Form No. 3327-816

Groundsmaster® 228–D

2WD and 4WD Traction Unit

Model No. 30241—220000001 and Up

Model No. 30242—220000001 and Up

Parts Catalog

Ordering Replacement Parts

To order replacement parts, please supply: the part number, the quantity, and the description of each part desired.

Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form **a:b.** The **a** represents the reference number of the entire service assembly and the **b** represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number **6**, the tire by **6:1**, the valve by **6:2**, and the wheel by **6:3**. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually.

Reference numbers of this type appear in illustrations and in part lists.

Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form **nX y.** The **n** represents the quantity of the part, the **X** is the multiplication symbol, and the **y** represents the reference number.

For example, in an illustration, the reference number **2X 37** means that two of the parts identified by reference number 37 are indicated.

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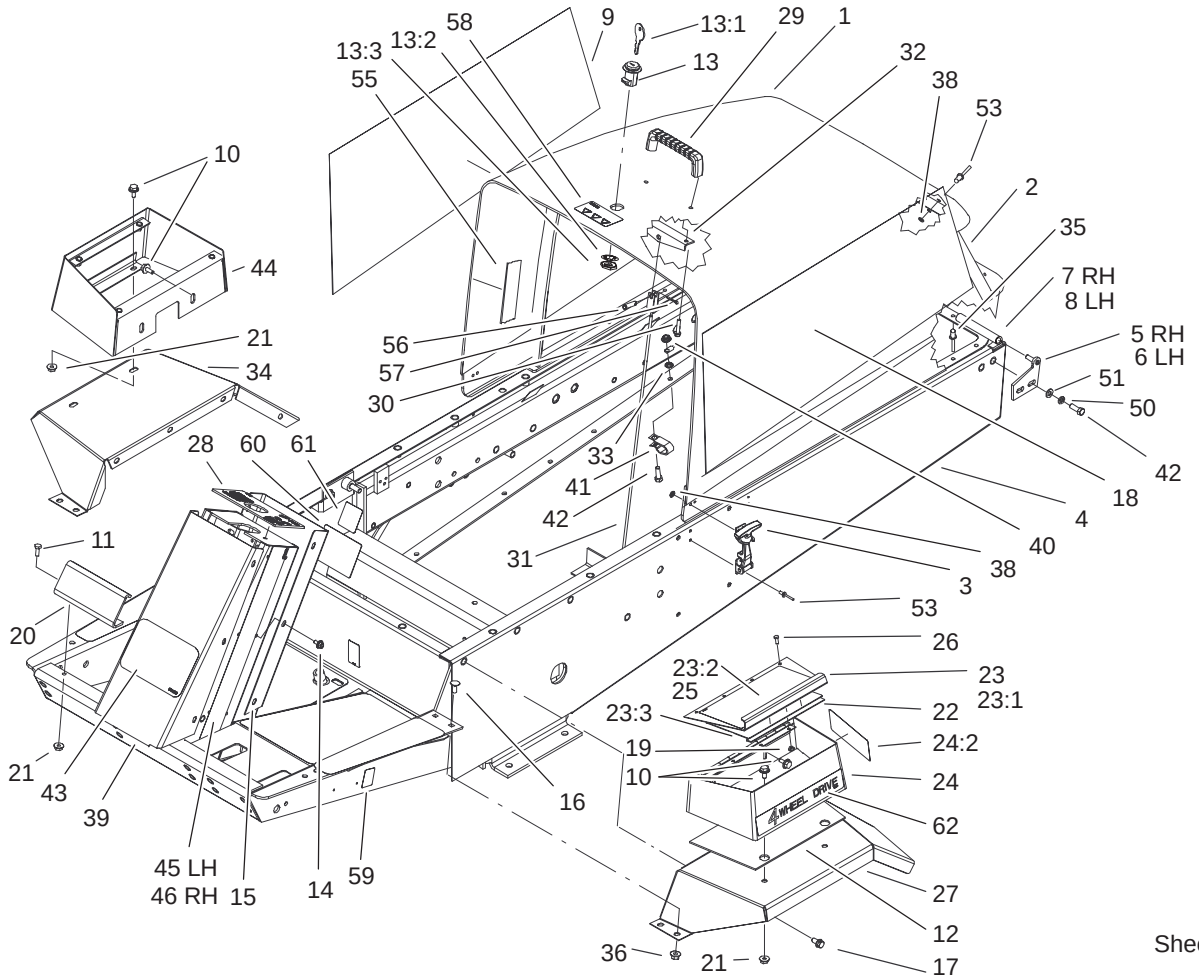
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Part Description Abbreviations

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



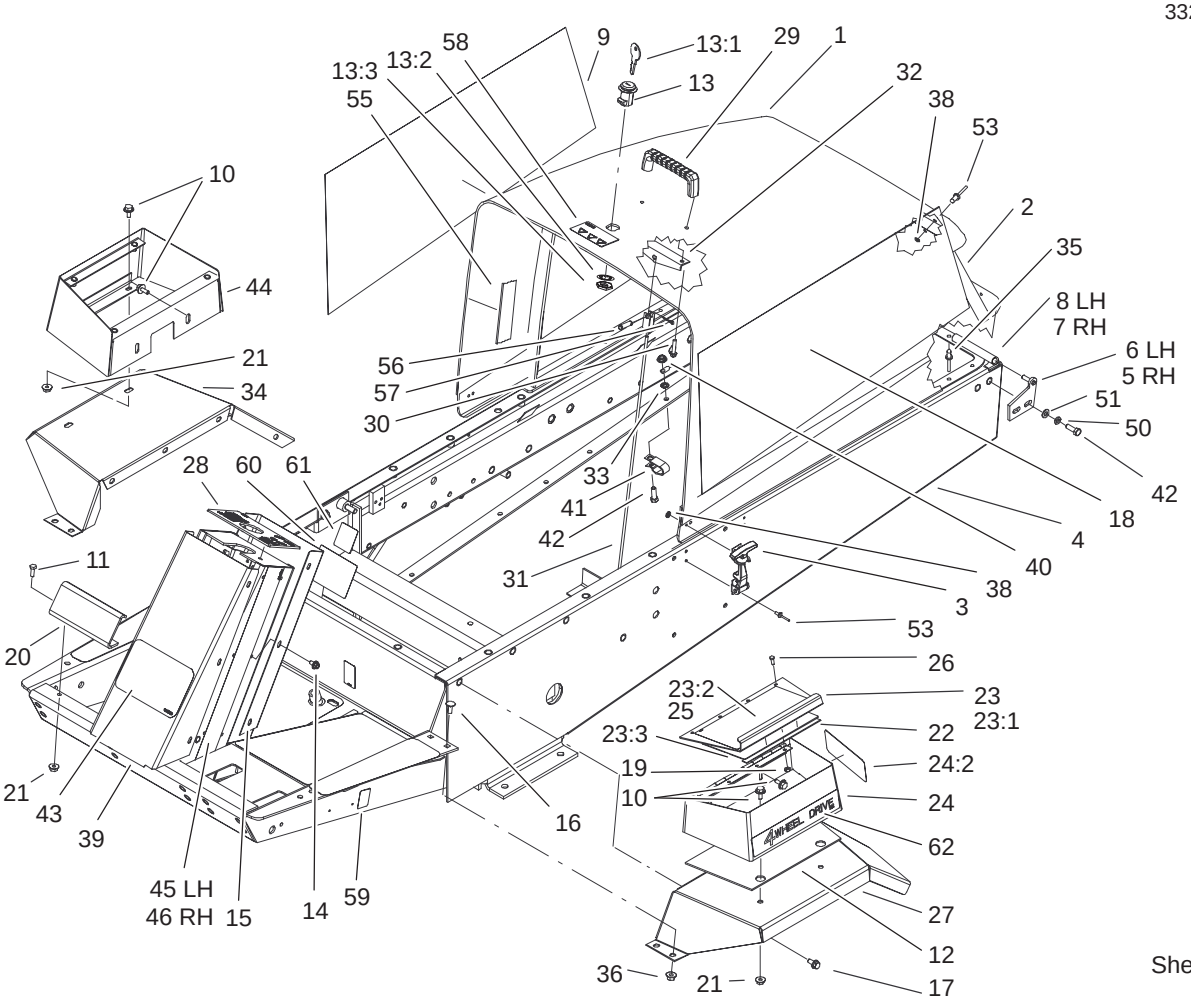
Sheet No.:2

Frame and Hood Assembly

Ref. No.	Part No.	Qty.	Description
1	104–3485	1	Hood
2	105–0006–03	1	Screen–Hood
3	95–6339	2	Latch
4	95–6280	1	Frame ASM
5	105–0003–01	1	RH Hinge Pin ASM
6	105–0004–01	1	LH Hinge Pin ASM
7	105–4277–03	1	RH Hood Hinge ASM
8	105–4278–03	1	LH Hood Hinge ASM
9	105–0045	1	Decal–Groundsmaster 228–D, RH
10	3234–13	8	Screw–HHF
11	321–4	2	Screw–HH
12	76–4790	1	Pad–Rubber
13	98–9315	1	Latch–Locking
13:1	99–8350	2	Key–Latch, Locking
☆13:2		1	Washer–Switch
☆13:3		1	Nut–Switch
14	46–6810	7	Screw And Washer ASM (only on: 30242)
14	46–6810	13	Screw And Washer ASM (only on: 30241)
15	63–7320–01	1	Cover–Tower, Rear
16	3230–23	4	Screw–CARR

Ref. No.	Part No.	Qty.	Description
17	3234–14	4	Screw–HHF (only on: 30242)
17	3234–14	8	Screw–HHF (only on: 30241)
18	105–0070	1	Decal–Groundsmaster 228–D, LH
19	3296–12	4	Nut–Lock
20	92–5548–01	1	Shield–Stop, Pedal
21	32128–33	6	Nut–HF
22	66–3050	1	Latch–Box, Tool
23	105–0074	1	Tool Box Cover ASM
23:1	66–3040–03	1	Cover–Box, Tool
23:2	92–5774	1	Decal–Danger
23:3	104–3484	1	Decal–Service
24	92–6501	1	Tool Box ASM
24:2	93–7822	1	Decal–Refueling
25	93–7804	1	Decal–Danger
26	3290–359	4	Screw–HWH
27	63–7310–01	1	Fender–LH
28	100–6581	1	Decal–Panel, Tower
29	65–5100	1	Handle–Door
30	46–8092	2	Screw–Plastite
31	105–3650	1	Cable–Hood
32	105–0088–03	1	Bracket–Cable, Hood
33	3255–8	1	Washer–Lock/Ext

☆ Not serviced separately

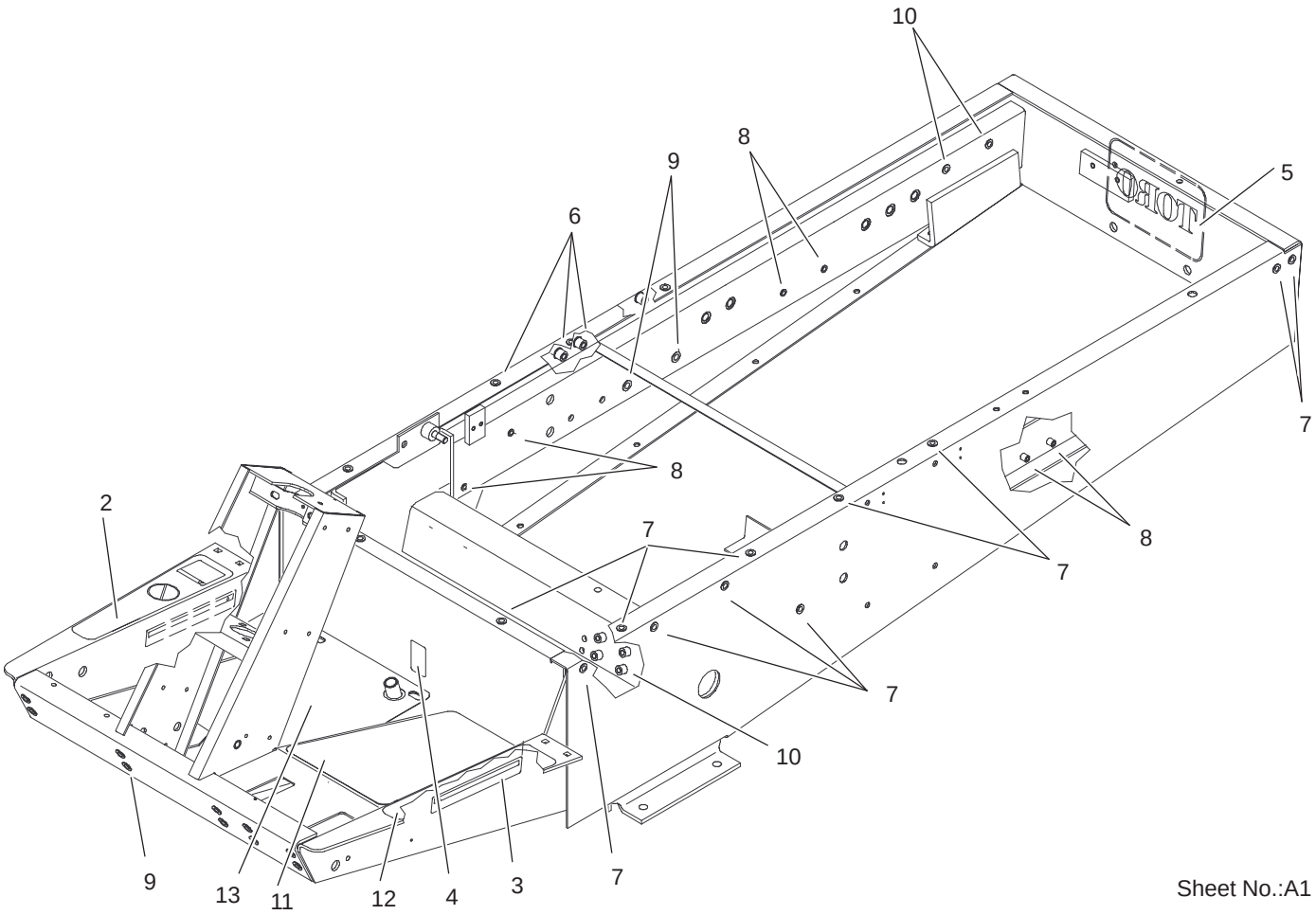


Sheet No.:2

Frame and Hood Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
34	63–7300–01	1	Fender–RH
35	3290–412	12	Rivet
36	32128–20	4	Nut–HF
38	3256–14	14	Washer–Flat
39	92–5545–01	1	Cover–Tower, Front
40	32128–44	3	Nut (only on: 30242)
40	32128–44	1	Nut (only on: 30241)
41	92–5753	3	Clamp–Hose (only on: 30242)
42	322–5	7	Screw–HH (only on: 30242)
42	322–5	5	Screw–HH (only on: 30241)
43	62–5550	1	Decal–Toro
44	63–8050	1	Box–Control
45	66–8760	1	Decal–Tower, LH
46	66–8770	1	Decal–Tower, RH
50	3253–4	4	Washer–Lock
51	3256–23	4	Washer–Flat
53	3269–4	18	Rivet–Pop
55	105–3651	1	Strip–Foam
56	283–58	2	Pin–Clevis
57	3272–10	2	Pin–Cotter
58	100–6574	1	Decal–Warning
59	93–7252	1	Decal–International

Ref. No.	Part No.	Qty.	Description
60	92–5524	1	Decal–Noise Rating, Intl (only on: 30242)
61	105–4674	1	Decal–Noise, Ce (only on: 30242)
62	72–3560	2	Decal–4wd (only on: 30242)



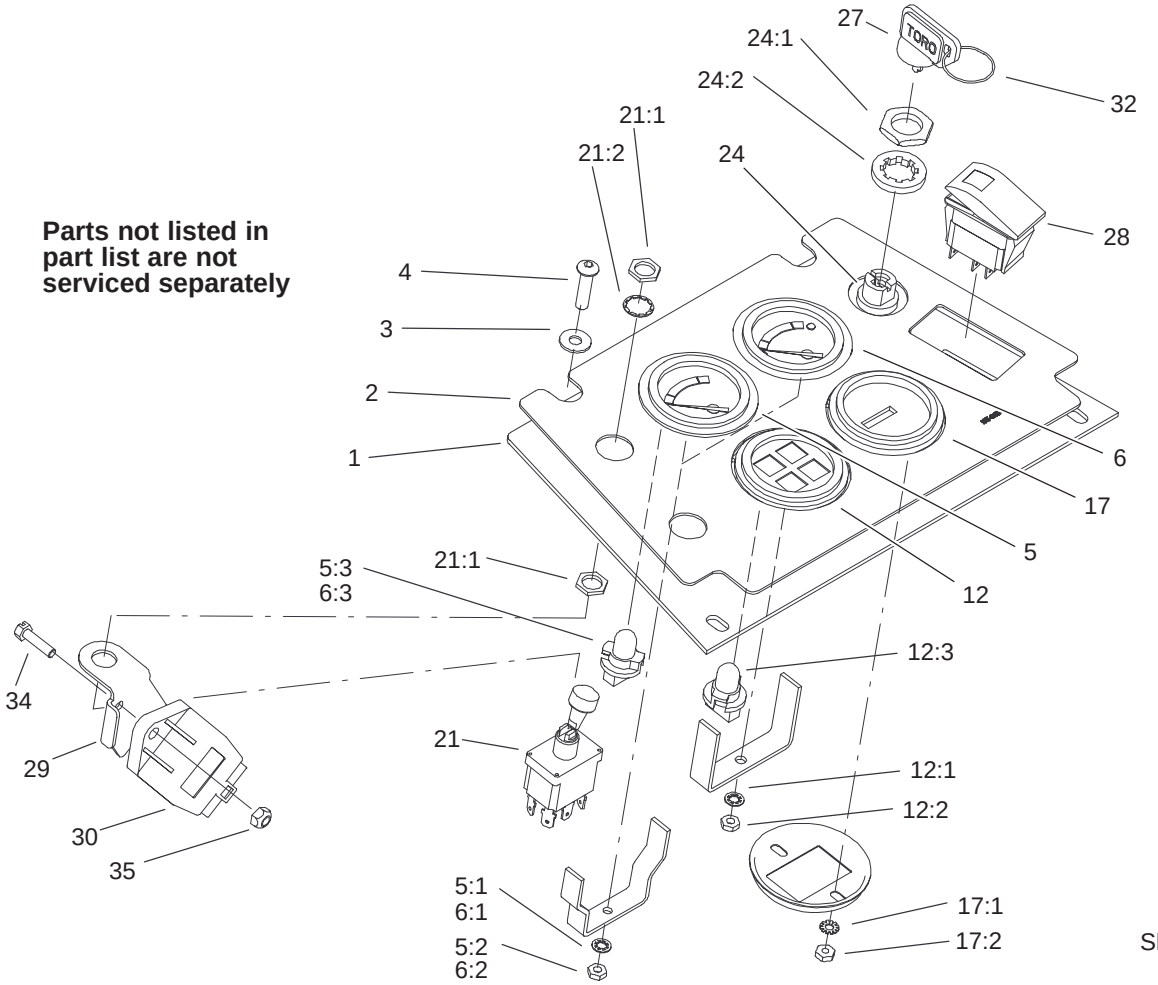
Sheet No.:A1

Frame Assembly No. 95–6280

Ref. No.	Part No.	Qty.	Description
2	93–7834	1	Decal–Footrest, RH
3	93–7830	2	Decal–Torque, Intl
4	100–6552	1	Decal–Oil
5	62–7400	1	Decal–Logo, Toro
6	32148–9	3	Insert–Nut
7	32148–7	22	Insert–Nut
8	32148–11	6	Insert–Threaded
9	32148–10	14	Insert–Threaded
10	32148–8	8	Insert–Threaded
11	66–3210	1	Tread–Footrest, LH
12	66–3200	1	Tread–Footrest, LH
13	92–5540	1	Tread–Footrest, RH

Ref. No.	Part No.	Qty.	Description

Parts not listed in part list are not serviced separately



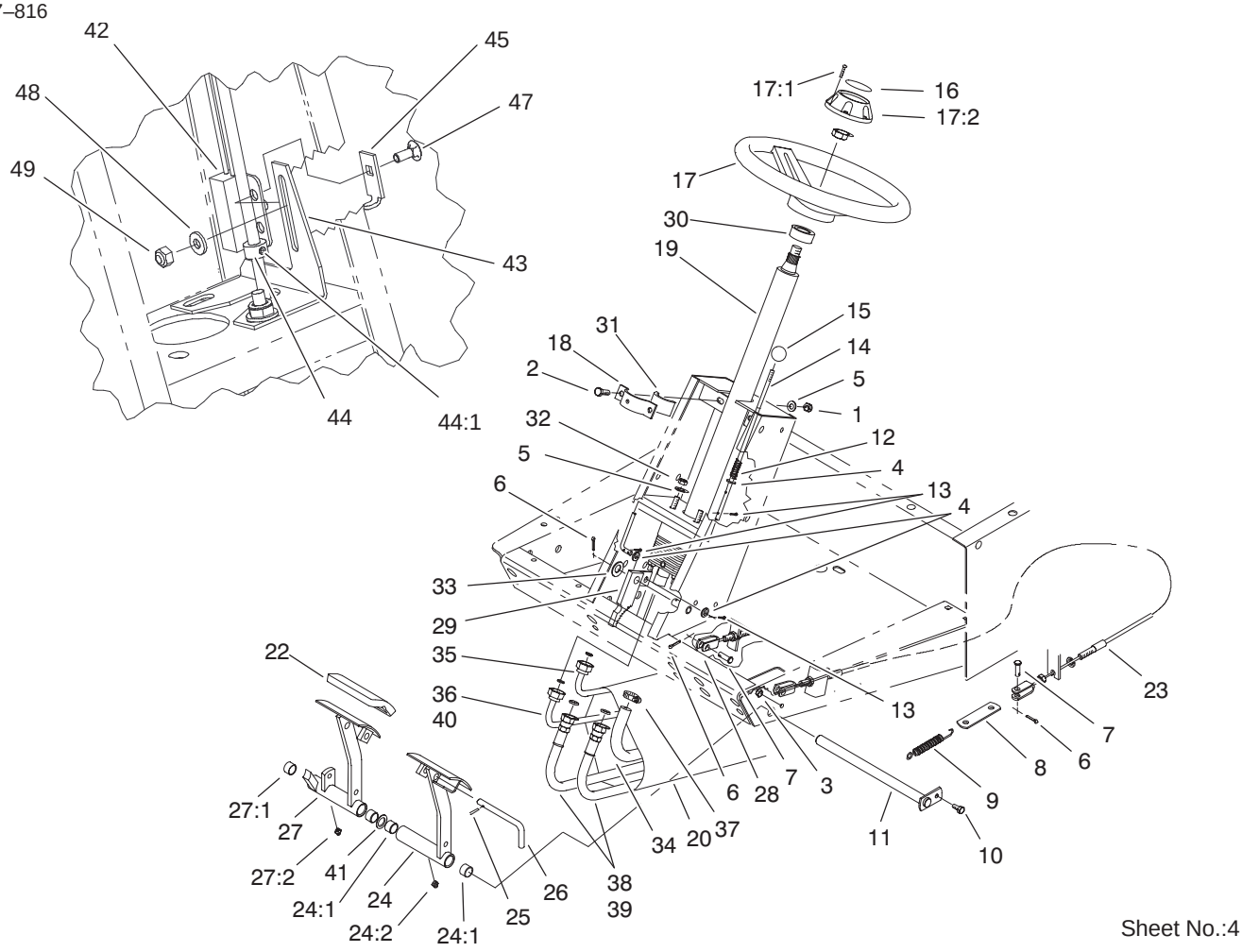
Sheet No.:3

Control Panel Assembly

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

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

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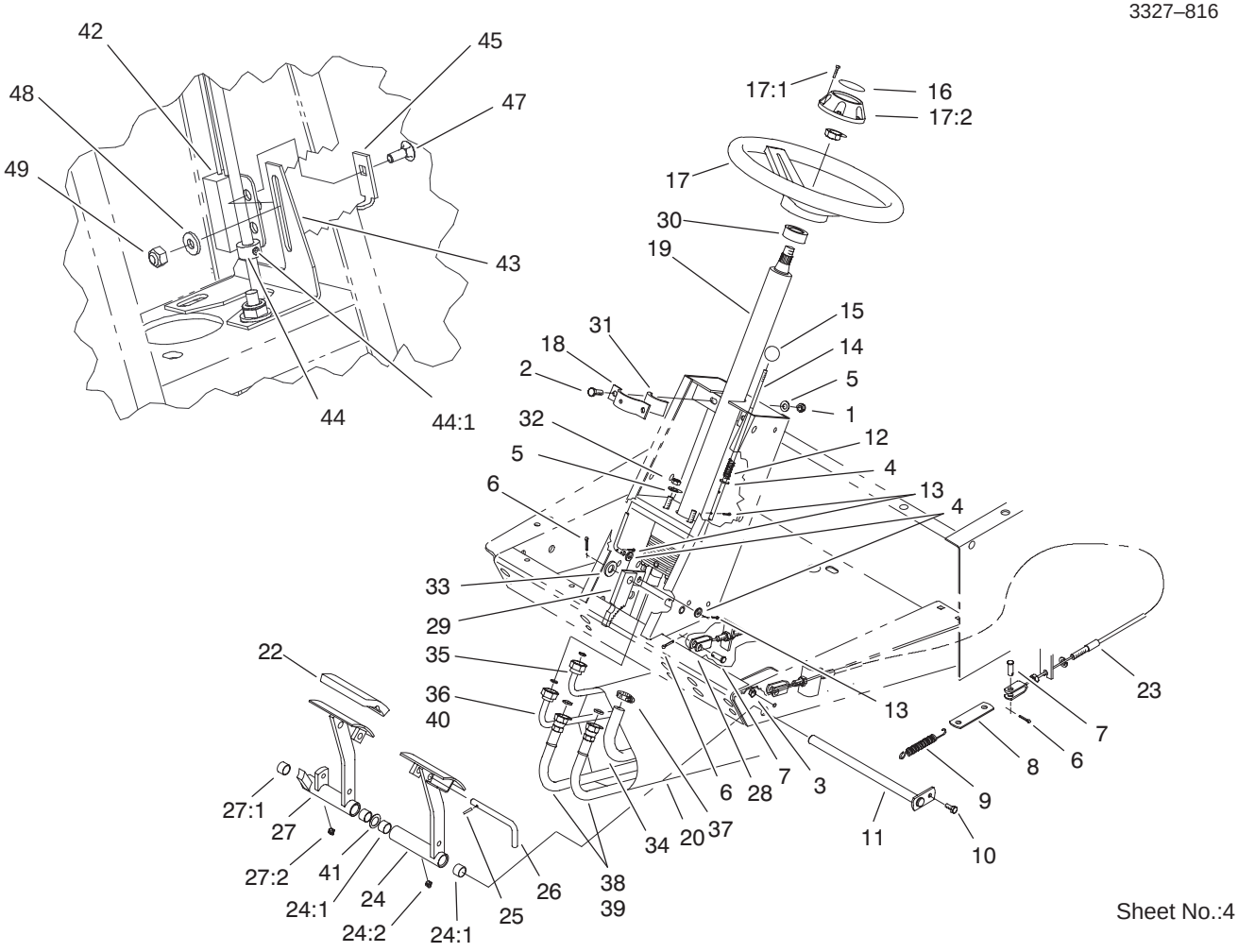


Sheet No.:4

Power Steering and Brake Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	3296–29	2	Nut–Lock, NI
2	322–5	2	Screw–HH
3	3296–42	1	Nut–Lock, NI
4	3256–22	3	Washer–Flat
5	3256–23	6	Washer–Flat
6	3272–10	5	Pin–Cotter
7	283–58	4	Pin–Clevis
8	63–6750	2	Link–Cable, Brake
9	3–7243	2	Spring–Extension
10	321–3	1	Screw–HH
11	63–6210–03	1	Pin–Brake
12	95–1821–03	1	Spring–Compression
13	3272–5	3	Pin–Cotter
14	63–7910	1	Rod–Brake, Parking
15	233–17	1	Knob
16	68–5370	1	Decal–Toro
17	75–0560	1	Wheel–Steering
17:1	32144–21	1	Screw
17:2	68–5140	1	Cap–Wheel, Steering
18	84–7660	1	Clamp–Column
19	92–7308	1	Power Steering Unit ASM
20	44–8530	1	Protector–Sleeve
22	93–8742	2	Footpad–Brake
23	63–7731	1	Cable–Brake
24	63–6180	1	Pedal–Brake, LH

Ref. No.	Part No.	Qty.	Description
24:1	256–42	2	Bushing
24:2	302–5	1	Fitting–Grease
25	32121–50	1	Pin–Spring
26	63–7880	1	Pin–Latch, Brake
27	63–6190	1	Pedal–Brake, RH
27:1	256–42	2	Bushing
27:2	302–5	1	Fitting–Grease
28	63–7730	1	Cable–Brake
29	63–7900–03	1	Rack ASM
30	21–9260	1	Cover–Dust
31	84–7670	2	Foam–Column, Support
32	3296–20	4	Nut–Lock, NI
33	3256–26	1	Washer–Flat
34	66–8140	1	Hose–Hydraulic
35	66–8630	1	Tube–Hydraulic
36	66–8620	1	Tube–Hydraulic
37	2412–36	1	Clamp–Hose
38	66–8170	2	Hose ASM (only on: 30241)
39	92–5080	1	Hose ASM (only on: 30242)
40	92–5081	1	Hose ASM (only on: 30242)
41	3256–69	2	Washer–Flat
42	105–0023	1	Switch–Proximity

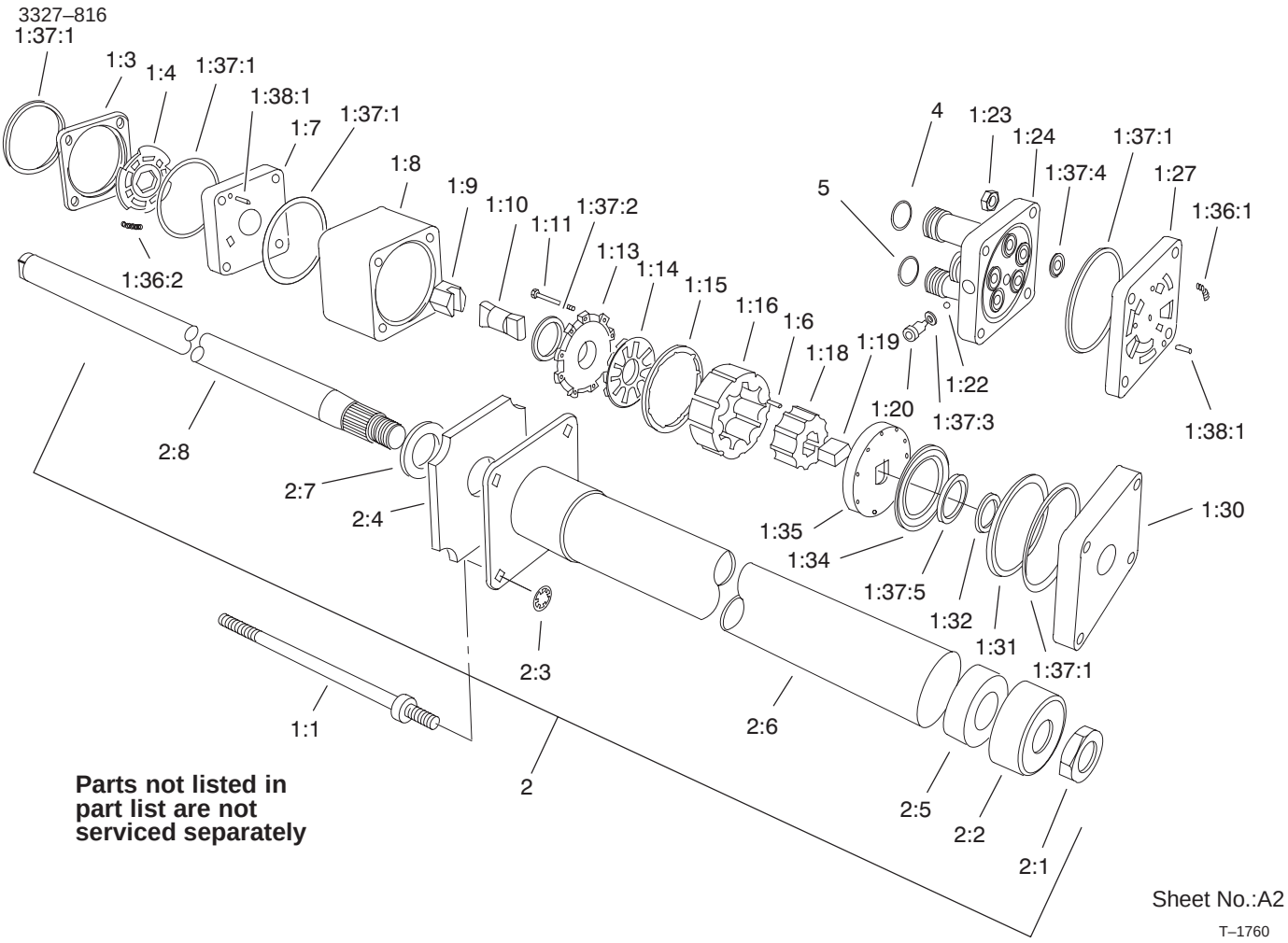


Sheet No.:4

Power Steering and Brake Pedal Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
43	104–3423–03	1	Bracket–Sensor, Brake
44	105–0021	1	Screw–Set, Collar
44:1	3245–42	1	Screw–Set
45	100–4872	1	Plate–Switch, Neutral
47	104–1450	1	Bolt–CARR
48	3256–14	1	Washer–Flat
49	3296–2	1	Nut–Lock

Ref. No.	Part No.	Qty.	Description

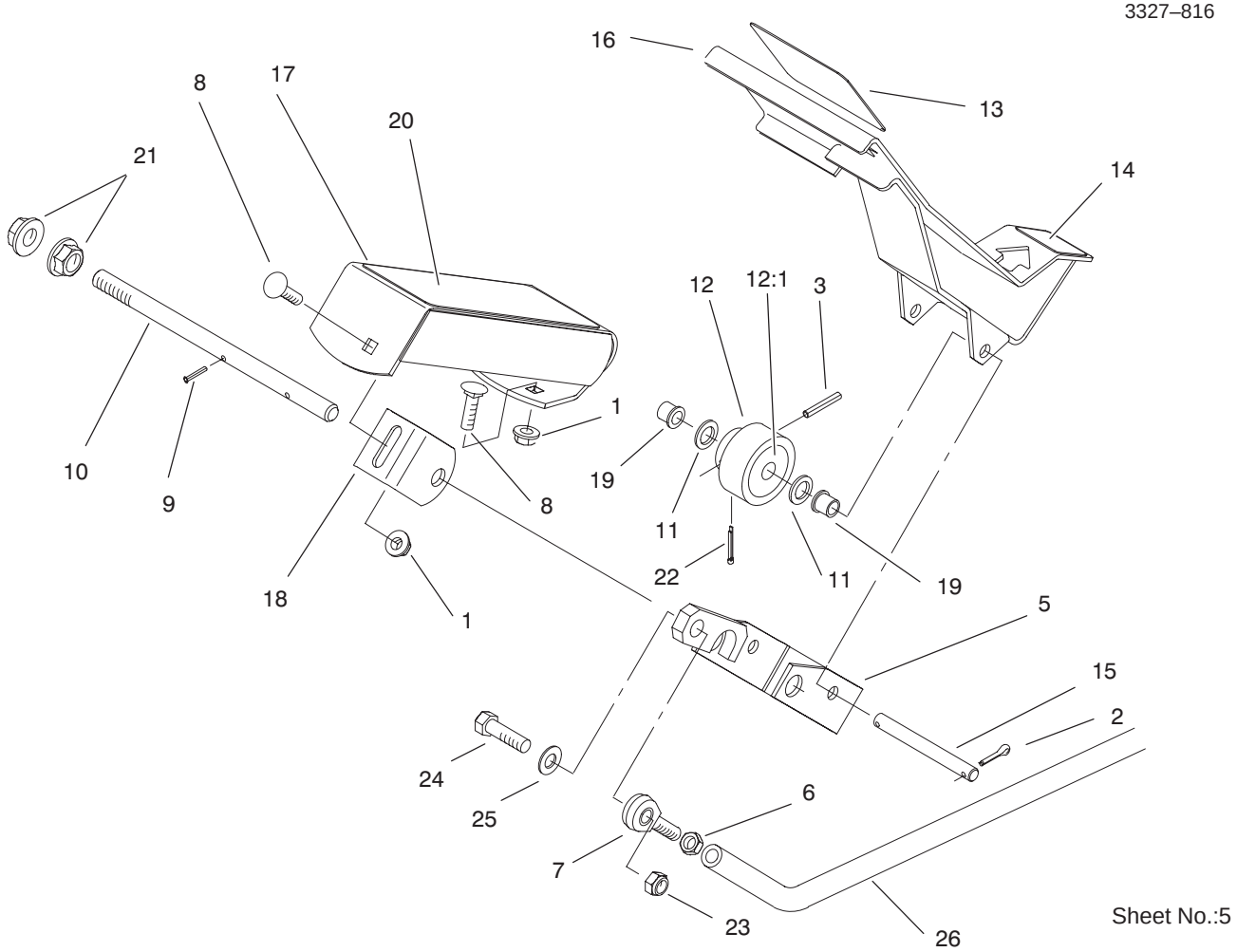


Power Steering Valve Assembly No. 92–7308

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

Ref. No.	Part No.	Qty.	Description
☆1:35		1	Plate–Drive
*1:36	66–9970	1	Kit–Spring
☆1:36:1		3	Spring
☆1:36:2		3	Spring
*1:37	66–9980	1	Kit–Seal
☆1:37:1		5	Ring–Seal
☆1:37:2		1	Seal–Commutator
☆1:37:3		1	O–Ring
☆1:37:4		5	O–Ring
☆1:37:5		1	Seal–Face
*1:38	66–9990	1	Kit–Roller, Needle
☆1:38:1		9	Pin–Alignment
2	92–7314	1	Column ASM
2:1	3220–6	1	Nut–Jam
2:2	92–7315	1	Seal–Upper
2:3	92–7316	4	Nut–Push On
2:4	92–7317	1	Seal–Foam, Upper Cover
2:5	66–9780	1	Bushing
☆2:6		1	Cover–Upper
☆2:7		1	Washer–Retaining
☆2:8		1	Shaft–Input
4	237–30	2	O–Ring
5	237–22	2	O–Ring

☆ Not serviced separately
* Not illustrated



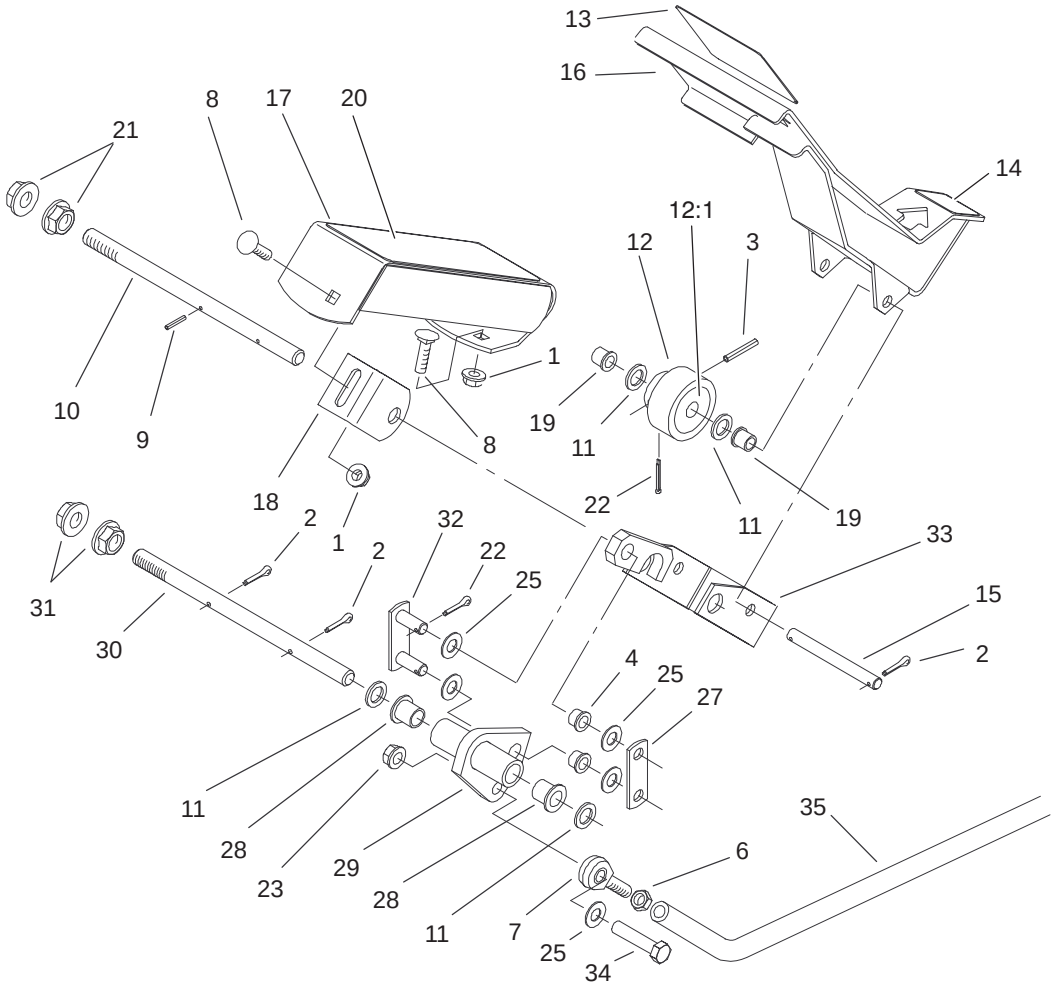
Sheet No.:5

2 Wheel Drive Traction Pedal Assembly (only on: 30241)

Ref. No.	Part No.	Qty.	Description
1	32128–44	2	Nut
2	3272–10	2	Pin–Cotter
3	32121–6	1	Pin–Roll
5	92–8854–03	1	Bracket–Pivot
6	3220–3	1	Nut–Jam
7	2411–36	1	Bearing–End, Rod
8	3230–2	2	Screw–CARR
9	32121–50	1	Pin–Spring
10	92–5534	1	Shaft–Pedal, Traction
11	5–7570	2	Washer–Flat
12	28–5220	1	Friction Wheel ASM
☆12:1		1	Rubber–Molded
13	94–3307	1	Pad–Pedal, Traction
14	94–3308	1	Pad–Pedal, Traction
15	92–5537	1	Pin–Pedal, Traction
16	94–3591–03	1	Support–Pedal
17	92–5514–01	1	Footrest
18	92–5077	1	Bracket–Footrest
19	256–156	2	Bushing–Flange
20	92–5750	1	Pad–Footrest
21	32128–56	2	Nut–HF
22	3272–6	1	Pin–Cotter
23	3296–39	1	Nut–Lock, NI
24	323–29	1	Screw–HH
25	3256–24	1	Washer–Flat
26	63–6410–03	1	Tube–Pump, Control

