



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

Model No. 30301—200000001 and Up

Model No. 30301TC—200000001 and Up

Model No. 30302—200000001 and Up

Model No. 30302TC—200000001 and Up

### Parts Catalog

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#### 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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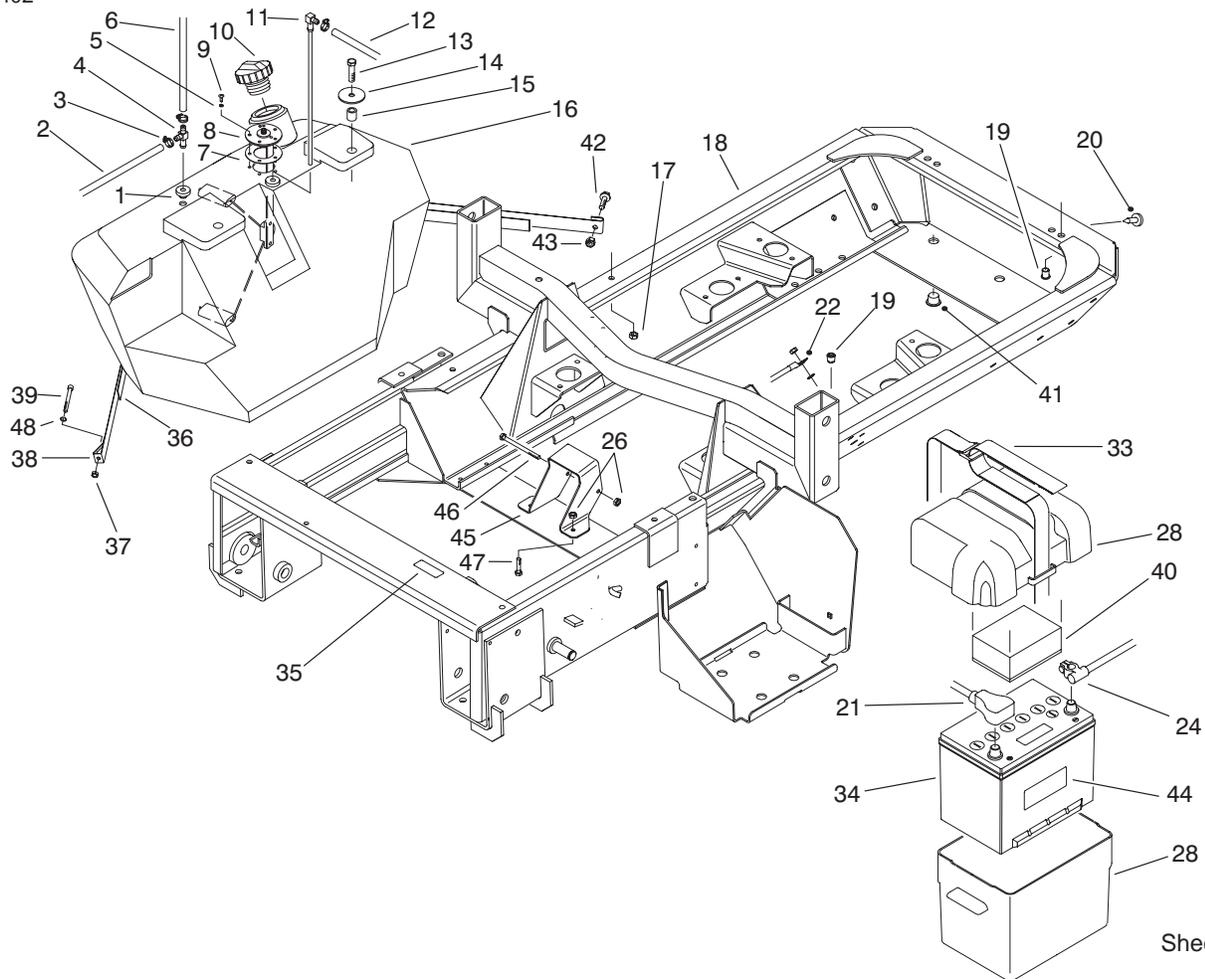
## Accessories

<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		



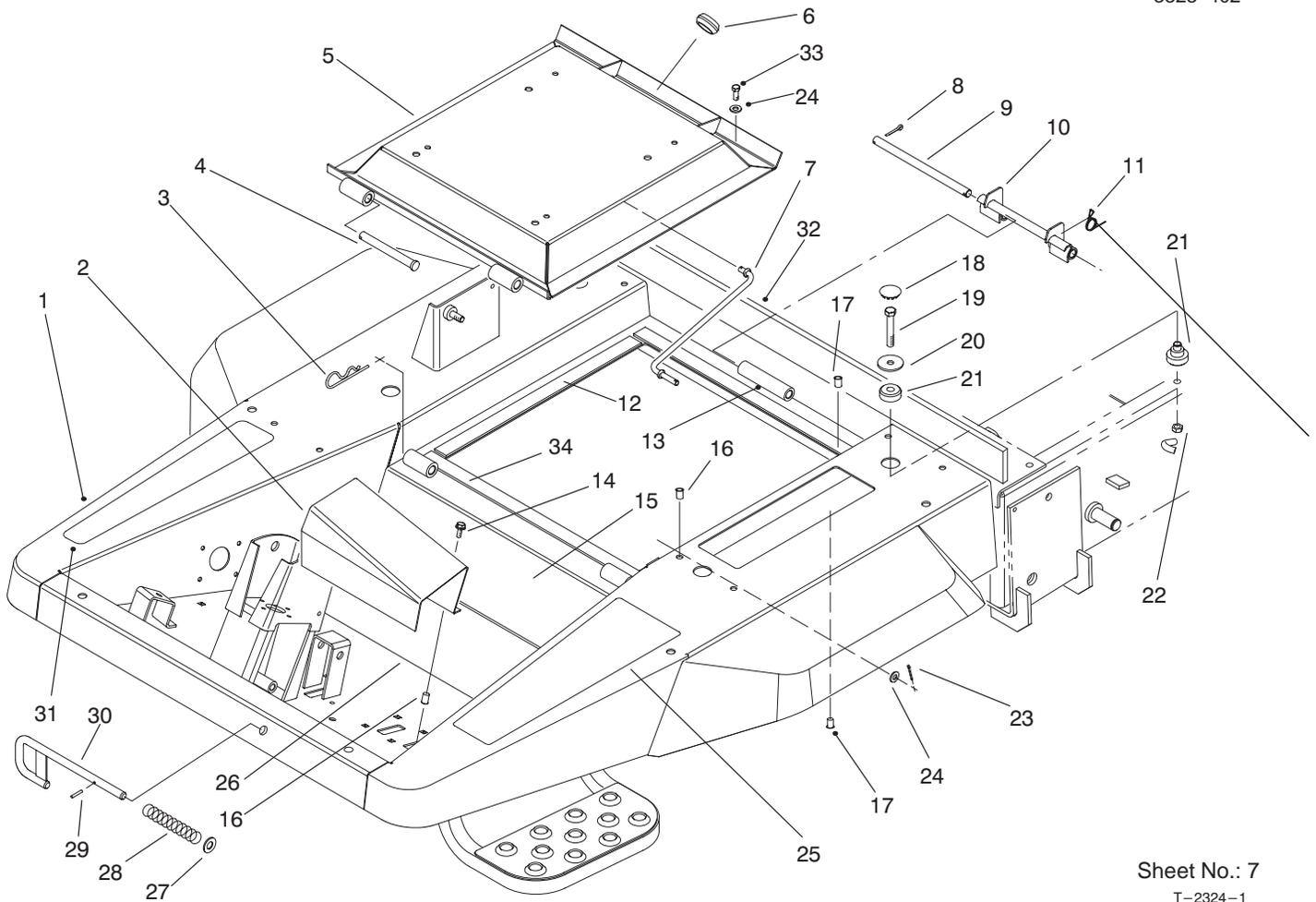
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## Frame, Fuel Tank & Battery Assembly

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
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

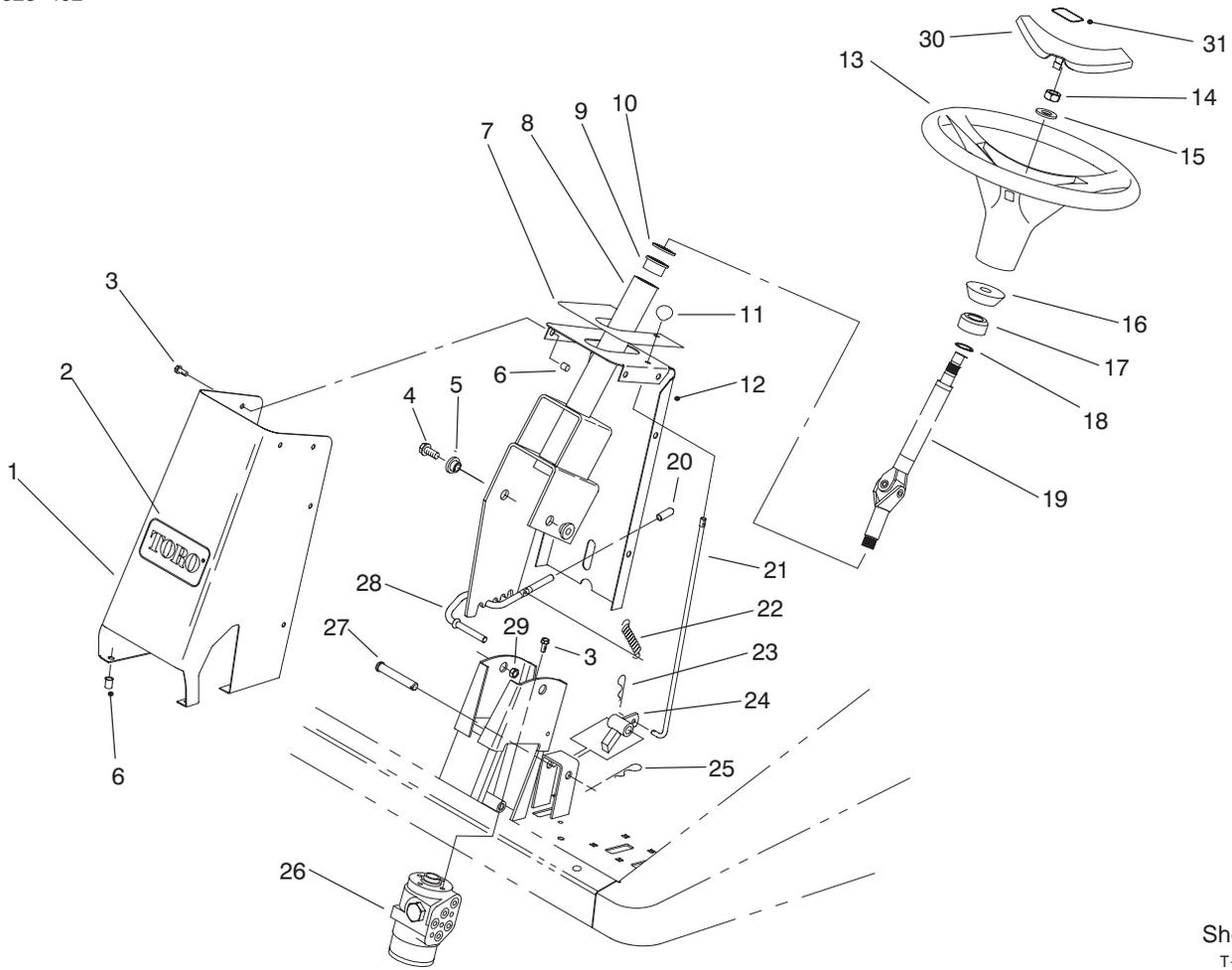


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## Front Frame & Seat Base Assembly

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	93-5343	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-ISO Mount
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-Traction Pedal (Europe)
32	93-5255	1	Strip-Foam
33	33114-020	2	Screw-HH (Europe)
34	99-5789	1	Foam Strip



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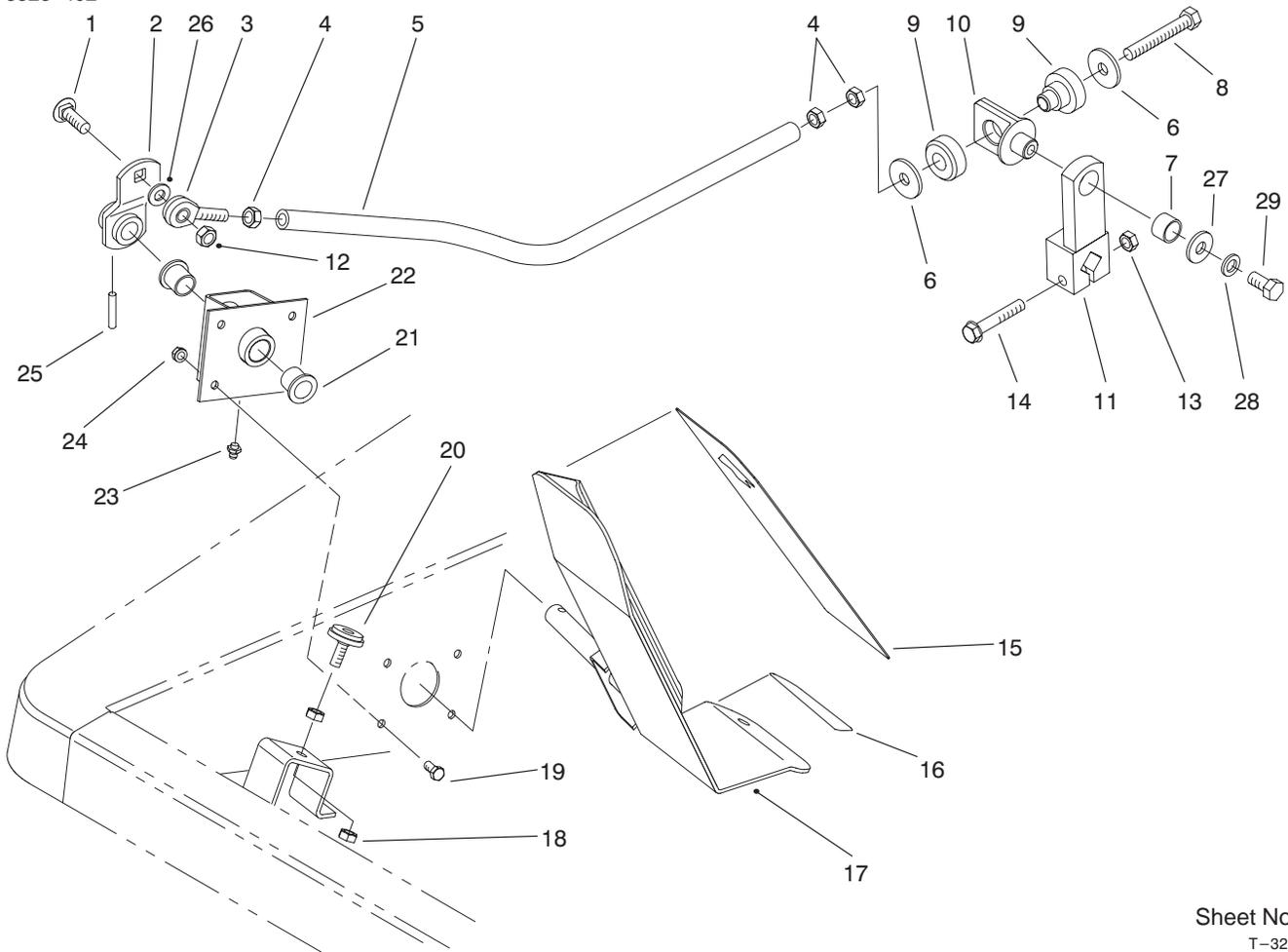
## Steering Assembly

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	Asm-Shaft, Steering
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	Steering Control Unit
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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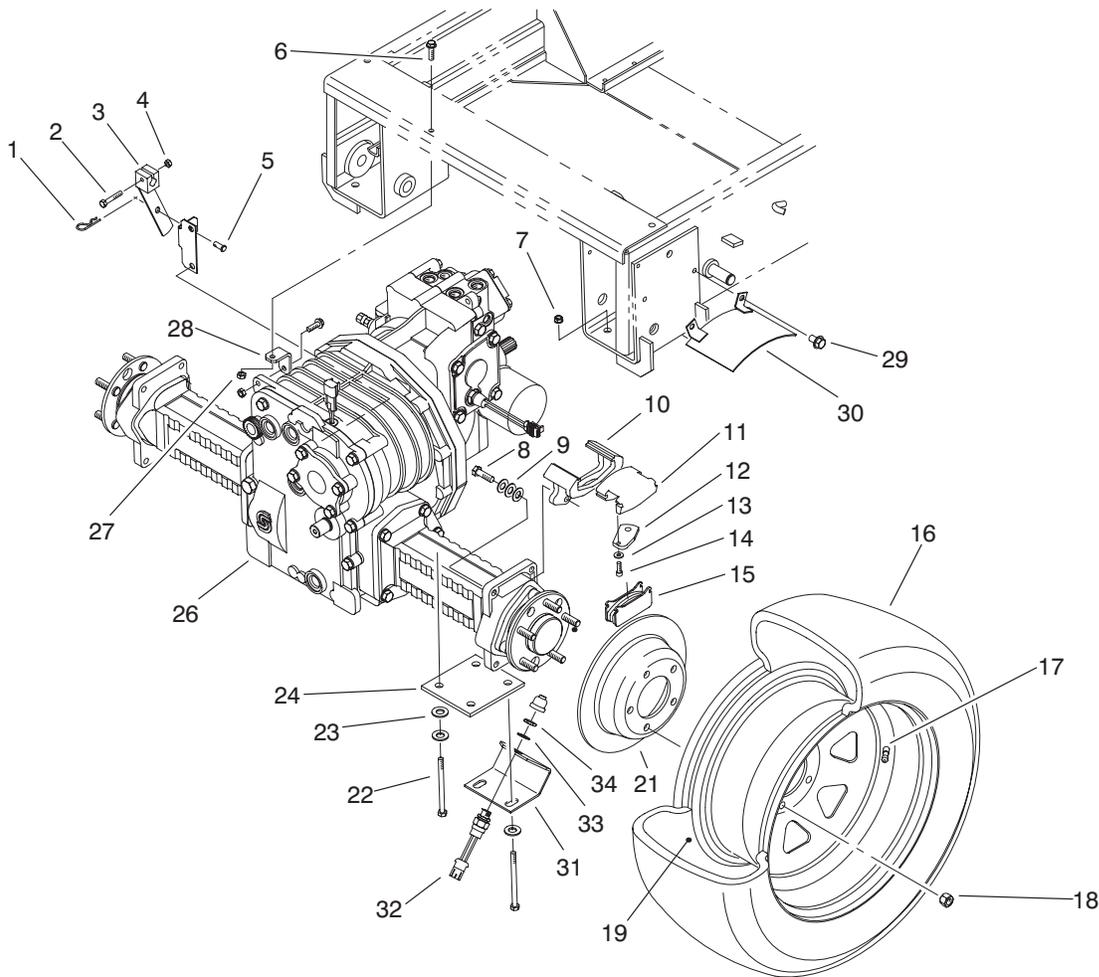
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## Traction Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	3231-25	1	Bolt-Carriage
2	93-5137	1	Lever-Traction
3	2411-36	1	Bearing-Rod End
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



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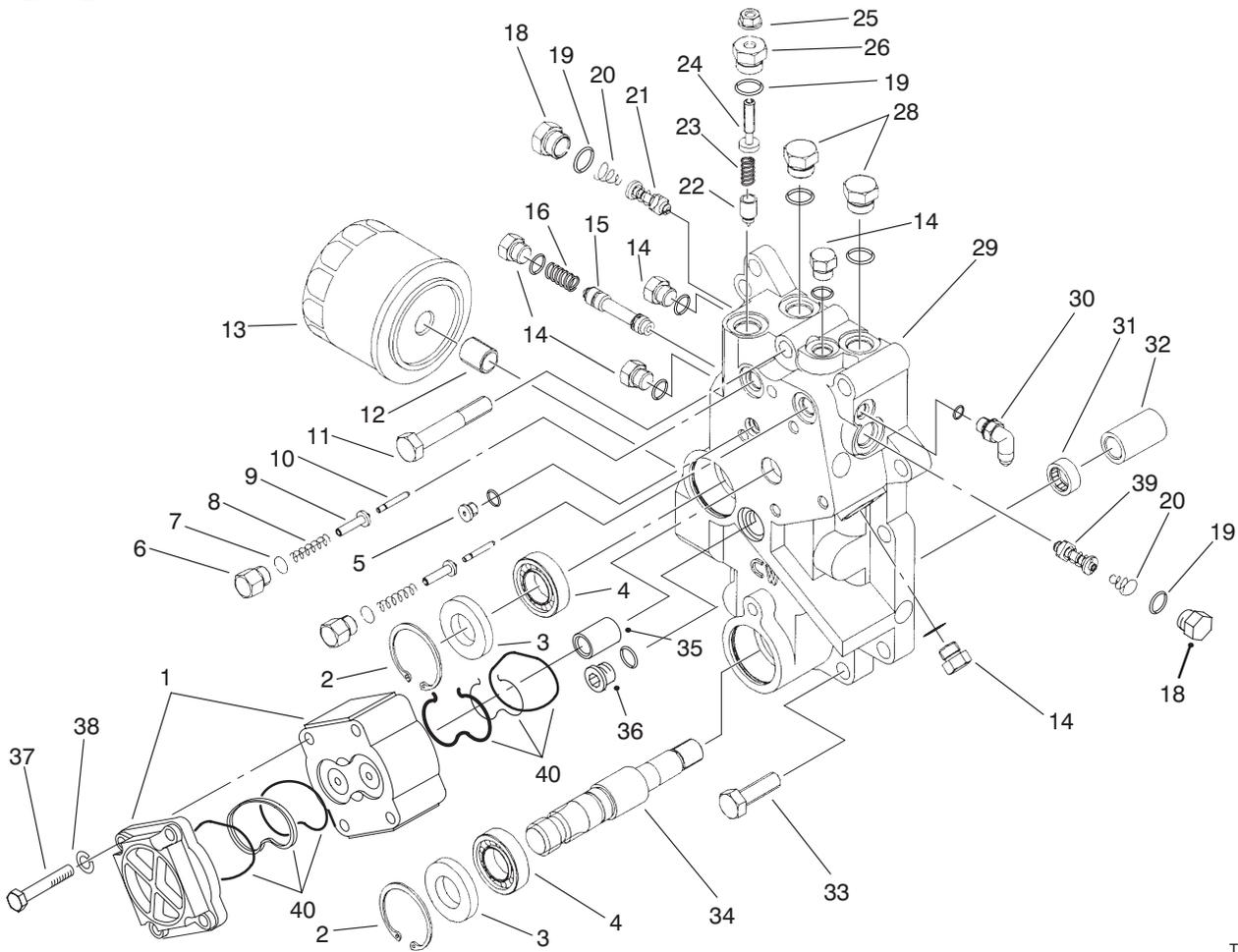
T-2327-4

