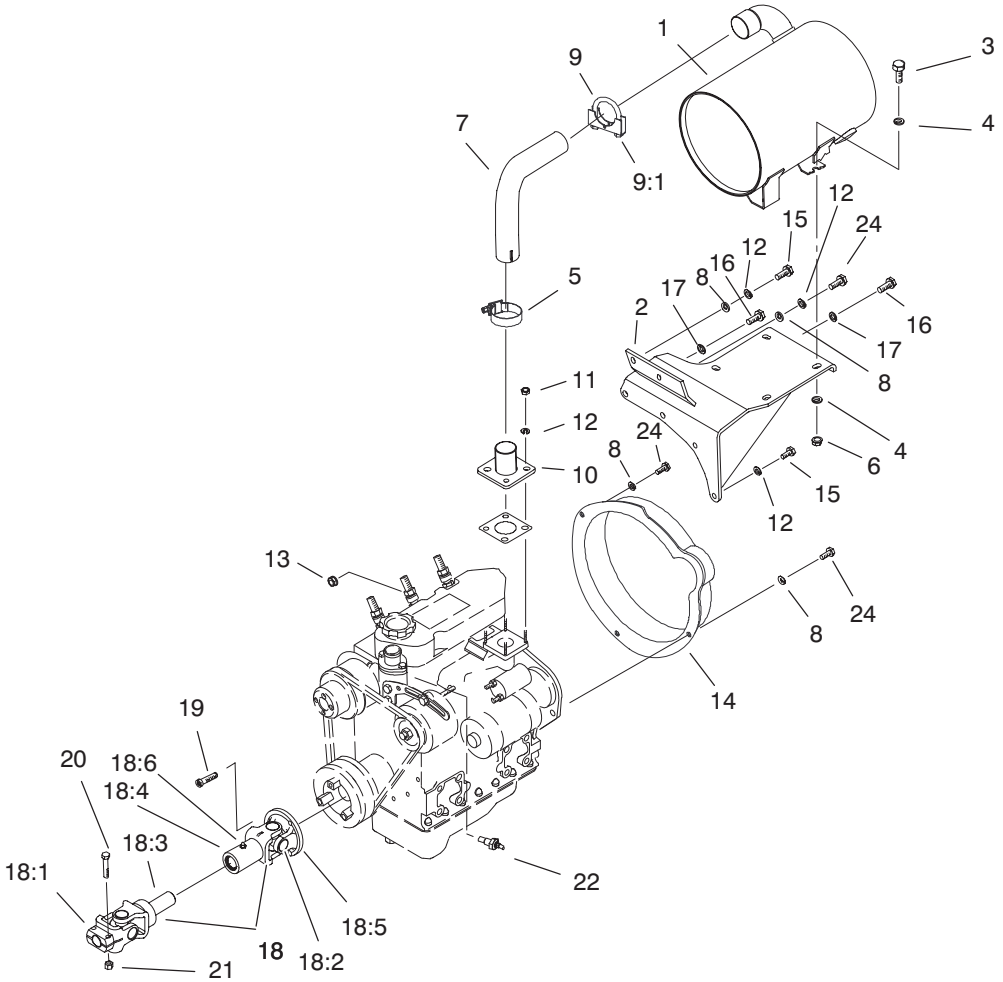


Sheet No.:14

Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	83–1050	4	Spacer
2	83–1030	4	Mount–Engine
3	322–5	8	Screw–HH
4	98–4539–03	1	Bracket–Engine Mount, LH
5	98–4543–03	1	Bracket–Engine Mount, RH
6	98–9749	1	Plate–Throttle
7	3253–21	1	Washer–Lock
8	3–6657	1	Clip–Skid
9	99–3441	1	Harness–Wire, Fusible Link
10	322–4	2	Screw–HH
11	98–4513–03	2	Bracket–Engine, Rear
12	93–0095–03	2	Bracket–Engine, Front
13	3213–2	8	Screw–HH
15	98–9322	1	Bolt–HH, Metric
16	3255–9	2	Washer–Lock/Ext
17	98–4598	1	Cable–Battery, Negative
18	106–7057	1	Engine–Kubota
19	3296–29	11	Nut–Lock, NI
20	3256–78	1	Washer–Flat
21	43–5930	1	Washer–Spring
22	48–7890	1	Nut
23	98–4594	1	Clamp–Retainer

Ref. No.	Part No.	Qty.	Description
24	32128–36	3	Nut–HF
25	98–4515–03	1	Bracket–Rear Engine, LH
26	98–4514–03	1	Bracket–Rear Engine, RH
27	323–12	3	Screw–HH
28	3253–7	8	Washer–Lock
29	87–5100	4	Washer–Snubbing
30	3256–40	4	Washer–Flat
31	43–0090	14	Screw–HH
32	42–9600	14	Lockwasher–Spring
33	323–10	1	Screw–HH

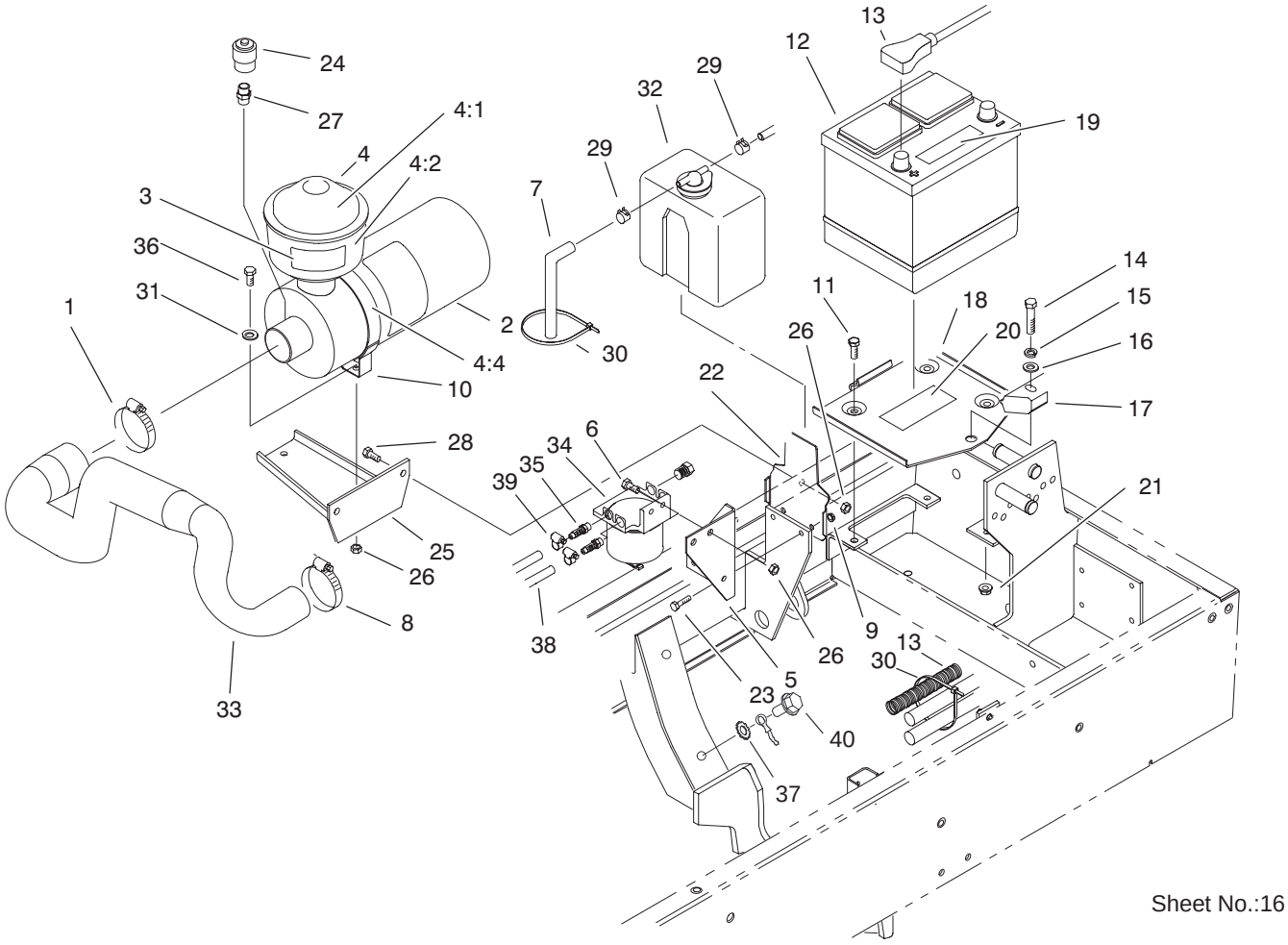


Sheet No.:15

Muffler and Pump Drive Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9794	1	Muffler–Exhaust
2	98–4555–03	1	Bracket–Muffler
3	323–7	4	Screw–HH
4	3256–4	8	Washer–Flat
5	2112–9	1	Clamp
6	3296–39	4	Nut–Lock, NI
7	98–9745	1	Tube–Exhaust
8	3256–23	5	Washer–Flat
9	2112–6	1	Clamp–Muffler
9:1	3218–2	2	Nut–Jam
10	98–4527	1	Pipe–Exhaust, Engine
11	33014–00	4	Nut–Hex
12	42–9850	7	Washer–Lock, Spring
13	33024–00	1	Nut–Lock
14	105–7505	1	Guard–Flywheel
15	33114–025	3	Screw–HH
16	43–0090	2	Screw–HH
17	42–9600	2	Lockwasher–Spring
18	98–4593	1	Driveshaft ASM
18:1	98–9768	1	Yoke
18:2	98–9766	2	Universal Joint Kit
18:3	98–9765	1	Yoke And Shaft
18:4	98–9767	1	Tube–Yoke
18:5	98–9769	1	Flange–Yoke
18:6	302–5	3	Fitting–Grease
19	98–9322	3	Bolt–HH, Metric

Ref. No.	Part No.	Qty.	Description
20	322–9	2	Screw–HH
21	3296–29	2	Nut–Lock, NI
22	98–9346	1	Sender–Temperature
24	33114–020	4	Screw–HH



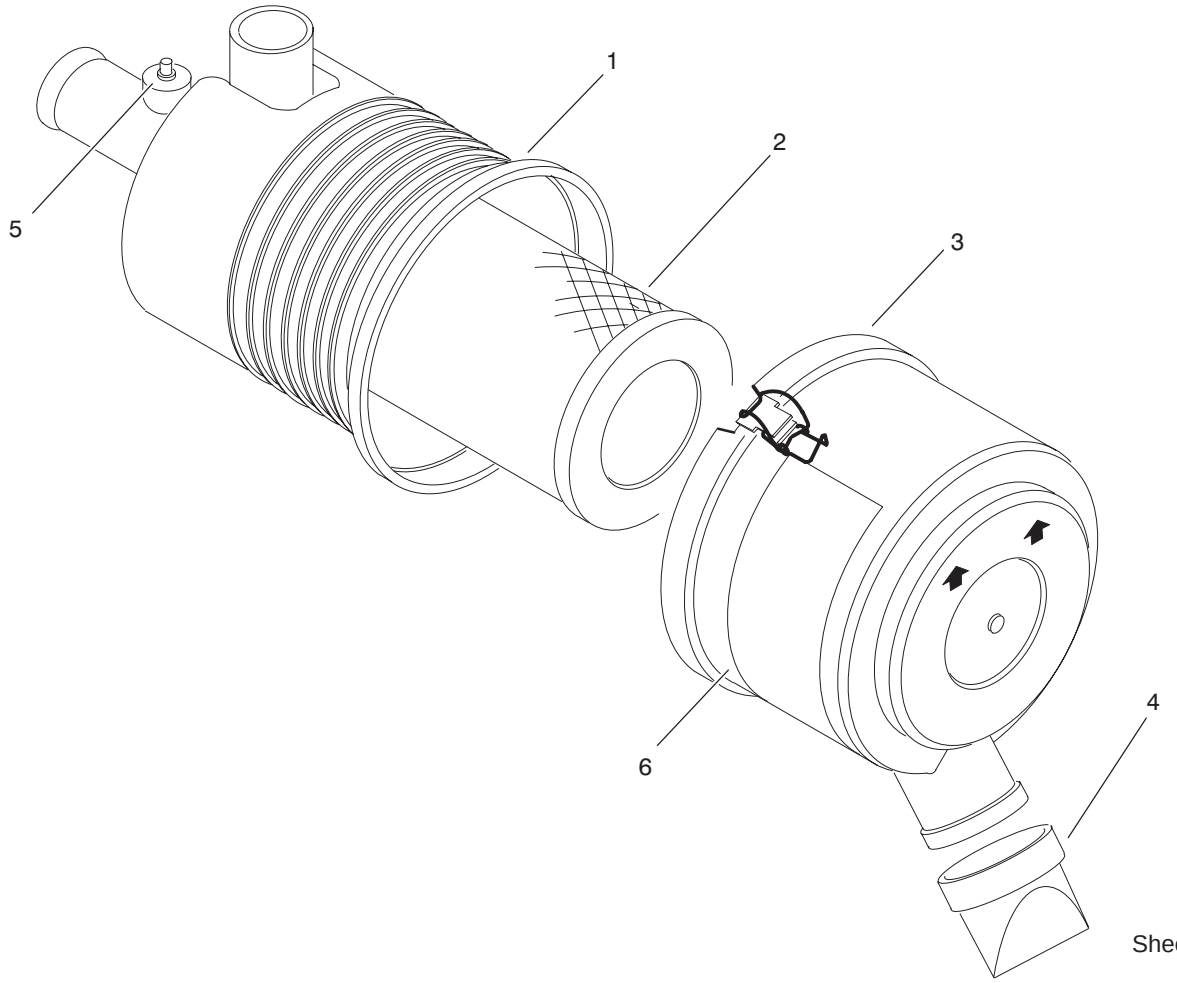
Sheet No.:16

Engine Components Assembly

Ref. No.	Part No.	Qty.	Description
1	2412–42	1	Clamp–Hose
2	98–4517	1	Air Cleaner ASM
3	93–6692	1	Decal–Fluid, Starting
4	48–7430	1	Precleaner
4:1	33–1260	1	Cover ASM
4:2	33–1270	1	Bowl–Clear
*4:3	62–6300	1	Sleeve ASM
4:4	94–6873	1	Clamp
5	98–4578–03	1	Bracket–Filter, Fuel
6	3234–29	2	Screw–HHF
7	63–7630	1	Hose–Fuel
8	2412–92	1	Clamp–Hose
9	32128–33	2	Nut–HF
10	98–4525	1	Bracket–Cleaner, Air
11	322–4	3	Screw–HH
13	104–0086	1	Cable–Battery, Positive
14	323–9	1	Screw–HH
15	3253–21	1	Washer–Lock
16	3256–24	1	Washer–Flat
17	66–2490	1	Retainer–Battery
18	94–7343	1	Battery Base ASM
19	93–6668	1	Decal–Battery
20	93–7276	1	Decal–Danger
21	32128–20	1	Nut–HF

Ref. No.	Part No.	Qty.	Description
22	98–4576–03	1	Bracket–Reservoir, Water
23	321–5	2	Screw–HH
24	93–9164	1	Indicator–Mini
25	98–4518–03	1	Bracket–Cleaner, Air
26	3296–29	6	Nut–Lock, NI
27	94–1416	1	Indicator Adapter ASM
28	322–5	2	Screw–HH
29	92–2379	2	Clamp–Hose
30	3290–378	2	Tie–Cable
31	3256–23	2	Washer–Flat
32	104–9318	1	Bottle–Overflow
33	98–4510	1	Hose–Cleanner, Air
34	98–9305	1	Filter–Water/Fuel
35	353–783	2	Fitting
36	322–6	2	Screw–HH
37	3255–8	1	Washer–Lock
38	95–4275	1	Hose–Fuel
39	2412–108	4	Clamp–Worm
40	32144–14	1	Screw–HWH
*99	3290–379	1	Tie–Cable

* Not illustrated



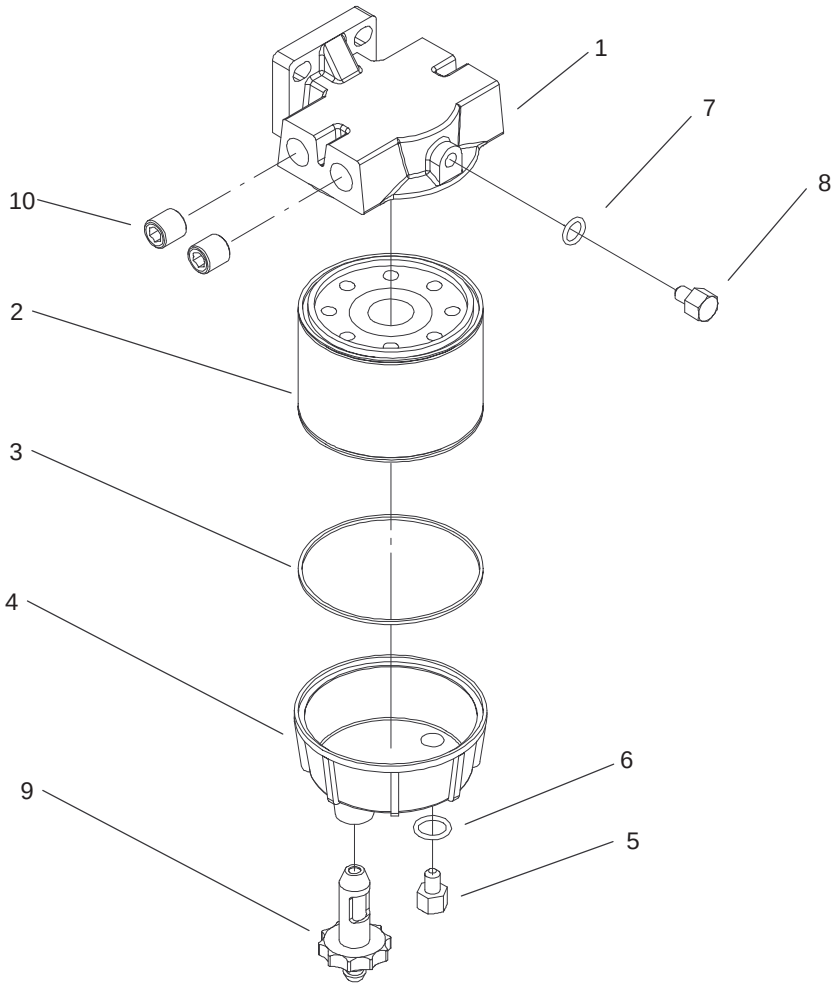
Sheet No.:B1
T–2903

Air Cleaner Assembly No. 98–4517

Ref. No.	Part No.	Qty.	Description
☆1		1	Body Assembly
2	98–9763	1	Element ASM
3	98–9771	1	Cover ASM
4	94–1414	1	Valve–Vacuator
☆5		1	Plug
6	98–9788	1	Decal–Instruction

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

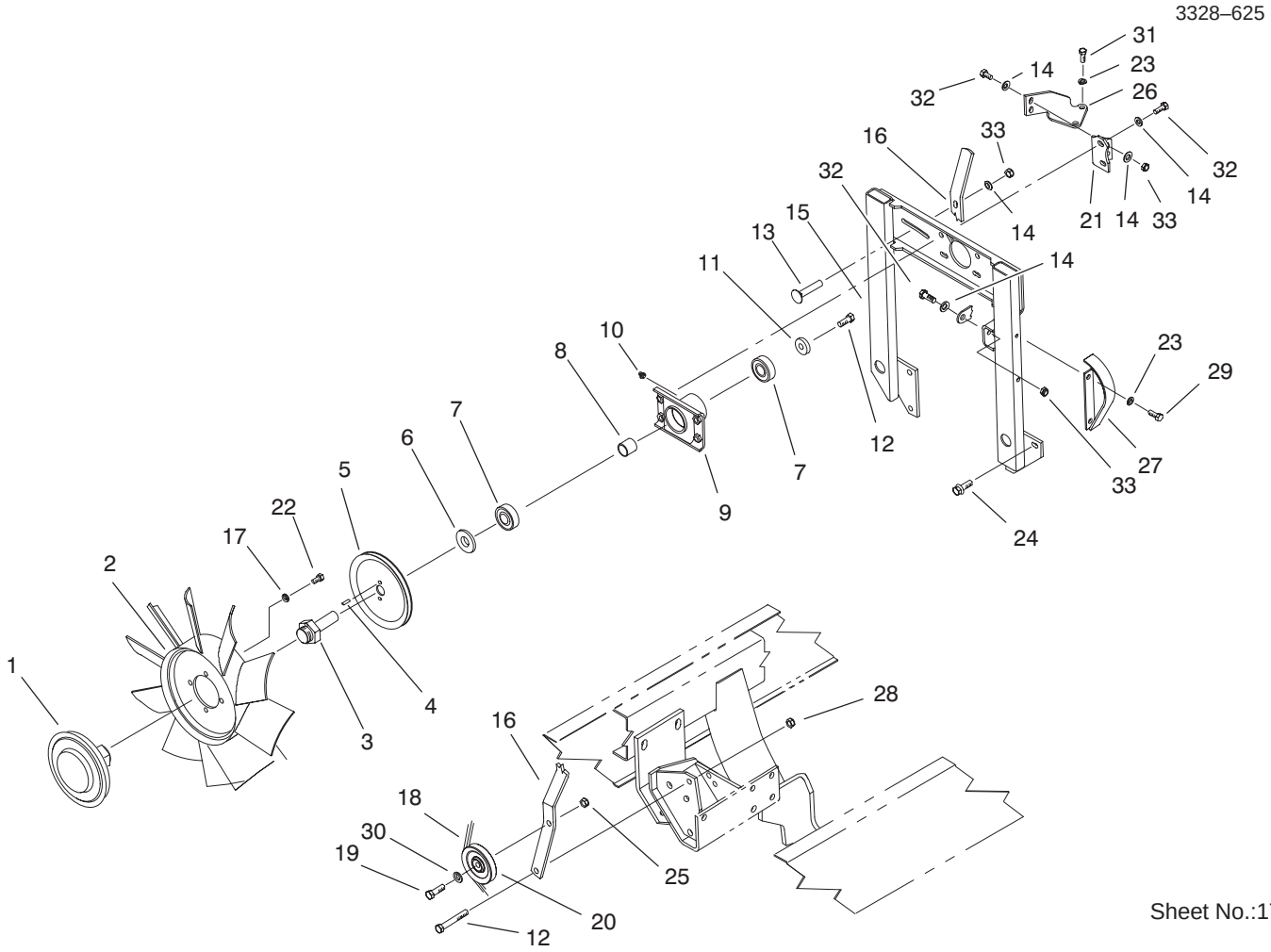


Sheet No.:B2
T–3330

Water/Fuel Separator Assembly No. 98–9305

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

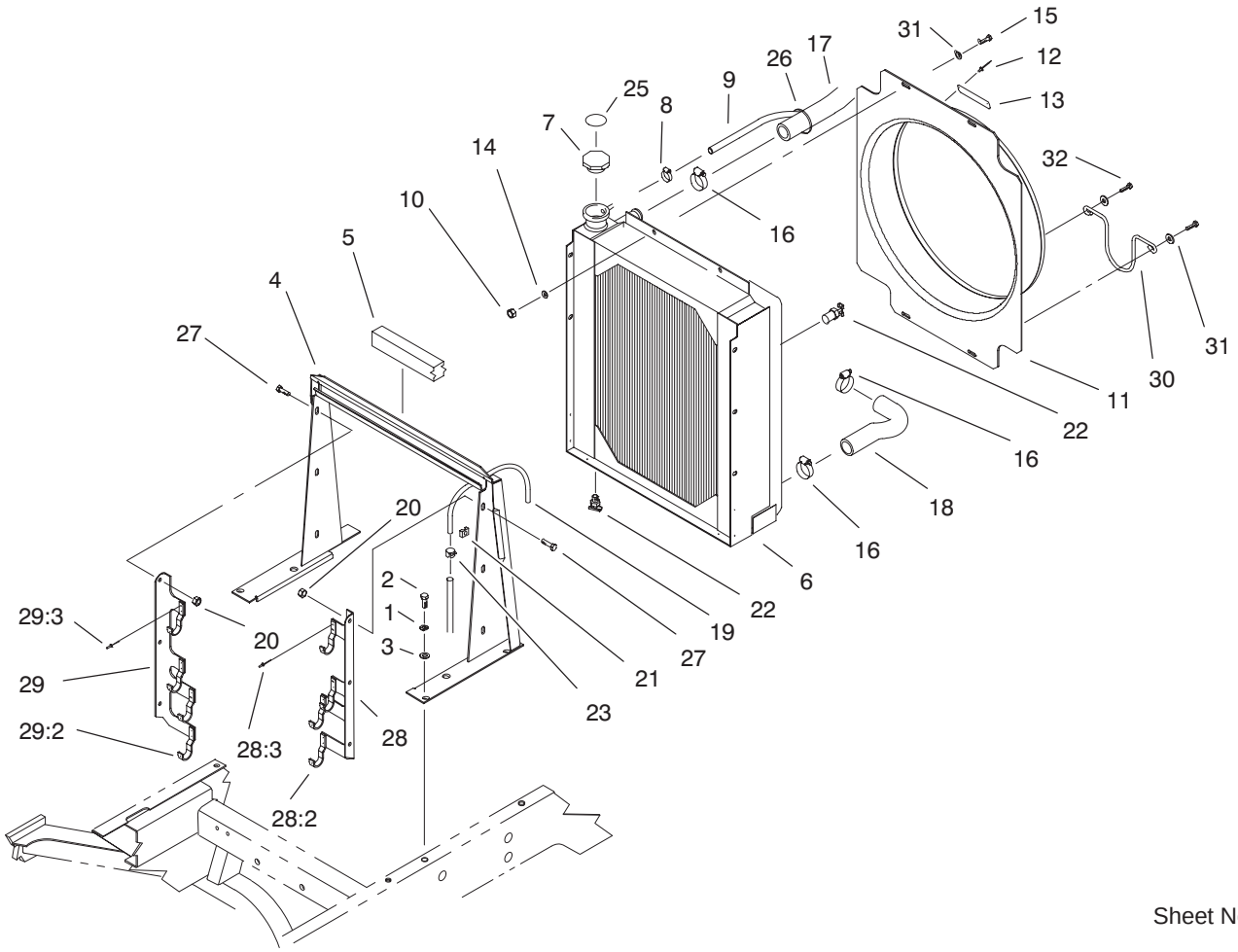
Ref. No.	Part No.	Qty.	Description



Fan Drive Assembly

Ref. No.	Part No.	Qty.	Description
1	74–5520	1	Clutch–Fan
2	75–3780	1	Fan–Engine
3	75–6380	1	Shaft–Fan
4	104–9312	2	Pin–Grooved
5	98–9313–03	1	Pulley–Fan
6	104–9259	1	Washer–Thrust
7	251–318	2	Bearing
8	104–0001	1	Spacer
9	75–4450–03	1	Hub
10	302–2	1	Fitting–Grease
11	67–1630	1	Spacer
12	323–6	2	Screw–HH
13	3230–2	1	Bolt–CARR
14	3256–23	9	Washer–Flat
15	98–4530–03	1	Support–Fan
16	98–4575–03	1	Lever–Idler, Fan
17	3253–4	4	Washer–Lock
18	98–9312	1	V–Belt
19	323–8	1	Screw–HH
20	63–8140	1	Pulley–Idler
21	98–9740	1	Bracket–Fan, Support
22	322–2	4	Screw–HH
23	42–9850	4	Washer–Lock, Spring
24	3234–29	6	Screw–HHF
25	3296–59	1	Nut–Lock, NI
26	98–9741	1	Bracket–Mount, Fan

Ref. No.	Part No.	Qty.	Description
27	98–4561–03	1	Shield–Alternator
28	3296–39	1	Nut–Lock, NI
29	32144–14	2	Screw–HWH
30	3256–24	1	Washer–Flat
31	33114–016	2	Screw–HH
32	322–4	7	Screw–HH
33	3296–29	4	Nut–Lock, NI

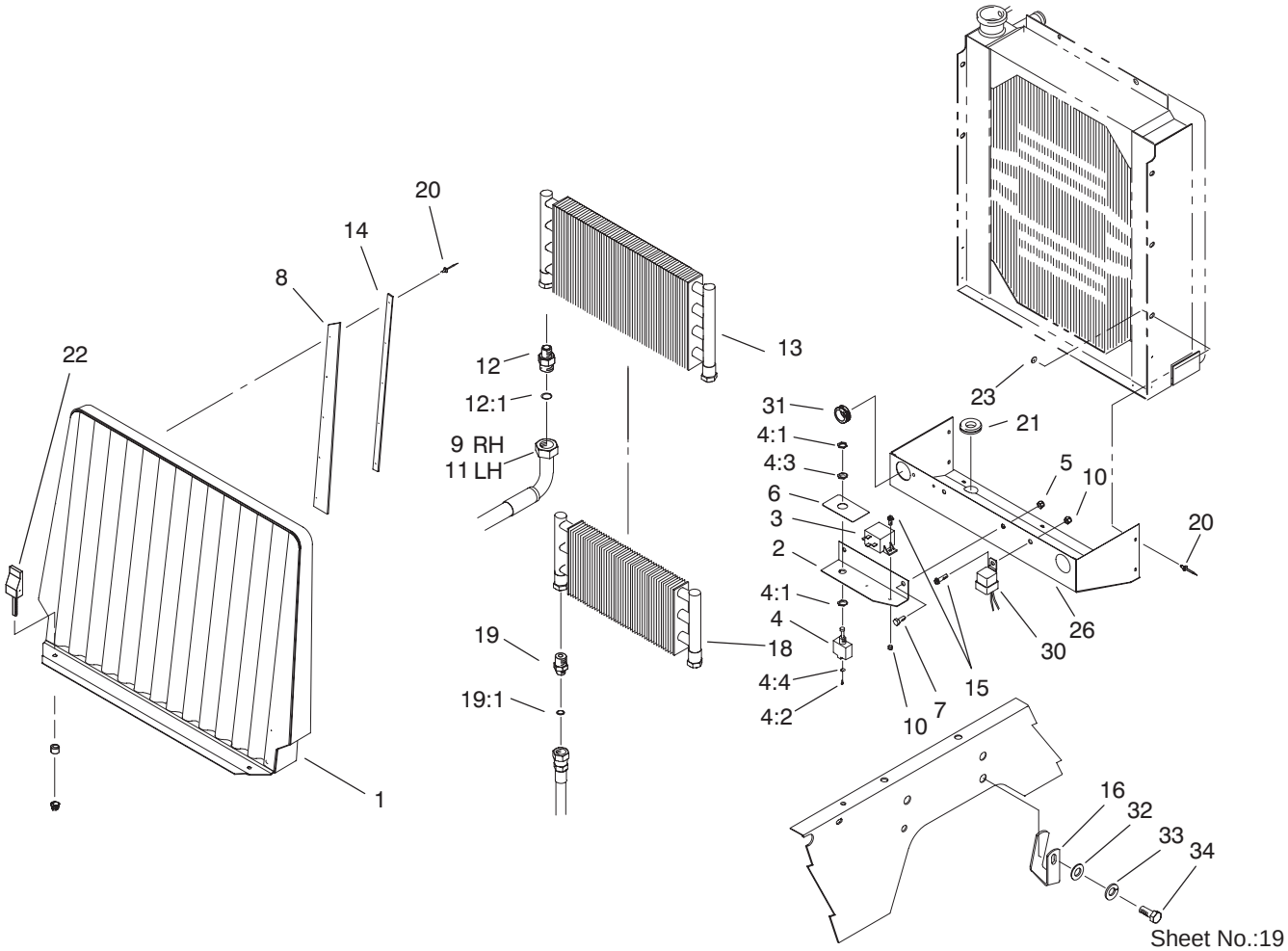


Sheet No.:18

Radiator Assembly

Ref. No.	Part No.	Qty.	Description
1	3253–4	4	Washer–Lock
2	322–5	4	Screw–HH
3	3256–23	4	Washer–Flat
4	98–9317–03	1	Support–Radiator
5	93–0005	1	Strip–Foam, Radiator Top
6	98–4507	1	Radiator
7	66–3240	1	Cap–Radiator
8	92–2379	1	Clamp–Hose
9	75–2851	1	Hose–Fuel
10	3296–42	4	Nut–Lock, NI
11	98–4571	1	Shroud–Fan
12	3290–55	2	Rivet–Pop
13	98–9335	1	Plate–Warning, Fan
14	3256–22	4	Washer–Flat
15	321–4	2	Screw–HH
16	2412–34	4	Clamp–Hose
17	98–4511	1	Hose–Radiator, Upper
18	98–4512	1	Hose–Radiator, Lower
19	66–3180	1	Tube–Vent
20	32128–20	6	Nut–HF
21	2412–103	1	Clamp
22	304–46	1	Draincock
23	2412–98	1	Clamp
25	106–5976	1	Decal–Cap, Radiator
26	3290–379	1	Tie–Cable

