



Count on it.

Parts Catalog

Groundsmaster® 3500-D

Traction Unit

Model No. 30839—Serial No. 31000001 and Up

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 illustration and in parts 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.

List of Abbreviations

AR: as required

ASM: assembly

BBC: blade brake control

BHTF: button head thread forming

CARR: carriage

CCW: counter clockwise

CW: clockwise

DEG: degrees

DPA: Dual Point Adjustment

ECM: electronic control module

EXT: external

FH: flat head

GA: gauge

HD: heavy-duty

HF: hex flange

HH: hex head

HHF: hex head flange

HHFTF: hex head flange thread forming

HJ: hex jam

HLH: hex lag head

HOC: height-of-cut

HSBH: hex socket button head

HSFH: hex socket flat head

HSH: hex socket head

HWH: hex washer head

HWHTF: hex washer head thread forming

HYD: hydraulic

LH: left hand

LP: Liquid Propane

NI: nylon insert

NPTF: national pipe thread fine

PFH: phillips flat head

PPH: phillips pan head

PPHTF: phillips pan head thread forming

PRH: phillips round head

PTH: phillips truss head

PTO: power-take-off

RH: right hand

ROPS: roll-over protection system

RRB: rear roller brush

SFH: slotted fillister head

SHH: slotted hex head

SHWH: slotted hex washer head

SPH: slotted pan head

SQH: square head

SRH: slotted round head

STD: standard

TAP: self tapping

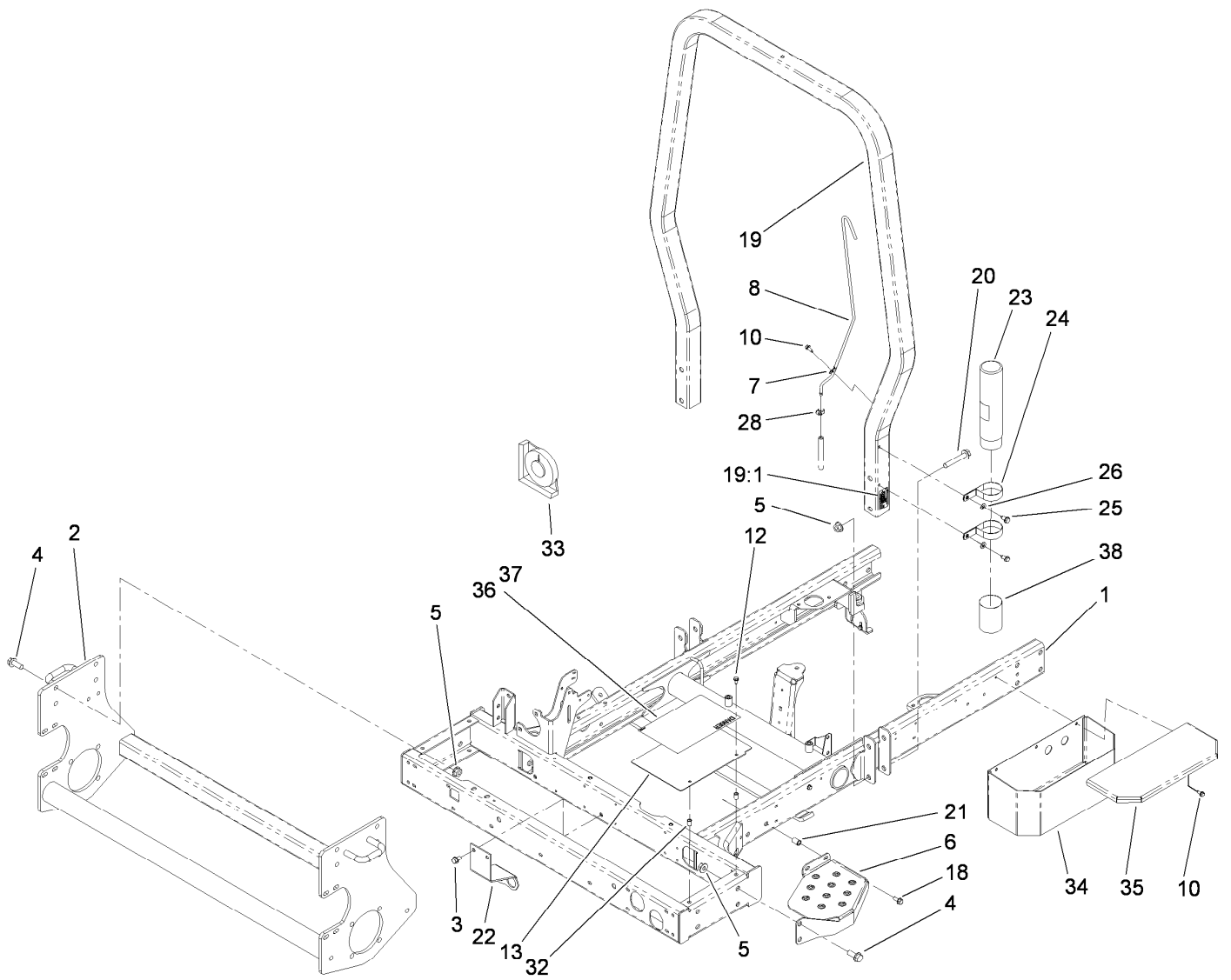
TTH: torx truss head

Contents

Frame Assembly	5
Front Wheel and Brake Assembly	6
Brake Assembly No. 104-7705	8
Steering Column Assembly	9
Steering Valve Assembly No. 104-5180	10
Rear Fork and Tire Assembly	11
Hydraulic Cylinder Assembly No. 94-8141	13
Hydraulic Motor Assembly No. 95-8694	14
Control Panel Assembly	15
Front Platform Assembly	16
Traction Pedal Assembly	17
Control Valve Installation Assembly	18
2-Spool Control Valve Assembly No. 95-8581	19
Rear Lift Arm Assembly	20
Hydraulic Cylinder Assembly No. 112-9916	21
Neutral Arm Assembly	22
Engine Assembly	23
Air Cleaner and Muffler Assembly	24
Radiator Assembly	25
Hood and Screen Assembly	26
Fuel System Assembly	27
Manifold Block Installation Assembly	28
Manifold Block Assembly No. 115-3486	29
Hydraulic Tank Assembly	30
Hydrostat Assembly	31
Piston Pump Assembly No. 104-4890	33
Hydraulic Gear Pump Assembly No. 108-9036	34
Carrier Assembly	35
Scissor Assembly	37
Rotary Motor Assembly	38
Hydraulic Motor Assembly No. 105-9872	39
Battery Assembly	40
Parking Brake Assembly	41
Seat Mounting Assembly	42
Crankcase Assembly	43
Dipstick, Guide and Oil Pan Assembly	44
Cylinder Head Assembly	45
Cylinder Head Cover Assembly	46
Gear Case and Oil Filter Cartridge Assembly	47
Main Bearing Case Assembly	48
Camshaft and Idle Gear Shaft Assembly	49
Piston and Crankshaft Assembly	50
Flywheel Assembly	51
Fuel Camshaft and Governor Shaft Assembly	52
Idle Apparatus Assembly	53
Injection Pump Assembly	54
Governor Assembly	55
Speed Control Plate Assembly	56
Nozzle Holder and Glow Plug Assembly	57
Nozzle Holder Assembly	58
Alternator and Pulley Assembly	59
Alternator Components Assembly	60
Starter Components	61
Water Flange and Thermostat Assembly	62

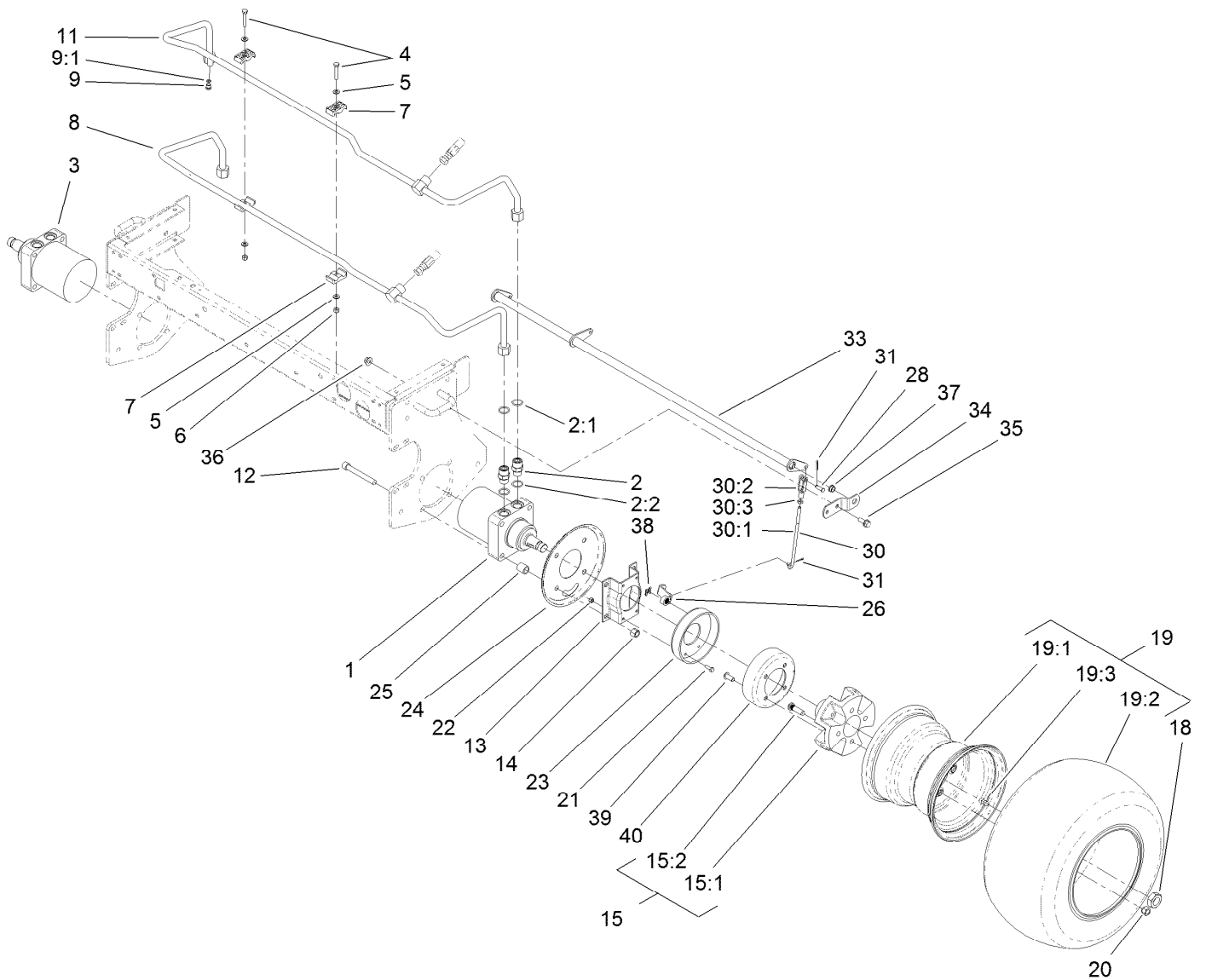
Contents (continued)

Water Pump and Fuel Pump Cover Assembly.....	63
Inlet and Exhaust Manifold Assembly.....	64
Valve and Rocker Arm Assembly.....	65
Turbo Charger Assembly.....	66
Oil Pipe (Turbo Charger) Assembly.....	67
Oil Cooler Assembly.....	68
Starter, Overflow Bottle and Miscellaneous Engine Parts.....	69
Upper and Lower Gasket Kits.....	70
Attachments and Accessories.....	71



Frame Assembly

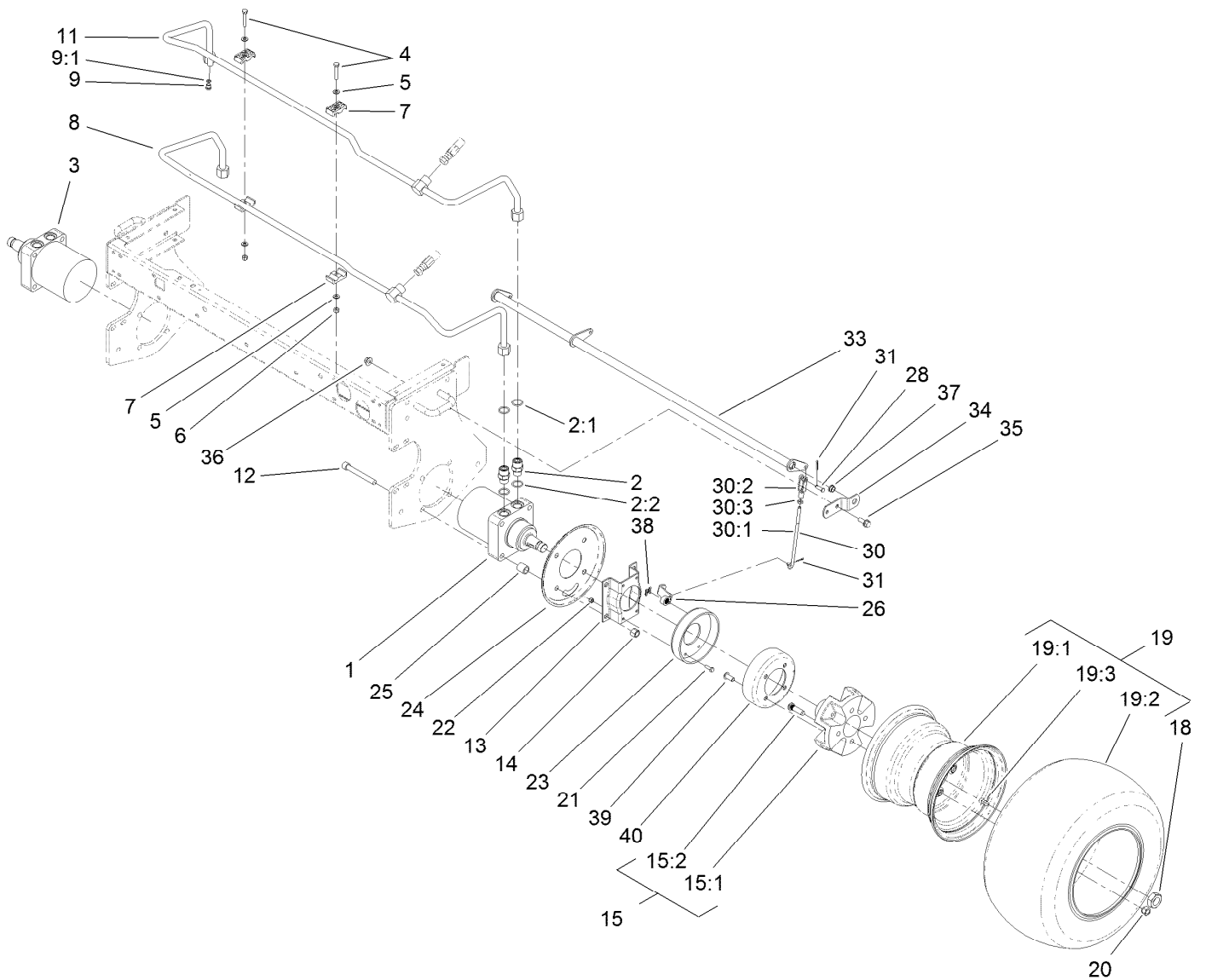
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	99-3610-03	1	Frame ASM	21	32148-8	2	Insert-Threaded
2	95-8568-03	1	Frame-Lower	22	115-3417-03	1	Bracket-Bulkhead, Scissor
3	32144-15	2	Screw-HHFTF	23	104-7050	1	Tube-Manual
4	3234-38	8	Screw-HHF	24	2412-133	2	R-Clamp
5	32128-49	12	Nut-HHF	25	32144-70	2	Screw-HWHTF
6	99-3375-03	1	Step	26	3256-23	2	Washer-Flat
7	2412-72	3	Clip-Closed, Insulated	28	2412-108	1	Clamp-Worm
8	95-8615	1	Tube-Breather	32	32148-6	2	Insert-Nut
10	32144-10	6	Screw-HWH	33	99-3503	1	Indicator-Angle
12	3234-4	2	Screw-HHF	34	104-4634-03	1	Toolbox ASM
13	104-0468-01	1	Cover-Frame	35	104-4633-03	1	Toolbox Cover ASM
18	3234-5	2	Screw-HHF	36	104-0484	1	Decal-Danger
19	107-7833	1	ROPS ASM	37	104-5181	1	Decal-Danger, Ce
19:1	107-7831	1	Decal-ROPS	38	104-7048	1	Cap-Housing
20	3234-40	4	Screw-HF				



Front Wheel and Brake Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	110-8785	1	HYD Motor ASM (CCW)	15:2	10-6830	4	Stud-Type, Drive
2	340-7	4	Adapter	18	26-3790	2	Nut-Lock
2:1	237-65	1	O-Ring	19	19	2	Tire And Wheel ASM ●
2:2	237-80	1	O-Ring	19:1	117-5126	1	Rim
3	110-8786	1	HYD Motor ASM (CW)	19:2	117-5125	1	Tire
4	322-9	2	Screw-HH	19:3	232-27	1	Stem-Valve
5	3256-23	4	Washer-Flat	20	242-50	8	Nut-Lug
6	3296-29	2	Nut-Lock, NI	21	321-5	8	Screw-HH
7	56-7971	4	Clamp-Tube	22	3296-42	8	Nut-Lock, NI
8	95-8783	1	Tube ASM	23	104-7705	2	Brake ASM
9	353-990	1	Plug	24	104-0485-03	2	Shield-Wheel
9:1	237-78	1	O-Ring	25	92-1715	8	Spacer
11	95-8784	1	Tube ASM	26	114-2726	2	Lever-Brake
12	3274-99	8	Screw-HSH	28	283-1	2	Pin-Clevis
13	84-2000-03	2	Bracket-Brake	30	115-6672	2	Brake Lever ASM
14	3296-23	8	Nut-Lock, NI	30:1	104-4627	1	Rod-Adjusting
15		2	Wheel Hub / Stud ASM ●	30:2	1-303105	1	Yoke-Adjustable
15:1	104-0462-03	1	Hub-Wheel	30:3	3220-2	1	Nut-Jam

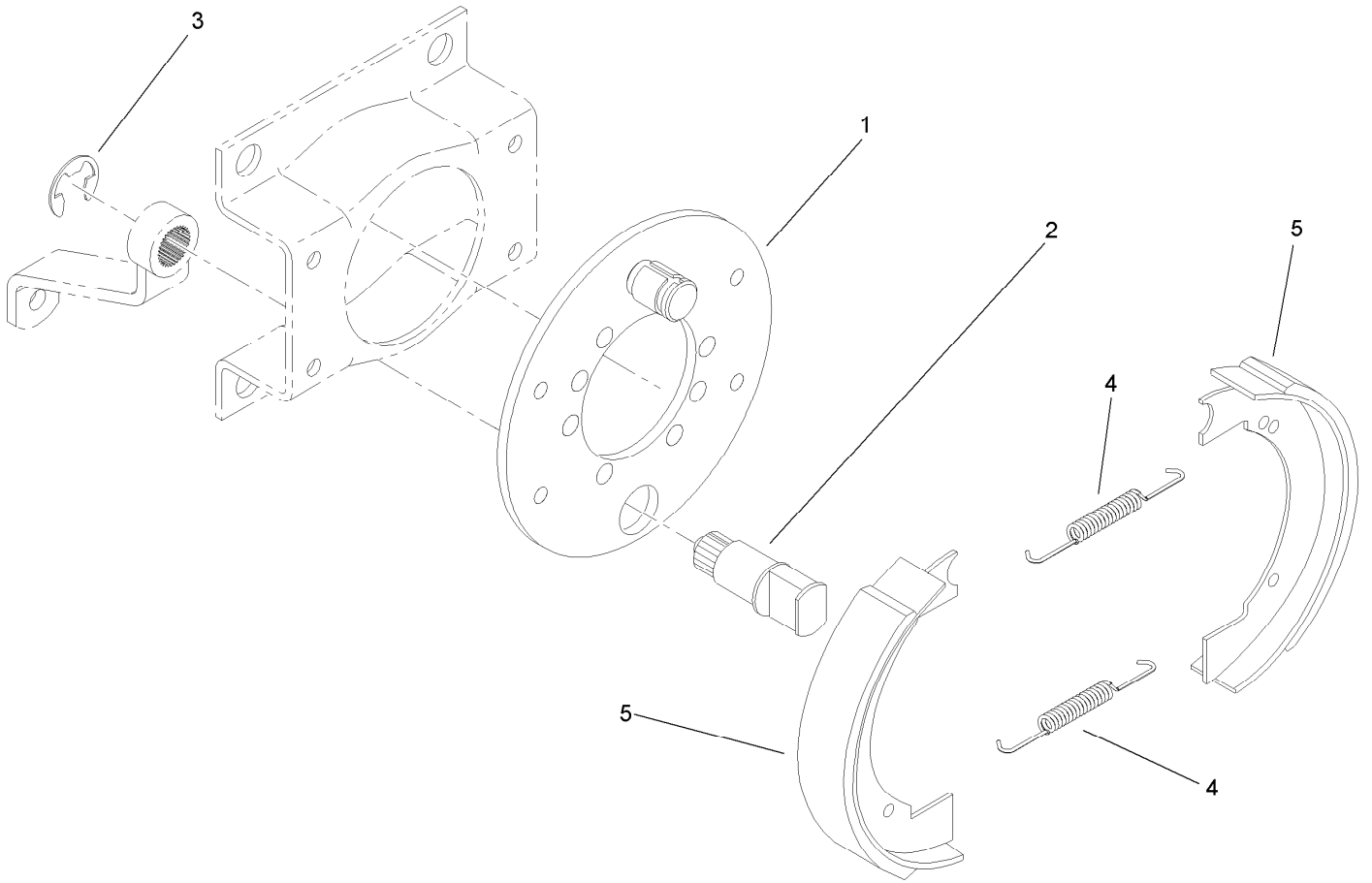
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Front Wheel and Brake Assembly (continued)

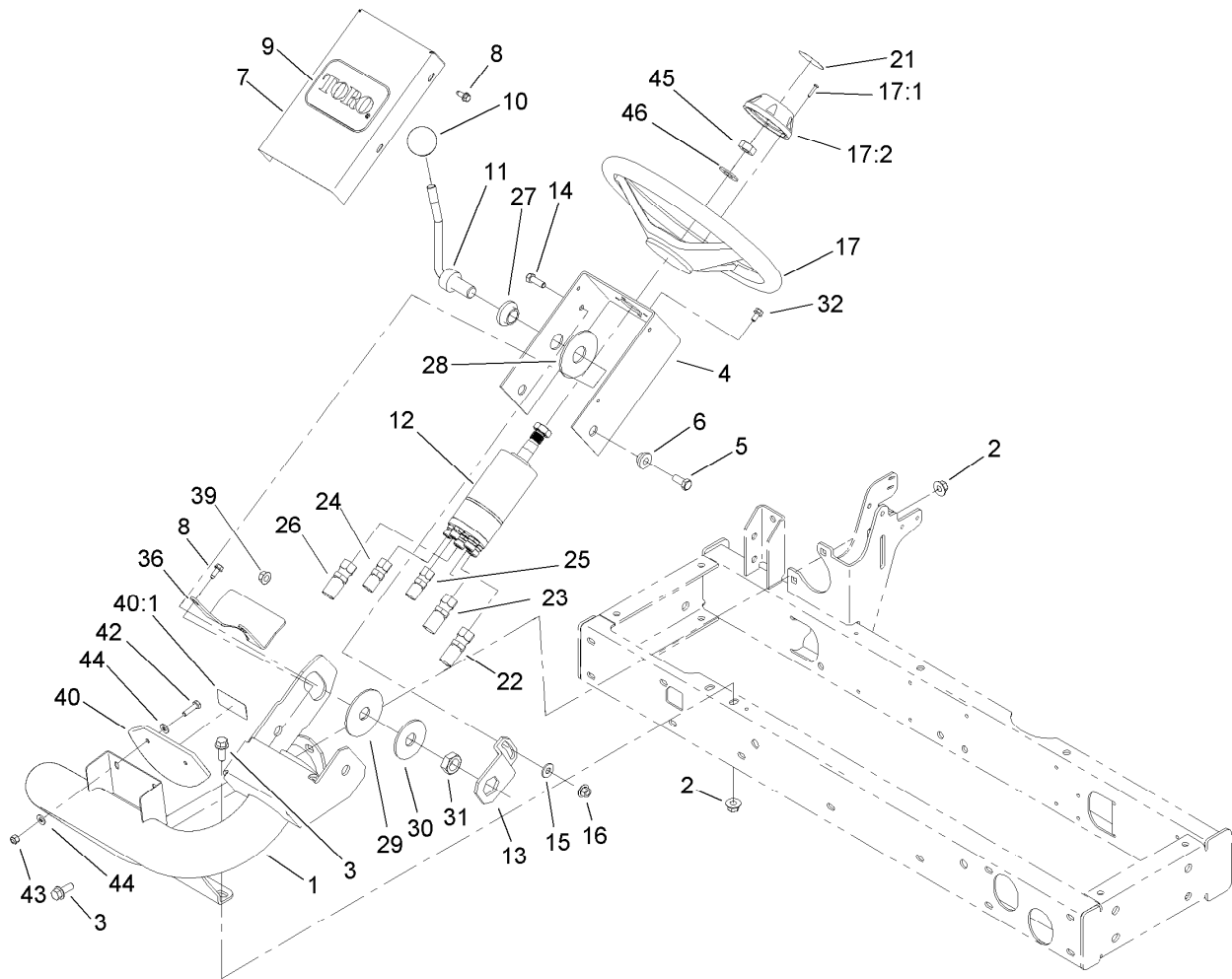
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
31	3272-6	4	Pin-Cotter	37	256-156	2	Bushing-Flange
33	104-4625-03	1	Brake Pivot Shaft ASM	38	104-7706	2	E-Ring, Bowed
34	95-8683	2	Bracket-Pivot, Brake	39	3274-105	8	Screw-HSBH
35	3234-11	4	Screw-HHF	40	104-4809	2	Drum-Brake
36	32128-43	4	Nut-Flange				

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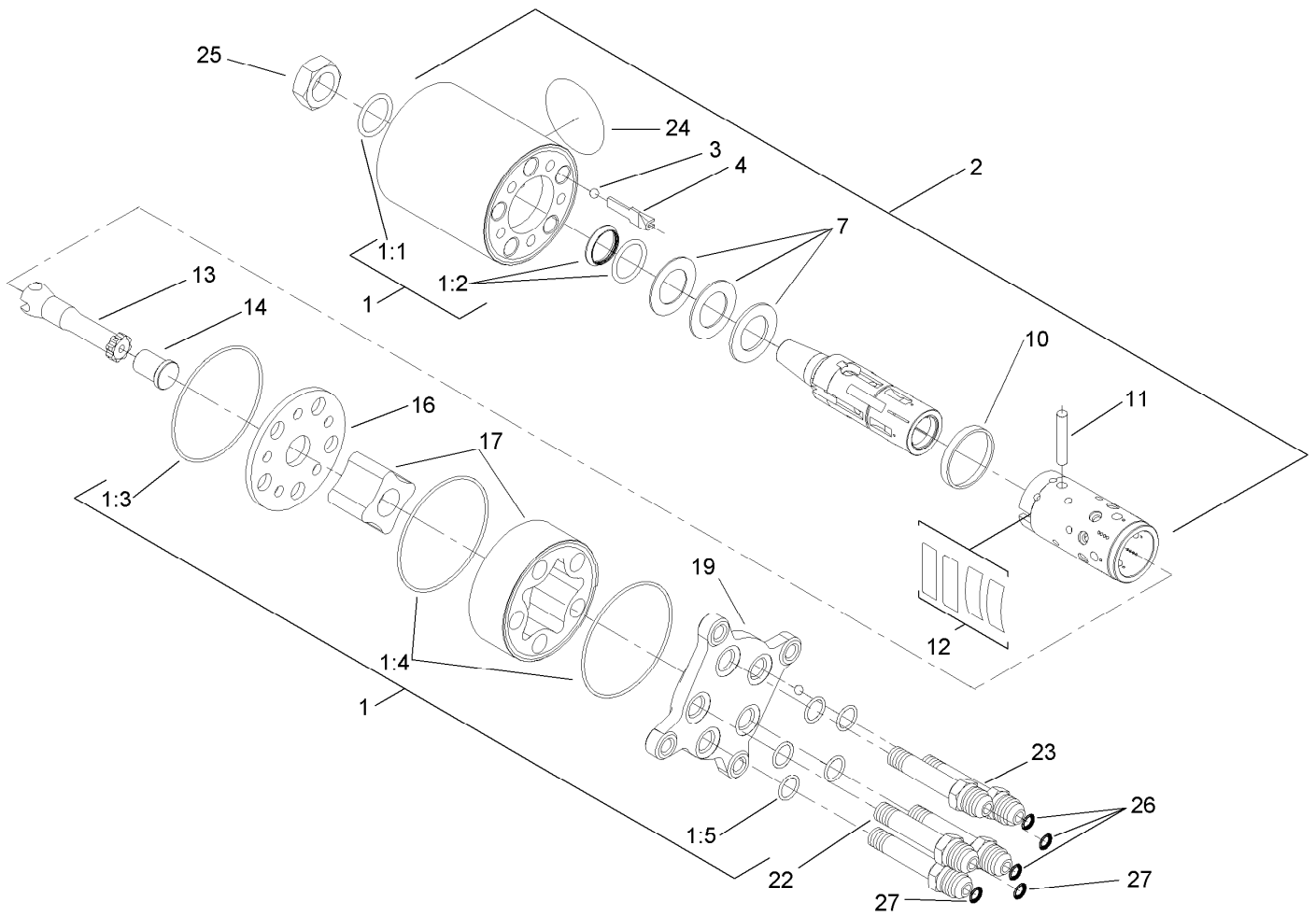
Brake Assembly No. 104-7705

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	70-9870	1	Plate-Backing
2	104-7707	1	Shaft-Cam, Brake
3	104-7706	1	E-Ring, Bowed
4	70-9880	2	Spring-Return
5	70-9840	2	Shoe-Brake



Steering Column Assembly

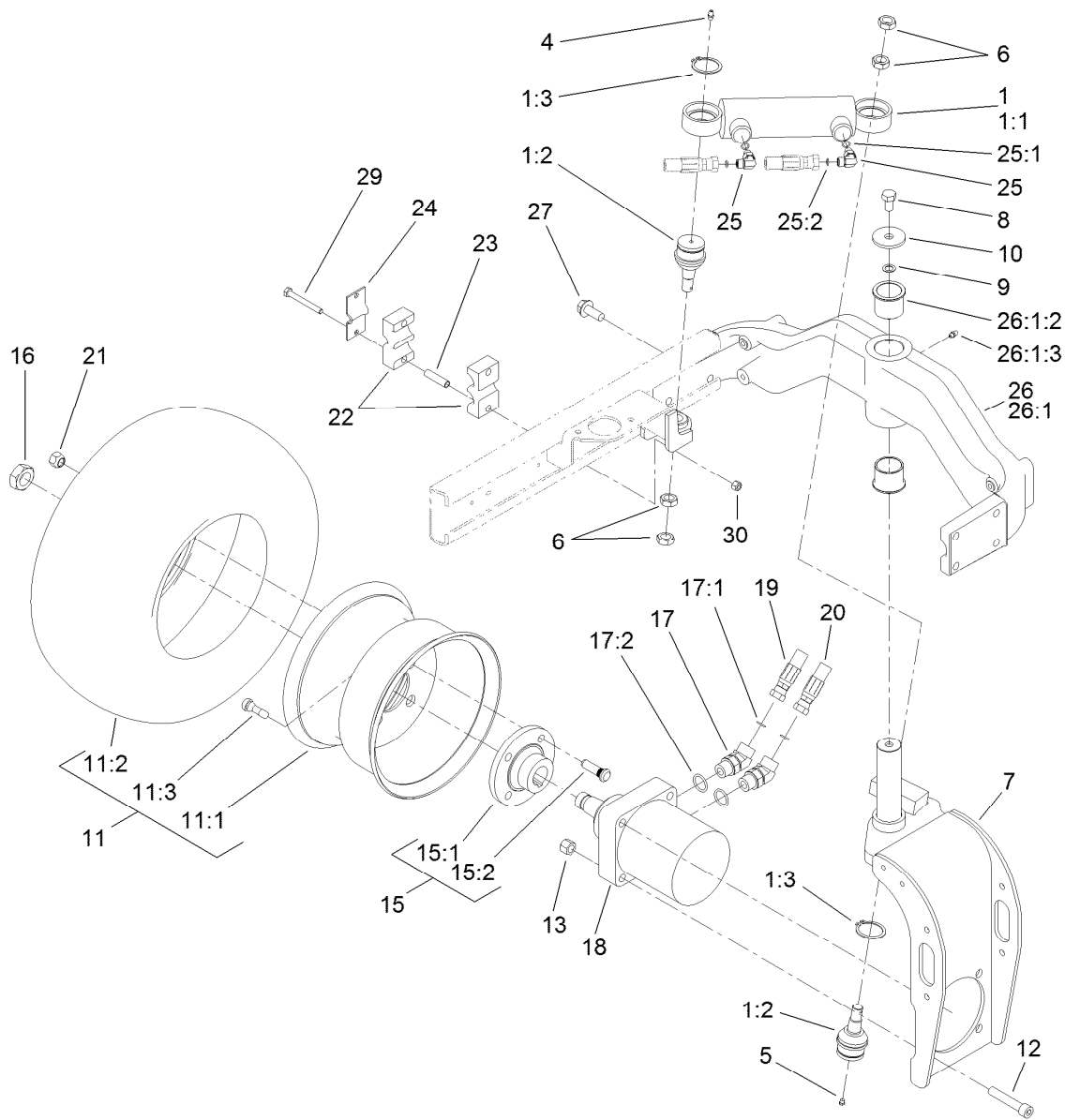
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	105-8536-01	1	Arm-Steering	23	95-8843	1	Hose ASM
2	32128-43	4	Nut-Flange	24	100-4892	1	Hose ASM
3	3234-11	4	Screw-HHF	25	100-4893	1	Hose ASM
4	104-5185-01	1	Bracket-Valve, Steering	26	95-8846	1	Hose ASM
5	323-5	2	Screw-HH	27	99-3502	1	Boss
6	93-5988	2	Hub-Pivot	28	31-0390	1	Disc-Friction
7	95-8794-01	1	Cover-Valve, Steering	29	82-9010	1	Disc-Friction
8	32144-10	5	Screw-HWH	30	80-2930	1	Washer-Flat
9	67-1300	1	Decal	31	3218-7	1	Nut-Jam
10	233-48	1	Knob	32	33103-012	4	Screw-HHF
11	95-8798-03	1	Lever-Steering	36	99-3405-01	1	Shield-Steering
12	104-5180	1	Steering Valve ASM	39	32128-21	2	Nut-HF
13	80-2880	1	Bracket-Tilt	40	100-4929	1	Slope Indicator ASM
14	322-5	1	Screw-HH	40:1	100-4837	1	Decal-Danger
15	3256-3	1	Washer-Flat	40:1	107-7801	1	Decal-Danger, Ce
16	32128-44	1	Nut	42	321-7	2	Screw-HH
17	75-0560	1	Wheel-Steering	43	3296-42	2	Nut-Lock, NI
17:1	32144-21	1	Screw	44	3256-22	4	Washer-Flat
17:2	68-5140	1	Cap-Wheel, Steering	45	3296-33	1	Nut-Lock, NI
21	68-5370	1	Decal	46	3256-27	1	Washer-Flat
22	95-8842	1	Hose ASM				



Steering Valve Assembly No. 104-5180

Ref.	Part Number	Qty.	Description
1	106-6716	1	Seal Kit
1:1		1	Ring-Seal, Dust ●
1:2		1	Seal-Shaft ●
1:3		1	Ring-Retaining ●
1:4		2	Ring-Retaining ●
1:5		5	Ring-Retaining ●
2		1	Housing ●
3		1	Ball ●
4		1	Stop-Ball ●
7		1	Bearing ASM ●
10		1	Ring ●
11		1	Pin-Cross ●
12		1	Springs ●
13		1	Shaft ●
14		1	Spacer ●
16		1	Plate-Distributor ●
17		1	Gearwheel Set ●
19		1	Cover-End ●
22		1	Screw-Special ●
23		4	Screw-Special ●
24		1	Plate-Name ●
25	3296-33	1	Nut-Lock, NI
26	237-22	3	O-Ring
27	237-21	2	O-Ring