## Front Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	3290-467	1	Pin-Cotter, Hair
2	33114-040	1	Screw-HH
3	93-5383-03	1	Lever
4	33024-00	1	Nut-Lock
5	283-62	1	Pin-Clevis
6	33104-025	2	Screw-HHF
7	33006-00	8	Nut-HF
8	323-44	4	Screw-HH
9	3290-461	12	Washer-Belleville
10	95-5697	2	Bracket-Mounting
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	Valve Stem
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

Ref. No.	Part No.	Qty.	Description
24	93-5036-03	2	Plate-Axle
26	95-2630	1	Axle-2 Speed
27	33024-00	2	Nut-Lock
28	93-5306	1	Bracket-Transaxle
29	32144-14	4	Screw-HH
30	93-5977-03	2	Shield-Brake
31	93-4869-03	1	Bracket-Switch
32	94-3429	1	Switch
33	3254-5	1	Washer-Lock
34	3220-6	2	Nut-Jam

\* Not Illustrated



T-2257-1

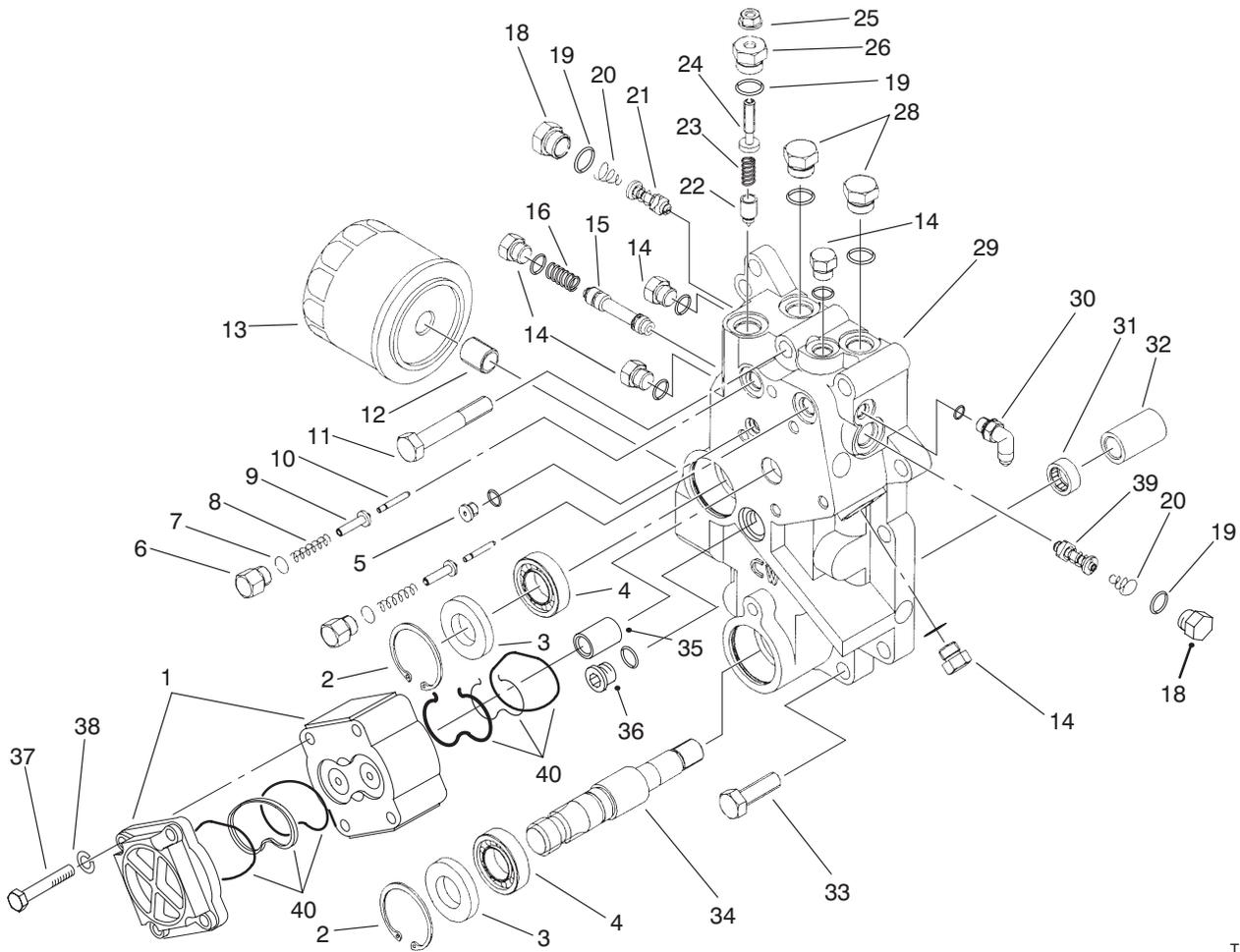
## Front Axle Center Section Assembly

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	Asm-Plug
6	94-3986	2	Plug-Hex. Head
7	94-3987	2	O-Ring
†8		2	Spring
†9		2	Asm-Sleeve
1†10		2	Piston
11	94-3999	2	Screw
12	25-2660	1	Union-Filter
13	94-3951	1	Filter
14	69-3940	5	Asm-Plug
†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	Asm-Plug
†29		1	Center Section
30	94-4075	1	Elbow
31	94-4021	1	Bearing
32	94-4023	1	Coupling-4 Wheel Drive
33	94-4020	8	Screw
34	94-4022	1	Shaft-4 Wheel Drive
35	94-3922	1	Coupling-Pump, Gear
36	94-9172	1	Asm-Plug
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	Asm-Center Section (Incl. Ref. #5-10, 12, 14-29 & 31)
*	94-9168	1	Asm-Valve, Implement Relief (Incl. Ref. #19 & 22-26)
*	94-9169	1	Kit-SCR Valve (6000 psi (Incl. Ref. #18-21)

\* Not Illustrated

† Not Serviced Separately



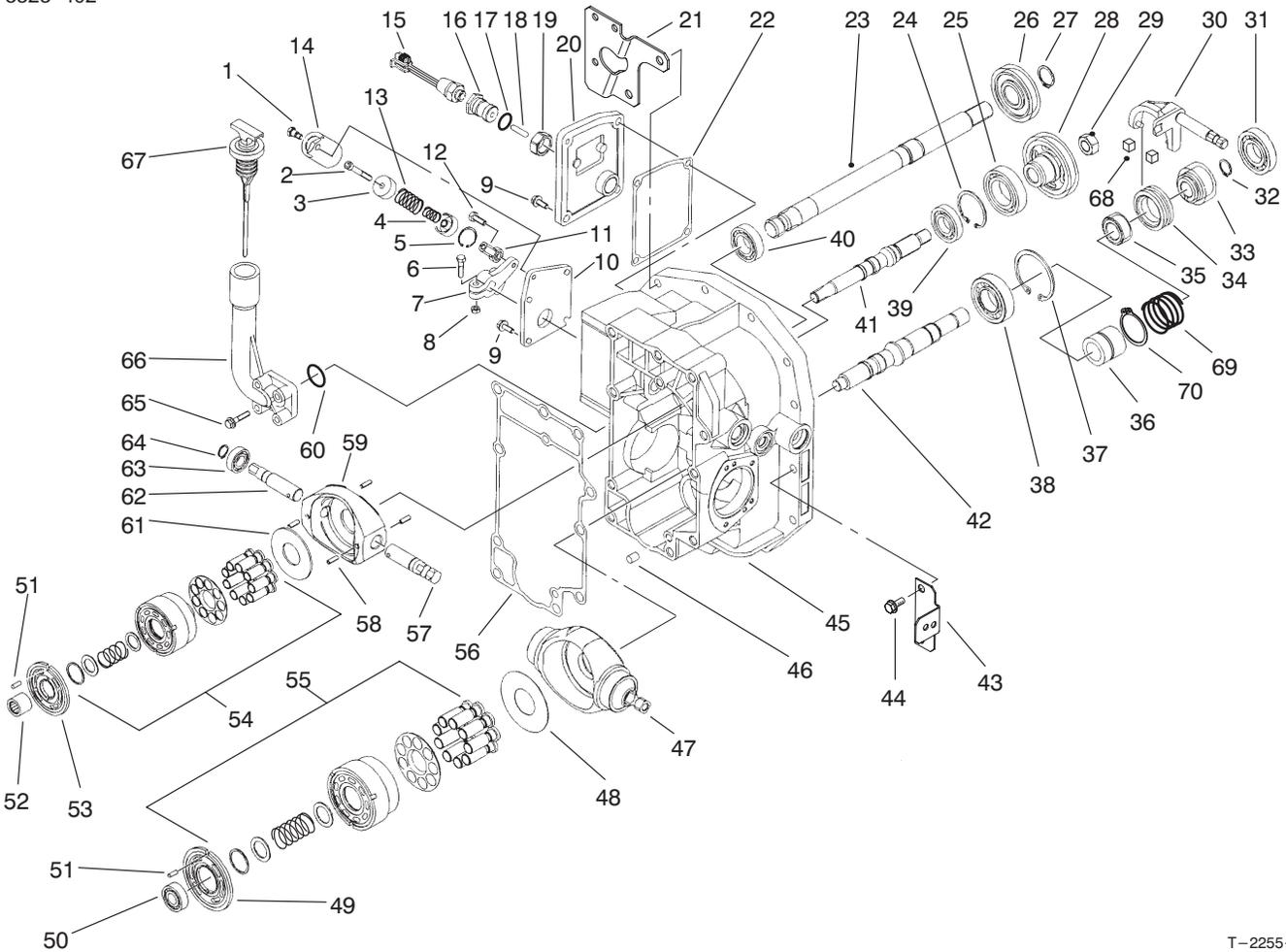
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## Front Axle Center Section Assembly (Continued)

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



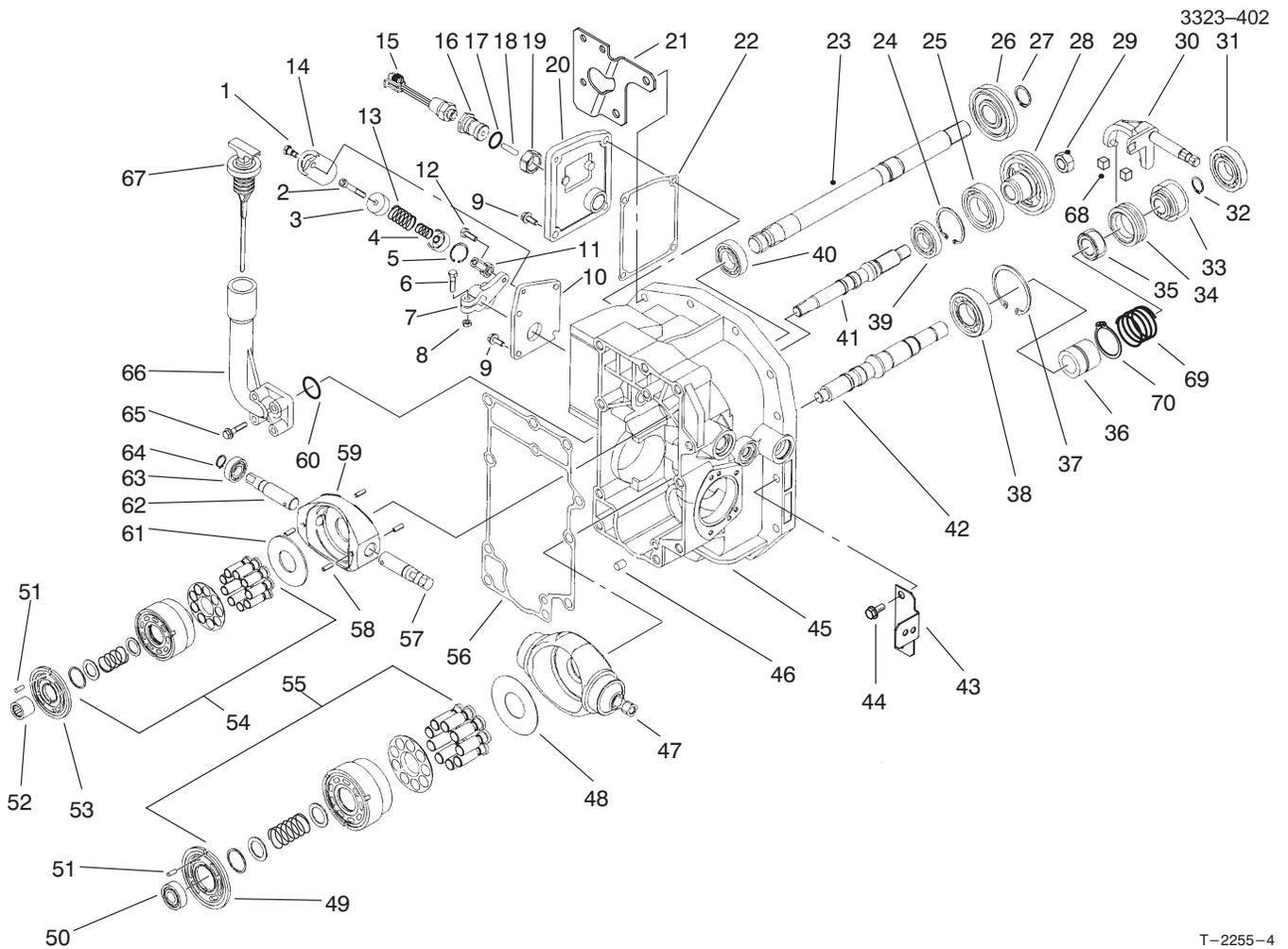
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## Hydraulic Housing Assembly

Ref. No.	Part No.	Qty.	Description
1	94-3928	1	Screw-HH, Shoulder
†2		1	Screw-Soc. Hd.
†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	Rod End-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-Counter Balance
22	94-3944	1	Gasket-Return,

Ref. No.	Part No.	Qty.	Description
			Neutral
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



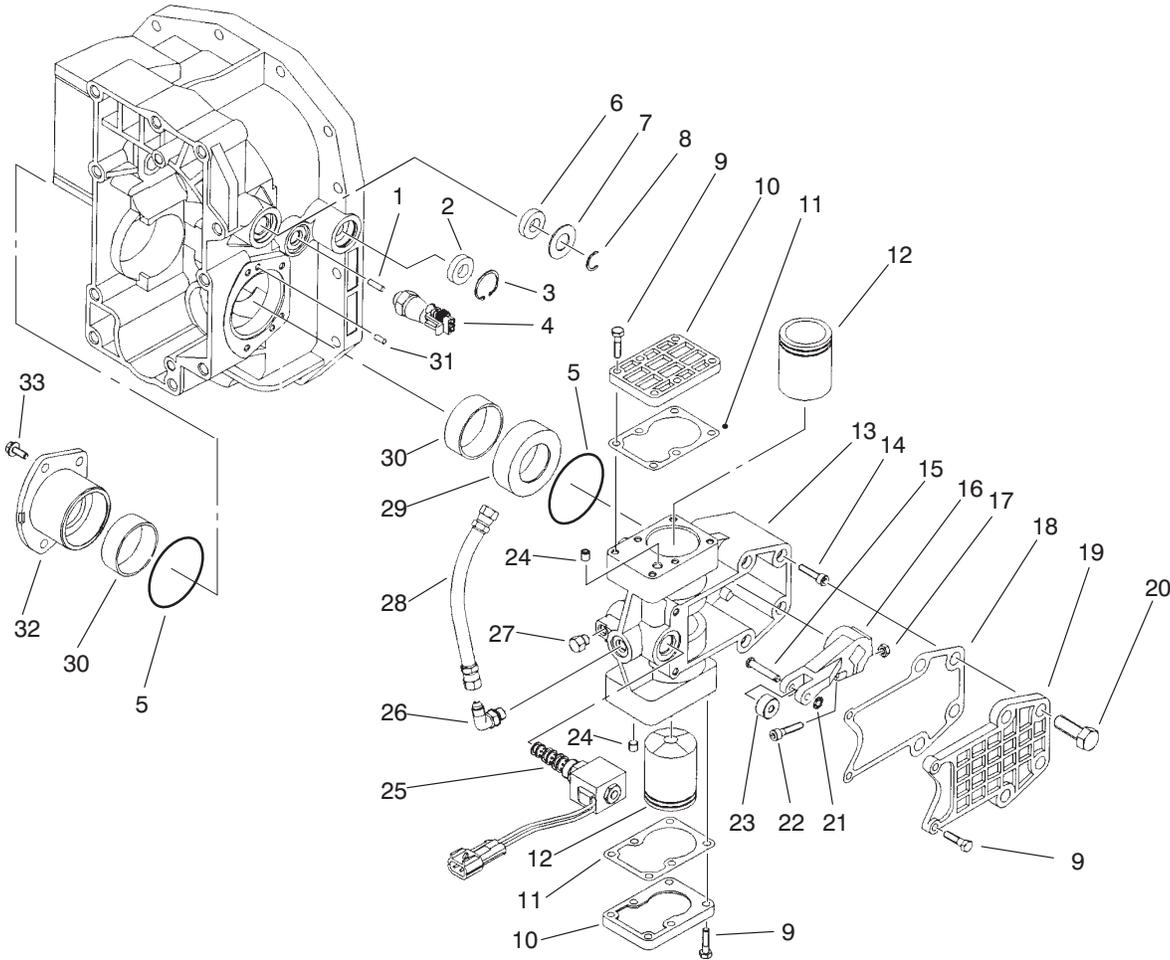
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## Hydraulic Housing Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
45	95-7038	1	Housing-Variable Motor
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-Center Section
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
68	95-7036	2	Guide-Slot

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

\* Not Illustrated



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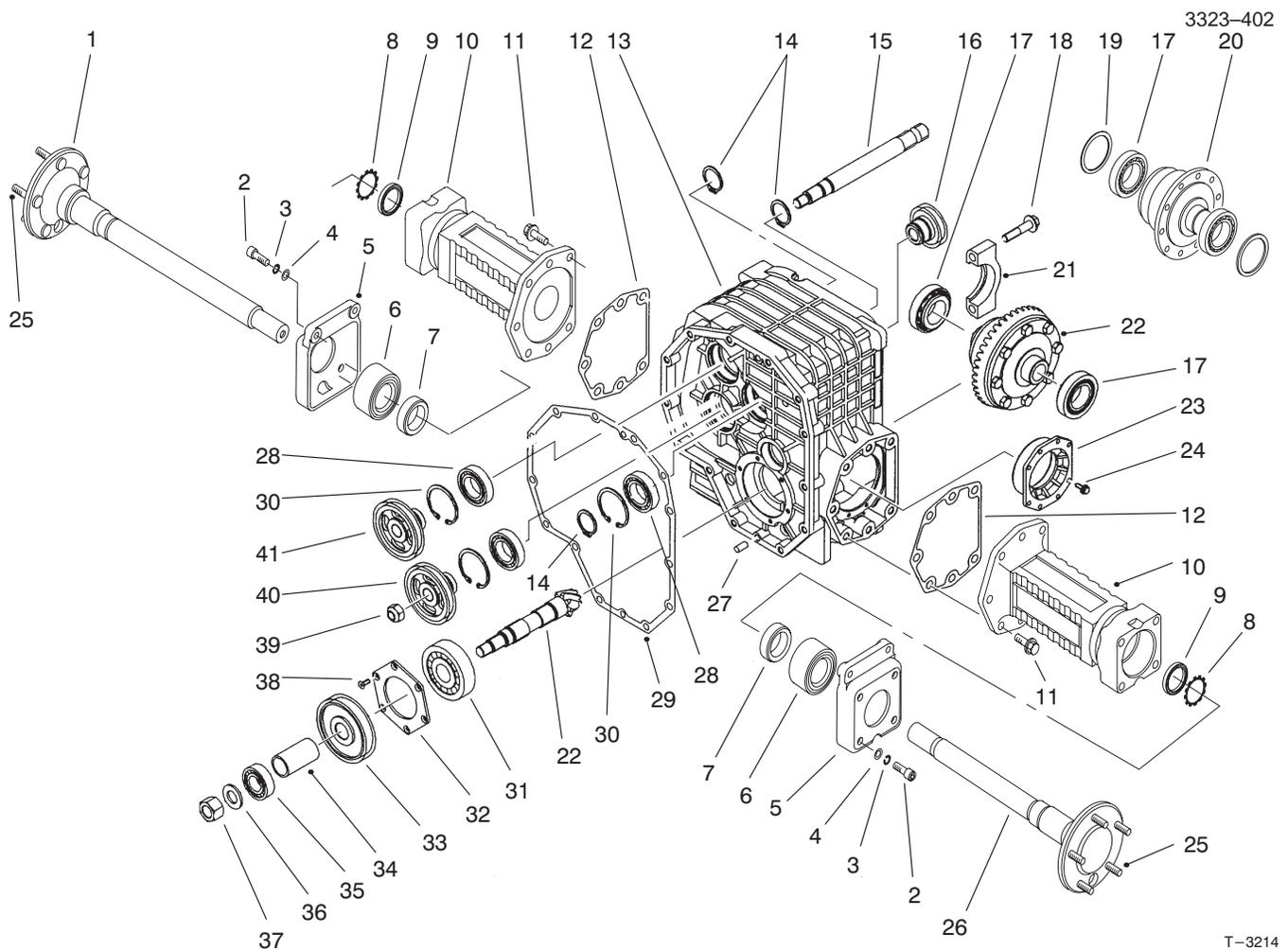
## Hydraulic Housing Assembly-Control