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



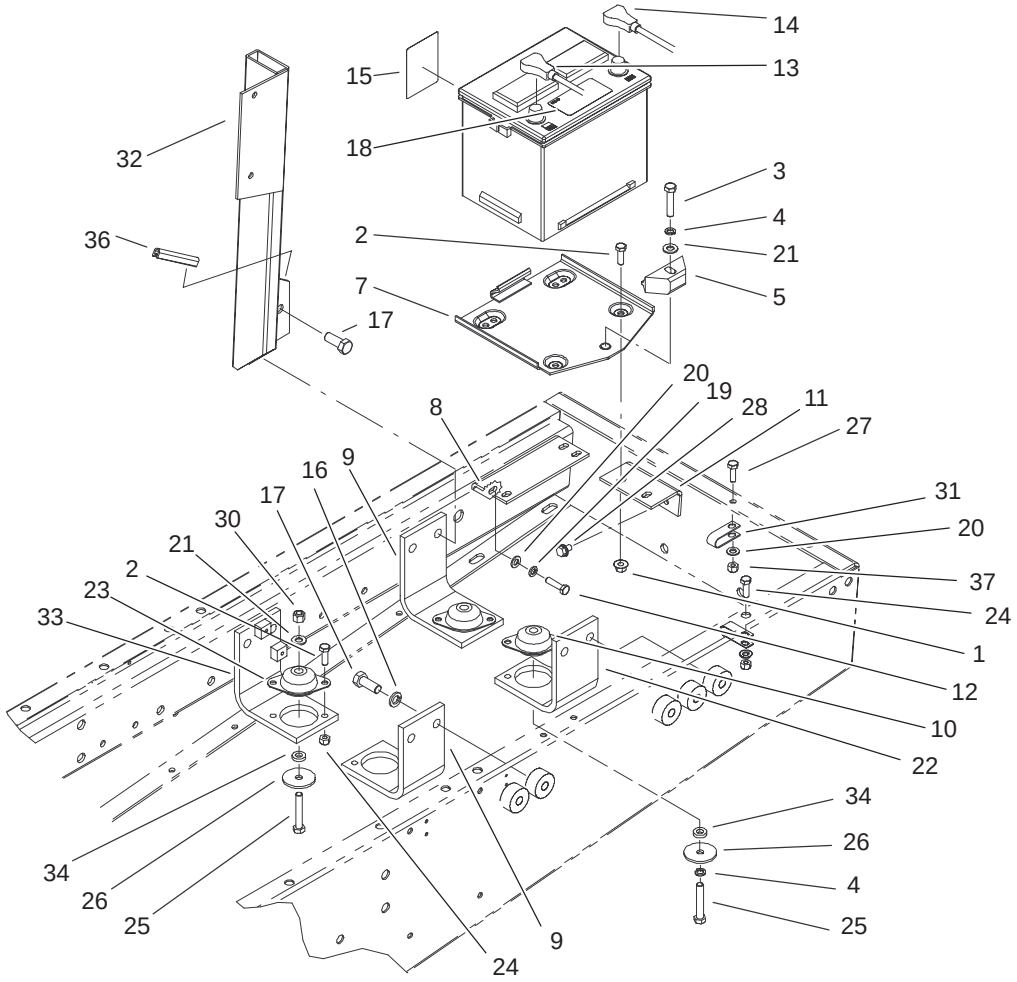
Sheet No.:6

4 Wheel Drive Traction Pedal Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description
1	32128–44	2	Nut
2	3272–10	4	Pin–Cotter
3	32121–6	1	Pin–Roll
4	256–116	2	Bushing–Flange
6	3220–3	1	Nut–Jam
7	2411–36	1	Bearing–End, Rod
8	3230–2	2	Screw–CARR
9	32121–50	1	Pin–Spring
10	92–5534	1	Shaft–Pedal, Traction
11	5–7570	4	Washer–Flat
12	28–5220	1	Friction Wheel ASM
☆12:1		1	Rubber–Molded
13	94–3307	1	Pad–Pedal, Traction
14	94–3308	1	Pad–Pedal, Traction
15	92–5537	1	Pin–Pedal, Traction
16	94–3591–03	1	Support–Pedal
17	92–5514–01	1	Footrest
18	92–5077	1	Bracket–Footrest
19	256–156	2	Bushing–Flange
20	92–5750	1	Pad–Footrest
21	32128–56	2	Nut–HF
22	3272–6	3	Pin–Cotter
23	3296–39	1	Nut–Lock, NI
25	3256–24	5	Washer–Flat
27	92–5721	1	Link–Traction
28	256–219	2	Bushing

Ref. No.	Part No.	Qty.	Description
29	92–5094–03	1	Arm–Traction
30	92–5075	1	Shaft–Pedal, Traction
31	32128–49	2	Nut–HHF
32	92–5532	1	Link–Traction
33	92–5093–03	1	Arm–Pivot
34	323–9	1	Screw–HH
35	92–5536–03	1	Tube–Control, Pump

☆ Not serviced separately

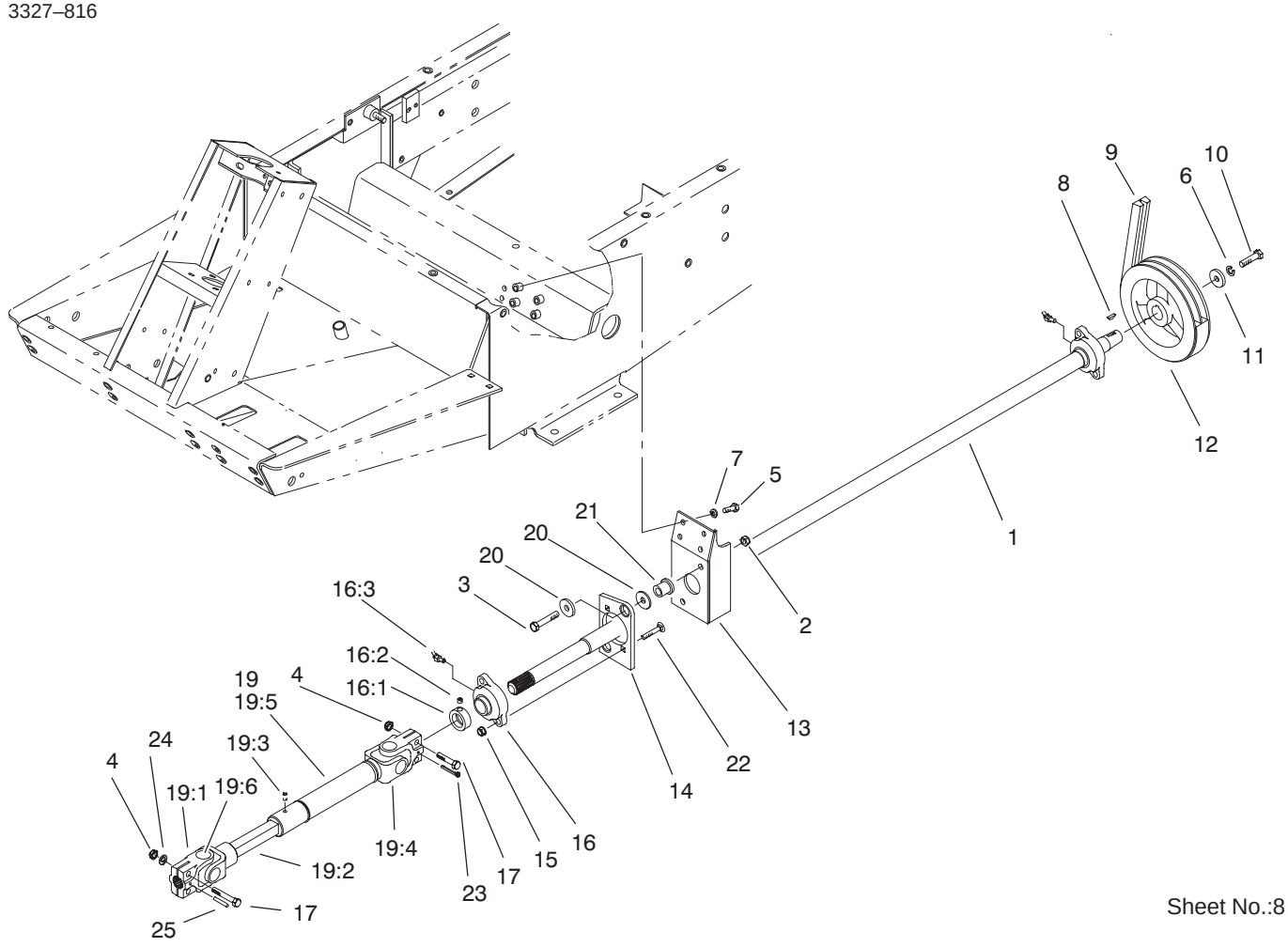


Sheet No.:7

Battery and Engine Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	32128–20	3	Nut–HF
2	322–5	11	Screw–HH
3	323–9	1	Screw–HH
4	3253–21	2	Washer–Lock
5	66–2490	1	Retainer–Battery
7	94–7343	1	Battery Base ASM
8	95–1592–03	1	Bracket–Base, Battery
9	95–6270–03	2	Bracket–Mount, Engine
10	63–7141	1	Mount–Shock, Engine
11	95–1599–03	1	Bracket–Base, Battery
12	322–6	2	Screw–HH
13	104–0086	1	Cable–Battery, Positive
14	105–0040	1	Cable–Battery, Negative
15	93–6668	1	Decal–Battery
16	3253–7	8	Washer–Lock
17	3213–2	8	Screw–HH
18	93–7276	1	Decal–Danger
19	3253–4	2	Washer–Lock
20	3256–23	5	Washer–Flat
21	3256–24	4	Washer–Flat
22	95–6271–03	1	Bracket–Mount, Engine
23	63–7142	3	Mount–Shock, Engine

Ref. No.	Part No.	Qty.	Description
24	3296–29	8	Nut–Lock, NI
25	323–11	4	Screw–HH
26	63–7400	4	Washer–Rebound
27	3274–96	3	Screw
28	3234–30	2	Screw–HHF
30	3296–39	3	Nut–Lock, NI
31	98–3883	3	Clamp–Wire
32	105–2513–03	1	Air Cleaner Mount ASM
33	105–7848–03	1	Engine Bracket ASM
34	80–7730	4	Spacer
36	43–4300	1	Trim–Frame, Rear
37	33024–00	3	Nut–Lock



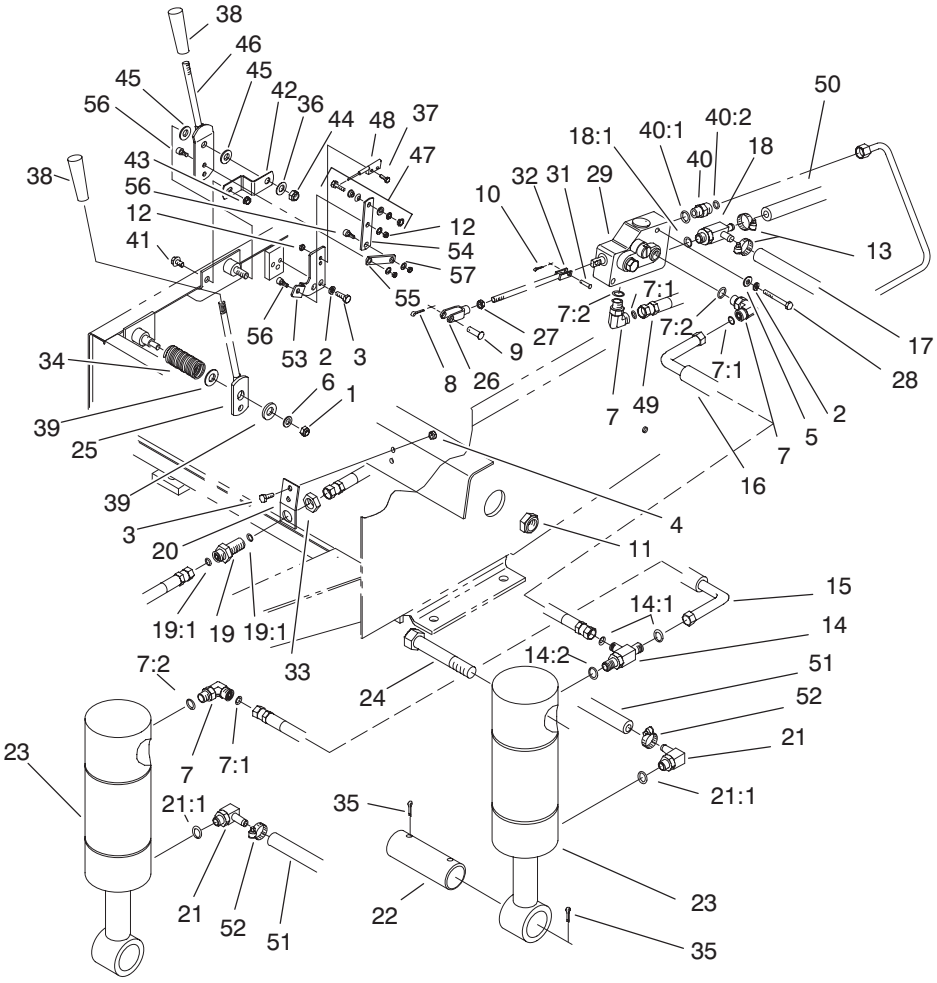
Sheet No.:8

PTO and Shaft Assembly

Ref. No.	Part No.	Qty.	Description
1	92–8855–03	1	Shaft–PTO
2	3296–39	2	Nut–Lock, NI
3	323–10	2	Screw–HH
4	3296–29	5	Nut–Lock, NI
5	322–5	4	Screw–HH
6	3253–21	1	Washer–Lock
7	3253–4	4	Washer–Lock
8	3257–5	1	Key–Woodruff
9	63–6240	1	V–Belt, PTO
10	323–18	1	Screw–HH
11	29–4730	1	Washer–Flat
12	43–5320–03	1	Pulley–PTO
13	92–8751–03	1	Bracket–Bearing, PTO
14	84–7580	1	Plate–Support, Bushing
15	32149–1	2	Nut
16	92–8799	1	Bearing–Flange
16:1	251–77	1	Lockcollar–Bearing
16:2	3246–1	1	Screw–Set
16:3	302–40	1	Fitting–Grease
17	322–9	4	Screw–HH
19	54–7950	1	Shaft–Universal
19:1	54–9040	1	Yoke–End
19:2	54–9050	1	Shaft–Yoke, Slip
19:3	302–58	1	Fitting–Grease
19:4	54–9090	1	Yoke–End

Ref. No.	Part No.	Qty.	Description
19:5	54–9170–01	1	Tube–Yoke, Slip
19:6	54–9180	2	U–Joint Kit
*19:6:1	62–3820	1	Fitting–Grease
20	63–8410	4	Washer
21	63–9750	2	Mount
22	3230–4	2	Screw–CARR
23	3272–15	1	Pin–Cotter
24	3256–23	1	Washer–Flat
25	32121–34	1	Pin–Roll

* Not illustrated

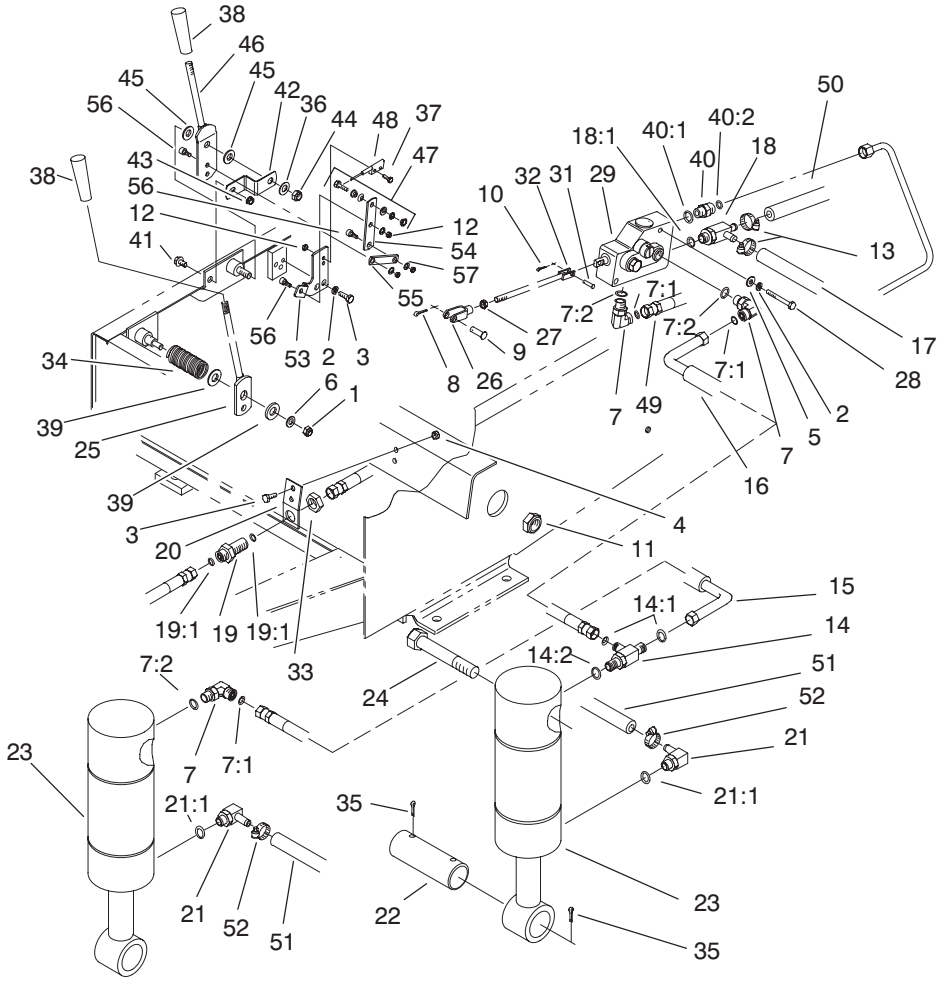


Sheet No.:9

Hydraulic Lift and Throttle Assembly

Ref. No.	Part No.	Qty.	Description
1	3296–29	1	Nut–Lock, NI
2	3253–3	4	Washer–Lock
3	321–4	4	Screw–HH
4	3296–42	2	Nut–Lock, NI
5	3256–22	2	Washer–Flat
6	3256–23	1	Washer–Flat
7	340–77	3	Fitting–HYD, 90°
7:1	237–22	1	O–Ring
7:2	237–42	1	O–Ring
8	3272–10	1	Pin–Cotter
9	283–58	1	Pin–Clevis
10	3272–5	1	Pin–Cotter
11	3296–15	2	Nut–Lock NI
12	3296–12	4	Nut–Lock
13	2412–36	2	Clamp–Hose
14	340–86	1	Fitting–Tee, HYD
14:1	237–22	2	O–Ring
14:2	237–42	1	O–Ring
15	66–8190	1	Hydraulic Hose ASM
16	66–8640	1	Hydraulic Hose ASM
17	66–8150	1	Hose–Hydraulic
18	66–3130	1	Fitting–Special
18:1	237–65	1	O–Ring
19	340–71	1	Fitting–Straight, Bulkhead
19:1	237–22	2	O–Ring

Ref. No.	Part No.	Qty.	Description
20	63–7410	1	Bracket–Bulkhead
21	304–99	2	Stem–Hose
21:1	237–78	1	O–Ring
22	27–4240	2	Pin–Cylinder
23	63–6630	2	Cylinder–Hydraulic
24	3216–3	2	Screw–HH
25	66–2720–03	1	Lever–Valve
26	282–27	1	Clevis
27	3220–2	1	Nut
28	321–11	2	Screw–HH
29	63–7960	1	Valve–Lift
31	283–16	1	Pin–Clevis
32	76–4830–03	1	Rod–Valve
33	340–70	1	Nut–Lock
34	70–7530	1	Spring–Compression
35	3272–23	4	Pin–Cotter
36	3256–24	1	Washer–Flat
37	32105–12	1	Screw
38	233–39	2	Knob–Control
39	3256–26	2	Washer–Flat
40	82–8530	1	Fitting–HYD, Special
40:1	237–42	1	O–Ring
40:2	237–22	1	O–Ring
41	3234–13	1	Screw–HHF
42	66–2670	1	Bracket–Throttle
43	32128–33	1	Nut–HF

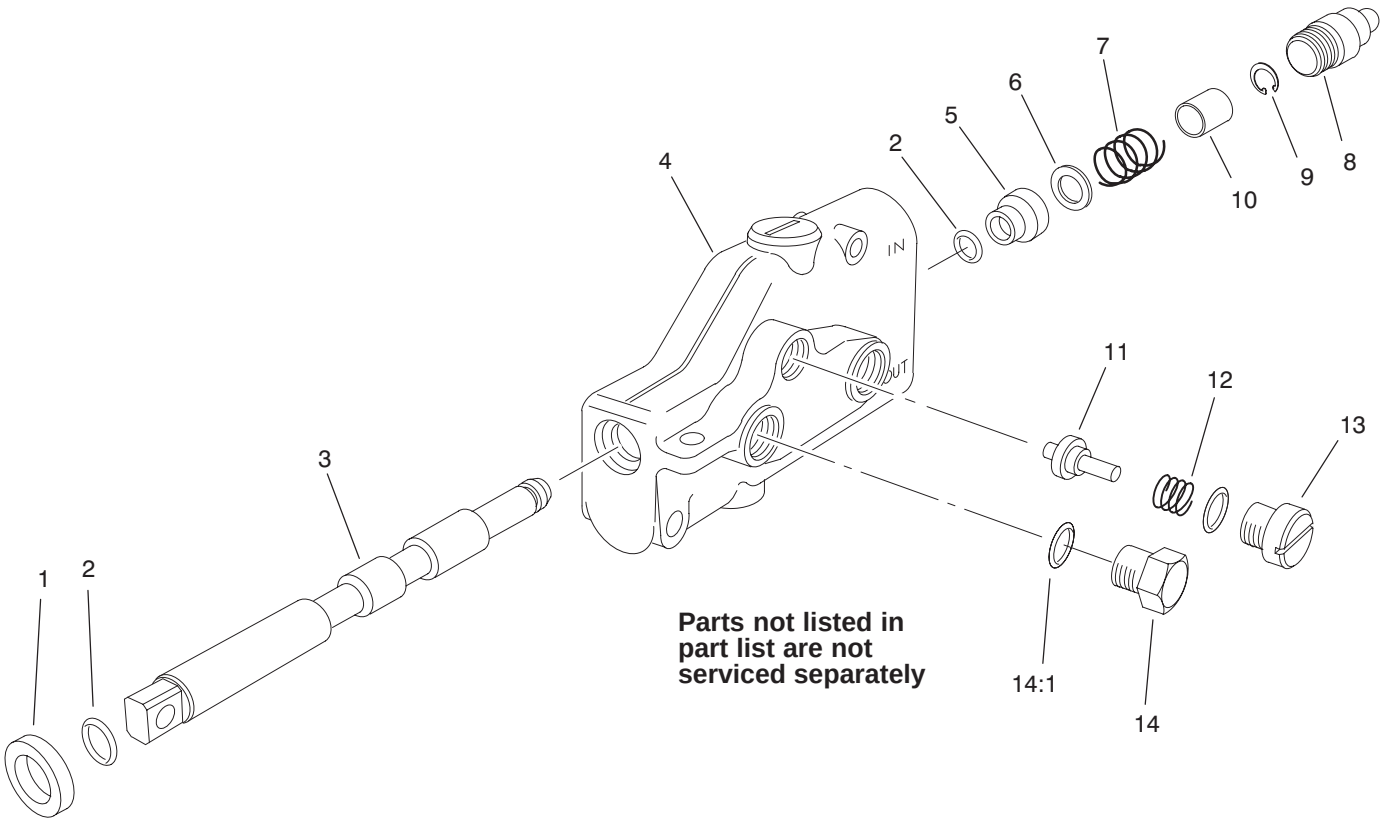


Sheet No.:9

Hydraulic Lift and Throttle Assembly (Continued)

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

Ref. No.	Part No.	Qty.	Description



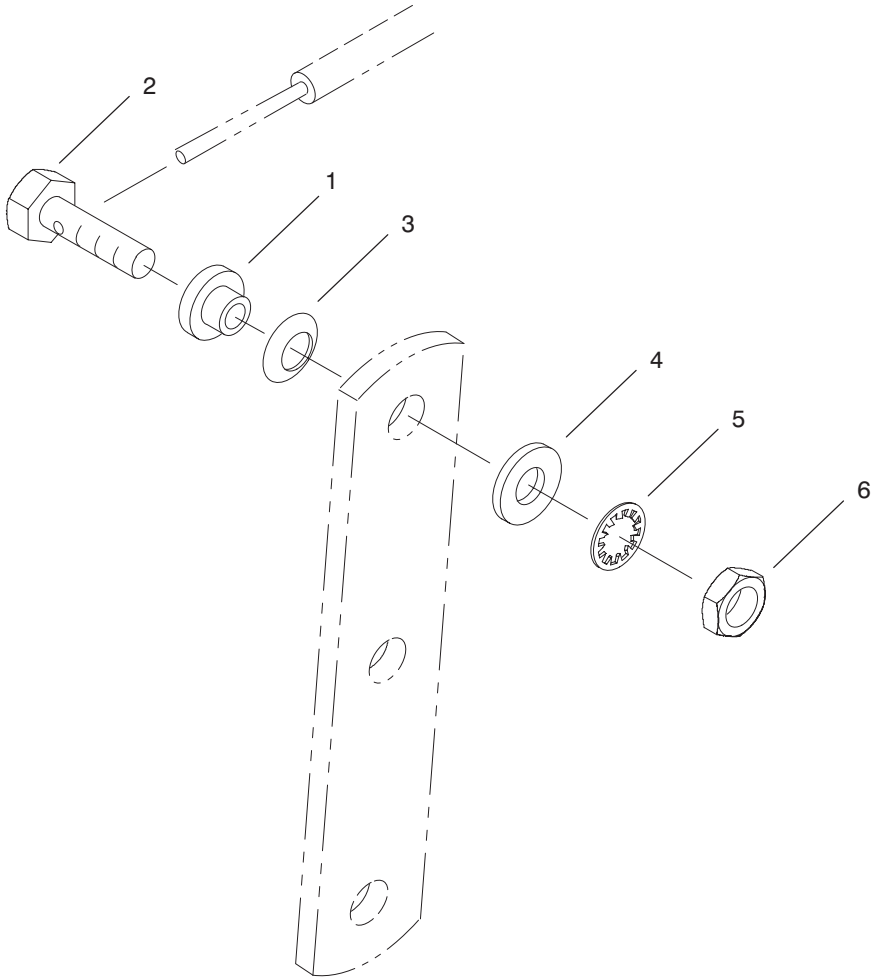
Sheet No.:A3
T–0532

Lift Valve Assembly No. 63–7960

Ref. No.	Part No.	Qty.	Description
1	58–6320	1	Wiper
2	58–6450	2	O–Ring
☆3		1	Spool
☆4		1	Body
5	58–6400	1	Bushing
6	65–2770	1	Washer
7	65–2950	1	Spring
8	58–6420	1	Cap
9	58–6460	1	Ring
10	65–2740	1	Spacer
11	65–2750	1	Plunger
12	65–2760	1	Spring
13	65–2930	1	Plug ASM
14	353–508	1	Plug
14:1	237–42	1	O–Ring

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

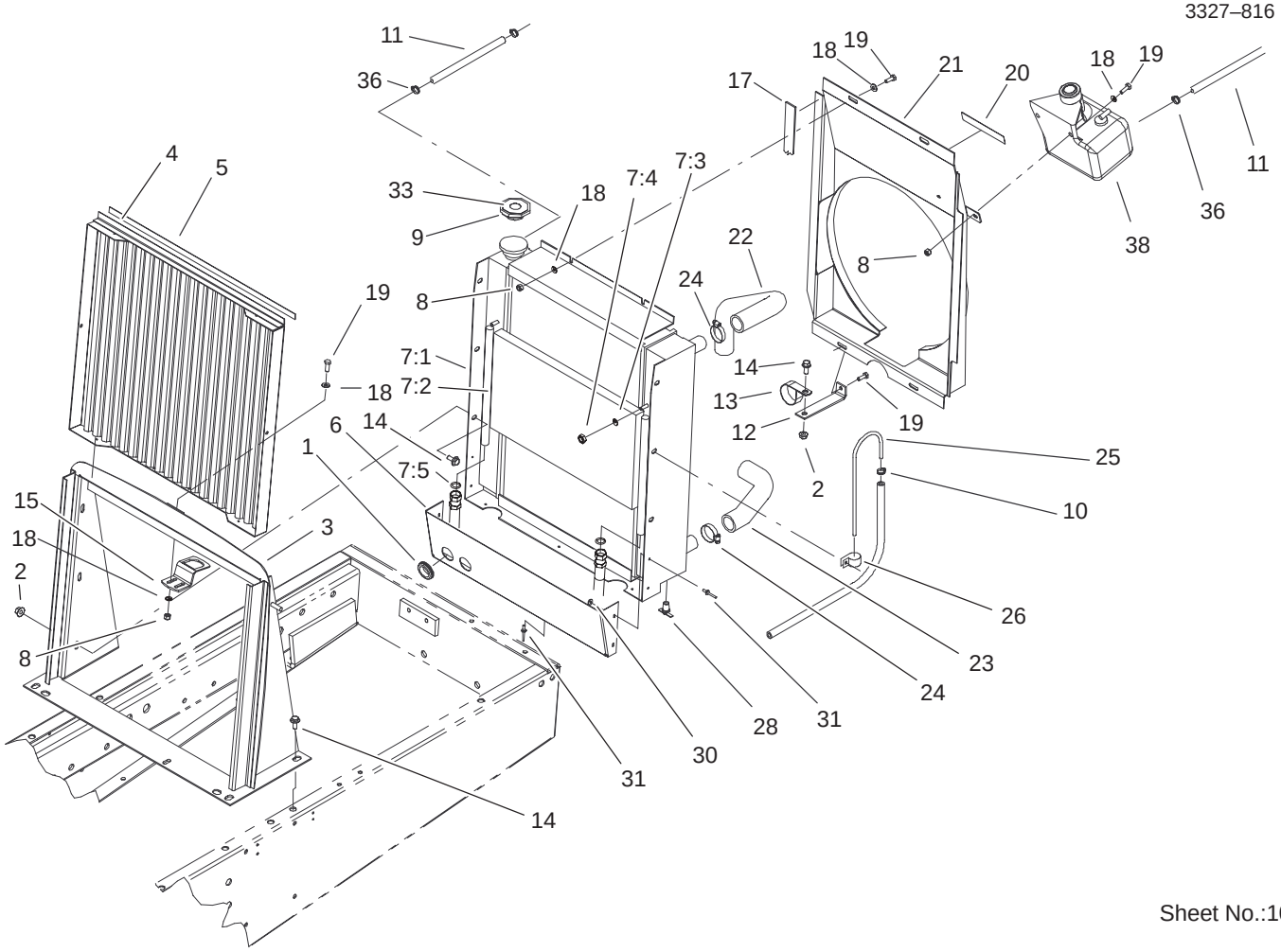


Sheet No.:A4
T–3791

Connector Fitting Assembly No. 63–6760

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

Ref. No.	Part No.	Qty.	Description



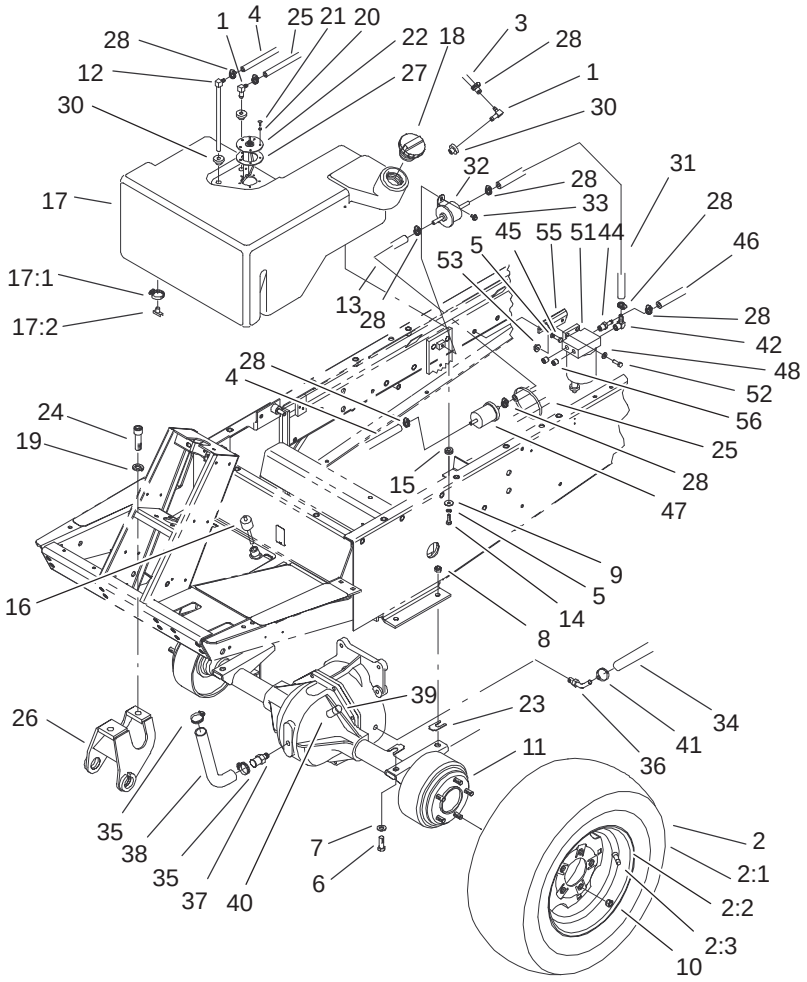
Sheet No.:10

Radiator Assembly

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

Ref. No.	Part No.	Qty.	Description
21	105–4261–03	1	Fan Shroud ASM
22	104–3443	1	Hose–Radiator, Upper
23	104–3442	1	Hose–Radiator, Lower
24	2412–34	4	Clamp–Hose
25	66–3180	1	Tube–Vent
26	2412–103	2	Clamp
28	304–46	1	Draincock
30	3269–10	2	Washer–Back
31	3269–13	5	Rivet–Pop
33	93–7840	1	Decal–Cap, Radiator
36	92–2379	3	Clamp–Hose
38	93–5642	1	Reservoir–Coolant

☆ Not serviced separately



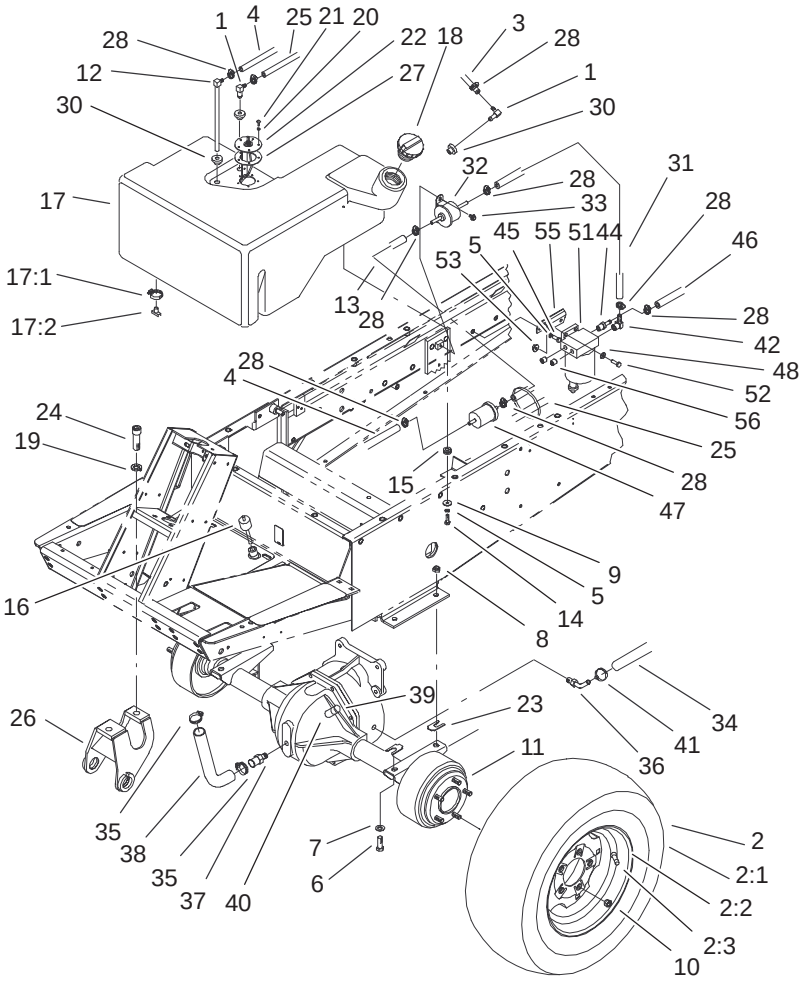
Sheet No.:11

Fuel Tank and Front Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	94–6765	2	Fitting–90°, Barbed
☆2		2	Tire ASM
2:1	95–3348	1	Tire
2:2	217–117	1	Wheel ASM
2:3	232–27	1	Stem–Valve
3	94–4522	1	Hose–Fuel
4	63–7630	1	Hose–Fuel
5	3253–3	5	Washer–Lock
6	324–5	4	Screw–HH
7	3256–25	4	Washer–Flat
8	3296–48	4	Nut–Lock NI
9	3256–67	3	Washer–Flat
10	23–7270	10	Nut–Wheel
11	86–9640–03	1	Front Axle ASM (only on: 30241)
11	92–2377–03	1	Front Axle ASM (only on: 30242)
12	66–8120	1	Pipe–Stand
13	63–7622	1	Hose–Fuel
14	321–5	3	Screw–HH
15	237–136	3	Grommet
16	66–3060	1	Dipstick
17	98–5001	1	Tank–Fuel
17:1	2412–36	1	Clamp–Hose
17:2	304–46	1	Draincock

Ref. No.	Part No.	Qty.	Description
18	93–3102	1	Cap–Fuel
19	3253–8	4	Washer–Lock
20	3253–15	5	Washer–Lock/Sp
21	32122–24	5	Screw–Pth
22	63–7640	1	Sender–Fuel
23	42–6080	1	Shim–Axle
24	3273–38	4	Screw–HSH
25	105–0020	1	Hose–Fuel
26	98–2328–03	2	Bracket–Carrier
27	62–7650	1	Gasket
28	2412–108	7	Clamp–Worm
30	46–6560	3	Bushing
31	63–7620	1	Hose–Fuel
32	104–5215	1	Pump–Fuel, Electric
33	3234–26	2	Screw
34	92–5083	1	Hose–Hydraulic
35	2412–34	2	Clamp–Hose
36	92–5088	1	Fitting–45°, Barbed
37	354–71	1	Fitting–HYD, Barbed
38	77–0550	1	Hose–Fill, Differential
39	2810–1	1	Coupling
40	289–6	1	Nipple–Pipe
41	2412–119	1	Clamp–Worm
42	353–781	1	Fitting
44	353–783	1	Fitting

