



## Groundsmaster<sup>®</sup> 3000-D 2WD/4WD Traction Unit

Model No. 30301—200000201 and Up

Model No. 30301TC—200000201 and Up

Model No. 30302—200000201 and Up

Model No. 30302TC—200000201 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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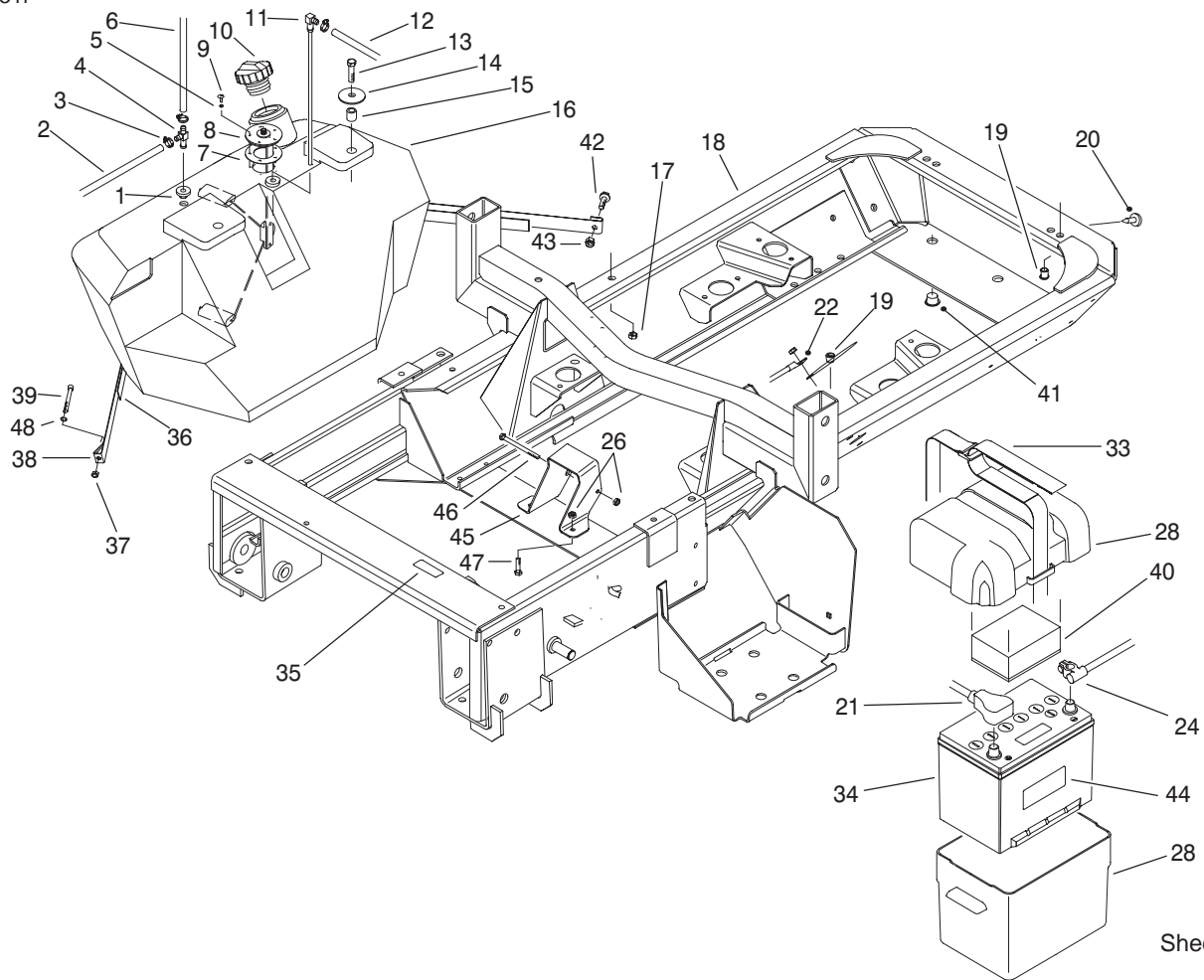
## Accessories

<b>Description</b>	<b>Model / Part No.</b>	<b>Description</b>	<b>Model / Part No.</b>
Two Post ROPS Kit . . . . .	30388	Road Light Kit . . . . .	30397
Cruise Control Kit . . . . .	30394	Standard Seat Kit . . . . .	30398
Standard Seat Suspension Kit . . . . .	30395	Armrest Kit . . . . .	30707
Deluxe Seat Suspension Kit . . . . .	30396	Hydraulic Kit (Contour Deck) . . . . .	30726

## Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

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

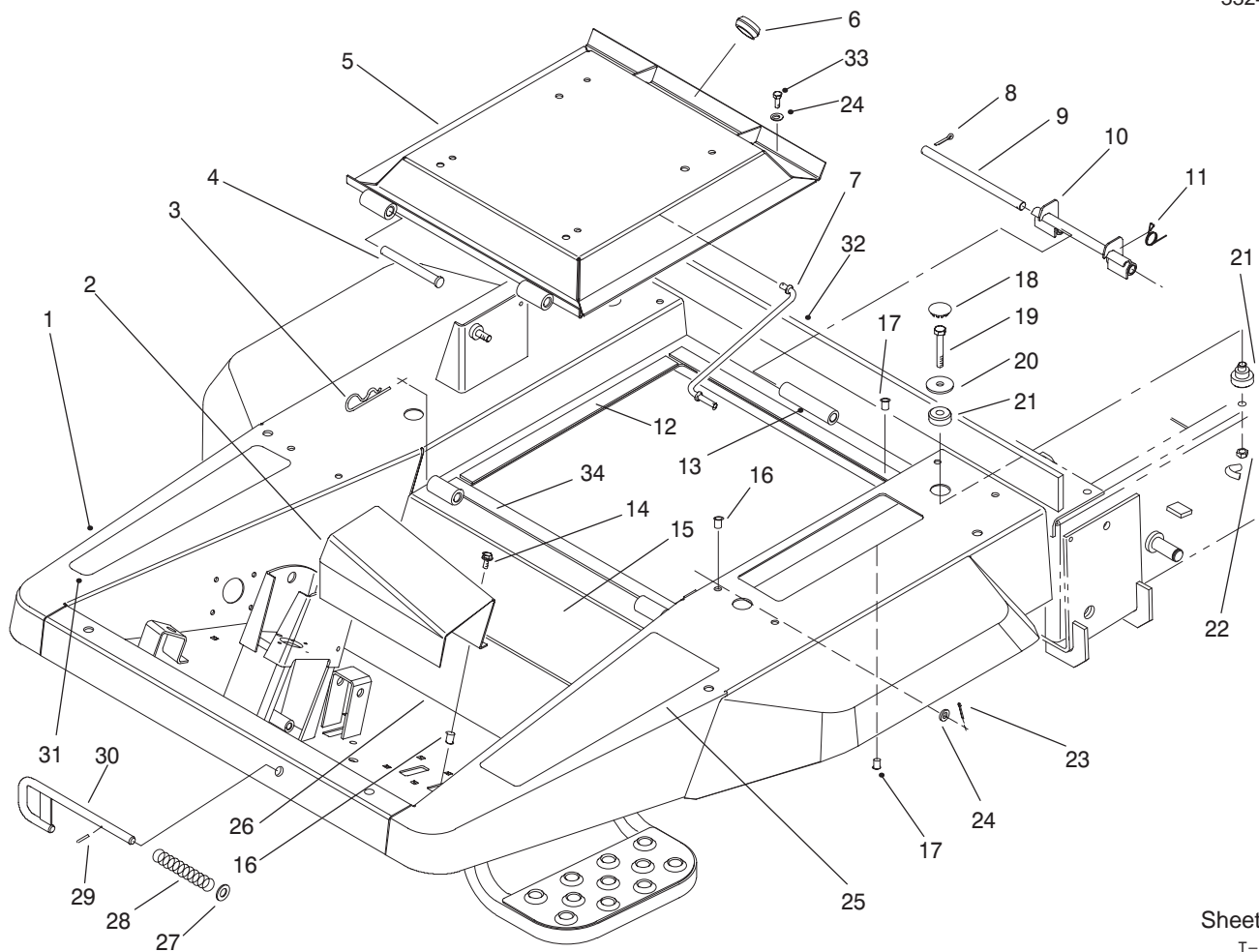


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## Frame, Fuel Tank & Battery Assembly

Ref. No.	Part No.	Qty.	Description
1	46-6560	2	Bushing
2	93-5483	1	Hose-Fuel
3	2412-108	3	Clamp-Hose
4	93-5119	1	Fitting
5	3253-15	5	Washer-Lock
6	95-5936	1	Hose-Fuel
7	62-7650	1	Gasket
8	92-9267	1	Sender-Fuel
9	32122-24	5	Screw
10	93-3102	1	Cap-Diesel Fuel
11	93-5453	1	Stand-Pipe
12	93-5484	1	Hose-Fuel
13	33105-040	2	Screw-HHF
14	83-1040	2	Washer-Rebound
15	93-5384	2	Spacer
16	95-5621	1	Tank-Fuel
17	33025-00	2	Nut-Lock
18	100-5596	1	Frame (Incl. Ref. #19 & 35)
19	93-5450	7	Nut-Clinch
20	237-37	3	Bumper-Rubber
21	98-7093	1	Cable-Battery, Positive
22	18-2770	1	Cable-Ground
24	93-5418	1	Cable-Battery, Negative
26	33024-00	3	Nut-Lock

Ref. No.	Part No.	Qty.	Description
28	93-7595	1	Battery Box ASM
33	94-1445	1	Strap-Battery Box
34		1	Battery
35	85-4730	1	Decal-Hydraulic Oil Only
35	93-8067	1	Decal-Hydraulic Oil Only (Europe)
36	93-5273	1	Strap-Felt
37	32146-17	1	Nut-Lock
38	95-3034	1	Strap
39	3274-54	1	Screw-HSH
40	93-7968	1	Pad-Foam
41	95-1587	2	Plug-1"
42	33103-016	1	Screw-HHF
43	33023-00	1	Nut-Lock
44	93-6668	1	Decal-Battery Charging (Europe)
45	95-2637-03	1	Guard-Driveshaft
46	33114-120	1	Screw-HH
47	33104-020	2	Screw-HHF
48	3253-3	1	Washer-Lock



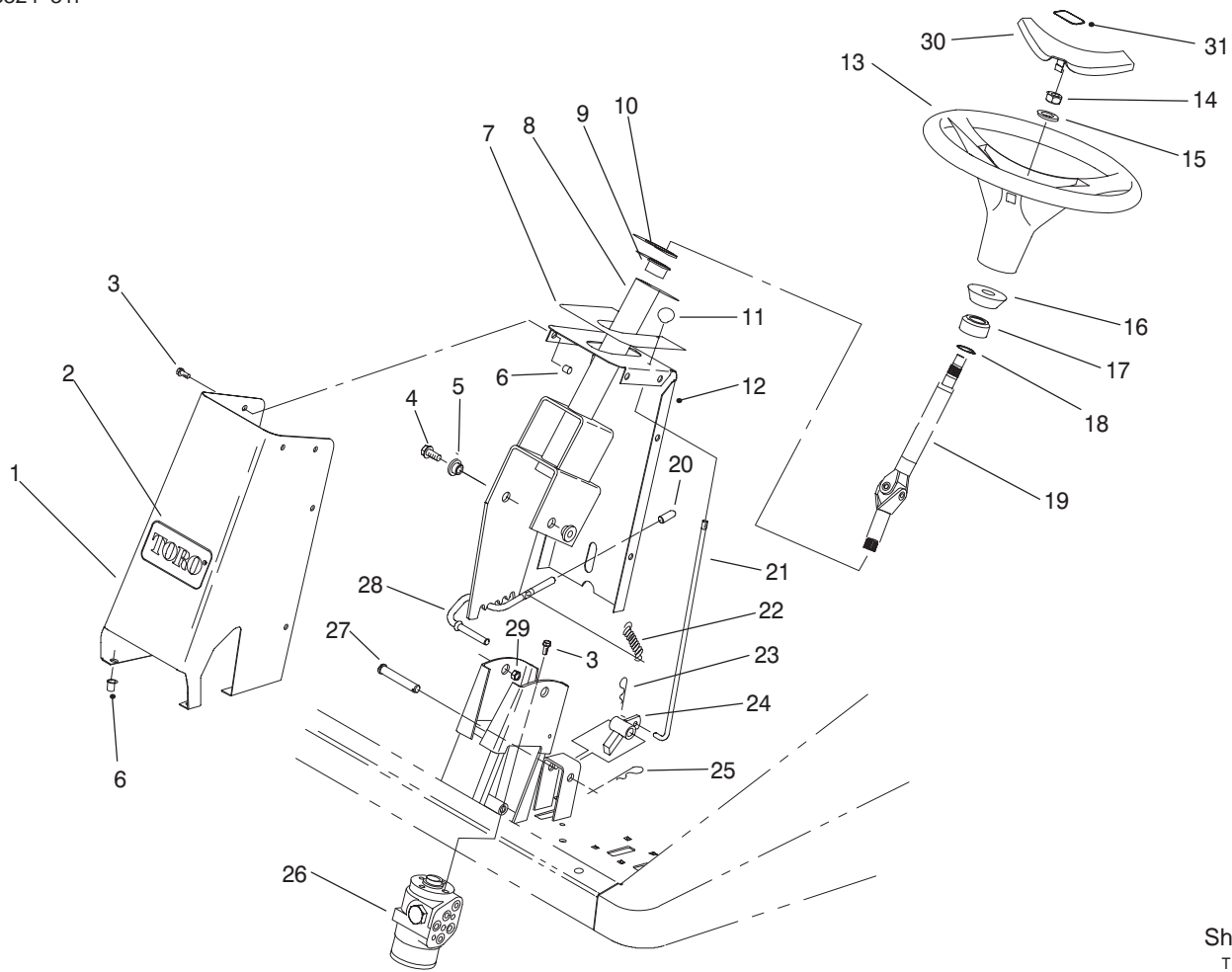
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## Front Frame & Seat Base Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5627	1	Platform (Incl. Ref. #15-17, 25-26, & 31)
2	93-5310-01	1	Cover-Tubes
3	3290-355	2	Pin-Hair, Cotter
4	283-83	2	Pin-Clevis
5	98-2395-03	1	Base-Seat
6	240-5	1	Grommet
7	93-5338	1	Rod-Prop
8	3272-11	2	Pin-Cotter
9	93-5366	1	Shaft-Latch
10	93-5363	1	Latch
11	93-5367	1	Spring-Torsion
12	93-5334	2	Strip-Foam, Seat
13	93-5335	1	Strip-Foam, Seat
14	33103-016	2	Screw-HHF
15	93-5348	1	Abrasive-Floor
16	93-5447	12	Nut-Clinch
17	93-5449	9	Nut-Clinch
18	93-3094	4	Plug-Cap
19	33115-060	4	Screw-HH
20	93-5308	4	Washer-Mount, ISO
21	93-5307	4	Mount-ISO
22	33025-00	4	Nut-Lock
23	3272-5	2	Pin-Cotter
24	3256-23	2	Washer-Flat

Ref. No.	Part No.	Qty.	Description
24	3256-23	4	Washer-Flat (Europe)
25	93-5507	1	Abrasive-Platform
26	93-5349	1	Abrasive-Floor
27	3256-69	1	Washer-Flat
28	28-0570	1	Spring-Compression
29	32121-79	1	Pin-Roll
30	95-3033	1	Rod
31	92-5772	1	Decal-Footrest, RH
31	93-7834	1	Decal-Pedal, Traction (Europe)
32	93-5255	1	Strip-Foam
33	33114-020	2	Screw-HH (Europe)
34	99-5789	1	Foam Strip



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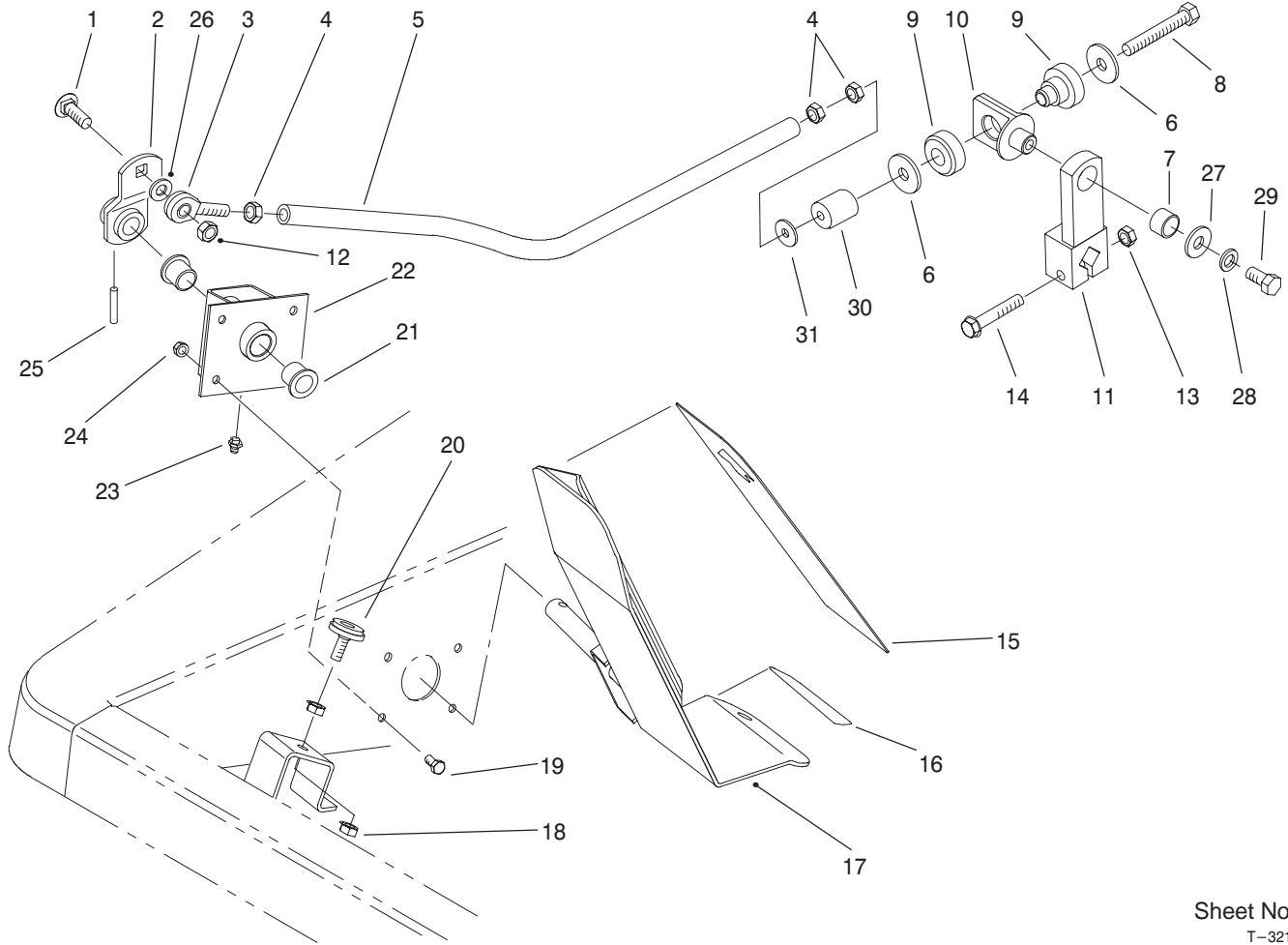
## Steering Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5633	1	Housing -Tower (Incl. Ref. #2 & 6)
2	67-1300	1	Decal-Tower
3	33103-016	16	Screw-HHF
4	33105-025	2	Screw-HHF
5	93-5988	2	Spacer
6	93-5447	12	Nut-Clinch
7	95-0814	1	Decal-Tower
8	93-5205-03	1	Column-Steering
9	256-132	2	Bushing-Flange
10	256-260	4	Washer
11	93-5312	1	Knob
12	95-5100	1	Cover-Tower (Incl. Ref. #6 & 7)
13	98-1471	1	Wheel-Steering
14	93-5590	1	Nut
15	3256-27	1	Washer-Flat
16	93-5429	1	Collar-Foam
17	93-5439	1	Seal-Steering
18	32151-29	2	Ring-Retaining
19	93-5428	1	Steering Shaft ASM
20	93-5446	1	Cap-Vinyl
21	93-5309	1	Rod-Brake, Parking
22	93-5985	1	Spring-Extension
23	3272-5	1	Pin-Cotter, Hair
24	93-5276-03	1	Pawl-Brake

Ref. No.	Part No.	Qty.	Description
25	3272-10	1	Pin-Cotter, Hair
26	93-5165	1	Unit-Control, Steering
27	283-5	1	Pin-Clevis
28	93-5989	1	Rod-Tilt
29	33005-00	2	Nut-HFH
30	88-3870	1	Cover
31	98-1459	1	Decal-Toro



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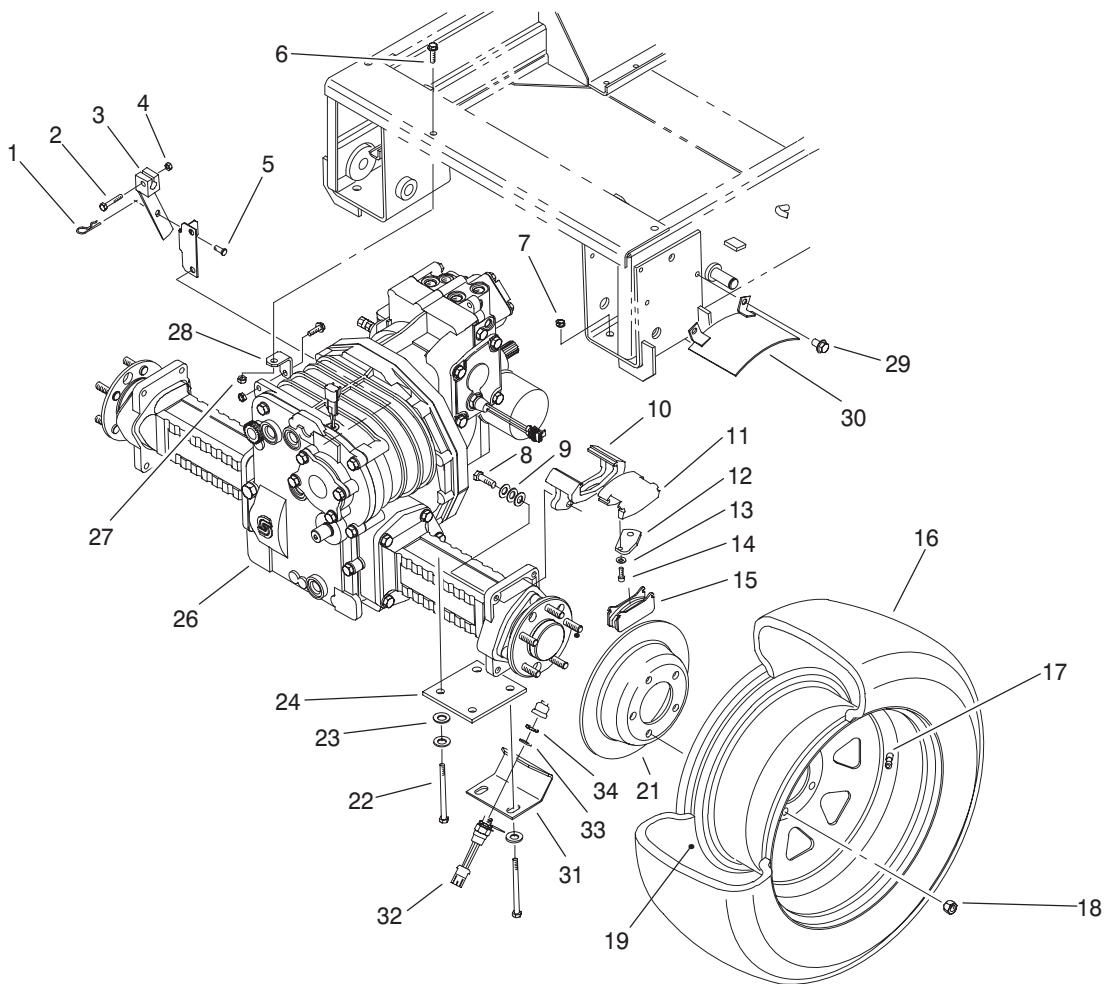
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## Traction Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	3231-25	1	Bolt-Carriage
2	93-5137	1	Lever-Traction
3	2411-36	1	Bearing-End, Rod
4	3220-3	3	Nut-Jam
5	100-5597-03	1	Tube-Control
6	63-8410	2	Washer-Flat
7	256-42	1	Bushing
8	3211-15	1	Screw-HH
9	95-2596	1	Mount-ISO
10	95-2595	1	Pivot
11	95-2598-03	1	Lever
12	3296-59	1	Nut-Lock
13	33024-00	1	Nut-Lock
14	33104-050	1	Screw-HHF
15	93-5347	1	Abrasive-Pedal
16	93-5368	1	Abrasive-Pedal
17	93-5133-01	1	Pedal-Traction
18	3217-6	2	Nut-Hex
19	33113-016	4	Screw-HH
20	32141-36	1	Screw-Level
21	256-10	2	Bushing-Flange
22	93-5129-03	1	Bracket-Pedal
23	302-5	1	Fitting-Grease
24	33003-00	1	Nut-HF
25	32121-9	1	Pin-Roll
26	3256-24	1	Washer-Flat

Ref. No.	Part No.	Qty.	Description
27	80-6990	1	Washer
28	3253-21	1	Washer-Lock
29	3211-2	1	Screw-HH
30	66-4310	1	Tube-Pivot
31	3256-3	1	Washer