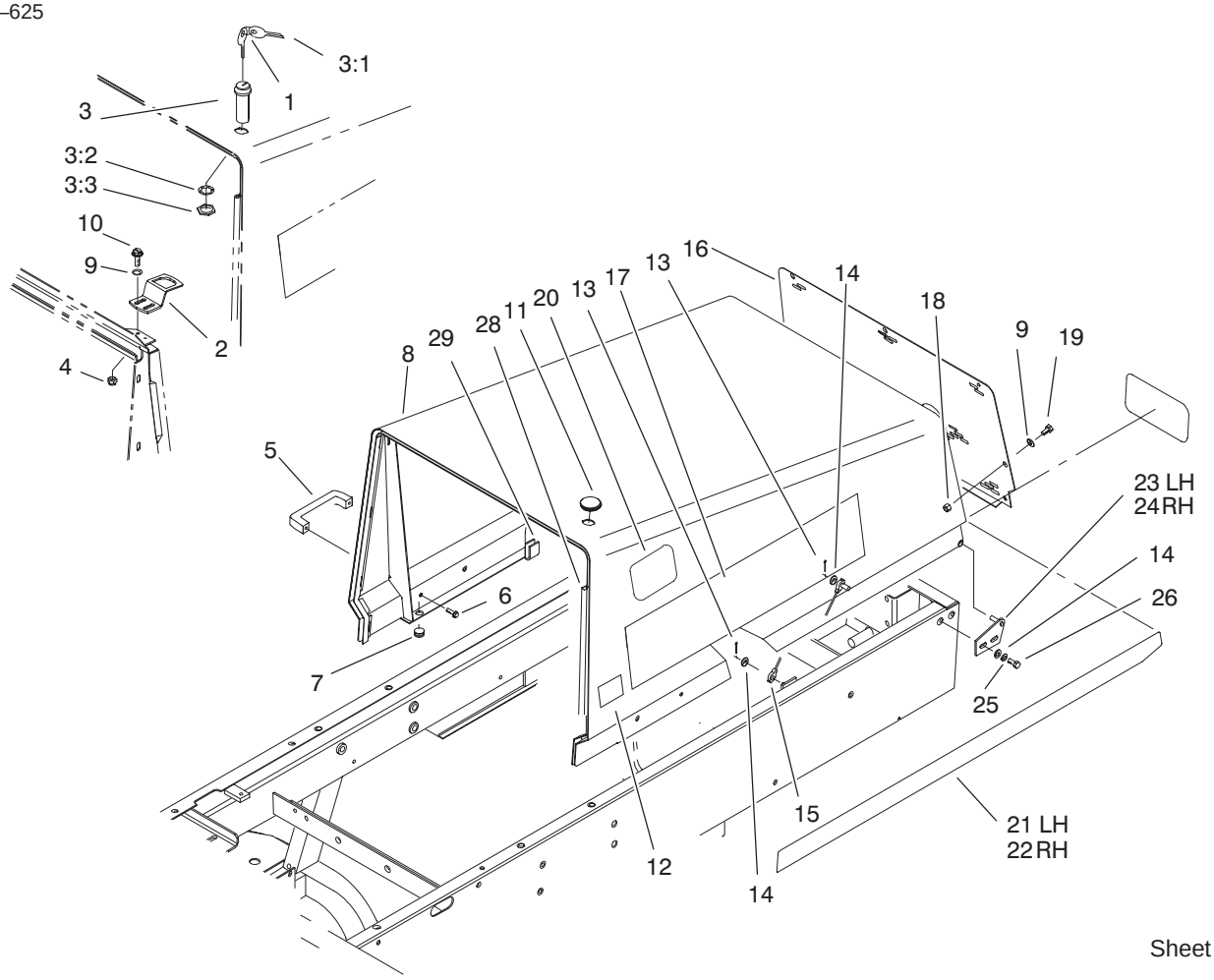
Ref. No.	Part No.	Qty.	Description
27	3234–5	6	Screw
28	99–6991	1	LH Cooler Mount ASM
28:2	75–0930	4	Hook–Cooler Mount
28:3	3269–15	8	Rivet
29	99–6994	1	RH Cooler Mount ASM
29:2	75–0930	4	Hook–Cooler Mount
29:3	3269–15	8	Rivet
30	104–1448	1	Hoop–Driveline
31	3256–55	4	Washer–Flat
32	321–6	2	Screw–HH



Oil Cooler/Radiator Assembly

Ref. No.	Part No.	Qty.	Description
1	93–0032–03	1	Housing–Screen, Front
2	75–3390–03	1	Bracket–Backlap
3	66–8800	1	Relay
4	99–8352	1	Switch–Backlap, Master
4:1	218–498	2	Locknut
4:2	218–588	3	Screw
4:3	218–589	1	Nut/Lockwasher
4:4	3253–19	3	Washer–Lock
5	3296–29	2	Nut–Lock, NI
6	93–6684	1	Decal–Backlap
7	322–2	2	Screw–HH
8	93–3623	2	Strip–Sealing, Radiator
9	93–0077	1	Hose ASM
10	3296–42	3	Nut–Lock, NI
11	93–0078	1	Hose ASM
12	92–4999	2	Fitting
12:1	237–65	1	O–Ring
13	75–1040	1	Cooler–Oil
14	93–3624–03	2	Plate–Retaining
15	321–4	3	Screw–HH
16	98–3928	2	Clamp–Hose
18	24–0760	1	Cooler ASM
19	340–124	2	Adapter

Ref. No.	Part No.	Qty.	Description
19:1	237–22	1	O–Ring
20	3269–13	15	Rivet–Pop
21	100–3815	2	Grommet–Rubber
22	93–1374	2	Latch–Swell
23	3269–10	5	Washer–Back
26	104–9257–03	1	Shield–Radiator
30	70–1480	1	Relay
31	240–3	2	Grommet–Rubber
32	3256–26	2	Washer–Flat
33	3253–7	2	Washer–Lock
34	325–5	2	Screw–HH



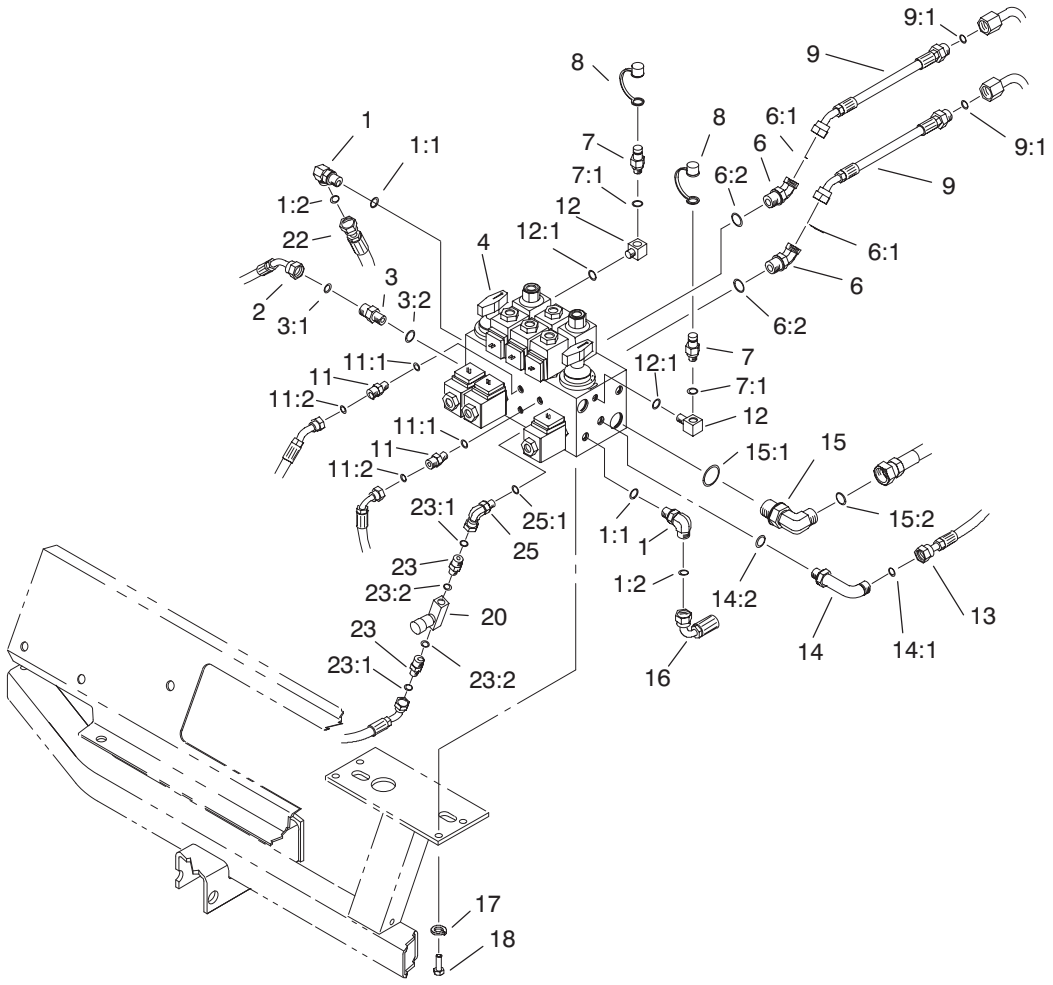
Sheet No.:20

Hood Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9321	1	Ring–Key
2	98–9316	1	Latch–Hood
3	98–9315	1	Latch–Locking
3:1	99–8350	2	Key–Latch, Locking
☆3:2		1	Washer–Switch
☆3:3		1	Nut–Switch
4	3296–16	2	Nut–Lock, NI
5	65–5100	2	Handle–Door
6	46–8091	4	Screw–HWH
7	237–141	2	Grommet–Rubber
8	98–9746	1	Hood ASM
9	3256–1	9	Washer–Flat
10	321–4	2	Screw–HH
11	98–9314	1	Grommet
12	93–7252	1	Decal–International
13	3272–4	2	Pin–Cotter
14	3256–23	6	Washer–Flat
15	75–0570	1	Cable–Hood
16	98–4573–03	1	Screen–Hood, Rear
17	106–7061	2	Decal–Reelmaster 5200d
18	3296–42	7	Nut–Lock, NI
19	321–39	7	Screw–HH
20	66–6140	2	Decal
21	92–5751	1	Decal–Hood, LH
22	92–5752	1	Decal–Hood, RH

Ref. No.	Part No.	Qty.	Description
23	63–6900–01	1	Plate ASM–Hood Hinge, LH
24	63–6890–01	1	Plate ASM–Hood Hinge, RH
25	3253–4	4	Washer–Lock
26	322–5	4	Screw–HH
28	93–0081	1	Strip–Seal
29	99–8975	1	Strip–Seal

☆ Not serviced separately



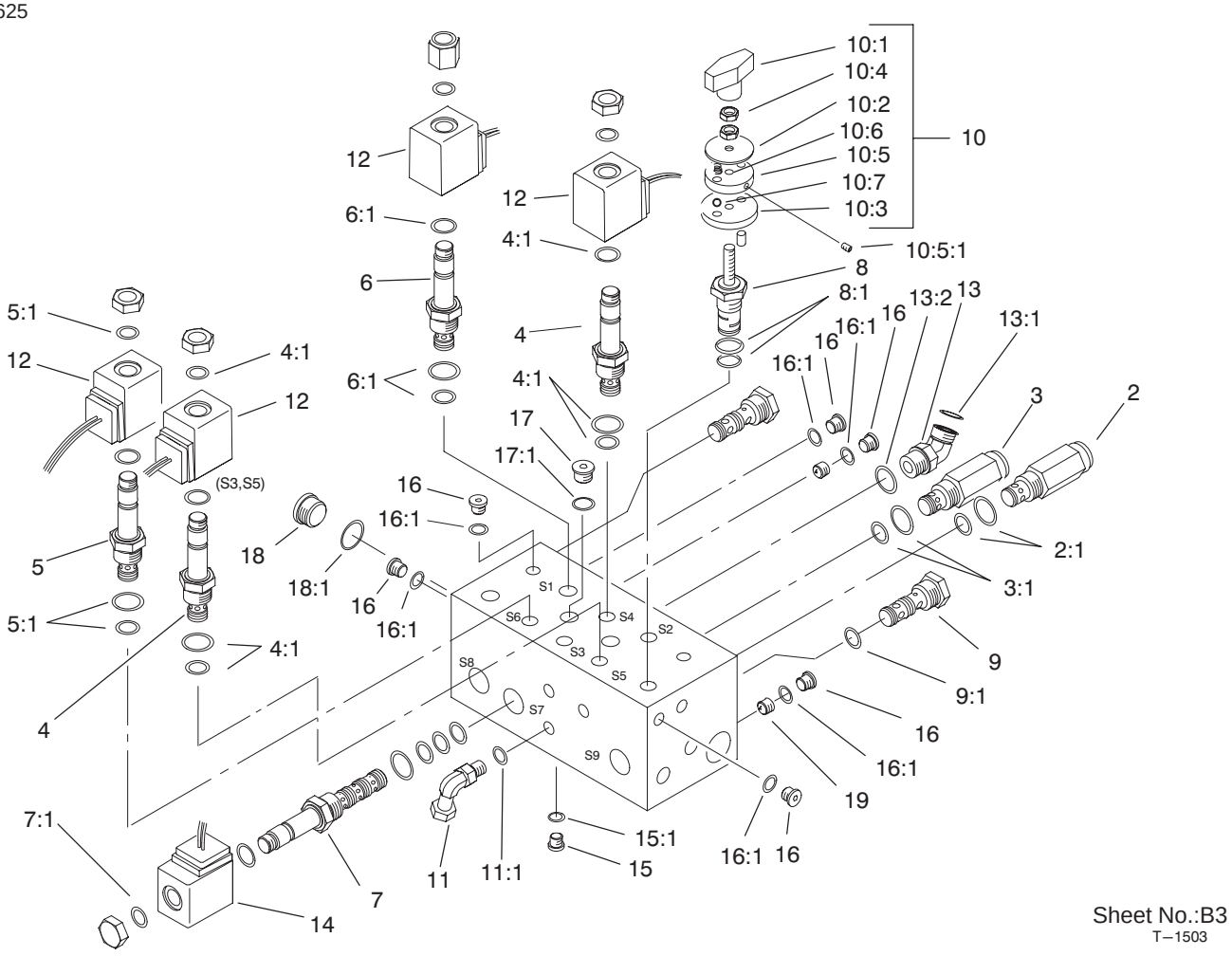
Sheet No.:21

Hydraulic Control Block and Hoses Assembly

Ref. No.	Part No.	Qty.	Description
1	340–98	2	Fitting–HYD, 90°
1:1	237–79	1	O–Ring
1:2	237–30	1	O–Ring
2	100–3879	1	HYD Hose ASM
3	340–4	1	Adapter
3:1	237–30	1	O–Ring
3:2	237–79	1	O–Ring
4	98–4579	1	Hydraulic Manifold ASM
6	340–101	2	Fitting–HYD, 90°
6:1	237–30	1	O–Ring
6:2	237–79	1	O–Ring
7	354–77	2	Fitting–Quick
7:1	237–78	1	O–Ring
8	354–79	2	Cap–Dust, Yellow
9	86–9190	2	Hose
9:1	237–30	1	O–Ring
11	340–92	2	Fitting–HYD, Straight
11:1	237–78	1	O–Ring
11:2	237–21	1	O–Ring
12	75–6640	2	Fitting–HYD, Special
12:1	237–78	1	O–Ring
13	98–9348	1	Hydraulic Hose ASM
14	98–9781	1	Fitting–HYD, 90°
14:1	237–30	1	O–Ring
14:2	237–79	1	O–Ring

Ref. No.	Part No.	Qty.	Description
15	340–139	1	Fitting–HYD, 90°
15:1	237–81	1	O–Ring
15:2	237–65	1	O–Ring
16	98–9347	1	Hydraulic Hose ASM
17	3253–4	4	Washer–Lock
18	322–3	4	Screw–HH
20	98–9742	1	Valve–Control, Flow
22	100–3878	1	HYD Hose ASM
23	340–1	2	Adapter
23:1	237–35	1	O–Ring
23:2	237–42	1	O–Ring
*24	3290–378	1	Tie–Cable
25	340–143	1	Elbow–Swivel, 90°
25:1	237–78	1	O–Ring

* Not illustrated

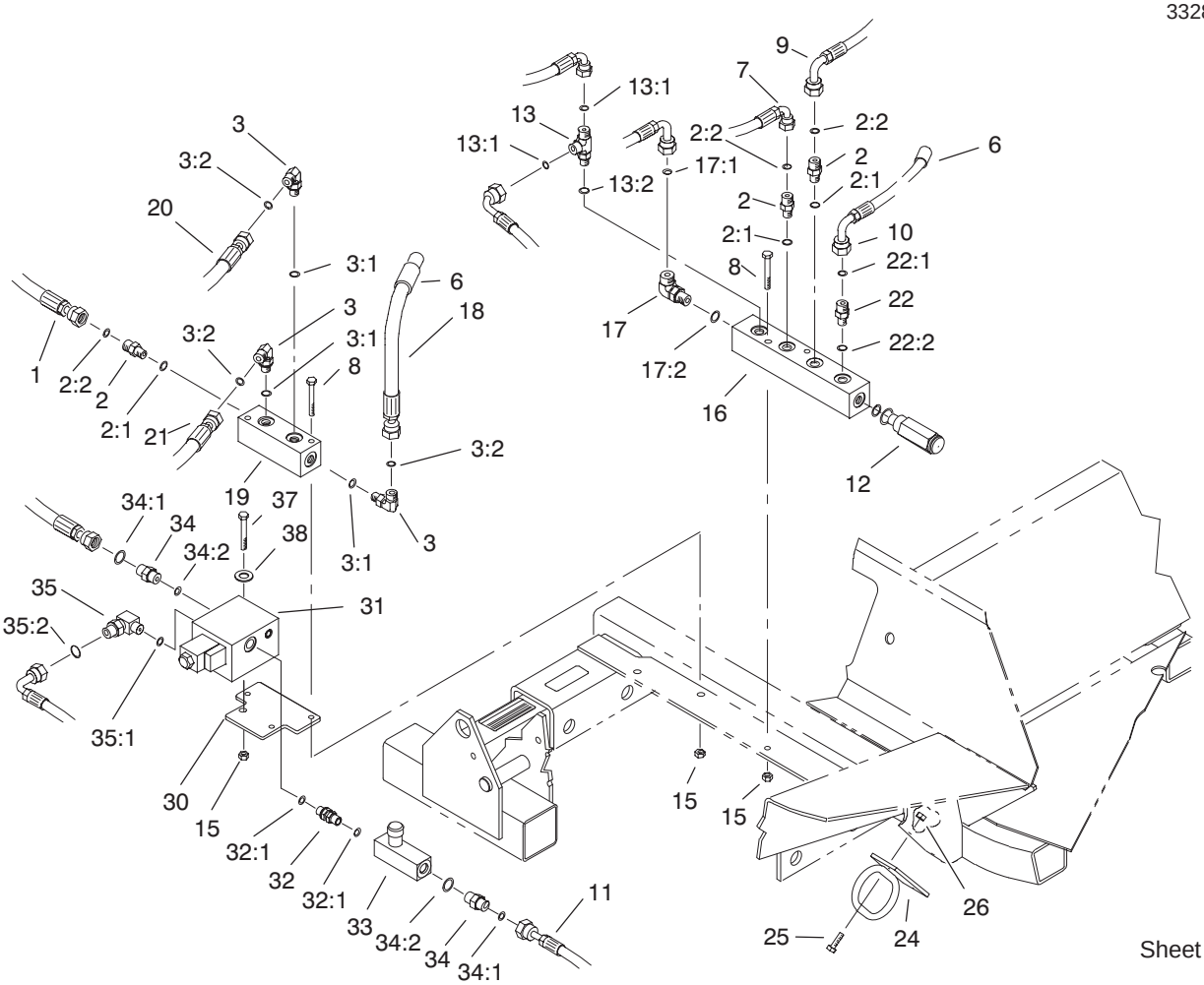


Sheet No.:B3
T–1503

Hydraulic Manifold Assembly No. 98–4579

Ref. No.	Part No.	Qty.	Description
2	75–2010	1	Cartridge–Relief, Da
2:1	95–5645	1	Seal Kit
3	75–0920	1	Cartridge–Relief
3:1	95–5645	1	Seal Kit
4	94–2685	3	Cartridge–N.c., Spool
4:1	95–5645	1	Seal Kit
5	92–6315	1	Cartridge–N.c., Poppet
5:1	104–0004	1	Cartridge Seal Kit
6	88–7020	2	Cartridge–N.o., Spool
6:1	95–5645	1	Seal Kit
7	88–6960	3	Cartridge
7:1	95–5642	1	Seal Kit
8	98–9779	2	Cartridge–Flow
8:1	95–5645	1	Seal Kit
9	69–4120	2	Cartridge–Logic
9:1	69–4240	1	Seal Kit
10	94–3660	1	Detent Kit
10:1	94–5020	1	Knob ASM
10:2	94–5025	1	Plate–Locating
10:3	94–5026	1	Plate–Indicator
10:4	3218–1	2	Nut–Jam
10:5	94–5023	1	Plate–Detent
10:5:1	3245–36	1	Screw–HSH
10:6	94–5027	2	Spring
10:7	255–13	2	Ball–Steel, Stainless

Ref. No.	Part No.	Qty.	Description
11	340–143	1	Elbow–Swivel, 90°
11:1	237–78	1	O–Ring
12	88–9190	6	Solenoid Coil Kit
13	340–101	1	Fitting–HYD, 90°
13:1	237–30	1	O–Ring
13:2	237–79	1	O–Ring
14	88–9200	3	Coil–Solenoid
15	353–991	10	Plug–Hex, Hollow
15:1	237–156	1	O–Ring
16	353–990	15	Plug
16:1	237–78	1	O–Ring
17	353–989	1	Plug–Hex, Hollow
17:1	237–42	1	O–Ring
18	354–70	1	Plug–Hex, Hollow
18:1	237–80	1	O–Ring
19	98–9791	2	Plug–Orifice

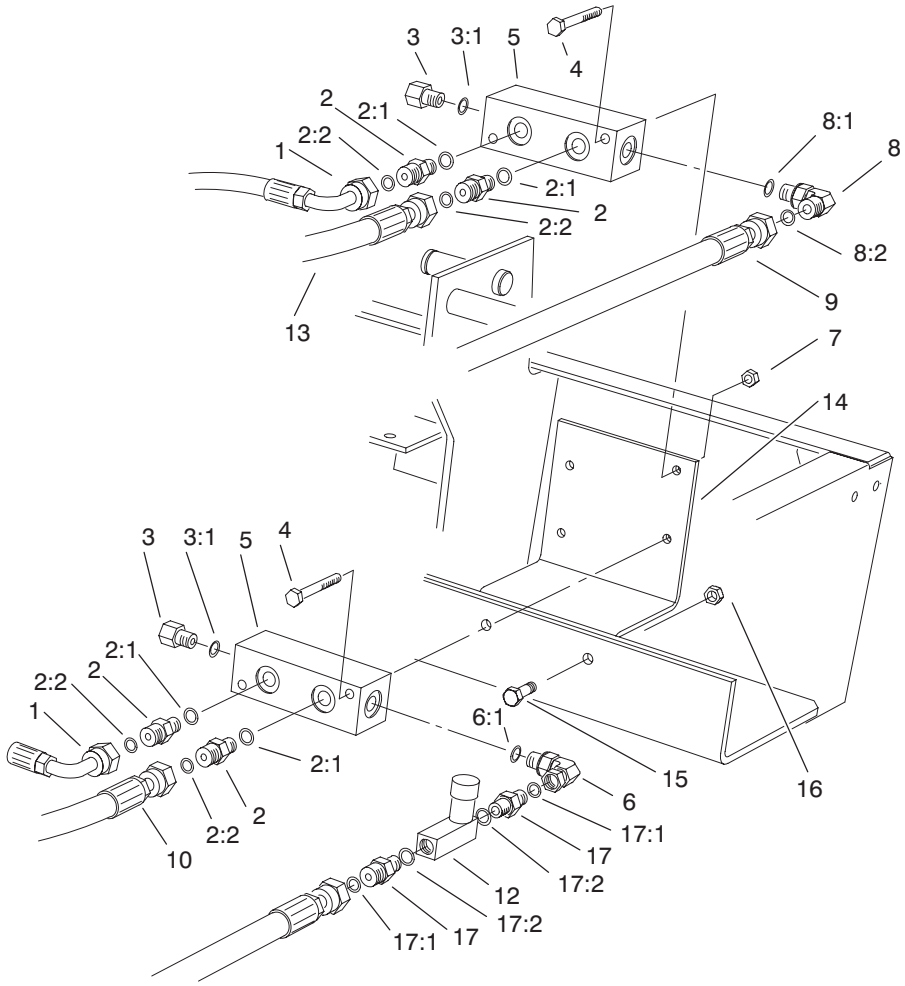


Sheet No.:22

Front Hydraulic Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	98–4584	1	HYD Hose ASM
2	340–92	3	Fitting–HYD, Straight
2:1	237–78	1	O–Ring
2:2	237–21	1	O–Ring
3	340–132	3	Fitting–HYD, 90°
3:1	237–78	1	O–Ring
3:2	237–21	1	O–Ring
6	38–3400	2	Guard–Rubber
7	75–5910	1	Hose
8	321–18	4	Screw–HH
9	93–0118	1	Hose ASM
10	93–0119	1	Hose ASM
11	99–5643	1	Hose–Hydraulic
12	93–0143	1	Cartridge–Relief, P.o.
13	340–140	1	Adapter–Tee
13:1	237–21	2	O–Ring
13:2	237–78	1	O–Ring
15	3296–42	6	Nut–Lock, NI
16	93–0139	1	Block–Manifold, 6 Port
17	340–77	1	Fitting–HYD, 90°
17:1	237–22	1	O–Ring
17:2	237–42	1	O–Ring
18	92–9096	1	Hose
19	75–1180	1	Block–Manifold, 4 Port
20	98–4587	1	HYD Hose ASM
21	104–9323	1	HYD Hose ASM

Ref. No.	Part No.	Qty.	Description
22	340–2	2	Fitting–Straight, HYD
22:1	237–22	1	O–Ring
22:2	237–42	1	O–Ring
24	104–0028	2	Guide–Hose
25	322–5	4	Screw–HH
26	3296–29	4	Nut–Lock, NI
30	105–7510	1	Bracket–Mounting
31	105–3303	1	Flow Divider Valve ASM
32	99–5644	1	Fitting–Sae
32:1	237–42	2	O–Ring
33	98–9742	1	Valve–Control, Flow
34	340–1	2	Adapter
34:1	237–35	1	O–Ring
34:2	237–42	1	O–Ring
35	340–82	1	Adapter
35:1	237–42	1	O–Ring
35:2	237–21	1	O–Ring
37	321–23	2	Screw–HH
38	3256–2	2	Washer–Flat



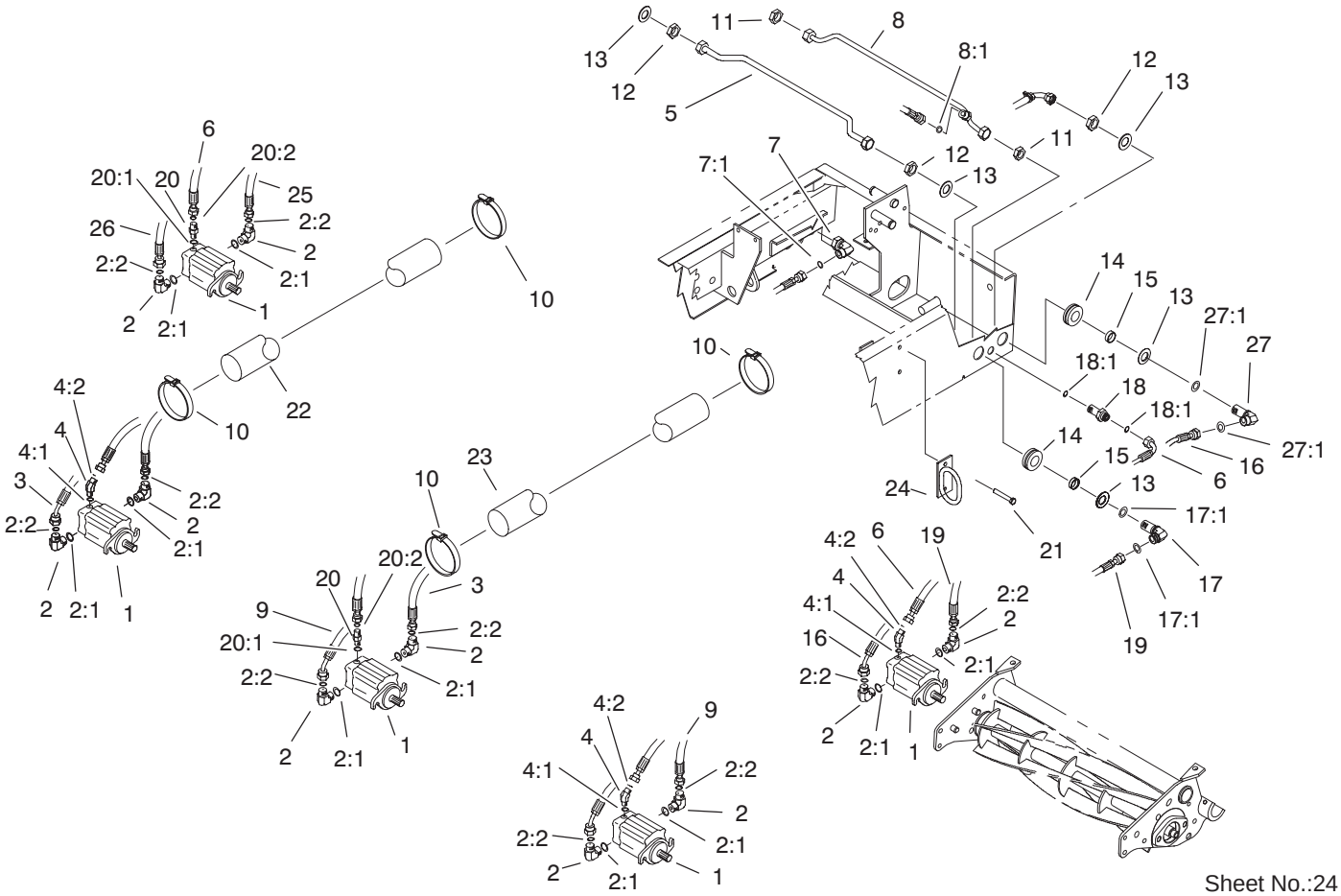
Sheet No.:23

Rear Hydraulic Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	75–6180	2	Hose
2	340–92	4	Fitting–HYD, Straight
2:1	237–78	1	O–Ring
2:2	237–21	1	O–Ring
3	353–512	2	Plug
3:1	237–78	1	O–Ring
4	321–11	4	Screw–HH
5	75–1180	2	Block–Manifold, 4 Port
6	340–143	1	Elbow–Swivel, 90°
6:1	237–78	1	O–Ring
7	32128–33	4	Nut–HF
8	340–132	1	Fitting–HYD, 90°
8:1	237–78	1	O–Ring
8:2	237–21	1	O–Ring
9	93–0118	1	Hose ASM
10	75–6080	1	Hose
12	98–9742	1	Valve–Control, Flow
13	75–6070	1	Hose
14	94–4920–03	1	Plate–Mounting, Valve
15	322–5	2	Screw–HH
16	32128–20	2	Nut–HF
17	340–1	2	Adapter
17:1	237–35	1	O–Ring
17:2	237–42	1	O–Ring
*18	3290–378	1	Tie–Cable

Ref. No.	Part No.	Qty.	Description

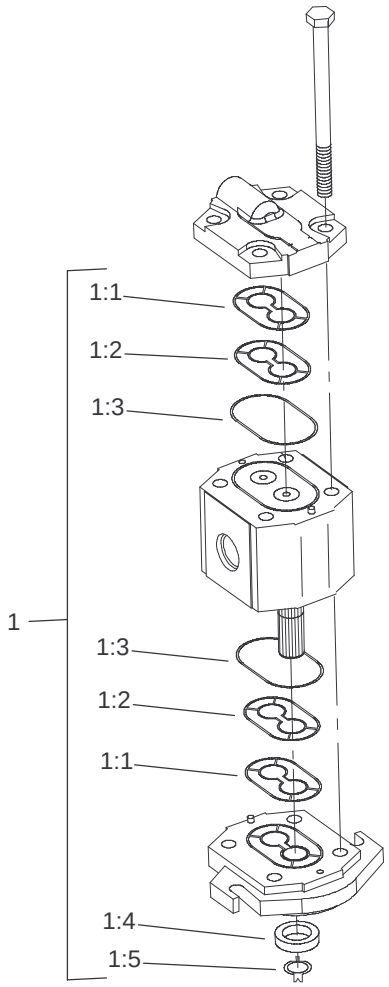
* Not illustrated



Reel Motors Assembly

Ref. No.	Part No.	Qty.	Description
1	100–6426	5	HYD Motor ASM
2	340–98	10	Fitting–HYD, 90°
2:1	237–79	1	O–Ring
2:2	237–30	1	O–Ring
3	104–9322	1	HYD Hose ASM
4	340–103	3	Fitting–HYD, 45°
4:1	237–78	1	O–Ring
4:2	237–21	1	O–Ring
5	94–4918	1	Tube ASM
6	98–4583	2	HYD Hose ASM
7	94–6031	1	Fitting–HYD
7:1	237–30	1	O–Ring
8	100–3714	1	Drain Tube ASM
8:1	237–21	1	O–Ring
9	104–9321	1	HYD Hose ASM
10	3290–379	10	Tie–Cable
11	340–70	2	Nut–Lock
12	340–127	4	Nut–Bulkhead
13	69–8930	8	Washer
14	240–5	4	Grommet
15	69–8960	4	Spacer
16	100–3876	1	HYD Hose ASM
17	93–9151	3	Fitting–HYD
17:1	237–30	2	O–Ring
18	340–71	2	Fitting–Straight, Bulkhead