☆ Not serviced separately

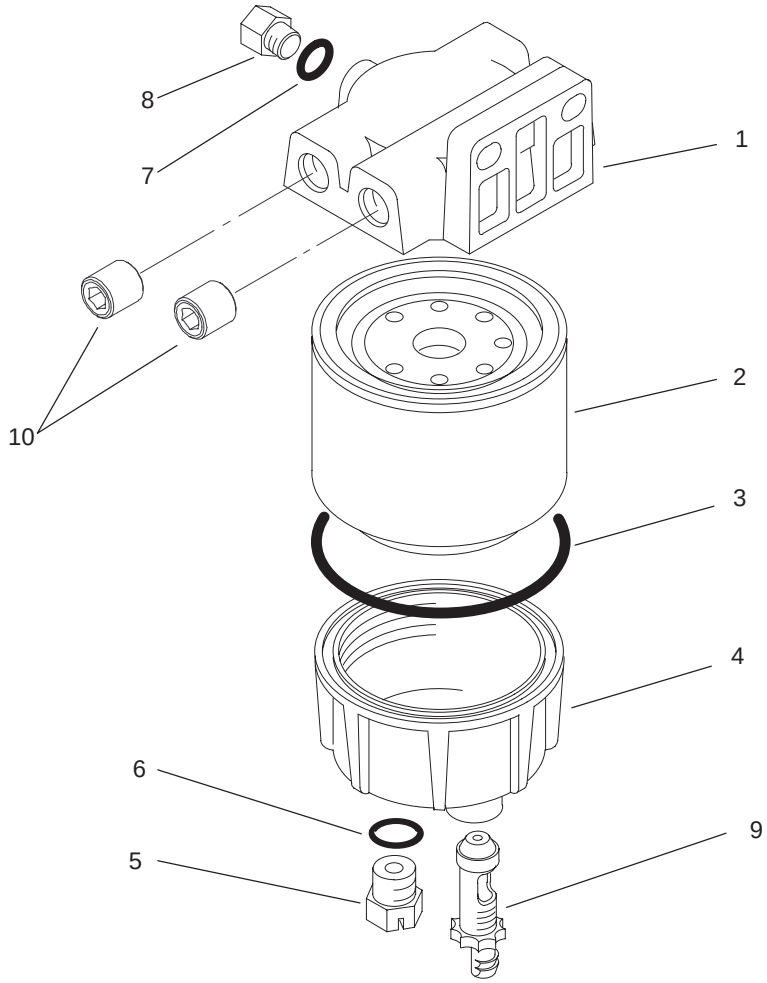


Sheet No.:11

Fuel Tank and Front Axle Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
45	321–4	2	Screw–HH
46	63–7627	1	Hose–Fuel
47	98–7612	1	Filter–Fuel
48	3256–22	2	Washer–Flat
51	98–9305	1	Filter–Water/Fuel
52	321–5	2	Screw–HH
53	32128–33	2	Nut–HF
55	104–3409–03	1	Bracket–Filter
56	285–22	2	Plug–Pipe

Ref. No.	Part No.	Qty.	Description

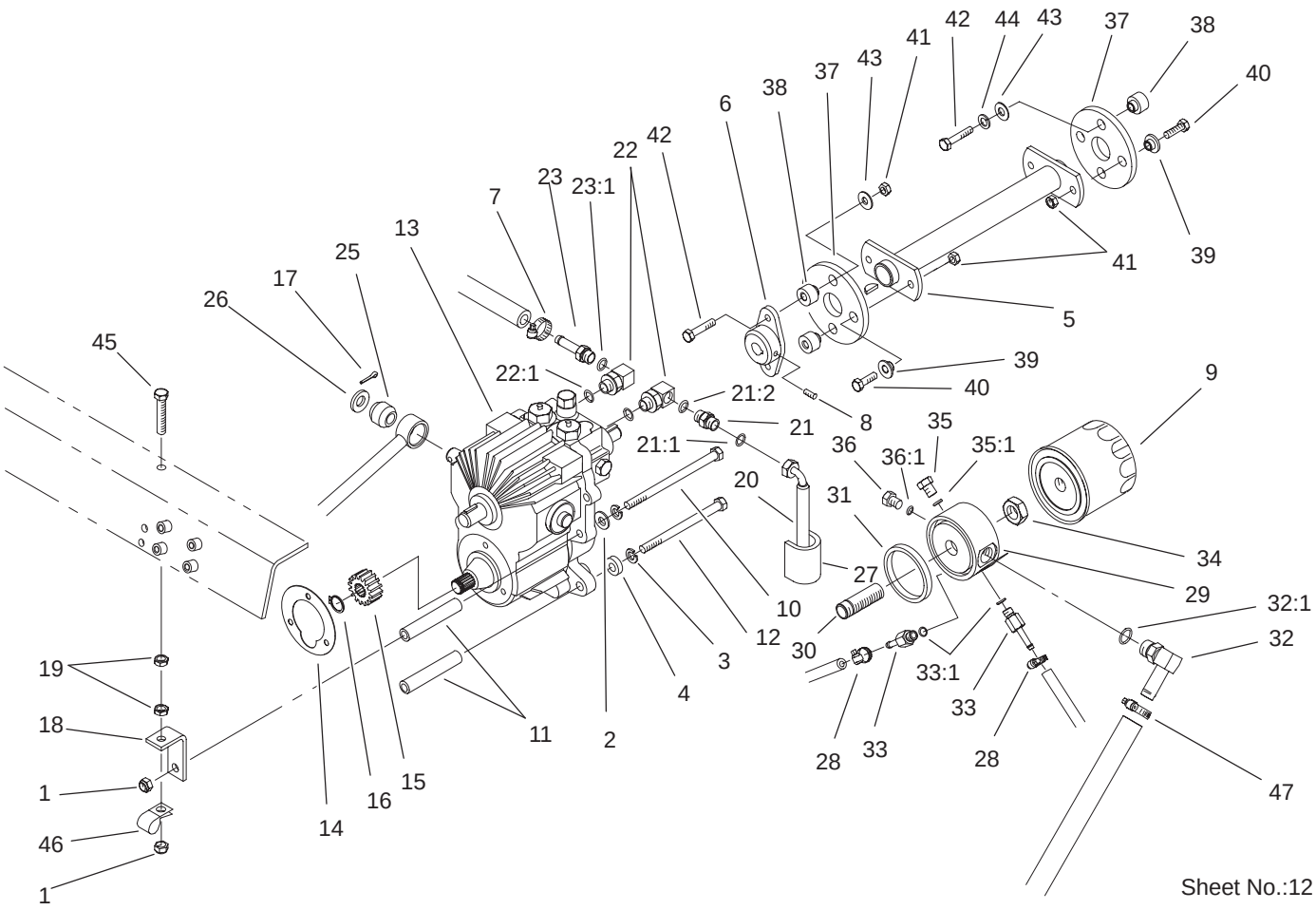


Sheet No.:A6
T–3330

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

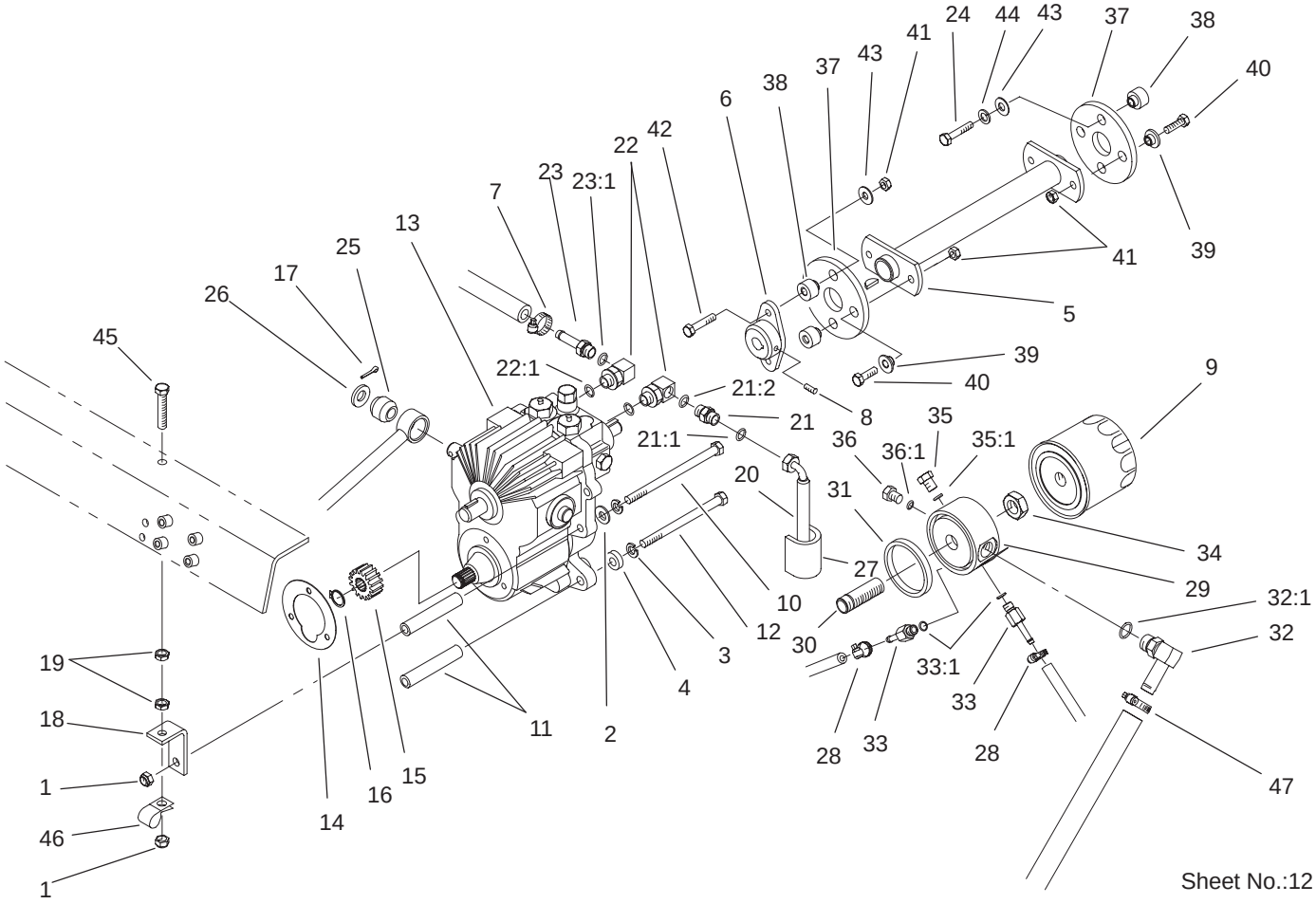
Ref. No.	Part No.	Qty.	Description



Transmission and Drive Coupling Assembly

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

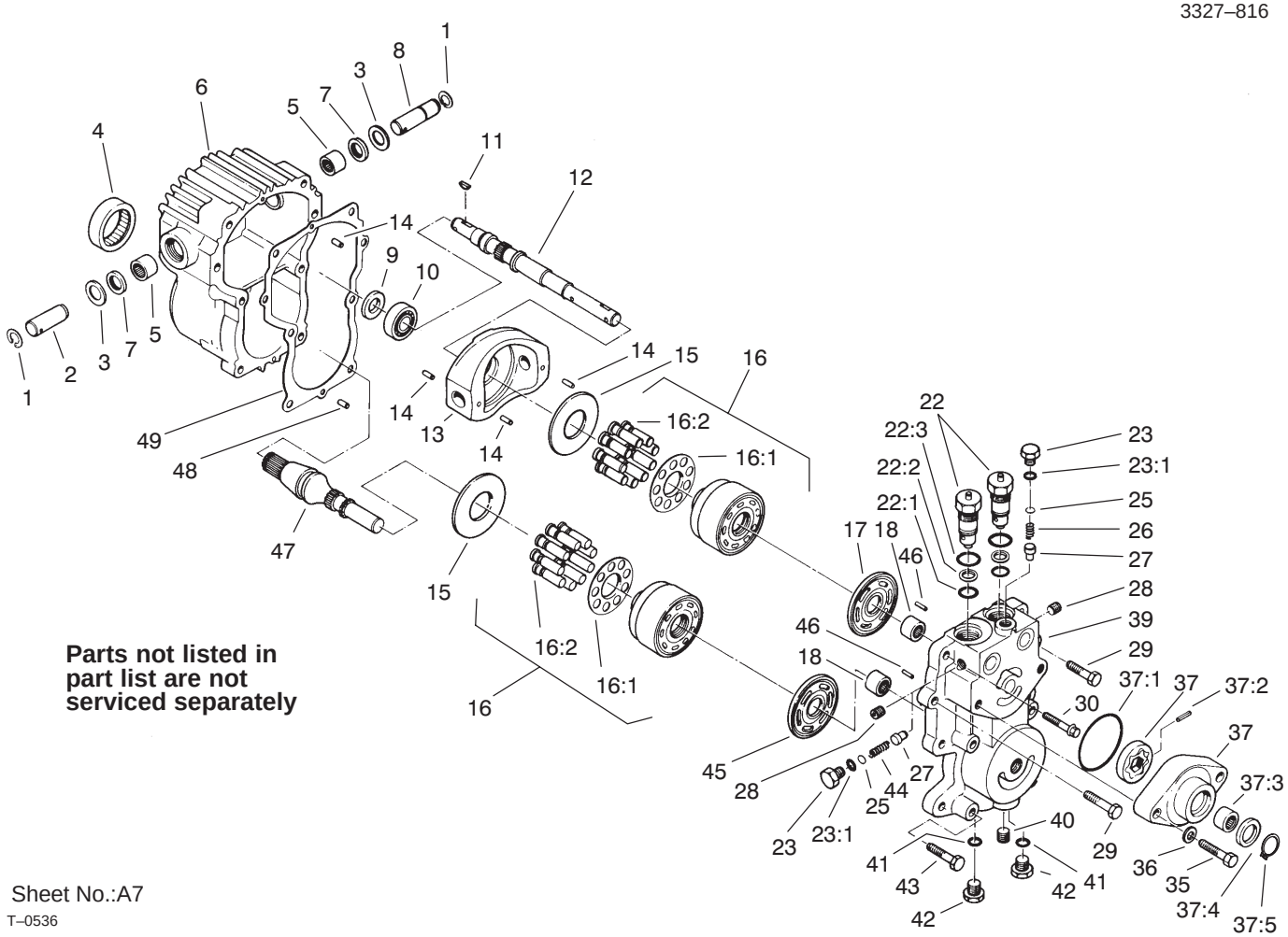
Ref. No.	Part No.	Qty.	Description
23	353–979	1	Fitting–Barb, Straight
23:1	237–42	1	O–Ring
25	23–2270	1	Bushing–Rubber
26	3256–26	1	Washer–Flat
27	38–3400	1	Guard–Rubber
28	2412–108	2	Clamp–Worm
29	92–5076	1	Adapter–Filter
30	92–5085	1	Union–Filter
31	92–5087	1	Seal–Adapter, Filter
32	92–5086	1	Fitting–HYD, 90°
32:1	237–79	1	O–Ring
33	92–5512	2	Fitting–Hose, Barbed
33:1	237–78	1	O–Ring
34	3220–7	1	Nut–Jam
35	353–990	1	Plug
35:1	237–78	1	O–Ring
36	353–988	1	Plug–Hex, Hollow
36:1	237–79	1	O–Ring
37	44–2230	2	Coupling–Rubber
38	27–6590	4	Spacer–Coupling, Rubber
39	27–6600	4	Spacer–Coupling
40	3210–5	4	Screw–HH
41	32152–5	6	Nut–Conelock
42	3210–8	4	Screw–HH
43	3256–71	4	Washer–Flat



Transmission and Drive Coupling Assembly (Continued)

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

Ref. No.	Part No.	Qty.	Description



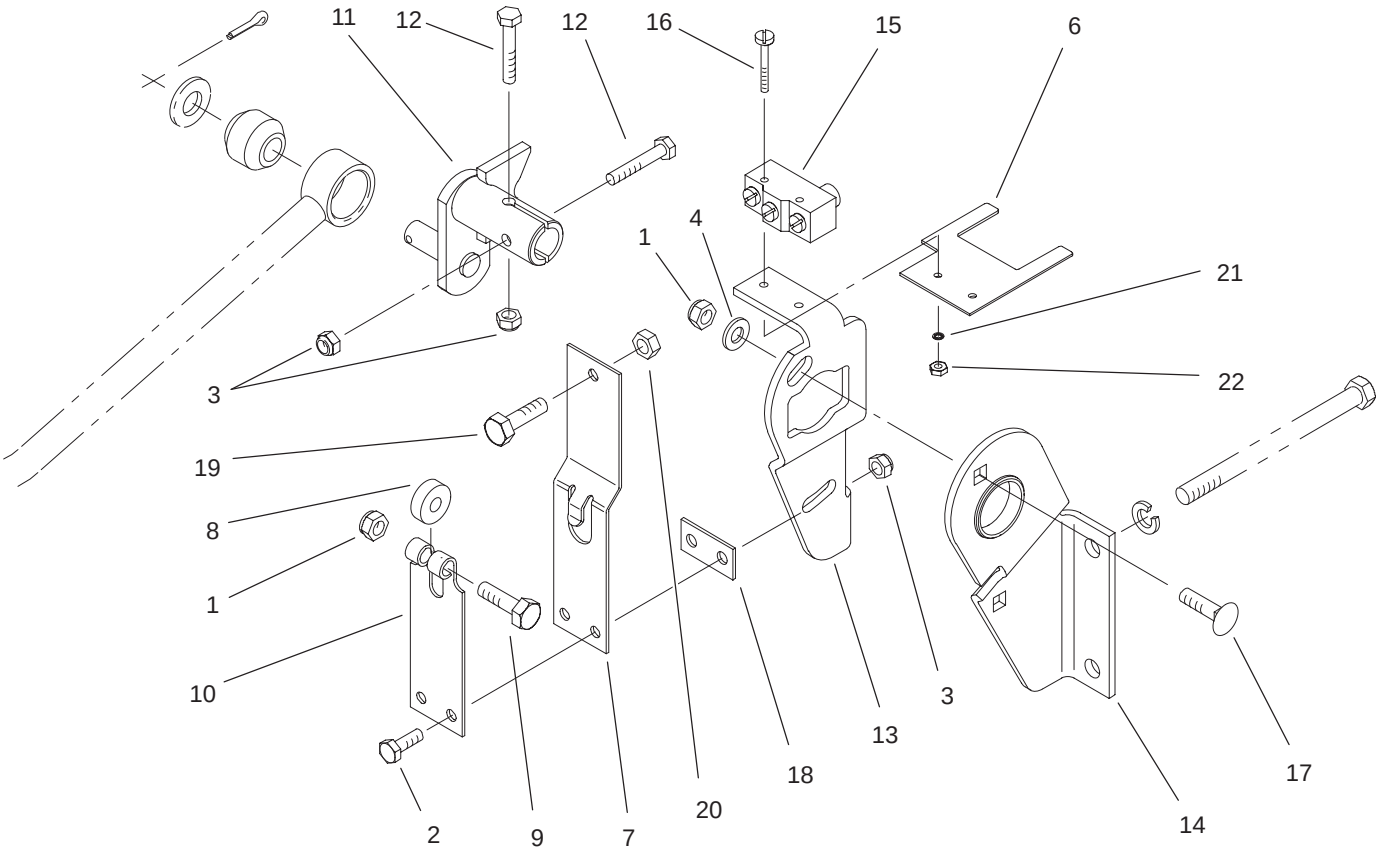
Sheet No.:A7
T–0536

Transmission Assembly No. 92–5513

Ref. No.	Part No.	Qty.	Description
1	32151–46	2	Ring–Retaining
2	25–2500	1	Shaft–Trunnion
3	25–2510	2	Washer–Flat
4	28–3300	1	Bearing–Roller
5	252–82	2	Bearing–Needle
6	92–5709	1	Housing–Transmission
7	25–3210	2	Seal–Lip
8	28–3670	1	Shaft–Trunnion
9	93–4133	1	Seal–Lip
10	28–3650	1	Bearing–Ball
11	3257–5	2	Key–Woodruff
12	28–3640	1	Shaft–Pump
13	49–7820	1	Swashplate–Variable
14	32121–91	3	Pin–Spring, Coil
15	25–2380	2	Plate–Thrust
16	48–1800	2	Cylinder Block Kit
☆16:1		1	Retainer–Slipper
☆16:2		9	Piston ASM
17	46–7320	1	Plate–Valve, Pump
18	25–3300	2	Bearing–Needle
22	49–7830	2	Check Valve Kit
22:1	28–3590	2	O–Ring
22:2	28–3580	2	Ring–Back Up
22:3	28–3570	2	O–Ring
23	25–2460	2	Plug–HH
23:1	237–86	1	O–Ring

Ref. No.	Part No.	Qty.	Description
25	25–2470	1	Pack–Shim
26	46–7310	1	Spring
27	83–7260	2	Cone–Relief, Charge
28	285–17	4	Plug–Pipe
29	323–8	2	Screw–HH
30	28–3530	2	Capscrew
35	324–23	2	Screw–HH
36	28–3450	2	Washer
37	38–2670	1	Charge Pump Kit
37:1	28–3520	1	O–Ring
37:2	38–2680	1	Pin
37:3	28–3480	1	Bearing
37:4	94–2975	1	Seal–Lip
37:5	94–2976	1	Ring–Retaining
39	92–5716	1	Section–Center
40	92–5717	1	Plug–Pipe
☆41		2	O–Ring
42	28–3440	2	Plug–Threaded
43	323–10	4	Screw–HH
44	25–2480	1	Spring–Valve
45	28–3380	1	Plate–Valve, Motor
46	25–2430	2	Pin–Dowel
47	49–8200	1	Shaft–Motor
48	353–599	2	Pin–Dowel
49	28–3340	1	Gasket

☆ Not serviced separately

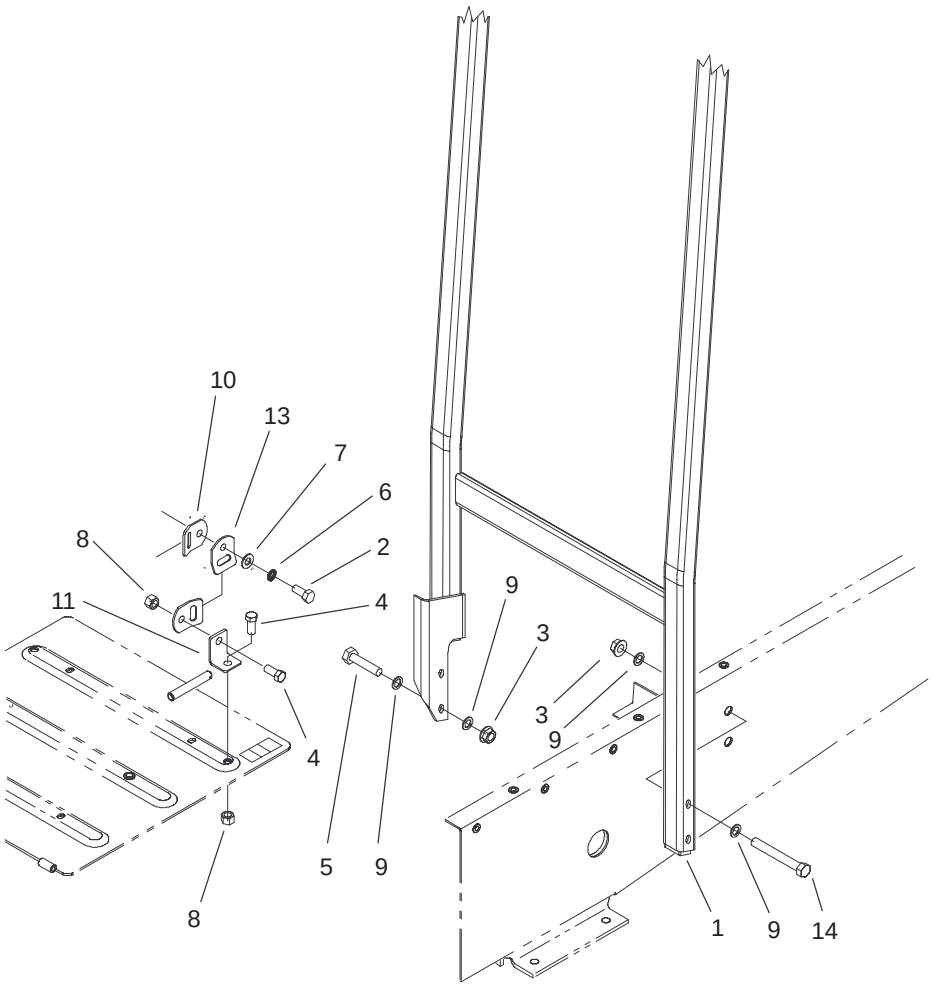


Sheet No.:13

Transmission Interlock Assembly

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

Ref. No.	Part No.	Qty.	Description

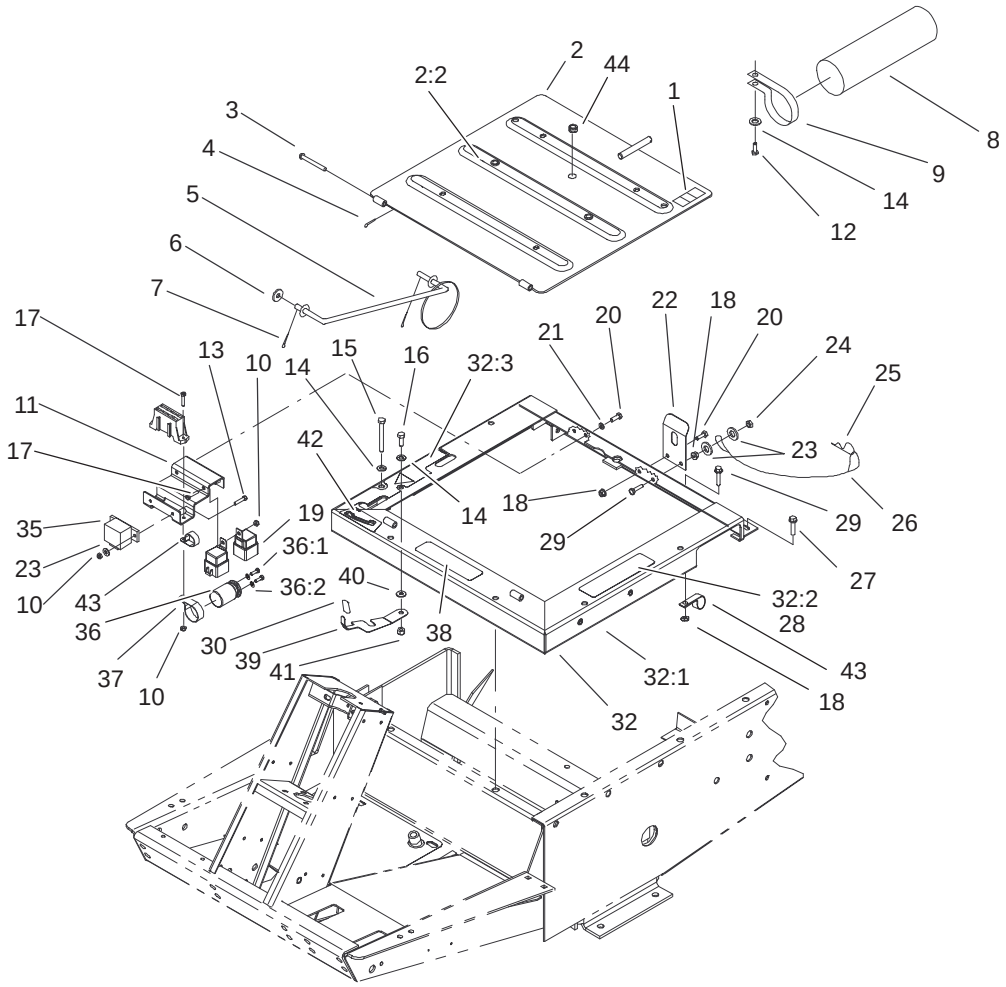


Sheet No.:14

Roll–Over–Protection–System Assembly (only on: 30242)

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

Ref. No.	Part No.	Qty.	Description



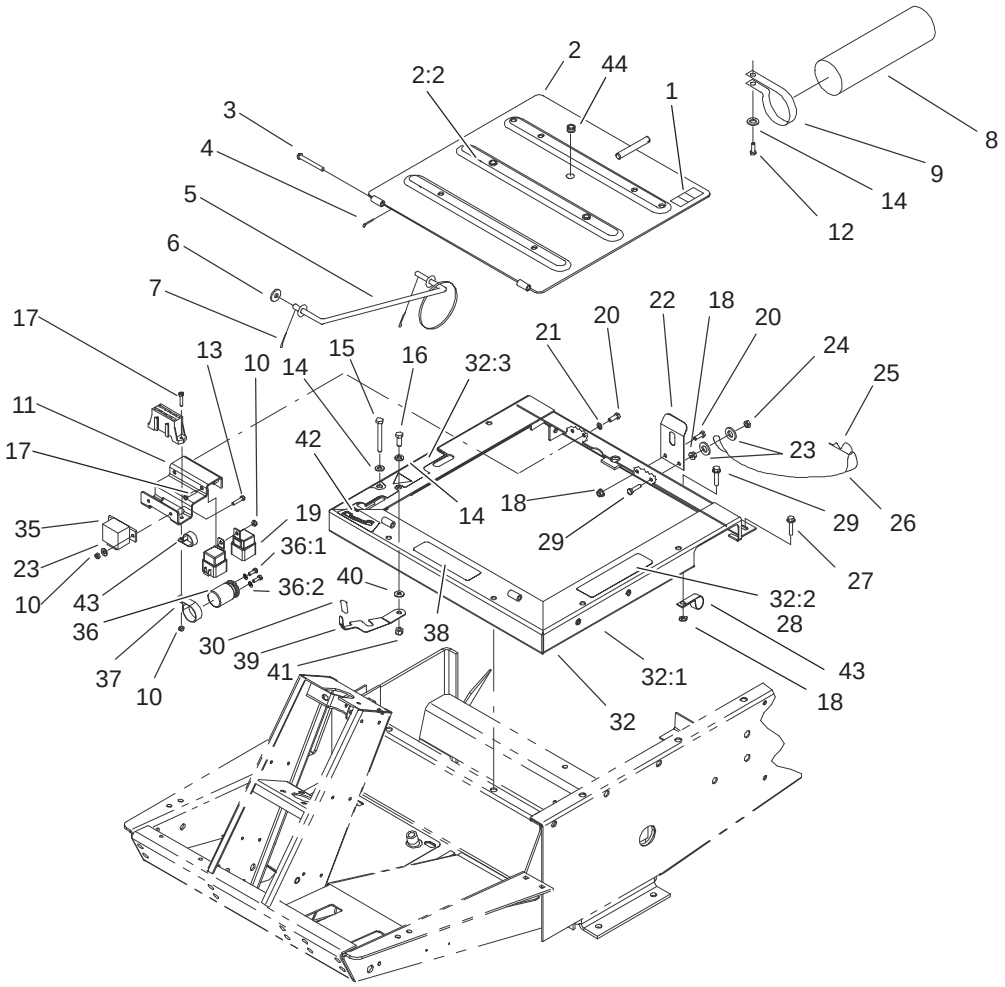
Sheet No.:15

Seat Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	93–6680	1	Decal–Diesel
2	92–5759	1	Plate–Seat
2:2	32148–9	2	Insert–Nut
3	283–49	2	Pin–Clevis
4	3272–4	2	Pin–Cotter
5	66–2800–03	1	Rod–Support
6	3256–24	1	Washer–Flat
7	3272–11	2	Pin–Cotter
8	74–0720	1	Tube–Manual
9	2412–133	2	R–Clamp
10	3296–12	6	Nut–Lock
11	105–0036	1	Fuse Block Bracket ASM
*11:2	32148–6	2	Insert–Nut
12	322–5	2	Screw–HH
13	32105–12	2	Screw
14	3256–23	9	Washer–Flat
15	322–13	6	Screw–HH
16	322–4	1	Screw–HH
17	32105–13	4	Screw–SHH
18	32128–33	3	Nut–HF
19	70–1480	4	Relay
20	321–4	3	Screw–HH
21	3253–3	2	Washer–Lock
22	66–2630	1	Latch–Seat
23	3256–22	3	Washer–Flat

Ref. No.	Part No.	Qty.	Description
24	3296–56	1	Nut–Lock, NI
25	3290–255	1	Pin–Hair
26	28–8070	1	Lanyard
27	3234–17	2	Screw–HHF
28	93–7841	1	Decal–Warning, Intl
29	321–5	2	Screw–HH
30	100–6576	1	Grip–Handle
32	92–8877	1	Seat Frame ASM
32:1	32148–6	4	Insert–Nut
32:2	67–1710	1	Decal–Warning
32:3	93–7833	1	Decal–Throttle & Lift Control
35	66–8800	1	Relay
36	37–2690	1	Capacitor
36:1	3252–18	2	Screw
36:2	3254–1	2	Washer–Lock, Internal
37	2412–74	1	R–Clamp
38	105–2509	1	Decal–Instructions, Starting
38	105–2511	1	Decal–Instructions, Starting
39	100–6551	1	Latch–Spring
40	3256–2	1	Washer–Flat (only on: 30242)
41	3296–29	1	Nut–Lock, NI
42	100–6577	1	Decal–Lock, Lift

* Not illustrated

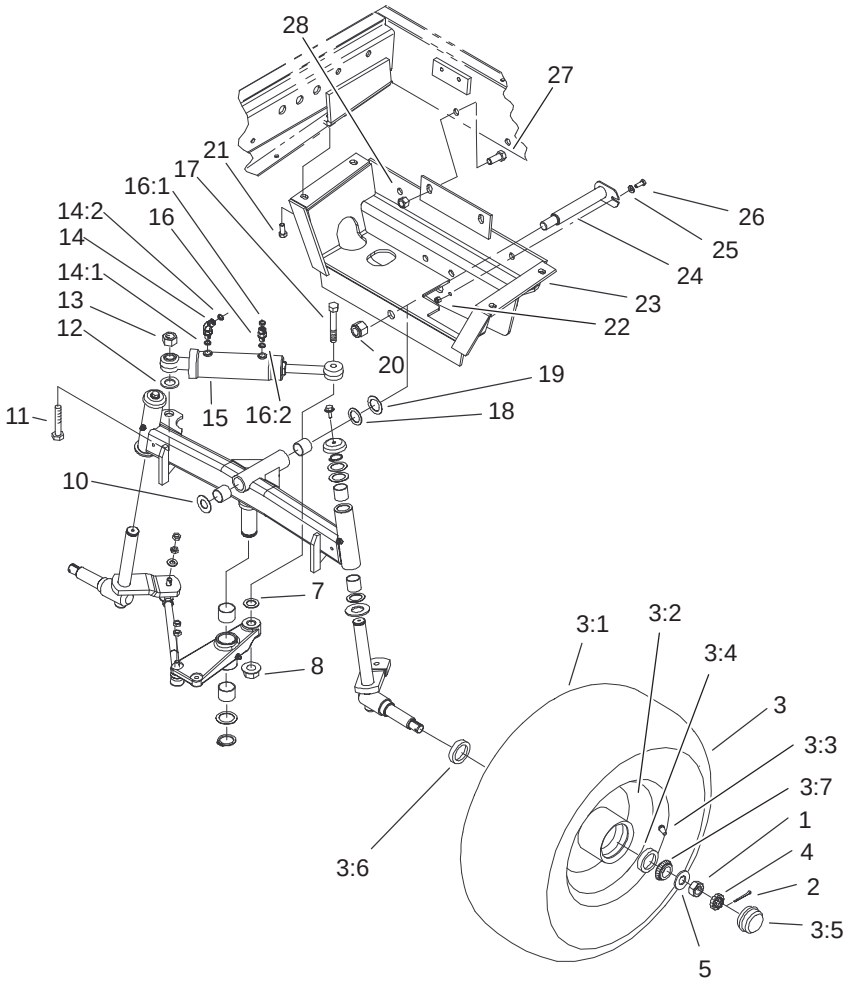


Sheet No.:15

Seat Frame Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
43	2412–106	2	Clamp–R
44	240–5	1	Grommet

Ref. No.	Part No.	Qty.	Description



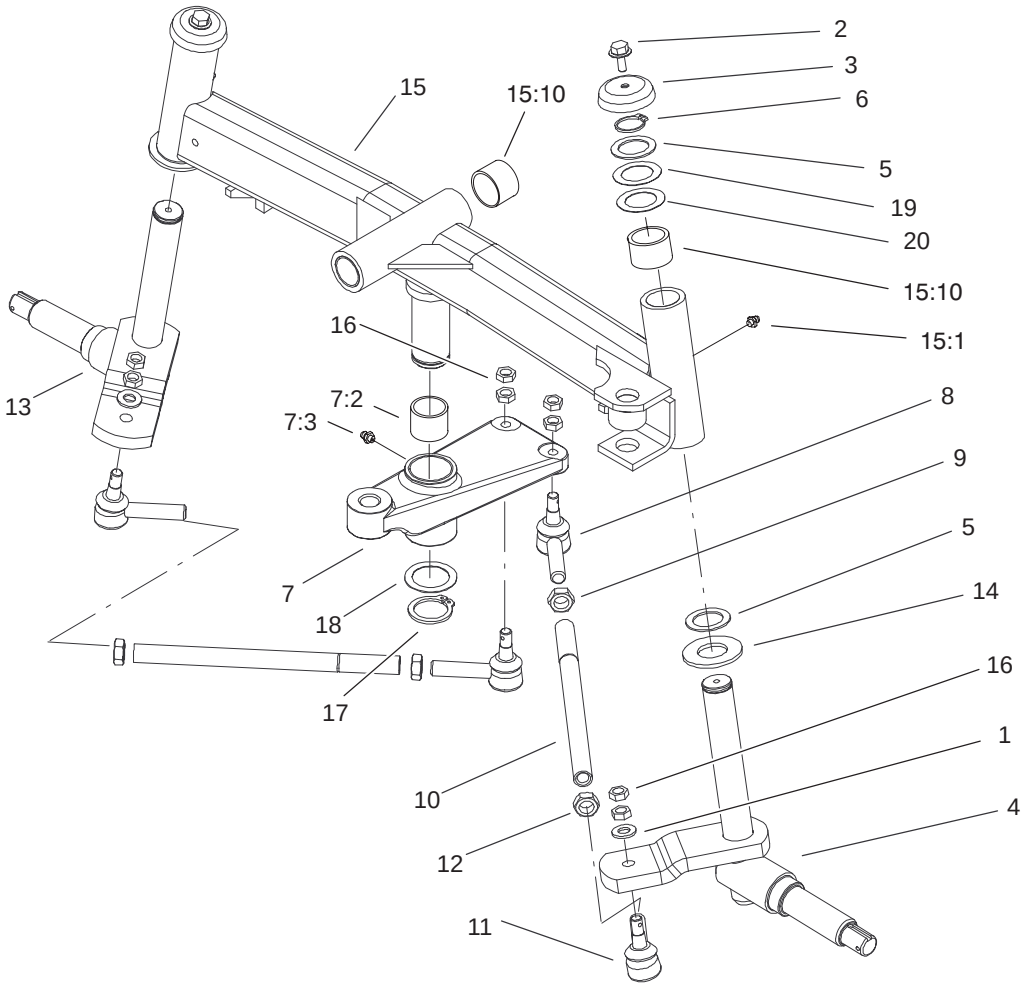
Sheet No.:16

2 Wheel Drive Rear Axle Assembly (only on: 30241)

Ref. No.	Part No.	Qty.	Description
1	3220–7	2	Nut–Jam
2	3272–13	2	Pin–Cotter
☆3		2	Wheel & Tire ASM
3:1	231–105	1	Tire
3:2	217–118	1	Rim
3:3	232–35	1	Stem–Valve
3:4	254–72	2	Bearing–Cup, Tapered
3:5	241–119	1	Cap–Dust
3:6	253–129	1	Seal
3:7	254–94	2	Bearing–Cone, Taper
4	93–0307	2	Nut–Lock, Retainer
5	93–0309	2	Washer–Tab
7	67–9410	1	Washer
8	32128–45	1	Locknut–Flange
10	71–4540	1	Washer–Thrust
11	67–7300	1	Screw–HH
12	67–7250	1	Spacer–Ring
13	32153–6	1	Locknut
14	340–103	1	Fitting–HYD, 45°
14:1	237–78	1	O–Ring
14:2	237–21	1	O–Ring
15	76–2070	1	Cylinder–Steering
16	340–92	1	Fitting–HYD, Straight
16:1	237–78	1	O–Ring
16:2	237–21	1	O–Ring
17	328–25	1	Screw–HH

Ref. No.	Part No.	Qty.	Description
18	10–8110	1	Washer–Thrust
19	56–2460	2	Washer–Flat
20	3296–51	1	Nut–Lock, NI
21	3234–25	4	Bolt–HF
22	3296–42	1	Nut–Lock, NI
23	63–6430–03	1	Frame–Rear
24	63–6770–03	1	Pin–Masked
25	3256–22	1	Washer–Flat
26	321–4	1	Screw–HH
27	325–5	2	Screw–HH
28	3296–25	2	Nut–Lock NI