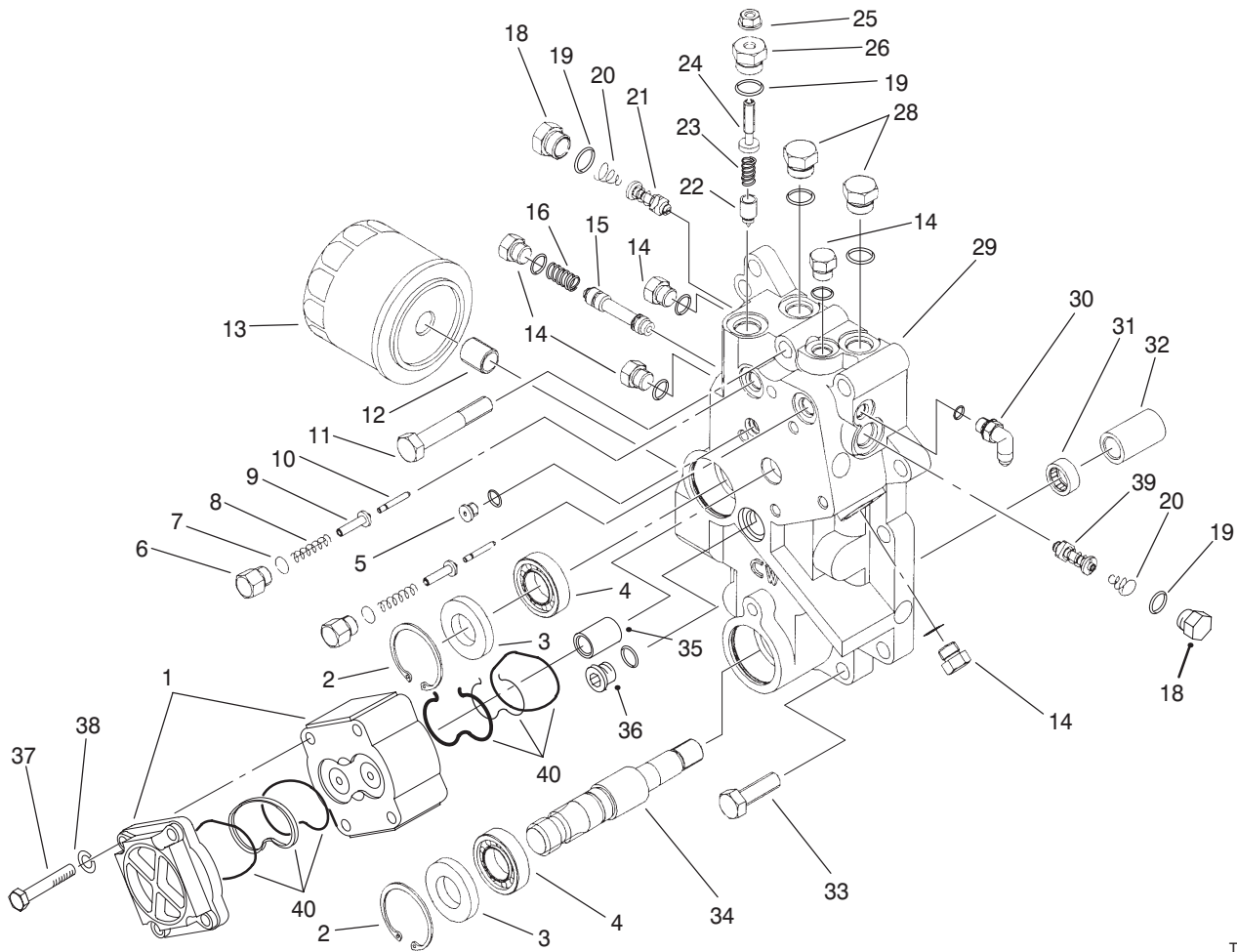
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## Front Axle Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	3290-467	1	Pin-Cotter, Hair	24	93-5036-03	2	Plate-Axle
2	33114-040	1	Screw-HH	26	95-2630	1	Axle-2 Speed
3	93-5383-03	1	Lever	27	33024-00	2	Nut-Lock
4	33024-00	1	Nut-Lock	28	93-5306	1	Bracket-Transaxle
5	283-62	1	Pin-Clevis	29	32144-14	4	Screw-HH
6	33104-025	2	Screw-HHF	30	93-5977-03	2	Shield-Brake
7	33006-00	8	Nut-HF	31	93-4869-03	1	Bracket-Switch
8	323-44	4	Screw-HH	32	94-3429	1	Switch
9	3290-461	12	Washer-Belleville	33	3254-5	1	Washer-Lock
10	95-5697	2	Bracket-Mounting	34	3220-6	2	Nut-Jam
11	95-2618	2	Housing				
12	94-4107	2	Lever				
13	94-4106	2	Washer				
14	95-2616	2	Screw				
15	95-5698	4	Pad				
16	93-5431	2	Tire (30301TC, 30302TC)				
16	95-2638	2	Tire (30301, 30302)				
17	232-27	2	Stem-Valve				
18	93-5268	10	Nut-Lug				
19	93-5548	2	Rim (30301TC, 30302TC)				
19	98-2374	2	Rim (30301, 30302)				
21	93-5958	2	Rotor-Brake				
22	33116-110	8	Screw-HH				
23	3256-26	14	Washer-Flat				

\* Not Illustrated



T-2257-1

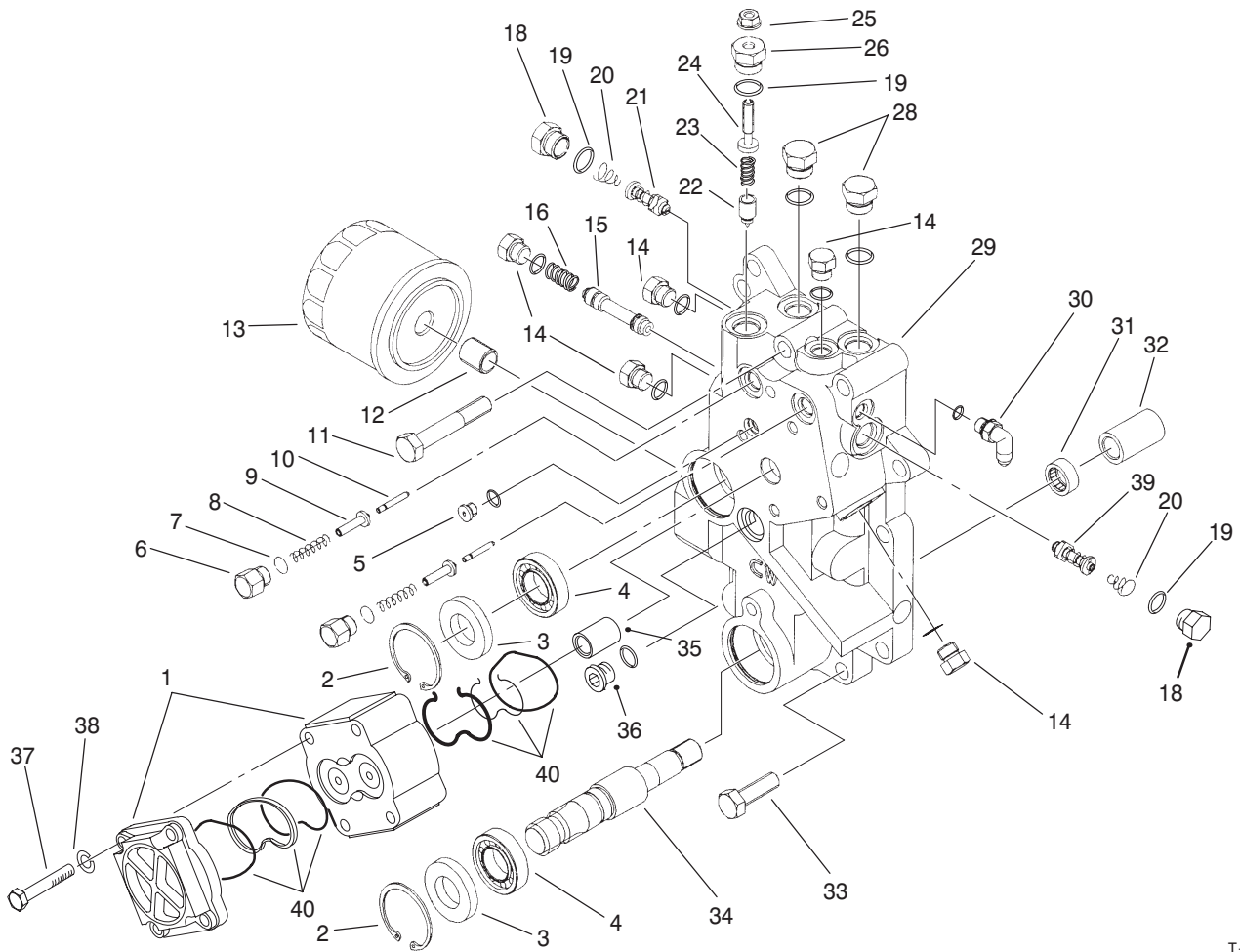
## Front Axle Center Section Assembly

Ref. No.	Part No.	Qty.	Description
1	94-3968	1	Pump-Gear (Incl. Ref. #37, 38 & 40)
2	94-4029	2	Ring-Retaining
3	94-3925	2	Seal-Lip
4	94-3942	2	Bearing-Ball
5	75-0170	1	Plug ASM
6	94-3986	2	Plug-HH
7	94-3987	2	O-Ring
†8		2	Spring
†9		2	Sleeve ASM
1†10		2	Piston
11	94-3999	2	Screw
12	25-2660	1	Union-Filter
13	94-3951	1	Filter
14	69-3940	5	Plug ASM
†15		1	Spool
†16		1	Spring-Helical
18	75-0190	2	Plug
19	75-0240	3	O-Ring
20	75-0140	2	Spring-Conical
21	94-3979	2	Valve (6000 psi)
†22		1	Cone-Valve, Relief
†23		1	Spring-Helical
†24		1	Screw-Adjusting
25	94-4017	1	Nut

Ref. No.	Part No.	Qty.	Description
26	94-3990	1	Plug-Relief, Implement
28	28-3440	2	Plug ASM
†29		1	Center Section
30	94-4075	1	Elbow
31	94-4021	1	Bearing
32	94-4023	1	Coupling-Drive, 4-Wheel
33	94-4020	8	Screw
34	94-4022	1	Shaft-Drive, 4-Wheel
35	94-3922	1	Coupling-Pump, Gear
36	94-9172	1	Plug ASM
37	94-9182	4	Screw
38	94-9183	4	Washer
39	84-0540	1	Valve (5000 psi)
40	94-9184	1	Kit-Seal, Gear Pump
*	95-7033	1	Center Section ASM (Incl. Ref. #5-10, 12, 14-29 & 31)
*	94-9168	1	Implement Relief Valve ASM (Incl. Ref. #19 & 22-26)
*	94-9169	1	Kit-Valve, SCR (6000 psi) (Incl. Ref. #18-21)

\* Not Illustrated

† Not Serviced Separately



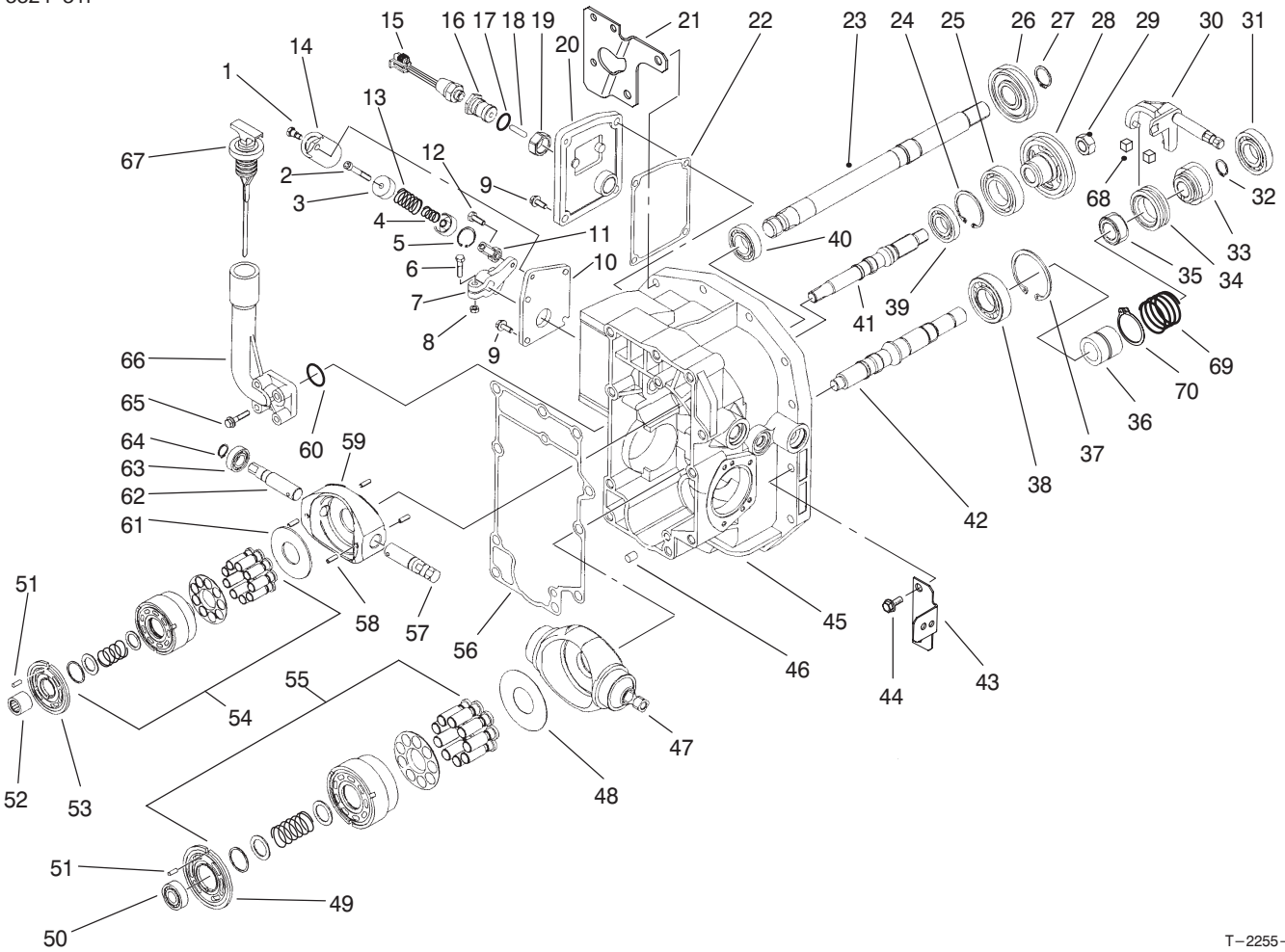
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## Front Axle Center Section Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
*	94-9170	1	Kit-Charge Press. Priority Valve (Incl. Ref. #14-16)
*	94-9171	1	Kit-Valve, Easy Ride (Incl. Ref. #6-10)

Ref. No.	Part No.	Qty.	Description

\* Not Illustrated



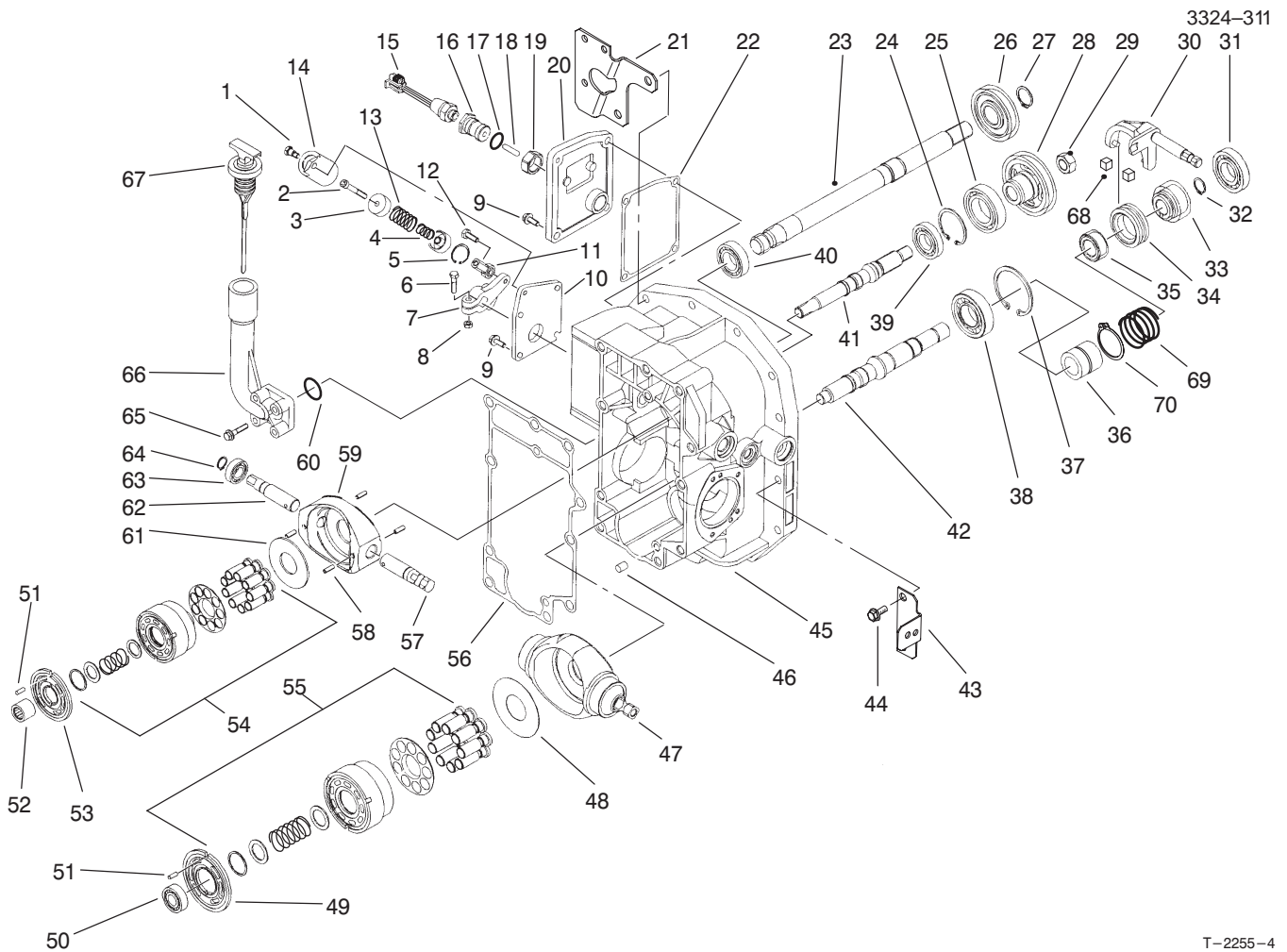
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## Hydraulic Housing Assembly

Ref. No.	Part No.	Qty.	Description
1	94-3928	1	Screw-HH, Shoulder
†2		1	Screw-Head, Socket
†3		2	Seat-Spring
†4		1	Spring-Compression
†5		1	Ring-Retaining
6	94-3940	1	Screw-HH
†7		1	Handle-Return, Neutral
8	94-3936	1	Nut-Lock
9	94-4002	8	Screw-HHF
†10		1	Plate-Return, Neutral
†11		1	End-Rod, Female
12	94-3927	1	Screw-HH
†13		1	Spring-Compression
†14		1	Housing-Return, Neutral
15	95-7034	2	Switch
16	94-4045	1	Adjuster-Threaded
17	28-3570	1	O-Ring
18	94-4046	1	Pin
19	94-4044	1	Nut-Hex
20	94-3943	1	Cover-Return, Neutral
21	94-9282	1	Bracket-Balance, Counter
22	94-3944	1	Gasket-Return, Neutral

Ref. No.	Part No.	Qty.	Description
23	94-3901	1	Shaft-Input
24	94-4029	1	Ring-Retaining
25	94-3971	1	Bearing-Ball
26	94-3903	1	Pinion-Drive, Pump
27	94-3994	1	Ring-Retaining
28	94-3905	1	Gear-Drive, Pump
29	94-3953	1	Nut-Lock
30	95-7875	1	Yoke-2 Speed
31	251-8	1	Bearing
32	94-3963	1	Ring-Retaining
33	94-3919	1	Pinion-Drive, Final
†34		1	Coupling-Gear, Change
†35		1	Coupling-2 Speed
36	95-2728	1	Spacer-Drive, Final
37	94-3997	3	Ring-Retaining
38	84-0310	1	Bearing
39	94-3960	1	Bearing-Ball
40	94-3942	1	Bearing-Ball
41	94-3904	1	Shaft-Pump
42	94-3906	1	Shaft-Motor
43	93-5381	1	Bracket
44	94-4004	23	Screw-HHF

† Not Serviced Separately



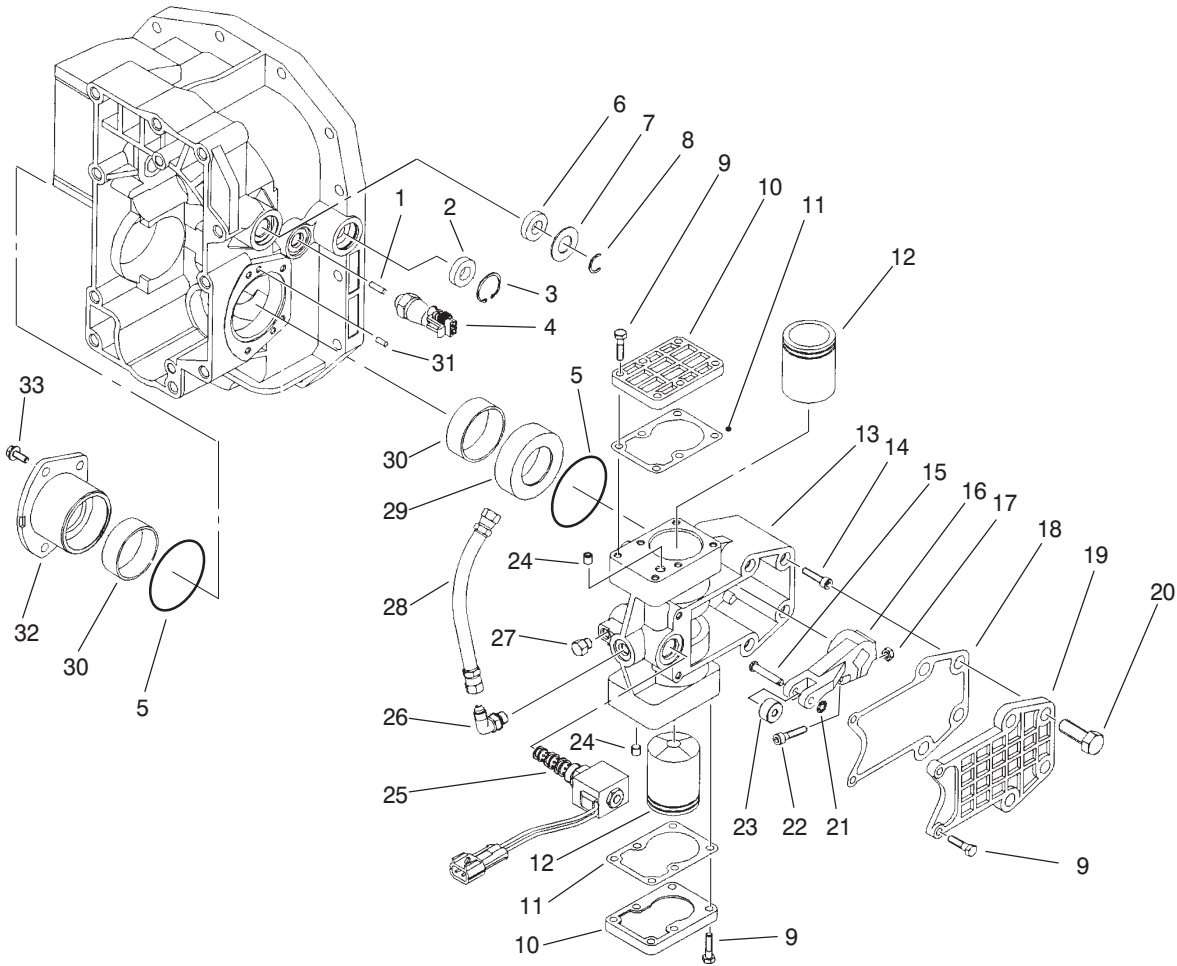
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## Hydraulic Housing Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
45	95-7038	1	Housing-Motor, Variable
46	94-3975	2	Pin
47	94-4058	1	Swashplate-Variable
48	75-0400	1	Plate-Thrust
49	94-3921	1	Plate-Valve, Motor
50	94-3956	1	Bearing-Ball
51	94-3974	2	Pin
52	94-3957	1	Bearing-Needle
53	94-3973	1	Plate-Valve, Pump
54	48-1800	1	Kit-Block, Cylinder
55	75-0470	1	Kit-Block, Cylinder
56	94-3992	1	Gasket-Section, Center
57	94-3946	1	Shaft-Trunnion
58	32121-91	4	Pin
59	94-3967	1	Swashplate-Pump, Variable
60	94-4051	1	O-Ring
61	94-3978	1	Plate-Thrust
62	94-3934	1	Shaft-Trunnion
63	94-4040	1	Bearing-Ball
64	94-3932	1	Ring-Retaining
65	94-4050	4	Screw-HHF
66	94-4048	1	Housing-Dipstick
67	94-4049	1	Dipstick

Ref. No.	Part No.	Qty.	Description
68	95-7036	2	Guide-Slot
69	95-2730	1	Spring
70	95-2729	1	Ring-Retaining
*	93-5969	1	Neutral Return ASM (Incl. Ref. #1-14)
*	93-5971	1	Kit-Seal, Overhaul
*	94-4149	1	Gear Change Coupling ASM (Incl. Ref. #34 & 35)

\* Not Illustrated



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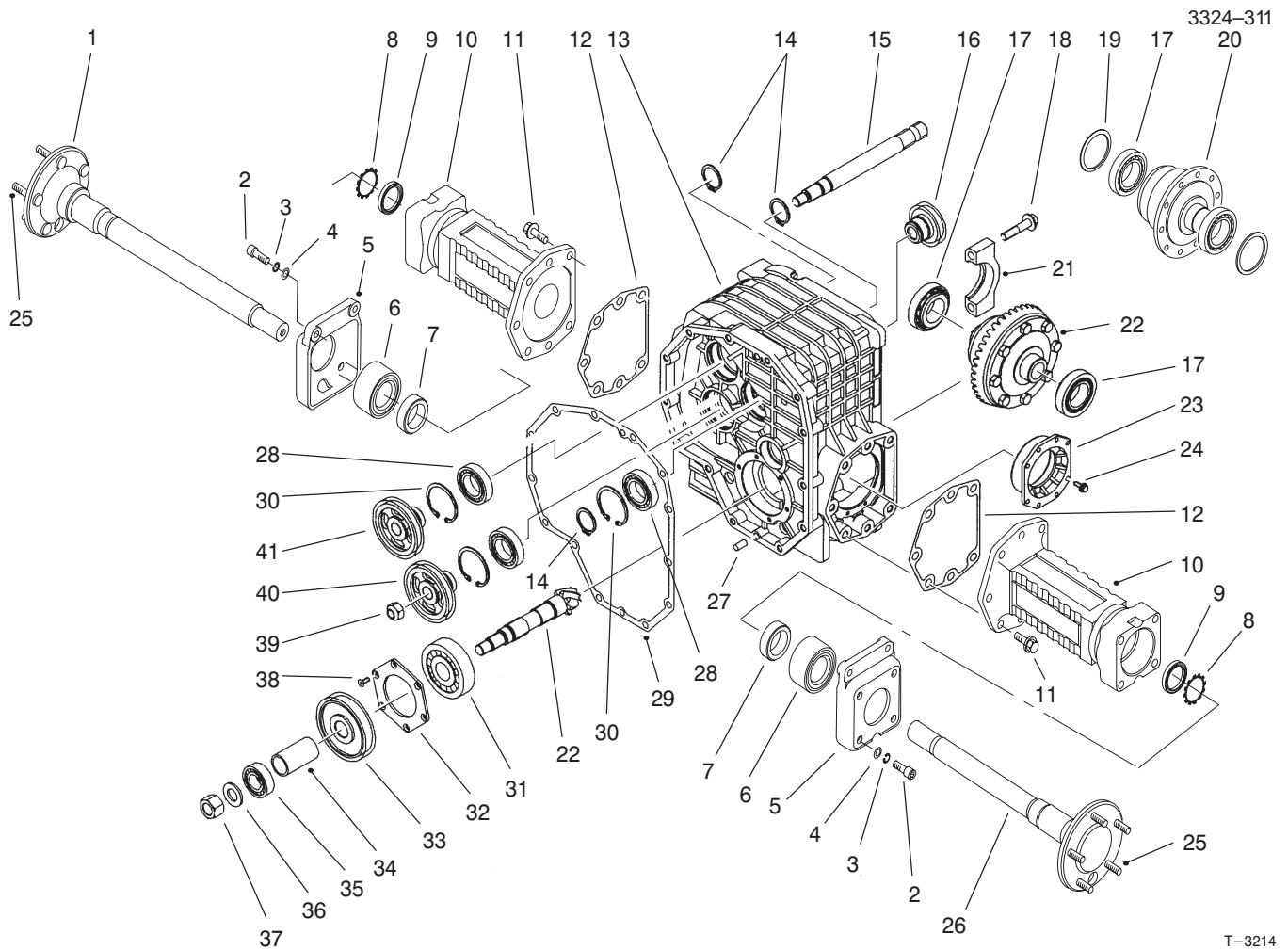
## Hydraulic Housing Assembly-Control

