Form No. 3329–623

Groundsmaster® 4700–D

Traction Unit

Model No. 30868—230000301 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 — 2003
All Rights Reserved

Contents

Description	Page
Hood Screen and Bumper Assembly	4
Steering Tower Assembly	6
Traction and Brake Pedal Assembly	8
Control Console Assembly	10
Hydraulic Filter and Reservoir Assembly	11
Fuel Tank and Filter Assembly	12
Front Drive and Brake Assembly	13
Planetary Assembly No. 105–4500–03	14
Left Hand Brake Assembly No. 100–3070–03	15
Piston Motor Assembly No. 105–1218	16
Right Hand Brake Assembly No. 100–3069–03	17
Manifold Mounting and Fitting Assembly	18
Hydraulic Pump Assembly	19
Triple Pump Assembly No. 105–9845	20
Piston Pump Assembly No. 105–9846	21
Control Assembly No. 93–6306	22
Radiator Assembly	23
Fan and Solenoid Assembly	24
Engine Installation Assembly	25
Air Cleaner Assembly No. 99–5410	26
Rear Axle Assembly	27
Cylinder Assembly No. 105–9861	28
Piston Motor Assembly No. 105–1219	29
Coupler Spacer and Adapter Plate Assembly	30
Battery Installation Assembly	31
Water and Fuel Filter Assembly No. 98–9305	32
Front Lift Arm Assembly	33
No. 4 and 5 Lift Cylinder Assembly No. 104–5527	34
No. 1 Lift Cylinder Assembly No. 104–5528	35
Lift Lever Assembly	36
No. 2 and 3 Lift Arm Assembly	37
No. 2 and 3 Lift Cylinder Assembly No. 104–5526	38
Hose Installation Assembly	39
No. 1, 4 and 5 Hose Installation Assembly	40
Hydraulic Motor Assembly No. 105–9820	41
No. 6 and 7 Hose Installation Assembly	42
No. 6 and 7 Lift Arm Assembly	43
Hydraulic Cylinder Assembly No. 104–5592	44
Roll–Over–Protection System and Frame Assembly	45
Front Frame Assembly No. 104–5469	46
Roller Support and Access Panel Assembly	47
Cutting Manifold Assembly	48
Manifold Assembly No. 104–5477	49
4 Wheel Drive Manifold and Filter Assembly	50
Filter Manifold Assembly No. 100–5558	51
4 Wheel Drive Manifold Assembly No. 105–9875	52
Traction Hydraulic Line Assembly	53
Hydraulic Mow Line Assembly	54
Steering Hydraulic Line Assembly	55

Description	Page
Hydraulic Lift Line Assembly	56
Lift Valve and Counter Balance Assembly	57
Manifold Assembly No. 104–5497	58
Single Spool Valve Assembly No. 105–9843	59
Rear Axle Assembly No. 100–3784 Bevel Pinion Shaft Assembly	60
Rear Axle Assembly No. 100–3784 (Continued) Differential Assembly	61
Rear Axle Assembly No. 100–3784 (Continued) Axle Support Assembly	62
Rear Axle Assembly No. 100–3784 (Continued) Bevel Gear Case Assembly	63
Rear Axle Assembly No. 100–3784 (Continued) Bevel Gear Shaft Assembly	64
Rear Axle Assembly No. 100–3784 (Continued) Axle Case Assembly	65
Rear Axle Assembly No. 100–3784 (Continued) Axle Assembly	66
Electrical Schematic	67
Hydraulic Schematic	68
Crankcase Assembly	69
Oil Pan Assembly	70
Cylinder Head Assembly	71
Gear Case Assembly	72
Head Cover Assembly	73
Oil Filter Assembly	74
Dipstick and Guide Assembly	75
Oil Pump Assembly	76
Breather Assembly	77
Main Bearing Case	78
Camshaft and Idler Gear Shaft Assembly	79
Piston and Crankshaft Assembly	80
Flywheel Assembly	81
Fuel Camshaft and Governor Shaft Assembly	82
Engine Stop Lever Assembly	83
Injection Pump Assembly	84
Injection Pump Component Parts Assembly	85
Governor Assembly	86
Speed Control Plate Assembly	87
Nozzle Holder and Glow Plug Assembly	88
Fuel Filter and Fuel Pump	89
Alternator and Pulley Assembly	90
Alternator Component Parts Assembly	91
Starter Assembly	92
Starter Component Parts Assembly	93
Oil Switch / Thermometer and Plug Assembly	94
Water Flange and Thermostat Assembly	95
Water Pump Assembly	96
Water Pipe Assembly	97
Fan Assembly	98
Valve and Rocker Arm Assembly	99
Inlet Manifold Assembly	100

Exhaust Manifold Assembly 101
Turbo Charger Assembly 102
Oil Pipe (Turbo Charger) Assembly 103
Oil Cooler Assembly 104
Muffler Gasket and Glow Controller 105
Engine Operator's Manual 106
Gasket Kit 107

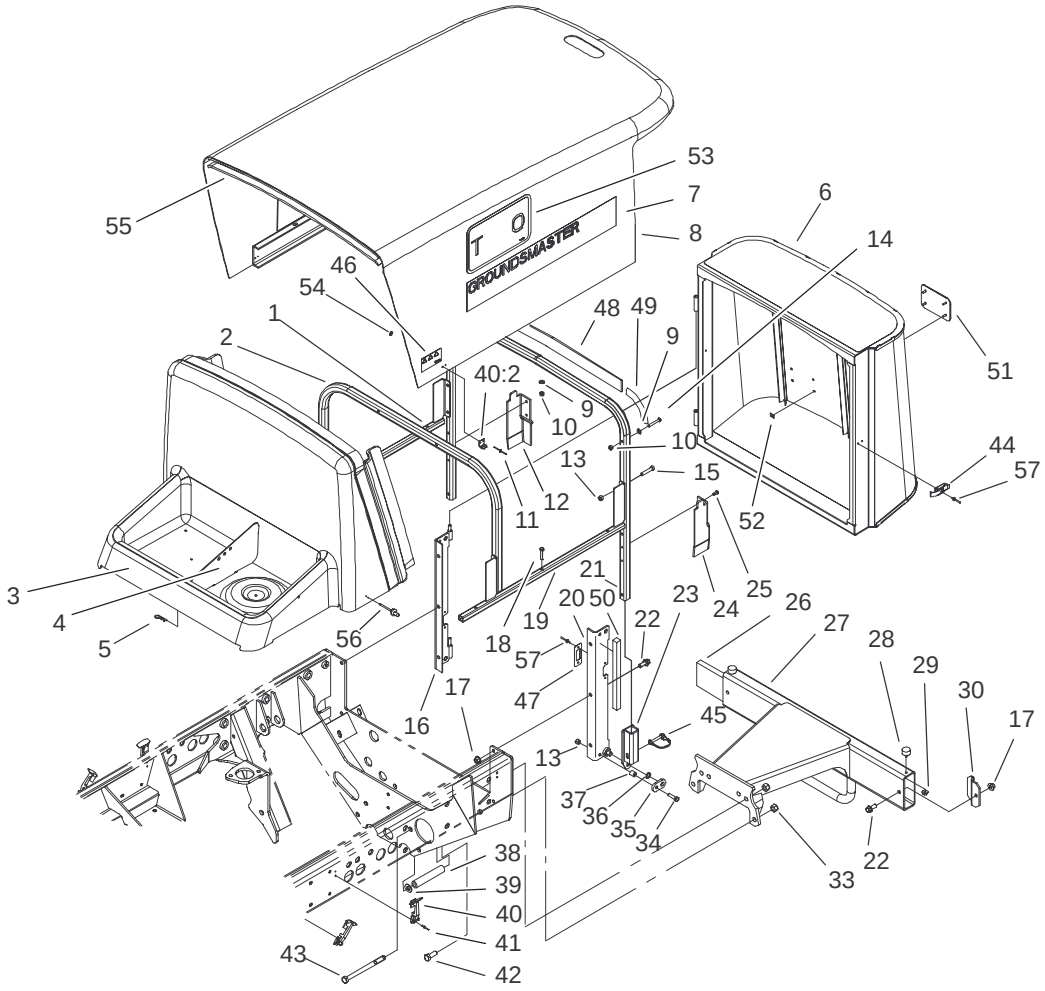
Accessories

Description	Model / Part No.
27in Contour Plus Replacement Deck	30827
Mulching Kit for the 27in Rotary Cutting Unit	30828
Standard Suspension Kit	30395
Milsco Seat Kit	30398
Armrest Kit	30707

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

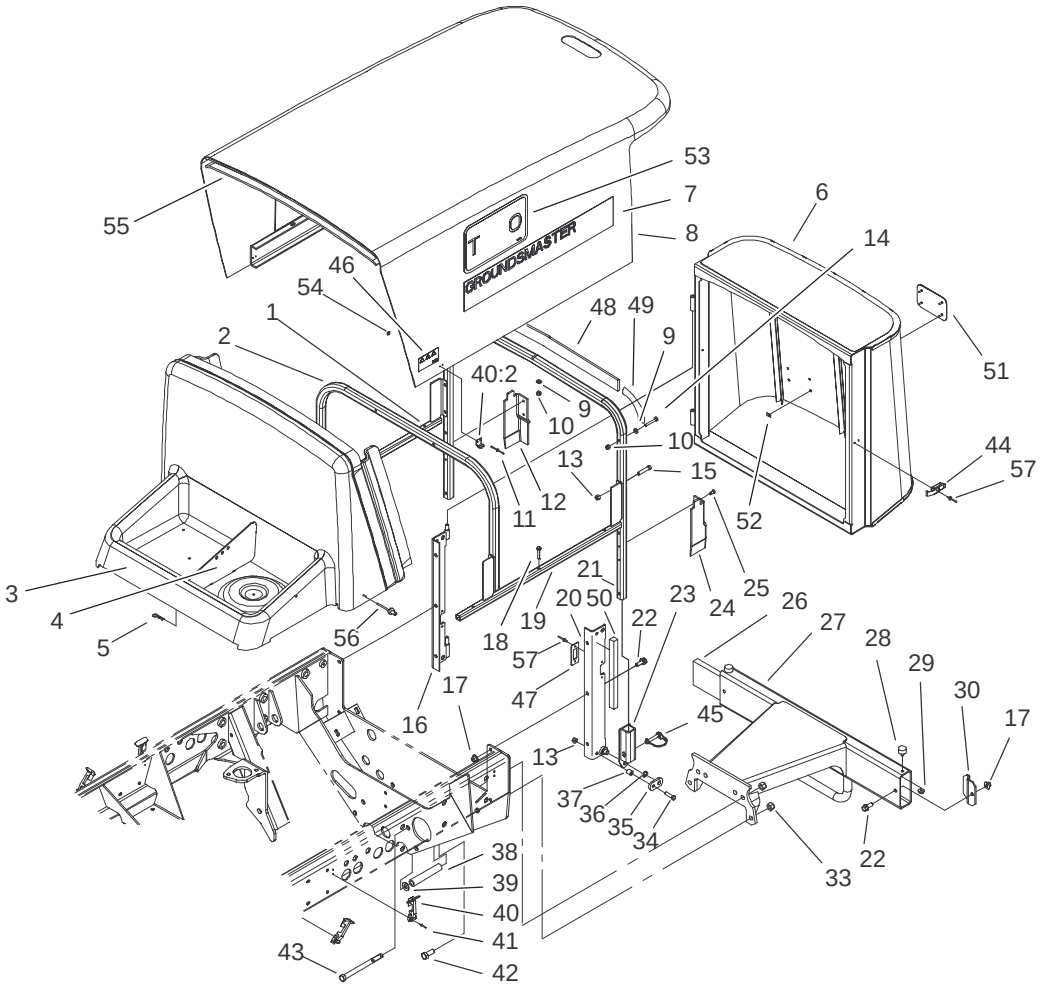


Sheet No.:2

Hood Screen and Bumper Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5437–03	1	Tube–Hood Frame, LH
2	104–5434–03	1	Tube–Front, Hood
3	104–5430	1	Shroud–Front
4	104–5446–03	1	Divider–Shroud
5	3290–467	2	Pin–Hair
6	104–5454–03	1	Screen ASM
7	105–9876	2	Decal
8	104–5419	1	Hood
9	3256–22	12	Washer–Flat
10	3296–42	12	Nut–Lock, NI
11	3269–17	4	Rivet–Pop
12	104–5431	1	Cover–Tube, RH
13	3296–29	10	Nut–Lock, NI
14	321–10	6	Screw–HH
15	322–9	8	Screw–HH
16	104–5445–03	1	RH Support ASM
17	32128–43	4	Nut–Flange
18	321–13	6	Screw–HH
19	104–5438–03	1	Tube–Hood Frame, RH
20	104–5444–03	1	LH Support ASM
21	104–5435–03	1	Tube–Rear, Hood
22	3234–11	4	Screw–HHF
23	104–5440–03	2	Hood Receiver ASM
24	104–5432	1	Cover–Tube, LH
25	32104–17	4	Screw–HH

Ref. No.	Part No.	Qty.	Description
26	105–9199–03	1	Weight–Bumper
27	105–9221–03	1	Rear Bumper ASM
28	240–14	2	Bumper–Rubber
29	32128–33	5	Nut–HF
30	105–9200–03	2	Clamp–Weight, Bumper
33	3296–23	4	Nut–Lock, NI
34	322–17	2	Screw–HH
35	104–5450	2	Retainer–Receiver, Hood
36	3290–221	2	Washer–Spring
37	104–5451	2	Spacer–Receiver, Hood
38	76–8350	2	Stop–Axle
39	3256–26	2	Washer–Flat
40	59–9740	4	Flex Draw Latch ASM
40:2	249–40	1	Keeper
41	3290–55	8	Rivet–Pop
42	325–6	2	Screw–HH
43	325–33	2	Screw–HH
44	105–3912	1	Latch–Draw
45	105–9245	2	Pin–Lock
46	106–6754	2	Decal–Danger
47	104–5459	1	Plate–Latch
48	105–9234	1	Seal–Foam
49	105–9237	2	Seal–Foam

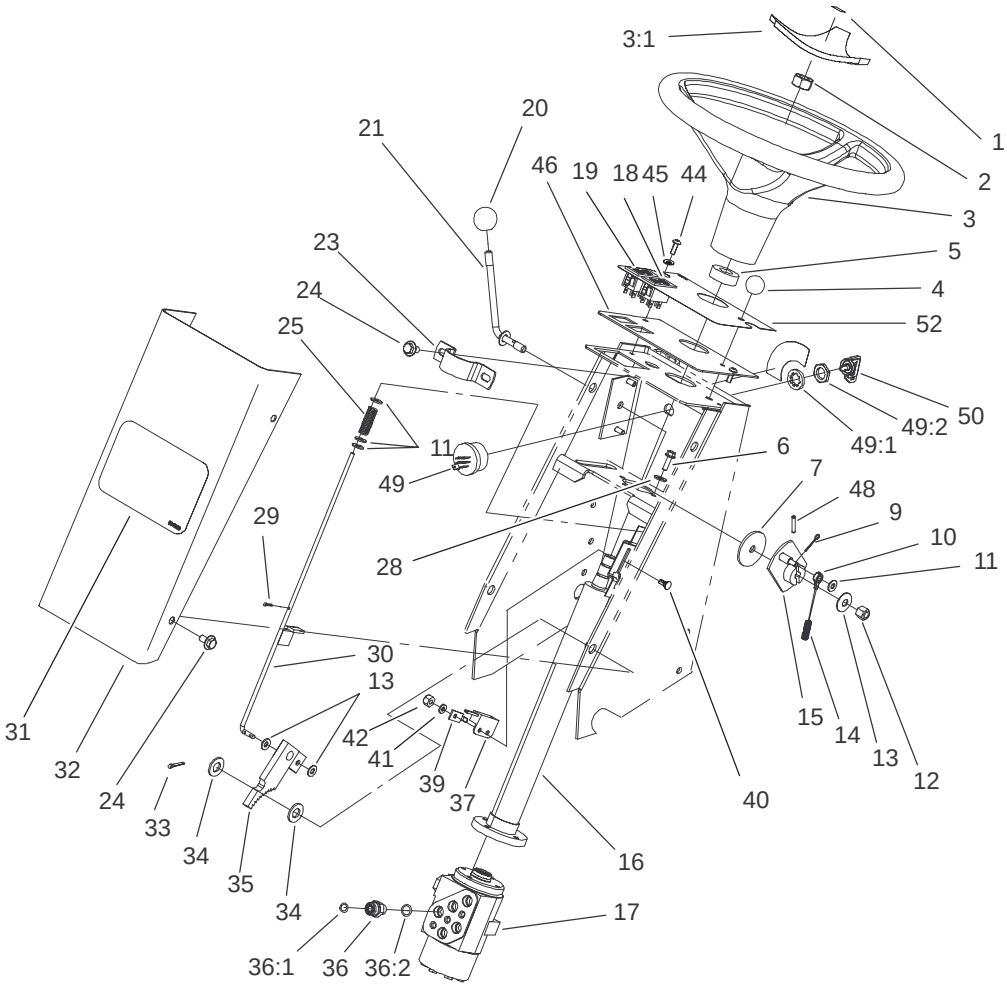


Sheet No.:2

Hood Screen and Bumper Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
50	105–9235	2	Seal–Foam
51	93–6028	1	Plate–Logo, Toro
52	94–2638	4	Nut–Tinnerman
53	66–1210	2	Decal
54	3269–10	8	Washer–Back
55	105–9829	1	Seal–Foam
56	3290–55	4	Rivet–Pop
57	3269–15	4	Rivet

Ref. No.	Part No.	Qty.	Description



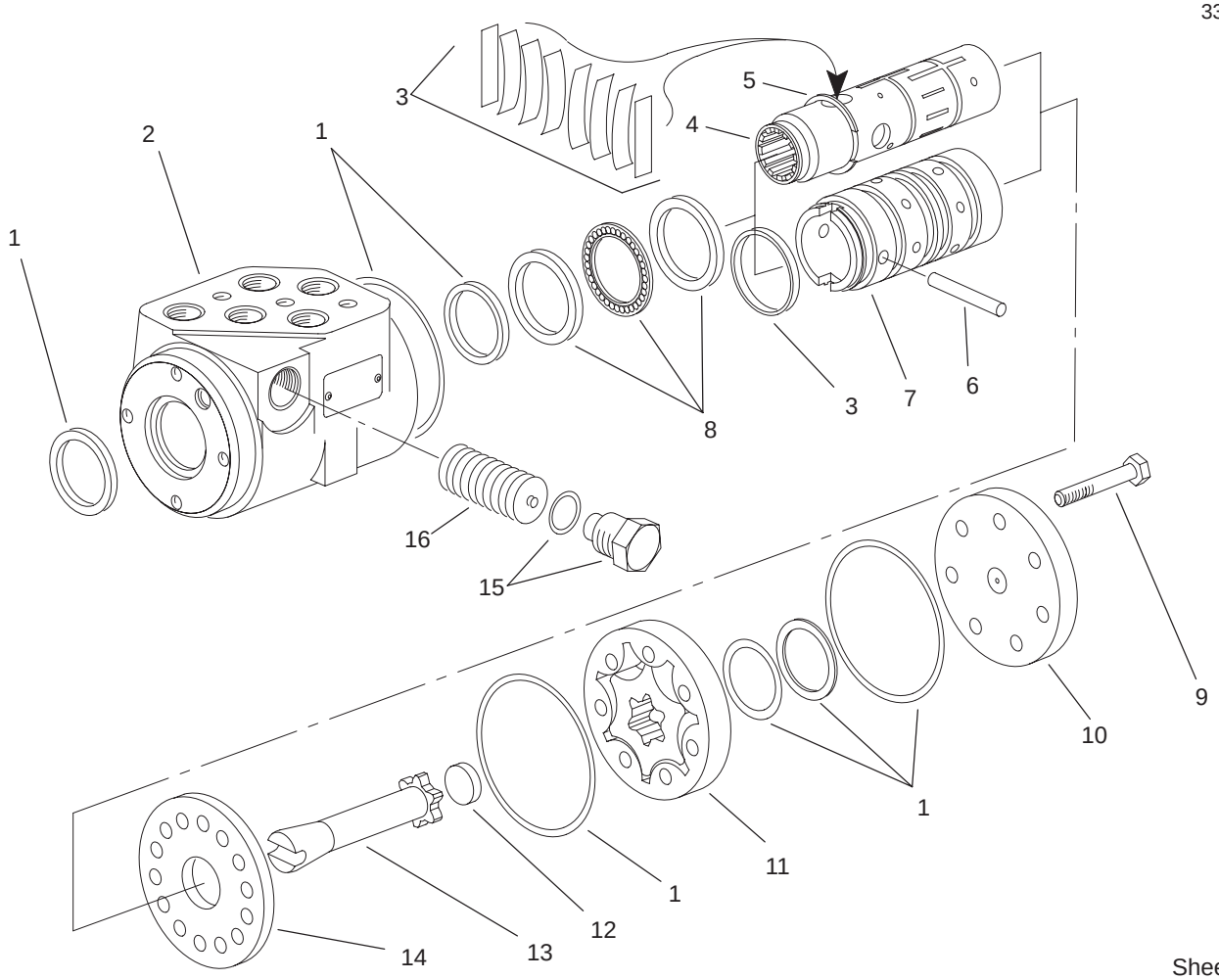
Sheet No.:3

Steering Tower Assembly

Ref. No.	Part No.	Qty.	Description
1	98–1459	1	Decal
2	94–9952	1	Nut–Hex
3	98–1471	1	Wheel–Steering
3:1	98–1468	1	Cover–Wheel, Steering
4	233–17	1	Knob
5	21–9260	1	Cover–Dust
6	33103–016	3	Screw–HHF
7	75–6550	1	Disc–Friction
9	3272–2	1	Pin–Cotter
10	75–6580	1	Cable–Pedal
11	3256–22	5	Washer–Flat
12	3296–39	1	Nut–Lock, NI
13	3290–461	1	Washer–Spring
14	95–7151	1	Tube–Convoluted
15	75–6510	1	Bracket–Lever
16	94–9951	1	Column–Steering
17	104–2213	1	Valve–Steering
18	100–8071	1	Lamp–Warning
19	100–8070	1	Lamp–Warning
20	233–42	1	Knob
21	75–6490	1	Lever
23	75–2810	1	Bracket–Column, Steering
24	3234–7	6	Screw–HHF
25	95–1821–03	1	Spring–Compression

Ref. No.	Part No.	Qty.	Description
28	3256–23	6	Washer–Flat
29	3272–5	3	Pin–Cotter
30	104–1492	1	Rod ASM
31	62–5550	1	Decal
32	93–7996–01	1	Cover–Tower
33	3272–10	1	Pin–Cotter
34	3256–26	2	Washer–Flat
35	63–7900–03	1	Rack ASM
36	340–2	5	Fitting–HYD, Straight
36:1	237–22	1	O–Ring
36:2	237–42	1	O–Ring
37	100–1270	1	Switch–Proximity
39	100–4872	1	Plate–Switch, Neutral
40	104–1450	1	Bolt–CARR
41	3256–14	1	Washer–Flat
42	3296–2	1	Nut–Lock
44	87–6620	2	Screw
45	3256–1	2	Washer–Flat
46	105–9232–03	1	Plate–Instrument
48	32121–45	1	Pin–Spring
49	88–9830	1	Key Switch ASM
49:1	3254–5	1	Washer–Tooth
49:2	218–461	1	Nut–HH
50	63–8360	1	Key–Ignition
52	105–3888	1	Decal–Tower
*99	3290–379	1	Tie–Cable

* Not illustrated



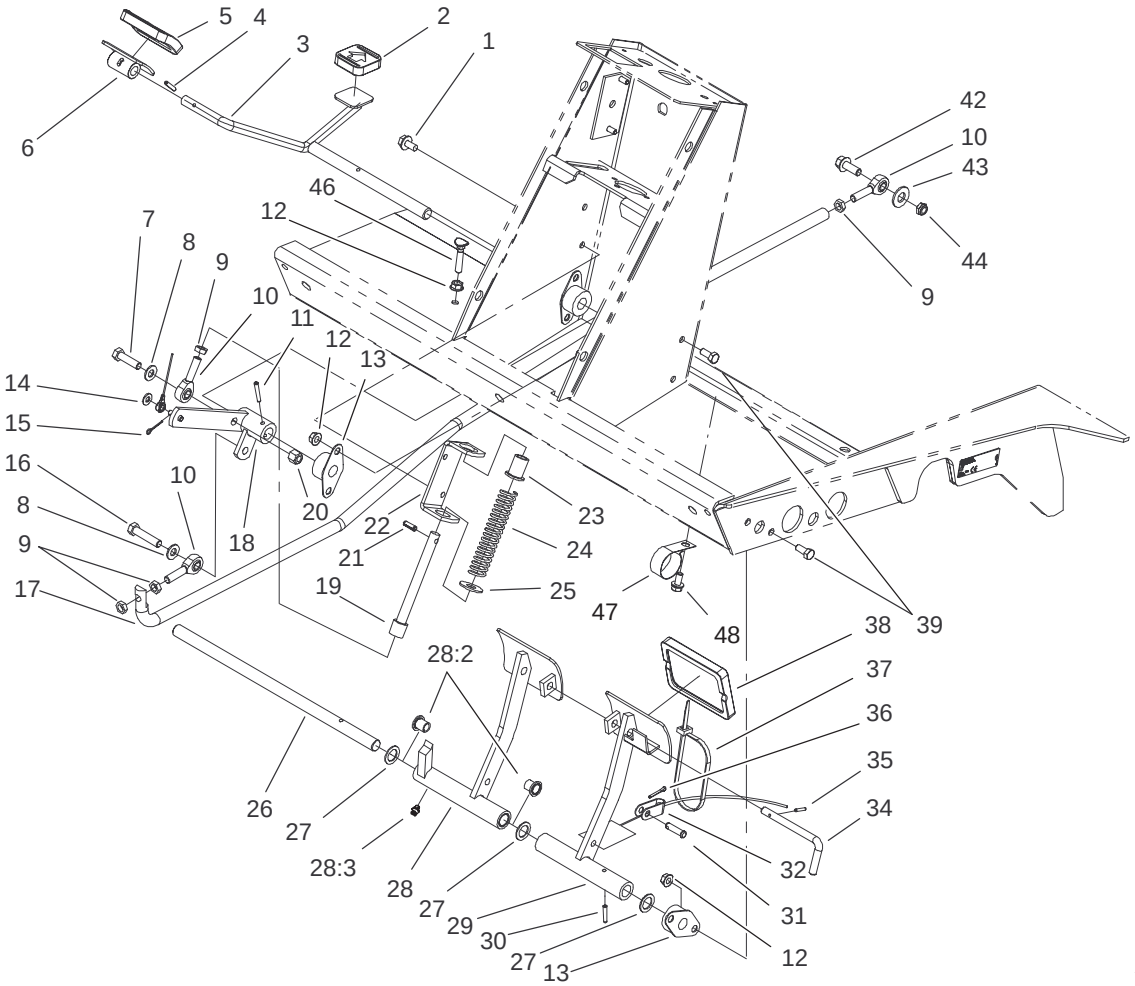
T–3795
Sheet No.:A1

Steering Valve Assembly No. 104–2213

Ref. No.	Part No.	Qty.	Description
1	94–4099	1	Seal Kit
☆2		1	Housing
3	94–4095	1	Centering Spring Kit
☆4		1	Spool
5	94–4098	1	Ring–Retaining
6	94–4094	1	Pin
☆7		1	Sleeve
8	94–4096	1	Bearing Kit
9	94–4088	7	Screw–Cap
10	94–4089	1	Cap–End
11	94–4090	1	Gerotor
12	94–4091	1	Spacer
13	94–4093	1	Drive
14	94–4092	1	Plate–Wear
15	99–5511	1	Plug ASM
16	99–5500	1	Valve–Relief

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



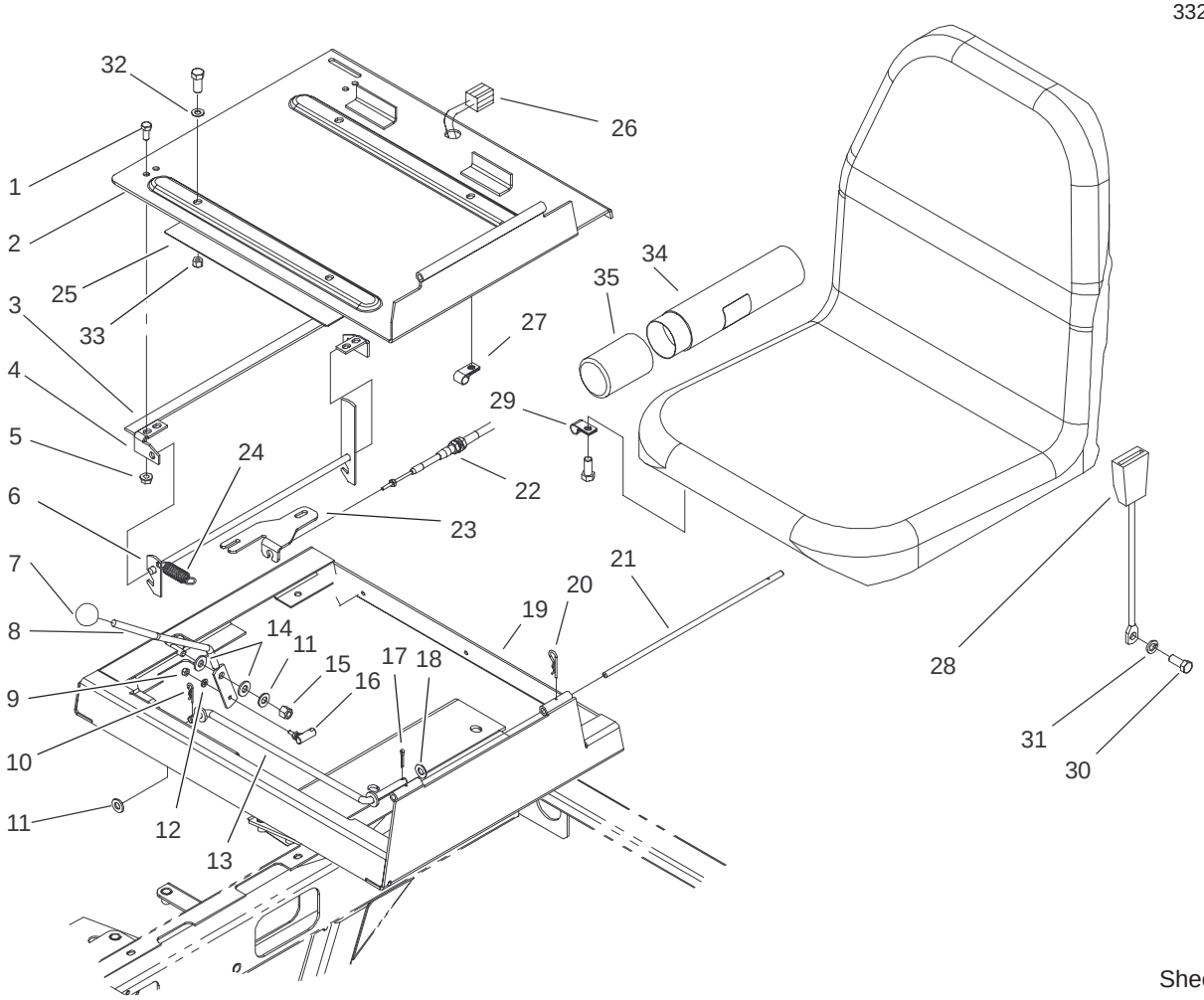
Sheet No.:4

Traction and Brake Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	32144–14	4	Screw–HWH
2	74–9110	1	Pad–Pedal, Reverse
3	75–2970	1	Pedal–Traction
4	32121–45	1	Pin–Spring
5	74–9100	1	Pad–Pedal, Forward
6	49–6440–03	1	Pedal–Forward
7	323–29	1	Screw–HH
8	3256–24	2	Washer–Flat
9	3220–3	4	Nut–Jam
10	2411–36	3	Bearing–End, Rod
11	32121–6	1	Pin–Roll
12	32128–20	12	Nut–HF
13	256–236	4	Bearing–Mount, Flange
14	3256–22	1	Washer–Flat
15	3272–2	1	Pin–Cotter
16	323–9	1	Screw–HH
17	104–5632–03	1	Rod–Control, Pump
18	75–3270–03	1	Hub–Pivot, Traction
19	92–7609	1	Shaft–Spring
20	3296–39	2	Nut–Lock, NI
21	32121–11	1	Pin–Roll
22	92–7608–03	1	Bracket–Spring
23	92–7610	1	Retainer–Spring
24	84–9100	1	Spring
25	3256–5	1	Washer–Flat

Ref. No.	Part No.	Qty.	Description
26	75–1470	1	Pin–Pivot, Brake
27	3256–69	3	Washer–Flat
28	75–1430	1	Pedal–Brake, RH
28:2	256–42	2	Bushing
28:3	302–5	1	Fitting–Grease
29	75–1440–03	1	Pedal–Brake, LH
30	32121–16	1	Pin–Spring
31	283–58	2	Pin–Clevis
32	92–7530	1	LH Brake Cable ASM
*33	92–7529	1	RH Brake Cable ASM
34	63–7880	1	Pin–Latch, Brake
35	32121–50	1	Pin–Spring
36	3272–10	2	Pin–Cotter
37	3290–378	1	Tie–Cable
38	93–8742	2	Footpad–Brake
39	322–3	8	Screw–HH
42	3234–11	1	Screw–HHF
43	5–0652	1	Spacer
44	3296–59	1	Nut–Lock, NI
46	17–9420	2	Screw–Handle
47	2412–150	1	J–Clip
48	3234–14	1	Screw–HHF

* Not illustrated

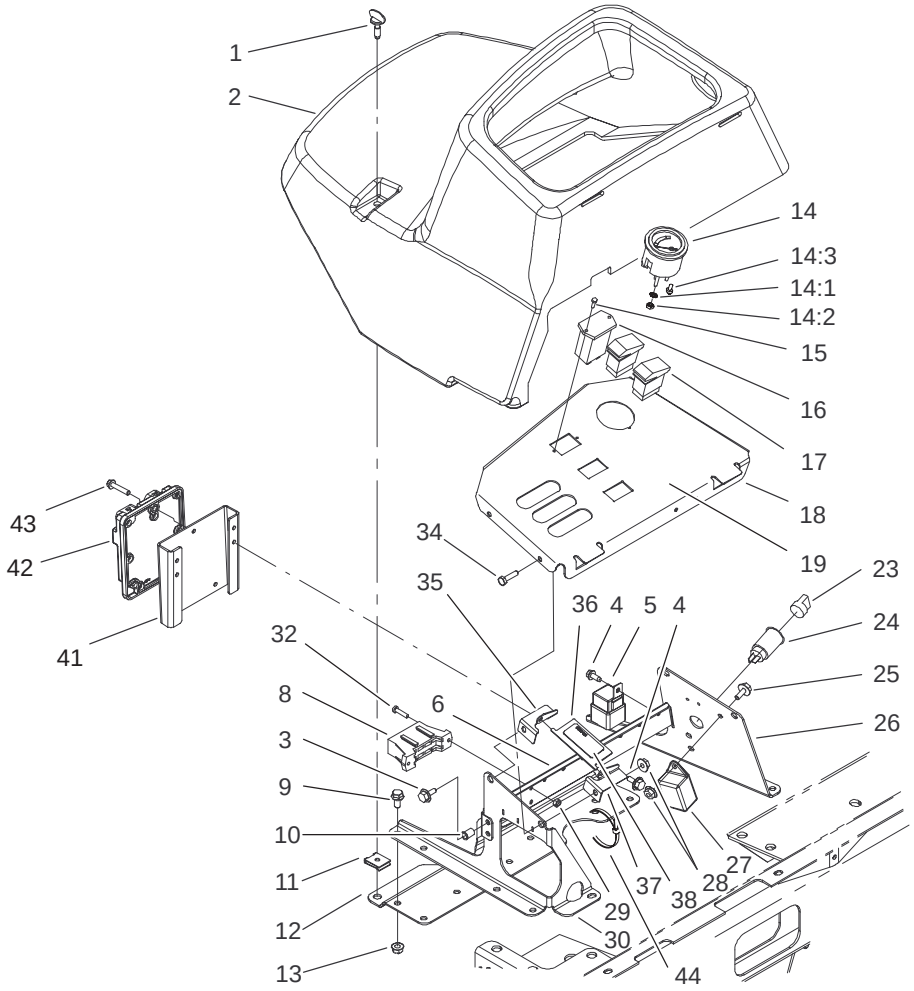


Sheet No.:5

Throttle and Seat Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	322–3	8	Screw–HH
2	98–2350–03	1	Plate–Seat
3	94–8146	1	Strip–Foam
4	98–2353	2	Bracket–Latch, Seat
5	32128–25	4	Nut–Flange
6	98–2354–03	1	Latch–Seat
7	233–42	1	Knob
8	93–7598–03	1	Lever–Throttle
9	3296–21	1	Nut–Lock, NI
10	3290–307	1	Pin–Hair
11	3256–24	3	Washer–Flat
12	3256–51	1	Washer–Flat
13	75–3680–03	1	Rod–Seat
14	66–2920	2	Washer–Friction
15	3296–39	1	Nut–Lock, NI
16	2411–38	1	Joint–Ball
17	3272–10	1	Pin–Cotter
18	52–2900	2	Washer
19	98–2352–03	1	Frame–Seat
20	3290–467	1	Pin–Hair
21	75–3400	1	Shaft–Pivot, Seat
22	104–7547	1	Cable–Throttle
23	105–3929–03	1	Bracket–Cable, Throttle
24	66–4190–03	1	Spring–Idler, Clutch
25	105–9895	1	Decal–Quick Ref

Ref. No.	Part No.	Qty.	Description
26	105–9189	1	Harness–Wire, Seat Switch
27	2412–133	2	R–Clamp
28	100–4928	1	Belt–Seat
29	2412–93	1	Clamp–R
30	3212–4	2	Screw–HH
31	3253–6	2	Washer–Lock
32	3256–23	4	Washer–Flat
33	3296–29	10	Nut–Lock, NI
34	104–7050	1	Housing–Manual
35	104–7048	1	Cap–Housing



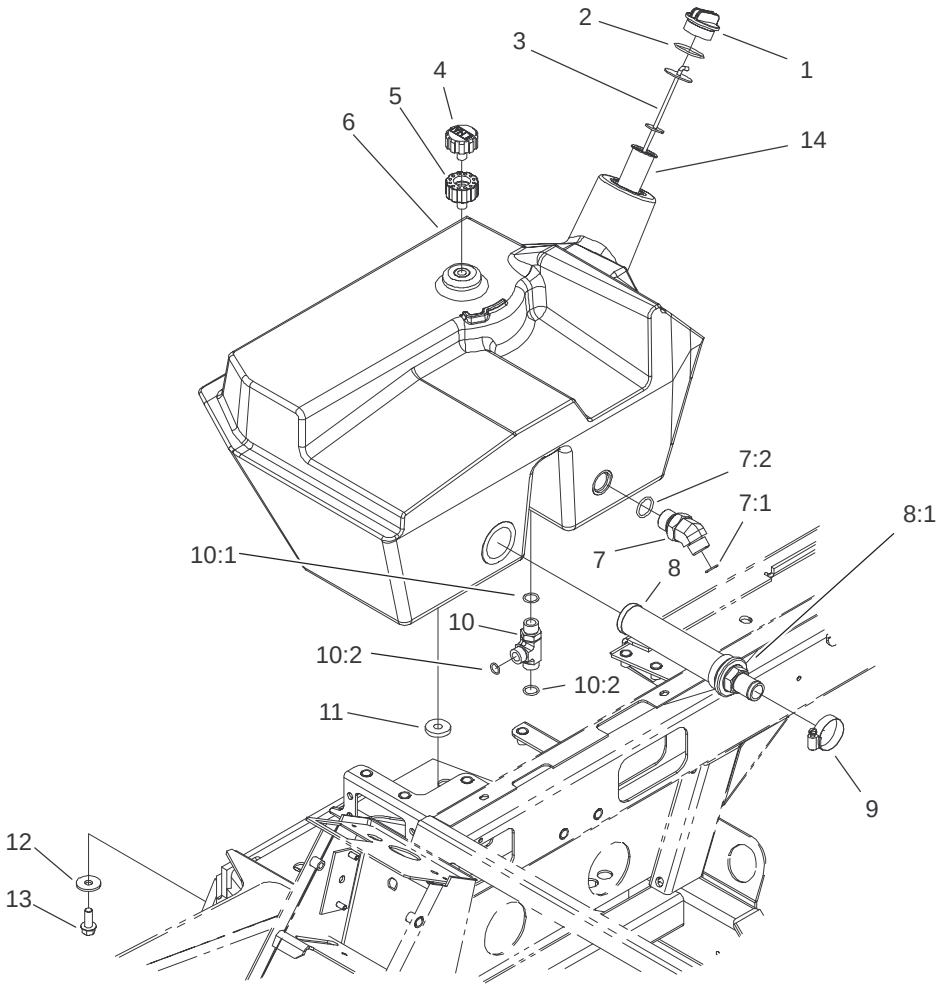
Sheet No.:6

Control Console Assembly

Ref. No.	Part No.	Qty.	Description
1	105–9208	2	Screw–Head, Wing
2	104–5599	1	Cover–Console
3	3234–13	4	Screw–HHF
4	32144–10	7	Tscrew–HWH
5	99–7430	3	Relay
6	104–5613–03	1	Panel–Relay
8	105–9867	1	Harness–Wire, Console
9	3234–14	13	Screw–HHF
10	32148–6	6	Insert–Nut
11	105–9209	2	Recepticle–Clip On
12	104–5612–03	1	Support–Cover
13	32128–20	4	Nut–HF
14	98–9308	1	Gauge–Temperature
14:1	3254–1	3	Washer–Lock, Int
14:2	3217–27	3	Nut–Hex
14:3	105–9265	1	Bulb And Lamp ASM
15	32144–18	2	Screw–HH
16	75–6820	1	Hourmeter
17	95–8999	2	Switch
18	104–5611–03	1	Dash
19	105–9223	1	Decal–Console, Ce
19	105–3890	1	Decal–Console
23	99–7416	1	Cap
24	99–7411	1	Point–Power
25	3234–4	1	Screw–HHF

Ref. No.	Part No.	Qty.	Description
26	104–5610–03	1	Panel–Dash, Rear
27	98–7611	1	Controller–Glow
28	32128–33	4	Nut–HF
29	3296–2	6	Nut–Lock
30	104–5609–03	1	Panel–Dash, Front
*31	105–3986	1	Module–Deck Control
32	32105–13	6	Screw–SHH
34	321–6	2	Screw–HH
35	105–9840	1	Bracket–Latch, RH
36	105–9842	1	Plate–Latch, Ce
37	105–9841	1	Bracket–Latch, LH
38	105–9830	1	Decal–Lever Lock, Ce
41	105–9873–03	1	Bracket–Scm
42	105–8505	1	Control Module ASM
43	32144–110	3	Screw–HWH
44	3290–379	5	Tie–Cable

* Not illustrated

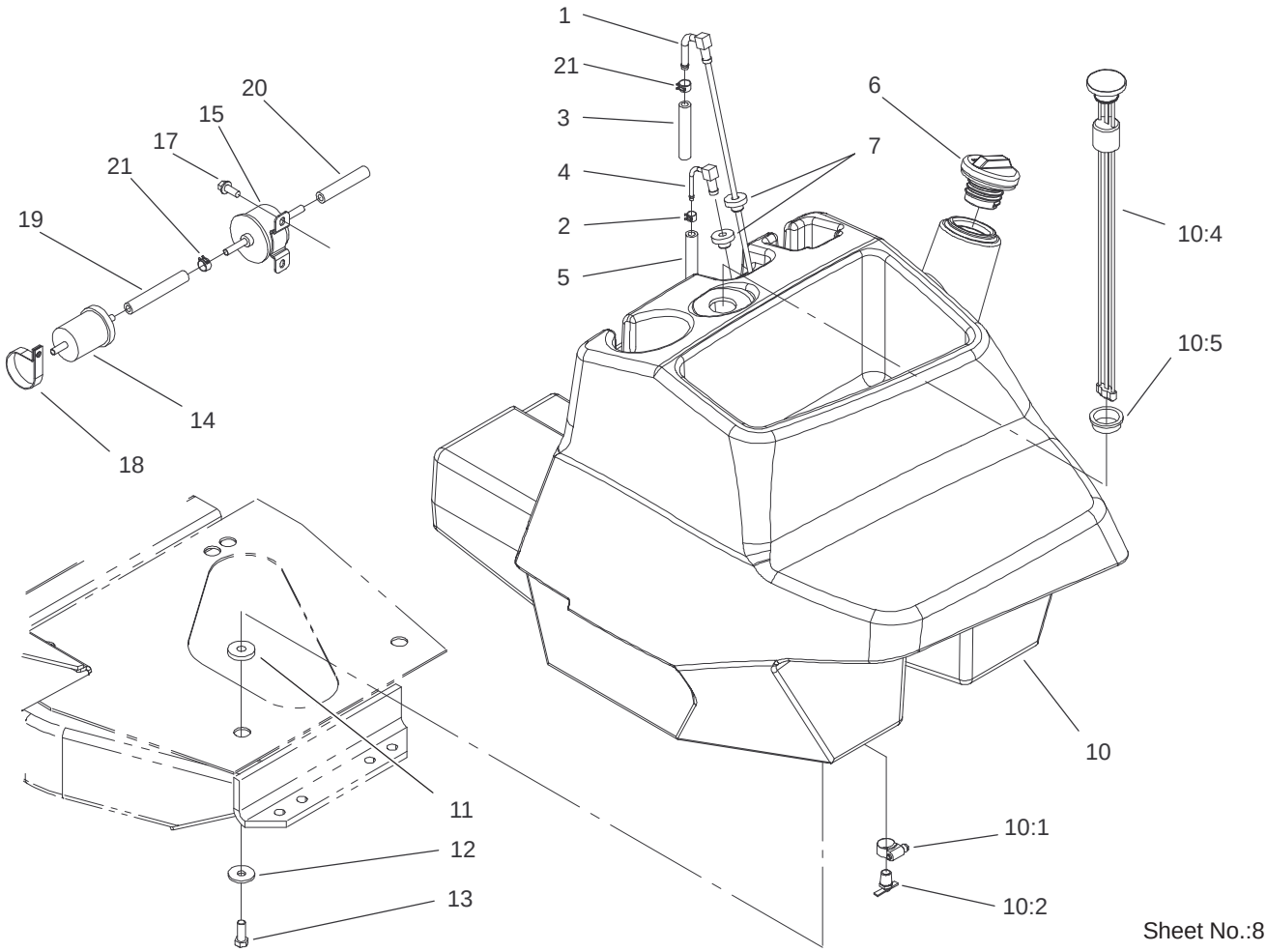


Sheet No.:7

Hydraulic Filter and Reservoir Assembly

Ref. No.	Part No.	Qty.	Description
1	93–7498	1	Plug–Plastic
2	94–8166	1	O–Ring
3	75–3710	1	Dipstick
4	68–6150	1	Breather
5	92–8020	1	Adapter–Breather
6	104–5600	1	Tank–Hydraulic
7	340–156	1	Fitting–HYD
7:1	237–65	1	O–Ring
7:2	237–81	1	O–Ring
8	104–7546	1	Strainer–Tank
8:1	340–136	1	O–Ring
9	2412–111	2	Clamp
10	340–109	1	Fitting–HYD, Tee
10:1	237–79	1	O–Ring
10:2	237–30	2	O–Ring
11	240–11	3	Grommet–Mount, Tank
12	63–8410	3	Washer
13	3234–11	3	Screw–HHF
14	61–2790	1	Filter–Screen

Ref. No.	Part No.	Qty.	Description

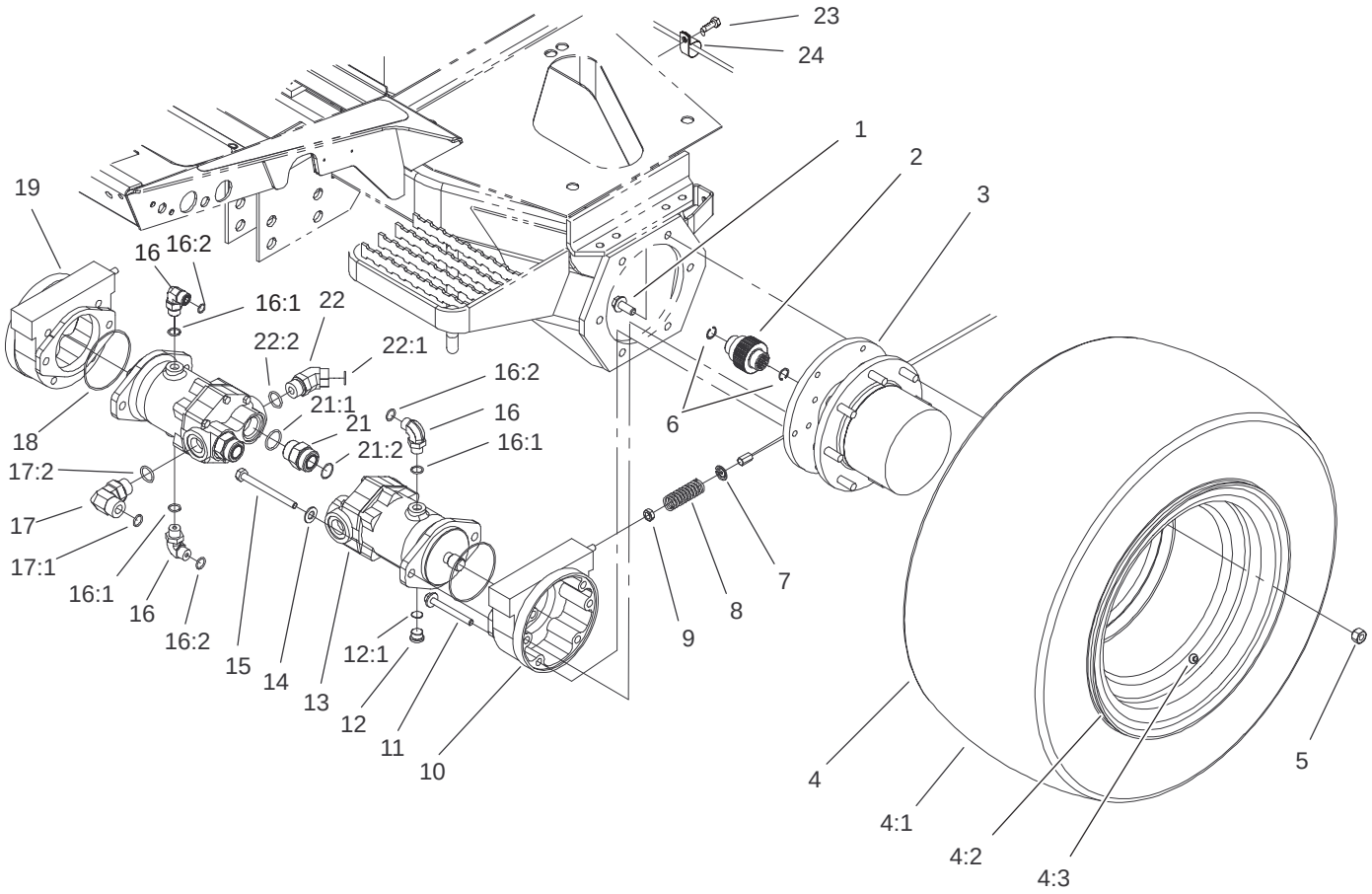


Sheet No.:8

Fuel Tank and Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5604	1	Fitting–Suction
2	2412–80	2	Clamp–Line, Fuel
3	39–1120	1	Hose–Fuel
4	104–5605	1	Fitting–Return
5	105–9242	1	Hose–Fuel
6	93–3102	1	Cap–Fuel
7	46–6560	2	Bushing
10	104–5601	1	Fuel Tank ASM
10:1	2412–36	1	Clamp–Hose
10:2	304–46	1	Draincock
10:4	104–5603	1	Gauge–Level, Fuel
10:5	95–8972	1	Grommet
11	240–11	4	Grommet–Mount, Tank
12	63–8410	4	Washer
13	323–6	4	Screw–HH
14	98–7612	1	Filter–Fuel
15	104–5215	1	Pump–Fuel, Electric
17	32144–10	3	Tscrew–HWH
18	2412–148	1	Clamp–R
19	105–9196	1	Hose–Fuel
20	93–2230	1	Hose–Fuel
21	92–2379	5	Clamp–Hose

Ref. No.	Part No.	Qty.	Description



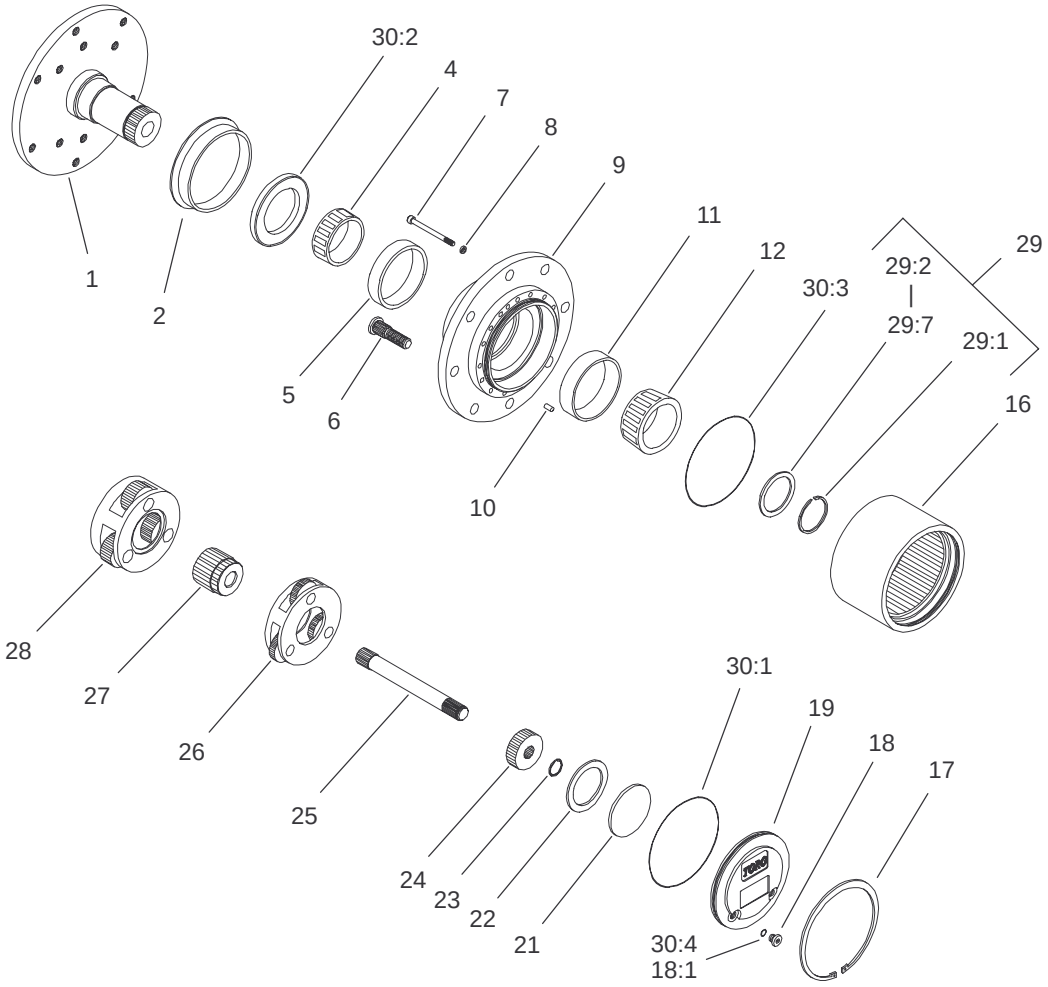
Sheet No.:9

Front Drive and Brake Assembly

Ref. No.	Part No.	Qty.	Description
1	33106–030	12	Screw–HHF
2	100–3046	2	Shaft–Brake, Splined
3	105–4500–03	2	Planetary ASM
☆4		2	Wheel And Tire ASM
4:1	95–3465	1	Tire
4:2	95–3464	1	Rim
4:3	232–24	1	Stem–Valve
5	92–7483	16	Nut–Lug
6	93–7972	4	Ring–Retaining, Internal
7	94–3050	2	Plate–Spring
8	94–3088	2	Spring–Compression
9	3218–4	2	Nut–Jam
10	100–3070	1	Brake ASM
11	33106–090	8	Screw–HHF
12	353–988	1	Plug–Hex, Hollow
12:1	237–79	1	O–Ring
13	105–1218	2	Motor–Piston
14	3256–26	4	Washer–Flat
15	33116–120	4	Screw–HH
16	340–98	3	Fitting–HYD, 90°
16:1	237–79	1	O–Ring
16:2	237–30	1	O–Ring
17	340–142	2	Fitting–HYD, 90°
17:1	237–58	1	O–Ring
17:2	237–81	1	O–Ring