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	Asm-Carrier, Trunnion Brg. (Incl. Ref. #30 & 32)
*	93-5967	1	Asm-Carrier, Trunnion Brg. MV (Incl. Ref. #29 & 30)
*	95-7041	1	Asm-Control, Housing (Incl. Ref. #13, 24 & 27)
*	94-9174	1	Asm-Arm, Control (Incl. Ref. #15-17 & 21-23)

\* Not Illustrated

† Not Serviced Separately



## Front Axle Gear Housing Assembly

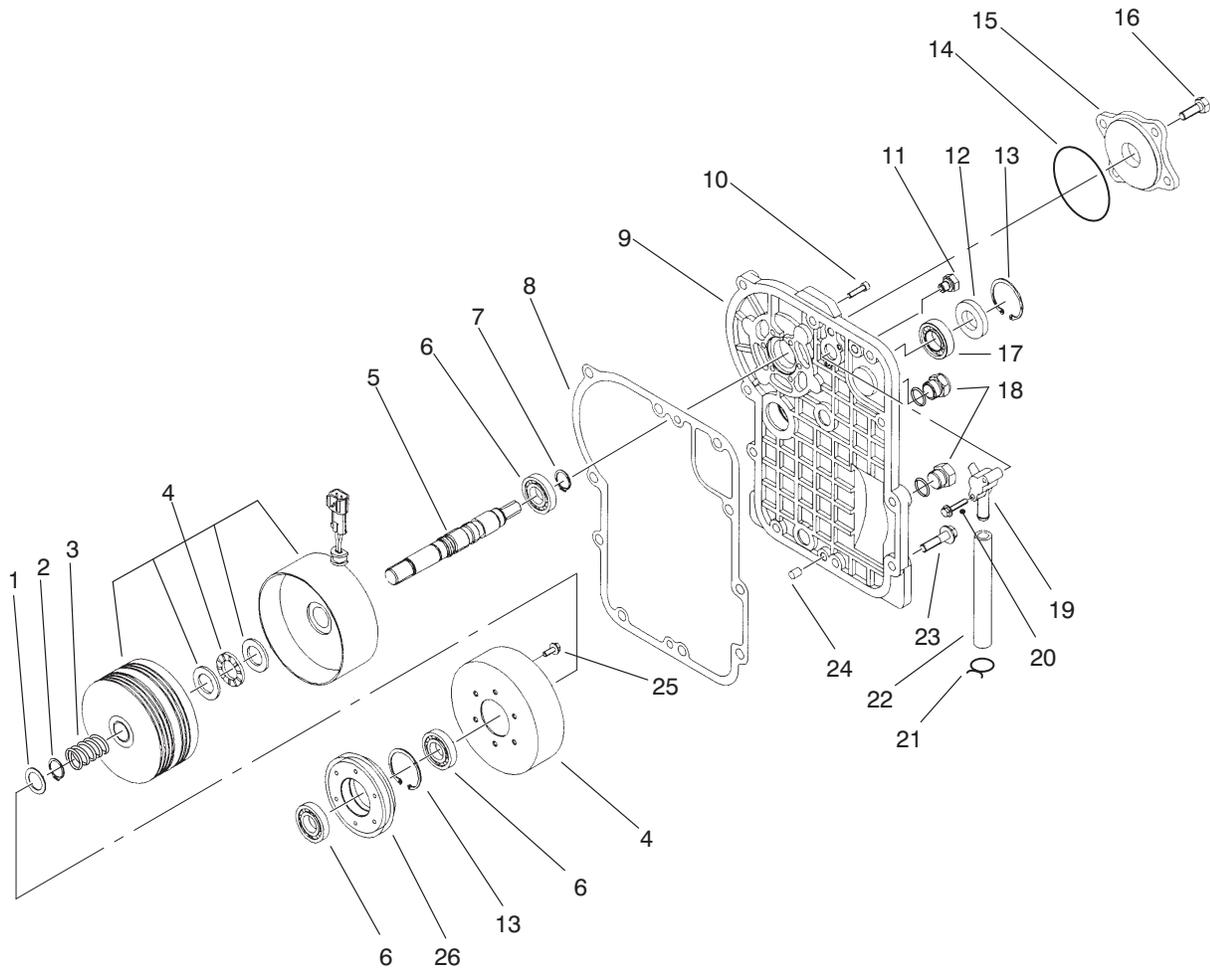
Ref. No.	Part No.	Qty.	Description
1	94-4031	1	Shaft-Axle, Left
2	94-4036	8	Screw
3	3253-7	8	Washer-Lock
4	3256-6	8	Washer-Flat
5	95-2632	2	Bracket-Brake
6	94-4030	2	Bearing
7	94-4144	2	Collar-Bearing
8	94-4142	2	Ring-Retaining
9	94-4032	2	Seal-Lip
10	95-2631	2	Housing-Axle
11	94-4007	14	Screw-HHF
12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

Ref. No.	Part No.	Qty.	Description
25	94-4143	10	Stud-Wheel
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-Final Drive
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	Asm-Axle, LH (Incl. Ref. #1-12 & 25)
*	95-2633	1	Asm-Axle, RH (Incl. Ref. #2-12, 25 & 26)

\* Not Illustrated

† Not Serviced Separately





T-2259-1

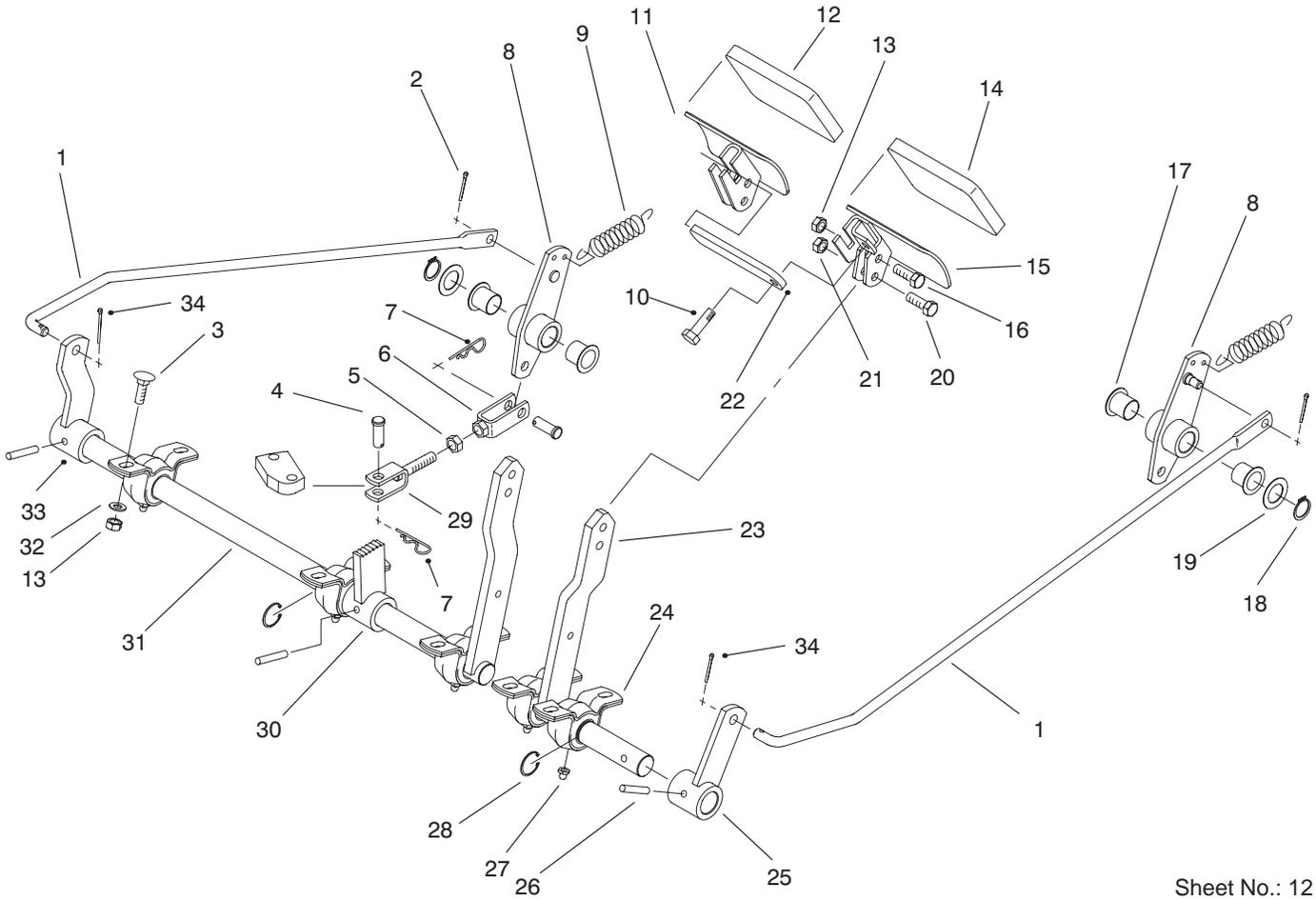
## Front Axle Cover Assembly

Ref. No.	Part No.	Qty.	Description
1	94-3995	1	Washer
2	94-4006	1	Ring-Retaining
3	94-4005	1	Spring-Compression
†4		1	Clutch-PTO
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	2	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

Ref. No.	Part No.	Qty.	Description
*	94-9179	1	Asm-Clutch (Incl. Ref. #1-7, 13, 25 & 26)
*	94-9180	1	Asm-Cover, Front (Incl. Ref. #9, 11, 18, & 19-22)
*	94-9181	1	Asm-Nozzle, Lubricating (Incl. Ref. #19, 21 & 22)

\* Not Illustrated

† Not Serviced Separately

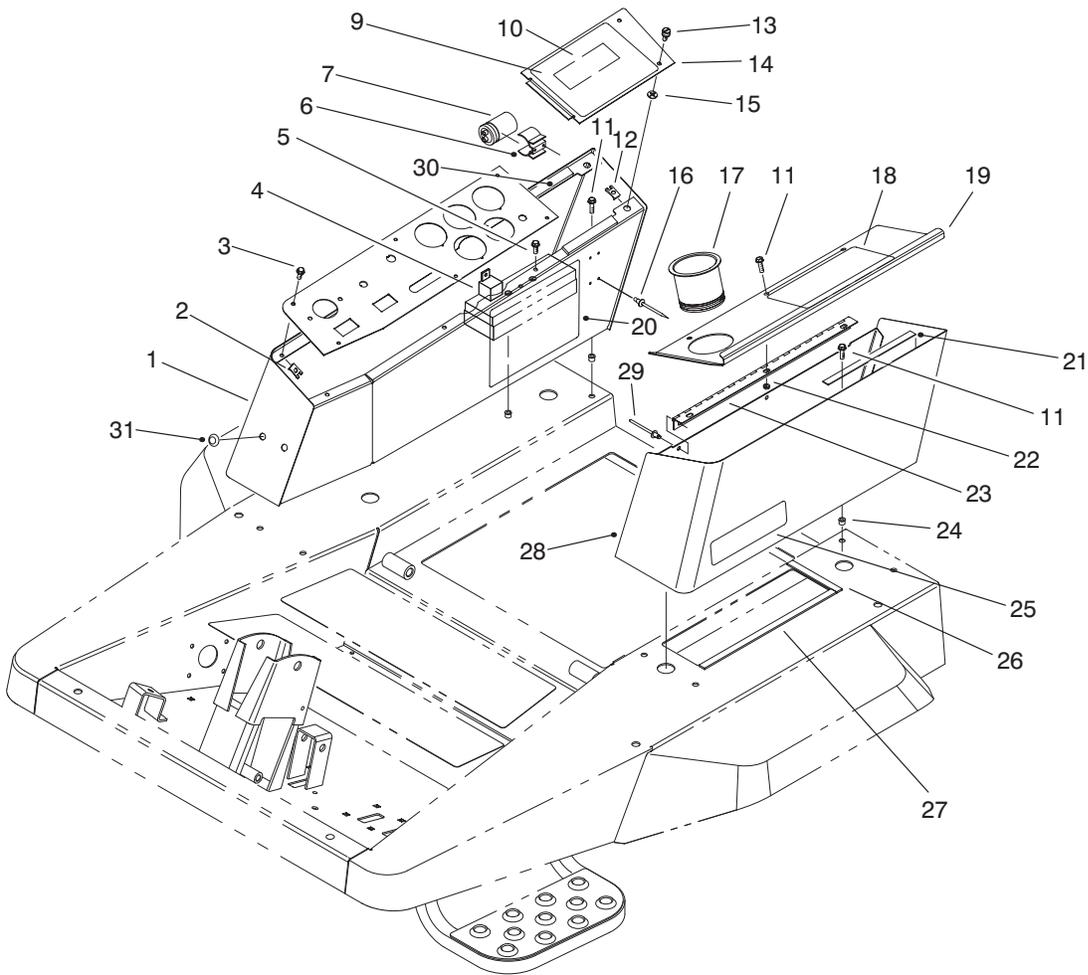


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T-2329-1

## 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-Right Turn
12	93-8742	1	Footpad-Brake (Europe)
13	33024-00	14	Nut-Lock
14	27-7570	1	Pad-Left Turn
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-Pillow Block
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

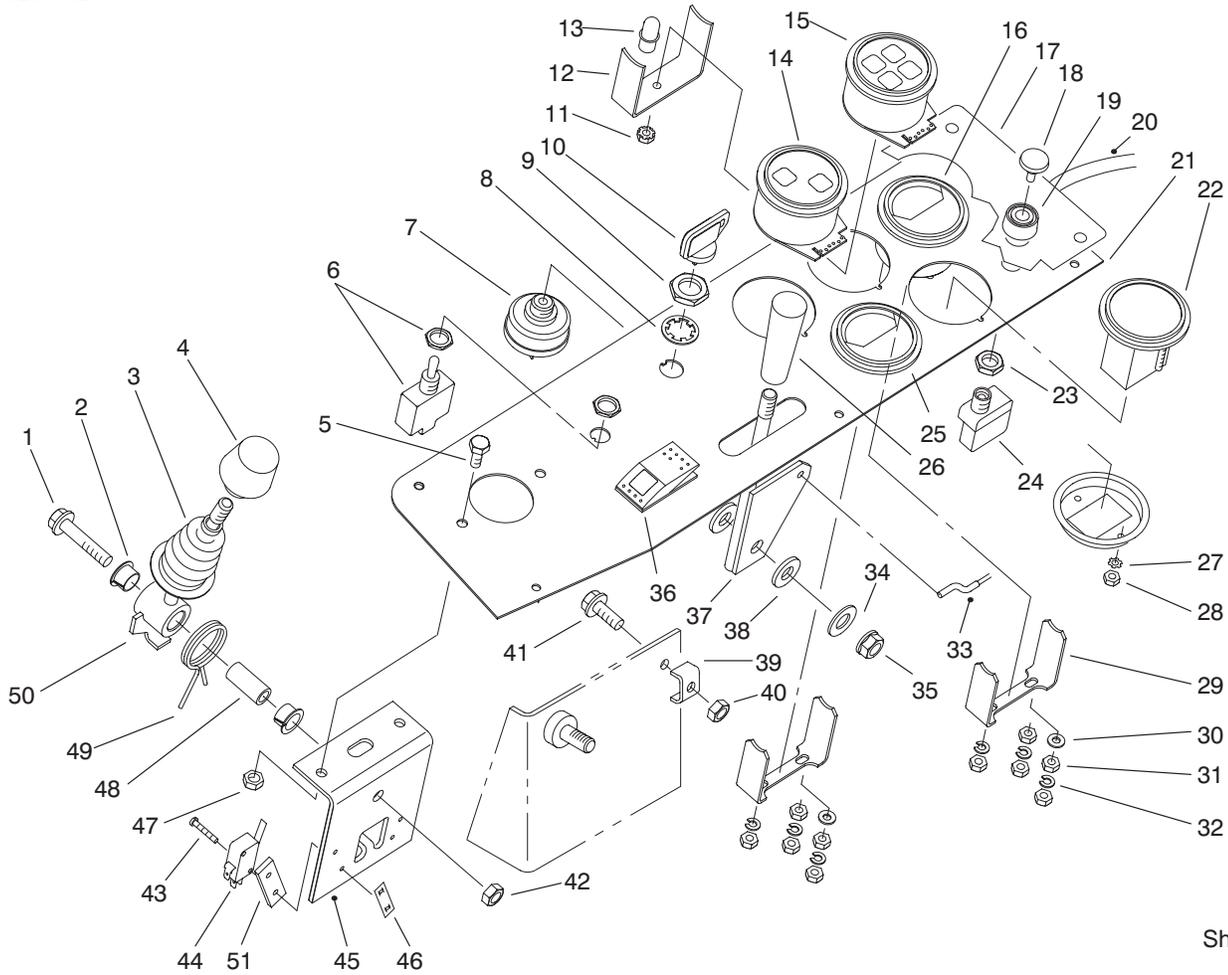


Sheet No.: 13  
T-2330-3

## 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 Instruct.	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-Clip On	*	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-Beverage Can				
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

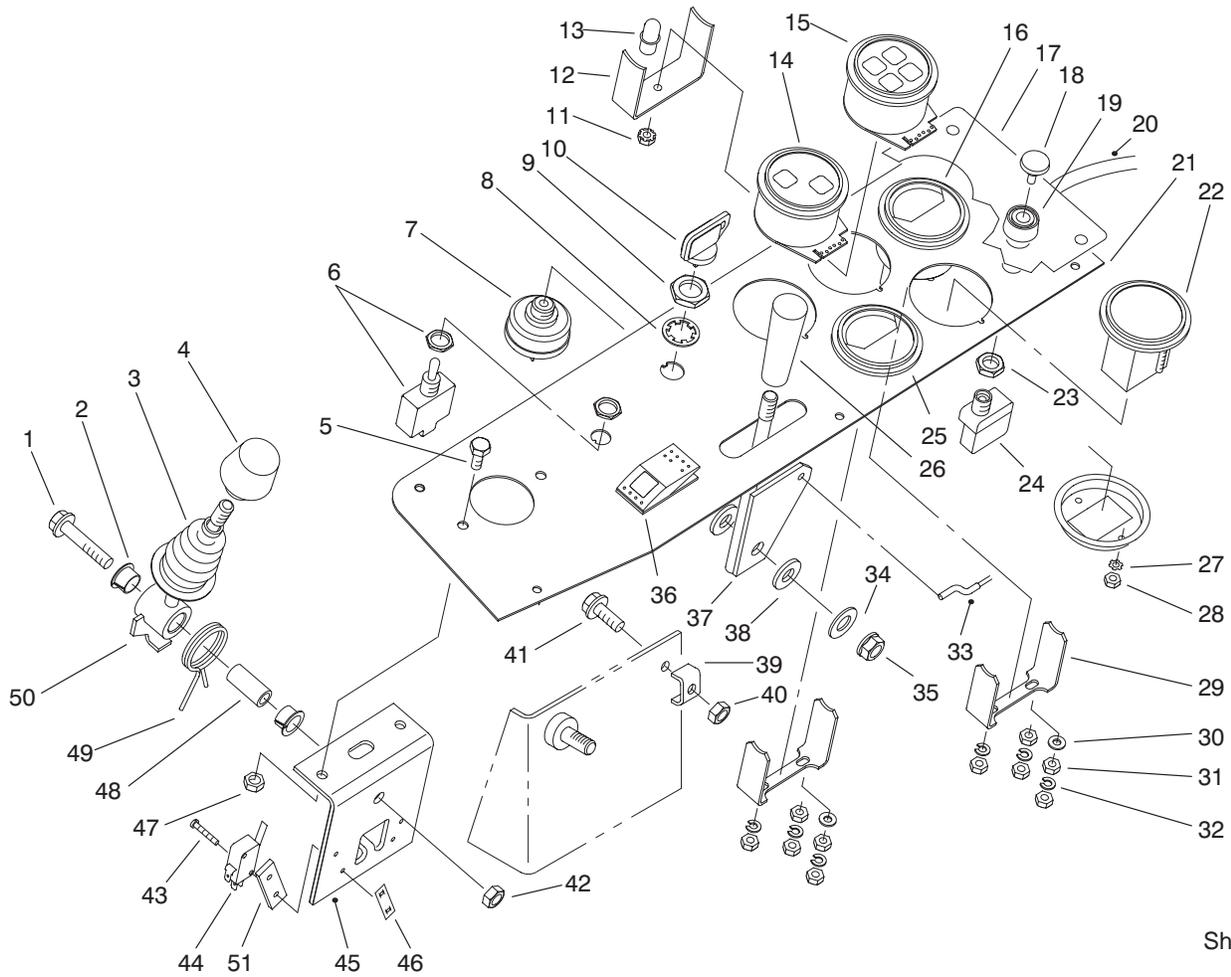


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## Operator's Control Console Assembly