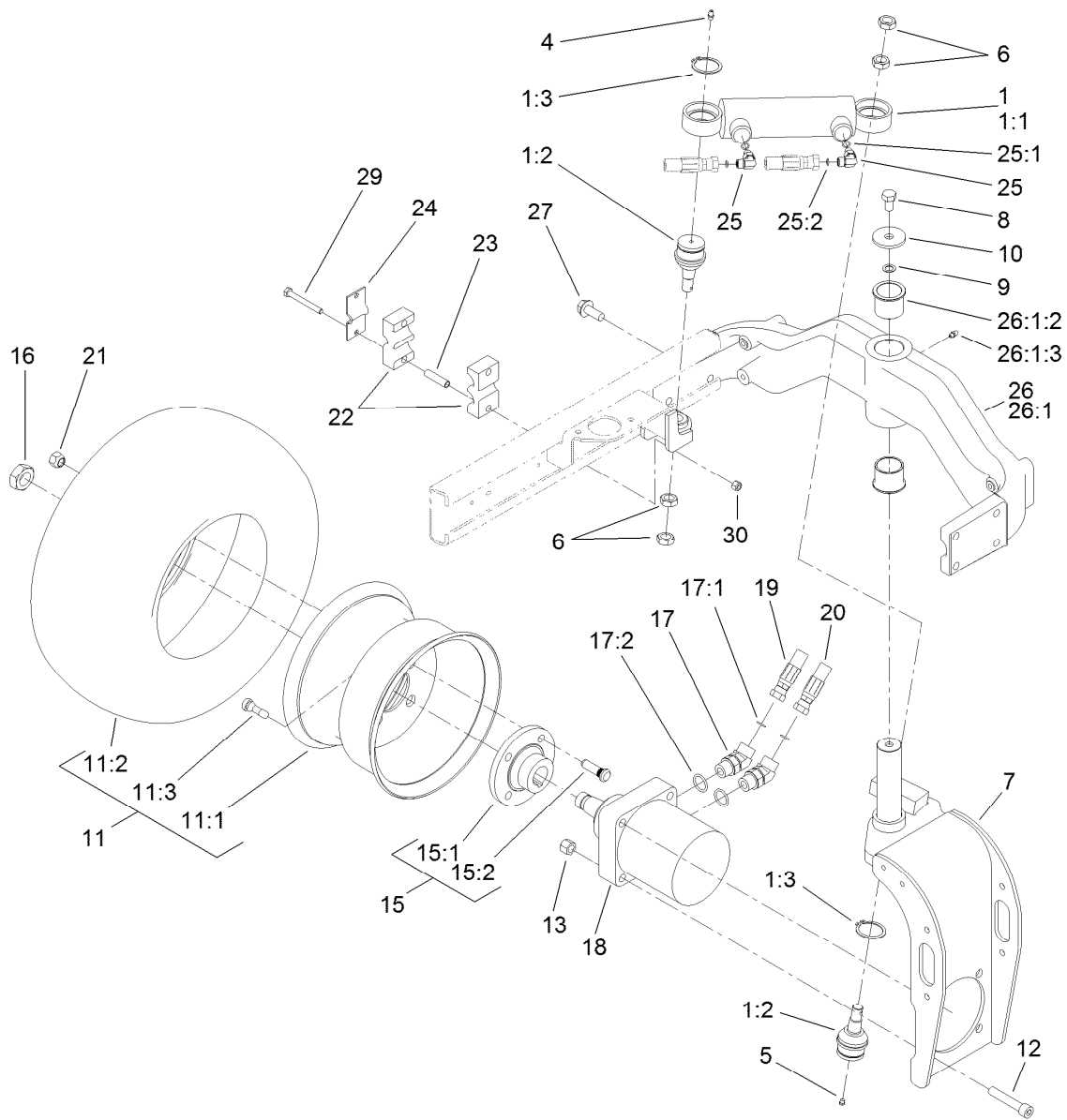
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Rear Fork and Tire Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1		1	Steering Cylinder / Balljoint ASM ●	15		1	Wheel Hub / Stud ASM ●
1:1	94-8141	1	HYD Cylinder ASM	15:1	10-6870-03	1	Hub-Wheel
1:2	106-6774	2	Joint-Ball	15:2	10-6830	4	Stud-Type, Drive
1:3	32151-104	2	Ring-Retaining, External	16	26-3790	1	Nut-Lock
4	302-5	1	Fitting-Grease	17	340-14	2	Fitting-HYD, 45 DEG
5	302-59	1	Plug-Threaded	17:1	237-65	1	O-Ring
6	3220-6	4	Nut-Jam	17:2	237-80	1	O-Ring
7	95-8905-01	1	Fork-Rear	18	95-8694	1	HYD Motor ASM
8	325-3	1	Screw-HH	19	105-1213	1	Hose ASM
9	3255-2	1	Washer-Lock / EXT	20	105-1212	1	Hose ASM
10	75-7730	1	Washer-Thrust	21	242-50	4	Nut-Lug
11		1	Tire And Wheel ASM ●	22	82-8170	2	Clamp
11:1	117-5129	1	Rim	23	93-7960	2	Spacer
11:2	115-1572	1	Tire (20 X 10-10)	24	93-7961	1	Clamp-Drain, Case
11:3	232-27	1	Stem-Valve	25	340-132	2	Fitting-HYD, 90 DEG
12	3274-93	4	Screw-HSH	25:1	237-78	1	O-Ring
13	3296-23	4	Nut-Lock, NI	25:2	237-21	1	O-Ring
				26	107-7828-03	1	Rear Casting ASM

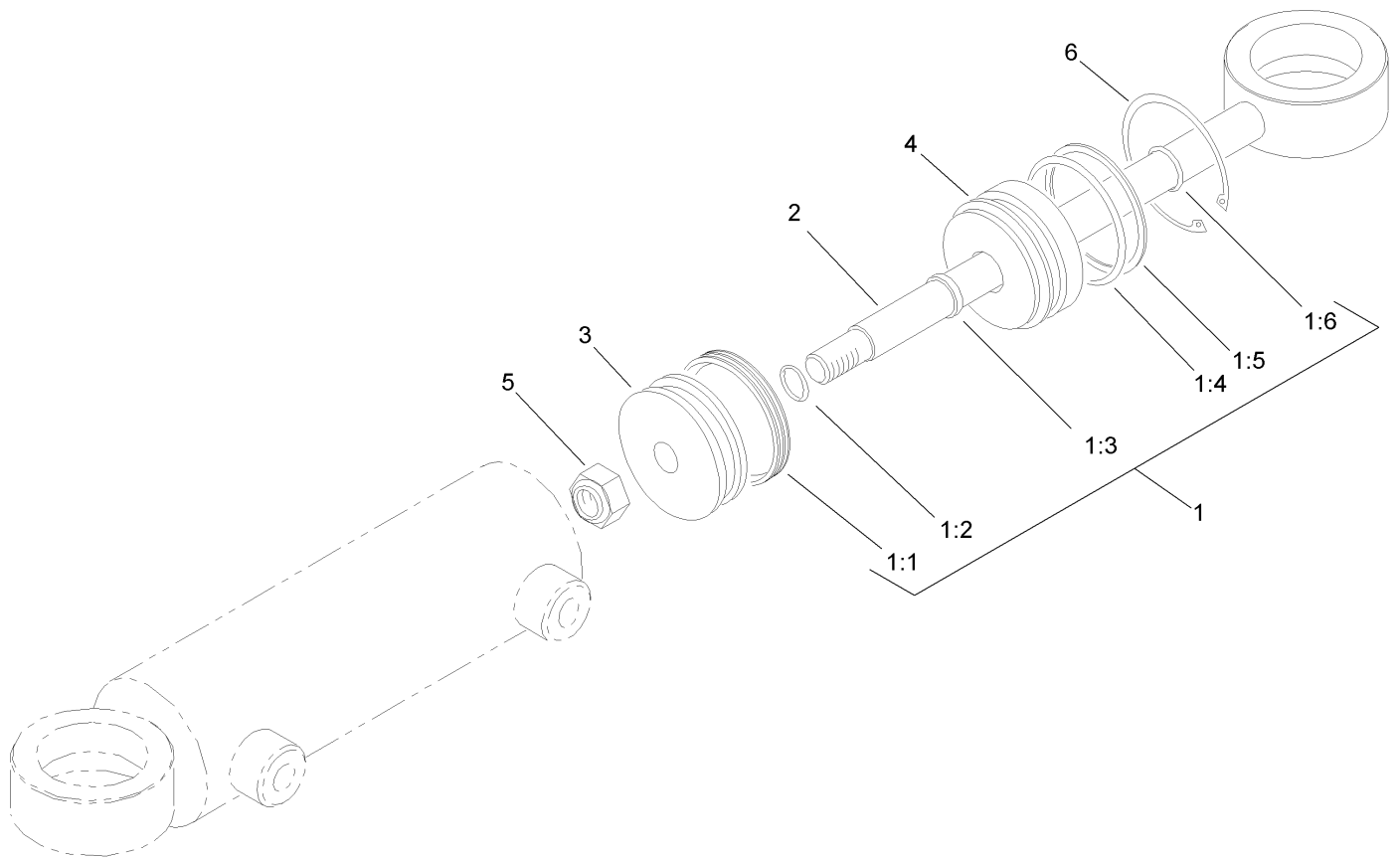
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Rear Fork and Tire Assembly (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
26:1		1	Rear Casting ASM ●	27	3234-38	8	Screw-HHF
26:1:2	95-8805	2	Bushing	29	322-13	2	Screw-HH
26:1:3	302-5	1	Fitting-Grease	30	3296-29	2	Nut-Lock, NI

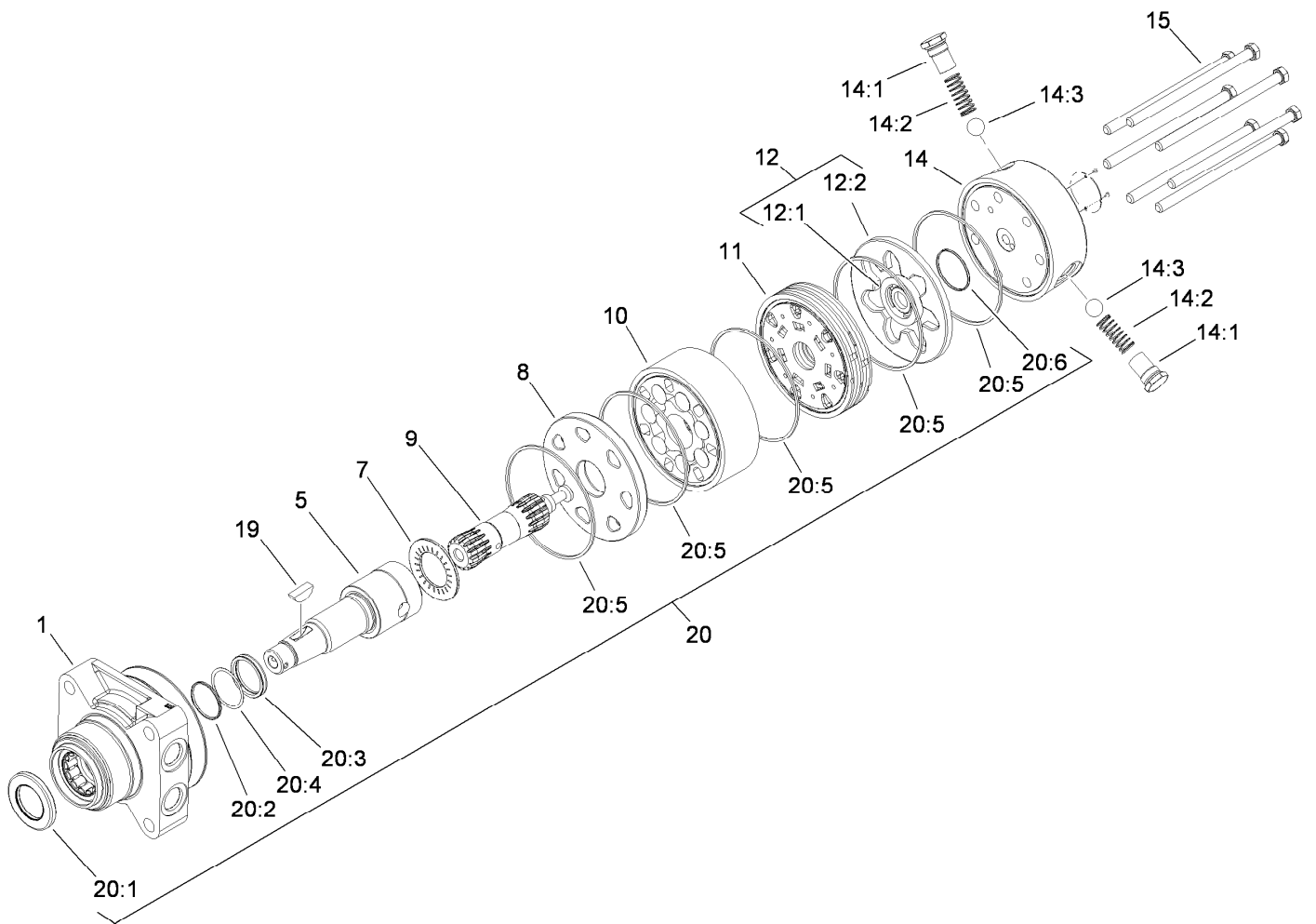
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Hydraulic Cylinder Assembly No. 94-8141

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	86-5390	1	Seal Kit
1:1		1	Uniring ●
1:2		1	O-Ring ●
1:3		1	Seal-Rod ●
1:4		1	O-Ring ●
1:5		1	Ring-Backup ●
1:6		1	O-Ring ●
2		1	Rod ●
3		1	Piston ●
4		1	Gland ●
5		1	Nut-Lock ●
6		1	Ring-Retaining ●

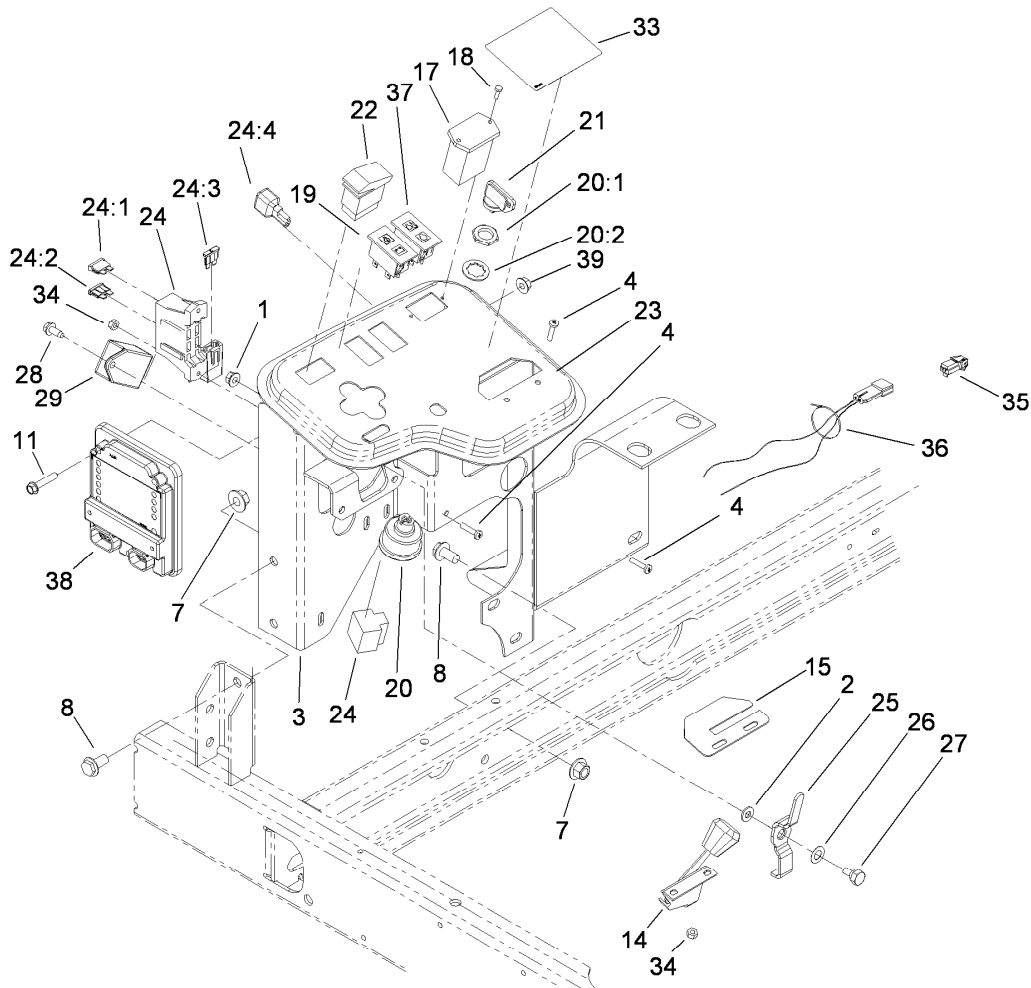
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Hydraulic Motor Assembly No. 95-8694

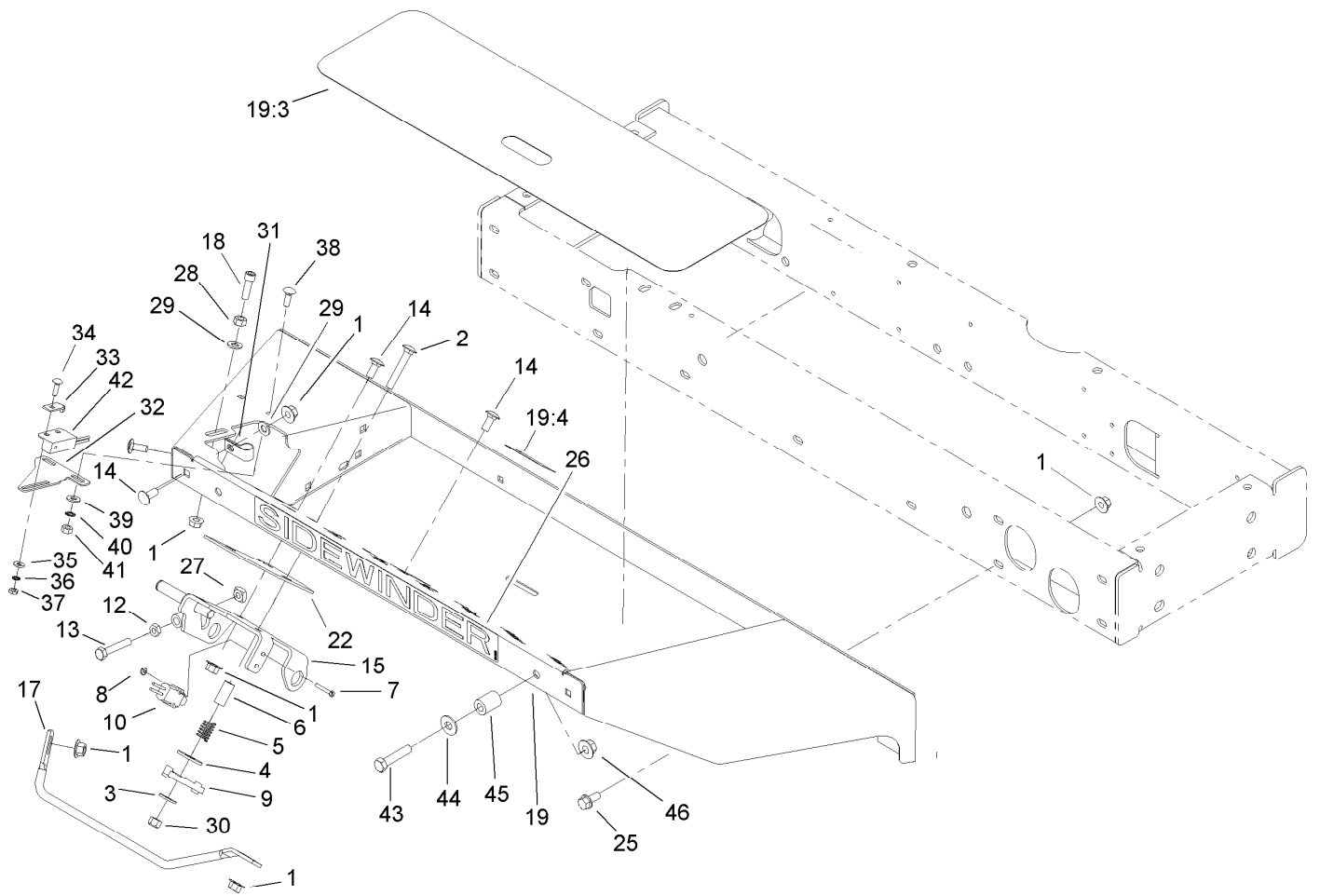
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	76-0810	1	Housing ASM	14:2	99-3541	1	Spring
5	99-3090	1	Shaft-Coupling	14:3	99-3540	1	Ball
7	76-0850	1	Bearing-Thrust	15	99-3536	7	Screw-HH
8	76-0870	1	Plate-Wear	19	3257-42	1	Key-Woodruff
9	99-3537	1	Link-Drive	20	94-8178	1	Seal Kit
10	99-3539	1	Set-Rotor	20:1		1	Seal-Dirt And Water ●
11	99-3535	1	Manifold	20:2		1	Backup-Ring ●
12	76-0880	1	Commutator ASM	20:3		1	Seal-Shaft ●
12:1		1	Commutator ●	20:4		1	Washer-Backup ●
12:2		1	Ring-Commutator ●	20:5		5	Seal-Square, Ring (Inner) ●
14	99-3538	1	End Cover ASM	20:6		1	Seal-Commutator ●
14:1		1	Spring Cap And O-Ring ASM ●				

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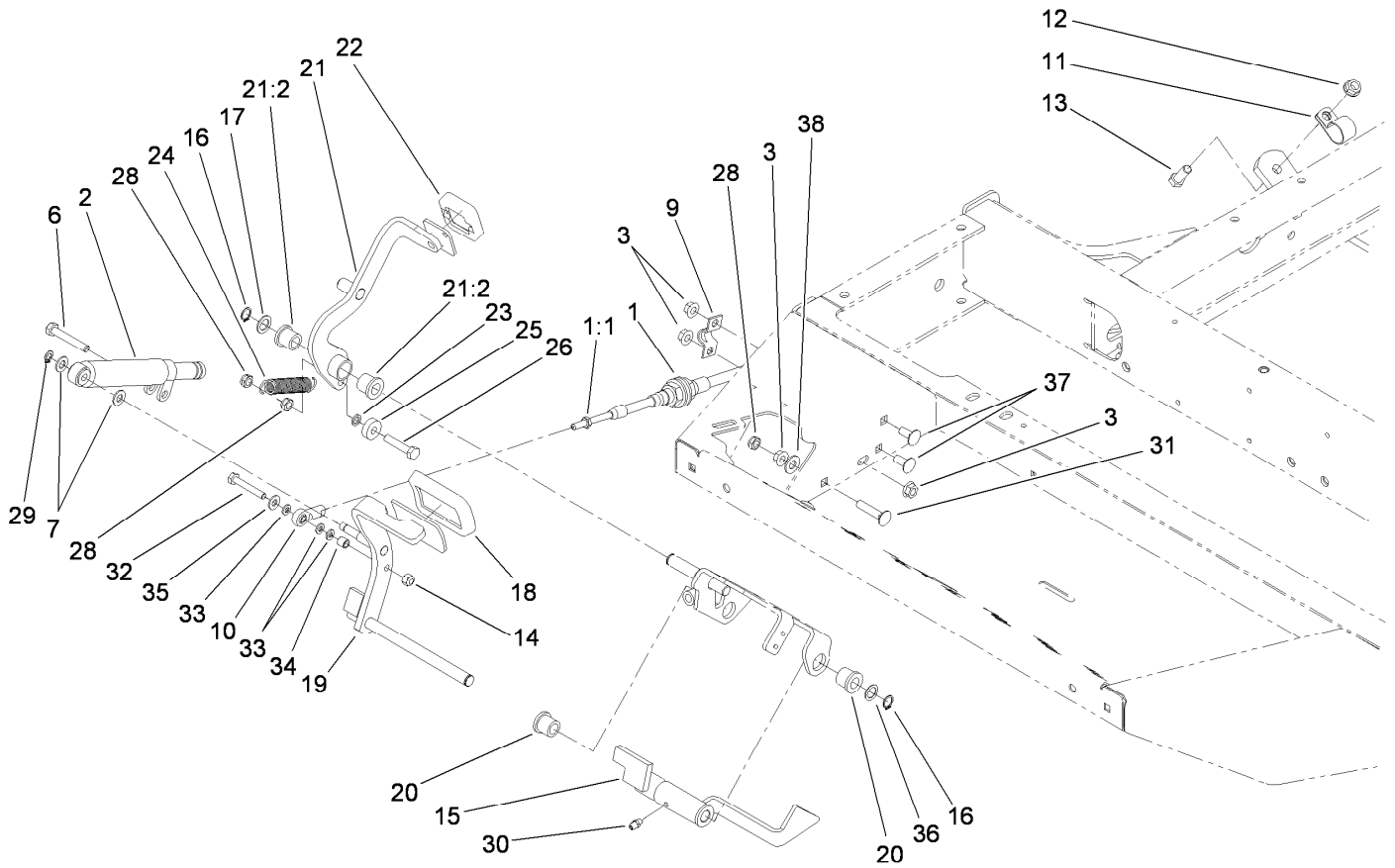
Control Panel Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	32128-32	1	Nut-HHF	24	112-9911	1	Harness-Wire
2	3256-22	1	Washer-Flat	24:1	218-578	2	Fuse-Blade, 10 Amp
3	115-3496-03	1	Control Panel ASM	24:2	109355	1	Fuse-Blade, 15 Amp
4	3290-134	4	Screw	24:3	94-6710	1	Fuse-2 Amp
7	32128-43	5	Nut-Flange	24:4	100-4918	1	Diode
8	3234-1	5	Screw-HHF	25	99-3401-03	1	Lever-Valve, Lock
11	321-8	3	Screw-HH	26	3290-477	1	Washer-Curved
14	110-8795	1	Cable-Throttle	27	63-3410	1	Screw-Shoulder
15	104-0421	1	Plate-Stop, Throttle	28	32144-10	1	Screw-HWH
17	75-6820	1	Hourmeter	29	98-7611	1	Controller-Glow
18	32144-18	2	Screw-HH	33	99-3558	1	Decal-Console, Ce
19	100-8070	1	Lamp-Warning	34	3290-148	4	Nut-HF
20	104-2541	1	Switch ASM	35	104-4875	1	Harness-Wire, Jumper
20:1	218-461	1	Nut-HH	36	3290-379	1	Tie-Cable
20:2	3254-5	1	Washer-Tooth, Internal	37	100-8071	1	Lamp-Warning
21	63-8360	2	Key-Ignition	38	106-9277	1	Module-Control, Standard
22	95-8999	1	Switch	39	32128-33	3	Nut-HF
23	104-5191	1	Decal-Console				



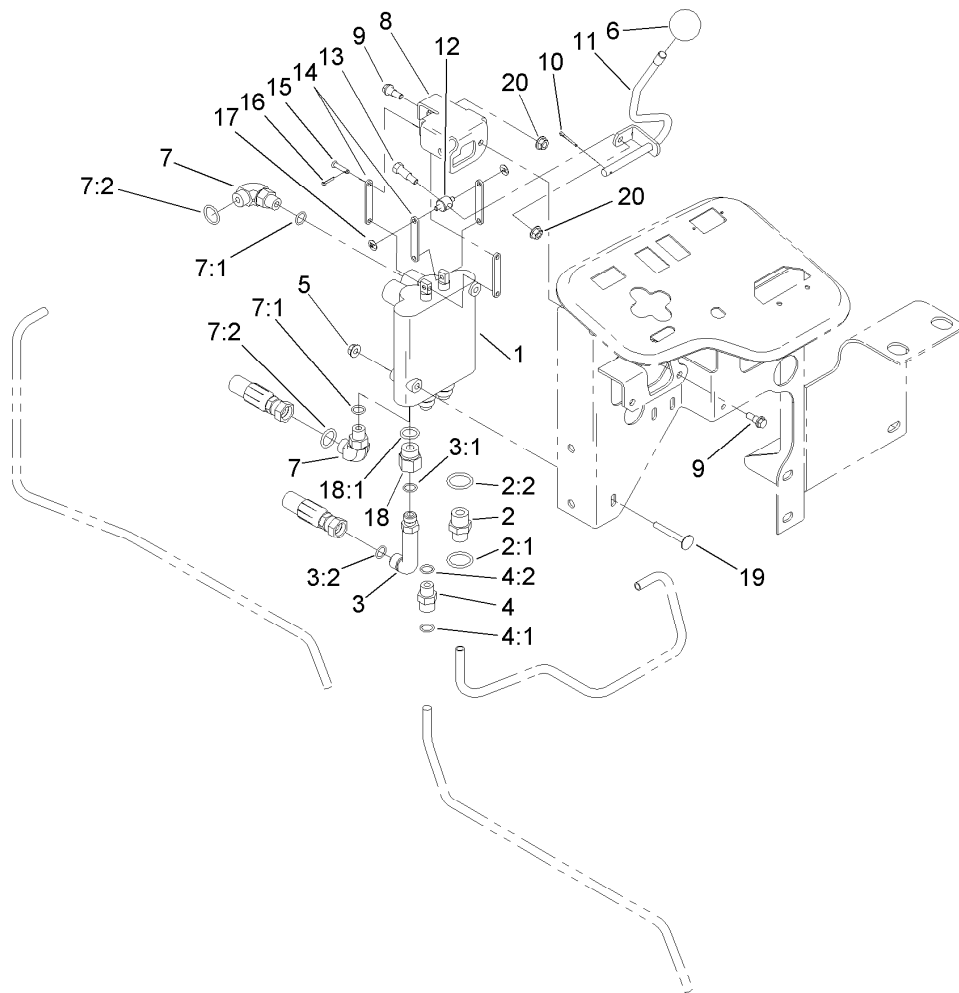
Front Platform Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	32128-20	18	Nut-HF	26	99-3388	1	Decal
2	3230-6	1	Screw-CARR	27	99-3565	1	Nut-Square
3	3256-3	1	Washer-Flat	28	3217-6	1	Nut-Hex
4	3256-40	1	Washer-Flat	29	3256-23	2	Washer-Flat
5	65-9940	1	Spring	30	3296-29	1	Nut-Lock, NI
6	95-8866	1	Tube-Arm, Rocker	31	2412-103	1	Clamp
7	32105-9	2	Screw	32	100-4871	1	Bracket-Switch, Neutral
8	3296-9	2	Nut-Lock	33	100-4872	1	Plate-Switch, Neutral
9	99-3593	1	Arm-Rocker	34	3229-20	1	Screw-CARR
10	95-8900	1	Switch	35	3256-14	1	Washer-Flat
12	3218-2	1	Nut-Jam	36	3255-17	1	Washer-Lock, EXT
13	322-41	1	Screw-HH	37	3296-2	1	Nut-Lock, NI
14	3230-23	5	Screw-CARR	38	3229-1	2	Screw-CARR
15	95-8869-03	1	Bracket-Pedal, Traction	39	3256-22	2	Washer-Flat
17	95-8893	1	Bar-Deflector	40	3255-7	2	Washer-Lock/EXT
18	3274-22	1	Screw-HSH	41	3217-5	2	Nut-Hex
19	106-4154	1	Floorplate ASM	42	100-1270	1	Switch-Proximity
19:3	99-3478	1	Tread-Foot	43	323-9	2	Screw-HH
19:4	99-3444	1	Decal-Mow / Transport	44	3256-4	2	Washer-Flat
22	106-2661-01	1	Plate-Support	45	104-4613	2	Tube-Latch
25	3234-5	10	Screw-HHF	46	32128-43	2	Nut-Flange



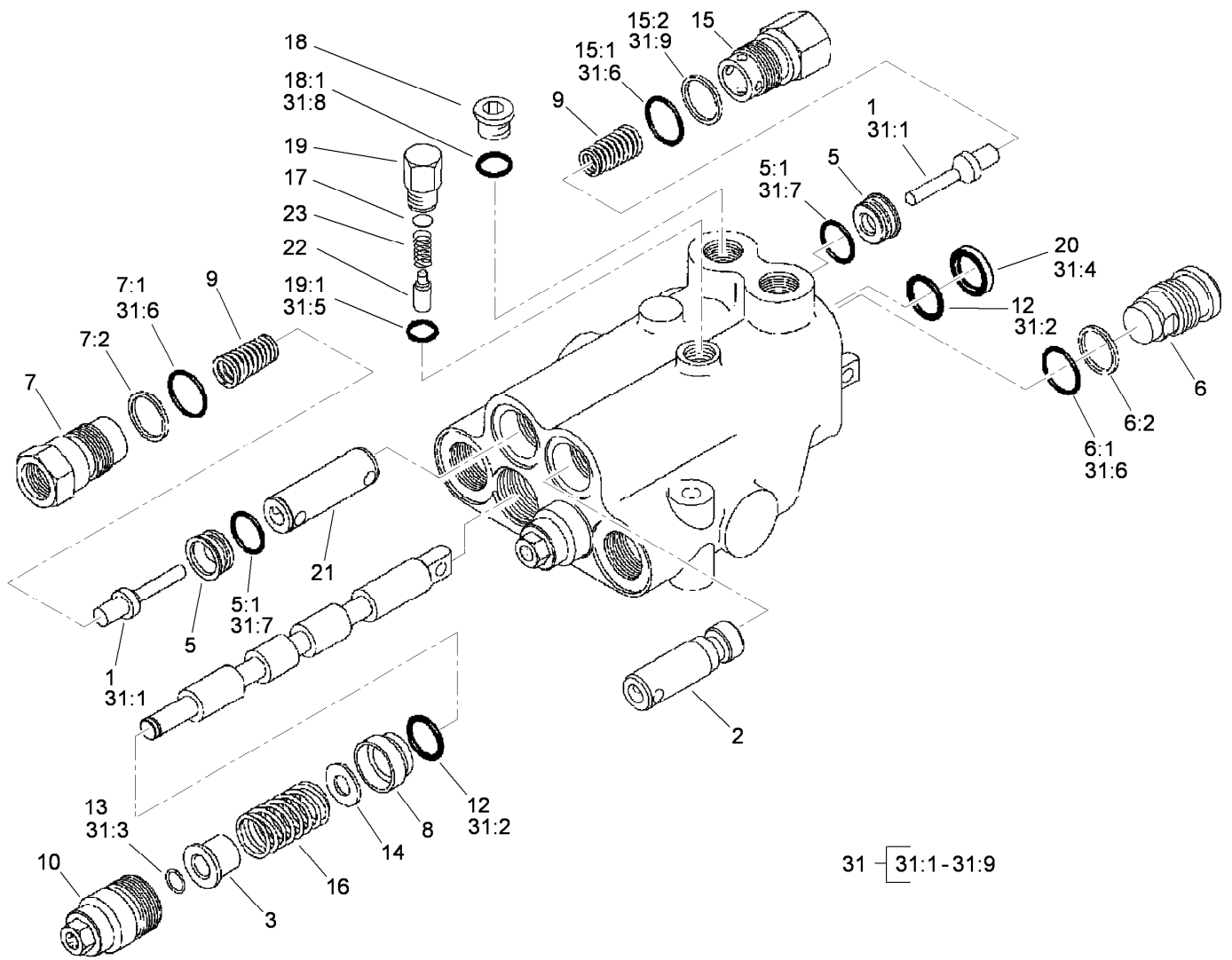
Traction Pedal Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	100-4815	1	Cable-Control, Traction	21	99-3379	1	Pedal-Reverse
1:1	3220-1	2	Nut-Jam	21:2	256-243	2	Bearing-Flange
2	76-8870	1	Lever Damper ASM	22	74-9110	1	Pad-Pedal, Reverse
3	32128-20	5	Nut-HF	23	75-5470	1	Spacer-Bearing
6	322-10	1	Screw-HH	24	99-3476	1	Spring-Extension
7	3256-23	2	Washer-Flat	25	251-259	1	Bearing-Ball
9	93-2092	1	Clamp-Cable	26	322-7	1	Screw-HH
10	2411-41	1	Rod End-Ball Joint	28	3296-47	3	Nut-Lock, NI
11	2412-41	1	Clamp	29	32151-3	1	Ring-Grip
12	3290-357	1	Nut-HHF, Whiz	30	302-5	1	Fitting-Grease
13	323-6	1	Screw-HH	31	3230-27	1	Screw-CARR
14	3296-42	1	Nut-Lock, NI	32	321-10	1	Screw-HH
15	95-8861	1	Slide	33	33093-00	3	Washer-Flat
16	32151-84	2	Ring-Shaft, EXT	34	99-3545	1	Spacer
17	41-8440	1	Washer	35	3256-22	1	Washer-Flat
18	74-9100	1	Pad-Pedal, Forward	36	73-0040	4	Washer-Thrust
19	104-4852-03	1	Traction Pedal ASM	37	3230-23	2	Screw-CARR
20	256-243	2	Bearing-Flange	38	3256-24	1	Washer-Flat