Ref. No.	Part No.	Qty.	Description
1	94-4028	1	Roller-Needle
2	94-3939	1	Seal-Lip
3	94-3962	1	Ring-Retaining
4	95-7034	2	Switch
5	94-4059	2	O-Ring
6	25-3210	1	Seal
7	25-2510	1	Washer
8	94-3945	1	Ring-Retaining
9	95-7037	14	Screw-HH
10	94-4063	2	Cover-Servo
11	95-7040	2	Gasket-Cover
12	94-4070	2	Piston-Control
13		1	Housing-Control
14	94-4009	4	Screw
†15		1	Pin-Headed
†16		1	Arm-Control
17	94-3936	1	Nut-Lock
18	95-7039	1	Gasket-Housing
19	94-4065	1	Cover-Control
20	94-4007	4	Screw-HHF
†21		1	Washer-Retention, Shaft
22	94-4069	1	Screw
†23		1	Roller-Arm, Control
†24		2	Plug-Orifice
25	94-4072	1	Valve-Solenoid

Ref. No.	Part No.	Qty.	Description
26	94-4075	2	Elbow
27	94-4074	1	Plug
28	94-4076	1	Hose
†29		1	Carrier-Bearing, Trunnion
†30		2	Bearing-Journal
31	69-3450	2	Pin
†32		1	Carrier-Trunnion Bearing
33	94-4026	4	Screw-HHF
*	93-5968	1	Trunnion Bearing Carrier ASM (Incl. Ref. #30 & 32)
*	93-5967	1	Trunnion Bearing Carrier ASM MV (Incl. Ref. #29 & 30)
*	95-7041	1	Housing Control ASM (Incl. Ref. #13, 24 & 27)
*	94-9174	1	Control Arm ASM (Incl. Ref. #15-17 & 21-23)

\* Not Illustrated

† Not Serviced Separately



T-3214

## Front Axle Gear Housing Assembly

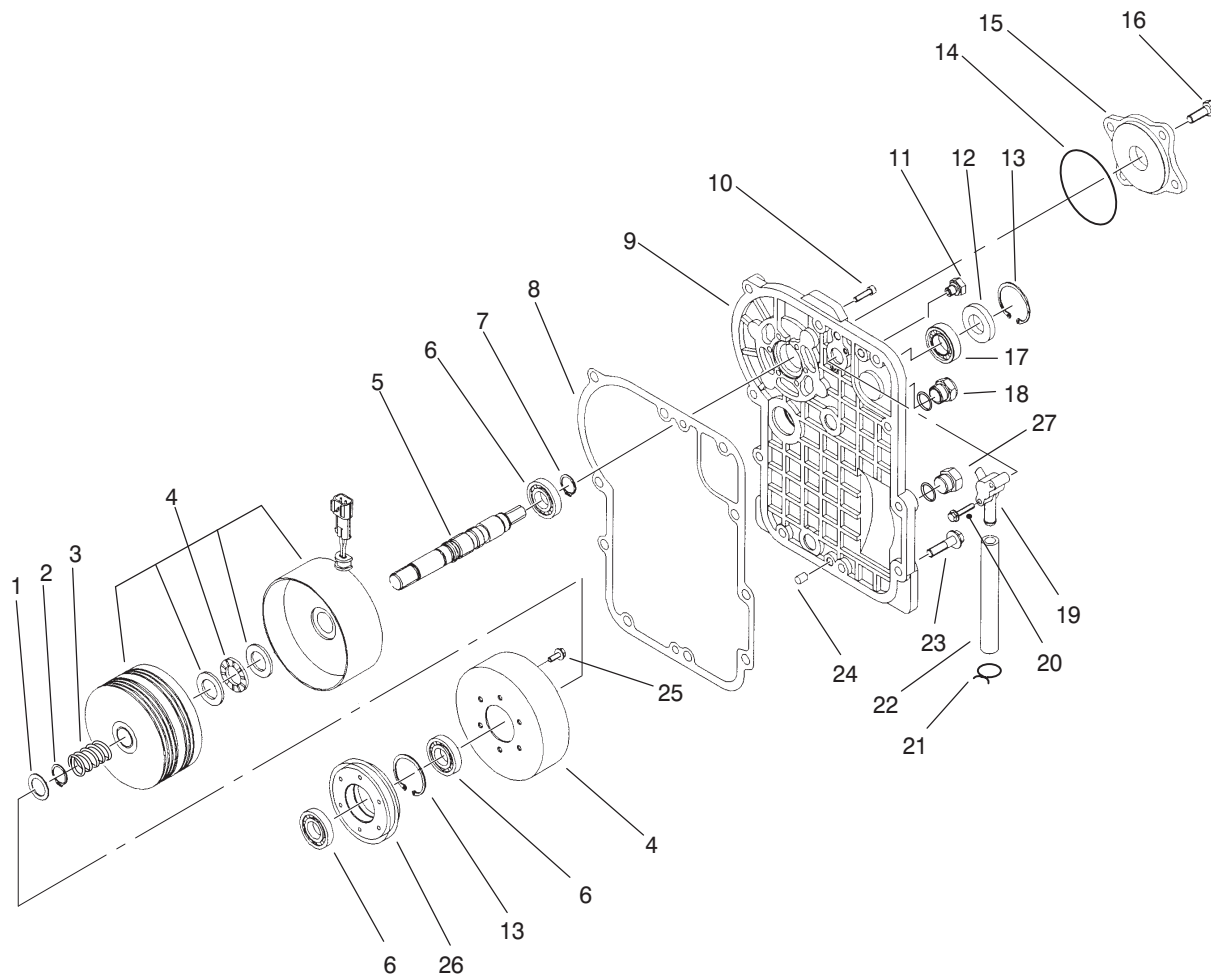
Ref. No.	Part No.	Qty.	Description
1	94-4031	1	Shaft-Axle, Left
2	94-4036	8	Screw
3	3253-7	8	Washer-Lock
4	3256-6	8	Washer-Flat
5	95-2632	2	Bracket-Brake
6	94-4030	2	Bearing
7	94-4144	2	Collar-Bearing
8	94-4142	2	Ring-Retaining
9	94-4032	2	Seal-Lip
10	95-2631	2	Housing-Axle
11	94-4007	14	Screw-HHF
12	94-4015	2	Gasket-Housing
†13		1	Housing-Gear
14	69-3170	3	Ring-Retaining
15	94-3913	1	Shaft-PTO, Front
16	94-4052	1	Pinion-Clutch, PTO
17	93-5966	2	Kit-Bearing
18	94-4003	2	Screw-HHF
19		2	Washer
20	99-5781	1	Differential ASM
†21		1	Clamp-Differential
22	99-5780	1	Differential Ring & Pinion
†23		1	Carrier-Bearing
24	94-4002	6	Screw-HHF
25	94-4143	10	Stud-Wheel

Ref. No.	Part No.	Qty.	Description
26	94-4035	1	Shaft-Axle, Right
27	94-3975	4	Pin
28	94-3971	3	Bearing-Ball
29	94-3959	1	Gasket-Housing
30	94-3997	3	Ring-Retaining
31	94-3961	1	Bearing-Ball
†32		1	Retainer-Bearing
33	94-3912	1	Gear-Drive, Final
34	94-3958	1	Spacer-Pinion
35	75-0520	1	Bearing
36	99-5784	1	Washer
37	99-5783	1	Nut-Lock
38	98-1812	6	Screw
39	94-3953	1	Nut-Lock
40	94-3914	1	Gear-Drive, PTO
41	94-3909	1	Pinion-Drive, PTO
*	95-2634	1	LH Axle ASM (Incl. Ref. #1-12 & 25)
*	95-2633	1	RH Axle ASM (Incl. Ref. #2-12, 25 & 26)

\* Not Illustrated

† Not Serviced Separately





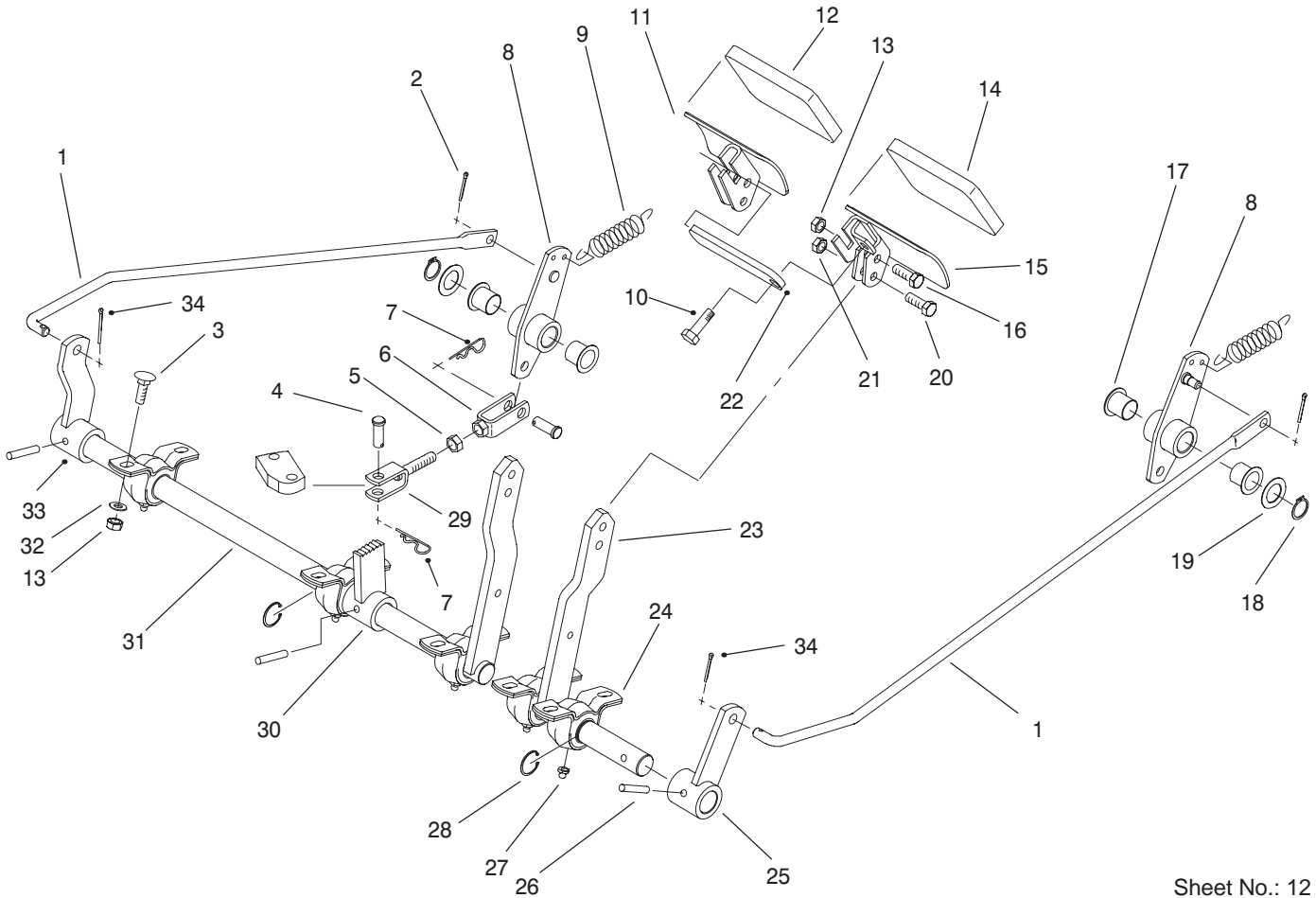
T-2259-1

## Front Axle Cover Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	94-3995	1	Washer	27	104-0112	1	Plug-Magnetic
2	94-4006	1	Ring-Retaining	*	94-9179	1	Clutch ASM (Incl. Ref. #1-7, 13, 25 & 26)
3	94-4005	1	Spring-Compression	*	94-9180	1	Front Cover ASM (Incl. Ref. #9, 11, 18, & 19-22)
†4		1	Clutch-PTO	*	94-9181	1	Lubricating Nozzle ASM (Incl. Ref. #19, 21 & 22)
5	94-3910	1	Shaft-Clutch				
6	94-3960	3	Bearing-Ball				
7	94-3996	1	Ring-Retaining				
8	94-4001	1	Gasket-Cover, Front				
9	94-3991	1	Cover-Front				
10	94-4009	6	Screw				
11	94-3998	1	Vent-Breather				
12	94-3925	1	Seal-Lip				
13	94-4029	2	Ring-Retaining				
14	94-4011	1	O-Ring				
15	94-4010	1	Cover-Gerotor				
16	94-4008	4	Screw				
17	94-3942	1	Bearing-Ball				
18	67-8030	1	Plug				
†19		1	Tube-Lubrication				
20	95-7037	2	Screw-HHF				
†21		2	Clamp				
†22		1	Hose-Lubricating				
23	94-4004	10	Screw-HHF				
24	94-3975	2	Pin				
25	94-4026	6	Screw-HHF				
26	94-4053	1	Gear-Clutch, PTO				

\* Not Illustrated

† Not Serviced Separately

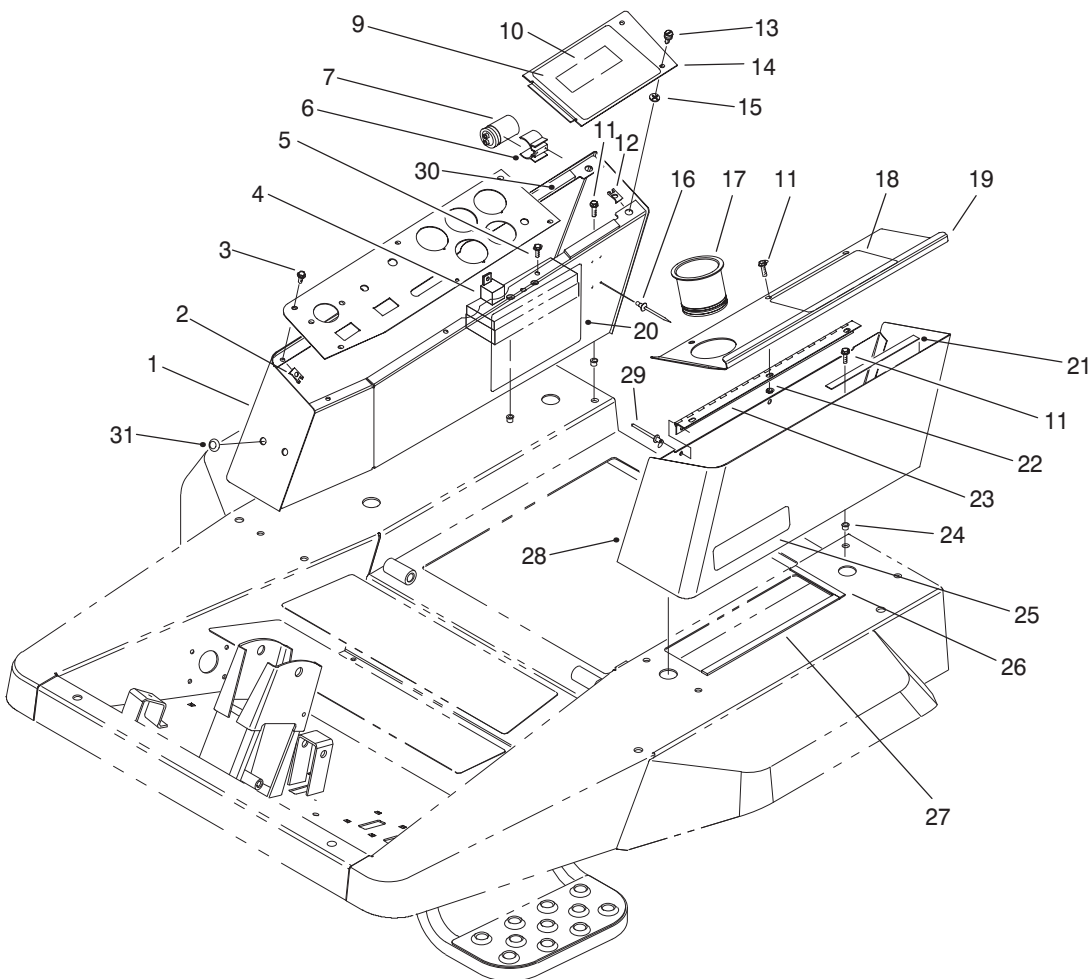


Sheet No.: 12  
T-2329-1

## Brake Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5333	2	Rod-Control
2	3272-7	2	Pin-Cotter
3	33124-020	10	Screw-Carriage
4	283-2	4	Pin-Clevis
5	3220-3	2	Nut-Jam
6	93-5552	2	Clevis
7	3290-467	4	Pin-Cotter, Hair
8	93-5326	2	Bellcrank
9	93-5262	2	Spring-Extension
10	33114-020	1	Screw-HH
11	93-5456-03	1	Pedal-RH
12	27-7580	1	Pad-Turn, Right
12	93-8742	1	Footpad-Brake (Europe)
13	33024-00	14	Nut-Lock
14	27-7570	1	Pad-Turn, Left
14	93-8742	1	Footpad-Brake (Europe)
15	93-5455-03	1	Pedal-LH
16	33114-025	3	Screw-HH
17	93-5313	4	Bushing-Nylon
18	32120-72	2	Ring-Retaining
19	3-6498	2	Washer-Thrust
20	322-4	1	Screw-HH
21	3218-2	1	Nut-Hex
22	93-5568	1	Arm-Lock

Ref. No.	Part No.	Qty.	Description
23	93-5280-03	1	Arm-Brake, LH
24	93-4849	5	Bearing-Block, Pillow
25	93-5473-03	1	Lever-Brake, LH
26	32121-15	3	Pin-Roll
27	302-5	5	Fitting-Grease
28	32151-83	3	Ring-Retaining
29	93-5551	2	Clevis
30	93-5475-03	1	Latch-Brake
31	93-5284-03	1	Arm-Brake, RH
32	33094-00	10	Washer-Flat
33	93-5474-03	1	Lever-Brake, RH
34	3272-10	2	Pin-Cotter

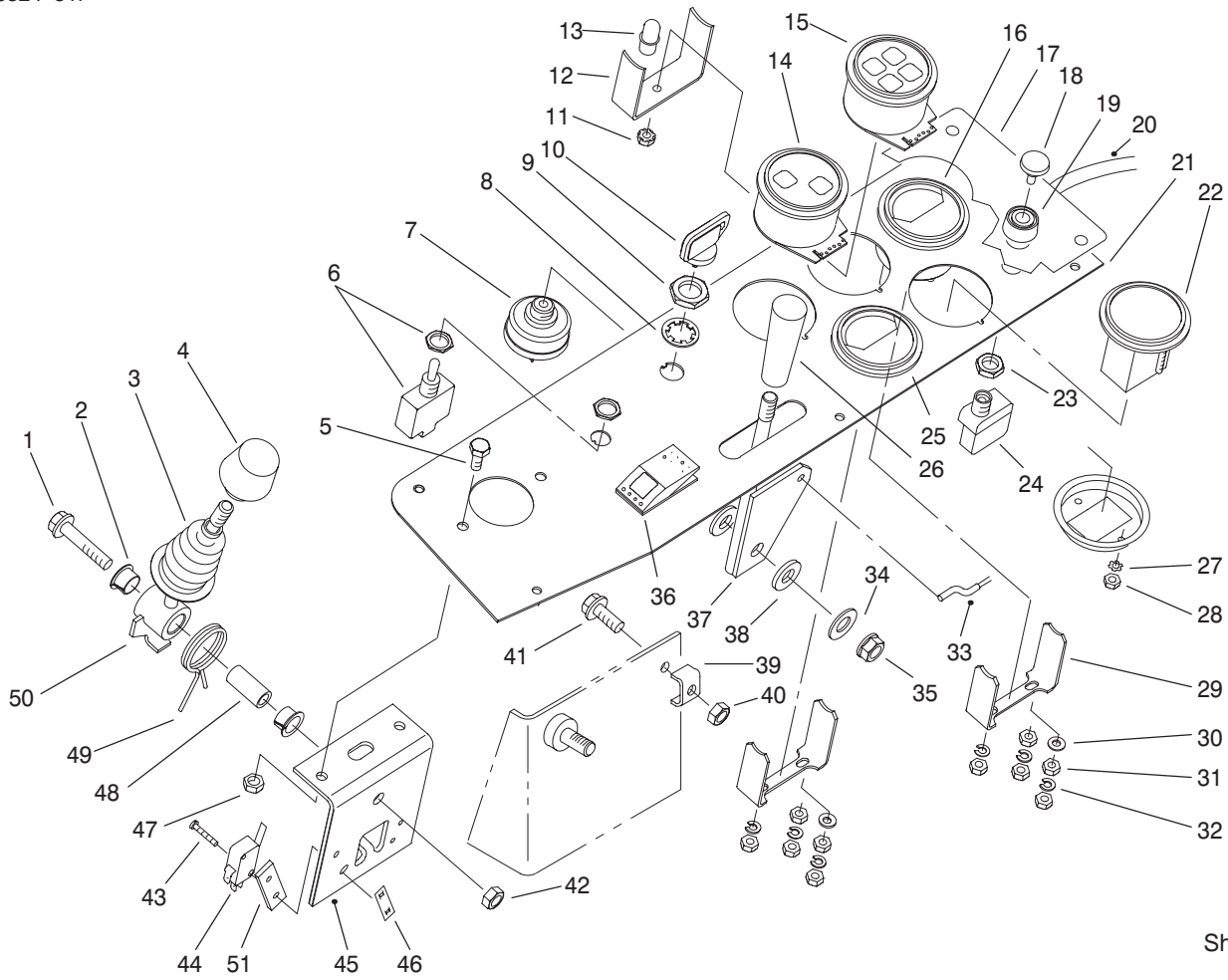


Sheet No.: 13  
T-2330-3

## Control Console Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	93-5369-03	1	Console	21	66-3050	2	Strip-Magnetic
2	3290-191	6	Nut-Speed	22	33003-00	3	Nut-HF
3	3250-14	6	Screw	23	93-5554	1	Hinge-Cover
4	116397	7	Relay	24	93-5447	8	Nut-Clinch
5	93-5949	2	Screw-HHF	25	67-1710	1	Decal-Caution
6	74-2310	2	Clamp-Plastic	25	93-7252	1	Decal-CE Mark (Europe)
7	37-2690	2	Capacitor	26	93-5413	2	Strip-Foam
9	93-5930	1	Decal-Operating Instructions	27	93-5414	2	Strip-Foam
9	94-6323	1	Decal-Operating Instructions (Europe)	28	93-5399-03	1	Console-LH
10	93-5932	1	Decal-Fuses	29	93-8744	3	Rivet-Pop
10	93-5624	1	Decal-Fuses (Europe)	30	93-5637	2	Strip-Foam
11	33103-016	12	Screw-HHF	31	93-5992	2	Plug-1/2"
12	93-5558	2	Nut-On, Clip	*	218-574	1	Fuse-7.5A
13	93-5556	2	Screw-Knurled	*	218-578	1	Fuse-10A
14	93-5527-03	1	Panel-Access	*	218-594	2	Fuse-20A
15	93-5557	2	Retainer-Nylon	*	94-4109	1	Fuse-80A
16	117433	2	Rivet-Pop	*	92-3188	2	Board-Diode
17	94-1410	1	Holder-Can, Beverage				
18	93-5621	1	Decal-Warning (Model 30301)				
18	93-5620	1	Decal-Warning (Model 30302)				
19	93-5403-03	1	Cover-Console				
20	93-5934	1	Decal-Service				