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-Warning Light
15	93-5478	1	Cluster-Warning Light
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	Wire Harness
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



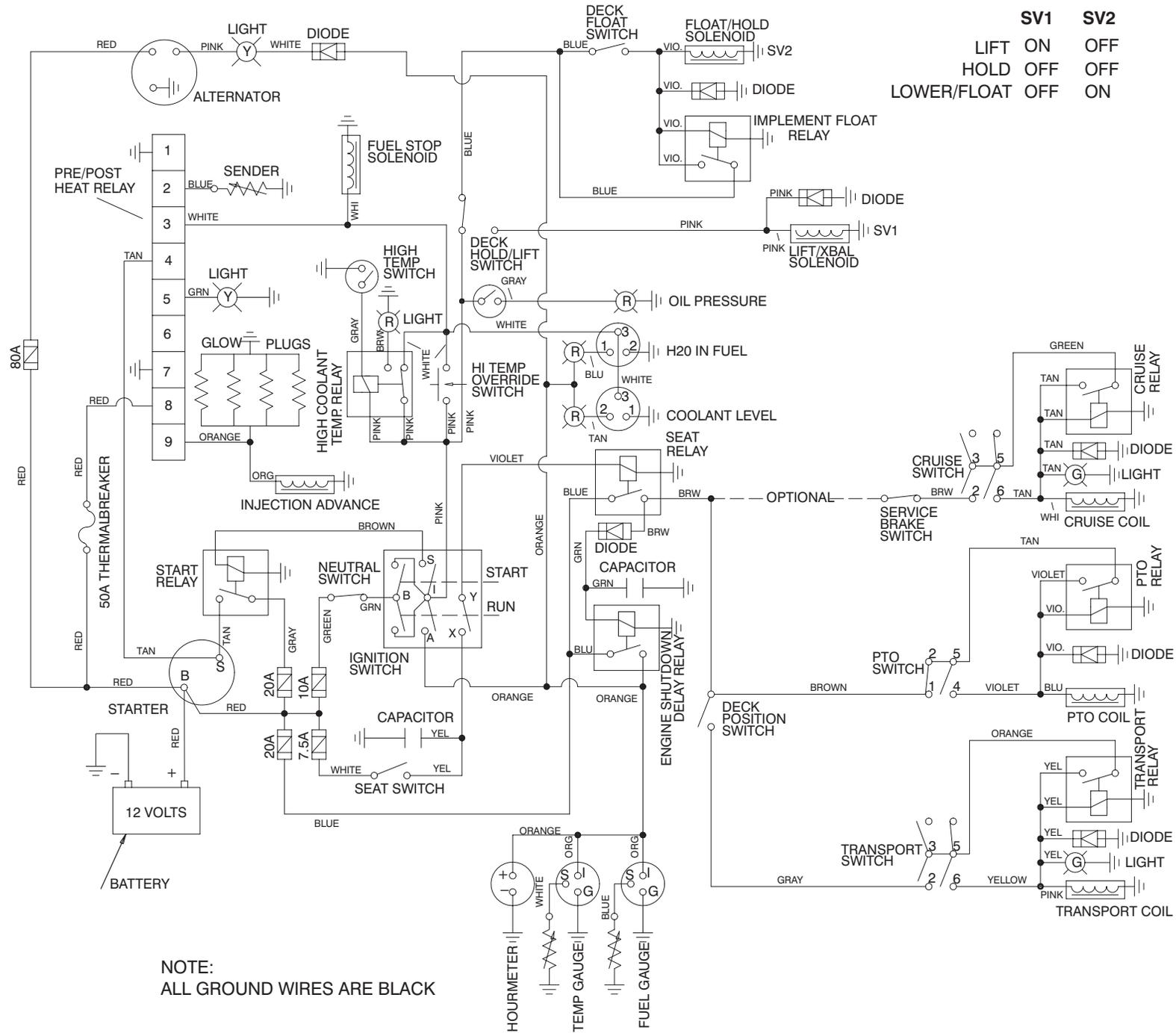
Sheet No.: 14  
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### Operator's Control Console Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
51	61-2990	2	Plate-Backup
*	95-2648	1	Wire Harness

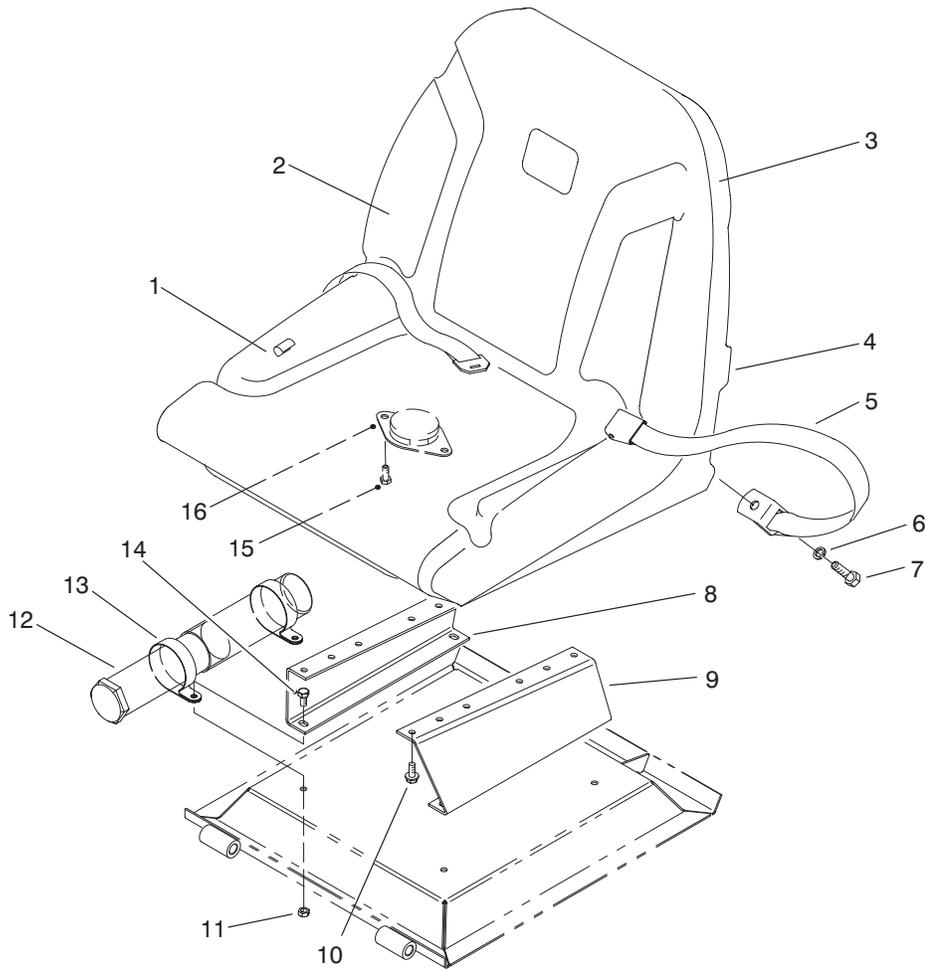
Ref. No.	Part No.	Qty.	Description
*	94-9967	1	Breaker-Circuit, 50A

\* Not Illustrated



T-2262-7

# Electrical Schematic



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## Seat Assembly

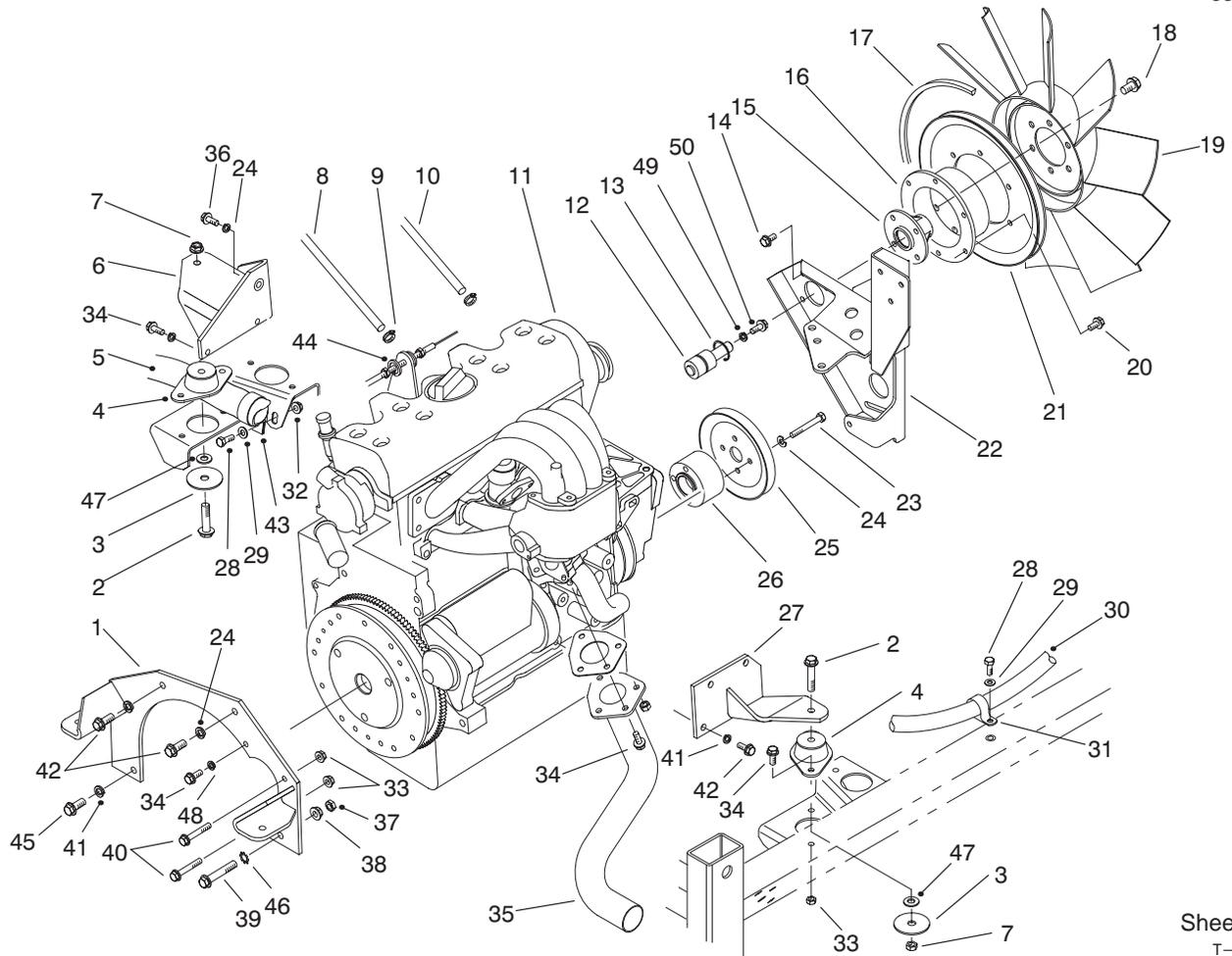
Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	351-80	1	Clip-Edging	*	93-5987	1	Asm-Seat (Incl. Ref. 1-4 & 15-16)
2	92-6533	1	Kit-Cushion, Replacement				
3	351-78	1	Edging				
4	92-6534	1	Shell				
5	72-9390	1	Belt-Seat (For All Models Except 30301)				
6	3253-6	2	Washer-Lock (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	321-3	2	Screw-HH				
16	92-6282	1	Switch-Seat				

\* Not Illustrated









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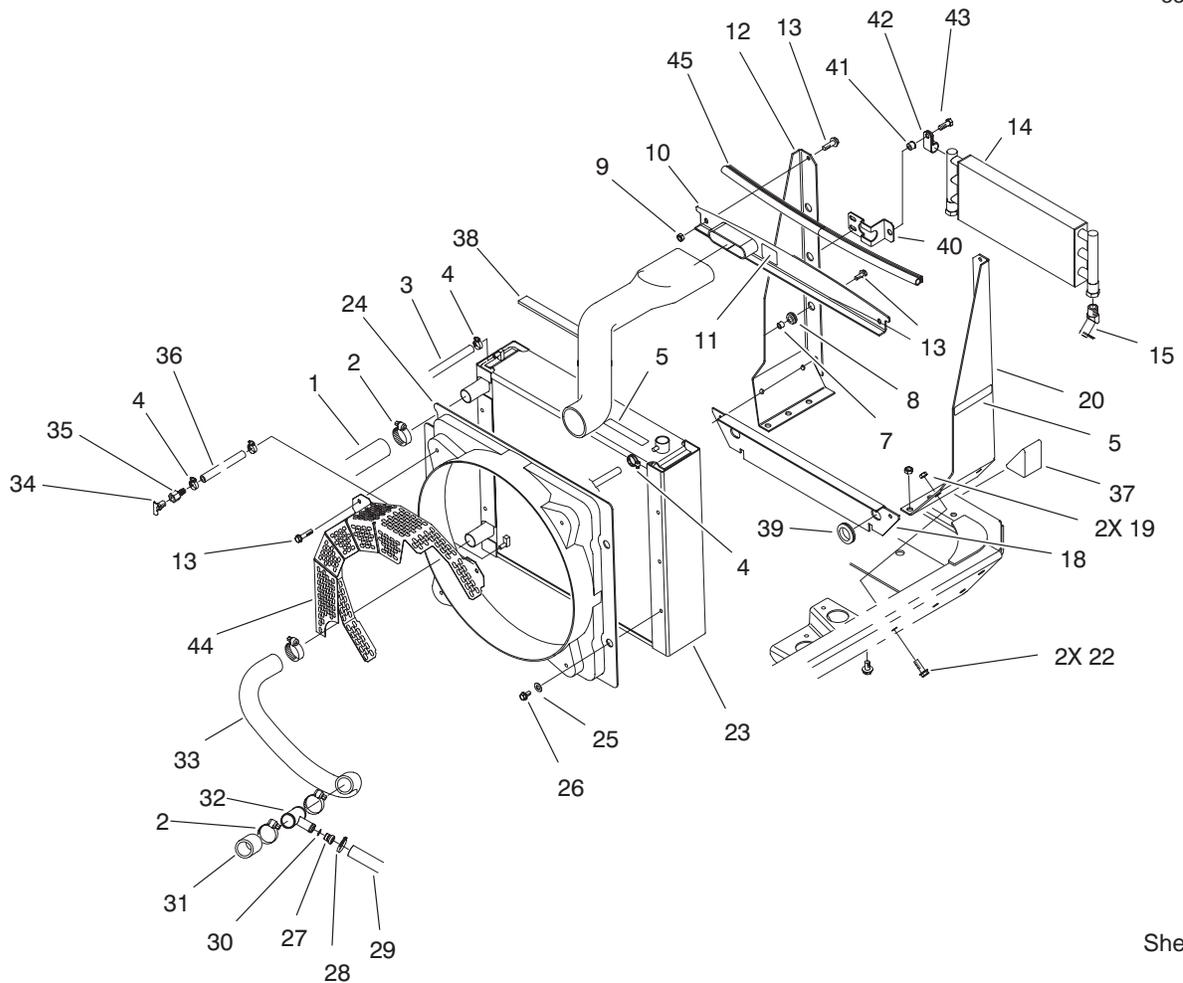
T-2334-4

## 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-Shubbing
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





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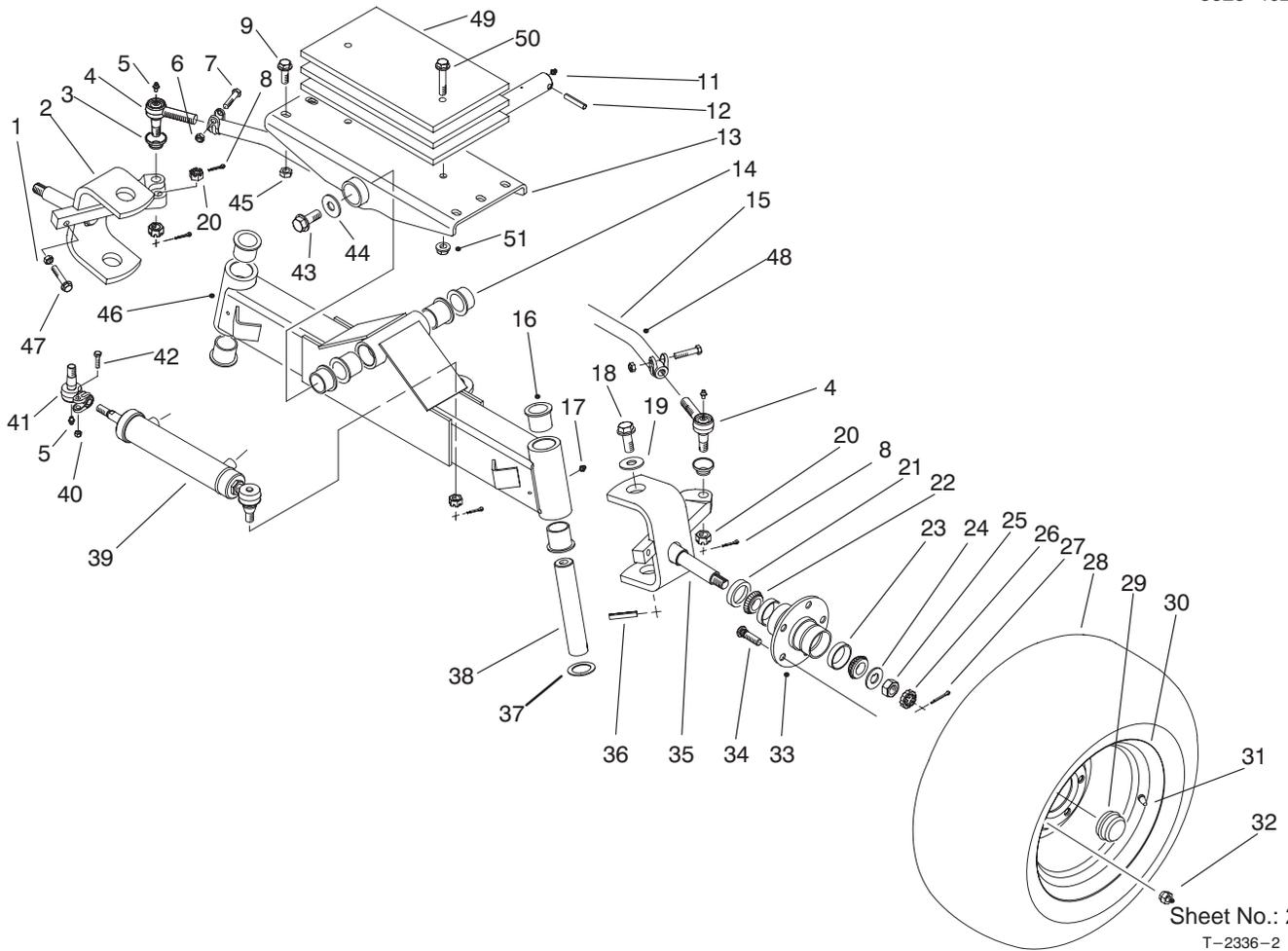
T-2322

## 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-Starting Fluid
11	93-7275	1	Decal-Starting Fluid (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-LH, Radiator
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-Drain Cock
35	354-94	1	Barb-Female, Hose
36	18-2080	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





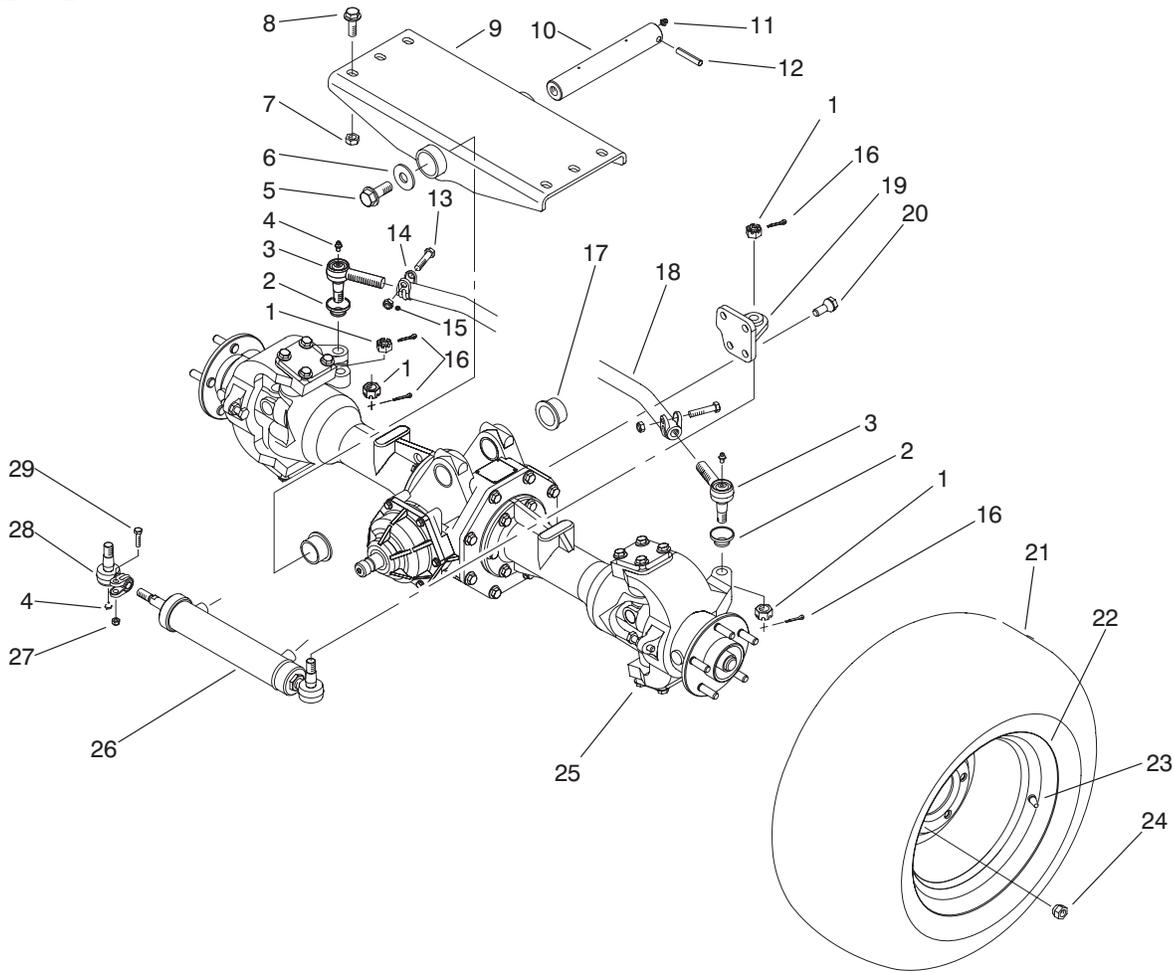
## Rear Axle Assembly (Model No. 30301)