Control Valve Installation Assembly

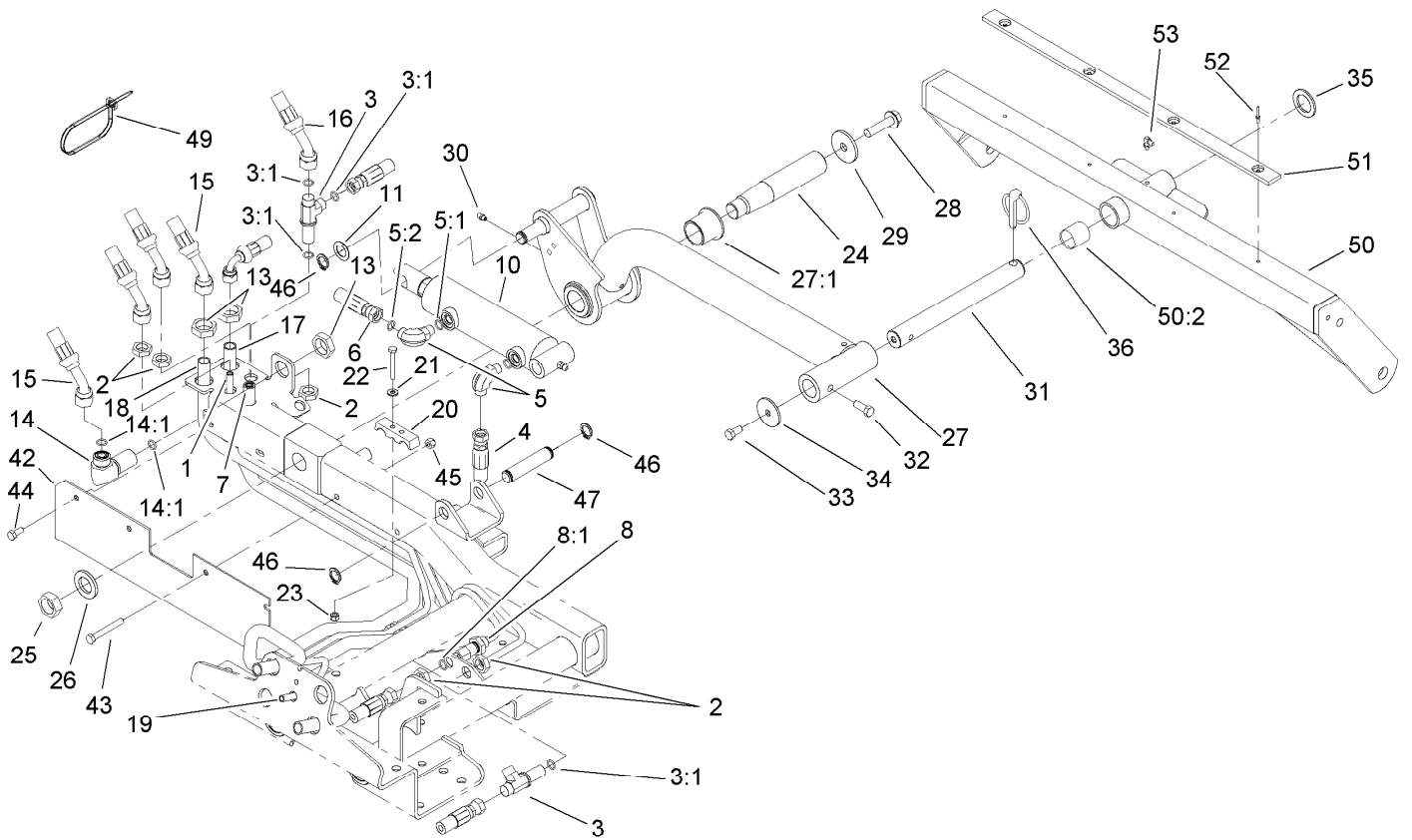
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	95-8581	1	2-Spool Control Valve ASM	8	95-8633	1	Bracket-Valve, Actuator
2	340-3	1	Adapter	9	42-3560	2	Bolt-Shoulder
2:1	237-22	1	O-Ring	10	3272-6	1	Pin-Cotter
2:2	237-79	1	O-Ring	11	95-8635	1	Lever-Valve
3	69-4320	1	Fitting-HYD, 90 DEG	12	95-8638	1	Trunnion-Valve, Actuator
3:1	237-22	1	O-Ring	13	92-8916	1	Bolt-Shoulder
3:2	237-42	1	O-Ring	14	95-8634	4	Link
4	340-2	1	Fitting-HYD, Straight	15	58-3830	3	Pin-Clevis
4:1	237-22	1	O-Ring	16	3272-5	3	Pin-Cotter
4:2	237-42	1	O-Ring	17	32151-106	2	Ring-Retaining
5	32128-33	2	Nut-HF	18	353-397	1	Reducer-Adapter
6	233-42	1	Knob	18:1	237-79	1	O-Ring
7	340-77	2	Fitting-HYD, 90 DEG	19	3230-33	2	Screw-CARR
7:1	237-22	1	O-Ring	20	32128-32	3	Nut-HHF
7:2	237-42	1	O-Ring				



2-Spool Control Valve Assembly No. 95-8581

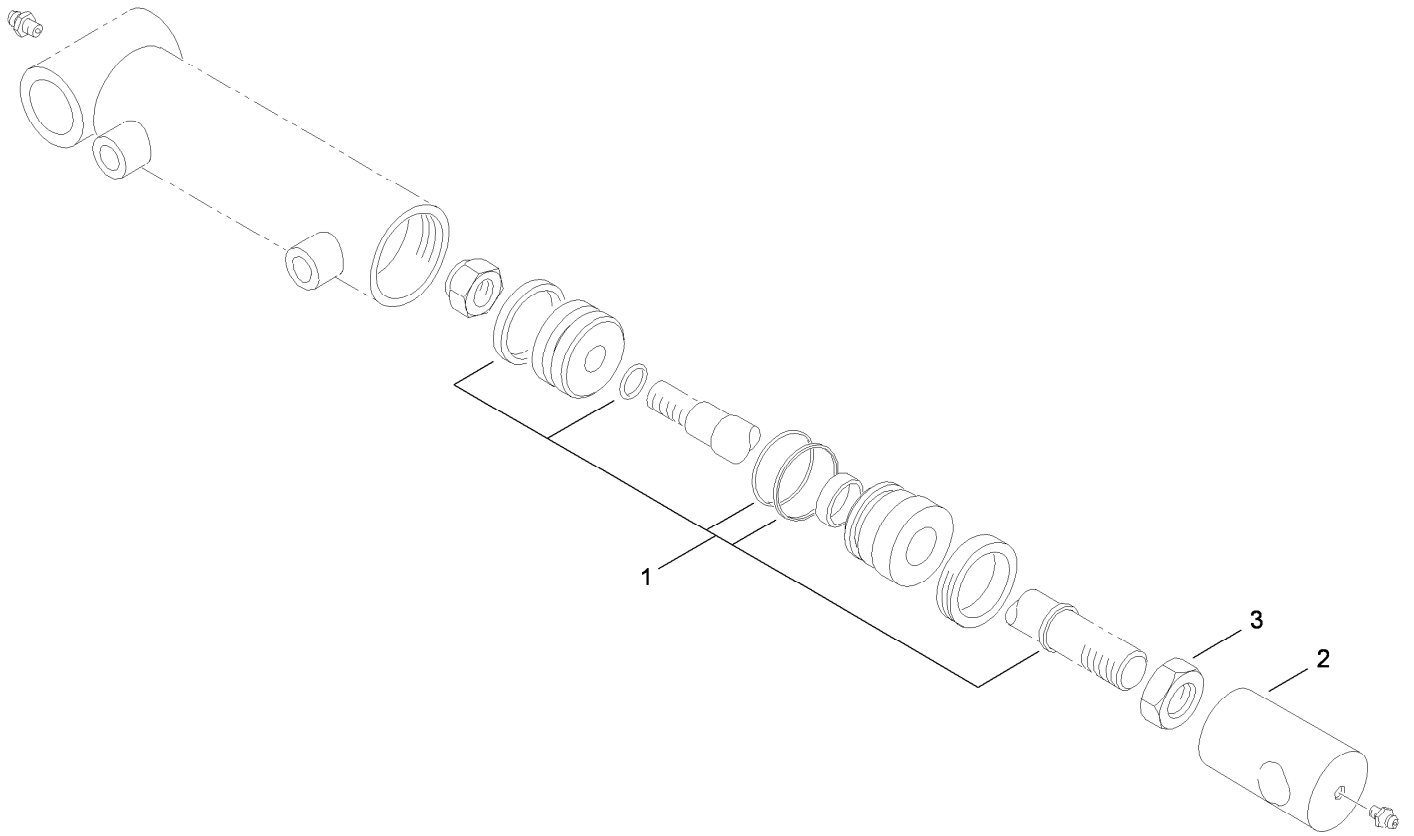
Ref.	Part Number	Qty.	Description
1	58-6290	3	Poppet
2	69-1840	1	Plunger
3	58-6310	2	Spacer
5	58-6330	3	Seat
5:1	58-6340	1	O-Ring
6	58-6350	1	Plug
6:1	60-5720	1	O-Ring
6:2	58-6370	1	Washer
7	69-1800	2	Plug ASM
7:1	60-5720	1	O-Ring
7:2	58-6370	1	Washer
8	58-6400	2	Bushing
9	69-1810	3	Spring
10	58-6420	2	Cap
12	58-6450	4	O-Ring
13	58-6460	2	Ring-Retaining
14	65-2770	2	Washer
15	99-3526	1	Plug ASM
15:1	60-5720	1	O-Ring
15:2	59-7730	1	Washer-Backup

Ref.	Part Number	Qty.	Description
16	99-3531	2	Spring
17	60-6450	1	Disc
18	353-989	1	Plug-Hex, Hollow
18:1	237-42	1	O-Ring
19	58-6780	1	Plug
19:1	58-6790	1	O-Ring
20	58-6320	2	Wiper
21	99-3528	1	Plunger
22	58-6770	1	Plunger
23	58-6760	1	Spring
31	99-3530	1	Seal Kit
31:1	58-6290	3	Poppet
31:2	58-6450	4	O-Ring
31:3	58-6460	2	Ring-Retaining
31:4	58-6320	2	Wiper
31:5	58-6790	1	O-Ring
31:6	60-5720	4	O-Ring
31:7	58-6340	2	O-Ring
31:8	237-42	1	O-Ring
31:9	59-7730	2	Washer-Backup



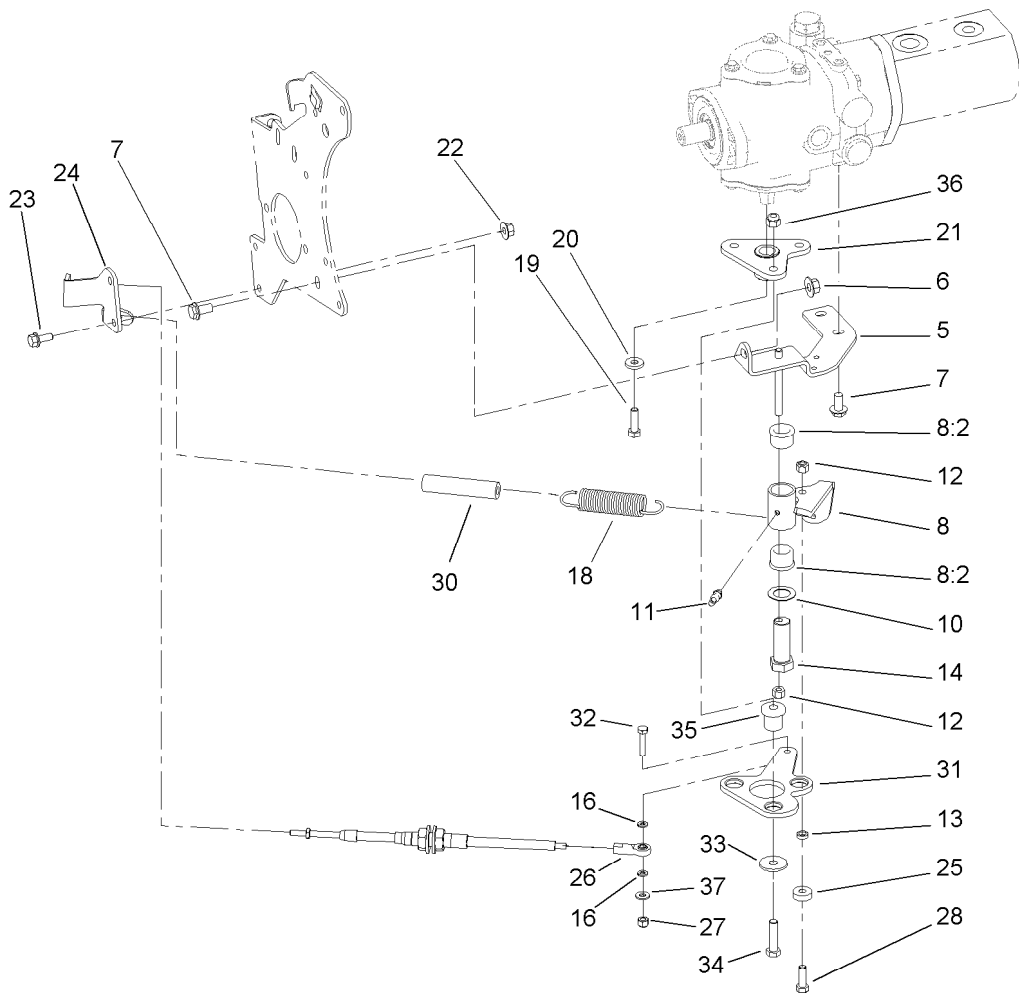
Rear Lift Arm Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	104-0402	1	Tube ASM	24	95-8990	1	Shaft-Pivot, Rear
2	340-70	5	Nut-Lock	25	3220-9	1	Nut-Jam
3	340-68	2	Fitting-Tee, Bulkhead	26	86-1480	1	Washer
3:1	237-22	3	O-Ring	27	115-3473	1	Rear Liftarm ASM
4	104-0407	1	Hose ASM	27:1	69-6470	2	Bushing-Castor
5	340-77	2	Fitting-HYD, 90 DEG	28	3234-27	1	Screw-HHF
5:1	237-22	1	O-Ring	29	75-7730	1	Washer-Thrust
5:2	237-42	1	O-Ring	30	302-5	1	Fitting-Grease
6	100-4891	1	Hose ASM	31	100-4944	1	Shaft-Pivot, Cutting Unit
7	104-0403	1	Tube ASM	32	323-6	1	Screw-HH
8	340-71	1	Fitting-Straight, Bulkhead	33	323-4	1	Screw-HH
8:1	237-22	2	O-Ring	34	63-7400	1	Washer-Rebound
10	112-9916	1	HYD Cylinder ASM	35	3-6781	1	Washer-Thrust
11	3-6498	1	Washer-Thrust	36	283-71	1	Pin-Lynch
13	340-74	3	Nut-Lock, Bulkhead	42	104-0453-03	1	Guard
14	340-72	1	Fitting-Bulkhead, 90 DEG	43	322-12	2	Screw-HH
14:1	237-65	2	O-Ring	44	322-3	2	Screw-HH
15	100-4879	2	Hose ASM	45	32128-20	4	Nut-HF
16	115-3411	1	Hose ASM	46	32120-93	3	Ring-Retaining
17	104-0401	1	Tube ASM	47	95-8575	1	Pin
18	104-0400	1	Tube ASM	49	3334-945	2	Cable Tie
19	104-0404	1	Tube ASM	50	104-4229	1	Rear Carrier Frame ASM
20	99-3641	2	Clamp-Tube	50:2	108-4000	2	Bushing
21	3256-22	4	Washer-Flat	51	95-8936	1	Strip-Wear
22	321-11	2	Screw-HH	52	3269-18	4	Rivet-Pop
23	3296-42	2	Nut-Lock, NI	53	302-60	1	Fitting-Grease



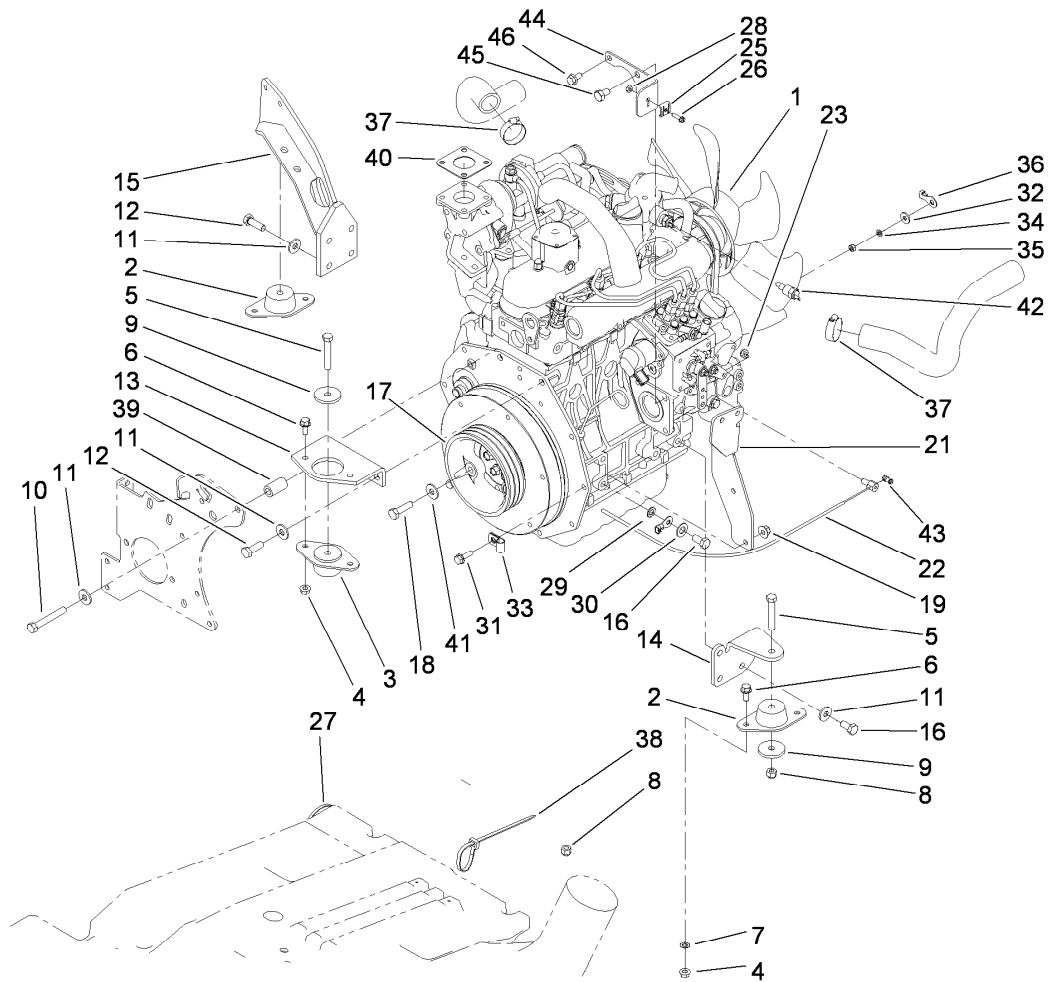
Hydraulic Cylinder Assembly No. 112-9916

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	115-3410	1	Seal Kit
2	108-9035	1	Clevis
3	3220-7	1	Nut-Jam



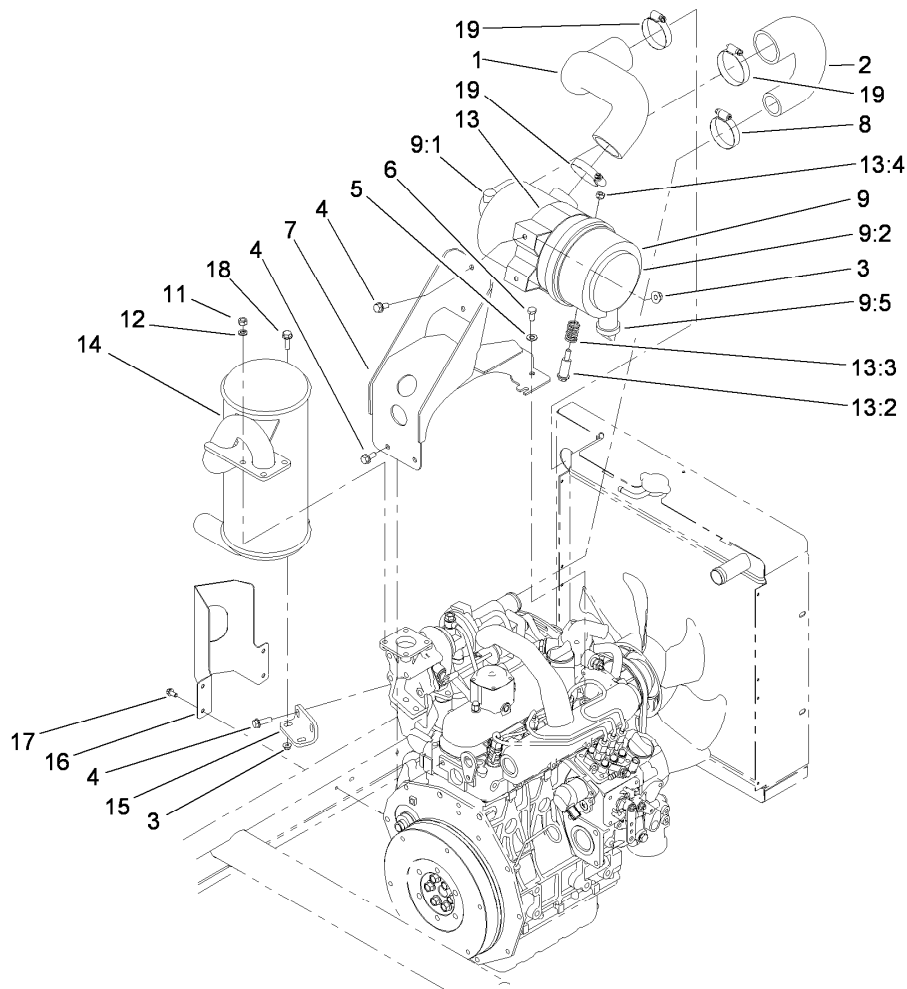
Neutral Arm Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
5	95-8960-03	1	Bracket-Neutral	22	32128-44	2	Nut
6	32128-43	1	Nut-Flange	23	3234-5	2	Screw-HHF
7	3234-1	3	Screw-HHF	24	104-0464-03	1	Bracket-Support, Cable
8	104-0422	1	Neutral Arm ASM	25	251-259	1	Bearing-Ball
8:2	256-113	2	Bushing-Flange	26	2411-41	1	Rod End-Ball Joint
10	3-6498	1	Washer-Thrust	27	3296-42	1	Nut-Lock, NI
11	302-60	1	Fitting-Grease	28	3274-104	1	Screw-HSBH
12	3296-29	2	Nut-Lock, NI	30	99-3556	1	Hose
13	100-4817	1	Spacer-Bearing	31	99-3594-03	1	Lever-Pump
14	76-8640	1	Stud-Traction	32	321-8	1	Screw-HH
16	33093-00	2	Washer-Flat	33	2844	3	Washer
18	94-1369	1	Spring-Extension	34	95-3857	3	Screw-HSBH
19	3210-6	1	Screw-HH	35	63-9750	3	Mount
20	88-7200	1	Washer-Flat	36	3296-39	3	Nut-Lock, NI
21	99-3598-03	1	Hub ASM	37	3256-22	1	Washer-Flat



Engine Assembly

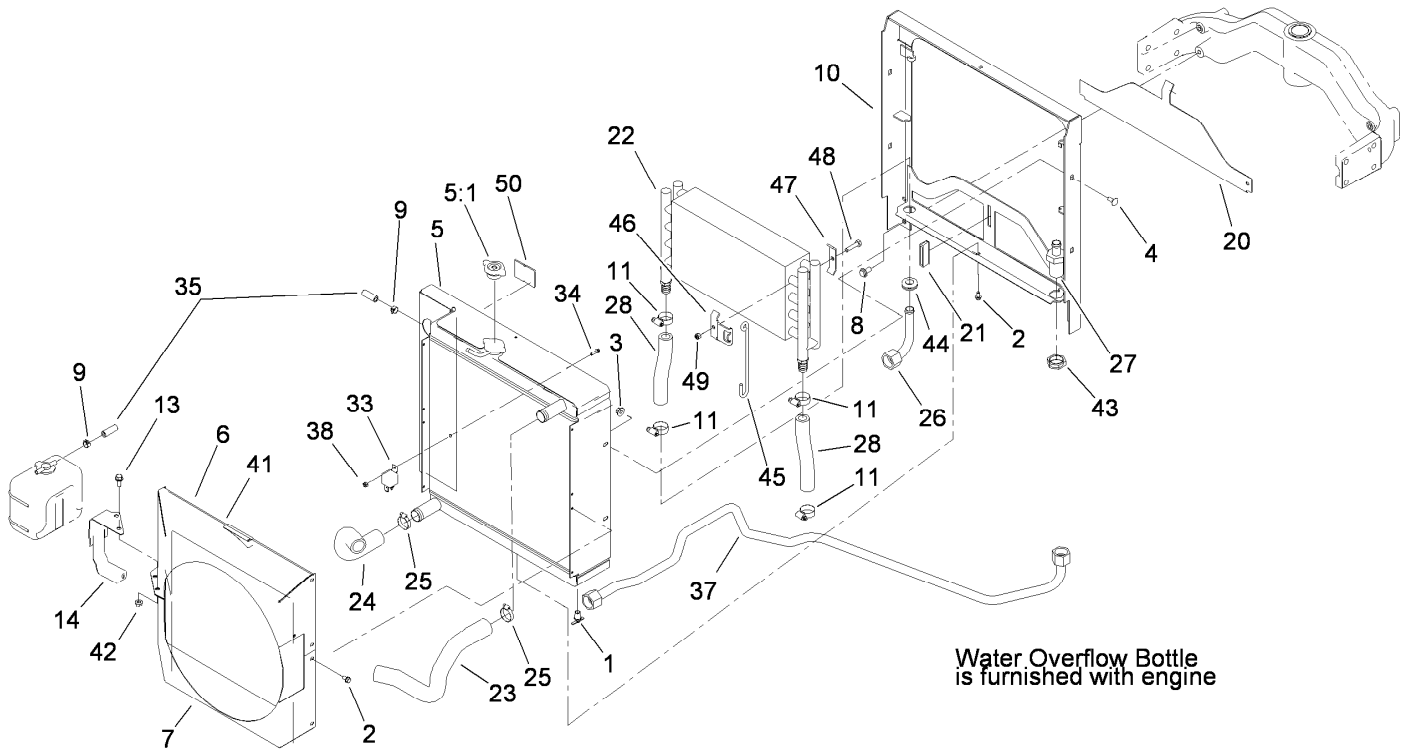
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	112-9908	1	Engine ASM	25	81-1690	1	Clamp-Cable
2	83-1030	2	Mount-Engine	26	32105-13	1	Screw-HWH
3	93-5265	1	Mount-Engine	27	3290-379	2	Tie-Cable
4	32128-20	6	Nut-HF	28	3296-2	1	Nut-Lock, NI
5	323-11	3	Screw-HH	29	3255-9	1	Washer-Lock
6	3234-5	6	Screw-HHF	30	3256-25	1	Washer-Flat
7	3255-8	1	Washer-Lock	31	3234-17	2	Screw-HHF
8	3296-39	3	Nut-Lock, NI	32	3256-78	1	Washer-Flat
9	80-8560	3	Washer-Hardened	33	2412-10	1	R-Clamp
10	42-9370	1	Screw-HH	34	43-5930	1	Washer-Lock, Spring
11	80-6990	9	Washer-Hardened	35	48-7890	1	Nut-Hex
12	95-8812	5	Screw-HH	36	99-3441	1	Harness-Wire, Fusible Link
13	99-3618-03	1	Mount-Engine, Front	37	2412-34	2	Clamp-Hose
14	95-8937-03	1	Mount-Engine, LH	38	3290-378	14	Cable Tie
15	100-4838-03	1	Mount-Engine	39	95-8736	1	Spacer
16	63-7790	4	Screw-Cap	40	98-9611	1	Gasket
17	99-3626-03	1	Pulley	41	3256-24	4	Washer-Flat
18	56-2140	3	Screw-HH	42	106-7772	1	Thermoswitch
19	32128-44	2	Nut	43	112-9919	1	Stop-Cable, Throttle
21	115-3487-03	1	Bracket-Mount, Fuel Filter	44	110-9009-03	1	Bracket-Cable, Throttle
22	98-9311	1	Swivel-Throttle	45	70-8470	1	Screw-HH
23	3296-20	1	Nut-Lock, NI	46	33104-016	1	Screw-HHF



Air Cleaner and Muffler Assembly

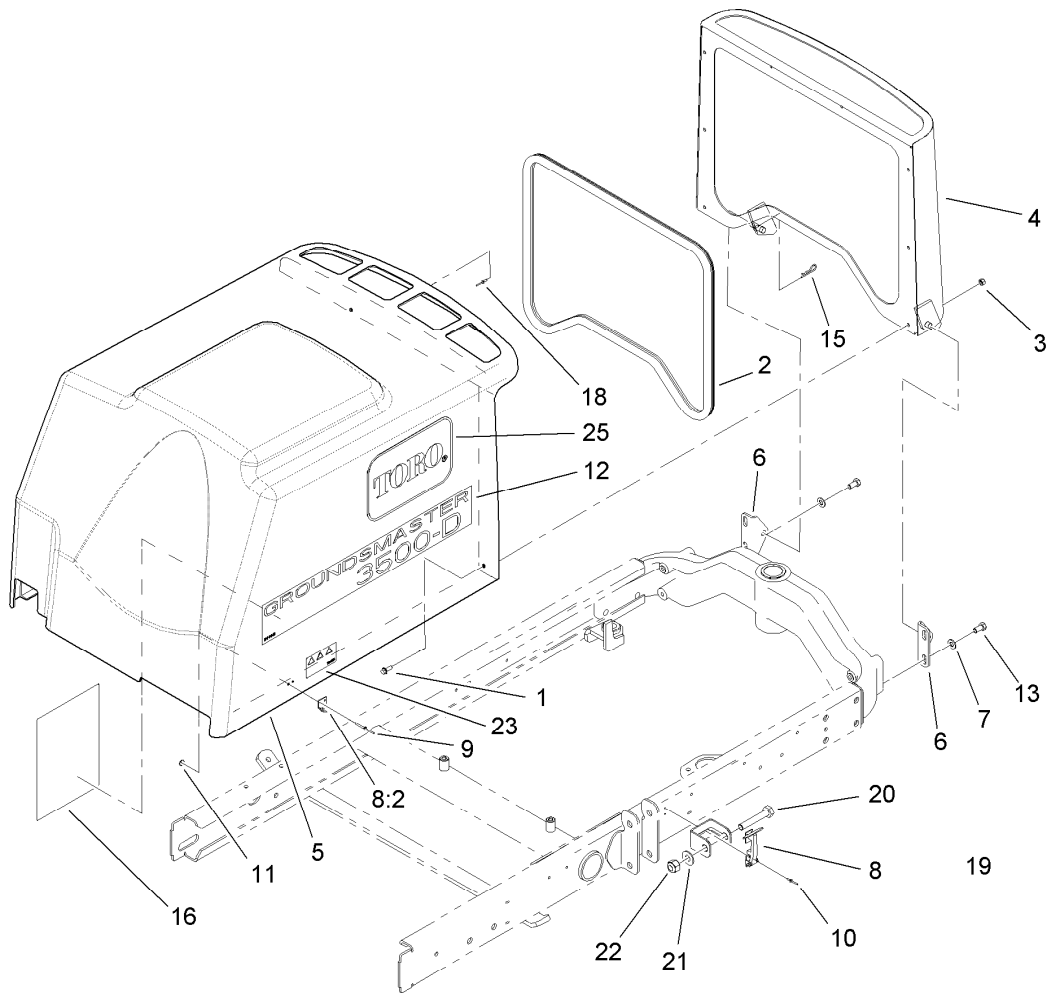
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	104-0420	1	Hose-Air Intake, Upper	9:7	104-4897	1	Gasket ●
2	112-9910	1	Hose-Air Intake, Lower	11	33014-00	4	Nut-Hex
3	32128-44	6	Nut	12	3253-4	4	Washer-Lock
4	3234-5	3	Screw-HHF	13	100-4825	1	Band-Mounting, Air Cleaner
5	3256-23	3	Washer-Flat	13:2	94-3653	1	Bolt
6	33114-016	3	Screw-HH	13:3	94-3654	1	Spring
7	112-9926-03	1	Mount-Air Cleaner	13:4	48-9510	1	Nut
8	2412-92	1	Clamp-Hose	14	100-4810	1	Muffler
9	100-4824	1	Air Cleaner ASM	15	95-8943-03	1	Bracket-Muffler
9:1	285-17	1	Plug-Pipe	16	99-3425-03	1	Guard-Exhaust
9:2	104-0497	1	Cover ASM	17	32144-4	4	Screw-HWH
9:5	104-0498	1	Valve-Vacuator	18	3234-17	3	Screw-HHF
9:6	108-3810	1	Filter-Air ●	19	2412-130	3	Clamp-Hose

● Not illustrated



Radiator Assembly

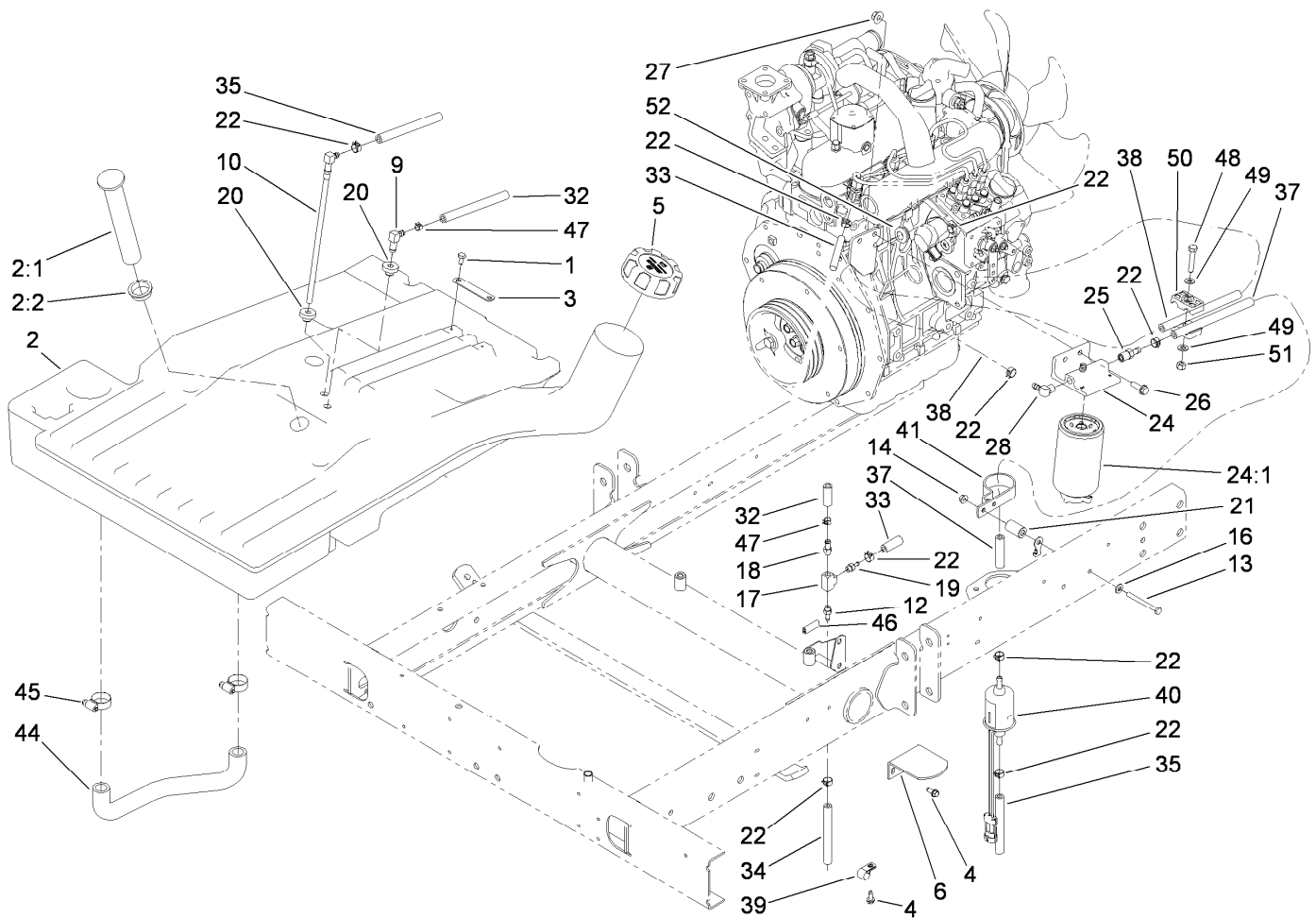
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	304-46	1	Draincock	25	2412-34	2	Clamp-Hose
2	32104-116	11	Screw	26	99-3644	1	Filter Head Tube ASM
3	32128-44	4	Nut	27	100-4925	1	Fitting-Bulkhead
4	3230-1	4	Bolt-CARR	28	99-3646	2	Hose-Cooler, Oil
5	117-5135	1	Radiator	33	99-7435	1	Relay-Power
5:1	117-5138	1	Cap-Radiator	34	32105-13	1	Screw-HWH
6	100-4885-03	1	Shroud-Fan, Top	35	109-0274	1	Hose-Fuel
7	110-8798-03	1	Lower Fan Shroud ASM	37	115-3489	1	Tube ASM
8	3234-1	4	Screw-HHF	38	3296-2	1	Nut-Lock, NI
9	92-2379	2	Clamp-Hose	41	93-6681	1	Decal-Warning, Fan
10	104-4855-03	1	Radiator Frame ASM	42	32128-20	2	Nut-HF
11	2412-129	4	Clamp-Hose	43	340-126	1	Nut-Bulkhead
13	3234-5	2	Screw-HHF	44	100-4866	1	Grommet
14	100-4899-03	1	Bracket-Reservoir	45	100-4858	2	Form-Wire
20	95-8702-03	1	Shield-Radiator, Lower	46	100-4859	2	Bracket-Cooler, Keeper
21	99-3497	1	Magnet	47	100-4860	2	Bracket-Clamp
22	100-4869	1	Cooler-Oil	48	322-17	2	Screw-HH
23	104-0454	1	Hose-Radiator, Upper	49	3296-47	2	Nut-Lock, NI
24	100-4809	1	Hose-Radiator, Lower	50	104-9459	2	Seal-Foam