Ref. No.	Part No.	Qty.	Description
18	237–166	2	O–Ring
19	100–3069	1	Brake ASM
21	104–3797	4	Fitting–HYD, Straight
21:1	237–146	1	O–Ring
21:2	340–65	1	O–Ring
22	100–5530	2	Fitting–HYD, 45°
22:1	237–58	1	O–Ring
22:2	237–81	1	O–Ring
23	32144–14	2	Screw–HWH
24	2412–93	2	Clamp–R

☆ Not serviced separately



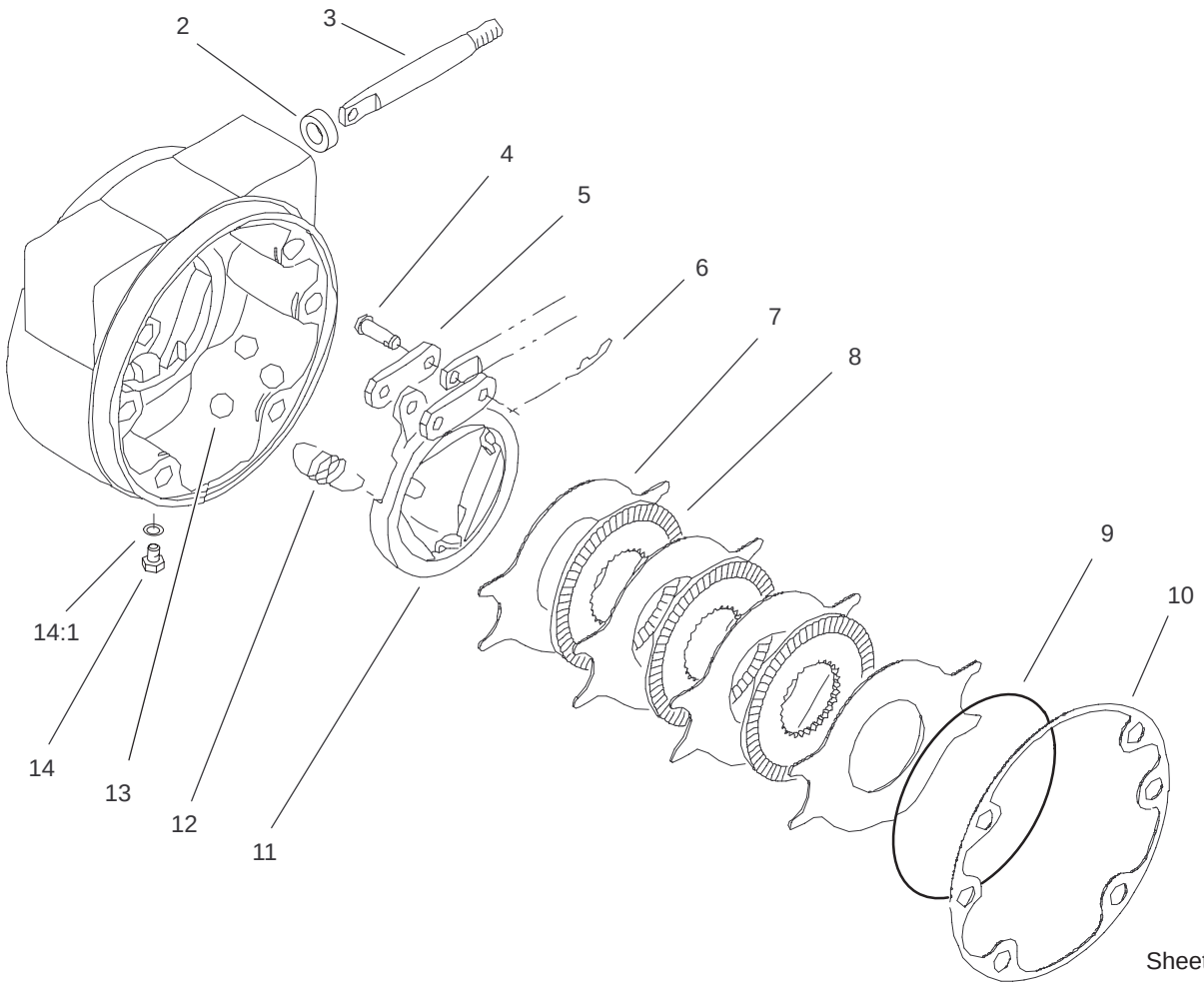
Sheet No.:A2

Planetary Assembly No. 105–4500–03

Ref. No.	Part No.	Qty.	Description
☆1		1	Spindle
2	105–8122	1	Seal–Boot
4	105–8120	1	Bearing–Cone
5	105–8119	1	Bearing–Cup
6	105–8124	8	Stud–Wheel
7	105–8125	16	Bolt–Socket Head
8	3253–18	16	Washer–Lock/Sp
☆9		1	Housing
10	105–8121	1	Pin–Dowel
11	105–8117	1	Bearing–Cup
12	105–8118	1	Bearing–Cone
16	105–8113	1	Gear–Ring
17	105–8132	1	Ring–Retaining
18	353–990	2	Plug
18:1	237–78	1	O–Ring
19	105–8138	1	Cap–End
21	105–8133	1	Plug–Thrust
22	105–8123	1	Washer–Thrust
23	105–8131	1	Ring–Retaining
24	105–8114	1	Gear–Primary
25	105–8115	1	Shaft–Drive
26	105–8129	1	Primary Carrier ASM
27	105–8139	1	Gear–Secondary
28	105–8130	1	Secondary Carrier ASM
29	105–8136	1	Part Kit

Ref. No.	Part No.	Qty.	Description
☆29:1		1	Ring–Snap
☆29:2		1	Shim–Bearing, 2.9mm
☆29:3		1	Shim–Bearing, 2.8mm
☆29:4		1	Shim–Bearing, 2.7mm
☆29:5		1	Shim–Bearing, 2.6mm
☆29:6		1	Shim–Bearing, 2.5mm
☆29:7		1	Shim–Bearing, 2.4mm
*30	105–8137	1	Seal Kit
☆30:1		1	O Ring–Flange Cap
☆30:2		1	Seal–Oil
☆30:3		2	O Ring–End Cap
30:4	237–78	2	O–Ring

☆ Not serviced separately
* Not illustrated

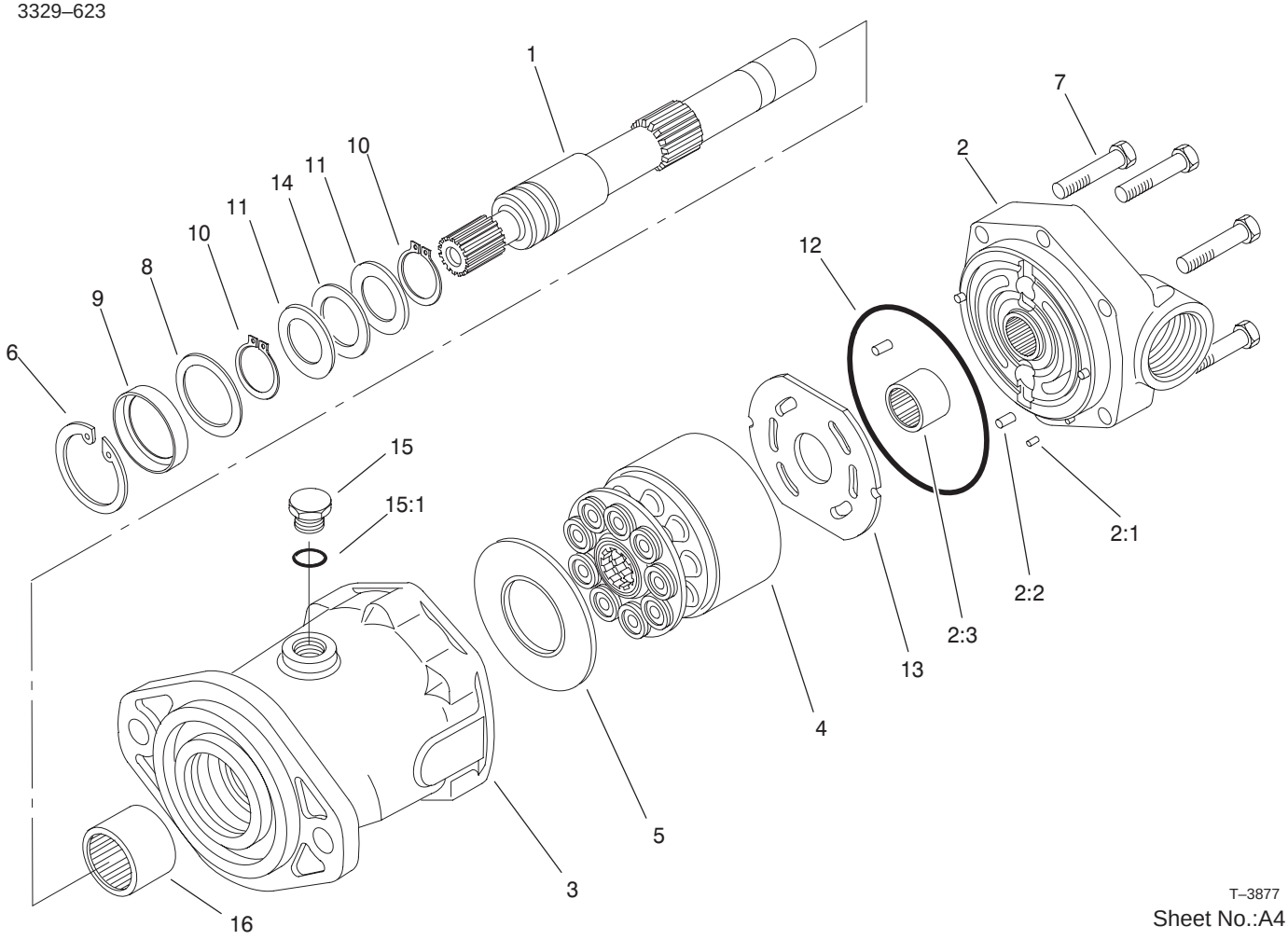


T–3760
Sheet No.:A3

Left Hand Brake Assembly No. 100–3070–03

Ref. No.	Part No.	Qty.	Description
2	93–7977	1	Seal
3	93–7978	1	Rod–Pull
4	93–7983	2	Pin–Clevis
5	93–7980	2	Link
6	93–7979	2	Pin–Hitch
7	93–7986	4	Disc–Stationary
8	104–4278	3	Disc–Rotating
9	93–7976	1	Ring–Retaining
10	93–7984	1	Gasket
11	104–4279	1	Actuator–Rotating
12	93–7987	3	Spring–Extension
13	93–7985	3	Ball
14	353–990	2	Plug
14:1	237–78	1	O–Ring

Ref. No.	Part No.	Qty.	Description



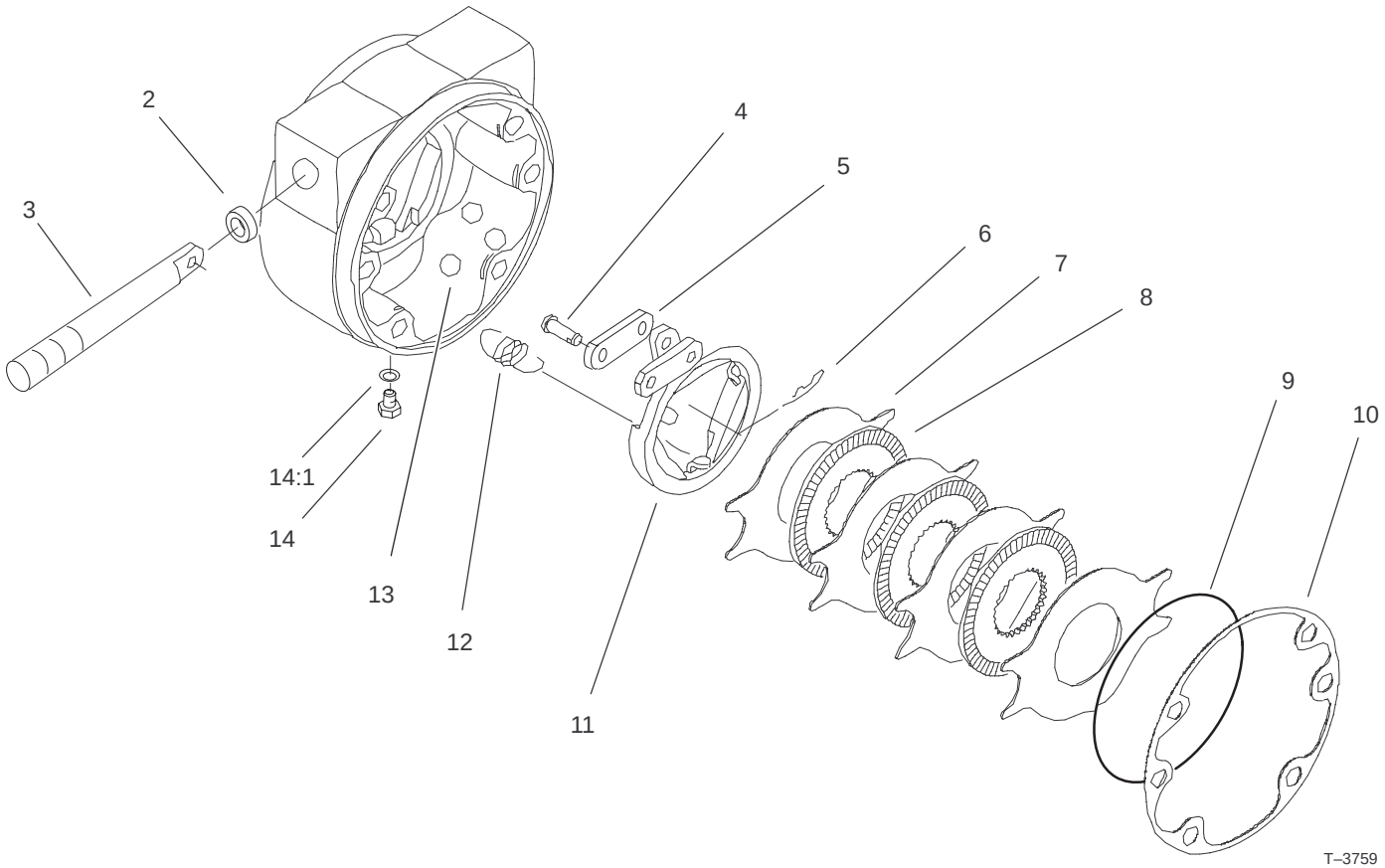
T–3877
Sheet No.:A4

Piston Motor Assembly No. 105–1218

Ref. No.	Part No.	Qty.	Description
1	94–3004	1	Shaft–Drive, Splined
2	105–2851	1	Backplate ASM
☆2:1		3	Pin–Dowel
☆2:2		1	Pin–Dowel
☆2:3		1	Bearing–Needle
☆3		1	Housing
4	76–6910	1	Rotating Kit
5	76–6970	1	Insert–Plate, Cam
6	60–6260	1	Ring
7	94–3002	6	Capscrew
8	94–3007	1	Washer
9	105–3331	1	Seal–Shaft
10	76–7000	2	Ring–Retaining
11	60–6160	2	Race
12	76–6980	1	O–Ring
13	94–3003	1	Plate–Valve
14	60–6170	1	Bearing–Thrust
15	353–550	1	Plug–HYD
15:1	237–79	1	O–Ring
16	63–4390	1	Bearing–Needle

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



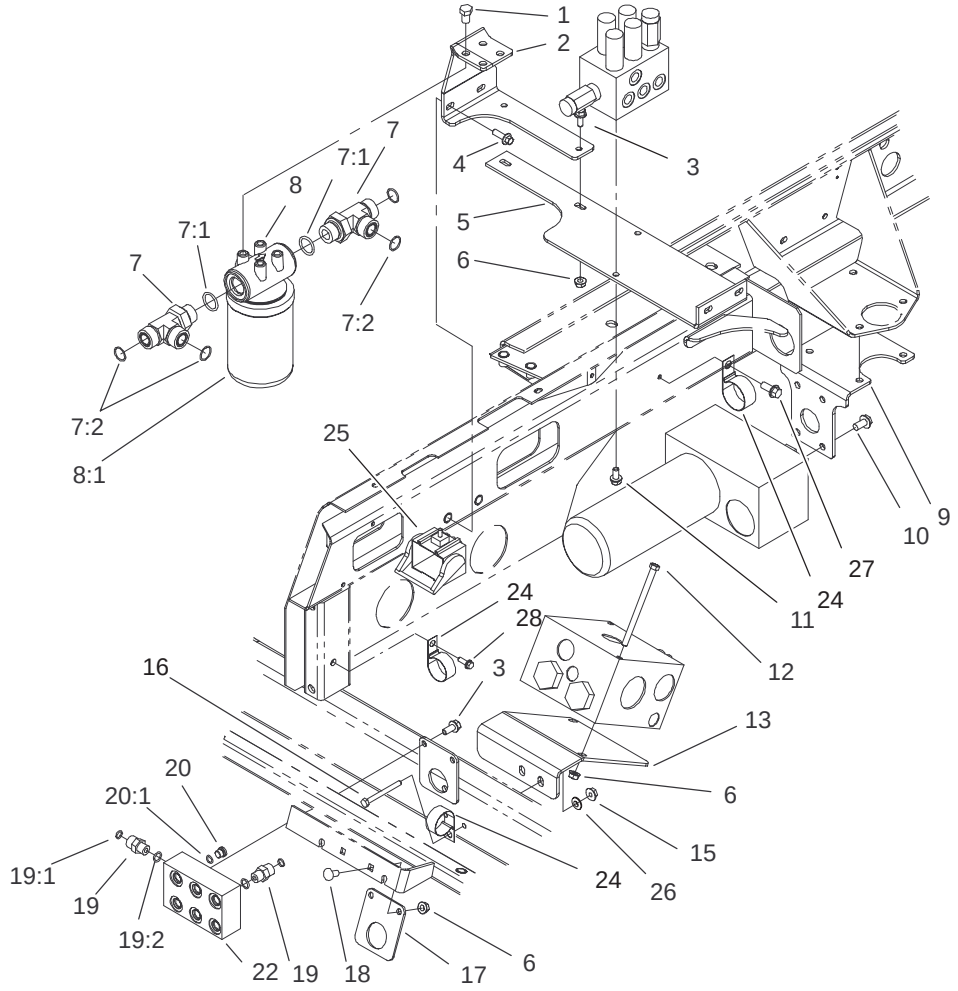
T–3759

Sheet No.:A5

Right Hand Brake Assembly No. 100–3069–03

Ref. No.	Part No.	Qty.	Description
2	93–7977	1	Seal
3	93–7978	1	Rod–Pull
4	93–7983	2	Pin–Clevis
5	93–7980	2	Link
6	93–7979	2	Pin–Hitch
7	93–7986	4	Disc–Stationary
8	104–4278	3	Disc–Rotating
9	93–7976	1	Ring–Retaining
10	93–7984	1	Gasket
11	104–4280	1	Actuator–Rotating
12	93–7987	3	Spring–Extension
13	93–7985	3	Ball
14	353–990	2	Plug
14:1	237–78	1	O–Ring

Ref. No.	Part No.	Qty.	Description

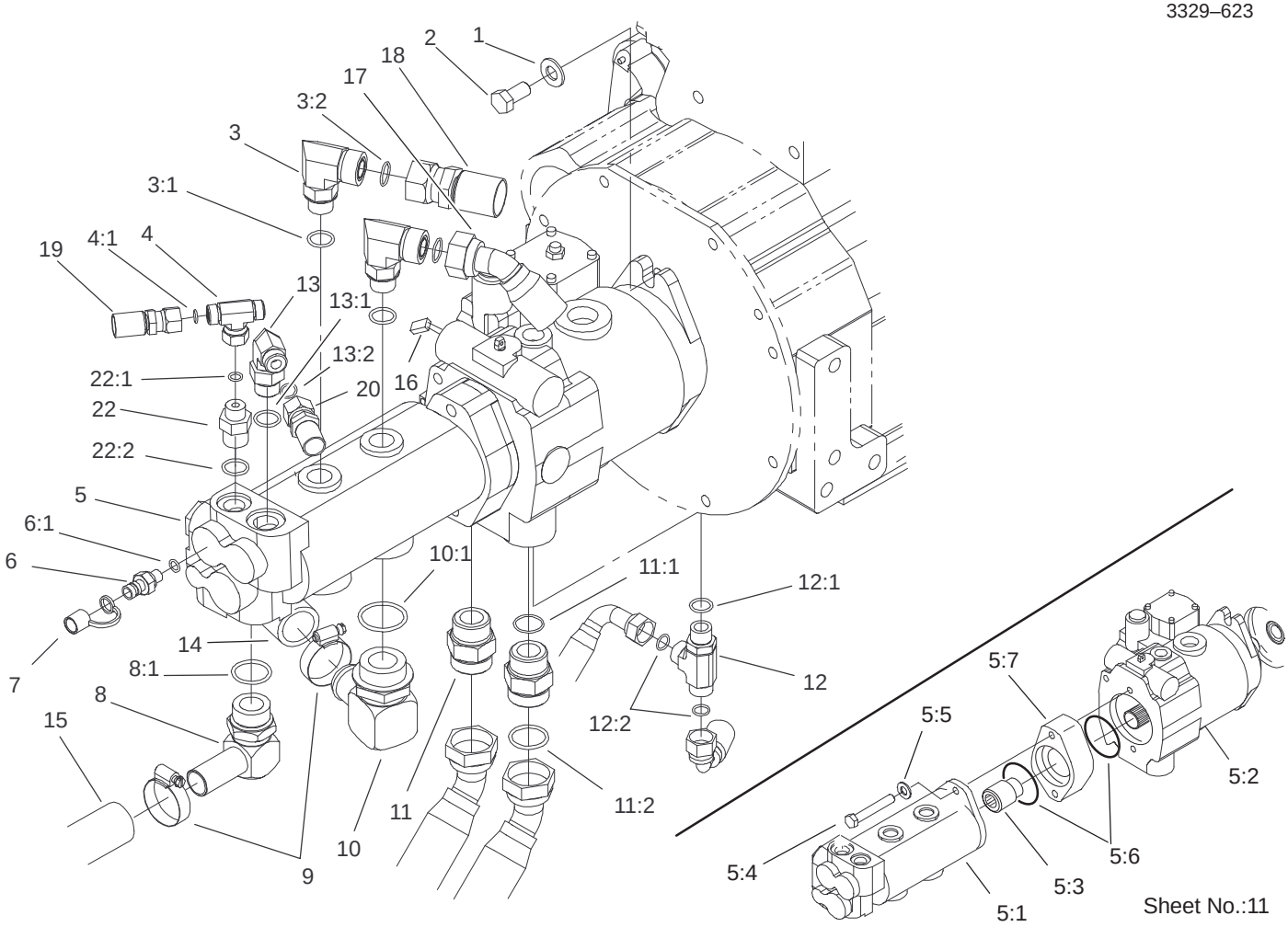


Sheet No.:10

Manifold Mounting and Fitting Assembly

Ref. No.	Part No.	Qty.	Description
1	33115–016	4	Screw–HH
2	104–5492–03	1	Bracket–Mount, Filter
3	3234–5	4	Screw
4	3234–17	4	Screw–HHF
5	104–5493–03	1	Bracket–Mount, Valve
6	32128–20	6	Nut–HF
7	340–148	2	Fitting–Tee
7:1	237–81	1	O–Ring
7:2	237–58	2	O–Ring
8	93–2242	1	Oil Filter ASM
8:1	75–1310	1	Element–Filter
9	104–5471–03	1	Bracket–Valve, Filter
10	3234–1	4	Screw–HHF
11	3234–14	4	Screw–HHF
12	322–48	2	Screw–HH
13	104–5467–03	1	Bracket–Mount, Valve
15	32128–33	2	Nut–HF
16	321–14	2	Screw–HH
17	104–5516–01	1	Support–Tube
18	3230–23	2	Screw–CARR
19	340–2	4	Fitting–HYD, Straight
19:1	237–22	1	O–Ring
19:2	237–42	1	O–Ring
20	353–990	1	Plug
20:1	237–78	1	O–Ring
22	104–5515	1	Manifold–Junction, Lift

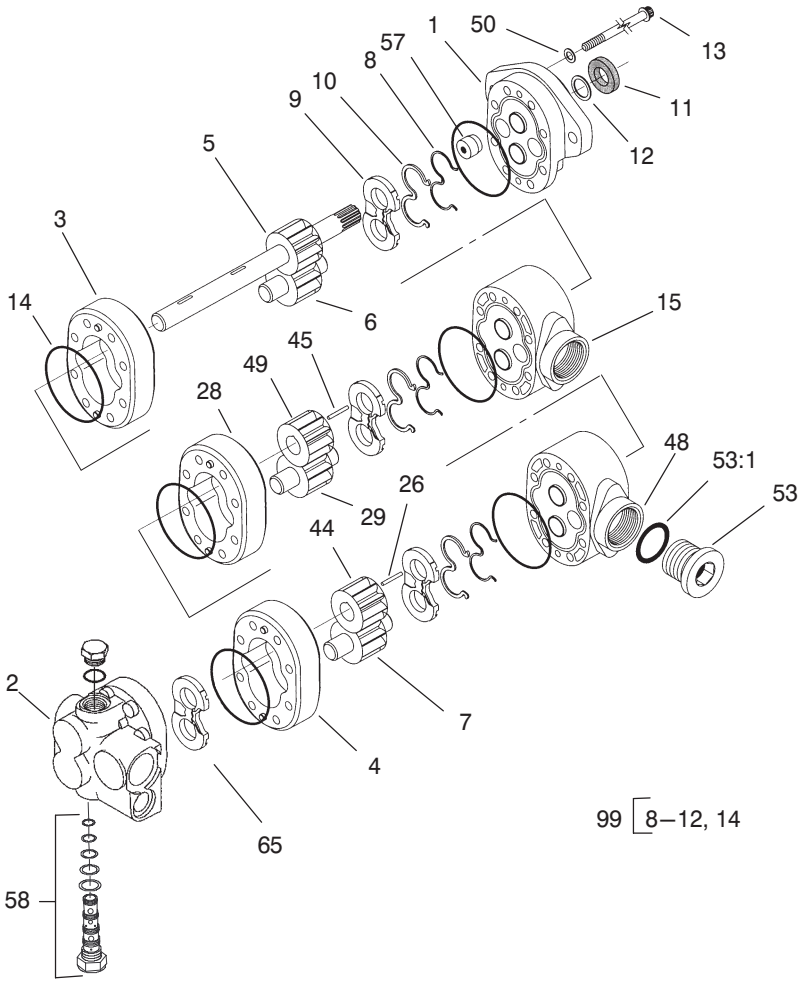
Ref. No.	Part No.	Qty.	Description
24	2412–150	3	J–Clip
25	105–9868	1	Harness–Wire, Main
26	3256–22	2	Washer–Flat
27	32144–14	1	Screw–HWH
28	3234–4	1	Screw–HHF



Hydraulic Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	87–7270	2	Washer–Thrust
2	3213–2	2	Screw–HH
3	340–16	2	Fitting–HYD, 90
3:1	237–80	1	O–Ring
3:2	237–58	1	O–Ring
4	340–166	1	Fitting–Tee, HYD
4:1	237–22	1	O–Ring
5	105–1226	1	Pump ASM
5:1	105–9845	1	Triple Pump ASM
5:2	105–9846	1	Piston Pump ASM
5:3	74–9030	1	Coupler
5:4	323–32	2	Screw–HH
5:5	60–3540	2	Washer
5:6	60–3520	2	O–Ring
5:7	99–5510	1	Spacer
6	354–77	2	Fitting–Quick
6:1	237–78	1	O–Ring
7	354–79	2	Cap–Dust
8	56–9530	1	Fitting–HYD, 90°
8:1	237–117	1	O–Ring
9	2412–111	2	Clamp
10	92–7526	1	Fitting–HYD, 90°
10:1	237–101	1	O–Ring
11	104–3797	2	Fitting–HYD, Straight
11:1	237–146	1	O–Ring
11:2	340–65	1	O–Ring

Ref. No.	Part No.	Qty.	Description
12	340–109	1	Fitting–HYD, Tee
12:1	237–79	1	O–Ring
12:2	237–30	2	O–Ring
13	340–98	1	Fitting–HYD, 90°
13:1	237–79	1	O–Ring
13:2	237–30	1	O–Ring
14	104–5482	1	Hose–Suction
15	104–5484	1	Hose–Suction
16	105–0122	1	Harness–Wire
17	105–3874	1	Hose ASM
18	105–3875	1	Hose ASM
19	92–7595	1	Hose ASM
20	105–3869	1	Hose ASM
22	340–141	1	Fitting–HYD, Straight
22:1	237–22	1	O–Ring
22:2	237–80	1	O–Ring



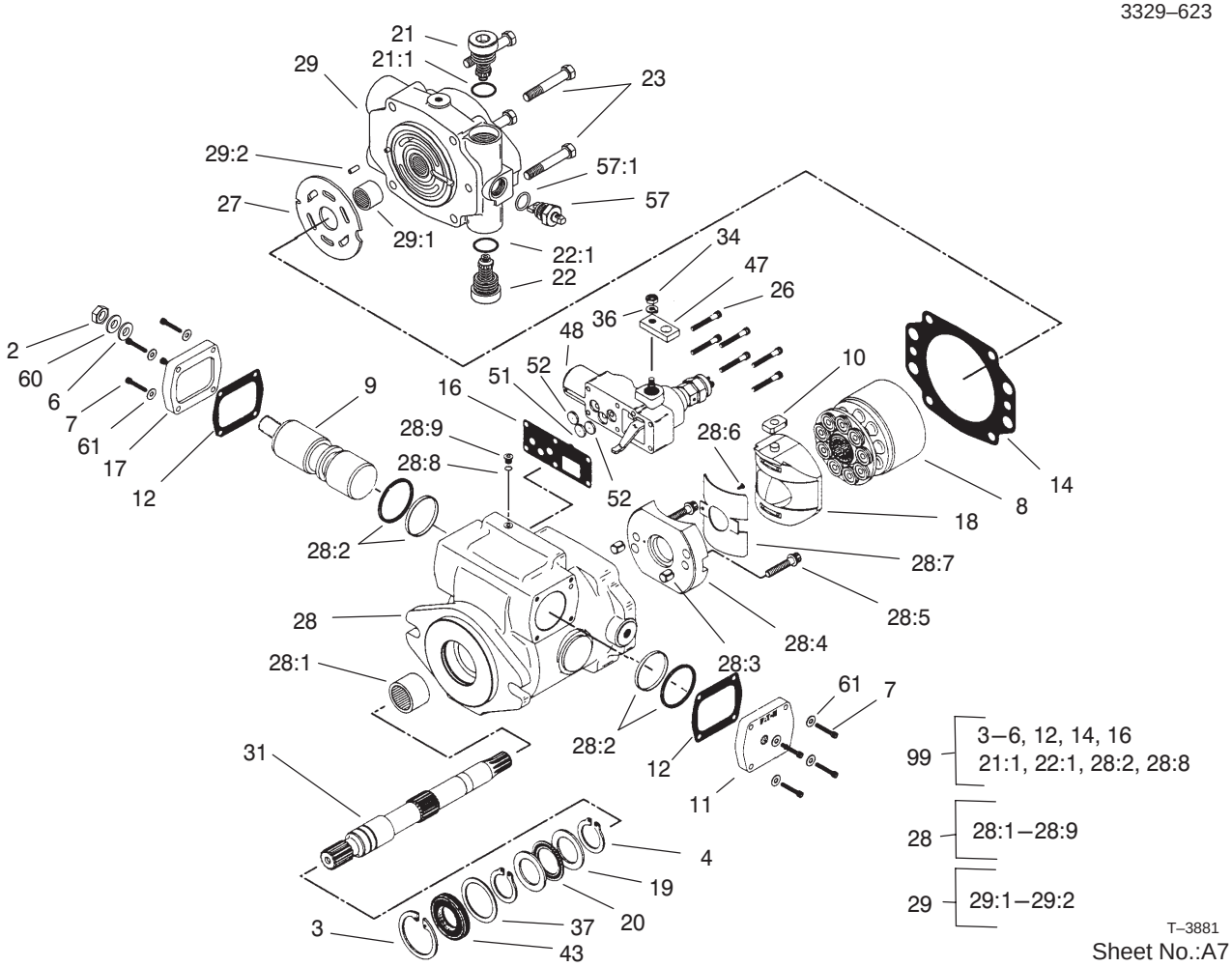
T–3880
Sheet No.:A6

Triple Pump Assembly No. 105–9845

Ref. No.	Part No.	Qty.	Description
☆1		1	Front Plate ASM
☆2		1	Back Plate ASM
☆3		1	Body
☆4		1	Body
☆5		1	Drive Gear ASM
☆6		1	Gear–Idler
☆7		1	Gear–Idler
☆8		3	Gasket–Backup
☆9		3	Plate–Wear
☆10		3	Seal–Pressure, Balance
11	49–2640	1	Seal–Shaft
12	60–5890	1	Washer
13	105–9849	8	Capscrew
14	105–2866	6	O–Ring
☆15		1	Plate–Adaptor
☆26		1	Key
☆28		1	Body
☆29		1	Gear–Idler
☆44		1	Gear
☆45		1	Key
☆48		1	Plate–Adaptor
☆49		1	Gear
50	105–9850	4	Washer–Copper
53	94–3013	1	Plug
☆53:1		1	O–Ring

Ref. No.	Part No.	Qty.	Description
57	94–3011	1	Plug
58	105–2870	1	Valve–Proportional
☆65		1	Plate–Thrust
99	105–2868	1	Seal Kit

☆ Not serviced separately

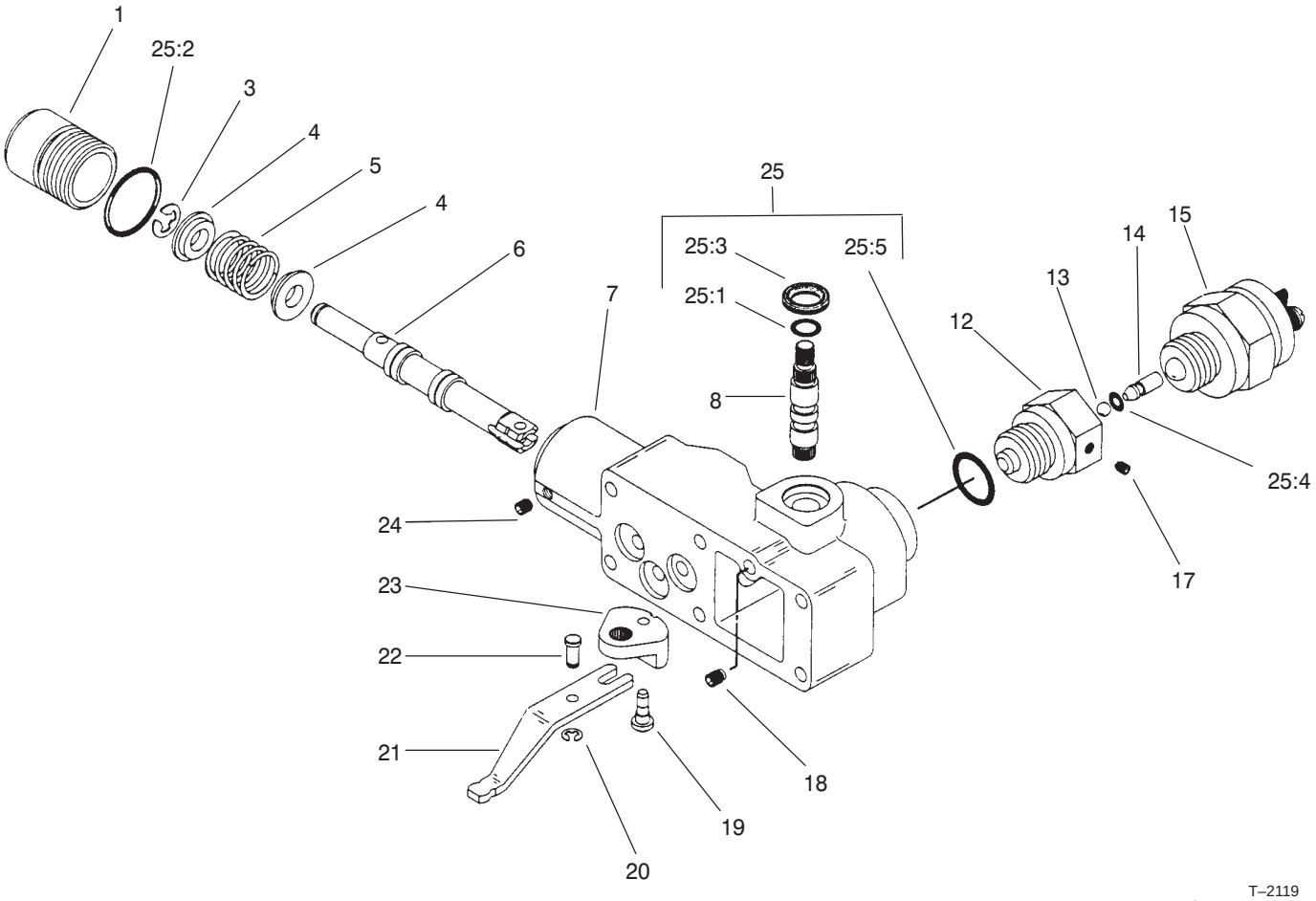


Piston Pump Assembly No. 105–9846

Ref. No.	Part No.	Qty.	Description
2	3220–2	1	Nut
3	76–7010	1	Ring–Retaining
4	76–7000	2	Ring–Retaining
6	94–3027	1	Washer–Seal
7	3274–81	8	Screw–HSH
8	105–9851	1	Rotating Kit ASM
9	105–4572	1	Servo Piston ASM
10	105–9852	1	Follower–Piston
11	105–9853	1	Plate–Cover
☆12		2	Gasket–Plate, Cover
☆14		1	Gasket–Housing
☆16		1	Gasket
17	94–3034	1	Plate–Cover
18	94–3026	1	Camplate ASM
19	76–6950	2	Race–Thrust
20	76–6960	1	Bearing–Thrust
21	105–2857	1	Valve–Relief
☆21:1		1	O–Ring
22	105–2857	1	Valve–Relief
☆22:1		1	O–Ring
23	323–45	4	Screw–HH
26	3274–59	6	Screw–HSH
27	105–9854	1	Plate–Valve
28	105–9855	1	Housing ASM
29	105–9856	1	Backplate ASM
31	105–2861	1	Shaft–Drive

Ref. No.	Part No.	Qty.	Description
34	3217–5	1	Nut–Hex
36	3253–3	1	Washer–Lock
37	94–3007	1	Washer
43	105–3331	1	Seal–Shaft
47	94–3031	1	Arm–Control
48	93–6306	1	Control ASM
51	105–2909	1	Orifice–Control
52	94–3041	1	Orifice–Control
57	105–2864	1	Valve–Bypass
☆57:1		1	O–Ring
60	94–3030	1	Washer
61	3256–77	8	Washer–Flat
99	105–3349	1	Seal Kit

☆ Not serviced separately



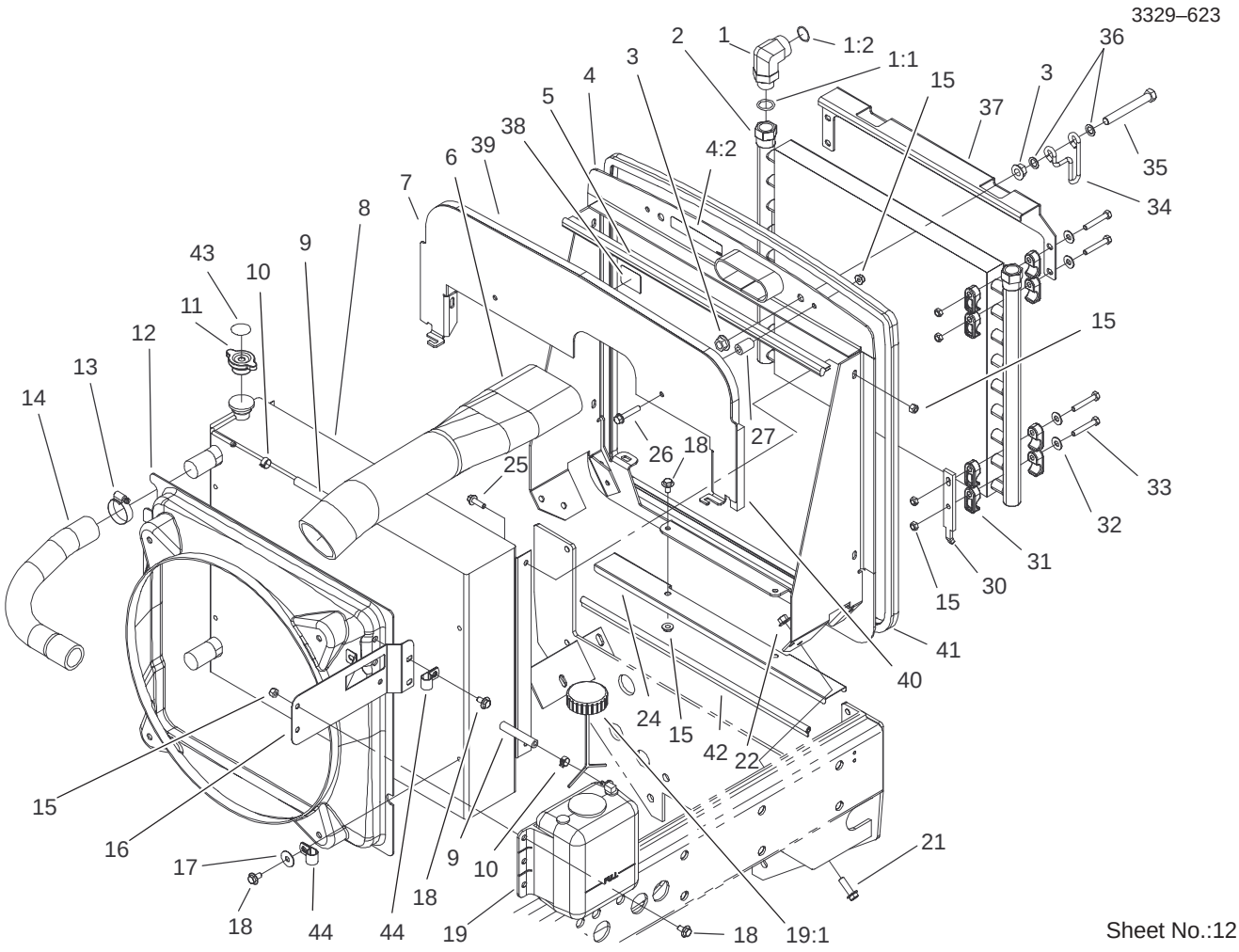
T–2119
Sheet No.:A8

Control Assembly No. 93–6306

Ref. No.	Part No.	Qty.	Description
☆1		1	Plug
☆3		1	Ring–Retaining
☆4		2	Retainer–Spring
☆5		1	Spring
☆6		1	Valve–Spool
☆7		1	Housing–Control
☆8		1	Shaft–Input
☆12		1	Adaptor
☆13		1	Ball
☆14		1	Pin
15	94–3043	1	Switch–Safety, Neutral
☆17		1	Screw–Set
☆18		1	Screw–Set
☆19		1	Pin
☆20		1	Ring–Retaining
☆21		1	Link
☆22		1	Pin–Dowel
☆23		1	Crank–Bell
☆24		1	Screw–Set
25	94–3044	1	Seal Kit
☆25:1		1	O–Ring
☆25:2		1	O–Ring
☆25:3		1	Seal–Wiper
☆25:4		1	O–Ring
☆25:5		1	O–Ring

Ref. No.	Part No.	Qty.	Description

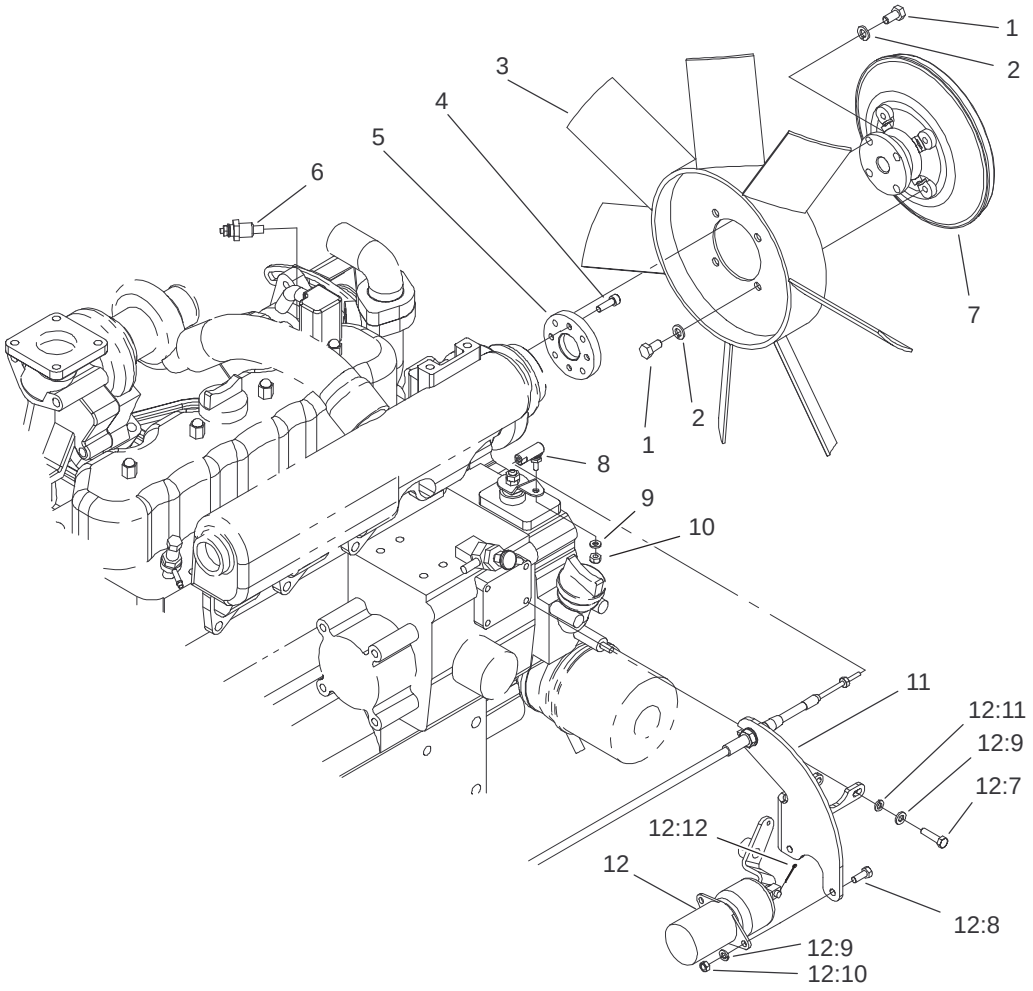
☆ Not serviced separately



Radiator Assembly

Ref. No.	Part No.	Qty.	Description
1	104–3796	2	Fitting–HYD, 90°
1:1	237–81	1	O–Ring
1:2	340–65	1	O–Ring
2	99–5495	1	Cooler–Oil
3	32128–49	4	Nut–HHF
4	105–3994	1	Bracket–Radiator
4:2	93–7272	1	Decal–Warning
5	104–2223	1	Seal–Bulb
6	100–5550	1	Hose–Cleaner, Air
7	105–3934–03	1	Bracket–Seal, Hood
8	99–5426	1	Radiator
9	71–3370	2	Hose–Fuel
10	92–2379	3	Clamp–Hose
11	93–5957	1	Cap–Radiator
12	99–5428	1	Shroud–Radiator
13	2412–111	4	Clamp
14	100–5547	2	Hose–Radiator
15	104–8300	19	Nut–Flange, NI
16	100–5505–03	1	Bracket–Tank
17	99–2900	4	Washer–Flat
18	3234–7	11	Screw–HHF
19	104–2276	1	Reservior–Coolant
19:1	87–7050	1	Cap–Reservoir
21	3234–11	4	Screw–HHF
22	32128–43	4	Nut–Flange
24	104–5426–03	1	Cover–Bottom

Ref. No.	Part No.	Qty.	Description
25	3234–17	4	Screw–HHF
26	94–5780	2	Screw–HWH
27	93–6981	2	Spacer
30	104–5460–03	2	Plate–Mount, Oil Cooler
31	105–3943	16	Clamp–Cooler, Oil
32	3256–23	14	Washer–Flat
33	322–10	8	Screw–HH
34	104–5429	2	Clamp–Form, Wire
35	325–17	2	Screw–HH
36	41–8440	4	Washer
37	104–5428	1	Bracket–Oil Cooler, Top
38	93–7275	1	Decal–Fluid, Starting
39	105–9233	1	Seal–Foam
40	105–9236	2	Seal–Foam
41	105–9814	1	Seal–Bulb
42	105–9858	1	Seal–Bulb
43	106–6755	1	Decal–Cap, Radiator
44	2412–81	2	Clamp–R

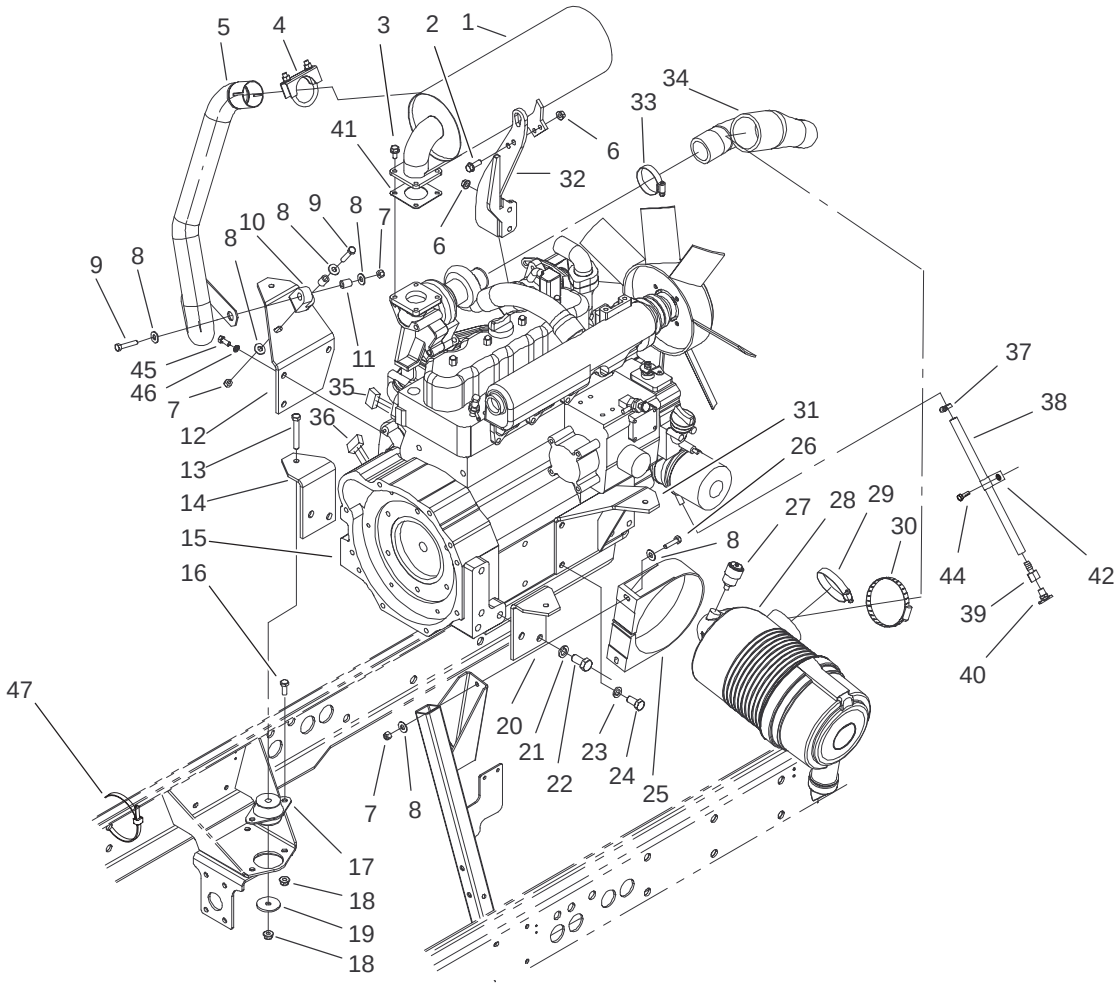


Sheet No.:13

Fan and Solenoid Assembly

Ref. No.	Part No.	Qty.	Description
1	322–2	8	Screw–HH
2	3253–4	8	Washer–Lock
3	105–0750	1	Fan
4	52–6290	4	Screw–HSH
5	100–3066	1	Adapter–Fan
6	98–9346	1	Sender–Temperature
7	104–2212	1	Clutch–Fan
8	2411–38	1	Joint–Ball
9	3256–51	1	Washer–Flat
10	3296–21	1	Nut–Lock, NI
11	104–7540–03	1	Support–Cable
12	98–3817	1	Solenoid Kit
12:7	33113–025	3	Screw–HH
12:8	33113–016	2	Screw–HH
12:9	48–8020	5	Washer–Spring
12:10	33013–00	2	Nut–Hex
12:11	33093–00	3	Washer–Flat
12:12	3272–2	1	Pin–Cotter