\* Not Illustrated

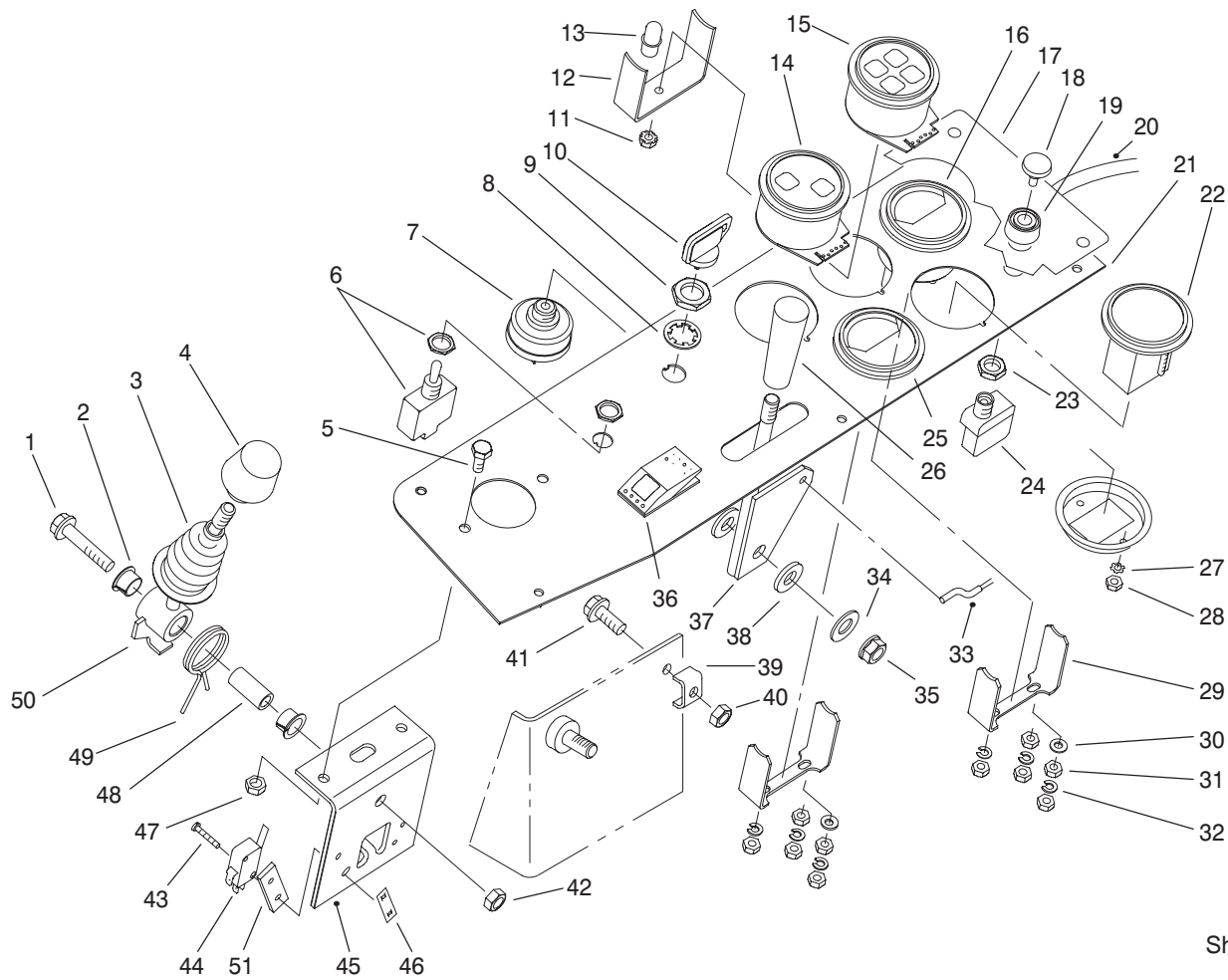


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T-2331-2

## Operator's Control Console Assembly

Ref. No.	Part No.	Qty.	Description
1	33104-040	1	Screw-HHF
2	93-5547	2	Bushing-Nylon
3	93-5961	1	Boot
4	233-37	1	Knob
5	33103-016	2	Screw-HHF
6	93-5270	1	Switch-Toggle
7	27-2360	1	Switch-Ignition (Incl. Ref. #8-9)
8	218-447	1	Washer-Lock
9	218-446	1	Nut-Hex
10	62-7770	1	Key-Ignition
11		1	Nut-Keps
12		1	Clamp
13		4	Bulb-Light
14	93-5481	1	Cluster-Light, Warning
15	93-5478	1	Cluster-Light, Warning
16	76-9060	1	Gauge-Temperature
17	93-5425	1	Decal-Control
18	43-6280	1	Button-Push
19	43-6420	1	Bezel-Switch
20	95-2649	1	Harness-Wire
21	93-5376-03	1	Plate-Control
22	66-2950	1	Gauge-Hourmeter
23	218-498	1	Nut-Hex
24	72-9760	1	Switch-Override
25	66-2940	1	Gauge-Fuel

Ref. No.	Part No.	Qty.	Description
26	233-39	1	Knob-Lever
27	3255-20	2	Washer-Lock
28	3217-25	2	Nut-Hex
29		2	Clamp
30	3256-14	4	Washer-Flat
31	3219-14	12	Nut-Hex
32	3253-2	10	Washer-Lock
33	93-5350	1	Cable-Throttle
34	3256-24	1	Washer-Flat
35	95-1579	1	Nut-Lock
36	93-5476	1	Switch
37	93-5373	1	Lever-Throttle
38	66-2920	2	Washer-Nylon
39	29-9550	1	Clamp
40	33003-00	1	Nut-HHF
41	33103-016	1	Screw-HHF
42	33024-00	1	Nut-Lock
43	3290-329	4	Screw-PH
44	111332	2	Switch-Interlock
45	93-5991-03	1	Bracket
46	3290-354	2	Nut-Speed
47	33023-00	2	Nut-Lock
48	93-5512	1	Spacer
49	93-5509	1	Spring-Torsion
50	93-5515-03	1	Lever

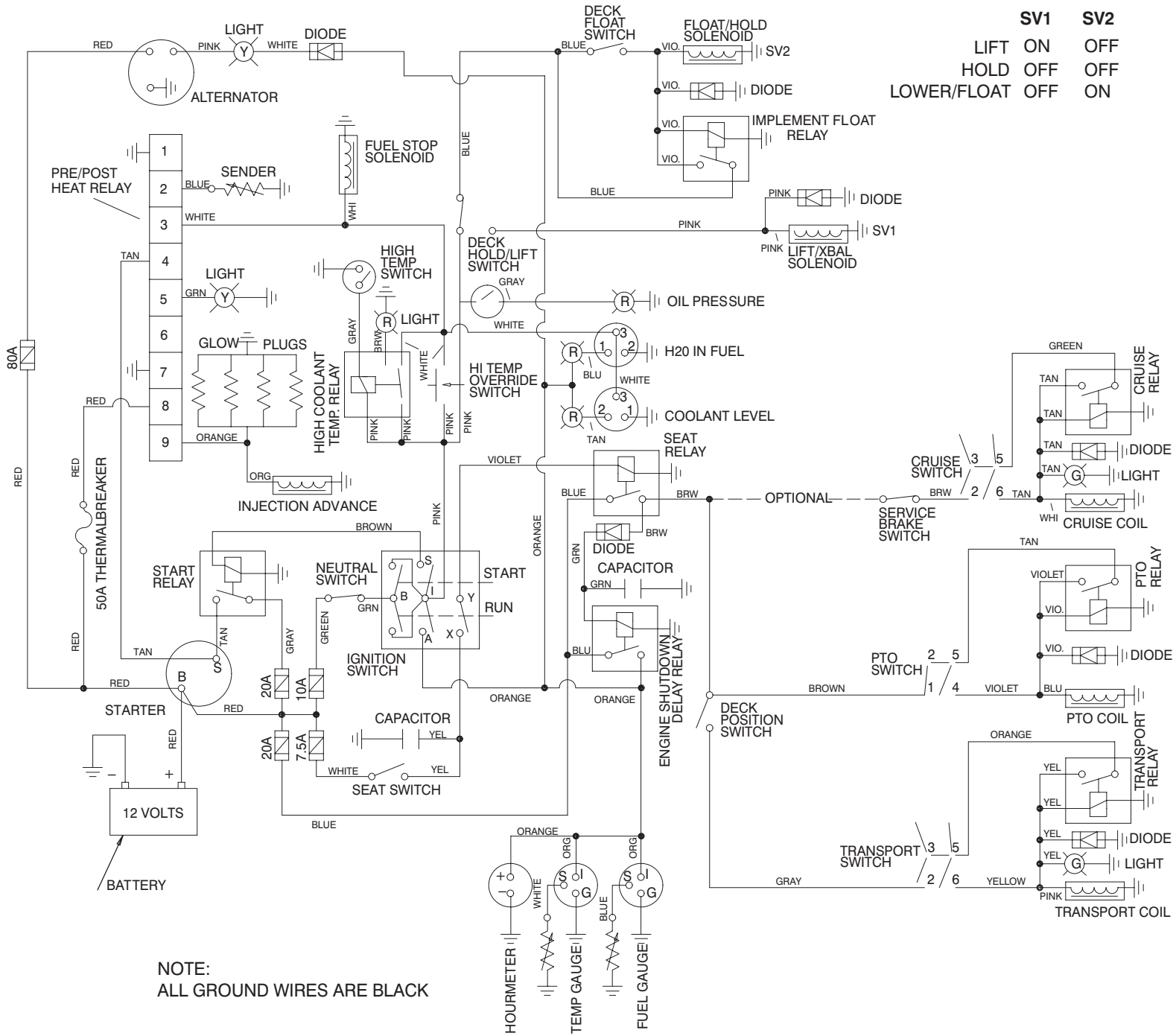


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T-2331-2

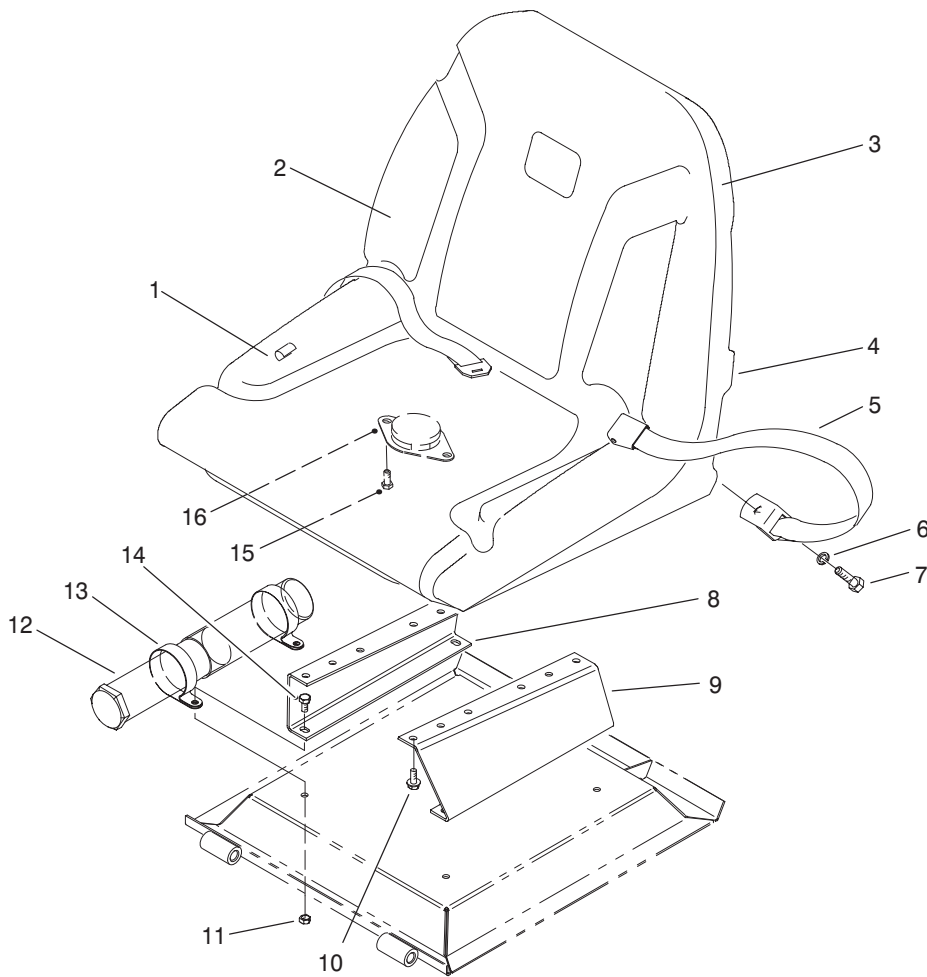
## Operator's Control Console Assembly (Continued)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
51	61-2990	2	Plate-Backup	*	94-9967	1	Breaker-Circuit, 50A
*	95-2648	1	Harness-Wire				

\* Not Illustrated



# Electrical Schematic



Sheet No.: 16

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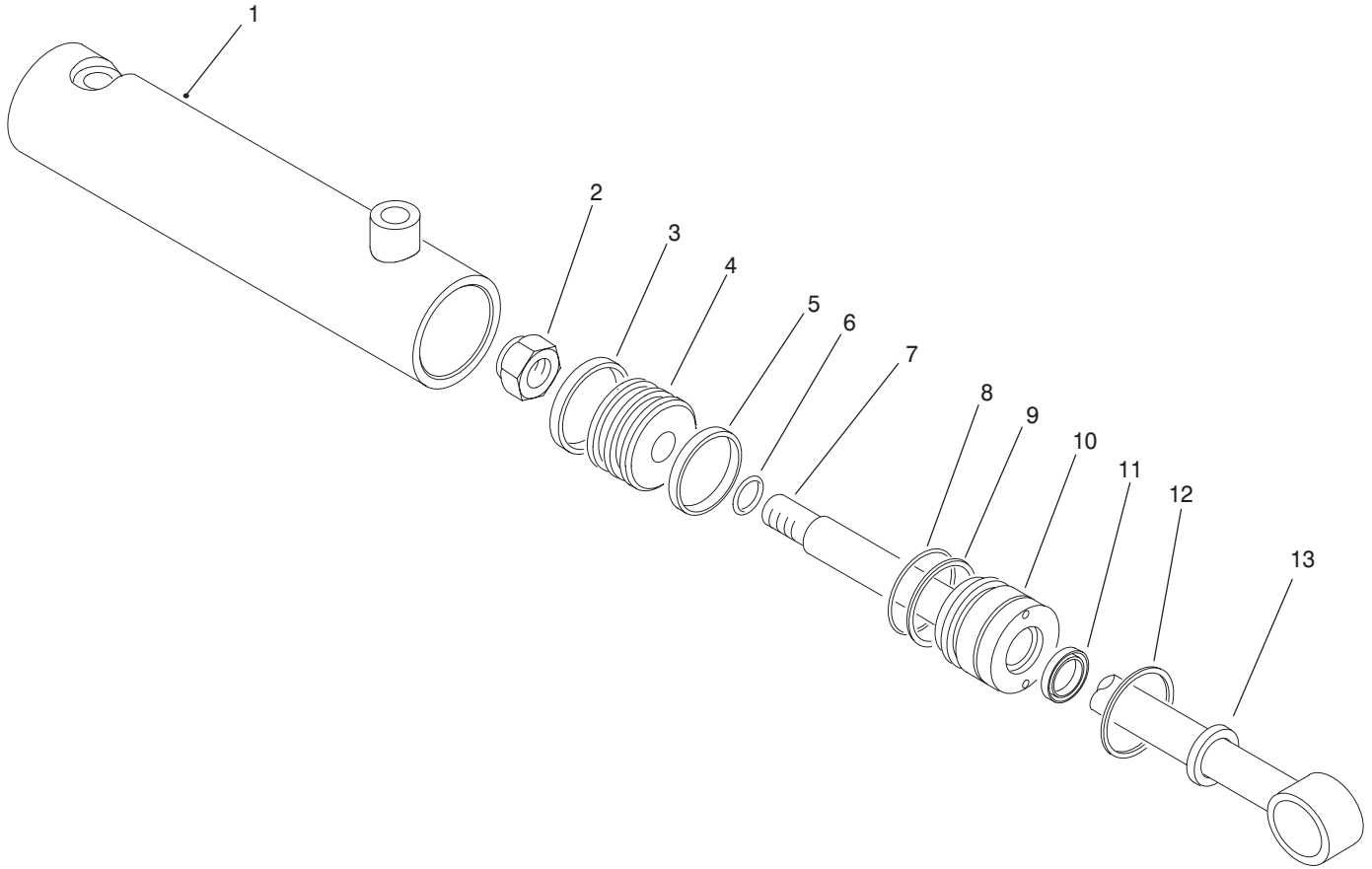
## Seat Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	351-80	1	Clip-Edging	*	93-5987	1	Seat ASM (Incl. Ref. 1-4 & 15-16)
2	92-6533	1	Kit-Cushion, Replacement				
3	351-78	1	Edging				
4	92-6534	1	Shell				
5	72-9390	1	Belt-Seat (For All Models Except 30301)				
6	3253-6	2	Washer-Lock (For All Models Except 30301)				
7	3212-4	2	Screw-HH (For All Models Except 30301)				
8	93-5599-03	1	Bracket-Seat, RH				
9	93-5600-03	1	Bracket-Seat, LH				
10	3234-5	4	Screw-HFH				
11	33024-00	4	Nut-Lock				
12	74-0720	1	Tube-Manual				
13	2412-133	2	Clamp-R				
14	33114-016	4	Screw-HH				
15	32144-10	2	Screw-HH				
16	92-6282	1	Switch-Seat				

\* Not Illustrated







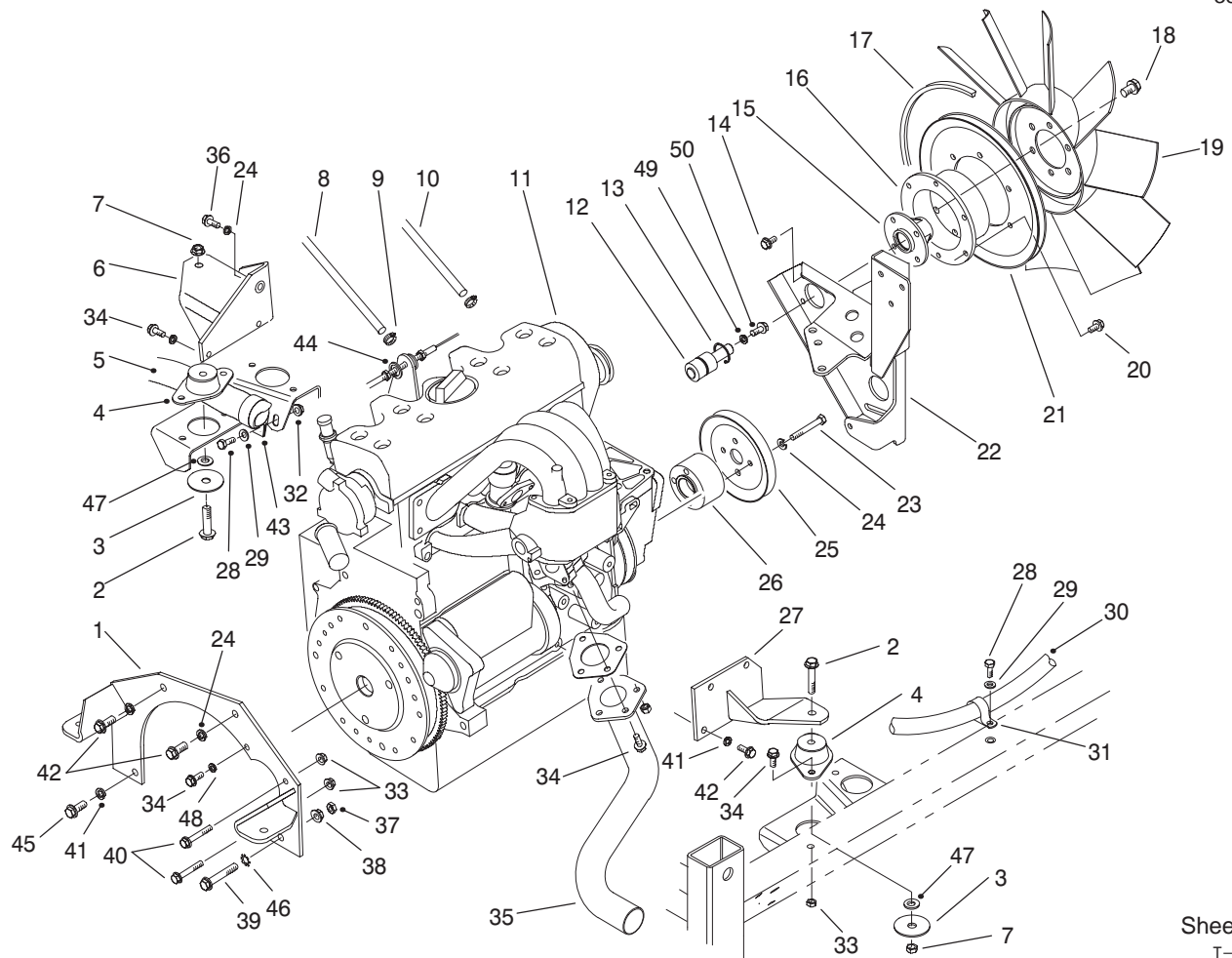
T-3210

## Hydraulic Cylinder Assembly No. 95-5699

Ref. No.	Part No.	Qty.	Description
1	95-2606	1	Tube ASM
2	95-2601	1	Nut-Lock
3		1	Ring-Wear
4	95-2603	1	Piston
5		1	Seal-Piston
6		1	O-Ring
7	95-2605	1	Rod ASM
8		1	O-Ring
9		1	Washer-Backup
10	95-2602	1	Head
11		1	Seal-Rod
12	95-2604	1	Ring-Retaining
13		1	Seal-Dust
*	95-2607	1	Kit-Repair, Seal (Incl. Ref. #3, 5, 6, 8, 9, 11, & 13)

Ref. No.	Part No.	Qty.	Description

\* Not Illustrated



Sheet No.: 17

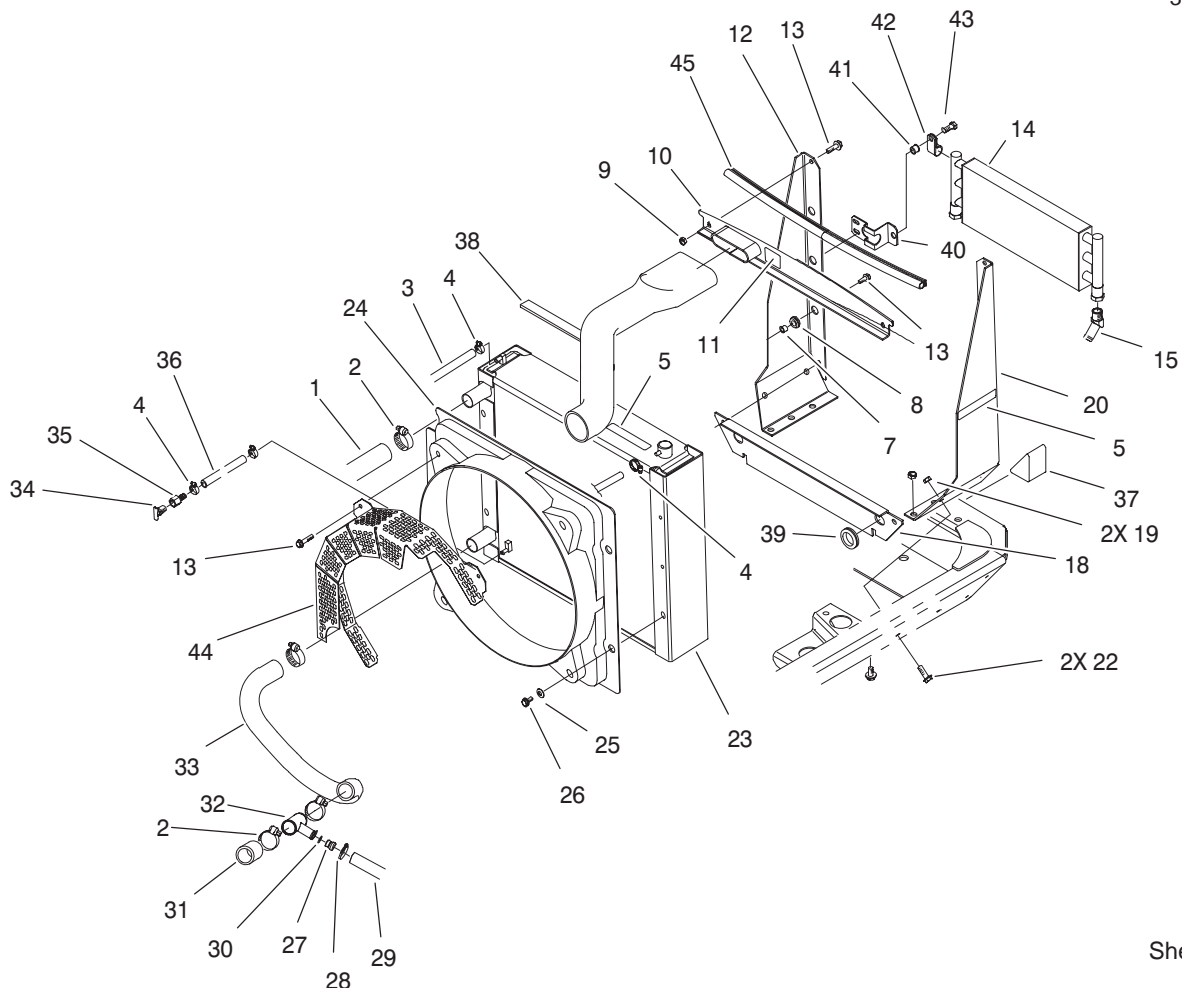
T-2334-4

## Engine Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5055-03	1	Plate-Engine, Front
2	33105-060	4	Screw-HHF
3	87-5100	4	Washer-Snubbing
4	93-5265	4	Mount-Engine
5	93-5596	1	Hose-Radiator, Lower
6	93-5059-03	1	Mount-Engine, RH
7	33025-00	4	Nut-Lock
8	93-5485	1	Hose-Fuel
9	2412-108	2	Clamp-Hose
10	93-5482	1	Hose-Fuel
11	93-5389	1	Engine-Peugeot #80197
12	98-3578	1	Bearing
13	32120-10	1	Ring-Retaining
14	33104-016	4	Screw-HHF
15	93-5187	1	Hub-Fan
16	93-5545	1	Hub-Fan
17	95-5618	1	V-Belt
18	33105-020	6	Screw-HHF
19	93-5114	1	Fan
20	33114-016	6	Screw-HH
21	96-1267-03	1	Pulley-Fan
22	93-5166-03	1	Bracket-Fan
23	33114-060	4	Screw-HH
24	3253-4	7	Washer-Lock
25	93-5192-03	1	Pulley-Crank

Ref. No.	Part No.	Qty.	Description
26	93-5196	1	Spacer-Crank
27	93-5062-03	1	Mount-Engine, LH
28	33114-020	2	Screw-HH
29	3256-23	2	Washer-Flat
30	93-5537	1	Hose
31	2412-104	1	Clamp-R
32	33004-00	1	Nut-HF
33	33024-00	3	Nut-Lock
34	33104-020	4	Screw-HHF
35	93-5049	1	Pipe-Exhaust
36	33104-035	1	Screw-HHF
37	33015-00	1	Nut-HH
38	33005-00	1	Nut-HF
39	71-4690	1	Screw-HHF
40	33104-050	2	Screw-HHF
41	3253-6	6	Washer-Lock
42	33105-025	5	Screw-HHF
43	2412-127	1	Clamp-R
44	86-2990	2	Mount-Cable, Throttle
45	33105-035	1	Screw-HHF
46	3255-9	1	Washer-Lock
47	33095-00	4	Washer-Flat
48	3255-8	1	Washer-Lock
49	3256-24	1	Washer-Flat
50	3234-25	1	Screw-HH