Hood and Screen Assembly

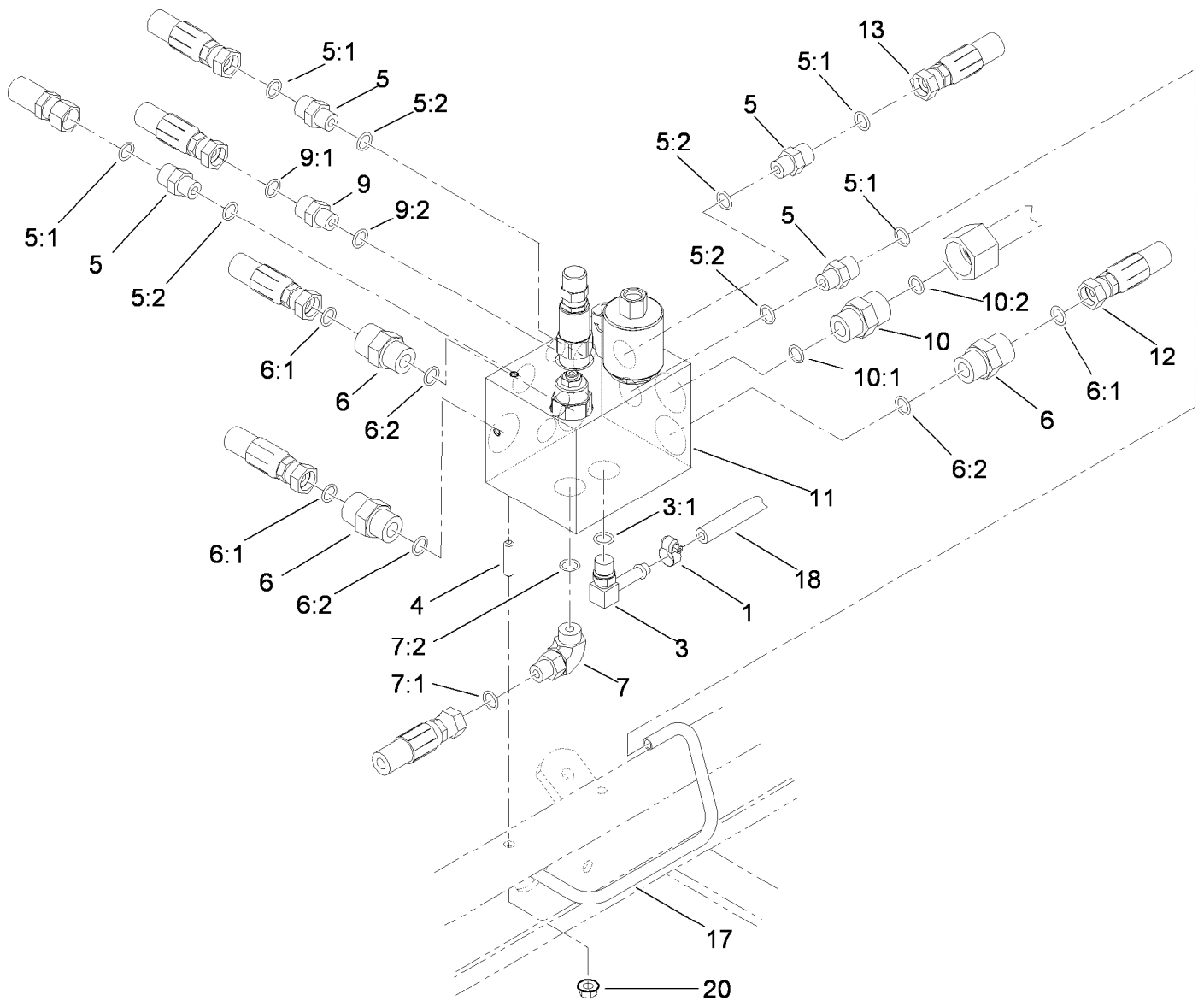
Ref.	Part Number	Qty.	Description
1	3234-4	6	Screw-HHF
2	100-4932	1	Trim-Seal
3	3296-42	6	Nut-Lock, NI
4	104-4853-03	1	Hood Screen ASM
5	100-4855	1	Hood
5:5	106-8115	1	Heat Tape Repair Kit ●
6	95-8728	2	Bracket-Pivot, Hood
7	3256-24	8	Washer-Flat
8	59-9740	2	Flex Draw Latch ASM
8:2	249-40	1	Keeper
9	98-7310	4	Rivet
10	3290-55	4	Rivet-Pop
11	3269-10	4	Washer-Back
12	104-5152	2	Decal-Hood
13	323-6	4	Screw-HH
15	3290-467	1	Pin-Hair
16	117-5103	1	Decal-Service
18	3269-21	2	Rivet-Pop
19	99-3568	1	Bracket-Lock, Ce
20	321-9	1	Screw-HH
21	3256-22	1	Washer-Flat
22	3296-42	1	Nut-Lock, NI
23	106-6754	1	Decal-Danger
25	66-6140	2	Decal

● Not illustrated



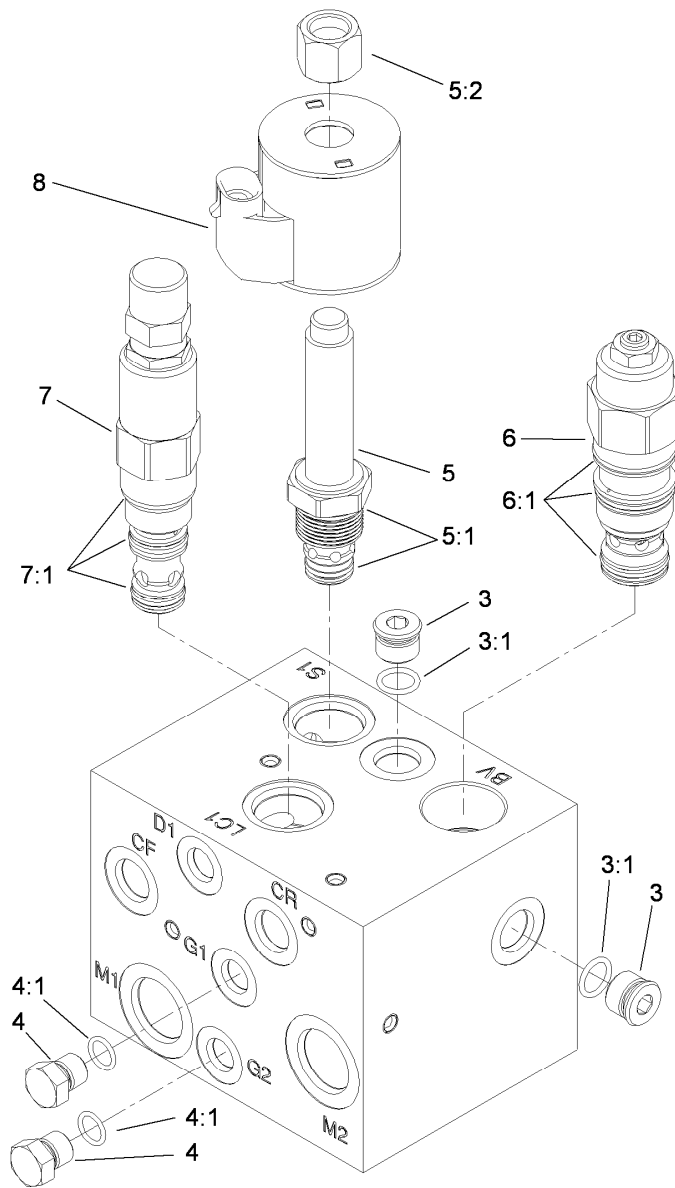
Fuel System Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	321-2	2	Screw-HH	25	353-783	1	Fitting-Straight
2	105-7865	1	Tank-Fuel	26	3234-17	2	Screw-HHF
2:1	95-8971	1	Guage-Fuel	27	32128-44	2	Nut
2:2	95-8972	1	Grommet	28	353-781	1	Fitting-Elbow
3	95-8881	1	Strap-Line, Fuel	32	110-6187	1	Hose-Fuel
4	32144-10	3	Screw-HWH	33	110-8751	1	Hose-Fuel
5	114-5064	1	Cap-Biodiesel	34	110-5701	1	Hose-Fuel
6	95-8968-03	1	Support-Tank, Fuel	35	110-4100	1	Hose-Fuel
9	46-6550	1	Fitting-Elbow, 90 DEG	37	110-4109	1	Hose-Fuel
10	110-9689	1	Pipe-Stand	38	110-4113	1	Hose-Fuel
12	304-73	1	Connector-Hose	39	2412-73	1	Clamp-R
13	321-14	1	Screw-HH	40	110-8806	1	Pump-Fuel
14	32128-33	1	Nut-HF	41	110-8817	1	Bracket-Pump, Fuel
16	3256-22	1	Washer-Flat	44	105-4094	1	Hose-Formed
17	354-20	1	Fitting-Tee	45	2412-129	2	Clamp-Hose
18	354-21	1	Fitting-Barbed	46	110-8754	1	Trim
19	354-22	1	Fitting-Barbed	47	2412-80	2	Clamp-Line, Fuel
20	46-6560	2	Bushing	48	322-8	1	Screw-HH
21	77-3180	1	Spacer	49	3256-23	2	Washer-Flat
22	92-2379	9	Clamp-Hose	50	56-7971	2	Clamp-Tube
24	110-9044	1	Filter-Seperator	51	3296-29	1	Nut-Lock, NI
24:1	110-9049	1	Filter-Spin On	52	1-543296	1	Grommet



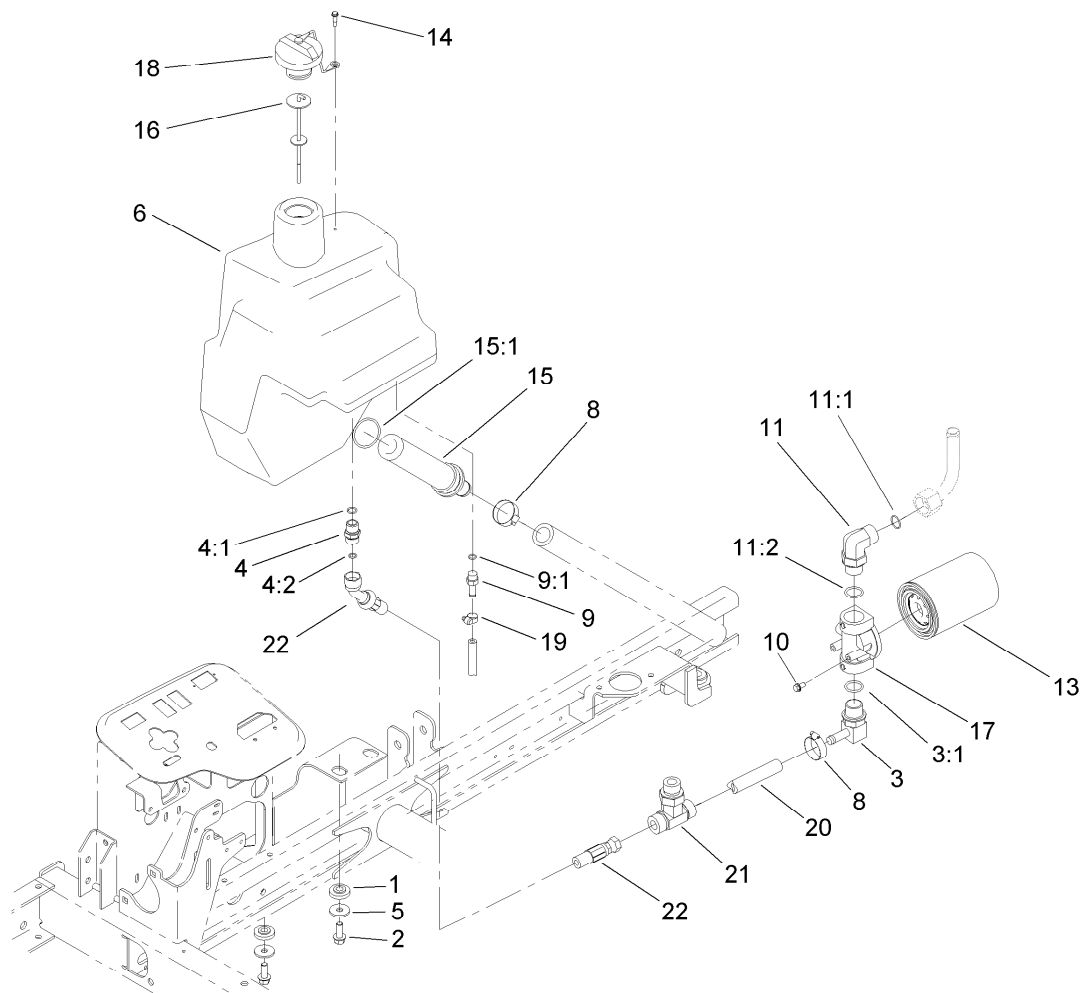
Manifold Block Installation Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	2412-36	1	Clamp-Hose	9	340-92	1	Fitting-HYD, Straight
3	100-4887	1	Fitting-Barbed, 90 DEG	9:1	237-78	1	O-Ring
3:1	237-42	1	O-Ring	9:2	237-21	1	O-Ring
4	104-0430	2	Stud	10	340-66	1	Fitting-HYD
5	340-2	4	Fitting-HYD, Straight	10:1	237-80	1	O-Ring
5:1	237-22	1	O-Ring	10:2	237-58	1	O-Ring
5:2	237-42	1	O-Ring	11	115-3486	1	Manifold Block ASM
6	340-7	3	Adapter	12	104-0488	1	Hose ASM
6:1	237-65	1	O-Ring	13	92-7595	1	Hose ASM
6:2	237-80	1	O-Ring	17	100-4827	1	Tube ASM
7	340-77	1	Fitting-HYD, 90 DEG	18	80-7342	1	Hose ASM
7:1	237-22	1	O-Ring	20	32128-20	2	Nut-HF
7:2	237-42	1	O-Ring				



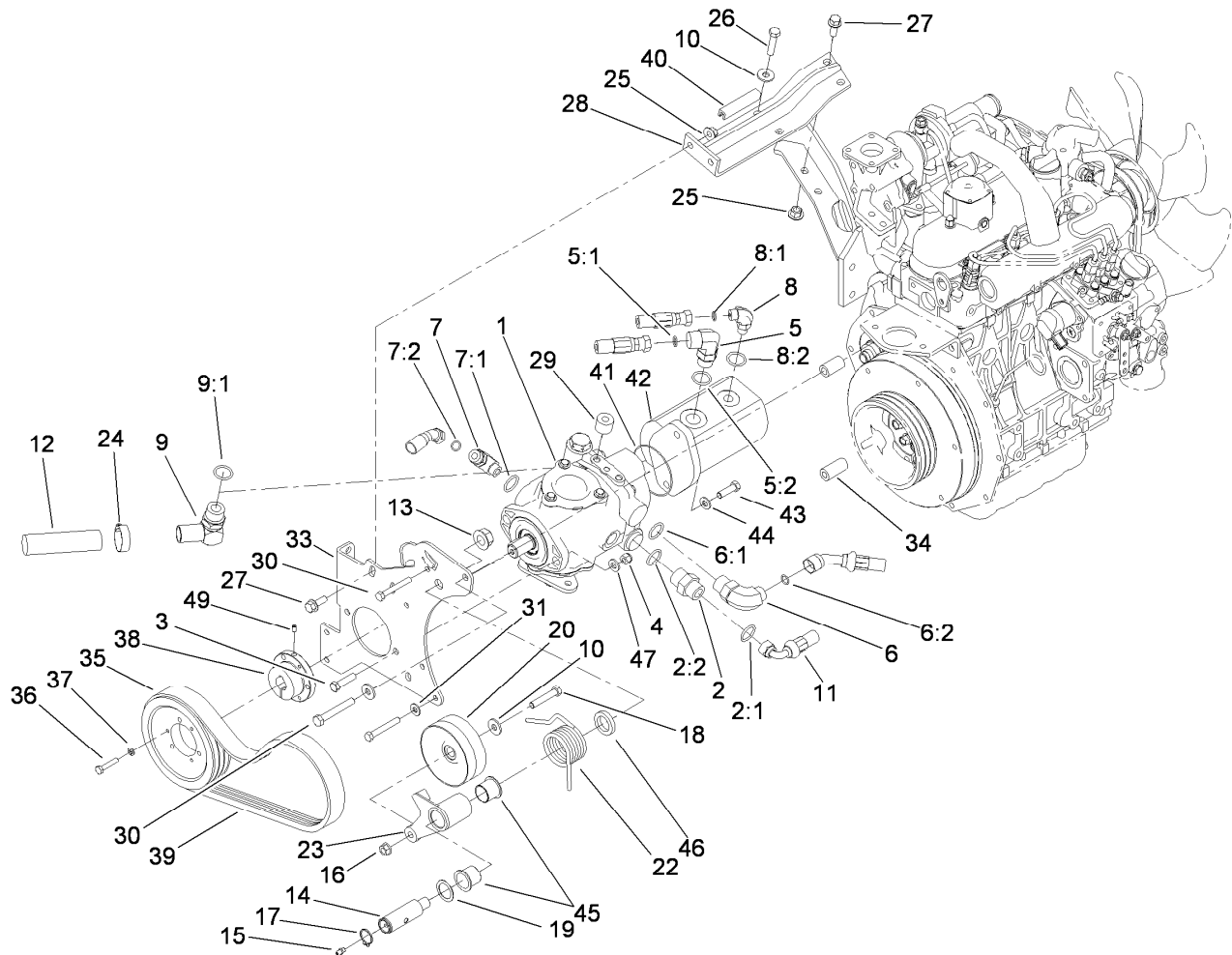
Manifold Block Assembly No. 115-3486

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
3	106-1026	2	Plug-HYD
3:1	237-42	1	O-Ring
4	117-0115	2	Plug-HYD
4:1	237-78	1	O-Ring
5	110-8768	1	Valve-Relief, Solenoid
5:1	110-6316	1	Seal Kit
5:2	110-2635	1	Nut-Coil
6	117-5110	1	Valve-Counterbalance
6:1	117-5111	1	Seal Kit
7	115-5402	1	Valve-Logic, 250 Psi (Adjustable)
7:1	119-2159	1	Seal Kit
8	110-6344	1	Coil-12V, Dc



Hydraulic Tank Assembly

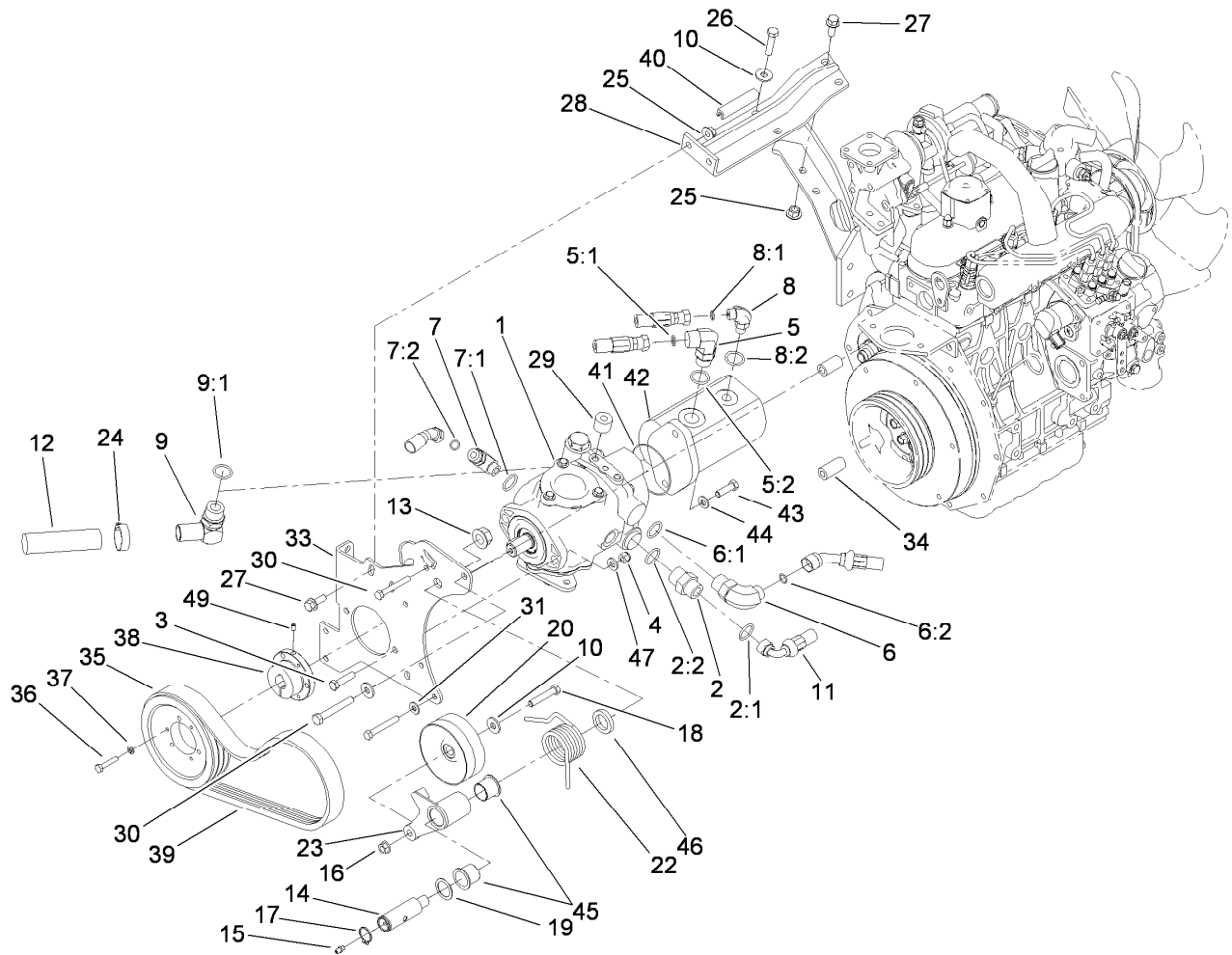
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	240-11	4	Bushing-Flange	11	340-142	1	Fitting-HYD, 90 DEG
2	3234-11	4	Screw-HHF	11:1	237-58	1	O-Ring
3	353-987	1	Fitting-HYD, 90 DEG	11:2	237-81	1	O-Ring
3:1	237-81	1	O-Ring	13	86-3010	1	Filter-Oil
4	100-4890	1	Fitting-Check	14	57-5420	1	Screw-Shoulder
4:1	237-79	1	O-Ring	15	104-7546	1	Strainer-Tank
4:2	237-30	1	O-Ring	15:1	340-136	1	O-Ring
5	63-8410	4	Washer	16	75-3710	1	Dipstick
6	104-4840	1	Tank-HYD	17	92-5821	1	Filter Head ASM
8	2412-34	2	Clamp-Hose	18	93-7160	1	Cap-Oil, HYD
9	353-979	1	Fitting-Straight	19	2412-36	1	Clamp-Hose
9:1	237-42	1	O-Ring	20	104-0486	1	Hose ASM
10	3234-13	2	Screw-HHF	21	104-4836	1	Fitting-Tee
				22	104-0487	1	Hose ASM



Hydrostat Assembly

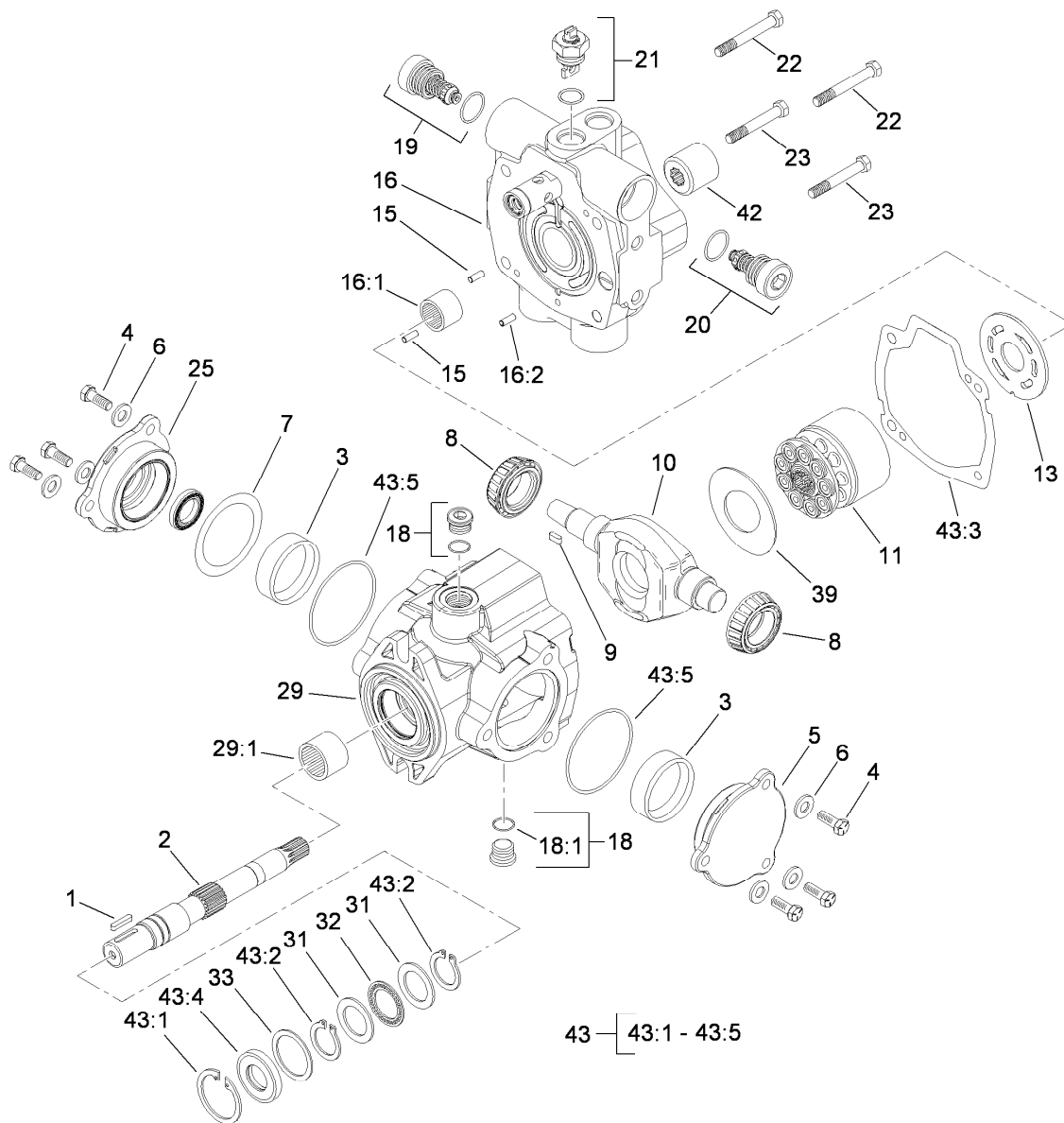
Ref.	Part Number	Qty.	Description
1	104-4890	1	Piston Pump ASM
2	340-8	1	Adapter
2:1	237-65	1	O-Ring
2:2	237-81	1	O-Ring
3	323-8	2	Screw-HH
4	3296-39	2	Nut-Lock, NI
5	340-17	1	Fitting-HYD, 90 DEG
5:1	237-65	1	O-Ring
5:2	237-80	1	O-Ring
6	340-139	1	Fitting-HYD, 90 DEG
6:1	237-81	1	O-Ring
6:2	237-65	1	O-Ring
7	340-18	1	Fitting-HYD, 90 DEG
7:1	237-79	1	O-Ring
7:2	237-22	1	O-Ring
8	340-77	1	Fitting-HYD, 90 DEG
8:1	237-22	1	O-Ring
8:2	237-42	1	O-Ring
9	95-3502	1	Fitting-Elbow
9:1	237-81	1	O-Ring
10	80-6990	3	Washer-Hardened
11	105-1214	1	Hose ASM
12	104-5486	1	Hose
13	32128-54	1	Nut-HF
14	99-3624	1	Shaft-Pivot, Idler
15	302-5	1	Fitting-Grease
16	32128-21	1	Nut-HF

Ref.	Part Number	Qty.	Description
17	32151-36	1	Ring-Retaining
18	323-10	1	Screw-HH
19	74-1810	1	Washer
20	107-7834	1	Pulley-Idler
22	115-3488	1	Spring-Torsion
23	99-3623-03	1	Arm-Idler
24	2412-34	1	Clamp-Hose
25	32128-43	4	Nut-Flange
26	323-19	2	Screw-HH
27	3234-11	4	Screw-HHF
28	99-3436-03	1	Support-Pump
29	99-3440	2	Spacer
30	33114-060	4	Screw-HH
31	87-8640	3	Washer-Flat
33	95-8933-03	1	Plate-Mount, Pump
34	95-8941	4	Spacer-Mount, Pump
35	99-3620	1	Pulley-3V, Pump
36	321-13	3	Screw-HH
37	3253-3	3	Washer-Lock
38	100-4813	1	Bushing-Lock, Taper
39	99-3619	1	Belt-3V
40	70-2041	1	Trim
41	353-949	1	O-Ring
42	108-9036	1	HYD Gear Pump ASM
43	323-7	2	Screw-HH
44	3256-24	2	Washer-Flat
45	99-3631	2	Bushing-Flange
46	99-3625	1	Spacer-Arm, Idler



Hydrostat Assembly (continued)

Ref.	Part Number	Qty.	Description
47	100-4852	2	Washer-Hardened
49	3245-41	1	Screw-HSH

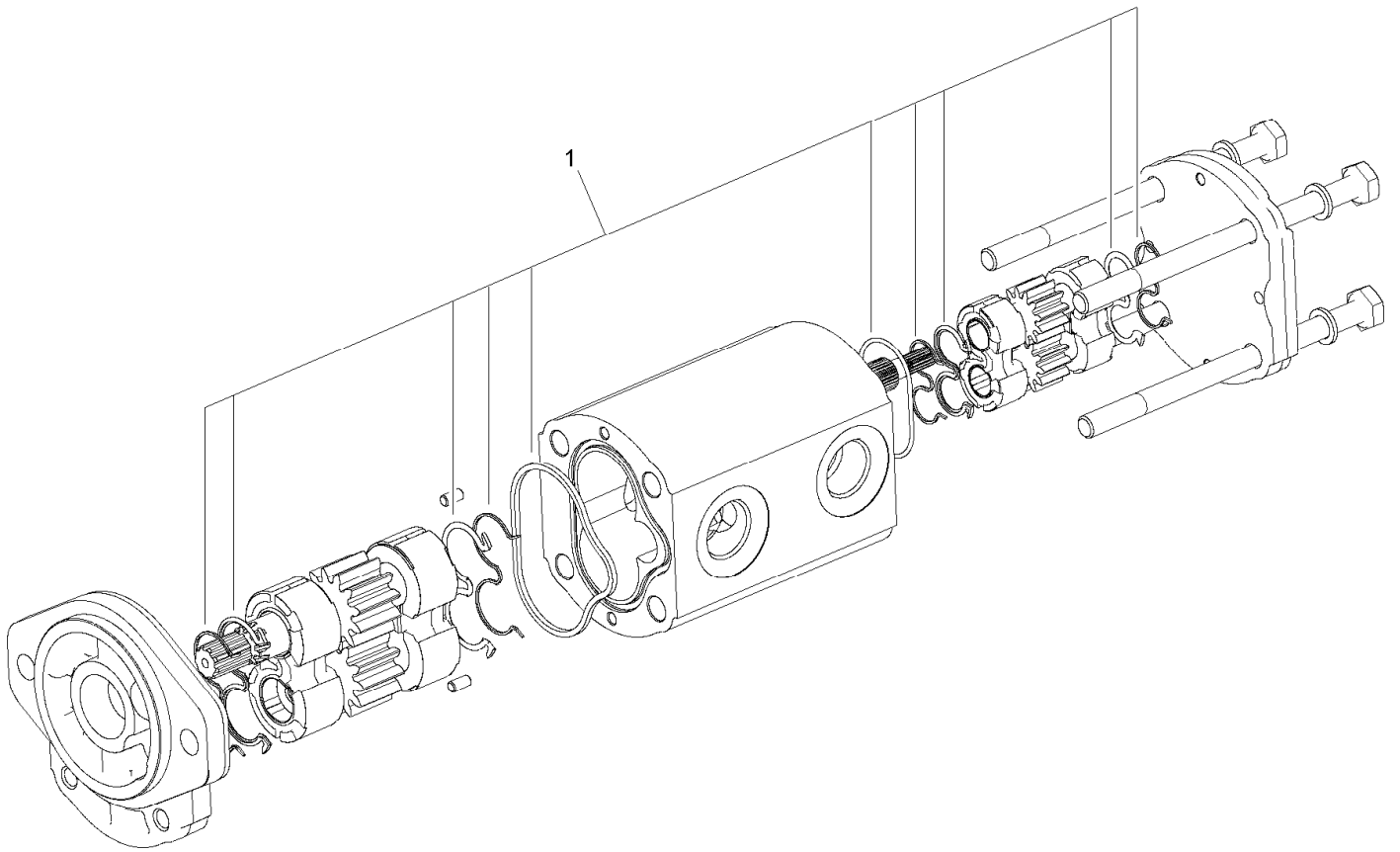


Piston Pump Assembly No. 104-4890

Ref.	Part Number	Qty.	Description
1	94-3645	1	Key
2	94-6359	1	Shaft-Drive
3	104-4046	2	Bearing-Cup
4	98-4640	6	Screw-Cap
5	98-4644	1	Plate-Cover
6	105-9762	6	Washer
7	100-3182	2	Shim Kit
8	98-4639	2	Bearing-Cone
9	94-3646	1	Key
10	104-4888	1	Swashplate
11	76-6070	1	Rotating Kit
13	104-0429	1	Plate-Valve
15	76-6150	2	Pin-Dowel
16	105-3813	1	Endcover Sub ASM
16:1	94-6368	1	Bearing
16:2		1	Pin-Roll ●
18	74-9280	2	Plug ASM
18:1		1	Ring-Retaining ●
19	104-4889	1	Relief Valve ASM

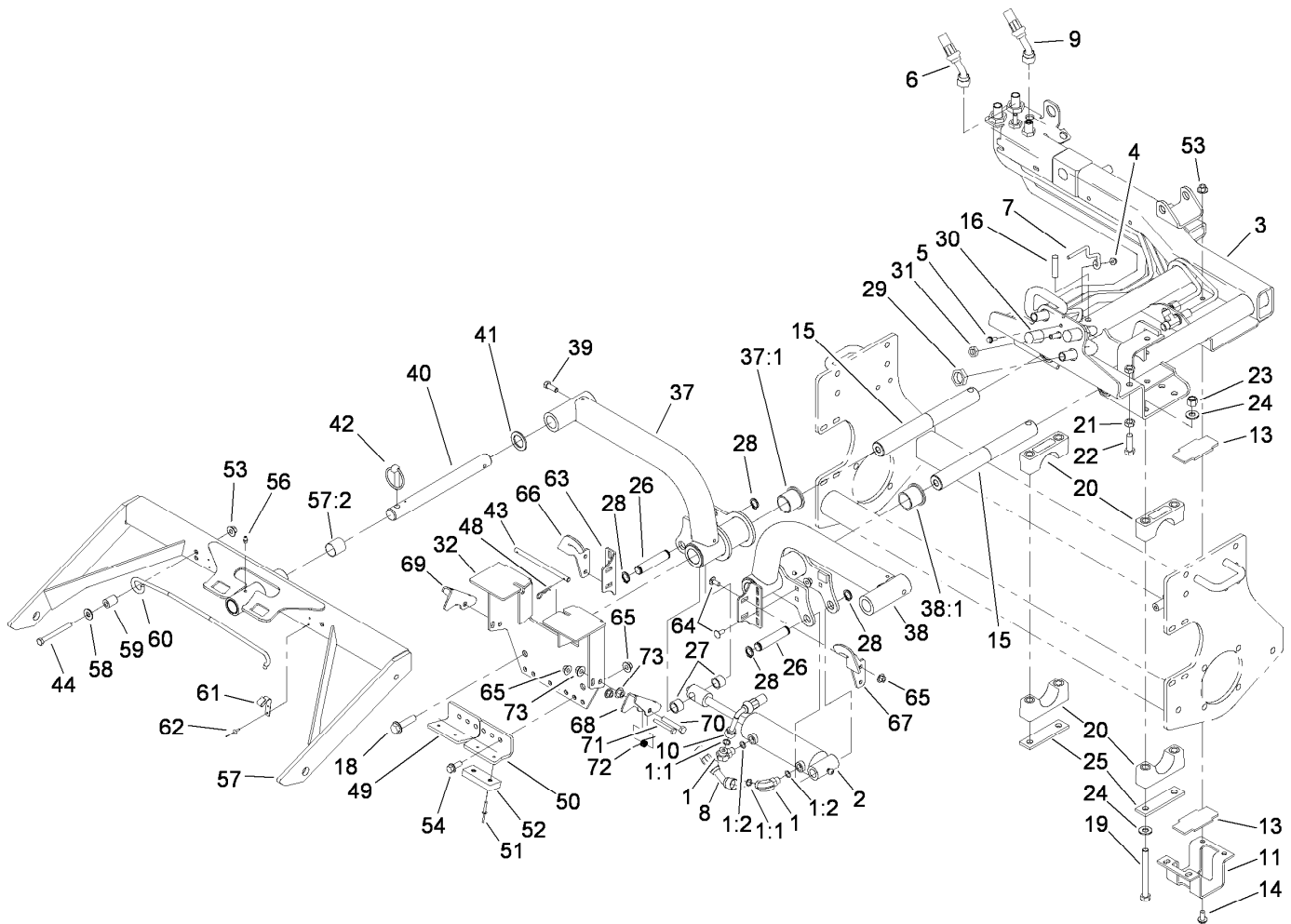
Ref.	Part Number	Qty.	Description
20	105-3812	1	Valve-Check
21	105-3811	1	Valve-Bypass
22	76-6170	2	Capscrew
23	76-6160	2	Capscrew
25	98-4645	1	Plate-Cover
29	100-3176	1	Housing ASM
29:1	94-6363	1	Bearing
31	252-71	2	Washer-Thrust
32	252-66	1	Bearing-Thrust
33	33-3720	1	Washer
39	98-4635	1	Insert-Plate, Cam
42	74-9040	1	Coupler
43	104-4868	1	Seal Repair Kit
43:1	32151-13	1	Ring-Retaining
43:2	32151-29	1	Ring-Retaining
43:3	33-4930	1	Gasket-Housing
43:4	104-4861	1	Seal-Shaft
43:5	100-3179	1	O-Ring