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	Asm-Tie Rod (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	Asm-Hub (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





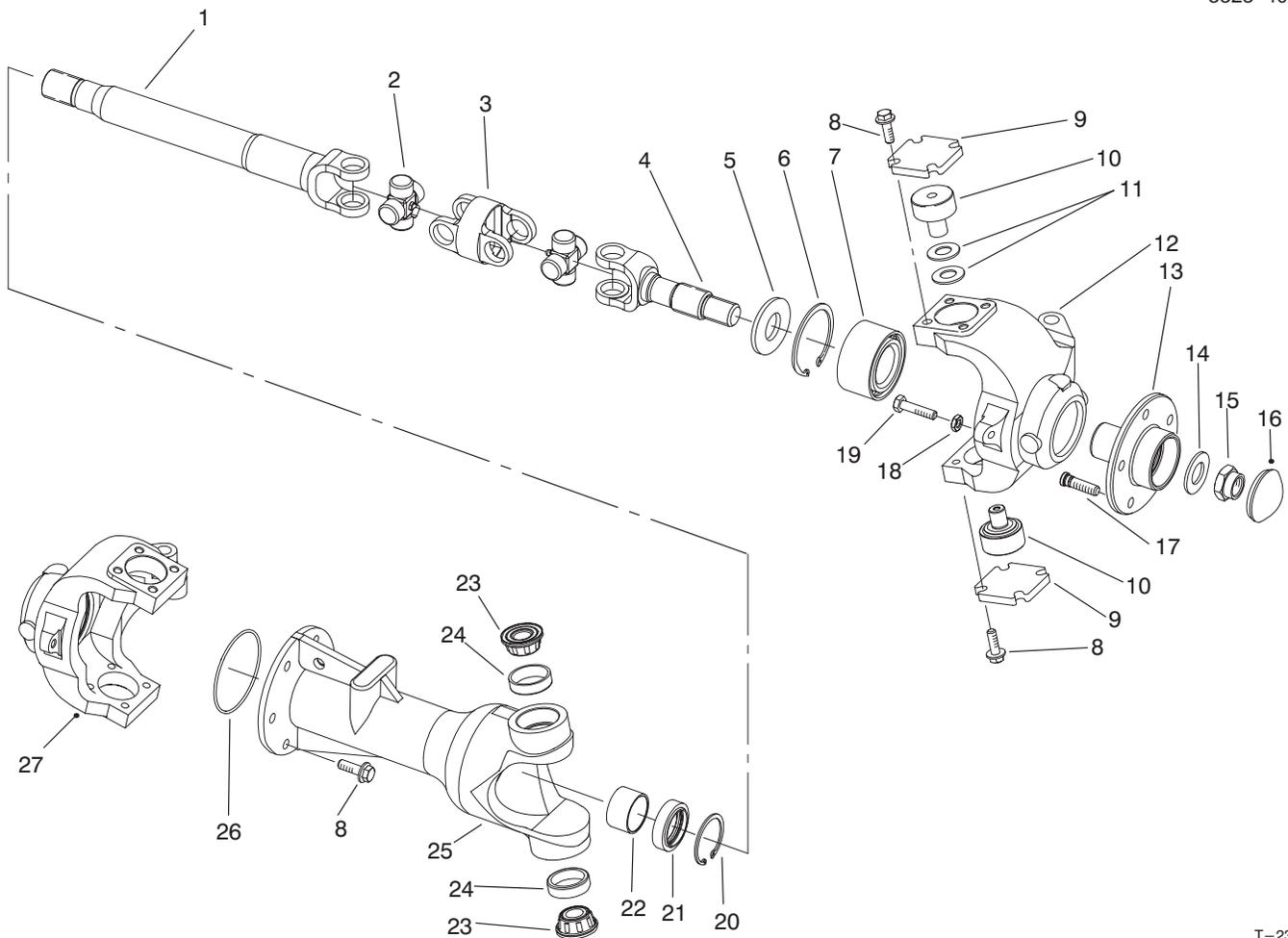


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## Rear Axle Assembly (Model No. 30302)

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	Asm-Clamp & Tube
15	3296-39	2	Nut-Lock
16	3272-11	4	Pin- Cotter
17	93-4510	2	Bushing-Castor
18	104-0100-03	1	Asm-Tie Rod (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

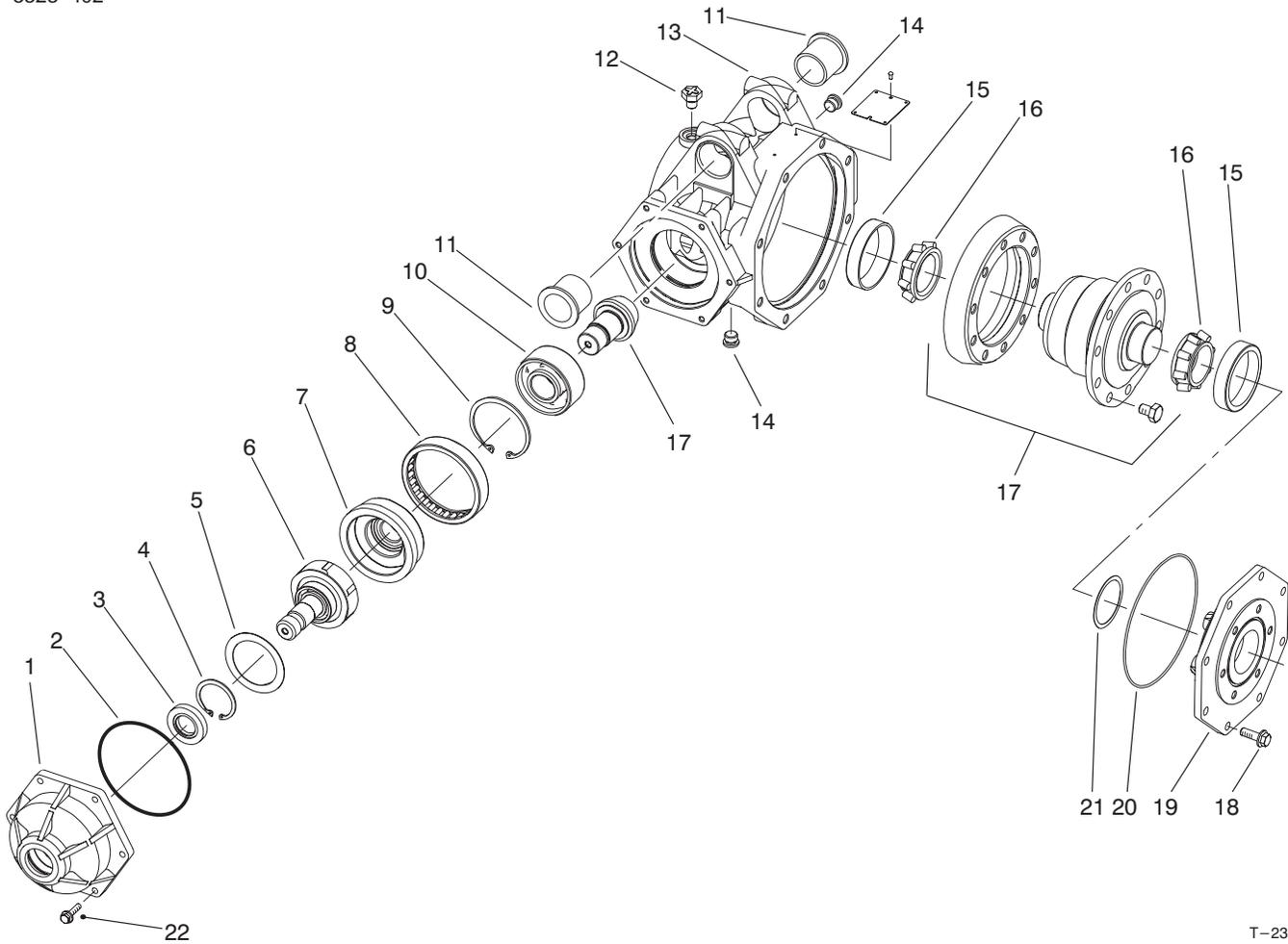


T-2393

## 4WD Axle-Universal Joint & Kingpin Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	95-0650	1	Yoke-Shaft, Inboard	27	94-4115	1	Flange-Spindle, RH
2	95-0651	2	Kit-Cross & Bearing	*	94-4123	1	Joint-Universal (Incl. Ref. #1-4)
3	95-0652	1	Yoke-Pivot, Double	*	94-9190	1	Asm-Housing, Axle (Incl. Ref. 20-22 & 25)
4	95-0653	1	Yoke-Shaft, Outboard	*	94-9191	1	Kit-Bearing, Kingpin (Incl. Ref. #23-24)
5	94-4037	2	Washer	*	94-9193	1	Asm-Hub, Wheel (Incl. Ref. #13 & 17)
6	93-5964	2	Ring-Retaining	*	94-9194	1	Asm-Flange, Spindle RH (Incl. Ref. #6, 7, 13, 17 & 27)
7	94-4030	2	Bearing-Tapered	*	94-9195	1	Asm-Flange, Spindle LH (Incl. Ref. #6, 7, 12, 13 & 17)
8	33105-030	28	Screw-HHF	*	94-9198	1	Kit-Seal, Overhaul
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				

\* Not Illustrated



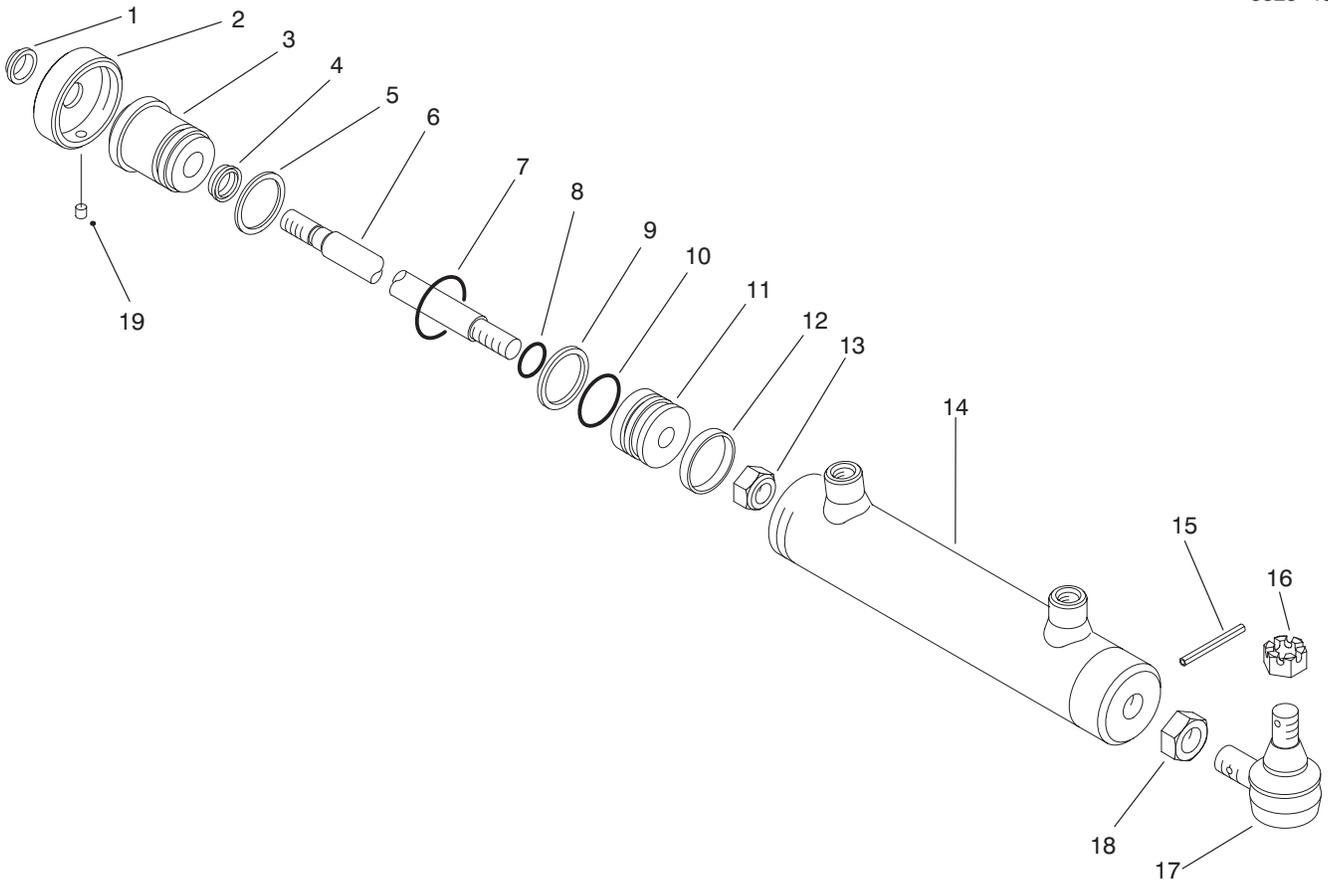
T-2394

## 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	Asm-Differential
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
*	94-9185	1	Asm-Gear, Bevel (Incl. Ref. #10, 15-17

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

\* Not Illustrated

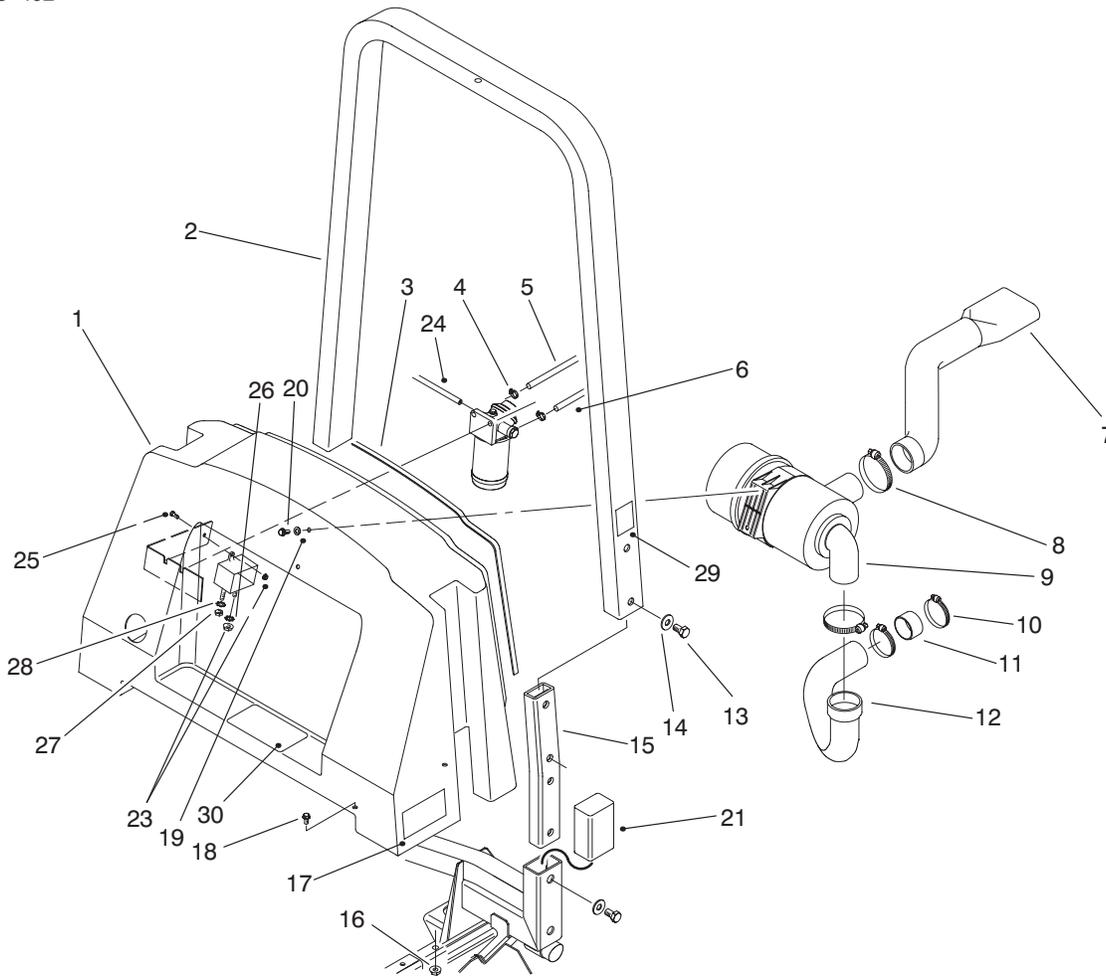


T-2432-1

## Steering Cylinder Assembly No. 93-5962

Ref. No.	Part No.	Qty.	Description
1		1	Wiper-Rod
2	92-5705	1	Cap-Threaded
3	92-5706	1	Head-Cap, Threaded
4		1	U-Cup, Loaded
5		1	Ring-Backup
6	93-5555	1	Rod
7		1	O-Ring
8		1	O-Ring
9		1	Ring-Piston, Unithane
10		1	O-Ring
11	92-5703	1	Piston
12		1	Ring-Wear
13	88-3590	1	Nut-Lock
14		1	Asm-Barrel
15	32121-44	1	Pin-Roll
16	32136-13	1	Nut-Slotted
17	82-5730	1	End-Tie Rod
18	82-5740	1	Nut-Jam
19	92-5708	1	Screw-Set, Socket Hd.
*	92-5707	1	Kit-Seal (Incl. Ref. #1, 4, 5, 7-10 & 12)

Ref. No.	Part No.	Qty.	Description

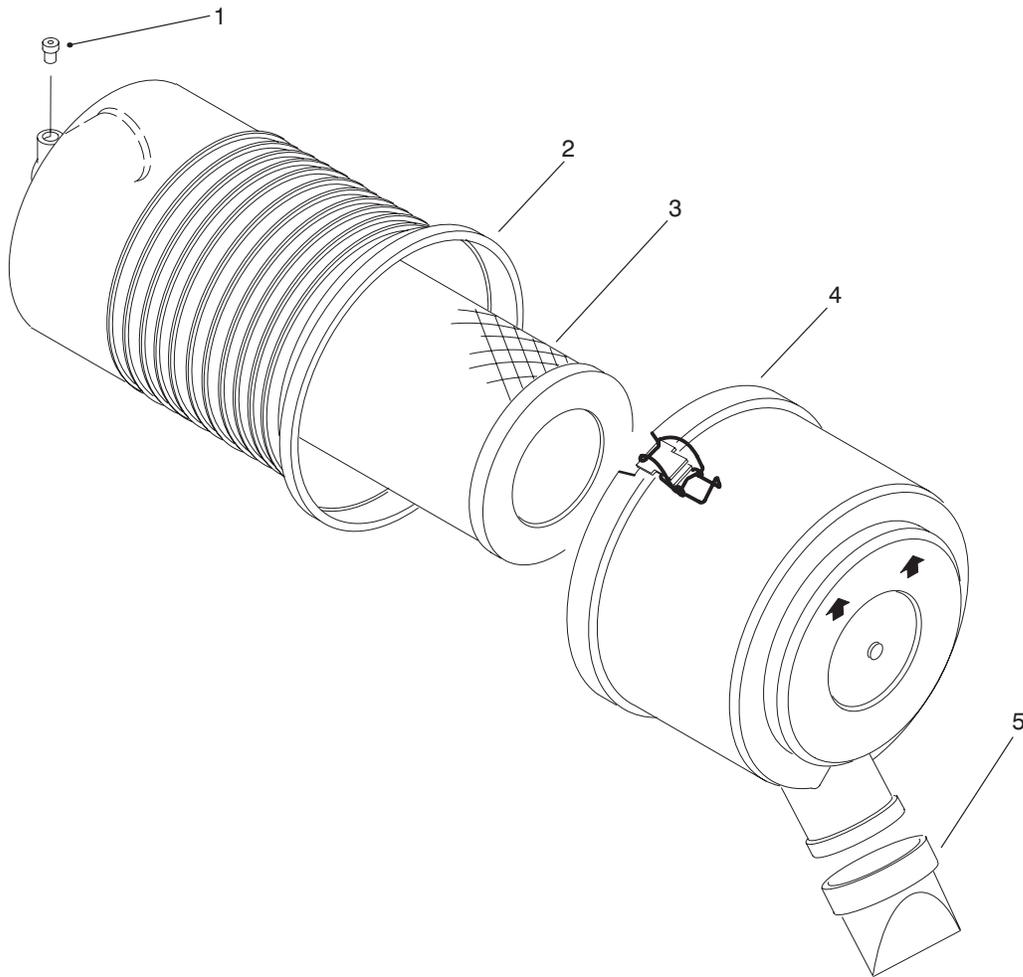


Sheet No.: 4  
T-2319-6

## Center Shroud & Air Cleaner Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5645	1	Asm-Shroud, Center
2	95-6135	1	Roll Over Protection System (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-Air Cleaner
8	2412-110	2	Clamp-Hose
9	93-5111	1	Air Cleaner
10	2412-130	2	Clamp-Hose
11	93-5427	1	Spacer-Intake
12	93-5084	1	Hose-Air Cleaner
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)