Ref. No.	Part No.	Qty.	Description
18:1	237–22	2	O–Ring
19	100–3877	1	HYD Hose ASM
20	340–92	2	Fitting–HYD, Straight
20:1	237–78	1	O–Ring
20:2	237–21	1	O–Ring
21	32104–32	4	Screw–HH
22	99–5648	4	Sleeve–Protective
23	99–5617	1	Sleeve–Protective
24	104–0028	2	Guide–Hose
25	104–0057	1	HYD Hose ASM
26	104–0069	1	HYD Hose ASM
27	100–3713	1	Fitting–HYD, 90°
27:1	237–30	2	O–Ring



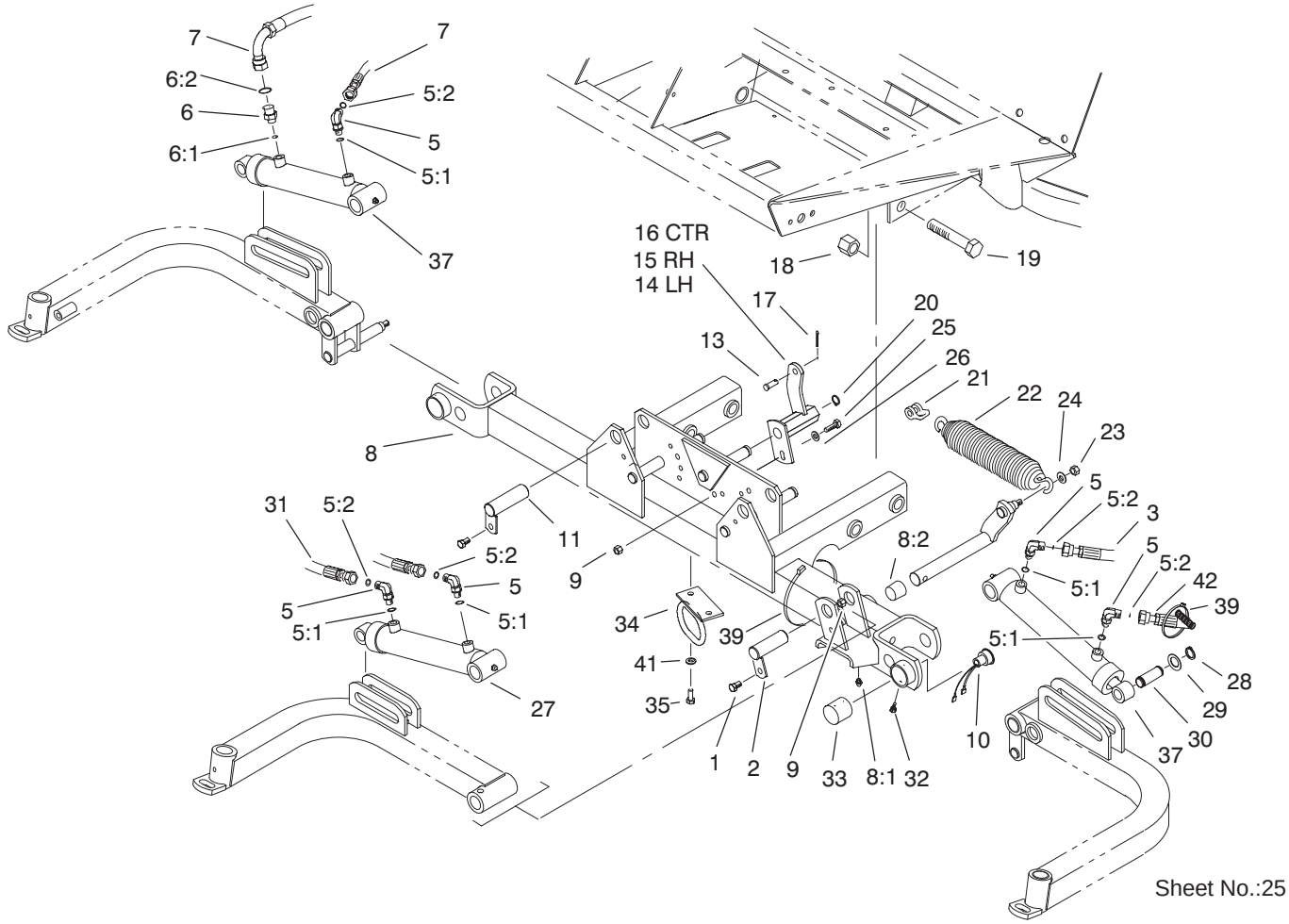
Sheet No.:B4

Reel Motor Assembly No. 100–6426

Ref. No.	Part No.	Qty.	Description
1	105–9758	1	Seal Kit
☆1:1		2	Seal–Extrusion, Anti
☆1:2		2	Seal–Pressure
☆1:3		2	O–Ring
☆1:4		1	Seal–Shaft
☆1:5		1	Washer–Backup

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



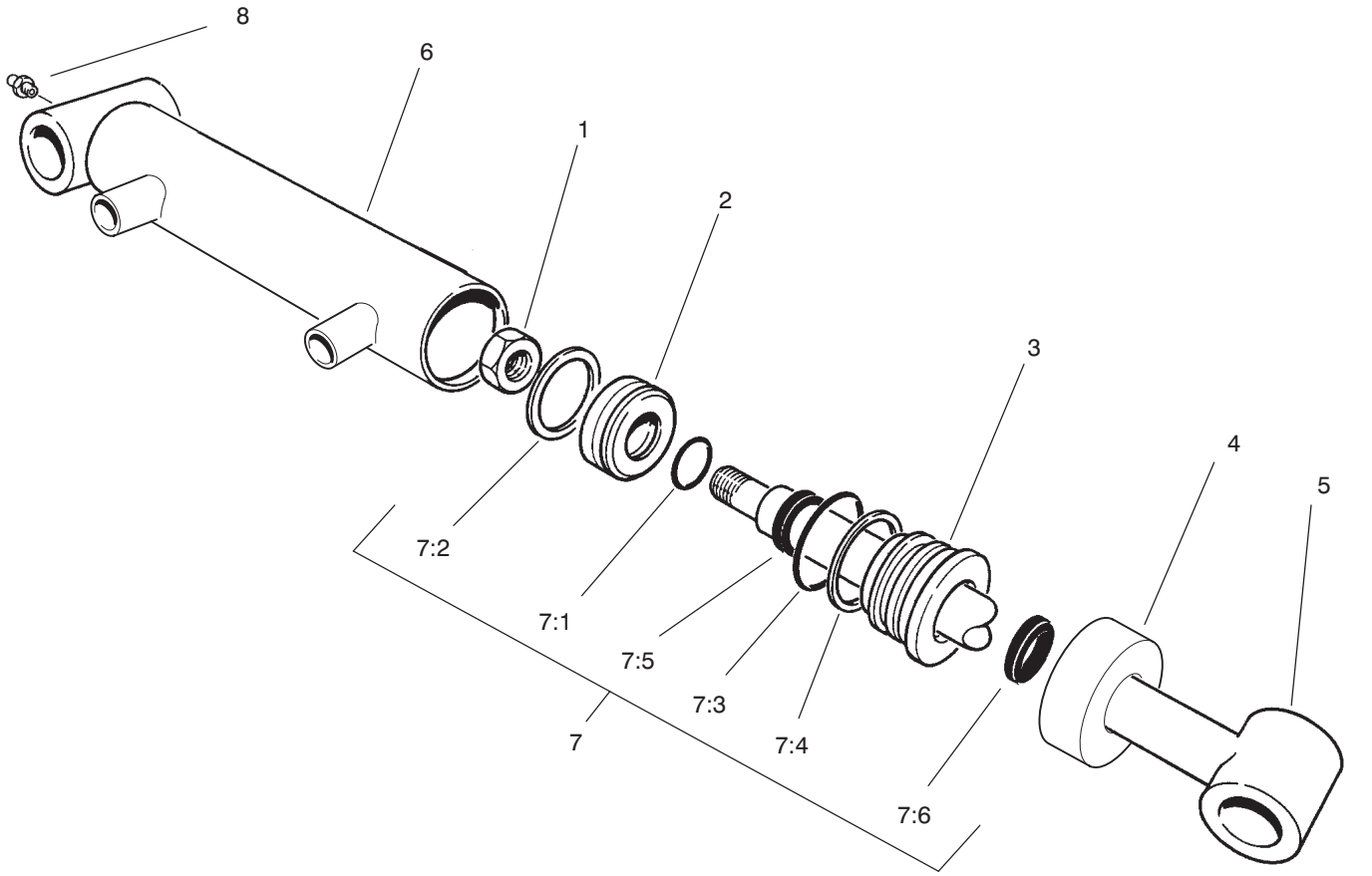
Sheet No.:25

Front Lift Circuit Assembly

Ref. No.	Part No.	Qty.	Description
1	32144–14	3	Screw–HWH
2	83–6790	1	Pin–Cylinder
3	99–5643	1	Hose–Hydraulic
5	340–132	5	Fitting–HYD, 90°
5:1	237–78	1	O–Ring
5:2	237–21	1	O–Ring
6	340–92	1	Fitting–HYD, Straight
6:1	237–78	1	O–Ring
6:2	237–21	1	O–Ring
7	99–5641	2	Hose–Hydraulic
8	94–5808	1	Frame–Carrier
8:1	302–5	1	Fitting–Grease
8:2	67–1750	2	Bushing
9	3296–29	4	Nut–Lock, NI
10	92–8002	1	Switch–Lift, Back Biased
11	83–6780	2	Pin–Cylinder
*12	3290–379	4	Tie–Cable
13	283–6	3	Pin–Clevis
14	75–5220–03	1	Bracket–Spring, LH
15	75–5200–03	1	Bracket–Spring, RH
16	75–5210–03	1	Bracket–Spring, Center
17	3272–10	3	Pin–Cotter
18	3296–51	4	Nut–Lock, NI
19	328–7	4	Screw–HH

Ref. No.	Part No.	Qty.	Description
20	32151–48	3	E–Ring
21	282–4	3	Shackle
22	5–0743–03	3	Spring–Mower
23	3296–44	3	Nut–Lock, NI
24	3256–24	3	Washer–Flat
25	322–5	3	Screw–HH
26	3256–23	3	Washer–Flat
27	93–9310	1	Cylinder–Hydraulic
28	32120–93	6	Ring–Retaining
29	3–6498	6	Washer–Thrust
30	104–0046	3	Pin–Cylinder Slide
31	75–5900	1	Hose
32	32104–76	2	Screw
33	75–6370	1	Cap–Sensor
34	104–0028	1	Guide–Hose
35	322–5	2	Screw–HH
37	99–6986	2	Cylinder–Hydraulic
39	3290–378	2	Tie–Cable
41	3253–4	2	Washer–Lock
42	99–5642	1	Hose–Hydraulic

* Not illustrated



Sheet No.:B5

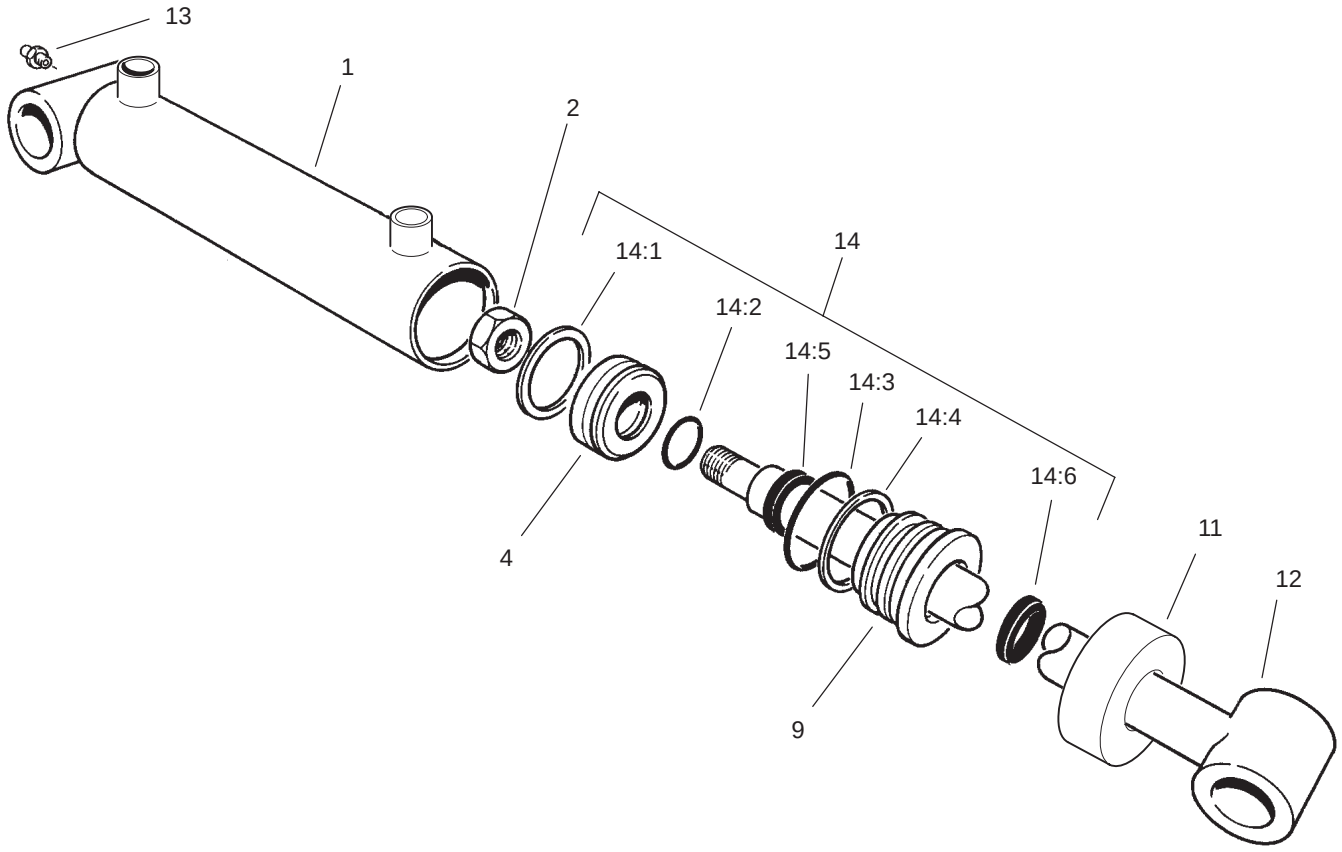
T–2114

Hydraulic Cylinder Assembly No. 93–9310

Ref. No.	Part No.	Qty.	Description
☆1		1	Locknut
☆2		1	Piston
☆3		1	Head
☆4		1	Collar
☆5		1	Shaft W/Tube
☆6		1	Barrel ASM
7	86–7330	1	Seal Kit
☆7:1		1	O–Ring
☆7:2		1	Seal–Special
☆7:3		1	O–Ring
☆7:4		1	Backup
☆7:5		1	Seal–Rod
☆7:6		1	Seal–Dust
8	302–5	1	Fitting–Grease

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



Sheet No.:B6
T–3383

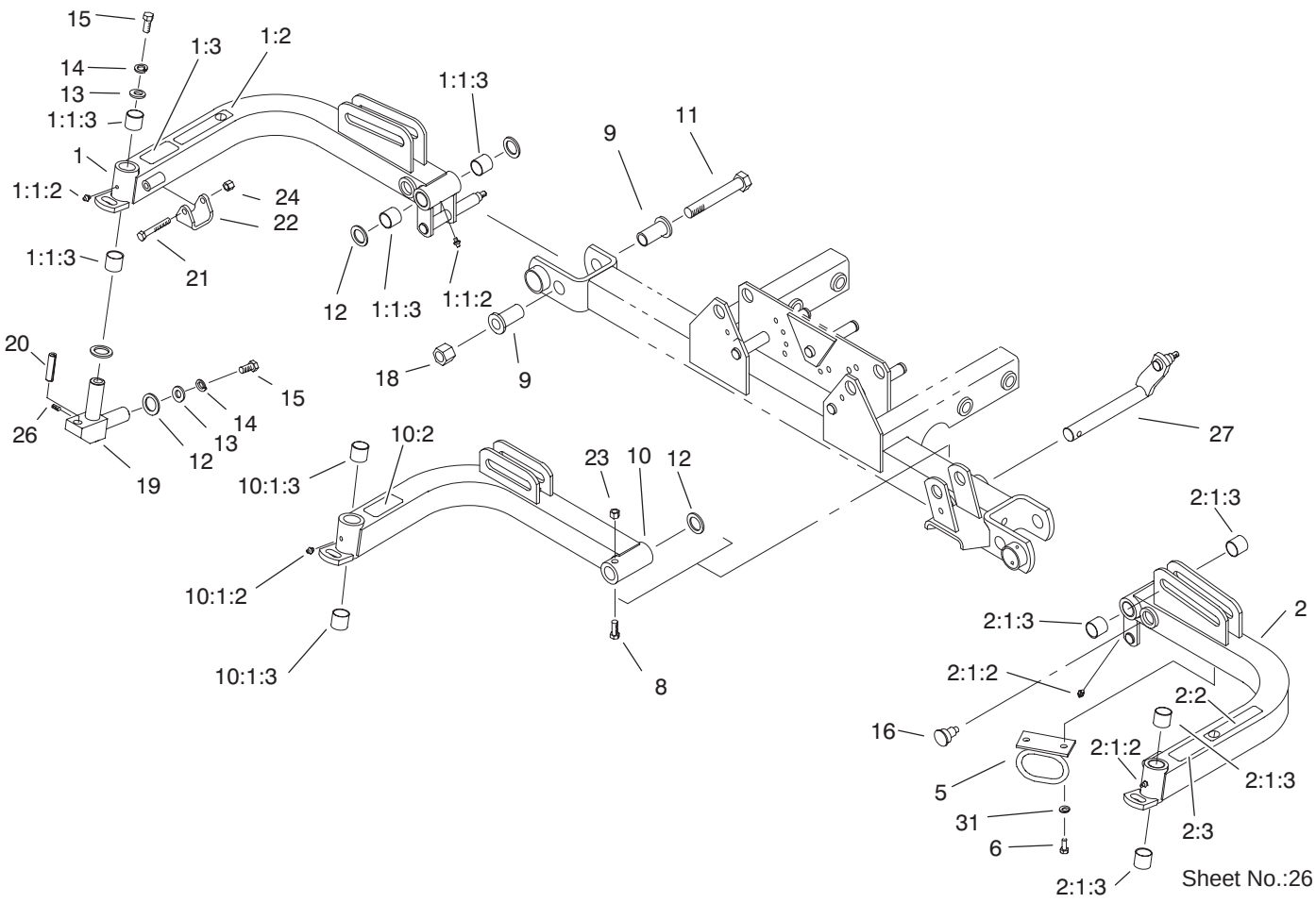
Hydraulic Cylinder Assembly No. 99–6986

Ref. No.	Part No.	Qty.	Description
☆1		1	Barrel
2	32152–10	1	Locknut
☆4		1	Piston
☆9		1	Head
☆11		1	Collar
☆12		1	Shaft W/Clevis
☆13		1	Fitting–Grease
14	100–8023	1	Seal Repair Kit
☆14:1		1	Seal–Psp
☆14:2		1	O–Ring
☆14:3		1	O–Ring
☆14:4		1	Backup
☆14:5		1	Seal–Rod
☆14:6		1	Seal–Dust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

3328–625

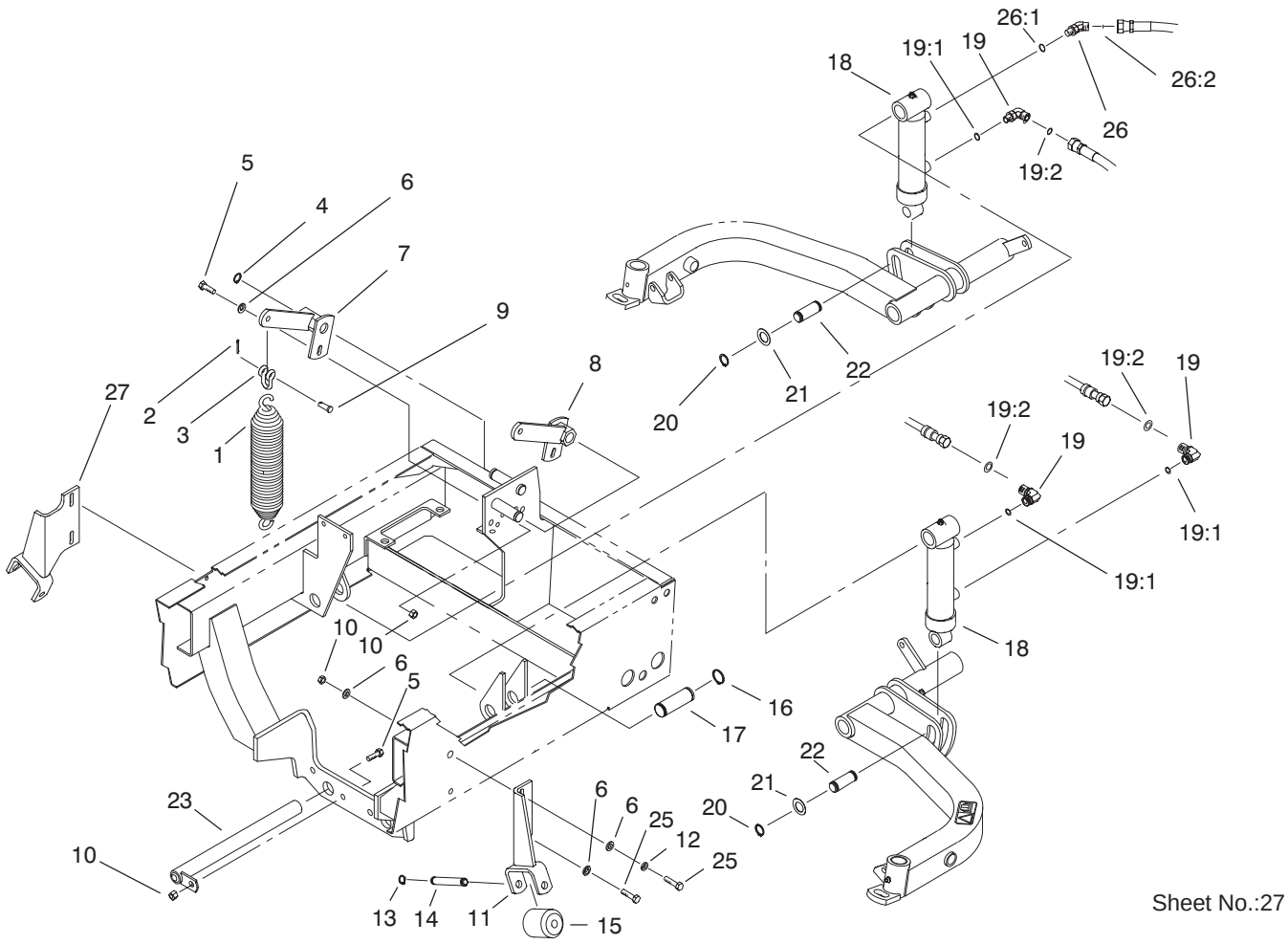


Front Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	104–8601	1	RH Lift Arm ASM
☆1:1		1	Arm–Lift, RH
1:1:2	302–5	2	Fitting–Grease
1:1:3	67–1750	4	Bushing
1:2	93–6687	1	Decal–Step, No
1:3	93–6696	1	Decal–Spring, Loaded
2	104–8600	1	LH Lift Arm ASM
☆2:1		1	Arm–Lift, LH
2:1:2	302–5	2	Fitting–Grease
2:1:3	67–1750	4	Bushing
2:2	93–6687	1	Decal–Step, No
2:3	93–6696	1	Decal–Spring, Loaded
5	104–0028	2	Guide–Hose
6	322–5	4	Screw–HH
8	323–11	1	Screw–HH
9	84–8320	4	Insert–Hinge
10	104–8602	1	Center Lift Arm ASM
☆10:1		1	Arm–Lift, Center
10:1:2	302–5	1	Fitting–Grease
10:1:3	67–1750	2	Bushing
10:2	93–6696	1	Decal–Spring, Loaded
11	328–12	2	Screw–HH
12	256–115	11	Washer–Thrust
13	3256–6	6	Washer–Flat
15	98–7993	6	Screw–HHF

Ref. No.	Part No.	Qty.	Description
16	92–8754	1	Lug–Reed Switch, Magnet
18	3296–51	2	Nut–Lock, NI
19	75–3010–03	3	Joint–Arm
20	104–9319	3	Pin–Grooved
21	323–12	2	Screw–HH
22	75–5410	2	Bracket–Arm
23	3296–44	1	Nut–Lock, NI
24	3296–39	2	Nut–Lock, NI
26	92–9097	3	Screw–HS
27	75–4550–03	1	Shaft–Lift, Center
31	3253–4	4	Washer–Lock

☆ Not serviced separately



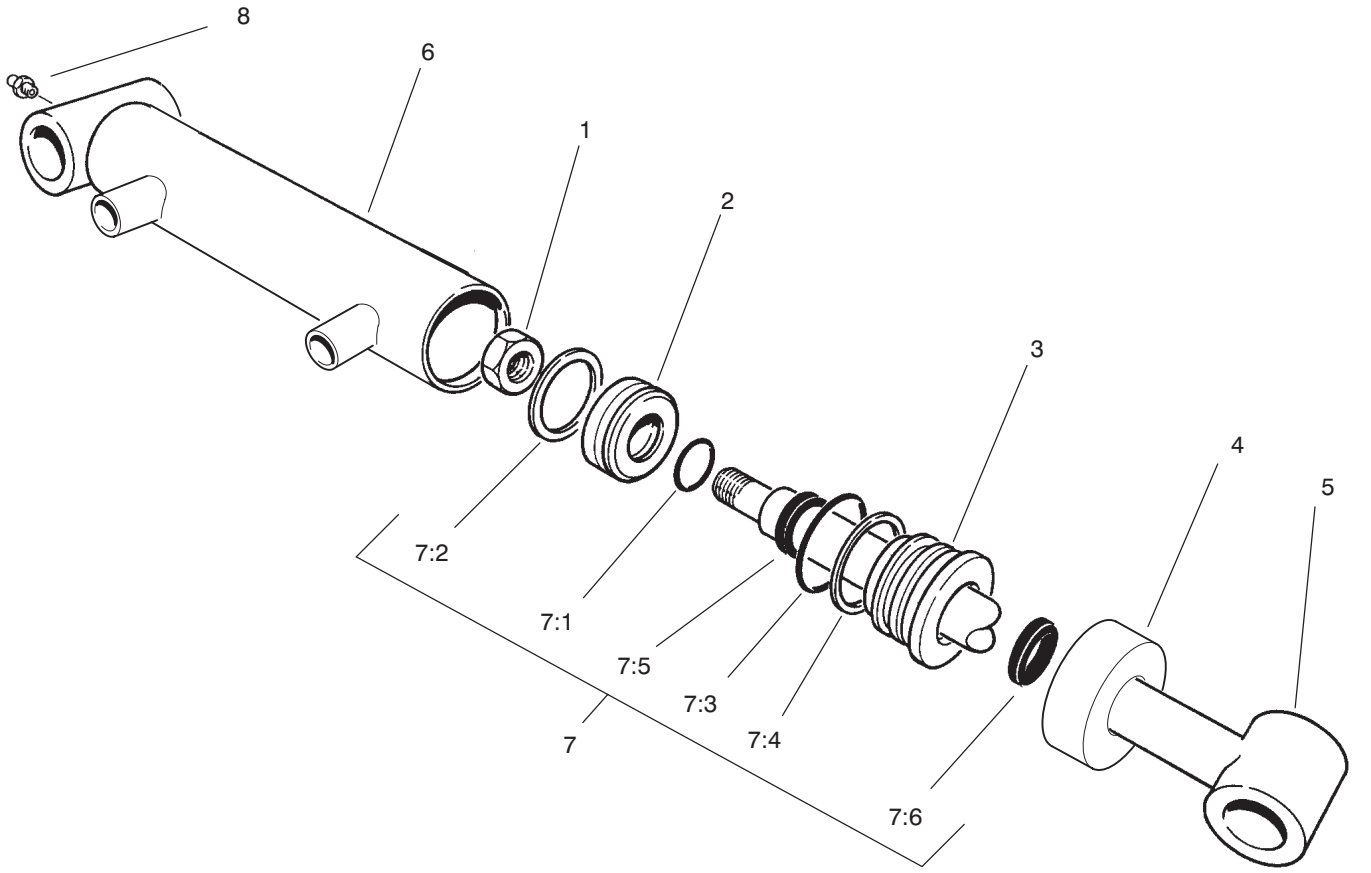
Sheet No.:27

Rear Lift Circuit Assembly

Ref. No.	Part No.	Qty.	Description
1	5–0743–03	2	Spring–Mower
2	3272–10	2	Pin–Cotter
3	282–4	2	Shackle
4	32151–48	2	E–Ring
5	322–5	4	Screw–HH
6	3256–23	9	Washer–Flat
7	98–4548–03	1	Bracket–Spring, RH
8	98–4536–03	1	Bracket–Spring, LH
9	283–6	2	Pin–Clevis
10	3296–29	11	Nut–Lock, NI
11	100–3831–01	1	Bracket–LH Roller
12	3253–4	2	Washer–Lock
13	32151–61	4	Ring–Retaining
14	75–5400	2	Pin–Roller
15	75–5390	2	Roller
16	32151–36	4	Ring–Retaining
17	75–5360	2	Pin–Cylinder
18	93–9311	2	Cylinder–HYD
19	340–132	3	Fitting–HYD, 90°
19:1	237–78	1	O–Ring
19:2	237–21	1	O–Ring
20	32120–93	4	Ring–Retaining
21	3–6498	4	Washer–Thrust
22	104–0046	2	Pin–Cylinder Slide
23	93–0069–03	2	Pin–Rear
*24	3290–379	3	Tie–Cable

Ref. No.	Part No.	Qty.	Description
25	322–6	4	Screw–HH
26	340–103	1	Fitting–HYD, 45°
26:1	237–78	1	O–Ring
26:2	237–21	1	O–Ring
27	100–3829–01	1	Bracket–RH Roller

* Not illustrated



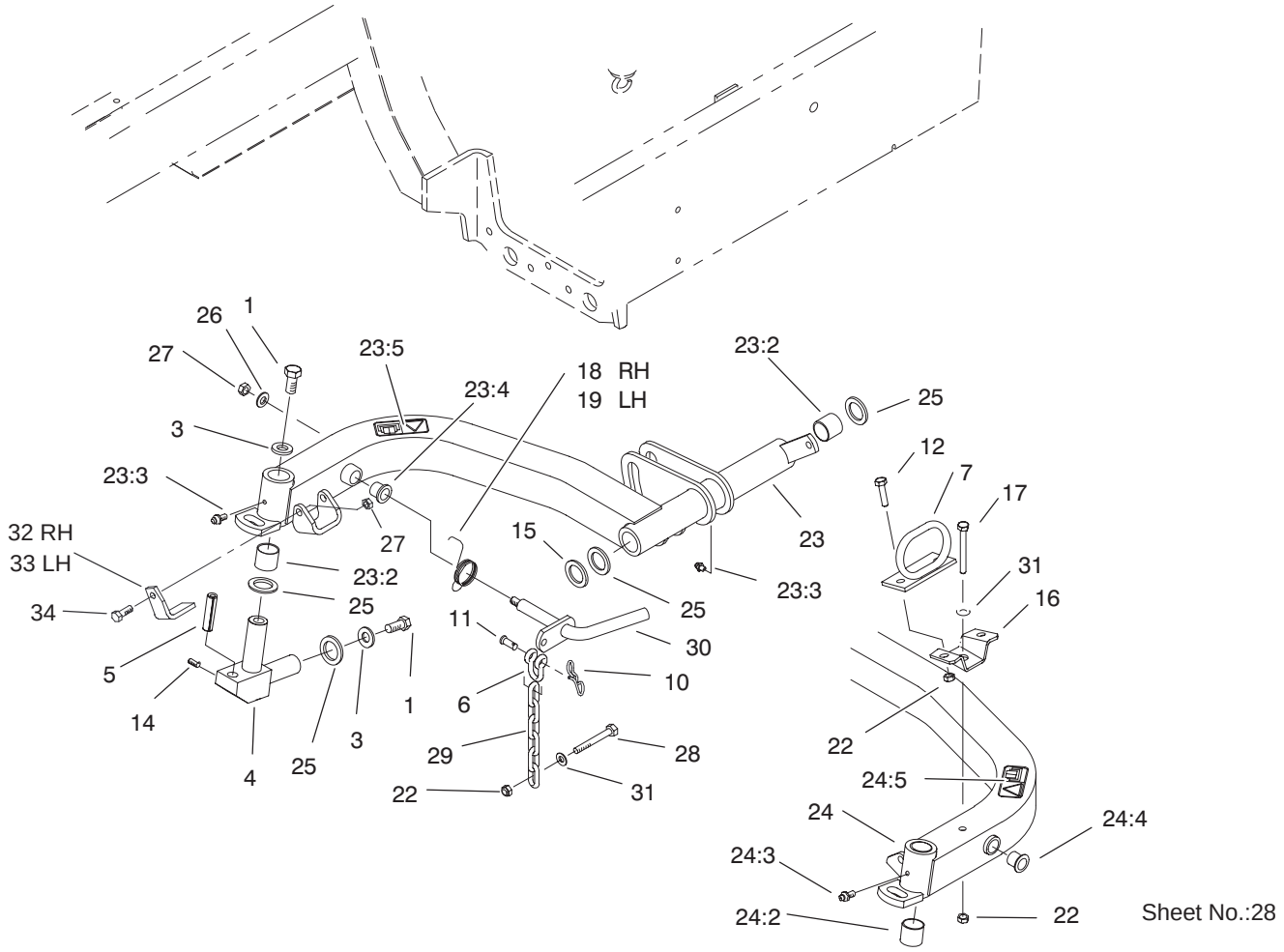
Sheet No.:B7
T–2114

Hydraulic Cylinder Assembly No. 93–9311

Ref. No.	Part No.	Qty.	Description
☆1		1	Locknut
☆2		1	Piston
☆3		1	Head
☆4		1	Collar
☆5		1	Shaft W/Tube
☆6		1	Barrel ASM
7	86–7330	1	Seal Kit
☆7:1		1	O–Ring
☆7:2		1	Seal–Special
☆7:3		1	O–Ring
☆7:4		1	Backup
☆7:5		1	Seal–Rod
☆7:6		1	Seal–Dust
8	302–5	1	Fitting–Grease