Ref. No.	Part No.	Qty.	Description



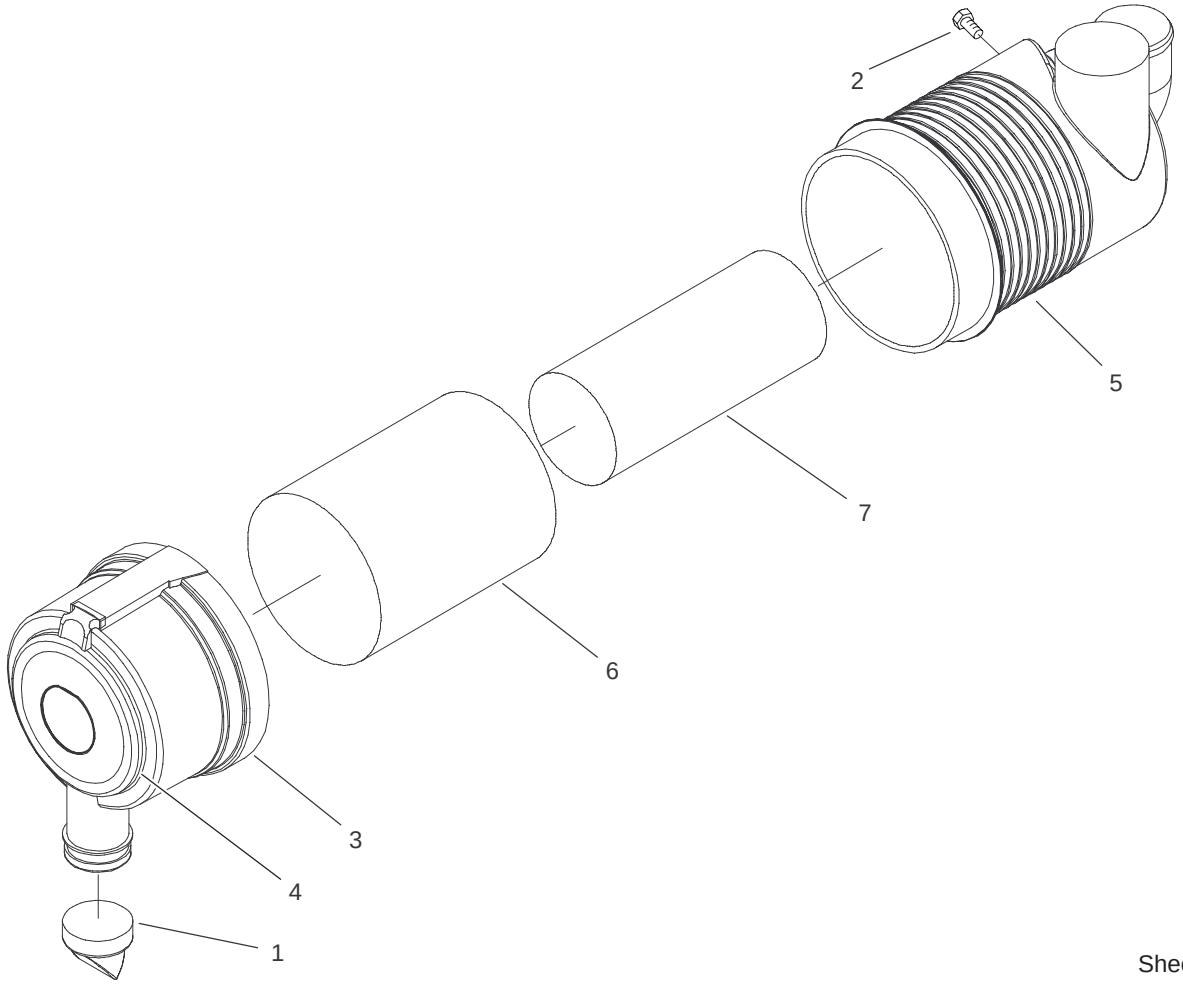
Sheet No.:14

Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	99–5424	1	Muffler–Turbo
2	33104–025	2	Screw–HHF
3	33104–016	4	Screw–HHF
4	18–2130	1	Clamp
5	104–5461	1	Pipe–Exhaust
6	33004–00	4	Nut–HF
7	3296–29	4	Nut–Lock, NI
8	3256–3	8	Washer–Flat
9	322–8	4	Screw–HH
10	95–5622	1	Hanger–Rubber
11	93–5023	2	Spacer
12	100–3141–03	1	RH Mount ASM
13	323–13	4	Screw–HH
14	100–3148–03	1	Mount–Engine, RH
15	99–5413	1	Engine–Turbo, Kubota
16	3234–11	8	Screw–HHF
17	53–9682	4	Support–Engine, Rubber
18	104–8301	12	Nut–Flange, NI
19	63–7400	4	Washer–Rebound
20	100–3147–03	1	Mount–Engine, LH
21	43–5950	4	Washer–Lock, Spring
22	43–3210	4	Screw–HH
23	48–8070	5	Washer–Lock
24	42–9250	5	Bolt
25	99–5414	1	Strap–Cleaner, Air

Ref. No.	Part No.	Qty.	Description
26	322–6	2	Screw–HH
27	104–3563	1	Indicator
*27:1	94–1416	1	Indicator Adapter ASM
28	99–5410	1	Cleaner–Air
29	2412–125	1	Clamp–Hose
30	2412–110	1	Clamp–Hose
31	100–3144–03	1	LH Mount ASM
32	99–5421–03	1	Bracket–Mounting
33	2412–92	1	Clamp–Hose
34	99–5415	1	Hose–Cleaner, Air
35	99–3441	1	Harness–Wire, Fusible Link
36	105–9869	1	Harness–Wire, Engine
37	2412–108	2	Clamp–Worm
38	99–7376	1	Hose–Breather
39	354–94	1	Fitting–Female, Barbed
40	93–5528	1	Fitting–Cock, Drain
41	100–9333	1	Gasket–Muffler
42	2412–150	1	J–Clip
44	32144–14	1	Screw–HWH
45	43–0090	1	Screw–HH
46	48–9590	1	Washer–Lock
47	3290–378	3	Tie–Cable

* Not illustrated



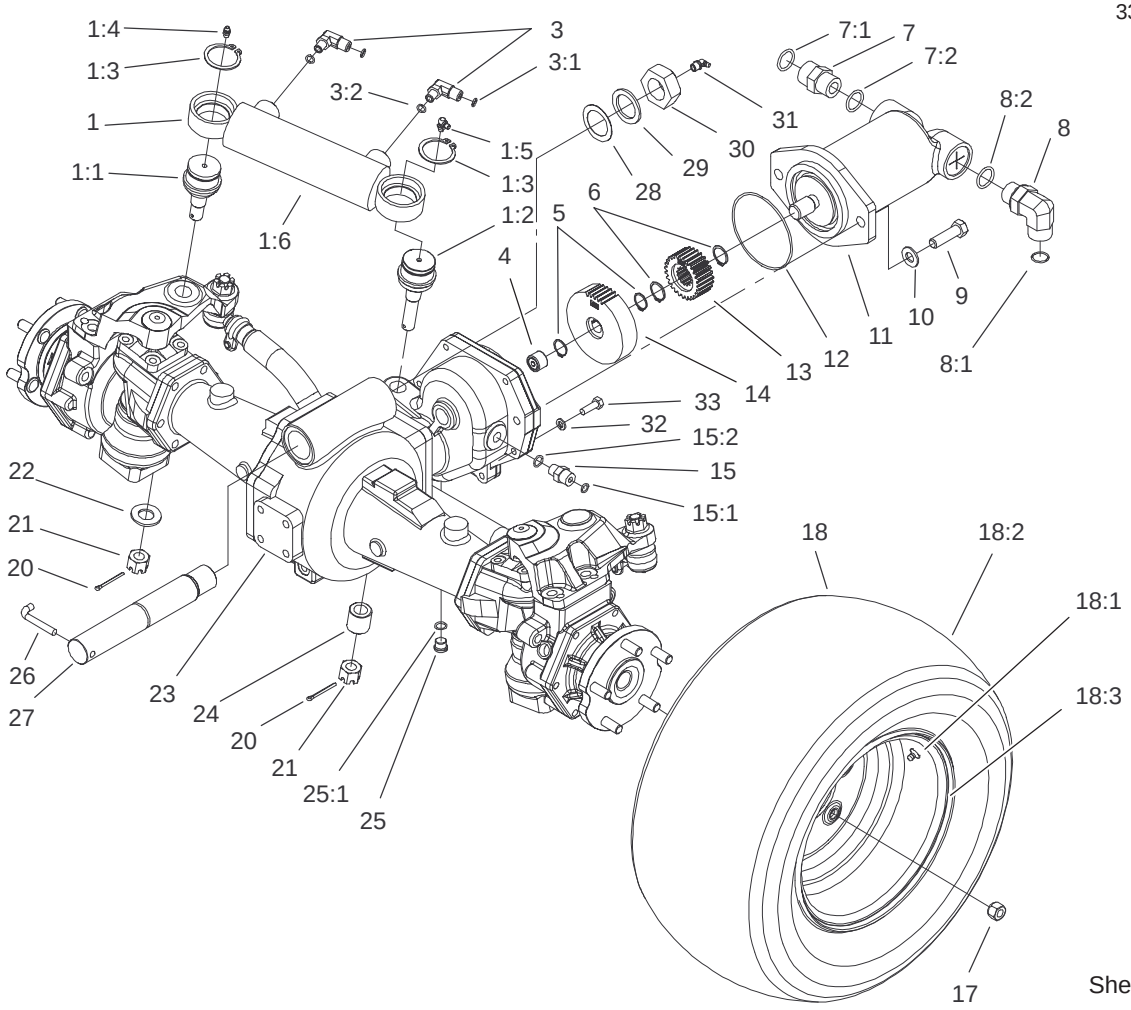
T–3770
Sheet No.:A9

Air Cleaner Assembly No. 99–5410

Ref. No.	Part No.	Qty.	Description
1	104–4258	1	Valve–Vacuator
☆2		1	Plug–Pipe
3	104–4259	1	Cover ASM
☆4		1	Marking
☆5		1	Body ASM
6	104–4260	1	Element ASM
7	104–4261	1	Element ASM

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



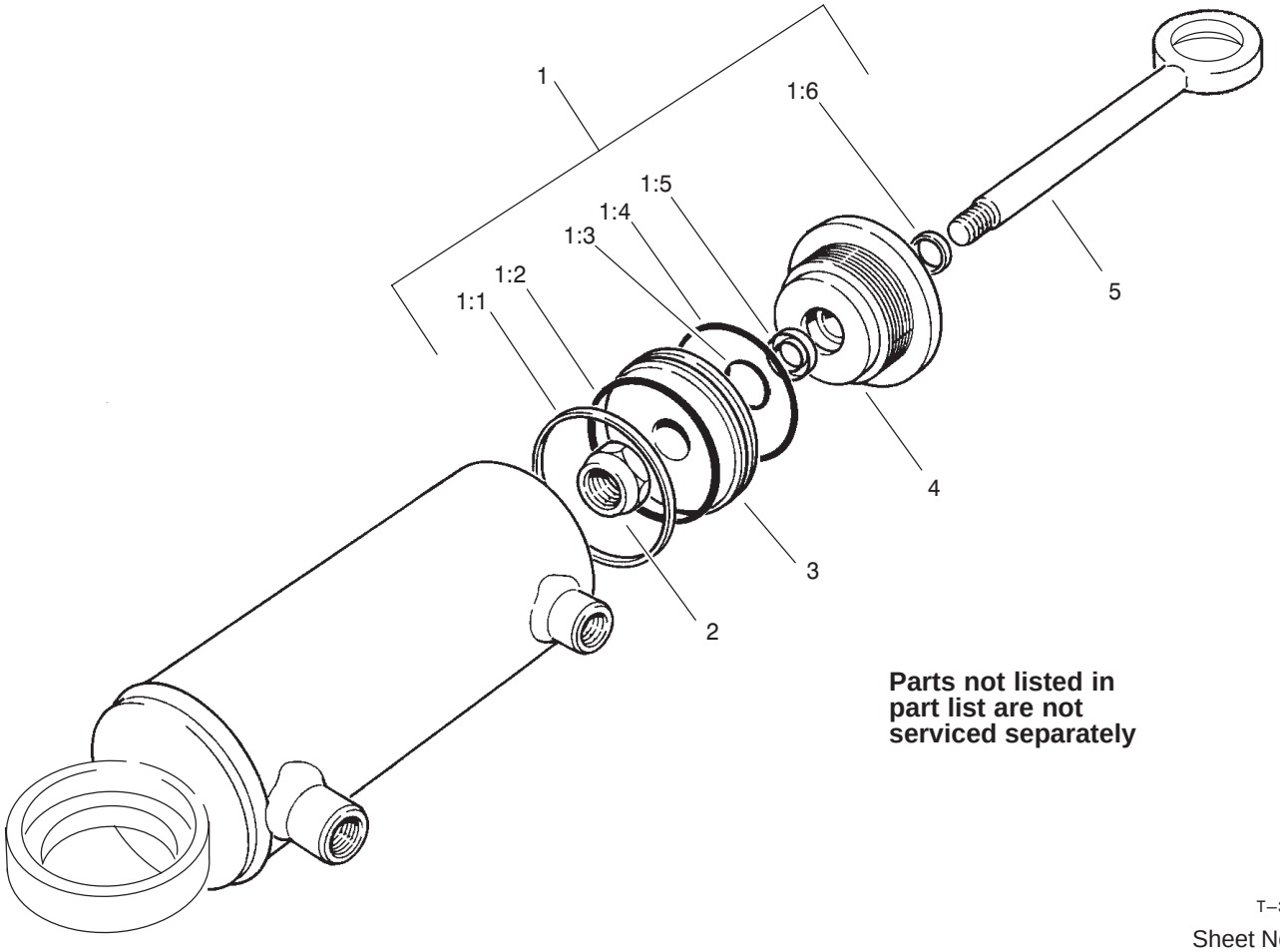
Sheet No.:15

Rear Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	105–9861	1	Steering Cylinder ASM
1:1	92–5838	1	Joint–Ball
1:2	100–3795	1	Joint–Ball
1:3	32151–104	2	Ring–Retaining, External
1:4	302–5	1	Fitting–Grease
1:5	302–60	1	Fitting–Grease
☆1:6		1	HYD Cylinder ASM
3	340–97	2	Fitting–HYD, 90°
3:1	237–22	1	O–Ring
3:2	237–78	1	O–Ring
4	74–5700	1	Bearing–Needle, Roller
5	32120–15	2	Ring–Snap, Ext
6	32120–76	2	Ring–Snap, Ext
7	340–9	1	Fitting–HYD, Straight
7:1	237–58	1	O–Ring
7:2	237–81	1	O–Ring
8	340–142	1	Fitting–HYD, 90°
8:1	237–58	1	O–Ring
8:2	237–81	1	O–Ring
9	325–7	2	Screw–HH
10	3256–26	2	Washer–Flat
11	105–1219	1	Motor–Piston
12	237–166	1	O–Ring
13	104–0755	1	Pinion–27 Tooth

Ref. No.	Part No.	Qty.	Description
14	100–3053	1	Gear–45 Tooth
15	340–2	1	Fitting–HYD, Straight
15:1	237–22	1	O–Ring
15:2	237–42	1	O–Ring
17	93–5268	10	Nut–Lug
☆18		2	Tire And Wheel ASM
18:1	232–27	1	Stem–Valve
18:2	104–0451	1	Tire
18:3	105–9219	1	Wheel
20	3272–12	2	Pin–Cotter
21	32136–14	2	Nut–SHH
22	92–5836	1	Washer
23	100–3784	1	Drive Axle ASM
24	100–3796	1	Spacer–Joint, Ball
25	353–989	1	Plug–Hex, Hollow
25:1	237–42	1	O–Ring
26	100–3771	1	Pin–Stop
27	100–3770	1	Pin–Axle, Pivot
28	92–1765	1	Washer–Thrust
29	98–3867	2	Washer–Thrust
30	3296–68	1	Nut–Lock, NI
31	302–33	1	Fitting–Grease
32	3253–4	6	Washer–Lock
33	33114–025	6	Screw–HH

☆ Not serviced separately



Parts not listed in part list are not serviced separately

T–3527

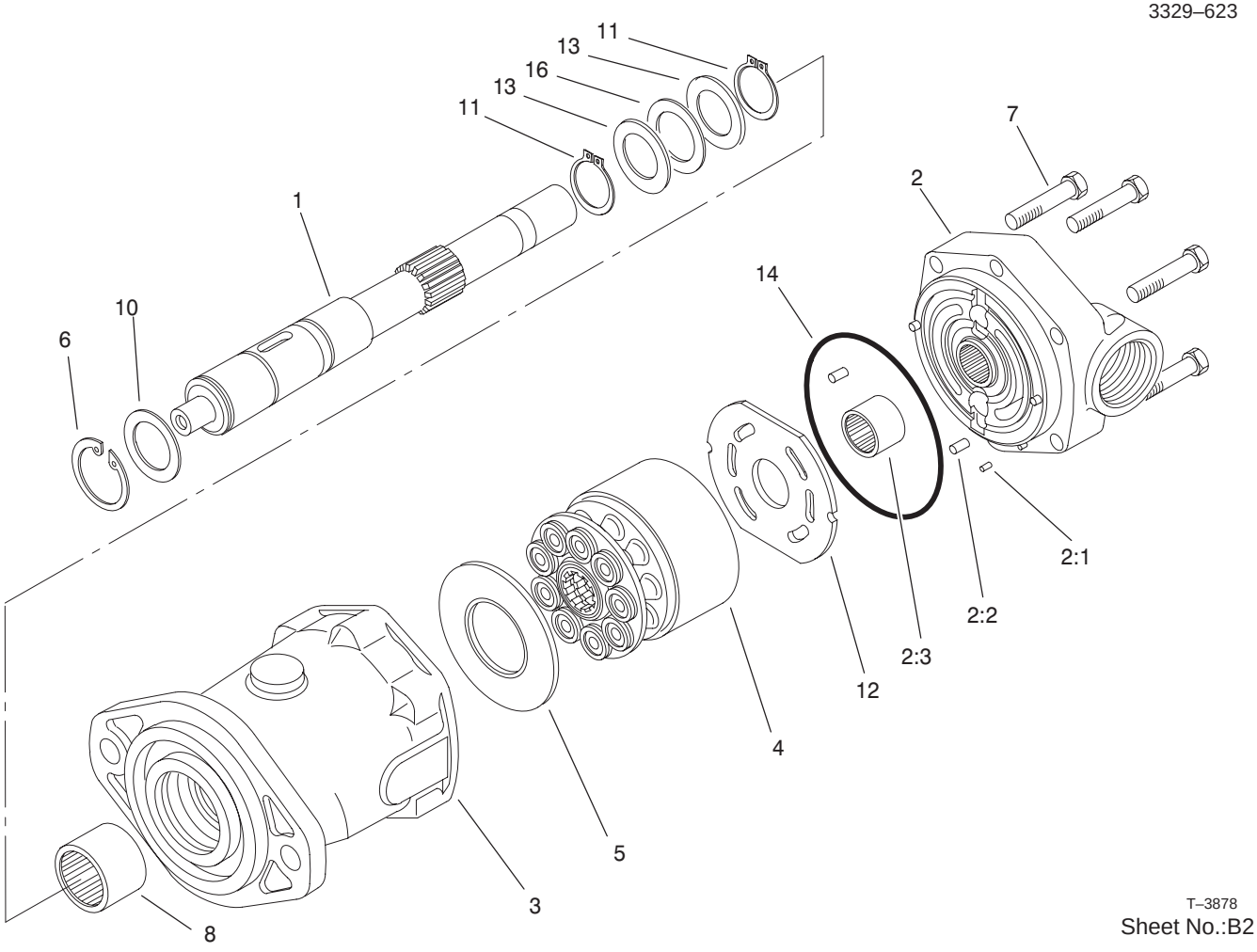
Sheet No.:B1

Cylinder Assembly No. 105–9861

Ref. No.	Part No.	Qty.	Description
1	92–6593	1	Seal Kit
☆1:1		1	Seal
☆1:2		1	O–Ring
☆1:3		1	O–Ring
☆1:4		1	O–Ring
☆1:5		1	U–Cup
☆1:6		1	Wiper
☆2		1	Locknut
☆3		1	Piston
☆4		1	Gland
☆5		1	Rod ASM

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



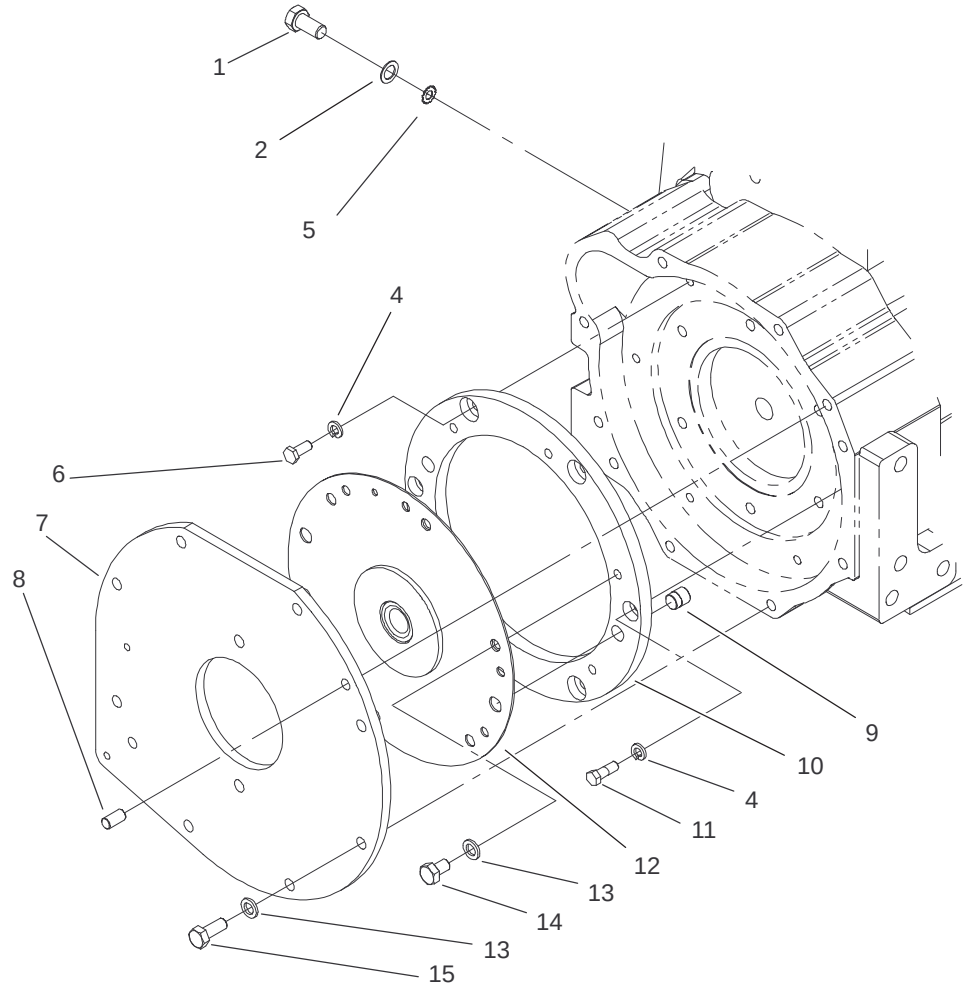
T–3878
Sheet No.:B2

Piston Motor Assembly No. 105–1219

Ref. No.	Part No.	Qty.	Description
1	105–2853	1	Shaft–Drive
2	100–2551	1	Backplate
☆2:1		3	Pin–Dowel
☆2:2		1	Pin–Dowel
☆2:3		1	Bearing–Needle
☆3		1	Housing
4	76–6910	1	Rotating Kit
5	76–6970	1	Insert–Plate, Cam
6	60–6260	1	Ring
7	94–3002	6	Capscrew
8	63–4390	1	Bearing–Needle
10	76–7020	1	Spacer
11	76–7000	2	Ring–Retaining
12	94–3003	1	Plate–Valve
13	60–6160	2	Race
14	76–6980	1	O–Ring
16	60–6170	1	Bearing–Thrust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

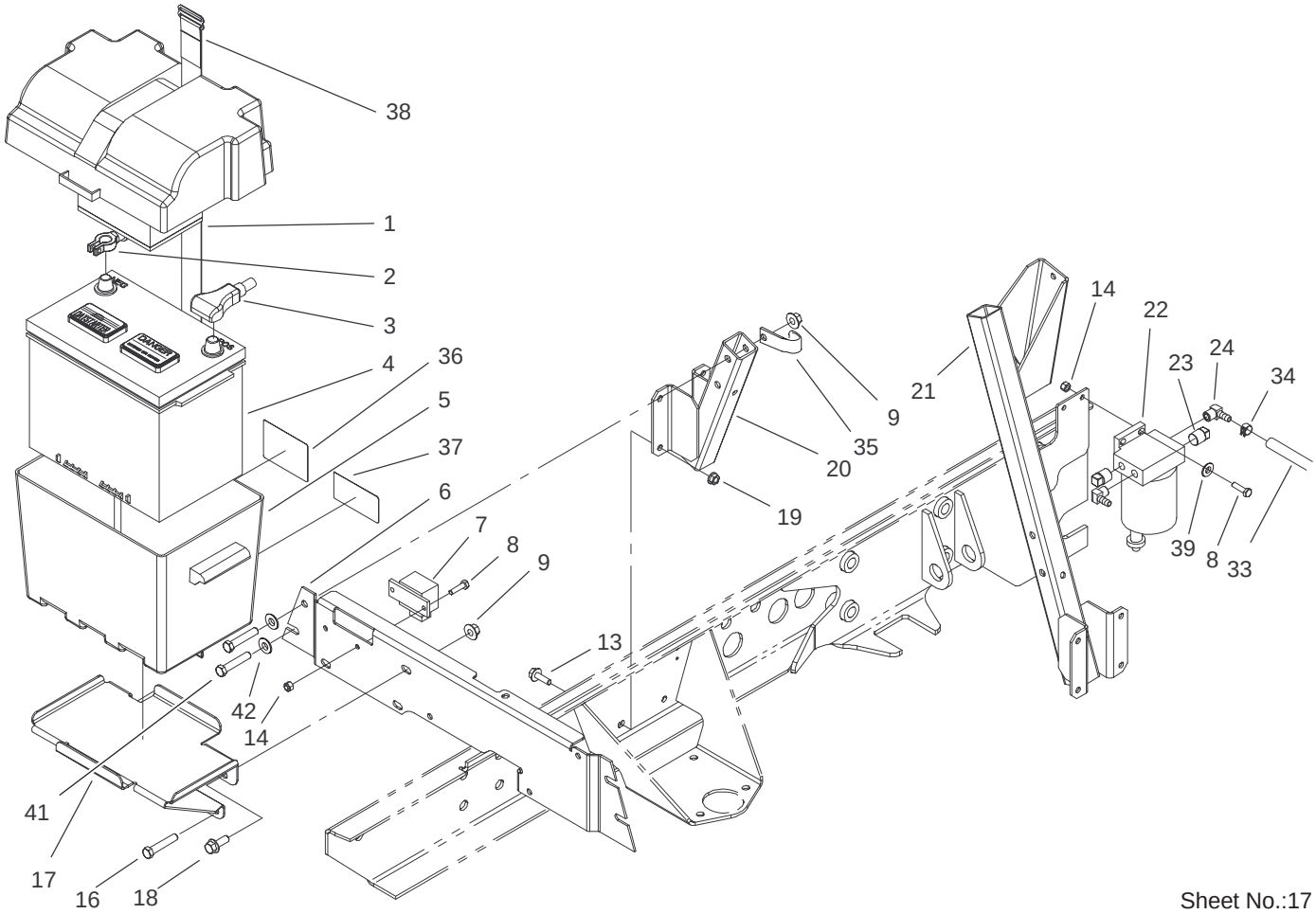


Sheet No.:16

Coupler Spacer and Adapter Plate Assembly

Ref. No.	Part No.	Qty.	Description
1	42–9250	1	Bolt
2	3255–2	1	Washer–Lock/Ext
4	42–9850	6	Washer–Lock, Spring
5	3255–9	1	Washer–Lock, Ext
6	33114–020	4	Screw–HH
7	100–5632–03	1	Plate–Adapter
8	100–5635	2	Pin–Plate
9	58–3590	2	Dowel
10	100–5633	1	Spacer–Coupling
11	100–5634	2	Bolt–Shoulder
12	92–1753	1	Coupling–Spring
13	48–9590	14	Washer–Lock
14	70–8470	6	Screw–HH
15	43–0090	8	Screw–HH

Ref. No.	Part No.	Qty.	Description

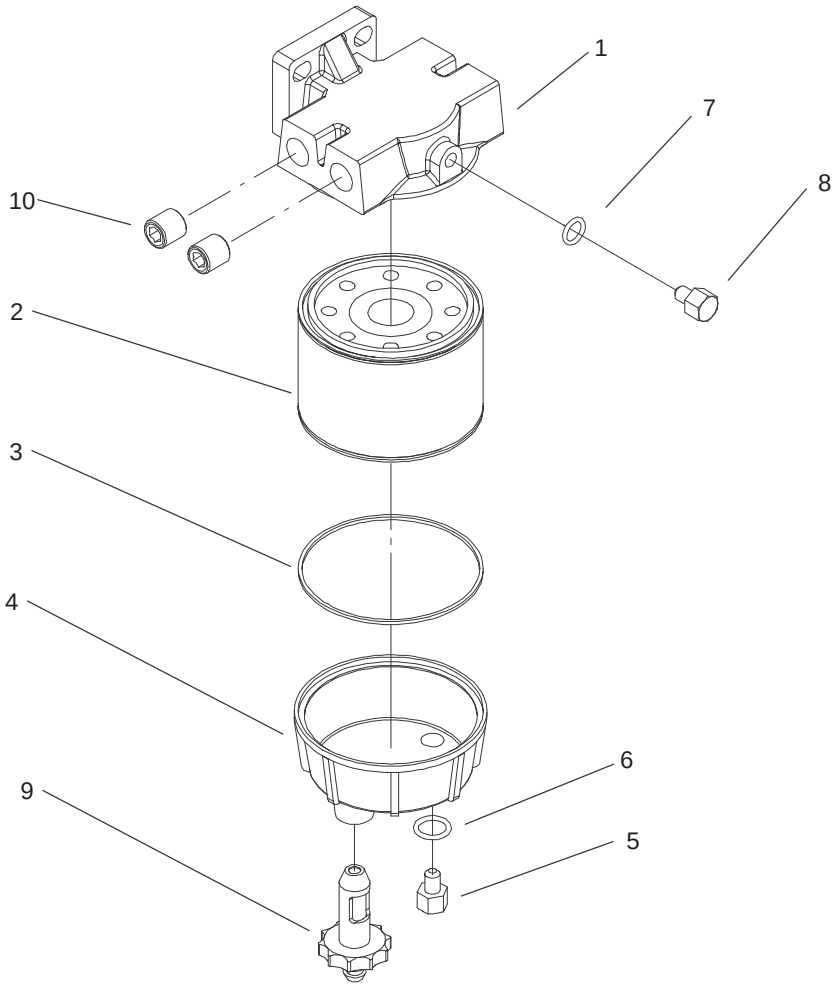


Sheet No.:17

Battery Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	93–7968	1	Pad–Foam
2	105–3880	1	Cable–Battery, Negative
3	105–0114	1	Cable–Battery, Positive
4	93–3220	1	Battery
5	93–7595	1	Battery Box ASM
6	104–5422–03	1	Bracket–Support, Battery
7	66–8800	1	Relay
8	321–6	4	Screw–HH
9	32128–43	6	Nut–Flange
13	3234–29	8	Screw–HHF
14	3296–42	4	Nut–Lock, NI
16	323–11	3	Screw–HH
17	104–5423–03	1	Tray–Battery
18	3234–11	2	Screw–HHF
19	32128–20	12	Nut–HF
20	104–5420–03	1	Battery Support ASM
21	104–5417–03	1	A/C Bracket ASM
22	98–9305	1	Filter–Water/Fuel
23	281–13	2	Plug–Pipe
24	353–781	2	Fitting–Elbow
33	63–7627	1	Hose–Fuel
34	92–2379	3	Clamp–Hose
35	2412–81	2	Clamp–R

Ref. No.	Part No.	Qty.	Description
36	93–6668	1	Decal–Battery
37	93–7276	1	Decal–Danger
38	94–1445	1	Strap–Battery
39	3256–22	2	Washer–Flat
41	323–12	1	Screw–HH
42	3256–24	2	Washer–Flat



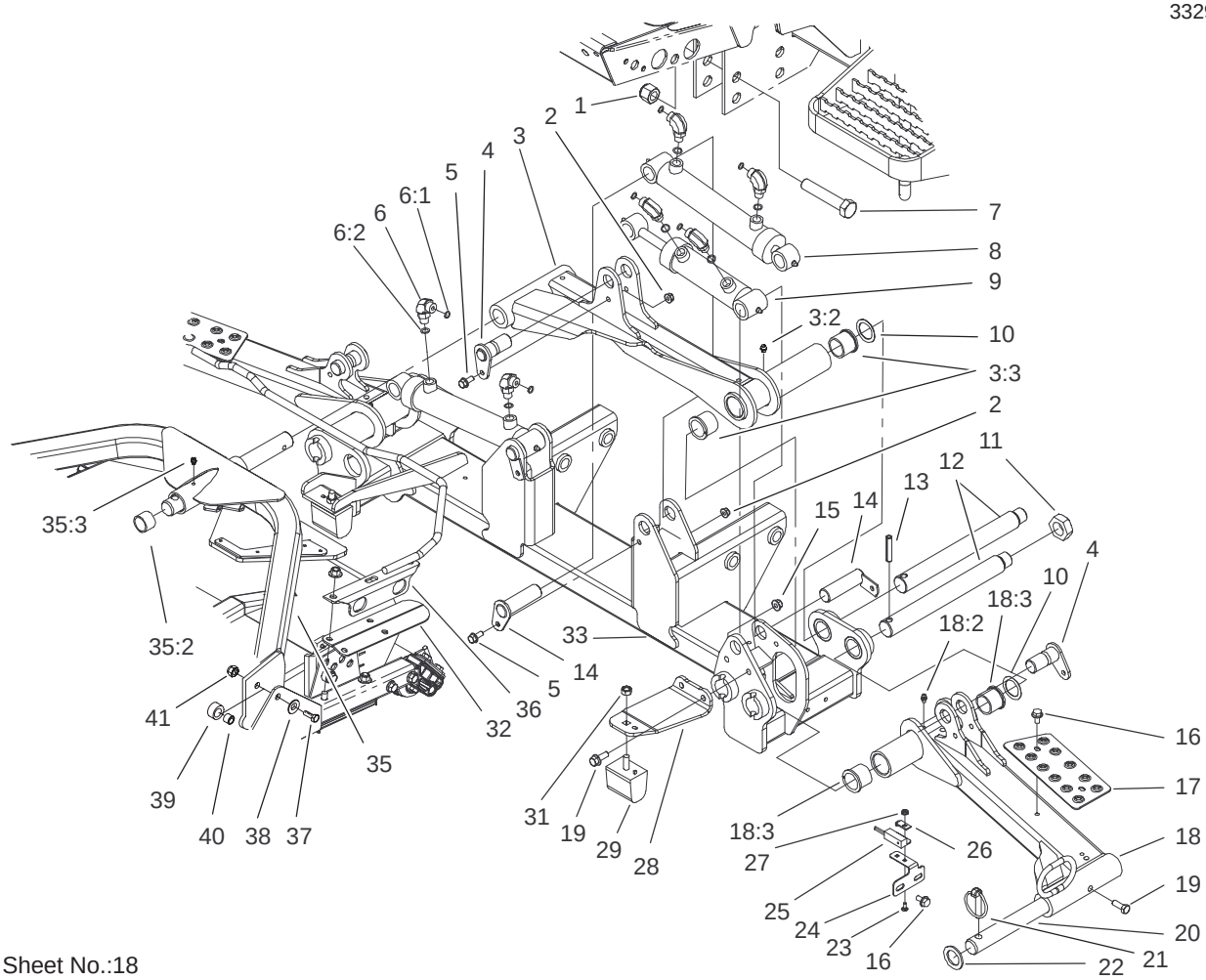
T–3330

Sheet No.:B3

Water and Fuel Filter Assembly No. 98–9305

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

Ref. No.	Part No.	Qty.	Description

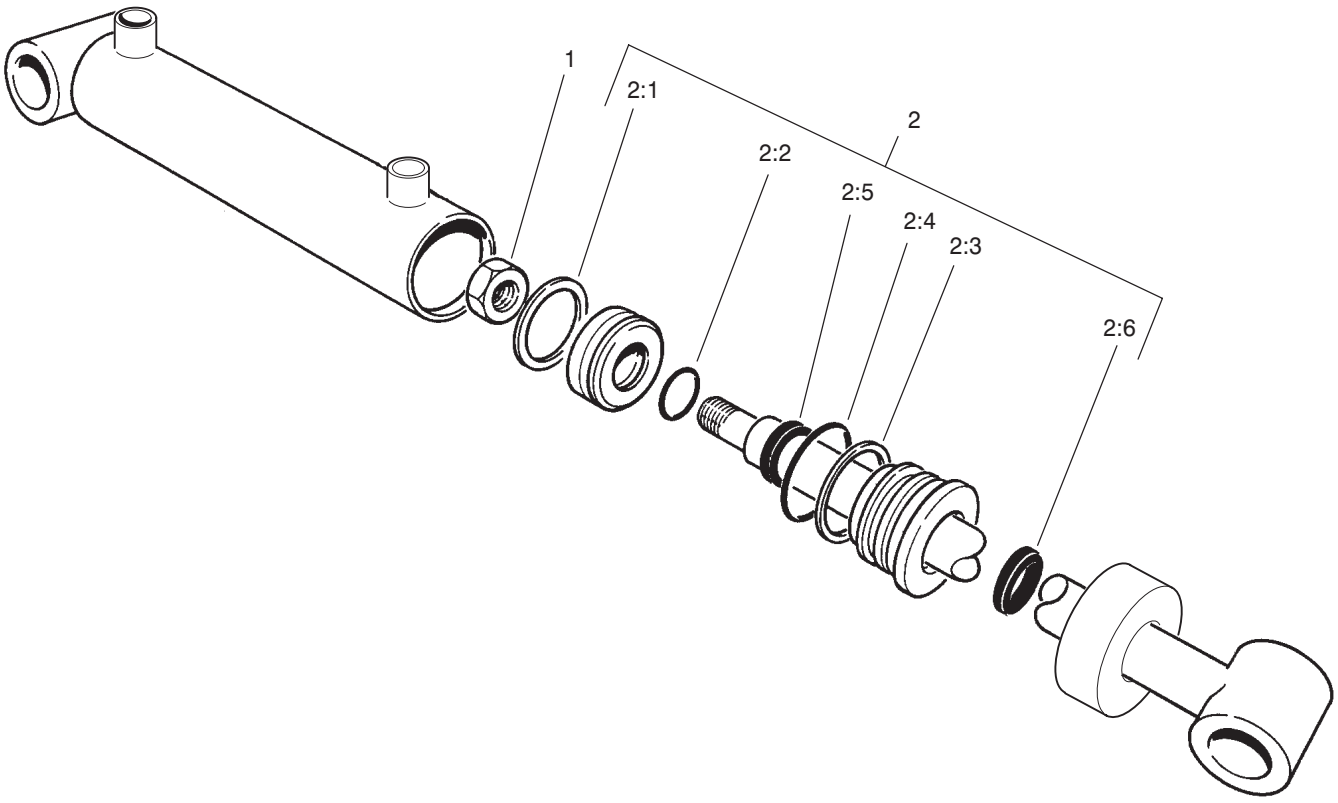


Sheet No.:18

Front Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	3296–51	4	Nut–Lock, NI
2	104–8300	6	Nut–Flange, NI
3	105–9201	1	No. 1 Lift Arm ASM
3:2	302–60	1	Fitting–Grease
3:3	104–0015	2	Bushing–Flange
4	104–5525	3	Cylinder Pin ASM
5	3234–5	6	Screw
6	340–77	6	Fitting–HYD, 90°
6:1	237–22	1	O–Ring
6:2	237–42	1	O–Ring
7	328–7	4	Screw–HH
8	104–5527	2	Cylinder–Lift #4, 5
9	104–5528	1	Cylinder–Lift #1
10	76–2980	3	Washer–Thrust
11	3296–49	3	Nut–Lock, NI
12	95–7158	3	Pin–Pivot
13	32121–110	3	Pin–Roll, Slotted
14	105–9889	3	Cylinder Pin ASM
15	104–8301	6	Nut–Flange, NI
16	32144–14	8	Screw–HWH
17	105–3987–03	2	Plate–Skid
18	105–9205	1	No. 5 Lift Arm ASM
18	105–9204	1	No. 4 Lift Arm ASM
18:2	302–5	1	Fitting–Grease
18:3	104–0015	2	Bushing–Flange
19	323–6	5	Screw–HH

Ref. No.	Part No.	Qty.	Description
20	95–8979	3	Shaft
21	283–71	3	Pin–Lynch
22	3–6781	3	Washer–Thrust
23	104–1450	2	Bolt–CARR
24	104–5585	2	Bracket–Switch
25	100–1270	2	Switch–Proximity
26	100–4872	2	Plate–Switch, Neutral
27	32149–7	2	Nut–Keps
28	104–5689–03	1	Bracket–Support, Bumper
29	87–3470	2	Bumper–Axle, Rear
31	33025–00	2	Nut–Lock
32	105–9831–01	2	Bracket–Bumper, No. 1
33	104–5680–03	1	Front Carrier Frame ASM
35	104–5656	7	Carrier Frame ASM
35:2	95–8795	2	Bushing
35:3	302–5	1	Fitting–Grease
36	106–2653–01	6	Foot Guard ASM
37	3234–18	14	Screw–HHF
38	93–8806	14	Washer–Hardened
39	105–9823	14	Bushing–Carrier
40	105–9822	14	Spacer
41	32128–43	14	Nut–Flange



T–3872

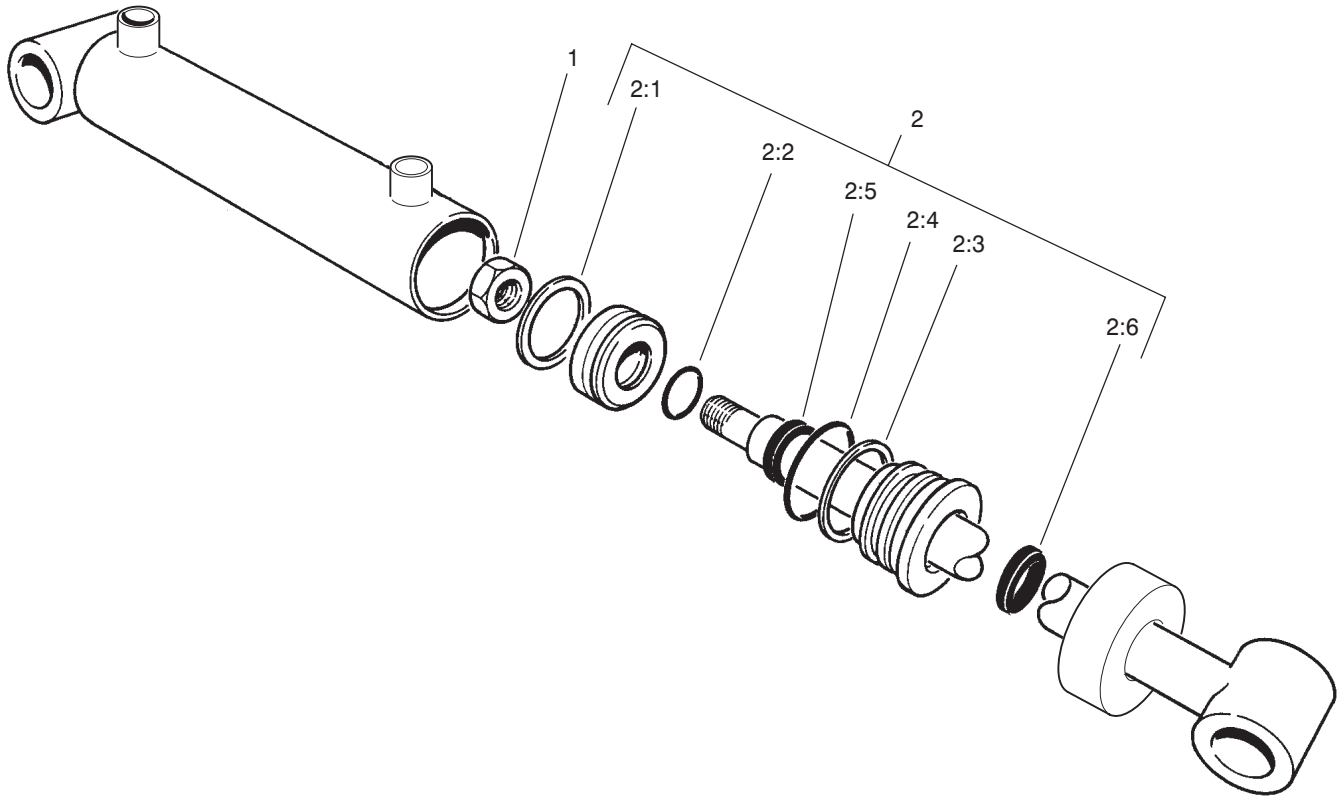
Sheet No.:B4

No. 4 and 5 Lift Cylinder Assembly No. 104–5527

Ref. No.	Part No.	Qty.	Description
1	32152–10	1	Locknut
2	104–5847	1	Seal Kit
☆2:1		2	O–Ring
☆2:2		1	O–Ring
☆2:3		2	O–Ring, Backup
☆2:4		1	T–Seal
☆2:5		2	Seal–Rod
☆2:6		2	Seal–Dust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



T–3872

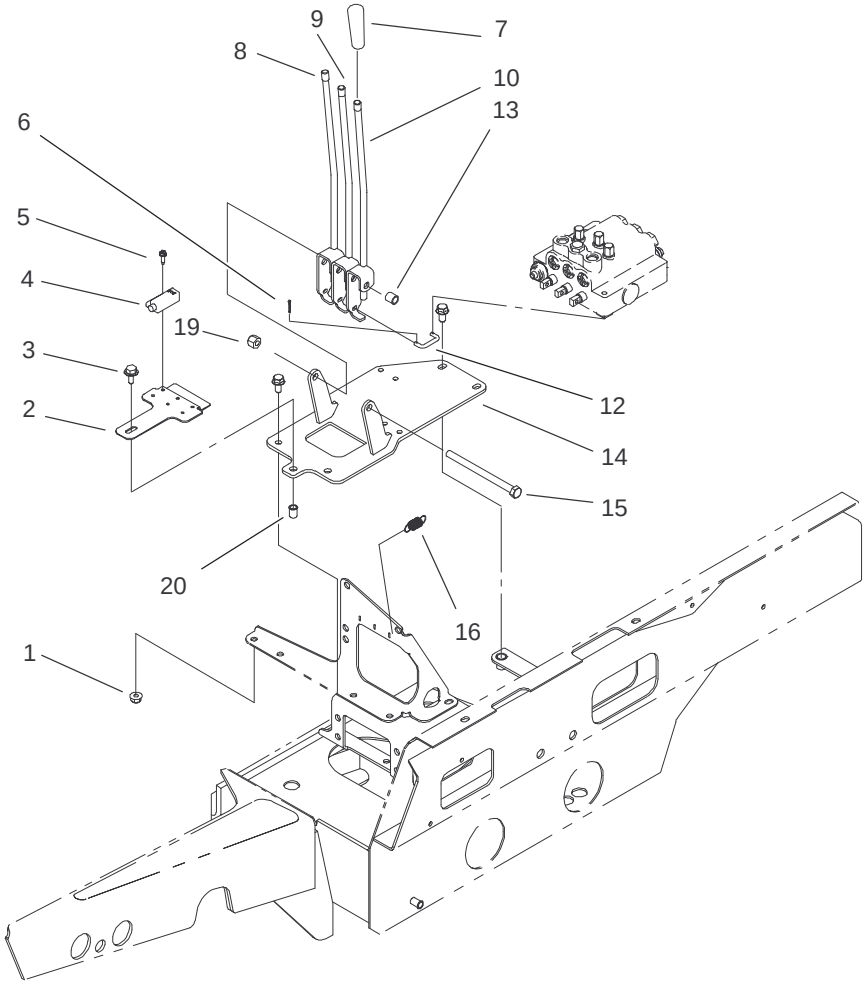
Sheet No.:B5

No. 1 Lift Cylinder Assembly No. 104–5528

Ref. No.	Part No.	Qty.	Description
1	32152–10	1	Locknut
2	104–5847	1	Seal Kit
☆2:1		2	O–Ring
☆2:2		1	O–Ring
☆2:3		2	O–Ring, Backup
☆2:4		1	T–Seal
☆2:5		2	Seal–Rod
☆2:6		2	Seal–Dust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

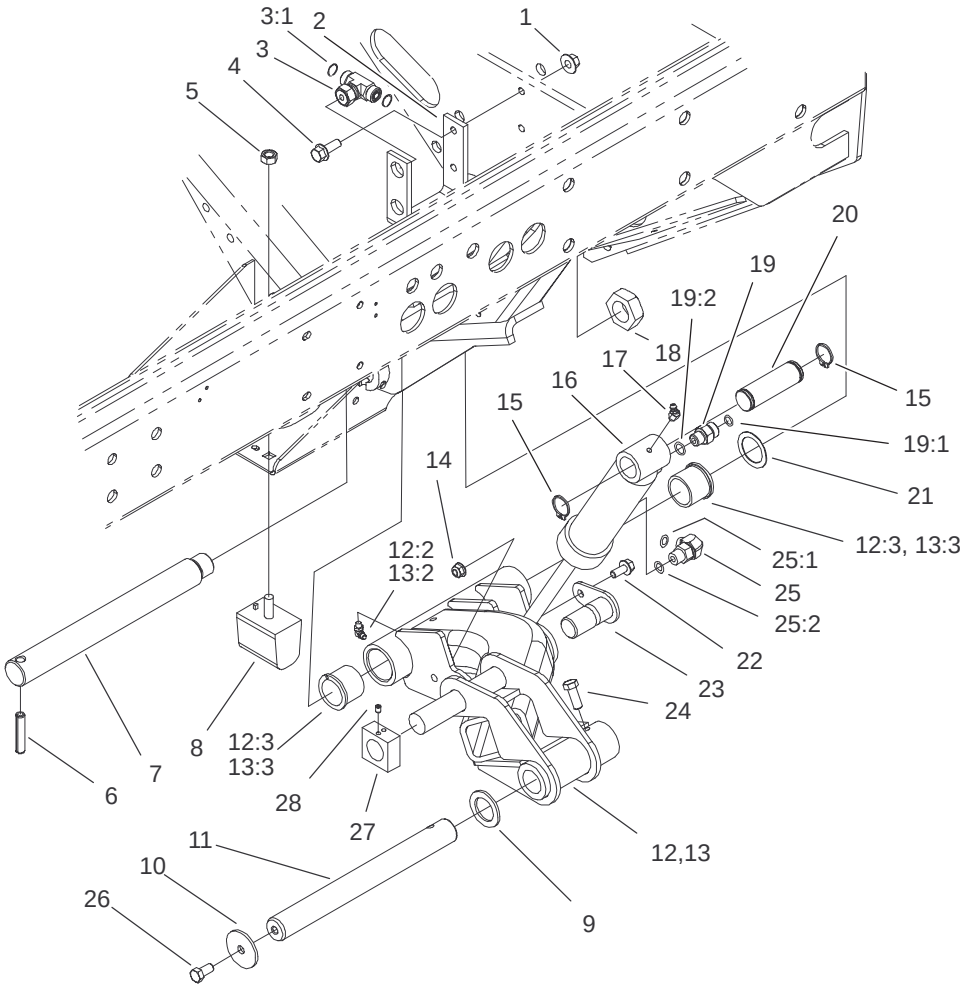


Sheet No.:19

Lift Lever Assembly

Ref. No.	Part No.	Qty.	Description
1	104–8300	2	Nut–Flange, NI
2	104–5530–03	1	Plate–Switch
3	3234–4	1	Screw–HHF
4	105–0023	3	Switch–Proximity
5	32144–19	6	Screw–SHWH
6	3272–1	6	Pin–Cotter
7	233–39	3	Knob–Control
8	104–5617	1	Right Lever ASM
9	104–5616	1	Center Lever ASM
10	104–5618	1	Left Lever ASM
12	69–9140	3	Link–Lever, Valve
13	65–9980	1	Spacer
14	104–5606–03	1	Valve Support ASM
15	323–39	1	Screw–HH
16	105–3938	3	Spring–Extension
19	3296–39	1	Nut–Lock, NI
20	32148–6	1	Insert–Nut