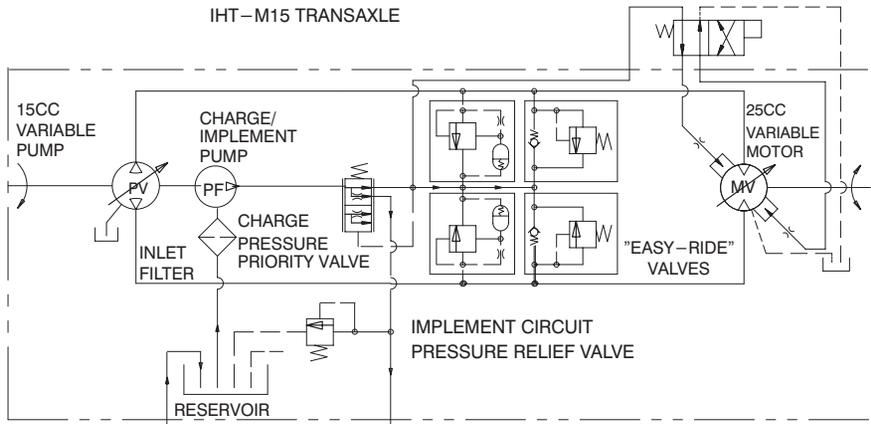


T-2252-1

### Air Cleaner Assembly No. 93-5111

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

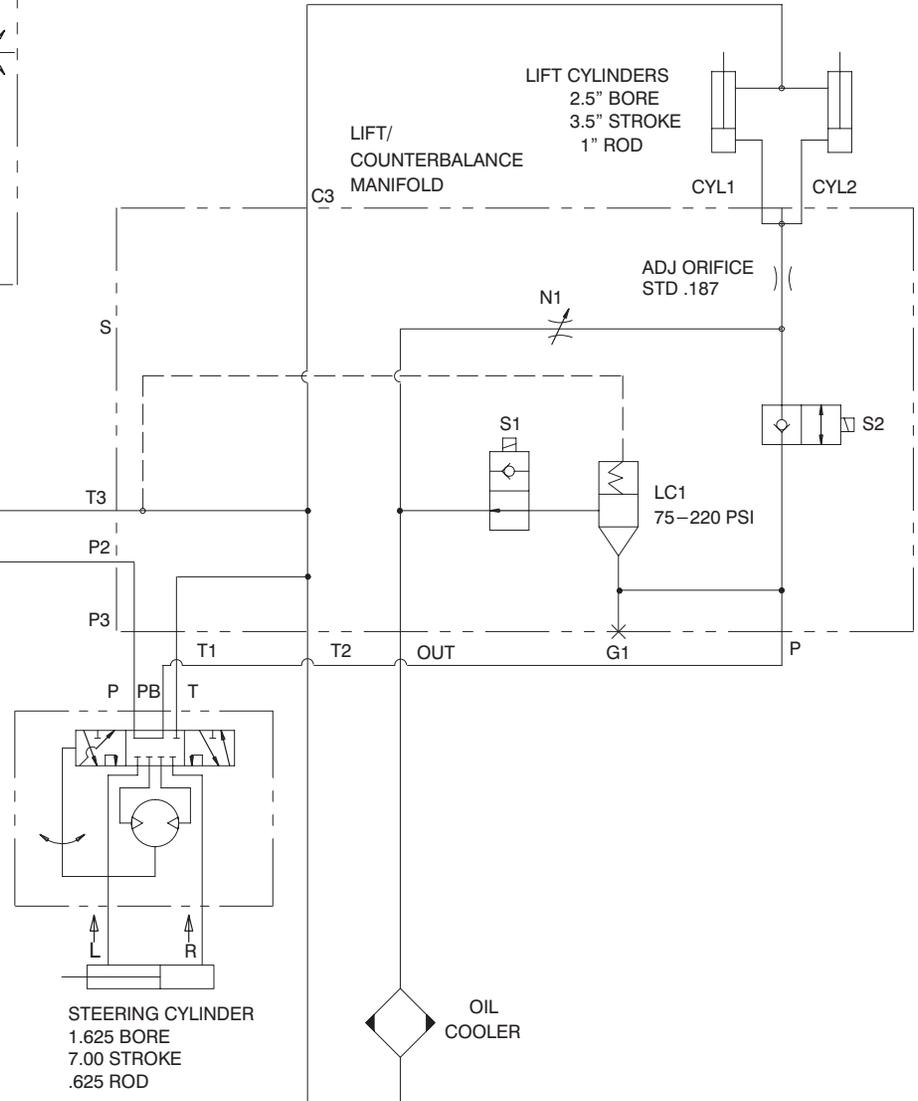
Ref. No.	Part No.	Qty.	Description
4	93-5986	1	Asm-Cover
5	94-1414	1	Valve



LIFT/LOWER CONTROL

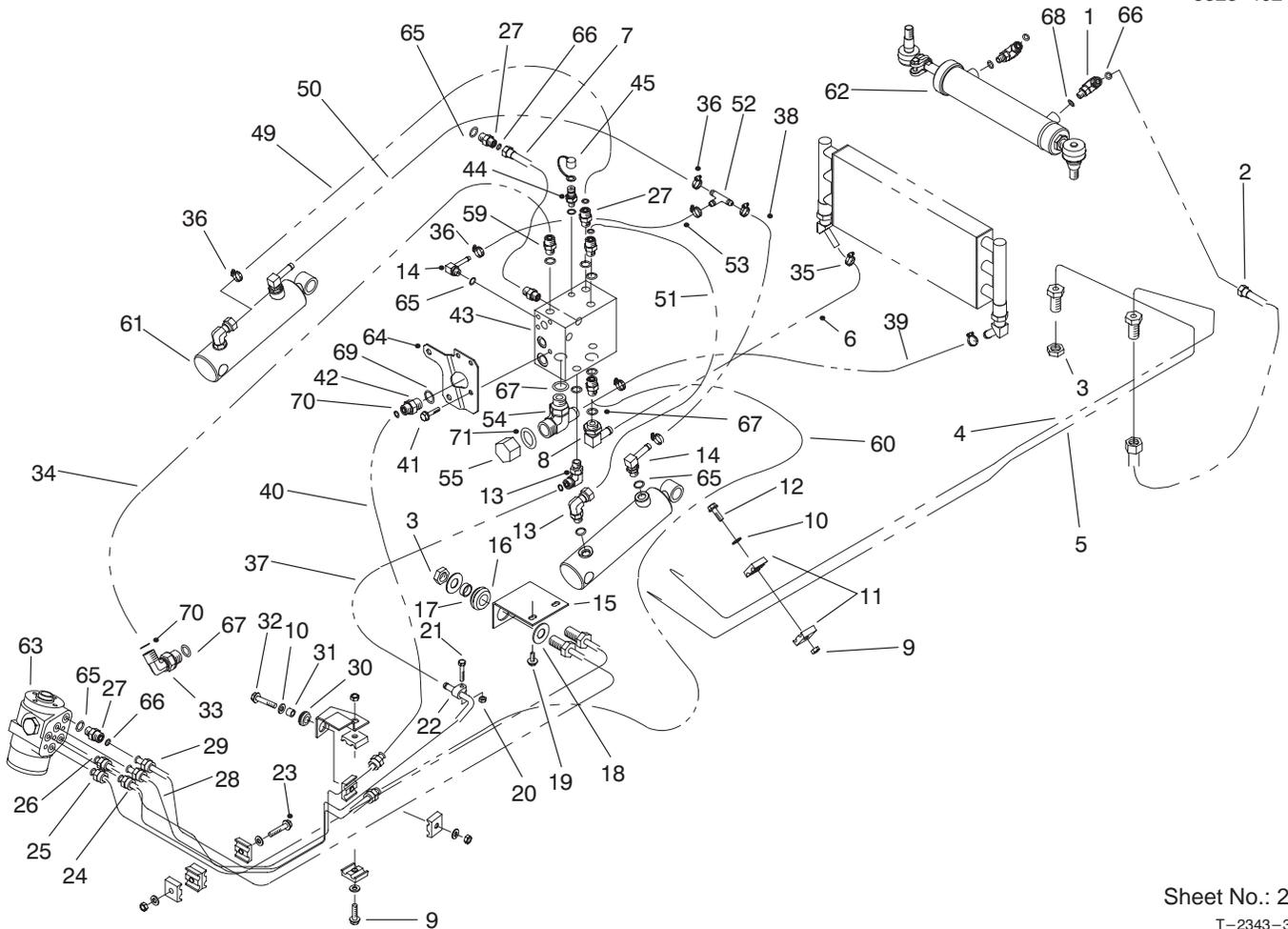
SOLENOIDS

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



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

Hydraulic Schematic

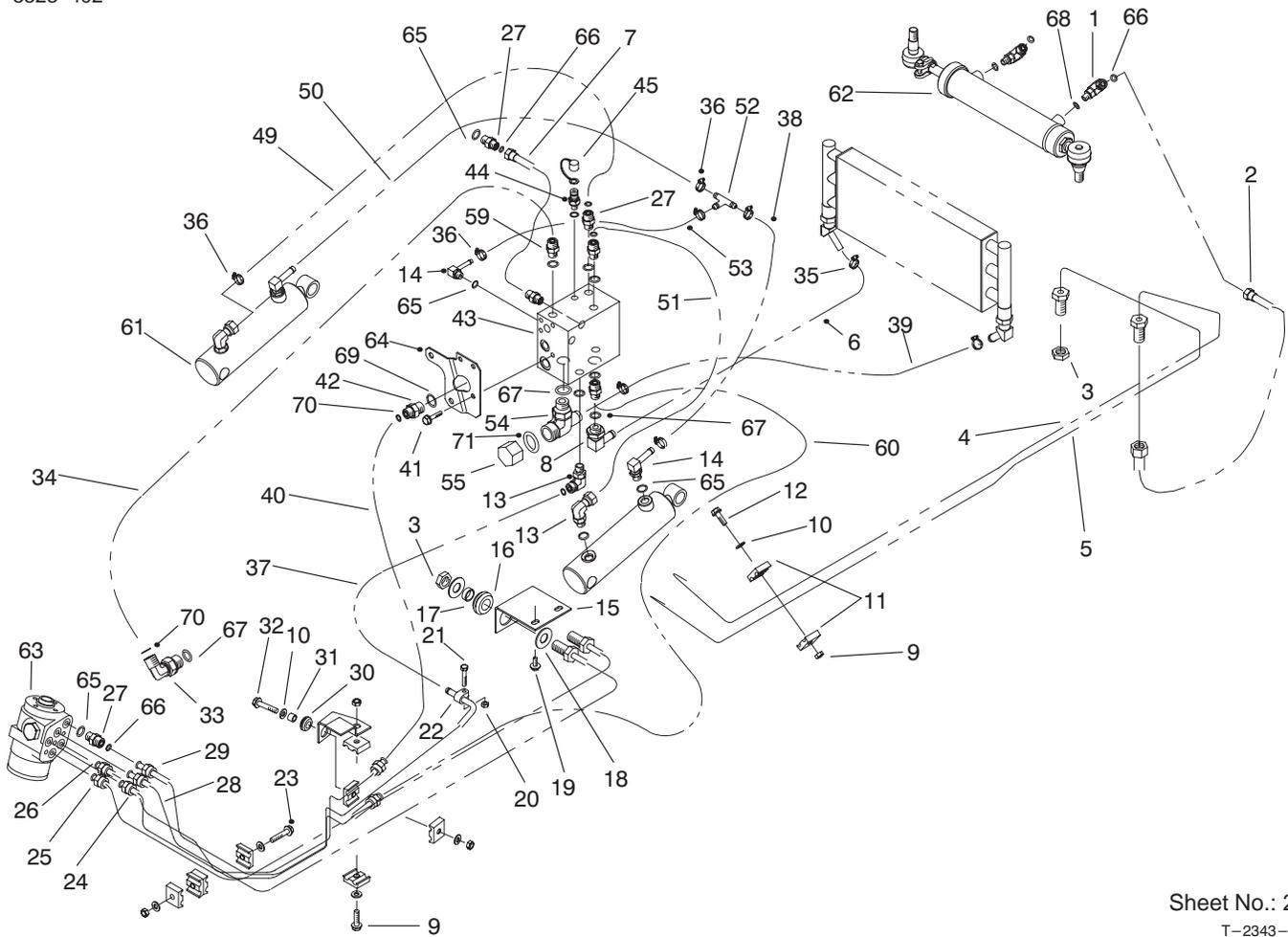


Sheet No.: 25  
T-2343-3

## Hydraulic Component Assembly

Ref. No.	Part No.	Qty.	Description
1	340-97	2	Fitting-Hydraulic 90# (Incl. Ref. #66 & 68)
2	93-5353	2	Asm-Hose
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	Asm-Hose
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

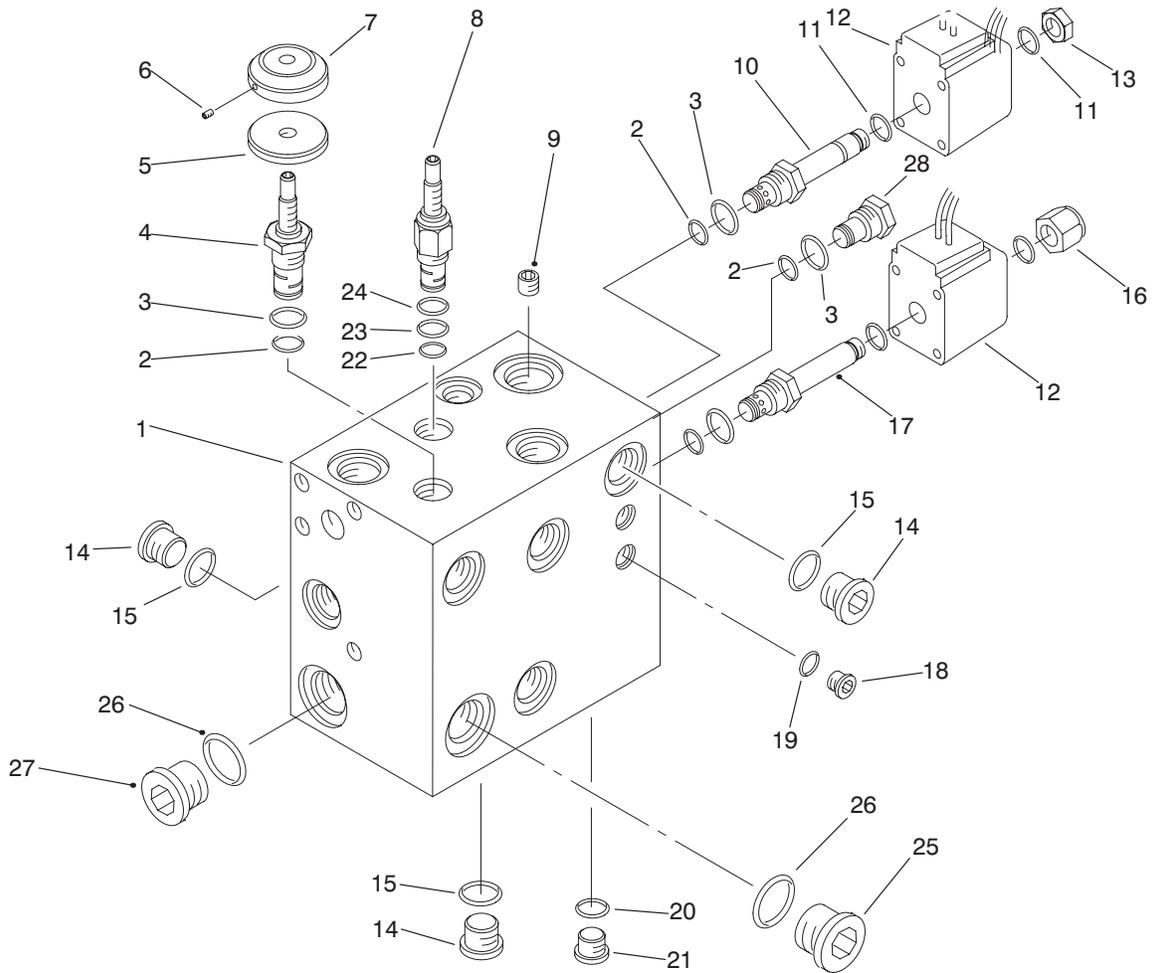


Sheet No.: 25  
T-2343-3

## Hydraulic Component Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
44	354-77	1	Fitting-Quick Connect (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	Steering Control Unit
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

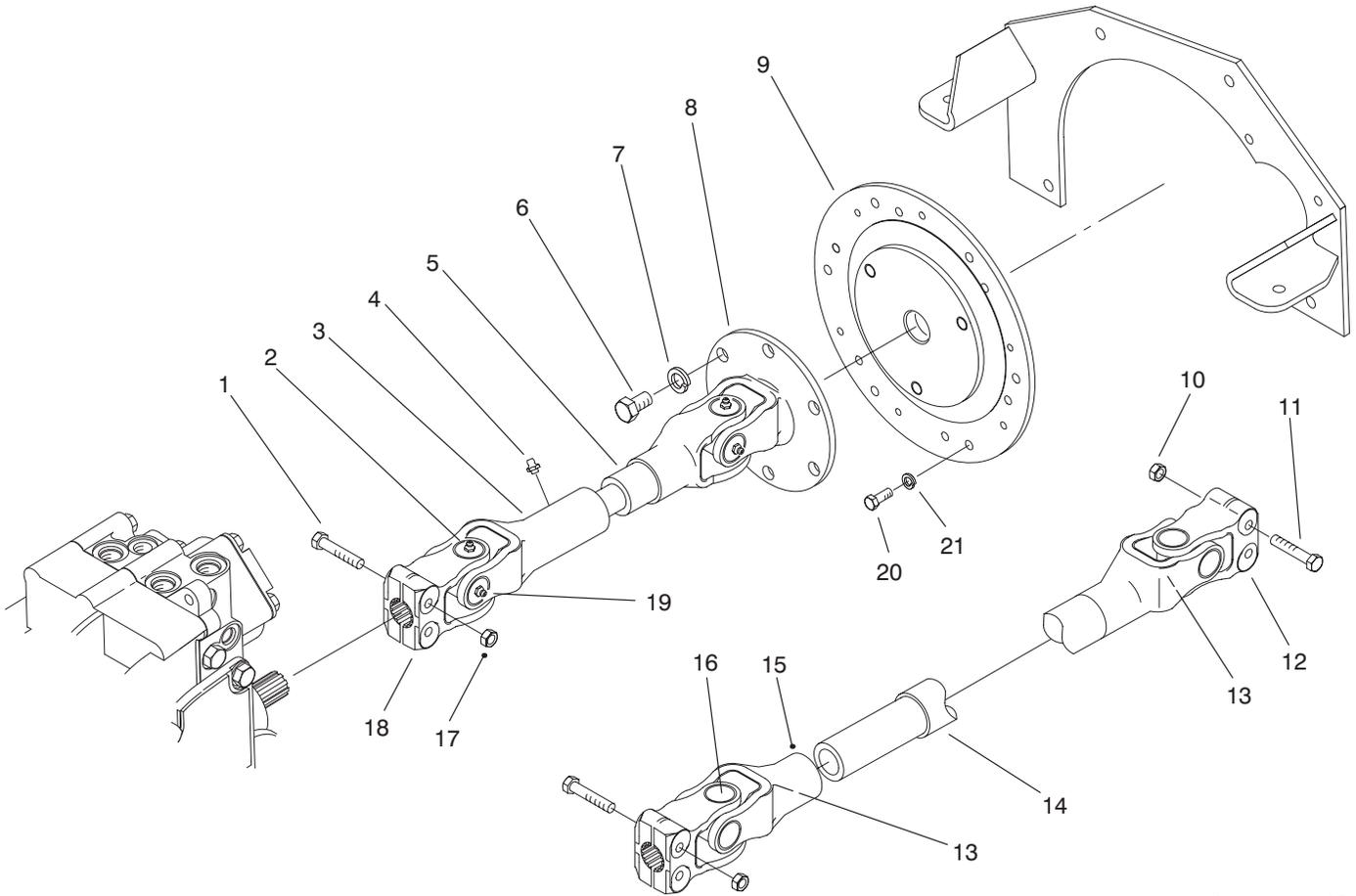
## Manifold Assembly No. 94-9291

Ref. No.	Part No.	Qty.	Description
†1		1	Body
†2		3	O-Ring
†3		3	O-Ring
4	93-5944	1	Valve-Needle (Incl. Ref. #2, 3 & 5-7)
†5		1	Wheel
†6		1	Screw-Set
7	93-5948	1	Knob-Knurled (Incl. Ref. #5 & 6)
8	93-5943	1	Valve-Logic (Incl. Ref. #22-24)
9	95-5941	1	Plug-Orifice (.187 Dia.)
10	92-6315	1	Cartridge-NC, Poppet (Incl. Ref. #2, 3, 11 & 13)
11	94-5438	4	O-Ring
12	88-9190	2	Kit-Solenoid Coil
13	3219-10	1	Nut
14	353-989	6	Plug (Incl. Ref. #15)
15	237-42	6	O-Ring
†16		1	Nut
17	93-7494	1	Cartridge-NO, Poppet (Incl. Ref. #2, 3, 11 & 16)