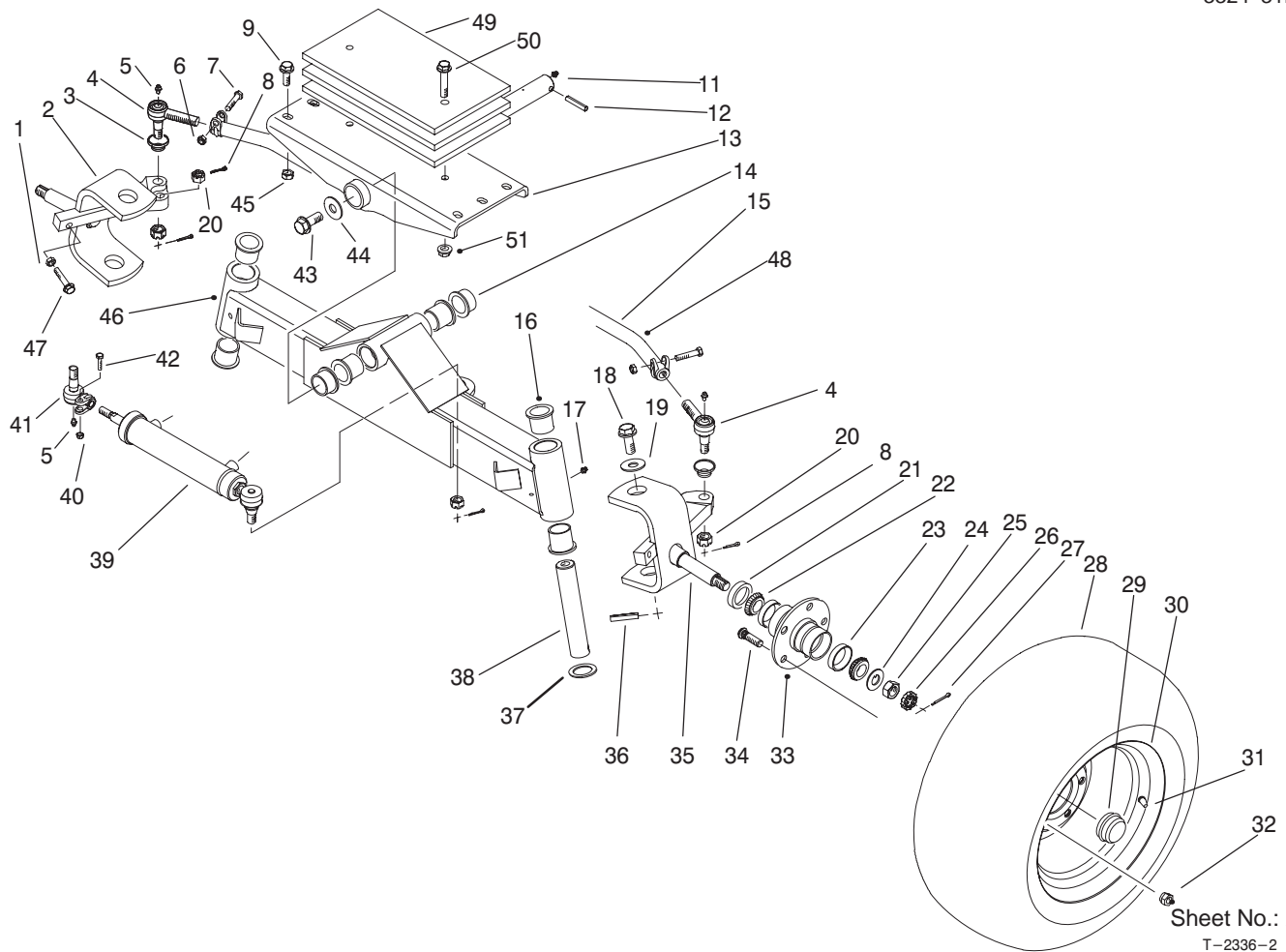
Sheet No.: 6  
T-2322

## Radiator & Cooler Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5595	1	Hose-Radiator, Upper
2	2412-111	6	Clamp-Hose
3	93-5538	1	Hose
4	2412-108	3	Clamp-Hose
5	77-3100	3	Decal-Caution
5	93-7272	3	Decal-Caution (Europe)
7	93-5109	6	Spacer
8	93-5108	6	Grommet-Rubber
9	33024-00	4	Nut-Lock
10	99-5799-03	1	Support- Upper, Radiator
11	83-9150	1	Decal-Fluid, Starting
11	93-7275	1	Decal-Fluid, Starting (Europe)
12	93-5104-03	1	Support-RH, Radiator
13	33104-020	13	Screw-HHF
14	63-5400	1	Exchanger-Heat
15	95-5629	2	Fitting-Adapter
18	95-0987-03	1	Support-Lower, Radiator
19	33025-00	4	Nut-Lock
20	93-5105-03	1	Support-Radiator, LH
22	33105-030	4	Screw-HHF
23	93-5942	1	Radiator
24	93-5034	1	Shroud-Radiator

Ref. No.	Part No.	Qty.	Description
25	3256-35	4	Washer-Flat
26	33104-016	4	Screw-HHF
27	93-5054	1	Fitting-Restriction
28	2412-141	2	Clamp
29	93-5537	1	Hose
30	93-5392	1	O-Ring
31	93-5597	1	Hose-Radiator
32	93-5053	1	Fitting-Hose, Radiator
33	93-5596	1	Hose-Radiator, Lower
34	93-5528	1	Fitting-Cock, Drain
35	354-94	1	Barb-Female, Hose
36	104-0109	1	Hose
37	93-5954	2	Foam-Plug
38	95-0698	1	Strip-Foam
39	240-3	2	Grommet-Rubber
40	95-0972-03	2	Bracket-Mount, Cooler
41	32148-9	2	Nut-Clinch
42	2412-81	2	Clamp-R
43	323-6	2	Screw-HH
44	98-0663-03	1	Guard-Fan (Europe)
45	93-5251	1	Seal-Bulb, Top





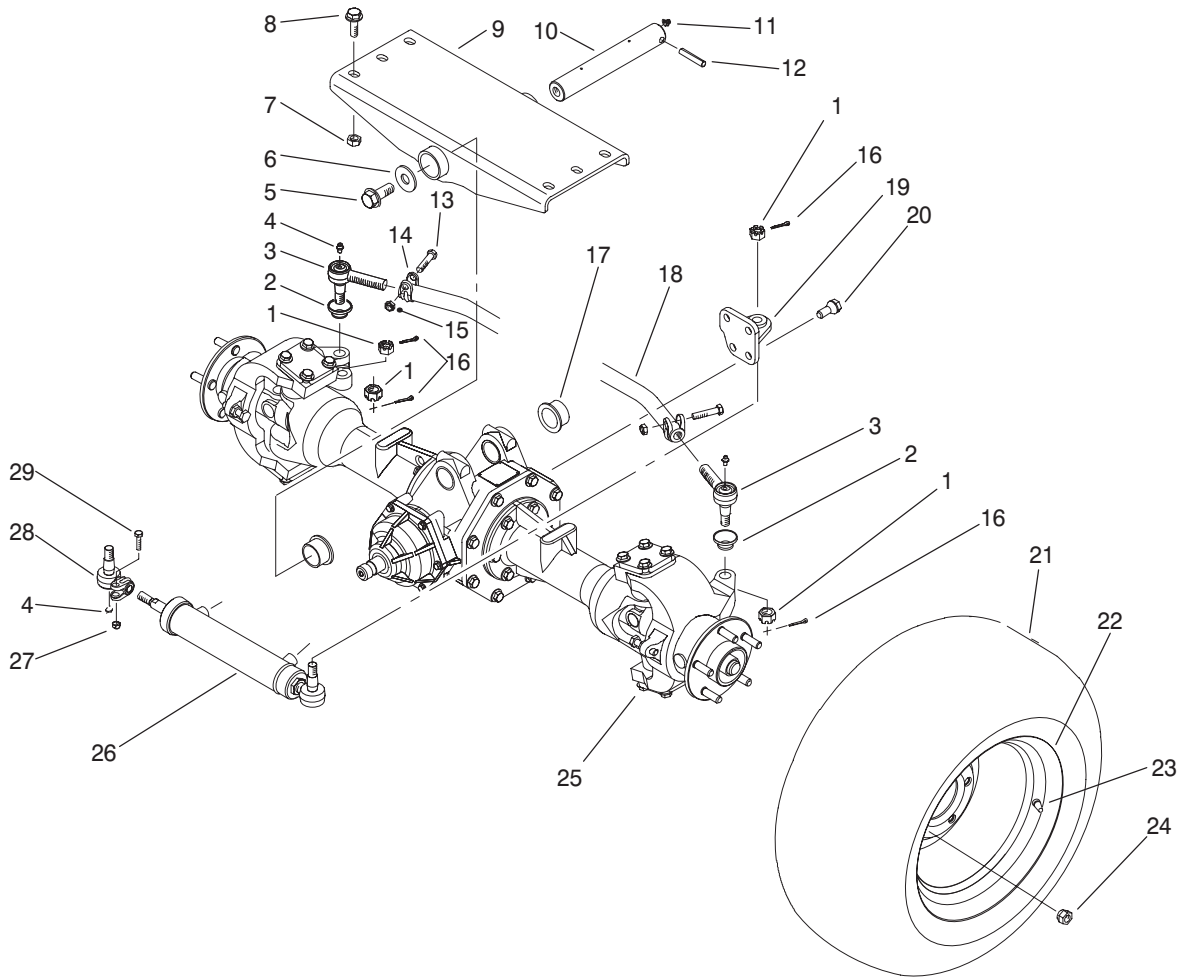
## Rear Axle Assembly (Model No. 30301)

Ref. No.	Part No.	Qty.	Description
1	33015-00	2	Nut-HH
2	98-7096	1	Spindle-RH (Incl. Ref. #21 & 22)
3	71-4760	2	Seal
4	71-4740	2	Rod-End
5	302-55	3	Fitting-Grease
6	3296-39	2	Nut-Lock
7	323-9	2	Screw-HH
8	3272-11	4	Pin-Cotter
9	33106-035	6	Screw-HHF
10	93-5142	1	Pin-Axle, Pivot
11	302-2	1	Fitting-Grease
12	32121-110	1	Pin-Spring
13	95-4411-03	1	Pivot-Axle
14	93-4510	2	Bushing-Castor
15	104-0100-03	1	Tie Rod ASM (Incl. Ref. #3-7, 20 & 48)
16	69-6470	6	Bushing
17	302-5	2	Fitting-Grease
18	33108-035	2	Screw-HHF
19	3256-7	2	Washer-Flat
20	32136-13	4	Nut-Castle
21	95-2647	2	Seal-Hub
22	95-2646	4	Cone-Bearing
23	254-72	4	Cup-Bearing

Ref. No.	Part No.	Qty.	Description
24	93-0309	2	Washer-Tab
25	3220-7	2	Nut-Jam
26	93-0307	2	Nut-Retainer, Lock
27	3272-13	2	Pin-Cotter
28	74-5560	2	Tire (30301TC)
28	95-2625	2	Tire (30301)
29	241-119	2	Cap-Dust
30	217-122	2	Rim (30301TC)
30	100-1357	2	Rim (30301)
31	232-27	2	Stem-Valve
32	242-50	10	Nut-Lug
33	21-2820	2	Hub ASM (Incl. Ref. #23 & 34)
34	10-6830	10	Stud-Drive
35	98-7095	1	Spindle-LH (Incl. Ref. #21 & 22)
36	32121-110	2	Pin-Spring
37	62-2170	2	Washer-Thrust
38	93-5503	2	Pin-Spindle, Pivot
39	93-5502	1	Cylinder-Steering
40	3296-4	1	Nut-Lock
41	92-5072	1	Rod-End, Ball Joint
42	3210-7	1	Screw-HH
43	33108-035	1	Screw-HHF
44	3256-7	1	Washer-Flat





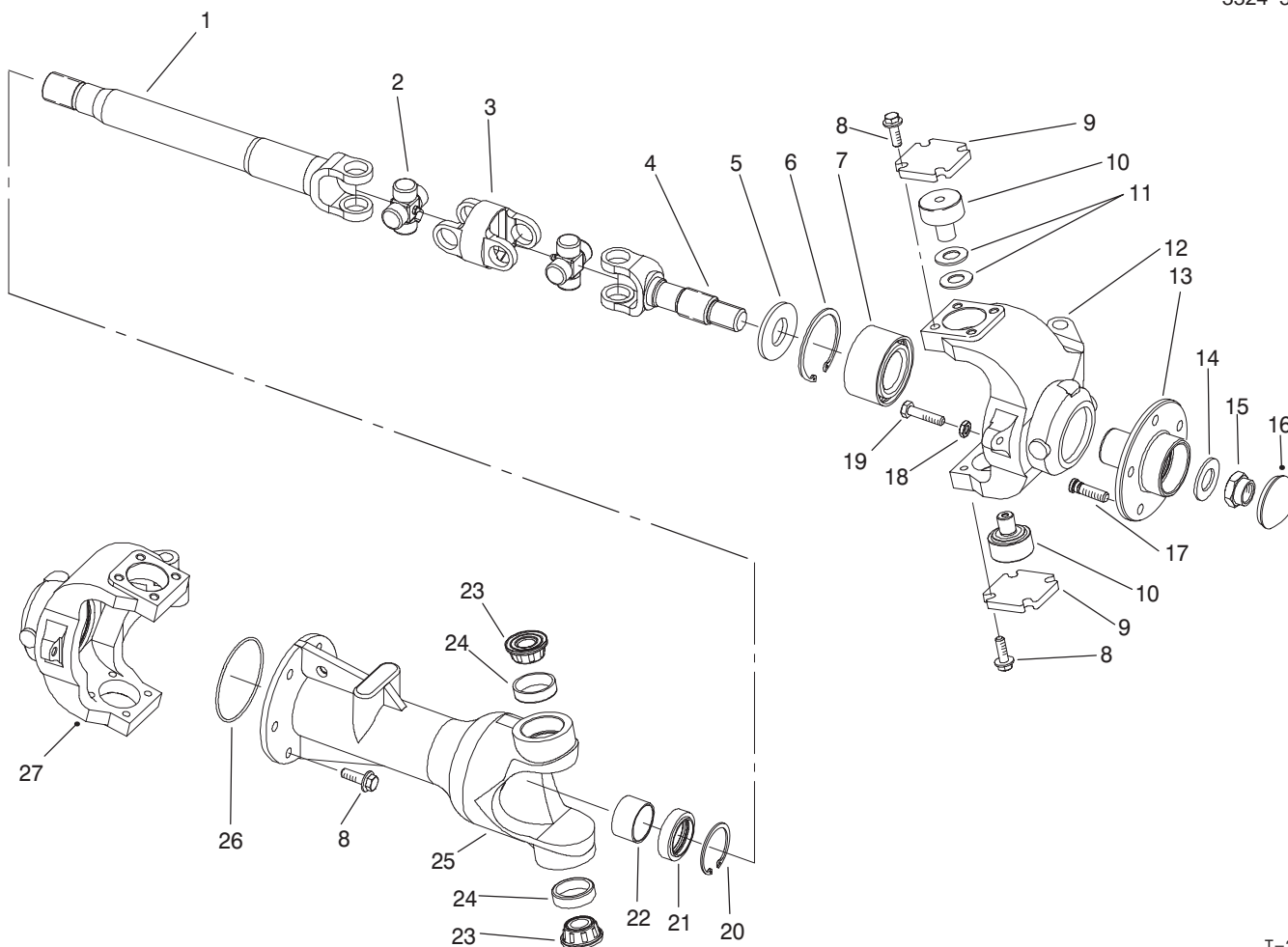


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## Rear Axle Assembly (Model No. 30302)

Ref. No.	Part No.	Qty.	Description
1	32136-13	4	Nut-Hex, Slotted
2	71-4760	2	Seal
3	71-4740	2	Rod-End
4	302-55	3	Fitting-Grease
5	33108-040	1	Screw-HHF
6	3256-7	1	Washer-Flat
7	33026-00	6	Nut-Lock
8	33106-035	6	Screw-HHF
9	95-4411-03	1	Pivot-Axle
10	93-5142	1	Pin-Axle, Pivot
11	302-2	1	Fitting-Grease
12	32121-110	1	Pin-Spring
13	323-9	2	Screw-HH
14	104-0101-03	1	Clamp & Tube ASM
15	3296-39	2	Nut-Lock
16	3272-11	4	Pin- Cotter
17	93-4510	2	Bushing-Castor
18	104-0100-03	1	Tie Rod ASM (Incl. Ref. #1-4, & 13-15)
19	93-5436-03	1	Anchor-Cylinder
20	93-5444	4	Screw-Tapered
21	74-5560	2	Tire (30302TC)
21	95-2625	1	Tire
22	217-122	2	Rim (30302TC)
22	100-1357	1	Rim

Ref. No.	Part No.	Qty.	Description
23	232-27	2	Stem-Valve
24	93-5268	10	Nut-Lug
25	95-2592	1	Axle-Rear, 4WD
26	93-5962	1	Cylinder-Steering
27	3296-4	1	Nut-Lock
28	92-5072-03	1	Rod-End, Ball Joint
29	3210-7	1	Screw-HH



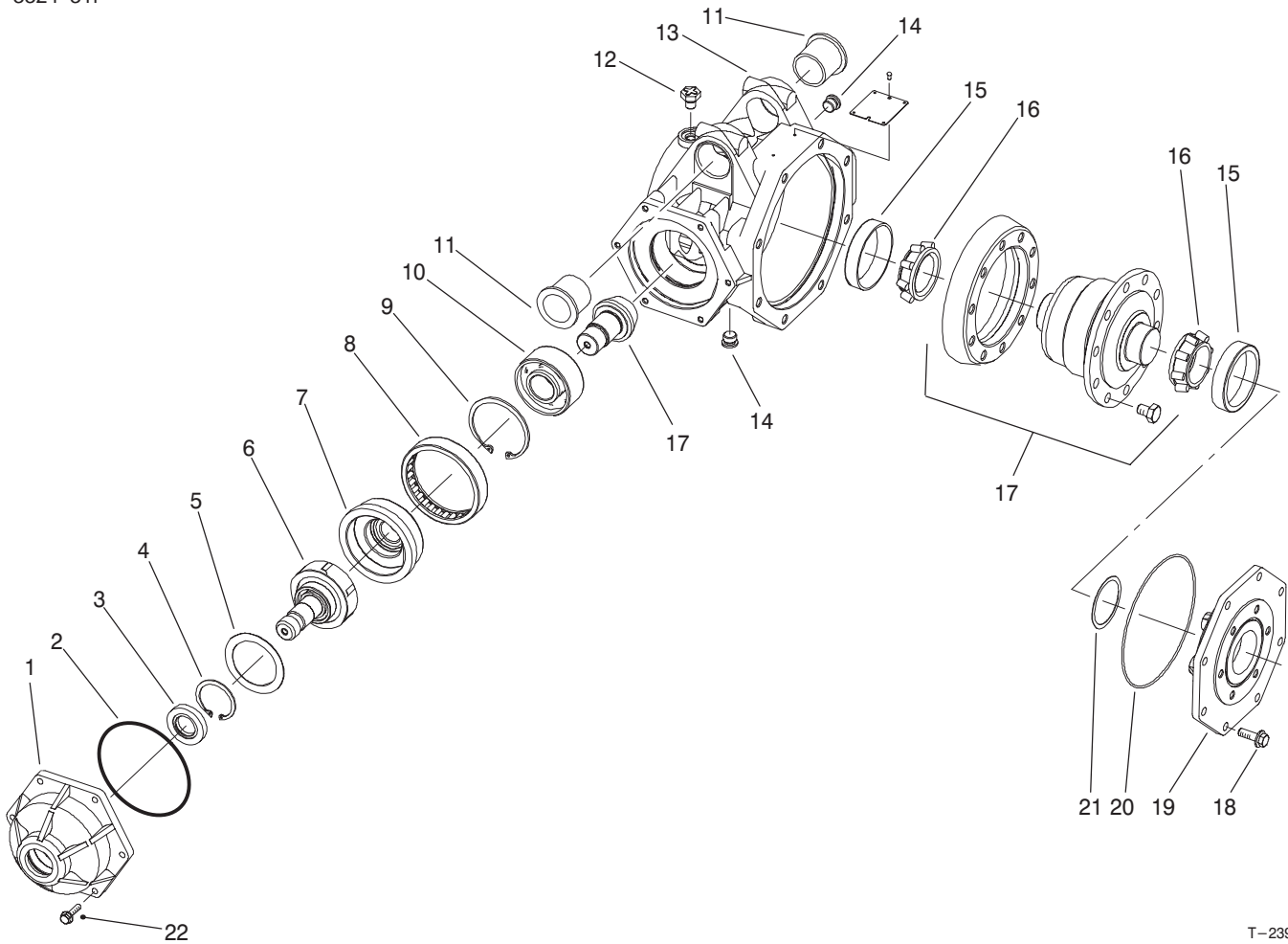
T-2393

## 4WD Axle-Universal Joint & Kingpin Assembly

Ref. No.	Part No.	Qty.	Description
1	95-0650	1	Yoke-Shaft, Inboard
2	95-0651	2	Kit-Cross & Bearing
3	95-0652	1	Yoke-Pivot, Double
4	95-0653	1	Yoke-Shaft, Outboard
5	94-4037	2	Washer
6	93-5964	2	Ring-Retaining
7	94-4030	2	Bearing-Tapered
8	33105-030	28	Screw-HHF
9	94-4119	4	Cover-Kingpin
10	94-4121	4	Trunnion-Kingpin
11	94-4126	4	Washer-Belleville
12	94-4116	1	Flange-Spindle, LH
13		2	Hub-Wheel
14	94-4034	2	Washer
15	94-4079	2	Nut-Hex
16	95-0654	2	Cap-Dust
17	94-4143	10	Stud-Wheel
18	33015-00	2	Nut-Hex
19	33105-050	2	Screw-HHF
20	94-4133	2	Ring-Retaining
21	94-4128	2	Seal-Lip
22	94-4127	2	Bearing-Journal
23		4	Cone-Bearing
24		4	Cup-Bearing
25		2	Housing-Kingpin
26	94-4131	2	O-Ring

Ref. No.	Part No.	Qty.	Description
27	94-4115	1	Flange-Spindle, RH
*	94-4123	1	Joint-Universal (Incl. Ref. #1-4)
*	94-9190	1	Axle Housing ASM (Incl. Ref. 20-22 & 25)
*	94-9191	1	Kit-Bearing, Kingpin (Incl. Ref. #23-24)
*	94-9193	1	Wheel Hub Assembly (Incl. Ref. #13 & 17)
*	94-9194	1	RH Spindle Flange ASM (Incl. Ref. #6, 7, 13, 17 & 27)
*	94-9195	1	LH Spindle Flange ASM (Incl. Ref. #6, 7, 12, 13 & 17)
*	94-9198	1	Kit-Seal, Overhaul

\* Not Illustrated



T-2394

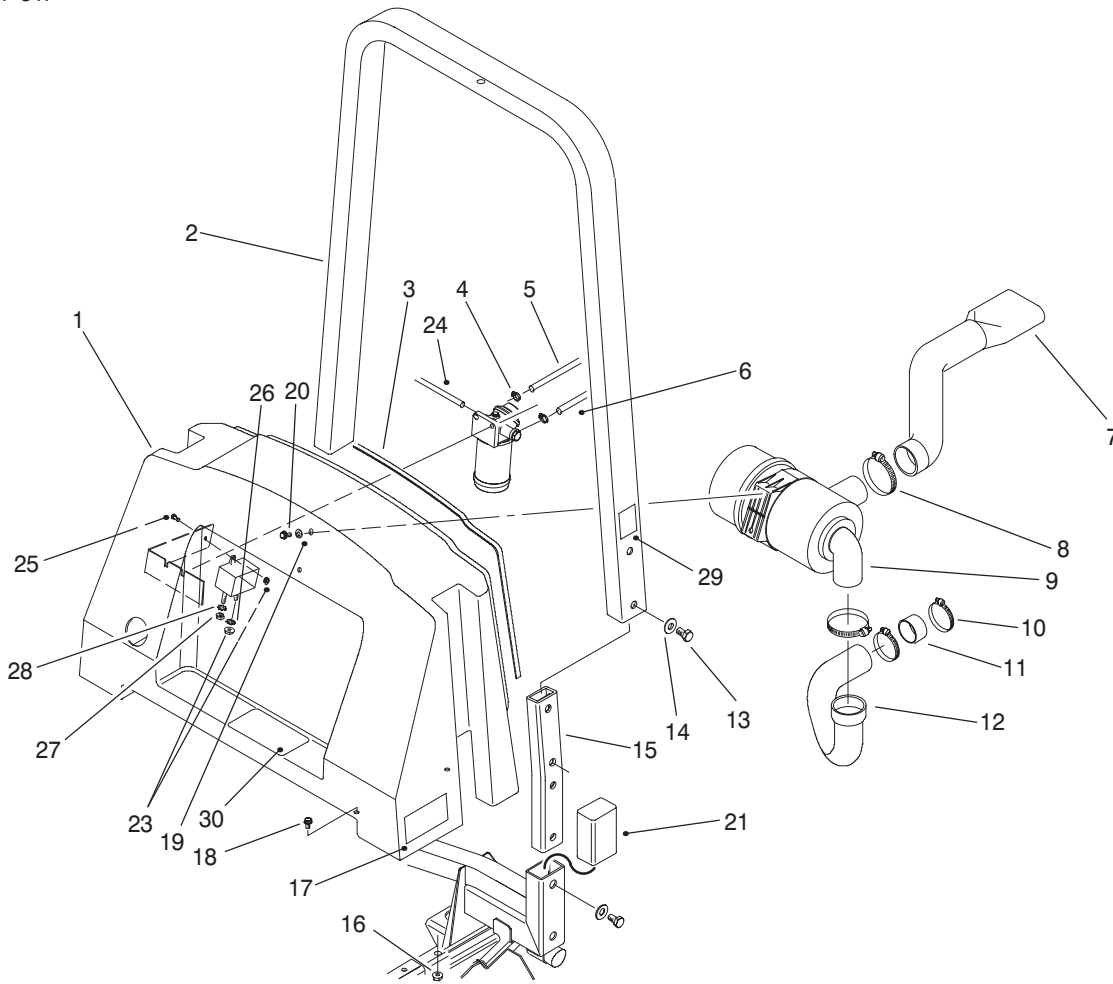
## 4WD Axle-Housing Assembly

Ref. No.	Part No.	Qty.	Description
1	94-4134	1	Housing-Clutch
2	94-4132	1	O-Ring
3	94-3925	1	Seal-Lip
4	94-4029	1	Ring-Retaining, Internal
5	94-4137	1	Washer-Thrust
6	95-2590	1	Clutch
7	94-4138	1	Race-Clutch
8	94-4136	1	Bearing-Needle
9	69-3200	1	Ring-Retaining
10	94-4130	1	Bearing-Ball
11	69-6470	2	Bushing
12	94-3998	1	Vent-Breather
13		1	Housing-Axle Steerable
14	353-989	2	Plug
15		2	Cup-Bearing
16		2	Cone-Bearing
17	94-4120	1	Differential ASM
18	33105-030	8	Screw-HHF
19	94-4114	1	Cover-Side
20	94-4129	1	O-Ring
21	94-9187	1	Kit-Shim, Differential
22	33103-025	6	Screw-HHF

Ref. No.	Part No.	Qty.	Description
*	94-9185	1	Bevel Gear ASM (Incl. Ref. #10, 15-17 & 21)
*	94-9186	2	Kit-Bearing, Differential (Incl. Ref. #15-16)
*	94-9188	1	Differential ASM (Incl. Ref. #9-21)
*	94-9189	1	Differential Housing ASM (Incl. Ref. #11 -14)
*	95-2591	1	Overrunning Clutch ASM (Incl. Ref. #1-8 & 22)