Ref. No.	Part No.	Qty.	Description

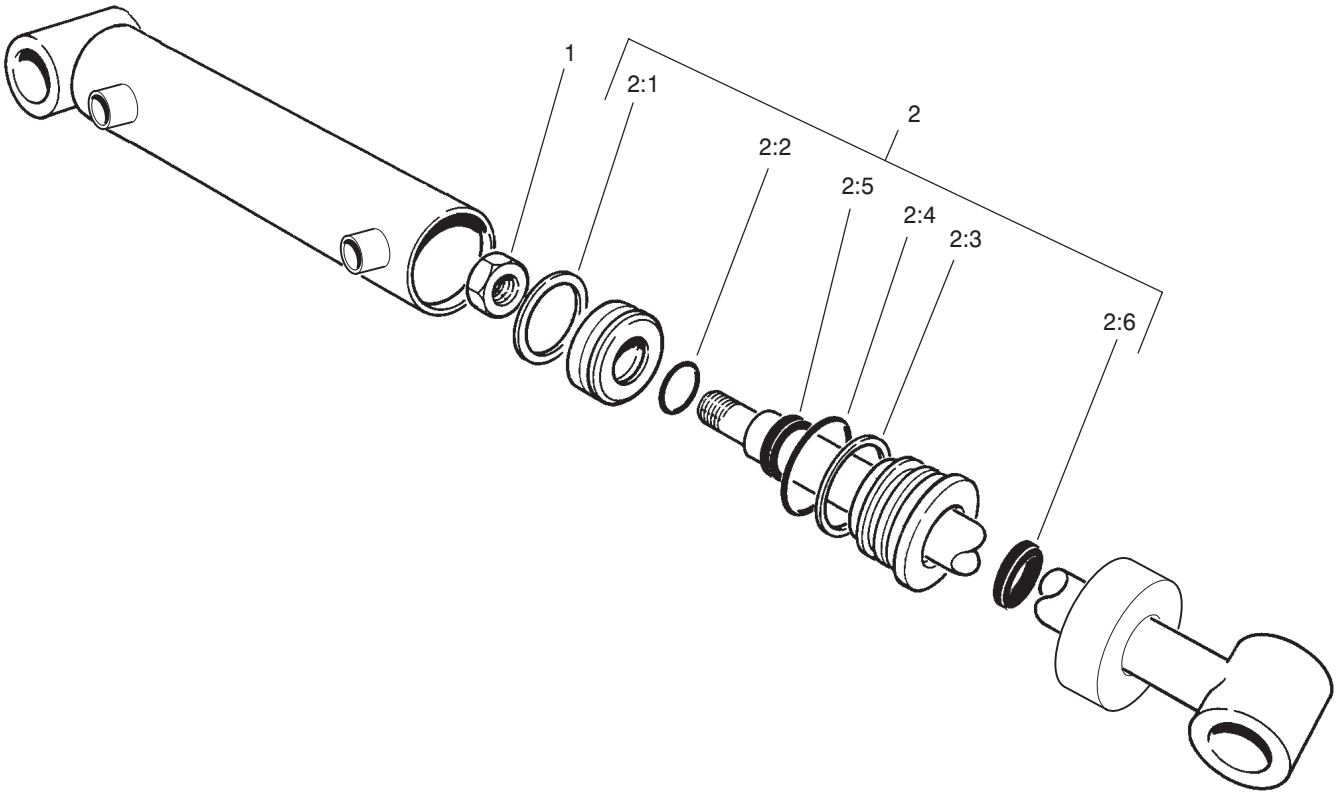


Sheet No.:20

No. 2 and 3 Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	32128–20	2	Nut–HF
2	105–3992–03	1	Bracket–Bulkhead
3	340–166	2	Fitting–Tee, HYD
3:1	237–22	1	O–Ring
4	3234–17	2	Screw–HHF
5	33025–00	2	Nut–Lock
6	32121–110	2	Pin–Roll, Slotted
7	95–7158	2	Pin–Pivot
8	87–3470	2	Bumper–Axle, Rear
9	3–6781	2	Washer–Thrust
10	63–7400	2	Washer–Rebound
11	105–9827	2	Shaft
12	105–9202	1	No. 2 Lift Arm ASM
12:2	302–60	1	Fitting–Grease
12:3	104–0015	2	Bushing–Flange
13	105–9203	1	No. 3 Lift Arm ASM
13:2	302–60	1	Fitting–Grease
13:3	104–0015	2	Bushing–Flange
14	104–8300	2	Nut–Flange, NI
15	32151–36	4	Ring–Retaining
16	104–5526	2	Cylinder–Lift #2, 3
17	302–11	2	Fitting–Lube, 45°
18	3296–49	2	Nut–Lock, NI
19	340–2	2	Fitting–HYD, Straight
19:1	237–22	1	O–Ring
19:2	237–42	1	O–Ring

Ref. No.	Part No.	Qty.	Description
20	92–7548	2	Pin–Cylinder
21	76–2980	2	Washer–Thrust
22	3234–17	2	Screw–HHF
23	104–5525	2	Cylinder Pin ASM
24	323–6	2	Screw–HH
25	340–77	2	Fitting–HYD, 90°
25:1	237–22	1	O–Ring
25:2	237–42	1	O–Ring
26	323–4	2	Screw–HH
27	105–9839	2	Stop–Rotation, No. 2 & 3
28	3245–7	4	Screw–HS



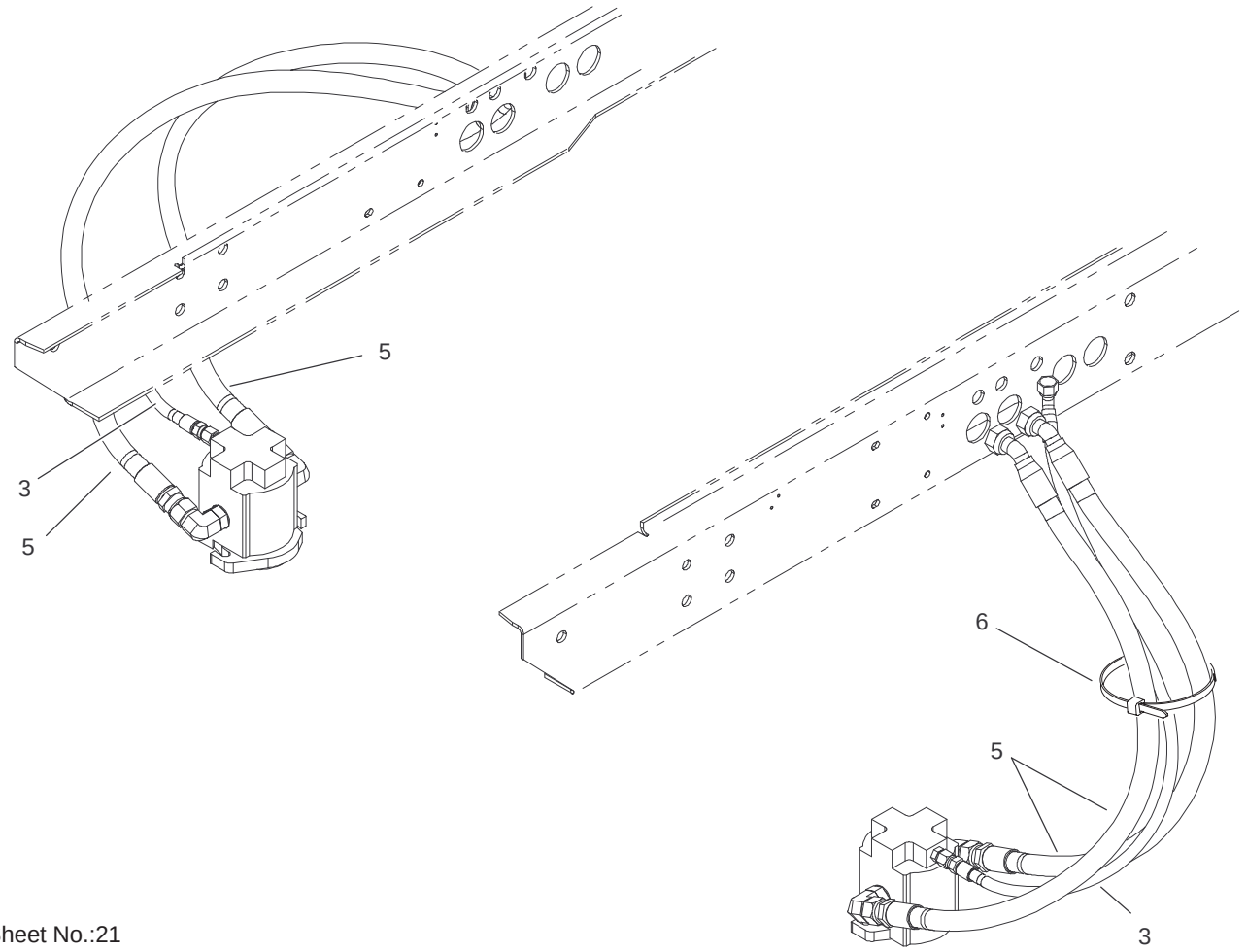
Sheet No.:B8

No. 2 and 3 Lift Cylinder Assembly No. 104–5526

Ref. No.	Part No.	Qty.	Description
1	32152–10	1	Locknut
2	104–5847	1	Seal Kit
☆2:1		2	O–Ring
☆2:2		1	O–Ring
☆2:3		2	O–Ring, Backup
☆2:4		1	T–Seal
☆2:5		2	Seal–Rod
☆2:6		2	Seal–Dust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

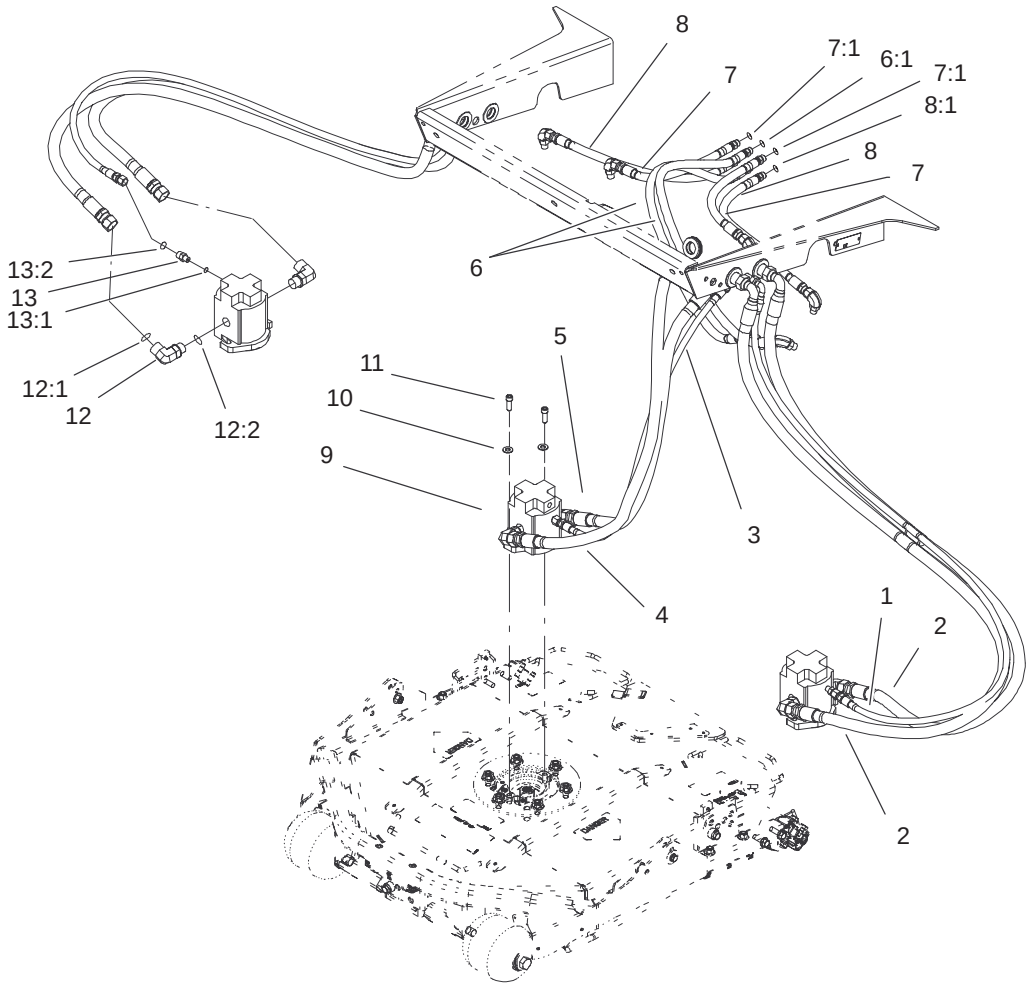


Sheet No.:21

Hose Installation Assembly

Ref. No.	Part No.	Qty.	Description
3	104–5502	2	Hose ASM
5	104–5505	4	Hose ASM
6	3290–379	2	Tie–Cable

Ref. No.	Part No.	Qty.	Description

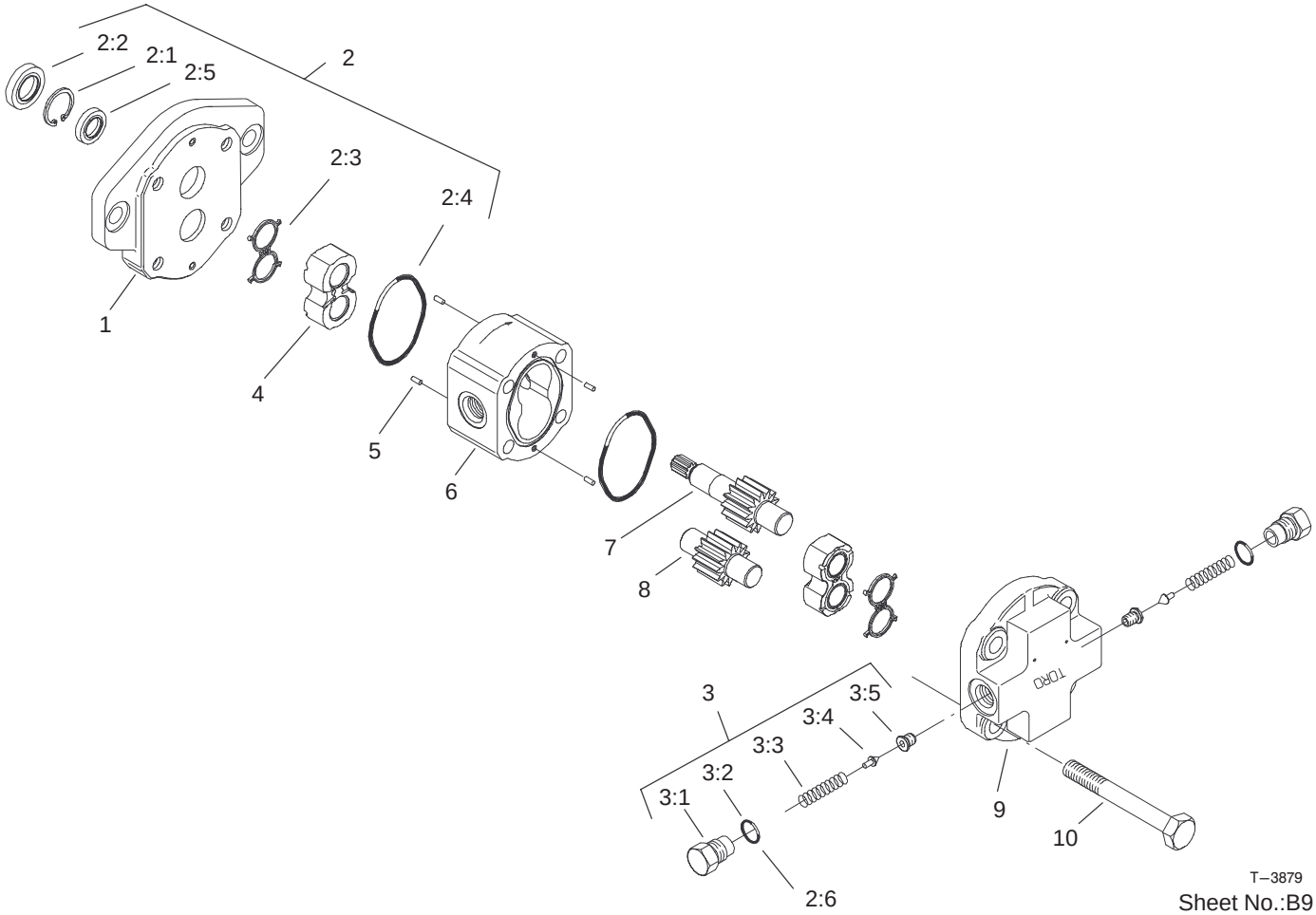


Sheet No.:22

No. 1, 4 and 5 Hose Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5500	2	Hose ASM
2	104–5501	4	Hose ASM
3	104–5502	1	Hose ASM
4	104–5504	1	Hose ASM
5	104–5505	1	Hose ASM
6	104–5511	2	Hose ASM
6:1	237–42	1	O–Ring
7	104–5512	2	Hose ASM
7:1	237–42	1	O–Ring
8	104–5513	2	Hose ASM
8:1	237–42	1	O–Ring
9	105–9820	7	Motor–HYD
10	3256–24	14	Washer–Flat
11	3274–7	14	Screw–HSH
12	340–17	14	Fitting–HYD, 90°
12:1	237–65	1	O–Ring
12:2	237–80	1	O–Ring
13	340–92	7	Fitting–HYD, Straight
13:1	237–78	1	O–Ring
13:2	237–21	1	O–Ring

Ref. No.	Part No.	Qty.	Description



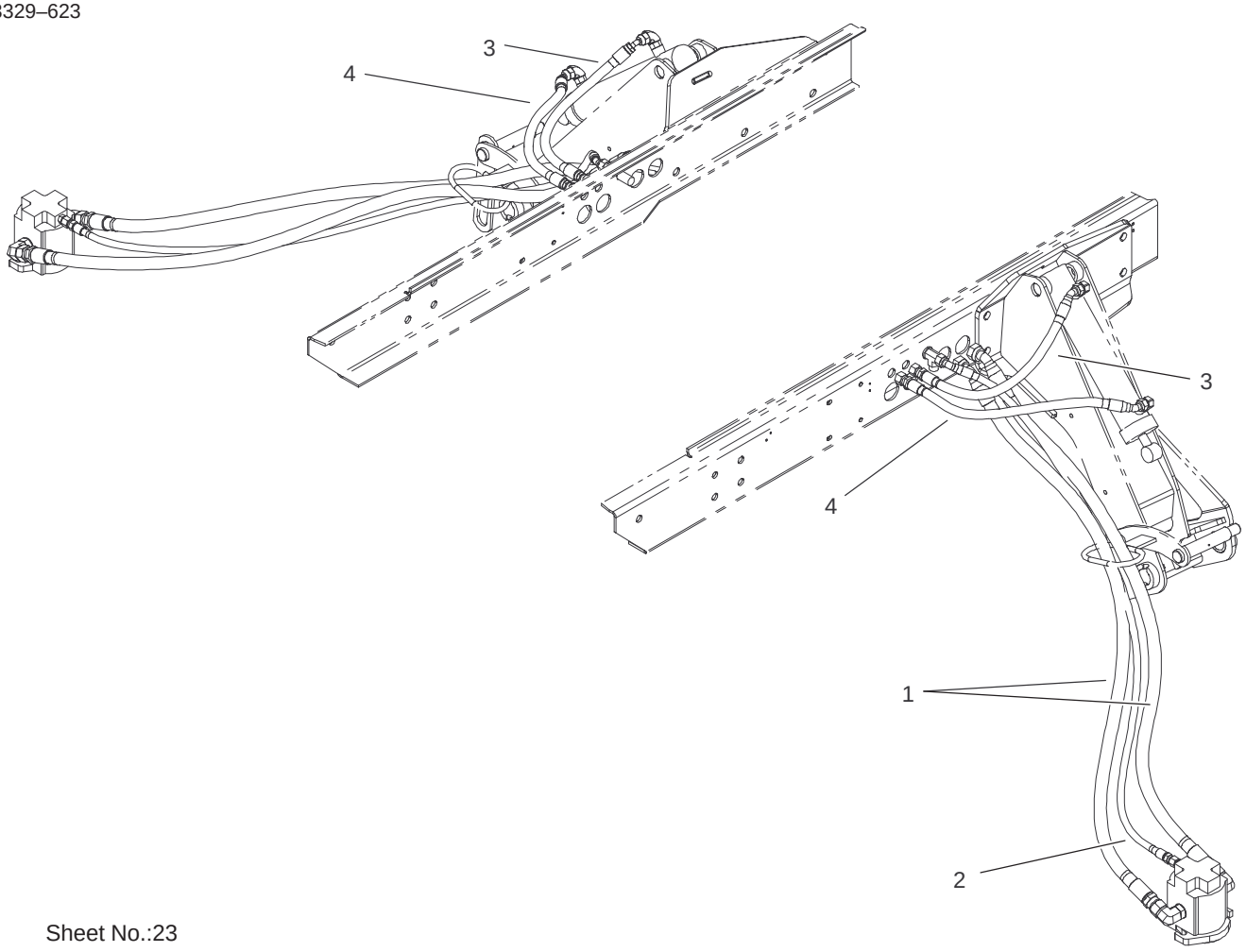
Sheet No.:B9

Hydraulic Motor Assembly No. 105–9820

Ref. No.	Part No.	Qty.	Description
☆1		1	Flange
2	105–9191	1	Seal Kit
☆2:1		1	Ring–Retaining
☆2:2		1	Seal–Shaft
☆2:3		2	Seal
☆2:4		2	O–Ring
☆2:5		1	Seal–Shaft
☆2:6		2	O–Ring
3	105–9192	2	Relief Valve Kit
☆3:1		1	Cap–Valve, Relief
☆3:2		1	O–Ring
☆3:3		1	Spring
☆3:4		1	Poppet
☆3:5		1	Seat–Valve, Relief
☆4		2	Block–Bushing
☆5		4	Pin–Dowel
☆6		1	Housing
☆7		1	Gear–Drive
☆8		1	Gear–Idler
☆9		1	Block–Valve
☆10		4	Bolt

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

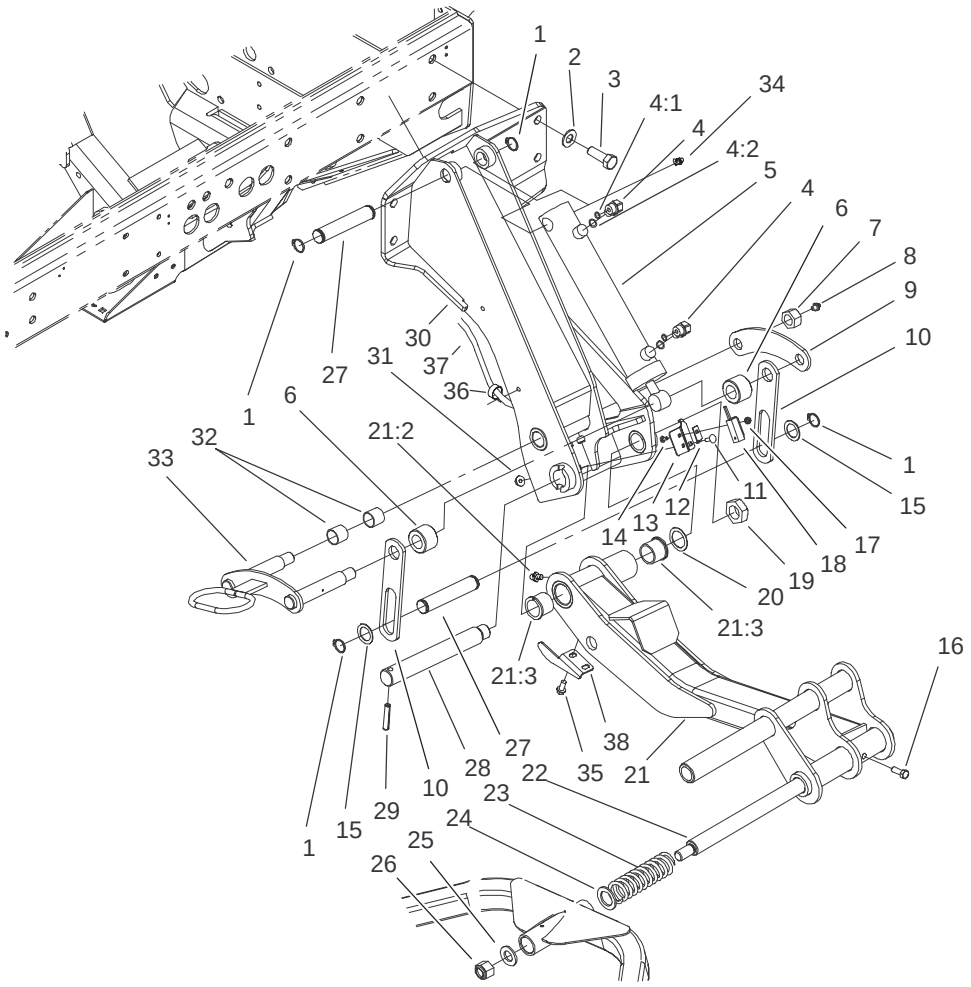


Sheet No.:23

No. 6 and 7 Hose Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5498	4	Hose ASM
2	104–5499	2	Hose ASM
3	105–3918	2	Hose ASM
4	105–3919	2	Hose ASM

Ref. No.	Part No.	Qty.	Description



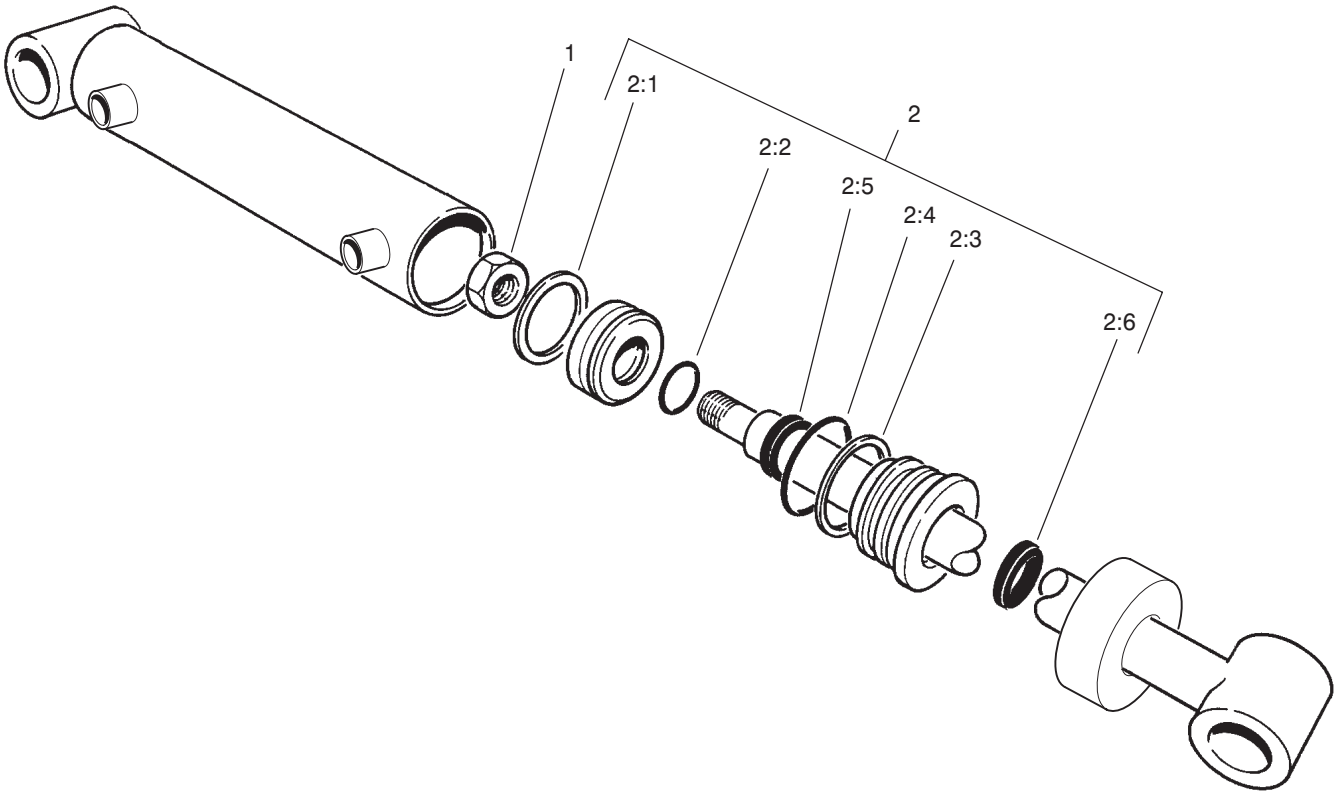
Sheet No.:24

No. 6 and 7 Lift Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	32151–36	8	Ring–Retaining
2	99–7667	12	Washer–Flat
3	327–5	12	Screw–HH
4	340–77	4	Fitting–HYD, 90°
4:1	237–22	1	O–Ring
4:2	237–42	1	O–Ring
5	104–5592	2	Cylinder–Lift #6, 7
6	93–2700	4	Roller–Plastic
7	33029–00	4	Nut–Lock, NI
8	302–2	4	Fitting–Grease
9	98–8821	2	Link–Rear
10	93–2704	4	Link–Left
11	3229–28	2	Screw–CARR
12	100–4872	2	Plate–Switch, Neutral
13	105–3858	2	Bracket–Switch
14	104–1450	2	Bolt–CARR
15	10–8110	8	Washer–Thrust
16	323–6	2	Screw–HH
17	32149–7	4	Nut–Keps
18	100–1270	2	Switch–Proximity
19	3296–49	2	Nut–Lock, NI
20	76–2980	2	Washer–Thrust
21	105–9206	1	No. 6 Lift Arm ASM
21	105–9207	1	No. 7 Lift Arm ASM
21:2	302–5	1	Fitting–Grease
21:3	104–0015	2	Bushing–Flange

Ref. No.	Part No.	Qty.	Description
22	105–3983	2	Pin–Carrier, Pivot
23	105–3999	2	Spring–Compression
24	3–6781	2	Washer–Thrust
25	3256–28	2	Washer–Flat
26	3296–50	2	Nut–Lock, NI
27	93–2699	4	Pin
28	98–8826	2	Pin–Pivot
29	32121–110	2	Pin–Roll, Slotted
30	104–5657–03	1	No. 6 Support Arm ASM
30	104–5658–03	1	No. 7 Support Arm ASM
31	32128–33	2	Nut–HF
32	67–1750	4	Bushing
33	104–5669	2	Link ASM
34	302–5	2	Fitting–Grease
35	32144–14	8	Screw–HWH
36	2412–93	4	Clamp–R
37	105–9188	1	Harness–Wire
38	105–9828	2	Actuator–Switch
*99	3334–945	2	Tie–Cable
*99	3290–378	2	Tie–Cable

* Not illustrated



T–3873

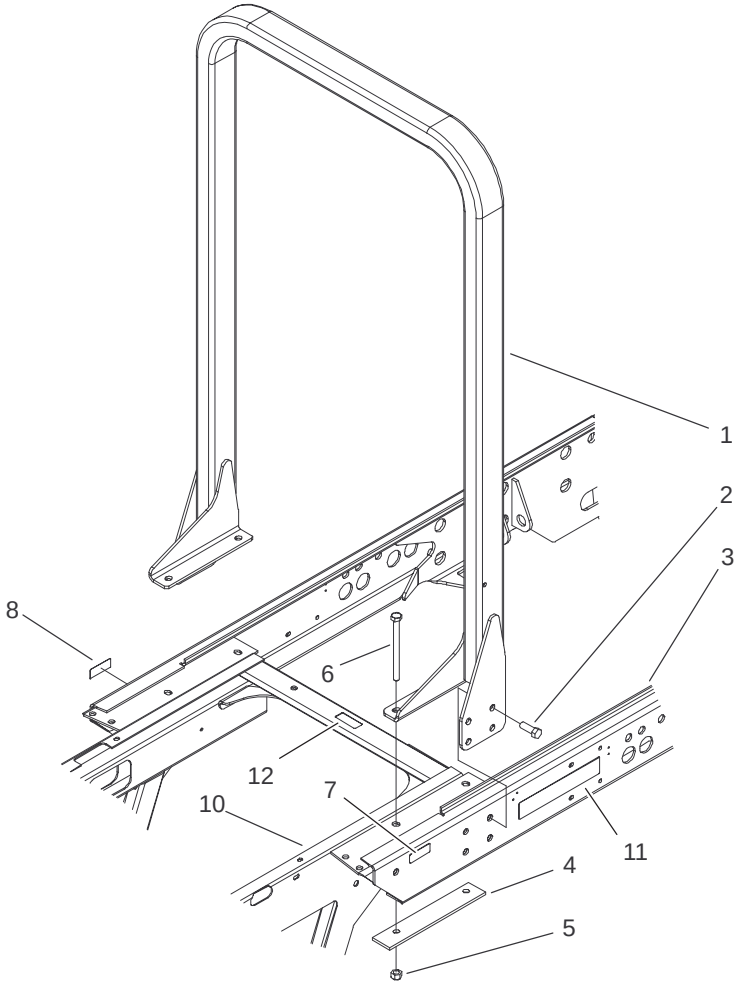
Sheet No.:C1

Hydraulic Cylinder Assembly No. 104–5592

Ref. No.	Part No.	Qty.	Description
1	32152–10	1	Locknut
2	105–9244	1	Kit–Seal
☆2:1		1	T–Seal
☆2:2		1	O–Ring
☆2:3		1	O–Ring
☆2:4		1	Ring–Backup
☆2:5		1	Seal–Rod
☆2:6		1	Seal–Dust

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

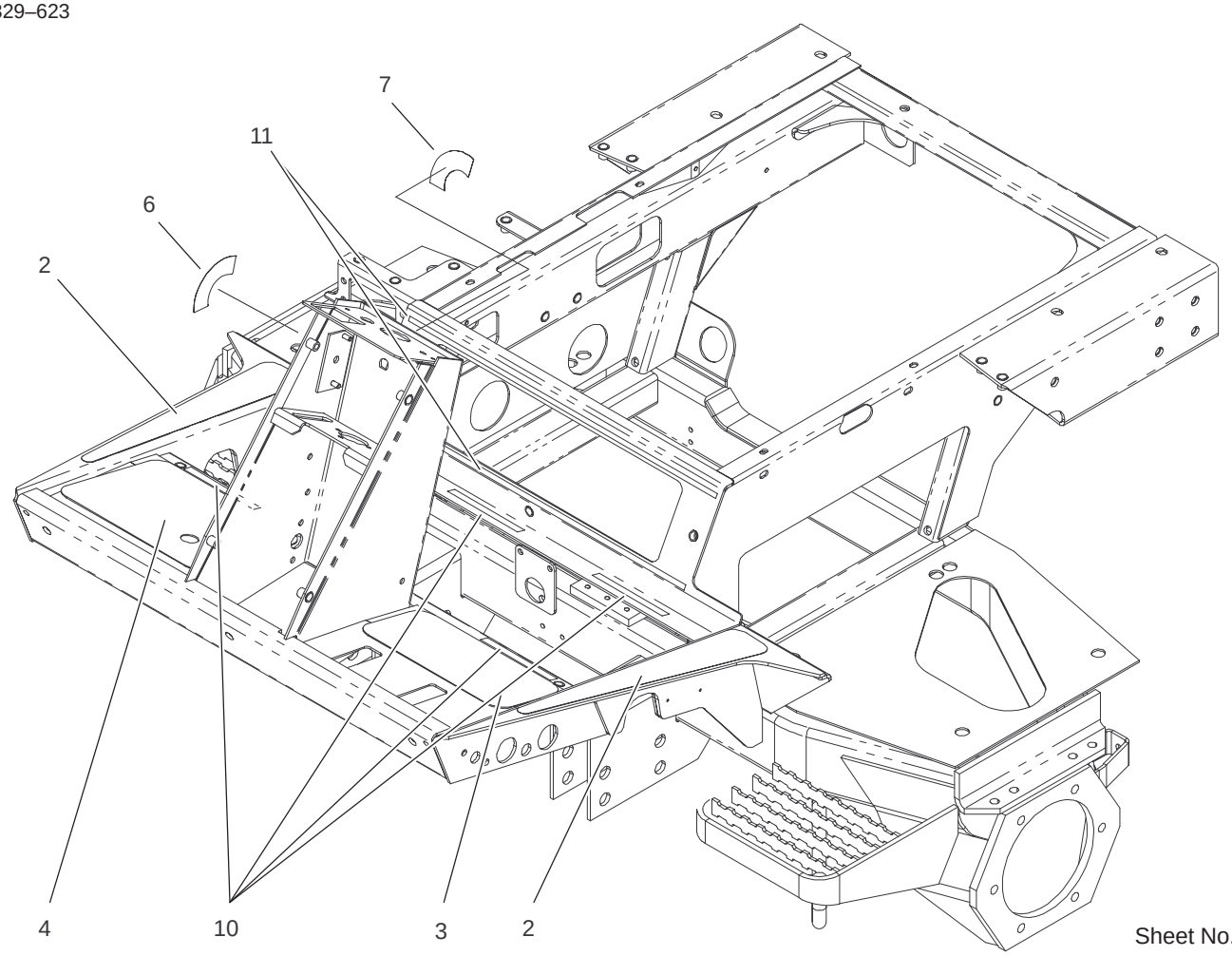


Sheet No.:25

Roll–Over–Protection System and Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5579–03	1	Rops
2	3234–38	10	Screw–HHF
3	104–5410–03	1	Frame–Rear
4	104–5584–03	2	Plate–Reinforcement, Rops
5	32128–49	4	Nut–HHF
6	325–20	4	Screw–HH
7	93–6680	1	Decal–Diesel
8	93–6686	1	Decal–Oil, HYD
10	104–5469	1	Front Frame ASM
11	72–3560	2	Decal
12	100–6574	1	Decal–Warning

Ref. No.	Part No.	Qty.	Description

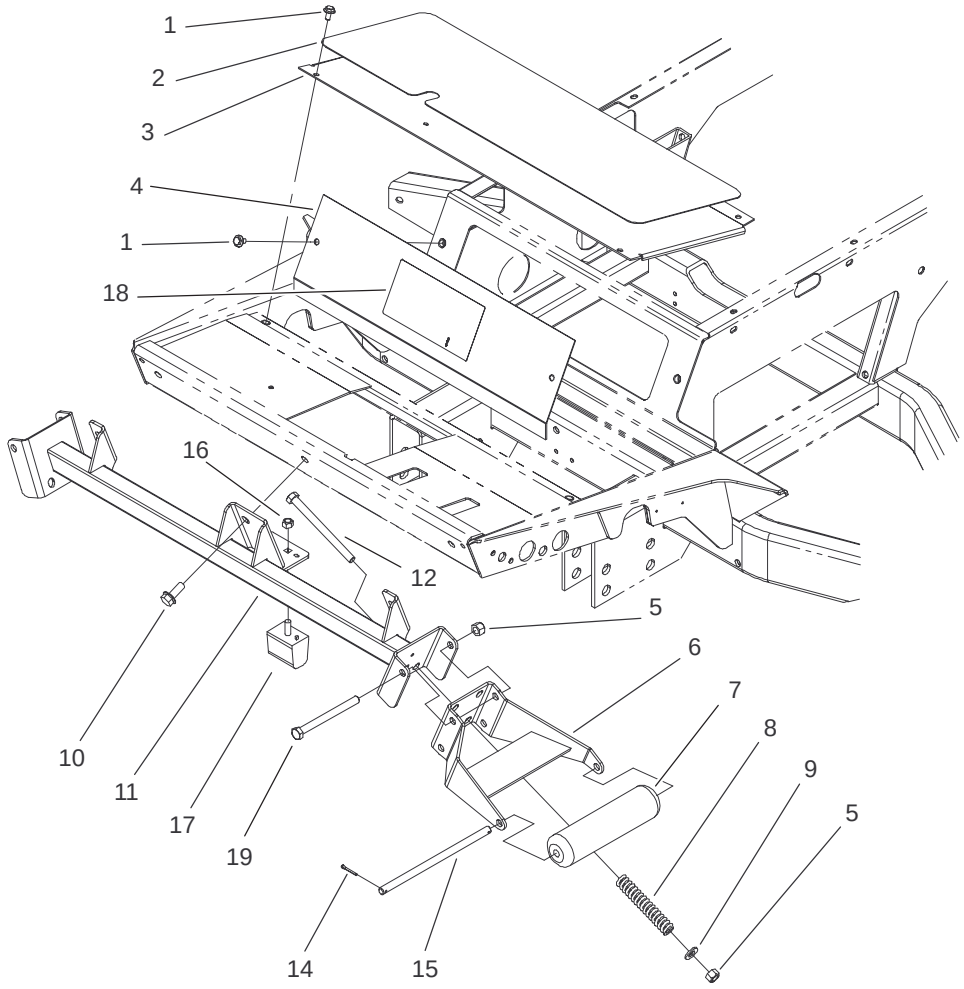


Sheet No.:C2

Front Frame Assembly No. 104–5469

Ref. No.	Part No.	Qty.	Description
2	93–7592	2	Tread–Rest, Foot
3	75–0620	1	Tread–Foot, LH
4	104–5223	1	Tread–Foot, RH
6	93–6699	1	Decal–Fast/Slow
7	105–7506	1	Decal–Switch, Key
10	105–9859	6	Seal–Foam
11	105–9860	2	Seal–Foam

Ref. No.	Part No.	Qty.	Description

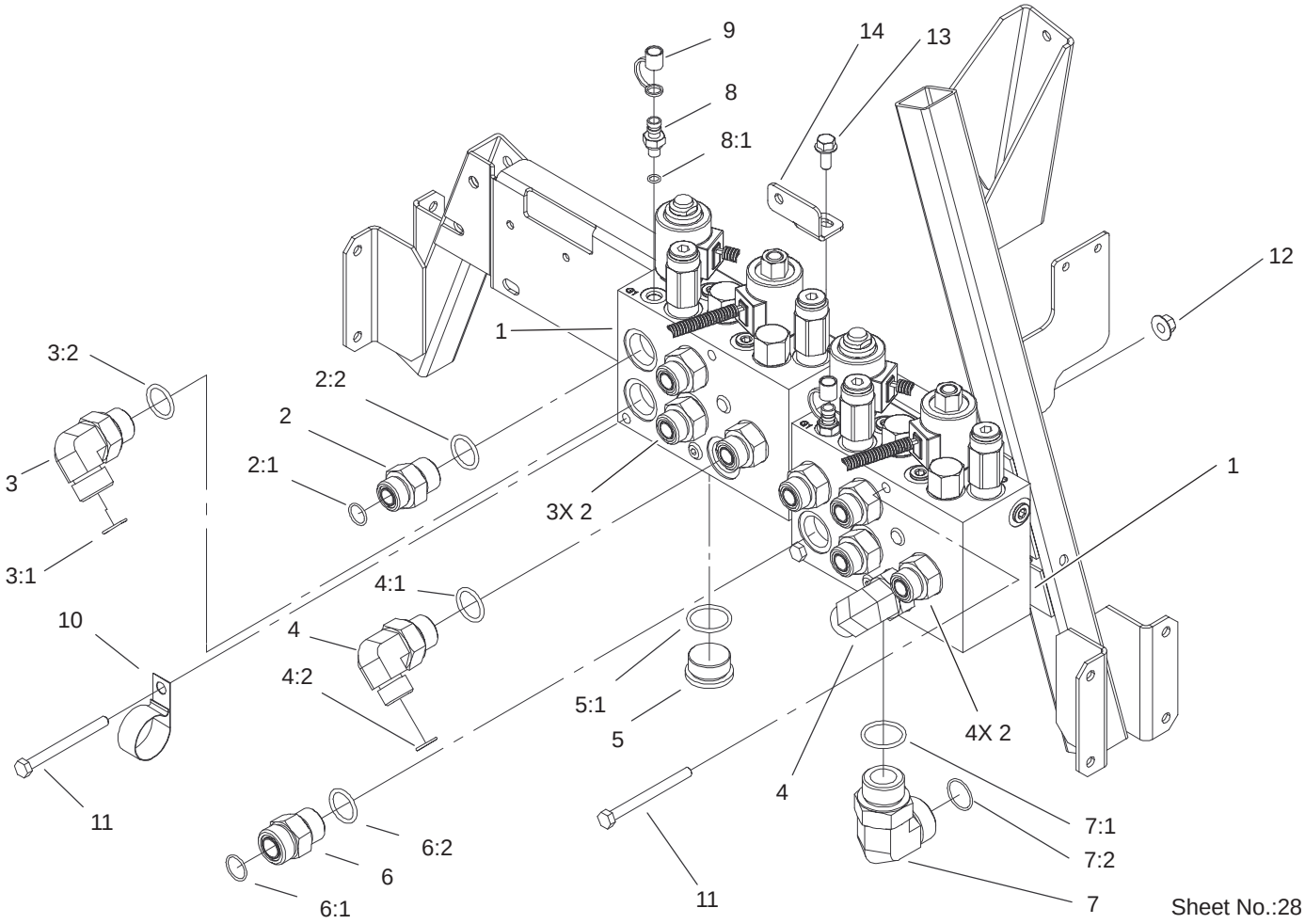


Sheet No.:26

Roller Support and Access Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	3234–7	7	Screw–HHF
2	75–0630	1	Tread–Foot, Center
3	75–1410–01	1	Plate–Access, Floor
4	105–9243–01	1	Plate–Access
5	3296–23	4	Nut–Lock, NI
6	105–3996–01	2	Roller Support ASM
7	105–9816	2	Roller–Plastic
8	105–3970	2	Spring–Compression
9	3256–26	2	Washer–Flat
10	3234–38	3	Screw–HHF
11	104–5539–01	1	Roller Support ASM
12	325–22	2	Screw–HH
14	3272–11	4	Pin–Cotter
15	104–5545	2	Shaft–Roller
16	33025–00	1	Nut–Lock
17	87–3470	1	Bumper–Axle, Rear
18	105–9222	1	Decal–Warning, Ce
18	105–3889	1	Decal–Danger
19	325–20	2	Screw–HH

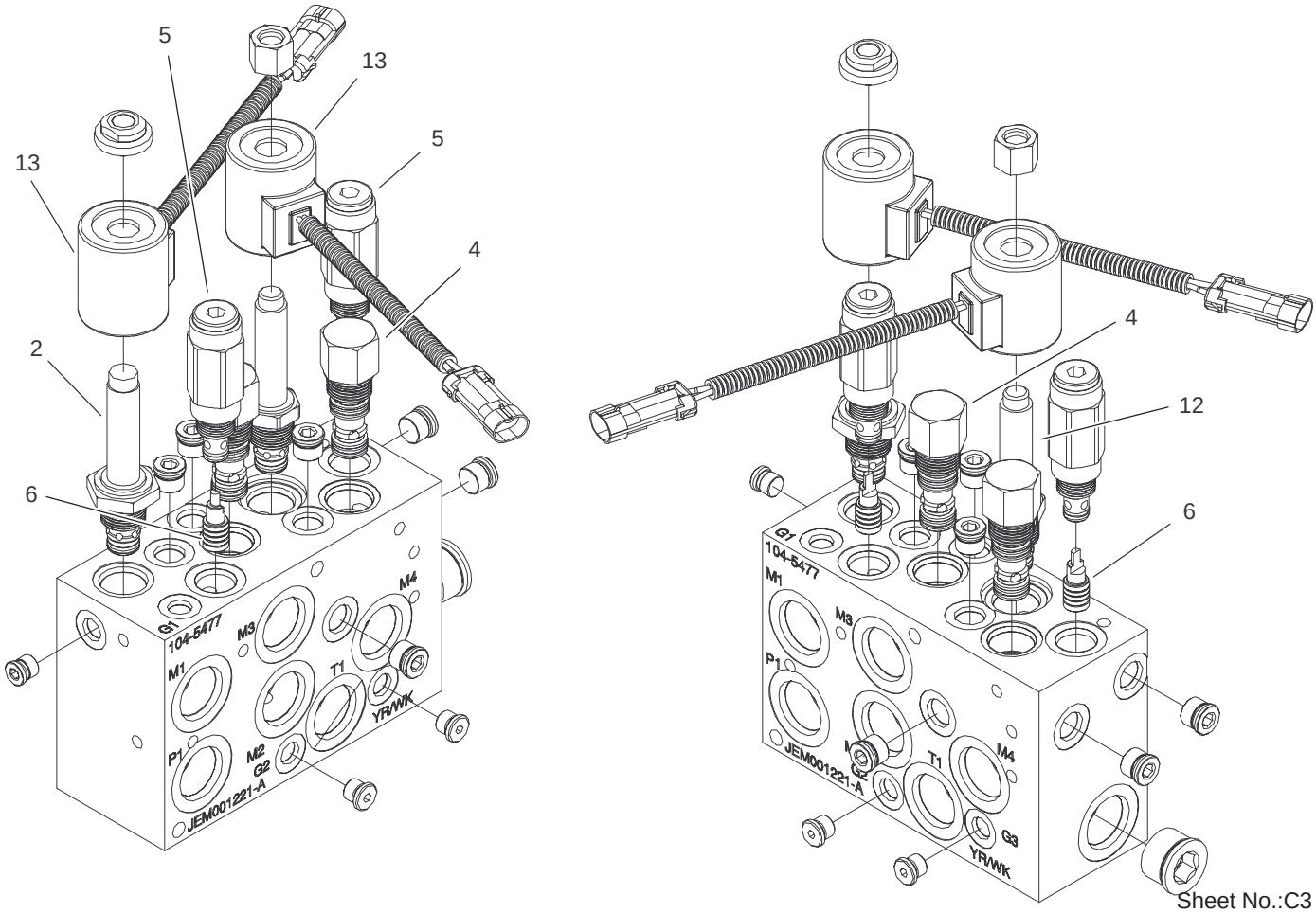
Ref. No.	Part No.	Qty.	Description



Cutting Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5477	2	Manifold ASM
2	340–8	8	Adapter
2:1	237–65	1	O–Ring
2:2	237–81	1	O–Ring
3	340–142	1	Fitting–HYD, 90°
3:1	237–58	1	O–Ring
3:2	237–81	1	O–Ring
4	340–139	2	Fitting–HYD, 90°
4:1	237–81	1	O–Ring
4:2	237–65	1	O–Ring
5	105–3921	1	Fitting–Plug
5:1	237–146	1	O–Ring
6	340–9	1	Fitting–HYD, Straight
6:1	237–58	1	O–Ring
6:2	237–81	1	O–Ring
7	340–129	1	Fitting–HYD, 90°
7:1	237–146	1	O–Ring
7:2	340–65	1	O–Ring
8	354–77	2	Fitting–Quick
8:1	237–78	1	O–Ring
9	354–79	2	Cap–Dust
10	2412–150	1	J–Clip
11	322–22	4	Screw–HH
12	32128–44	5	Nut
13	3234–5	1	Screw
14	104–5487	1	Bracket–L

Ref. No.	Part No.	Qty.	Description



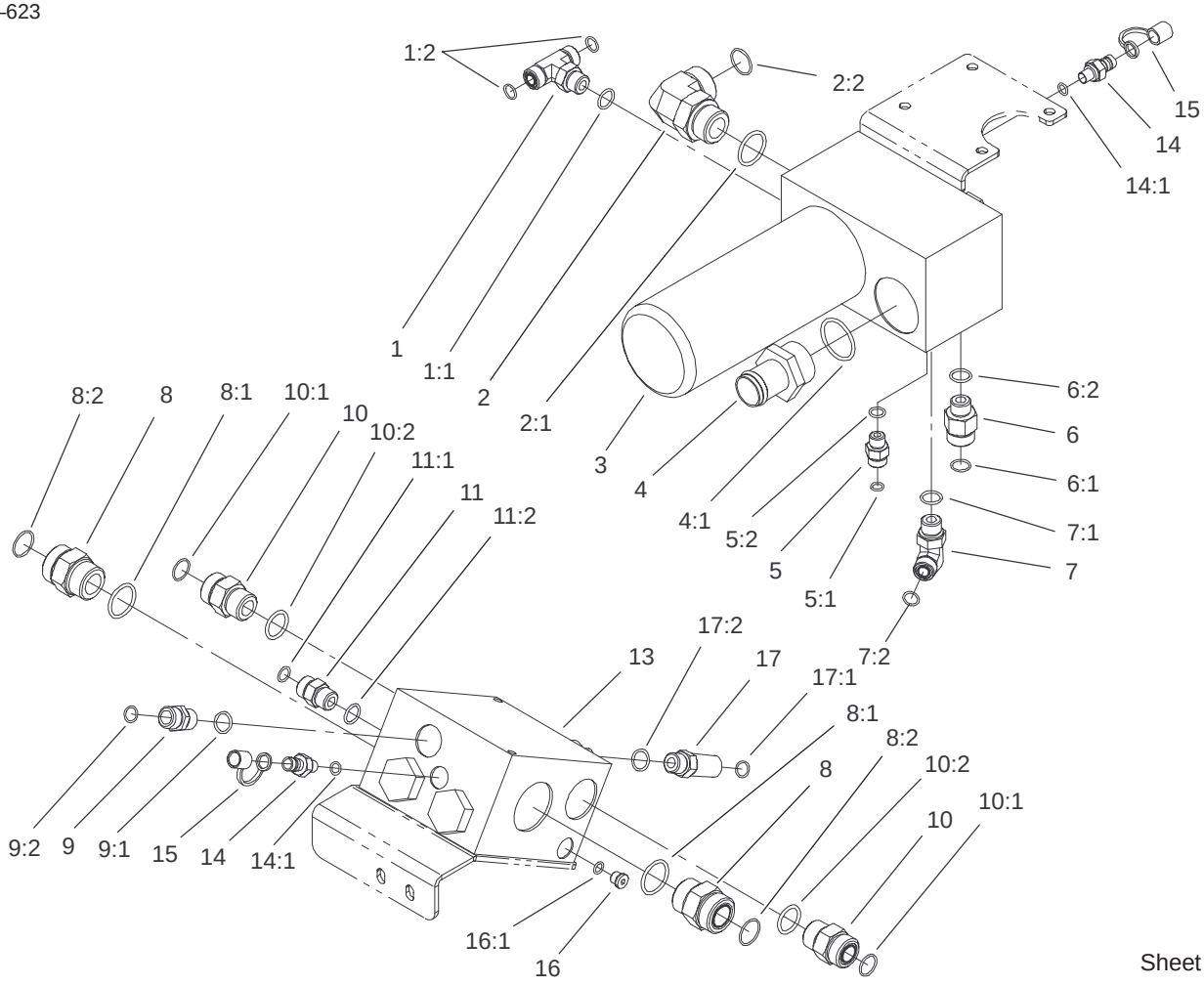
Sheet No.:C3

Manifold Assembly No. 104–5477

Ref. No.	Part No.	Qty.	Description
2	105–9150	1	Relief–Propotional
*2:1	105–9151	1	Seal Kit
☆2:1:1		1	O–Ring
☆2:1:2		1	Ring, Back–Up
4	105–9153	2	Element–Logic, Vented
*4:1	105–9154	1	Seal Kit
☆4:1:1		1	O–Ring
☆4:1:2		1	Ring, Back–Up
☆4:1:3		1	O–Ring
☆4:1:4		1	Ring, Back–Up
5	105–9155	2	Valve–Relief
*5:1	105–9156	1	Seal Kit
☆5:1:1		1	O–Ring
☆5:1:2		1	Ring, Back–Up
6	105–9157	2	Piston–Pilot
12	105–9158	1	N.o. Solenoid Valve
*12:1	105–9159	1	Kit–Seal
☆12:1:1		1	O–Ring
☆12:1:2		1	Ring, Back–Up
13	105–9152	2	Coil Assembly