● Not serviced separately



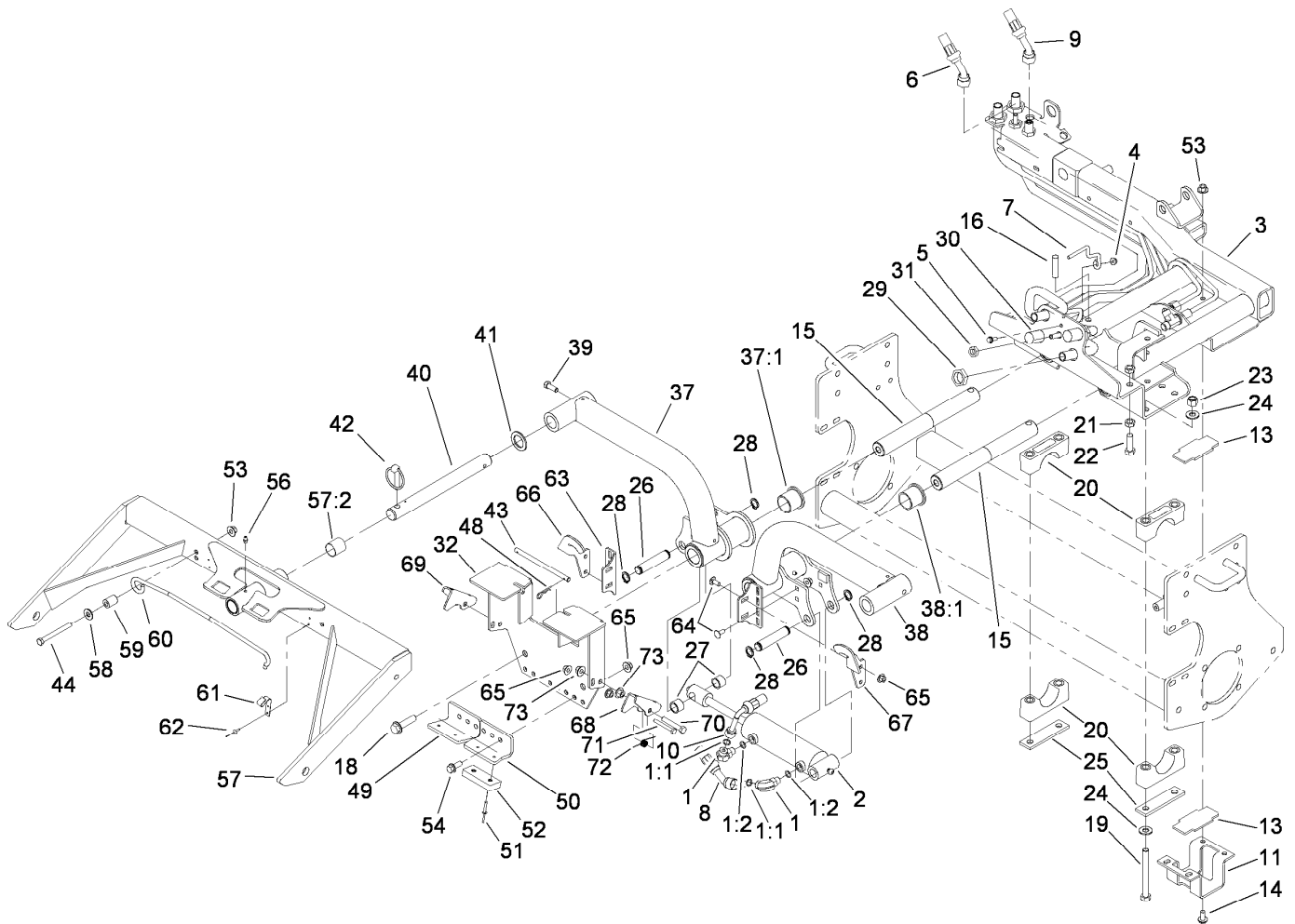
Hydraulic Gear Pump Assembly No. 108-9036

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	110-8755	1	Seal Kit



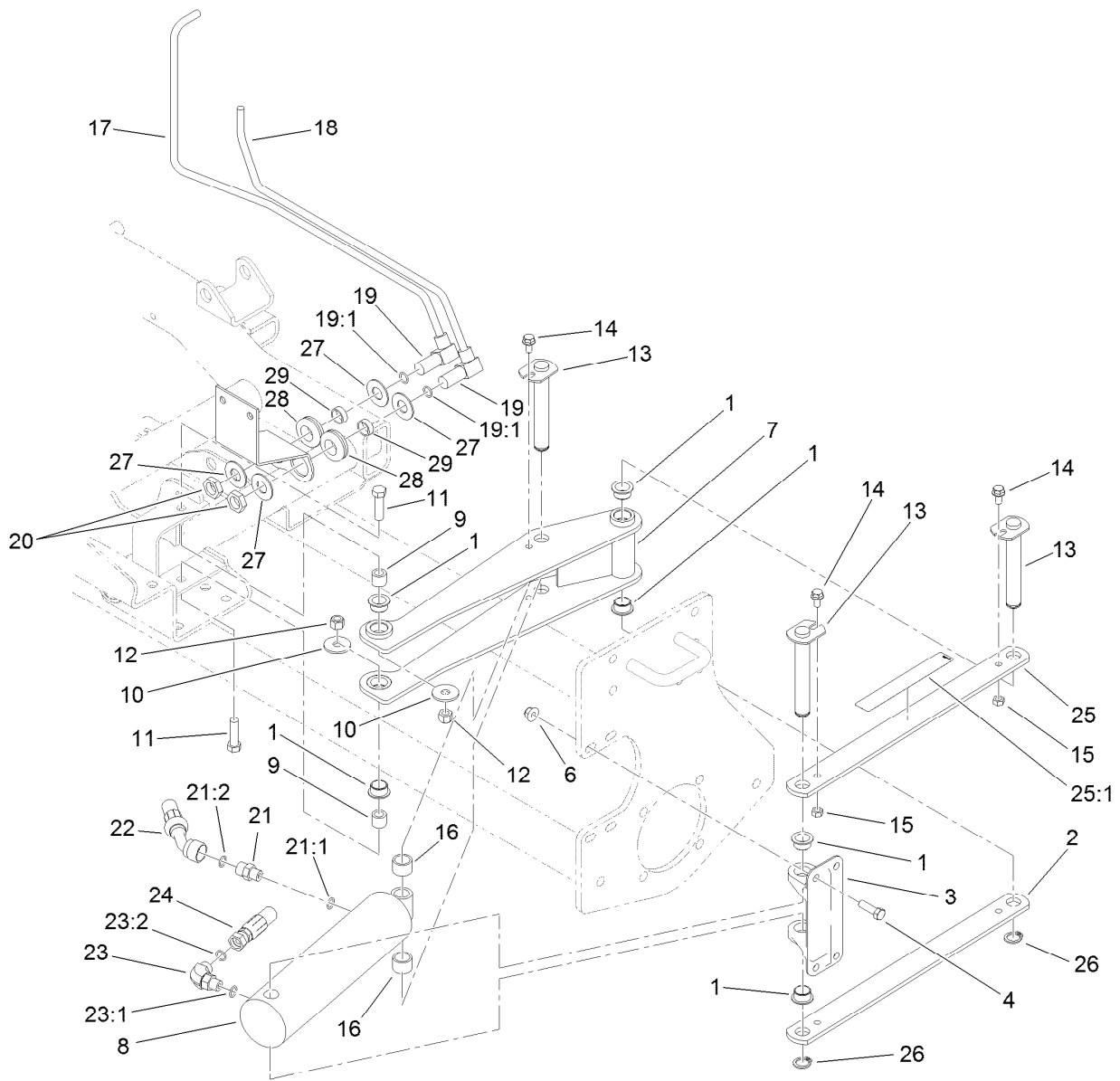
Carrier Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	340-77	2	Fitting-HYD, 90 DEG	29	340-74	4	Nut-Lock, Bulkhead
1:1	237-22	1	O-Ring	30	99-3640	1	Tube ASM
1:2	237-42	1	O-Ring	31	340-78	1	Nut-Lock, Bulkhead
2	112-9916	1	HYD Cylinder ASM	32	104-4820-03	1	Bracket-Stop, Carrier
3	100-4939-03	1	Sidewinder Carrier ASM	37	115-3462	1	RH Liftarm ASM
4	32128-33	1	Nut-HF	37:1	69-6470	2	Bushing-Castor
5	3234-4	1	Screw-HHF	38	115-3461	1	LH Liftarm ASM
6	95-8822	1	Hose ASM	38:1	69-6470	2	Bushing-Castor
7	99-3433	1	Wire-Center	39	323-6	2	Screw-HH
8	104-0405	1	Hose ASM	40	95-8979	2	Shaft
9	95-8821	1	Hose ASM	41	3-6781	2	Washer-Thrust
10	104-0406	1	Hose ASM	42	283-71	2	Pin-Lynch
11	104-0416-03	1	Bracket-Slide	43	104-0472	1	Rod
13	104-0417	2	Slide-Plastic	44	323-15	2	Screw-HH
14	3234-11	4	Screw-HHF	48	3290-467	2	Pin-Hair
15	95-8531	2	Shaft-Pivot, Liftarm	49	110-8793-03	1	Stop-Deck, RH
16	32121-122	2	Pin-Roll	50	110-8794-03	1	Stop-Deck, LH
18	3234-27	2	Screw-HHF	51	3269-11	4	Rivet-Pop
19	325-19	8	Screw-HH	52	86-5350	2	Bumper-Rubber
20	104-4865	8	Cap-Bearing	53	104-8301	10	Nut-Flange, NI
21	3218-5	4	Nut-Jam	54	3234-11	4	Screw-HHF
22	325-6	2	Screw-HH	56	302-5	2	Fitting-Grease
23	3296-23	8	Nut-Lock, NI	57	110-8787	2	Front Carrier Frame ASM
24	87-7270	16	Washer-Thrust	57:2	108-4000	2	Bushing
25	99-3373	4	Bar-Support, Slide	58	93-8806	2	Washer-Hardened
26	95-8575	2	Pin	59	104-4613	2	Tube-Latch
27	75-9590	2	Spacer-Cylinder	60	104-4612	2	Rod-Latch
28	32120-93	4	Ring-Retaining	61	104-4237	2	Clip-Rod



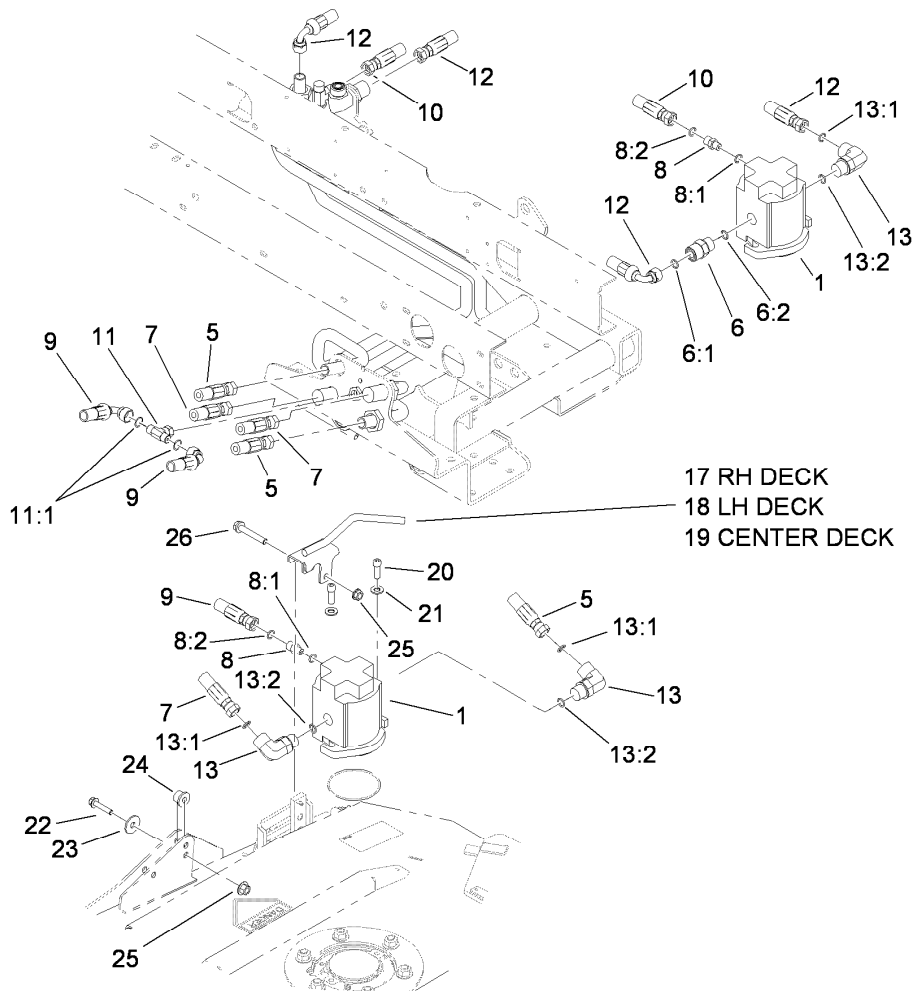
Carrier Assembly (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
62	3290-271	4	Rivet-Pop	68	104-4819-03	1	Bracket-Pivot, LH
63	104-4828-03	2	Bracket-Actuator	69	104-4825-03	1	Bracket-Pivot, RH
64	3230-23	8	Screw-CARR	70	323-11	2	Screw-HH
65	32128-44	12	Nut	71	322-11	2	Screw-HH
66	104-4826-03	1	Actuator-RH	72	104-4821	2	Spring-Torsion
67	104-4827-03	1	Actuator-LH	73	32128-43	4	Nut-Flange



Scissor Assembly

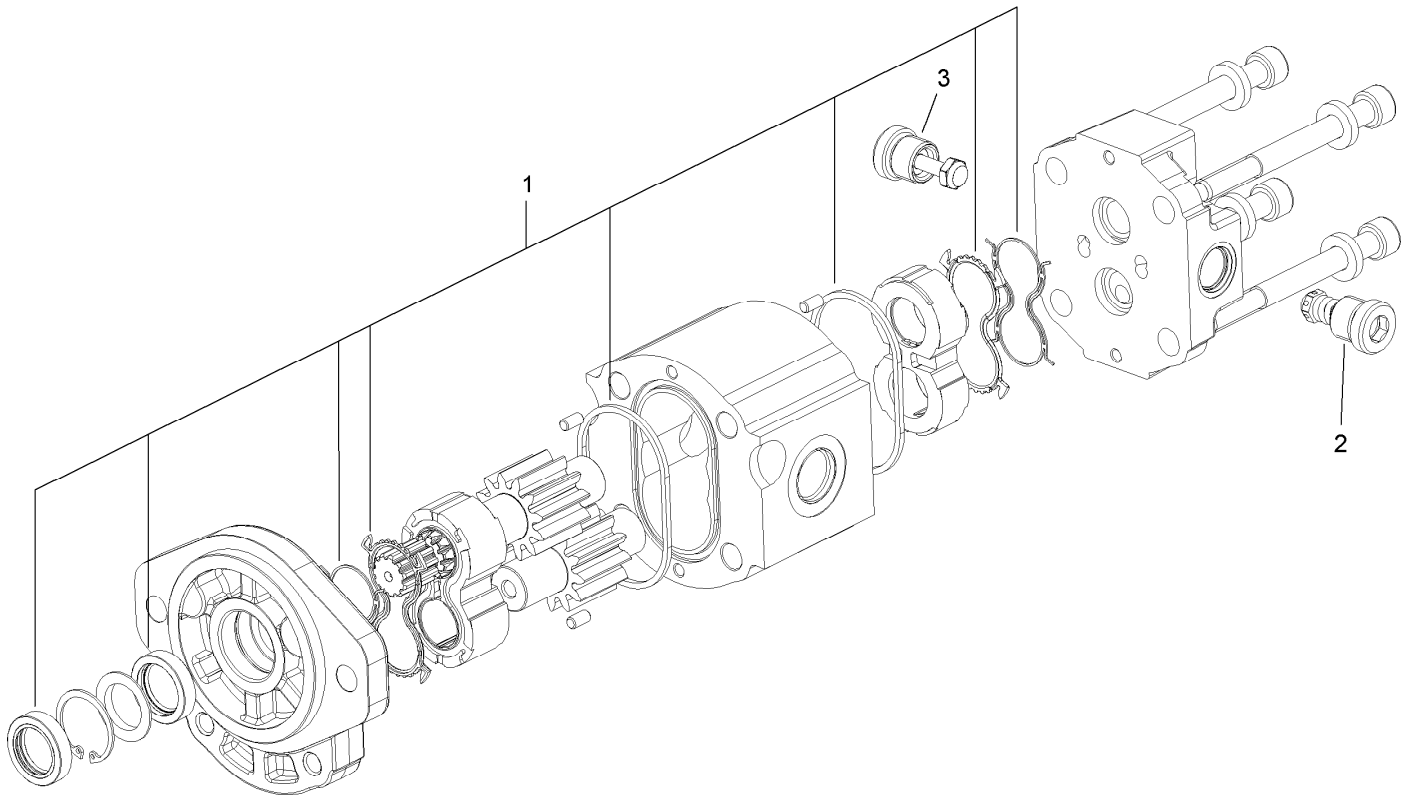
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	95-8526	6	Bushing-Plastic	19	340-154	2	Union-Bulkhead
2	95-8527-03	1	Link-Scissor	19:1	237-22	2	O-Ring
3	95-8883	1	Mount-Scissor	20	340-70	2	Nut-Lock
4	323-7	4	Screw-HH	21	85-9720	1	Fitting-Orificed (.060)
6	104-8301	4	Nut-Flange, NI	21:1	237-78	1	O-Ring
7	95-8521-03	1	Frame-Scissor	21:2	237-21	1	O-Ring
8	95-8512	1	Cylinder-HYD	22	95-8838	1	Hose ASM
9	95-8603	2	Spacer	23	340-132	1	Fitting-HYD, 90 DEG
10	87-5330	2	Washer	23:1	237-78	1	O-Ring
11	324-6	2	Screw-HH	23:2	237-21	1	O-Ring
12	3296-48	2	Nut-Lock, NI	24	95-8839	1	Hose ASM
13	95-8529	3	Pin	25	99-3505	1	Scissors Link ASM
14	3234-14	3	Screw-HHF	25:1	94-3353	1	Decal-Point, Pinch
15	32152-1	3	Nut-Lock, Cone	26	32120-93	2	Ring-Retaining
16	46-6350	2	Spacer	27	69-8940	4	Washer
17	95-8790	1	Tube ASM	28	240-4	2	Grommet-Rubber
18	95-8791	1	Tube ASM	29	69-8970	2	Spacer



Rotary Motor Assembly

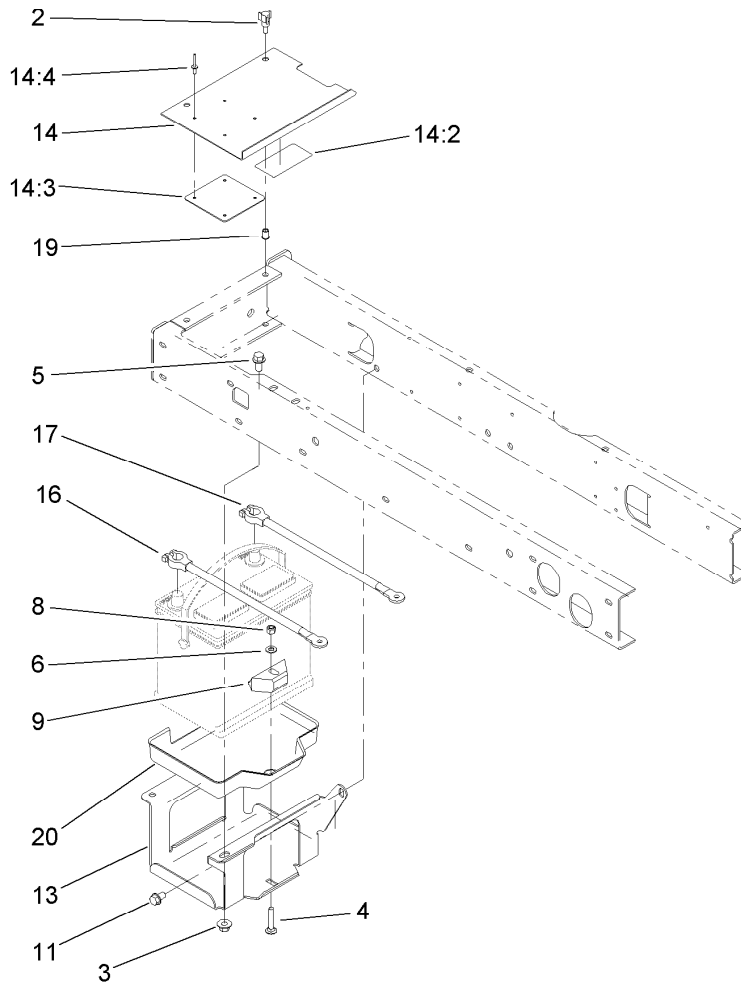
Ref.	Part Number	Qty.	Description
1	105-9872	3	HYD Motor ASM
5	105-1216	2	Hose ASM
6	340-7	1	Adapter
6:1	237-65	1	O-Ring
6:2	237-80	1	O-Ring
7	105-1215	2	Hose ASM
8	340-92	3	Fitting-HYD, Straight
8:1	237-78	1	O-Ring
8:2	237-21	1	O-Ring
9	104-1080	2	Hose ASM
10	100-4876	1	Hose ASM
11	99-3477	1	Fitting-Tee
11:1	237-42	2	O-Ring
12	100-4880	2	Hose ASM

Ref.	Part Number	Qty.	Description
13	340-17	5	Fitting-HYD, 90 DEG
13:1	237-65	1	O-Ring
13:2	237-80	1	O-Ring
17	112-9901-03	1	RH Foot Guard ASM
18	112-9902-03	1	LH Foot Guard ASM
19	112-9900-03	1	Guard-Foot
20	3274-7	6	Screw-HSH
21	3256-24	6	Washer-Flat
22	323-52	6	Screw-HH
23	93-8806	6	Washer-Hardened
24	95-8803	6	Bushing-Flange
25	104-8301	10	Nut-Flange, NI
26	323-11	4	Screw-HH



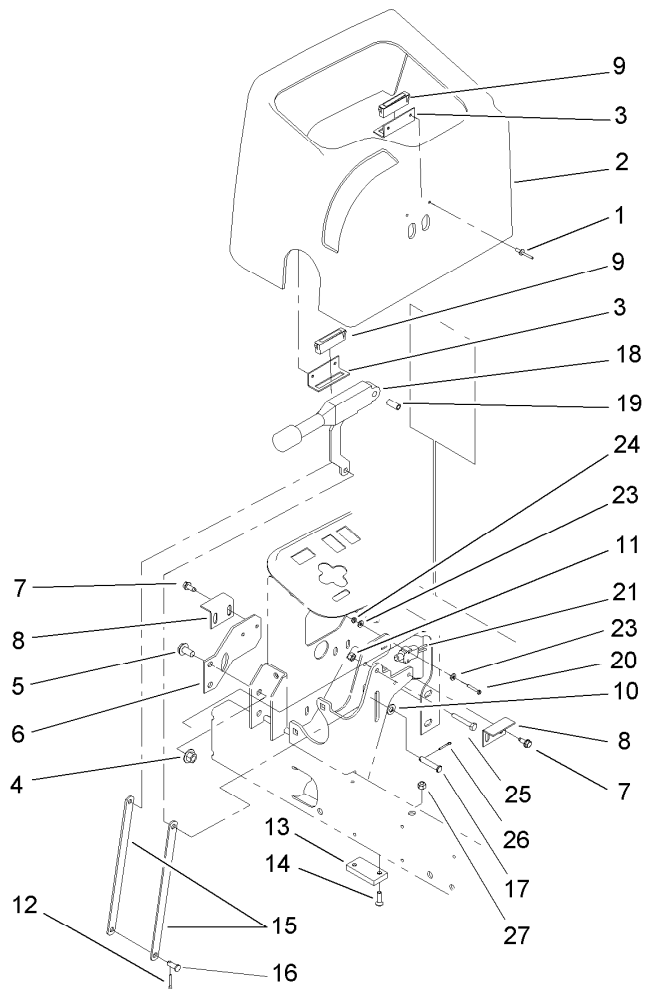
Hydraulic Motor Assembly No. 105-9872

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	107-7819	1	Seal Kit
2	107-7820	1	Valve-Relief
3	107-7821	1	Valve-Anticavitation



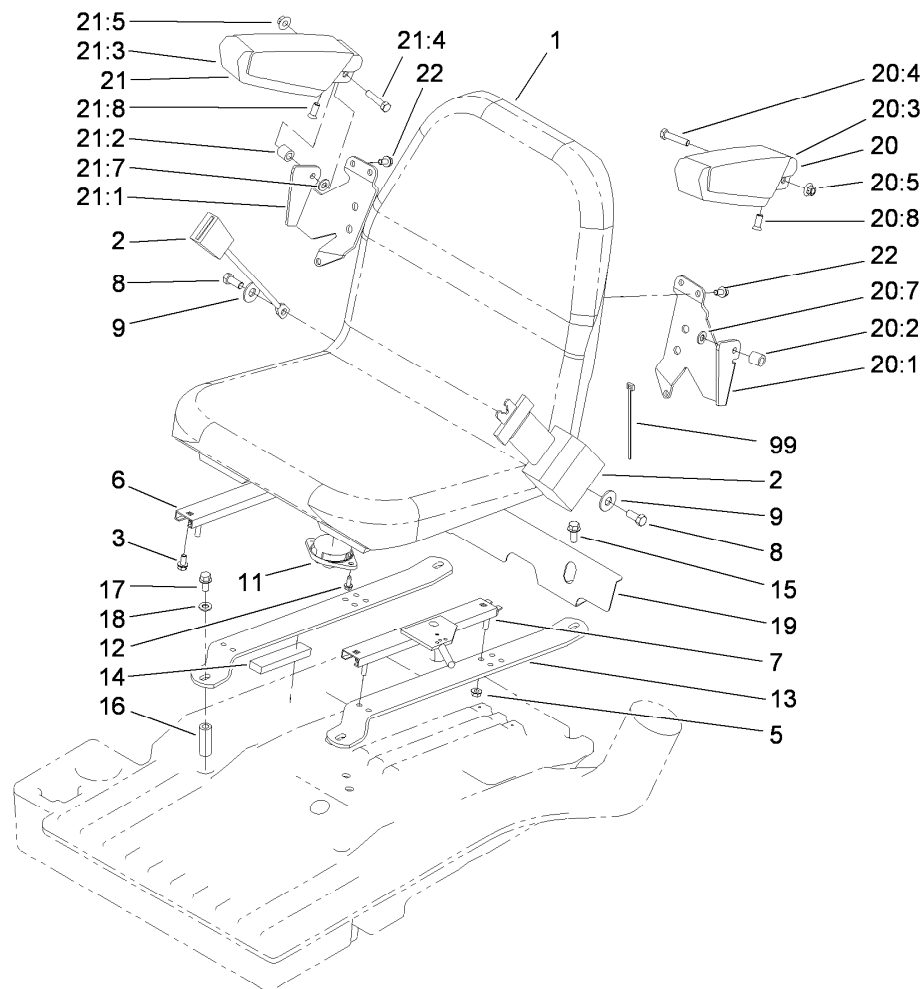
Battery Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2	233-70	2	Knob-Star, Three
3	32128-43	3	Nut-Flange
4	3230-6	1	Screw-CARR
5	3234-1	3	Screw-HHF
6	3256-23	1	Washer-Flat
8	3296-29	1	Nut-Lock, NI
9	66-2490	1	Retainer-Battery
11	32144-15	1	Screw-HHFTF
13	95-8796-03	1	Support-Battery
14	99-3602	1	Battery Cover ASM
14:2	93-7276	1	Decal-Danger
14:3	87-7620	1	Shield-Terminal, Battery
14:4	3269-27	4	Rivet-Snap
16	95-8853	1	Cable-Battery, Positive
17	95-8854	1	Cable-Battery, Negative
19	32148-6	2	Insert-Nut
20	99-3513	1	Tray-Battery



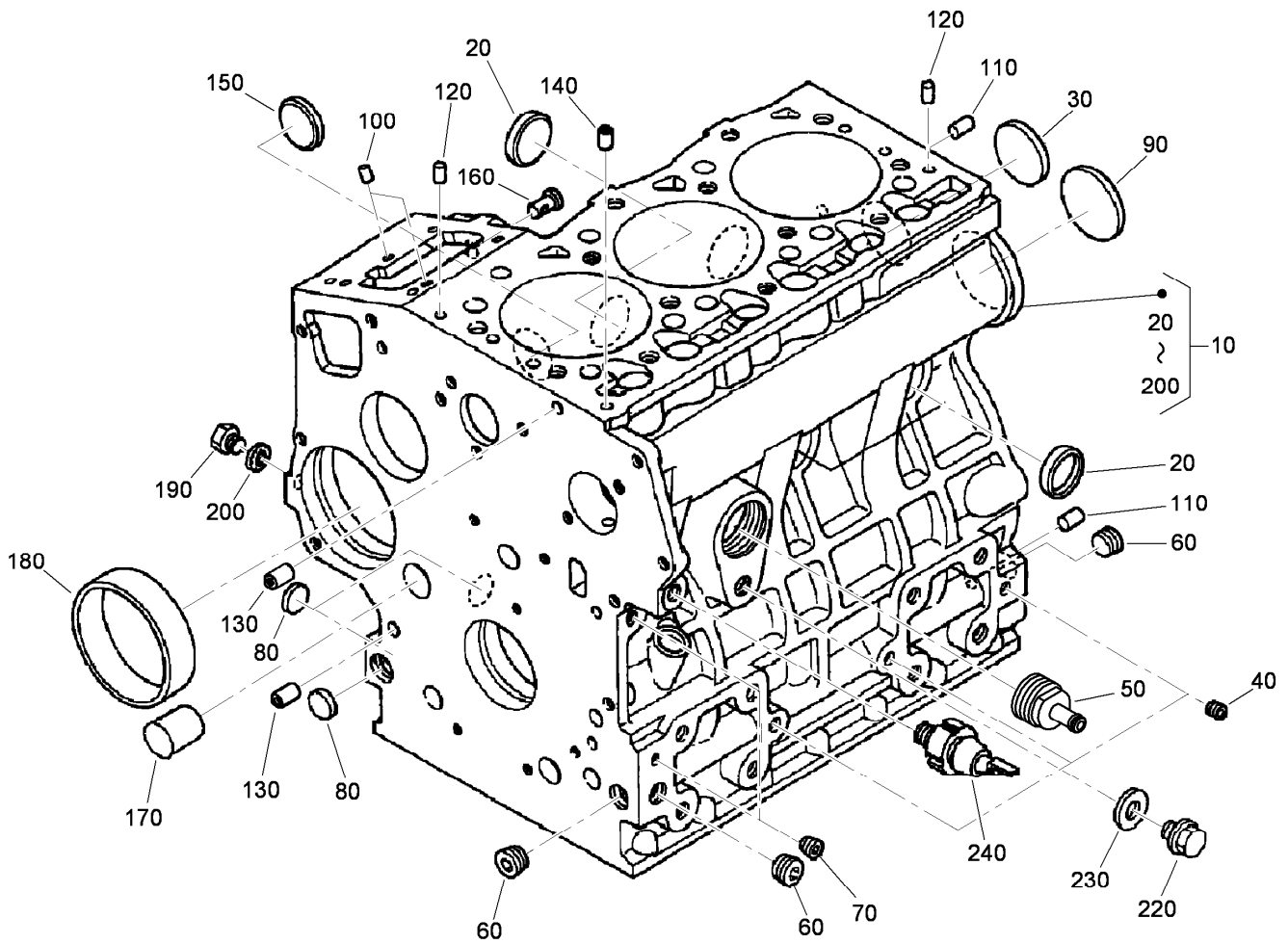
Parking Brake Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	3269-5	4	Rivet-Pop	14	3289-4	2	Screw-FH
2	95-8707	1	Cover-Dash	15	104-4628-03	2	Link-Brake, Parking
3	95-8763	2	Bracket-Hold Down, Cover	16	283-62	1	Pin-Clevis
4	32128-43	2	Nut-Flange	17	94-3829	1	Pin-Clevis
5	3234-1	2	Screw-HHF	18	104-4817	1	Lever-Brake
6	95-8764-03	1	Support-Magnet	19	87-4710	1	Spacer-Brake, Parking
7	32144-10	4	Screw-HWH	20	32105-9	2	Screw
8	95-8765	2	Bracket-Strike, Magnet	21	95-8900	1	Switch
9	58-4250	2	Catch-Magnetic	23	3256-21	4	Washer-Flat
10	3256-23	1	Washer-Flat	24	3296-9	2	Nut-Lock
11	3296-42	1	Nut-Lock, NI	25	321-10	1	Screw-HH
12	3272-10	1	Pin-Cotter	26	3272-6	1	Pin-Cotter
13	95-8684	1	Pad-Bumper	27	32128-32	2	Nut-HHF



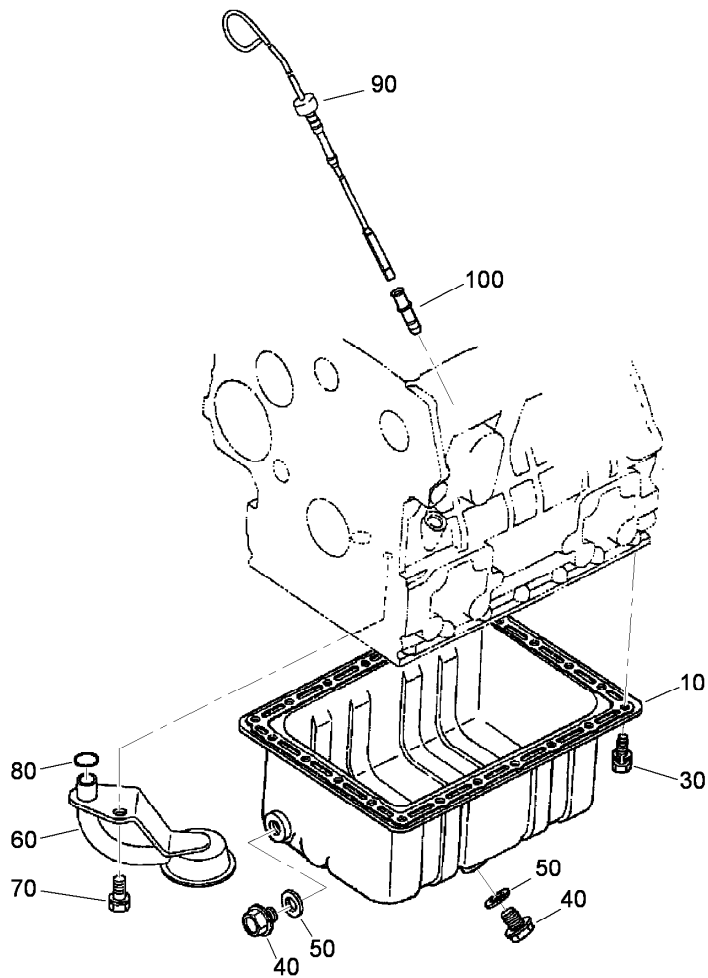
Seat Mounting Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	104-4620	1	Seat	20:1	69-0760	1	Bracket-Arm, LH
2	100-4928	1	Belt-Seat	20:2	92-7301	1	Spacer
3	3234-14	4	Screw-HHF	20:3	69-1180	1	Armrest
5	104-8300	4	Nut-Flange, NI	20:4	323-9	1	Screw-HH
6	92-8990	1	Adjuster-Slave	20:5	32128-19	1	Nut-HF
7	92-8991	1	Adjuster ASM (W/Latch)	20:7	3256-24	1	Washer-Flat
8	3212-4	2	Screw-HH	20:8	92-7318	1	Screw
9	3253-6	2	Washer-Lock	21	92-7306	1	RH Armrest ASM
11	92-6282	1	Switch-Seat	21:1	69-0770	1	Bracket-Arm, RH
12	32144-10	2	Screw-HWH	21:2	92-7301	1	Spacer
13	104-0467-03	2	Strap-Support, Seat	21:3	69-1180	1	Armrest
14	95-8896	2	Foam	21:4	323-9	1	Screw-HH
15	3234-11	2	Screw-HHF	21:5	32128-19	1	Nut-HF
16	104-0466	2	Spacer-Tube	21:7	3256-24	1	Washer-Flat
17	323-14	2	Screw-HH	21:8	92-7318	1	Screw
18	3256-24	2	Washer-Flat	22	3234-14	6	Screw-HHF
19	104-4833-03	1	Shield-Heat	99	3290-378	1	Cable Tie
20	92-7307	1	LH Armrest ASM				