Ref. No.	Part No.	Qty.	Description
18	353-991	5	Plug (Incl. Ref. #19)
19	237-156	5	O-Ring
20	237-78	1	O-Ring
21	353-990	1	Plug (Incl. Ref. #20)
†22		1	O-Ring
†23		1	O-Ring
†24		1	O-Ring
25	354-70	1	Plug (Incl. Ref. #26)
26	237-79	2	O-Ring
27	353-988	1	Plug (Incl. Ref. #26)
28	95-7480	1	Plug-Cavity (Incl. Ref. #2 & 3)
*	69-4240	1	Kit-Seal (Incl. Ref. #22-24)
*	75-2080	1	Kit-Seal (Incl. Ref. #2 & 3)
*	93-5948	1	Kit-Knob (Incl. Ref. #5-7)
*	95-7003	1	Plug-Orifice (Optional)

\* Not Illustrated

† Not Serviced Separately



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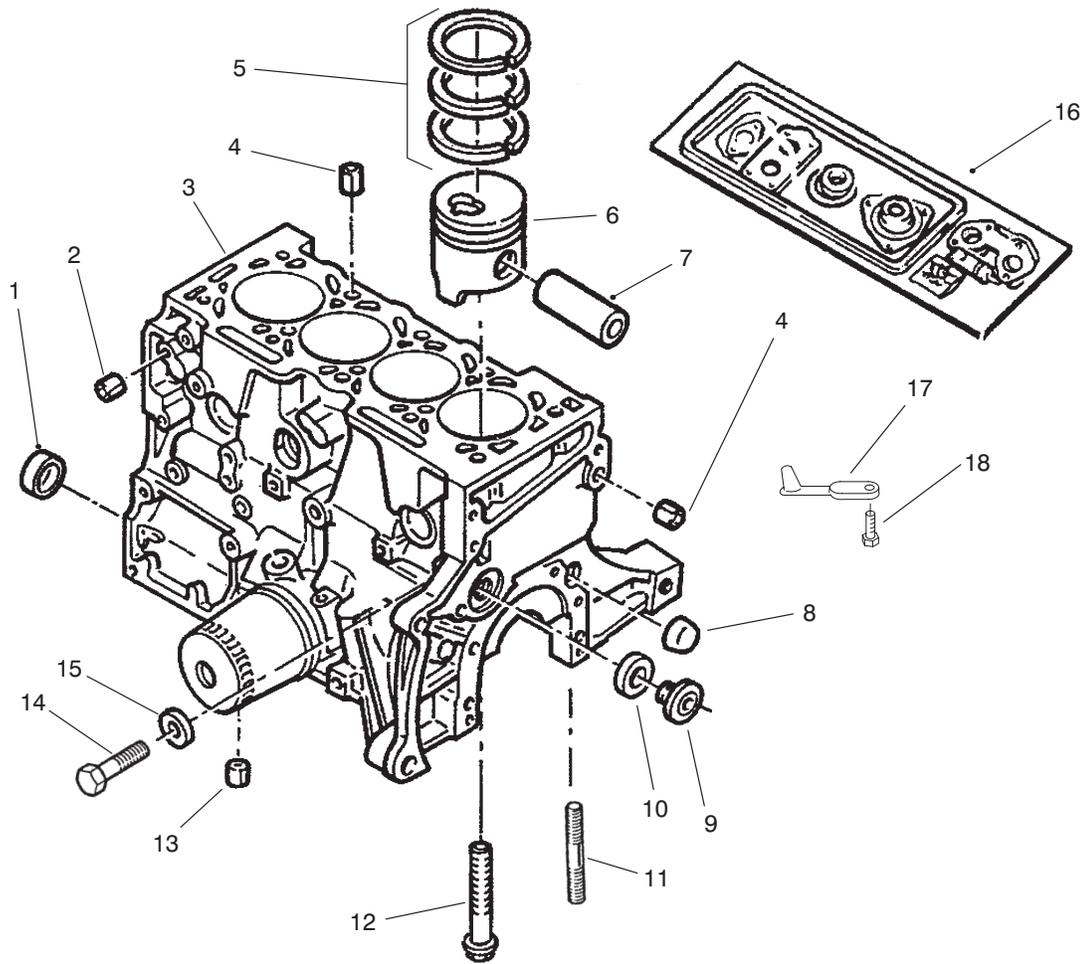
T-2335-2

## 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	Asm-Drive Shaft, Engine (Incl. Ref. #2-5, 8, 18, & 19)
*	93-5042	1	Asm-Drive Shaft (Model 30302 Only) (Incl. Ref. #4, & 12-16)

\* Not Illustrated



T-2277

## Cylinder Block Assembly

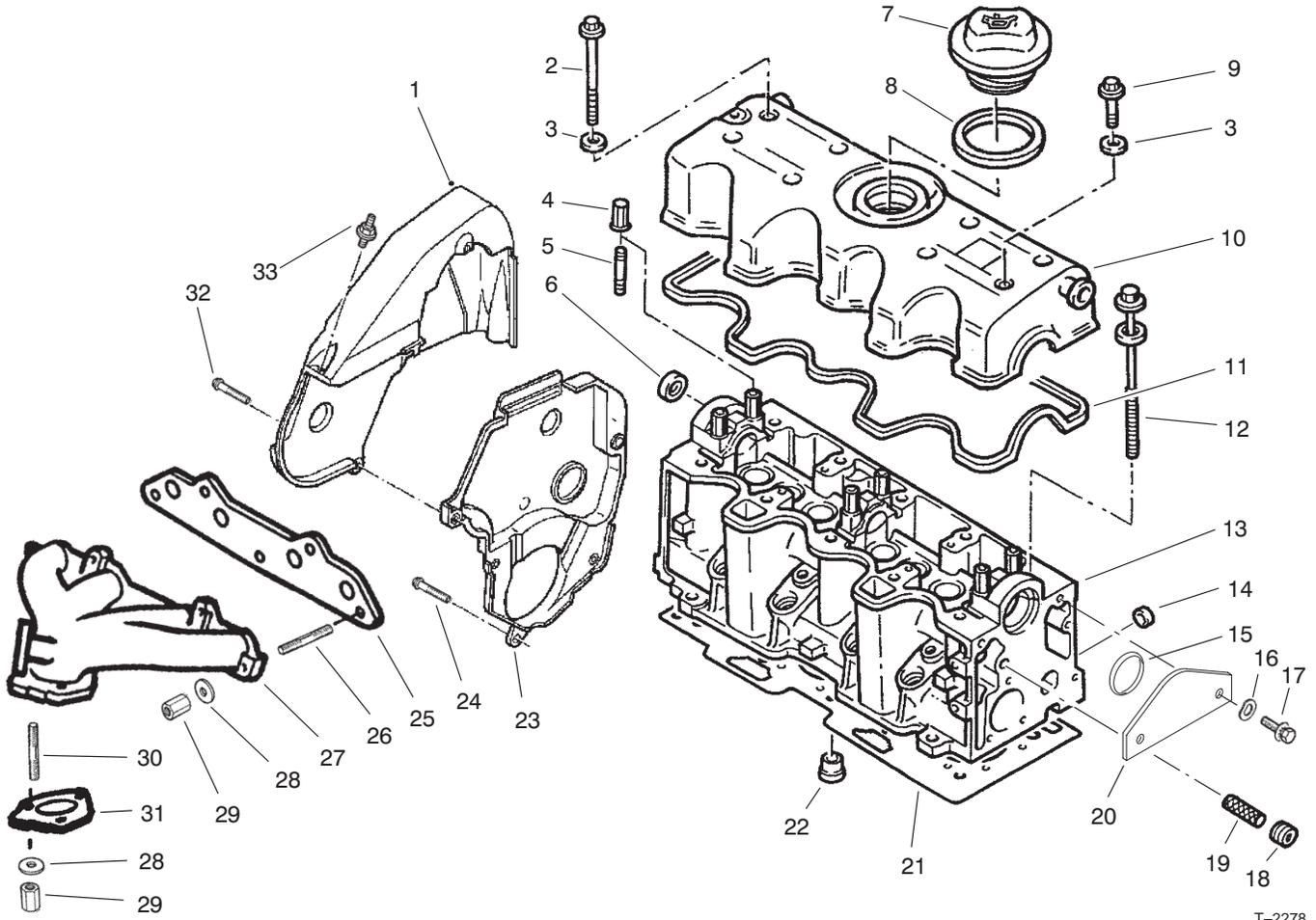
Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	74-7840	7	Plug				
2	93-5659	2	Pin (Dowel-Ring)				
3	93-5965	1	Asm-Cylinder Block (Incl. Ref. #9, 10, 14, 15, 17 & 18)				
4	76-5690	4	Pin (Dowel-Ring)				
5	93-5714	1	Piston Ring Set (77mm Dia.) (Set of 3)				
†6		4	Piston				
†7		4	Pin-Wrist				
8	93-5656	1	Plug				
9	94-3121	2	Threaded Plug				
10	93-5653	2	Plug Seal				
11	93-5660	3	Stud				
12	93-5657	10	Screw				
13	93-5658	1	Pin (Dowel)				
14	100-1389	1	Plug-Drain				
15	95-3026	1	Gasket-14mm Dia.				
16	93-5652	1	Engine Gasket Set				
■17	100-1358	4	Oil Jet				
▲17	100-1359	4	Oil Jet				
■18	93-5704	4	Screw				
▲18	93-5680	4	Screw				
*	93-5650	1	Engine-Stripped				

\*Not Illustrated

■For Engine Serial Numbers 600505 &amp; Up.

†Not Serviced Separately

▲For Engine Serial Numbers 600504 &amp; Down.



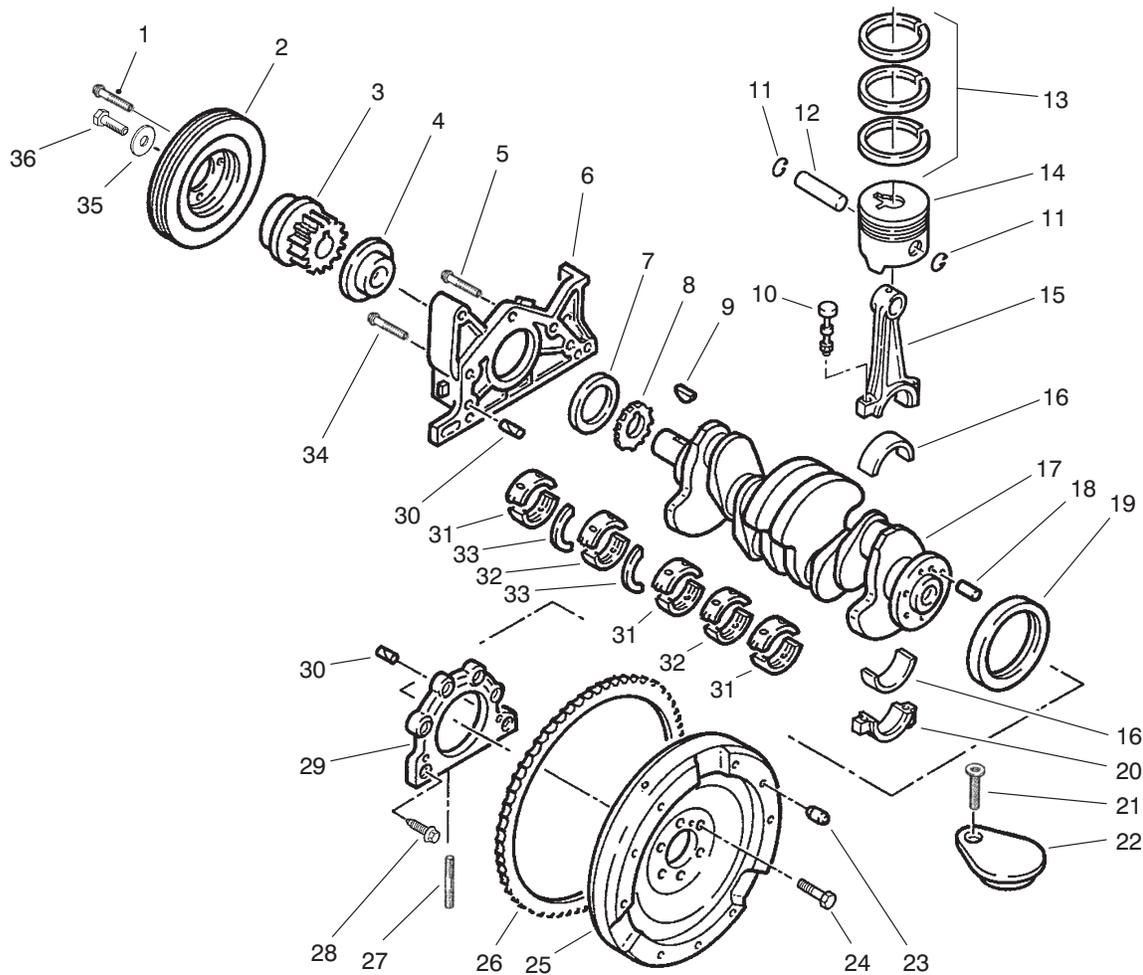
T-2278

## Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
1	95-7475	1	Upper Cover
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	Asm-Oil Cap Filler (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	Cylinder Head
14	93-5669	4	Plug
15	93-5926	1	O-Ring
16	93-5928	2	Spring Washer
17	93-5927	2	Screw
18	94-3118	2	Plug
19	93-5670	1	Filter Element
20	100-1364	1	Cover Plate ASM (Incl. Ref. #15)
21	93-5947	1	Cylinder Head Gasket
22	94-4145	4	Swirl Chamber
23	98-8070	1	Lower Cover
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	Exhaust Manifold
28	93-5897	8	Plate Washer
29	93-5896	8	Hexagonal Nut
30	93-5898	3	Stud
31	93-5892	1	Pipe Gasket
32	95-7479	1	Screw
33	95-7478	1	Screw
*	93-5664	1	Cylinder Head Gasket Set

\*Not Illustrated



T-2279

## Piston & Crankshaft Assembly

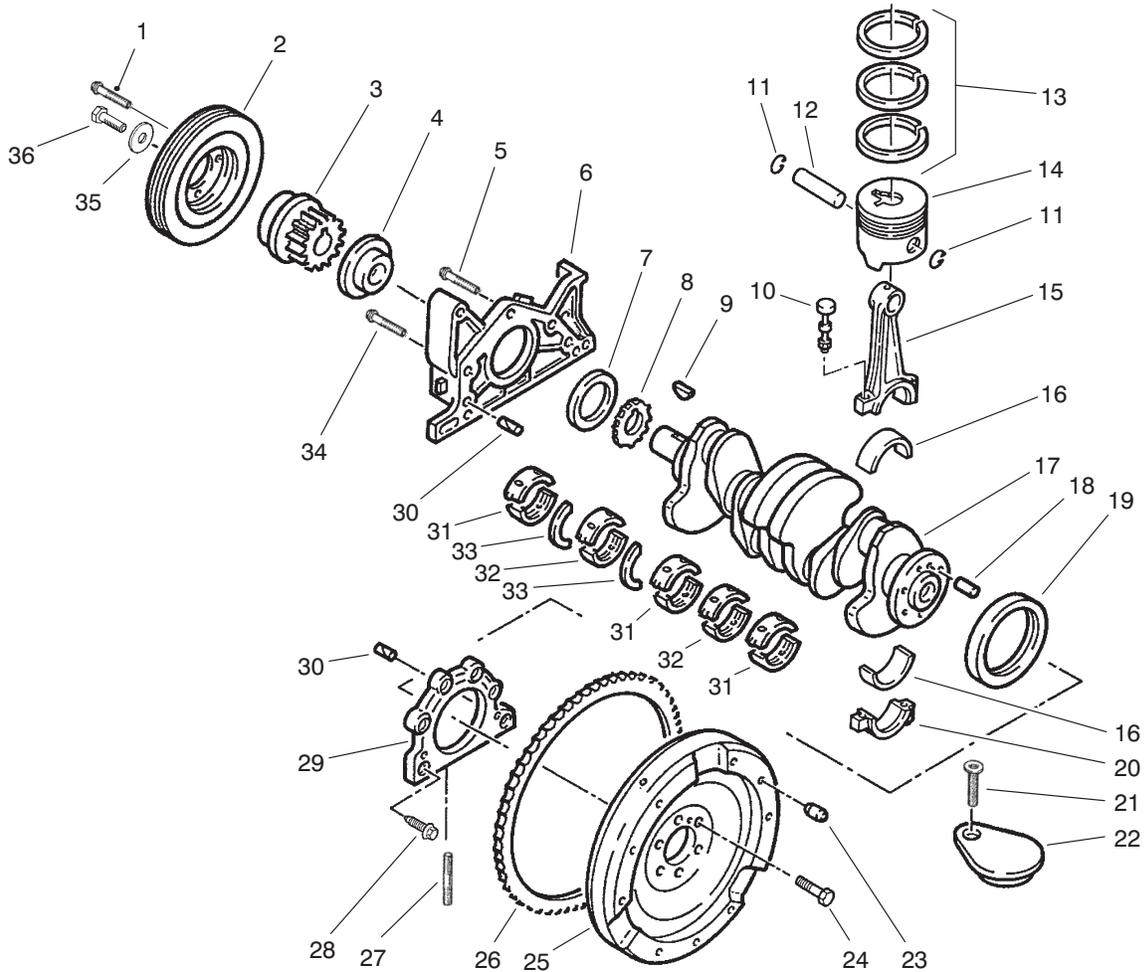
Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	94-3112	4	Screw	19	93-5702	1	Gasket
2	98-8071	1	Crankshaft Pulley	†20		4	Cap-Connecting Rod
▲3	93-5684	1	Gear-Timing	21	93-5709	1	Screw
●3	100-1374	1	Gear-Timing	22	93-5700	1	Plug
4	93-5699	1	Spacer	23	93-5705	3	Pin
5	93-5710	2	Screw	24	93-5708	6	Screw
6	93-5687	1	Gasket Plate	■25	95-2642	1	Engine Flywheel (Incl. Ref. #26)
7	93-5701	1	Gasket	■26	95-2641	1	Starter Ring Gear
▲8	93-5698	1	Gear-Oil Pump	27	93-5707	2	Stud
●8	100-1375	1	Gear-Oil Pump	28	93-5704	6	Screw
9	93-5703	1	Key	29	93-5686	1	Gasket Plate
10	93-5715	8	Connecting Rod Bolt	30	100-1383	4	Pin
11	93-5716	8	Circlip	31	93-5688	6	Half Bearing (1.844 Thick)
†12		4	Pin-Wrist	*	93-5689	6	Half Bearing (1.858 Thick)
13	93-5714	4	Set Of 3 Piston Rings (77mm Dia.)	*	93-5690	6	Half Bearing (1.869 Thick)
†14		4	Piston	*	95-2706	6	Half Bearing (1.994 Thick)
15	93-5712	1	Set Of 4 Connecting Rods (Incl. Ref. #10 & 20)	*	95-2707	6	Half Bearing (2.008 Thick)
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				

\*Not Illustrated

■For Engine Serial No. 549159 &amp; Up

●For Engine Serial No. 650226 &amp; Down.