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



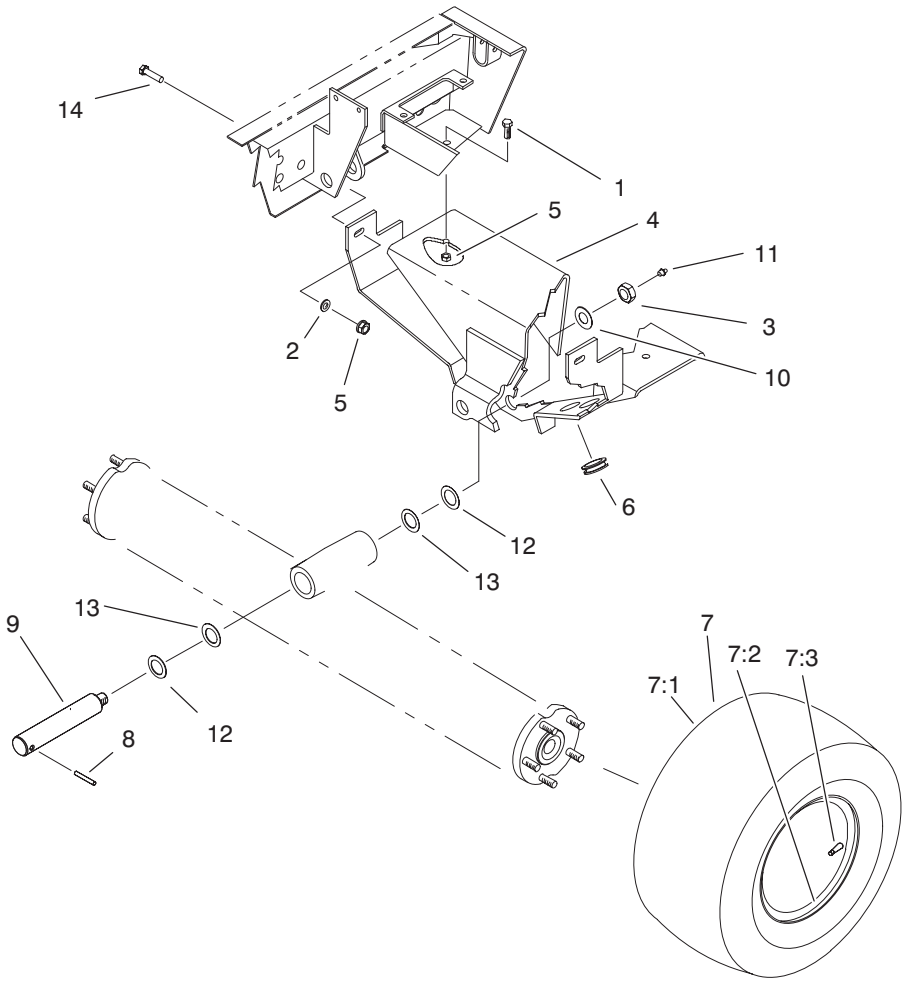
Sheet No.:28

Rear Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7993	4	Screw–HHF
3	3256–6	4	Washer–Flat
4	75–3010–03	2	Joint–Arm
5	104–9319	2	Pin–Grooved
6	282–4	2	Shackle
7	104–0028	1	Guide–Hose
*9	3290–379	1	Tie–Cable
10	105–7512	2	Pin–Bow Tie
11	283–6	2	Pin–Clevis
12	322–5	2	Screw–HH
14	92–9097	2	Screw–HS
15	93–0142	2	Bushing–Straight
16	94–4919–03	1	Bracket–Clamp, Hose
17	322–13	1	Screw–HH
18	75–4520	1	Spring–Torsion, RH
19	75–4530	1	Spring–Torsion, LH
22	3296–29	4	Nut–Lock, NI
23	100–3828	1	RH Rear Lift Arm ASM
23:2	67–1750	4	Bushing
23:3	302–5	2	Fitting–Grease
23:4	256–287	2	Bushing
23:5	93–6696	1	Decal–Spring, Loaded
24	100–3827	1	LH Rear Lift Arm ASM
24:2	256–287	2	Bushing
24:3	302–5	2	Fitting–Grease
24:4	67–1750	4	Bushing

Ref. No.	Part No.	Qty.	Description
24:5	93–6696	1	Decal–Spring, Loaded
25	256–115	12	Washer–Thrust
26	3256–24	2	Washer–Flat
27	3296–39	4	Nut–Lock, NI
28	322–12	2	Screw–HH
29	84–2451	2	Chain–Link, Straight
30	100–3834–03	2	Rod–Pivot
31	3256–23	3	Washer–Flat
32	93–3640	1	Stop–RH
33	83–5170	1	Stop–LH
34	323–6	2	Screw–HH

* Not illustrated



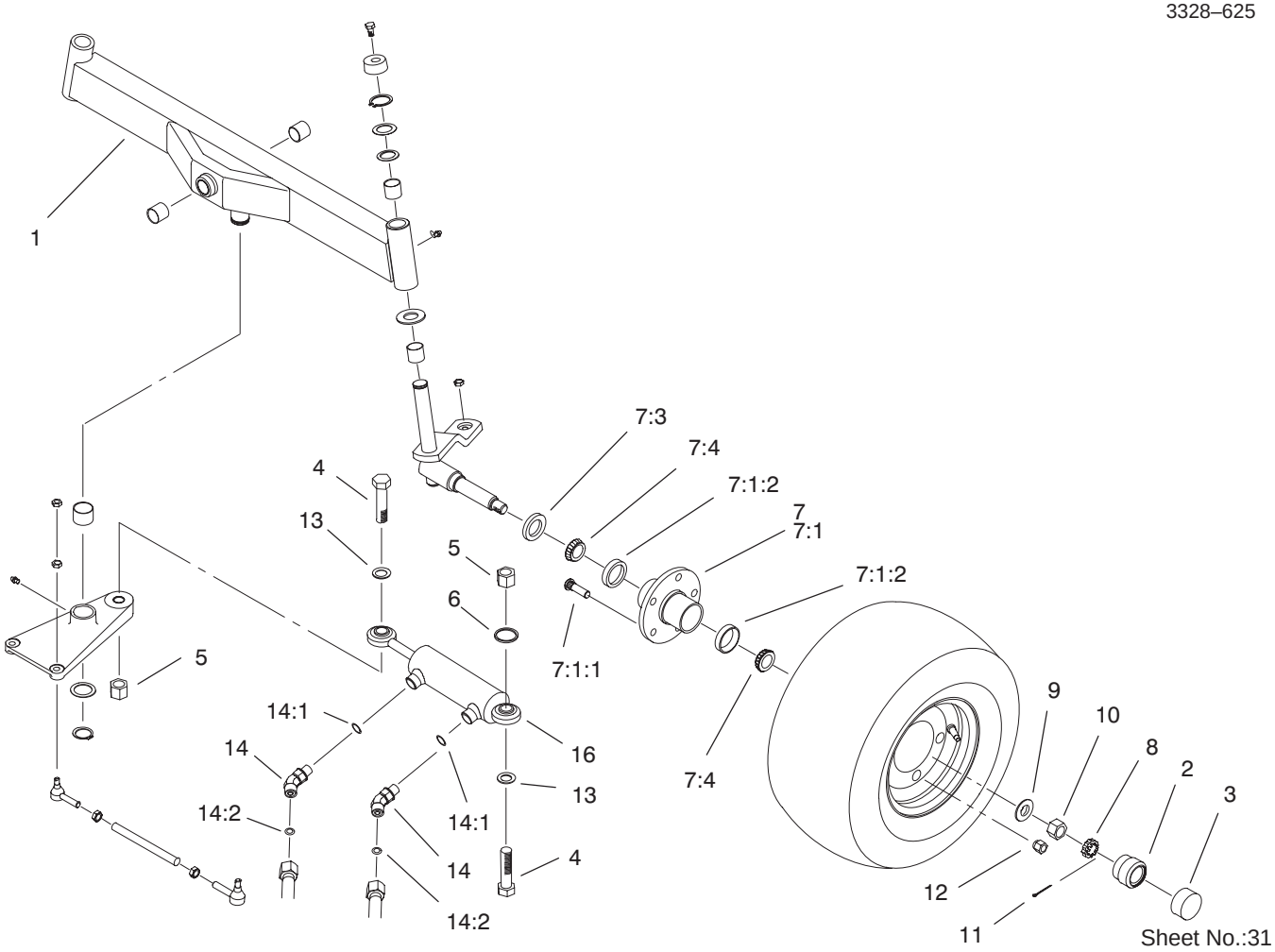
Sheet No.:30

Rear Axle Support Assembly

Ref. No.	Part No.	Qty.	Description
1	323–7	2	Screw–HH
2	3256–24	2	Washer–Flat
3	32146–20	1	Nut–Jam
4	98–8172–03	1	Support–Axle
5	3296–39	4	Nut–Lock, NI
6	237–165	2	Grommet
☆7		2	Tire And Wheel ASM
7:1	86–5910	1	Tire
7:2	100–2582	1	Rim
7:3	232–27	1	Stem–Valve
8	32121–32	1	Pin–Roll
9	98–8173–03	1	Pin–Pivot, Axle
10	71–4540	1	Washer–Thrust
11	302–2	1	Fitting–Grease
12	99–8431	2	Washer–Thrust
13	99–8432	2	Washer–Thrust
14	323–13	2	Screw–HH

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



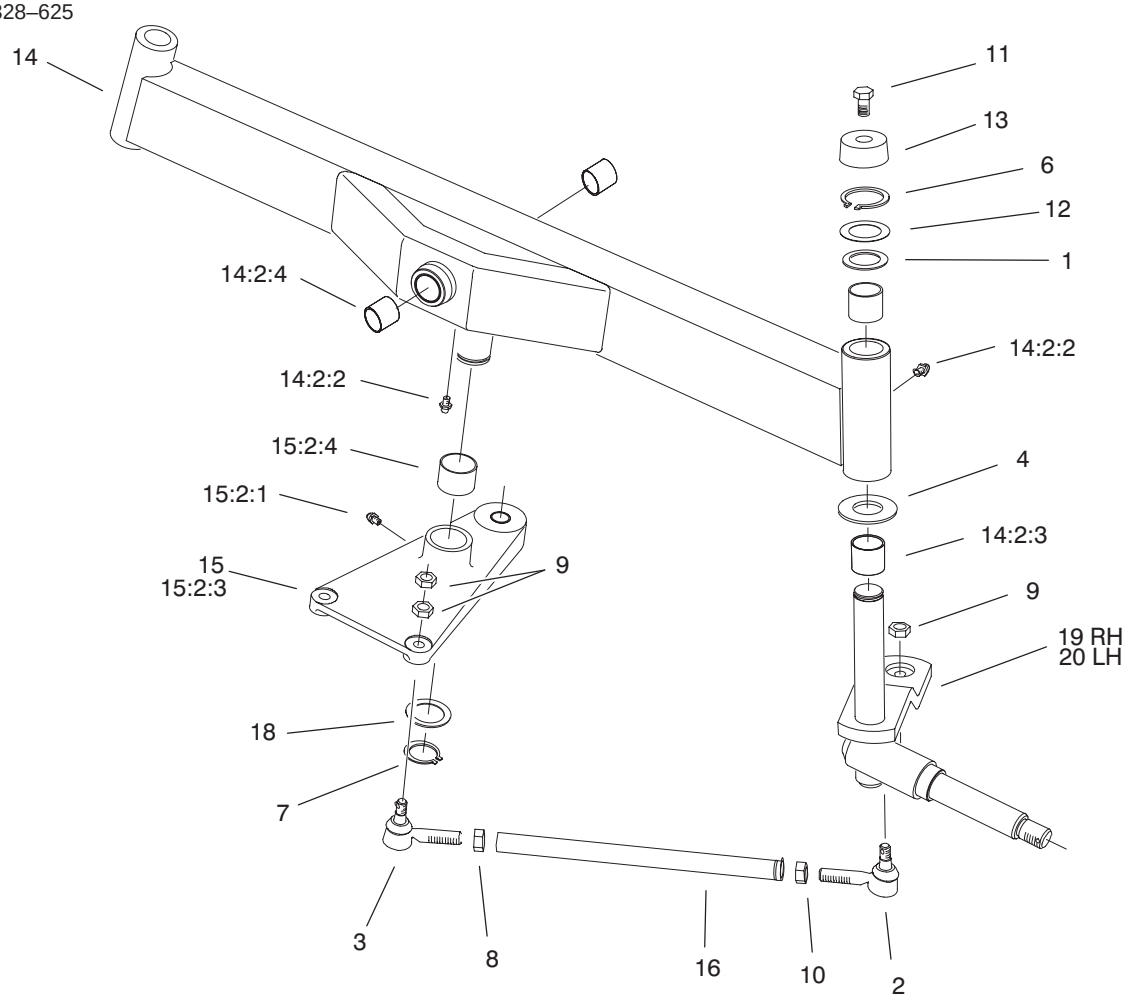
2 Wheel Drive Axle Assembly

Ref. No.	Part No.	Qty.	Description
☆1		1	Rear Axle ASM
2	100–3769	2	Buddy–Bearing
3	100–3809	2	Cap–Protector, Bearing
4	328–25	2	Screw–HH
5	32153–6	2	Locknut
6	67–7250	1	Spacer–Ring
☆7		2	Hub ASM
7:1	21–2820	1	Hub ASM
7:1:1	10–6830	5	Stud–Type, Drive
7:1:2	254–72	2	Bearing–Cup, Tapered
7:3	253–129	1	Seal
7:4	254–94	2	Bearing–Cone, Taper
8	93–0307	2	Nut–Lock, Retainer
9	93–0309	4	Washer–Tab
10	3220–7	2	Nut–Jam
11	3272–13	2	Pin–Cotter
12	242–50	10	Nut–Lug
13	67–9410	2	Washer
14	340–103	2	Fitting–HYD, 45°
14:1	237–78	1	O–Ring
14:2	237–21	1	O–Ring
16	75–1200	1	Cylinder–HYD, Steering

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

3328–625



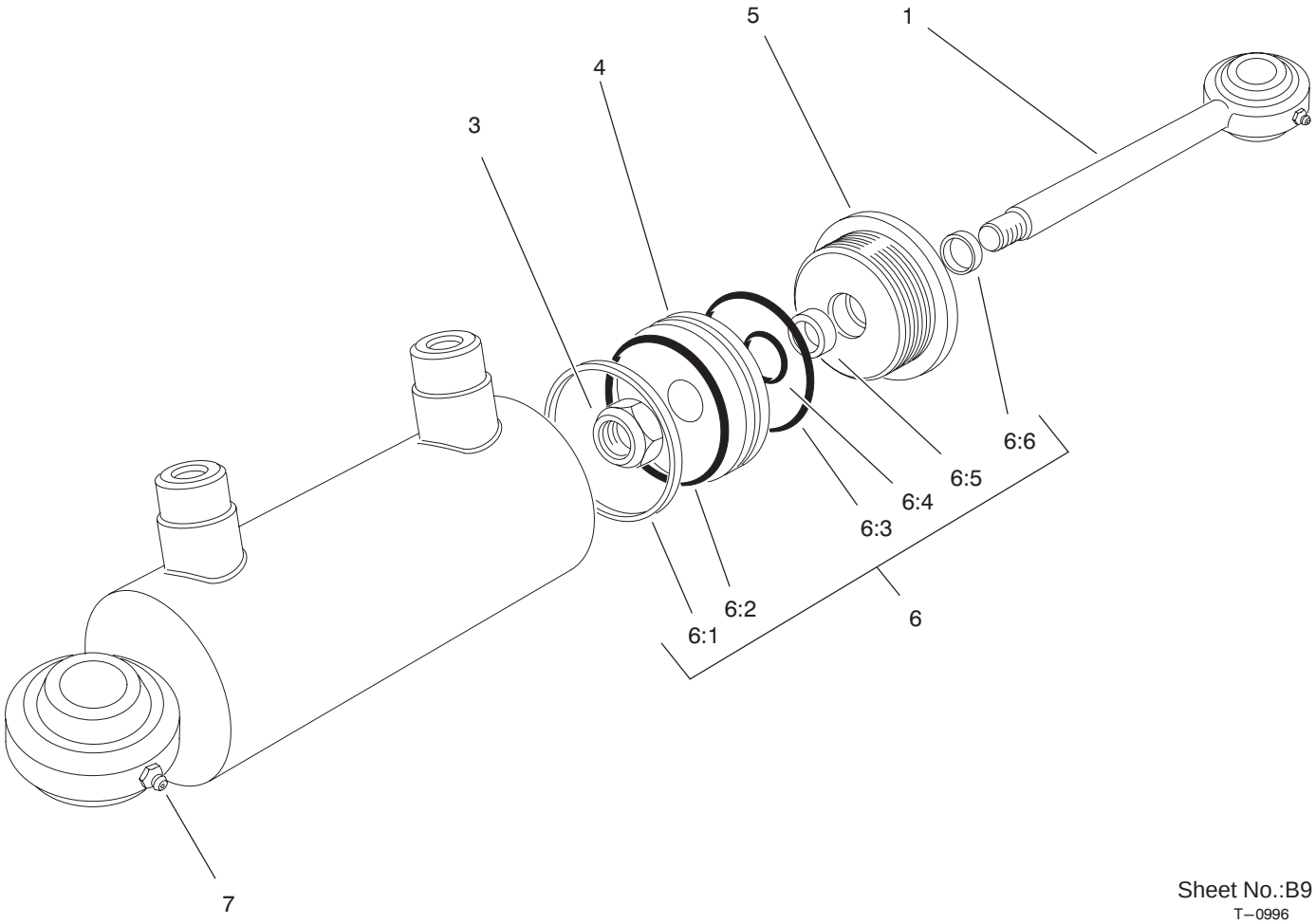
Sheet No.:B8
T–3604

Rear Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	10–8110	2	Washer–Thrust
2	21–0141	2	RH Ball Joint ASM
3	21–0151	2	LH Ball Joint ASM
4	256–121	2	Washer–Thrust
6	32151–36	2	Ring–Retaining
7	32151–77	1	Ring–Retaining, Ext
8	3220–12	2	Nut–HJ, LH Thread
9	3220–3	8	Nut–Jam
10	3220–5	2	Nut–Jam
11	3234–13	2	Screw–HHF
12	5–1226	2	Washer
13	66–2990	2	Cap–Spindle
14	99–6935–03	1	Axle–Rear
☆*14:2		1	Axle–Rear
14:2:2	302–5	2	Fitting–Grease
14:2:3	67–1750	4	Bushing
14:2:4	99–6964	2	Bushing–Axle
15	75–4410–03	1	Pivot Plate ASM
☆*15:2		1	Pivot Plate ASM
15:2:1	302–5	1	Fitting–Grease
15:2:3	75–2910	1	Plate–Pivot
15:2:4	76–2970	2	Bushing–Straight
16	75–3130–03	2	Rod–Tie
18	76–2980	1	Washer–Thrust
19	93–7000–03	1	Spindle–RH
20	93–7001–03	1	Splindle–LH

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately
* Not illustrated



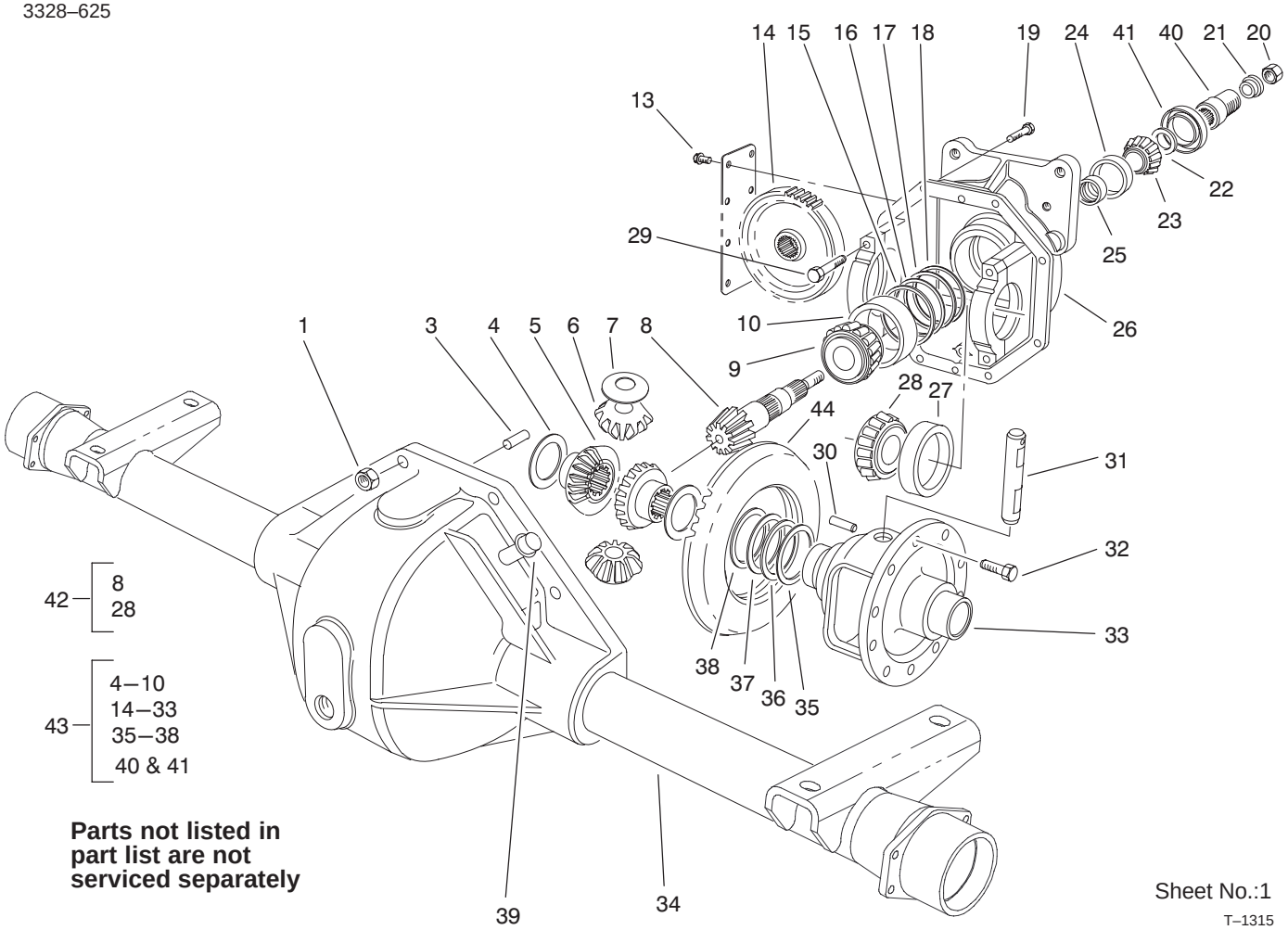
Sheet No.:B9
T–0996

Hydraulic Cylinder No. 75–1200

Ref. No.	Part No.	Qty.	Description
☆1		1	Rod
☆3		1	Nut
☆4		1	Piston
☆5		1	Head
6	75–1250	1	Seal Kit
☆6:1		1	Ring–Servon
☆6:2		1	O–Ring
☆6:3		1	O–Ring
☆6:4		1	O–Ring
☆6:5		1	U–Cup
☆6:6		1	Wiper
7	302–5	2	Fitting–Grease

Ref. No.	Part No.	Qty.	Description

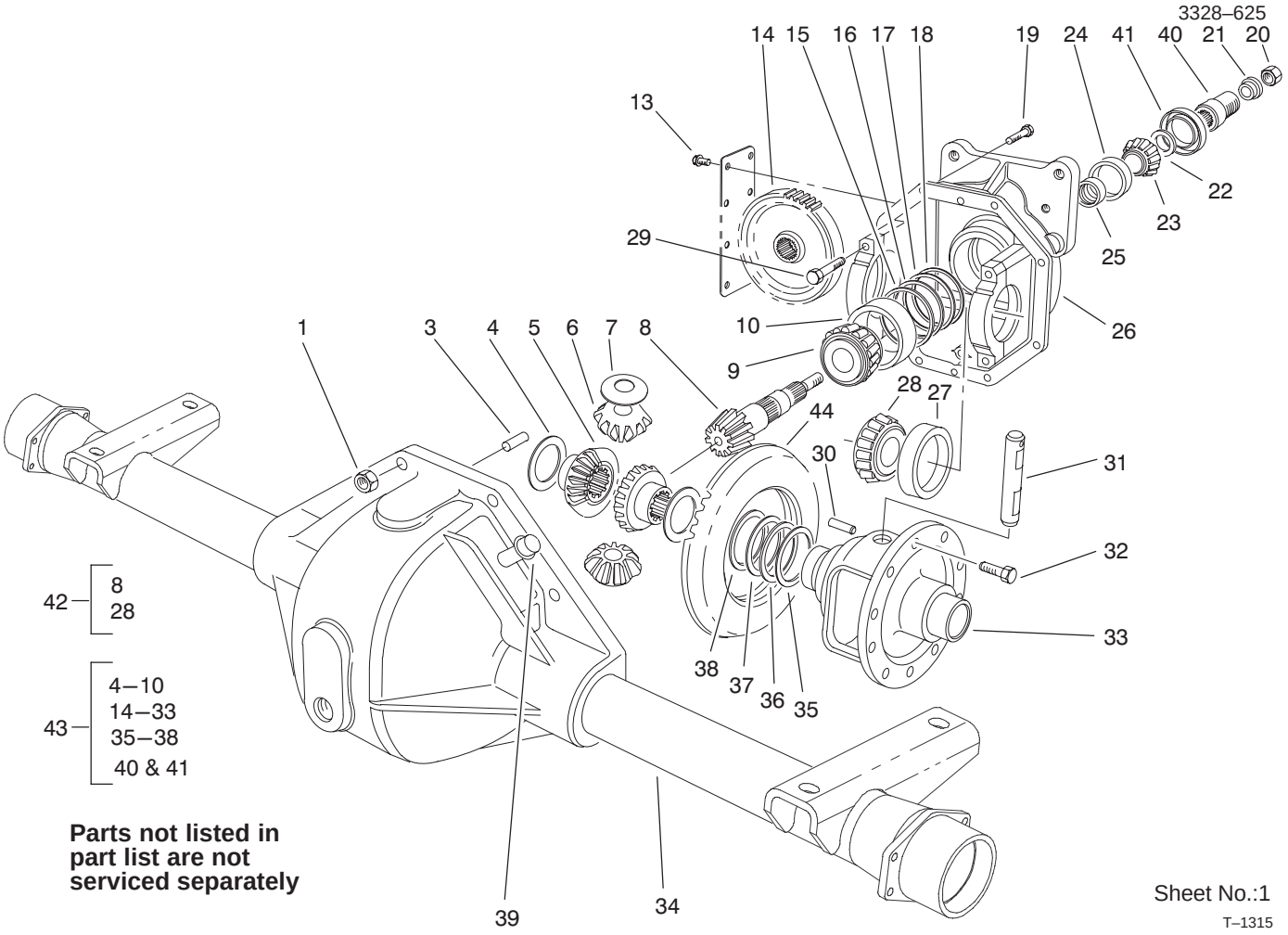
☆ Not serviced separately



Axle Assembly No. 99–6981–03

Ref. No.	Part No.	Qty.	Description
1	32149–5	8	Nut
3	21–8270	2	Pin–Dowel
4	21–7720	2	Washer–Thrust
5	24–8790	2	Gear–Differential
6	21–7690	2	Pinion–Differential
7	21–7730	2	Washer–Thrust, Pinion
9	43–6760	1	Bearing–Roller, Cone Taper
10	43–6750	1	Bearing–Taper, Cup
13	32144–112	8	Screw–HWHTF
14	86–7230	1	Gear–Input, Transmission
15	43–6710	1	Shim
16	43–6711	1	Shim
17	43–6712	1	Shim
18	43–6713	1	Shim
19	3210–8	8	Screw–HH
20	71–4350	1	Nut
21	83–5130	1	Spacer–Pinion
22	72–3570	1	Shim–Bearing, Front
22	72–3571	1	Shim–Bearing, Front
22	72–3572	1	Shim–Bearing, Front
22	72–3573	1	Shim–Bearing, Front
22	72–3574	1	Shim–Bearing, Front
22	72–3575	1	Shim–Bearing, Front
22	72–3576	1	Shim–Bearing, Front

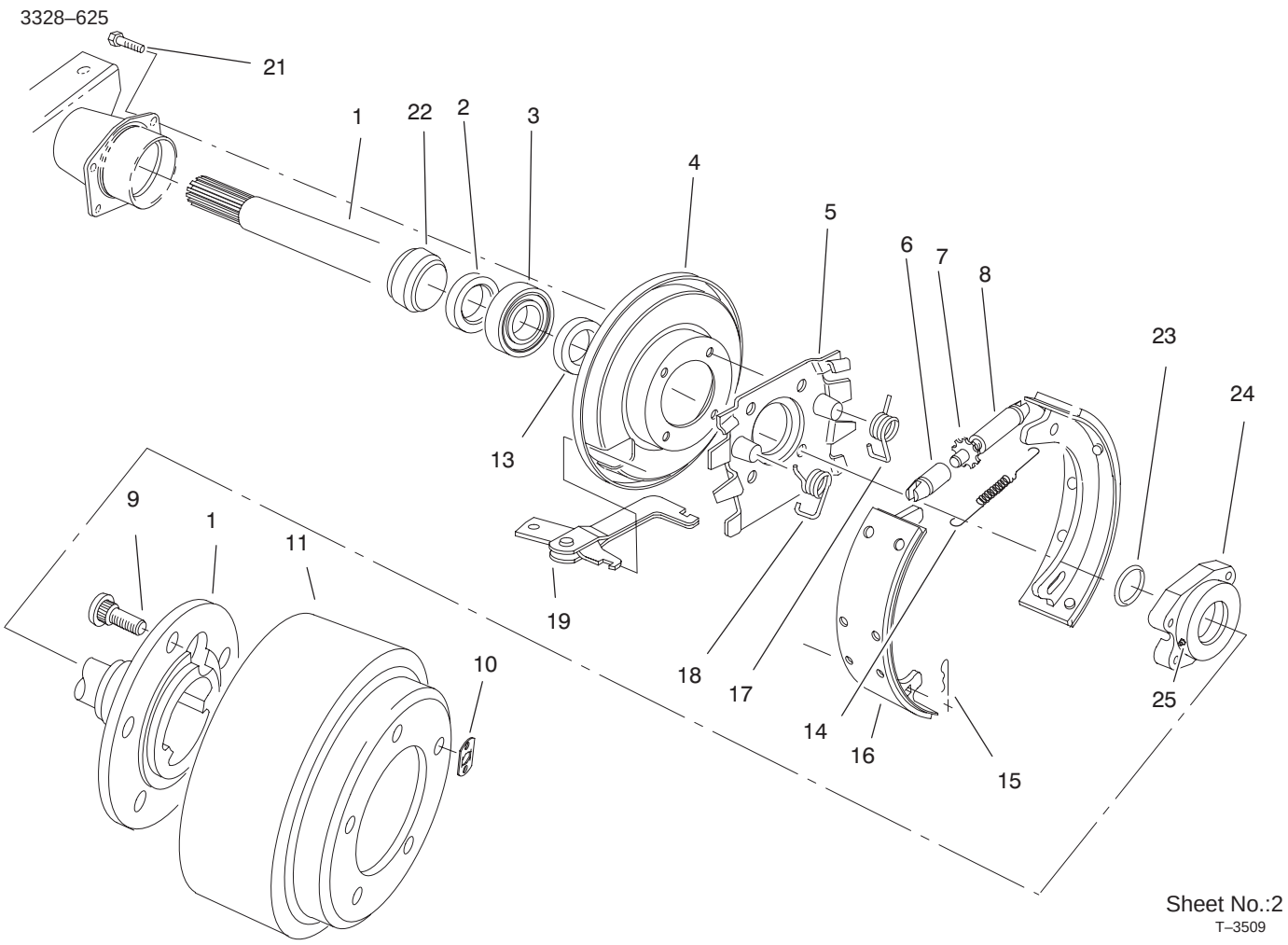
Ref. No.	Part No.	Qty.	Description
22	72–3577	1	Shim–Bearing, Front
22	72–3578	1	Shim–Bearing, Front
22	72–3580	1	Shim–Bearing, Front
22	72–3581	1	Shim–Bearing, Front
22	72–3582	1	Shim–Bearing, Front
22	72–3583	1	Shim–Bearing, Front
22	72–3584	1	Shim–Bearing, Front
22	72–3585	1	Shim–Bearing, Front
22	72–3586	1	Shim–Bearing, Front
22	72–3587	1	Shim–Bearing, Front
22	72–3588	1	Shim–Bearing, Front
22	72–3590	1	Shim–Bearing, Front
22	72–3591	1	Shim–Bearing, Front
22	72–3592	1	Shim–Bearing, Front
22	72–3593	1	Shim–Bearing, Front
22	72–3594	1	Shim–Bearing, Front
22	72–3595	1	Shim–Bearing, Front
22	72–3596	1	Shim–Bearing, Front
22	72–3597	1	Shim–Bearing, Front
22	72–3598	1	Shim–Bearing, Front
22	72–3600	1	Shim–Bearing, Front
23	254–91	1	Cone–Bearing
24	21–8390	1	Cup–Bearing
25	21–8020	1	Spacer–Bearing
26	93–3619	1	Upper Housing ASM
27	254–66	2	Cup–Bearing, Roller