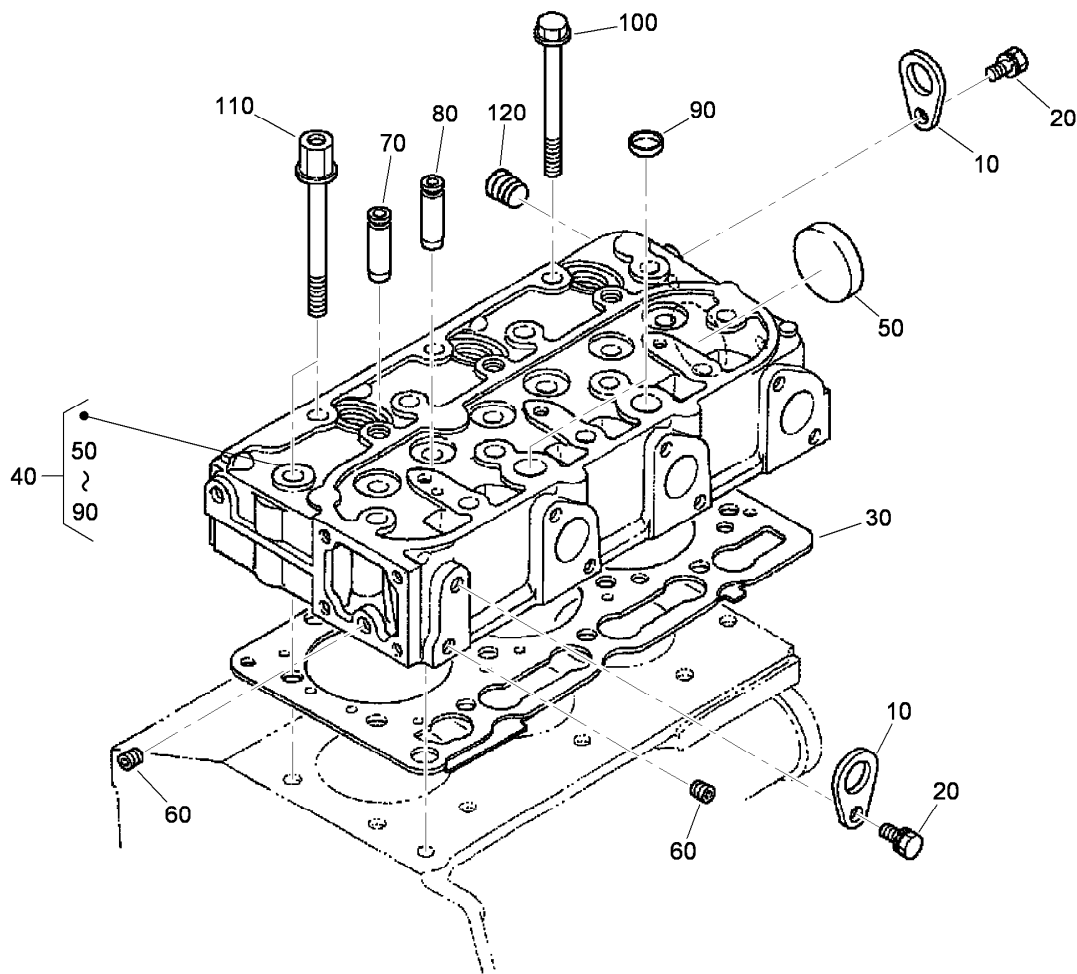
Crankcase Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7043	1	Crankcase ASM
20	98-9398	4	Cap-Sealing
30	98-7539	1	Cap-Sealing
40	98-7540	3	Plug
50	99-8347	1	Joint-Pipe, Drain
60	98-9597	3	Plug
70	98-7487	2	Plug
80	98-9379	3	Plug-Expansion
90	98-9668	1	Plug-Expansion
100	98-9375	2	Pin-Straight
110	98-9377	2	Pin-Straight
120	98-9376	2	Pin-Straight
130	98-9387	2	Pin-Pipe
140	98-9539	1	Pin-Pipe
150	98-9599	1	Plug
160	98-9630	1	Pin-Spring, Start
170	98-9675	1	Plug
180	98-9656	1	Bushing-Governor, Gear
190	98-7507	1	Plug
200	98-7428	1	Gasket
220	99-3447	1	Plug
230	106-7056	1	Gasket
240	98-9416	1	Switch-Oil



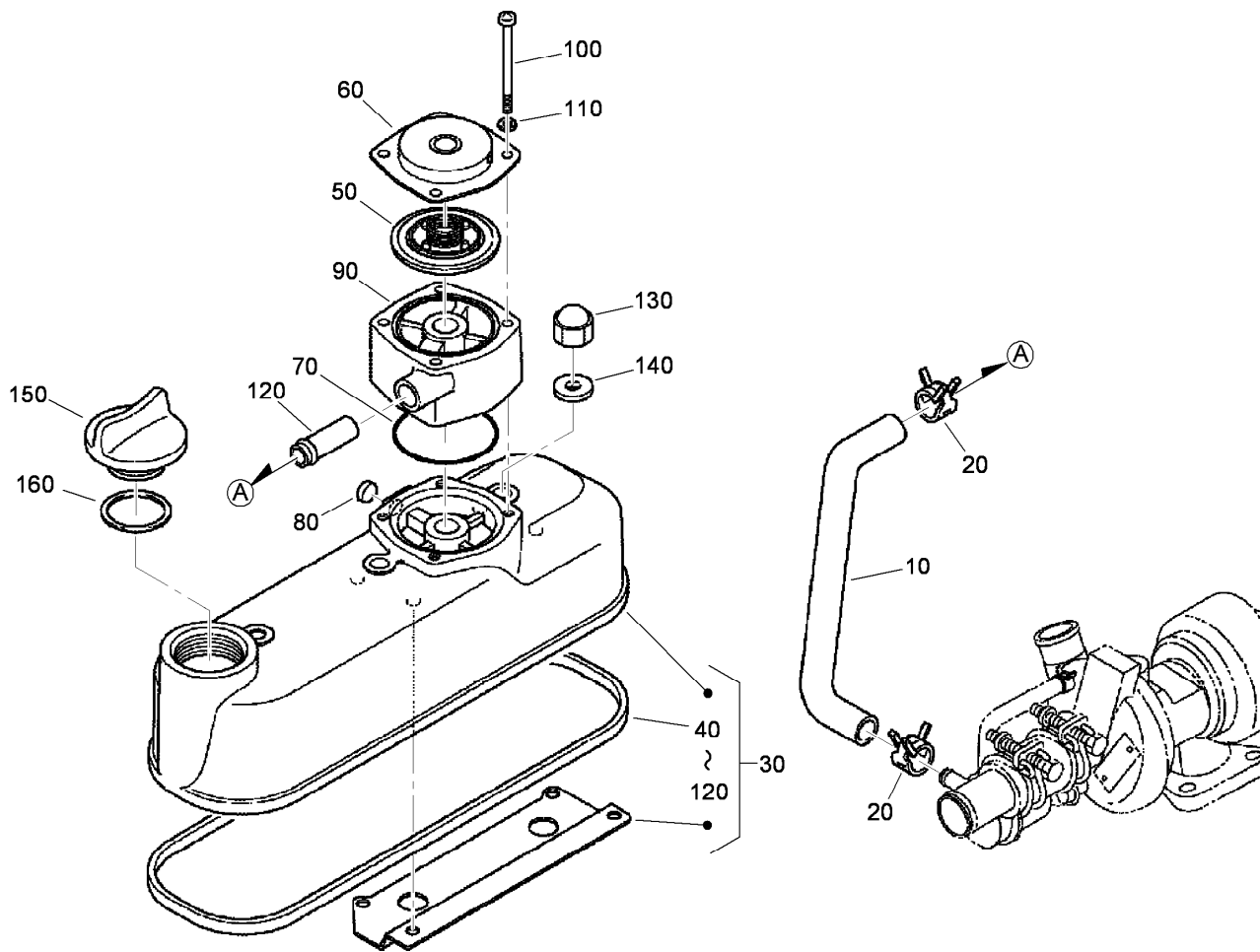
Dipstick, Guide and Oil Pan Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9685	1	Pan-Oil
30	98-9351	22	Bolt
40	114-8151	2	Plug-Drain
50	98-7524	2	Gasket
60	112-7044	1	Head-Filter
70	98-7526	1	Bolt
80	105-3776	1	O-Ring
90	107-9076	1	Gauge-Oil
100	105-4580	1	Guide-Gauge, Oil



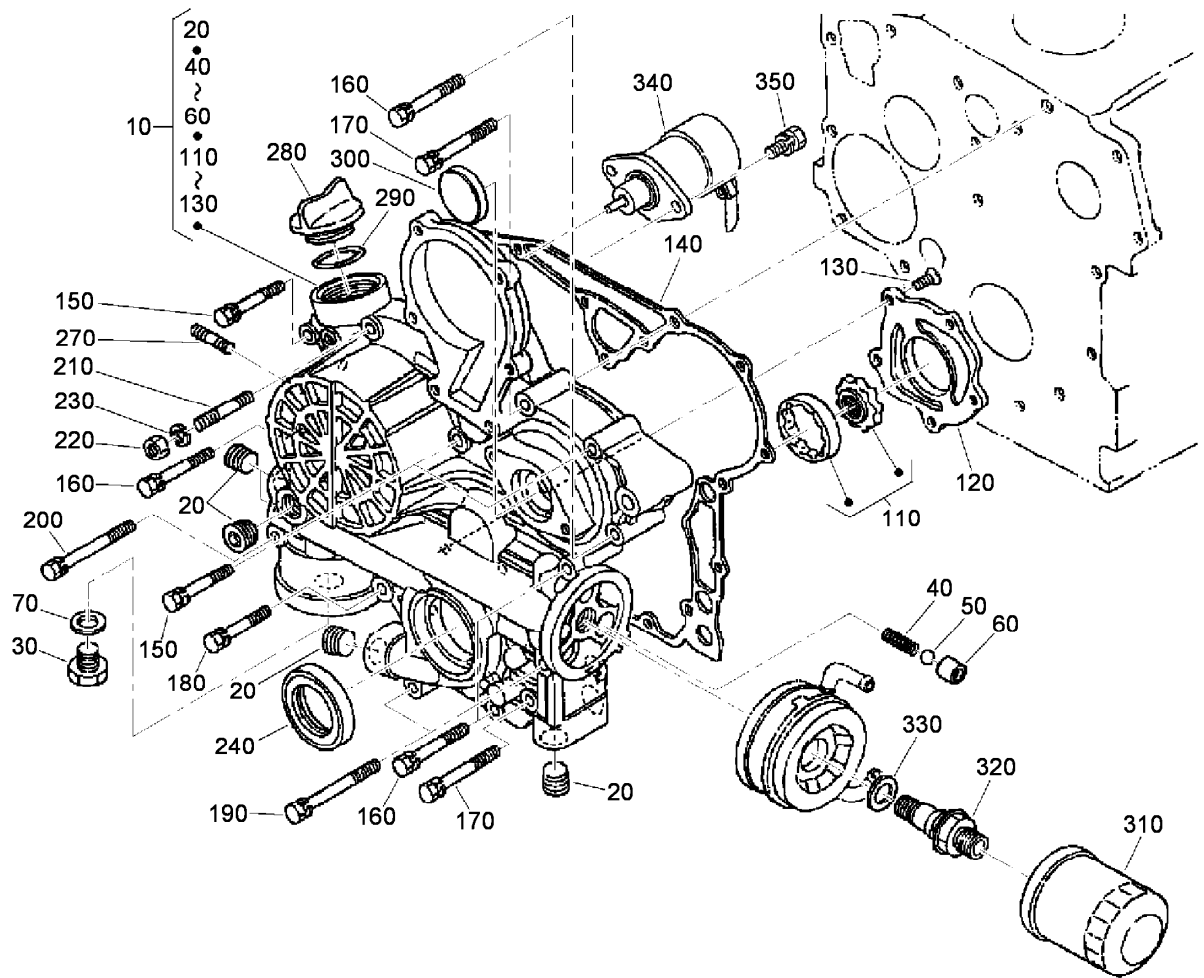
Cylinder Head Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-7531	2	Hook-Engine
20	100-9195	2	Bolt
30	108-6573	1	Gasket-Head, Cylinder
40	107-7823	1	Cylinder Head ASM
50	105-3705	1	Cap-Sealing
60	98-7540	2	Plug
70	107-9066	3	Guide-Valve, Inlet
80	107-9067	3	Guide-Valve, Exhaust
90	98-9389	2	Cap-Sealing
100	98-9479	12	Bolt-Head, Cylinder
110	98-9647	2	Bolt-Head, Cylinder
120	98-9444	1	Plug



Cylinder Head Cover Assembly

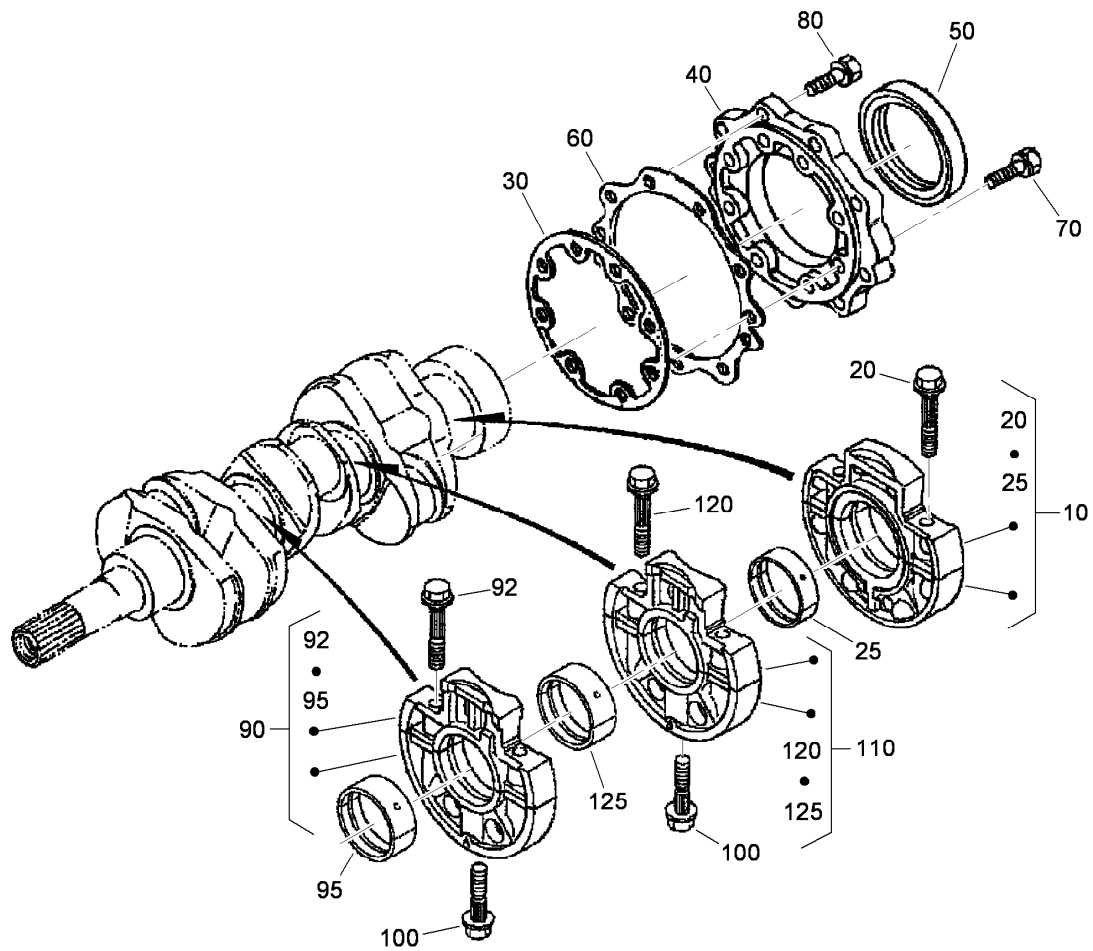
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	115-3040	1	Tube-Breather
20	108-2859	2	Clamp-Hose
30	115-3041	1	Cylinder Head Cover ASM
40	98-9615	1	Gasket-Cover, Head
50	110-3715	1	Valve-Breather
60	110-3714	1	Cover-Breather
70	110-3846	1	O Ring-Breather
80	115-3042	1	Cap-Sealing
90	115-3043	1	Spacer-Breather
100	115-3044	4	Screw-Pan Head
110	100-2204	4	Washer-Spring
120	98-7766	1	Pipe-Return, Water
130	98-9455	3	Nut-Cap
140	98-9454	3	Gasket
150	107-9075	1	Plug-Filler, Oil
160	99-3446	1	O-Ring



Gear Case and Oil Filter Cartridge Assembly

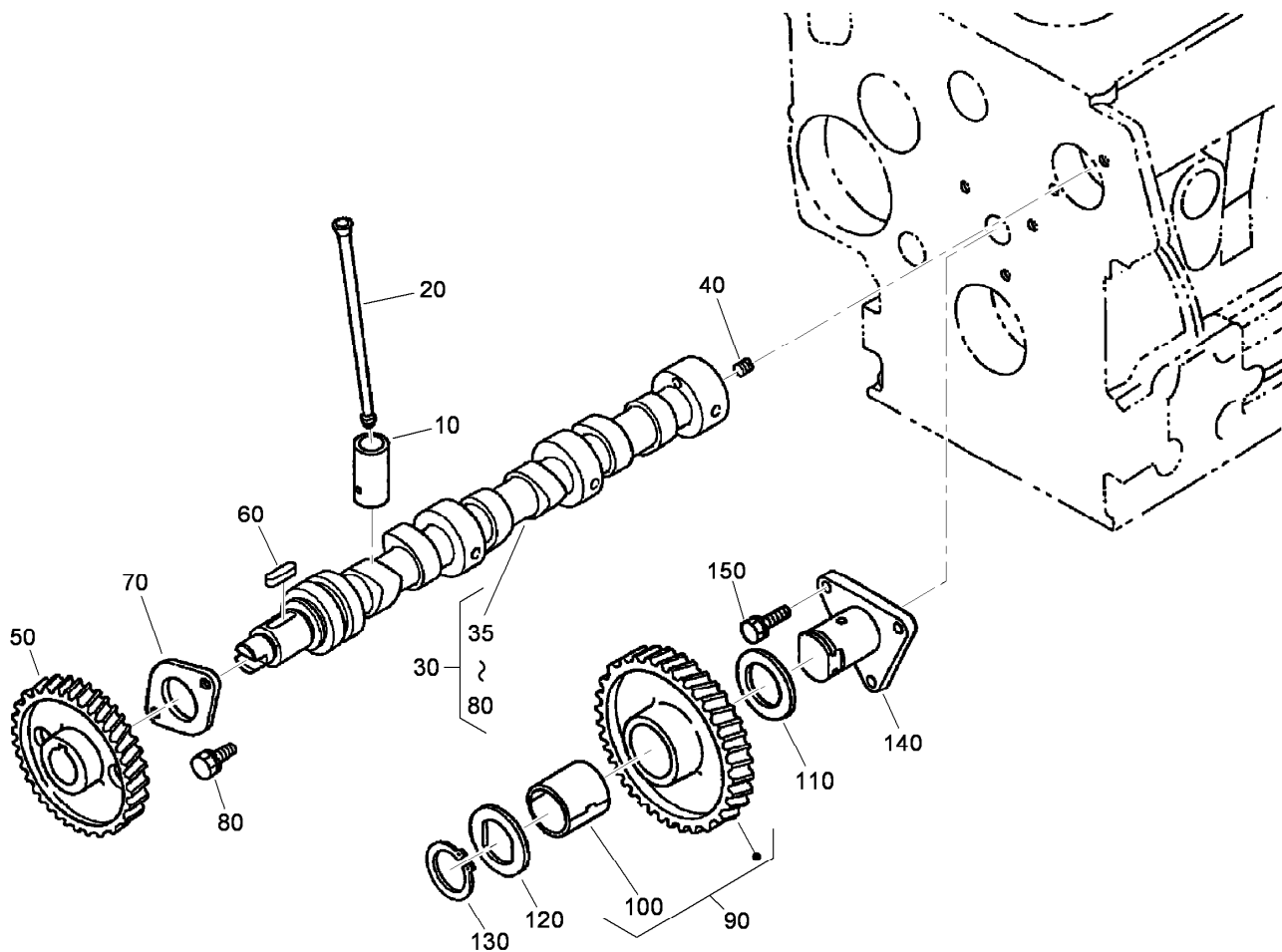
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-7825	1	Gear Case ASM
20	98-9598	5	Plug
30	99-3450	1	Plug
40	98-9544	1	Spring
50	98-9543	1	Seat-Valve
60	98-9380	1	Ball
70	99-3451	1	Plug-Packing
110	98-9540	1	Oil Pump Rotor ASM
120	105-3708	1	Cover-Pump, Oil
130	98-9592	5	Screw
140	98-9633	1	Gasket-Case, Gear
150	100-1765	3	Bolt
160	105-3797	4	Bolt
170	98-9356	2	Bolt
180	98-9437	1	Bolt

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
190	98-9586	2	Bolt
200	99-3511	1	Bolt
210	105-3709	1	Stud
220	98-7572	1	Nut
230	98-7699	1	Washer-Spring
240	98-9482	1	Seal-Oil
270	105-3710	2	Stud
280	107-9075	1	Plug-Filler, Oil
290	99-3446	1	O-Ring
300	98-9641	1	Cover-Case, Gear
310	99-8384	1	Filter-Oil
320	104-5159	1	Holder ASM
330	98-9727	1	Collar
340	104-5155	1	Solenoid-Stop
350	115-3039	2	Bolt-HSH



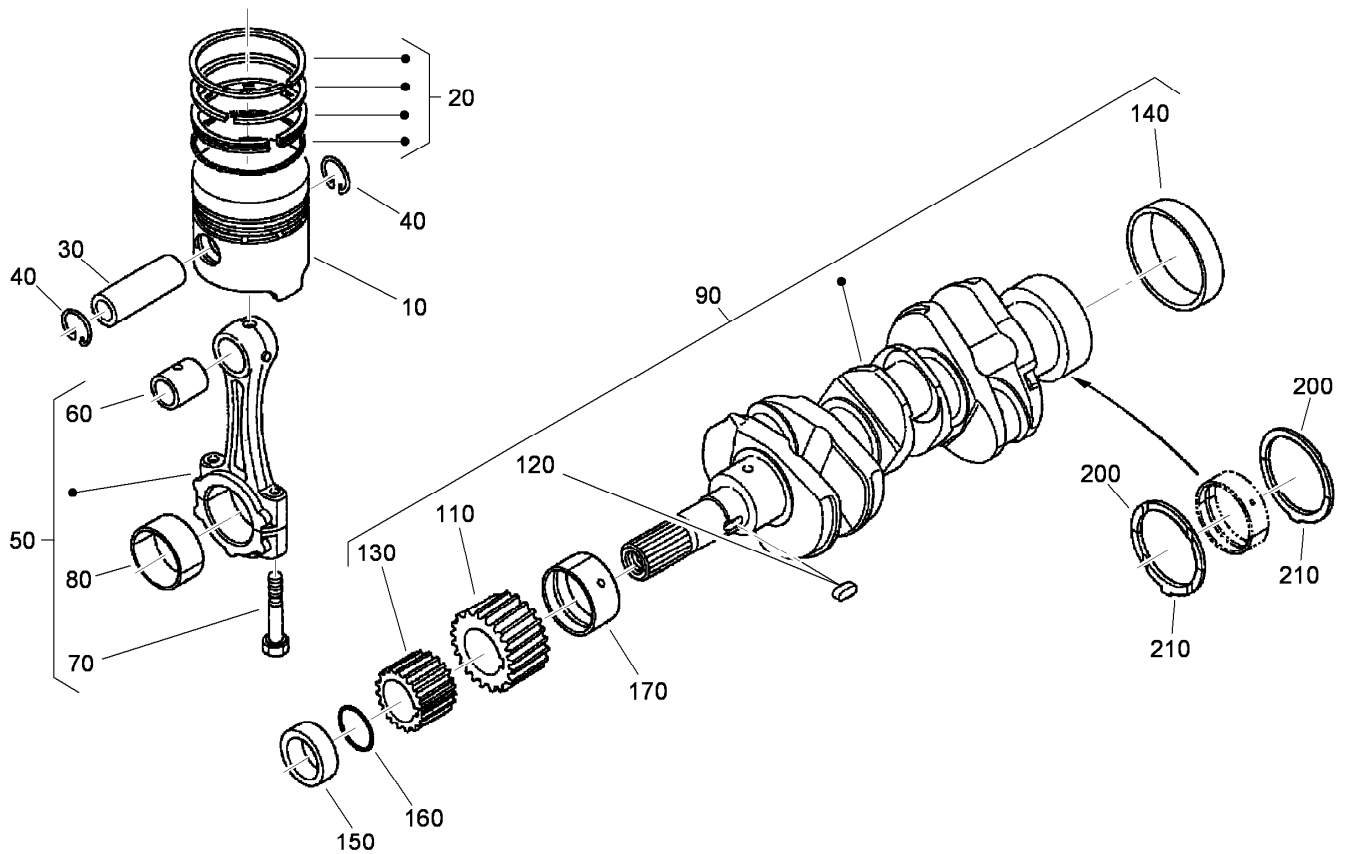
Main Bearing Case Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7026	1	Wheel Bearing Case ASM
20	98-9484	2	Bolt-Case, Bearing
25	112-7045	1	Metal-Crankshaft
25	112-7039	1	Metal-Crankshaft (0.2Mm)
25	112-7040	1	Metal-Crankshaft (-0.4Mm)
30	98-9634	1	Gasket-Case, Bearing
40	112-7046	1	Cover-Case, Bearing
50	112-0180	1	Seal-Oil
60	112-7037	1	Gasket-Cover, Case
70	98-9352	8	Bolt
80	98-7568	9	Bolt
90	112-7028	1	Bearing ASM
92	98-9484	2	Bolt-Case, Bearing
95	112-7011	1	Bearing-Main (STD)
95	112-7012	1	Metal-Crankpin (-0.2Mm)
95	112-7013	1	Metal-Crankpin (-0.4Mm)
100	98-9485	2	Bolt-Case, Bearing
110	112-7027	1	Bearing ASM
120	98-9484	2	Bolt-Case, Bearing
125	112-7011	1	Bearing-Main (STD)
125	112-7012	1	Metal-Crankpin (-0.2Mm)
125	112-7013	1	Metal-Crankpin (-0.4Mm)



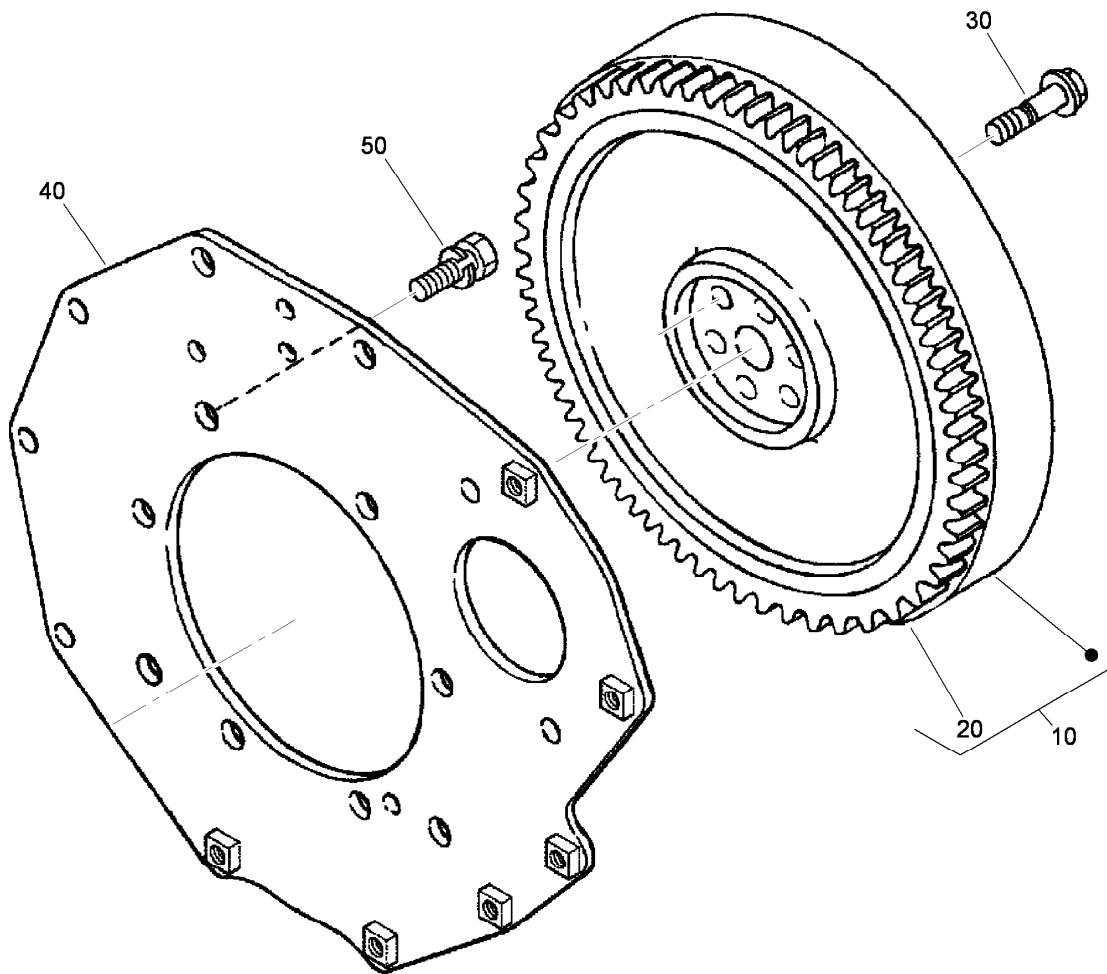
Camshaft and Idle Gear Shaft Assembly

Ref.	Part Number	Qty.	Description
10	112-0185	6	Tappet
20	98-9509	6	Rod-Push
30	112-7029	1	Camshaft ASM
35	108-1403	1	Camshaft
40	98-7449	1	Screw-Set
50	98-9512	1	Gear-Cam
60	98-9378	1	Key-Feather
70	98-9510	1	Stopper-Camshaft
80	98-7692	2	Bolt
90	98-9649	1	Idle Gear ASM
100	98-9650	1	Bushing-Gear, Idle
110	98-9535	1	Collar-Gear, Idle
120	98-9536	1	Collar-Gear, Idle
130	98-9534	1	Circlip-Gear, Idle
140	98-9533	1	Shaft-Gear, Idle
150	98-7692	3	Bolt



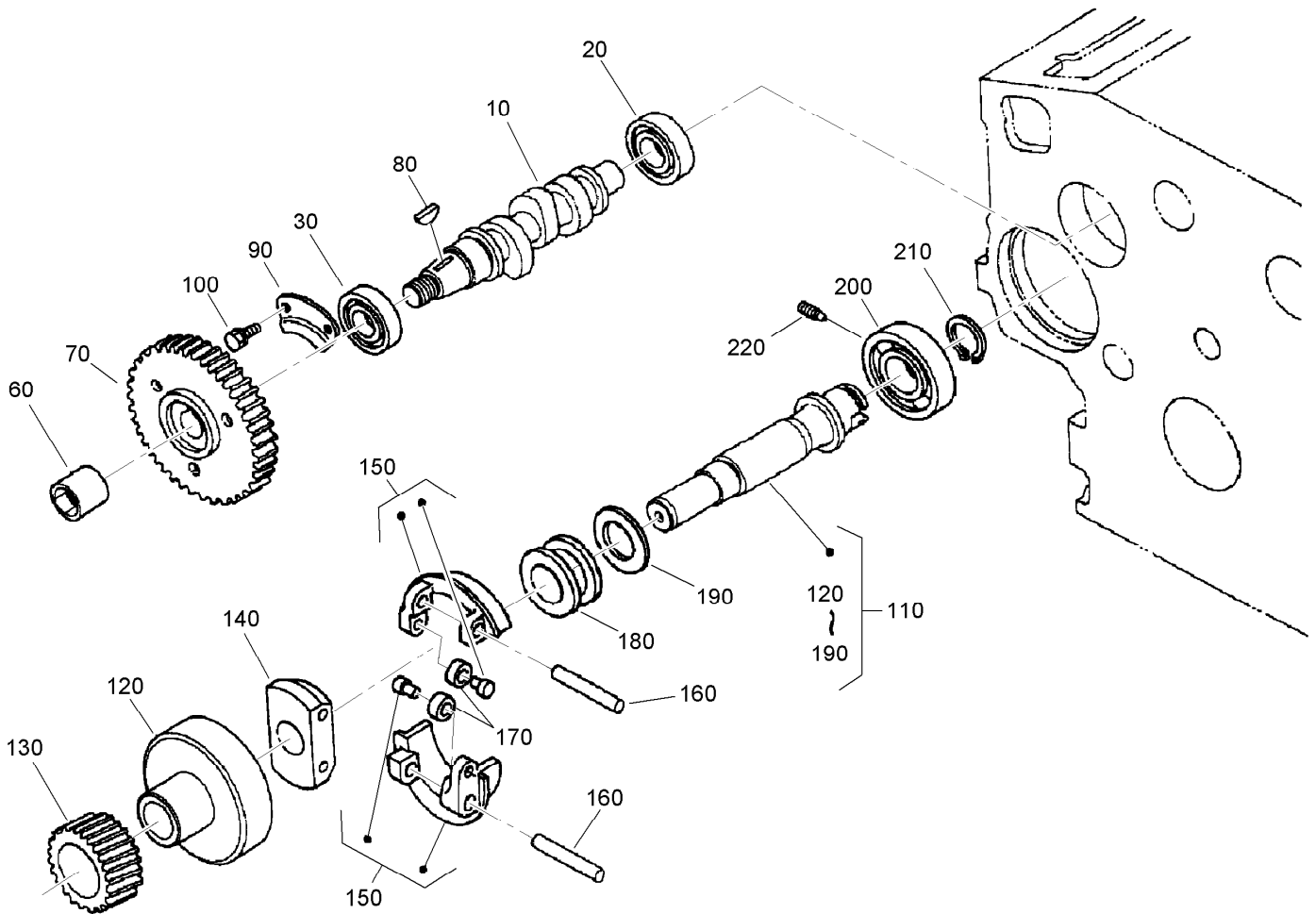
Piston and Crankshaft Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9550	3	Piston (STD)	120	98-9666	1	Key
10	108-1417	3	Piston (0.5Mm)	130	98-9542	1	Gear-Drive, Oil Pump
20	98-9551	3	Piston Ring ASM (STD)	140	98-9522	1	Sleeve-Crankshaft
20	108-1404	3	Piston Ring ASM (0.5Mm)	150	98-9521	1	Collar-Crankshaft
30	98-9513	3	Pin-Piston	160	105-3783	1	O-Ring
40	98-9514	6	Circlip-Pin, Piston	170	112-7005	1	Bearing-Main (STD)
50	98-9552	3	Connecting Rod ASM	170	112-7009	1	Metal-Crankpin (-0.2Mm)
60	115-3014	3	Bushing-Pin, Piston	170	112-7010	1	Metal-Crankpin (-0.4Mm)
70	98-9517	6	Bolt-Rod, Connecting	200	98-9413	2	Bearing-Thrust (STD)
80	98-9553	3	Bearing-Rod (STD)	200	98-9414	2	Bearing-Thrust (0.2Mm)
80	108-1405	3	Metal-Crankpin (-0.2Mm)	200	98-9415	2	Bearing-Thrust (0.4Mm)
80	108-1406	3	Metal-Crankpin (-0.4Mm)	210	98-9688	2	Bearing-Thrust (STD)
90	98-9642	1	Crankshaft ASM	210	98-9689	2	Bearing-Thrust (0.2Mm)
110	98-9532	1	Gear-Crankshaft	210	98-9690	2	Bearing-Thrust (0.4Mm)