Ref. No.	Part No.	Qty.	Description

* Not illustrated
☆ Not serviced separately

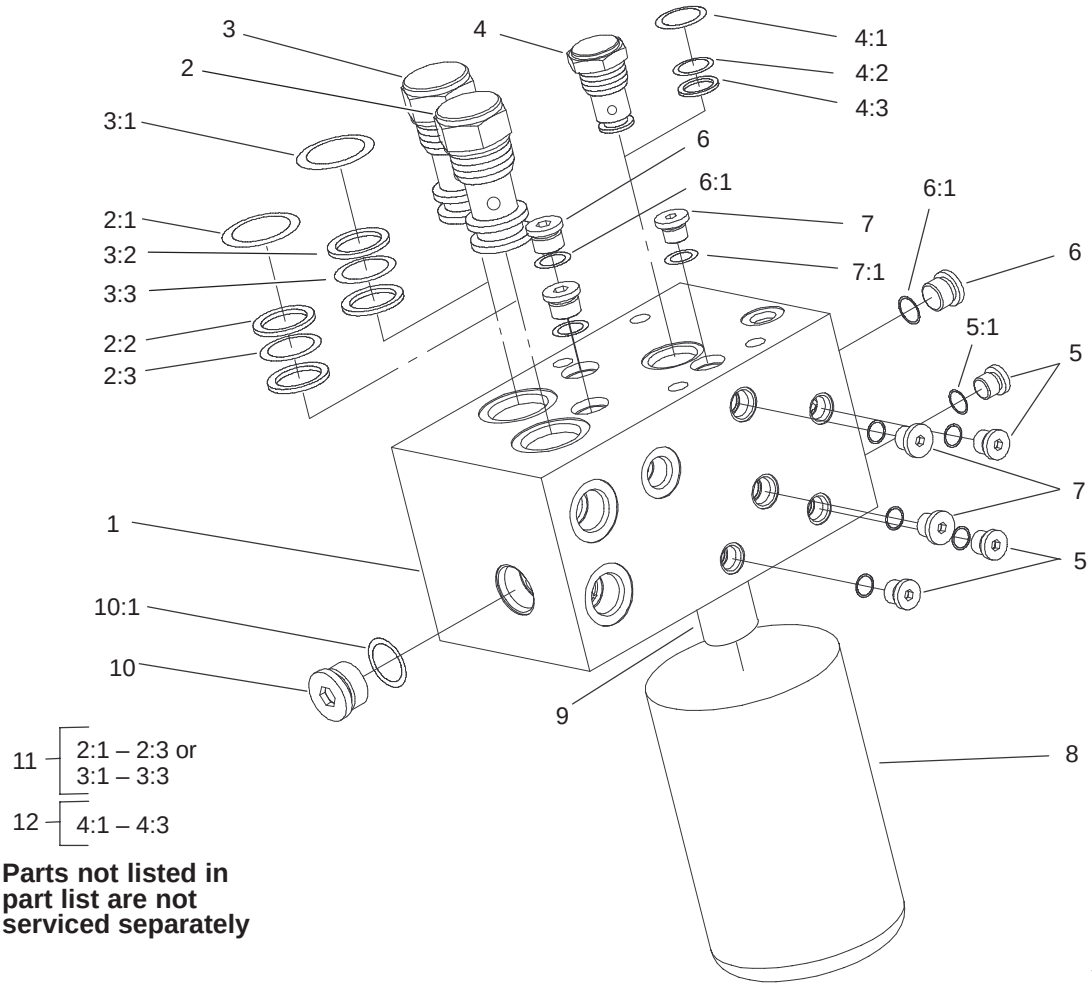


Sheet No.:29

4 Wheel Drive Manifold and Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	340–157	1	Fitting–HYD
1:1	237–79	1	O–Ring
1:2	237–30	2	O–Ring
2	340–129	1	Fitting–HYD, 90°
2:1	237–146	1	O–Ring
2:2	340–65	1	O–Ring
3	100–5558	1	Manifold–Filter
4	104–5480	1	Fitting–Hose, Straight Barb
4:1	237–123	1	O–Ring
5	340–2	1	Fitting–HYD, Straight
5:1	237–22	1	O–Ring
5:2	237–42	1	O–Ring
6	340–155	1	Fitting–HYD, Straight
6:1	237–79	1	O–Ring
6:2	237–151	1	O–Ring
7	340–98	1	Fitting–HYD, 90°
7:1	237–79	1	O–Ring
7:2	237–30	1	O–Ring
8	104–3797	2	Fitting–HYD, Straight
8:1	237–146	1	O–Ring
8:2	340–65	1	O–Ring
9	100–4890	1	Fitting–Check
9:1	237–79	1	O–Ring
9:2	237–30	1	O–Ring
10	340–9	2	Fitting–HYD, Straight

Ref. No.	Part No.	Qty.	Description
10:1	237–58	1	O–Ring
10:2	237–81	1	O–Ring
11	340–4	1	Fitting–HYD, Sraight
11:1	237–30	1	O–Ring
11:2	237–79	1	O–Ring
13	105–9875	1	4wd Manifold ASM
14	354–77	2	Fitting–Quick
14:1	237–78	1	O–Ring
15	354–79	2	Cap–Dust
16	353–990	1	Plug
16:1	237–78	1	O–Ring
17	94–2628	1	Adapter–HYD
17:1	237–79	1	O–Ring
17:2	237–30	1	O–Ring



Parts not listed in part list are not serviced separately

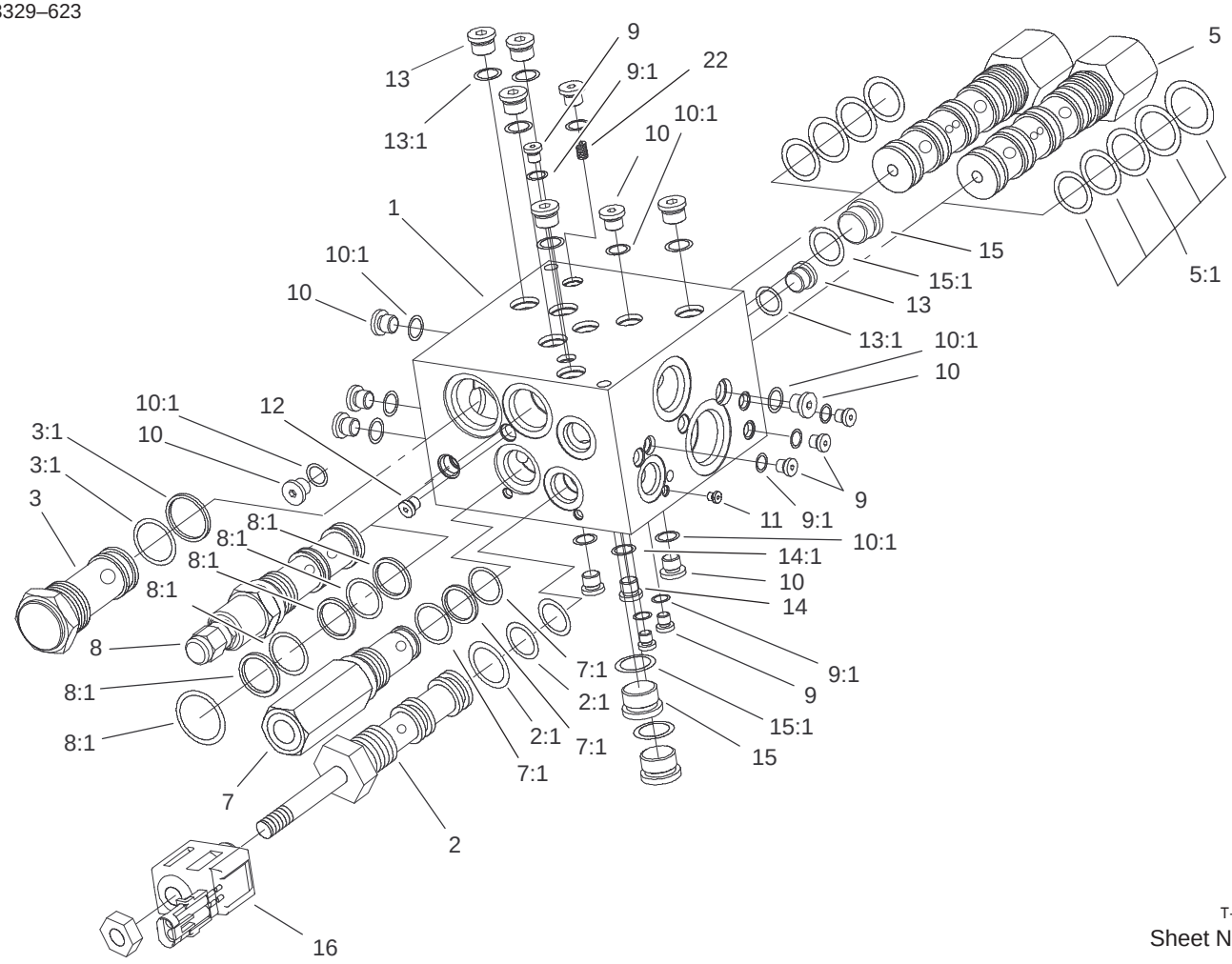
Sheet No.:C4

Filter Manifold Assembly No. 100–5558

Ref. No.	Part No.	Qty.	Description
☆1		1	Manifold
2	104–4292	1	Valve–Check
3	104–4293	1	Valve–Check
4	104–4294	1	Valve–Check
5	353–990	4	Plug
5:1	237–78	1	O–Ring
6	353–989	3	Plug–Hex, Hollow
6:1	237–42	1	O–Ring
7	354–137	3	Plug
7:1	237–86	1	O–Ring
8	94–2621	1	Element–Filter
☆9		1	Nipple–Filter
10	354–70	1	Plug–Hex, Hollow
10:1	237–80	1	O–Ring
11	99–5504	2	Seal Kit
12	99–5503	1	Seal Kit

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



T–3883

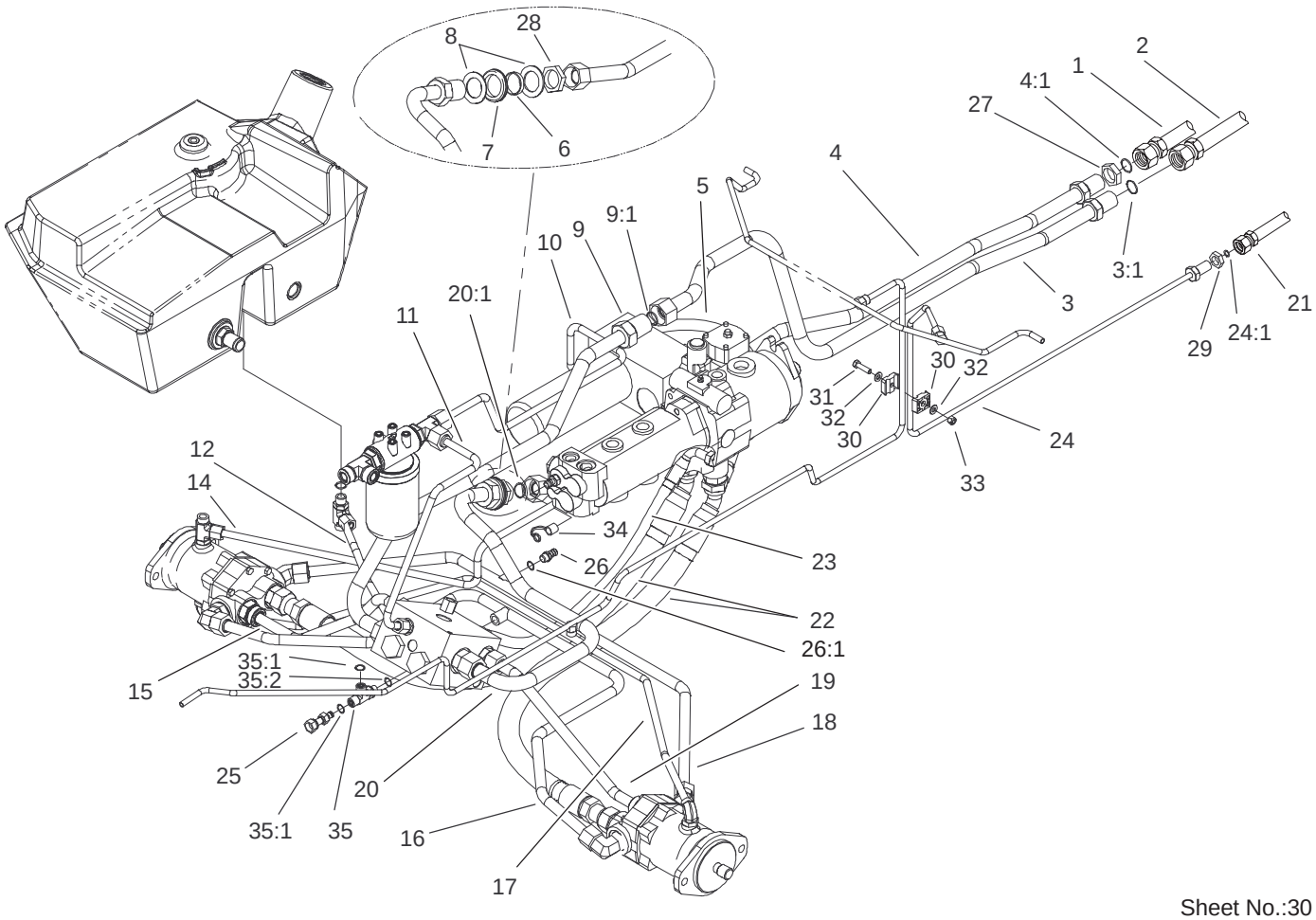
Sheet No.:C5

4 Wheel Drive Manifold Assembly No. 105–9875

Ref. No.	Part No.	Qty.	Description
☆1		1	Manifold
2	104–8603	1	Valve–Solenoid
2:1	99–5505	1	Seal Kit
3	104–8604	1	Valve–Check
3:1	99–5506	1	Seal Kit
5	104–8605	2	Valve–Control
5:1	99–5507	1	Seal Kit
7	105–9847	1	Valve–Relief
7:1	99–5503	1	Seal Kit
8	105–9848	1	Valve–Reducing
8:1	104–4266	1	Seal Kit
9	353–991	7	Plug–Hex, Hollow
9:1	237–156	1	O–Ring
10	354–137	8	Plug
10:1	237–86	1	O–Ring
☆11		5	Plug–Expander
☆12		5	Plug–Expander
13	353–989	6	Plug–Hex, Hollow
13:1	237–42	1	O–Ring
14	353–990	3	Plug
14:1	237–78	1	O–Ring
15	354–70	3	Plug–Hex, Hollow
15:1	237–80	1	O–Ring
16	104–4264	1	Coil–Solenoid
22	106–6766	1	Plug–Orifice

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

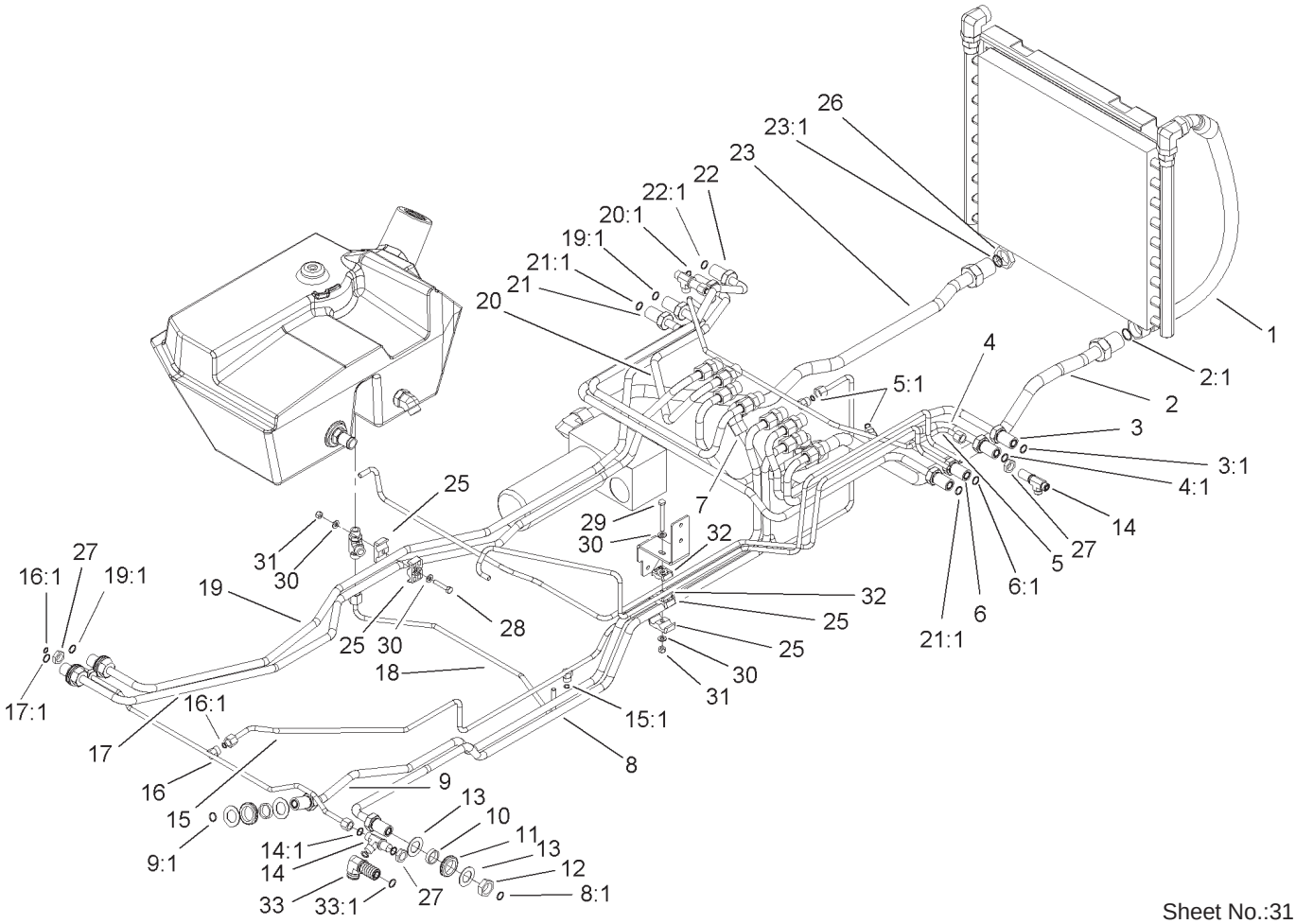


Sheet No.:30

Traction Hydraulic Line Assembly

Ref. No.	Part No.	Qty.	Description
1	92–7536	1	Hose ASM
2	105–9818	1	Hose ASM
3	104–5476	1	Tube ASM
3:1	340–65	1	O–Ring
4	104–5478	1	Tube ASM
4:1	340–65	1	O–Ring
5	105–3864	1	Hose ASM
6	69–8950	2	Spacer
7	240–2	2	Grommet–Rubber
8	69–8920	4	Washer
9	104–5472	1	Tube ASM
9:1	340–65	1	O–Ring
10	105–3861	1	Tube ASM
11	105–3915	1	Tube ASM
12	104–5489	1	Tube ASM
14	105–3866	1	Tube ASM
15	104–5470	1	Tube ASM
16	105–3984	1	Tube ASM
17	105–3865	1	Tube ASM
18	104–5462	1	Tube ASM
19	104–5468	1	Tube ASM
20	104–5473	1	Tube ASM
20:1	340–65	1	O–Ring
21	92–7534	1	Hose ASM
22	104–5464	2	Hose ASM
23	105–3985	1	Hose ASM

Ref. No.	Part No.	Qty.	Description
24	105–9863	1	Tube–HYD
24:1	237–22	1	O–Ring
25	86–5480	1	Nipple–Test
26	59–7410	1	Tip–Nipple, Diagonal
26:1	237–42	1	O–Ring
27	340–126	2	Nut–Bulkhead
28	340–128	2	Nut–Bulkhead
29	340–70	1	Nut–Lock
30	56–7973	2	Clamp–Tube
31	322–6	1	Screw–HH
32	3256–23	2	Washer–Flat
33	3296–29	1	Nut–Lock, NI
34	354–79	2	Cap–Dust
35	340–86	1	Fitting–HYD, Tee
35:1	237–22	2	O–Ring
35:2	237–42	1	O–Ring

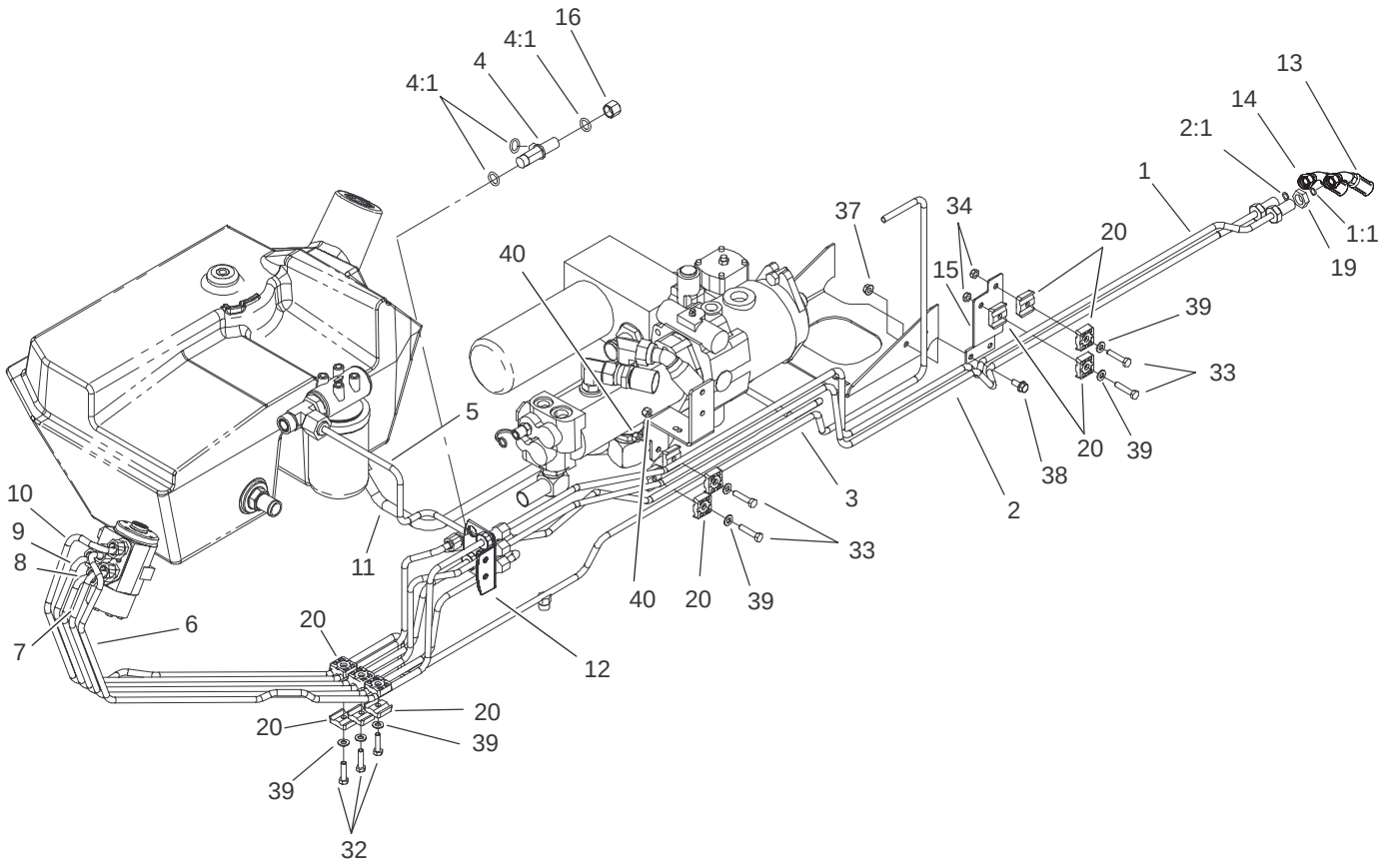


Sheet No.:31

Hydraulic Mow Line Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5483	2	Hose ASM
2	104–5488	1	Tube ASM
2:1	340–65	1	O–Ring
3	105–3892	1	Tube ASM
3:1	237–65	1	O–Ring
4	105–3891	1	Tube ASM
4:1	237–65	1	O–Ring
5	105–9862	1	Tube ASM
5:1	237–22	2	O–Ring
6	105–3895	1	Tube ASM
6:1	237–65	1	O–Ring
7	105–3885	1	Tube ASM
8	105–3893	1	Tube ASM
8:1	237–65	1	O–Ring
9	105–3894	1	Tube ASM
9:1	237–65	1	O–Ring
10	69–9000	13	Spacer
11	240–3	13	Grommet–Rubber
12	340–74	13	Locknut–Bulkhead
13	69–9010	26	Washer
14	340–68	3	Fitting–Tee, Bulkhead
14:1	237–22	3	O–Ring
15	105–3914	1	Tube ASM
15:1	237–22	1	O–Ring
16	105–3913	1	Tube ASM
16:1	237–22	2	O–Ring

Ref. No.	Part No.	Qty.	Description
17	105–3902	1	Tube ASM
17:1	237–65	1	O–Ring
18	105–3911	1	Tube ASM
19	105–3901	1	Tube ASM
19:1	237–65	2	O–Ring
20	105–3896	1	Tube ASM
20:1	237–65	1	O–Ring
21	105–3900	1	Tube ASM
21:1	237–65	2	O–Ring
22	105–3897	1	Tube ASM
22:1	237–65	1	O–Ring
23	104–5481	1	Tube ASM
23:1	340–65	1	O–Ring
25	56–7971	4	Clamp–Tube
26	340–128	2	Nut–Bulkhead
27	340–70	4	Nut–Lock
28	322–8	1	Screw–HH
29	322–13	1	Screw–HH
30	3256–23	4	Washer–Flat
31	3296–29	2	Nut–Lock, NI
32	56–7973	2	Clamp–Tube
33	340–72	1	Fitting–HYD, Bulkhead, 90°
33:1	237–65	2	O–Ring



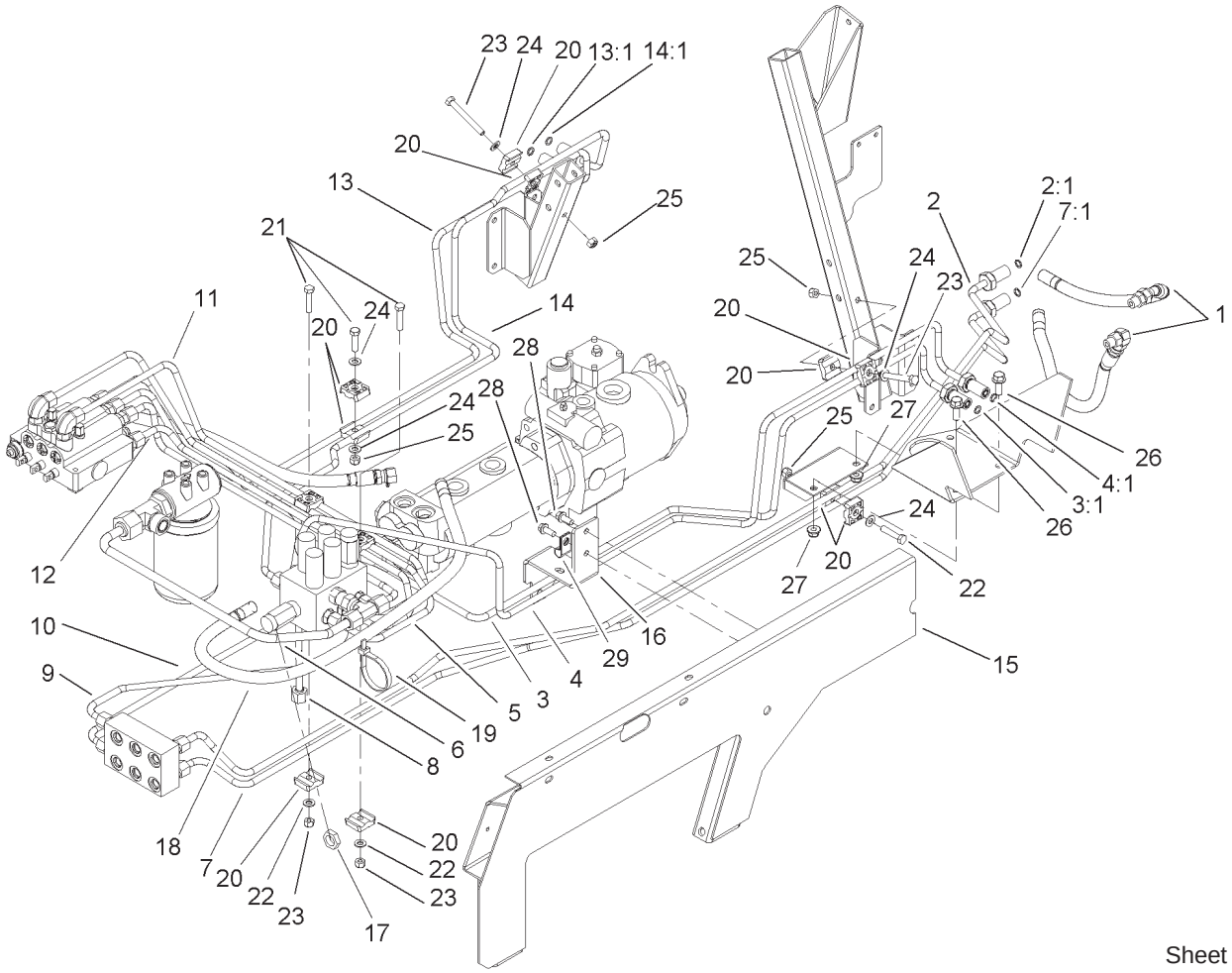
Sheet No.:32

Steering Hydraulic Line Assembly

Ref. No.	Part No.	Qty.	Description
1	105–3871	1	Tube ASM
1:1	237–22	1	O–Ring
2	105–3870	1	Tube ASM
2:1	237–22	1	O–Ring
3	105–3887	1	Tube ASM
4	340–68	1	Fitting–Tee, Bulkhead
4:1	237–22	3	O–Ring
5	105–3886	1	Tube ASM
6	94–3060	1	HYD Tube ASM
*6:1	237–22	1	O–Ring
7	94–3071	1	HYD Tube ASM
*7:1	237–22	1	O–Ring
8	94–3059	1	HYD Tube ASM
*8:1	237–22	1	O–Ring
9	94–3061	1	HYD Tube ASM
*9:1	237–22	1	O–Ring
10	94–3062	1	HYD Tube ASM
11	104–5485	1	Tube ASM
12	92–7606–03	1	Bracket–Bulkhead
13	105–9817	1	Hose ASM
14	92–7539	1	Hose ASM
15	105–3873–03	1	Bracket–Mount, Clamp
16	340–117	1	Cap
19	340–70	7	Nut–Lock
20	56–7973	14	Clamp–Tube
32	322–6	3	Screw–HH

Ref. No.	Part No.	Qty.	Description
33	322–7	4	Screw–HH
34	3296–47	2	Nut–Lock, NI
37	32128–20	2	Nut–HF
38	3234–5	7	Screw
39	3256–23	7	Washer–Flat
40	3296–29	4	Nut–Lock, NI

* Not illustrated

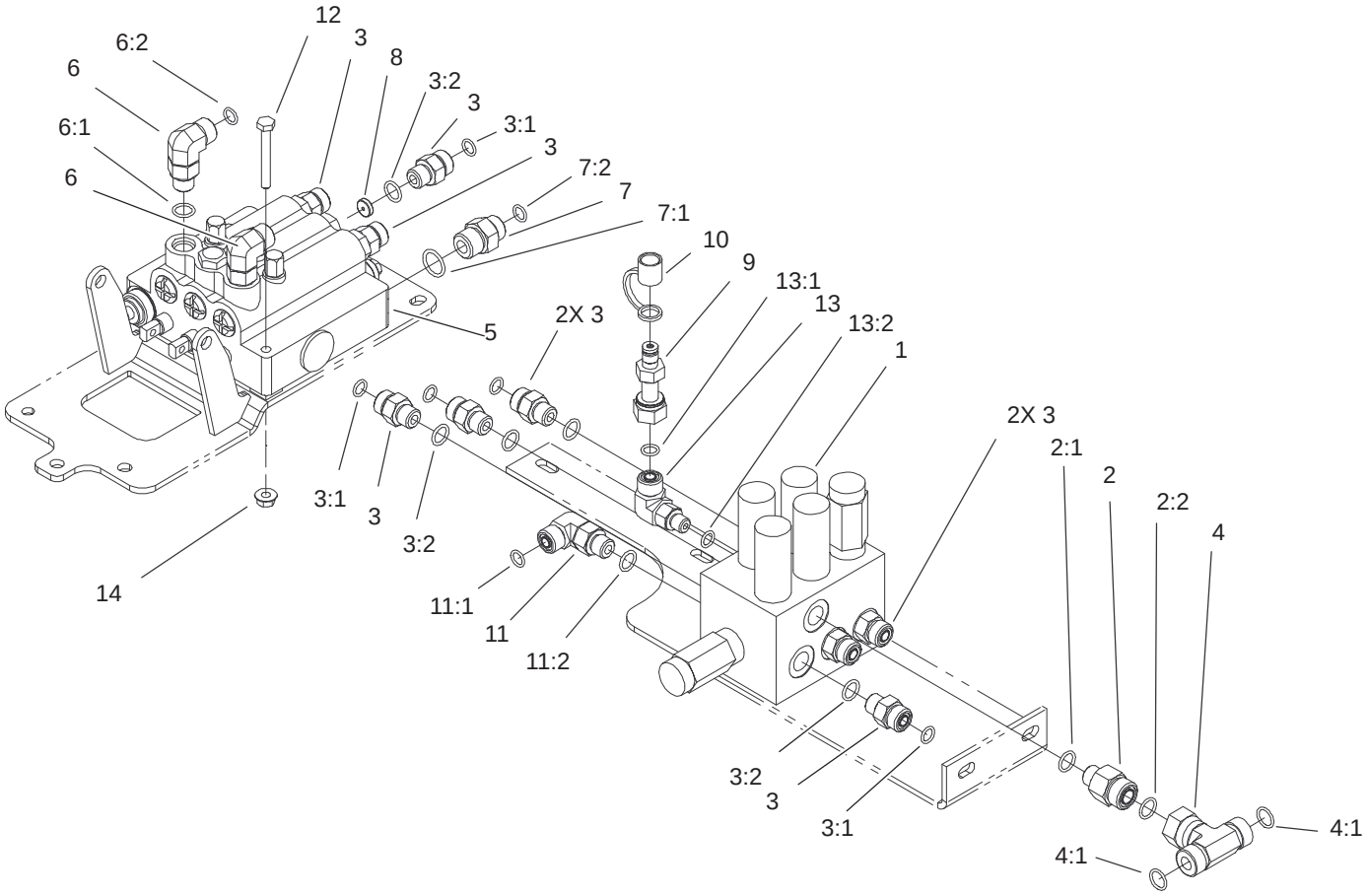


Sheet No.:33

Hydraulic Lift Line Assembly

Ref. No.	Part No.	Qty.	Description
1	105–9238	4	Hose ASM
2	105–3988	1	Tube ASM
2:1	237–22	1	O–Ring
3	105–3926	1	Tube ASM
3:1	237–22	1	O–Ring
4	105–3927	1	Tube ASM
4:1	237–22	1	O–Ring
5	106–1041	1	Tube ASM
6	105–3860	1	Tube ASM
7	105–3989	1	Tube ASM
7:1	237–22	1	O–Ring
8	105–3928	1	Tube ASM
9	105–3916	1	Tube ASM
10	105–3917	1	Tube ASM
11	106–1040	1	Tube ASM
12	105–3920	1	Tube ASM
13	105–3924	1	Tube ASM
13:1	237–22	1	O–Ring
14	105–3925	1	Tube ASM
14:1	237–22	1	O–Ring
15	105–3990–03	1	Bracket–Support, Tube
16	105–3993–03	1	Bracket–Support, Tube
17	340–70	6	Nut–Lock
18	105–9838	1	Hose ASM

Ref. No.	Part No.	Qty.	Description
19	3334–945	1	Tie–Cable
20	56–7973	14	Clamp–Tube
21	322–6	3	Screw–HH
22	322–7	3	Screw–HH
23	322–13	2	Screw–HH
24	3256–23	9	Washer–Flat
25	3296–29	7	Nut–Lock, NI
26	3234–11	2	Screw–HHF
27	104–8301	2	Nut–Flange, NI
28	32144–14	2	Screw–HWH
29	2412–138	1	R–Clamp

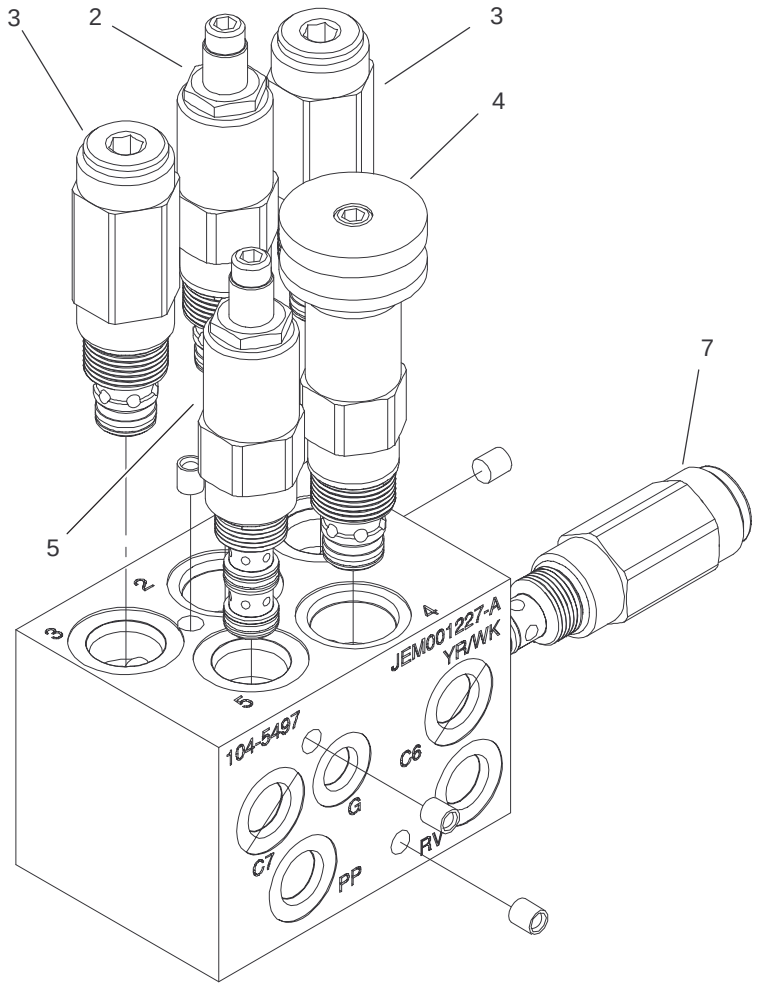


Sheet No.:37

Lift Valve and Counter Balance Assembly

Ref. No.	Part No.	Qty.	Description
1	104–5497	1	Manifold ASM
2	340–5	1	Fitting–Straight
2:1	237–42	1	O–Ring
2:2	237–30	1	O–Ring
3	340–2	9	Fitting–HYD, Straight
3:1	237–22	1	O–Ring
3:2	237–42	1	O–Ring
4	93–6810	1	Fitting–Tee
4:1	237–30	2	O–Ring
5	105–9843	1	Valve–Three Spool
6	340–77	2	Fitting–HYD, 90°
6:1	237–22	1	O–Ring
6:2	237–42	1	O–Ring
7	340–3	2	Adapter
7:1	237–22	1	O–Ring
7:2	237–79	1	O–Ring
8	105–9807	1	Orifice
9	86–5480	1	Nipple–Test
10	354–79	1	Cap–Dust
11	340–77	1	Fitting–HYD, 90°
11:1	237–22	1	O–Ring
11:2	237–42	1	O–Ring
12	321–11	2	Screw–HH
13	340–97	1	Fitting–HYD, 90°
13:1	237–22	1	O–Ring

Ref. No.	Part No.	Qty.	Description
13:2	237–78	1	O–Ring
14	32128–33	2	Nut–HF



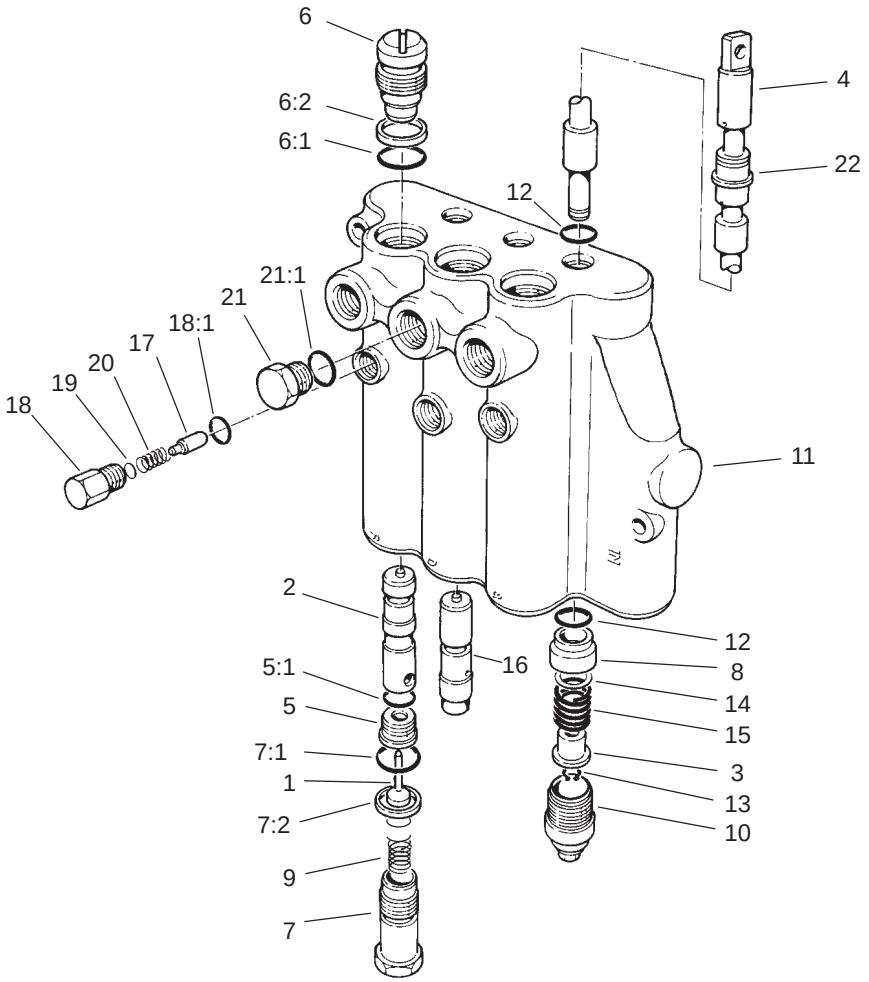
Sheet No.:C6

Manifold Assembly No. 104–5497

Ref. No.	Part No.	Qty.	Description
2	105–9161	1	Relief–Pilot Operated (725 Psi)
*2:1	105–9151	1	Seal Kit
☆2:1:1		1	O–Ring
☆2:1:2		1	Ring, Back–Up
3	105–9165	2	Sequence Valve (1200 Psi)
*3:1	105–9164	1	Seal Kit
4	105–9162	1	Relief–Pilot Operated (650 Psi)
*4:1	105–9151	1	Seal Kit
☆4:1:1		1	O–Ring
☆4:1:2		1	Ring, Back–Up
5	105–9163	1	Valve–Pilot Sequence, Ext.
*5:1	105–9164	1	Seal Kit
7	105–9844	1	Valve–Relief (1600 Psi)
*7:2	105–9156	1	Seal Kit
☆7:2:1		1	O–Ring
☆7:2:2		1	Ring, Back–Up

Ref. No.	Part No.	Qty.	Description

* Not illustrated
☆ Not serviced separately



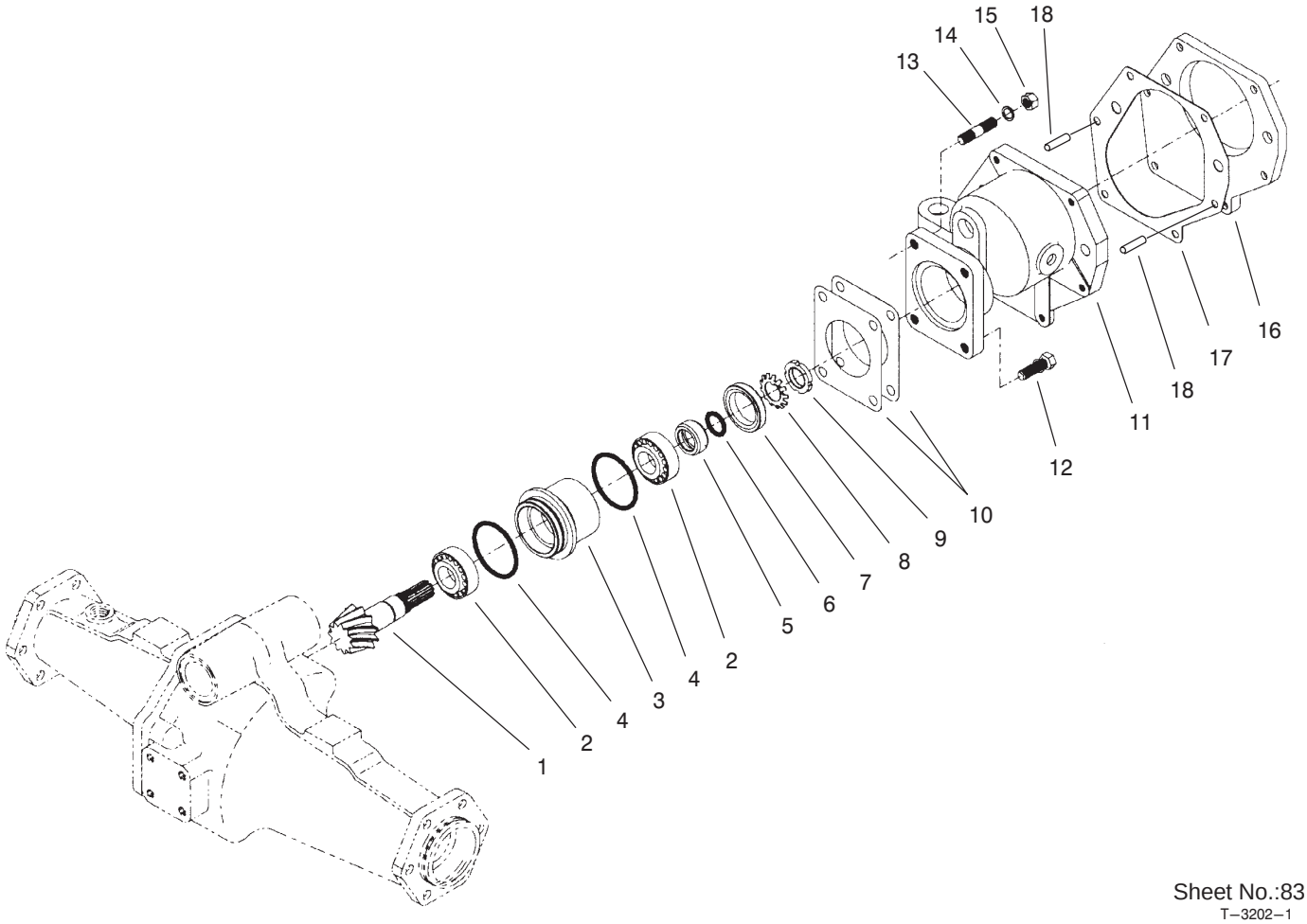
Sheet No.:C7
T–3887

Single Spool Valve Assembly No. 105–9843

Ref. No.	Part No.	Qty.	Description
1	58–6290	3	Poppet
2	84–6420	2	Plunger
3	58–6310	3	Spacer
☆4		3	Spool
5	58–6330	3	Seat
5:1	58–6340	1	O–Ring
6	58–6350	3	Plug
6:1	60–5720	1	O–Ring
6:2	58–6370	1	Washer
7	69–1800	3	Plug ASM
7:1	58–6360	1	O–Ring
7:2	58–6370	1	Washer
8	58–6400	3	Bushing
9	69–1810	3	Spring
10	58–6420	3	Cap
☆11		1	Body
12	58–6450	6	O–Ring
13	58–6460	3	Ring
14	58–6700	3	Washer
15	58–6730	3	Spring
16	69–1840	1	Plunger
17	58–6770	3	Plunger
18	58–6780	3	Plug
18:1	58–6790	1	O–Ring
19	60–6450	1	Disc
20	58–6760	3	Spring

Ref. No.	Part No.	Qty.	Description
21	58–6710	1	Plug
21:1	58–6720	1	O–Ring
22	58–6320	3	Wiper
*23	60–3780	1	Seal Kit

☆ Not serviced separately
* Not illustrated

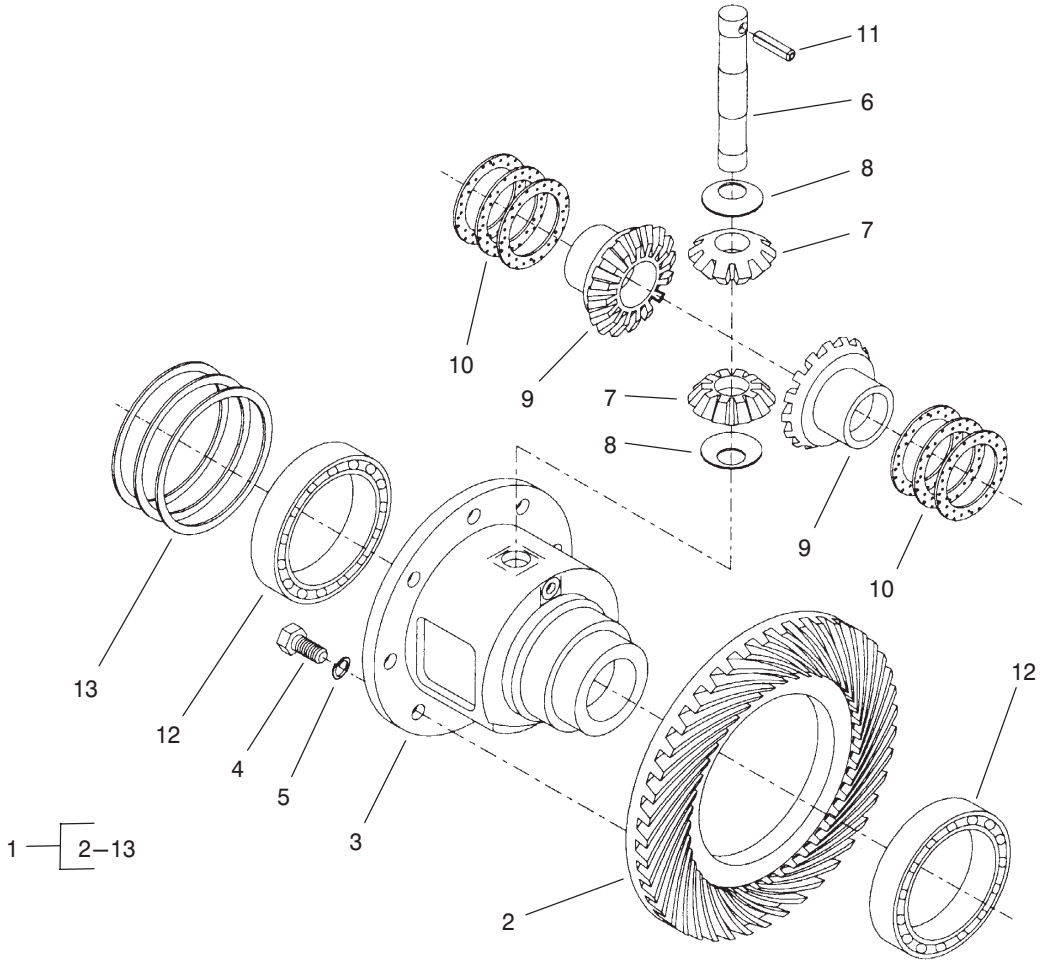


Sheet No.:83
T–3202–1

Rear Axle Assembly No. 100–3784
Bevel Pinion Shaft Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2555	1	Ring And Pinion Matched Set
2	99–7570	2	Bearing–Taper Roller
3	95–7534	1	Case–Bearing
4	99–7571	2	O–Ring
5	99–7572	1	Collar–Oil Seal
6	99–7573	1	O–Ring
7	99–7574	1	Seal–Oil
8	99–7559	1	Washer–Lock
9	99–7560	1	Nut–Lock
10	99–7550	2	Shim 0.1
10	99–7551	2	Shim 0.2
11	95–7533	1	Case–Gear
12	99–7575	2	Bolt
13	100–2556	2	Stud
14	99–7527	2	Washer–Spring
15	99–7526	2	Nut
16	95–7541	1	Plate–Cover
17	95–7540	1	Gasket
18	104–2353	2	Pin–Dowel

Ref. No.	Part No.	Qty.	Description

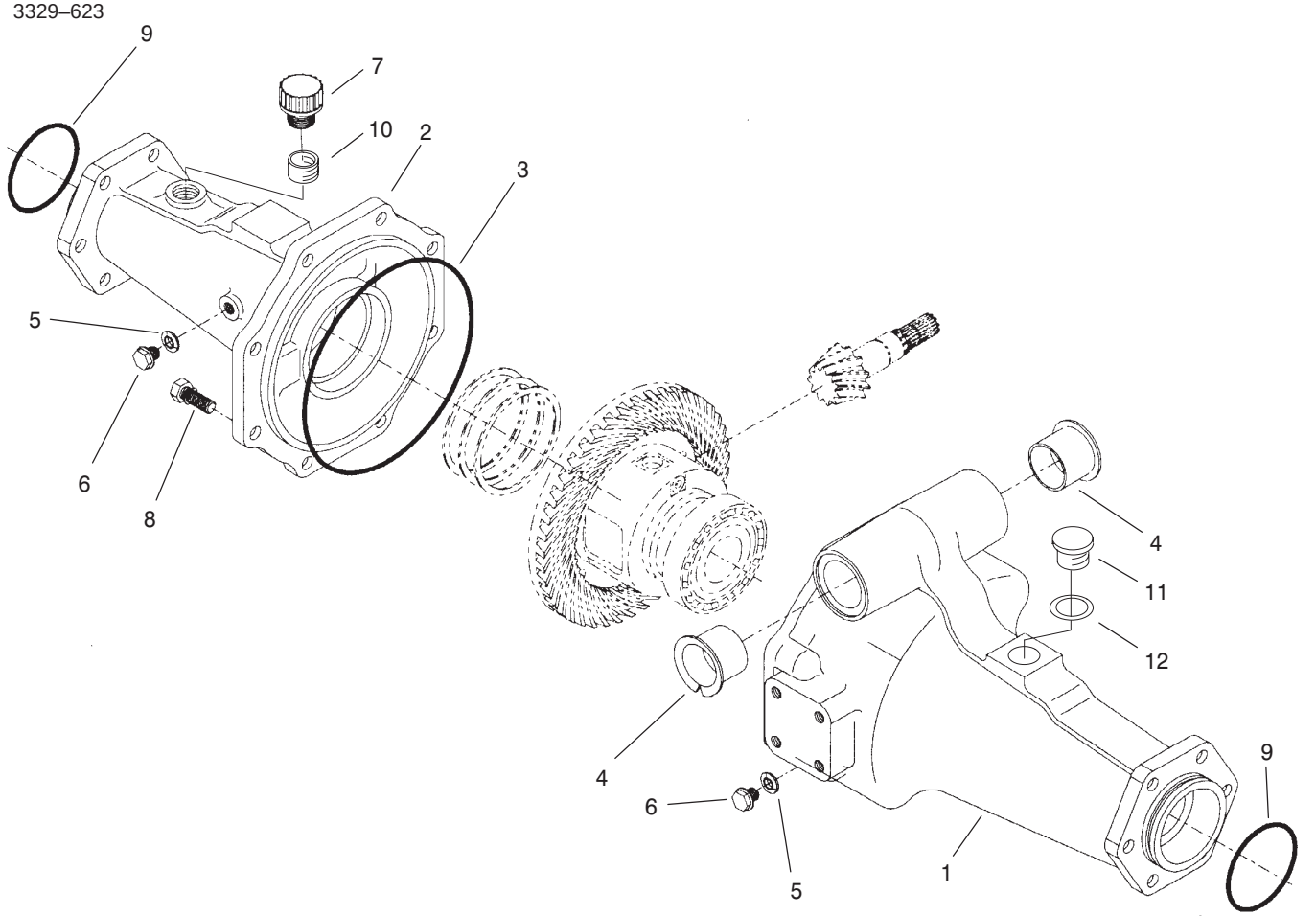


Sheet No.:84
T–3203–1

Rear Axle Assembly No. 100–3784 (Continued)
Differential Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7503	1	Differential ASM
2	100–2555	1	Ring And Pinion Matched Set
3	95–7502	1	Case–Differential
4	99–7576	8	Bolt
5	99–7577	8	Washer–Spring
6	99–7578	1	Shaft–Differential
7	99–7579	2	Pinion–Differential
8	99–7580	2	Washer–Differential
9	99–7581	2	Gear–Differential
10	99–7582	2	Washer–Differential
10	99–7583	2	Washer–Differential
10	99–7584	2	Washer–Differential
11	99–7588	1	Pin–Spring
12	99–7562	2	Bearing–Ball
13	99–7585	2	Shim 0.1
13	99–7586	2	Shim 0.2
13	99–7587	2	Shim 0.4