☆ Not serviced separately

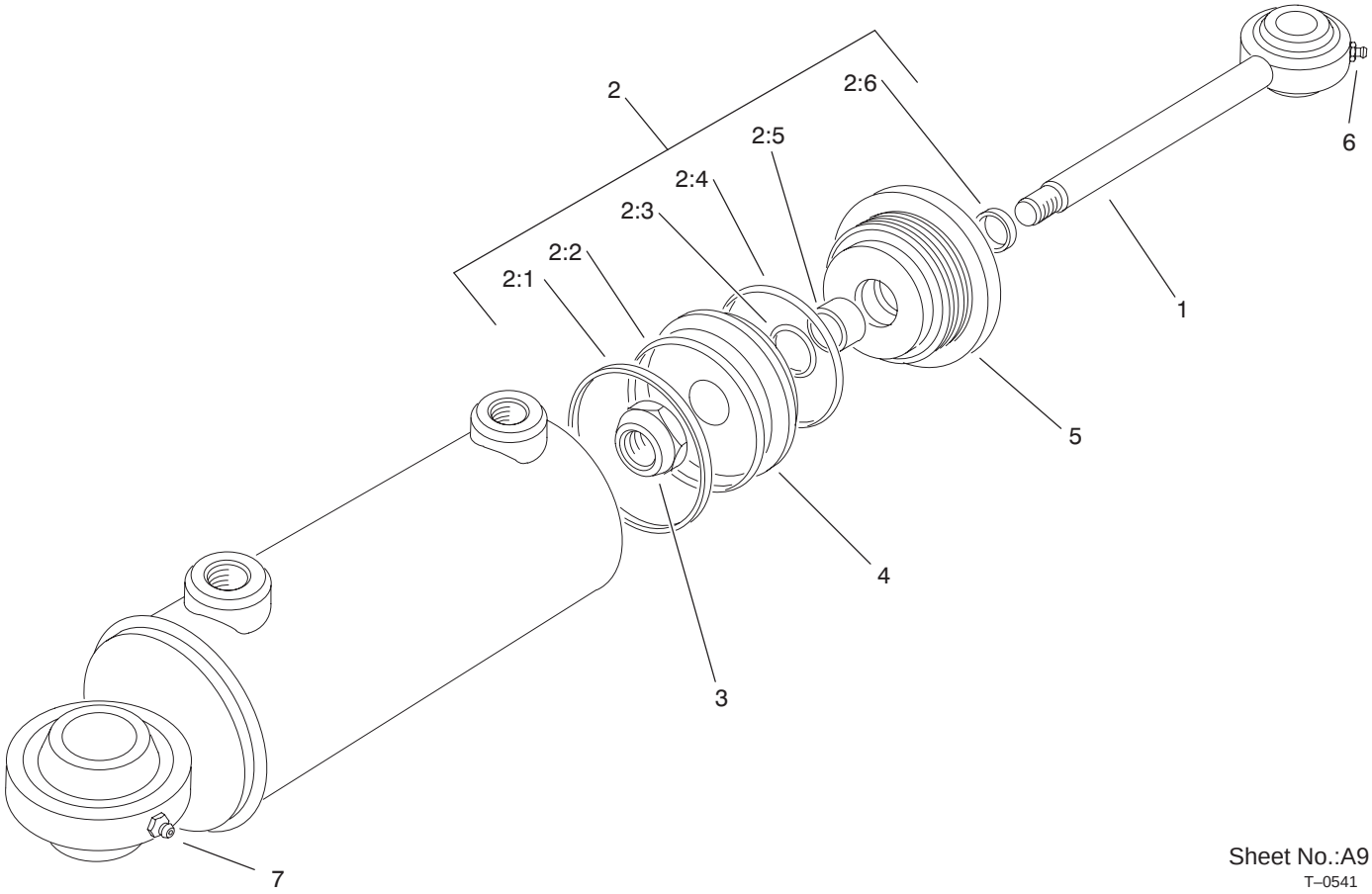


Sheet No.:A8

Axle Assembly (only on: 30241)

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

Ref. No.	Part No.	Qty.	Description



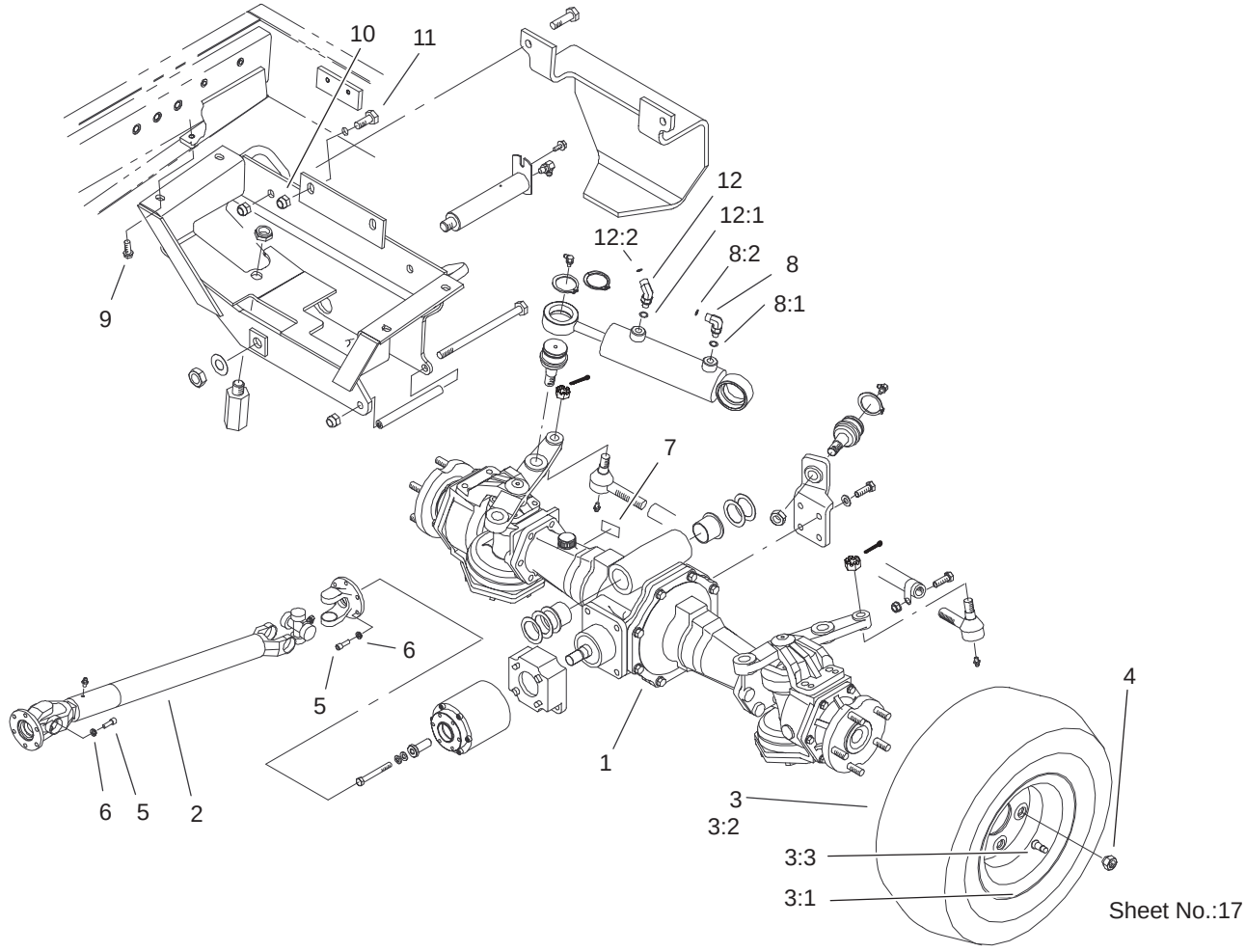
Sheet No.:A9
T–0541

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

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

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



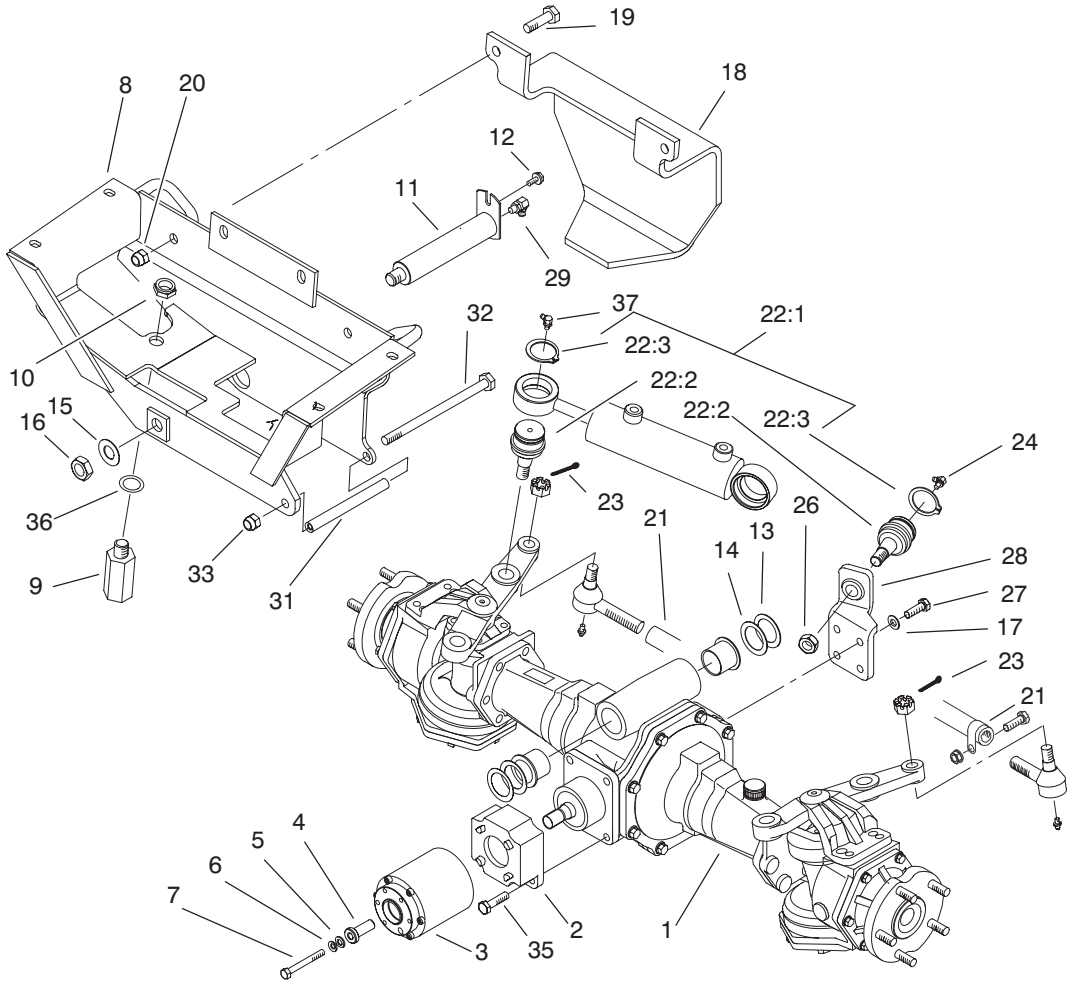
Sheet No.:17

4 Wheel Drive Rear Axle Assembly (only on: 30242)

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

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

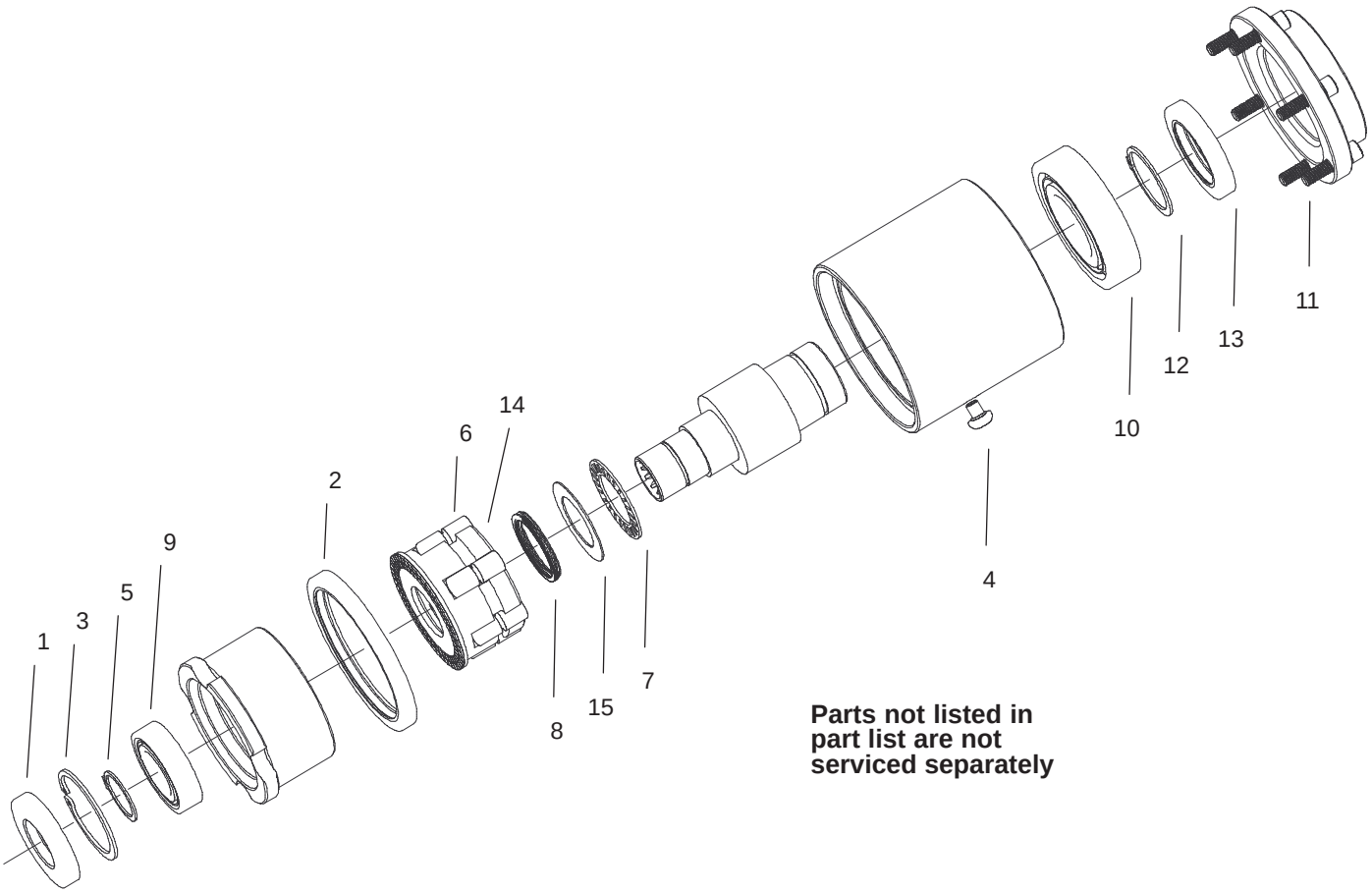


Sheet No.:B5

4 Wheel Drive Rear Axle Assembly (Continued) (only on: 30242)

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

☆ Not serviced separately

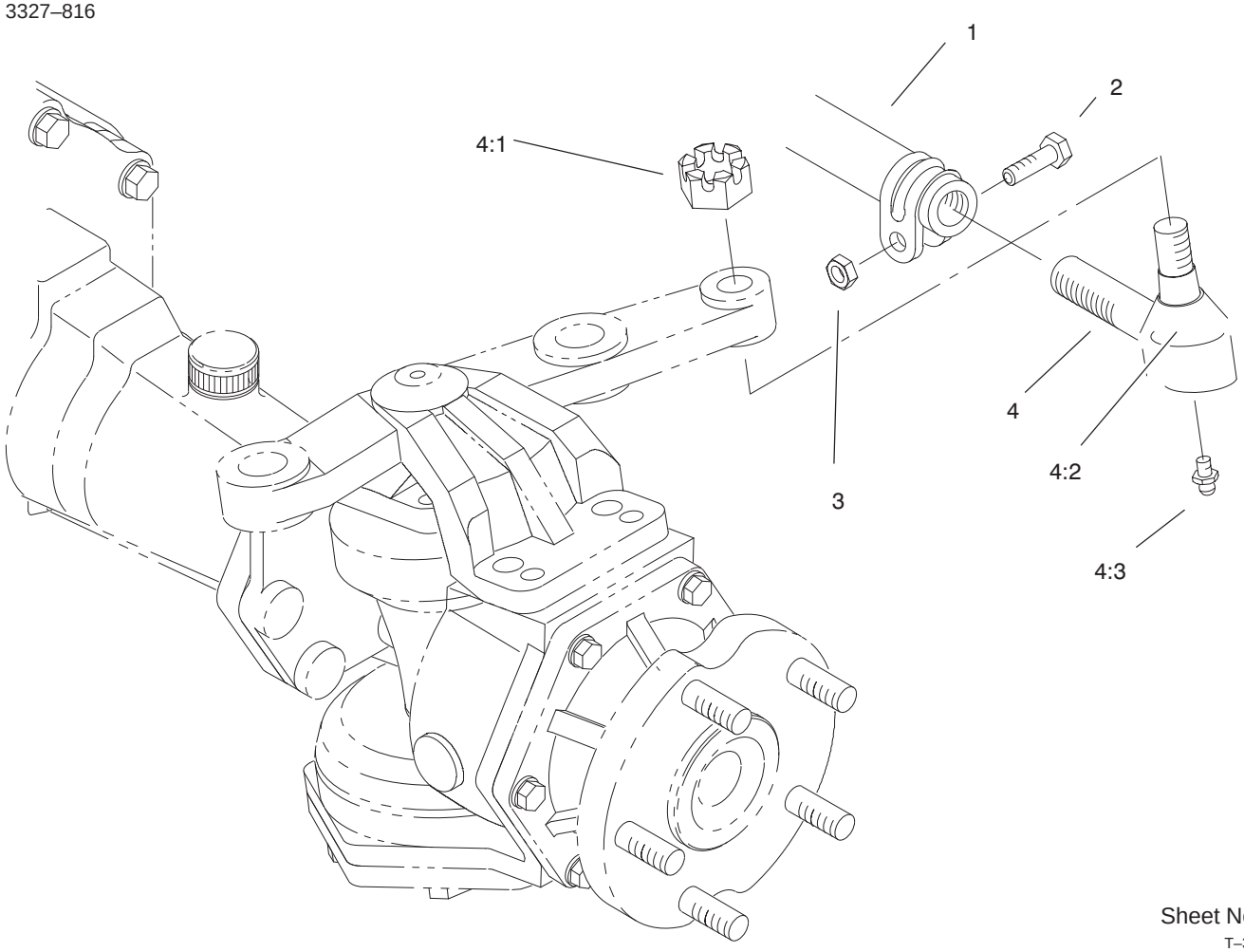


Sheet No.:B6
T–3802

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

Ref. No.	Part No.	Qty.	Description
1	100–6589	1	Seal–Oil
2	100–6593	1	Seal–Oil
3	100–6594	1	Ring–Snap,Internal
4	100–6596	1	Screw–PPH
5	100–6597	1	Ring–Snap, External
6	93–8925	6	Roller
7	93–8919	1	Bearing–Needle, Thrust
8	93–8923	1	Spring–Wave
9	99–2902	1	Bearing
10	92–9705	1	Bearing
11	3245–6	6	Screw–HSH
12	32120–84	1	Ring–Snap, External
13	71–6790	1	Seal–Oil
14	100–2568	1	Roll Cage ASM
15	93–8929	1	Washer–Thrust

Ref. No.	Part No.	Qty.	Description

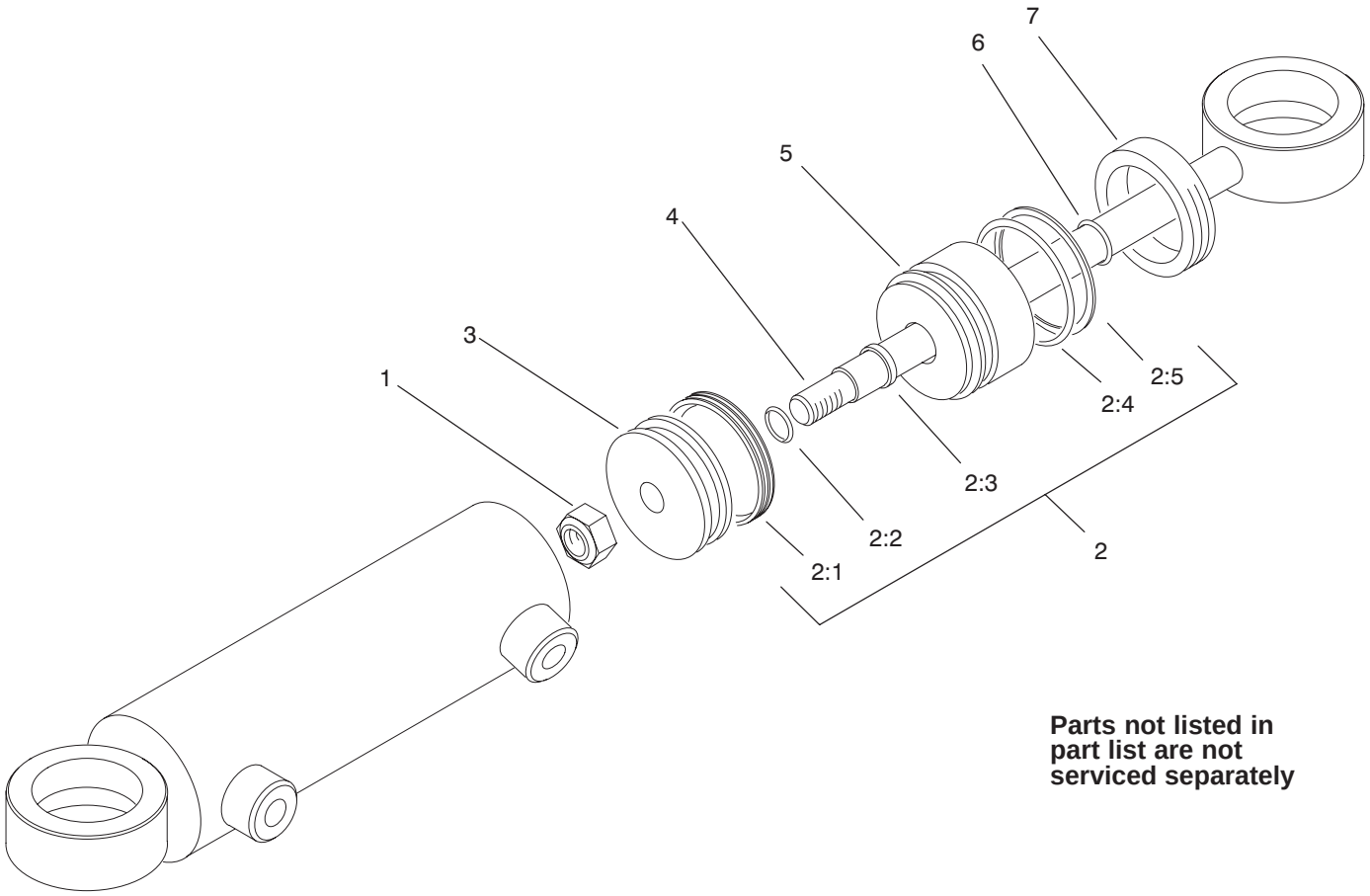


Sheet No.:B7
T–3803

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

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

Ref. No.	Part No.	Qty.	Description



Parts not listed in part list are not serviced separately

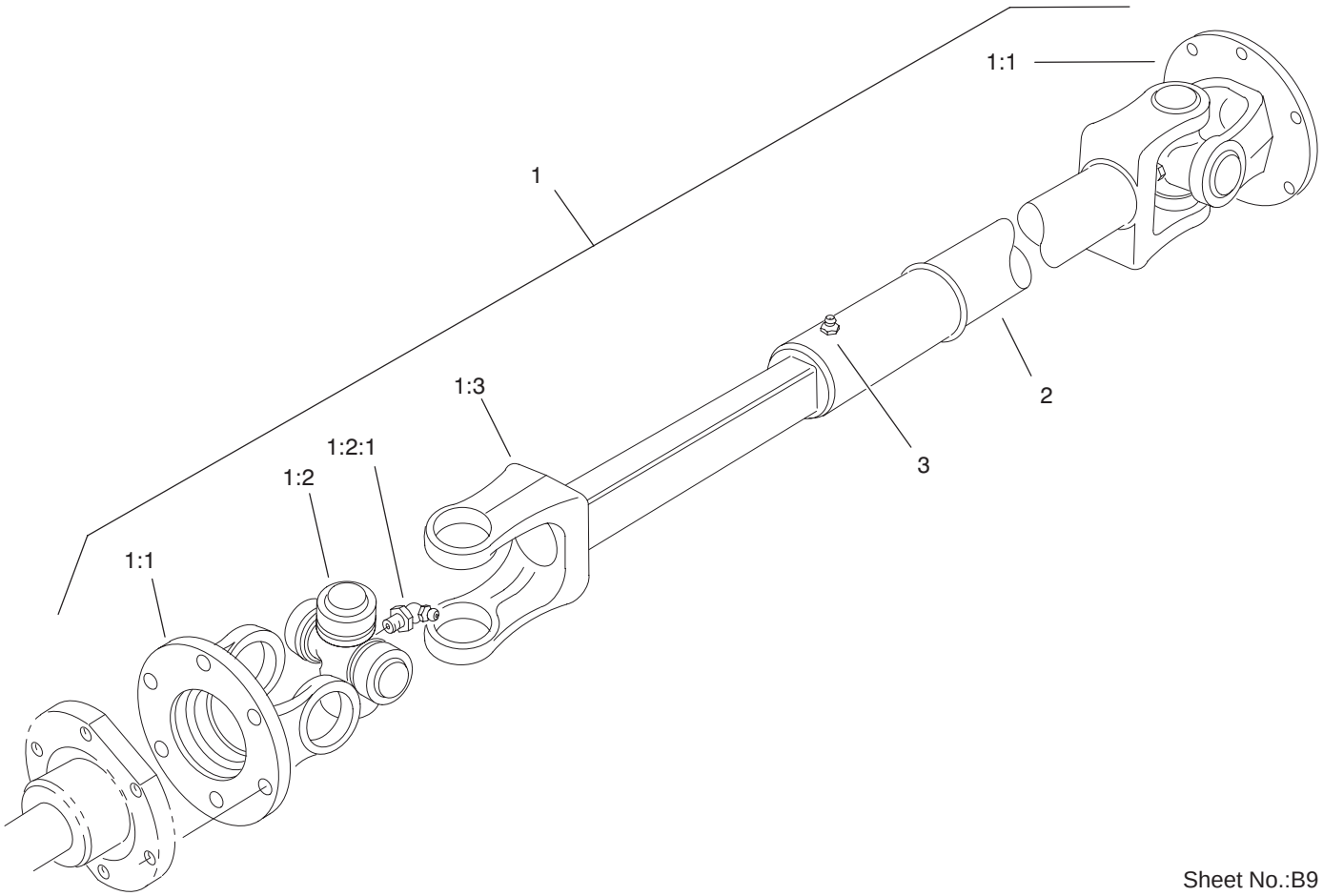
Sheet No.:B8
T–3111

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

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

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



Sheet No.:B9

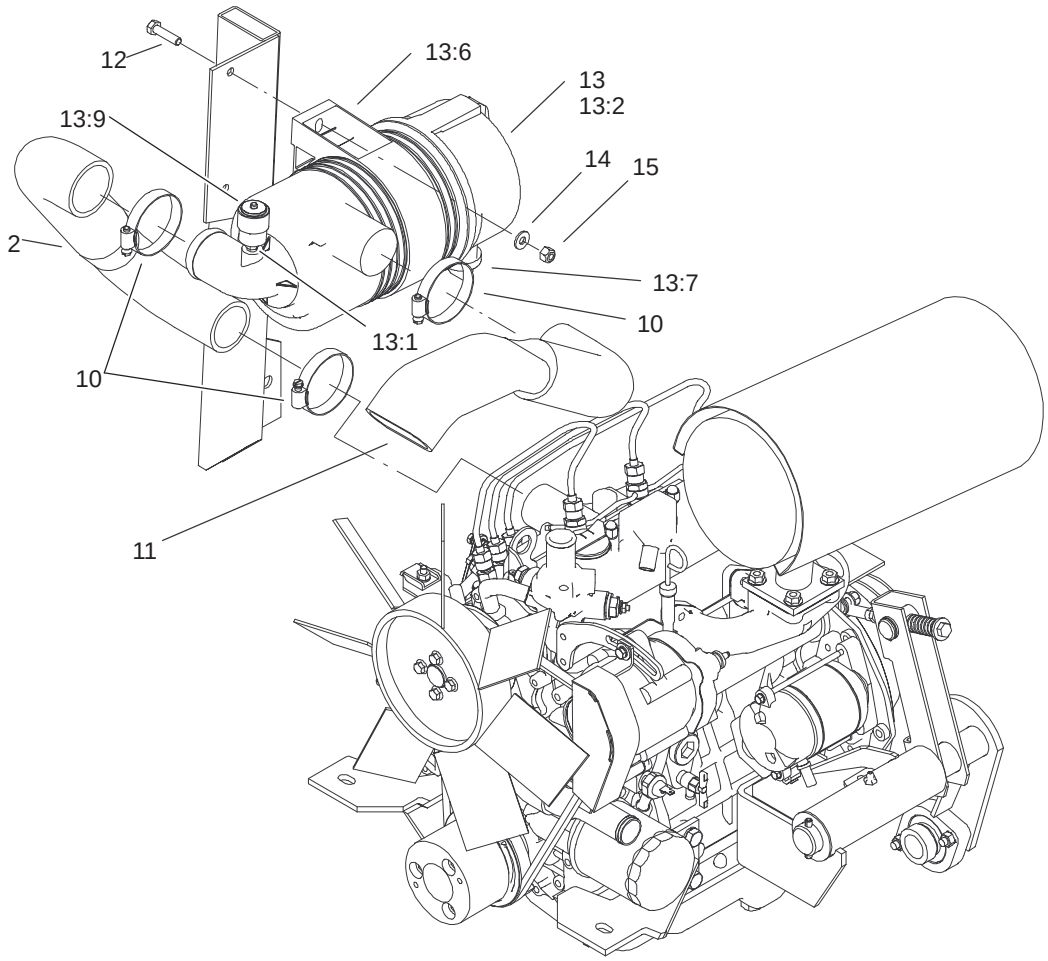
T–3804

Driveshaft Assembly No. 98–5009 (only on: 30242)

Ref. No.	Part No.	Qty.	Description
1	92–5096	1	Joint & Shaft ASM
1:1	72–3410	1	Yoke–Flange
1:2	54–9180	1	U–Joint Kit
*1:2:1	62–3820	1	Fitting–Grease
1:3	72–3420	1	Shaft–Slip, Yoke
2	72–3431	1	Tube–Slip, Yoke
3	302–58	1	Fitting–Grease

Ref. No.	Part No.	Qty.	Description

* Not illustrated



Sheet No.:18

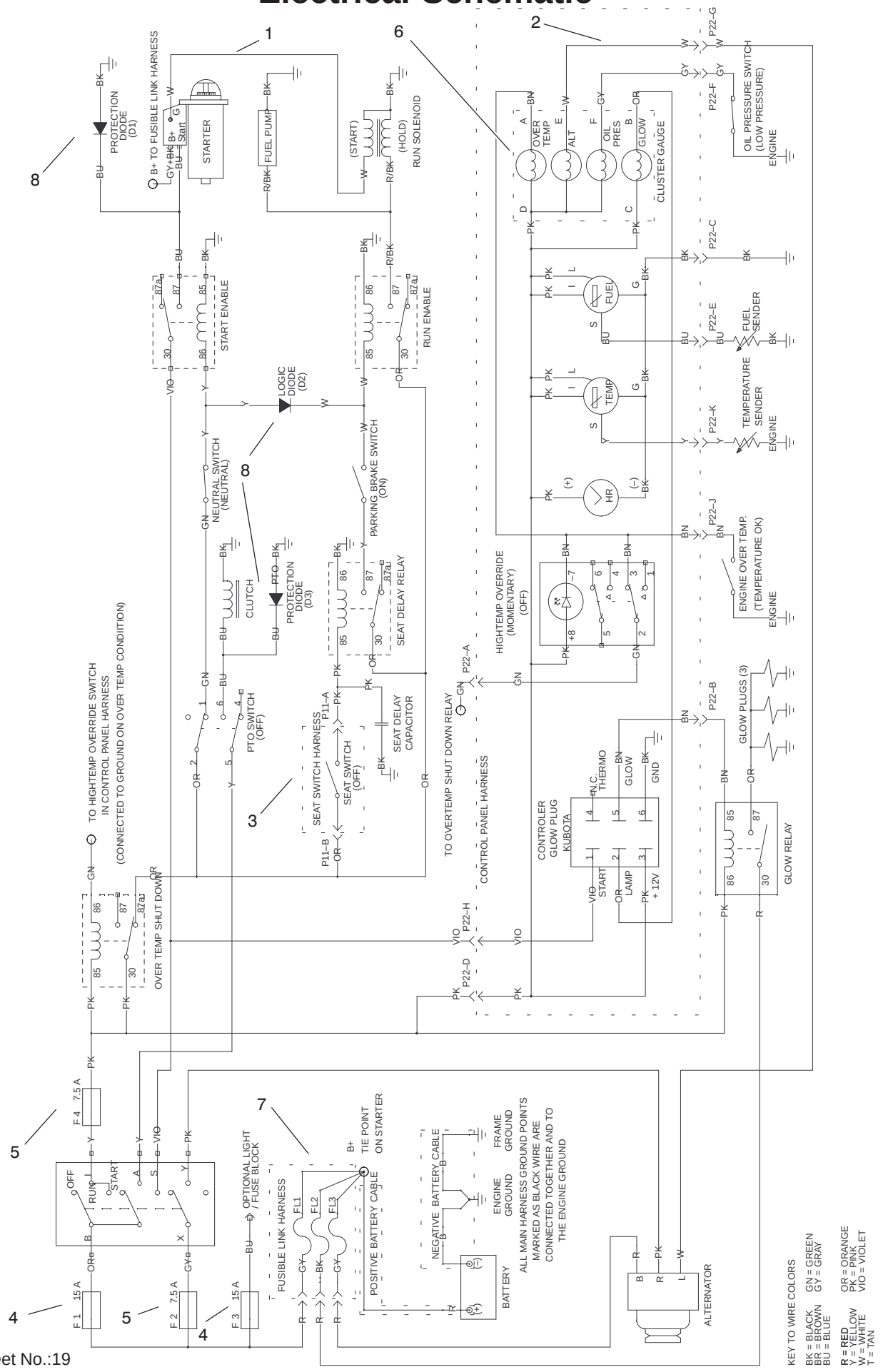
Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
2	104–3446	1	Hose–Outlet, Air
10	2412–42	3	Clamp–Hose
11	104–3444	1	Hose–Inlet, Air
12	322–6	2	Screw–HH
13	104–3427	1	Air Cleaner ASM
13:1	105–4292	1	Nipple–Pipe
13:2	104–0497	1	Cover ASM
13:6	98–4525	1	Bracket–Cleaner, Air
13:7	104–0498	1	Valve–Vacuator
*13:8	98–9763	1	Element ASM
13:9	93–9164	1	Indicator–Mini
14	3256–23	2	Washer–Flat
15	3296–29	2	Nut–Lock, NI

Ref. No.	Part No.	Qty.	Description

* Not illustrated

Electrical Schematic



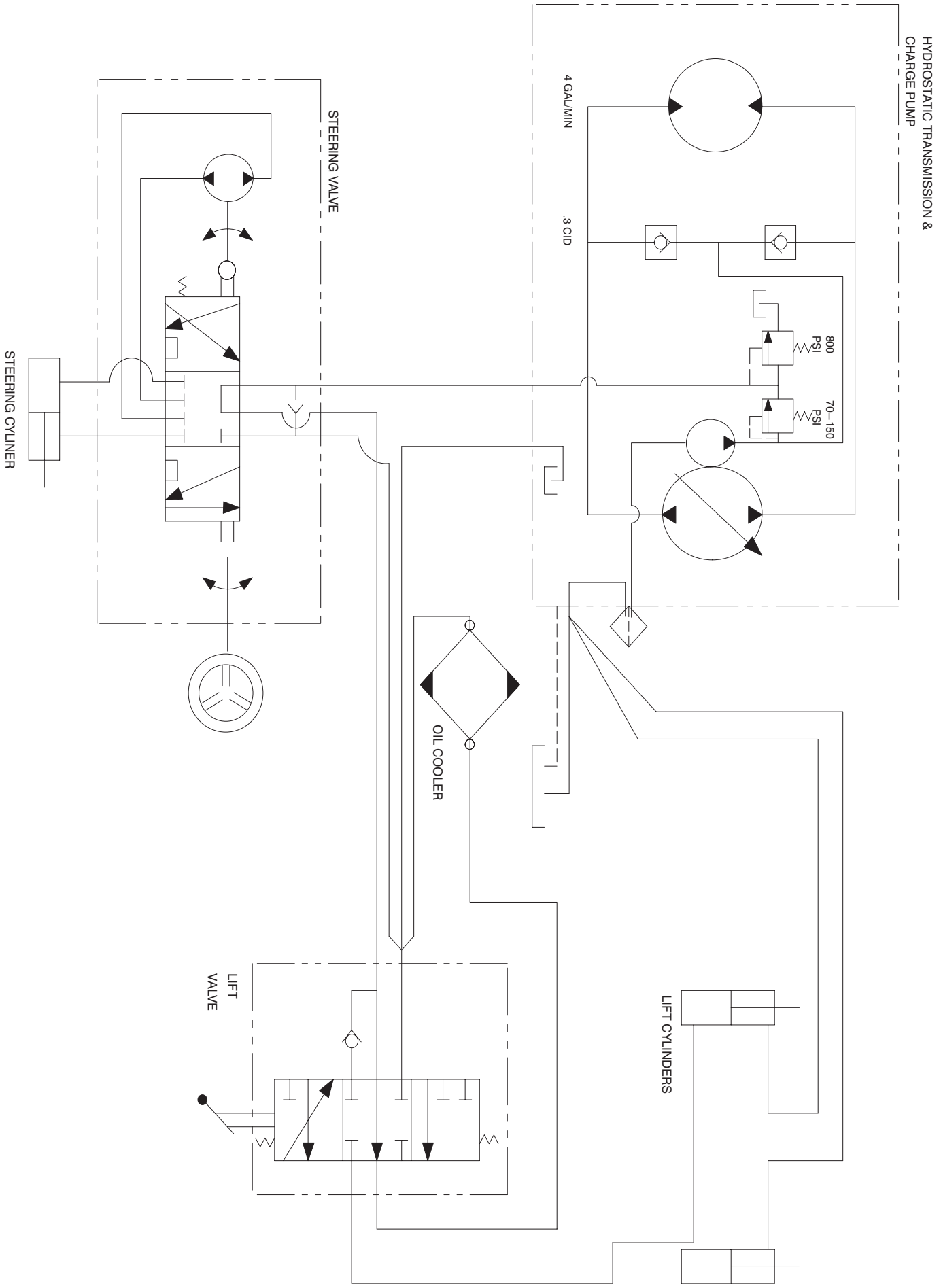
Sheet No.:19

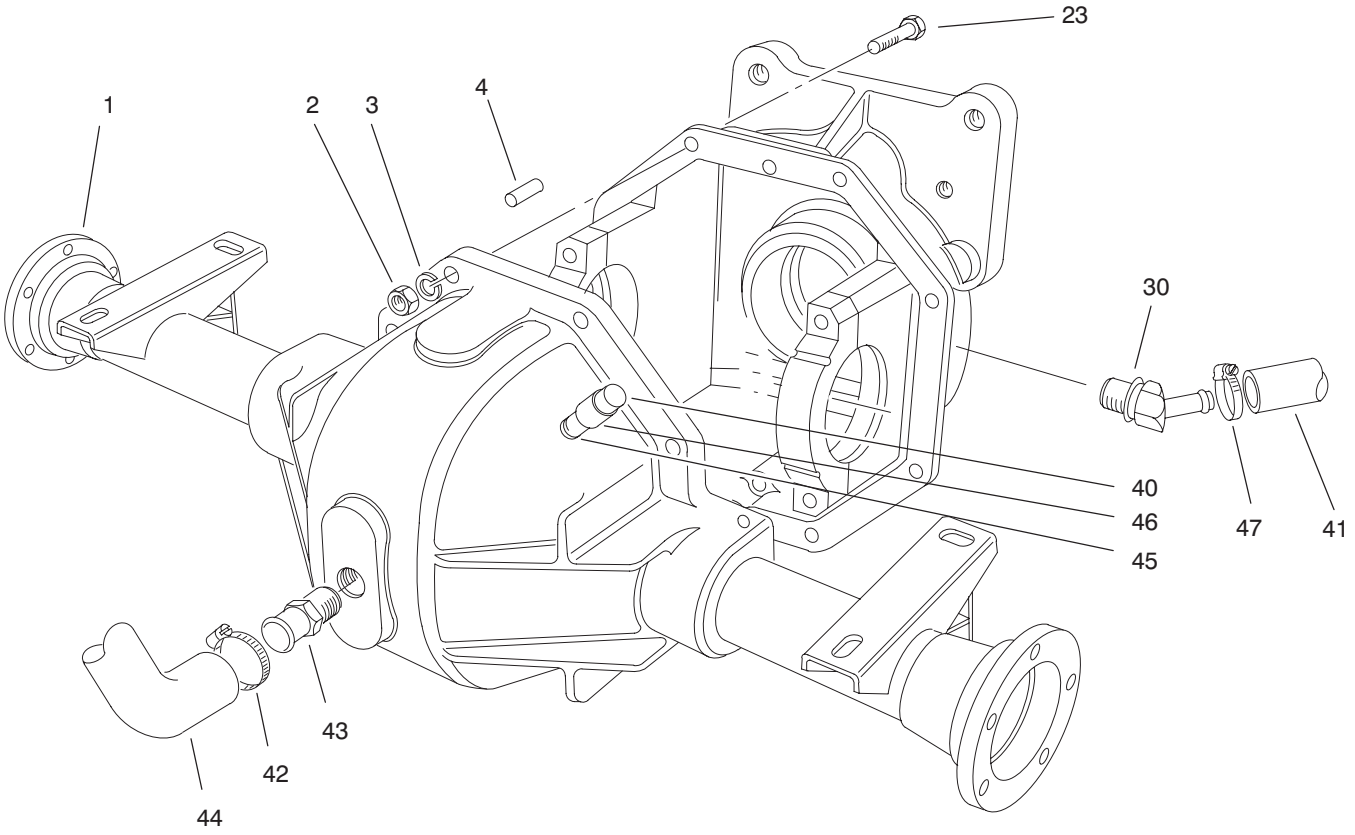
Electrical Schematic (Continued)