Axle Assembly No. 99–6981–03 (Continued)

Ref. No.	Part No.	Qty.	Description
28	254–65	2	Cone–Bearing, Roller
29	92–1773	4	Screw–HHF
30	21–7710	1	Pin–Roll
31	21–7700	1	Shaft–Pinion Mate
32	21–7770	5	Screw–Gear, Drive
33	21–7670	1	Case–Differential
34	100–3744–03	1	Lower Housing ASM
35	21–8120	1	Shim–Bearing, Diff. (.030)
36	21–8110	1	Shim–Bearing, Diff. (.010)
37	21–8100	1	Shim–Bearing, Diff. (.005)
38	21–8090	1	Shim–Bearing, Diff. (.003)
39	72–9420	1	Vent
40	83–4910	1	Coupler–Pinion
41	71–4330	1	Seal
42	93–3618	1	Gear And Pinion ASM
43	93–3617	1	Cover And Carrier Kit

Ref. No.	Part No.	Qty.	Description



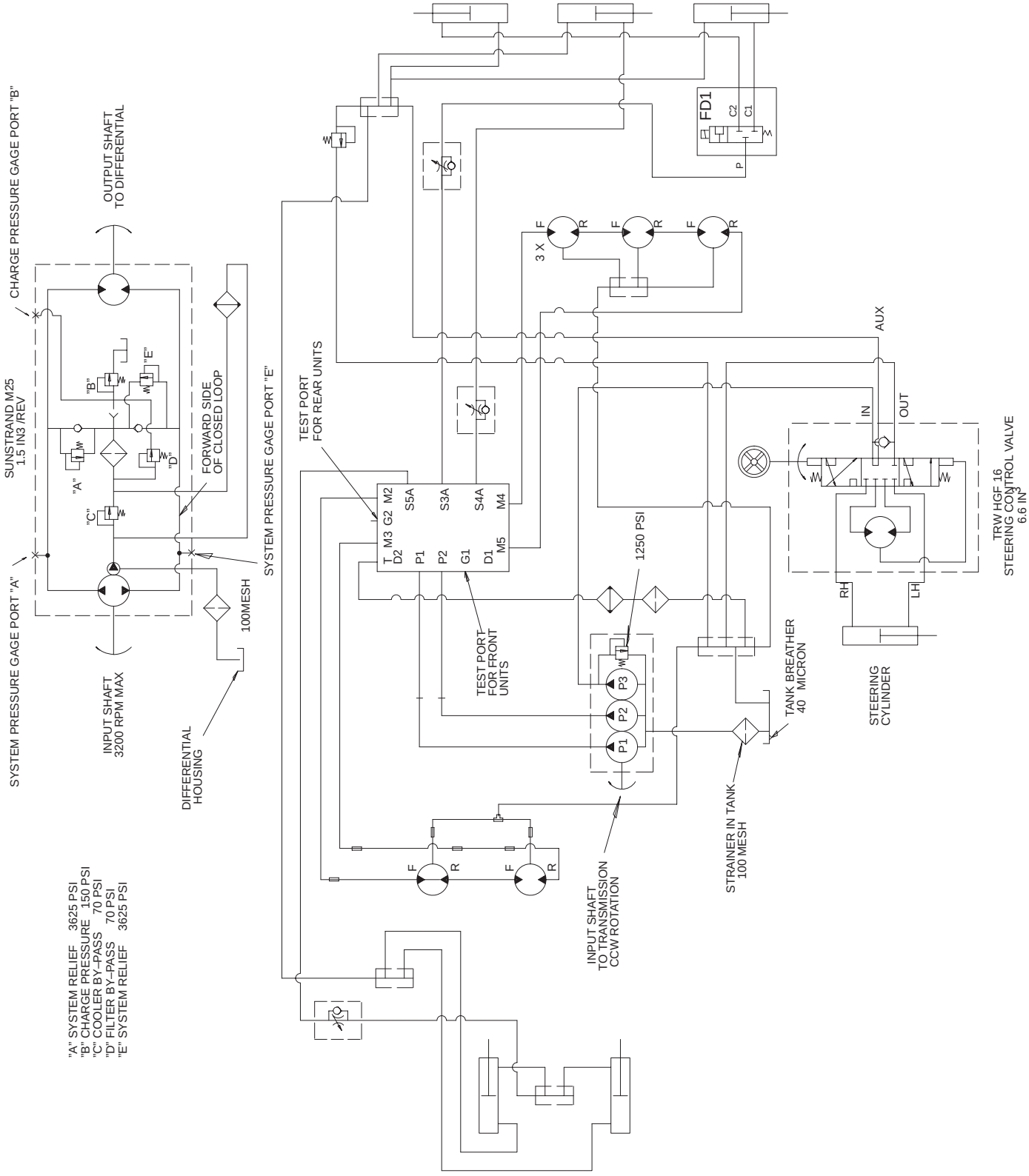
Brake Assembly

Ref. No.	Part No.	Qty.	Description
1	100–3840	1	Shaft–Axle, LH
1	100–3841	1	Shaft–Axle, RH
2	100–3842	2	Seal–Oil
3	21–8180	2	Bearing ASM
4	100–3843	2	Shield–Dust
5	100–3844	2	Spider–Torque
6	21–9390	2	Socket–Adjusting, Screw
7	21–9370	2	Screw–Adjusting
8	21–9380	2	Nut–Pivot
9	242–34	10	Stud–Drive
10	21–8360	2	Locknut
11	28–0680	2	Drum–Brake
13	100–3845	2	Seal–Grease
14	21–9440	2	Spring–Adjusting Screw
15	21–9460	4	Retainer–Lever, Brake
16	84–8590	4	Shoe And Lining ASM
17	21–9420	2	Spring–Return, LH
18	21–9430	2	Spring–Return, RH
19	24–9180	2	Strut And Lever ASM
21	100–3846	8	Screw–Special
22	100–3847	2	Retainer–Bearing
23	100–3848	2	O–Ring
24	100–3849	2	Cap–Bearing
25	100–3850	2	Zerk–Special

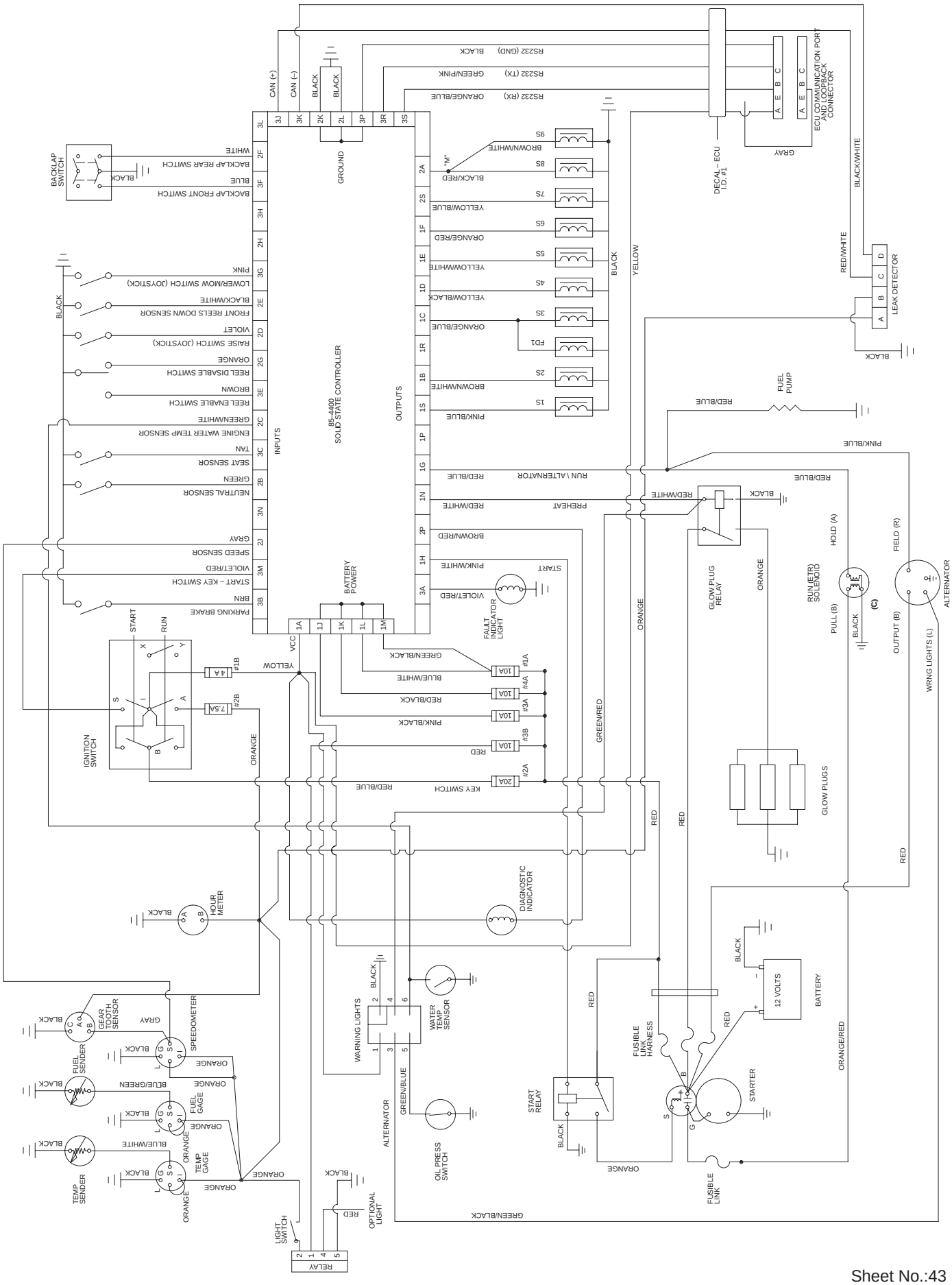
Ref. No.	Part No.	Qty.	Description
*26	84–8600	1	Set–Shoes, Lined
*27	92–8775	1	Liquid Gasket Kit

* Not illustrated

Hydraulic Schematic

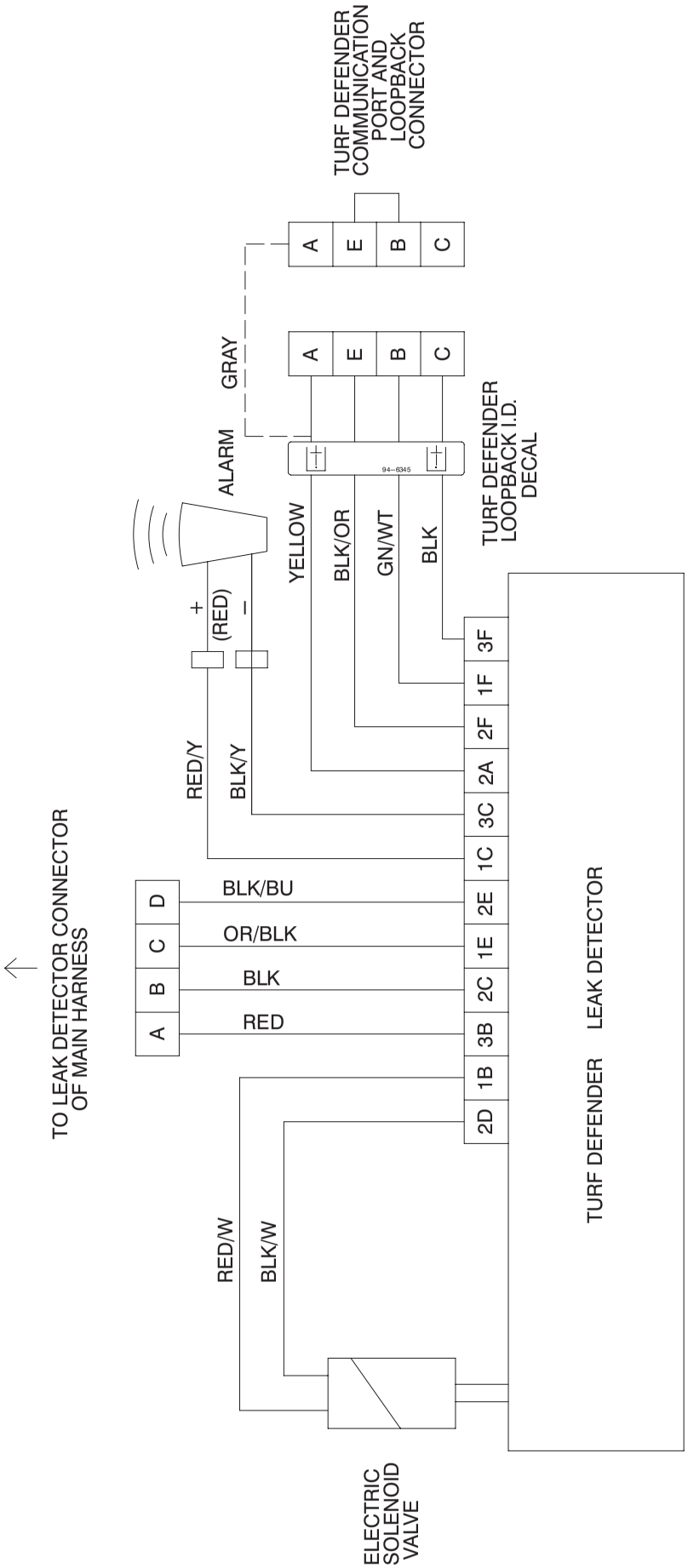


Electrical Schematic

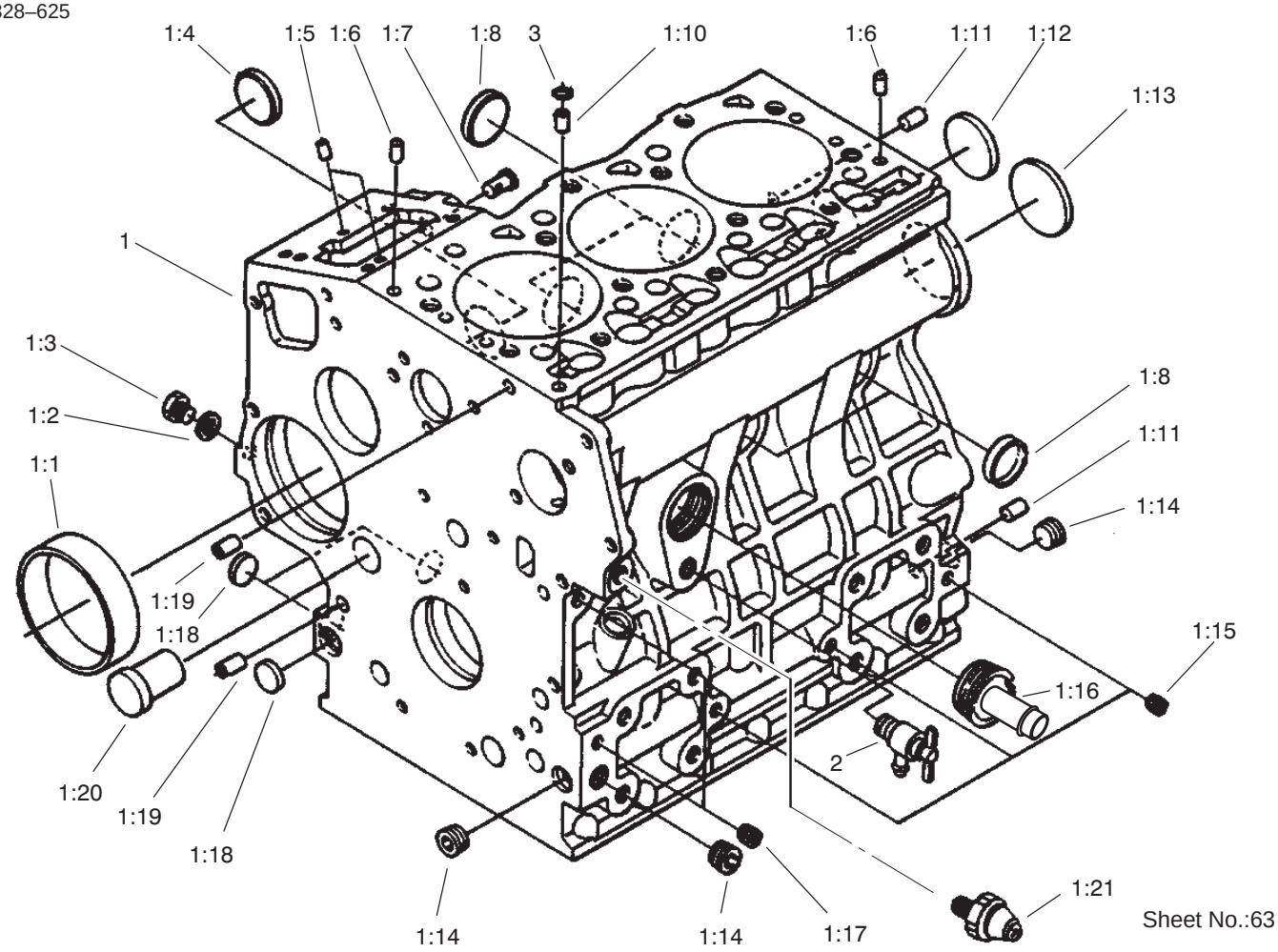


Sheet No.:43

Electrical Schematic – Turfdefender



3328–625

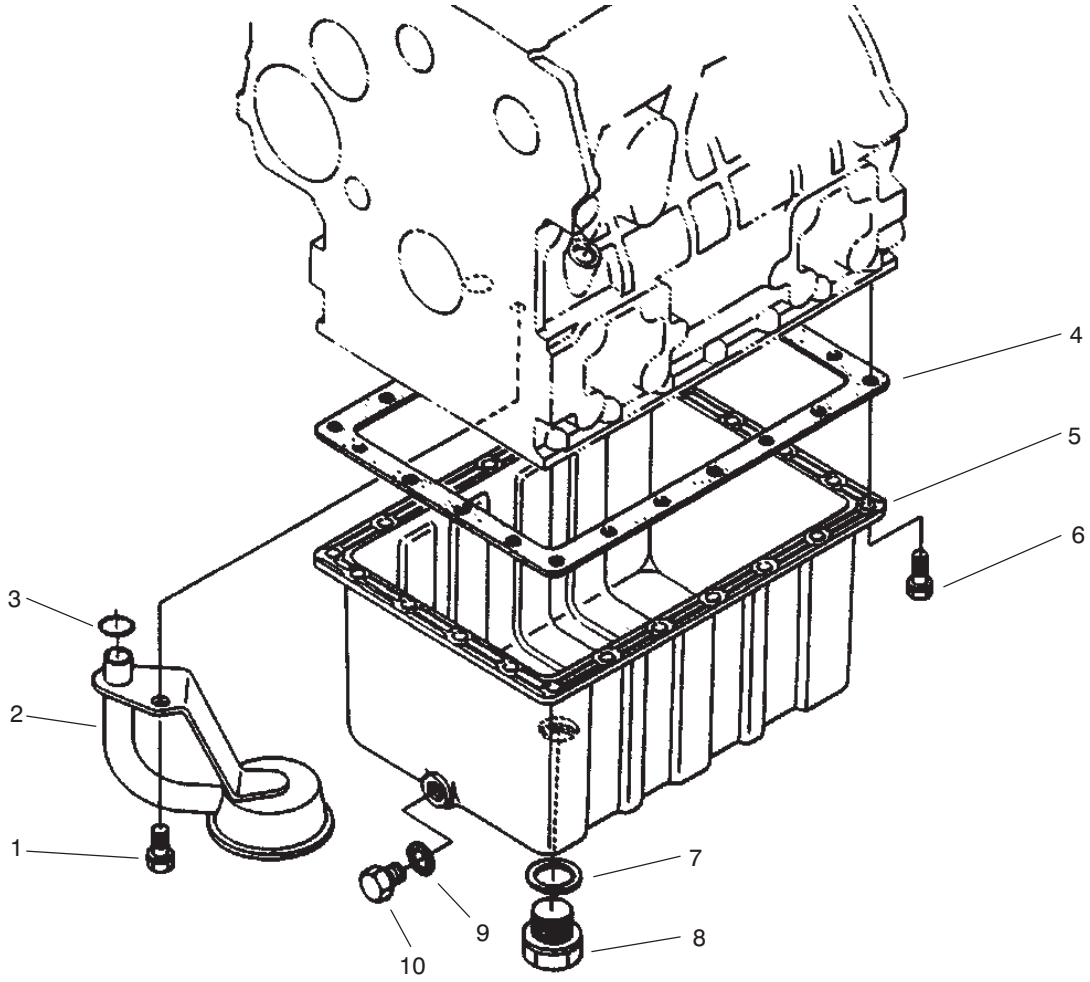


Sheet No.:63

Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9604	1	Crankcase ASM
1:1	98–9656	1	Bushing–Governor, Gear
1:2	98–7428	1	Gasket
1:3	98–7507	1	Plug
1:4	98–9599	1	Plug
1:5	98–9375	2	Pin–Straight
1:6	98–9376	2	Pin–Straight
1:7	98–9630	1	Pin–Spring, Start
1:8	98–9398	4	Cap–Sealing
1:10	98–9539	1	Pin–Pipe
1:11	98–9377	2	Pin–Straight
1:12	98–7540	1	Cap–Sealing
1:13	98–9668	1	Plug
1:14	98–9597	3	Plug
1:15	98–7539	3	Cap–Sealing
1:16	98–9667	1	Plug
1:17	98–7487	2	Plug
1:18	98–9379	3	Plug
1:19	98–9387	2	Pin–Pipe
1:20	98–9675	1	Plug
1:21	98–9416	1	Switch–Oil
2	98–9436	1	Drain Cock ASM
3	98–7509	1	O–Ring

Ref. No.	Part No.	Qty.	Description

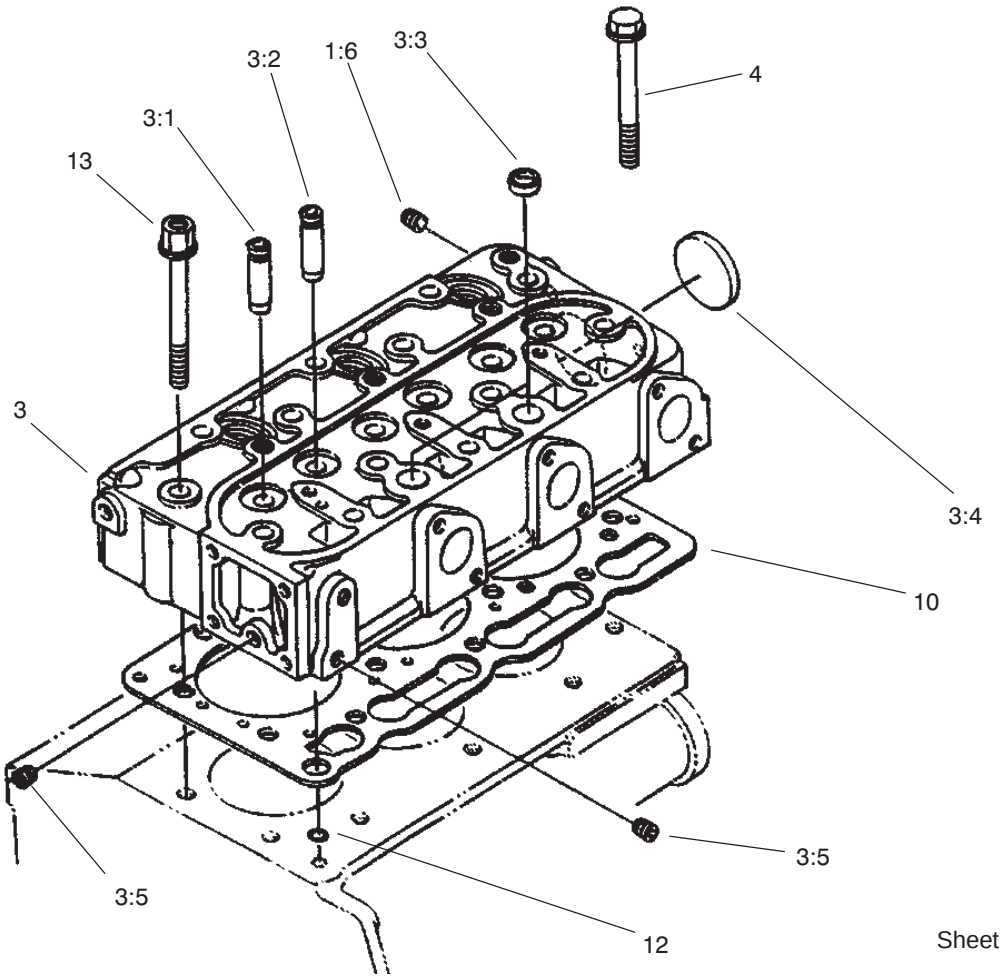


Sheet No.:64

Oil Pan Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9358	1	Bolt
2	98–9538	1	Filter–Oil
3	98–7527	1	O–Ring
4	98–9646	1	Gasket–Pan, Oil
5	98–9685	1	Drain–Oil
6	98–9350	22	Bolt
7	98–9399	1	Gasket
8	98–7523	1	Plug–Drain
9	98–7524	1	Gasket
10	98–9386	1	Plug

Ref. No.	Part No.	Qty.	Description

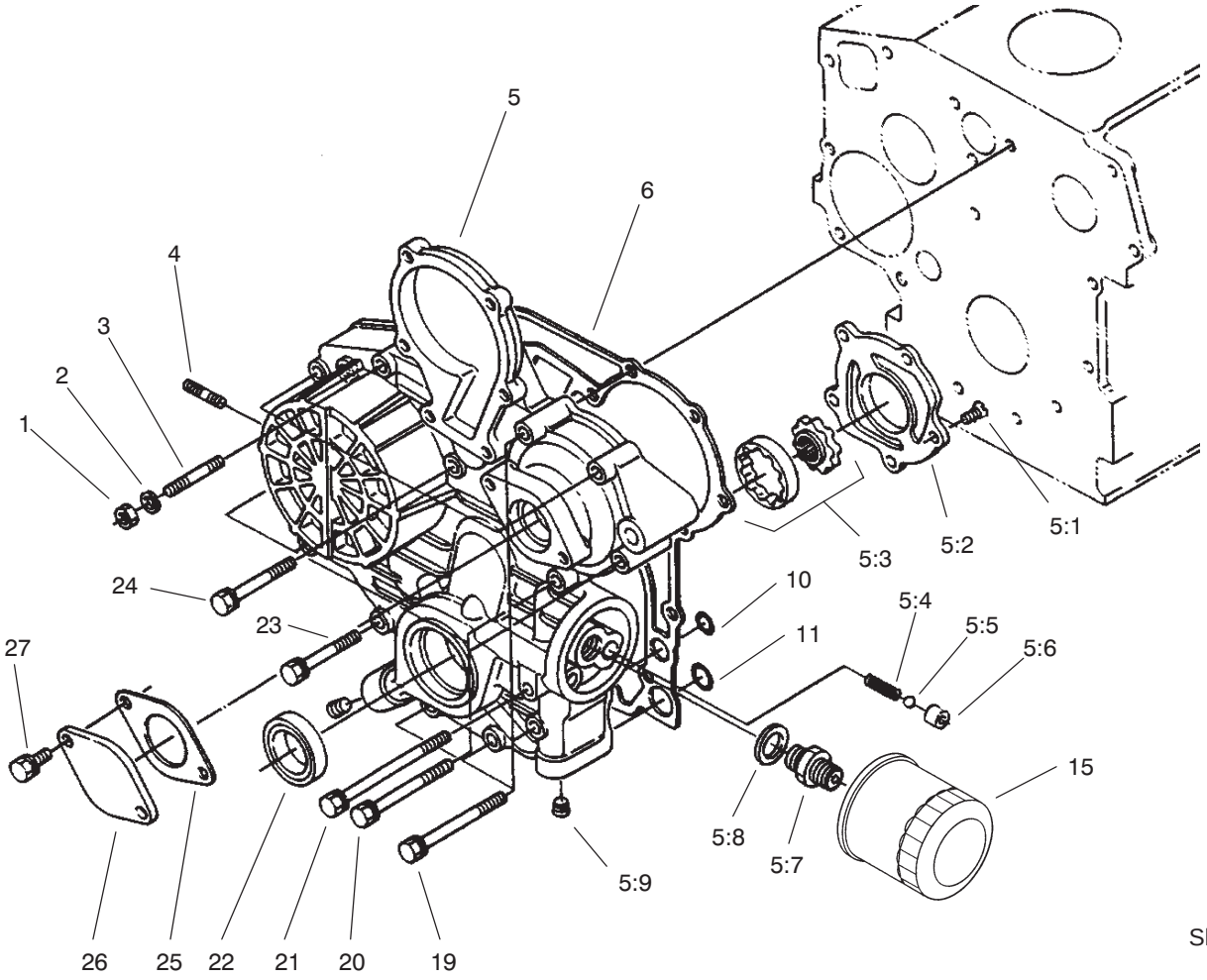


Sheet No.:65

Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
3	98–9460	1	Cylinder Head ASM
3:1	98–9499	3	Guide–Valve, Inlet
3:2	98–9500	3	Guide–Valve, Exhaust
3:3	98–9389	2	Cap–Sealing
3:4	98–9395	1	Cap–Sealing
3:5	98–7540	2	Cap–Sealing
4	98–9479	12	Bolt–Head, Cylinder
10	98–9613	1	Gasket–Head, Cylinder
12	98–7509	1	O–Ring
13	98–9647	2	Bolt–Head, Cylinder