Ref. No.	Part No.	Qty.	Description



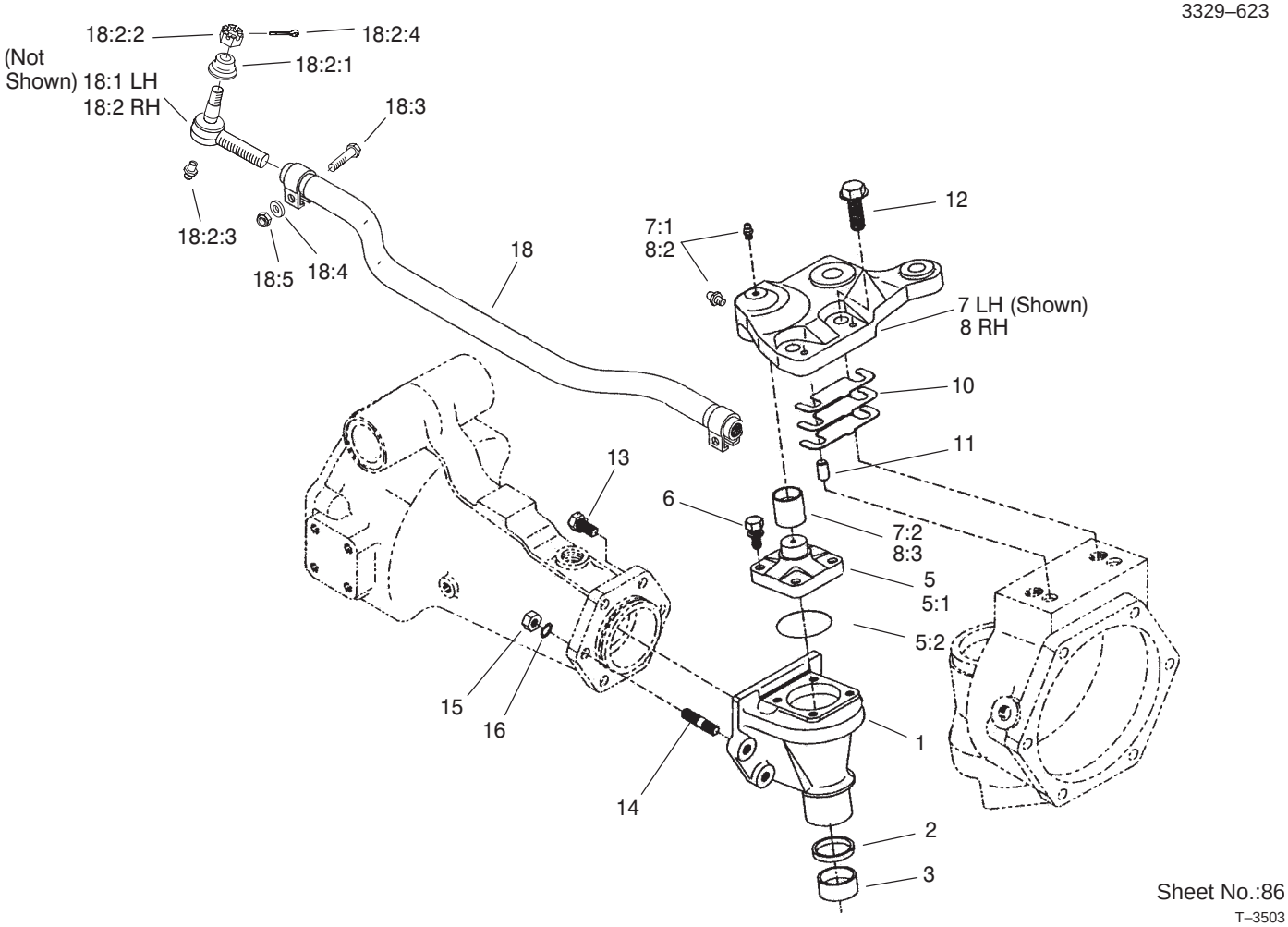
Sheet No.:85

T–3204–1

Rear Axle Assembly No. 100–3784 (Continued)
Axle Support Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7508	1	Support–Axle
2	95–7506	1	Support–Axle
3	95–7507	1	O–Ring
4	95–7537	2	Bushing–Flanged
5	99–7590	2	Washer–Seal
6	99–7589	2	Plug
7	99–7591	1	Oil Plug ASM
8	99–7592	8	Bolt
9	99–7593	2	O–Ring
10	104–2377	1	Extension, Vent
11	104–8643	1	Plug
12	104–8644	1	O–Ring

Ref. No.	Part No.	Qty.	Description



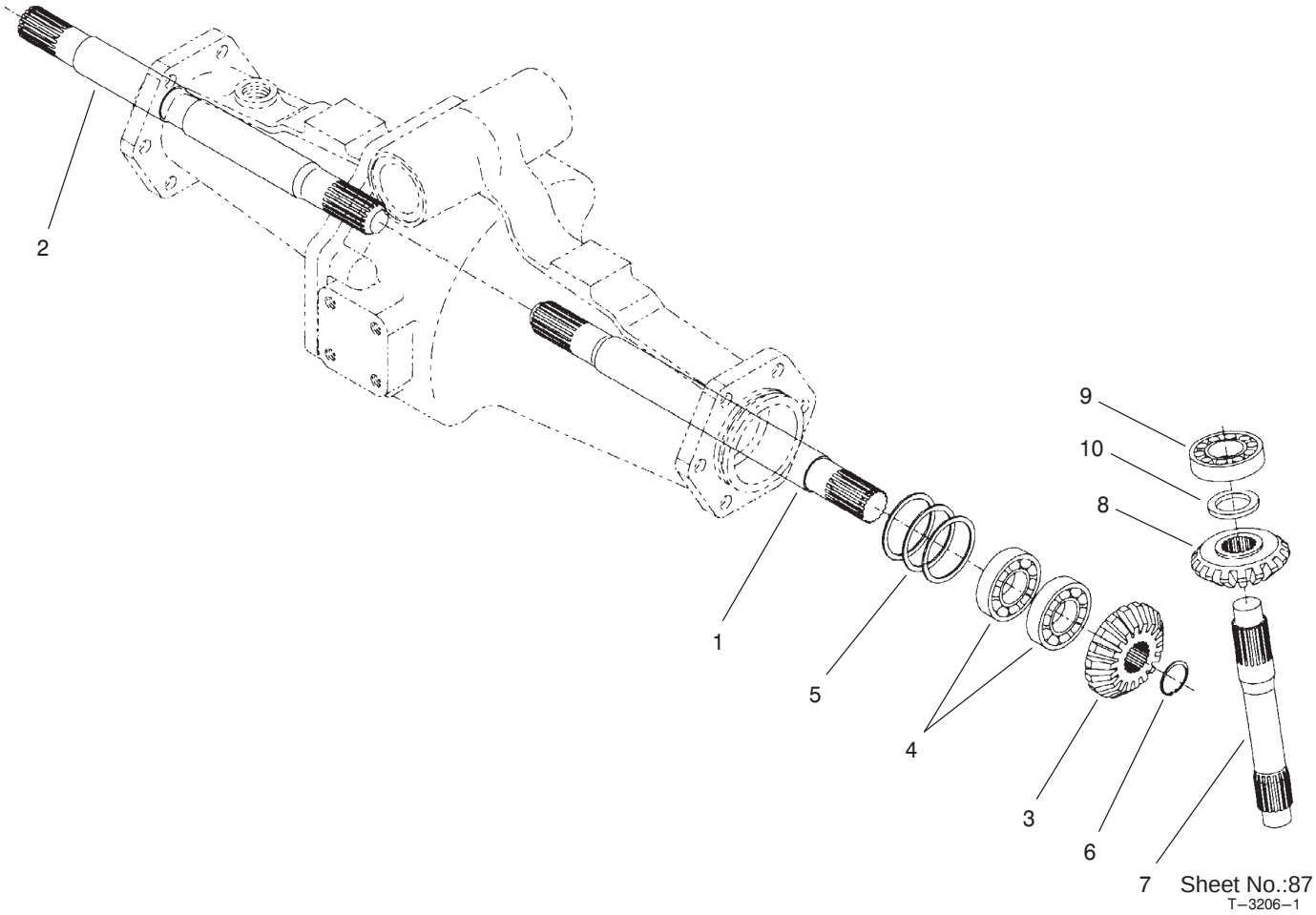
Sheet No.:86
T–3503

Rear Axle Assembly No. 100–3784 (Continued)
Bevel Gear Case Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7538	2	Case–Bevel Gear
2	100–2557	2	Seal–Oil
3	104–2378	2	Bushing
5	104–2376	2	Knuckle ASM
5:1	104–2373	1	Knuckle
5:2	104–2372	1	O–Ring
6	104–2374	8	Bolt
7	100–3768	1	LH Steering Arm ASM
7:1	302–5	2	Fitting–Grease
7:2	104–8634	1	Bushing
8	100–3766	1	RH Steering Arm ASM
8:2	302–5	2	Fitting–Grease
8:3	104–8634	1	Bushing
10	95–7547	2	Shim 0.1
10	95–7548	2	Shim 0.2
10	95–7549	2	Shim 0.4
11	99–7597	4	Pin–Dowel
12	104–2375	4	Bolt
13	99–7599	8	Bolt
14	99–7525	4	Stud
15	99–7526	4	Nut
16	99–7527	4	Washer–Spring
18	100–3762	1	Tie Rod ASM
*18:1	100–3851	1	LH Tie Rod End ASM

Ref. No.	Part No.	Qty.	Description
*18:1:1	100–3853	1	Cover–Dust
*18:1:2	100–3854	1	Nut–Castle
*18:1:3	302–5	1	Fitting–Grease
*18:1:4	3272–11	1	Pin–Cotter
18:2	100–3852	1	RH Tie Rod End ASM
18:2:1	100–3853	1	Cover–Dust
18:2:2	100–3854	1	Nut–Castle
18:2:3	302–5	1	Fitting–Grease
18:2:4	3272–11	1	Pin–Cotter
18:3	100–3855	2	Bolt
18:4	99–7527	2	Washer–Spring
18:5	99–7526	2	Nut

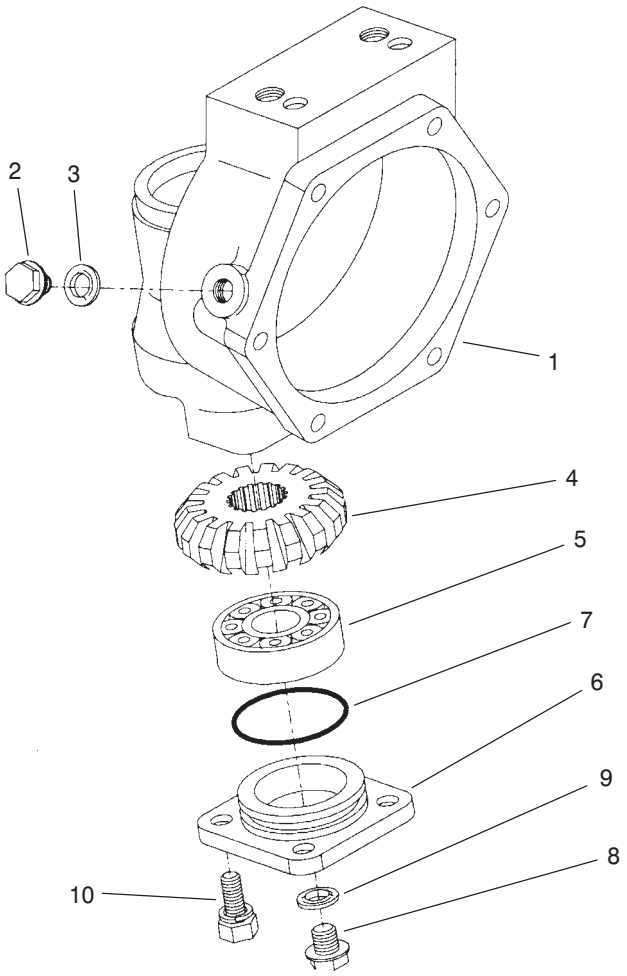
* Not illustrated



Rear Axle Assembly No. 100–3784 (Continued)
Bevel Gear Shaft Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7509	1	Shaft–Gear, Differential
2	95–7512	1	Shaft–Gear, Differential
3	95–7517	2	Gear–15 Tooth Bevel
4	99–7530	4	Bearing–Ball
5	99–7552	2	Shim 0.1
5	99–7553	2	Shim 0.2
5	99–7554	2	Shim 0.5
6	99–7531	2	Clip
7	95–7529	2	Shaft–Bevel Gear
8	95–7519	2	Gear–17 Tooth Bevel
9	99–7532	2	Bearing–Taper Roller
10	99–7558	2	Collar

Ref. No.	Part No.	Qty.	Description

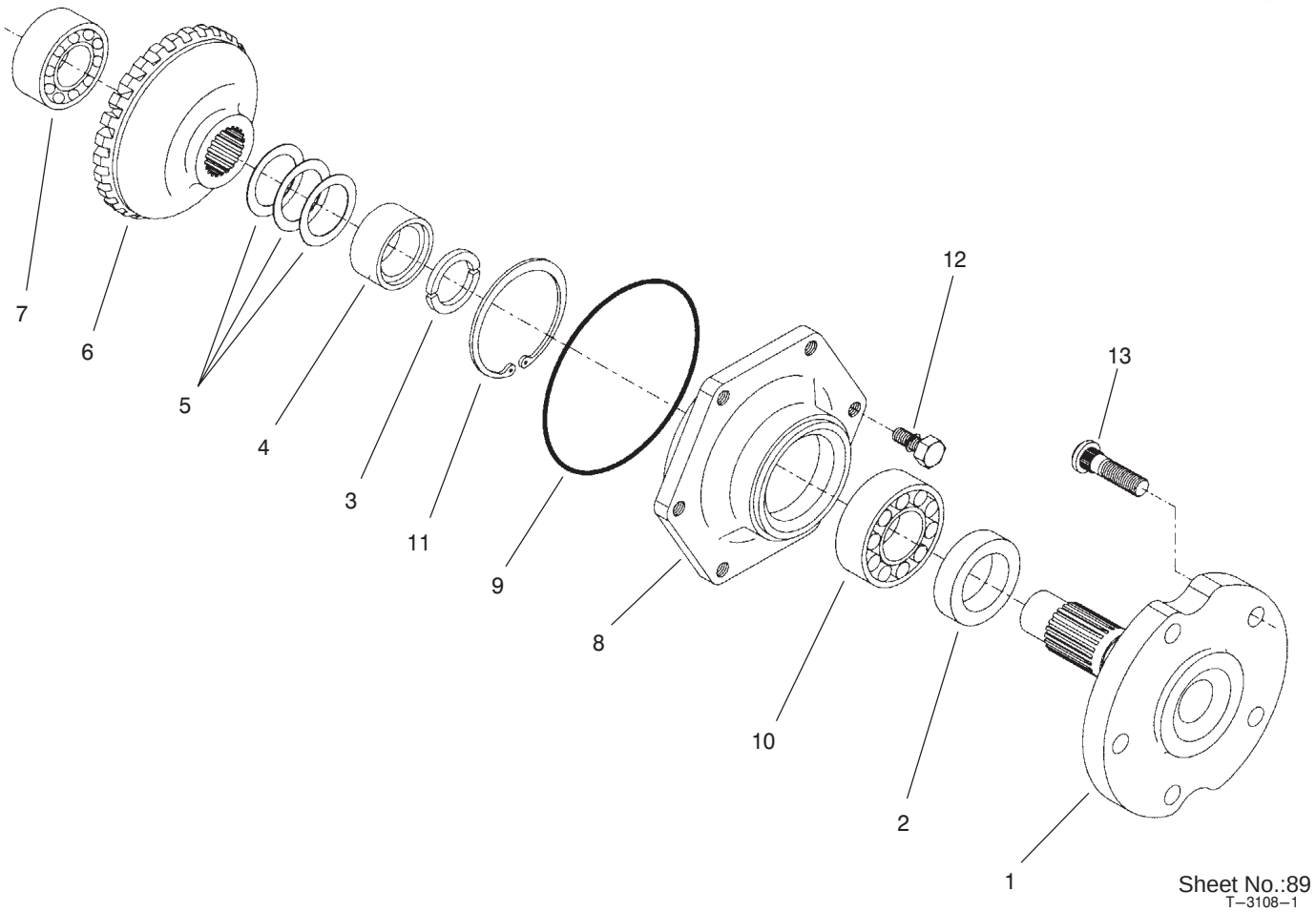


Sheet No.:88
T–3207–1

Rear Axle Assembly No. 100–3784 (Continued)
Axle Case Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7531	2	Case–Axle
2	99–7535	2	Plug
3	99–7536	2	Washer–Seal
4	95–7527	2	Gear–17 Tooth Bevel
5	99–7532	2	Bearing–Taper Roller
6	100–2560	2	Cover
7	100–2561	2	O–Ring
8	99–7589	2	Plug
9	99–7590	2	Washer–Seal
10	100–2562	8	Bolt

Ref. No.	Part No.	Qty.	Description



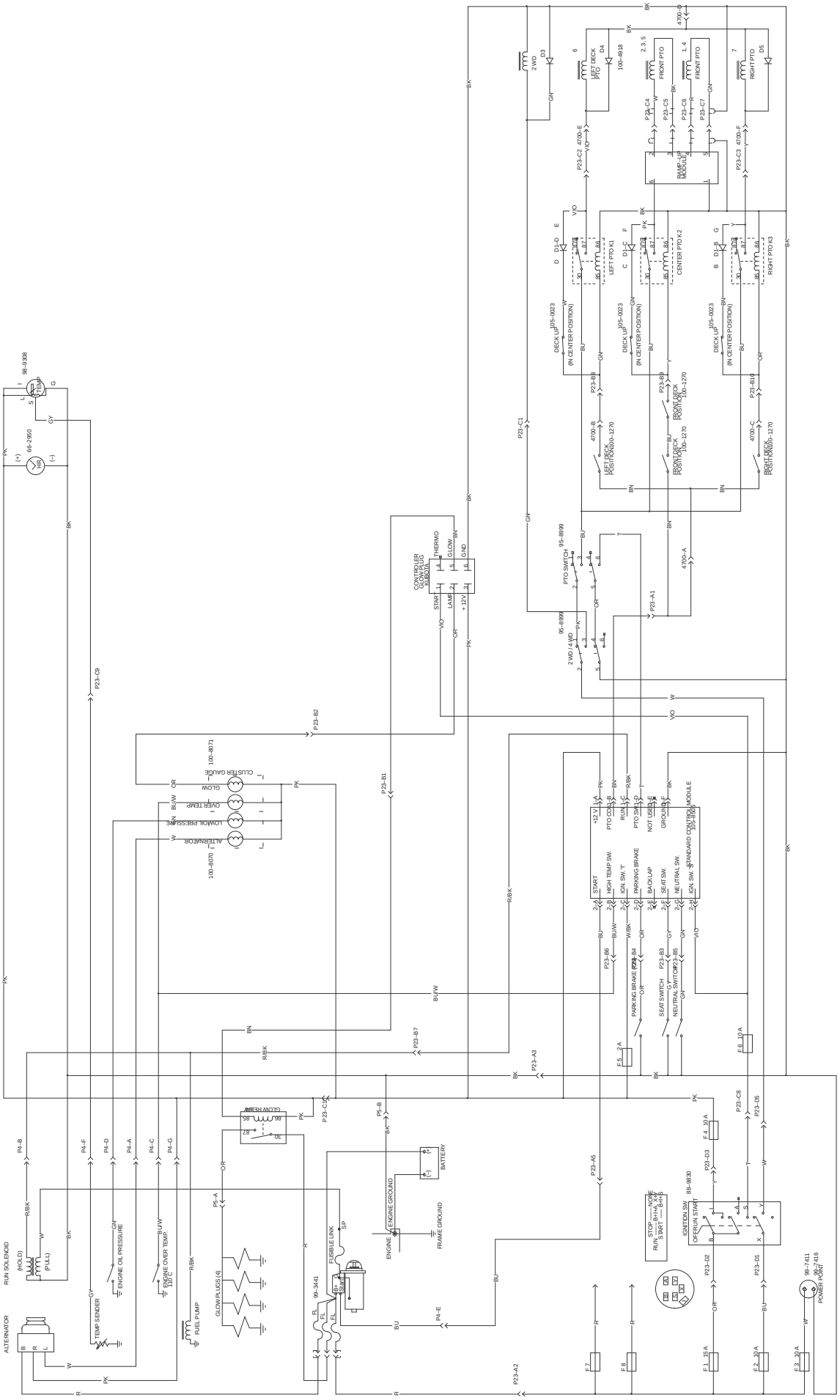
Sheet No.:89
T–3108–1

Rear Axle Assembly No. 100–3784 (Continued)
Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	95–7522	2	Axle
2	99–7564	2	Seal–Oil
3	95–7544	4	Clip
4	95–7523	2	Spacer
5	99–7555	2	Shim 0.3
5	99–7556	2	Shim 0.2
5	99–7557	2	Shim 0.5
6	95–7524	2	Gear–29 Tooth Bevel
7	99–7534	2	Bearing–Ball
8	95–7521	2	Cover–Axle
9	99–7538	2	O–Ring
10	99–7561	2	Bearing–Ball
11	99–7539	2	Clip
12	99–7596	12	Bolt
13	99–7563	10	Stud

Ref. No.	Part No.	Qty.	Description

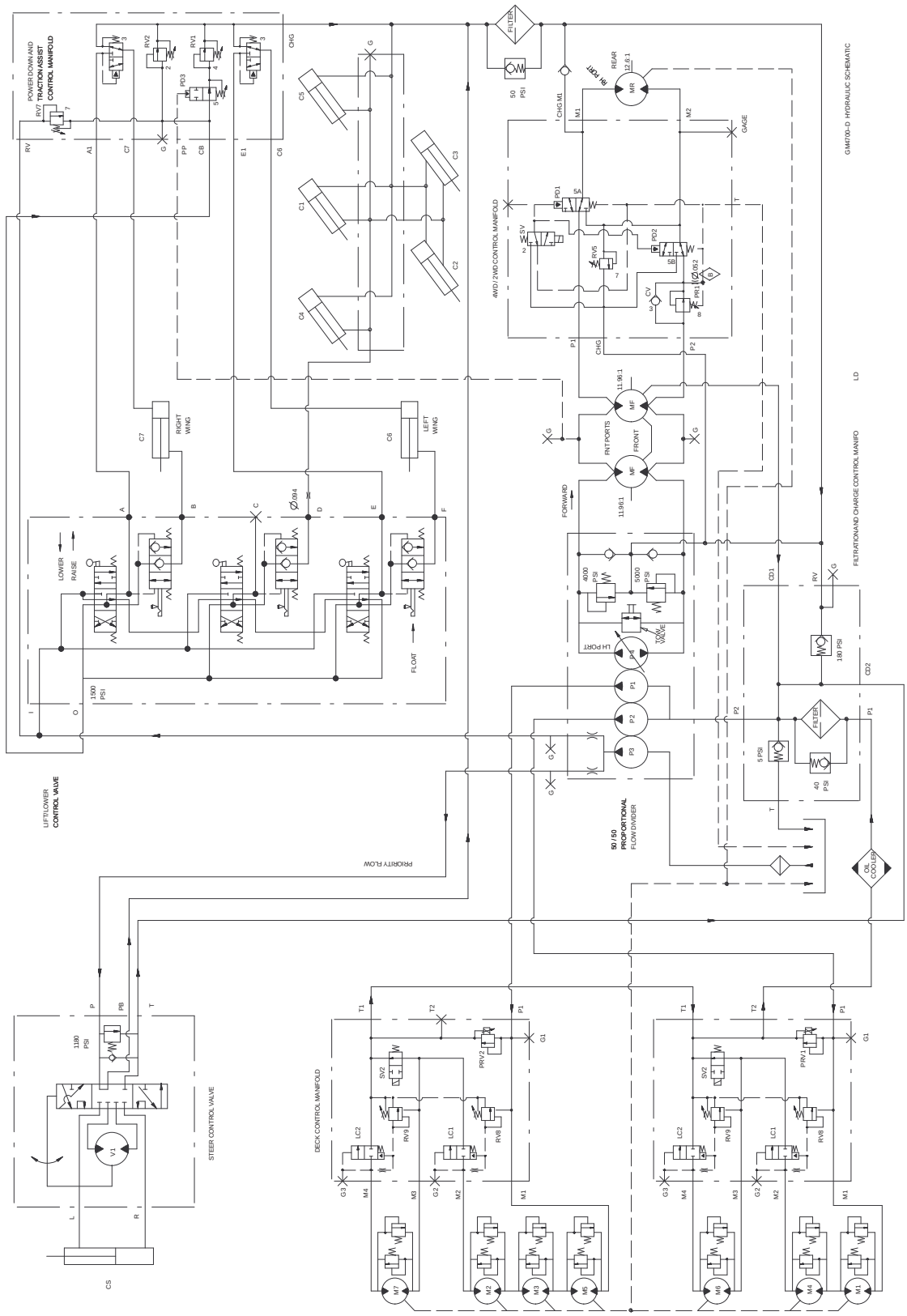
Electrical Schematic

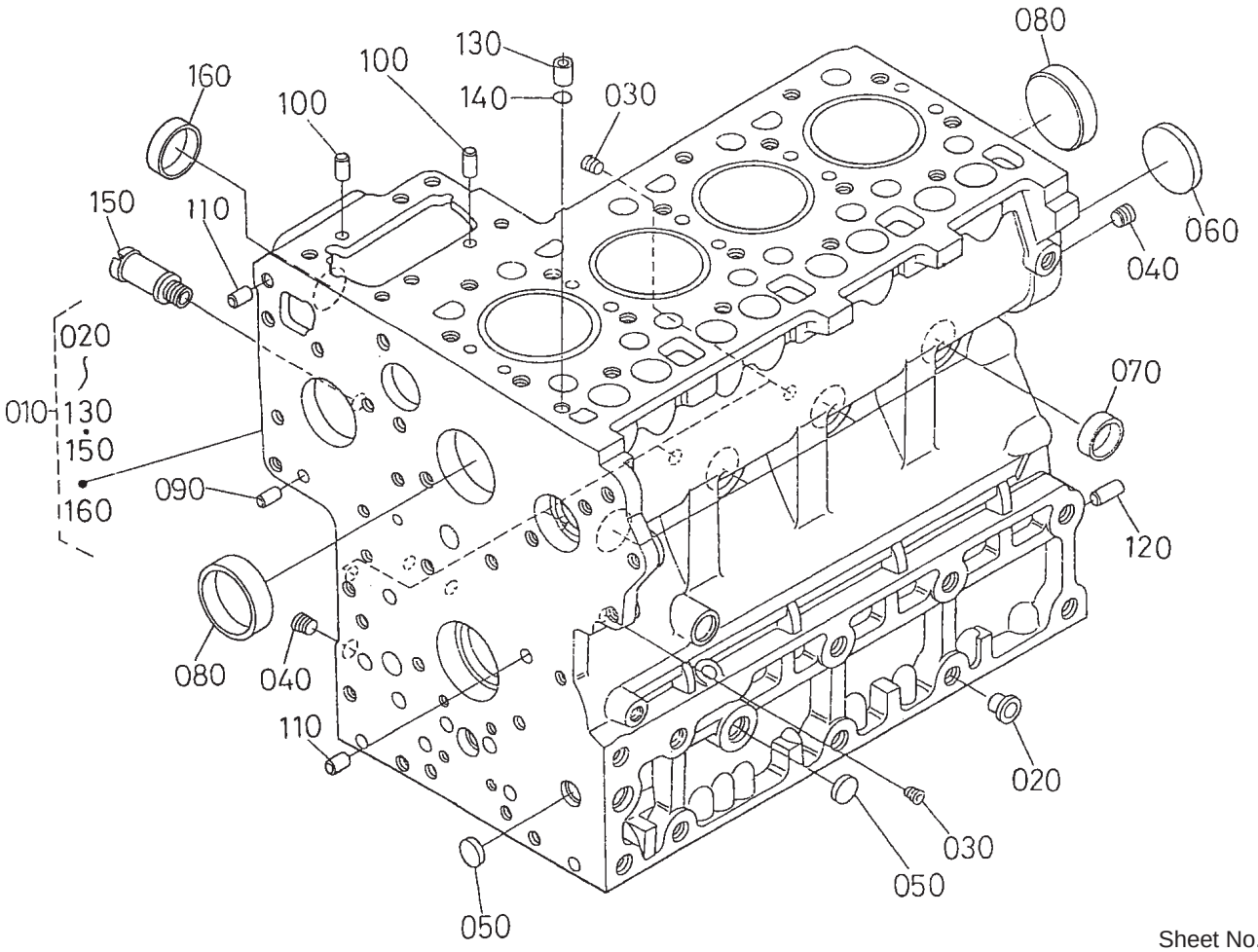


Hydraulic Schematic

FLOWS CALC. AT 2700 RPM AND .88 EFF.			
COMP.	CIR	GPM	PSI
P1	1.02	11.7	
P2	1.02	11.7	
P3	0.58	6.6	
P4	3.02	34.6	
M1	1.16		2100
M2	1.16		2100
M3	1.16		2100
M4	1.16		2100
M5	1.16		2100
M6	1.16		2100
M7	1.16		2100
MF	2.01		
MR	2.48		
V1	6.1		1800
PD3			620
RV1			700
RV2			450
PR1			3500
PRV1			3500
PRV2			550
RV5			2200
RV7			1100
RV8			1100
RV9			1100

COMP.	BORE	STROKE	ROD
C1	1.50	4.00	.625
C2	1.50	3.50	.625
C3	1.50	3.50	.625
C4	1.50	7.00	.625
C5	1.50	7.00	.625
C6	2.00	9.00	.750
C7	2.00	9.00	.750
CS	2.00	4.20	.625



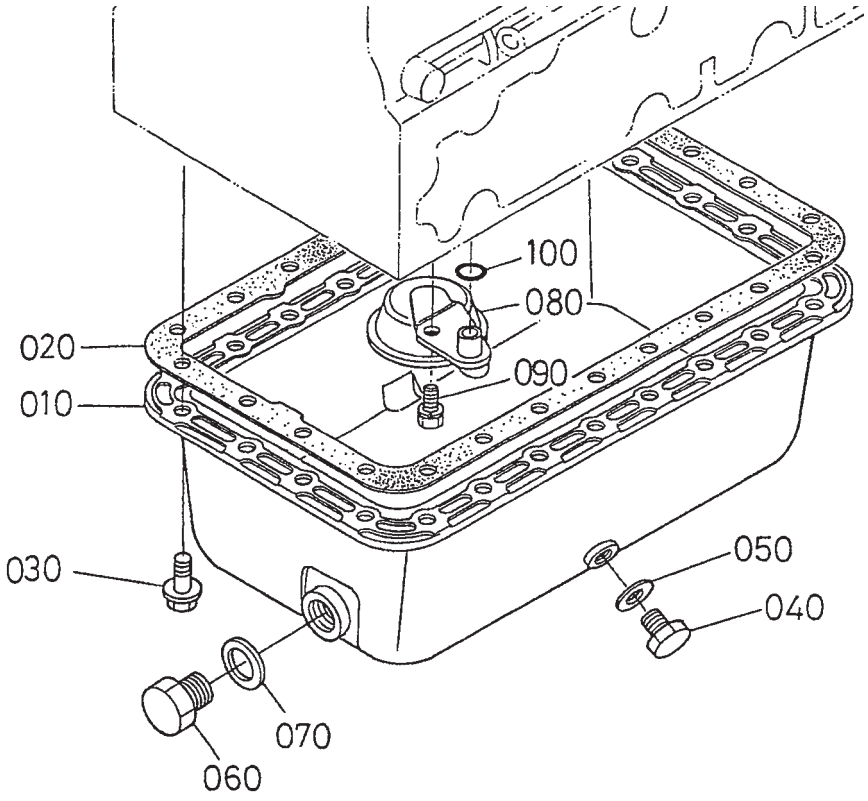


Sheet No.:40

Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9150	1	Crankcase
20	98–7486	2	Plug
30	98–7487	6	Plug
40	107–0107	2	Plug
50	98–7489	3	Plug
60	98–7490	1	Plug
70	98–7500	6	Cap–Sealing
80	98–7501	2	Cap–Sealing
90	98–7502	2	Pin–Straight
100	98–7503	2	Pin–Straight
110	98–7504	2	Pin–Straight
120	98–7505	1	Pin–Straight
130	98–7506	1	Pin–Pipe
140	98–7509	1	O–Ring
150	100–9153	1	Pipe–Return, Water
160	105–2883	1	Cap–Sealing

Ref. No.	Part No.	Qty.	Description

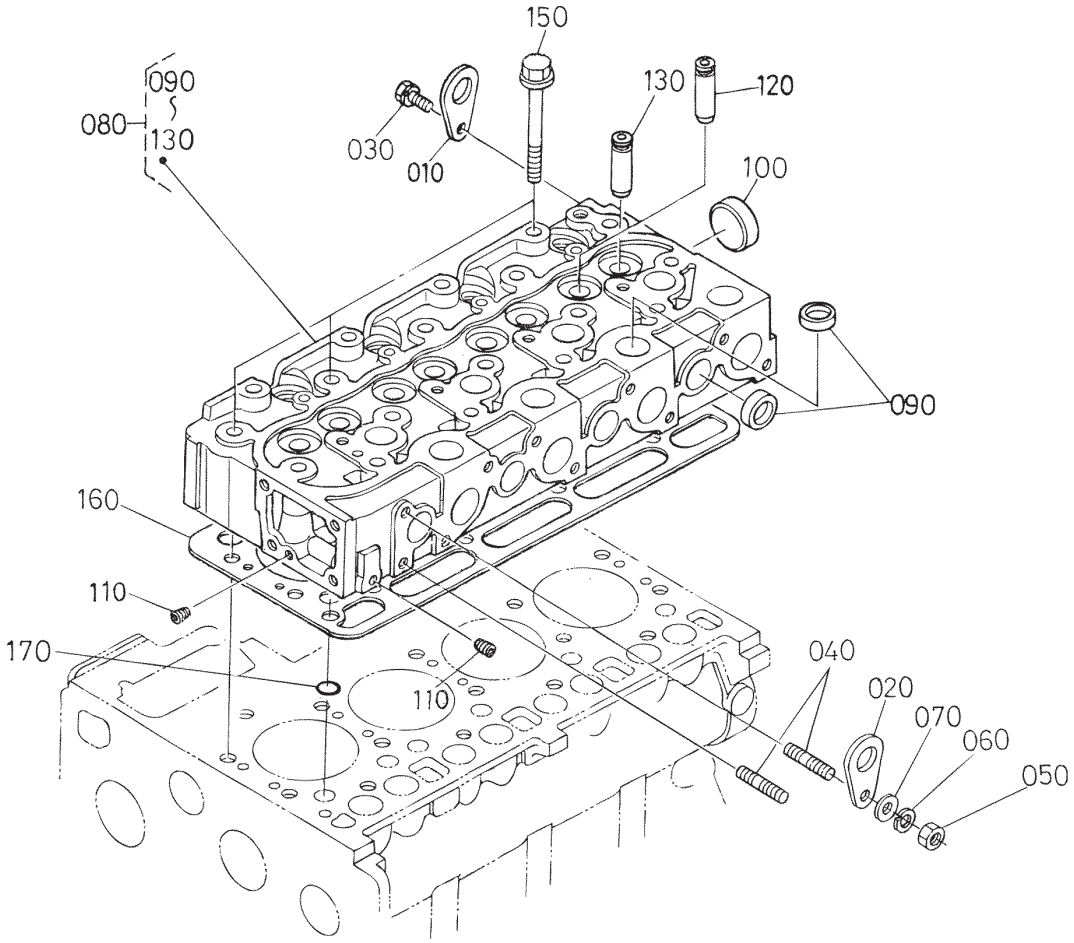


Sheet No.:41

Oil Pan Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7520	1	Pan–Oil
20	98–7521	1	Gasket
30	98–7522	24	Bolt–Flange
40	98–9386	1	Plug
50	98–7524	1	Gasket
60	98–7529	1	Plug–Drain
70	98–7528	1	O–Ring
80	98–7525	1	Filter–Oil
90	100–9192	1	Bolt
100	107–0101	1	O–Ring

Ref. No.	Part No.	Qty.	Description

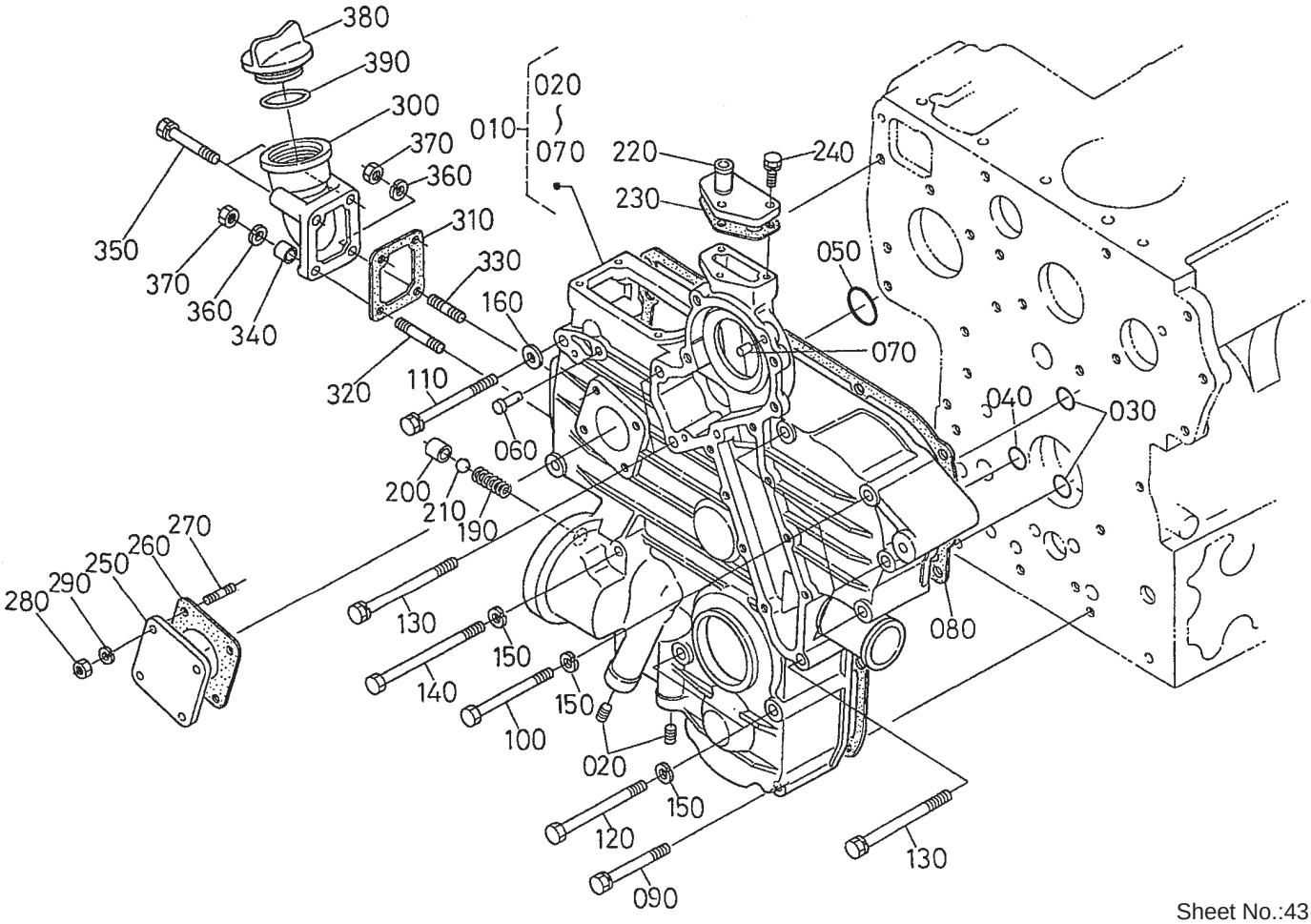


Sheet No.:42

Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7530	1	Hook–Engine
20	98–7531	1	Hook–Engine
30	100–9192	1	Bolt
40	98–7533	2	Stud
50	100–1559	1	Nut–Manifold, Exhaust
60	105–2893	1	Washer–Spring
70	98–7536	1	Washer–Plain
80	100–9159	1	Head–Cylinder
90	98–7538	12	Cap–Sealing
100	98–7539	1	Cap–Sealing
110	98–7540	2	Cap–Sealing
120	98–7541	4	Plug
130	98–7542	4	Guide–Valve, Exhaust
150	98–7543	18	Bolt–Head, Cylinder
160	100–9160	1	Gasket–Head, Cylinder
170	98–7509	1	O–Ring

Ref. No.	Part No.	Qty.	Description

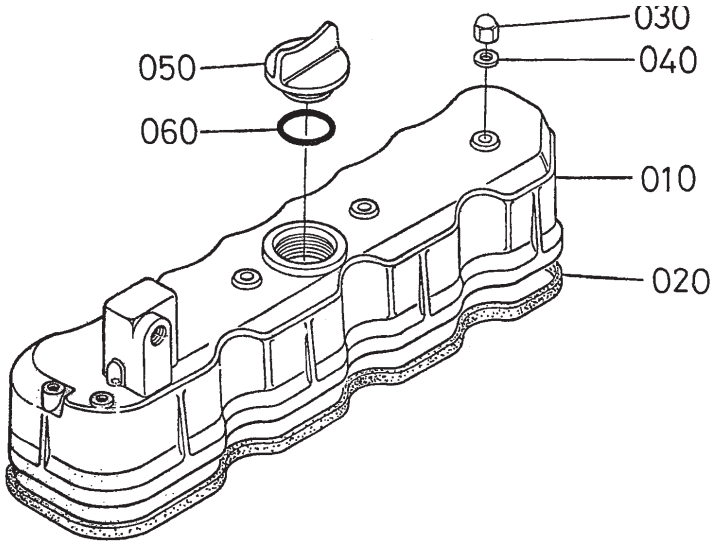


Sheet No.:43

Gear Case Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9161	1	Gearcase ASM
20	107–0108	2	Plug
30	107–0104	2	O–Ring
40	107–0105	1	O–Ring
50	107–0106	1	O–Ring
60	98–7550	1	Pin–Spring, Start
70	98–7504	2	Pin–Straight
80	98–7552	1	Packing–Case, Gear
90	98–7553	2	Bolt
100	99–8336	5	Bolt
110	98–7555	1	Bolt
120	98–7556	2	Bolt
130	98–7557	3	Bolt
140	98–7558	2	Bolt
150	105–2893	9	Washer–Spring
160	98–7536	1	Washer–Plain
190	98–7563	1	Spring
200	98–7564	1	Seat–Valve
210	98–7565	1	Ball
220	98–7566	1	Flange–Return, Water
230	98–7567	1	Gasket
240	98–7568	3	Bolt
250	98–7569	1	Cover
260	98–7570	1	Gasket–Unit, H/Meter
270	98–7571	4	Stud
280	98–7572	4	Nut

Ref. No.	Part No.	Qty.	Description
290	98–7699	4	Washer–Spring
300	100–9162	1	Flange–Filter, Oil
310	100–9163	1	Gasket
320	98–7571	1	Stud
330	100–9164	1	Stud
340	100–9165	1	Collar
350	98–7496	2	Bolt
360	98–7699	2	Washer–Spring
370	98–7572	2	Nut
380	98–7429	1	Plug–Filter, Oil
390	107–0102	1	O–Ring

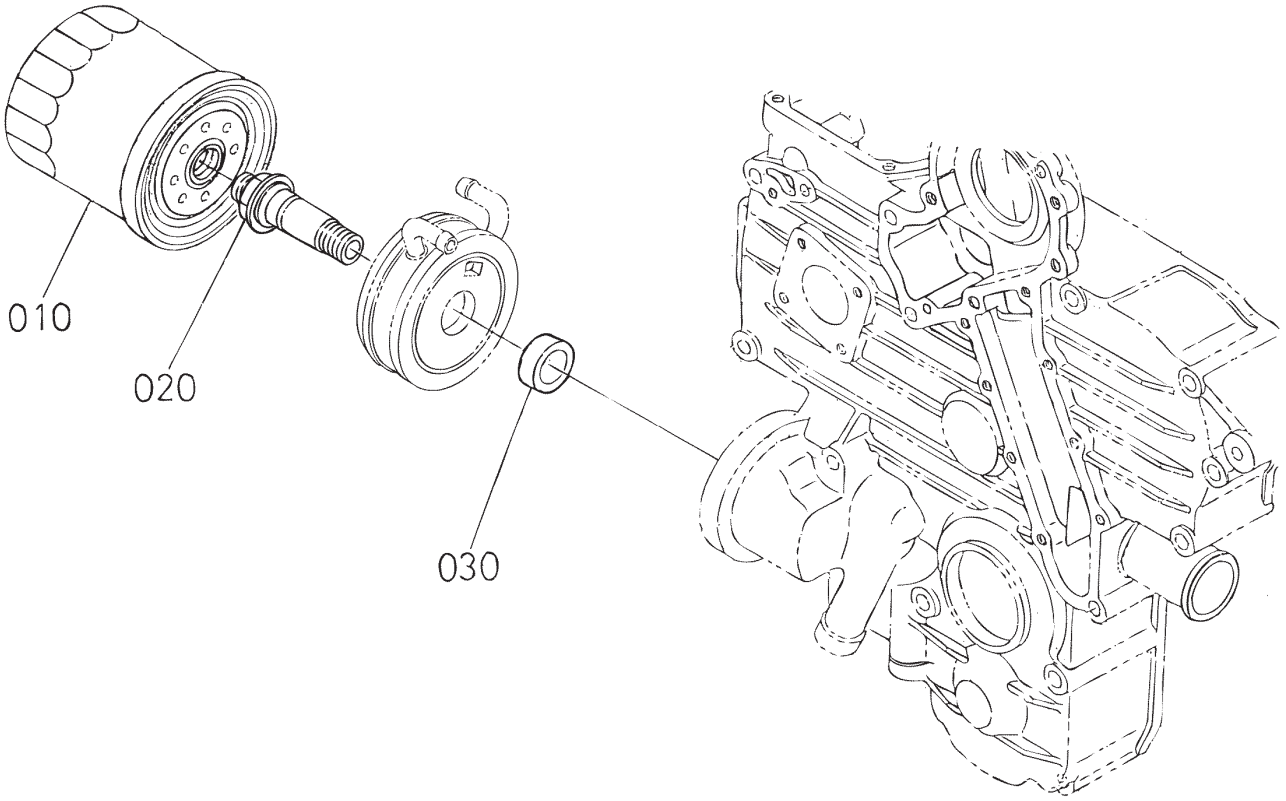


Sheet No.:44

Head Cover Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7425	1	Cover–Head, Cylinder
20	98–7426	1	Gasket–Cover, Head
30	98–7427	4	Nut–Cap
40	98–7428	4	Gasket
50	98–7429	1	Plug–Filter, Oil
60	107–0102	1	O–Ring

Ref. No.	Part No.	Qty.	Description

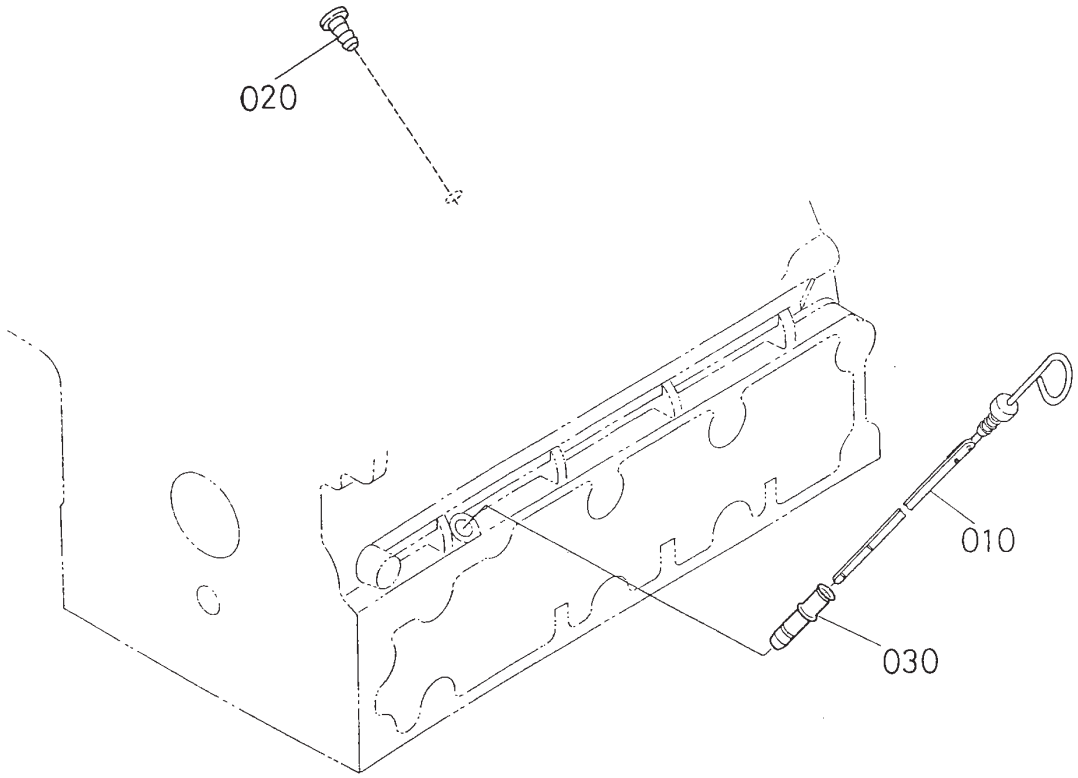


Sheet No.:45

Oil Filter Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7431	1	Cartridge–Filter, Oil
20	100–9166	1	Connector
30	100–9167	1	Collar

Ref. No.	Part No.	Qty.	Description

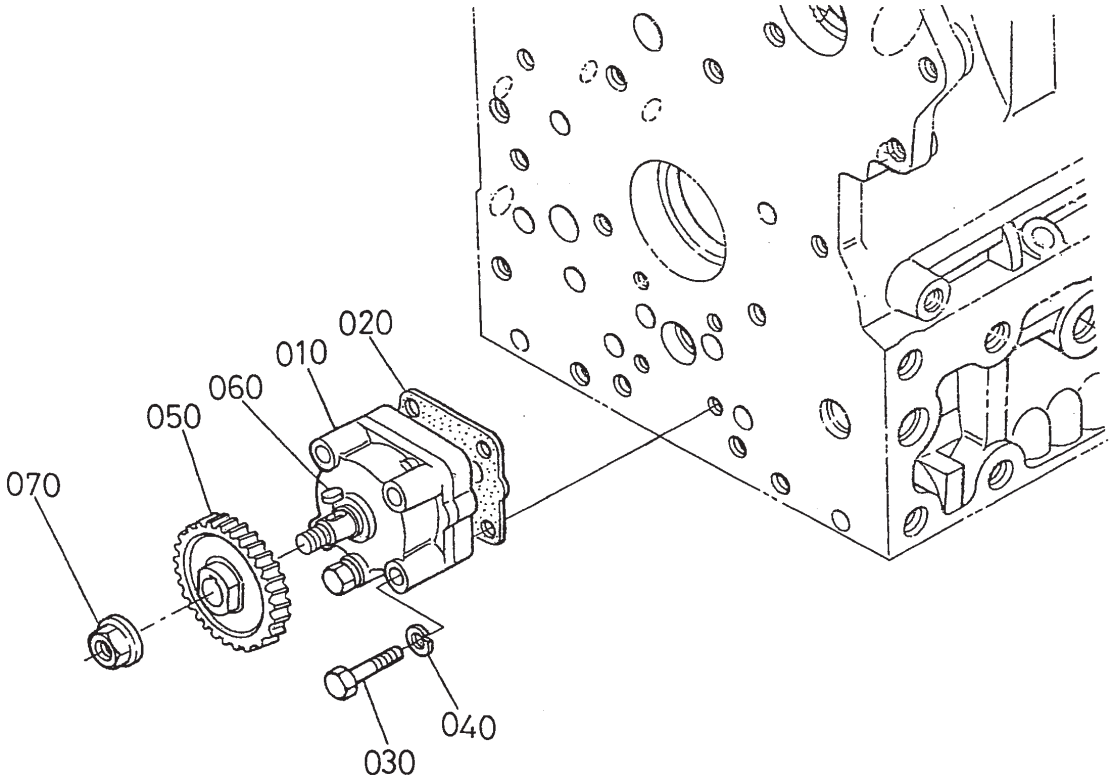


Sheet No.:46

Dipstick and Guide Assembly

Ref. No.	Part No.	Qty.	Description
10	105–4579	1	Gauge–Oil
20	100–9169	1	Plug–Gauge, Oil
30	105–4580	1	Guide

Ref. No.	Part No.	Qty.	Description

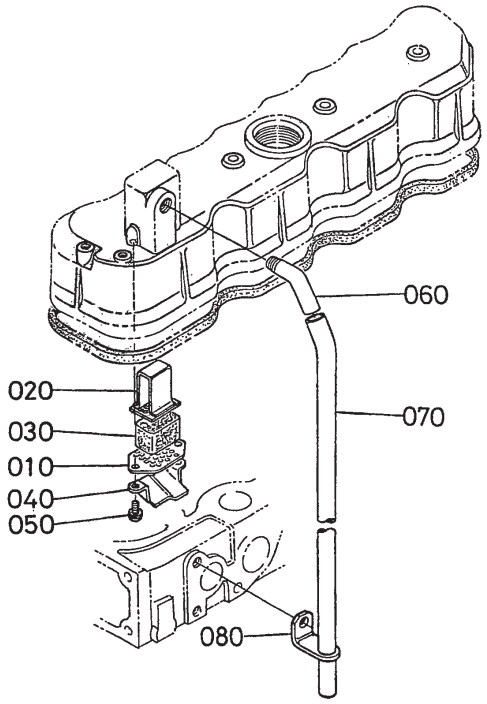


Sheet No.:47

Oil Pump Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9170	1	Oil Pump ASM
20	98–7513	1	Gasket–Pump, Oil
30	98–7514	4	Bolt
40	98–7699	4	Washer–Spring
50	98–7516	1	Gear–Drive, Oil Pump
60	98–7517	1	Key–Feather
70	98–7518	1	Nut–Flange