Ref. No.	Part No.	Qty.	Description
1	104–3431	1	Harness–Wire, Main
2	105–0024	1	Harness–Wire, Gauges
3	105–0025	1	Harness–Wire, Seat
4	218–581	2	Fuse–15 Amp, 32 Volt
5	218–574	2	Fuse 7.5 Amp(Blade Style)
6	219–17	4	Bulb
7	99–3441	1	Harness–Wire, Fusible Link
8	100–4918	3	Diode

Ref. No.	Part No.	Qty.	Description

Hydraulic Schematic





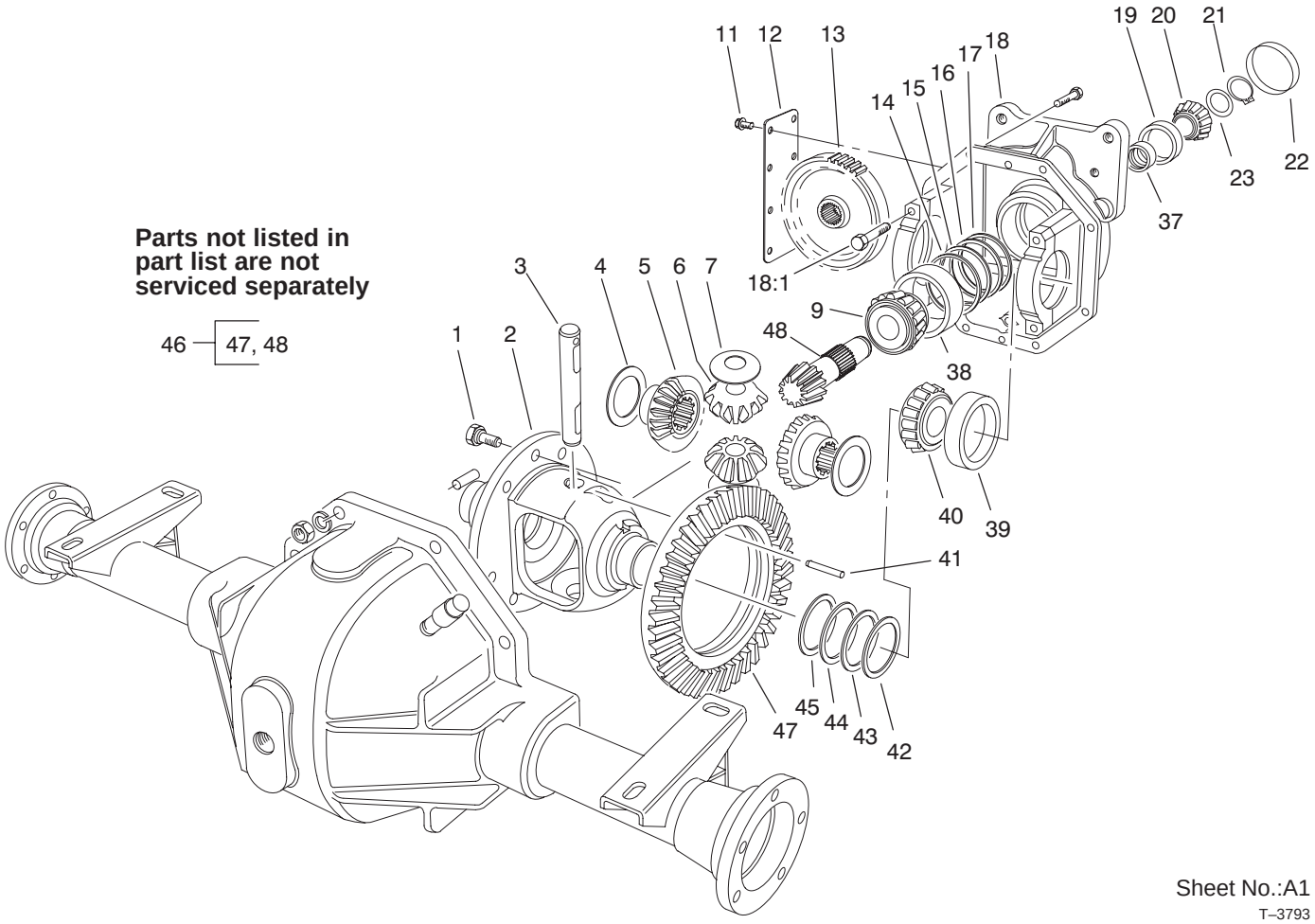
Sheet No.:1
T–3792

Differential Assembly

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

Ref. No.	Part No.	Qty.	Description

* Not illustrated



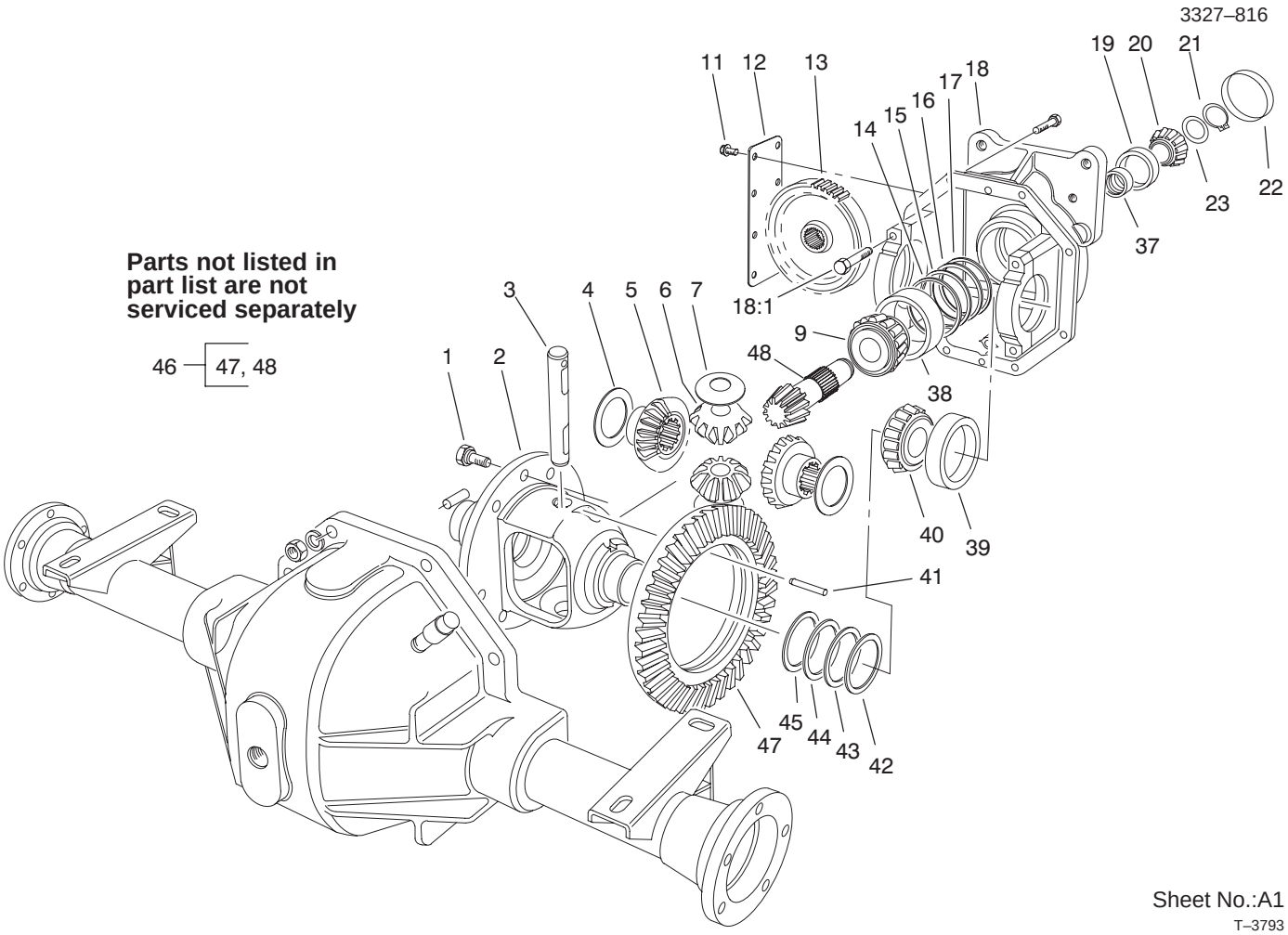
Sheet No.:A1

T–3793

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

Ref. No.	Part No.	Qty.	Description
1	21–7770	5	Screw–Gear, Drive
2	21–7670	1	Case–Differential
3	21–7700	1	Shaft–Pinion Mate
4	21–7720	2	Washer–Thrust
5	24–8790	2	Gear–Differential
6	21–7690	2	Pinion–Differential
7	21–7730	2	Washer–Thrust, Pinion
9	43–6760	1	Bearing–Roller, Cone Taper
11	12–5450	8	Screw
12	21–7830	1	Cover–Gear
13	86–7230	1	Gear–Input, Transmission
14	43–6710	1	Shim
15	43–6711	1	Shim
16	43–6712	1	Shim
17	43–6713	1	Shim
18	86–7930	1	Upper Housing ASM
18:1	92–1773	4	Screw–HHF
19	254–90	1	Bearing–Cup
20	254–91	1	Cone–Bearing
21	43–6550	1	Ring–Snap
22	21–7850	1	Cup Plug
23	46–2210	1	Shim–Front Bearing, .031
*24	46–2211	1	Shim–Front Bearing, .033
*25	46–2212	1	Shim–Front Bearing, .035
*26	46–2213	1	Shim–Front Bearing, .037
*27	46–2214	1	Shim–Front Bearing, .039
*28	46–2215	1	Shim–Front Bearing, .041
*29	46–2216	1	Shim–Front Bearing, .043
*30	46–2220	1	Shim–Front Bearing, .045
*31	46–2221	1	Shim–Front Bearing, .047
*32	46–2222	1	Shim–Front Bearing, .049
*33	46–2223	1	Shim–Front Bearing, .051
*34	46–2224	1	Shim–Front Bearing, .053
*35	46–2225	1	Shim–Front Bearing, .055

* Not illustrated

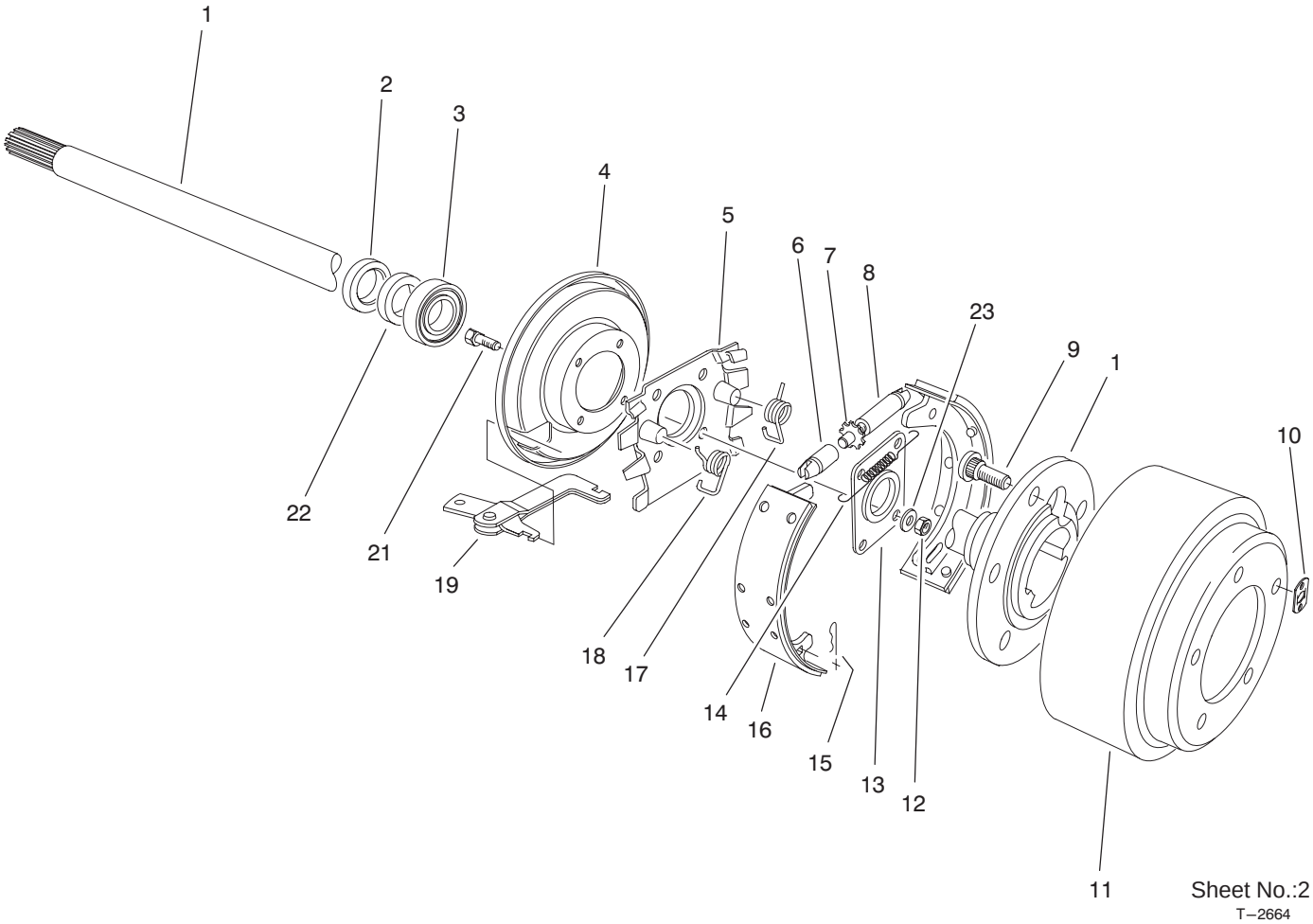


Differential Carrier Assembly No. 92–4909(Continued) (Only On: 30241)

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

Ref. No.	Part No.	Qty.	Description

* Not illustrated

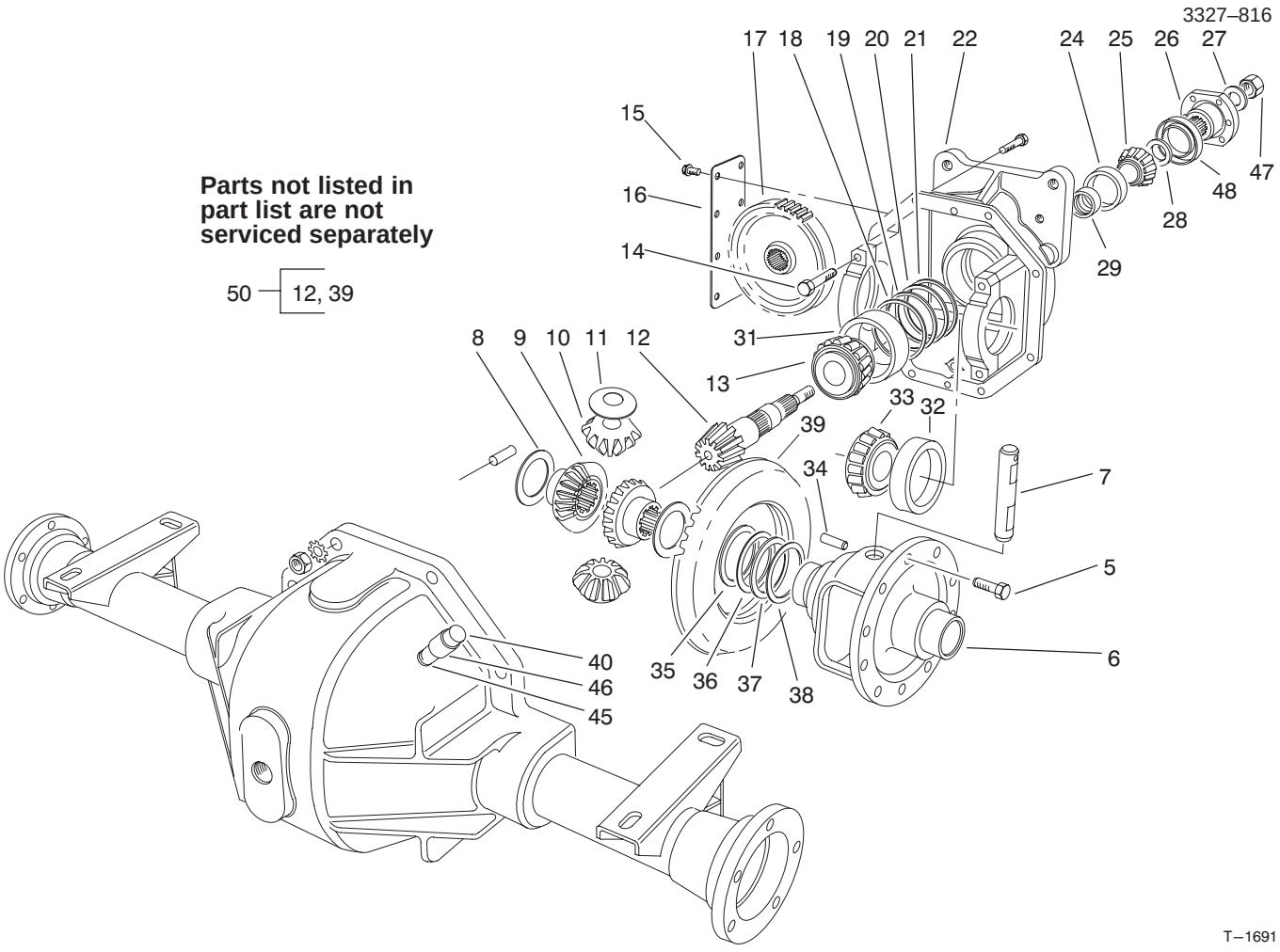


Brake Assembly

Ref. No.	Part No.	Qty.	Description
*1	27–6851	1	RH Flanged Axle Shaft
1	27–6861	1	LH Flanged Axle Shaft
2	92–1774	2	Seal–Oil
3	21–8180	2	Bearing ASM
4	21–9450	2	Shield–Dust
5	43–6810	2	Spider–Torque
6	21–9390	2	Socket–Adjusting, Screw
7	21–9370	2	Screw–Adjusting
8	21–9380	2	Nut–Pivot
9	242–34	10	Stud–Drive
10	21–8360	2	Locknut
11	28–0680	2	Drum–Brake
12	94–6935	8	Locknut
13	28–0670	2	Seal–Grease
14	21–9440	2	Spring–Adjusting Screw
15	21–9460	4	Retainer–Lever, Brake
16	84–8600	1	Set–4 Shoes, Brake
17	21–9430	2	Spring–Return, RH
18	21–9420	2	Spring–Return, LH
19	24–9180	2	Strut And Lever ASM
21	94–6934	8	Screw–HH, Brake
22	24–8840	2	Ring–Retaining, Wheel Bearing

Ref. No.	Part No.	Qty.	Description
23	94–6936	8	Washer–Hardened
*24	92–8775	1	Kit–Liquid Gasket

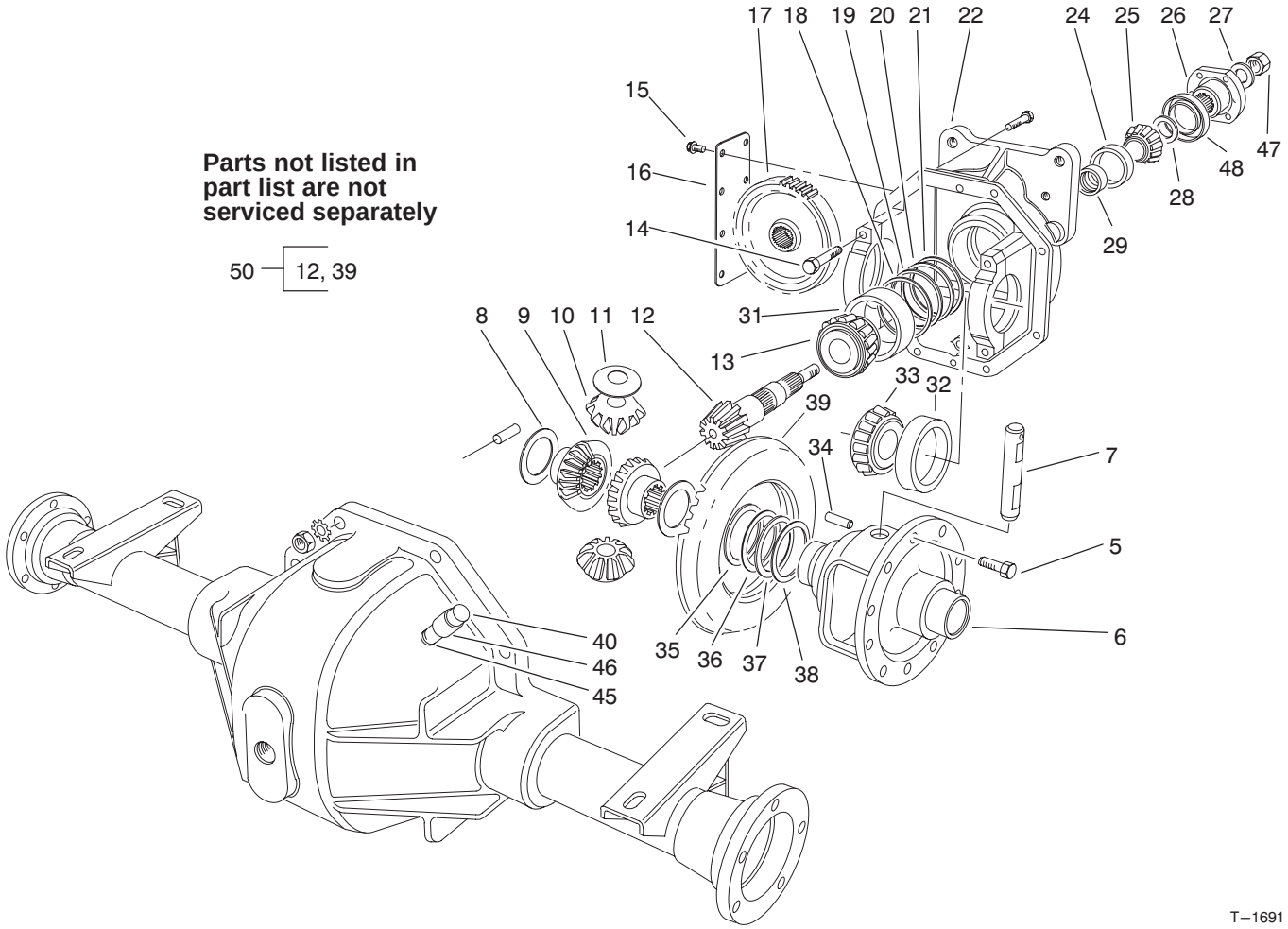
* Not illustrated



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

Ref. No.	Part No.	Qty.	Description
5	21–7770	5	Screw–Drive Gear
6	21–7670	1	Differential Case
7	21–7700	1	Shaft–Pinion Mate
8	21–7720	2	Washer–Thrust
9	24–8790	2	Gear–Bevel, Differential
10	21–7690	2	Gear–Pinion
11	21–7730	2	Washer–Thrust
12		1	Drive Pinion
13	43–6760	1	Cone–Bearing, Tapered
14	92–1773	4	Screw–HH
15	12–5450	8	Screw–Thread Forming
16	21–7830	1	Cover–Gear
17	86–7230	1	Gear–Spur
18	43–6710	A/R	Shim Adjusting Differential Bearing .003
19	43–6711	A/R	Shim Adjusting Differential Bearing .005
20	43–6712	A/R	Shim Adjusting Differential Bearing .010
21	43–6713	A/R	Shim Adjusting Differential Bearing .030
22	86–7190	1	Asm–Upper Housing (Incl. Ref. #14)
24	254–90	1	Cup–Bearing
25	254–91	1	Cone–Bearing
26	68–7010	1	Flange
27	71–4340	1	Washer
28	72–3570	A/R	Shim .094–Diff. Adjust.
*	72–3571	A/R	Shim .096–Diff. Adjust.
*	72–3572	A/R	Shim .098–Diff. Adjust.
*	72–3573	A/R	Shim .100–Diff. Adjust.
*	72–3574	A/R	Shim .102–Diff. Adjust.
*	72–3575	A/R	Shim .104–Diff. Adjust.
*	72–3576	A/R	Shim .106–Diff. Adjust.
*	72–3577	A/R	Shim .108–Diff. Adjust.
*	72–3578	A/R	Shim .110–Diff. Adjust.
*	72–3580	A/R	Shim .112–Diff. Adjust.
*	72–3581	A/R	Shim .114–Diff. Adjust.

*Not Illustrated

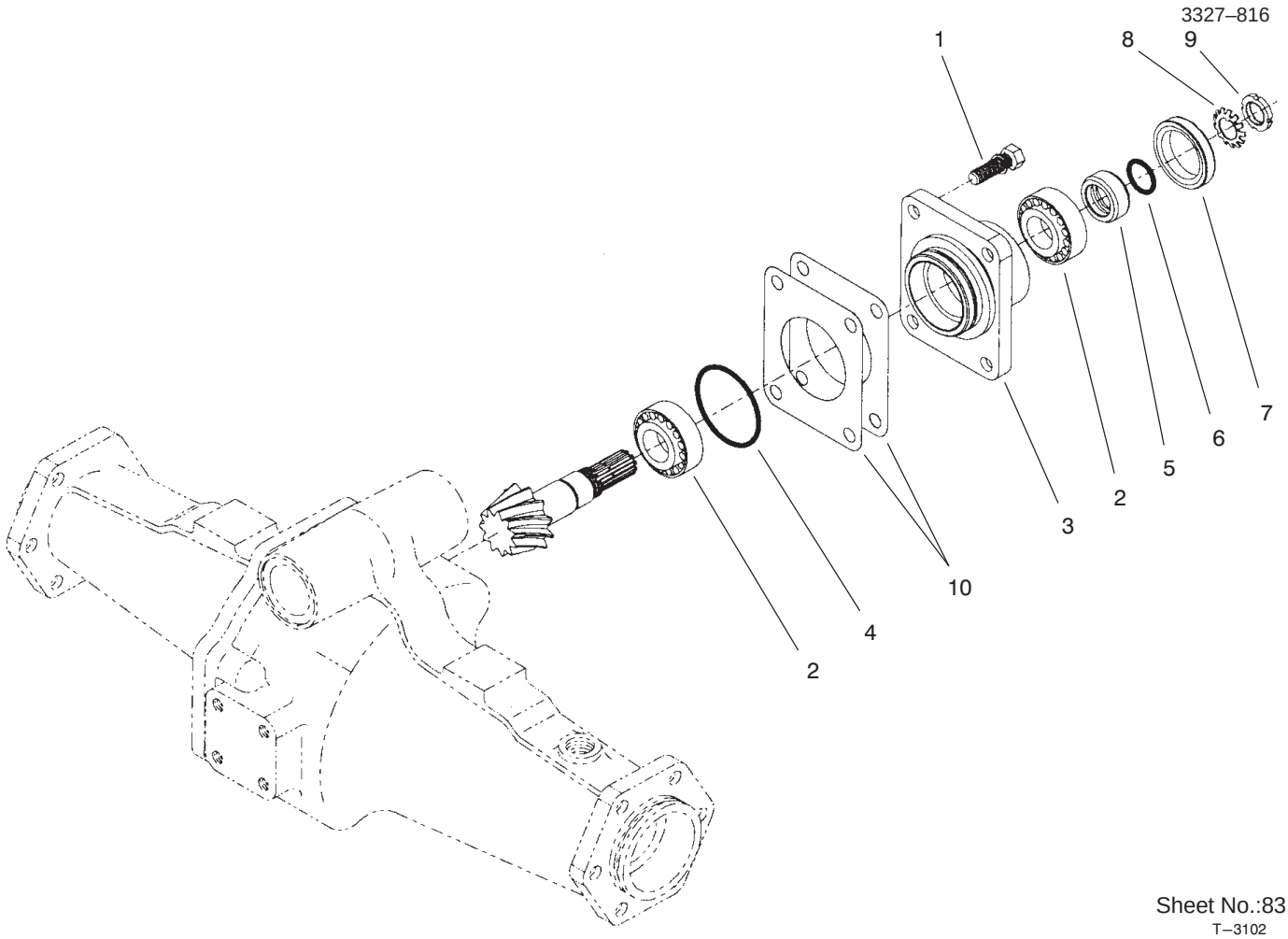


Differential Carrier Assembly No. 92–4907(Continued) (Only On: 30242)

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

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

*Not Illustrated



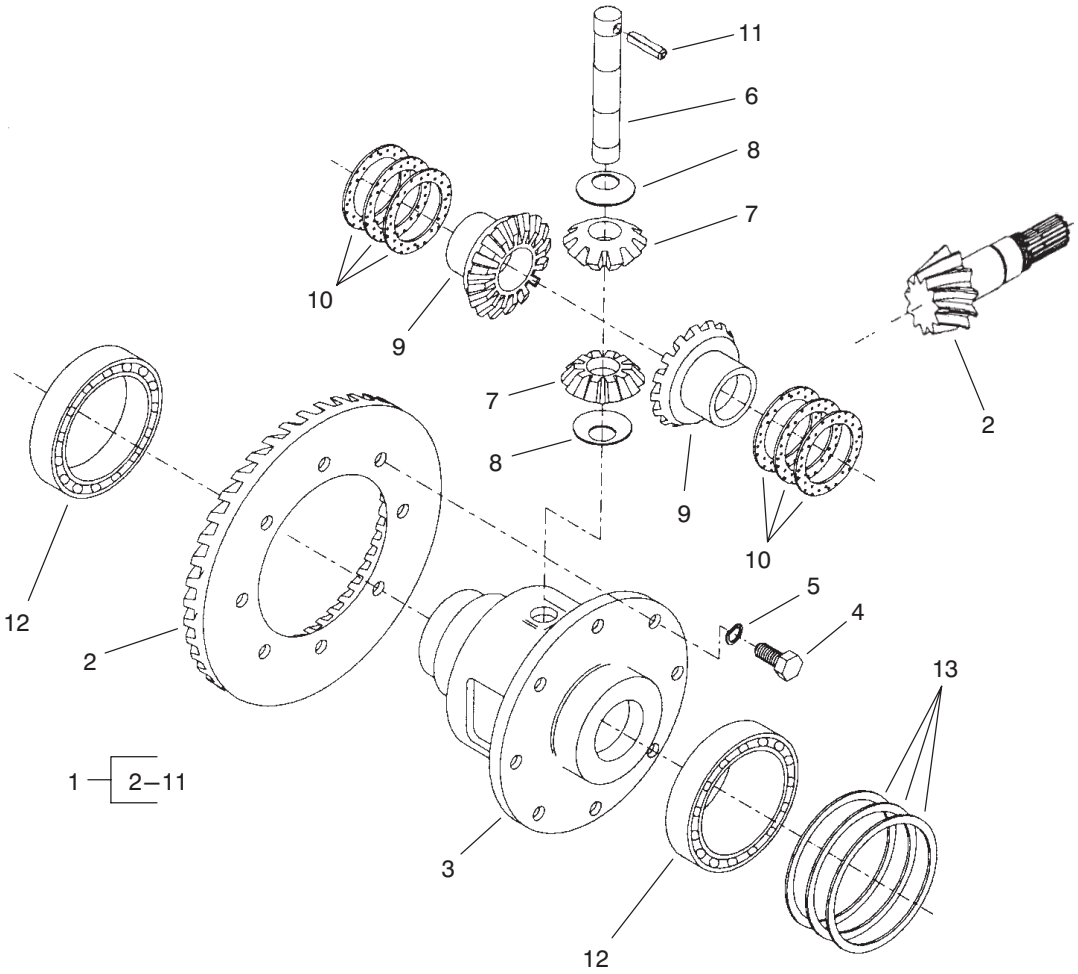
Sheet No.:83
T–3102

4 Wheel Drive Rear Axle Assembly No. 95–7501
Bevel Pinion Shaft Assembly (only on: 30242)

Ref. No.	Part No.	Qty.	Description
1	99–7575	4	Bolt
2	99–7570	2	Bearing–Taper Roller
3	95–7535	1	Case–Bearing
4	99–7571	1	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

Ref. No.	Part No.	Qty.	Description

* Not illustrated



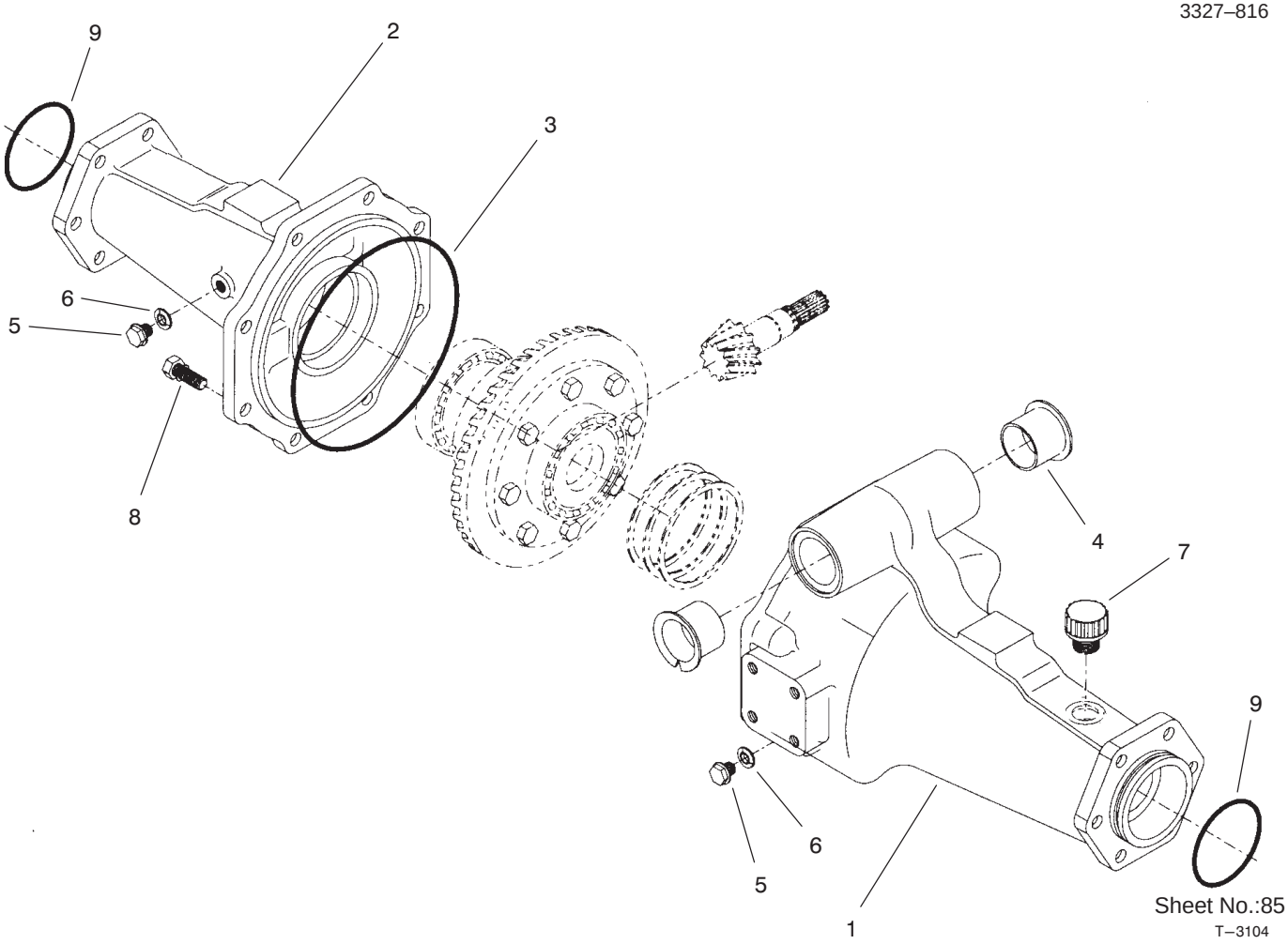
Sheet No.:84
T–3103

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

Ref. No.	Part No.	Qty.	Description
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

* Not illustrated

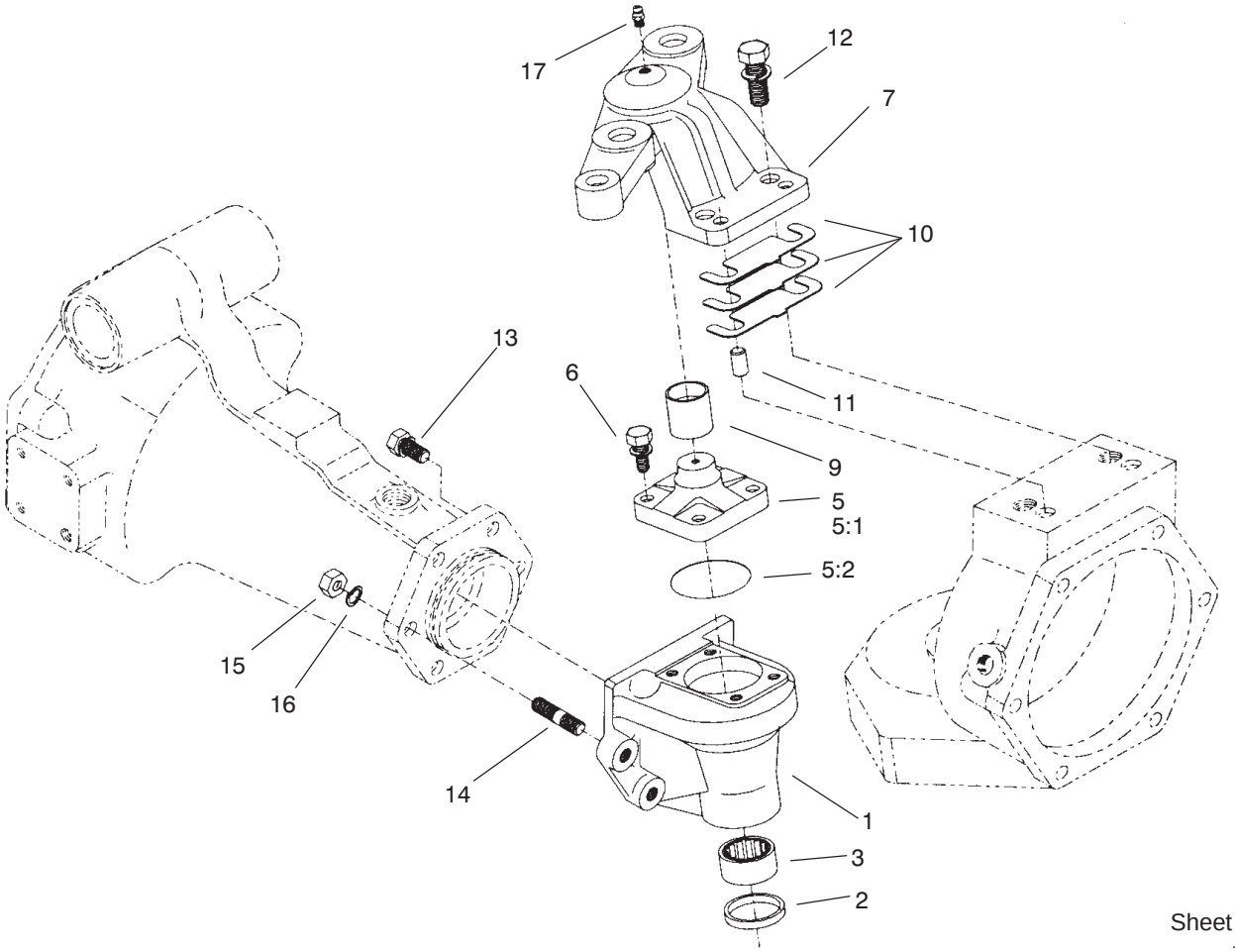


Sheet No.:85
T–3104

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

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

Ref. No.	Part No.	Qty.	Description



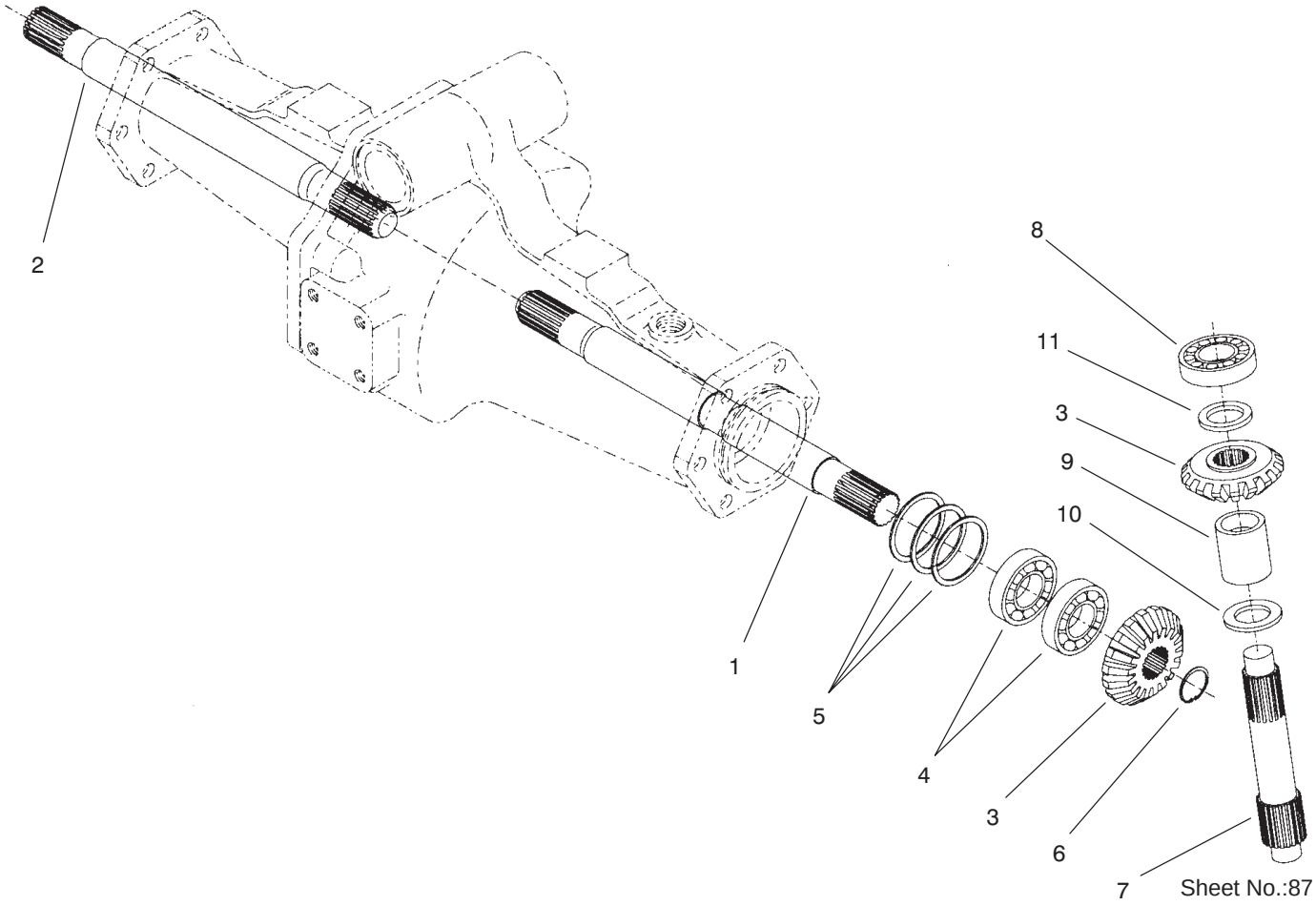
Sheet No.:86
T–3105

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

Ref. No.	Part No.	Qty.	Description
1	95–7539	2	Case–Bevel Gear
2	99–7594	2	Seal–Oil
3	99–7595	2	Bearing–Needle
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	95–7514	1	Support–Axle Case, RH
*8	95–7516	1	Support–Axle Case, LH
9	99–7529	2	Bushing
10	95–7547	2	Shim 0.1
*10	95–7548	2	Shim 0.2
*10	95–7549	2	Shim 0.4
11	99–7597	4	Pin–Dowel
12	99–7598	4	Bolt
13	99–7599	8	Bolt
14	99–7525	4	Stud
15	99–7526	4	Nut
16	99–7527	4	Washer–Spring
17	99–7528	2	Nipple–Grease