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



T-2279

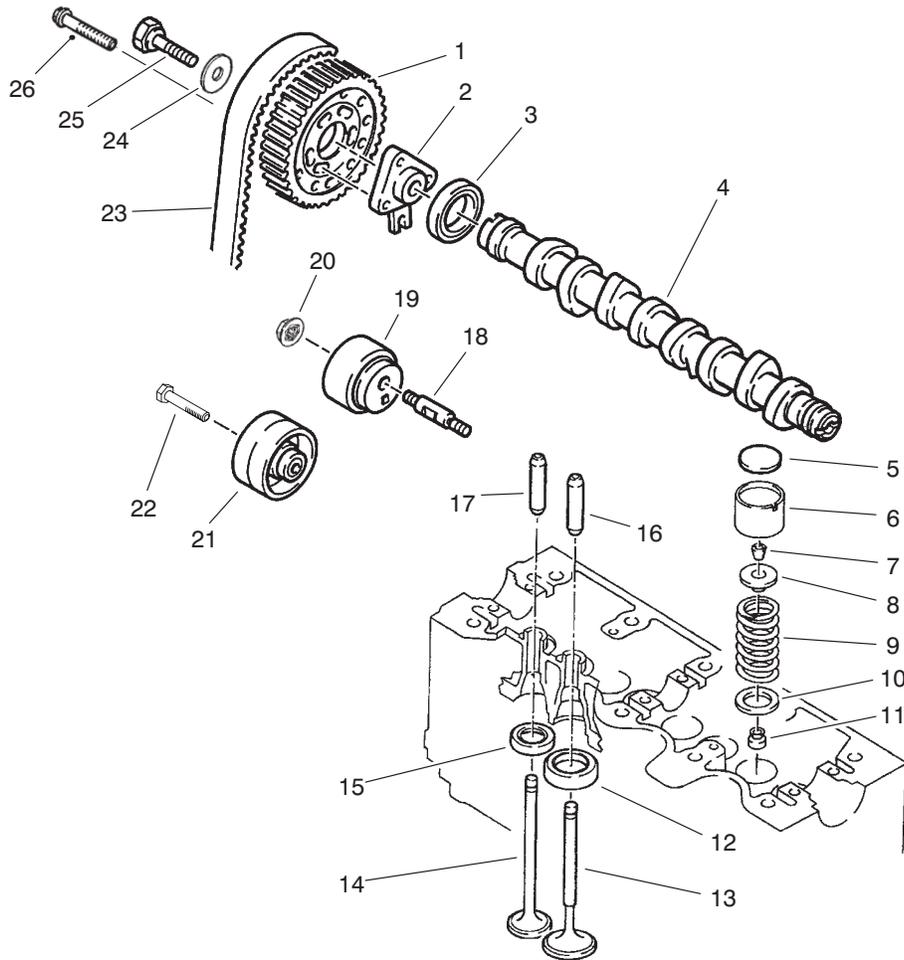
## Piston & Crankshaft Assembly (Continued)

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



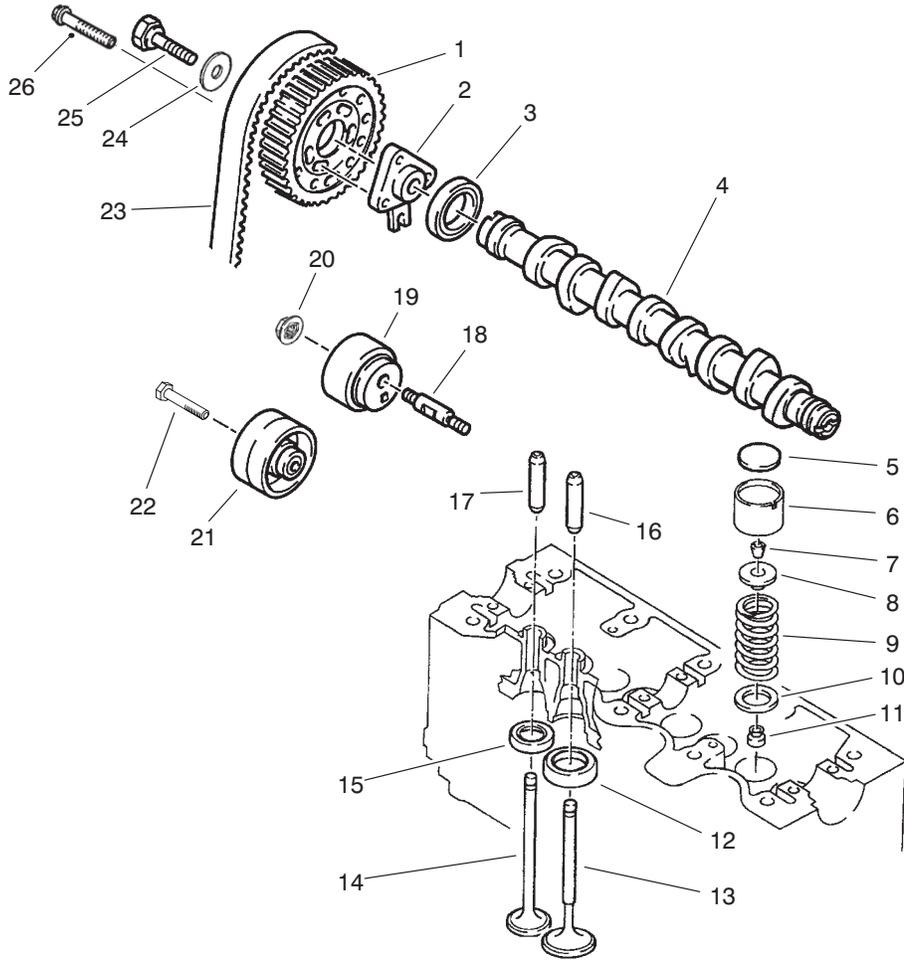
T-2280

## Camshaft & Valves Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5719	1	Camshaft Gear
2	93-5723	1	Pulley Hub
3	93-5718	1	Camshaft Seal
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



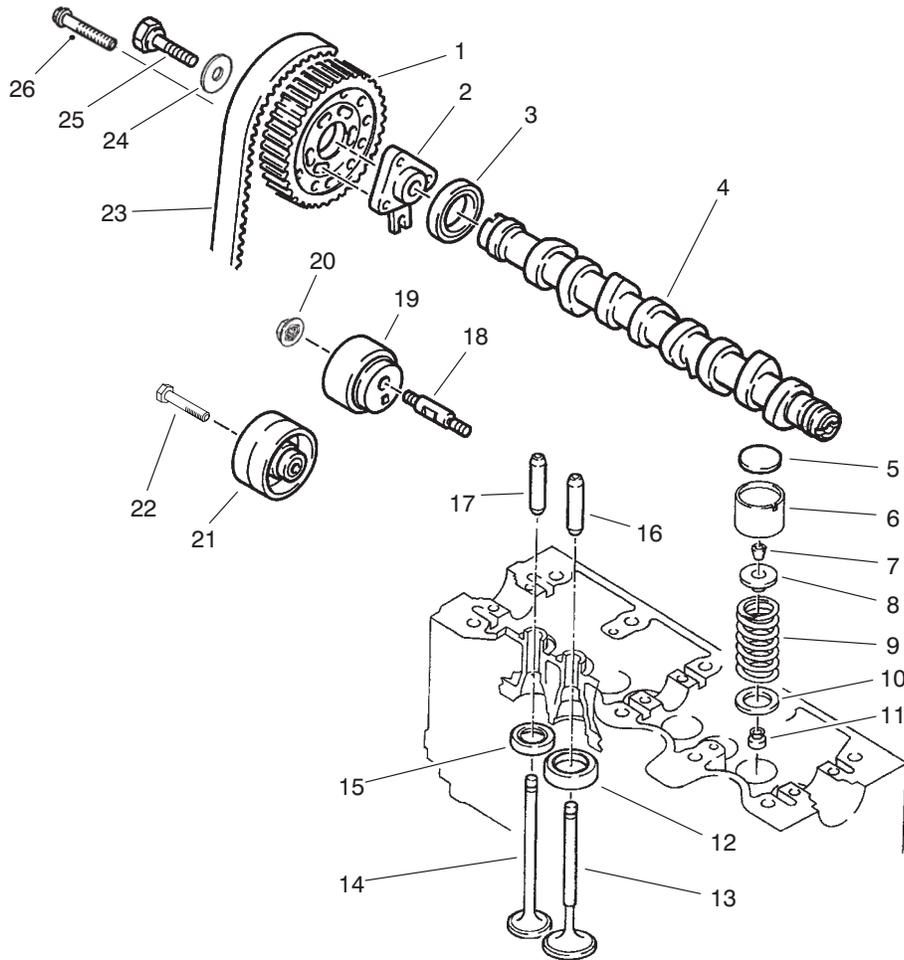
T-2280

## 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



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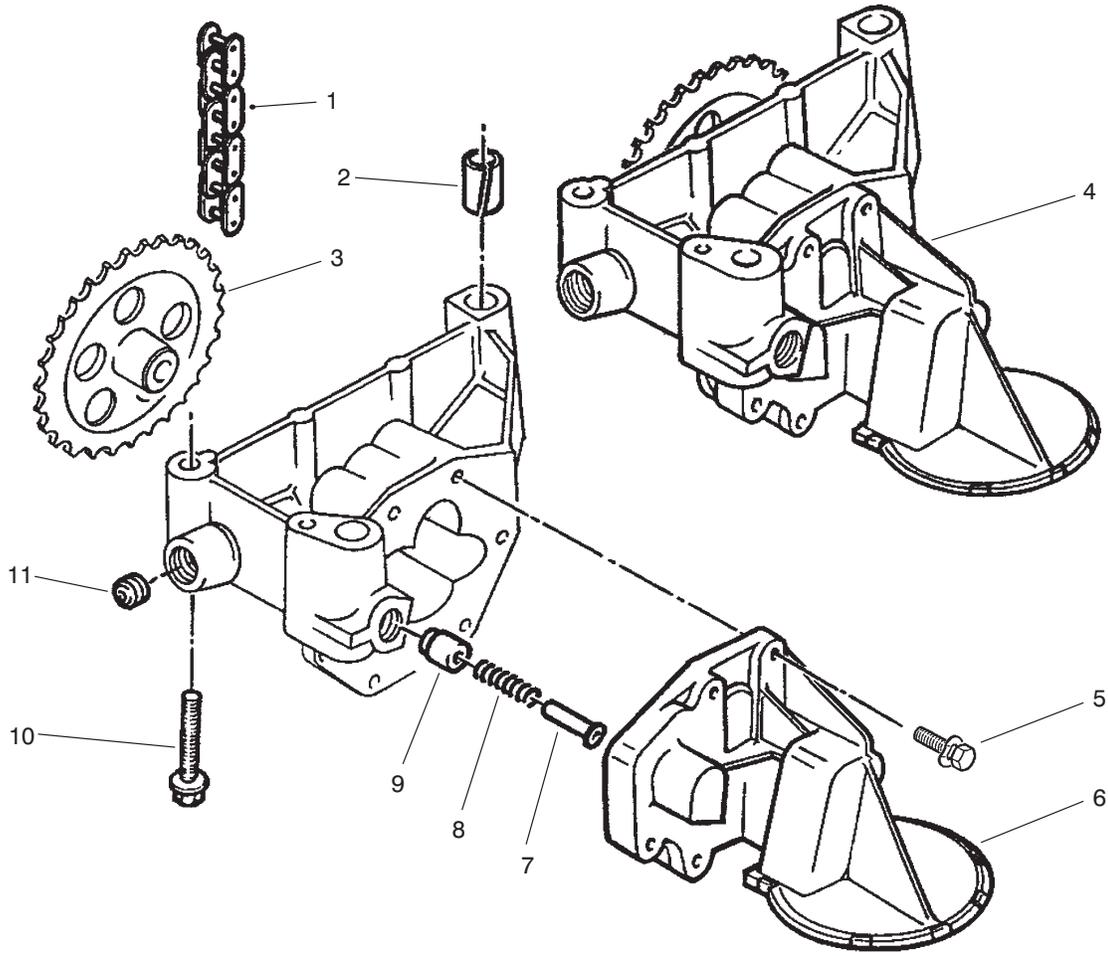
## Camshaft & Valves Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
*5	93-5790	8	Shim-Tappet (4.65 mm)
*	93-5791	8	Shim-Tappet (4.67 mm)
*	93-5792	8	Shim-Tappet (4.70 mm)
*	93-5793	8	Shim-Tappet (4.72 mm)
*	93-5794	8	Shim-Tappet (4.75 mm)
*	93-5795	8	Shim-Tappet (4.77 mm)
*	93-5796	8	Shim-Tappet (4.80 mm)
*	93-5797	8	Shim-Tappet (4.82 mm)
*	93-5798	8	Shim-Tappet (4.85 mm)
*	93-5799	8	Shim-Tappet (4.87 mm)
*	93-5800	8	Shim-Tappet (4.90 mm)
6	93-5736	8	Tappet
7	93-5734	16	Valve Half Bush
8	93-5733	8	Valve Spring Seat
9	93-5732	8	Valve Spring

Ref. No.	Part No.	Qty.	Description
10	93-5741	8	Flat Washer
11	100-1367	8	Valve Seal
12	93-5739	4	Inlet Seat Valve
13	93-5730	4	Intake Valve
14	93-5731	4	Exhaust Valve
15	93-5740	4	Outlet Seat Valve
16	93-5737	4	Inlet Valve Guide
17	93-5738	4	Outlet Valve Guide
18	93-5724	1	Tensioner Spindle
19	100-1360	1	Tensioner
20	93-5729	1	Nut
21	100-1363	1	Kit-Roller (Incl. Ref. #22)
22	93-5726	1	Screw
23	93-5720	1	Cogged Belt
24	93-5728	1	Plate Washer
25	93-5725	1	Pulley Screw
26	93-5851	3	Screw

\*Not Illustrated





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### Oil Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	93-5804	1	Oil Pump Chain
2	93-5658	1	Pin
†3		1	Gear-Drive
4	93-5801	1	Oil Pump (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

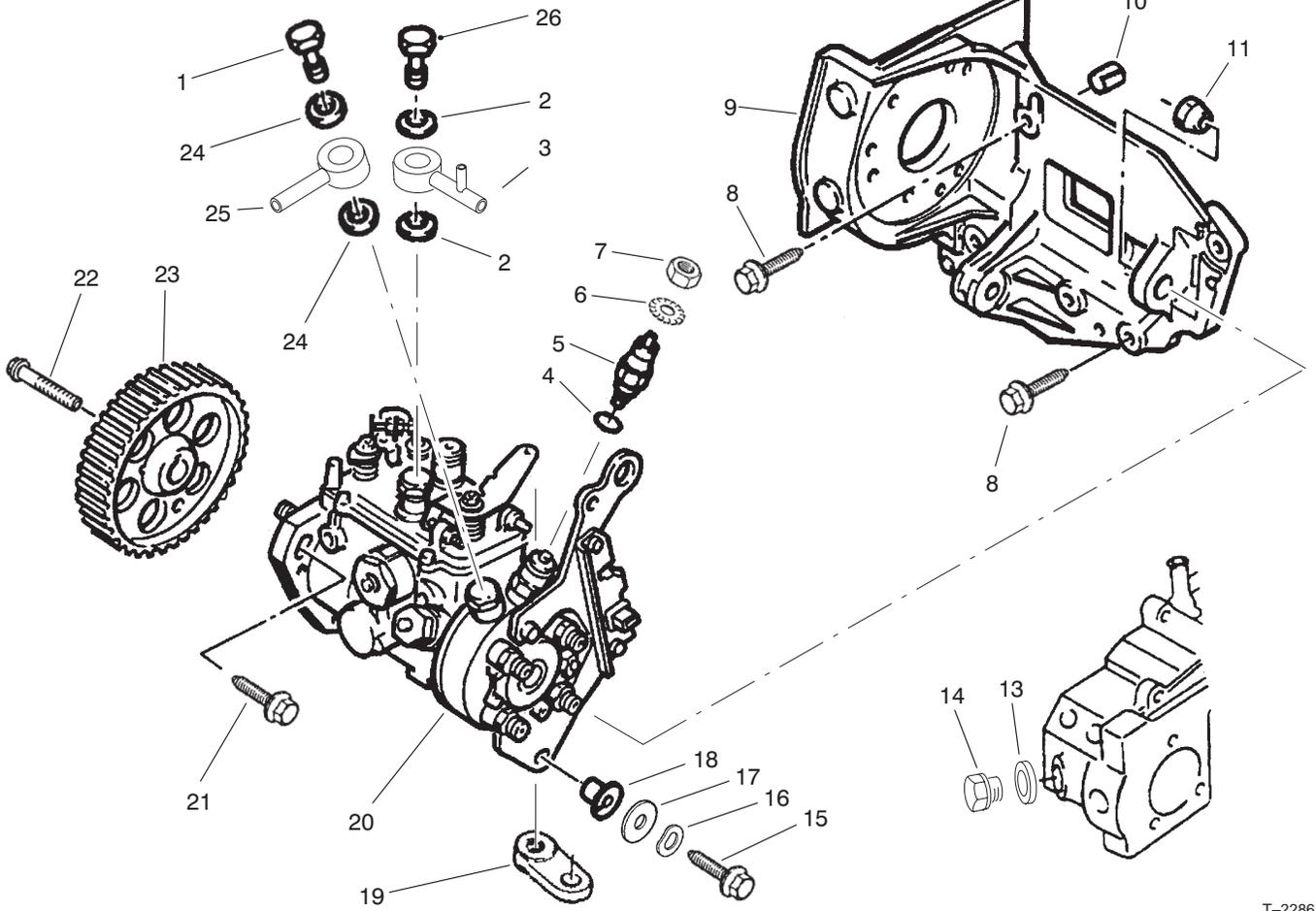
Ref. No.	Part No.	Qty.	Description

†Not Serviced Separately









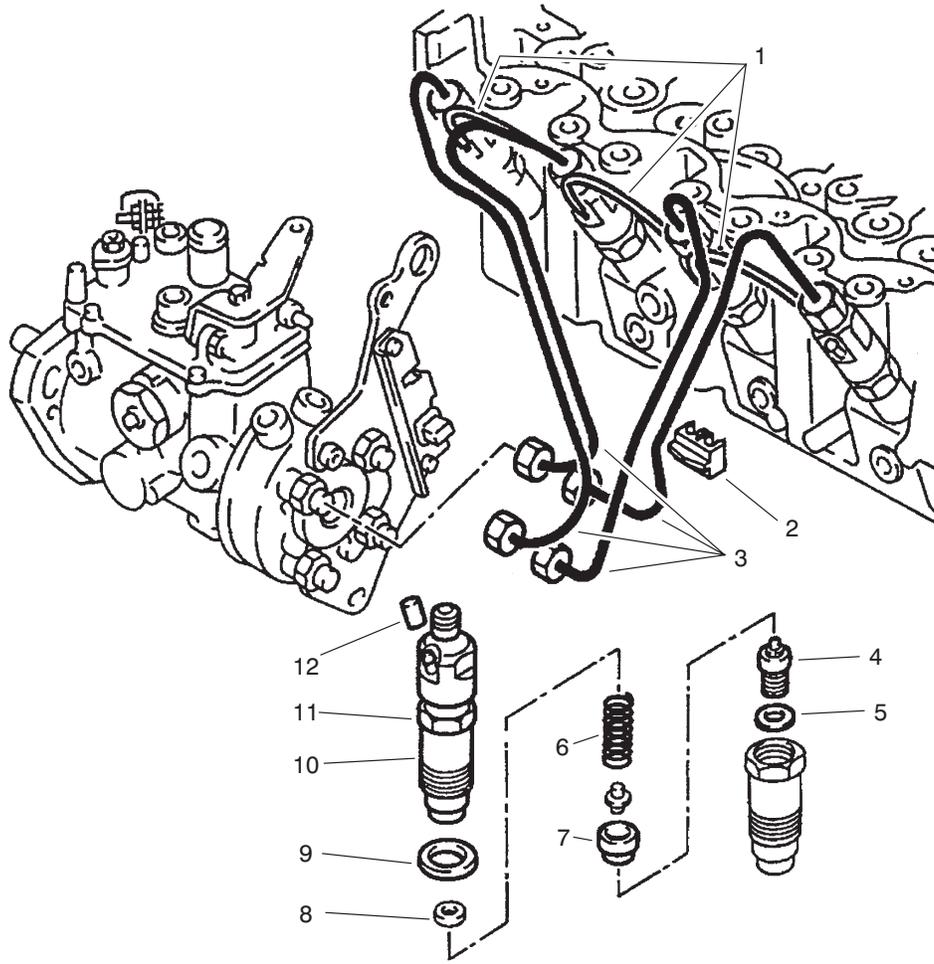
T-2286

### Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	94-4111	1	Union Screw-Inlet
2	74-8870	2	Gasket
3	95-1690	1	Outlet Union
4	94-3274	1	O-Ring
5	98-8806	1	Solenoid Valve
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	Injection Pump Bracket
10	93-5659	2	Pin
11	94-3165	1	Hexagonal Nut
13	94-3122	1	Gasket
14	94-3121	1	Plug
15	94-3221	1	Screw
16	94-3164	1	Spring Washer
17	93-5855	1	Plate Washer
18	93-5909	1	Ring
19	74-8650	1	Journal
20	93-5848	1	Injection Pump
21	93-5854	3	Screw
22	93-5851	3	Screw
23	93-5719	1	Injection Pump Gear
24	74-8680	2	Gasket
25	93-5857	1	Inlet Union

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

\*Not Illustrated



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## 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	Pipes Harness
4	93-5860	4	Injector
5	93-5867	4	Injector Gasket
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)

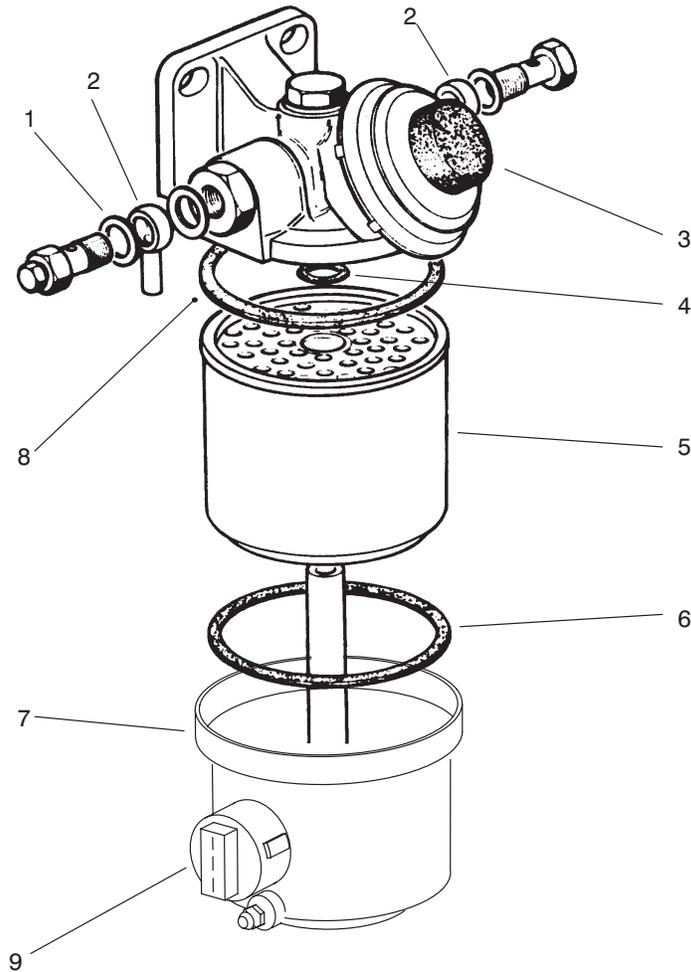
Ref. No.	Part No.	Qty.	Description
*	93-5887	1	Shim (1.320 mm)
*	93-5888	1	Shim (1.400 mm)
*	93-5889	1	Shim (1.480 mm)
*	93-5890	1	Shim (1.560 mm)
*	93-5891	1	Shim (1.640 mm)
9	93-5866	4	Injector Gasket
10	93-5868	4	Injector + Injector Holder
11	94-4147	4	Injector Holder
12	74-8770	1	Plug

\*Not Illustrated









T-0966

### 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	Asm-Filter, Fuel (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