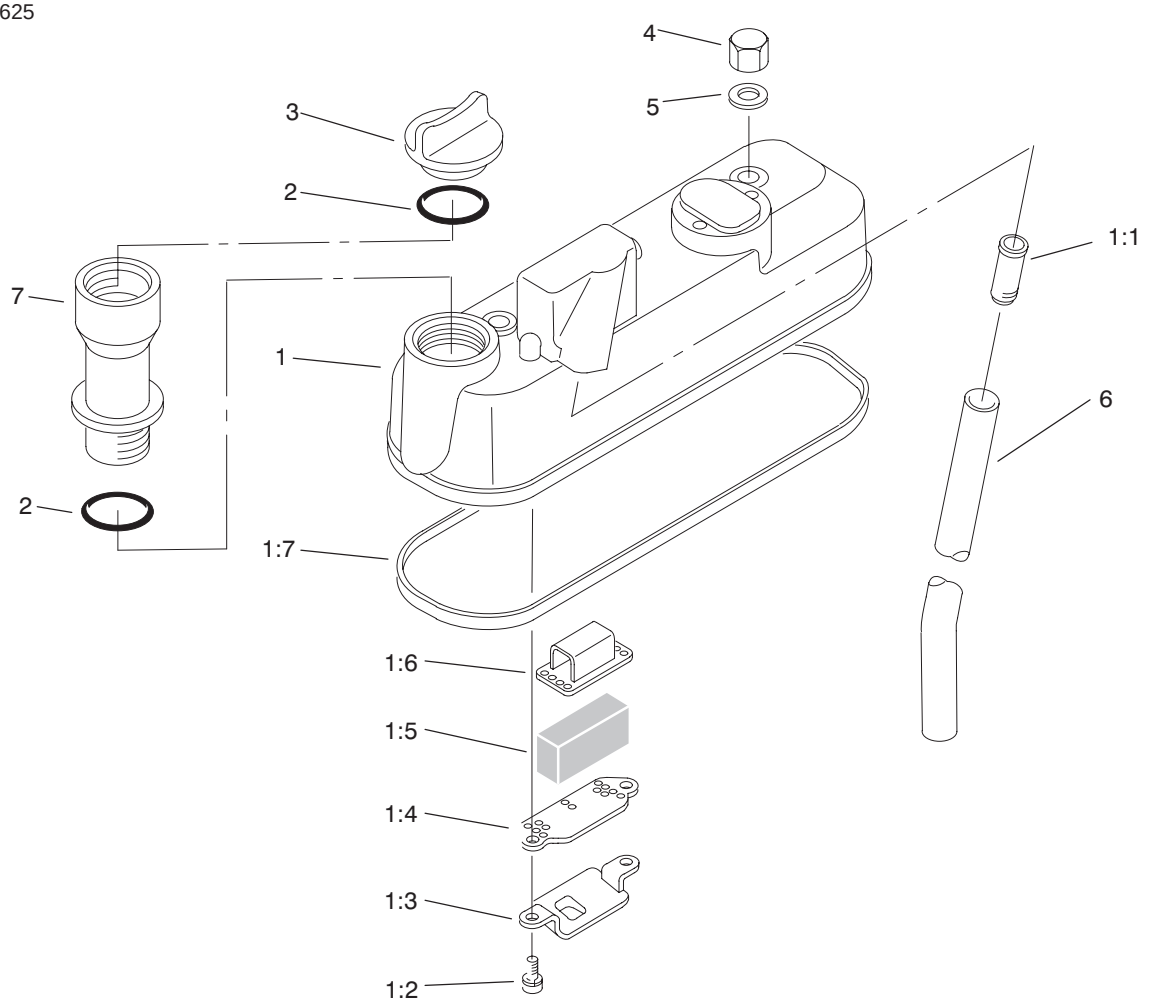
Ref. No.	Part No.	Qty.	Description



Sheet No.:66
T–2909

Grease and Oil Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7572	1	Nut
2	98–9367	1	Washer–Spring
3	98–9363	1	Stud
4	98–9362	2	Stud
5	98–9481	1	Gear Case ASM
5:1	98–9592	5	Screw
5:2	98–9541	1	Cover–Pump, Oil
5:3	98–9540	1	Oil Pump Rotor ASM
5:4	98–9544	1	Spring
5:5	98–9380	1	Ball
5:6	98–9543	1	Seat–Valve
5:7	98–9388	1	Joint–Pipe
5:8	98–7562	1	Washer–Plain
5:9	98–9598	2	Plug
6	98–9633	1	Gasket–Case, Gear
10	98–9372	2	O–Ring
11	98–7547	2	O–Ring
15	99–8384	1	Filter–Oil
19	98–9356	2	Bolt
20	98–9355	6	Bolt
21	98–9586	1	Bolt
22	98–9482	1	Seal–Oil
23	98–9437	1	Bolt
24	98–7496	3	Bolt
25	98–9684	1	Gasket–Gear Case
26	98–9641	1	Cover
27	98–7692	2	Bolt

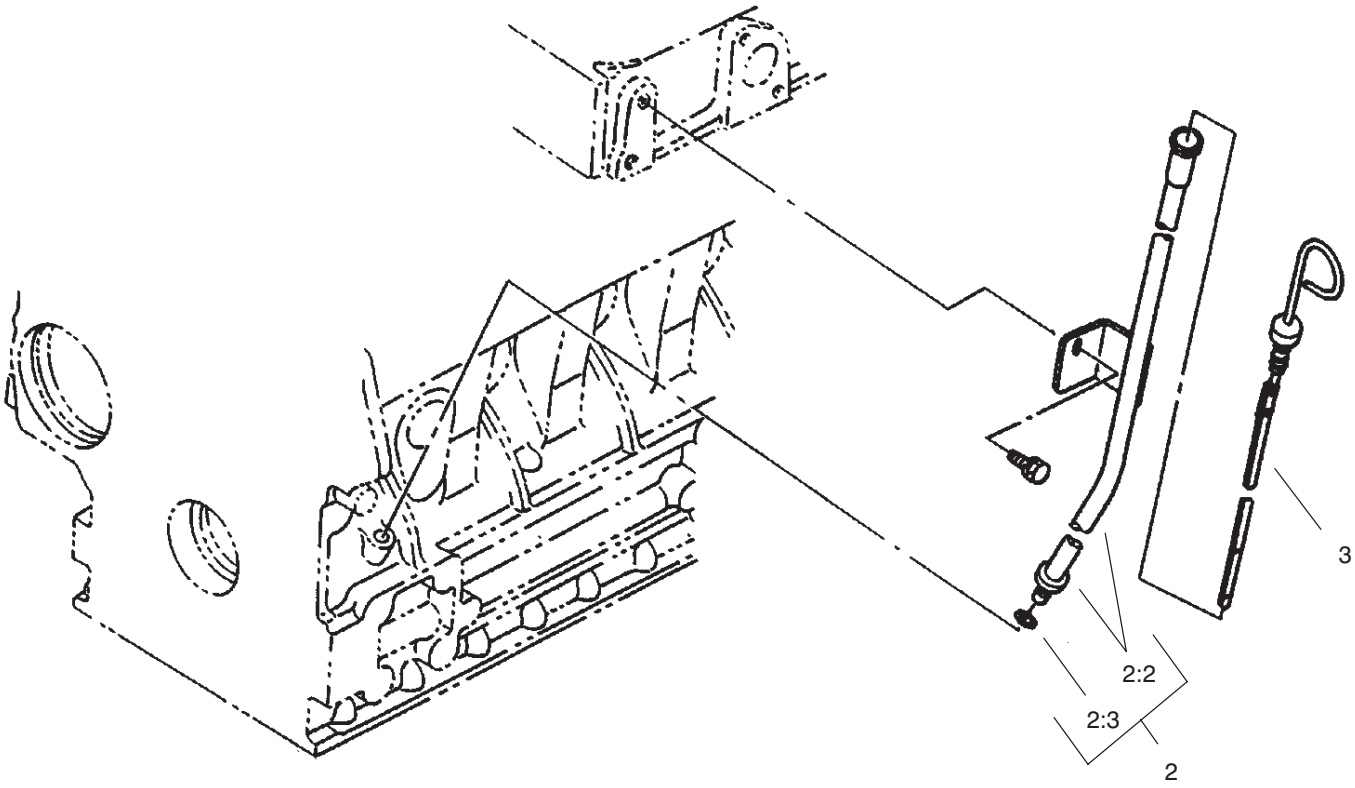


Sheet No.:67

Head Cover Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9614	1	Cylinder Head Cover ASM
1:1	98–9492	1	Joint–Pipe, Breather
1:2	98–9364	2	Screw–W/Washer
1:3	98–9490	1	Shield–Oil, Breather
1:4	98–9488	1	Plate–Element, Breather
1:5	98–9493	1	Element–Breather
1:6	98–9489	1	Plate–Element, Breather
1:7	98–9615	1	Gasket–Cover, Head
2	98–7430	2	O–Ring
3	98–9449	1	Plug–Filler, Oil
4	98–9455	3	Nut–Cap
5	98–9454	3	Gasket
6	98–9491	1	Pipe–Breather
7	99–8349	1	Extension–Oil Fill

Ref. No.	Part No.	Qty.	Description

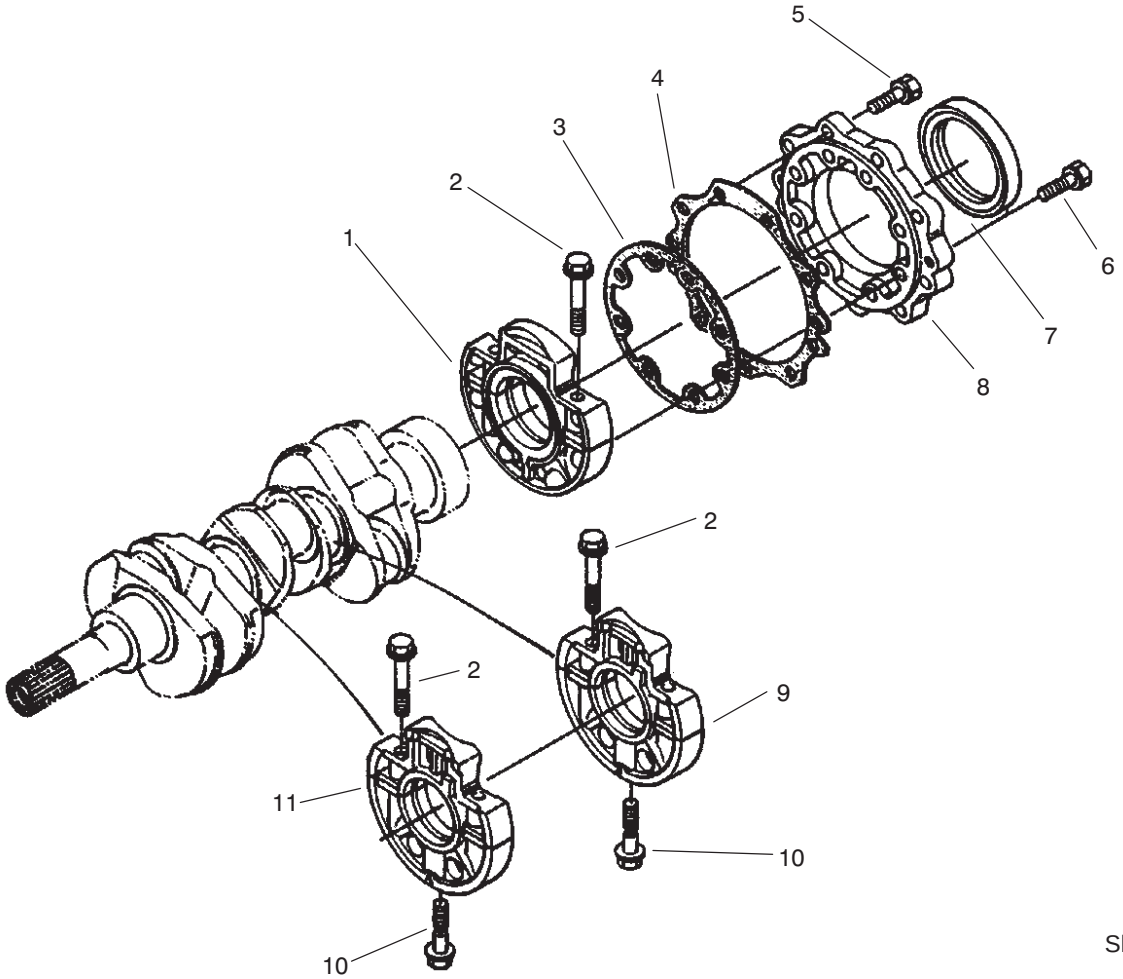


Sheet No.:68

Dipstick and Guide Assembly

Ref. No.	Part No.	Qty.	Description
1	98–4547	1	Plate–Mount, Fan
2	98–9672	1	Oil Gauge Guide ASM
2:2	98–9671	1	Guide–Gauge, Oil
2:3	98–9374	1	O–Ring
3	98–9670	1	Gauge–Oil

Ref. No.	Part No.	Qty.	Description

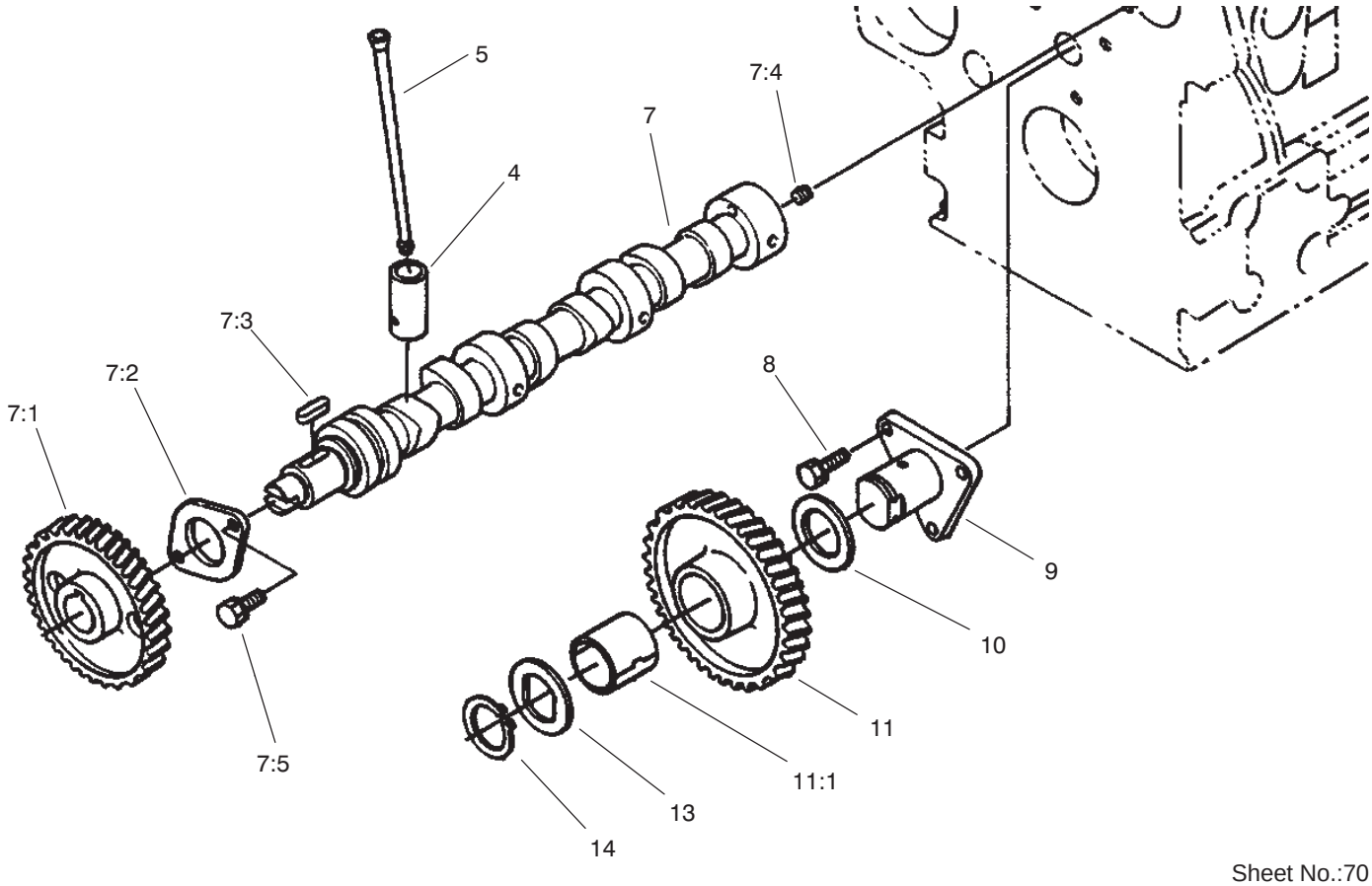


Sheet No.:69

Main Bearing Case Assembly

Ref. No.	Part No.	Qty.	Description
1	99–8345	1	Main Bearign Case ASM
2	98–9484	6	Bolt–Case, Bearing
3	98–9634	1	Gasket–Case, Bearing
4	98–9635	1	Gasket–Cover, Bearing Case
5	98–7568	9	Bolt
6	98–9352	8	Bolt
7	98–9483	1	Seal–Oil
8	98–9487	1	Cover–Case, Bearing
9	98–9607	1	Main Bearing Case ASM
10	98–9485	2	Bolt–Case, Bearing
11	98–9606	1	Main Bearing Case ASM

Ref. No.	Part No.	Qty.	Description

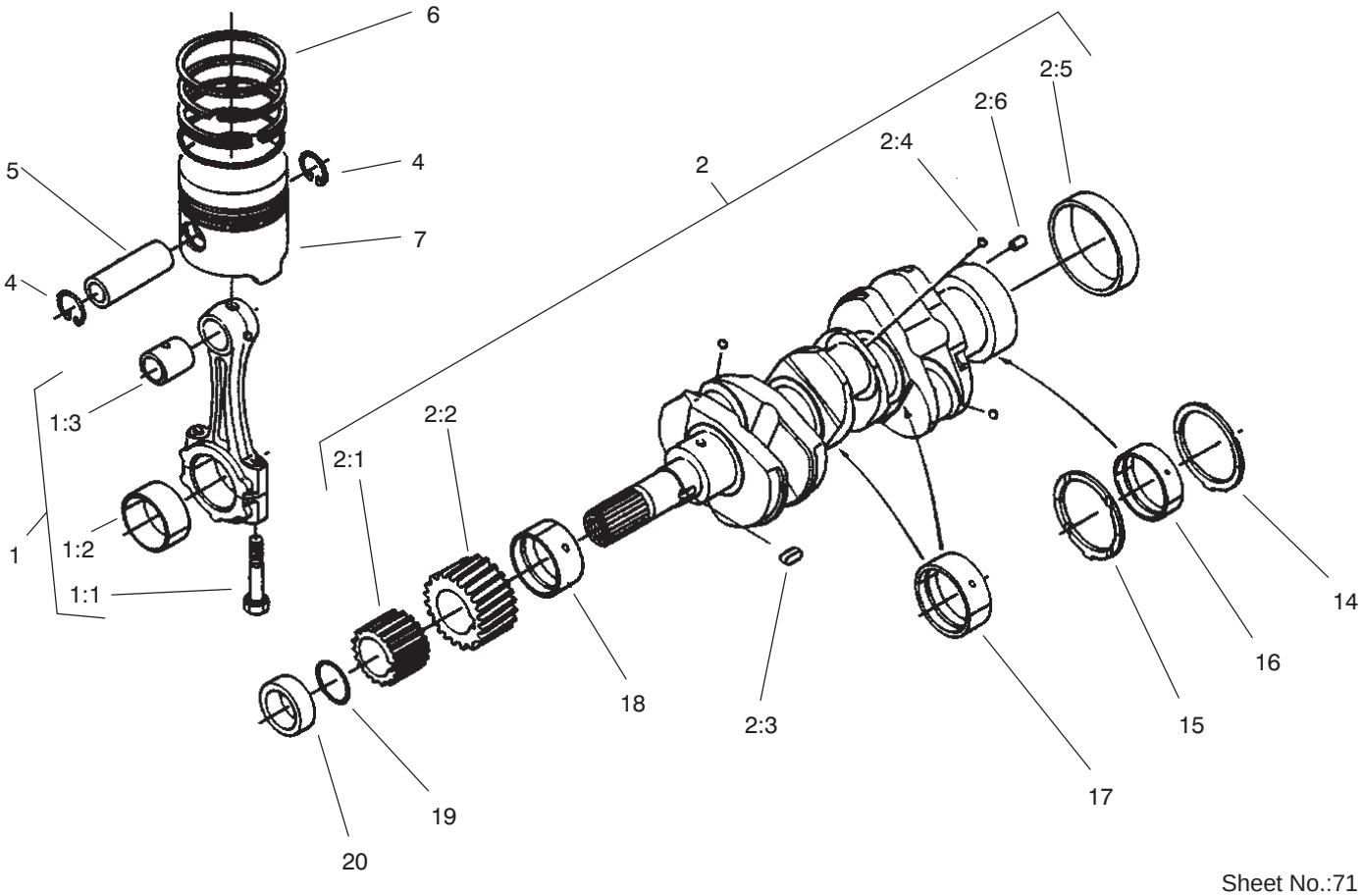


Sheet No.:70

Camshaft Assembly

Ref. No.	Part No.	Qty.	Description
4	98–9616	6	Tappet
5	98–9509	6	Rod–Push
7	98–9617	1	Camshaft ASM
7:1	98–9512	1	Gear–Cam
7:2	98–9510	1	Stopper–Camshaft
7:3	98–9378	1	Key–Feather
7:4	98–7449	1	Screw–Set
7:5	98–9351	2	Bolt
8	98–7692	3	Bolt
9	98–9533	1	Shaft–Gear, Idle
10	98–9535	1	Collar–Gear, Idle
11	98–9649	1	Idle Gear ASM
11:1	98–9650	1	Bushing–Gear, Idle
13	98–9536	1	Collar–Gear, Idle
14	98–9534	1	Clip–Circular, Idle Gear

Ref. No.	Part No.	Qty.	Description

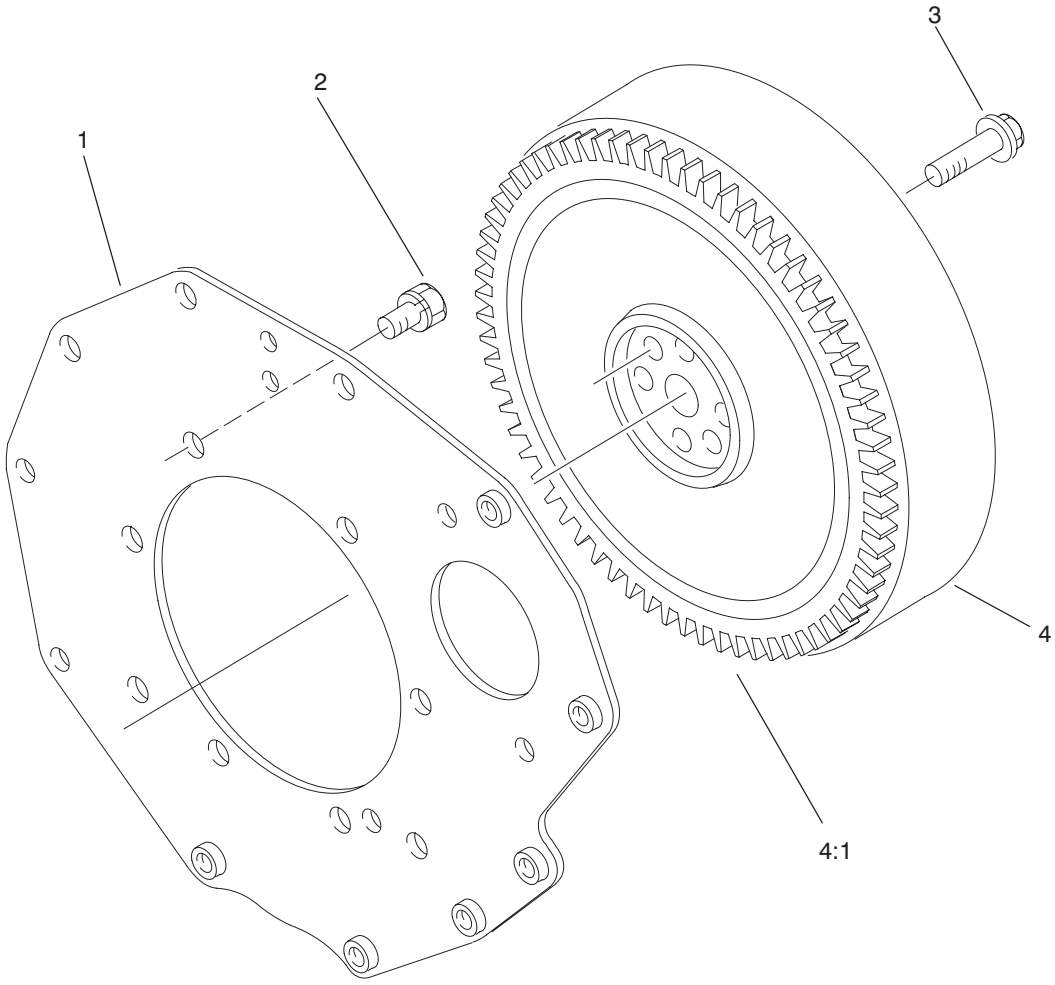


Sheet No.:71

Piston and Crankshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9516	3	Connecting Rod ASM
1:1	98–9517	6	Bolt–Rod, Connecting
1:2	98–9518	3	Metal–Crankpin (STD)
1:2	98–9519	3	Bearing–Rod (0.2mm)
1:2	98–9520	3	Bearing–Rod (0.4mm)
1:3	98–9515	3	Bushing–Pin, Piston
2	98–9642	1	Crankshaft ASM
2:1	98–9542	1	Gear–Drive, Oil Pump
2:2	98–9532	1	Gear–Crankshaft
2:3	98–9666	1	Key
2:4	98–7473	3	Ball
2:5	98–9522	1	Sleeve–Crankshaft
2:6	98–9375	1	Pin–Straight
4	98–9514	6	Clip–Circular, Piston Pin
5	98–9513	3	Pin–Piston
6	98–9619	3	Piston Ring ASM (0.5mm)
6	98–9618	3	Piston Ring ASM (STD)
7	98–9470	3	Piston (0.5mm)
7	98–9469	3	Piston (STD)
14	98–9413	2	Bearing–Thrust (STD)
14	98–9414	2	Bearing–Thrust (0.2mm)

Ref. No.	Part No.	Qty.	Description
14	98–9415	2	Bearing–Thrust (0.4mm)
15	98–9688	2	Bearing–Thrust (STD)
15	98–9689	2	Bearing–Thrust (0.2mm)
15	98–9690	2	Bearing–Thrust (0.4mm)
16	98–9525	1	Metal Crankshaft(STD Set)
16	98–9526	1	Bearing–Main (0.2mm)
16	98–9527	1	Bearing–Main (0.4mm)
17	98–9524	2	Metal–Crankshaft (STD Set)
17	98–9530	2	Bearing–Main (0.2mm)
17	98–9531	2	Bearing–Main (0.4mm)
18	98–9523	1	Metal Crankshaft (STD)
18	98–9528	1	Bearing–Main (0.2mm)
18	98–9529	1	Bearing–Main (0.4mm)
19	98–9373	1	O–Ring
20	98–9521	1	Collar–Crankshaft

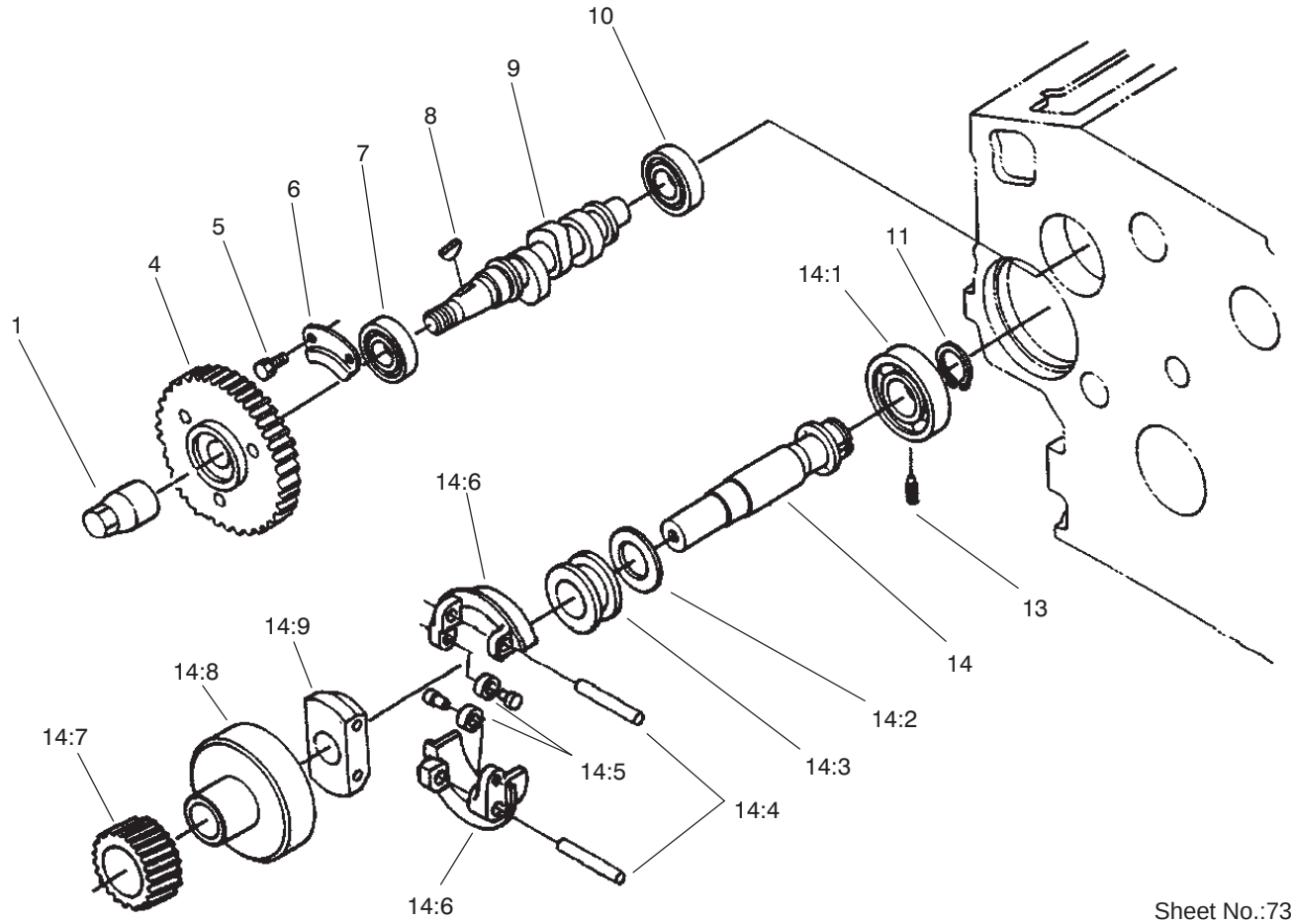


Sheet No.:72
T–2915

Flywheel Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9486	1	Plate–End, Rear
2	98–9392	8	Bolt
3	98–9537	6	Bolt–Flywheel
4	98–9691	1	Flywheel ASM
4:1	98–9394	1	Gear–Ring

Ref. No.	Part No.	Qty.	Description

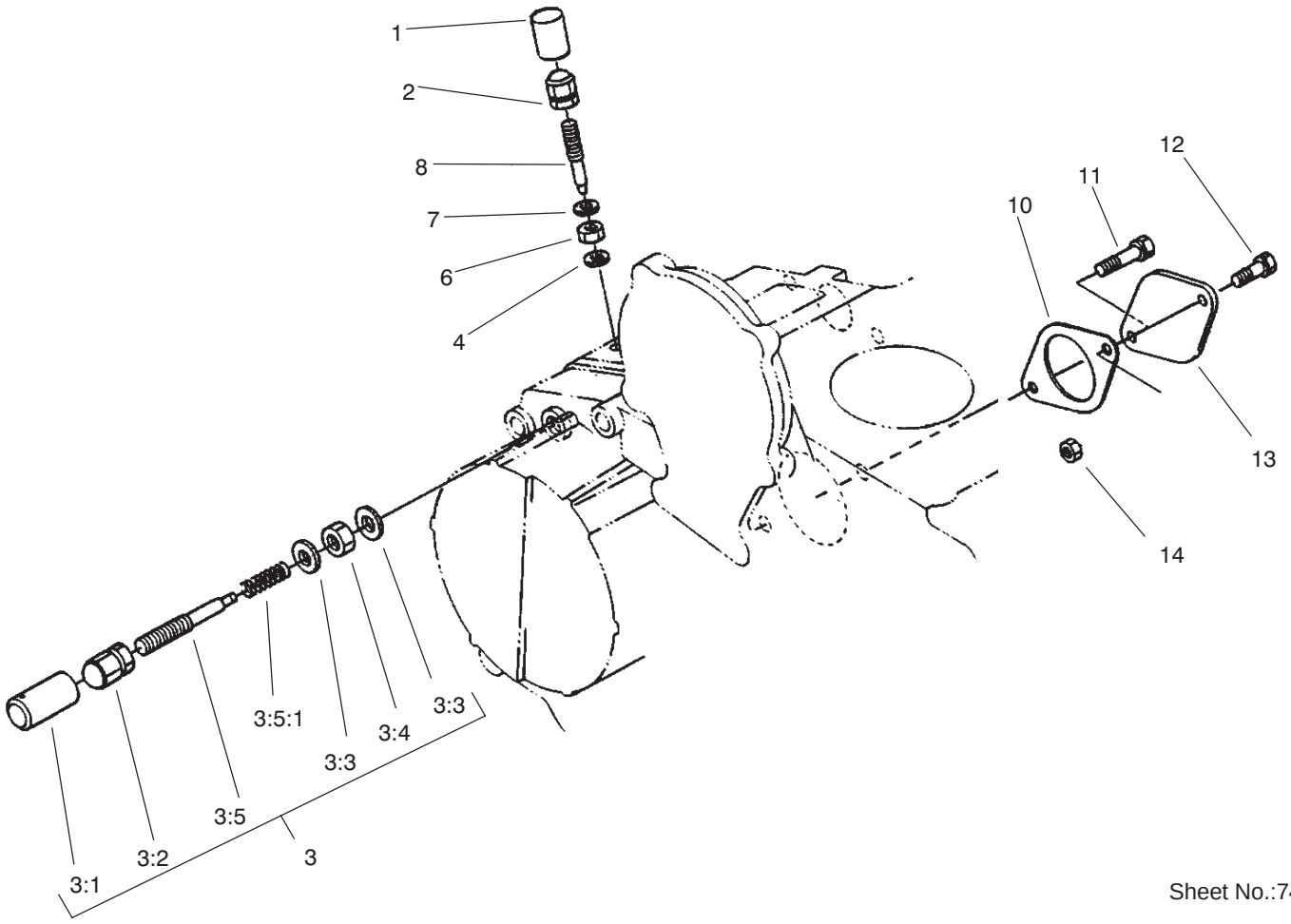


Sheet No.:73

Fuel Camshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9590	1	Nut–Cap
4	98–9669	1	Gear–Pump, Injection
5	98–9350	2	Bolt
6	98–9511	1	Stopper–Fuel, Camshaft
7	98–9383	1	Bearing–Ball
8	98–9595	1	Key–Woodruff
9	98–9459	1	Camshaft–Fuel
10	98–9382	1	Bearing–Ball
11	98–9657	1	Clip–Circular, Governor Shaft
13	98–9565	1	Screw–Set
14	98–9644	1	Governor Shaft ASM
14:1	98–9381	1	Bearing–Ball
14:2	98–9564	1	Washer–Thrust
14:3	98–9563	1	Sleeve–Governor
14:4	98–9560	2	Shaft–Weight, Governor
14:5	98–9692	2	Roller
14:6	98–9559	2	Governor Weight ASM
14:7	98–9673	1	Gear–Governor
14:8	98–9562	1	Holder–Gear, Governor
14:9	98–9561	1	Holder–Weight, Governor