Ref. No.	Part No.	Qty.	Description

* Not illustrated



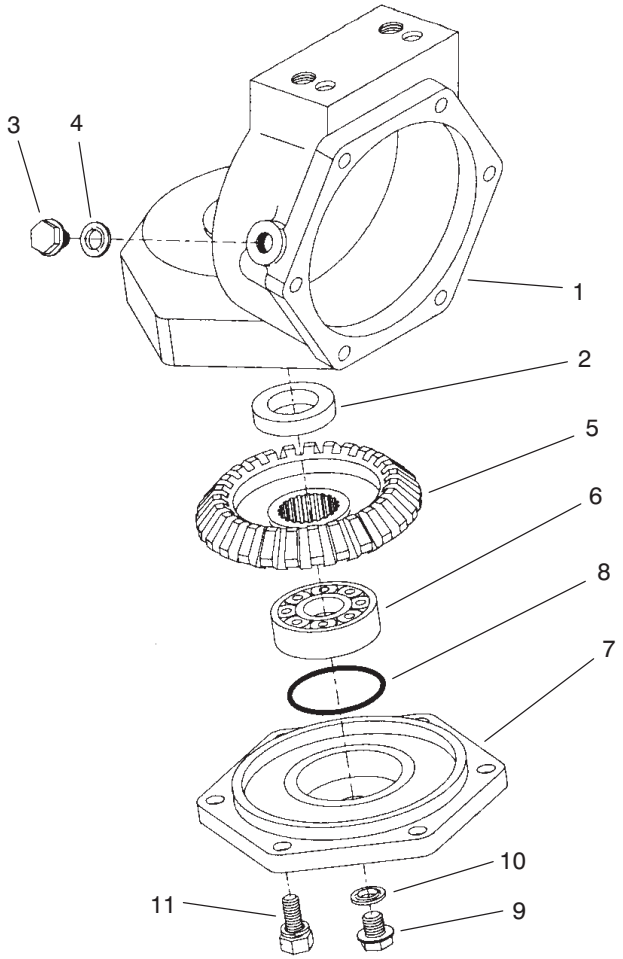
Sheet No.:87
T–3106

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

Ref. No.	Part No.	Qty.	Description
1	95–7509	1	Shaft–Gear, Differential
2	95–7512	1	Shaft–Gear, Differential
3	95–7518	4	Gear–18 Bevel
4	99–7530	4	Bearing–Ball
5	99–7552	2	Shim 0.1
*5	99–7553	2	Shim 0.2
*5	99–7554	2	Shim 0.5
6	99–7531	2	Clip
7	95–7530	2	Shaft–Bevel Gear
8	99–7532	2	Bearing–Taper Roller
9	95–7543	2	Spacer
10	99–7533	2	Collar–Thrust
11	99–7558	2	Collar

Ref. No.	Part No.	Qty.	Description

* Not illustrated

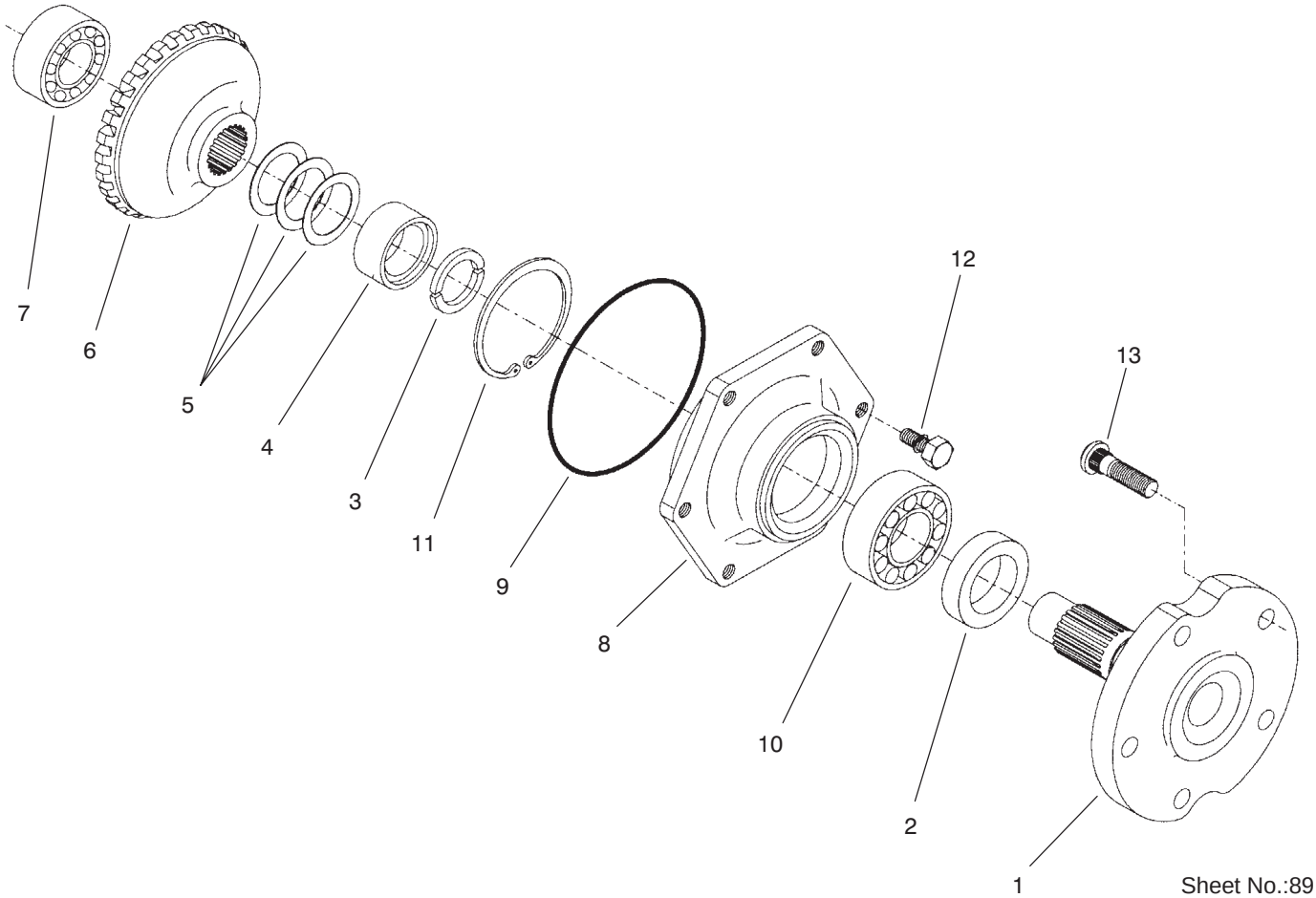


Sheet No.:88
T–3107

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

Ref. No.	Part No.	Qty.	Description
1	95–7532	2	Case–Axle
2	99–7594	2	Seal–Oil
3	99–7535	2	Plug
4	99–7536	2	Washer–Seal
5	95–7528	2	Gear–27 Bevel
6	99–7532	2	Bearing–Taper Roller
7	95–7526	2	Cover–Axle
8	99–7537	2	O–Ring
9	99–7589	2	Plug
10	99–7590	2	Washer–Seal
11	99–7596	12	Bolt

Ref. No.	Part No.	Qty.	Description



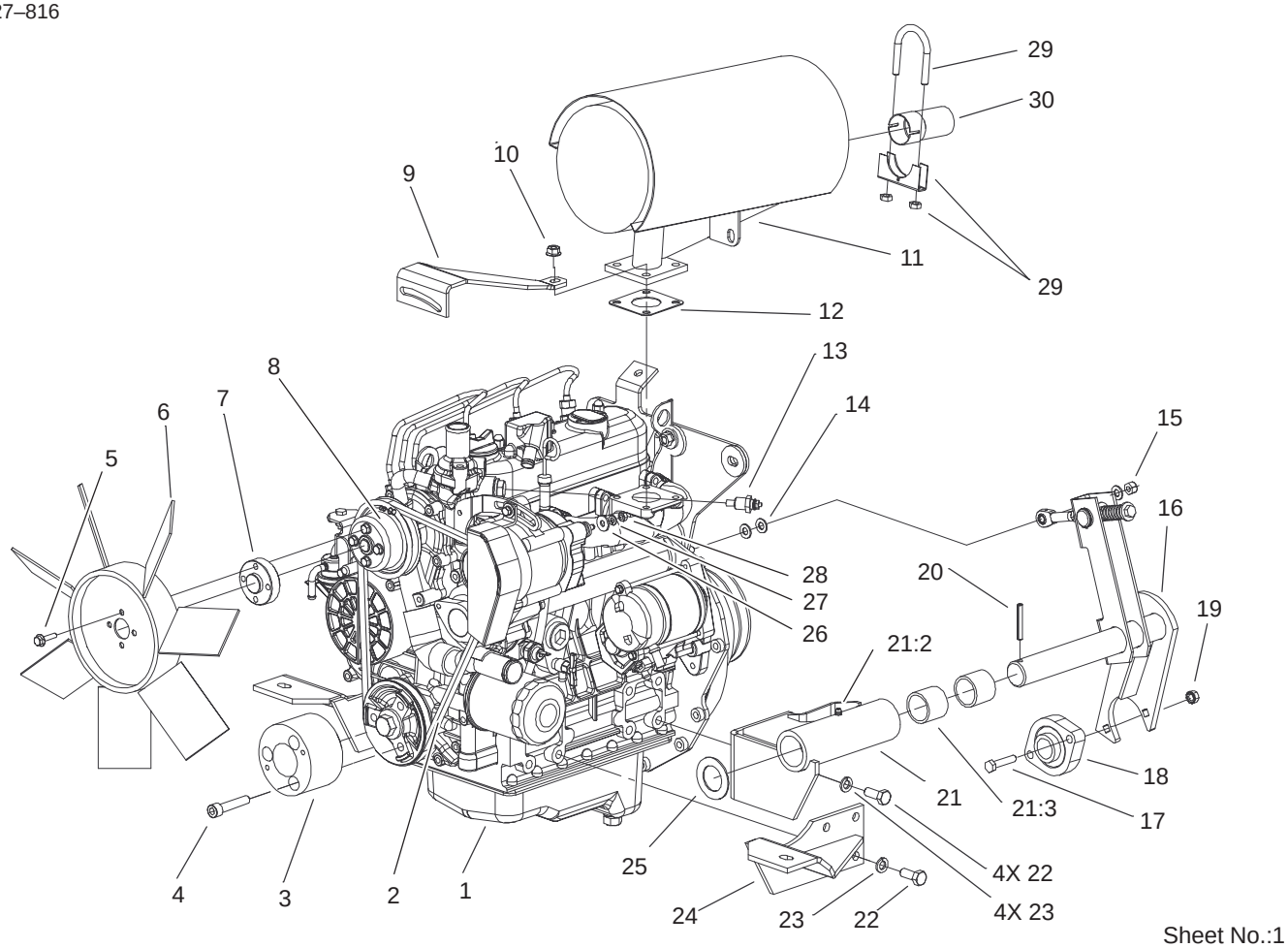
Sheet No.:89
T–3108

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

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	95–7525	2	Gear–27 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

* Not illustrated



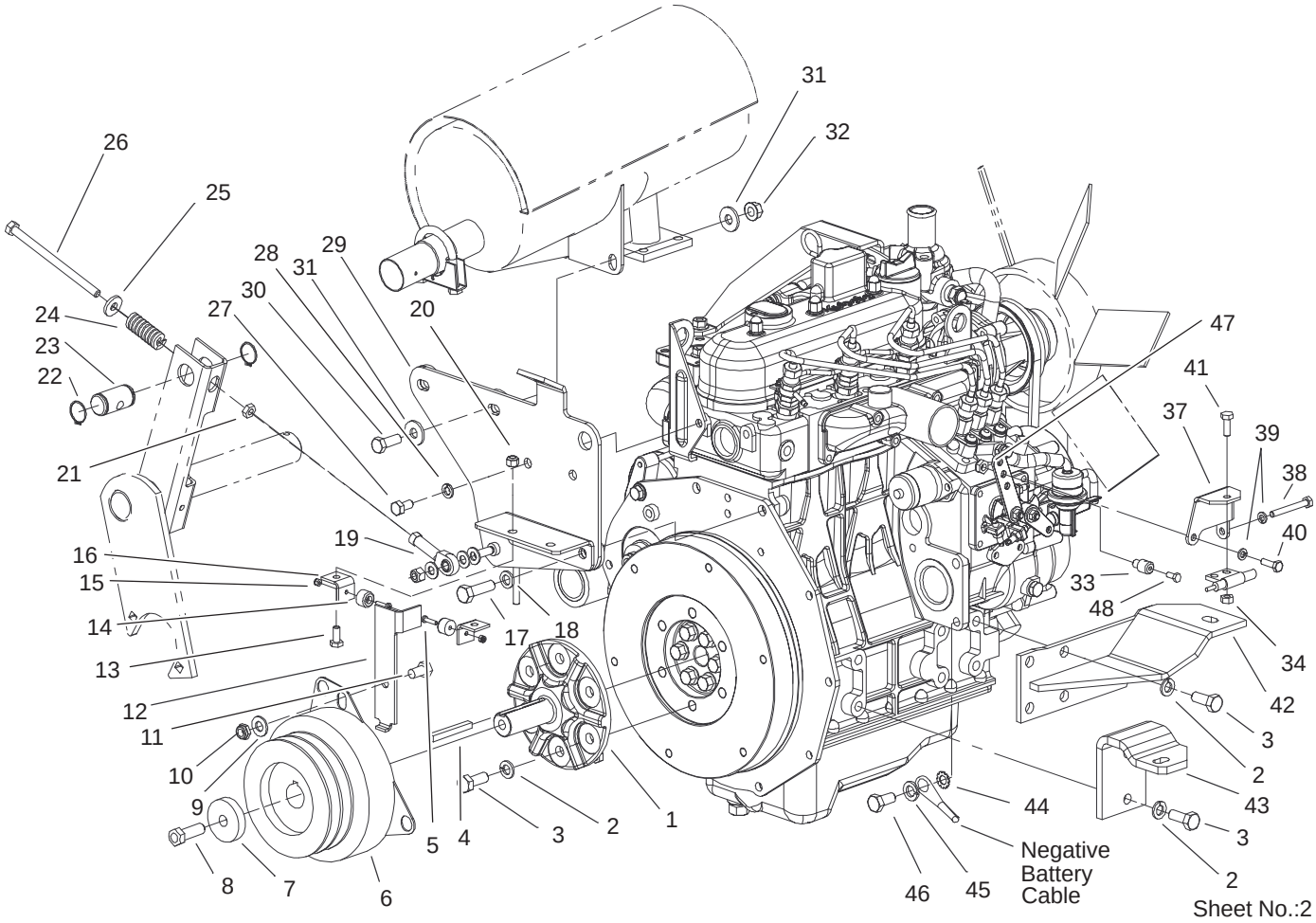
Sheet No.:1

Engine and Mounting Components Assembly

Ref. No.	Part No.	Qty.	Description
1	104–3448	1	Engine–Kubota
2	104–3494	1	Belt–V
3	104–1723–03	1	Adaptor–Front Drive
4	3274–106	3	Screw–HSH
5	33103–025	4	Screw–HHF
6	104–4246	1	Fan–Engine
7	105–0000	1	Spacer–Fan
8	104–3497	1	Pulley–Fan
9	105–2556–03	1	Brace–Alternator, Upper
10	33004–00	4	Nut–Flange
11	104–3426	1	Muffler–Exhaust
12	98–9611	1	Gasket
13	98–9346	1	Sender–Temperature
14	3256–23	4	Washer–Flat
15	3296–29	1	Nut–Lock
16	63–6250–03	1	Shaft–PTO Tension
17	322–7	2	Screw–HH
18	92–8799	1	Bearing–Flange
*18:1	251–77	1	Bearing–Lockcollar
*18:2	3246–1	1	Screw–Set
*18:3	302–40	1	Fitting–Grease
19	32149–1	2	Nut
20	32121–32	1	Pin–Roll
21	104–3417	1	Lr Engine Mount ASM
21:2	302–5	1	Fitting–Grease

Ref. No.	Part No.	Qty.	Description
21:3	256–299	1	Bushing–Straight
22	43–0090	8	Screw–HH
23	42–9600	8	Lockwasher–Spring
24	104–1702–03	1	Engine Mount ASM
25	3–4324	1	Washer–Flat
26	3256–78	1	Washer–Flat
27	43–5930	1	Washer–Spring
28	48–7890	1	Nut
29	2112–9	1	Clamp
30	105–4269	1	Extension–Tailpipe

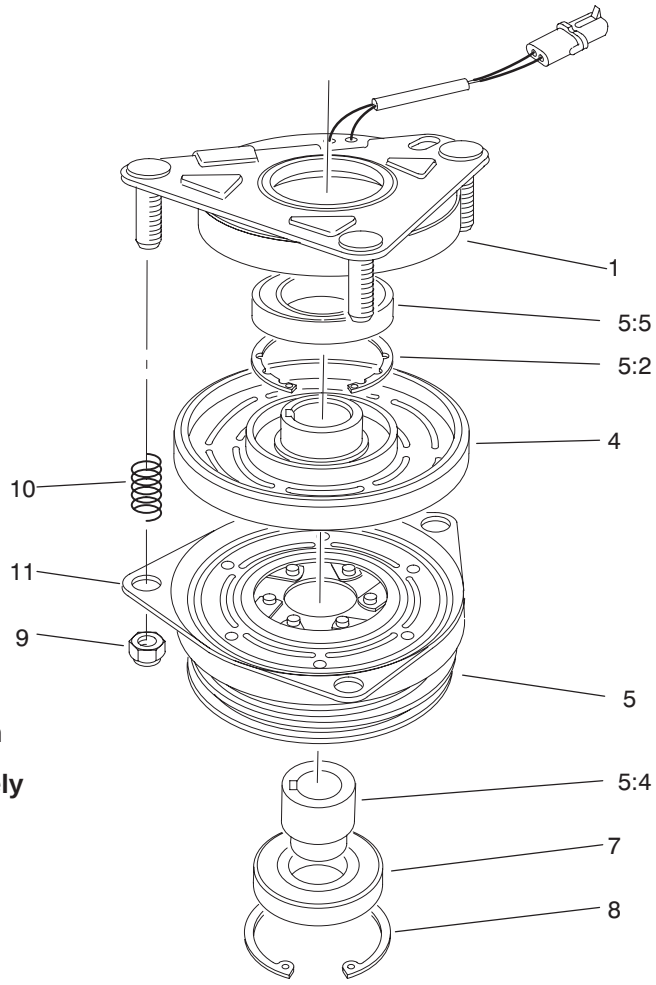
* Not illustrated



Engine and Mounting Components Assembly (Continued)

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

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



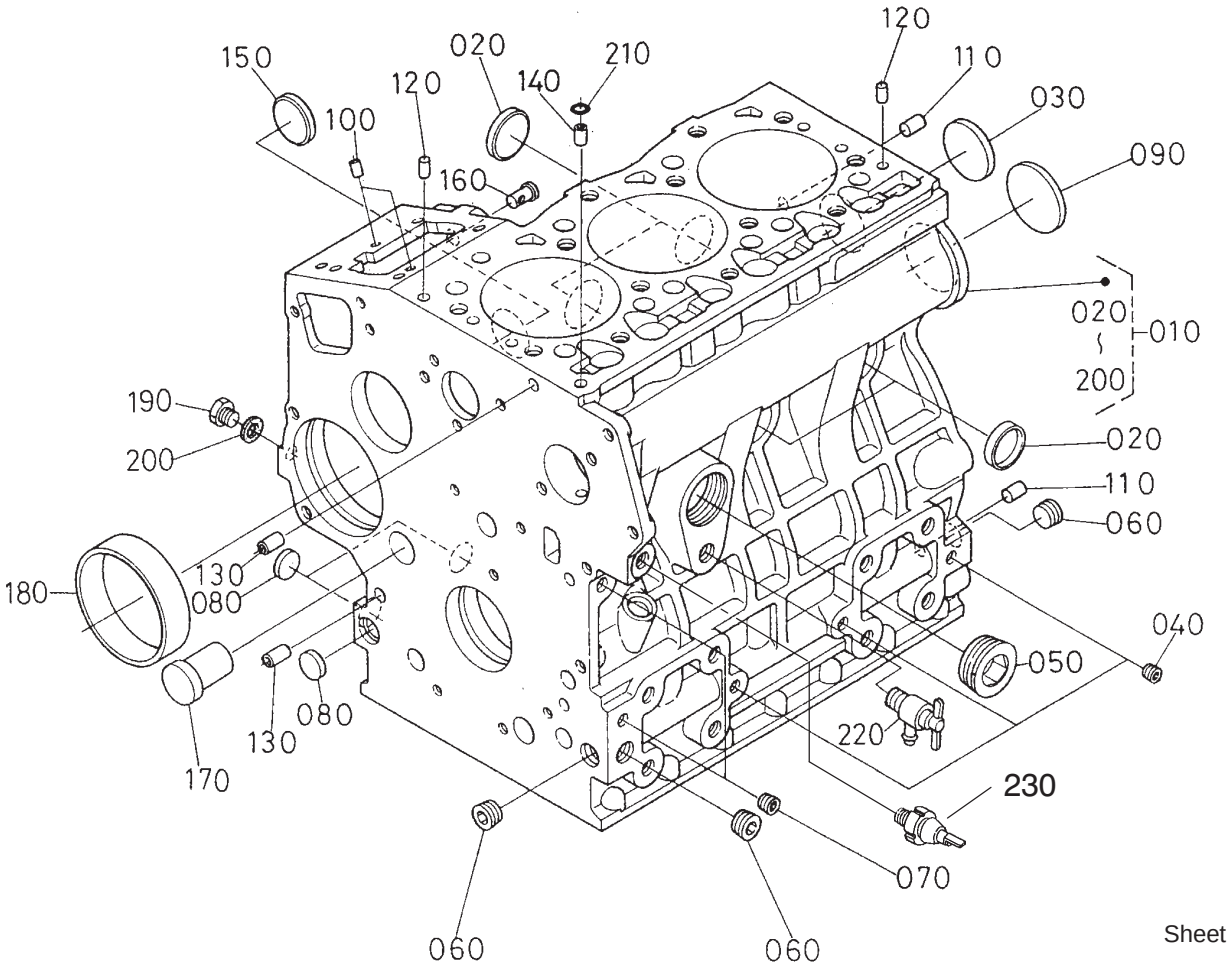
Parts not listed in part list are not serviced separately

Sheet No.:A4
T–0544

Electric Clutch/Brake Assembly No. 100–6565

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

Ref. No.	Part No.	Qty.	Description

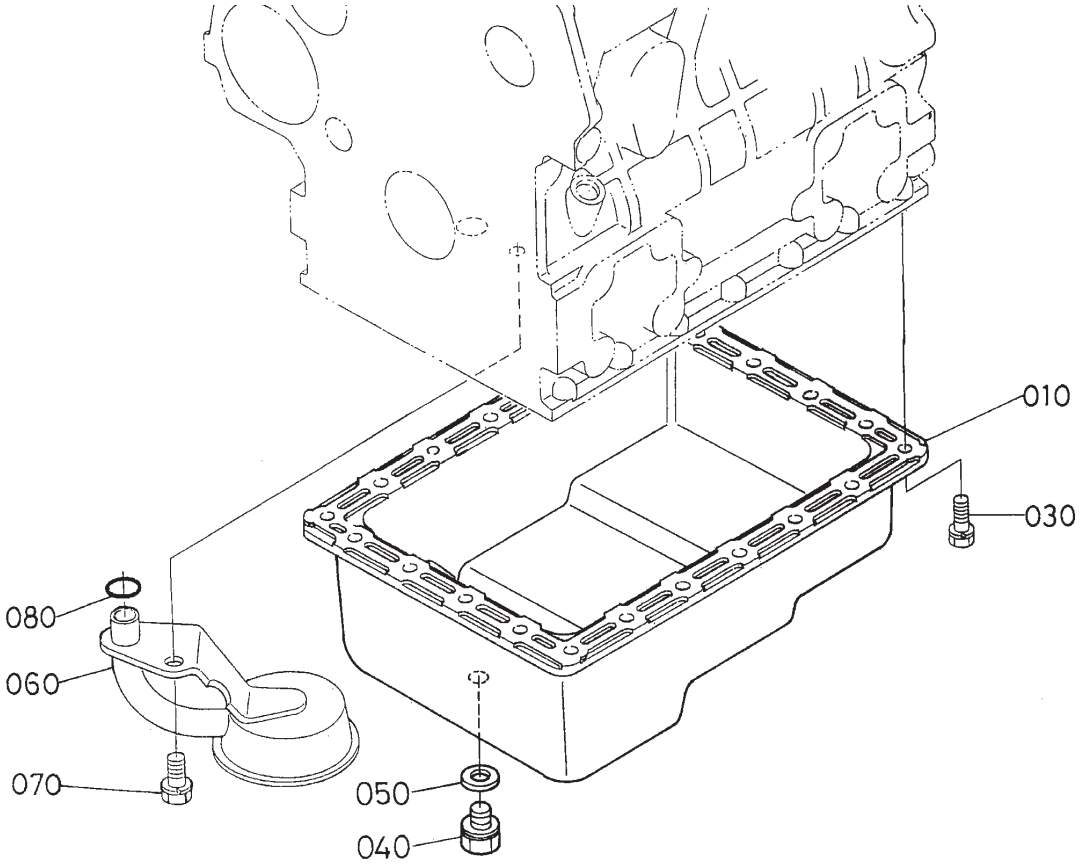


Sheet No.:53

Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
010	105–3778	1	Crankcase ASM
020	98–9398	4	Cap–Sealing
030	98–7539	1	Cap–Sealing
040	98–7540	3	Cap–Sealing
050	105–3779	1	Plug
060	98–9597	3	Plug
070	98–7487	2	Plug
080	98–7489	3	Plug
090	98–9668	1	Plug
100	105–3793	2	Pin–Straight
110	105–3794	2	Pin–Straight
120	105–3795	2	Pin–Straight
130	98–9387	2	Pin–Pipe
140	98–9539	1	Pin–Pipe
150	98–9599	1	Plug
160	98–9630	1	Pin–Spring, Start
170	98–9675	1	Plug
180	98–9656	1	Bush–Governor, Gear
190	98–7507	1	Plug
200	98–7428	1	Gasket
210	98–7509	1	O–Ring
220	98–9436	1	Drain Cock ASM
230	98–9416	1	Switch–Oil

Ref. No.	Part No.	Qty.	Description

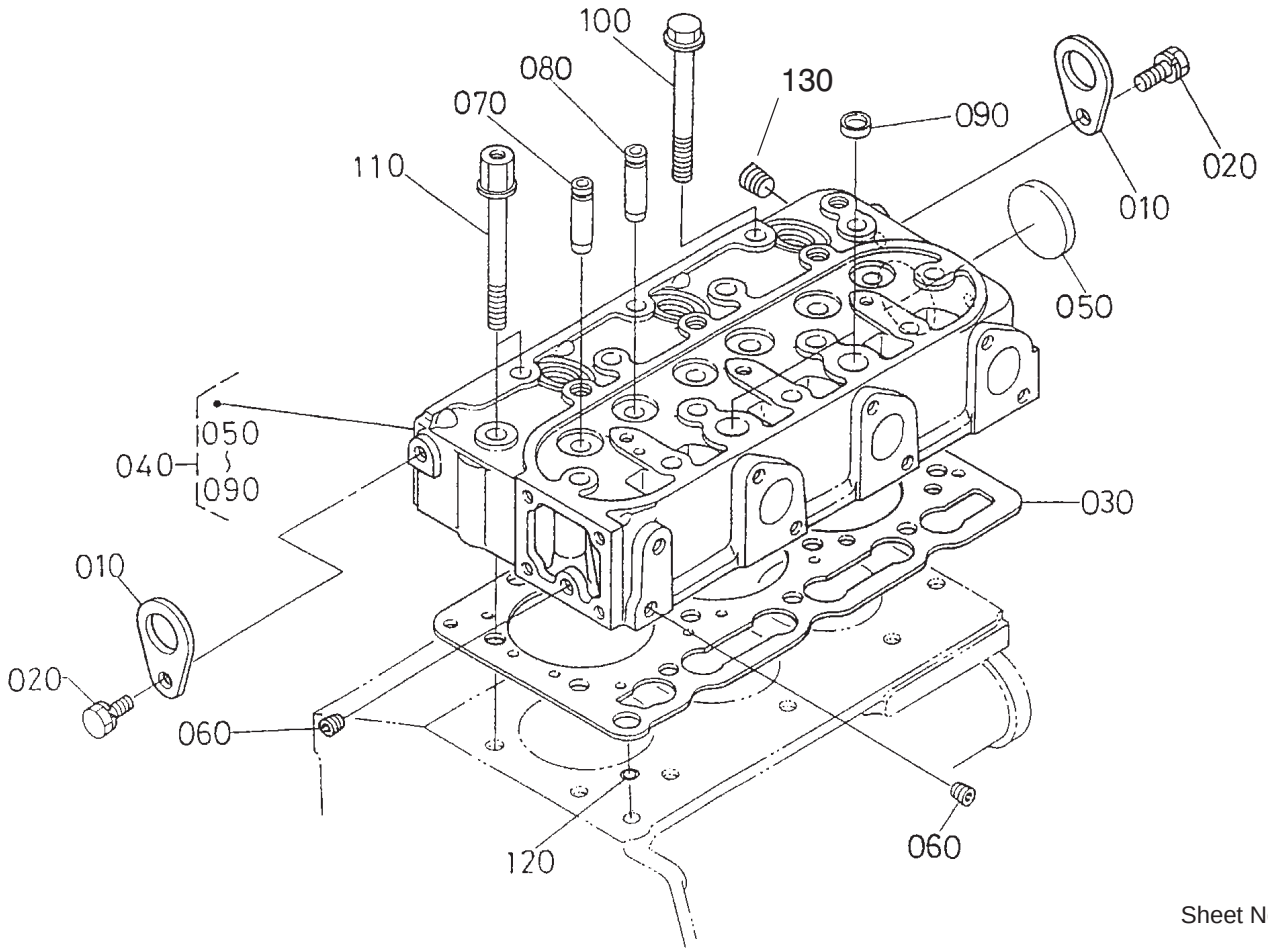


Sheet No.:54

Oil Pan Assembly

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

Ref. No.	Part No.	Qty.	Description

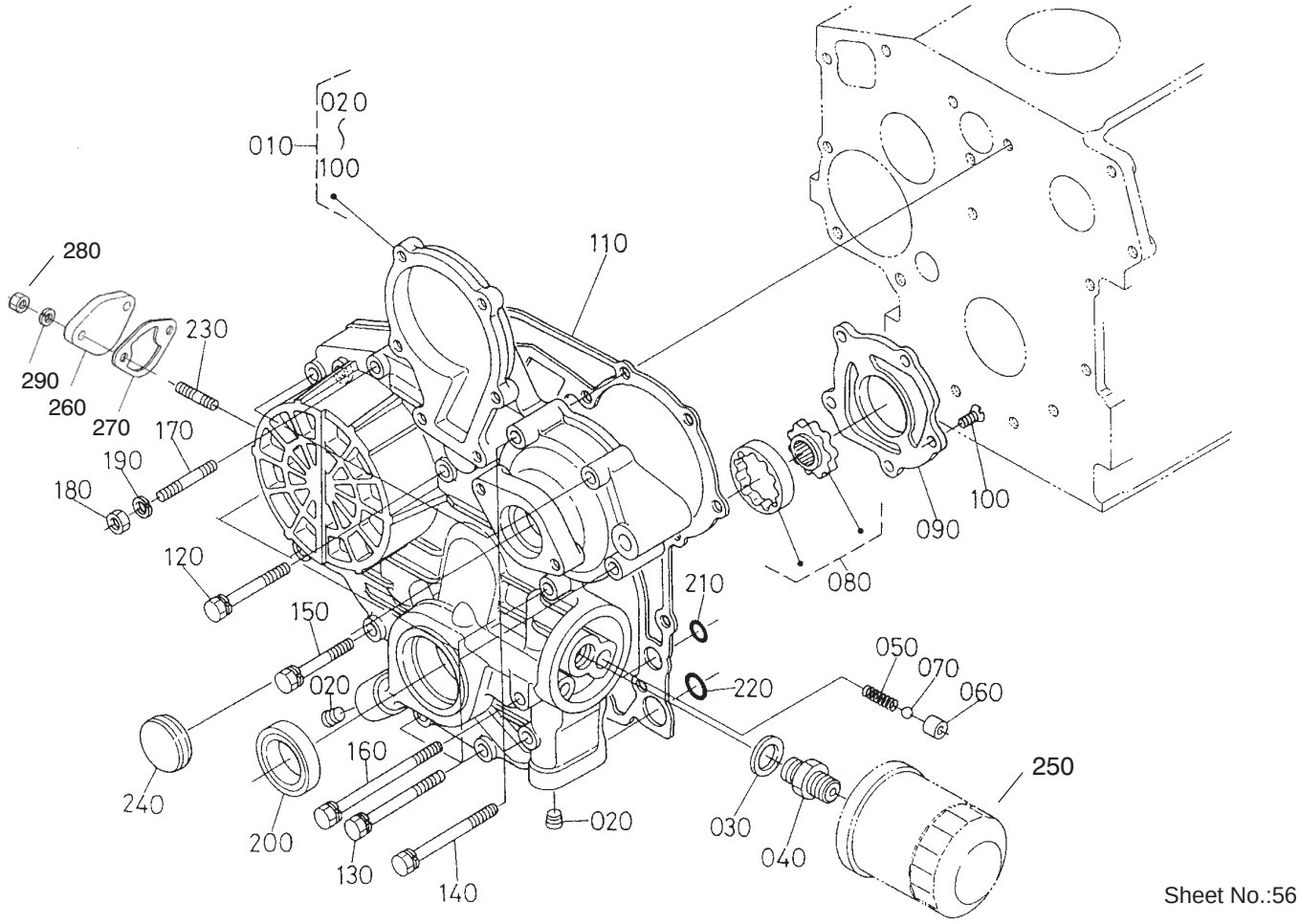


Sheet No.:55

Cylinder Head Assembly

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

Ref. No.	Part No.	Qty.	Description

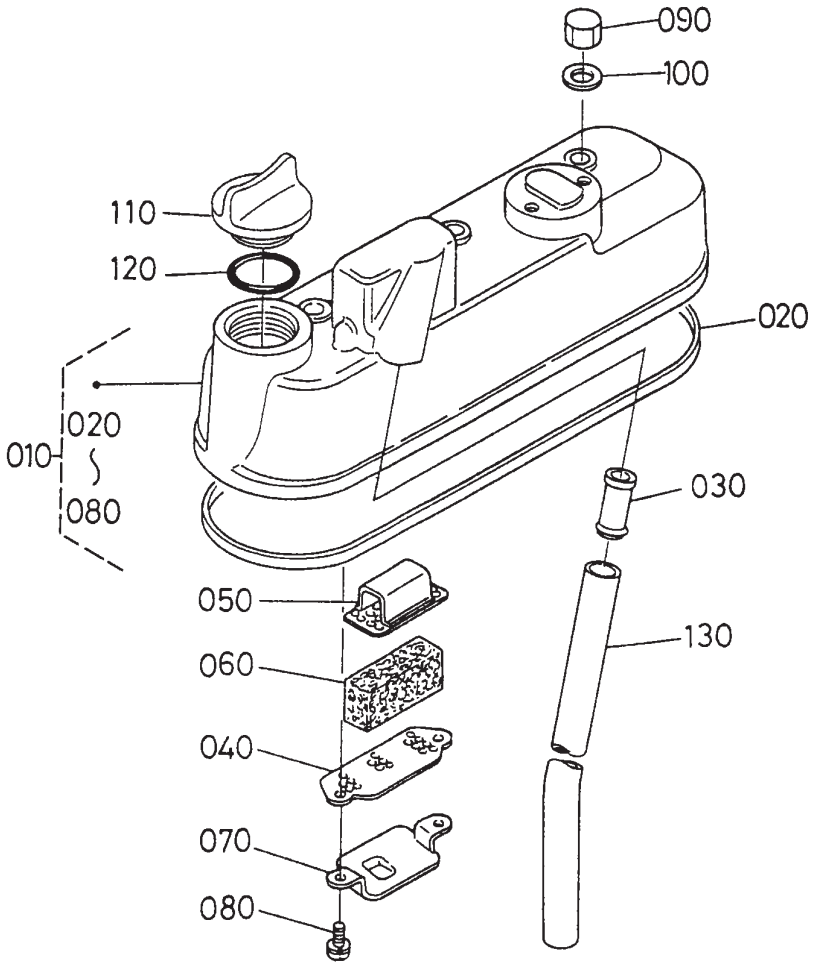


Sheet No.:56

Gear Case, Oil Filter and Cover Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9481	1	Gear Case ASM
020	98–9598	1	Plug
030	98–7562	1	Washer–Plain
040	98–9388	1	Joint–Pipe
050	98–9544	1	Spring
060	98–9543	1	Seat–Valve
070	98–9380	1	Ball
080	98–9540	1	Oil Pump Rotor ASM
090	98–9541	1	Cover–Pump, Oil
100	98–9592	5	Screw
110	98–9633	1	Gasket–Case, Gear
120	98–7496	3	Bolt
130	105–3797	6	Bolt
140	98–9356	2	Bolt
150	98–9437	1	Bolt
160	98–9586	1	Bolt
170	105–3709	1	Stud
180	98–7572	1	Nut
190	98–7699	1	Washer–Spring
200	98–9482	1	Seal–Oil
210	105–3781	2	O–Ring
220	105–3777	2	O–Ring
230	105–3710	2	Stud
240	98–9641	1	Cover
250	99–8384	1	Filter–Oil
260	99–3514	1	Cover

Ref. No.	Part No.	Qty.	Description
270	98–9636	1	Gasket–Pump, Fuel
280	98–7572	2	Nut
290	98–7699	2	Washer–Spring