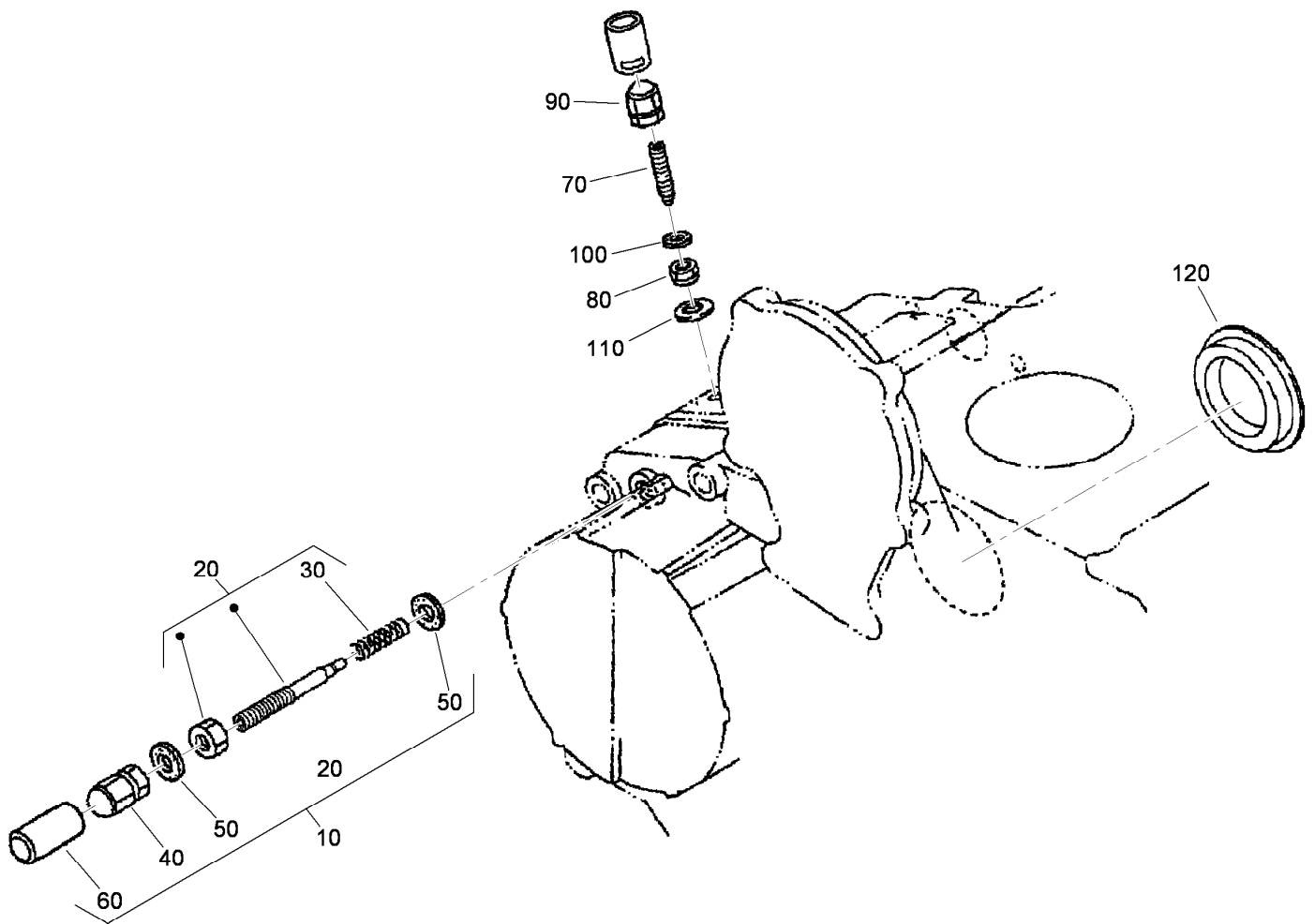
Flywheel Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	105-3784	1	Flywheel ASM
20	115-3015	1	Gear-Ring
30	98-9537	6	Bolt-Flywheel
40	98-9486	1	Plate-End, Rear
50	98-9392	8	Bolt



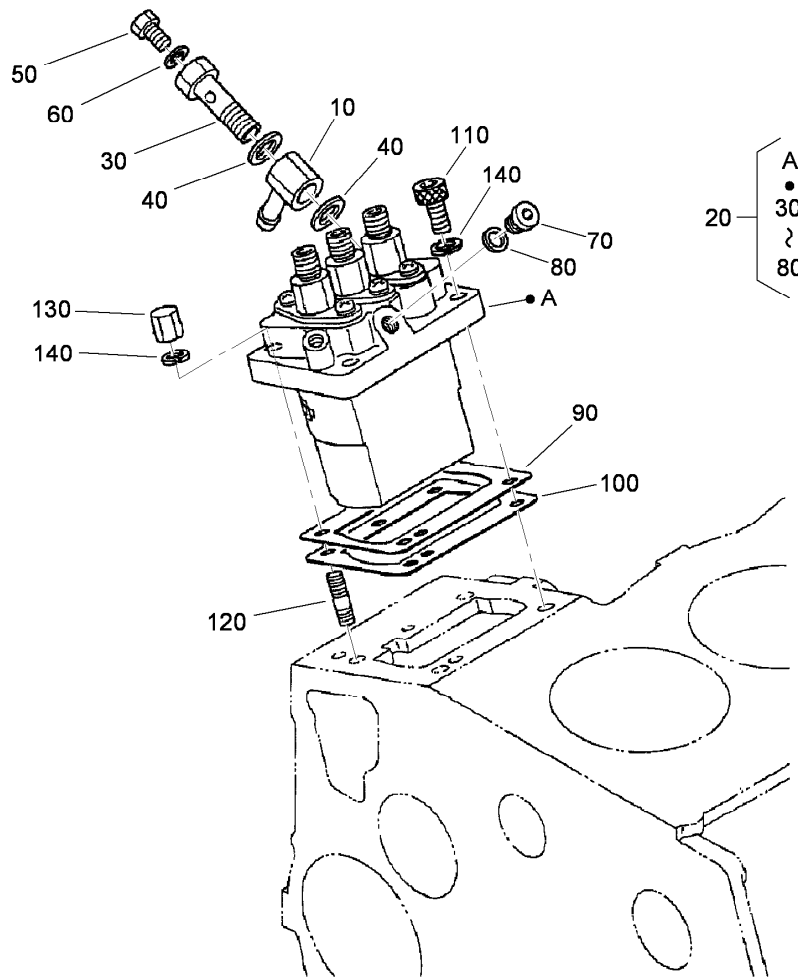
Fuel Camshaft and Governor Shaft Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9459	1	Camshaft-Fuel
20	107-9077	1	Bearing-Ball
30	107-9078	1	Bearing-Ball
60	98-9590	1	Nut-Cap
70	98-9669	1	Gear-Pump, Injection
80	98-9595	1	Key-Woodruff
90	98-9511	1	Stopper-Fuel, Camshaft
100	98-7692	2	Bolt
110	98-9644	1	Governor Shaft ASM
120	98-9562	1	Holder-Gear, Governor
130	98-9673	1	Gear-Governor
140	98-9561	1	Holder-Weight, Governor
150	98-9559	2	Governor Weight ASM
160	98-9560	2	Shaft-Weight, Governor
170	98-9692	2	Roller
180	98-9563	1	Sleeve-Governor
190	98-9564	1	Washer-Thrust
200	107-9079	1	Bearing-Ball
210	98-9657	1	Circlip-Shaft, Governor
220	98-9565	1	Screw-Set



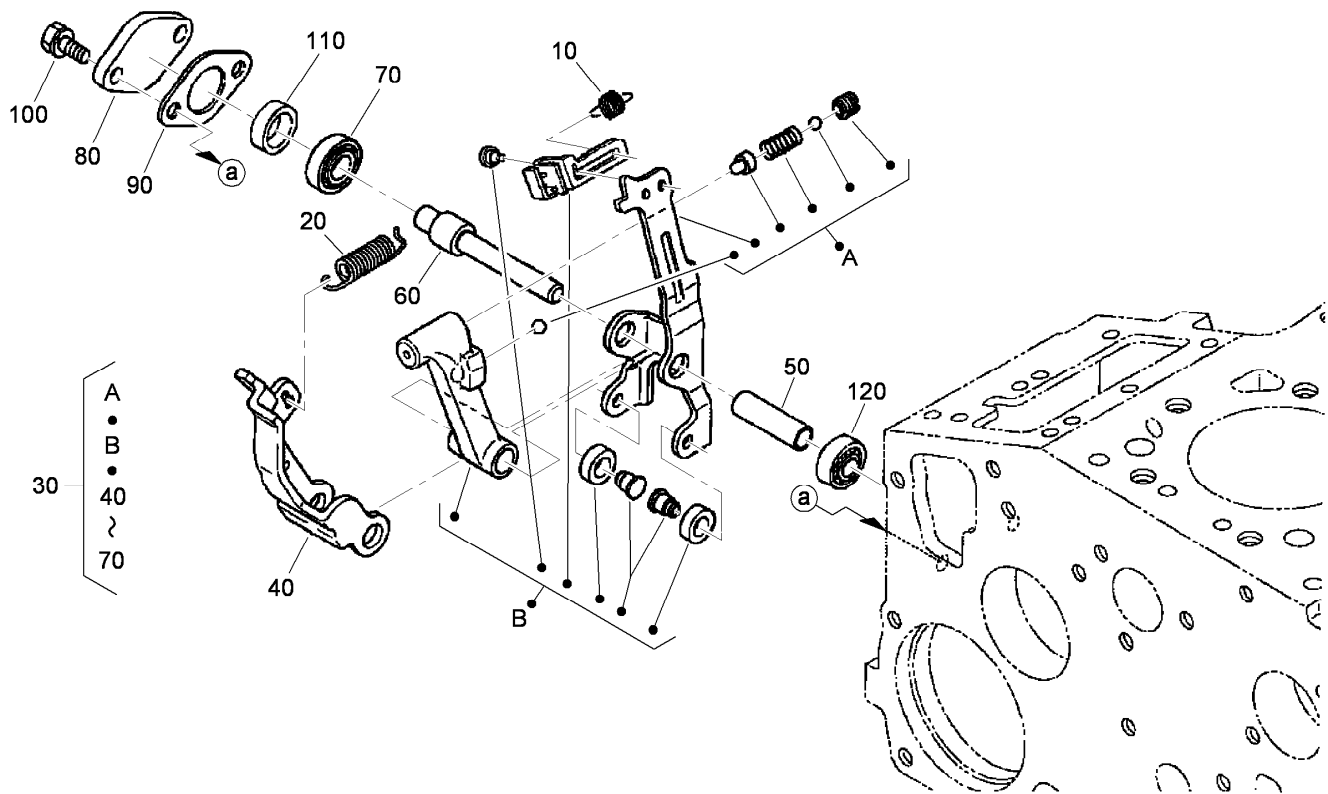
Idle Apparatus Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	115-4124	1	Apparatus-Idling
20	115-4125	1	Adjustment Bolt ASM
30	98-9439	1	Nut
40	112-0181	1	Nut
50	98-7654	2	Gasket
60	98-7656	1	Cap
70	112-7015	1	Bolt-Adjusting
80	100-2175	1	Nut-Lock
90	112-0181	1	Nut
100	98-7654	1	Gasket
110	107-9081	1	Gasket
120	112-7016	1	Cover-Pump



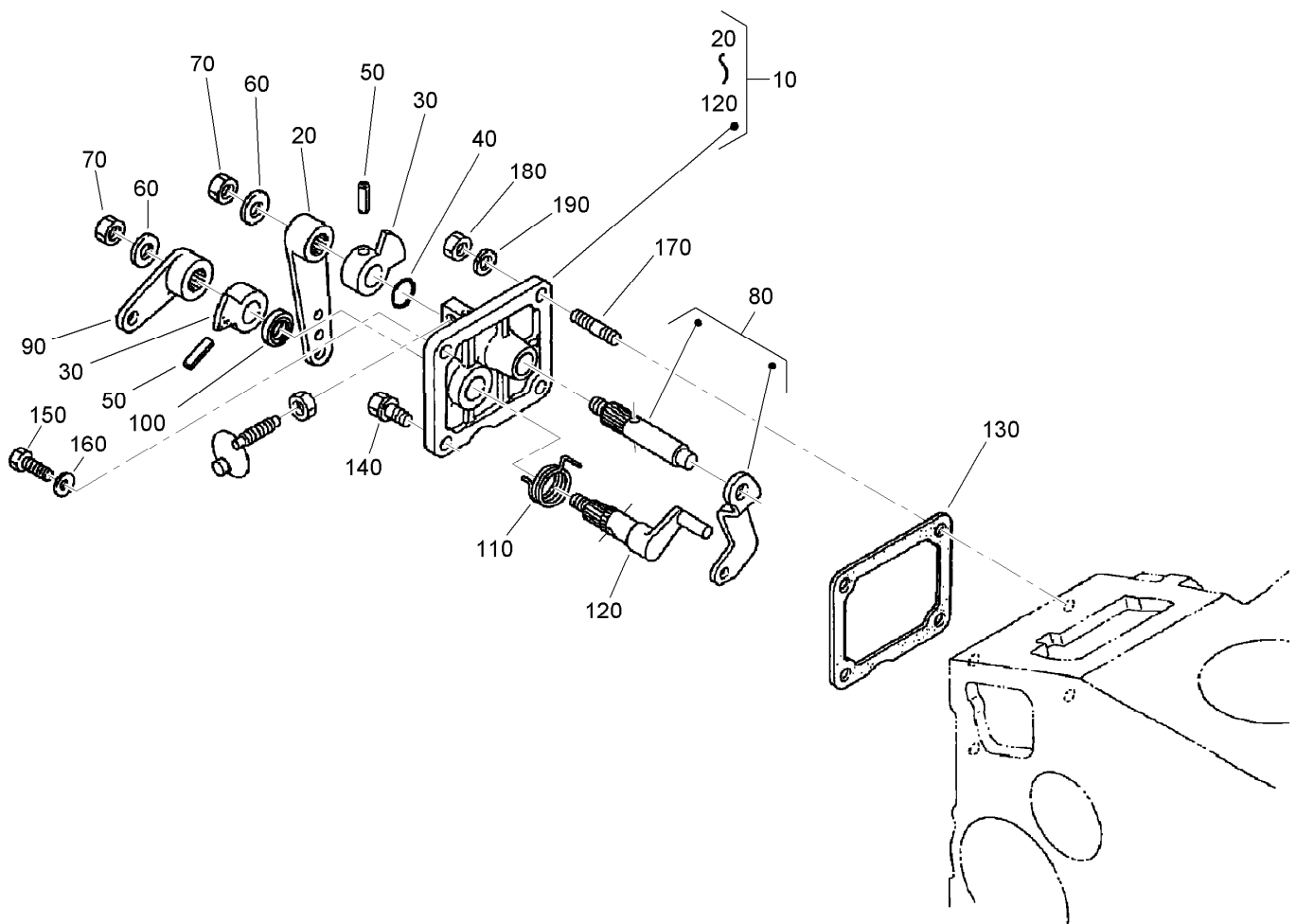
Injection Pump Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9596	1	Joint-Eye
20	98-9643	1	Injection Pump ASM
30	98-9464	1	Bolt-Joint
40	98-9445	2	Gasket
50	98-9430	1	Screw
60	98-9446	1	Gasket
70	98-9466	1	Plug
80	98-9451	1	Gasket
90	98-9456	1	Shim-Injection (0.20Mm)
90	98-9457	1	Shim-Injection (0.25Mm)
90	115-3045	1	Shim-Injection (0.175Mm)
100	98-9458	1	Shim-Injection (0.30Mm)
100	115-3046	1	Shim-Injection (0.35Mm)
110	98-9361	2	Bolt-HSH
120	98-9438	2	Stud
130	98-9440	2	Nut-Cap
140	98-7699	4	Washer-Spring



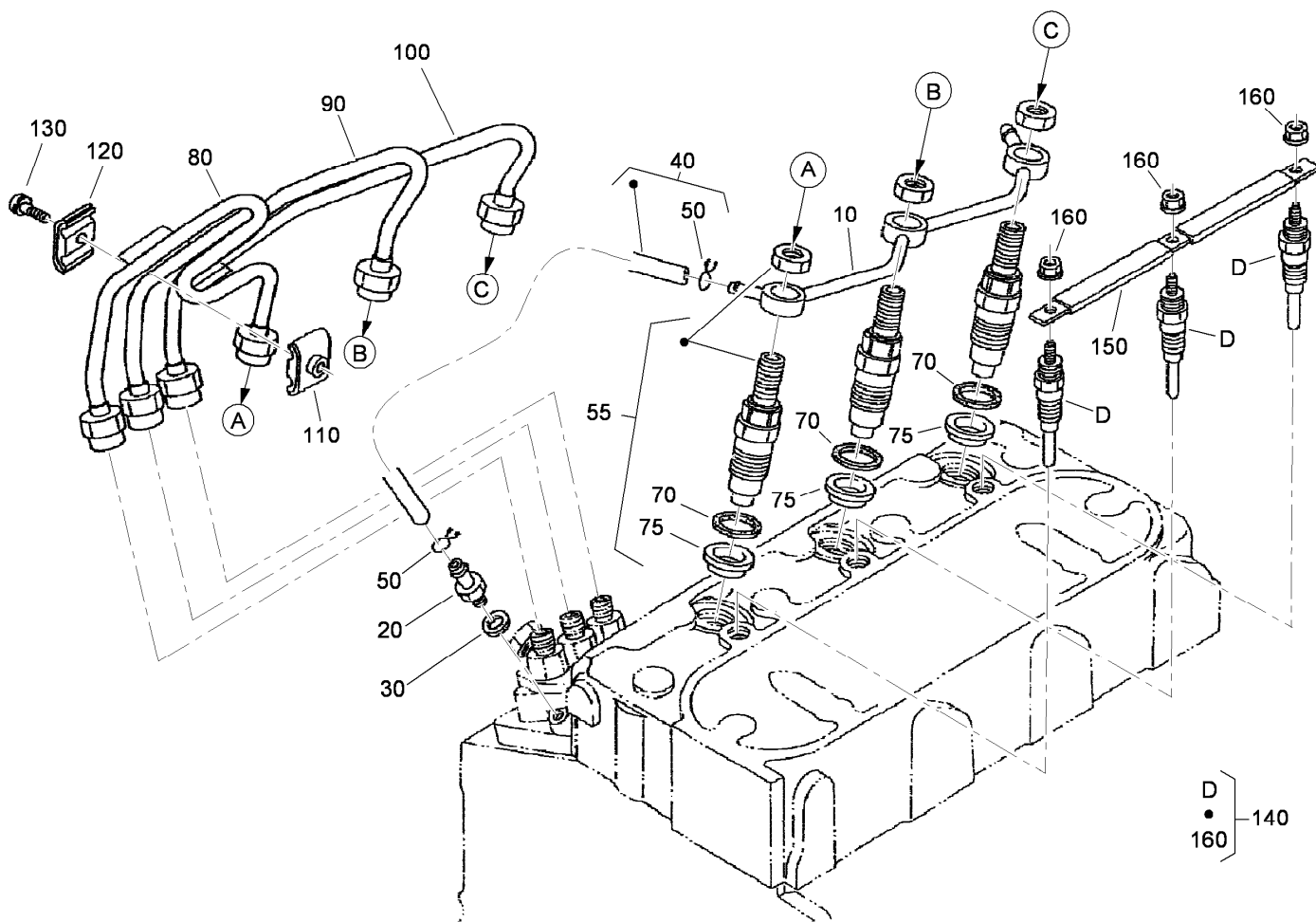
Governor Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	105-3786	1	Spring-Start
20	98-9681	1	Spring-Governor
30	115-4502	1	Fork Lever ASM
40	107-9084	1	Lever-Fork
50	107-9085	1	Shaft-Lever, Fork
60	107-9086	1	Shaft-Lever, Fork
70	98-9570	1	Bearing-Miniaturize
80	115-4122	1	Cover-Shaft, Fork Lever
90	98-9682	1	Gasket
100	98-9350	2	Bolt
110	98-9567	1	Collar
120	98-9571	1	Bearing-Miniaturize



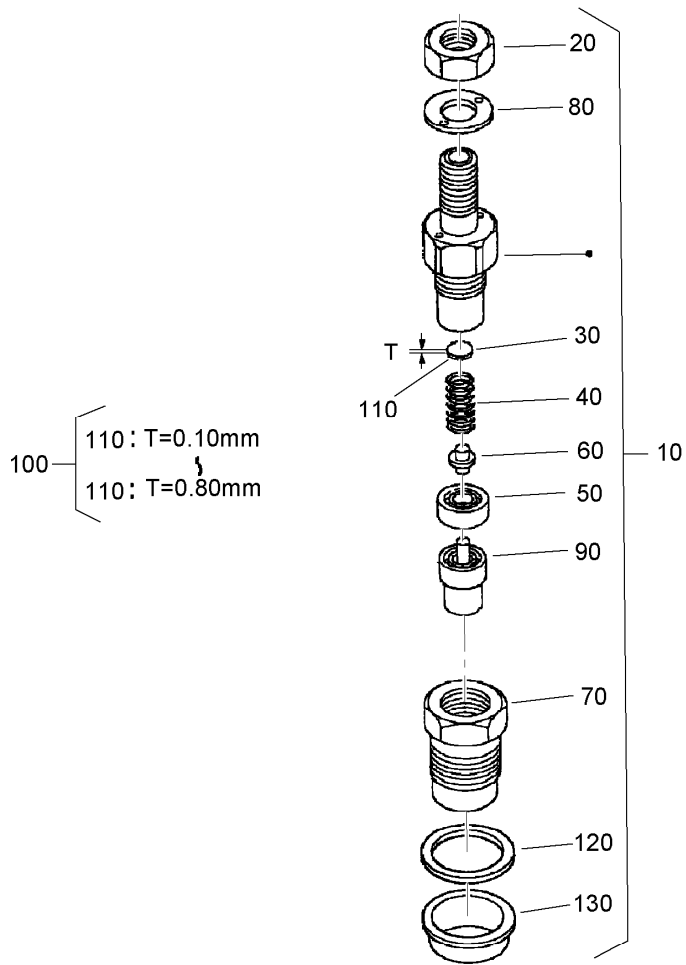
Speed Control Plate Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	105-3735	1	Control Plate ASM
20	98-9662	1	Lever-Control, Speed
30	98-9572	2	Lever-Control, Speed
40	105-3788	1	O-Ring
50	98-7602	2	Pin-Spring
60	98-9594	2	Washer-Plain
70	98-9589	2	Nut
80	98-9658	1	Governor Lever ASM
90	98-9663	1	Lever-Stop, Engine
100	98-7601	1	Seal-Oil
110	98-9472	1	Spring-Return
120	98-9664	1	Shaft-Lever, Stop
130	98-9637	1	Gasket
140	98-7692	1	Bolt
150	99-8348	1	Bolt
160	98-7654	1	Gasket
170	105-3710	2	Stud
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring



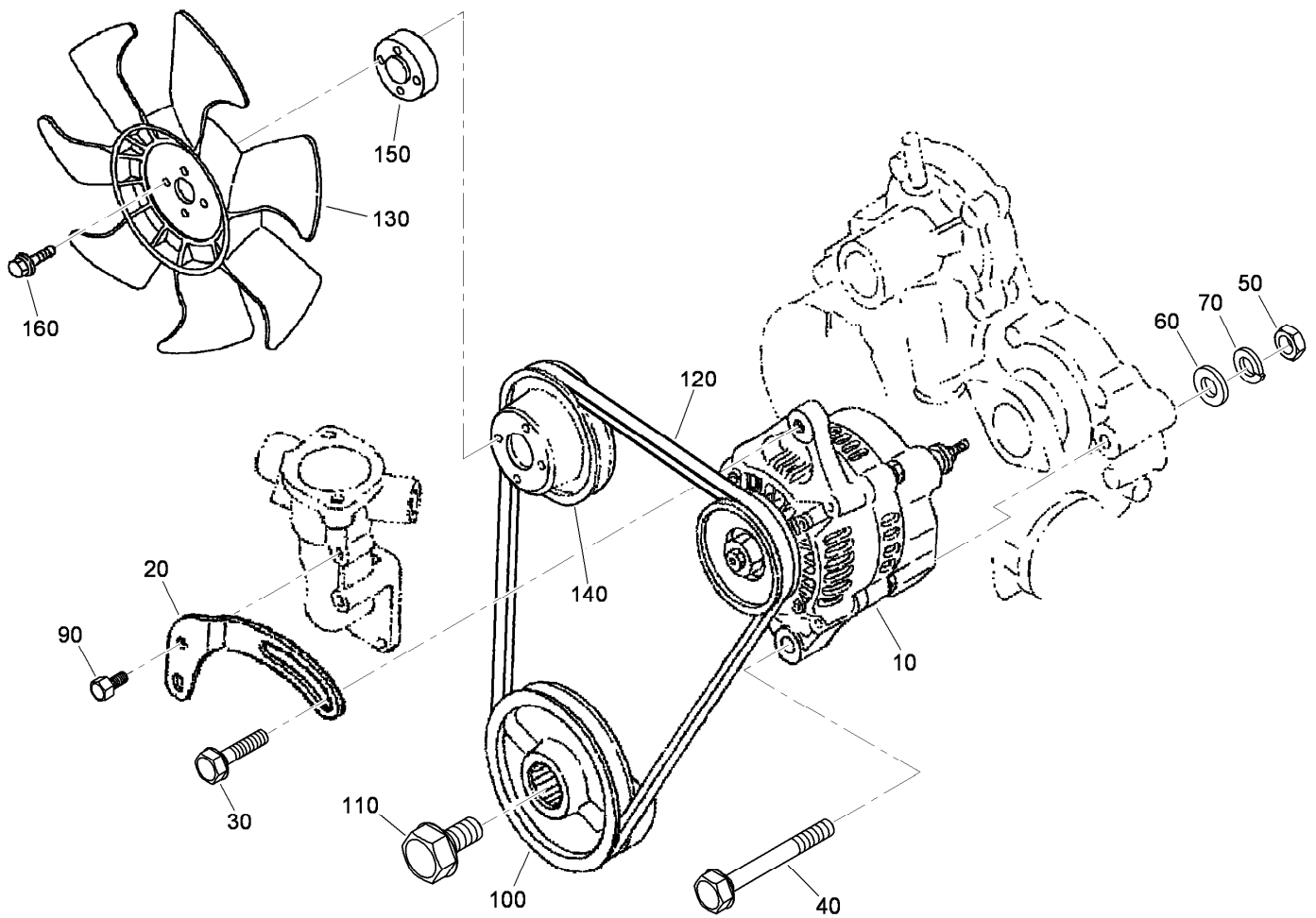
Nozzle Holder and Glow Plug Assembly

Ref.	Part Number	Qty.	Description
10	98-9621	1	Overflow Pipe ASM
20	98-9431	1	Screw-Bleeder, Air
30	98-7654	1	Gasket
40	98-9624	1	Overflow Pipe ASM
50	98-7671	2	Clip-Pipe
55	108-2866	3	Nozzle Holder Kit
70	98-7676	3	Gasket
75	98-7677	3	Seal-Heat
80	98-9622	1	Pipe-Injection
90	98-9654	1	Pipe-Injection
100	98-9655	1	Pipe-Injection
110	98-7682	2	Clamp-Pipe
120	98-7683	2	Clamp-Pipe
130	98-7684	2	Screw (W/Washer)
140	98-9623	3	Plug-Glow
150	98-9631	1	Cord-Plug, Glow
160	99-8377	3	Nut-Flange



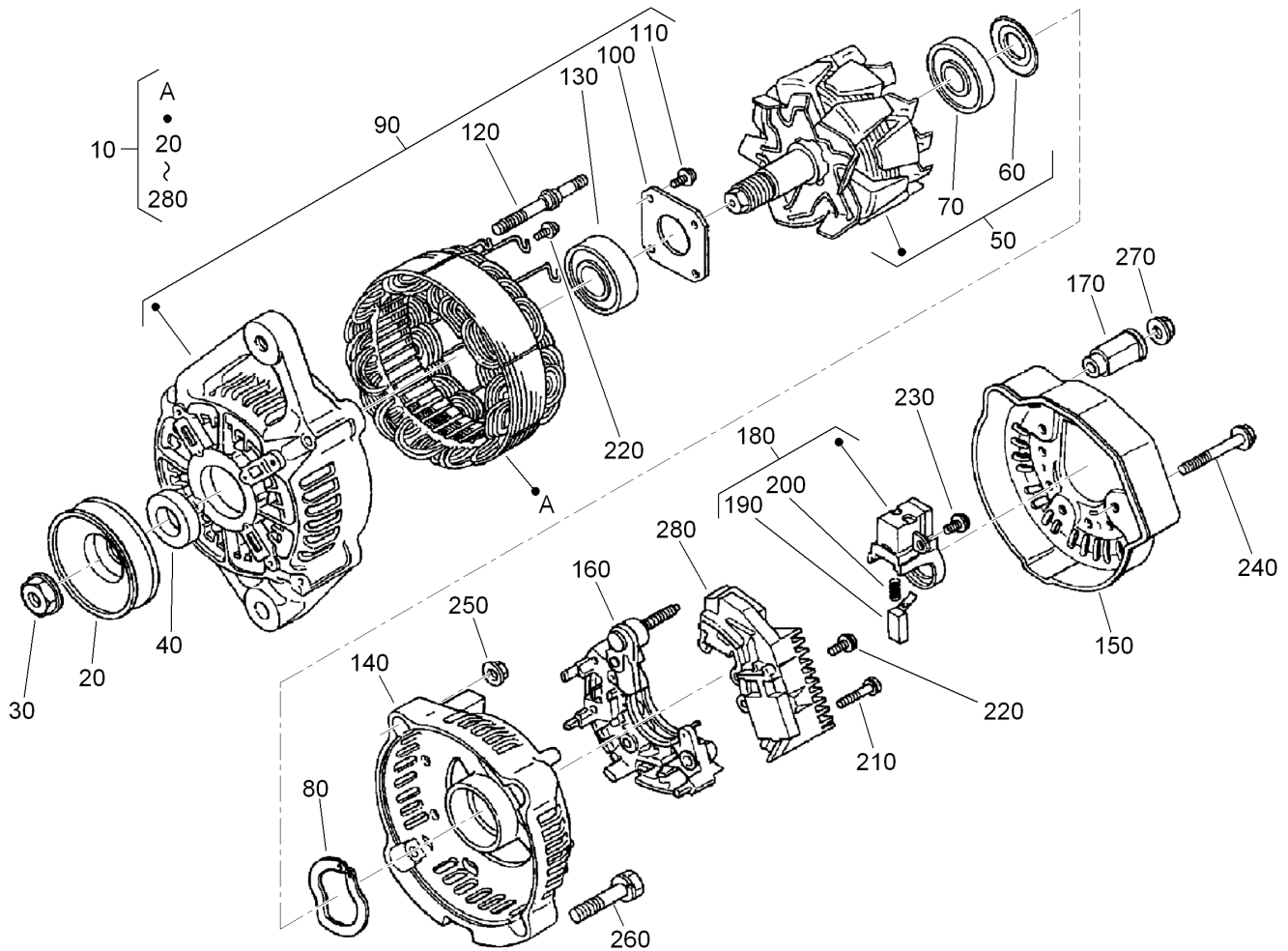
Nozzle Holder Assembly

Ref.	Part Number	Qty.	Description
10	108-2866	3	Nozzle Holder Kit
20	99-8301	3	Nut
30	99-8302	3	Washer-Adjusting
40	99-8303	3	Spring-Nozzle
50	99-8304	3	Spacer-Distance
60	99-8305	3	Rod-Push
70	99-8306	3	Nut-Nozzle
80	99-8307	3	Washer-Plain
90	107-7826	3	Piece-Nozzle
100	99-8309	3	Adjusting Washer ASM
110	99-8310	3	Washer-Adjust (0.10Mm)
110	99-8311	3	Washer-Adjust (0.20Mm)
110	99-8312	3	Washer-Adjust (0.30Mm)
110	99-8313	3	Washer-Adjust (0.40Mm)
110	99-8314	3	Washer-Adjust (0.50Mm)
110	99-8315	3	Washer-Adjust (0.52Mm)
110	99-8316	3	Washer-Adjust (0.54Mm)
110	99-8317	3	Washer-Adjust (0.56Mm)
110	99-8318	3	Washer-Adjust (0.58Mm)
110	99-8319	3	Washer-Adjust (0.80Mm)
120	98-7676	3	Gasket
130	98-7677	3	Seal-Heat



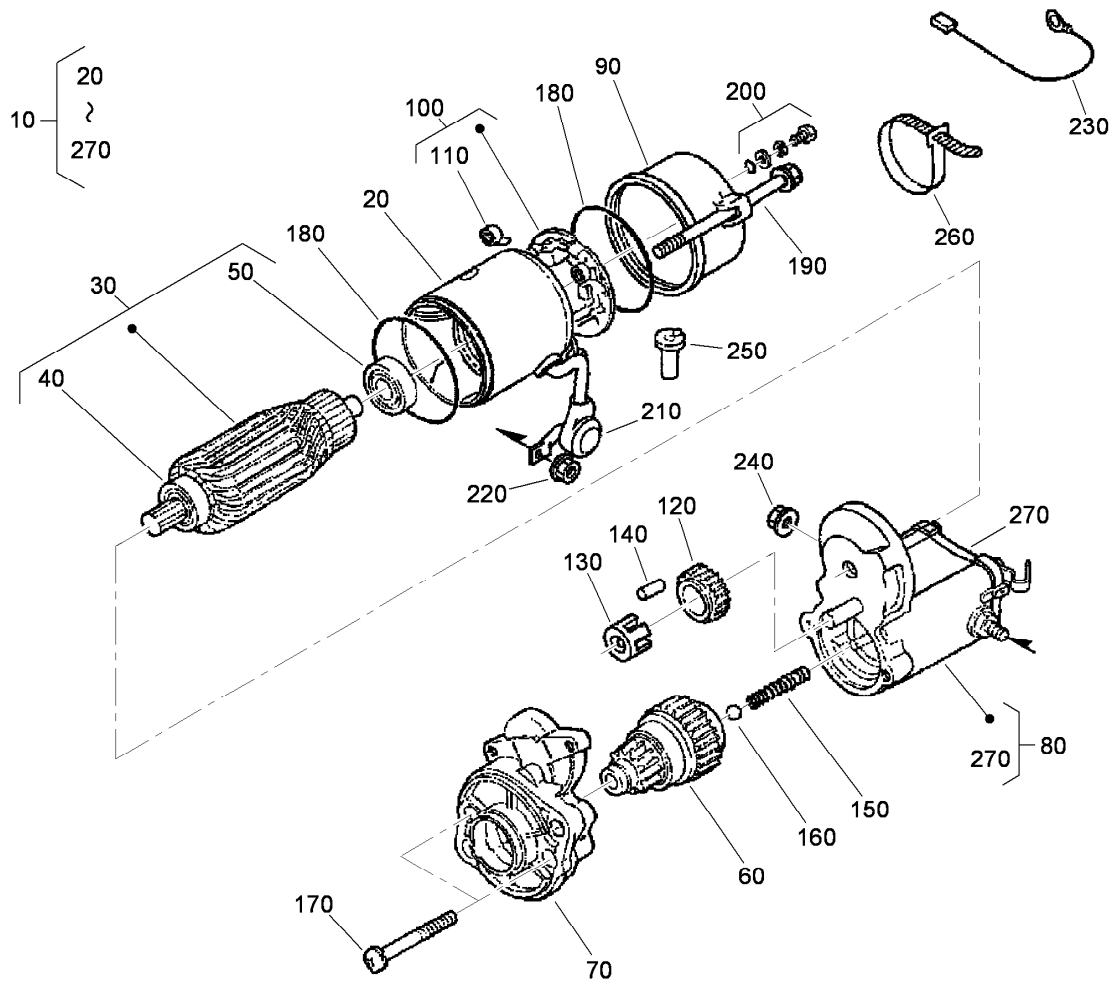
Alternator and Pulley Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9474	1	Alternator ASM
20	112-7047	1	Stay-Dynamo
30	108-7088	1	Bolt
40	98-9360	1	Bolt
50	98-7737	1	Nut
60	98-9366	1	Washer-Plain
70	98-7738	1	Washer-Spring
90	98-7692	1	Bolt
100	99-3456	1	Pulley-Drive, Fan
110	98-9585	1	Bolt
120	98-9676	1	V-Belt
130	104-4246	1	Fan-Engine
140	98-9584	1	Pulley-Fan
150	108-2872	1	Collar-Fan
160	108-2873	4	Bolt-Flange



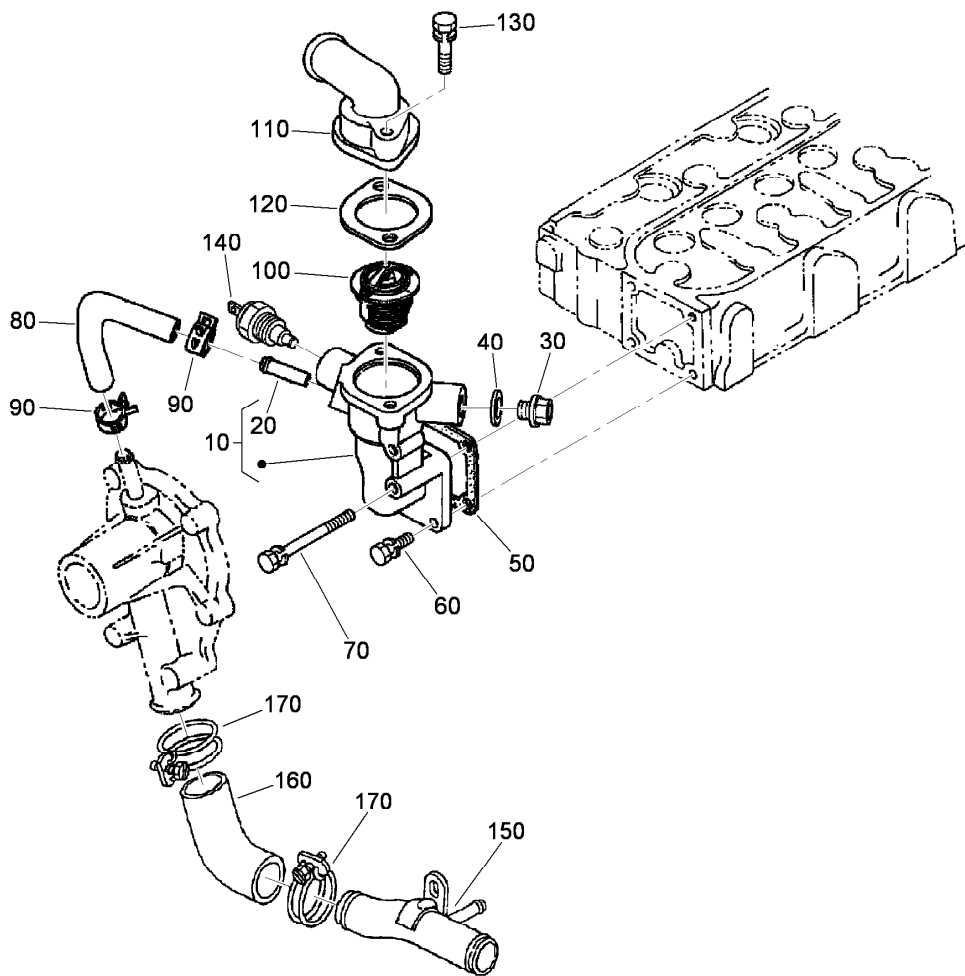
Alternator Components Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9474	1	Alternator ASM	150	107-0140	1	Cover-End
20	98-9453	1	Pulley-Dynamo	160	98-7721	1	Rectifier ASM
30	98-7708	1	Nut	170	98-7722	1	Bushing-Insulation
40	98-7709	1	Collar	180	107-0141	1	Brush Holder ASM
50	107-0136	1	Rotor ASM	190	98-7724	2	Brush
60	98-7711	1	Cover-Bearing	200	98-7725	2	Spring-Brush
70	107-0138	1	Bearing-Ball	210	98-7726	2	Screw-Head, Round
80	98-7713	1	Washer-Thrust	220	98-7727	6	Screw-Head, Round
90	107-0139	1	Drive End Frame ASM	230	98-7728	1	Screw-Head, Round
100	98-7715	1	Plate-Retainer	240	98-7729	3	Bolt
110	98-7716	4	Screw-Head, Round	250	98-7730	2	Nut
120	98-7717	2	Bolt-Through	260	98-7731	2	Bolt
130	107-0137	1	Bearing-Ball	270	98-7732	1	Nut
140	107-9087	1	Frame-End	280	110-3799	1	Regulator ASM