Ref. No.	Part No.	Qty.	Description



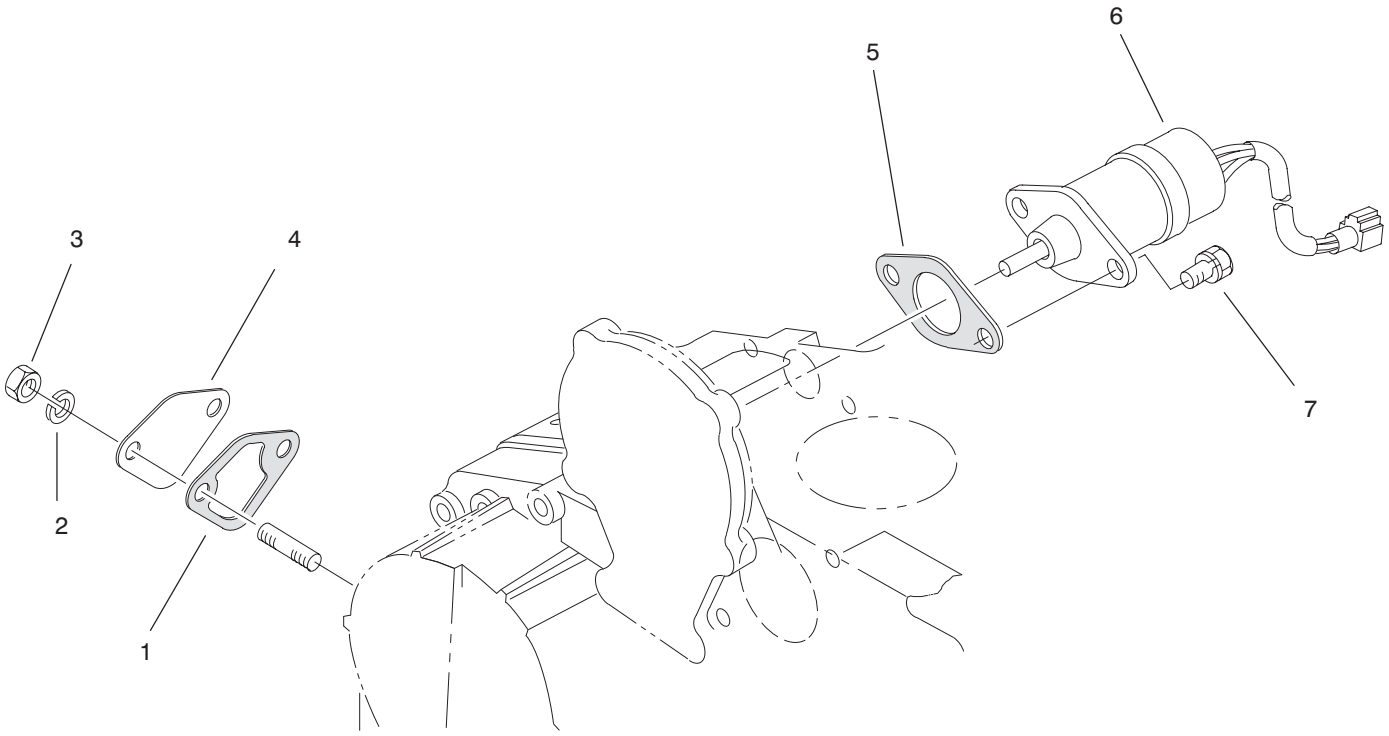
Sheet No.:74

Engine Stop Lever Assembly

Ref. No.	Part No.	Qty.	Description
1	99–8390	1	Pipe–Lock, Fuel Adj.
2	99–8387	1	Nut–Cap
3	98–9678	1	Idle Apparatus ASM
3:1	98–9558	1	Cap
3:2	98–9441	2	Nut–Cap
3:3	98–7654	2	Gasket
3:4	98–9439	2	Nut
3:5	98–9679	1	Adjusting Bolt ASM
☆3:5:1		1	Spring
4	99–8389	1	Gasket
6	99–8386	2	Nut
7	99–8388	1	Gasket
8	98–9557	1	Bolt–Adjusting
10	98–9674	1	Packing
11	98–7645	1	Bolt
12	98–9359	1	Bolt
13	98–9640	1	Cover–Pump
14	98–7534	1	Nut

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

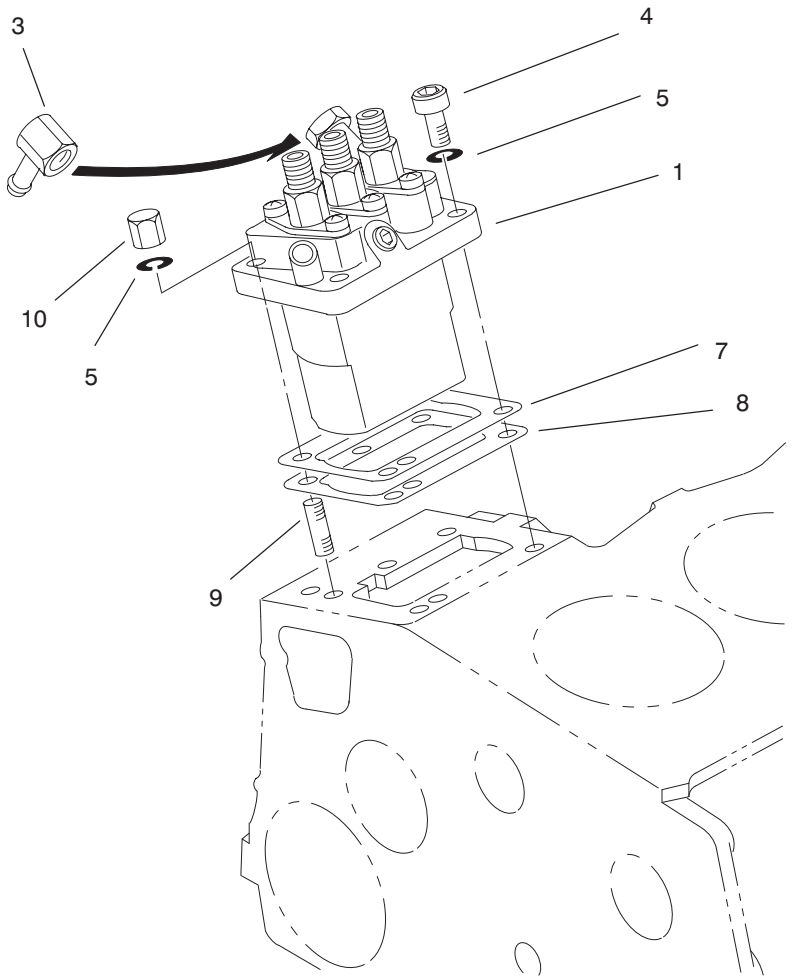


Sheet No.:75

Stop Solenoid and Fuel Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9636	1	Gasket–Pump, Fuel
2	98–9367	2	Washer–Spring
3	98–7572	2	Nut
4	99–3514	1	Cover
5	98–9683	1	Gasket–Cover, Solenoid
6	104–5155	1	Solenoid–Stop
7	98–9351	2	Bolt

Ref. No.	Part No.	Qty.	Description



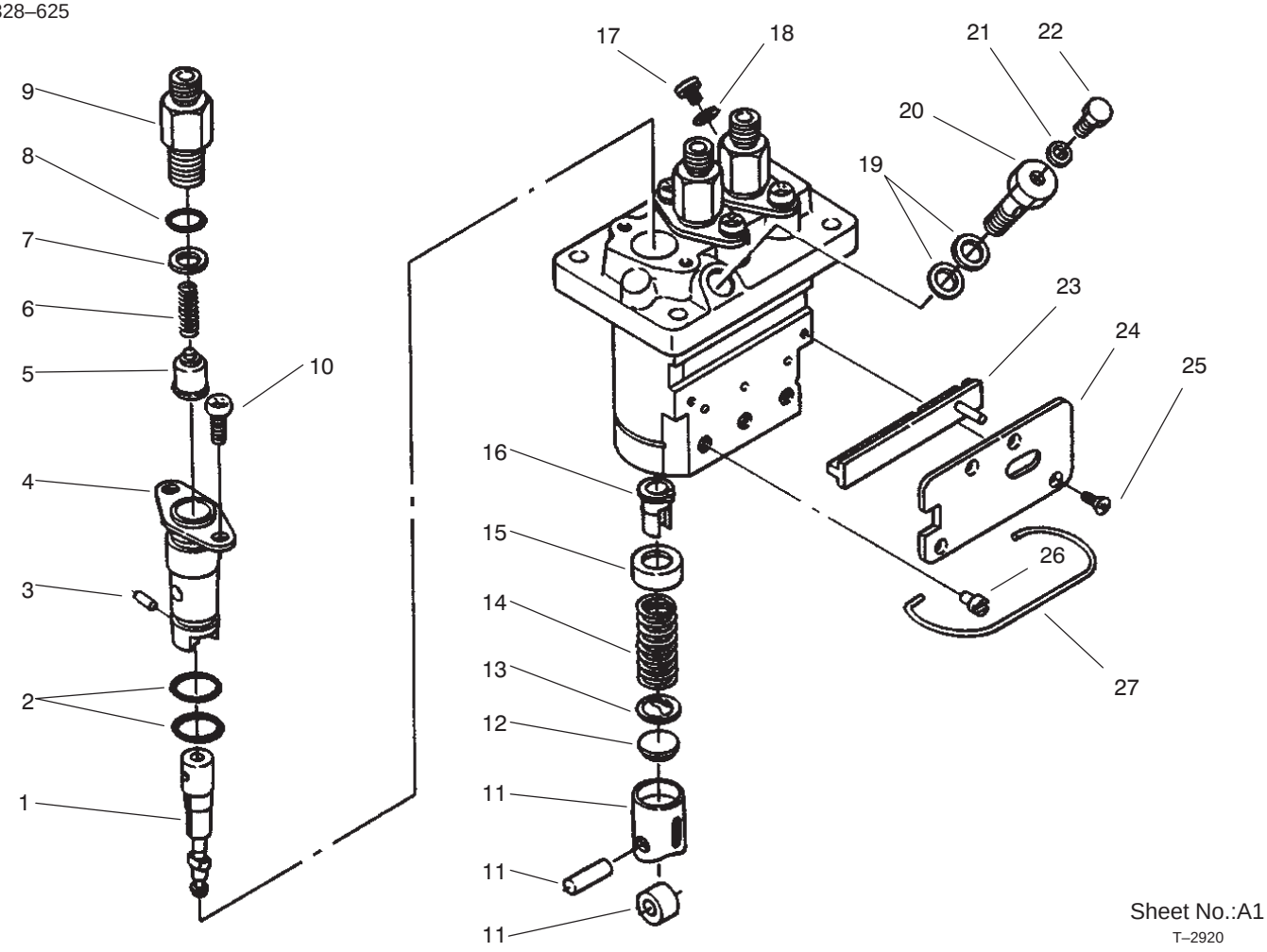
Sheet No.:76

Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9643	1	Injection Pump ASM
3	98–9596	1	Joint–Eye
4	98–9361	2	Bolt–HSH
5	98–9367	4	Washer–Spring
7	98–9457	1	Shim–Injection (0.25mm)
7	98–9456	1	Shim (0.2mm)
8	98–9458	1	Shim–Injection (0.30mm)
9	98–9438	2	Stud
10	98–9440	2	Nut–Cap

Ref. No.	Part No.	Qty.	Description

3328–625

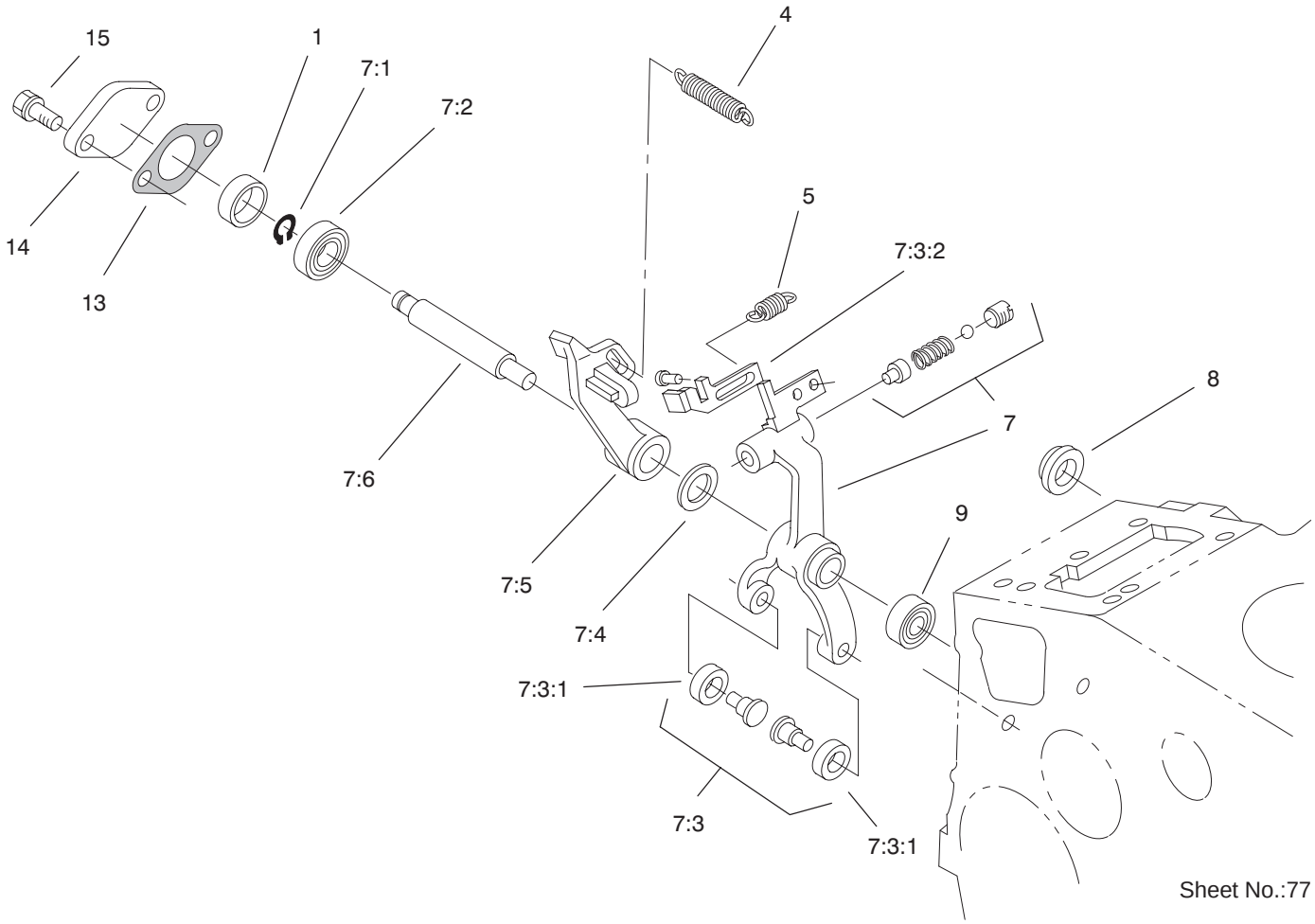


Sheet No.:A1
T–2920

Injection Pump Assembly No. 98–9643

Ref. No.	Part No.	Qty.	Description
1	98–9462	3	Element–Pump
2	98–9423	6	O–Ring
3	98–9443	3	Pin–Joint
4	98–9434	3	Flange–Sleeve
5	98–9421	3	Valve–Delivery
6	98–9424	3	Spring–Valve, Delivery
7	98–9425	3	Gasket–Valve, Delivery
8	98–9447	3	O–Ring
9	98–9652	3	Holder–Valve, Delivery
10	98–9452	6	Screw
11	98–9422	3	Tappet ASM
12	98–9433	3	Shim
13	98–9429	3	Seat–Spring, Lower
14	98–9428	3	Spring–Plunger
15	98–9427	3	Seat–Spring, Upper
16	98–9432	3	Sleeve–Control
17	98–9466	1	Plug
18	98–9451	1	Gasket
19	98–9445	1	Gasket
20	98–9464	1	Bolt–Joint
21	98–9446	1	Gasket
22	98–9430	1	Screw
23	98–9463	1	Control–Rack
24	98–9465	1	Plate
25	98–9442	4	Screw

Ref. No.	Part No.	Qty.	Description
26	98–9426	3	Pin–Guide, Tappet
27	98–9450	1	Pin–Clamp

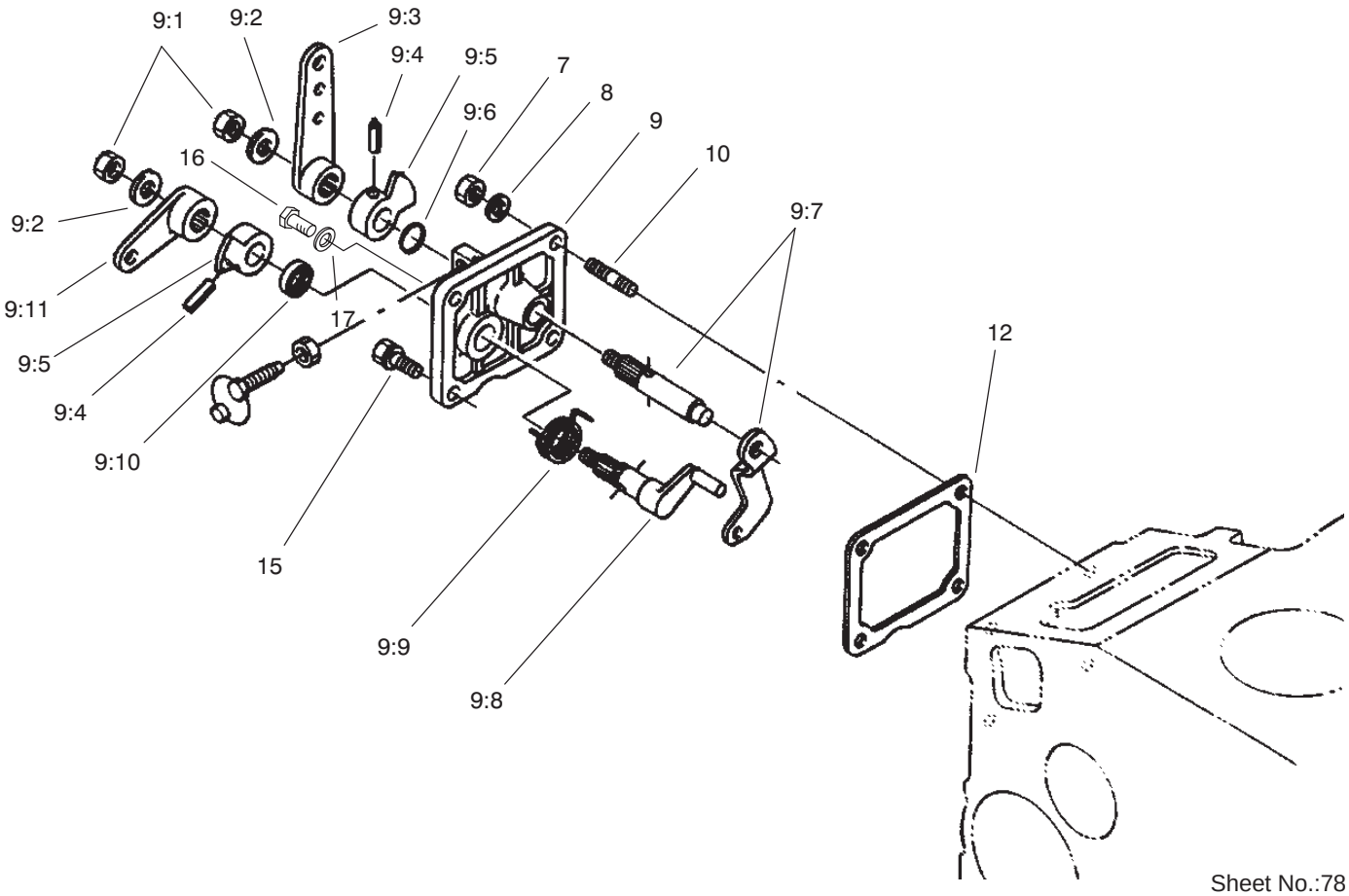


Sheet No.:77

Governor Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9567	1	Collar
4	98–9681	1	Spring–Governor
5	98–9645	1	Spring–Start
7	98–9680	1	Fork Lever ASM
7:1	98–9369	1	Clip–Circular, External
7:2	98–9570	1	Bearing–Miniaturize
7:3	99–8380	1	Fork Lever ASM
7:3:1	98–9692	2	Roller
7:3:2	98–9660	1	Lever–Thrust
7:4	98–9593	1	Washer–Plain
7:5	98–9659	1	Lever–Fork
7:6	98–9566	1	Shaft–Lever, Fork
8	98–9568	1	Collar
9	98–9571	1	Bearing–Miniaturize
13	98–9682	1	Gasket
14	98–9569	1	Cover–Shaft, Fork Lever
15	98–9351	2	Bolt

Ref. No.	Part No.	Qty.	Description

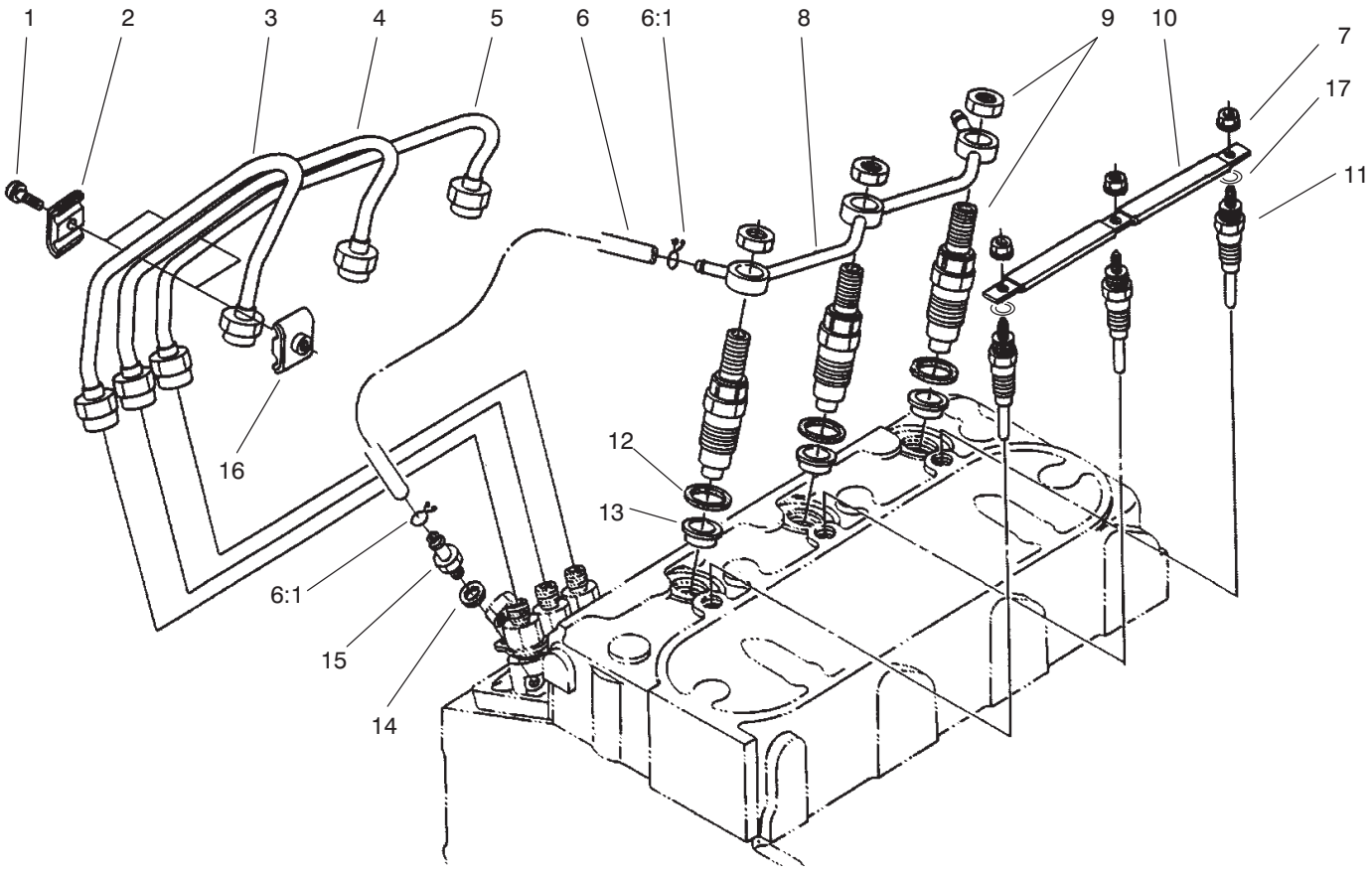


Sheet No.:78

Speed Control Plate Assembly

Ref. No.	Part No.	Qty.	Description
7	98–7572	2	Nut
8	98–9367	2	Washer–Spring
9	98–9661	1	Control Plate ASM
9:1	98–9589	2	Nut
9:2	98–9594	2	Washer–Plain
9:3	98–9662	1	Lever–Control, Speed
9:4	98–7602	2	Pin–Spring
9:5	98–9572	2	Lever–Control, Speed
9:6	98–9371	1	O–Ring
9:7	98–9658	1	Governor Lever ASM
9:8	98–9664	1	Shaft–Lever, Stop
9:9	98–9472	1	Spring–Return
9:10	98–7601	1	Seal–Oil
9:11	98–9663	1	Lever–Stop, Engine
10	98–9362	2	Stud
12	98–9637	1	Gasket
15	98–7692	1	Bolt
16	99–8348	1	Bolt
17	98–7654	1	Gasket

Ref. No.	Part No.	Qty.	Description

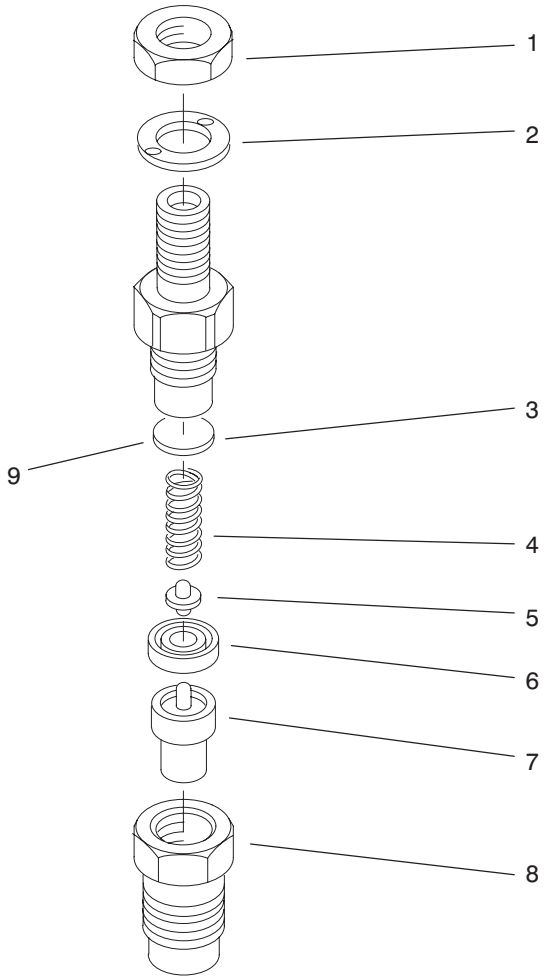


Sheet No.:79

Nozzle Holder and Glow Plug Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7684	2	Screw W/Washer
2	98–7683	2	Clamp–Pipe
3	98–9653	1	Pipe–Injection
4	98–9654	1	Pipe–Injection
5	98–9655	1	Pipe–Injection
6	98–9420	1	Over Flow Pipe ASM
6:1	98–7671	1	Clip–Pipe
7	99–8377	3	Nut–Flange
8	98–9620	1	Over Flow Pipe ASM
9	98–9468	3	Nozzle Holder ASM
10	98–9631	3	Cord–Plug, Glow
11	98–9695	3	Plug–Glow
12	98–7676	3	Gasket
13	98–7677	3	Seal
14	98–7654	1	Gasket
15	98–9431	1	Screw–Bleeder
16	98–7682	2	Clamp–Pipe
17	99–8378	3	Washer–Plain

Ref. No.	Part No.	Qty.	Description

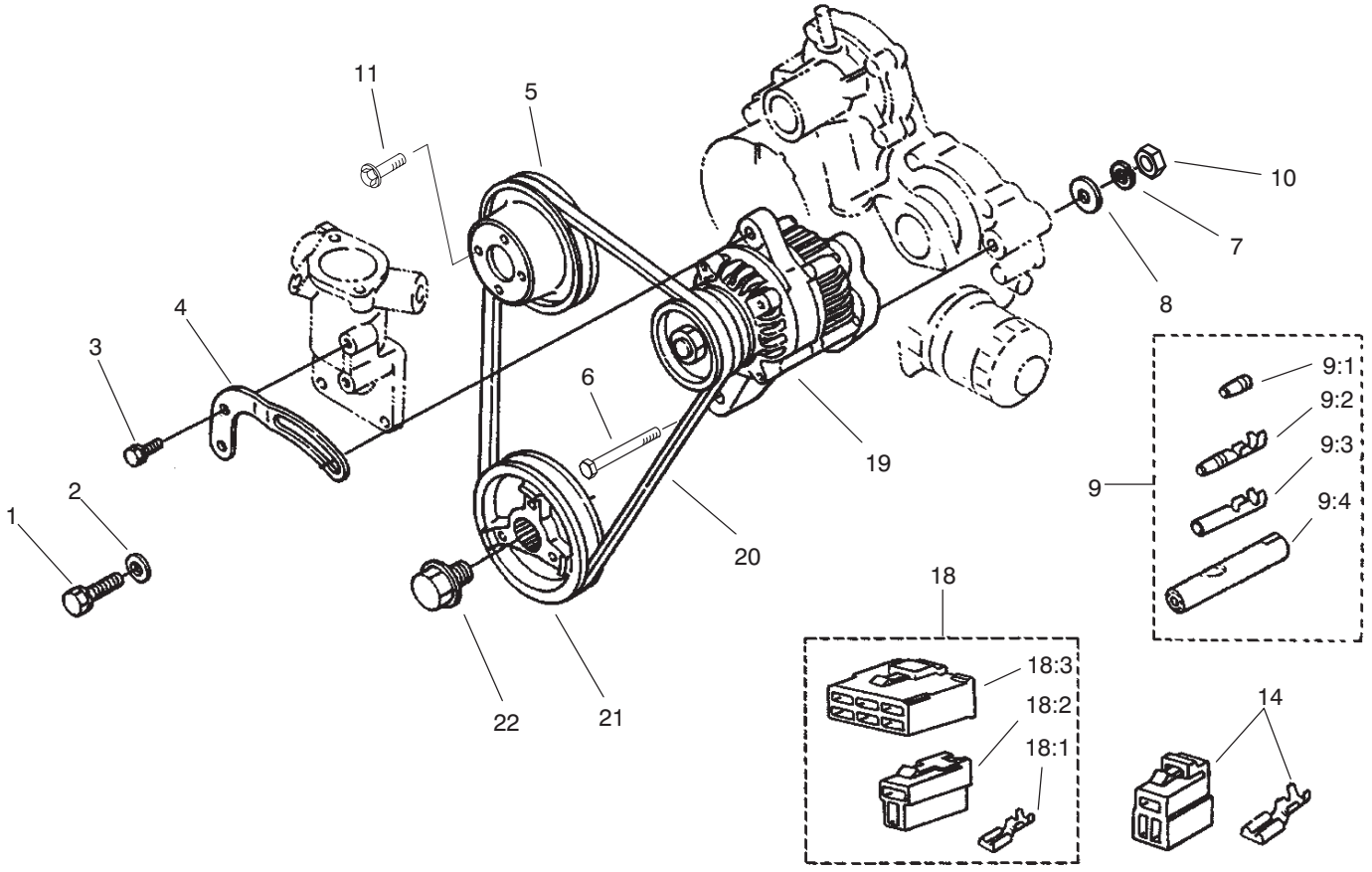


Sheet No.:A2

Nozzle Holder Assembly 98–9468

Ref. No.	Part No.	Qty.	Description
1	99–8301	3	Nut
2	99–8307	3	Washer–Plain
3	99–8302	3	Washer–Adjusting
4	99–8303	3	Spring–Nozzle
5	99–8305	3	Rod–Push
6	99–8304	3	Spacer–Distance
7	99–8308	3	Piece–Nozzle
8	99–8306	3	Nut–Nozzle
9	99–8317	3	Washer–Adjust (0.56mm)
9	99–8318	3	Washer–Adjust (0.58mm)
9	99–8319	3	Washer–Adjust (0.80mm)
9	99–8311	3	Washer–Adjust (0.20mm)
9	99–8310	3	Washer–Adjust (0.10mm)
9	99–8309	3	Adjusting Washer ASM
9	99–8316	3	Washer–Adjust (0.54mm)
9	99–8315	3	Washer–Adjust (0.52mm)
9	99–8314	3	Washer–Adjust (0.50mm)