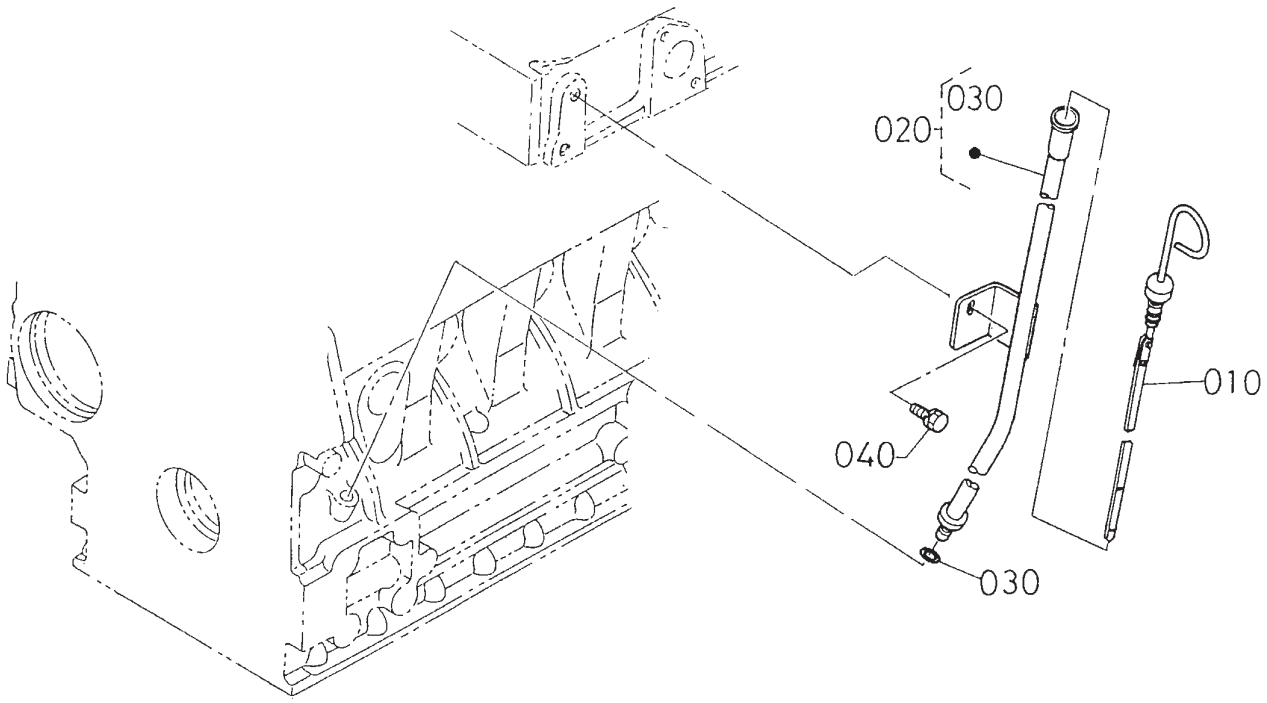


Sheet No.:57

Head Cover Assembly

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

Ref. No.	Part No.	Qty.	Description

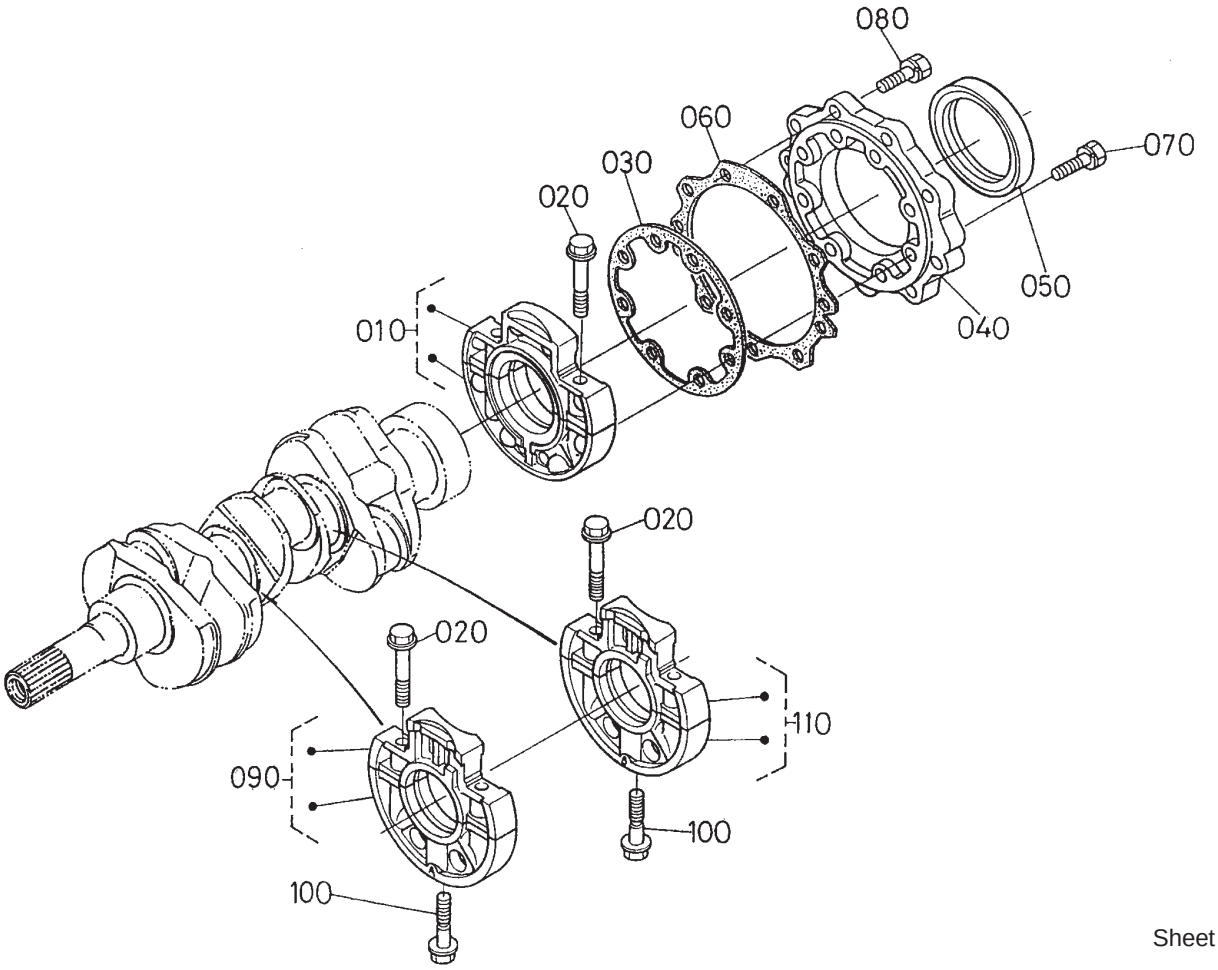


Sheet No.:58

Dipstick and Guide Assembly

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

Ref. No.	Part No.	Qty.	Description

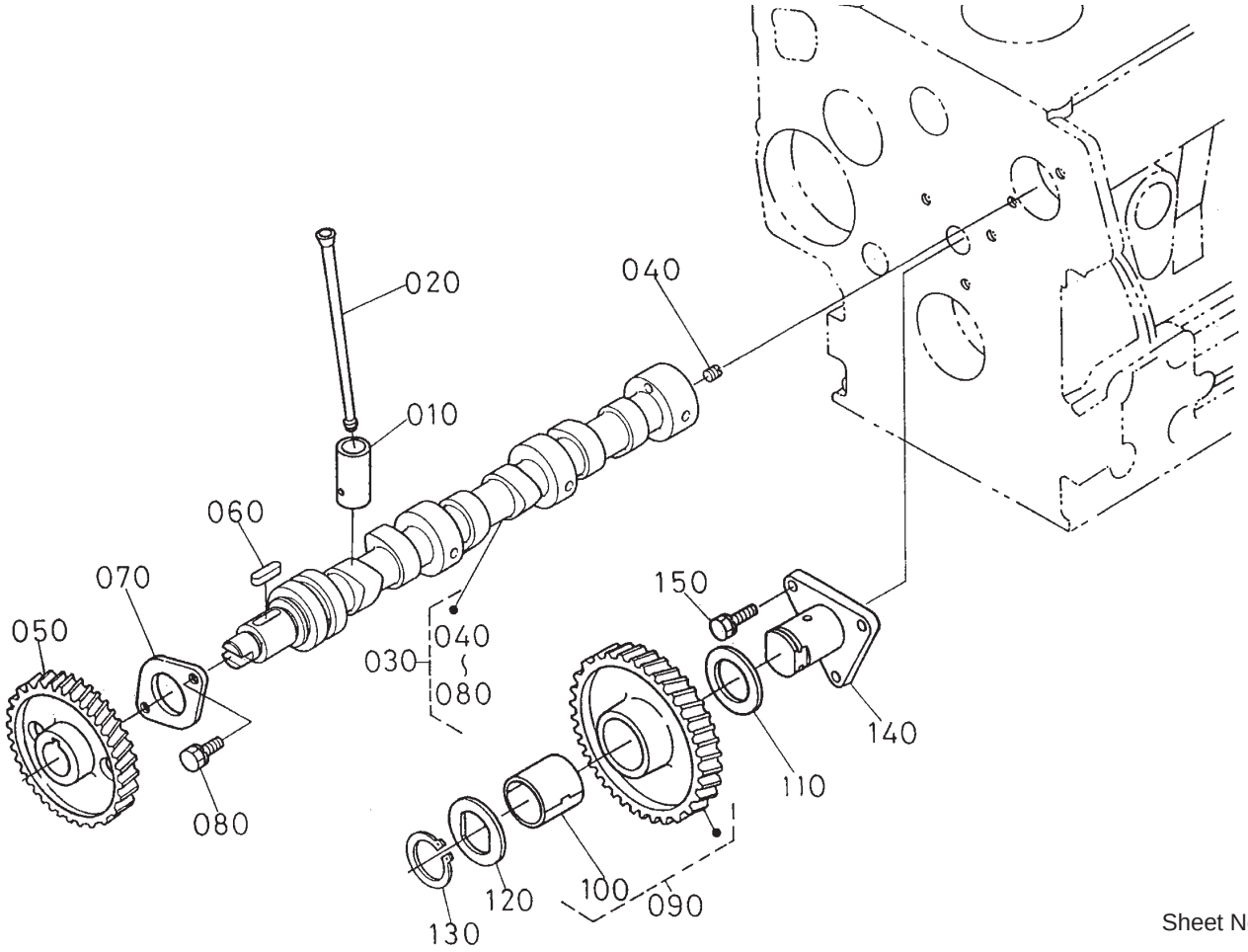


Sheet No.:59

Main Bearing Case Assembly

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

Ref. No.	Part No.	Qty.	Description

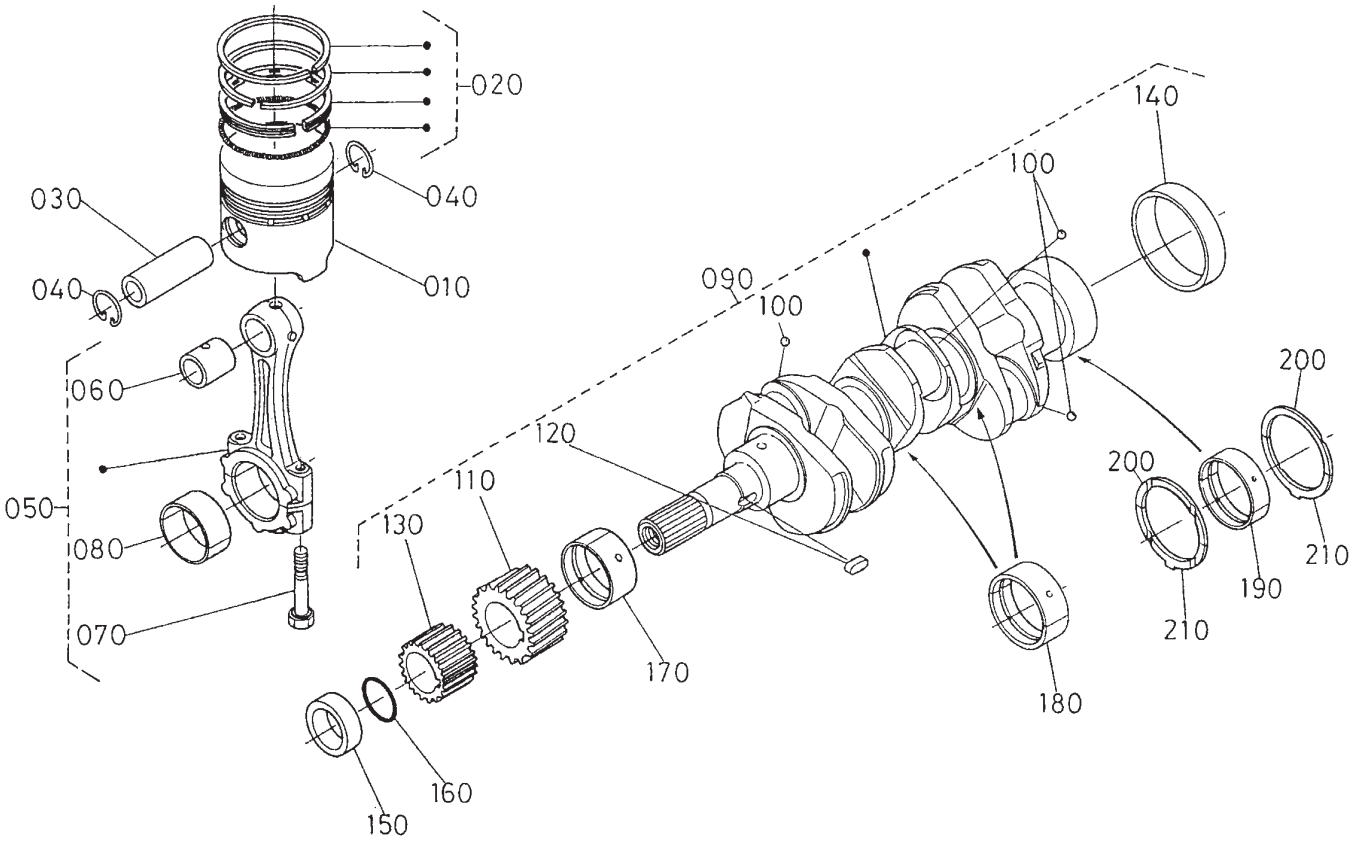


Sheet No.:60

Camshaft and Idler Gear Shaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9616	6	Tappet
020	98–9509	6	Rod–Push
030	98–9617	1	Camshaft ASM
040	98–7449	1	Screw–Set
050	98–9512	1	Gear–Cam
060	98–9378	1	Key–Feather
070	98–9510	1	Stopper–Camshaft
080	98–9351	2	Bolt
090	98–9649	1	Idle Gear ASM
100	98–9650	1	Bushing–Gear, Idle
110	98–9535	1	Collar–Gear, Idle
120	98–9536	1	Collar–Gear, Idle
130	98–9534	1	Clip–Circular, Idle Gear
140	98–9533	1	Shaft–Gear, Idle
150	98–7692	3	Bolt

Ref. No.	Part No.	Qty.	Description

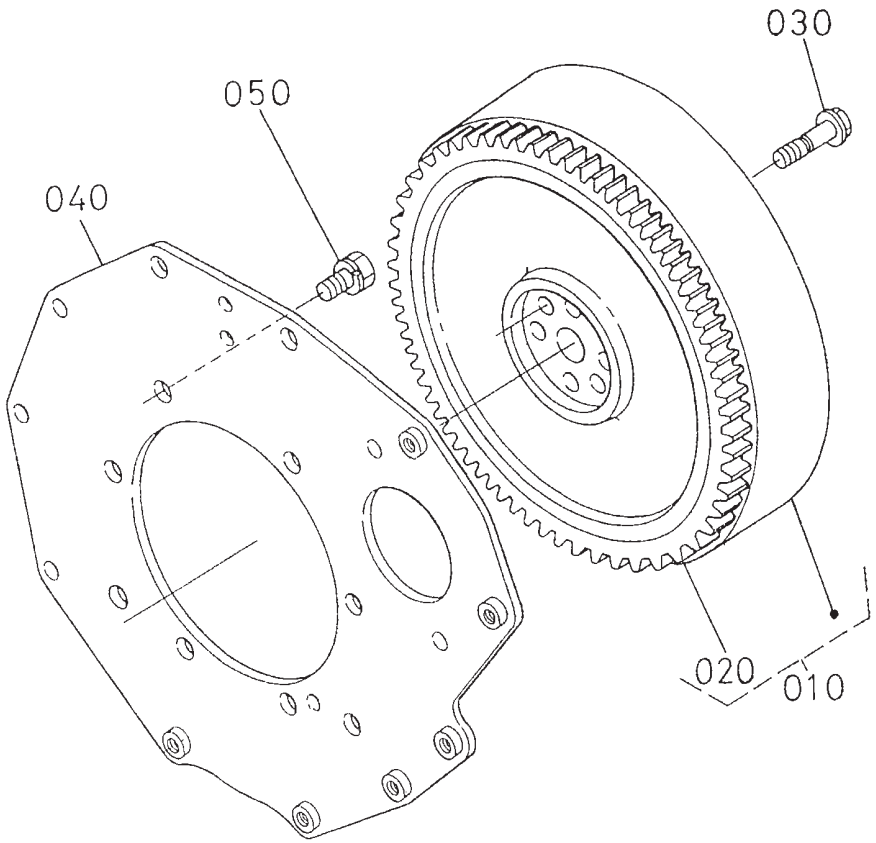


Sheet No.:61

Piston and Crankshaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9469	3	Piston (STD)
010	98–9470	3	Piston (0.5mm)
020	98–9618	3	Piston Ring ASM (STD)
020	98–9619	3	Piston Ring ASM (+0.5mm)
030	98–9513	3	Pin–Piston
040	98–9514	6	Clip–Circular, Piston Pin
050	98–9516	3	Connecting Rod ASM
060	98–9515	3	Bushing–Pin, Piston
070	98–9517	6	Bolt–Rod, Connecting
080	98–9518	3	Metal,Crankpin (STD)
080	98–9519	3	Bearing–Rod (0.2mm)
080	98–9520	3	Bearing–Rod (0.4mm)
090	98–9642	1	Crankshaft ASM
100	98–7473	3	Ball
110	98–9532	1	Gear–Crankshaft
120	98–9666	1	Key
130	98–9542	1	Gear–Drive, Oil Pump
140	98–9522	1	Sleeve–Crankshaft
150	98–9521	1	Collar–Crankshaft
160	105–3783	1	O–Ring
170	98–9529	1	Bearing–Main (0.4mm)
170	98–9528	1	Bearing–Main (0.2mm)
170	98–9523	1	Metal Crankshaft(STD)

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

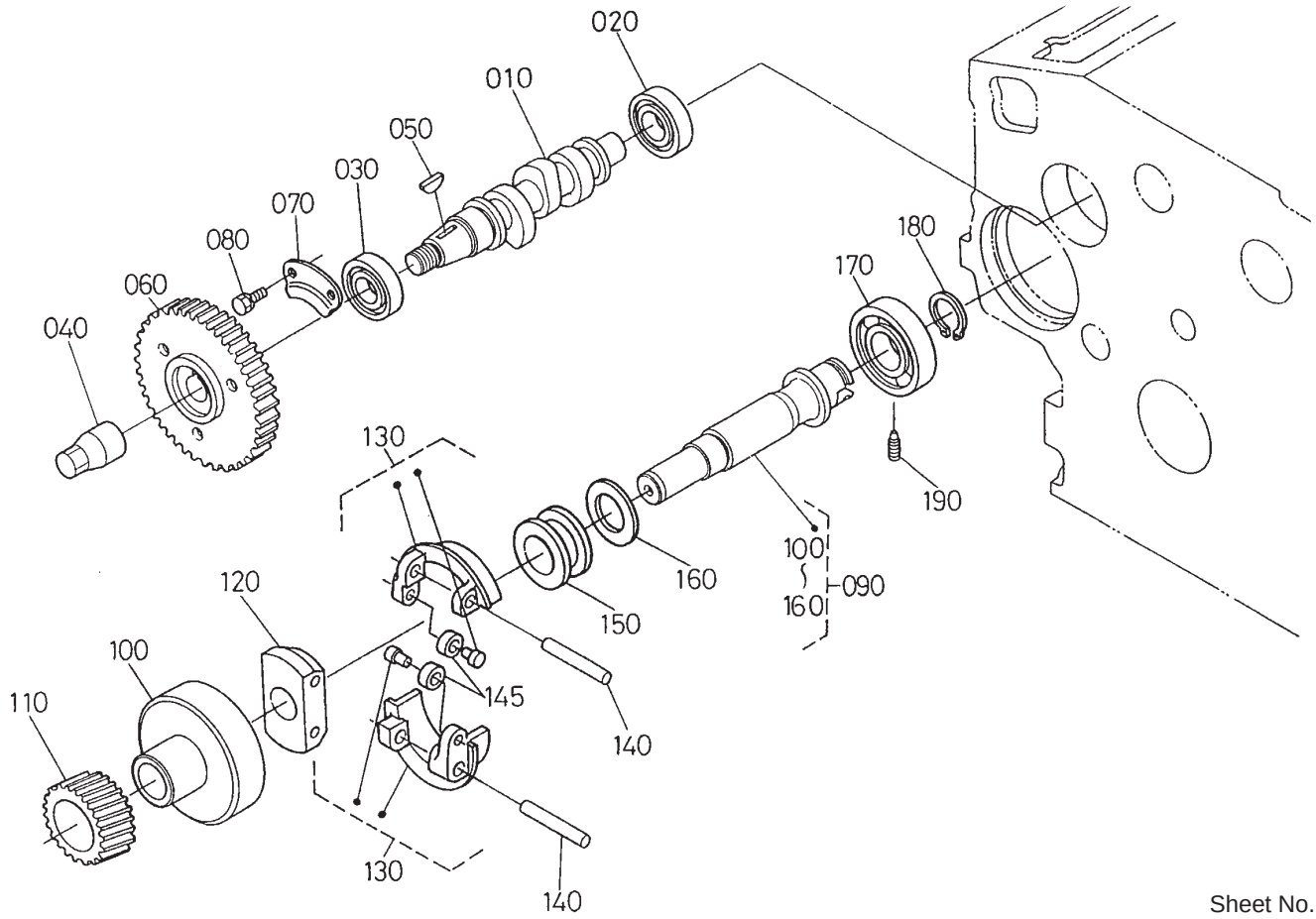


Sheet No.:62

Flywheel Assembly

Ref. No.	Part No.	Qty.	Description
010	105–3784	1	Flywheel ASM
020	105–3722	1	Gear–Ring
030	98–9537	6	Bolt–Flywheel
040	98–9486	1	Plate–End, Rear
050	98–9392	8	Bolt

Ref. No.	Part No.	Qty.	Description

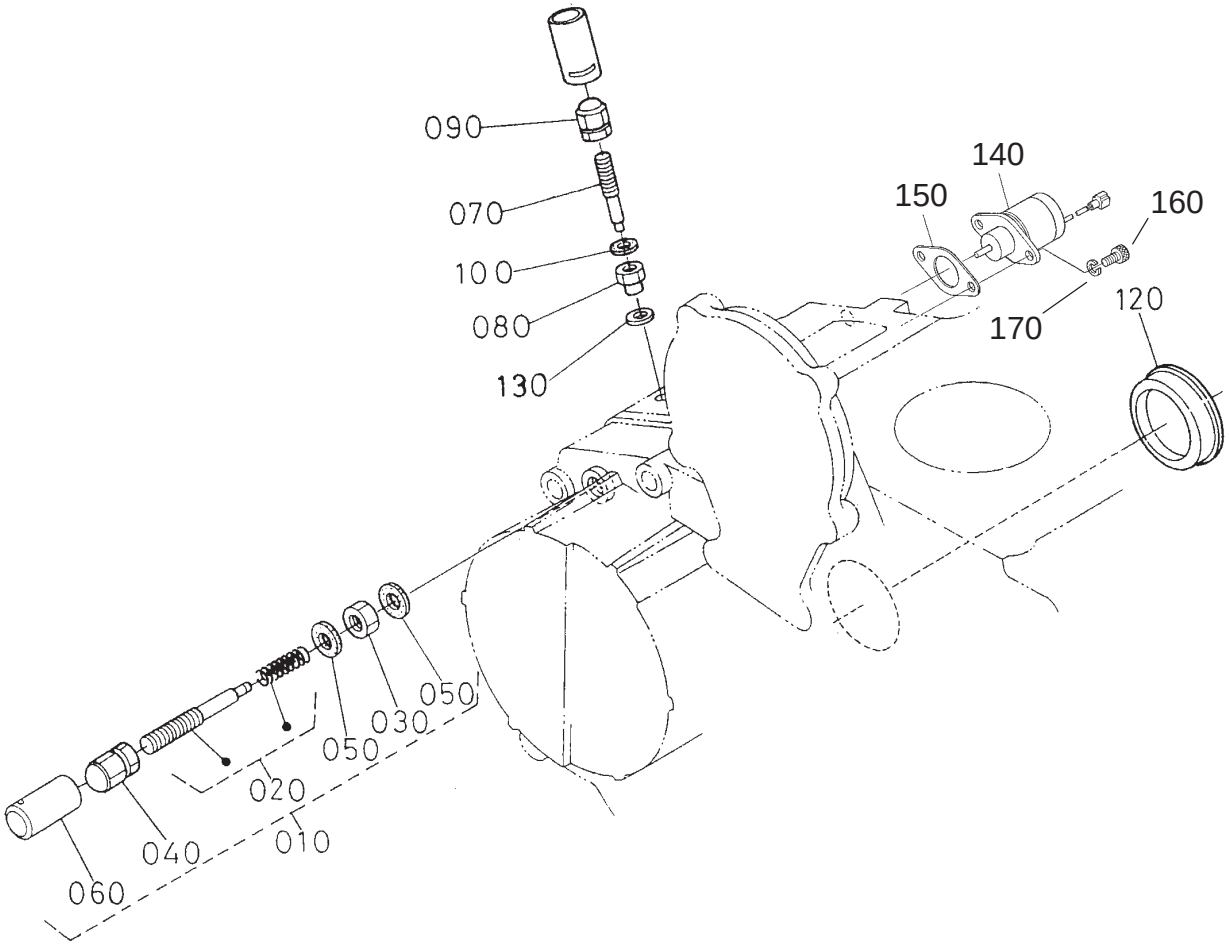


Sheet No.:63

Fuel, Camshaft and Governor Shaft Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9459	1	Camshaft–Fuel
020	98–9382	1	Bearing–Ball
030	98–9383	1	Bearing–Ball
040	98–9590	1	Nut–Cap
050	98–9595	1	Key–Woodruff
060	98–9669	1	Gear–Pump, Injection
070	98–9511	1	Stopper–Fuel, Camshaft
080	98–9350	2	Bolt
090	98–9644	1	Governor Shaft ASM
100	98–9562	1	Holder–Gear, Governor
110	98–9673	1	Gear–Governor
120	98–9561	1	Holder–Weight, Governor
130	98–9559	2	Governor Weight ASM
140	98–9560	2	Shaft–Weight, Governor
145	98–9692	2	Roller
150	98–9563	1	Sleeve–Governor
160	98–9564	1	Washer–Thrust
170	98–9381	1	Bearing–Ball
180	98–9657	1	Clip–Circular, Governor Shaft
190	98–9565	1	Screw–Set

Ref. No.	Part No.	Qty.	Description

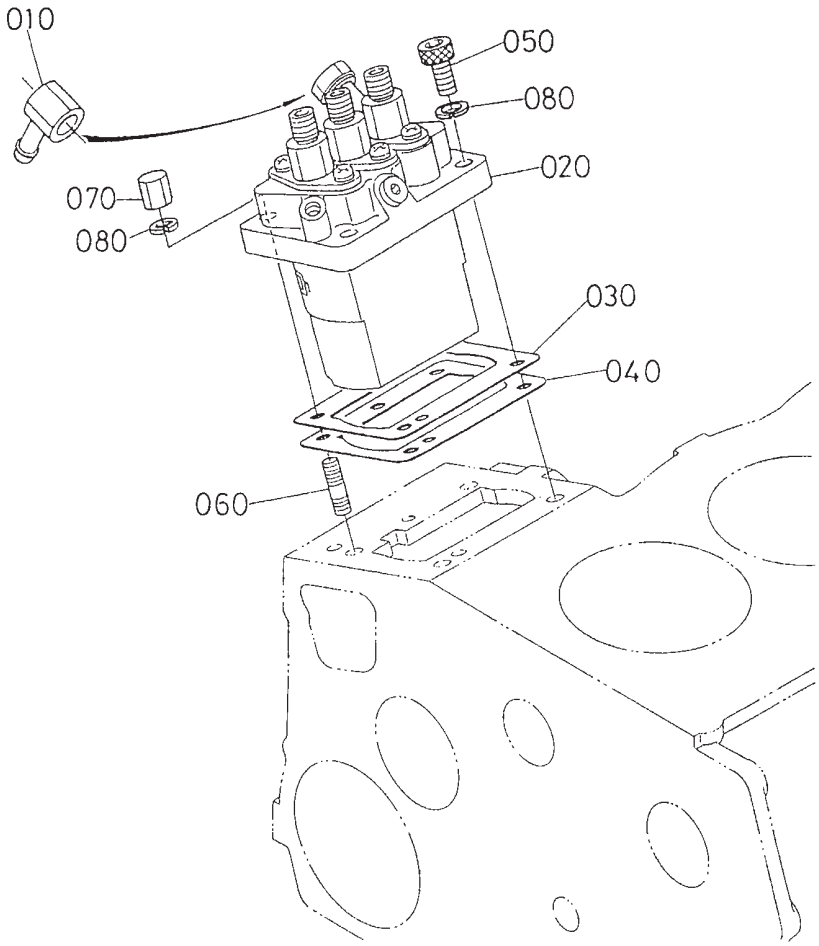


Sheet No.:64

Idle Apparatus and Stop Solenoid Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9678	1	Idle Apparatus ASM
020	98–9679	1	Adjusting Bolt ASM
030	98–9439	1	Nut
040	105–3785	1	Plug
050	98–7654	2	Gasket
060	98–7656	1	Cap
070	98–9557	1	Bolt–Adjusting
080	99–3512	1	Nut
090	105–3785	1	Plug
100	98–7654	1	Gasket
120	98–9640	1	Cover–Pump
130	99–8389	1	Gasket
140	98–9693	1	Solenoid–Stop
150	98–9683	1	Gasket–Cover, Solenoid
160	105–3799	2	Bolt–HSH
170	98–7699	2	Washer–Spring

Ref. No.	Part No.	Qty.	Description

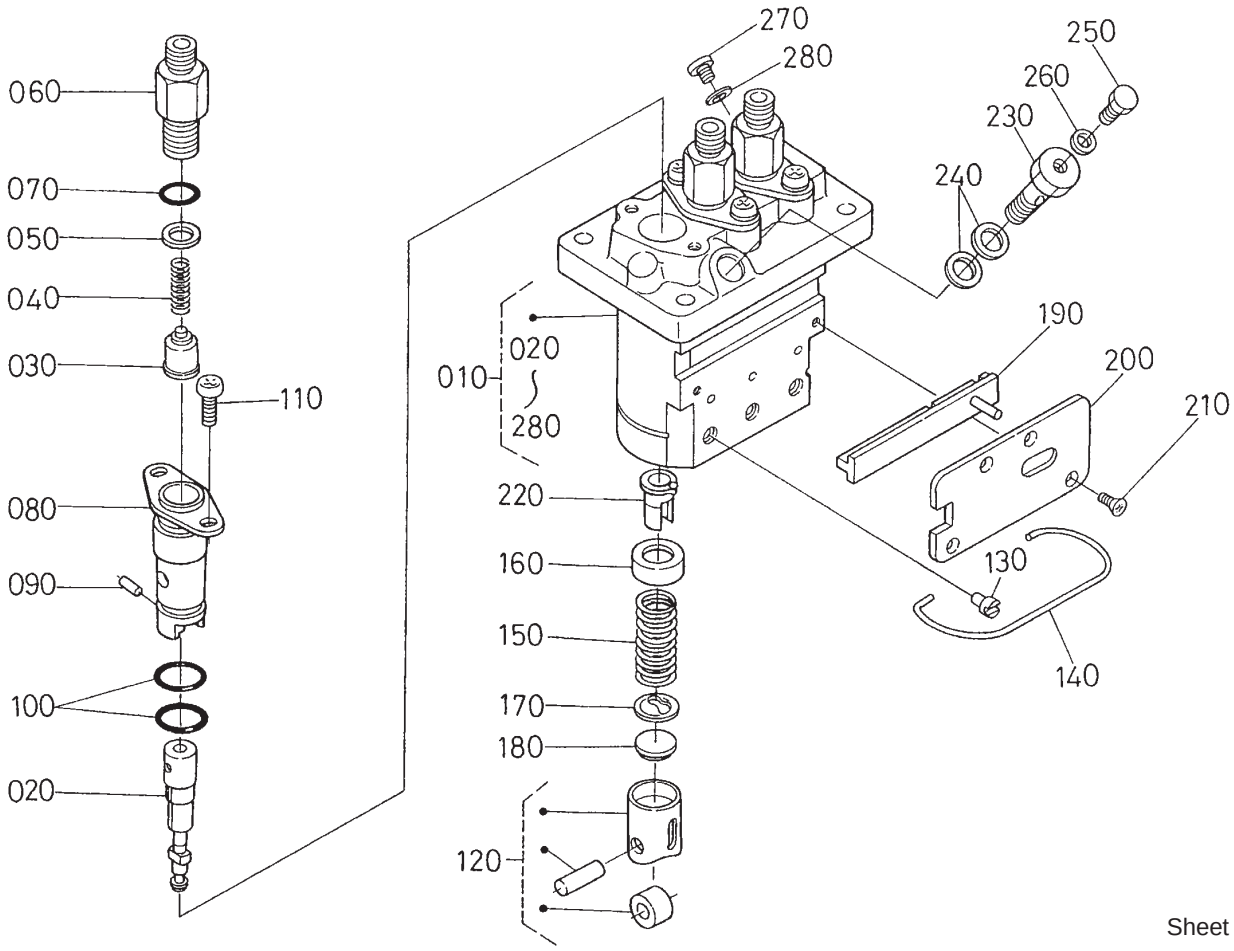


Sheet No.:65

Injection Pump Assembly

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

Ref. No.	Part No.	Qty.	Description

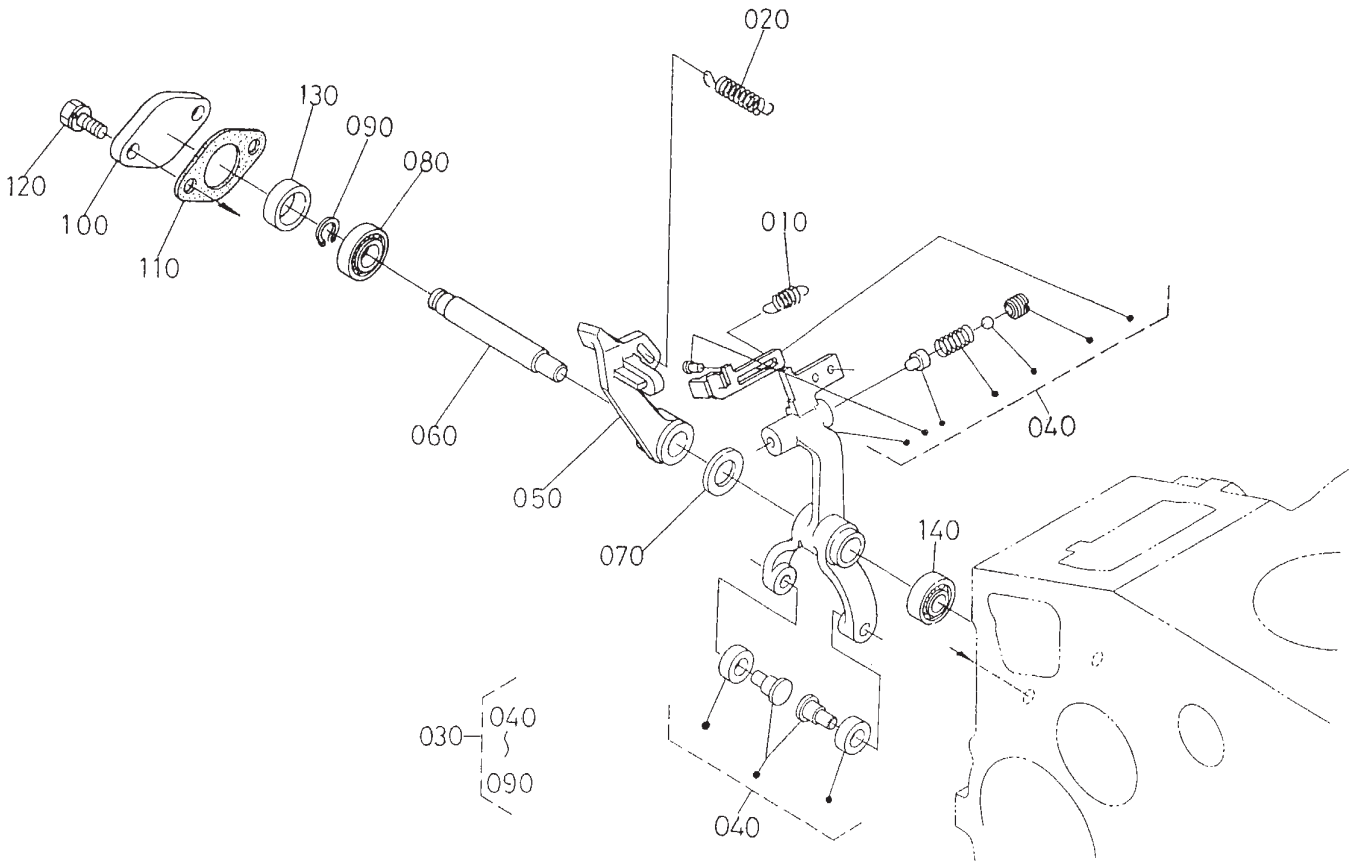


Sheet No.:66

Injection Pump Assembly No. 98–9643

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

Ref. No.	Part No.	Qty.	Description
260	98–9446	1	Gasket
270	98–9466	1	Plug
280	98–9451	1	Gasket