Ref. No.	Part No.	Qty.	Description

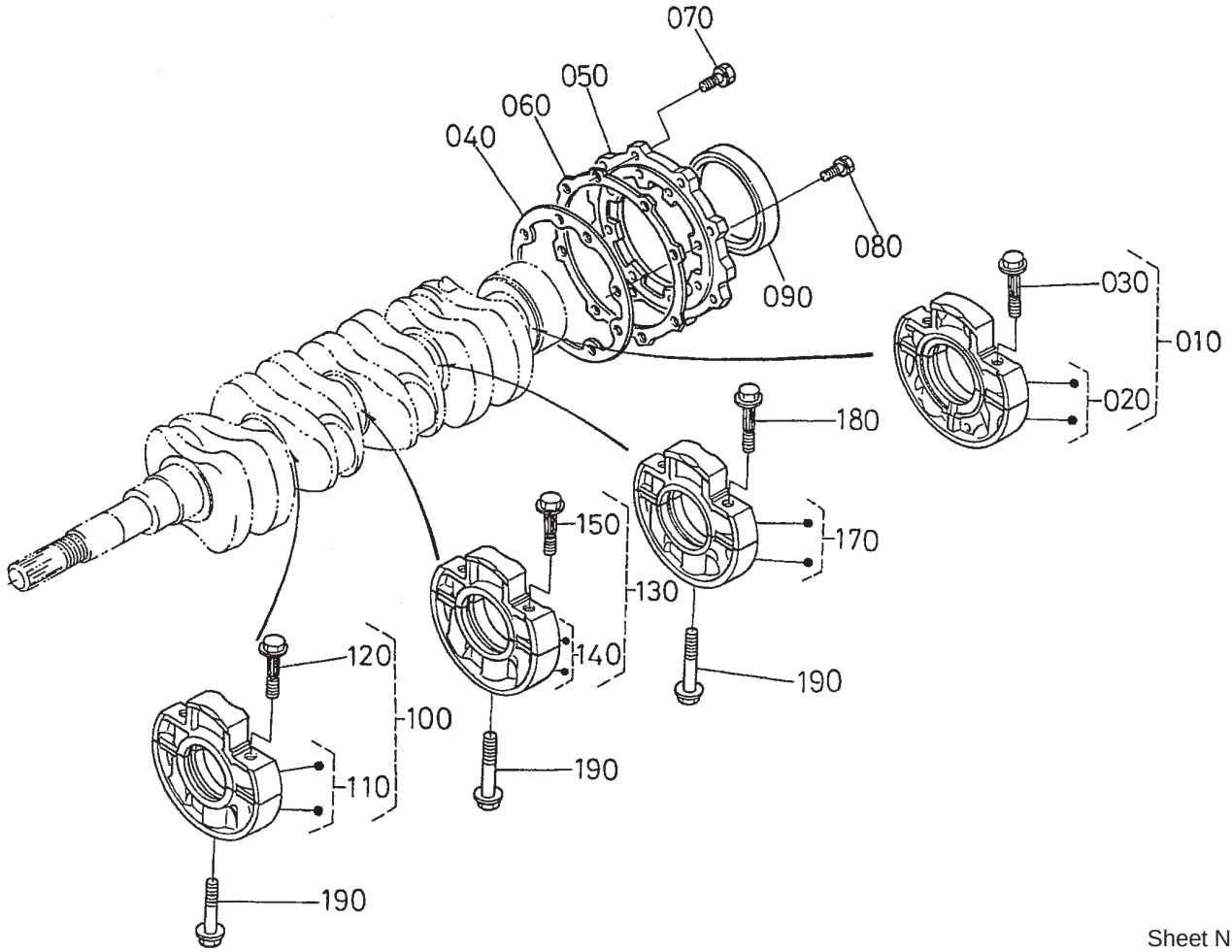


Sheet No.:48

Breather Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7417	1	Plate–Element
20	98–7418	1	Plate–Element
30	98–7419	1	Element–Breather
40	98–7420	1	Shield–Breather, Oil
50	98–7421	2	Screw–W/Washer
60	98–7422	1	Joint–Pipe, Breather
70	98–7423	1	Pipe–Breather
80	98–7424	1	Clamp–Pipe

Ref. No.	Part No.	Qty.	Description

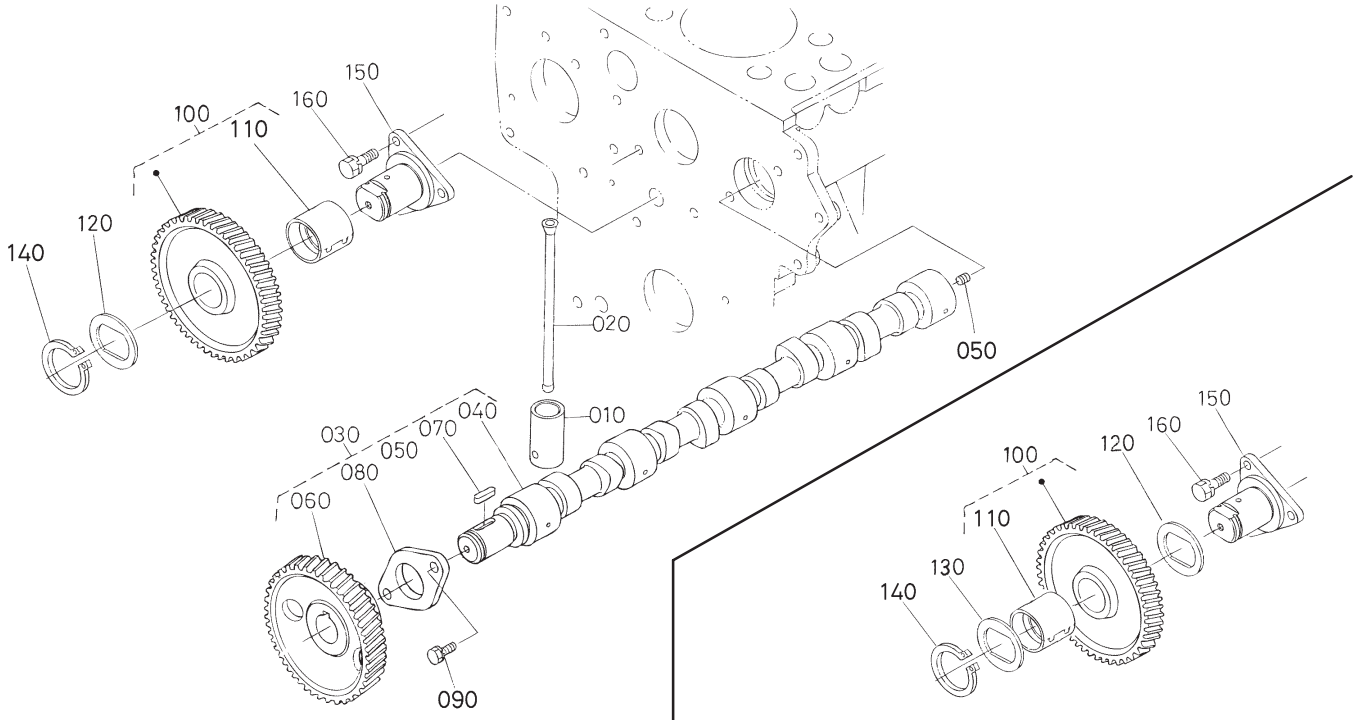


Sheet No.:49

Main Bearing Case

Ref. No.	Part No.	Qty.	Description
10	100–9172	1	Wheel Bearing Case ASM
20	100–9173	1	Bearing Case ASM
30	98–7434	2	Bolt–Case, Bearing
40	98–7435	1	Gasket–Case, Bearing
50	98–7436	1	Cover–Case, Bearing
60	98–7437	1	Gasket–Case Cover, Bearing
70	98–7438	8	Bolt
80	98–7439	8	Bolt
90	98–7440	1	Seal–Oil
100	100–9174	1	Main Bearing Case ASM
110	100–9175	1	Bearing Case ASM
120	98–7434	2	Bolt–Case, Bearing
130	100–9176	1	Main Bearing Case ASM
140	100–9177	1	Bearing Case ASM
150	98–7434	2	Bolt–Case, Bearing
170	100–9178	1	Bearing Case ASM
180	98–7434	2	Bolt–Case, Bearing
190	98–7444	3	Bolt–Case, Bearing

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
100	107–0109	(2A0001 or newer)
110	107–0110	(1Y0001 or newer)
120	107–0111	(1Y0001 or newer)
140	107–0112	(1Y0001 or newer)
150	107–0113	(1Y0001 or newer)

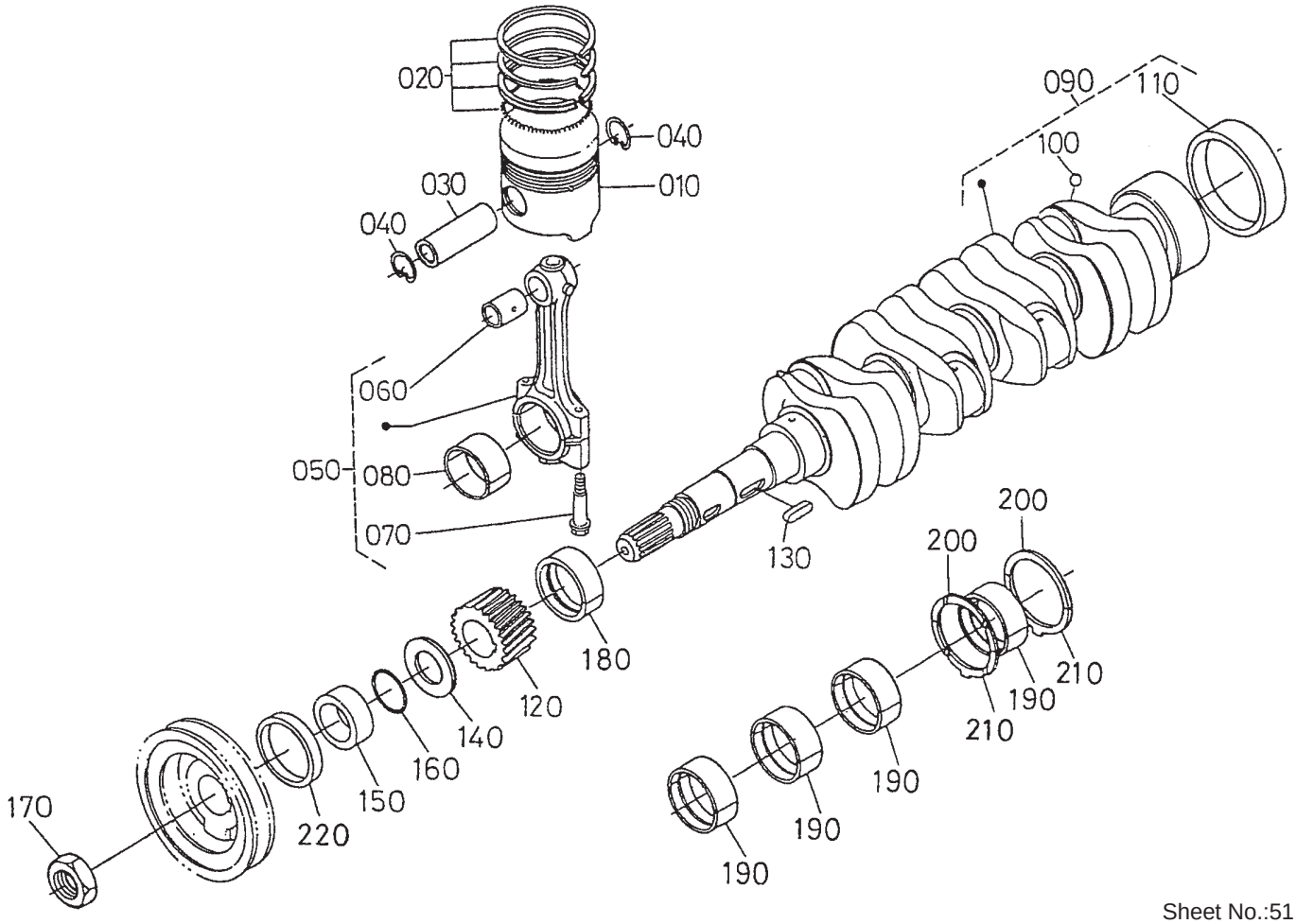
Ref. No.	Part No.	Engine Serial #
100	98–7454	(1W1377 or earlier)
110	98–7455	(1W1377 or earlier)
120	98–7456	(1W1377 or earlier)
140	98–7458	(1W1377 or earlier)
150	98–7459	(1W1377 or earlier)

Sheet No.:50

Camshaft and Idler Gear Shaft Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7445	8	Tappet
20	98–7446	8	Rod–Push
30	100–9179	1	Camshaft ASM
40	100–9180	1	Camshaft
50	98–7449	1	Screw–Set
60	98–7450	1	Gear–Camshaft
70	98–7451	1	Key–Feather
80	98–7452	1	Stopper–Camshaft
90	98–7453	2	Bolt
100	98–7454	1	Gear–Idler, Complete
100	107–0109	1	Gear–Idler, Complete
110	98–7455	1	Bushing–Gear, Idler
110	107–0110	1	Bushing–Idler Gear
120	98–7456	1	Collar
120	107–0111	1	Collar
130	98–7457	1	Collar
140	98–7458	1	Clip–Cir., External
140	107–0112	1	Clip–Cir., External
150	98–7459	1	Shaft–Gear, Idler
150	107–0113	1	Shaft–Gear, Idler
160	98–7453	3	Bolt

Ref. No.	Part No.	Qty.	Description

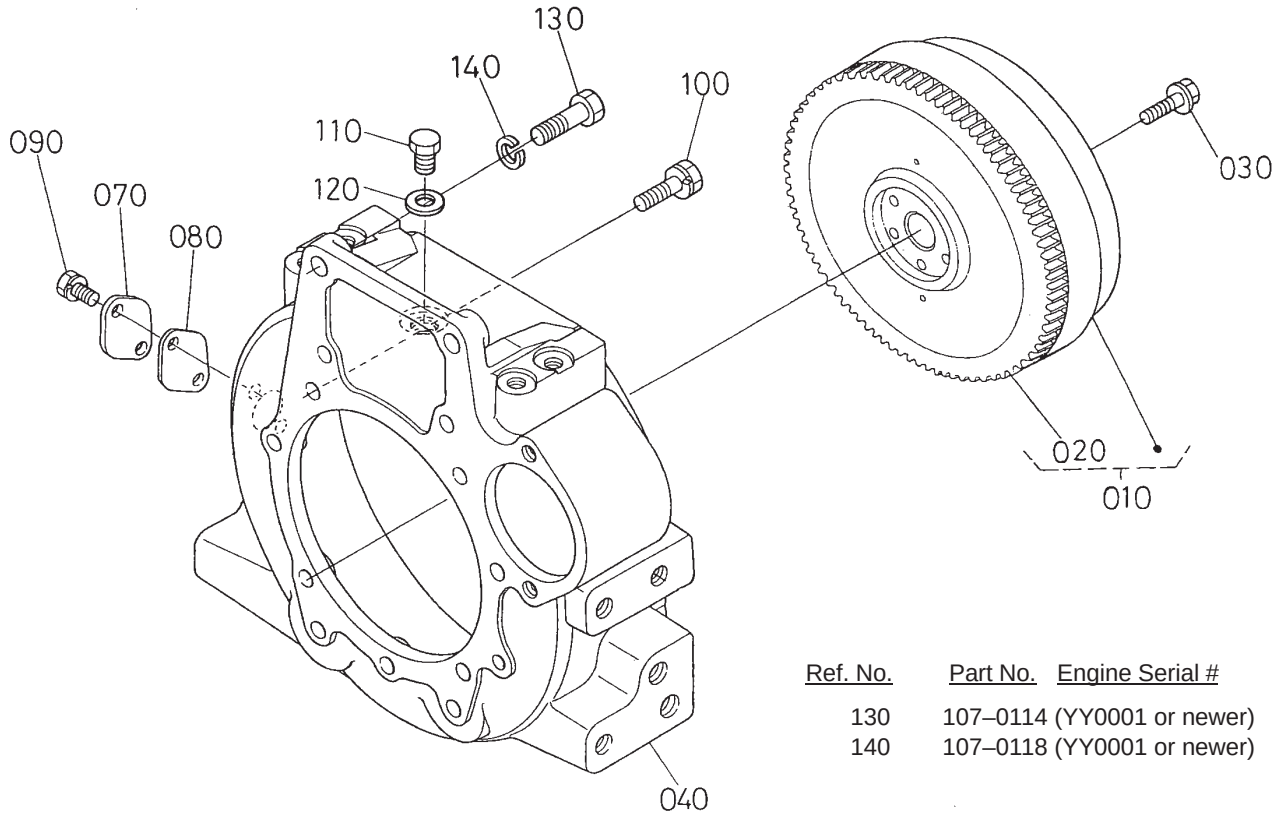


Sheet No.:51

Piston and Crankshaft Assembly

Ref. No.	Part No.	Qty.	Description
10	99–5435	1	Piston (.50mm)
10	100–9181	4	Piston–STD
20	100–9182	4	Piston Ring ASM (STD)
20	99–5436	1	Piston Ring ASM (0.50mm)
30	98–7464	4	Pin–Piston
40	98–7465	8	Clip–Pin, Piston
50	98–7466	4	Connecting Rod ASM
60	98–7467	4	Bushing–Pin, Piston
70	98–7468	8	Bolt–Rod, Connecting
80	98–7470	4	Metal–Crankpin (–0.20mm)
80	98–7471	4	Metal–Crankpin (–0.40mm)
80	98–7469	4	Metal–Crankpin (STD)
90	98–7472	1	Crankshaft–Complete
100	98–7473	4	Ball
110	98–7474	1	Sleeve–Crankshaft
120	98–7475	1	Gear–Crankshaft
130	98–7451	1	Key–Feather
140	98–7476	1	Slinger–Oil
150	98–7477	1	Collar–Crankshaht
160	98–7478	1	O–Ring
170	98–7479	1	Nut–Crankshaft

Ref. No.	Part No.	Qty.	Description
180	98–7481	1	Metal–Crankshaft (STD)
180	98–7482	1	Metal–Crankshaft (–0.20mm)
180	98–7483	1	Metal–Crankshaft (–0.40mm)
190	98–7484	4	Metal–Crankshaft (STD)
190	99–6862	4	Metal–Crankshaft (–0.20mm)
190	99–6863	4	Metal–Crankshaft (–0.40mm)
200	99–6864	2	Metal–Side (STD)
200	98–9414	2	Bearing–Thrust (0.2mm)
200	98–9415	2	Bearing–Thrust (0.4mm)
210	99–6867	2	Metal–Side (STD)
210	98–9689	2	Bearing–Thrust (0.2mm)
210	99–6869	2	Metal–Side, O/S (0.4mm)
220	98–7480	1	Seal–Oil



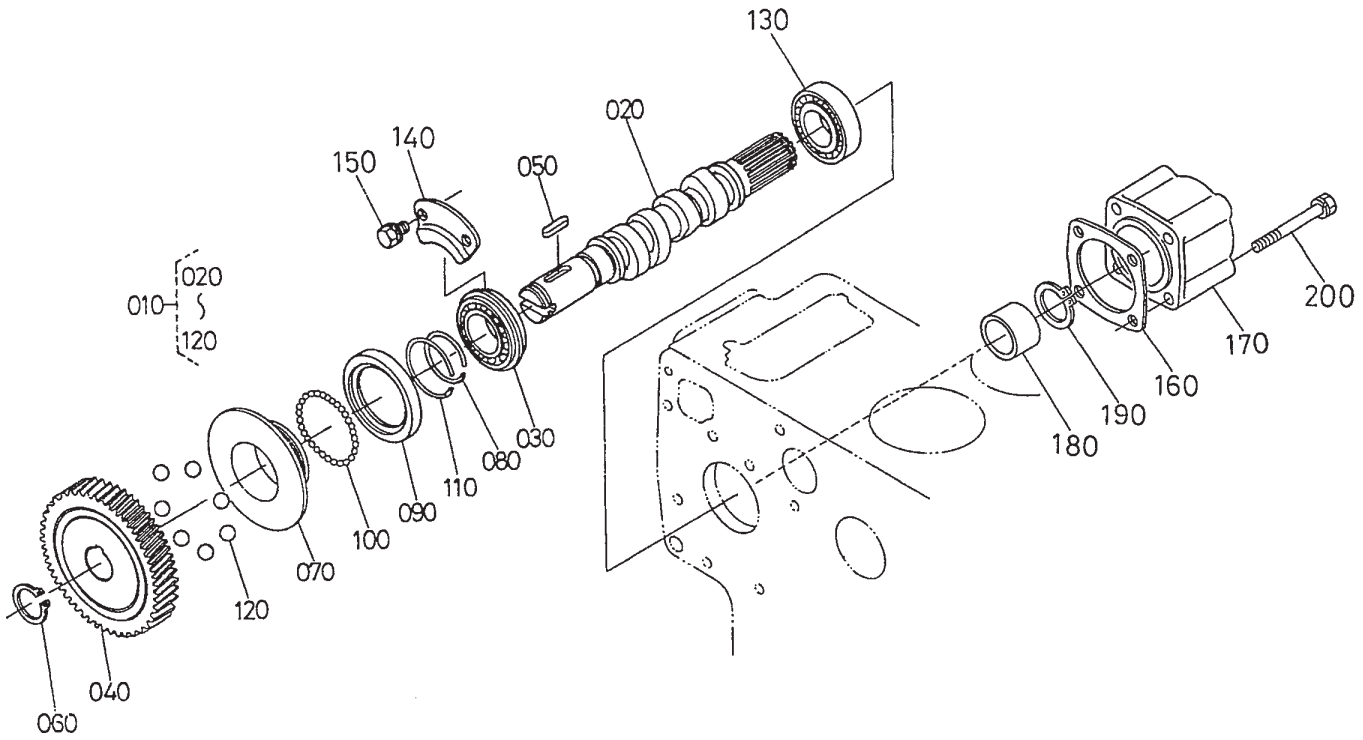
Ref. No.	Part No.	Engine Serial #
130	107–0114	(YY0001 or newer)
140	107–0118	(YY0001 or newer)

Sheet No.:52

Flywheel Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7532	1	Flywheel
20	98–7560	1	Gear–Ring
30	98–7573	6	Bolt–Flywheel
40	98–7559	1	Housing–Flywheel
70	98–7883	1	Cover
80	98–7886	1	Gasket
90	105–4577	2	Bolt
100	98–7885	11	Bolt
110	98–7546	1	Plug
120	100–9194	1	Washer–Plain
130	107–0114	2	Bolt
140	107–0118	2	Washer–Spring

Ref. No.	Part No.	Qty.	Description

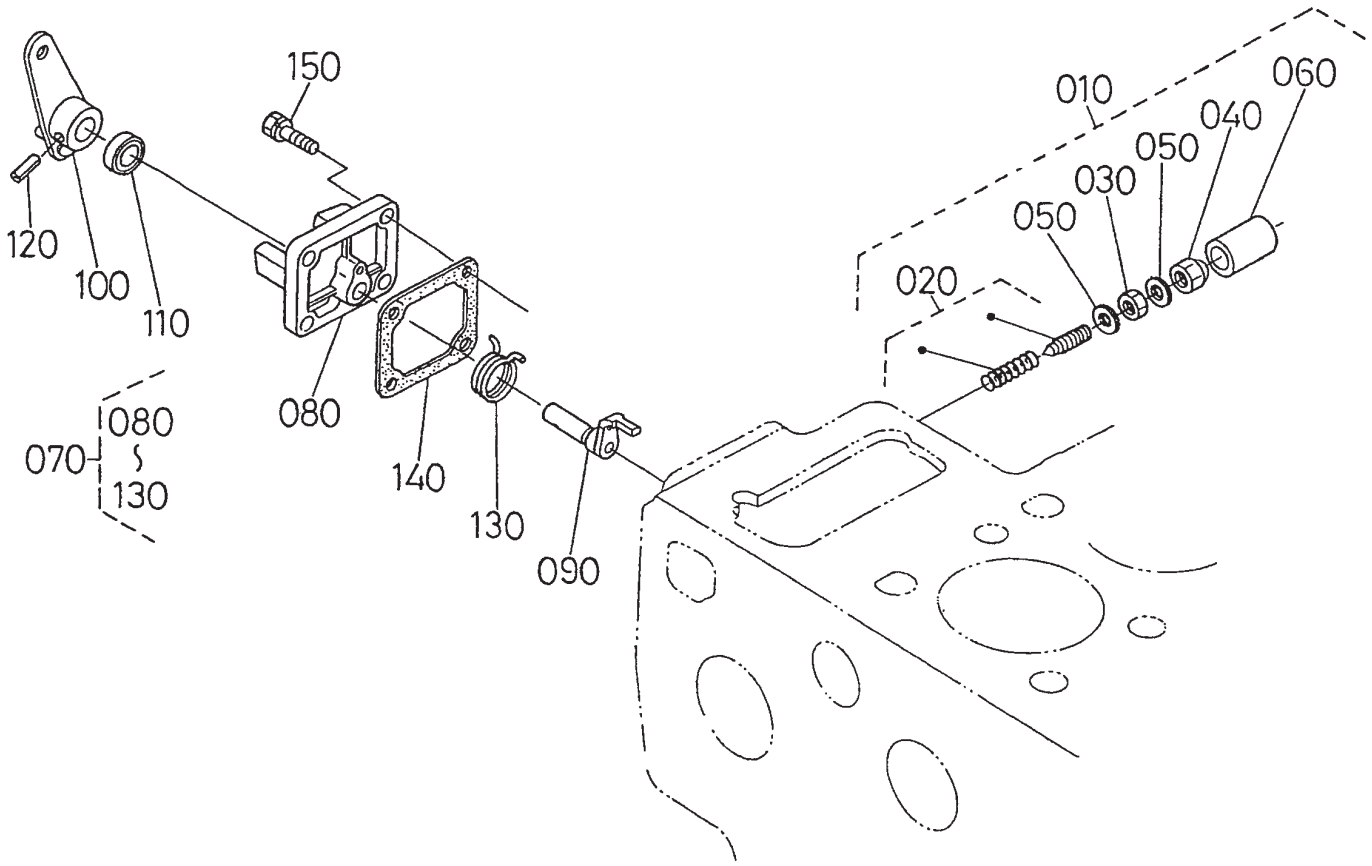


Sheet No.:53

Fuel Camshaft and Governor Shaft Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7551	1	Fuel Camshaft ASM
20	98–7508	1	Camshaft–Fuel
30	98–7595	1	Bearing–Ball
40	98–7574	1	Gear–Pump, Injection
50	98–7575	1	Key–Feather
60	98–7576	1	Clip–Cir., External
70	98–7577	1	Sleeve–Governor
80	98–7578	1	Clip–Cir., Governor Sleeve
90	98–7579	1	Case–Ball, Governor
100	98–7580	39	Ball
110	98–7581	1	Clip–Cir.
120	98–7582	7	Ball
130	98–7583	1	Bearing–Ball
140	98–7584	1	Stopper
150	100–9195	2	Bolt
160	98–7588	1	Gasket
170	98–7586	1	Cover–Fuel, Camshaft
180	98–7587	1	Collar
190	98–7589	1	Clip–Cir., External
200	98–7590	4	Bolt

Ref. No.	Part No.	Qty.	Description

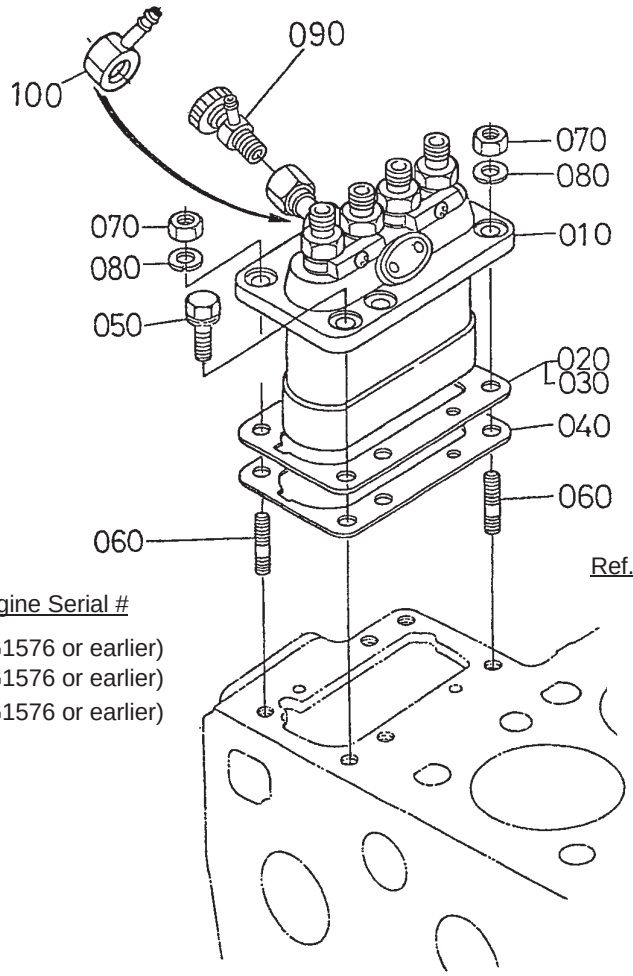


Sheet No.:54

Engine Stop Lever Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7591	1	I/D Appartus ASM
20	98–7592	1	Adjusting Bolt ASM
30	98–7593	1	Nut
40	98–7594	1	Nut–Cap
50	98–7428	2	Gasket
60	98–7596	1	Cap
70	100–9198	1	Eng Stop Lever ASM
80	98–7598	1	Cover–Pump, Injection
90	100–9200	1	Shaft–Lever
100	98–7600	1	Lever–Stop, Engine
110	98–7601	1	Seal–Oil
120	98–7602	1	Pin–Spring
130	98–7603	1	Spring–Return
140	98–7604	1	Gasket–Cover, Pump
150	98–7605	4	Bolt

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
020	98–7607	(2G1576 or earlier)
030	98–7608	(2G1576 or earlier)
040	98–7609	(2G1576 or earlier)

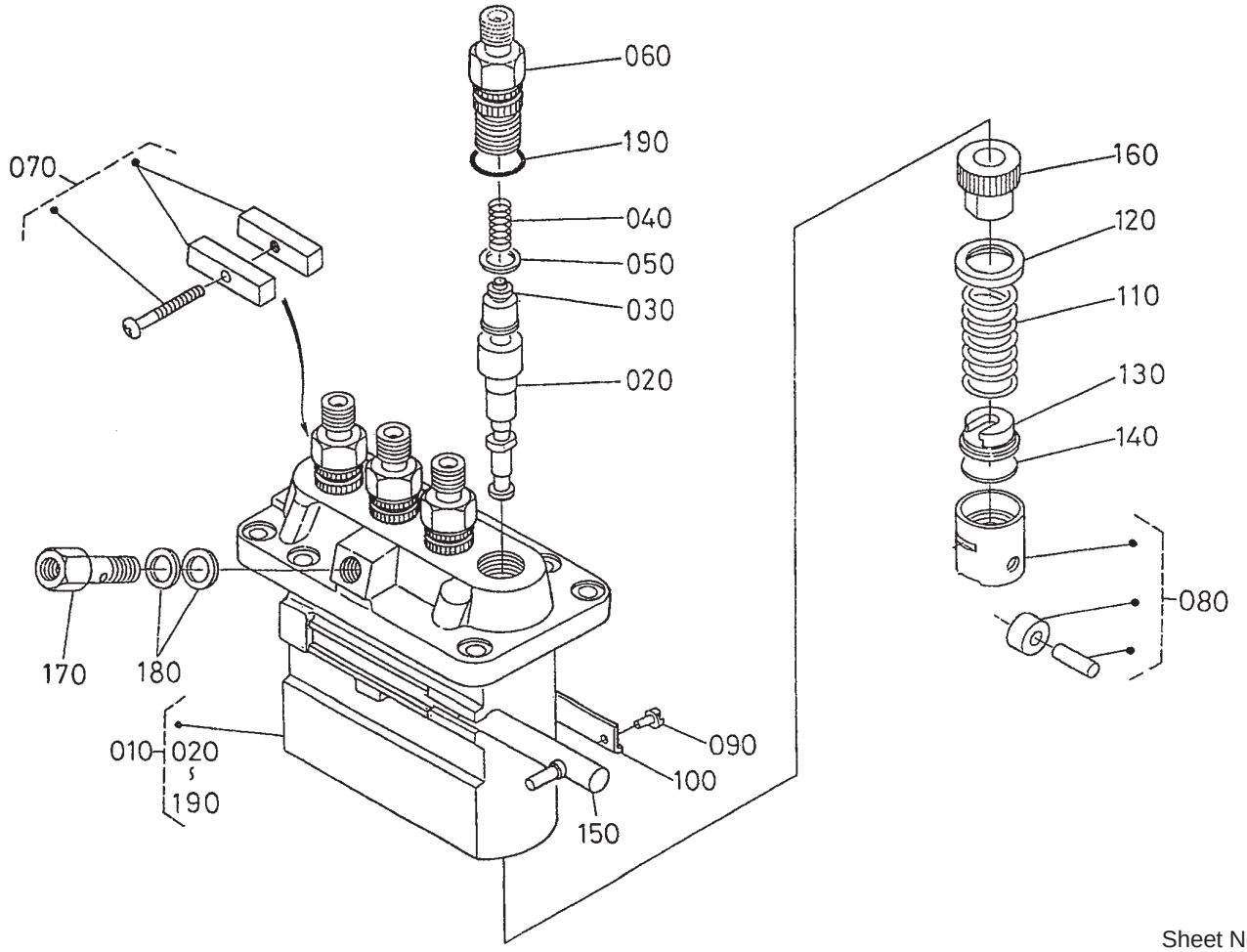
Ref. No.	Part No.	Engine Serial #
020	107–0146	(2J0001 or newer)
030	107–0147	(2J0001 or newer)
040	107–0148	(2J0001 or newer)

Sheet No.:55

Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9201	1	Injection Pump ASM
20	107–0146	1	Shim
20	98–7607	1	Shim
30	107–0147	1	Shim
30	98–7608	1	Shim
40	107–0148	1	Shim
40	98–7609	1	Shim–Pump, Injection
50	98–7610	4	Bolt
60	100–1558	2	Stud–Manifold, Exhaust
70	98–7534	2	Nut
80	105–2893	2	Washer–Spring
90	100–9202	1	Jet Start Cock ASM
100	98–7617	1	Joint

Ref. No.	Part No.	Qty.	Description

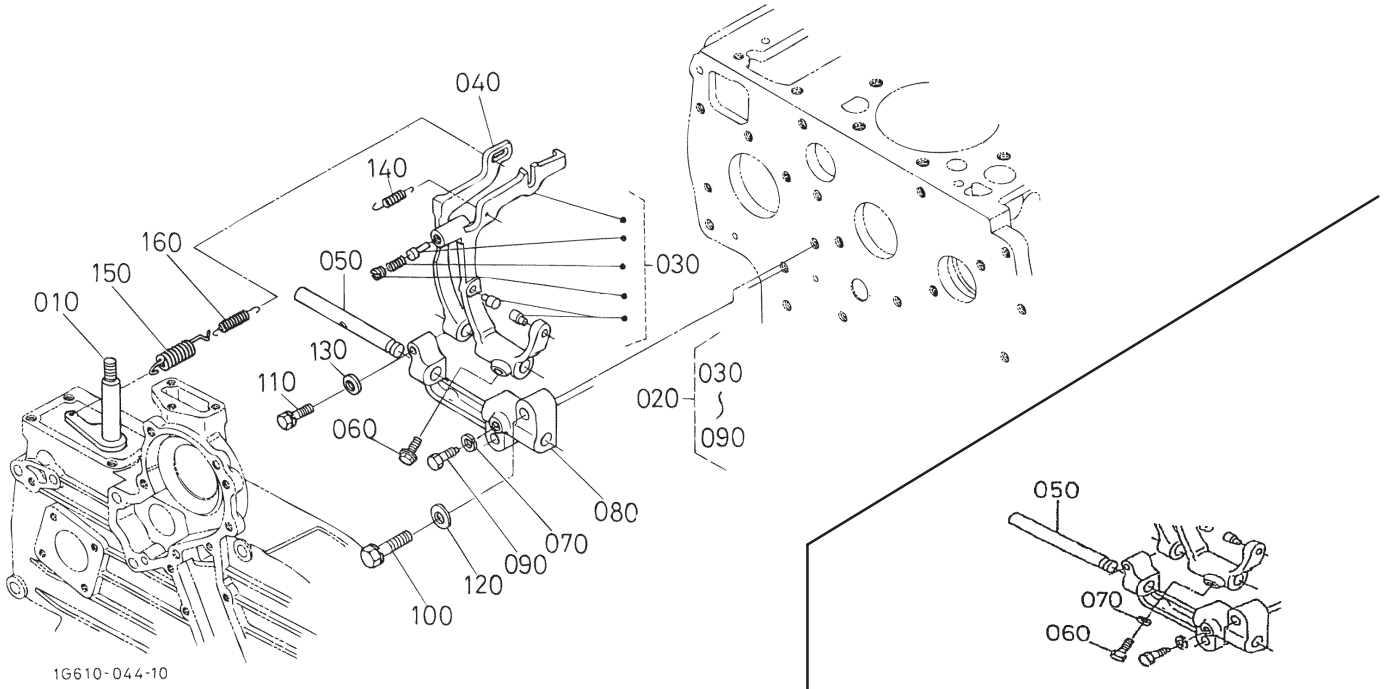


Sheet No.:56

Injection Pump Component Parts Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9201	1	Injection Pump ASM
20	98–7619	4	Plunger–Pump
30	98–7620	4	Valve–Delivery
40	98–7621	4	Spring–Valve, Delivery
50	98–7622	4	Gasket–Valve, Delivery
60	98–7623	4	Holder–Valve, Delivery
70	98–7624	2	Lock Plate ASM
80	98–7625	4	Tappet ASM
90	98–7626	4	Pin–Guide, Tappet
100	98–7627	2	Plate
110	98–7628	4	Spring–Plunger
120	98–7629	4	Seat–Spring, Upper
130	98–7630	4	Seat–Spring, Lower
140	98–7631	4	Shim
150	98–7632	1	Rack–Control
160	98–7634	4	Sleeve–Control
170	98–7635	1	Screw
180	98–7636	2	Gasket
190	98–7637	4	O–Ring

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
050	107–0120	(2C0001 or newer)
060	107–0116	(2C0001 or newer)
070	98–7699	(2C0001 or newer) (Qty. 1)

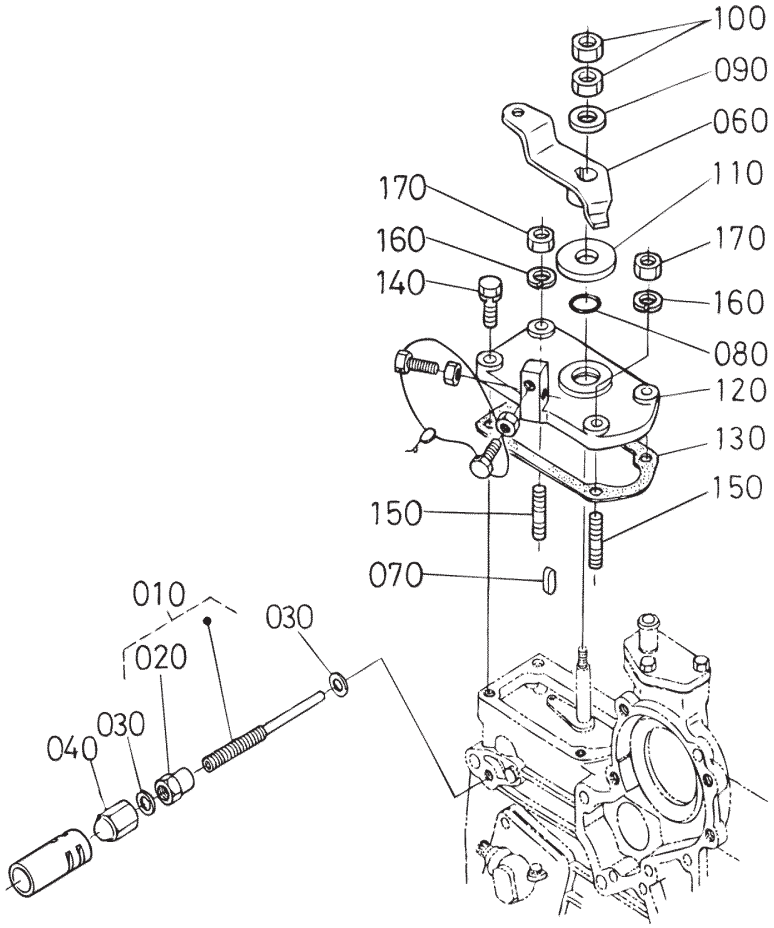
Ref. No.	Part No.	Engine Serial #
050	98–7640	(2A1266 or earlier)
060	98–7641	(2A1266 or earlier)
070	98–7699	(2A1266 or earlier) (Qty. 2)

Sheet No.:57

Governor Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7638	1	Lever–Governor
20	100–9204	1	Lever–Fork
30	100–9205	1	Lever–Fork
40	100–9206	1	Lever–Fork
50	107–0120	1	Shaft–Lever, Fork
50	98–7640	1	Shaft–Lever, Fork
60	107–0116	1	Bolt–Flange
60	98–7641	1	Bolt–Shaft, Lever
70	98–7699	3	Washer–Spring
80	98–7643	1	Holder–Lever, Fork
90	98–7644	1	Bolt
100	98–7645	2	Bolt
110	98–7646	1	Bolt
120	98–7536	2	Washer–Plain
130	98–7648	1	Washer–Plain
140	100–9207	1	Spring–Start
150	100–9208	1	Spring–Governor
160	98–7651	1	Spring–Governor

Ref. No.	Part No.	Qty.	Description

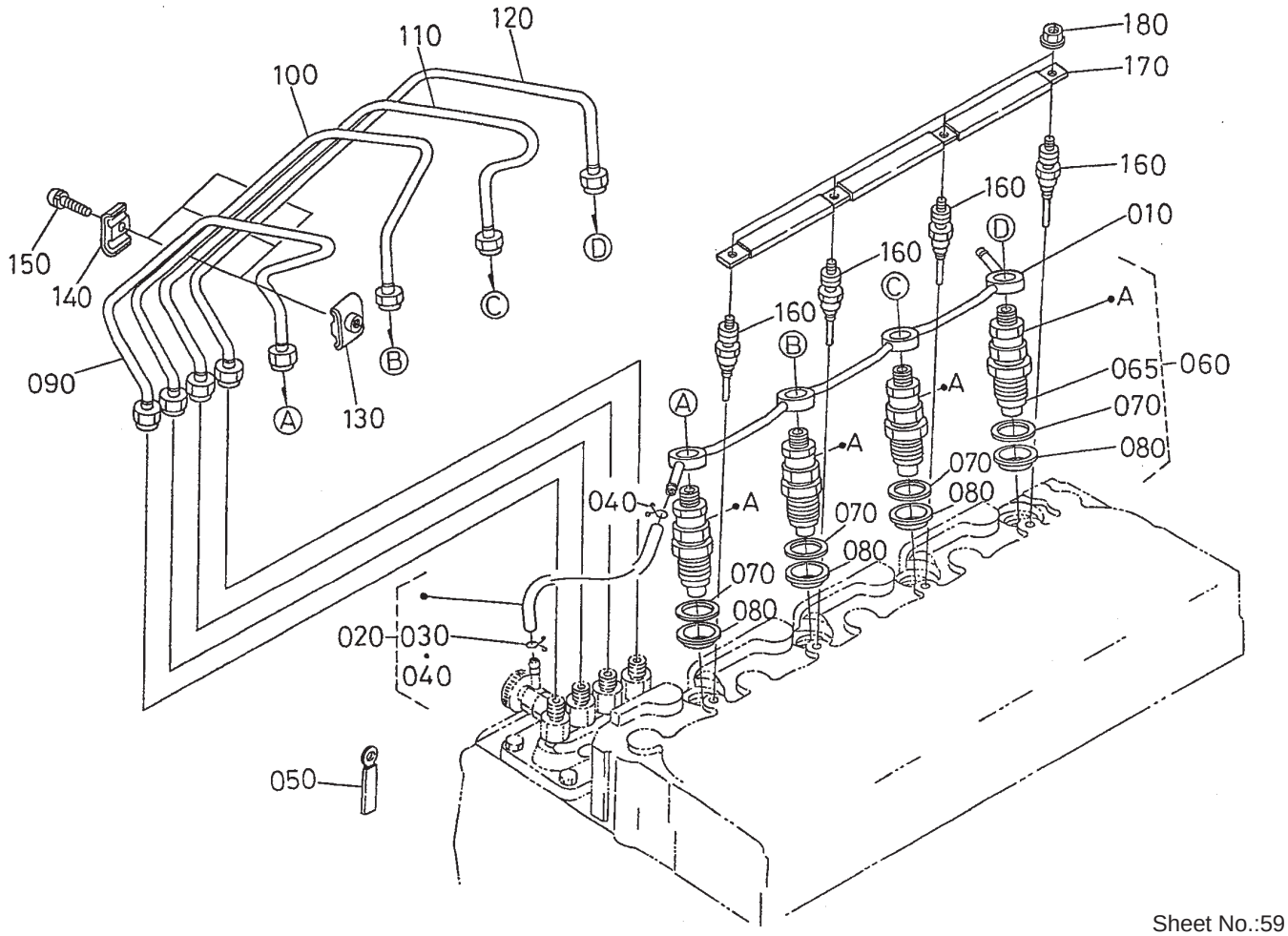


Sheet No.:58

Speed Control Plate Assembly

Ref. No.	Part No.	Qty.	Description
10	107–0132	1	Adjustable Bolt ASM
20	98–7653	1	Nut
30	98–7654	2	Gasket
40	98–7655	1	Nut–Cap
60	98–7657	1	Lever–Control, Speed
70	98–7658	1	Key–Feather
80	107–0103	1	O–Ring
90	98–7698	1	Washer–Plain
100	98–7661	2	Nut
110	98–7662	1	Collar
120	98–7663	1	Plate–Control, Speed
130	98–7664	1	Gasket
140	98–7568	2	Bolt
150	98–7571	2	Stud
160	98–7699	2	Washer–Spring
170	98–7572	4	Nut

Ref. No.	Part No.	Qty.	Description

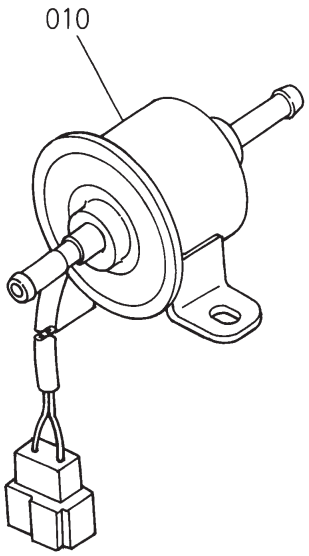


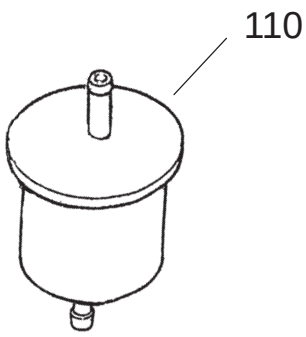
Sheet No.:59

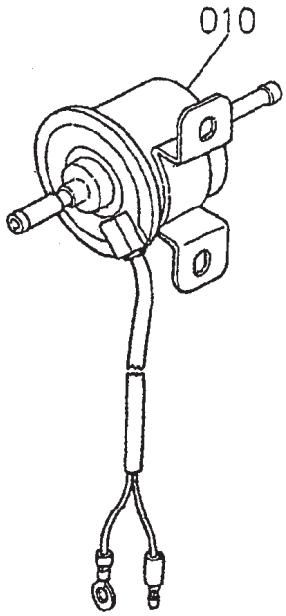
Nozzle Holder and Glow Plug Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9213	1	Overflow Pipe ASM
20	98–7670	1	Overflow Pipe ASM
30	98–7671	1	Clip–Pipe
40	98–7672	1	Clip–Pipe
50	98–7673	1	Clamp–Cord
60	100–9214	1	Nozzle Holder Kit
65	100–9215	4	Piece–Nozzle
70	98–7676	4	Gasket
80	98–7677	4	Seal
90	100–9216	1	Pipe–Injection
100	100–9217	1	Pipe–Injection
110	100–9218	1	Pipe–Injection
120	100–9219	1	Pipe–Injection
130	98–7682	3	Clamp–Pipe
140	98–7683	3	Clamp–Pipe
150	98–9364	3	Screw–W/Washer
160	98–7685	4	Plug–Glow
170	98–7686	1	Cord–Plug, Glow
180	99–8377	4	Nut–Flange

Ref. No.	Part No.	Qty.	Description







Ref. No.	Part No.	Engine Serial #
010	107–0122	(2S0001 or newer)

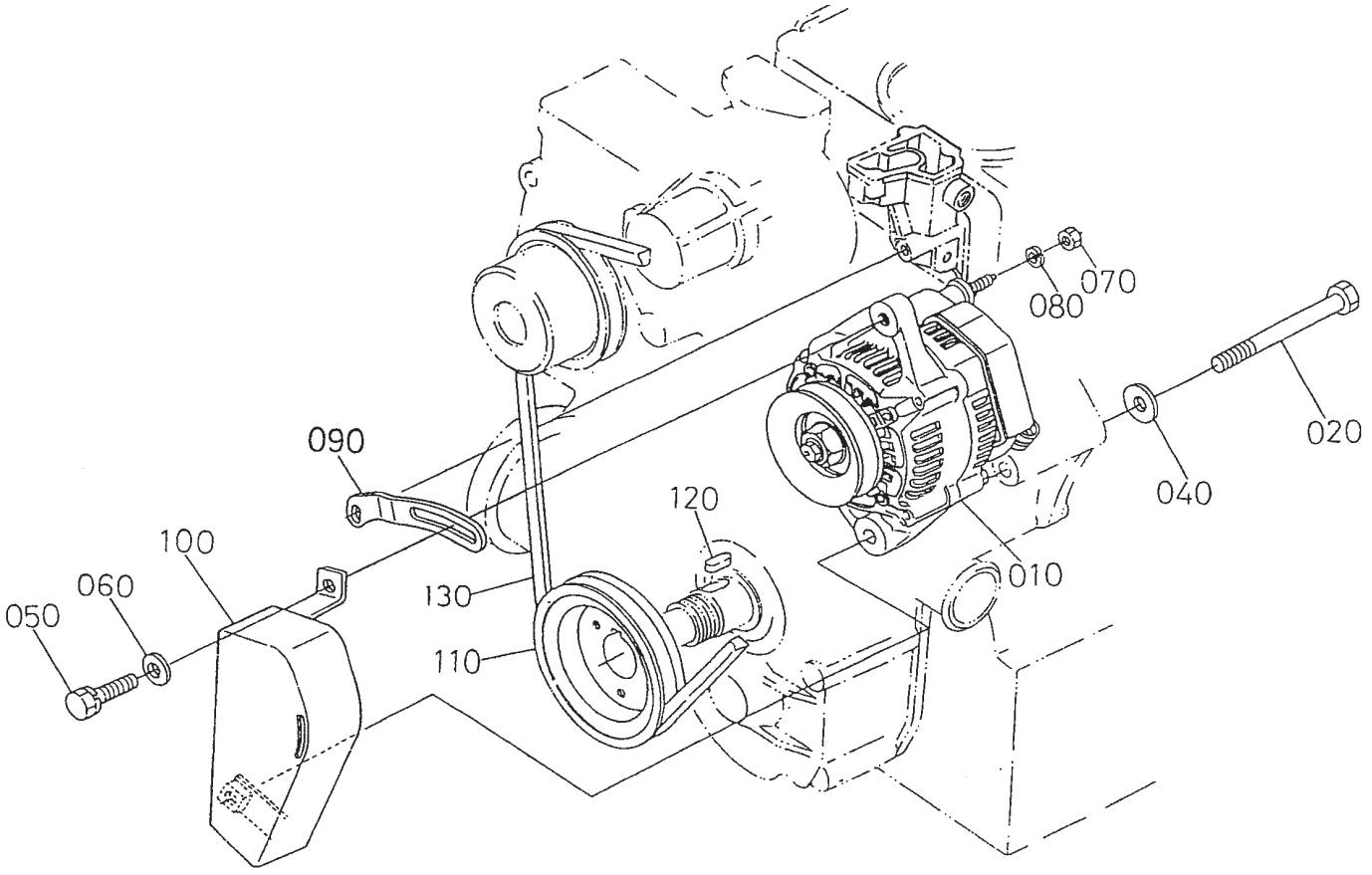
Ref. No.	Part No.	Engine Serial #
010	99–3464	(1U1056 or earlier)

Sheet No.:60

Fuel Filter and Fuel Pump

Ref. No.	Part No.	Qty.	Description
10	99–3464	1	Pump–Fuel
10	107–0122	1	Pump–Fuel
110	98–7612	1	Filter–Fuel