Ref. No.	Part No.	Qty.	Description
9	99–8313	3	Washer–Adjust (0.40mm)
9	99–8312	3	Washer–Adjust (0.30mm)

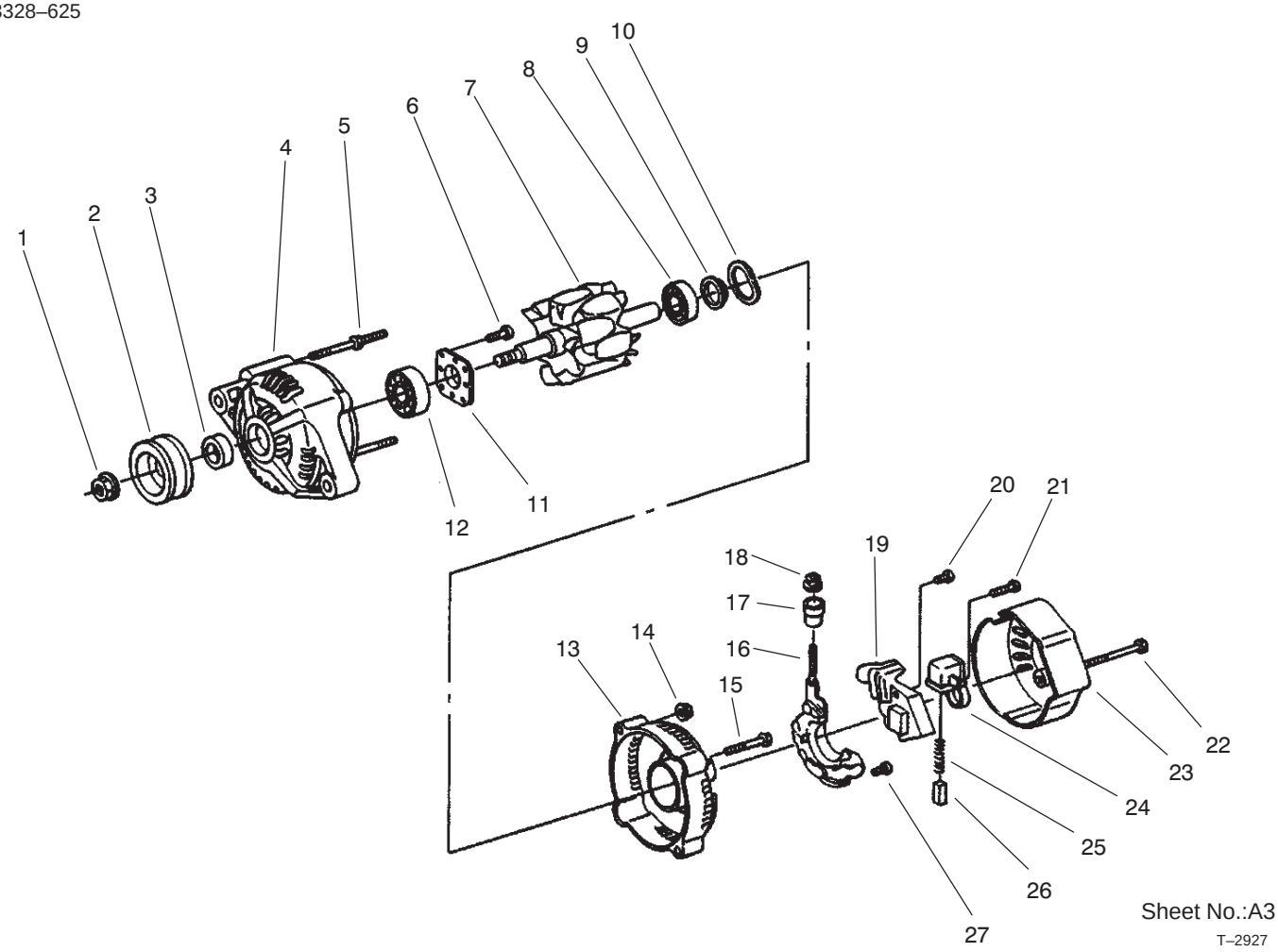


Sheet No.:80

Alternator and Pulley Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7697	1	Bolt
2	98–7698	1	Washer–Plain
3	98–7692	1	Bolt
4	98–9573	1	Stay–Dynamo
5	98–9584	1	Pulley–Fan
6	98–9360	1	Bolt
7	98–9368	1	Washer–Spring
8	98–9366	1	Washer–Plain
9	98–9700	1	Terminal ASM
9:1	98–9701	1	Terminal
9:2	98–9702	1	Sleeve
9:3	98–9703	1	Terminal
9:4	98–9704	1	Sleeve
10	98–7737	1	Nut
11	99–8363	4	Bolt–Flange
14	98–9602	1	Lock Coupler ASM
18	98–9696	1	Coupler ASM
18:1	98–9699	7	Terminal
18:2	98–9698	1	Connector
18:3	98–9697	1	Connector
19	98–9474	1	Alternator ASM
20	98–9676	1	V–Belt
21	106–7055	1	Pulley–Drive, Fan
22	98–9585	1	Bolt

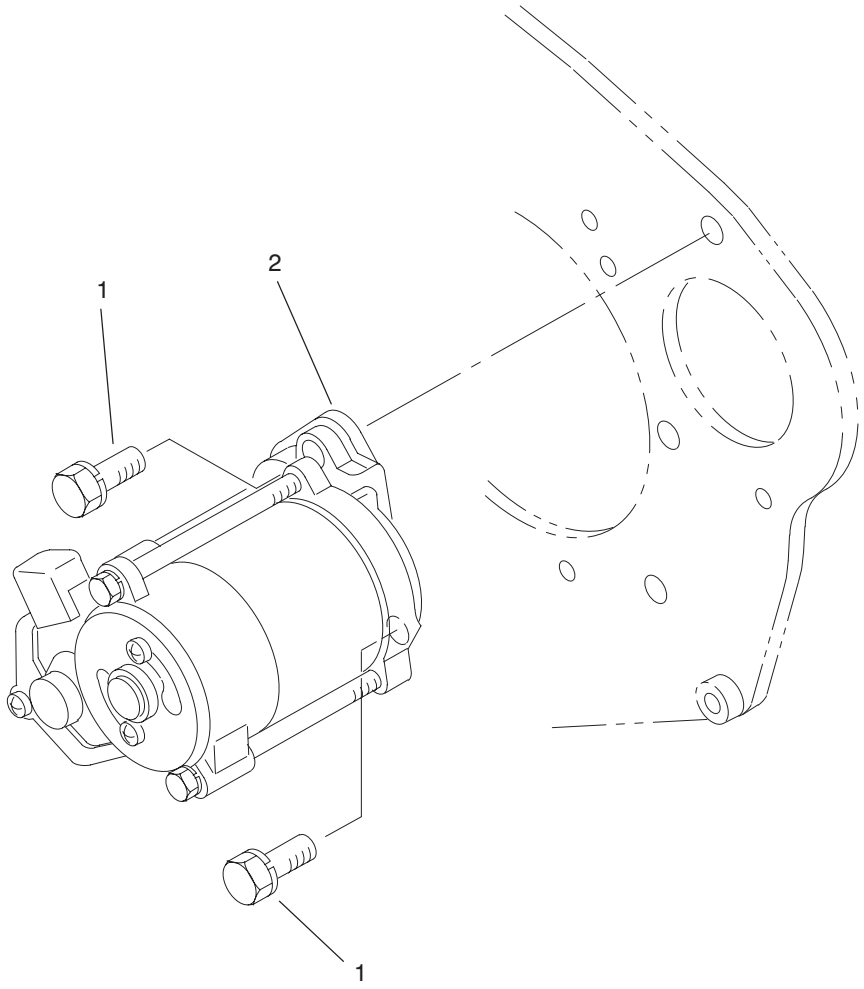
Ref. No.	Part No.	Qty.	Description



Alternator Assembly No. 98–9474

Ref. No.	Part No.	Qty.	Description
1	98–7708	1	Nut
2	98–9453	1	Pulley–Dynamo
3	98–7709	1	Collar
4	98–7714	1	Frame–End, Drive
5	98–7717	2	Bolt–Through
6	98–7716	4	Screw–Head, Round
7	98–7710	1	Rotor
8	98–7712	1	Bearing–Ball
9	98–7711	1	Cover–Bearing
10	98–7713	1	Washer–Thrust
11	98–7715	1	Plate–Retainer
12	98–7718	1	Bearing–Ball
13	98–7719	1	Frame–End
14	98–7730	2	Nut
15	98–7731	2	Bolt
16	98–7721	1	Rectifier ASM
17	98–7722	1	Bushing–Insulation
18	98–7732	1	Nut
19	98–7733	1	Regulator ASM
20	98–7726	2	Screw–Head, Round
21	98–7728	1	Screw–Head, Round
22	98–7729	3	Bolt
23	98–7720	1	Cover–End
24	98–7723	1	Holder–Brush
25	98–7725	2	Spring–Brush

Ref. No.	Part No.	Qty.	Description
26	98–7724	2	Brush
27	98–7727	6	Screw–Head, Round

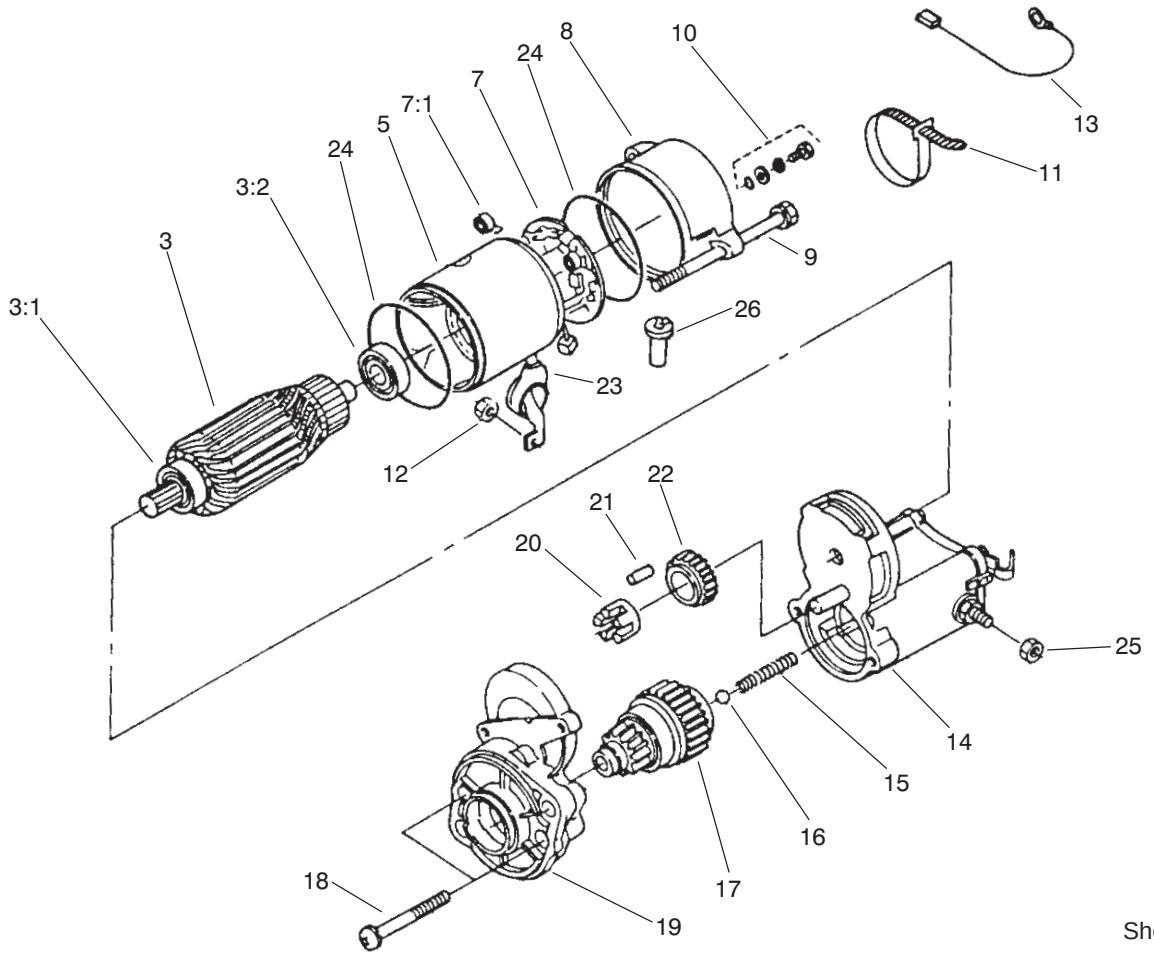


Sheet No.:81
T–2928

Starter Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7697	2	Bolt
2	98–9705	1	Starter ASM

Ref. No.	Part No.	Qty.	Description

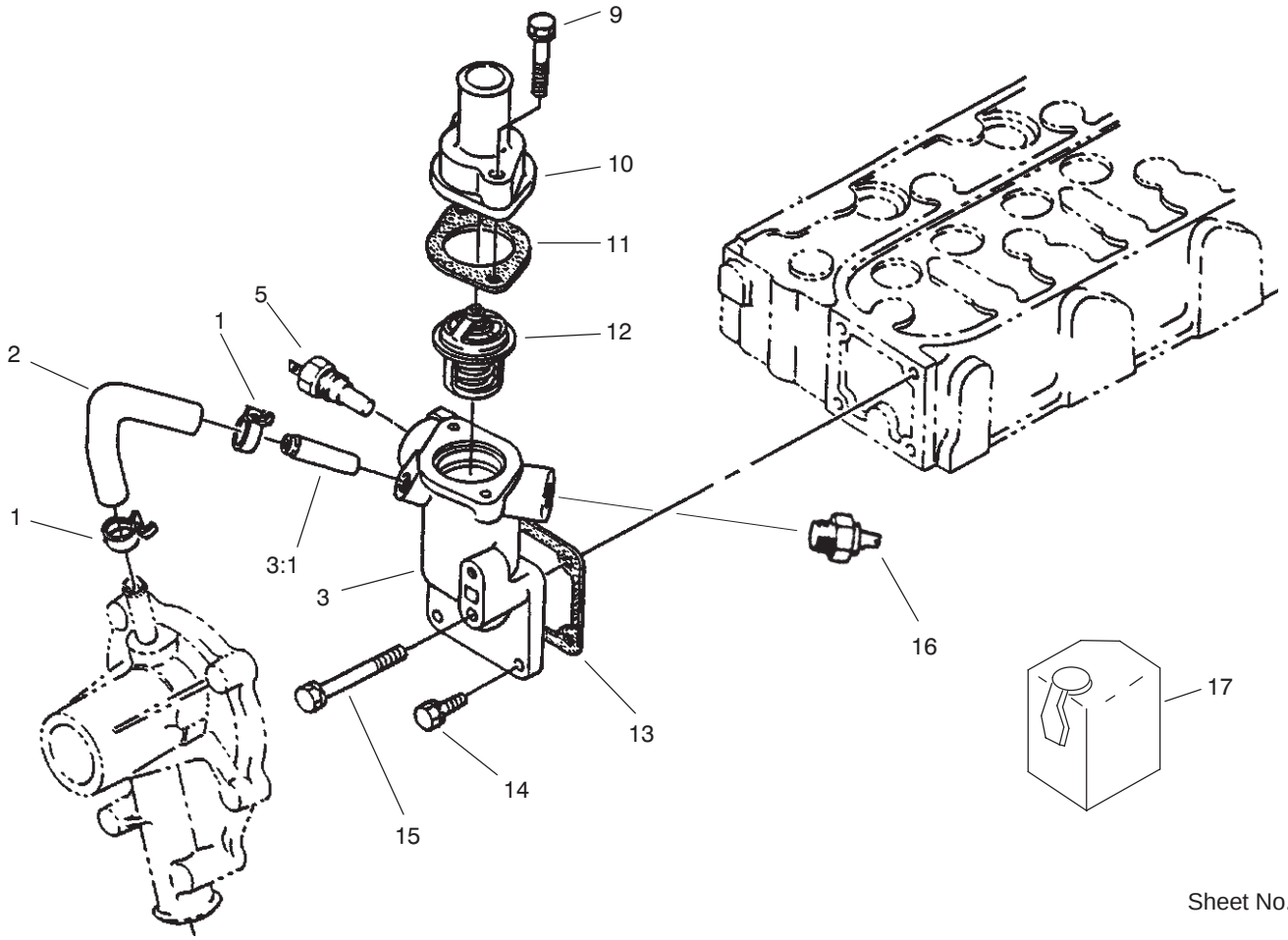


Sheet No.:A4

Starter Assembly No. 98–9705

Ref. No.	Part No.	Qty.	Description
3	98–7742	1	Armature ASM
3:1	98–7743	1	Bearing
3:2	98–7744	1	Bearing
5	98–7741	1	Yoke ASM
7	98–7749	1	Brush Holder ASM
7:1	98–7750	4	Spring–Brush
8	99–8370	1	Frame–End
9	98–9549	2	Bolt
10	98–7758	2	Bolt ASM
11	98–9712	1	Band–Cover
12	99–8371	1	Nut–Hex
13	98–9711	1	Cord–Solenoid, Stop
14	99–8372	1	Magnetic Switch ASM
15	98–7754	1	Spring
16	98–7755	1	Ball
17	99–8373	1	Clutch–Running, Over
18	98–7756	2	Bolt
19	99–8374	1	Frame–End, Drive
20	98–7752	1	Retainer
21	98–7753	5	Roller
22	98–7751	1	Gear
23	99–8375	1	Cover
24	98–7757	2	O–Ring
25	99–8376	1	Nut–Hex
26	98–7759	1	Pipe–Drain

Ref. No.	Part No.	Qty.	Description

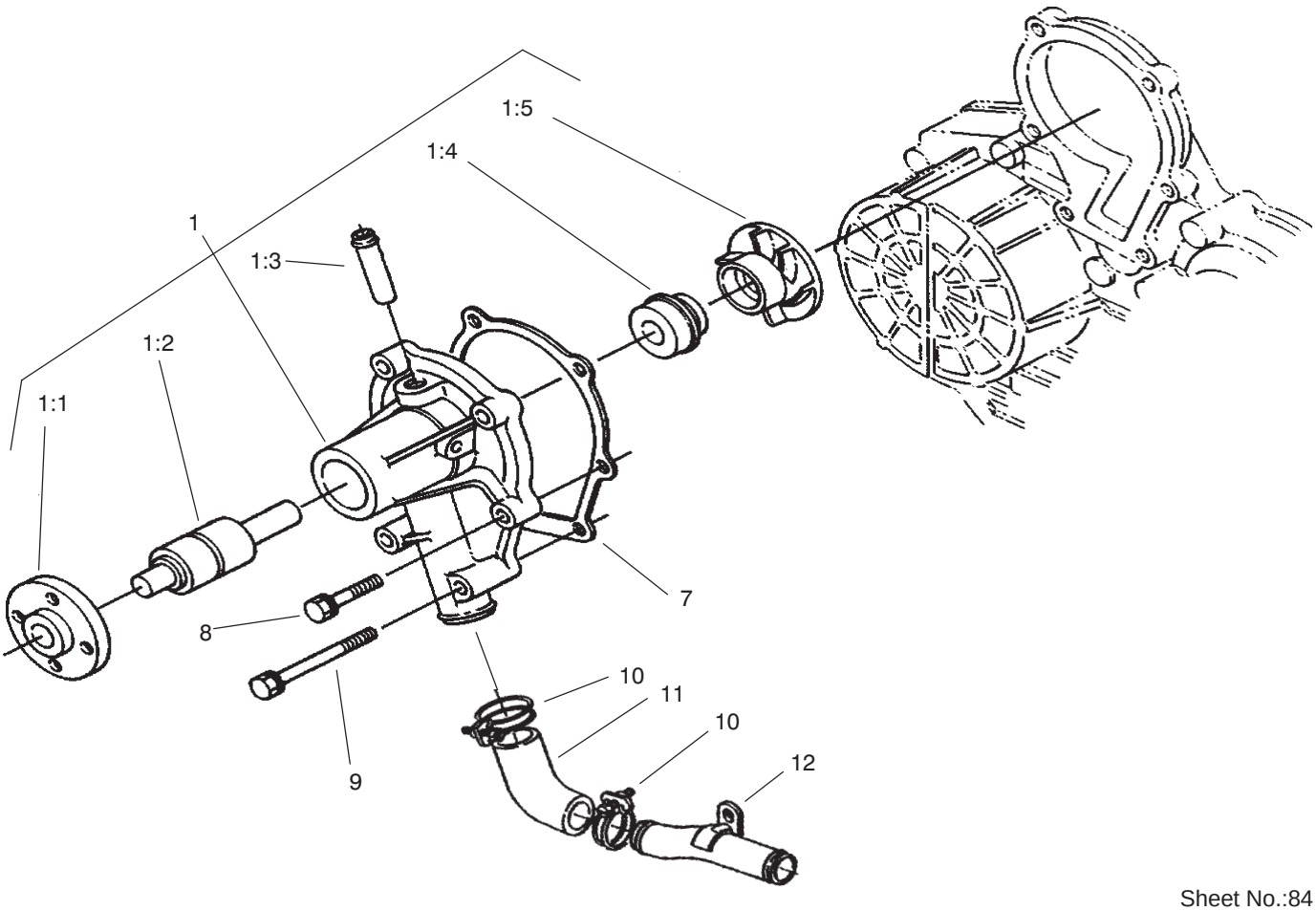


Sheet No.:83

Water Flange and Thermostat Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9579	2	Band–Pipe
2	98–9578	1	Pipe–Return, Water
3	98–9713	1	Water Flange ASM
3:1	98–9580	1	Pipe–Return, Water
5	98–9719	1	Thermoswitch
9	98–7777	2	Bolt
10	98–9471	1	Cover–Thermostat
11	98–7776	1	Gasket
12	98–7778	1	Thermostat ASM
13	98–9638	1	Gasket–Flange, Water
14	98–7692	3	Bolt
15	98–9356	1	Bolt
16	98–9346	1	Sender–Temperature
17	104–9318	1	Bottle–Overflow

Ref. No.	Part No.	Qty.	Description

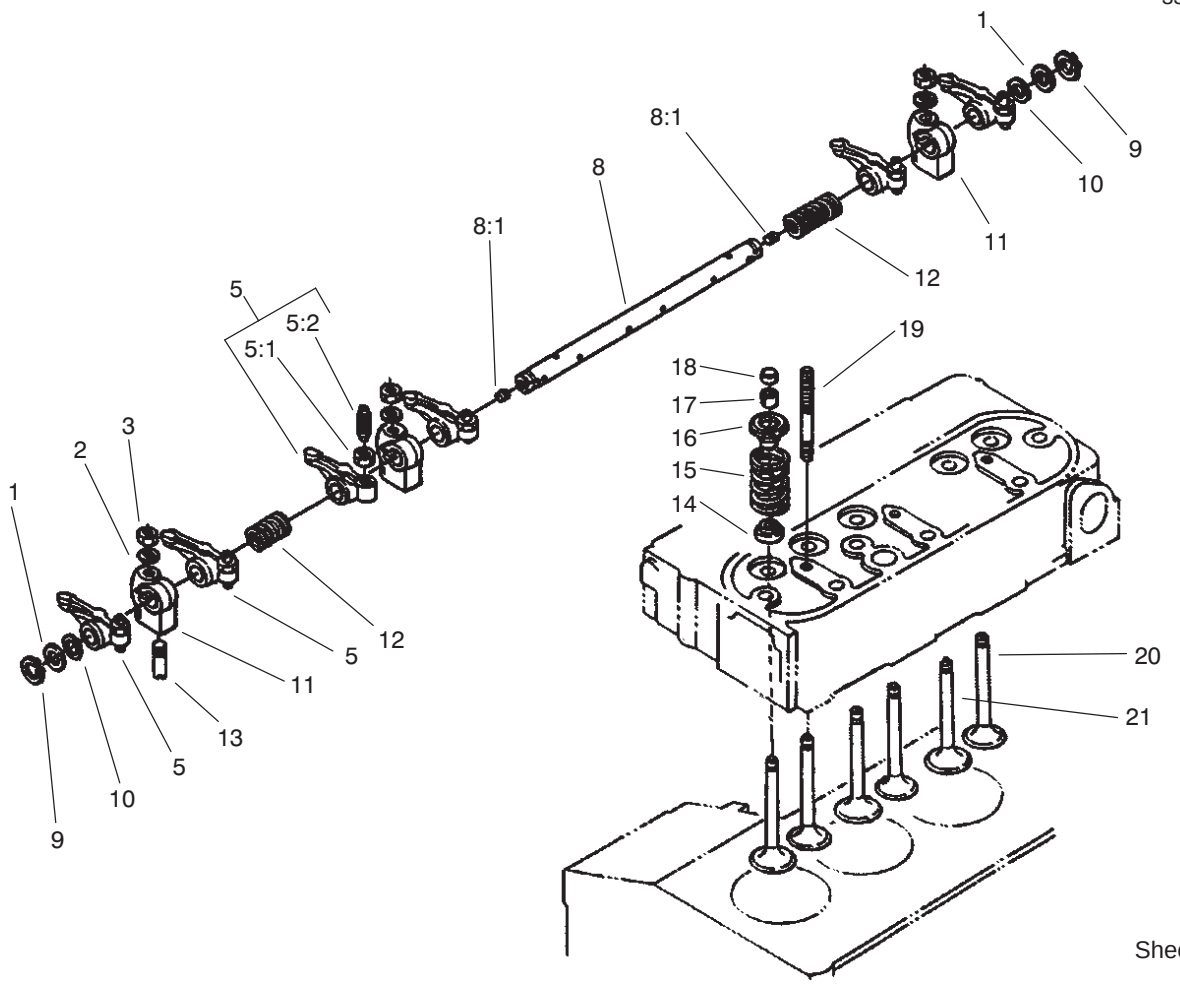


Sheet No.:84

Water Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9575	1	Water Pump ASM
1:1	98–9582	1	Flange–Pump, Water
1:2	98–9583	1	Bearing
1:3	98–9577	1	Pipe–Return, Water
1:4	98–9576	1	Mechanical Seal ASM
1:5	98–9581	1	Impeller–Pump, Water
7	98–9632	1	Gasket–Water Pump
8	98–9353	1	Bolt
9	98–9357	4	Bolt
10	98–9717	2	Clamp
11	98–9574	1	Pipe–Water
12	98–9716	1	Pipe–Water

Ref. No.	Part No.	Qty.	Description

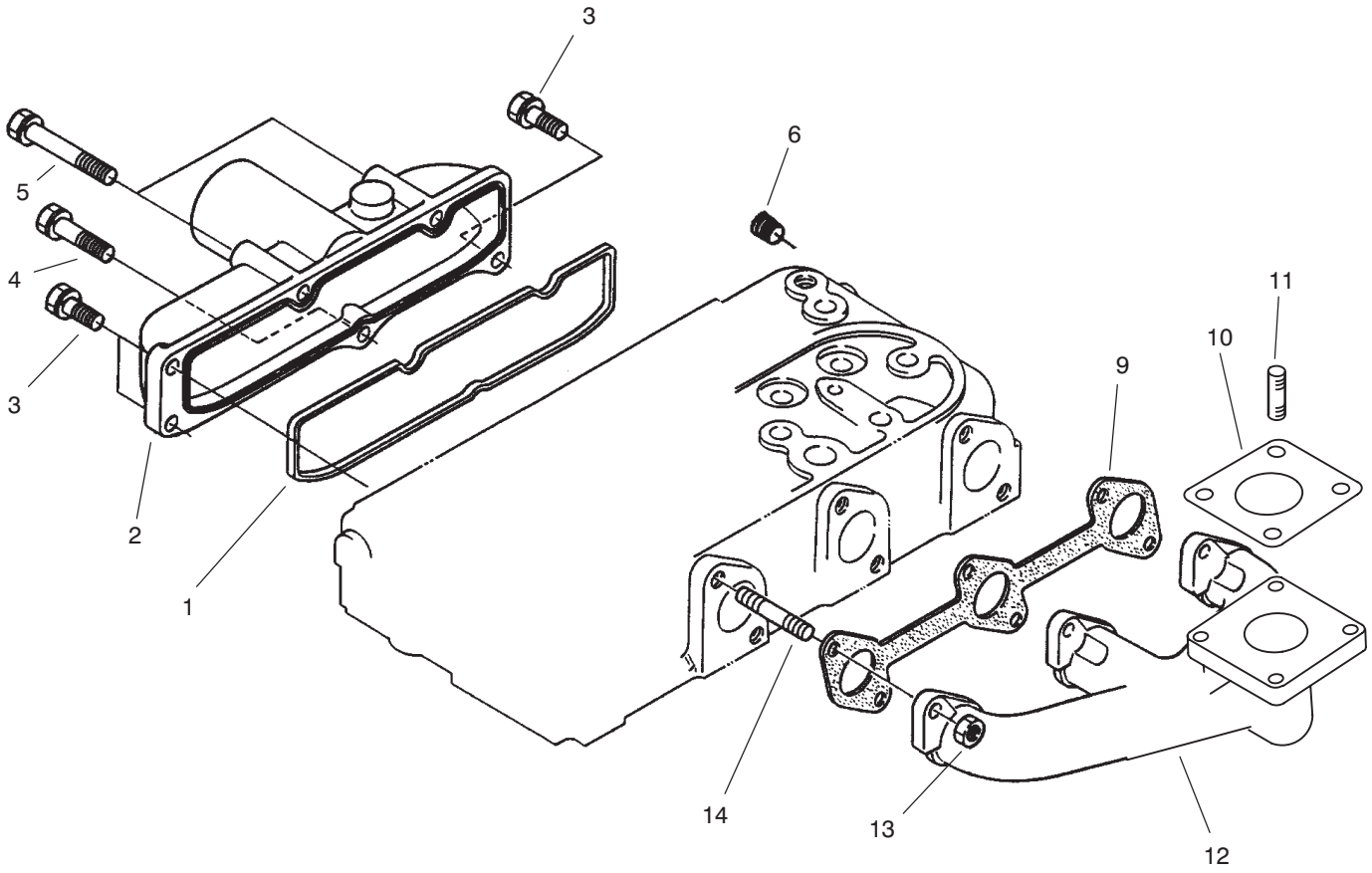


Sheet No.:85

Valve and Rocker Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9508	2	Washer–Shaft, R–Arm
2	98–9385	3	Washer–Flat
3	98–9393	3	Nut
5	98–9501	6	Rocker Arm ASM
5:1	98–9503	6	Nut
5:2	98–9502	6	Screw–Adjusting
8	98–9612	1	R–Arm Shaft ASM
8:1	98–9365	2	Screw–Set
9	98–9370	2	Clip–Circular, External
10	98–9507	2	Washer–Shaft, R–Arm
11	98–9505	3	Bracket–Arm, Rocker
12	98–9504	2	Spring–Arm, Rocker
13	98–9391	1	Screw–Set, Rocker Arm
14	99–8385	6	Seat–Stem, Valve
15	98–9648	6	Spring,Valve
16	98–9498	6	Retainer–Valve
17	98–9390	6	Collet–Set, Valve Spring
18	98–9497	6	Cap–Valve
19	98–9506	3	Stud
20	98–9495	3	Valve–Exhaust
21	98–9494	3	Valve–Inlet

Ref. No.	Part No.	Qty.	Description



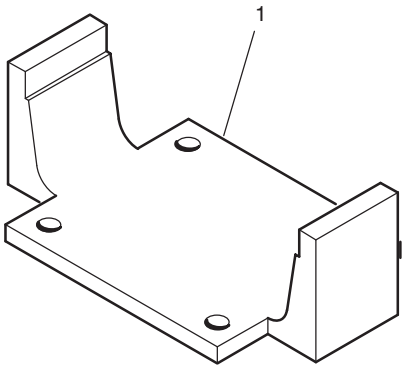
Sheet No.:86

Exhaust Manifold and Gasket Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9609	1	Gasket
2	98–9608	1	Lamp–Indictor
3	98–7605	3	Bolt
4	98–9353	1	Bolt
5	98–9355	2	Bolt
6	98–9444	1	Plug
9	98–9610	1	Gasket
10	99–8343	1	Gasket–Muffler
11	99–8342	4	Stud
12	98–9718	1	Manifold–Exhaust
13	98–9665	6	Nut
14	98–9588	6	Stud
15	98–7612	1	Filter–Fuel
16	104–5215	1	Pump–Fuel, Electric

Ref. No.	Part No.	Qty.	Description

Special Tools
Axle Tool No. *TOR859920



T–1325–1

Ref. No.	Part No.	Description	No. Used
1		Tool–Axle	1

*Obtain these items directly from OTC 2013 4th St. Owatonna, MN. 55060 1–800–533–0492 (in Minnesota and Canada 1–507–455–7050) Fax. 507–455–7011.


TORO®