\* Not Illustrated



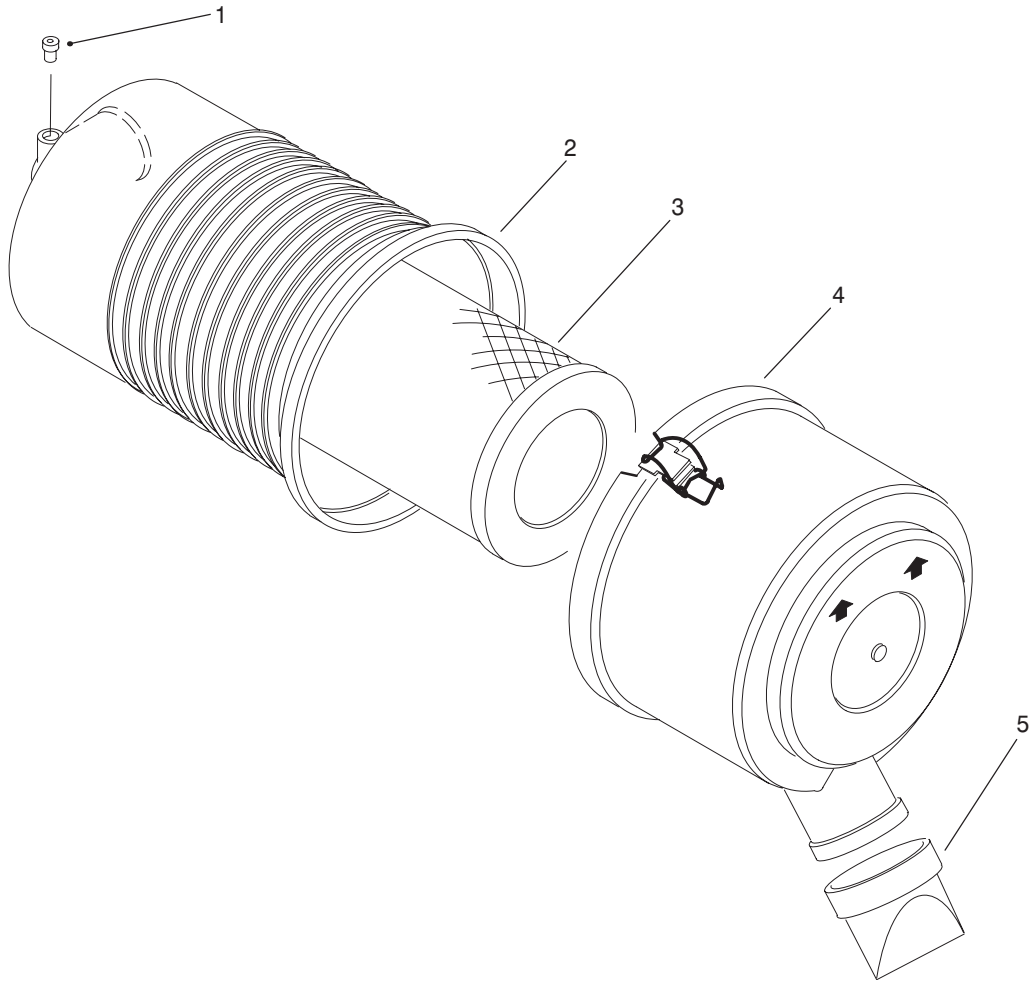


Sheet No.: 4  
T-2319-6

## Center Shroud & Air Cleaner Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5645	1	Center Shroud ASM
2	95-6135	1	System-Protection, Roll Over (Incl. Ref. #29) (Model 30302 Only)
3	93-5253	1	Strip-Foam, Hood
4	2412-108	2	Clamp-Hose
5	95-5936	1	Hose-Fuel
6	93-5484	1	Hose-Fuel
7	93-5083	1	Hose-Cleaner, Air
8	2412-110	2	Clamp-Hose
9	93-5111	1	Cleaner-Air
10	2412-130	2	Clamp-Hose
11	93-5427	1	Spacer-Intake
12	93-5084	1	Hose-Cleaner-Air
13	93-5420	8	Screw-HH (Model 30302 Only)
14	3256-6	8	Washer-Flat (Model 30302 Only)
15	93-5157-03	2	Bar (Model 30302 Only)
16	33004-00	2	Nut-HF
17	94-8099	2	Decal-4 WD (Model 30302 Only)

Ref. No.	Part No.	Qty.	Description
18	33104-016	4	Screw-HHF
19	3256-3	2	Washer-Flat
20	33104-020	2	Screw-HHF
21	93-5638	2	Cover-Tube (Model 30301 Only)
23	33003-00	2	Nut-HF
24	68-5910	1	Hose
25	33113-020	1	Screw-HH
26	3255-7	1	Washer-Lock
27	48-7880	1	Nut
28	3255-10	1	Washer-Lock
29	95-5646	1	Decal-ROPS
30	93-9894	1	Decal-Safety (Model 30301 Only)

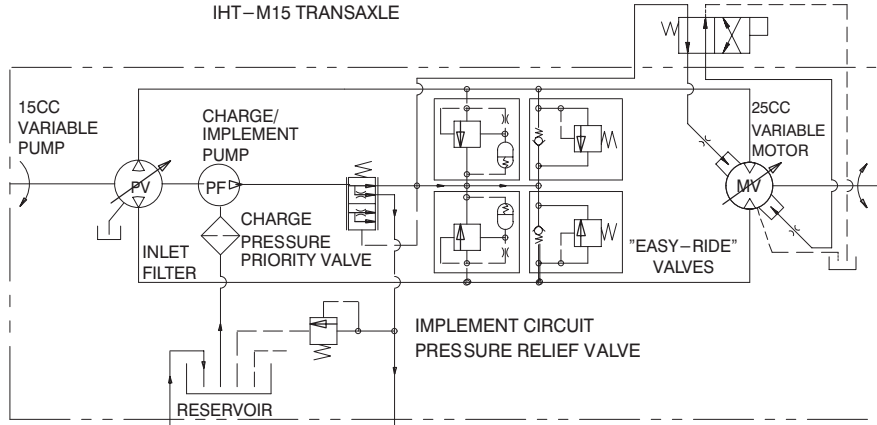


T-2252-1

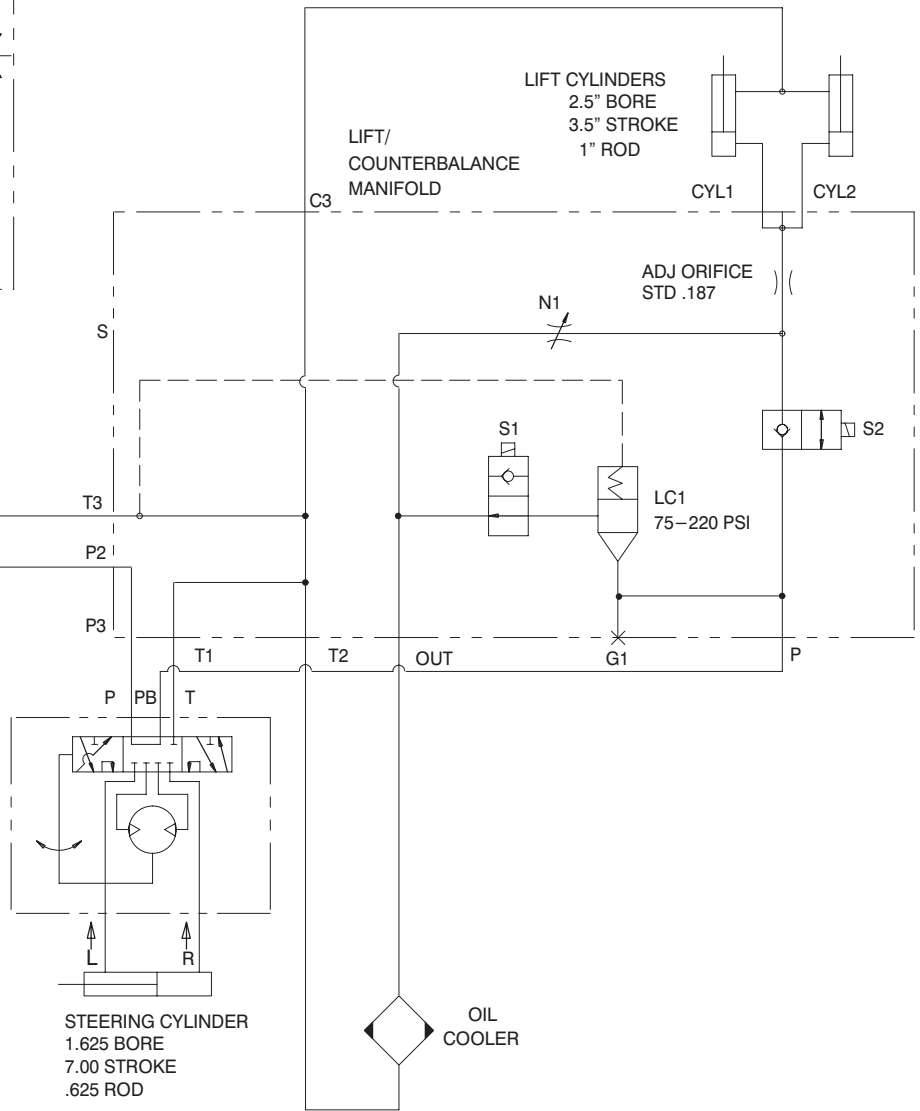
### Air Cleaner Assembly No. 93-5111

Ref. No.	Part No.	Qty.	Description
1		1	Plug
2		1	Body ASM
3	94-1412	1	Element ASM

Ref. No.	Part No.	Qty.	Description
4	93-5986	1	Cover ASM
5	94-1414	1	Valve

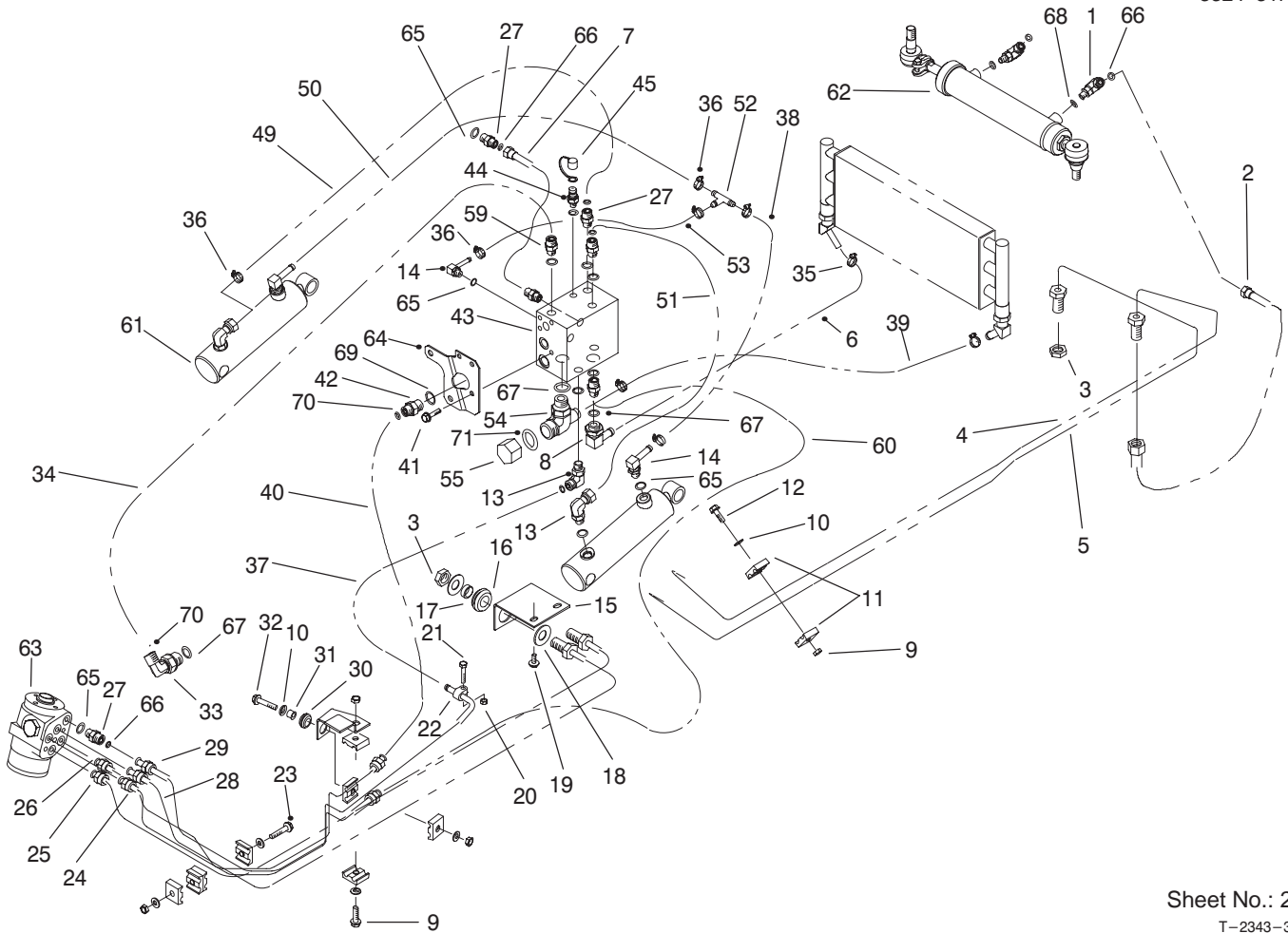


LIFT/LOWER CONTROL	SOLENOIDS	
	S1	S2
LIFT	ON	OFF
HOLD	OFF	OFF
LOWER/FLOAT	OFF	ON



STEERING CONTROL UNIT  
6.1 IN<sup>3</sup> DISPLACEMENT

Hydraulic Schematic

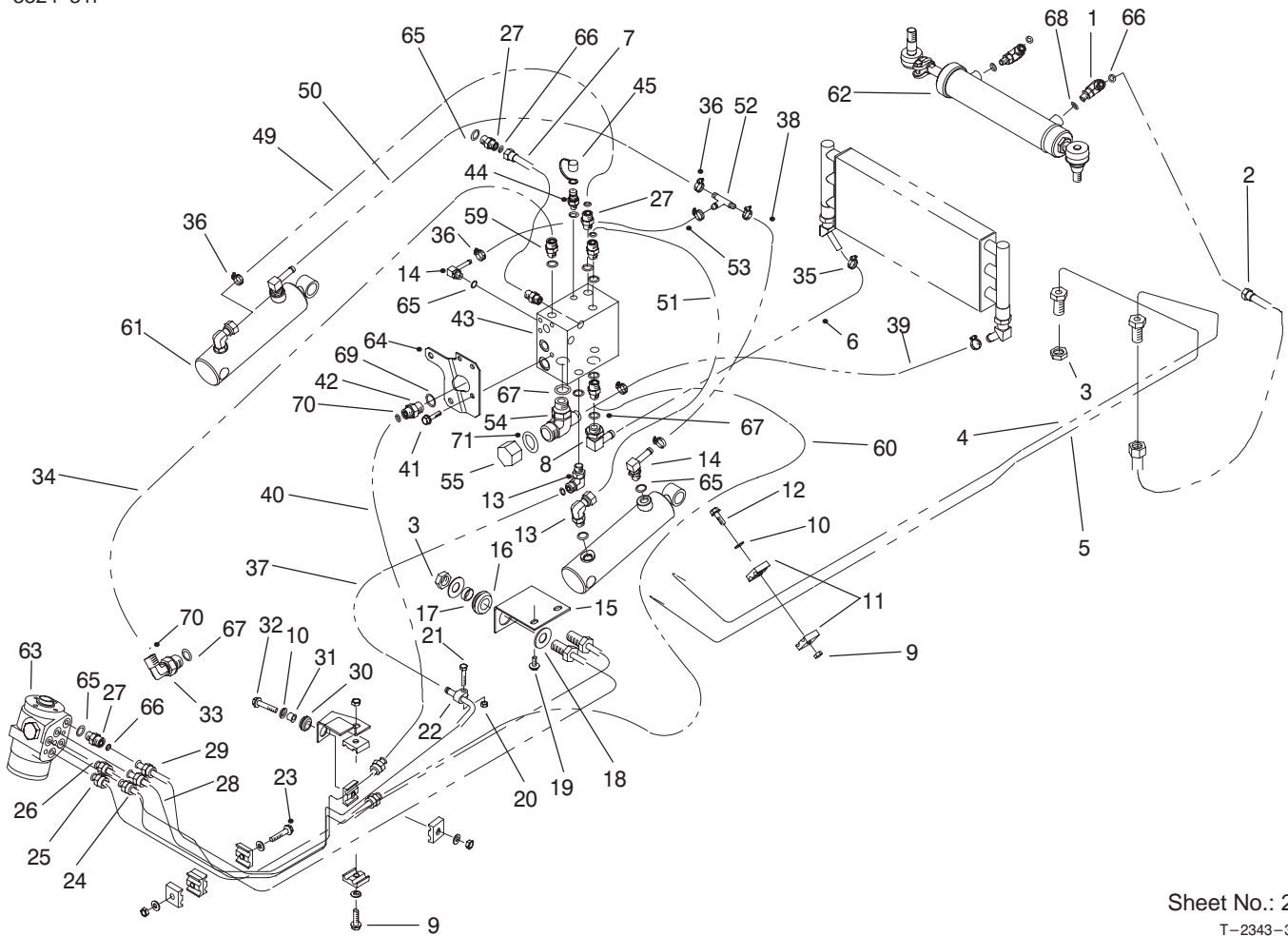


Sheet No.: 25  
T-2343-3

## Hydraulic Component Assembly

Ref. No.	Part No.	Qty.	Description
1	340-97	2	Fitting-Hydraulic, 90° (Incl. Ref. #66 & 68)
2	93-5353	2	Hose ASM
3	340-70	4	Nut-Lock, Bulkhead
4	93-5571	1	Tube-Hydraulic
5	93-5572	1	Tube-Hydraulic
6	95-0954	1	Hose
7	95-0950	1	Hose ASM
8	354-128	1	Fitting-Barbed (Incl. Ref. #67)
9	33104-035	2	Screw-HHF
10	3256-23	6	Washer-Flat
11	56-7973	10	Clamp-Tube
12	33024-00	4	Nut-Lock
13	340-77	3	Fitting-Hydraulic, 90° (Incl. Ref. # 65 & 66)
14	354-135	3	Fitting-Barbed (Incl. Ref. #65)
15	93-5587-03	1	Bracket-Bulkhead
16	240-4	2	Grommet
17	69-8970	2	Spacer
18	69-8940	4	Washer
19	33104-016	2	Screw-HHF
20	33023-00	1	Nut-Lock
21	33113-035	1	Screw-HH
22	2412-114	1	Clamp-Tube

Ref. No.	Part No.	Qty.	Description
23	33114-060	1	Screw-HH
24	93-5574	1	Tube-Hydraulic
25	93-5576	1	Tube-Hydraulic
26	93-5575	1	Tube-Hydraulic
27	340-2	13	Adapter (Incl. Ref. # 65 & 66)
28	93-5577	1	Tube-Hydraulic
29	93-5573	1	Tube-Hydraulic
30	93-5108	1	Grommet-Rubber
31	93-5109	1	Spacer
32	33104-040	1	Screw-HHF
33	340-105	1	Elbow (Incl. Ref. #67 & 70)
34	95-0975	1	Tube-Hydraulic
35	2412-141	4	Clamp-Hose
36	2412-108	7	Clamp-Hose
37	95-0952	1	Hose
38	93-5358	1	Hose
39	95-0955	1	Hose
40	93-5346	1	Hose
41	33104-025	3	Screw-HHF
42	340-2	1	Adapter (Incl. Ref. #69 & 70)
43	94-9291	1	Manifold-Hydraulic

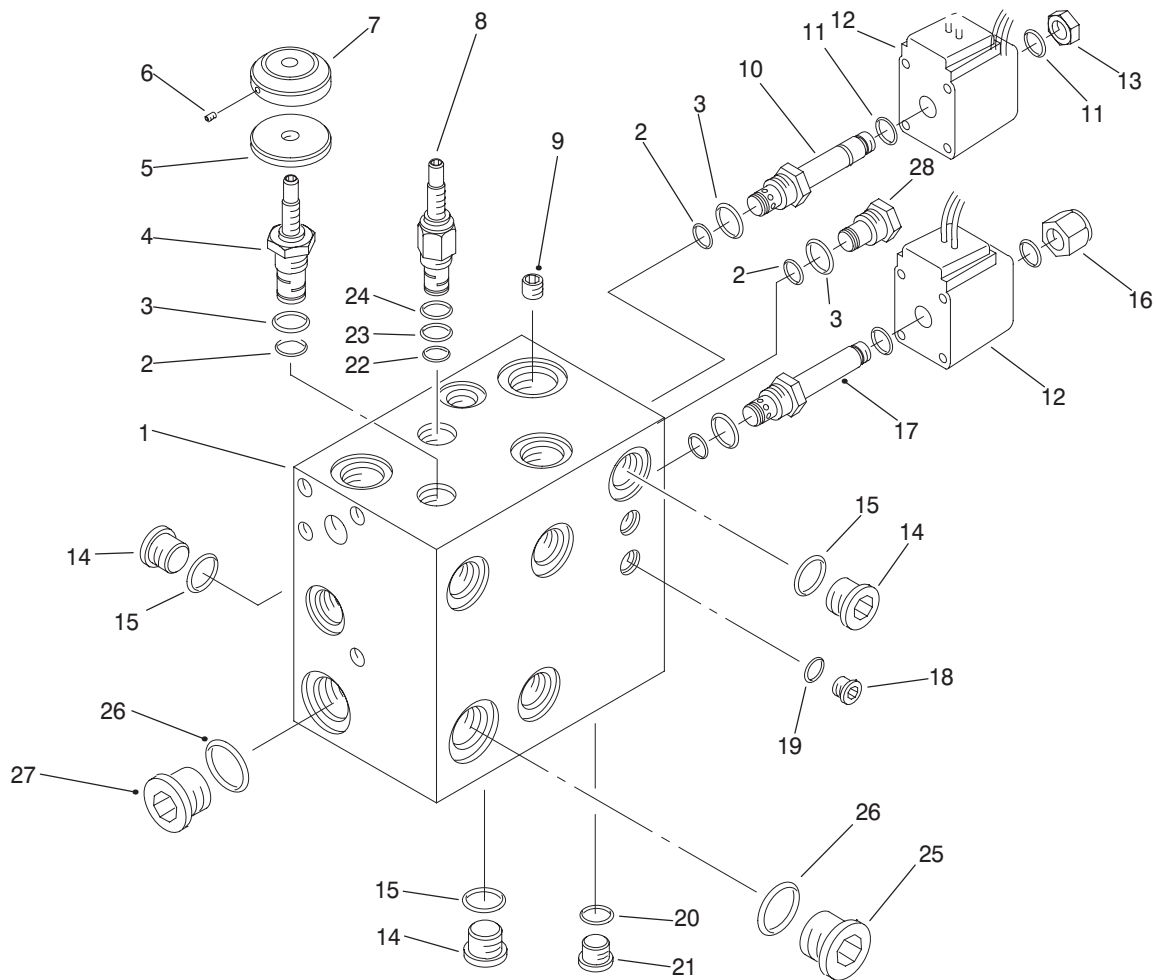


Sheet No.: 25  
T-2343-3

## Hydraulic Component Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
44	354-77	1	Fitting-Connect, Quick (Incl. Ref. #68)
45	353-947	1	Cap-Dust
49	93-5386	1	Hose
50	93-5357	1	Hose
51	93-5385	1	Hose
52	354-107	1	Fitting-Tee
53	95-0953	1	Hose
54	94-9295	1	Fitting-Tee (Incl. Ref. #67 & 71)
55	95-0979	1	Cap-Hydraulic
59	340-5	1	Fitting-Hydraulic, Straight (Incl. Ref. #65 & 70)
60	95-0951	1	Hose
61	95-5699	2	Cylinder-Hydraulic
62	93-5962	1	Cylinder-Steering (Model 30302)
63	93-5165	1	Unit-Control, Steering
64	94-9282	1	Bracket-Counter - Balance
65	237-42	20	O-Ring
66	237-22	20	O-Ring
67	237-80	3	O-Ring
68	237-78	3	O-Ring
69	237-79	1	O-Ring