Ref. No.	Part No.	Qty.	Description

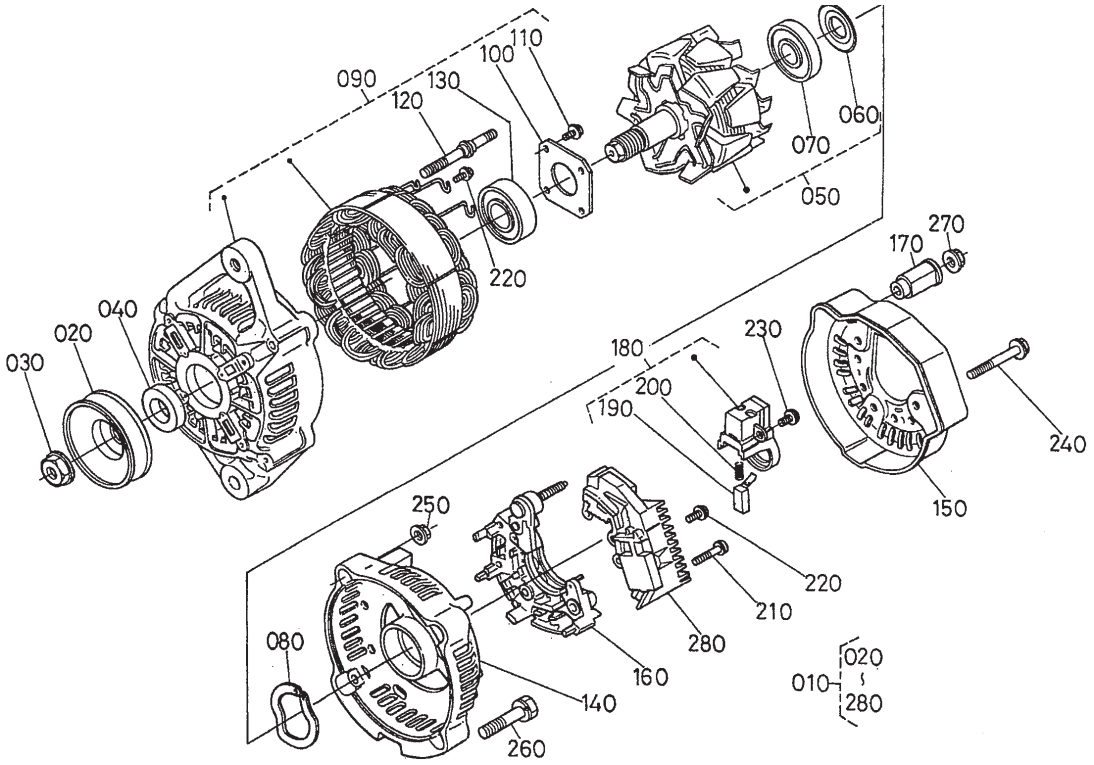


Sheet No.:61

Alternator and Pulley Assembly

Ref. No.	Part No.	Qty.	Description
10	107–0145	1	Alternator ASM
20	98–7695	1	Bolt
40	98–9366	1	Washer–Plain
50	98–7697	1	Bolt
60	100–9233	1	Washer–Plain
70	98–7572	1	Nut
80	98–7699	1	Washer–Spring
90	105–2872	1	Bracket–Alternator
100	98–7701	1	Cover–Belt
110	106–2044	1	Pulley–Drive, Fan
120	98–7451	1	Key–Feather
130	98–7705	1	V–Belt

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
090	98–7714	(1Q1216 or earlier)
150	98–7720	(1Q1216 or earlier)
180	98–7723	(1Q1216 or earlier)

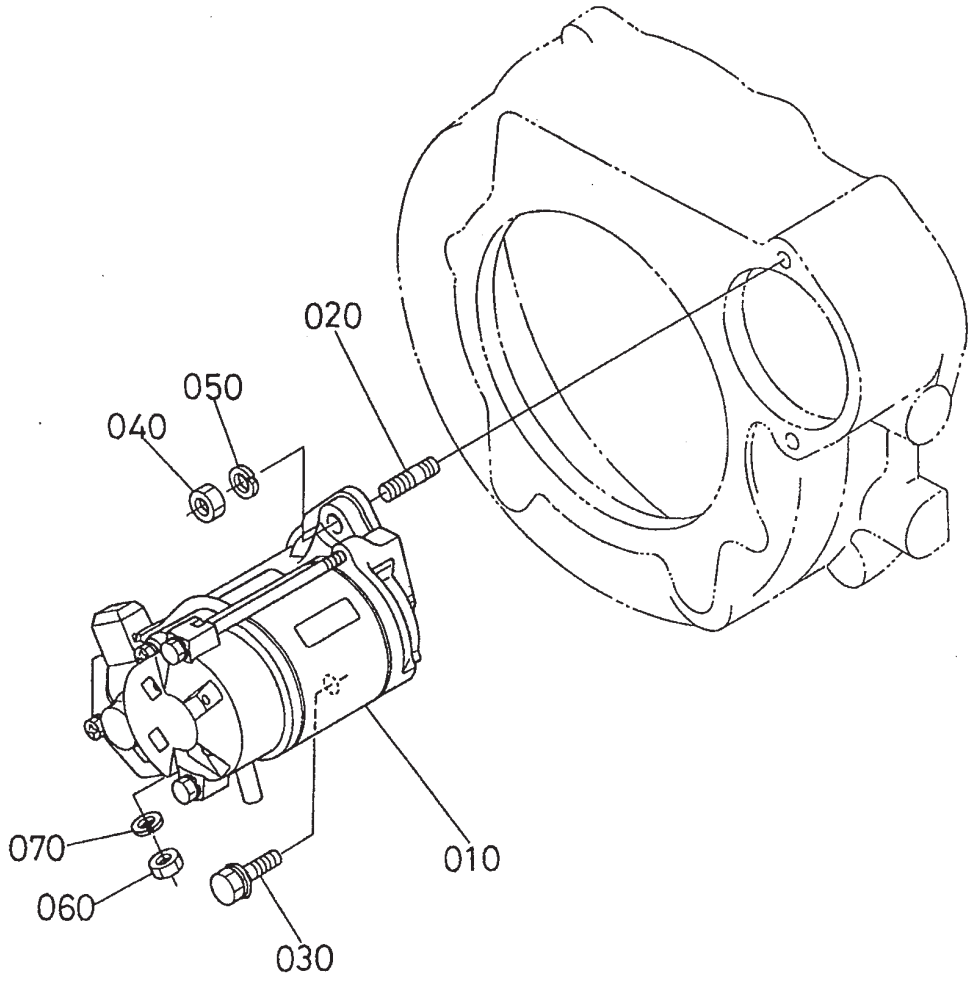
Ref. No.	Part No.	Engine Serial #
090	107–0139	(1S0001 or newer)
150	107–0140	(1S0001 or newer)
180	107–0141	(1S0001 or newer)

Sheet No.:62

Alternator Component Parts Assembly

Ref. No.	Part No.	Qty.	Description
10	107–0145	1	Alternator ASM
20	98–7707	1	Pulley–Alternator
30	98–7708	1	Nut
40	98–7709	1	Collar
50	107–0136	1	Rotor
60	98–7711	1	Cover–Bearing
70	107–0138	1	Bearing–Ball
80	98–7713	1	Washer–Thrust
90	107–0139	1	Drive End Frame ASM
90	98–7714	1	Frame–End, Drive
100	98–7715	1	Plate–Retainer
110	98–7716	4	Screw–Head, Round
120	98–7717	2	Bolt–Through
130	107–0137	1	Bearing–Ball
140	98–7719	1	Frame–End
150	98–7720	1	Cover–End
150	107–0140	1	Cover–End
160	98–7721	1	Rectifier ASM
170	98–7722	1	Bushing–Insulation
180	98–7723	1	Holder–Brush
180	107–0141	1	Holder–Brush
190	98–7724	2	Brush
200	98–7725	2	Spring–Brush
210	98–7726	2	Screw–Head, Round
220	98–7727	6	Screw–Head, Round
230	98–7728	1	Screw–Head, Round

Ref. No.	Part No.	Qty.	Description
240	98–7729	3	Bolt
250	98–7730	2	Nut
260	98–7731	2	Bolt
270	98–7732	1	Nut
280	98–7733	1	Regulator ASM

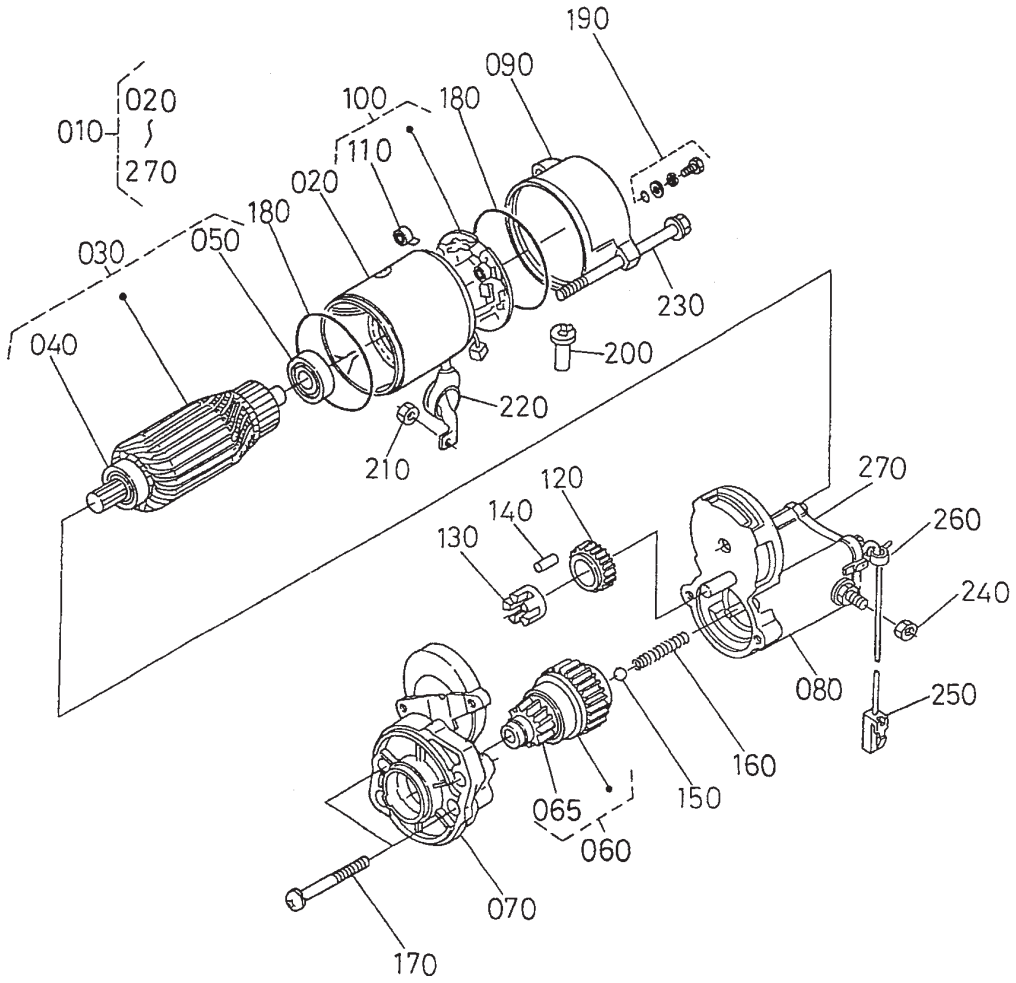


Sheet No.:63

Starter Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9237	1	Starter ASM
20	98–7735	1	Stud
30	98–7736	1	Bolt
40	98–7737	1	Nut
50	98–7738	1	Washer–Spring
60	98–7739	1	Nut
70	105–2893	1	Washer–Spring

Ref. No.	Part No.	Qty.	Description

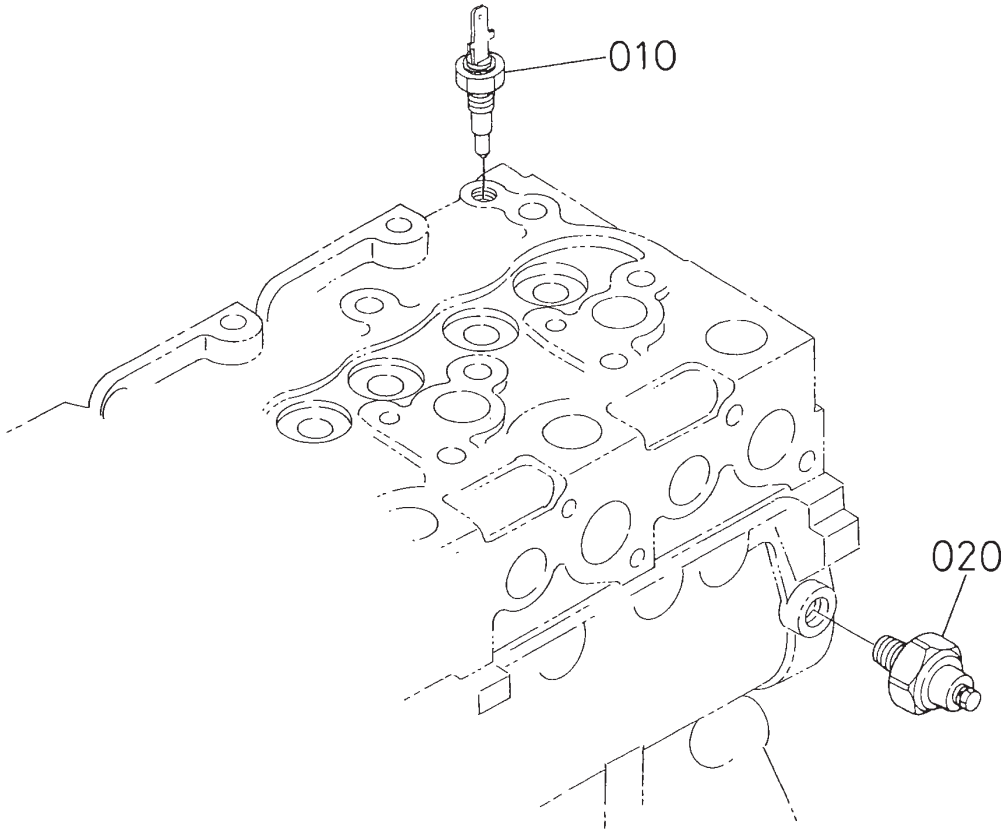


Sheet No.:64

Starter Component Parts Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9237	1	Starter ASM
20	104–8608	1	Yoke ASM
30	98–7742	1	Armature ASM
40	98–7744	1	Bearing
50	98–7743	1	Bearing
60	98–7745	1	Clutch–Running, Over
65	105–2887	1	Pinion–Bevel
70	98–7746	1	Frame–End, Drive
80	100–9239	1	Magentic Switch ASM
90	98–7748	1	Frame–End
100	98–7749	1	Brush Holder ASM
110	98–7750	4	Spring–Brush
120	98–7751	1	Gear
130	98–7752	1	Retainer
140	98–7753	5	Roller
150	98–7755	1	Ball
160	98–7754	1	Spring
170	98–7756	2	Bolt
180	98–7757	2	O–Ring
190	98–7758	2	Bolt ASM
200	98–7759	1	Pipe–Drain
210	105–2873	1	Nut
220	99–8375	1	Cover
230	100–9240	2	Bolt
240	99–8376	1	Nut–Hex
250	98–9711	1	Cord–Solenoid, Stop

Ref. No.	Part No.	Qty.	Description
260	98–9712	1	Band–Cover
270	105–2886	1	Cover ASM

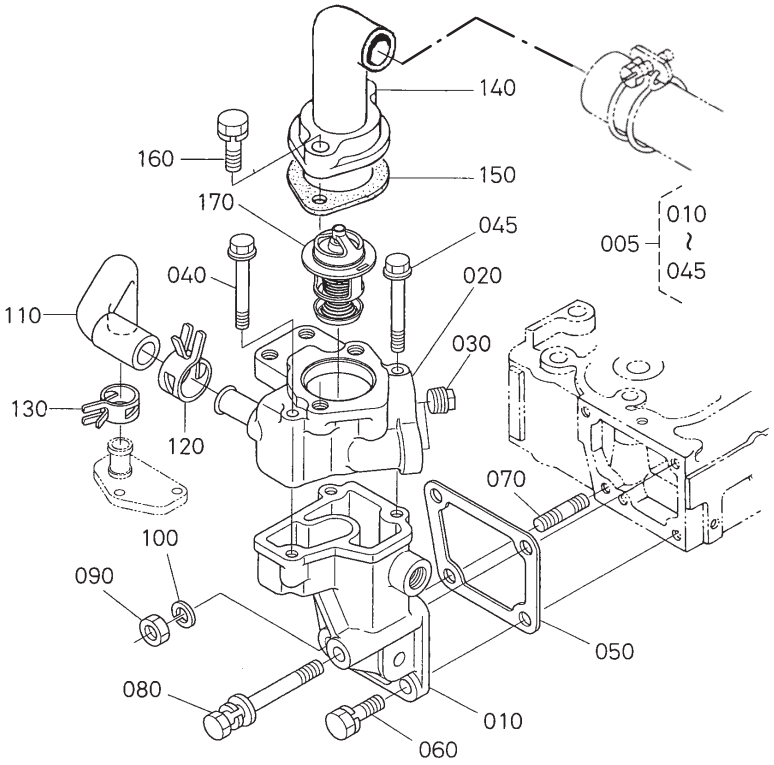


Sheet No.:65

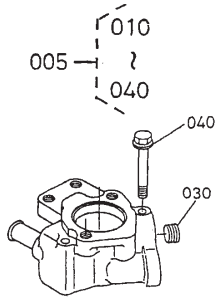
Oil Switch / Thermometer and Plug Assembly

Ref. No.	Part No.	Qty.	Description
10	99–3582	1	Thermoswitch
20	98–7764	1	Switch–Oil

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
020	107–0144	(1N0001 or newer)
040	105–2875	(1E0001 or newer) (Qty. 2)
045	107–0117	(1E0001 or newer)
080	107–0115	(1U0001 or newer)



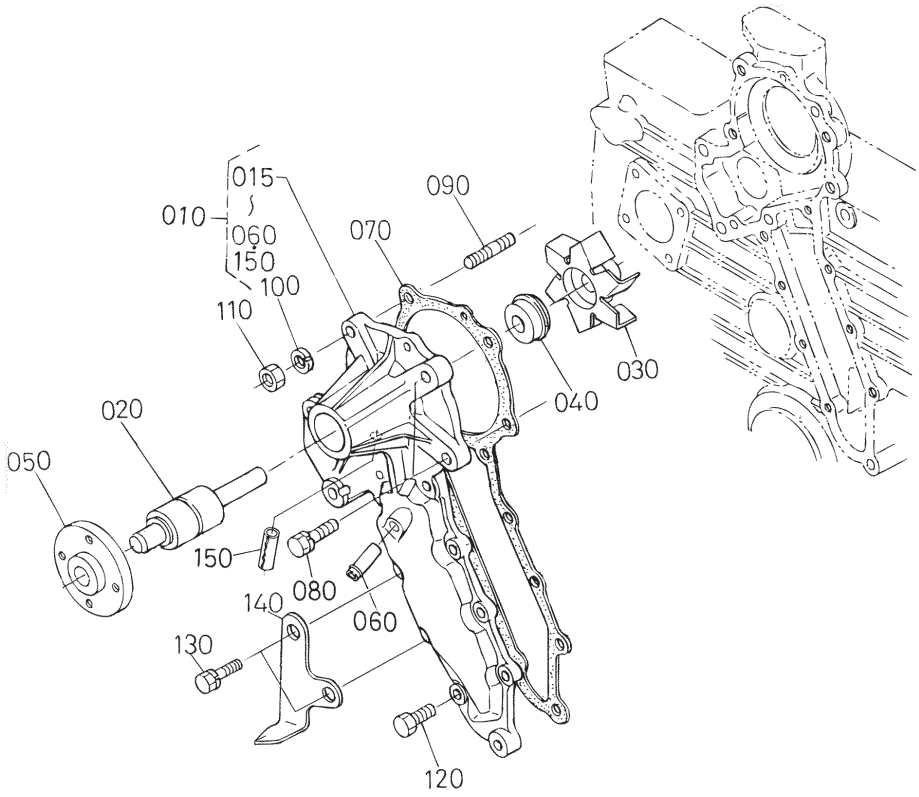
Ref. No.	Part No.	Engine Serial #
040	105–2875	(1C1478 or earlier) (Qty. 3)

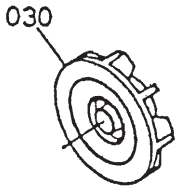
Sheet No.:66

Water Flange and Thermostat Assembly

Ref. No.	Part No.	Qty.	Description
5	105–4578	1	Water Flange ASM
10	107–0143	1	Flange–Water
20	107–0144	1	Flange–Water
30	105–2874	2	Plug
40	105–2875	2	Bolt–Flange
40	105–2875	3	Bolt–Flange
45	107–0117	1	Bolt–Flange
50	105–2876	1	Gasket–Flange, Water
60	98–7610	2	Bolt
70	100–1558	1	Stud–Manifold, Exhaust
80	107–0115	1	Bolt
90	98–7534	1	Nut
100	105–2893	1	Washer–Spring
110	105–2878	1	Pipe–Return, Water
120	98–9714	1	Clamp–Hose
130	105–2879	1	Clamp–Hose
140	100–9244	1	Cover–Thermostat
150	105–2880	1	Gasket–Cover, Thermostat
160	98–7777	2	Bolt
170	105–2881	1	Thermostat ASM

Ref. No.	Part No.	Qty.	Description





Ref. No.	Part No.	Engine Serial #
010	107–0129	(2S0001 or newer)
030	107–0130	(1Y0001 or newer)
150	107–0131	(2S0001 or newer)

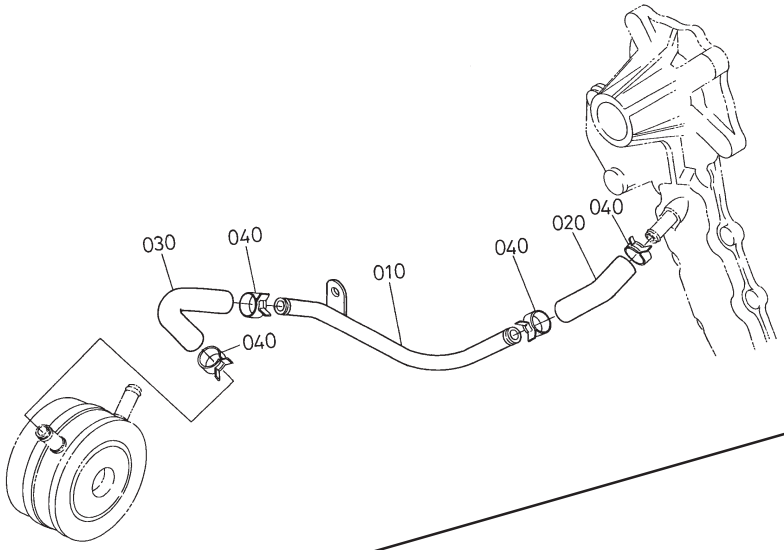
Ref. No.	Part No.	Engine Serial #
010	100–9245	(1W1377 or earlier)
030	98–7781	(1W1377 or earlier)

Sheet No.:68

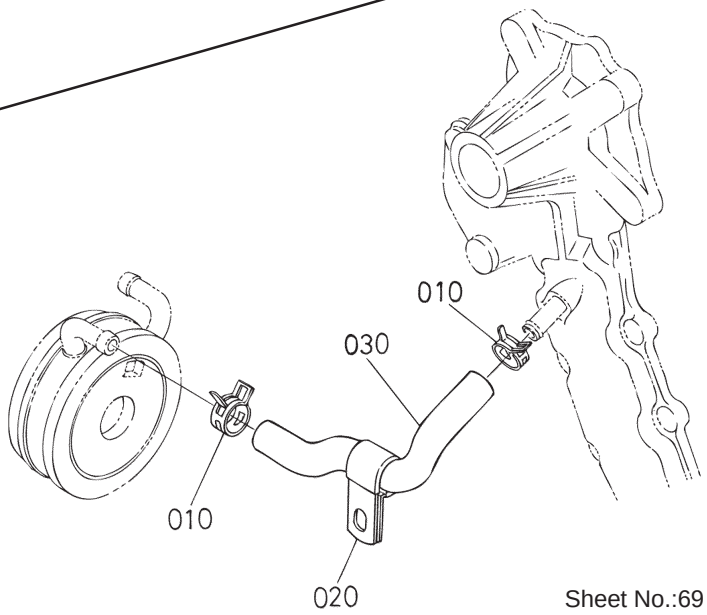
Water Pump Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9245	1	Water Pump ASM
10	107–0129	1	Water Pump ASM
15	105–2885	1	Body–Pump, Water
20	98–7780	1	Bearing–Ball
30	107–0130	1	Impeller–Pump, Water
30	98–7781	1	Impeller–Pump, Water
40	105–2882	1	Mechanical Seal ASM
50	98–7783	1	Flange–Pump, Water
60	98–9580	1	Pipe–Return, Water
70	98–7784	1	Gasket–Pump, Water
80	98–7439	2	Bolt
90	98–7786	2	Stud
100	105–2893	2	Washer–Spring
110	98–7534	2	Nut
120	98–7605	6	Bolt
130	98–7568	2	Bolt
140	100–9246	1	Indicator–Timing
150	107–0131	1	Pin–Spring

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
010	100–9278	(2Q1204 or earlier)
020	100–9279	(2Q1204 or earlier)
030	100–9280	(2Q1204 or earlier)
040	98–9579	(2Q1204 or earlier) (Qty. 4)



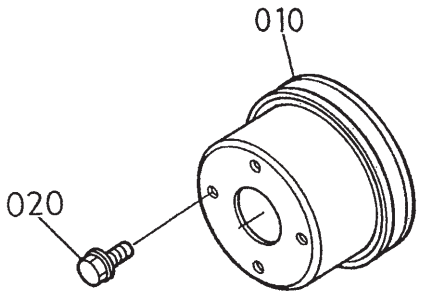
Ref. No.	Part No.	Engine Serial #
010	98–9579	(2S0001 or newer) (Qty. 2)
020	107–0123	(2S0001 or newer)
030	107–0124	(2S0001 or newer)

Sheet No.:69

Water Pipe Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9278	1	Pipe–Water
10	98–9579	2	Band–Pipe
20	100–9279	1	Pipe–Water
20	107–0123	1	Clamp–Cord
30	100–9280	1	Pipe–Cooler, Oil
30	107–0124	1	Pipe–Cooler, Oil
40	98–9579	4	Band–Pipe

Ref. No.	Part No.	Qty.	Description

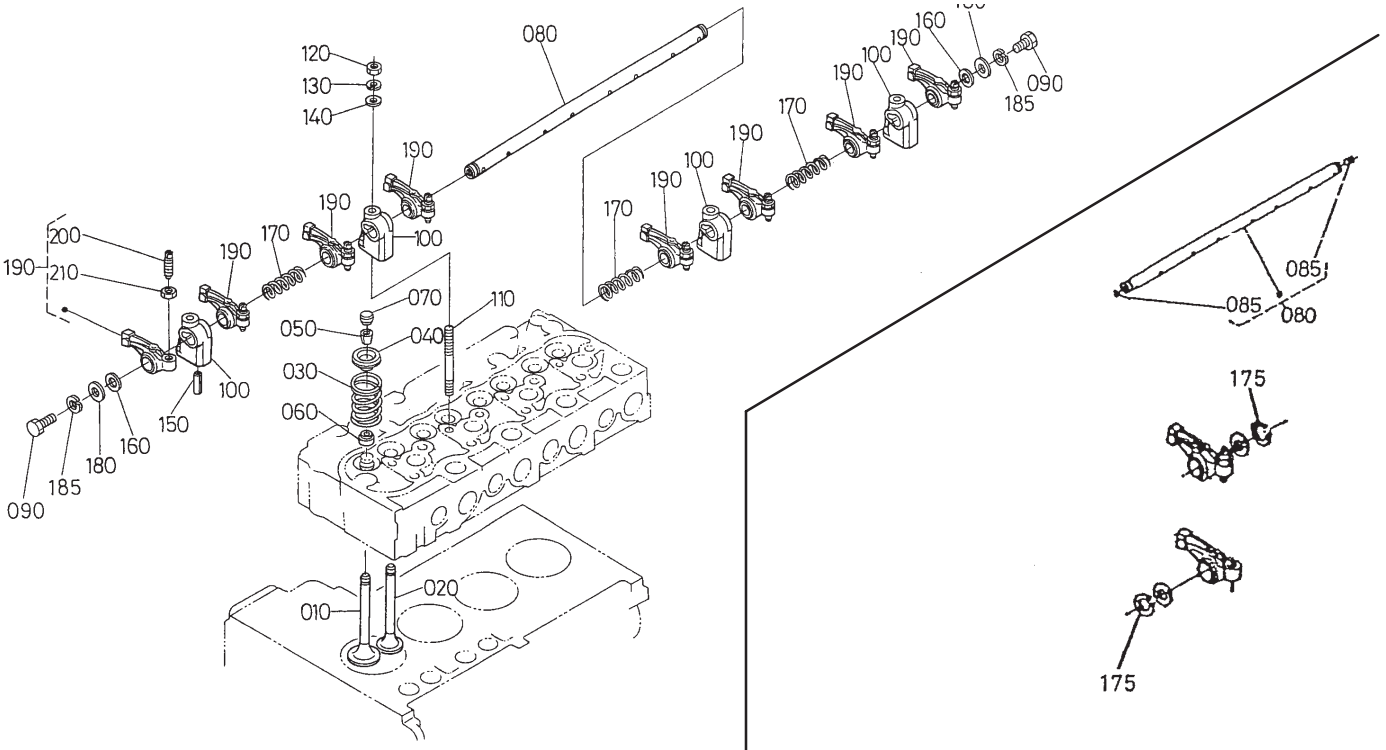


Sheet No.:70

Fan Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7702	1	Pulley–Fan
20	99–8363	4	Bolt–Flange

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
080	107–0134	(2A0001 or newer)
090	98–7884	(2A0001 or newer)
180	98–7698	(2A0001 or newer)
185	105–2893	(2A0001 or newer) (Qty. 2)

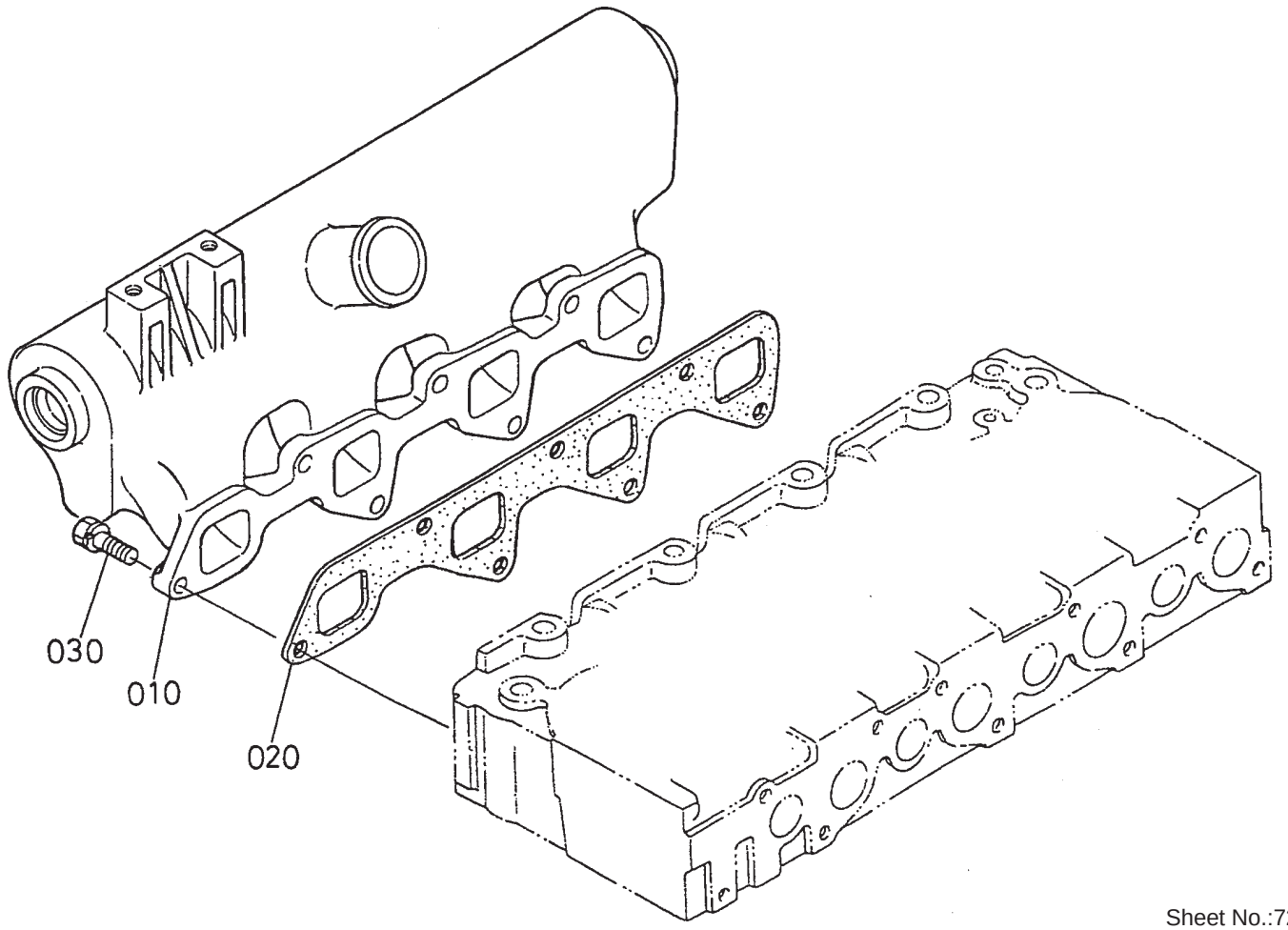
Ref. No.	Part No.	Engine Serial #
080	98–7798	(1Y1240 or earlier)
085	107–0135	(1Y1240 or earlier)
175	98–7808	(1Y1240 or earlier)

Sheet No.:71

Valve and Rocker Arm Assembly

Ref. No.	Part No.	Qty.	Description
10	98–7791	4	Valve–Inlet
20	100–9281	4	Valve–Exhaust
30	98–7793	8	Spring–Valve
40	98–7794	8	Retainer–Spring, Valve
50	98–7795	8	Collet–Spring, Valve
60	98–7796	8	Seal–Stem, Valve
70	98–7797	8	Cap–Valve
80	107–0134	1	Shaft–Arm, Rocker
80	98–7798	1	Rocker Arm Shaft ASM
85	107–0135	2	Screw–Set
90	98–7884	2	Bolt
100	98–7800	4	Bracket–Arm, Rocker
110	98–7801	4	Stud
120	98–7534	4	Nut
130	105–2893	4	Washer–Spring
140	98–7536	4	Washer–Plain
150	98–7805	1	Pin–Spring
160	98–7806	2	Washer
170	98–7807	3	Spring–Arm, Rocker
175	98–7808	2	Clip–Cir., External
180	98–7698	2	Washer–Plain
185	105–2893	2	Washer–Spring
190	98–7809	8	Rocker Arm ASM
200	98–7810	8	Screw–Adjusting
210	98–7811	8	Nut

Ref. No.	Part No.	Qty.	Description

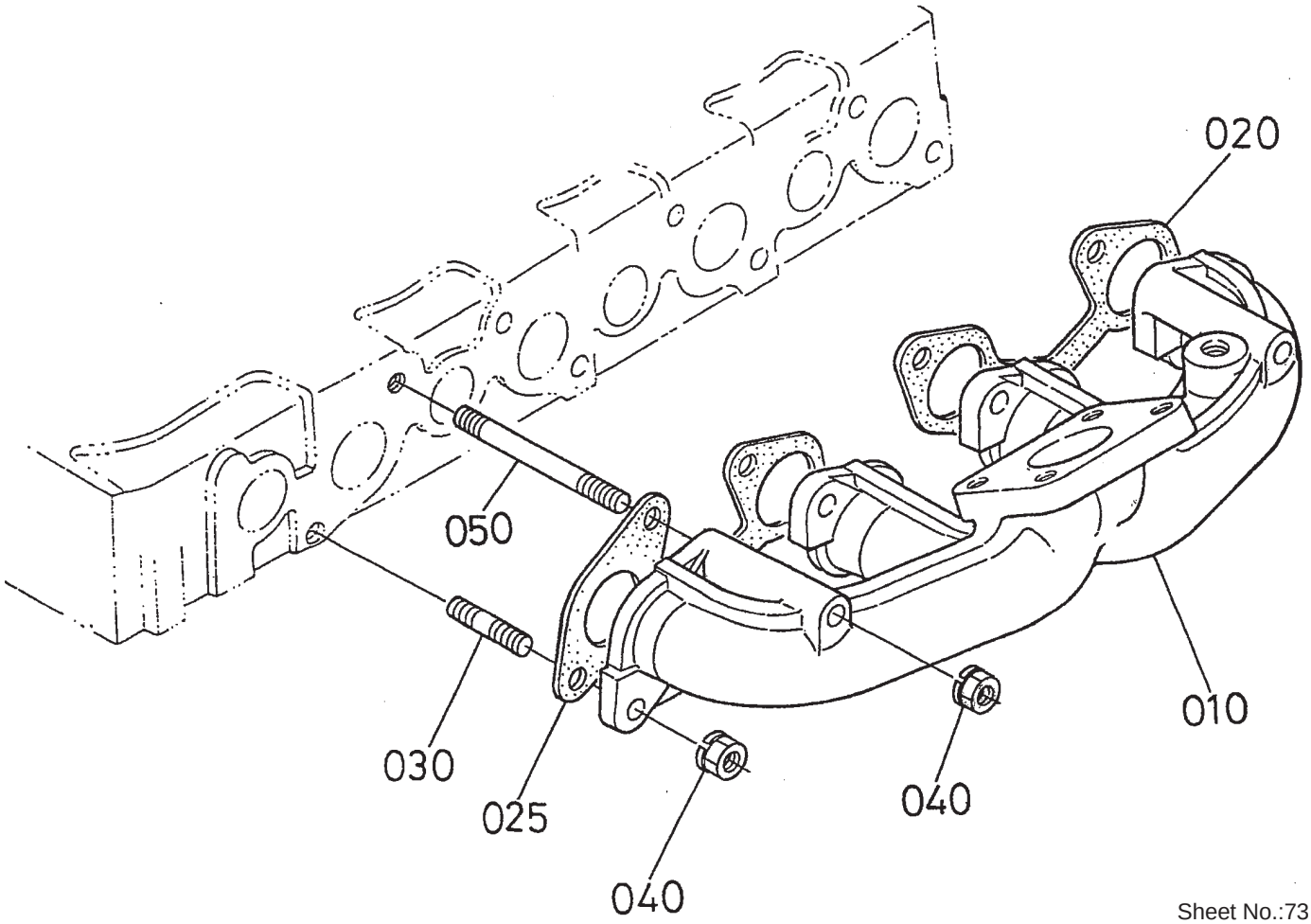


Sheet No.:72

Inlet Manifold Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9283	1	Inlet–Manifold
20	100–9284	1	Gasket–In Manifold
30	98–7610	7	Bolt

Ref. No.	Part No.	Qty.	Description

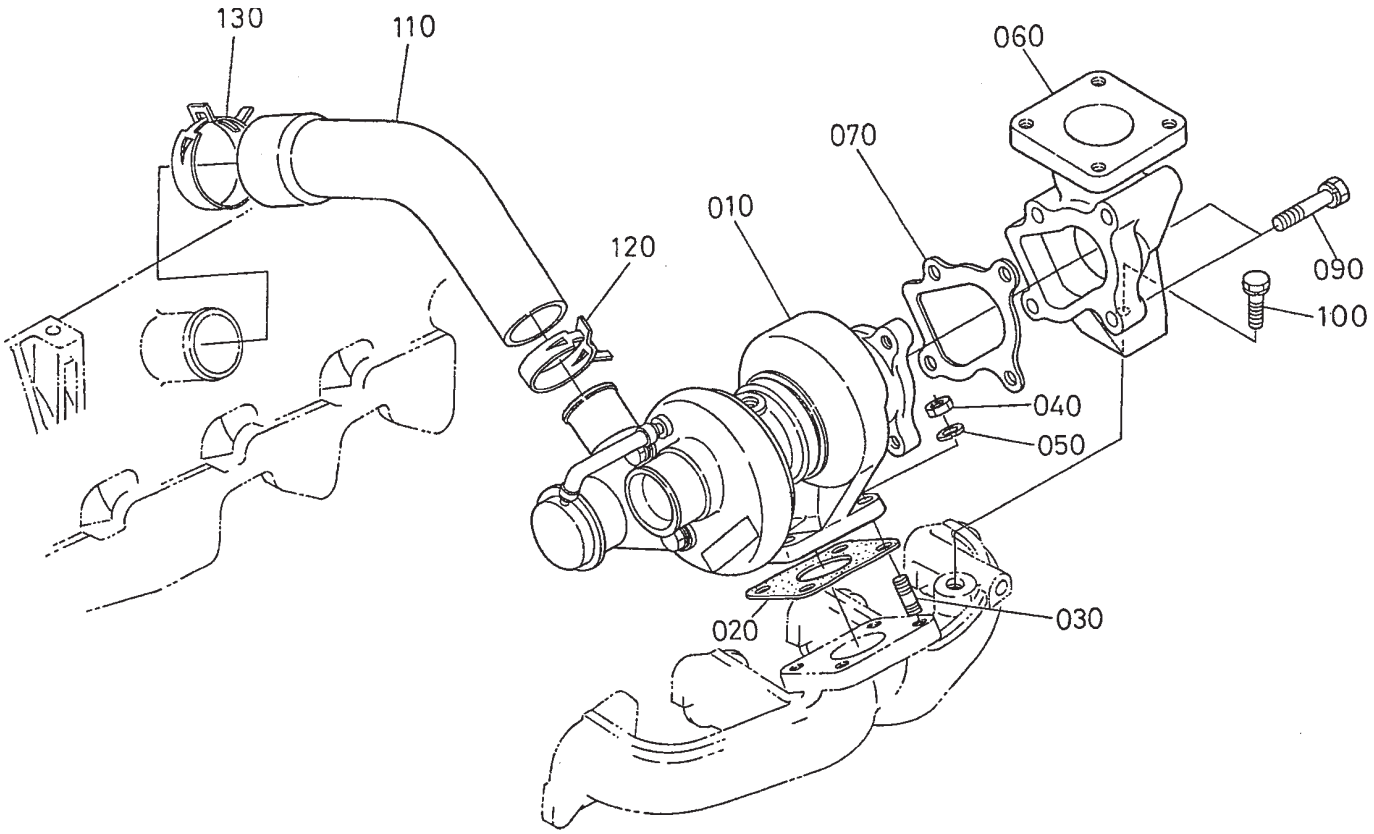


Sheet No.:73

Exhaust Manifold Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9285	1	Manifold–Exhaust
20	98–7802	1	Gasket
25	98–7803	1	Gasket
30	98–7533	6	Stud
40	100–9288	8	Nut
50	100–9289	2	Stud

Ref. No.	Part No.	Qty.	Description

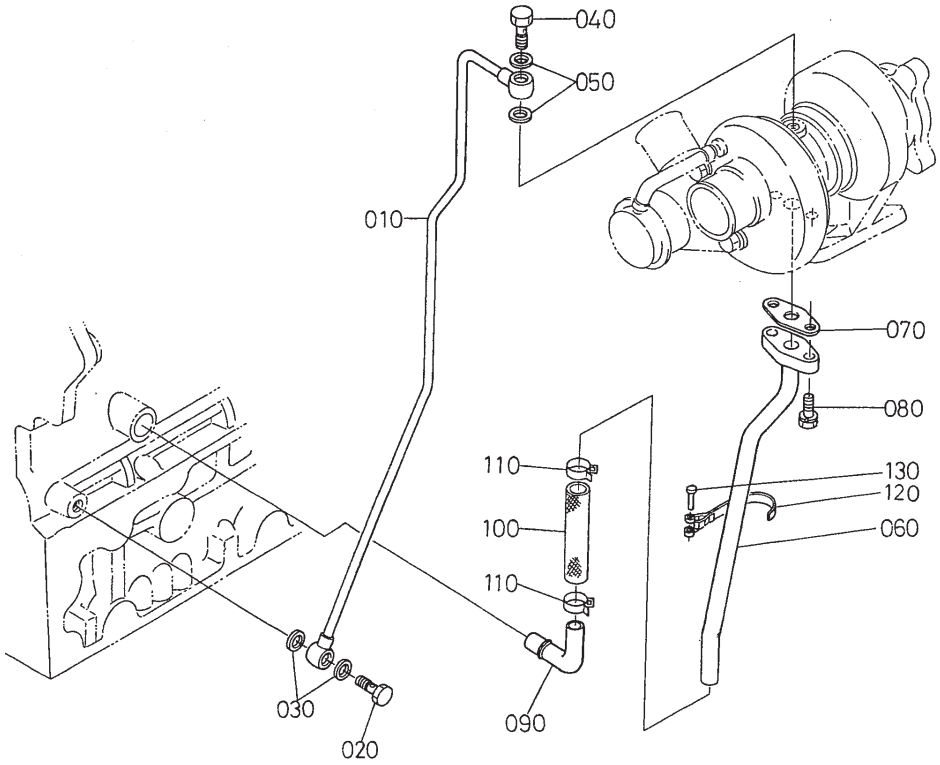


Sheet No.:74

Turbo Charger Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9313	1	Turbo Changer ASM
20	100–9314	1	Gasket
30	99–8341	4	Stud
40	98–7534	4	Nut
50	105–2893	4	Washer–Spring
60	100–9315	1	Flange–Muffler
70	100–9316	1	Gasket
90	98–7697	4	Bolt
100	100–9230	1	Bolt
110	100–9318	1	Hose–Inlet
120	100–9319	1	Band–Pipe
130	99–8322	1	Band–Pipe

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
010	100–9320	(1U1056 or earlier)
060	100–9322	(1U1056 or earlier)
180	98–7568	(1G1576 or earlier)

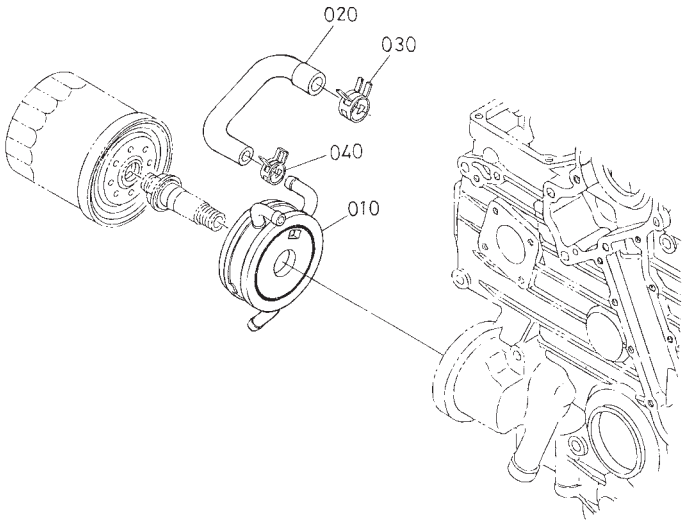
Ref. No.	Part No.	Engine Serial #
010	107–0127	(1W0001 or newer)
060	107–0128	(1W0001 or newer)
180	98–7605	(2J0001 or newer)

Sheet No.:75

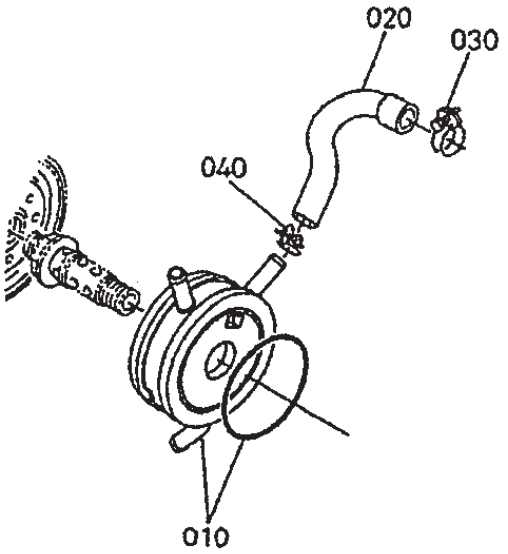
Oil Pipe (Turbo Charger) Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9320	1	Pipe–Oil
10	107–0127	1	Pipe–Oil, Complete
20	100–9321	1	Bolt–Joint, Eye
30	98–7428	2	Gasket
40	98–9418	1	Bolt–Joint, Eye
50	99–8346	2	Gasket
60	107–0128	1	Pipe–Oil, Complete
60	100–9322	1	Pipe–Oil
70	98–9435	1	Gasket–Oil Return, Turbo
80	98–7605	2	Bolt
80	98–7568	2	Bolt
90	100–9323	1	Pipe–Oil
100	98–9721	1	Pipe–Oil
110	98–9714	2	Clamp–Hose
120	100–9324	1	Clamp–Pipe
130	98–9591	1	Pin–Band

Ref. No.	Part No.	Qty.	Description



Ref. No.	Part No.	Engine Serial #
010	107–0125	(2S0001 or newer)
020	107–0126	(2S0001 or newer)
030	105–2879	(2S0001 or newer)
040	98–9579	(2S0001 or newer)



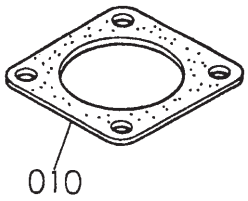
Ref. No.	Part No.	Engine Serial #
010	100–9325	(2Q1204 or earlier)
020	100–9326	(2Q1204 or earlier)
030	98–7774	(2Q1204 or earlier)
040	100–9327	(2Q1204 or earlier)

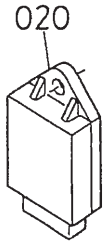
Sheet No.:76

Oil Cooler Assembly

Ref. No.	Part No.	Qty.	Description
10	100–9325	1	Oil Cooler ASM
10	107–0125	1	Oil Cooler ASM
20	100–9326	1	Hose–Cooler, Oil
20	107–0126	1	Hose–Cooler, Oil
30	98–7774	1	Band–Pipe
30	105–2879	1	Clamp–Hose
40	100–9327	1	Band–Pipe
40	98–9579	1	Band–Pipe

Ref. No.	Part No.	Qty.	Description



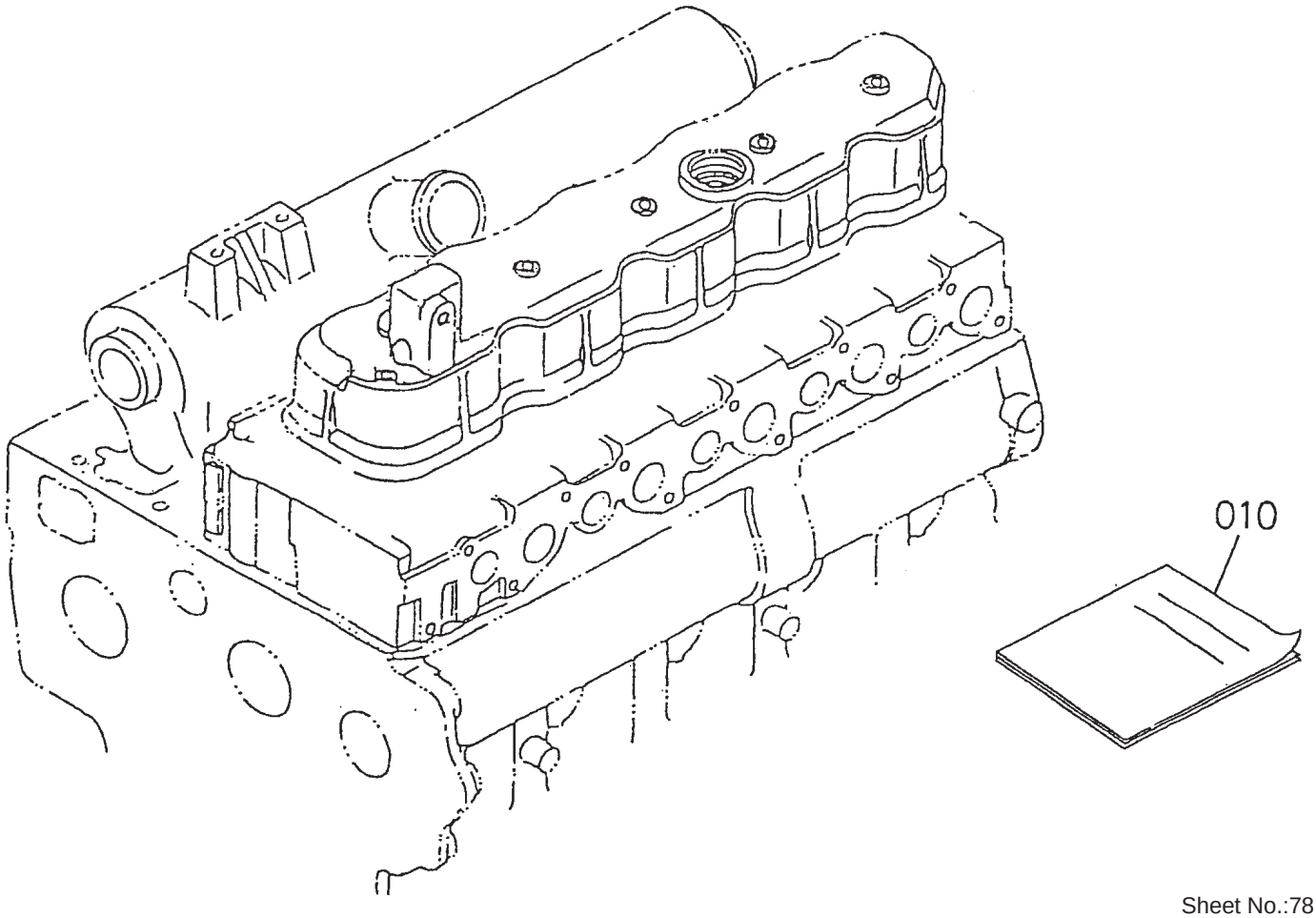


Sheet No.:77

Muffler Gasket and Glow Controller

Ref. No.	Part No.	Qty.	Description
10	100–9333	1	Gasket–Muffler
20	98–7611	1	Controller–Glow

Ref. No.	Part No.	Qty.	Description

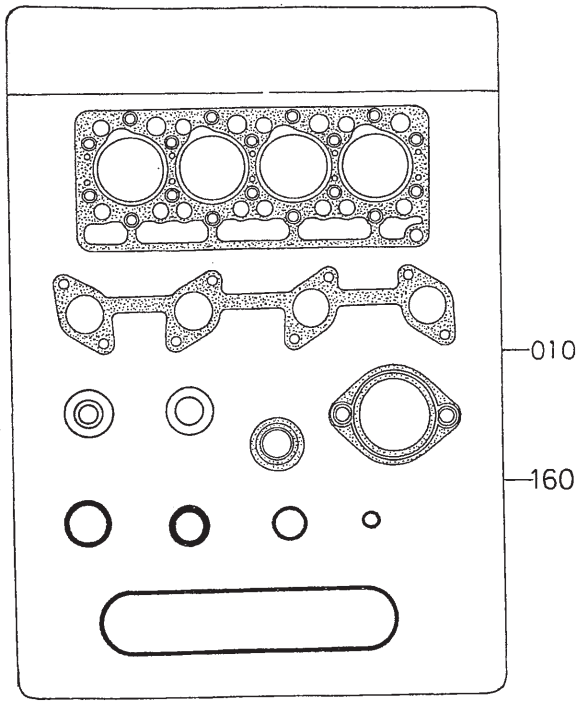


Sheet No.:78

Engine Operator’s Manual

Ref. No.	Part No.	Qty.	Description
10	100–9335	1	Manual–Instruction

Ref. No.	Part No.	Qty.	Description



Sheet No.:79

Gasket Kit

Ref. No.	Part No.	Qty.	Description
10	100–9337	1	Upper Gasket Kit
160	98–7888	1	Lower Gasket Kit

Ref. No.	Part No.	Qty.	Description

Maintenance Record

Date								

Maintenance Record

Date								

Maintenance Record

Date								

Maintenance Record

Date								


TORO®