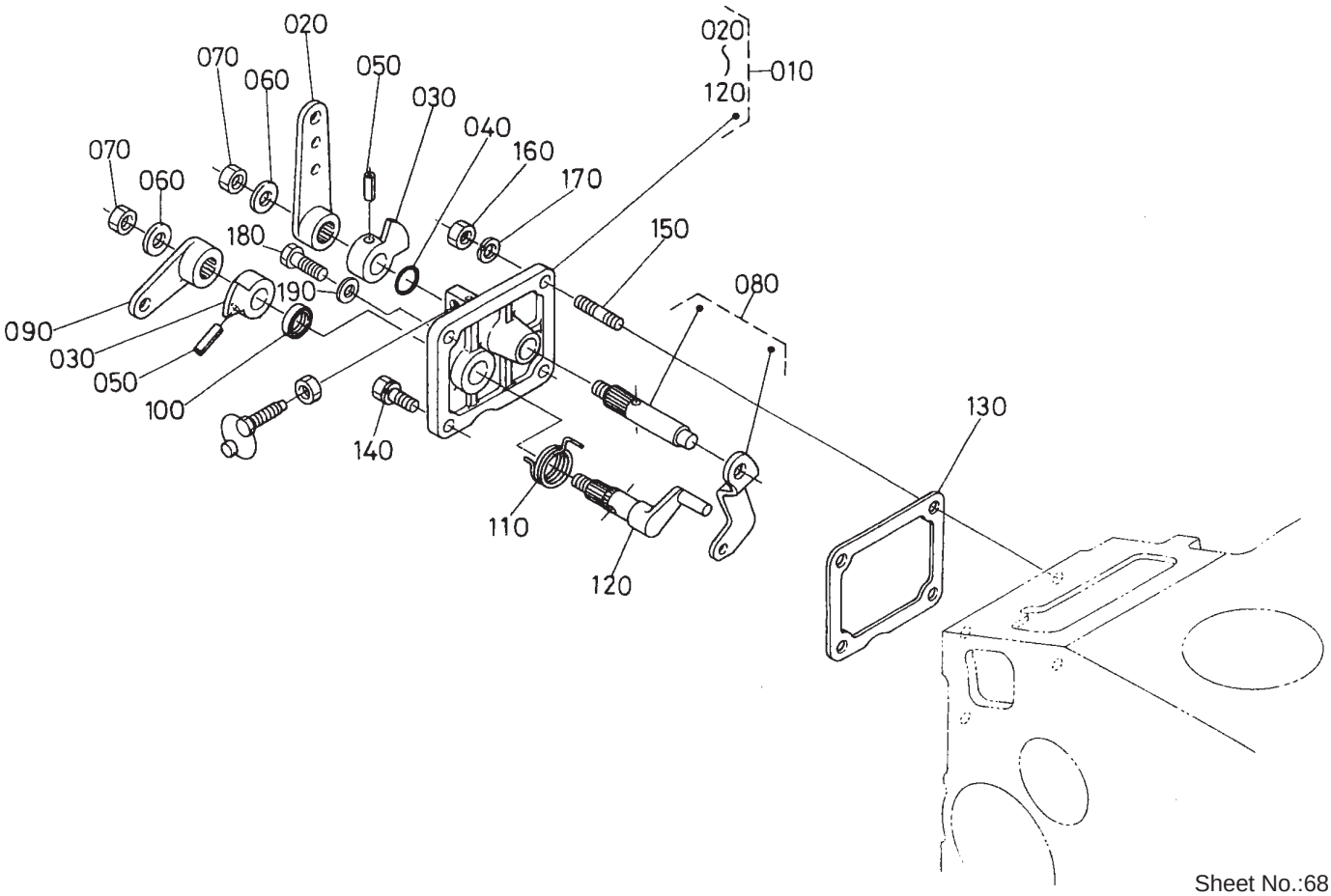


Sheet No.:67

Governor Assembly

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

Ref. No.	Part No.	Qty.	Description

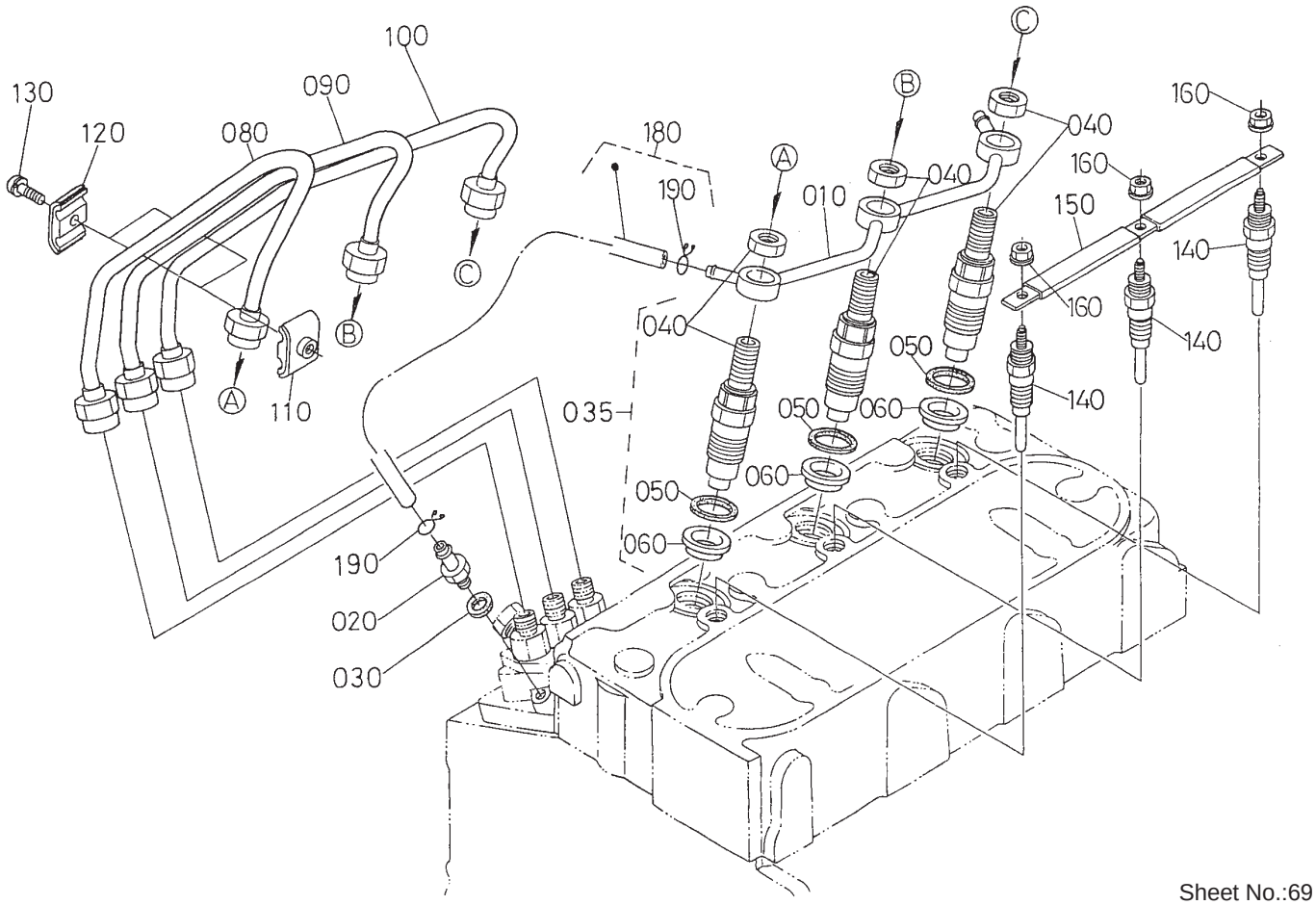


Sheet No.:68

Speed Control Plate Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9661	1	Control Plate ASM
020	98–9662	1	Lever–Control, Speed
030	98–9572	2	Lever–Control, Speed
040	105–3788	1	O–Ring
050	98–7602	2	Pin–Spring
060	98–9594	2	Washer–Plain
070	98–9589	2	Nut
080	98–9658	1	Governor Lever ASM
090	98–9663	1	Lever–Stop, Engine
100	98–7601	1	Seal–Oil
110	98–9472	1	Spring–Return
120	98–9664	1	Shaft–Lever, Stop
130	98–9637	1	Gasket
140	98–7692	1	Bolt
150	105–3710	2	Stud
160	98–7572	2	Nut
170	98–7699	2	Washer–Spring
180	99–8348	1	Bolt
190	98–7654	1	Gasket

Ref. No.	Part No.	Qty.	Description

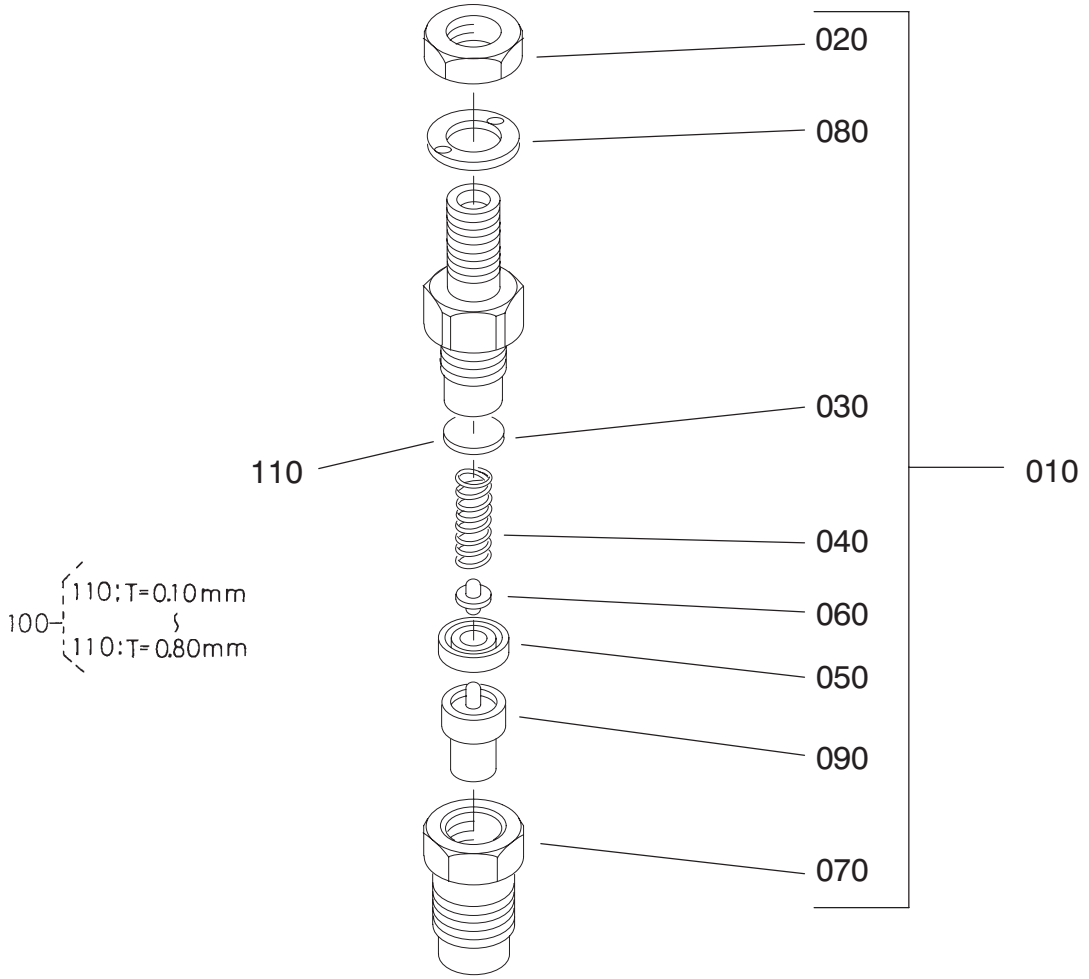


Sheet No.:69

Nozzle Holder Glow Plug Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9620	1	Over Flow Pipe ASM
020	98–9431	1	Screw–Bleeder
030	98–7654	1	Gasket
035	105–3740	3	Kit–Holder, Nozzle
040	98–9468	3	Nozzle Holder ASM
050	98–7676	3	Gasket
060	98–7677	3	Seal
080	98–9653	1	Pipe–Injection
090	98–9654	1	Pipe–Injection
100	98–9655	1	Pipe–Injection
110	98–7682	2	Clamp–Pipe
120	98–7683	2	Clamp–Pipe
130	98–7684	2	Screw W/Washer
140	98–9695	3	Plug,Glow
150	98–9631	3	Cord–Plug, Glow
160	99–8377	3	Nut – Flange
180	98–9420	1	Over Flow Pipe ASM
190	98–7671	2	Clip–Pipe

Ref. No.	Part No.	Qty.	Description

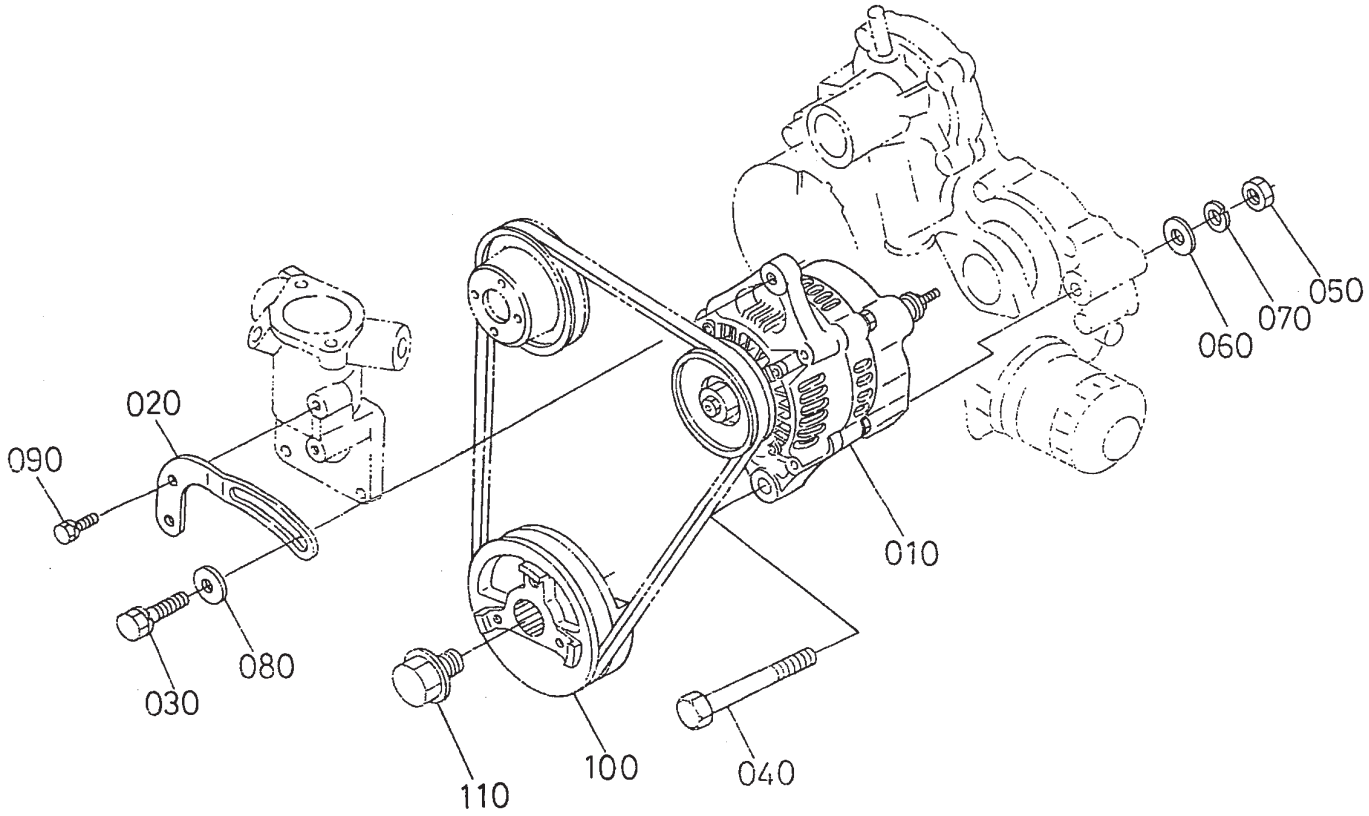


Sheet No.:70

Nozzle Holder Assembly No. 98–9468

Ref. No.	Part No.	Qty.	Description
010	98–9468	3	Nozzle Holder ASM
020	99–8301	3	Nut
030	99–8302	3	Washer–Adjusting
040	99–8303	3	Spring – Nozzle
050	99–8304	3	Spacer – Distance
060	99–8305	3	Rod–Push
070	99–8306	3	Nut – Nozzle
080	99–8307	3	Washer–Plain
090	99–8308	3	Piece – Nozzle
100	99–8309	3	Adjusting Washer ASM
110	99–8315	3	Washer–Adjust (0.52mm)
110	99–8316	3	Washer–Adjust (0.54mm)
110	99–8317	3	Washer–Adjust (0.56mm)
110	99–8318	3	Washer–Adjust (0.58mm)
110	99–8319	3	Washer–Adjust (0.80mm)
110	99–8310	3	Washer–Adjust (0.10mm)
110	99–8311	3	Washer–Adjust (0.20mm)
110	99–8312	3	Washer–Adjust (0.30mm)

Ref. No.	Part No.	Qty.	Description
110	99–8313	3	Washer–Adjust (0.40mm)
110	99–8314	3	Washer–Adjust (0.50mm)

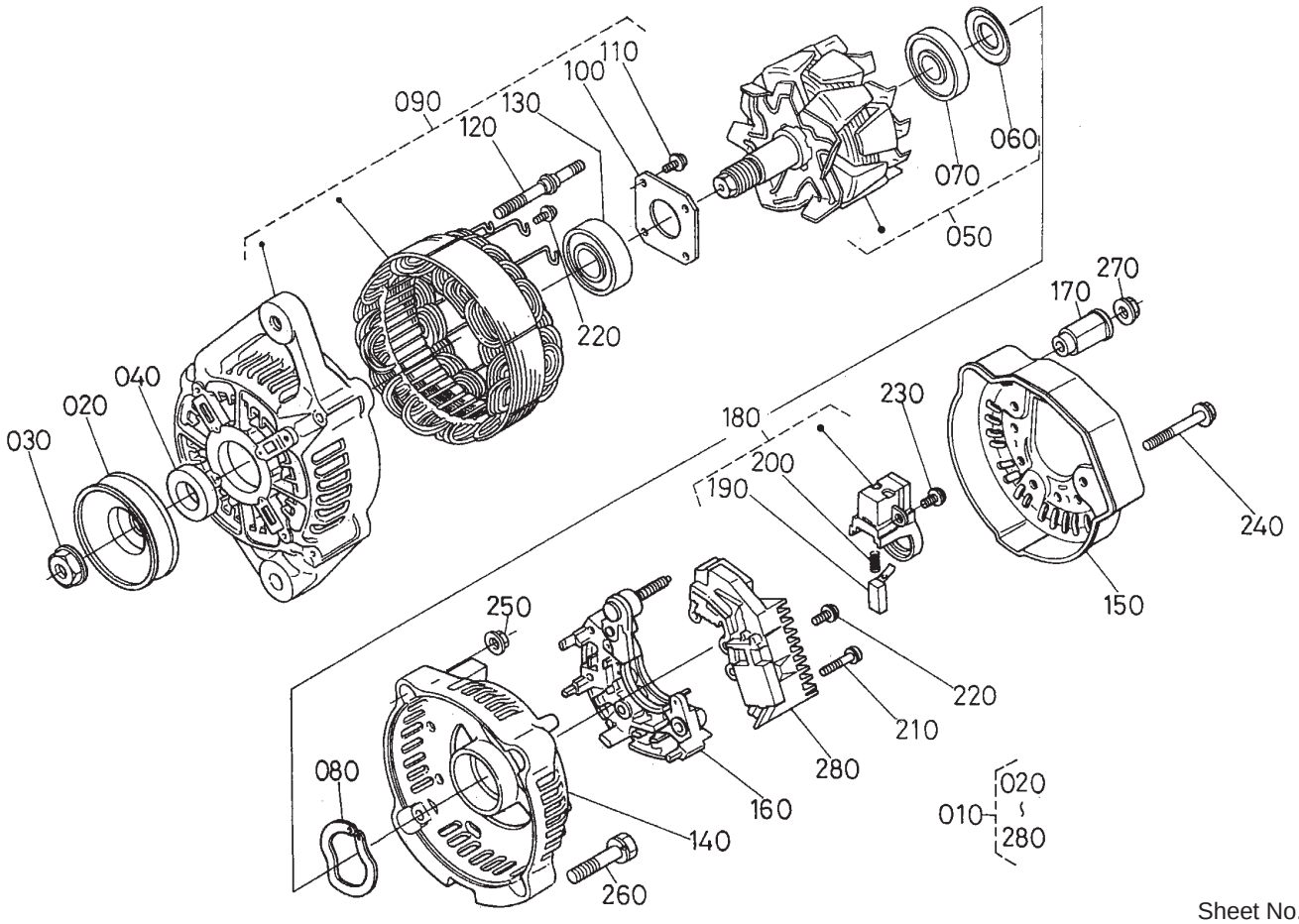


Sheet No.:71

Alternator and Pulley Assembly

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

Ref. No.	Part No.	Qty.	Description

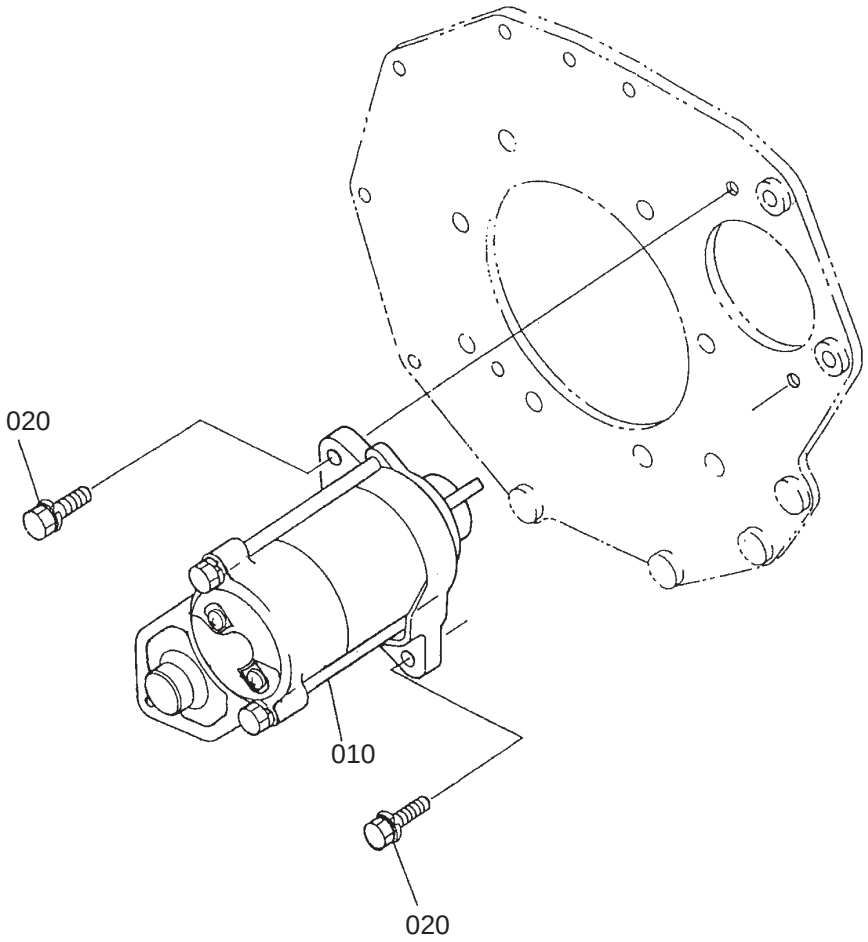


Sheet No.:72

Alternator Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9474	1	Alternator ASM
020	98–9453	1	Pulley–Dynamo
030	98–7708	1	Nut
040	98–7709	1	Collar
050	98–7710	1	Rotor
060	98–7711	1	Cover–Bearing
070	98–7712	1	Bearing–Ball
080	98–7713	1	Washer–Thrust
090	98–7714	1	Frame–End, Drive
100	98–7715	1	Plate–Retainer
110	98–7716	4	Screw–Head, Round
120	98–7717	2	Bolt–Through
130	98–7718	1	Bearing–Ball
140	98–7719	1	Frame–End
150	98–7720	1	Cover–End
160	98–7721	1	Rectifier ASM
170	98–7722	1	Bushing–Insulation
180	98–7723	1	Holder–Brush
190	98–7724	2	Brush
200	98–7725	2	Spring–Brush
210	98–7726	2	Screw–Head, Round
220	98–7727	6	Screw–Head, Round
230	98–7728	1	Screw–Head, Round
240	98–7729	3	Bolt
250	98–7730	2	Nut
260	98–7731	2	Bolt

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

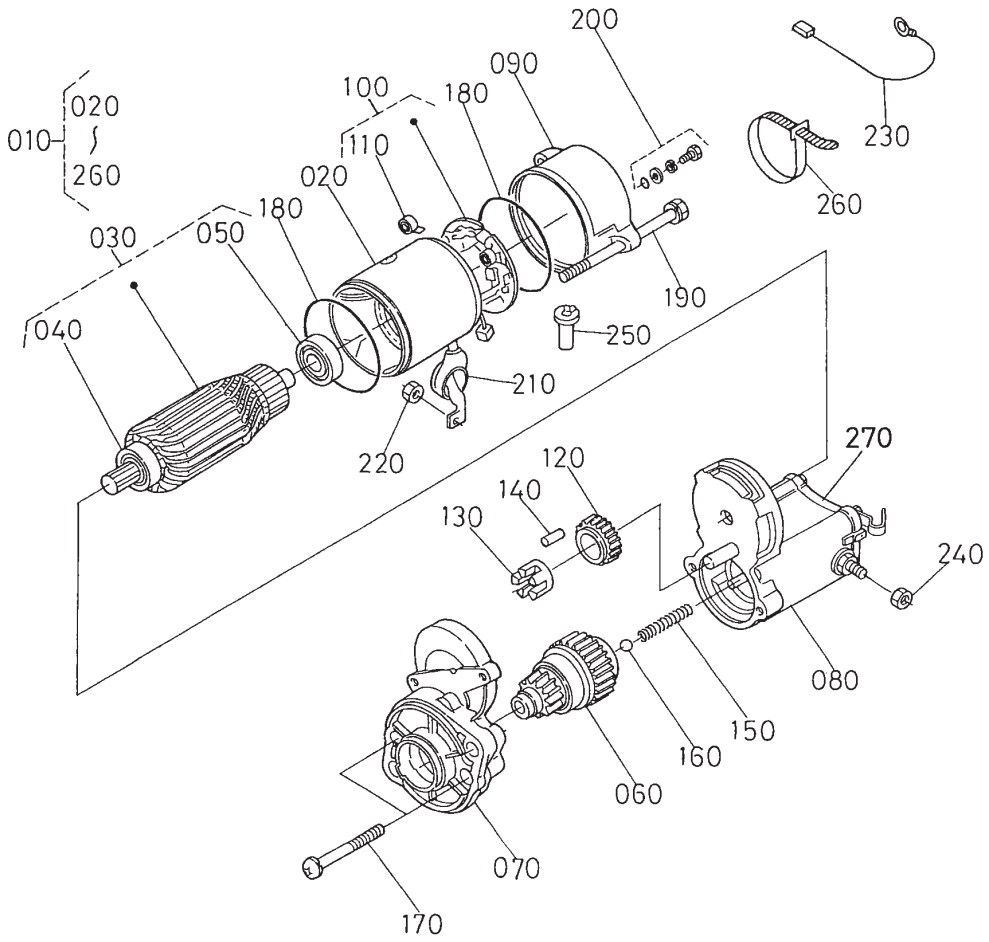


Sheet No.:73

Starter Mount Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9705	1	Starter ASM
020	98–7697	2	Bolt

Ref. No.	Part No.	Qty.	Description

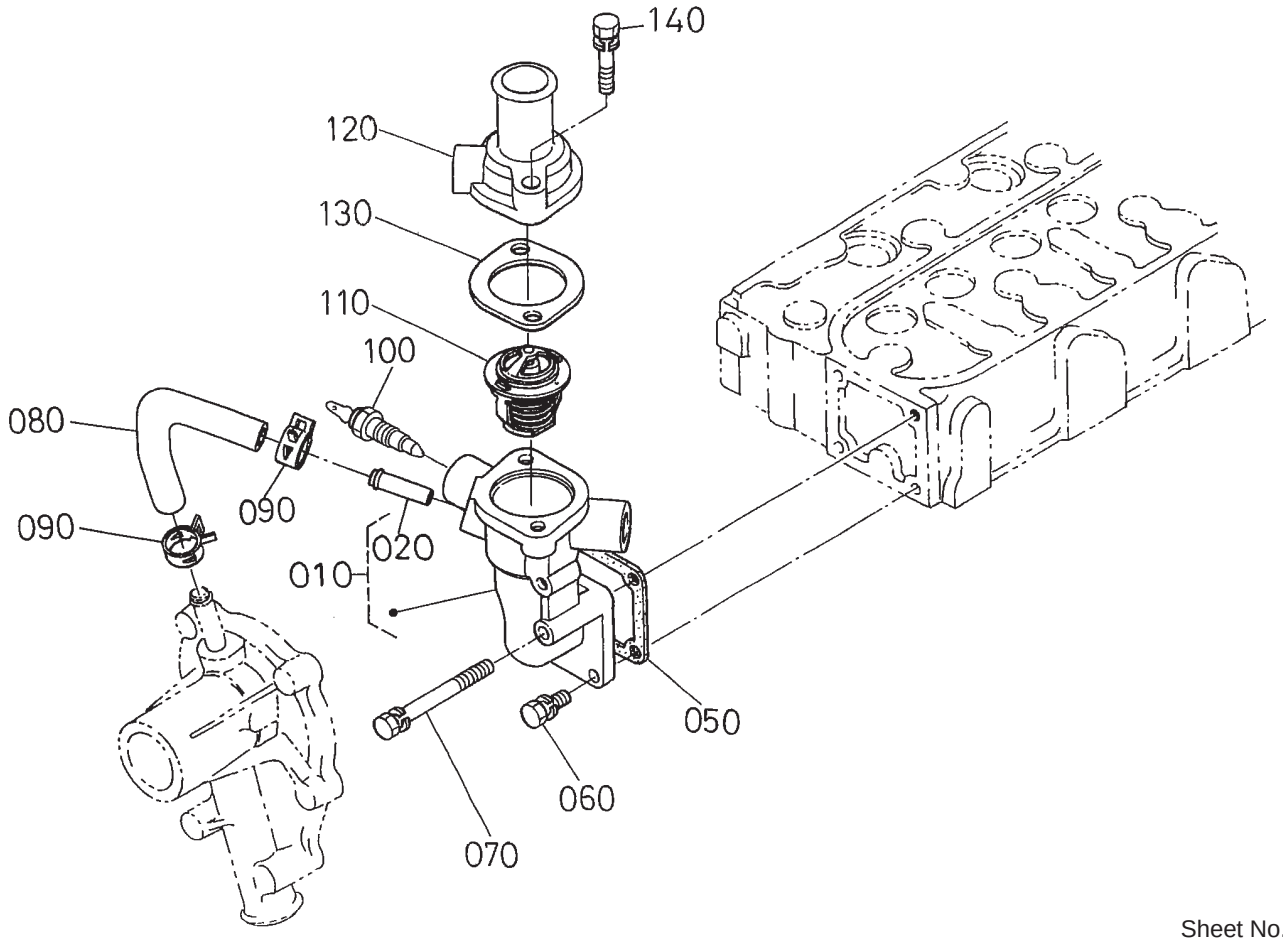


Sheet No.:74

Starter Assembly No. 98–9705

Ref. No.	Part No.	Qty.	Description
010	98–9705	1	Starter ASM
020	104–8608	1	Yoke ASM
030	98–7742	1	Armature ASM
040	98–7744	1	Bearing
050	98–7743	1	Bearing
060	99–8373	1	Clutch–Running, Over
070	99–8374	1	Frame–End, Drive
080	105–3746	1	Magnetic Switch ASM
090	98–7748	1	Frame–End
100	98–7749	1	Brush Holder ASM
110	98–7750	4	Spring–Brush
120	98–7751	1	Gear
130	98–7752	1	Retainer
140	98–7753	5	Roller
150	98–7754	1	Spring
160	98–7755	1	Ball
170	98–7756	2	Bolt
180	98–7757	2	O–Ring
190	100–9240	2	Bolt
200	98–7758	2	Bolt ASM
210	99–8375	1	Cover
220	99–8371	1	Nut–Hex
230	98–9711	1	Cord–Solenoid, Stop
240	99–8376	1	Nut – Hex
250	98–7759	1	Pipe–Drain

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

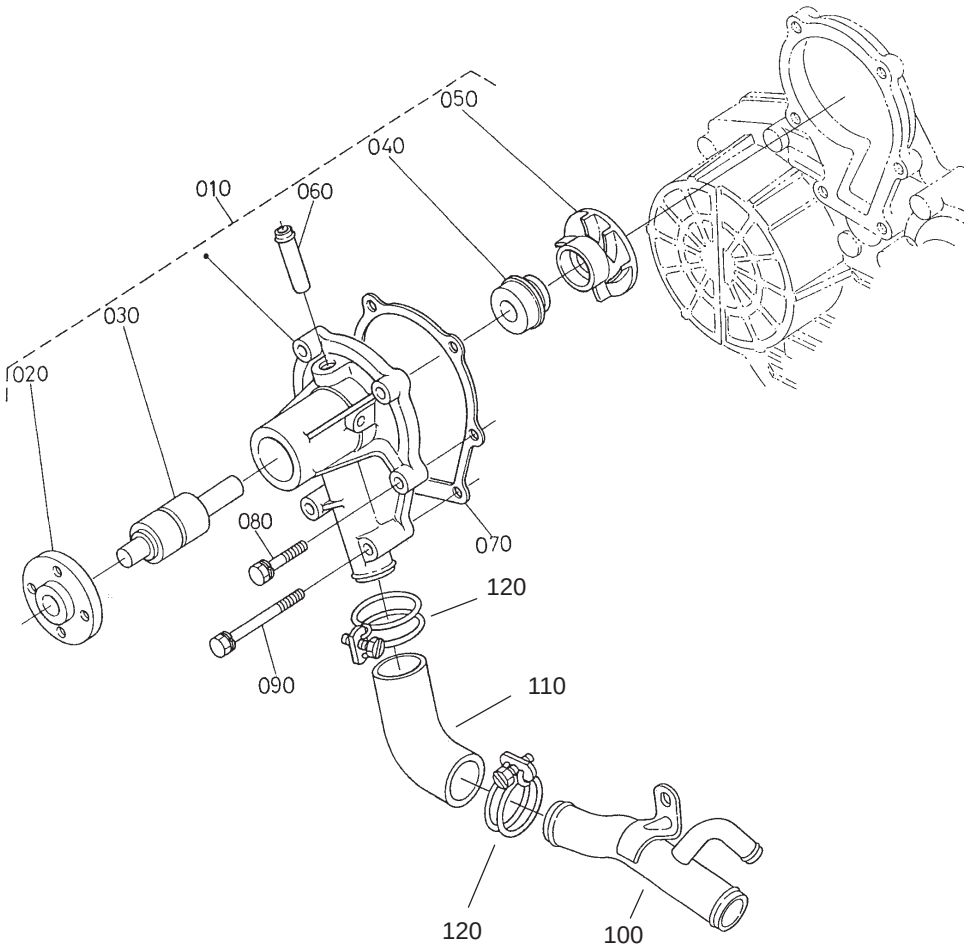


Sheet No.:75

Water Flange and Thermostat Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9713	1	Water Flange ASM
020	98–9580	1	Pipe–Return, Water
050	98–9638	1	Gasket–Flange, Water
060	98–7692	3	Bolt
070	98–9356	1	Bolt
080	98–9578	1	Pipe–Return, Water
090	98–9579	2	Band–Pipe
100	98–9719	1	Thermoswitch
110	98–7778	1	Thermostat ASM
120	98–9471	1	Cover–Thermostat
130	105–3748	1	Gasket–Thermostat
140	98–7777	2	Bolt

Ref. No.	Part No.	Qty.	Description

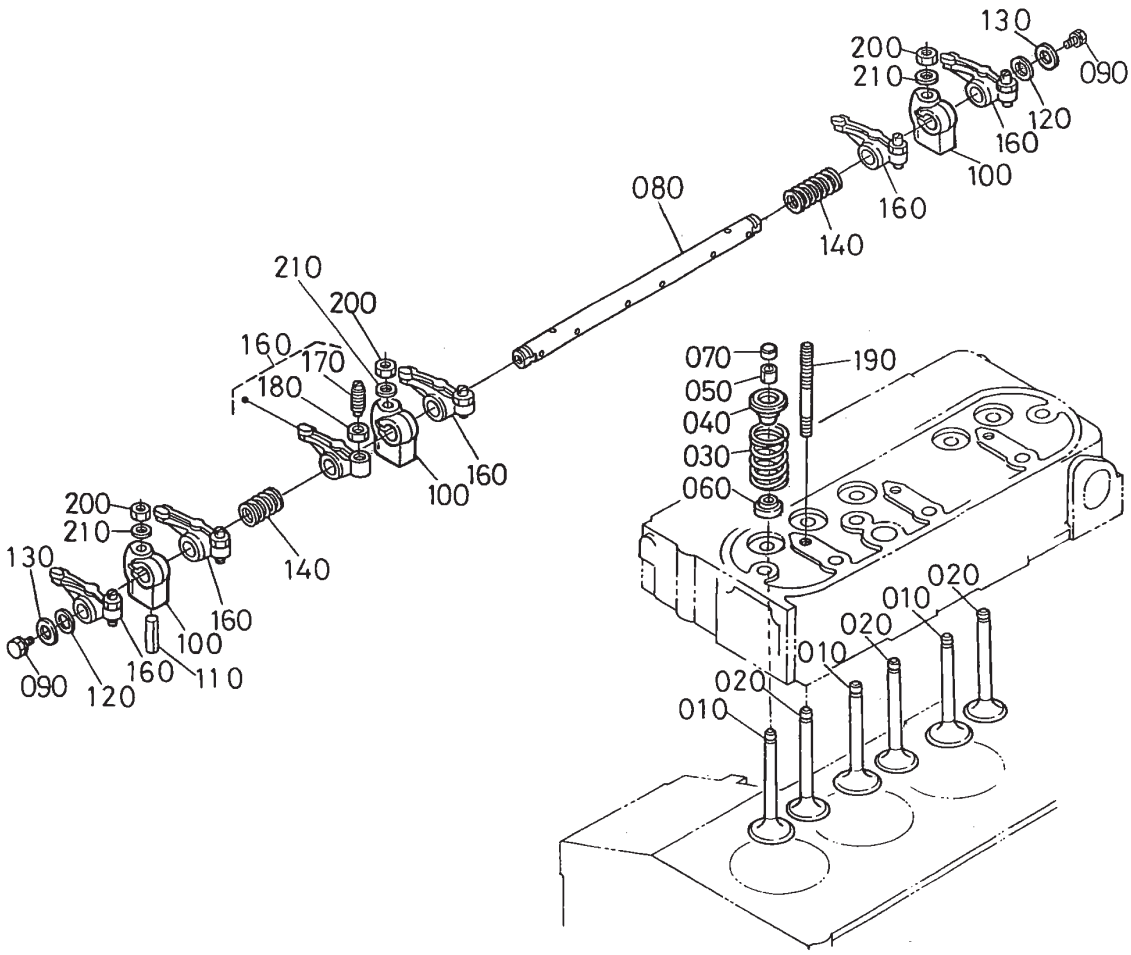


Sheet No.:76

Water pump and Water Pipe Assembly

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

Ref. No.	Part No.	Qty.	Description

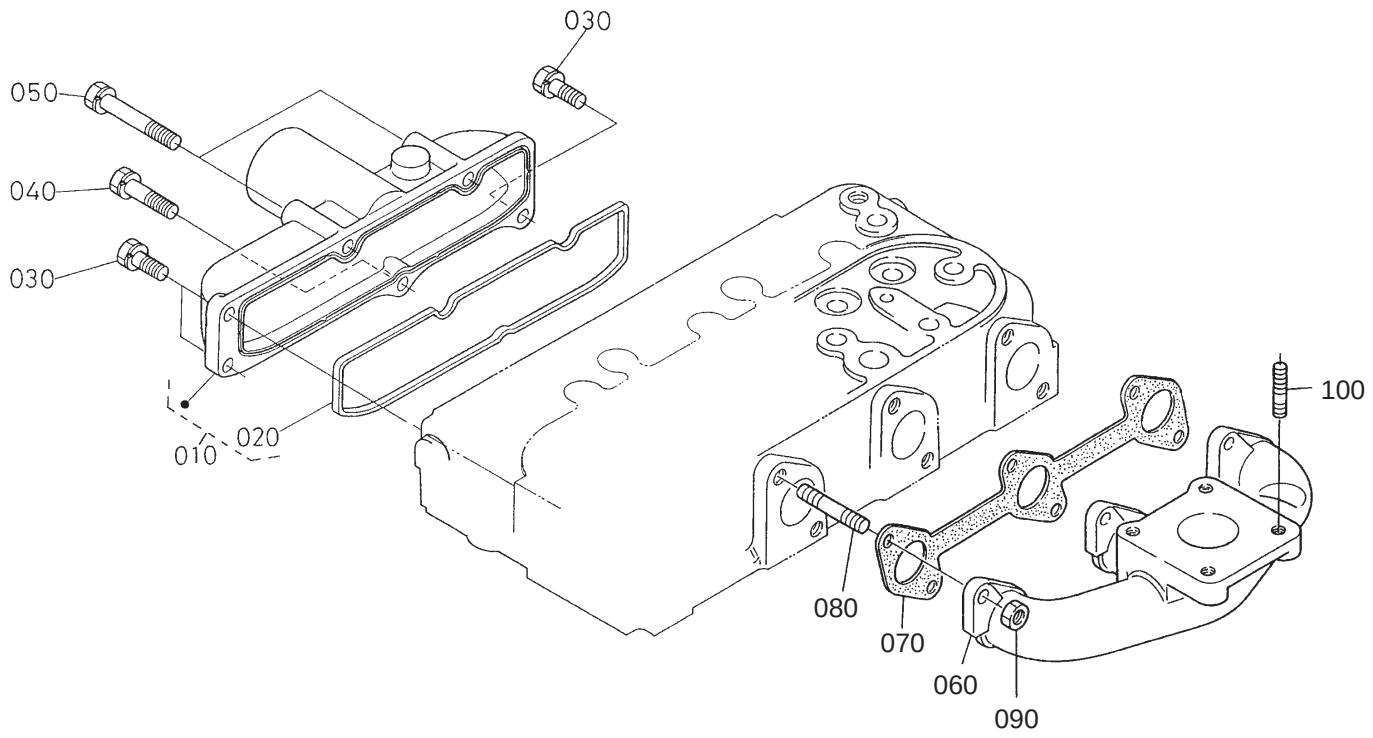


Sheet No.:77

Valve and Rocker Arm Assembly

Ref. No.	Part No.	Qty.	Description
010	98–9494	3	Valve–Inlet
020	98–9495	3	Valve, Exhaust
030	98–9648	6	Spring,Valve
040	98–9498	6	Retainer–Valve
050	98–9390	6	Collet–Set, Valve Spring
060	99–8385	6	Seat–Stem, Valve
070	98–9497	6	Cap–Valve
080	105–3790	1	R–Arm Shaft ASM
090	100–9265	2	Bolt
100	98–9505	3	Bracket–Arm, Rocker
110	98–7602	1	Pin–Spring
120	98–9507	2	Washer–Shaft, R–Arm
130	3256–1	2	Washer–Flat
140	98–9504	2	Spring–Arm, Rocker
160	98–9501	6	Rocker Arm ASM
170	98–9502	6	Screw,Adjusting
180	98–9503	6	Nut
190	98–9506	3	Stud
200	98–9393	3	Nut
210	98–9385	3	Washer – Flat

Ref. No.	Part No.	Qty.	Description



Sheet No.:78

Inlet and Exaust Manifold Assembly

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

Ref. No.	Part No.	Qty.	Description

Maintenance Record

Date								

Maintenance Record

Date								

Maintenance Record

Date								


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