Ref. No.	Part No.	Qty.	Description
70	237-30	2	O-Ring
71	237-58	1	O-Ring



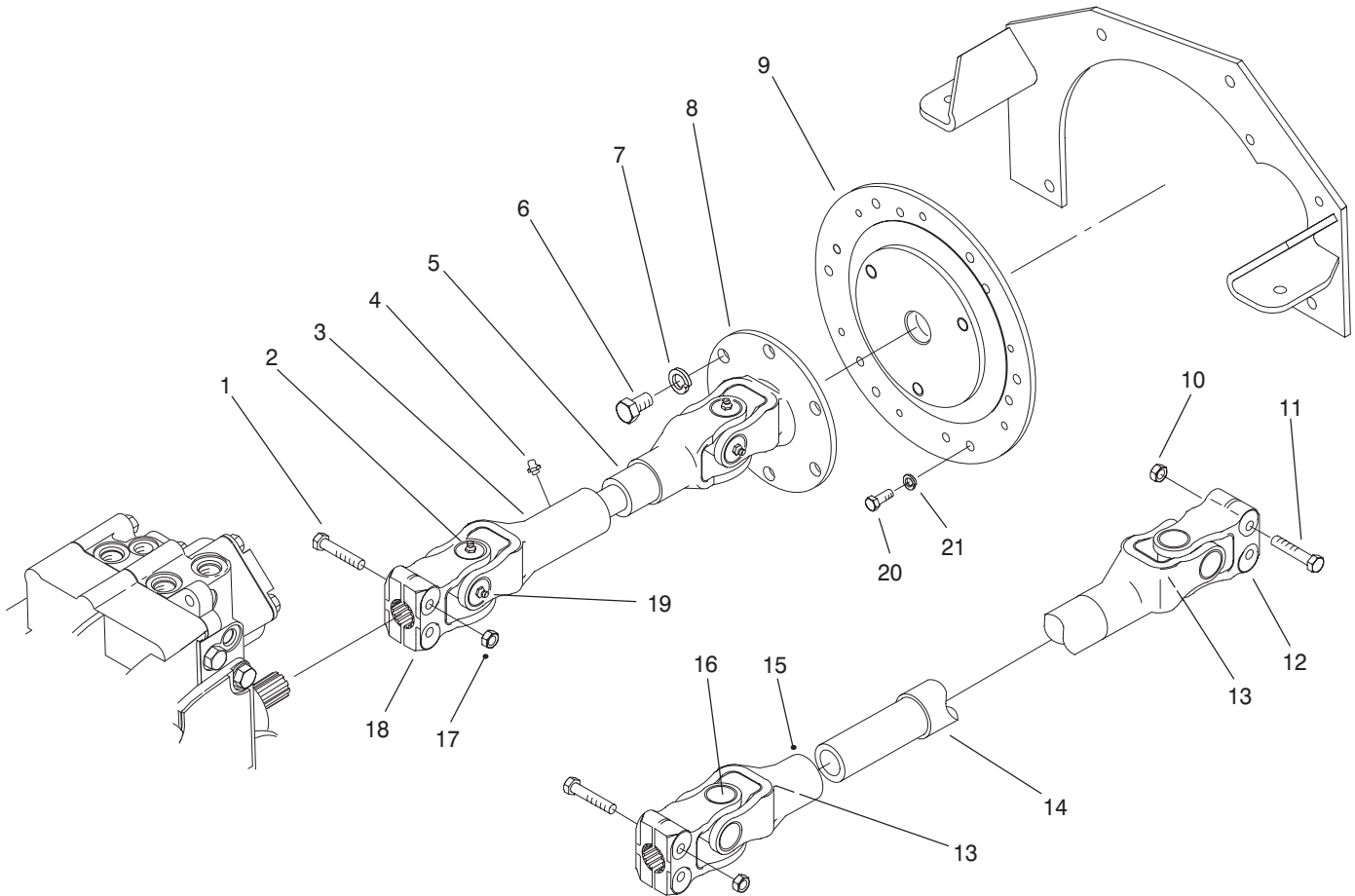
T-2650

## Manifold Assembly No. 94-9291

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
†1		1	Body	18	353-991	5	Plug (Incl. Ref. #19)
†2		3	O-Ring	19	237-156	5	O-Ring
†3		3	O-Ring	20	237-78	1	O-Ring
4	93-5944	1	Valve-Needle (Incl. Ref. #2, 3 & 5-7)	21	353-990	1	Plug (Incl. Ref. #20)
†5		1	Wheel	†22		1	O-Ring
†6		1	Screw-Set	†23		1	O-Ring
7	93-5948	1	Knob-Knurled (Incl. Ref. #5 & 6)	†24		1	O-Ring
8	93-5943	1	Valve-Logic (Incl. Ref. #22-24)	25	354-70	1	Plug (Incl. Ref. #26)
9	95-5941	1	Plug-Orifice (.187 Dia.)	26	237-79	2	O-Ring
10	92-6315	1	Cartridge-NC, Poppet (Incl. Ref. #2, 3, 11 & 13)	27	353-988	1	Plug (Incl. Ref. #26)
11	94-5438	4	O-Ring	28	95-7480	1	Plug-Cavity (Incl. Ref. #2 & 3)
12	88-9190	2	Kit-Solenoid Coil	*	69-4240	1	Kit-Seal (Incl. Ref. #22-24)
13	3219-10	1	Nut	*	75-2080	1	Kit-Seal (Incl. Ref. #2 & 3)
14	353-989	6	Plug (Incl. Ref. #15)	*	93-5948	1	Kit-Knob (Incl. Ref. #5-7)
15	237-42	6	O-Ring	*	95-7003	1	Plug-Orifice (Optional)
†16		1	Nut				
17	93-7494	1	Cartridge-NO, Poppet (Incl. Ref. #2, 3, 11 & 16)				

\* Not Illustrated

† Not Serviced Separately



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T-2335-2

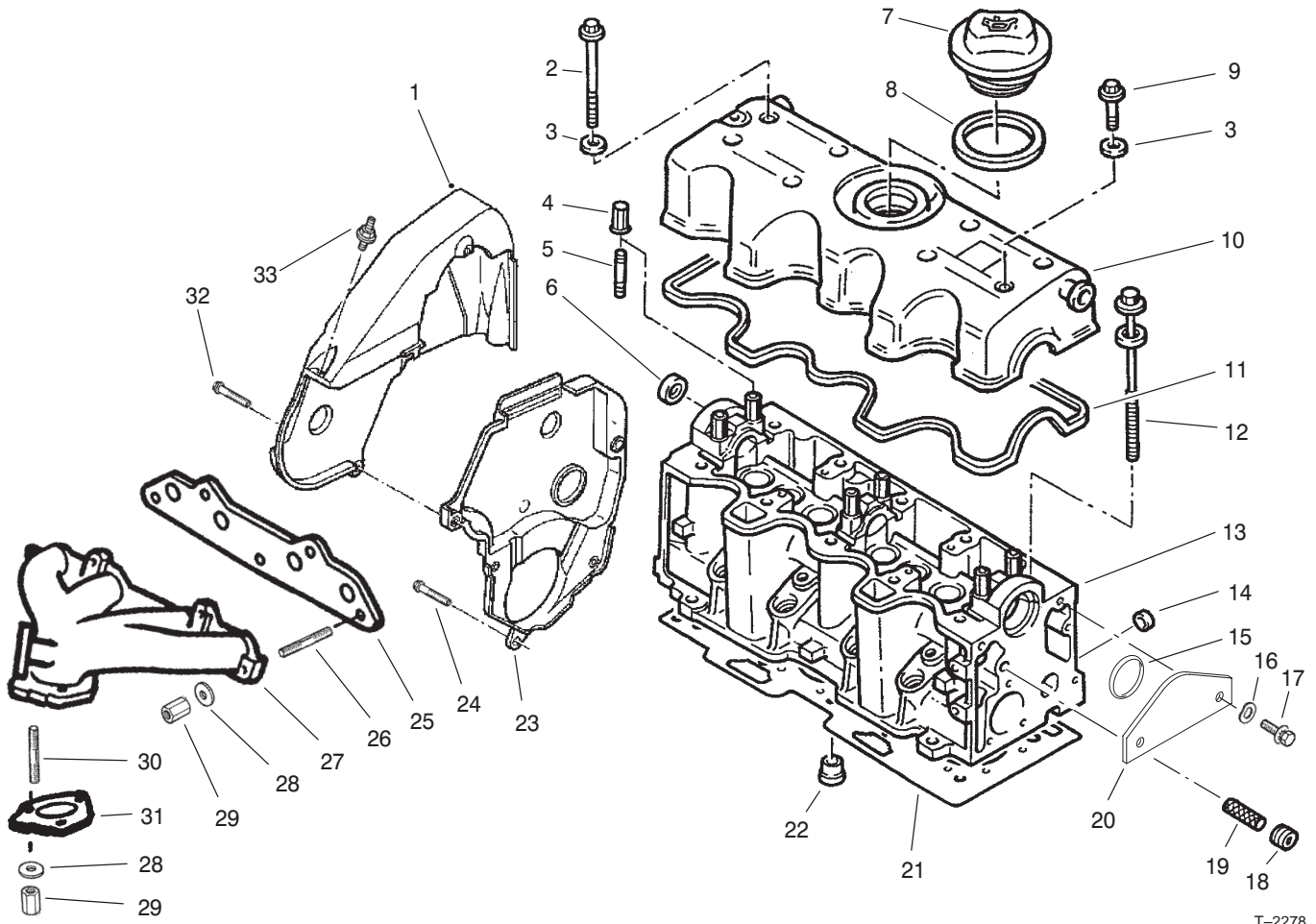
## Drive Shaft Assembly

Ref. No.	Part No.	Qty.	Description
1	33115-045	2	Screw-HH
2	95-2644	2	Kit-Cross & Bearing (Incl. Ref. #19)
3	95-2600	1	Yoke-Slip
4	302-5	2	Fitting-Grease
5	95-2599	1	Yoke & Shaft
6	33106-020	3	Screw-HHF
7	3253-7	3	Washer-Lock
8	95-2643	1	Yoke-Flange
9	93-5043-03	1	Plate-Adapter, Engine
10	33024-00	4	Nut-Lock (Model 30302)
11	33114-050	4	Screw-HH (Model 30302)
12	93-5560	2	Yoke-Clamp (Model 30302)
13	302-8	2	Fitting-Grease 45° (Model 30302)
14	93-5565	1	Yoke & Sleeve (Model 30302)
15	93-5564	1	Yoke & Shaft (Model 30302)
16	93-5561	2	Kit-Cross & Bearing (Model 30302)
17	33025-00	2	Nut-Lock
18	100-1354	1	Clamp-Yoke

Ref. No.	Part No.	Qty.	Description
19	302-58	8	Fitting-Grease
20	93-5398	6	Screw-HH
21	3253-4	6	Washer-Lock
*	100-1353	1	Engine Drive Shaft ASM (Incl. Ref. #2-5, 8, 18, & 19)
*	93-5042	1	Drive Shaft ASM (Model 30302 Only) (Incl. Ref. #4, & 12-16)

\* Not Illustrated





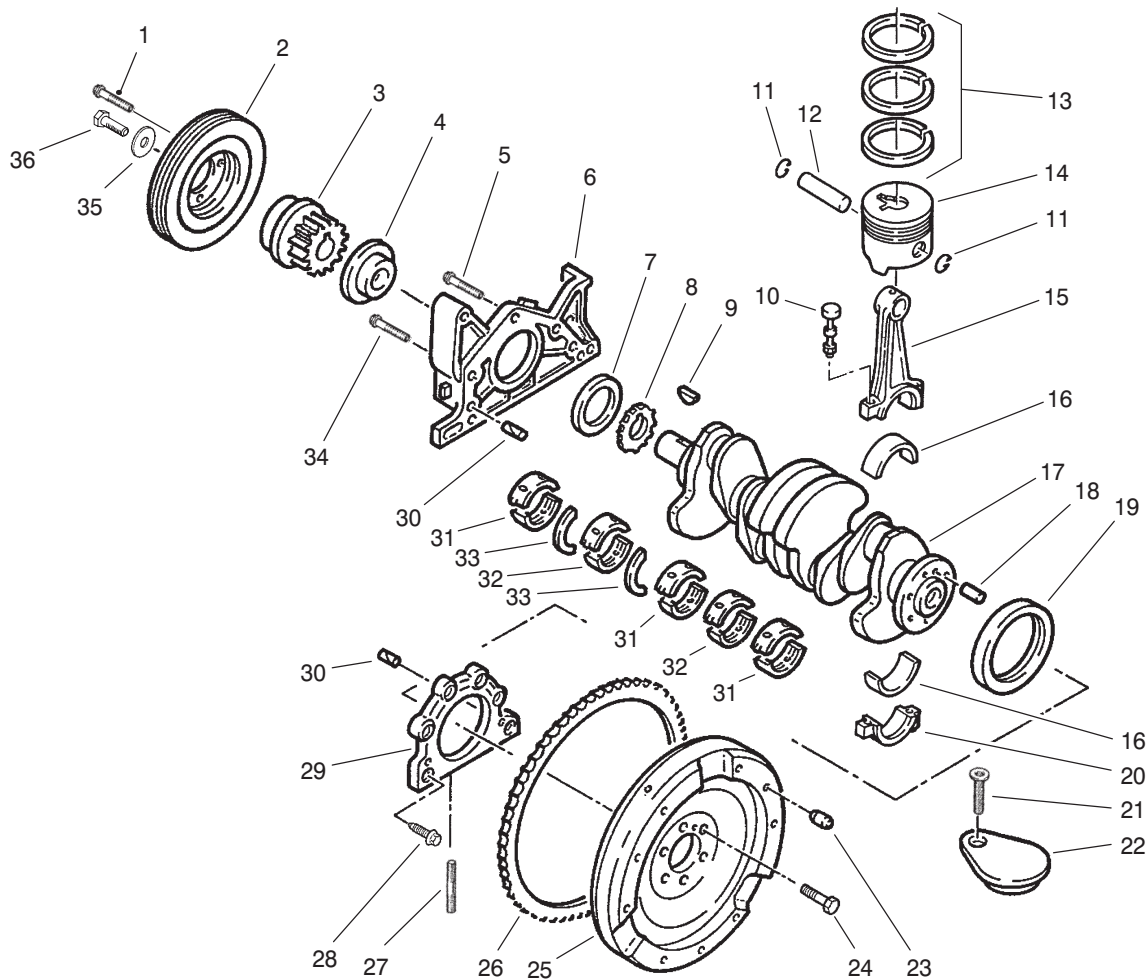
T-2278

## Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
1	95-7475	1	Cover-Upper
2	93-5672	4	Screw
3	93-5667	8	Gasket
4	93-5674	6	Nut
5	94-3162	6	Stud
6	74-7840	2	Plug
7	93-5668	1	Oil Cap Filler ASM (Incl. Ref. #8)
8	93-5666	1	Gasket
9	93-5673	4	Screw
10	93-5662	1	Cover (Incl. Ref. #11)
11	93-5665	1	Gasket
12	94-4146	10	Screw
13	93-5661	1	Head-Cylinder
14	93-5669	4	Plug
15	93-5926	1	O-Ring
16	93-5928	2	Washer-Spring
17	93-5927	2	Screw
18	94-3118	2	Plug
19	93-5670	1	Element-Filter
20	100-1364	1	Cover Plate ASM (Incl. Ref. #15)
21	93-5947	1	Gasket-Head, Cylinder
22	94-4145	4	Chamber-Swirl
23	98-8070	1	Cover-Lower
24	95-7477	5	Screw

Ref. No.	Part No.	Qty.	Description
25	93-5894	1	Gasket
26	93-5895	5	Stud
27	93-5893	1	Manifold-Exhaust
28	93-5897	8	Washer-Plate
29	93-5896	8	Nut-Hex
30	93-5898	3	Stud
31	93-5892	1	Gasket-Pipe
32	95-7479	1	Screw
33	95-7478	1	Screw
*	93-5664	1	Set-Gasket, Cylinder Head Gasket

\*Not Illustrated



## Piston & Crankshaft Assembly

T-2279

Ref. No.	Part No.	Qty.	Description
1	94-3112	4	Screw
2	98-8071	1	Pulley-Crankshaft
▲3	93-5684	1	Gear-Timing
●3	100-1374	1	Gear-Timing
4	93-5699	1	Spacer
5	93-5710	2	Screw
6	93-5687	1	Plate-Gasket
7	93-5701	1	Gasket
▲8	93-5698	1	Gear-Pump, Oil
●8	100-1375	1	Gear-Pump, Oil
9	93-5703	1	Key
10	93-5715	8	Bolt- Rod, Connecting
11	93-5716	8	Circlip
†12		4	Pin-Wrist
13	93-5714	4	Set Of 3 Piston Rings (77mm Dia.)
†14		4	Piston
15	93-5712	1	Set Of 4 Connecting Rods (Incl. Ref. #10 & 20)
16	93-5713	1	Set Of 8 Half Bearings (45mm Dia.)
16	95-2705	1	Set Of 8 Half Bearings (44.7mm Dia.)
17	93-5681	1	Crankshaft
18	74-8250	1	Pin

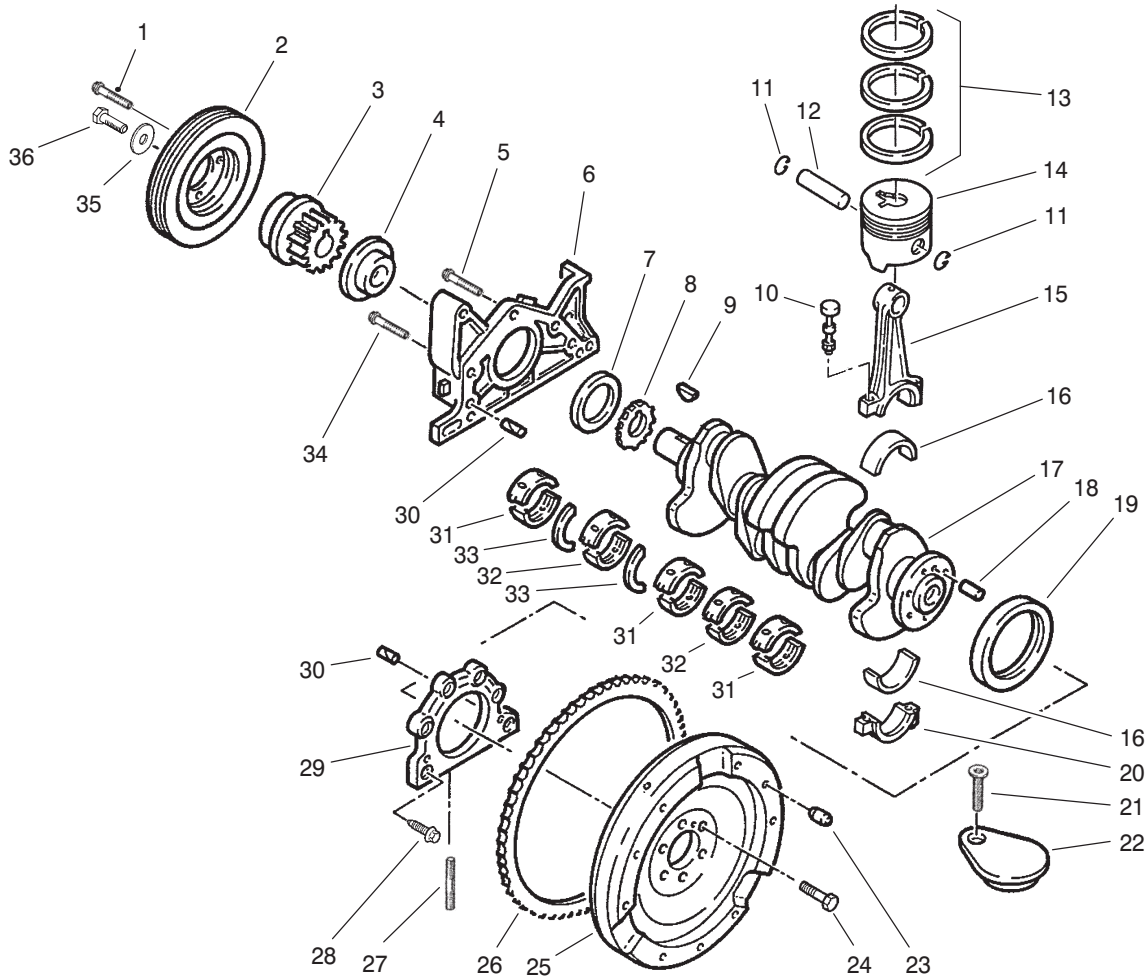
Ref. No.	Part No.	Qty.	Description
19	93-5702	1	Gasket
†20		4	Cap-Rod, Connecting
21	93-5709	1	Screw
22	93-5700	1	Plug
23	93-5705	3	Pin
24	93-5708	6	Screw
■25	95-2642	1	Flywheel-Engine (Incl. Ref. #26)
■26	95-2641	1	Gear-Starter, Starter
27	93-5707	2	Stud
28	93-5704	6	Screw
29	93-5686	1	Plate-Gasket
30	100-1383	4	Pin
31	93-5688	6	Bearing-Half (1.844 Thick)
*	93-5689	6	Bearing-Half (1.858 Thick)
*	93-5690	6	Bearing-Half (1.869 Thick)
*	95-2706	6	Bearing-Half (1.994 Thick)
*	95-2707	6	Bearing-Half (2.008 Thick)

\*Not Illustrated

■For Engine Serial No. 549159 & Up

●For Engine Serial No. 650226 & Down.

†Not Serviced Separately ▲For Engine Serial No. 650227 & Up.



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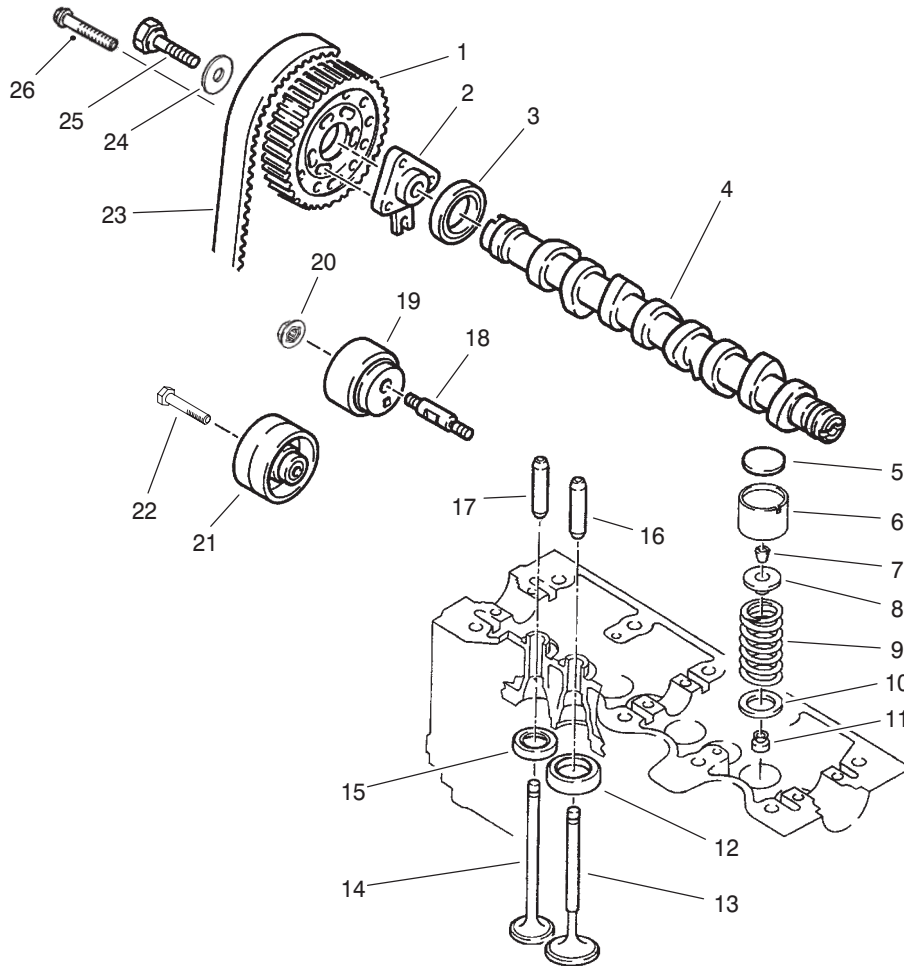
## Piston & Crankshaft Assembly (Continued)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
*	95-2708	6	Bearing-Half (2.019 Thick)	*	95-2702	1	Piston ASM. Repair A (Incl. Ref. #11-14)
32	93-5691	4	Bearing-Half (1.844 Thick)	*	95-2703	1	Piston ASM. Repair B (Incl. Ref. #11-14)
*	93-5692	4	Bearing-Half (1.858 Thick)	*	95-2704	1	Piston ASM. Repair C (Incl. Ref. #11-14)
*	93-5693	4	Bearing-Half (1.869 Thick)				
*	95-2709	4	Bearing-Half (1.994 Thick)				
*	95-2710	4	Bearing-Half (2.008 Thick)				
*	95-2711	4	Bearing-Half (2.019 Thick)				
33	93-5694	2	Flanges-Half (2.40 Thick)				
*	93-5695	2	Flanges-Half (2.50 Thick)				
*	93-5696	2	Flanges-Half (2.55 Thick)				
*	93-5697	2	Flanges-Half (2.60 Thick)				
34	93-5711	3	Screw				
35	74-8080	1	Washer-Pate				
▲36	94-3145	1	Screw-Pulley				
●36	100-1376	1	Screw-Pulley				

\*Not Illustrated

▲For engine Serial No. 650227 & Up.

●For Engine Serial No. 650226 & Down.



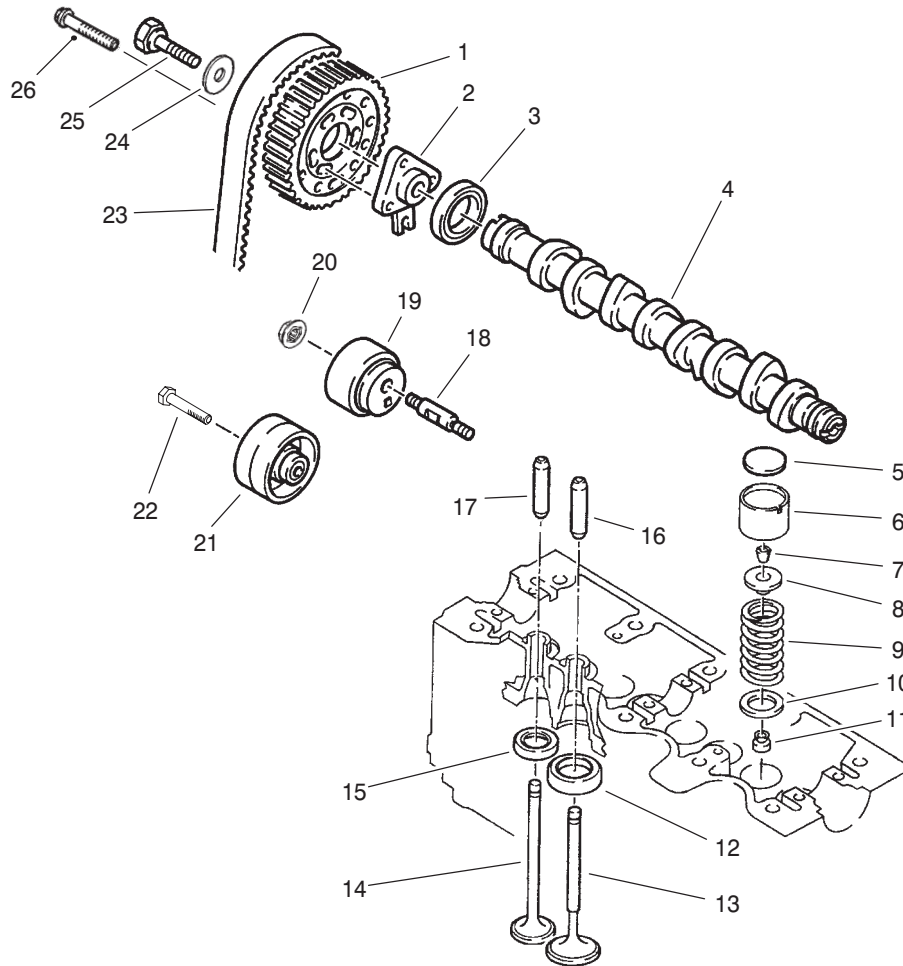
T-2280

## Camshaft & Valves Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5719	1	Gear-Camshaft
2	93-5723	1	Hub-Pulley
3	93-5718	1	Seal-Camshaft
4	93-5717	1	Camshaft
5	93-5742	8	Shim-Tappet (3.20 mm)
*	93-5743	8	Shim-Tappet (3.25 mm)
*	93-5744	8	Shim-Tappet (3.30 mm)
*	93-5745	8	Shim-Tappet (3.35 mm)
*	93-5746	8	Shim-Tappet (3.40 mm)
*	93-5747	8	Shim-Tappet (3.45 mm)
*	93-5748	8	Shim-Tappet (3.50 mm)
*	93-5749	8	Shim-Tappet (3.55 mm)
*	93-5750	8	Shim-Tappet (3.60 mm)
*	93-5751	8	Shim-Tappet (3.65 mm)
*	93-5752	8	Shim-Tappet (3.70 mm)

Ref. No.	Part No.	Qty.	Description
*	93-5753	8	Shim-Tappet (3.72 mm)
*	93-5754	8	Shim-Tappet (3.75 mm)
*	93-5755	8	Shim-Tappet (3.77 mm)
*	93-5756	8	Shim-Tappet (3.80 mm)
*	93-5757	8	Shim-Tappet (3.82 mm)
*	93-5758	8	Shim-Tappet (3.85 mm)
*	93-5759	8	Shim-Tappet (3.87 mm)
*	93-5760	8	Shim-Tappet (3.90 mm)
*	93-5761	8	Shim-Tappet (3.92 mm)
*	93-5762	8	Shim-Tappet (3.95 mm)
*	93-5763	8	Shim-Tappet (3.97 mm)
*5	93-5764	8	Shim-Tappet (4.00 mm)

\*Not Illustrated



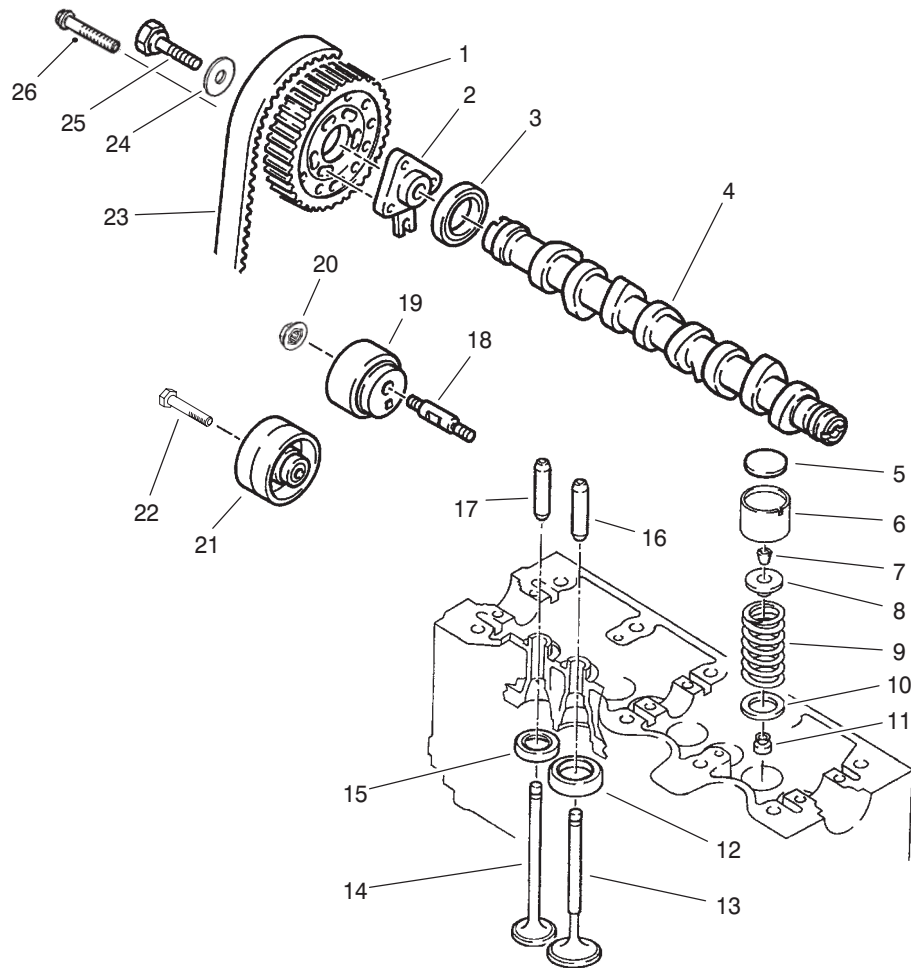
T-2280

## Camshaft & Valves Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
*	93-5765	8	Shim-Tappet (4.02 mm)
*	93-5766	8	Shim-Tappet (4.05 mm)
*	93-5767	8	Shim-Tappet (4.07 mm)
*	93-5768	8	Shim-Tappet (4.10 mm)
*	93-5769	8	Shim-Tappet (4.12 mm)
*	93-5770	8	Shim-Tappet (4.15 mm)
*	93-5771	8	Shim-Tappet (4.17 mm)
*	93-5772	8	Shim-Tappet (4.20 mm)
*	93-5773	8	Shim-Tappet (4.22 mm)
*	93-5774	8	Shim-Tappet (4.25 mm)
*	93-5775	8	Shim-Tappet (4.27 mm)
*	93-5776	8	Shim-Tappet (4.30 mm)
*	93-5777	8	Shim-Tappet (4.32 mm)

Ref. No.	Part No.	Qty.	Description
*	93-5778	8	Shim-Tappet (4.35 mm)
*	93-5779	8	Shim-Tappet (4.37 mm)
*	93-5780	8	Shim-Tappet (4.40 mm)
*	93-5781	8	Shim-Tappet (4.42 mm)
*	93-5782	8	Shim-Tappet (3.45 mm)
*	93-5783	8	Shim-Tappet (4.47 mm)
*	93-5784	8	Shim-Tappet (4.50 mm)
*	93-5785	8	Shim-Tappet (4.52 mm)
*	93-5786	8	Shim-Tappet (4.55 mm)
*	93-5787	8	Shim-Tappet (4.57 mm)
*	93-5788	8	Shim-Tappet (4.60 mm)
*	93-5789	8	Shim-Tappet (4.62 mm)

\*Not Illustrated



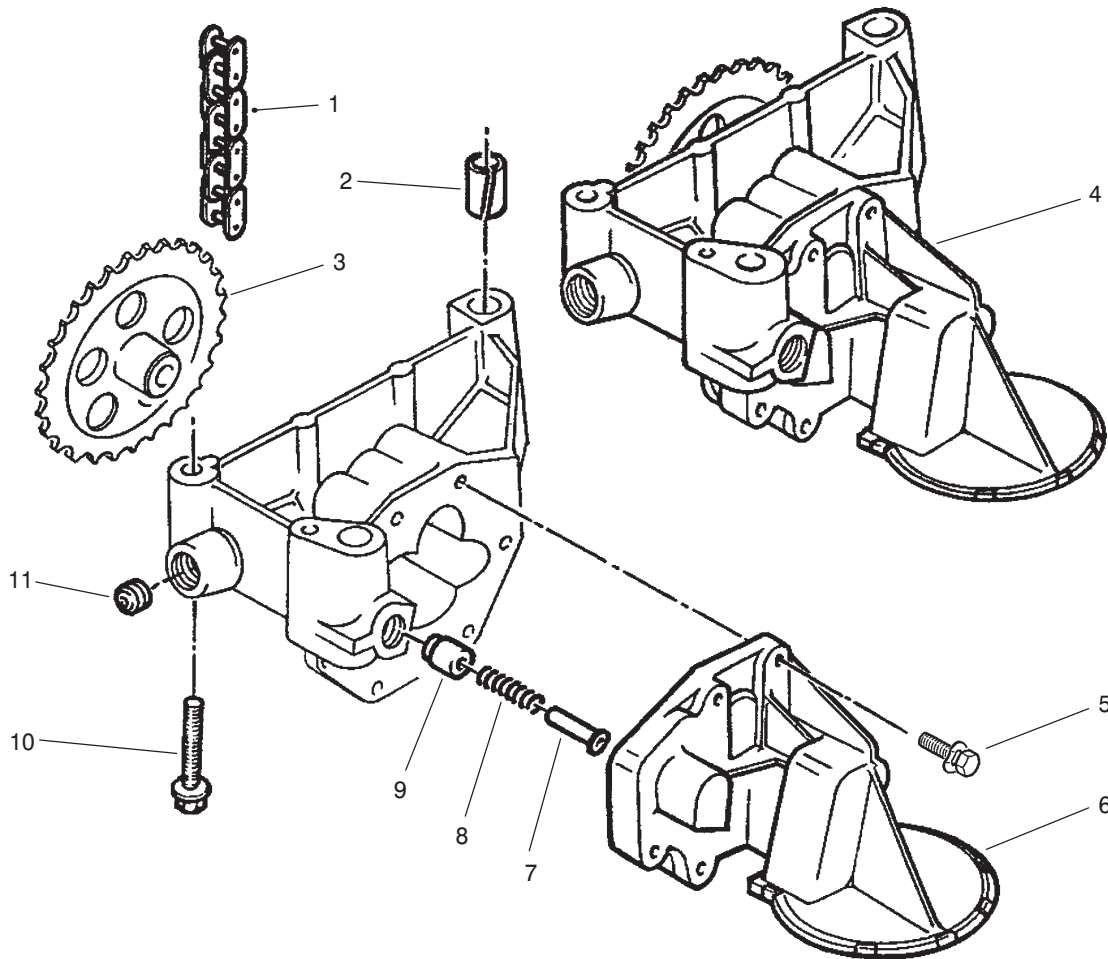
T-2280

## Camshaft & Valves Assembly (Continued)

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
*5	93-5790	8	Shim-Tappet (4.65 mm)	10	93-5741	8	Washer-Flat
*	93-5791	8	Shim-Tappet (4.67 mm)	11	100-1367	8	Seal-Valve
*	93-5792	8	Shim-Tappet (4.70 mm)	12	93-5739	4	Valve-Seat, Inlet
*	93-5793	8	Shim-Tappet (4.72 mm)	13	93-5730	4	Valve-Intake
*	93-5794	8	Shim-Tappet (4.75 mm)	14	93-5731	4	Valve-Exhaust
*	93-5795	8	Shim-Tappet (4.77 mm)	15	93-5740	4	Valve-Seat, Outlet
*	93-5796	8	Shim-Tappet (4.80 mm)	16	93-5737	4	Guide-Valve, Inlet
*	93-5797	8	Shim-Tappet (4.82 mm)	17	93-5738	4	Guide-Valve, Outlet
*	93-5798	8	Shim-Tappet (4.85 mm)	18	93-5724	1	Spindle-Tensioner
*	93-5799	8	Shim-Tappet (4.87 mm)	19	100-1360	1	Tensioner
*	93-5800	8	Shim-Tappet (4.90 mm)	20	93-5729	1	Nut
6	93-5736	8	Tappet	21	100-1363	1	Kit-Roller (Incl. Ref. #22)
7	93-5734	16	Valve Half Bush	22	93-5726	1	Screw
8	93-5733	8	Seat-Spring, Valve	23	93-5720	1	Belt-Cogged
9	93-5732	8	Spring-Valve	24	93-5728	1	Washer-Plate
				25	93-5725	1	Screw-Pulley
				26	93-5851	3	Screw

\*Not Illustrated





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### Oil Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5804	1	Chain-Pump, Oil
2	93-5658	1	Pin
†3		1	Gear-Drive
4	93-5801	1	Pump-Oil (Incl. Ref. #3)
5	93-5807	6	Screw
6	93-5802	1	Strainer
7	93-5806	1	Shaft
8	93-5805	1	Spring
9	94-3176	1	Plunger
10	93-5803	3	Screw
11	94-3177	1	Plug

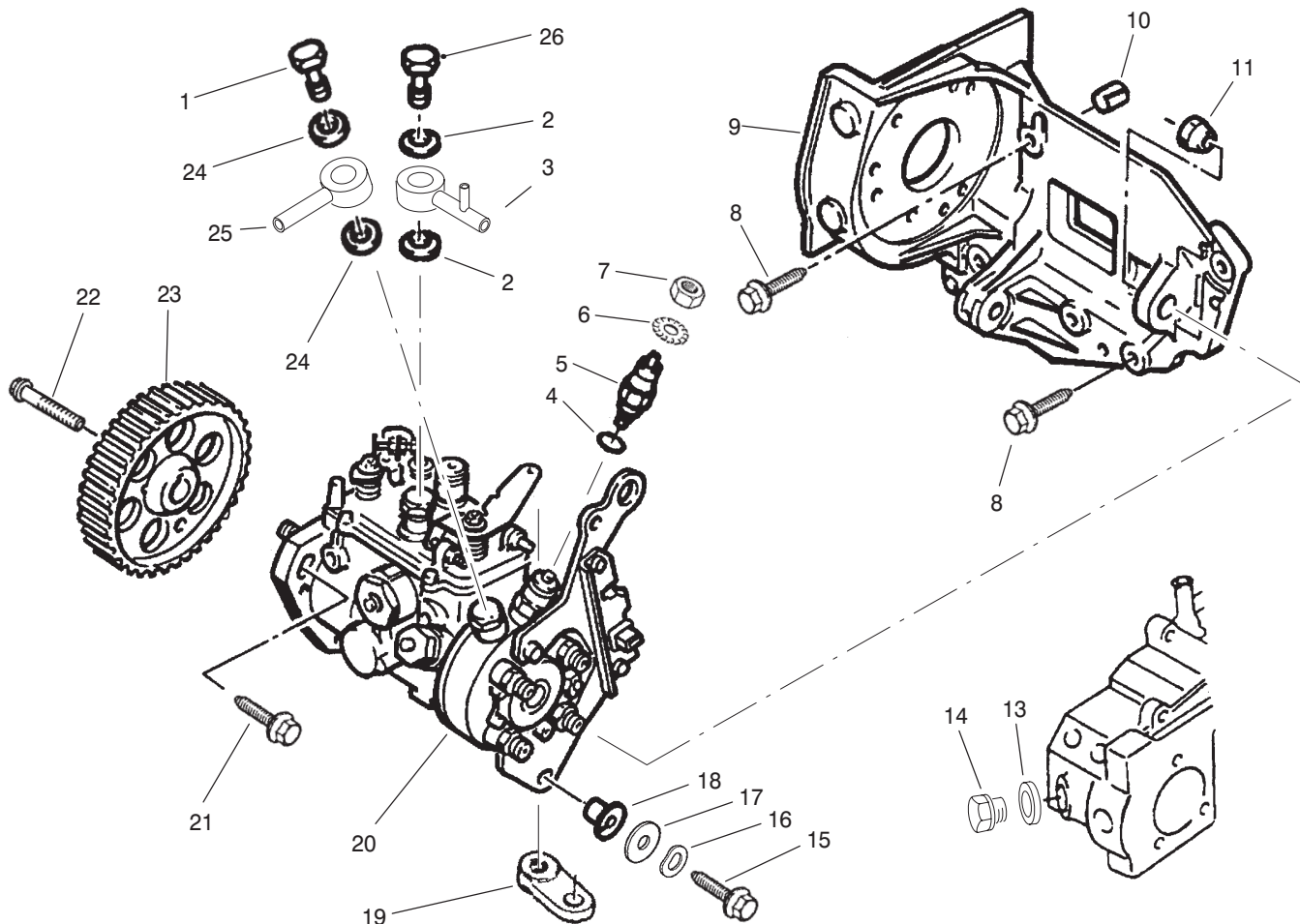
Ref. No.	Part No.	Qty.	Description

†Not Serviced Separately









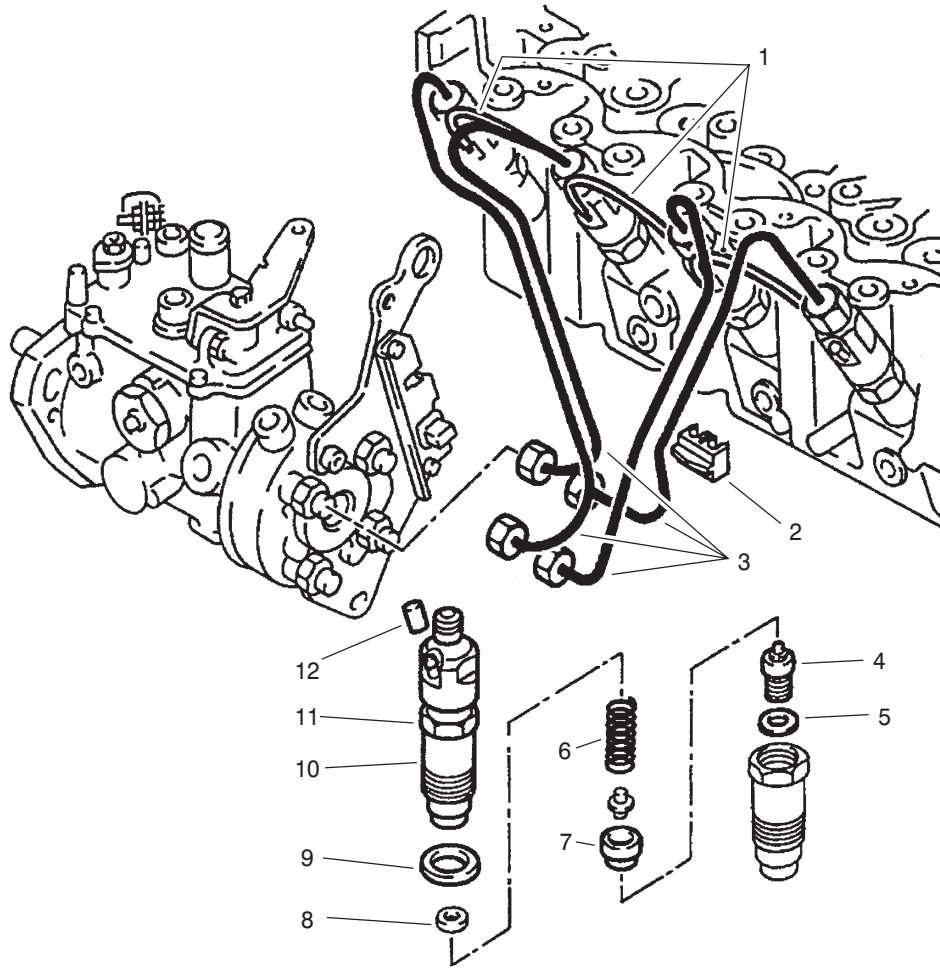
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### Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	94-4111	1	Screw-Union, Inlet
2	74-8870	2	Gasket
3	95-1690	1	Union-Outlet
4	94-3274	1	O-Ring
5	98-8806	1	Valve-Solenoid
6	74-8710	1	Washer
7	48-7880	1	Nut
8	93-5852	5	Screw (35mm)
*	93-5853	1	Screw (45mm)
9	93-5849	1	Bracket-Pump, Injection
10	93-5659	2	Pin
11	94-3165	1	Nut-Hex
13	94-3122	1	Gasket
14	94-3121	1	Plug
15	94-3221	1	Screw
16	94-3164	1	Washer-Spring
17	93-5855	1	Washer-Plate
18	93-5909	1	Ring
19	74-8650	1	Journal
20	93-5848	1	Pump-Injection
21	93-5854	3	Screw
22	93-5851	3	Screw
23	93-5719	1	Gear-Pump, Injection
24	74-8680	2	Gasket
25	93-5857	1	Union-Inlet

Ref. No.	Part No.	Qty.	Description
26	94-3250	1	Screw-Union, Outlet

\*Not Illustrated



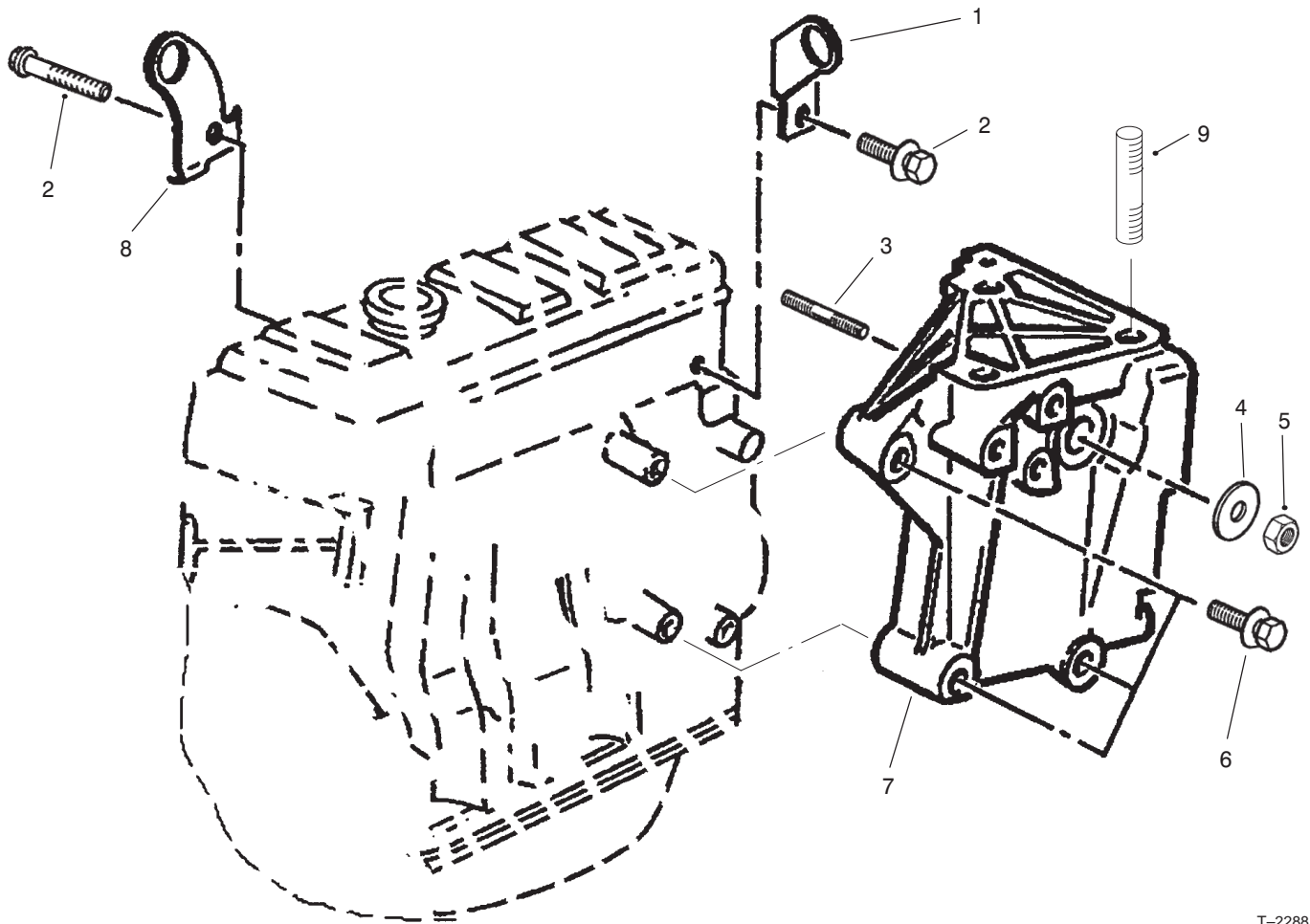
T-2287

## Fuel Injector & Plumbing Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5862	3	Union
*	93-5863	1	Union
2	94-3231	4	Bracket
3	93-5861	1	Harness-Pipes
4	93-5860	4	Injector
5	93-5867	4	Gasket-Injector
6	93-5864	4	Spring
7	93-5865	4	Spacer
8	93-5869	1	Shim (.680 mm)
*	93-5870	1	Shim (.720 mm)
*	93-5871	1	Shim (.760 mm)
*	93-5872	1	Shim (.800 mm)
*	93-5873	1	Shim (.840 mm)
*	93-5874	1	Shim (.880 mm)
*	93-5875	1	Shim (.920 mm)
*	93-5876	1	Shim (.960 mm)
*	93-5877	1	Shim (1.000 mm)
*	93-5878	3	Shim (1.035 mm)
*8	93-5879	1	Shim (1.065 mm)
*	93-5880	1	Shim (1.095 mm)
*	93-5881	1	Shim (1.125 mm)
*	93-5882	1	Shim (1.155 mm)
*	93-5883	1	Shim (1.185 mm)
*	93-5884	1	Shim (1.215 mm)
*	93-5885	1	Shim (1.245 mm)
*	93-5886	1	Shim (1.280 mm)

Ref. No.	Part No.	Qty.	Description
*	93-5887	1	Shim (1.320 mm)
*	93-5888	1	Shim (1.400 mm)
*	93-5889	1	Shim (1.480 mm)
*	93-5890	1	Shim (1.560 mm)
*	93-5891	1	Shim (1.640 mm)
9	93-5866	4	Gasket-Injector
10	93-5868	4	Holder-Injector + Injectpr
11	94-4147	4	Holder-Injector
12	74-8770	1	Plug

\*Not Illustrated



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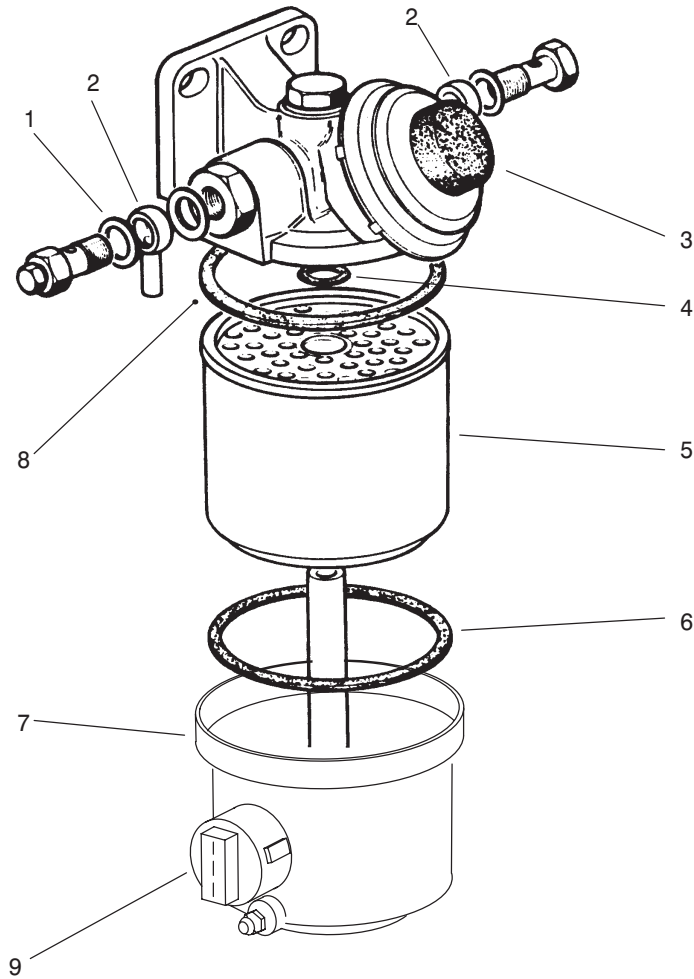
### Engine Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5901	1	Bracket-Lifting
2	93-5906	4	Screw
3	93-5905	1	Stud
4	93-5904	1	Washer-Plate
5	93-5903	1	Nut-Hex
6	93-5902	3	Screw
7	93-5899	1	Mount-Engine, RH
8	74-7570	1	Bracket-Lifting
9	93-5900	1	Stud

Ref. No.	Part No.	Qty.	Description







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### Fuel Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	76-5180	4	Washer-Copper
2	76-5190	2	Fitting-Adjustable
3	76-5300	1	Fuel Filter ASM (Incl. Ref. #7 & 9)
4		1	O-Ring
5	76-5220	1	Element-Filter (Incl. Ref. #4, 6 & 8)
6		1	Seal-Gasket
7		1	Cap-Filter, Fuel
8		1	Seal-Gasket
9	76-5320	1	Sensor-Water

Ref. No.	Part No.	Qty.	Description