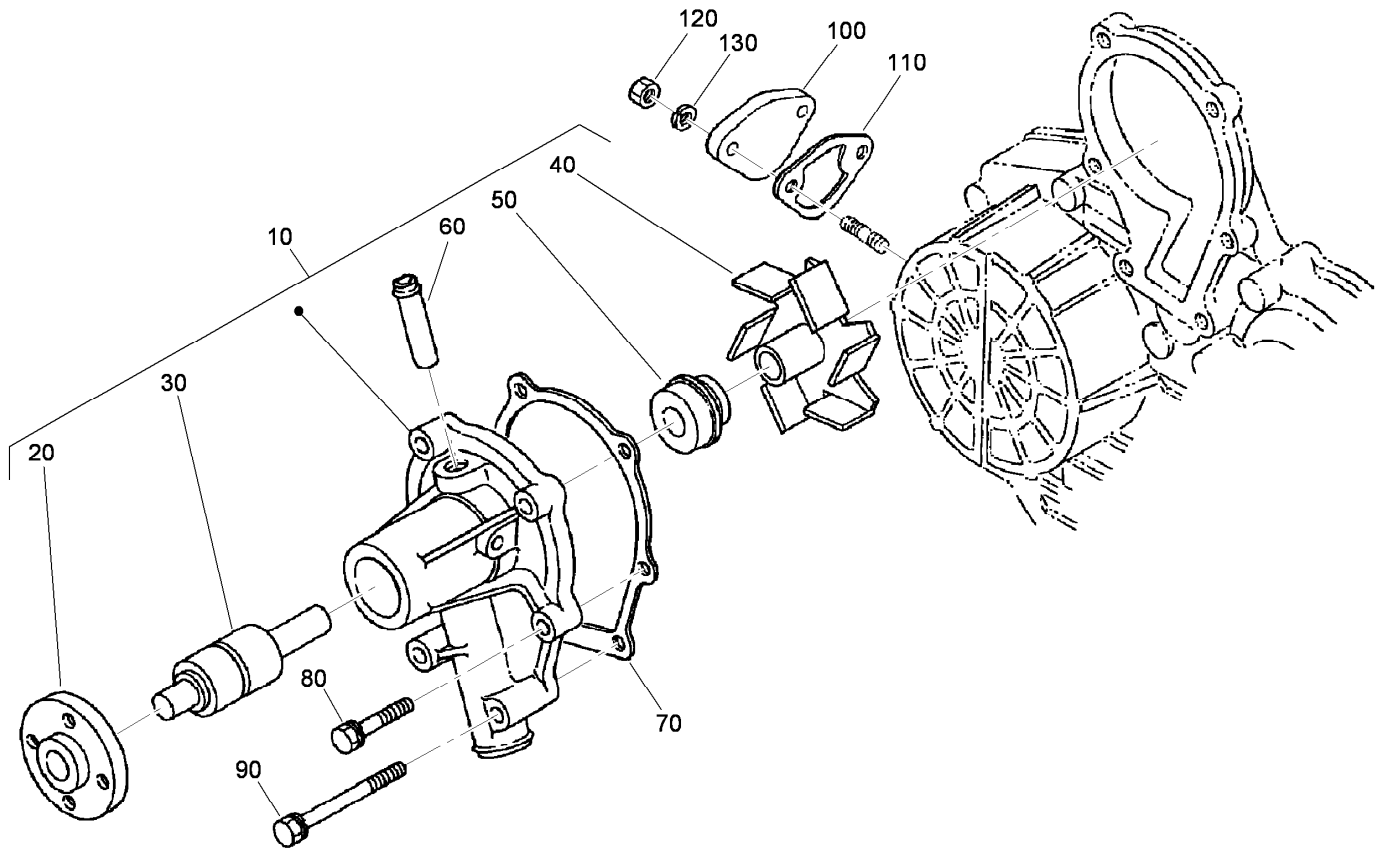
Starter Components

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9705	1	Starter ASM	150	98-7754	1	Spring
20	104-8608	1	Yoke ASM	160	98-7755	1	Ball
30	98-7742	1	Armature ASM	170	98-7756	2	Bolt
40	98-7744	1	Bearing	180	98-7757	2	O-Ring
50	98-7743	1	Bearing	190	100-9240	2	Bolt
60	99-8373	1	Clutch-Running, Over	200	98-7758	2	Bolt ASM
70	99-8374	1	Frame-End, Drive	210	99-8375	1	Cover
80	105-3746	1	Magnetic Switch ASM	220	99-8371	1	Nut-Hex
90	98-7748	1	Frame-End	230	98-9711	1	Cord-Solenoid, Stop
100	98-7749	1	Brush Holder ASM	240	99-8376	1	Nut-Hex
110	98-7750	4	Spring-Brush	250	98-7759	1	Pipe-Drain
120	98-7751	1	Gear	260	98-9712	1	Band-Cover
130	98-7752	1	Retainer	270	105-2886	1	Cover ASM
140	98-7753	5	Roller				



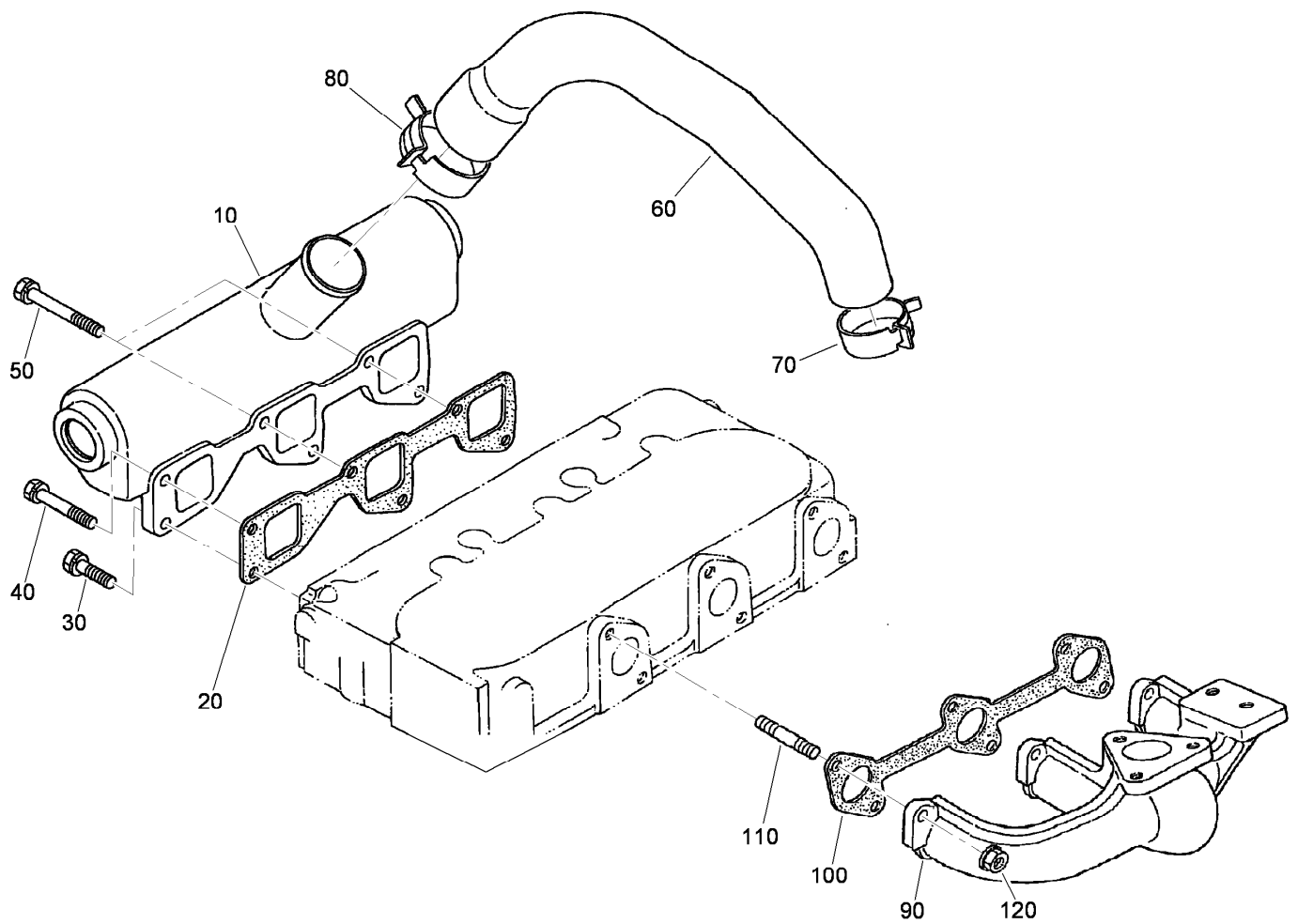
Water Flange and Thermostat Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9713	1	Water Flange ASM
20	98-9580	1	Pipe-Return, Water
30	105-3747	1	Plug
40	99-3583	1	Gasket
50	98-9638	1	Gasket-Flange, Water
60	98-7692	3	Bolt
70	98-9356	1	Bolt
80	98-9578	1	Pipe-Return, Water
90	98-9579	2	Band-Pipe
100	98-7778	1	Thermostat ASM
110	104-4804	1	Outlet-Water
120	105-3748	1	Gasket-Thermostat
130	98-7777	2	Bolt
140	98-9719	1	Thermoswitch
150	99-8379	1	Pipe-Water
160	107-9091	1	Pipe-Water
170	98-9717	2	Clamp



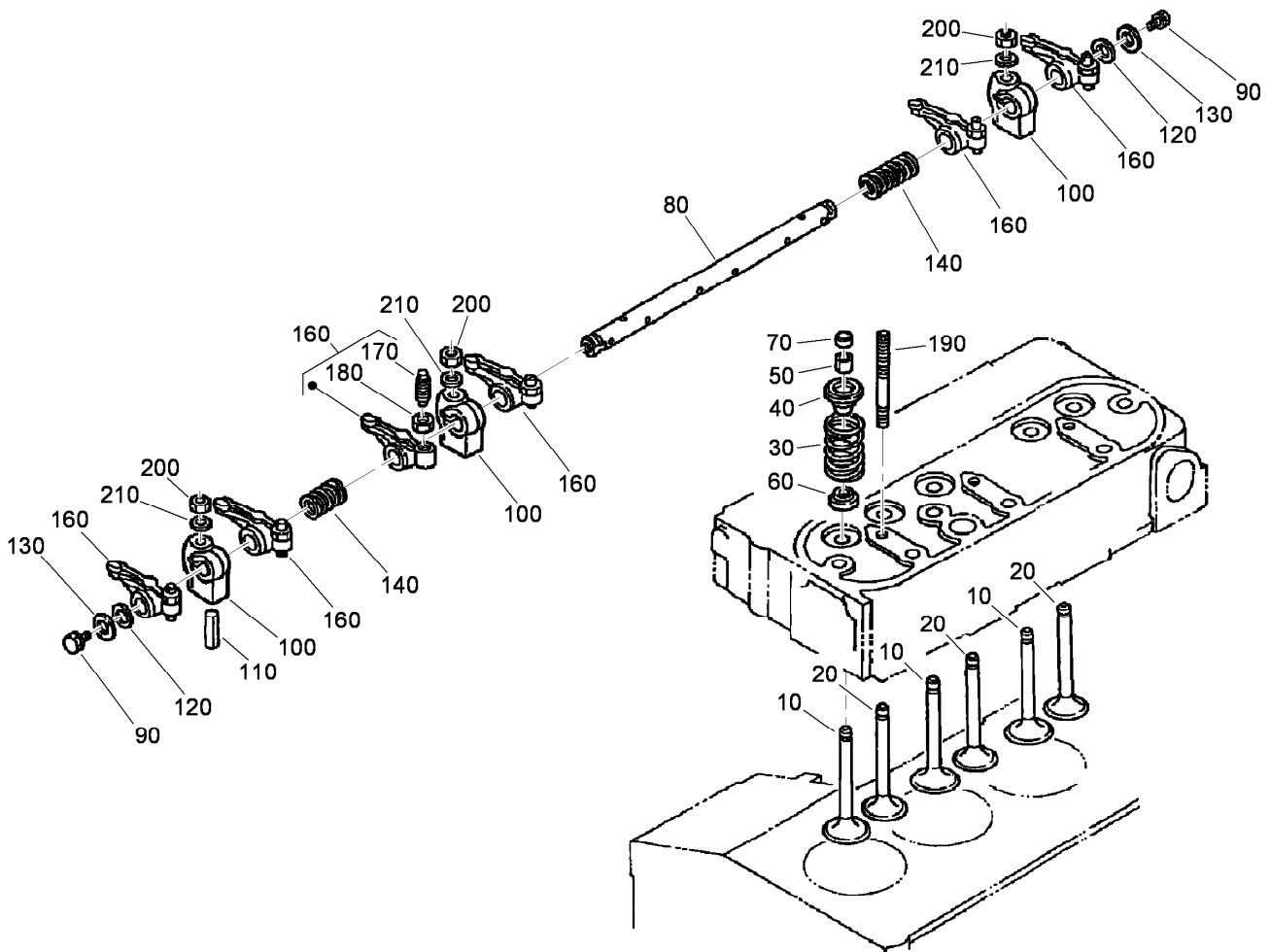
Water Pump and Fuel Pump Cover Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-9089	1	Water Pump ASM
20	99-3516	1	Flange-Pump, Water
30	99-3517	1	Bearing-Pump, Water
40	105-3750	1	Mechanical Seal ASM
50	112-7017	1	Impeller-Pump, Water
60	100-1932	1	Pipe-Return, Water
70	99-3454	1	Gasket-Pump, Water
80	98-9353	4	Bolt
90	98-9357	2	Bolt
100	99-3514	1	Cover
110	98-9636	1	Gasket-Pump, Fuel
120	98-7572	2	Nut
130	98-7699	2	Washer-Spring



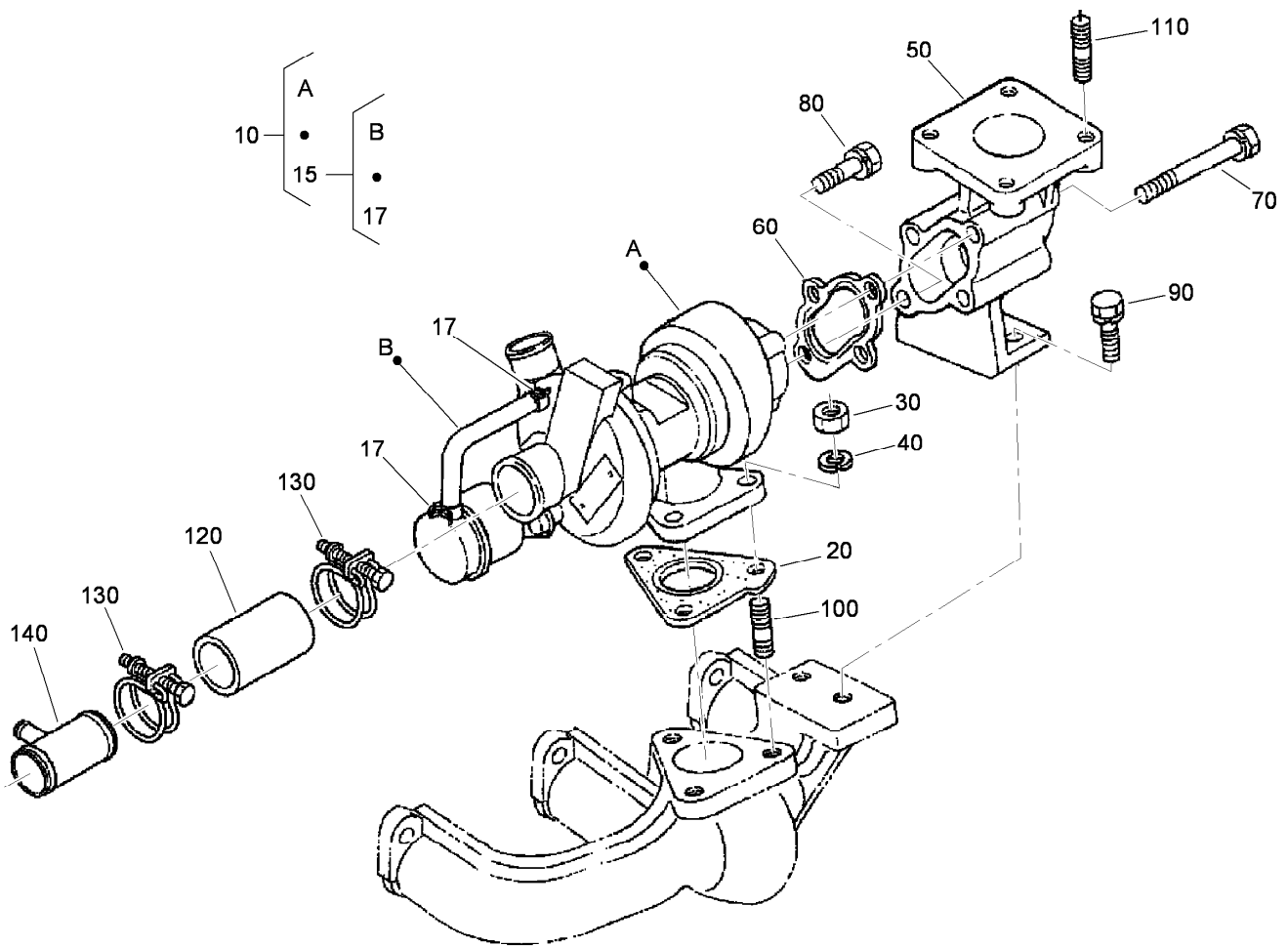
Inlet and Exhaust Manifold Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	99-8321	1	Manifold-Inlet
20	99-8329	1	Gasket-Manifold, Intake
30	98-7568	3	Bolt
40	107-9073	1	Bolt
50	99-8320	2	Bolt
60	115-3047	1	Hose-Inlet
70	115-3048	1	Clamp-Hose
80	115-3049	1	Clamp-Hose
90	108-1411	1	Manifold-Exhaust
100	99-8327	1	Gasket-Manifold, Exhaust
110	98-9588	6	Stud
120	98-9665	6	Nut



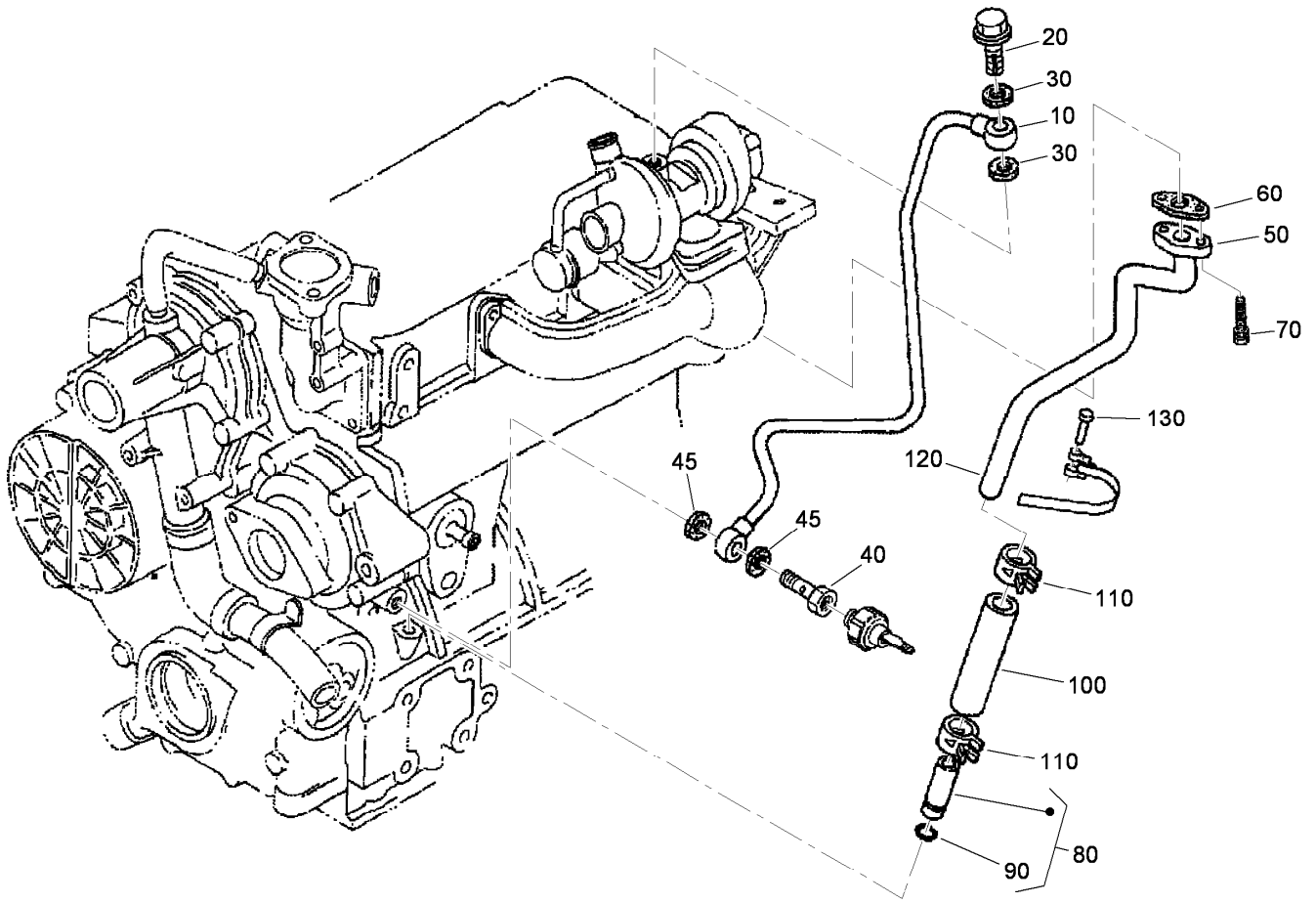
Valve and Rocker Arm Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7018	3	Valve-Inlet
20	112-7019	3	Valve-Exhaust
30	98-9626	6	Spring-Valve
40	107-9092	6	Retainer-Spring
50	98-9390	6	Collet-Spring, Valve
60	99-8385	6	Seal-Stem, Valve
70	98-9497	6	Cap-Valve
80	105-3790	1	R-Arm Shaft ASM
90	100-9265	2	Bolt
100	98-9505	3	Bracket-Arm, Rocker
110	105-3758	1	Pin-Spring
120	98-9507	2	Washer-Shaft, R-Arm
130	110-3832	2	Washer-Plain
140	98-9504	2	Spring-Arm, Rocker
160	112-7020	6	Rocker Arm ASM
170	98-9502	6	Screw-Adjusting
180	98-9503	6	Nut
190	98-9506	3	Stud
200	98-9393	3	Nut
210	98-9385	3	Washer-Flat



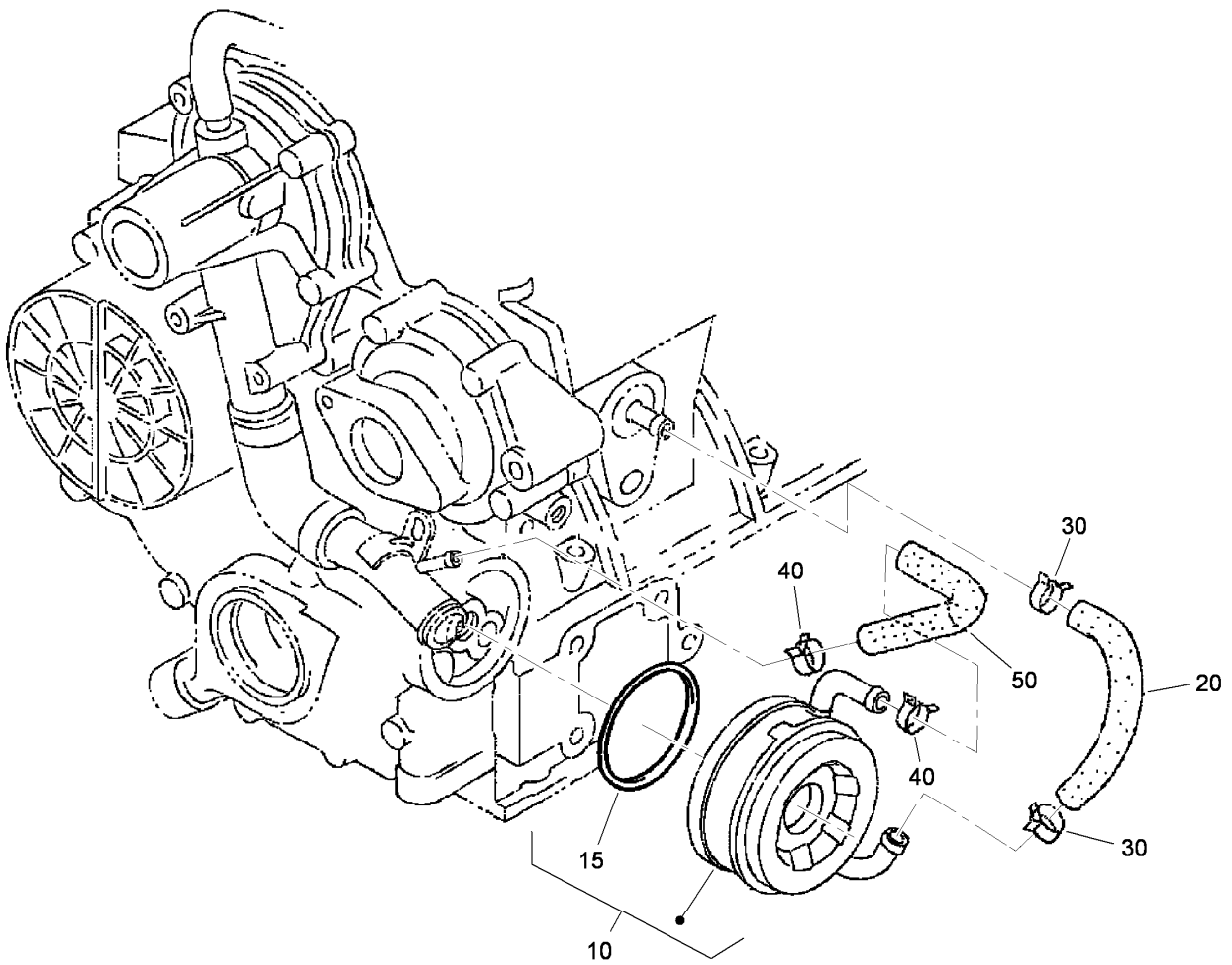
Turbo Charger Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-1412	1	Turbo Charger ASM
15	108-1413	1	Hose ASM
17	108-1414	2	Clamp-Hose
20	105-3767	1	Gasket
30	98-7534	3	Nut
40	105-2893	3	Washer-Spring
50	99-8335	1	Flange-Muffler
60	105-3768	1	Gasket
70	115-4100	3	Bolt
80	105-2895	1	Bolt
90	98-7610	2	Bolt
100	99-8342	3	Stud
110	98-7769	4	Stud
120	115-4101	1	Tube-Inlet, Turbo
130	115-4102	2	Band
140	115-4103	1	Pipe-Inlet, Breather



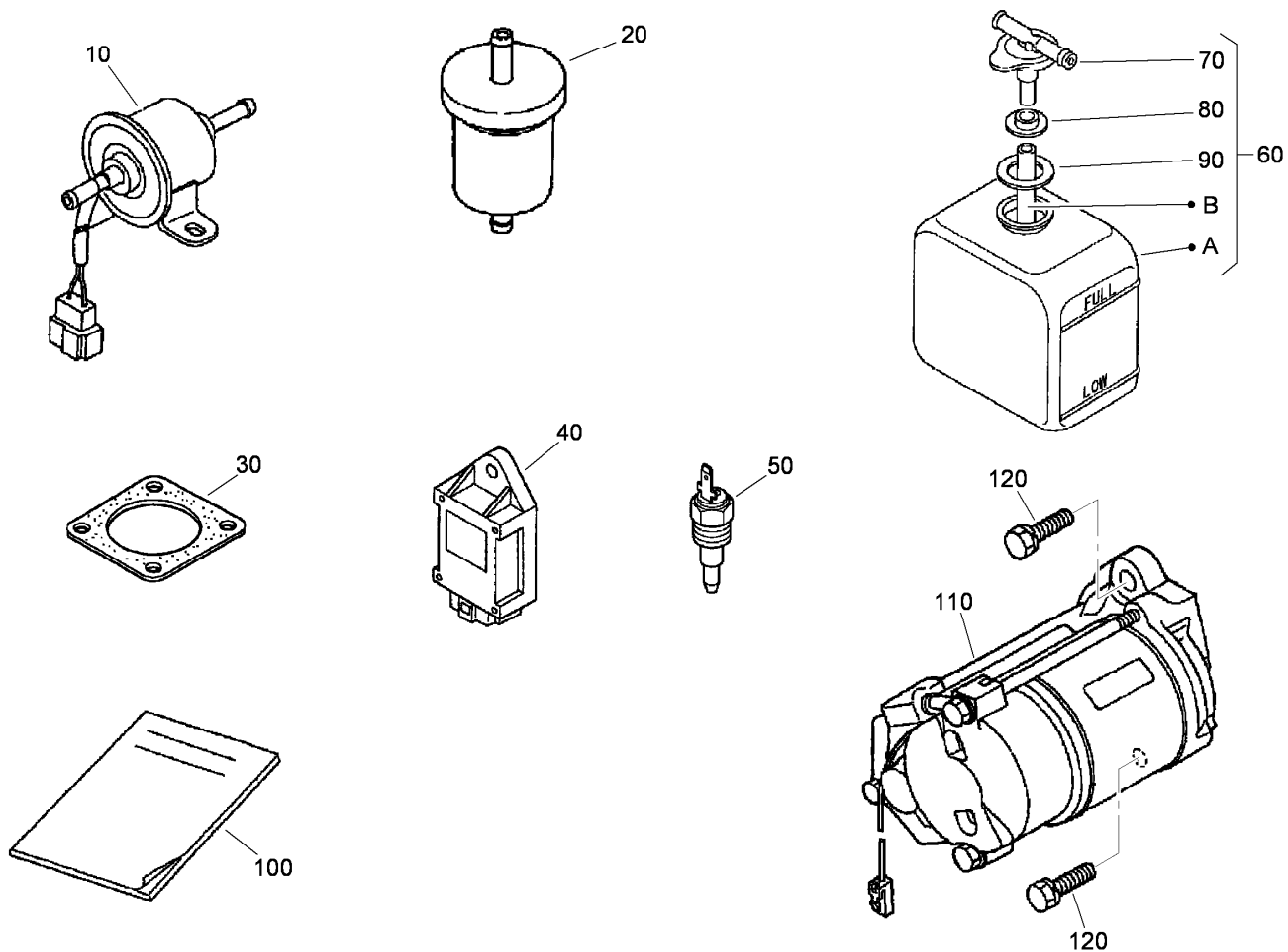
Oil Pipe (Turbo Charger) Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9419	1	Oil Pipe ASM
20	115-4126	1	Bolt-Joint, Eye
30	99-8346	2	Gasket
40	98-9417	1	Bolt-Joint, Eye
45	99-8346	2	Gasket
50	98-9461	1	Pipe Line ASM
60	108-4422	1	Gasket
70	98-7605	2	Bolt
80	99-8383	1	Oil Pipe ASM
90	98-9722	1	O-Ring
100	98-9721	1	Pipe-Oil
110	98-9714	2	Clamp-Hose
120	98-9601	1	Clamp-Pipe
130	98-9591	1	Pin-Band



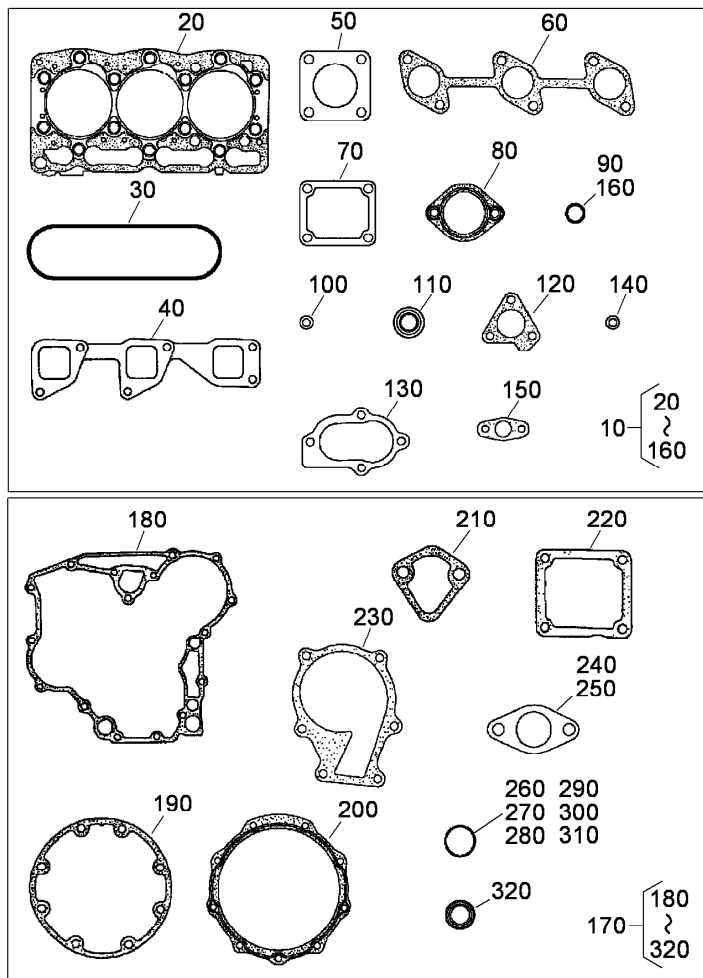
Oil Cooler Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	104-5158	1	Oil Cooler ASM
15	112-7030	1	O-Ring
20	98-9724	1	Pipe-Cooler, Oil
30	98-9579	2	Band-Pipe
40	98-9579	2	Band-Pipe
50	98-9578	1	Pipe-Return, Water



Starter, Overflow Bottle and Miscellaneous Engine Parts

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-0122	1	Pump-Fuel, Electric
20	98-7612	1	Filter-Fuel
30	98-9611	1	Gasket
40	98-7611	1	Controller-Glow
50	106-7772	1	Thermoswitch
60	104-9318	1	Overflow Bottle ASM
70	115-4132	1	Cap
80	105-3755	1	Gasket
90	105-3756	1	Plate
100	115-4104	1	Operator Manual
110	98-9705	1	Starter ASM
120	98-7697	2	Bolt



Upper and Lower Gasket Kits

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
10	108-1415	1	Upper Gasket Kit	170	112-7041	1	Lower Gasket Kit
20	108-6573	1	Gasket-Head, Cylinder ●	180	98-9633	1	Gasket-Case, Gear ●
30	98-9615	1	Gasket-Cover, Head ●	190	98-9634	1	Gasket-Case, Bearing ●
40	99-8329	1	Gasket-Manifold, Intake ●	200	112-7037	1	Gasket-Cover, Case ●
50	99-8343	1	Gasket-Muffler ●	210	98-9636	1	Gasket-Pump, Fuel ●
60	99-8327	1	Gasket-Manifold, Exhaust ●	220	98-9637	1	Gasket ●
70	98-9638	1	Gasket-Flange, Water ●	230	98-9632	1	Gasket-Pump, Water ●
80	105-3748	1	Gasket-Thermostat ●	240	98-9683	1	Gasket-Cover, Solenoid ●
90	99-3446	1	O-Ring ●	250	98-9682	1	Gasket ●
100	98-9454	3	Gasket ●	260	105-3781	2	O-Ring ●
110	99-8385	6	Seal-Stem, Valve ●	270	105-3777	2	O-Ring ●
120	105-3767	1	Gasket ●	280	105-3783	1	O-Ring ●
130	105-3768	1	Gasket ●	290	105-3776	1	O-Ring ●
140	99-8346	4	Gasket ●	300	98-9729	1	O-Ring ●
150	108-4422	1	Gasket ●	310	105-3788	1	O-Ring ●
160	98-9722	1	O-Ring ●	320	98-7601	1	Seal-Oil ●

● Not illustrated

Attachments and Accessories

For 30839 Groundsmaster 3500-D Traction Unit

Product Name	Model/Part
Blade-Lift, High	104-5183
Blade-Angle Sail	105-9810-03
Blade-Atomic	107-0235-03
27in Blade Service Pack	108-1462
Blade-Combo.....	108-9026-03
400-hour Filter Maintenance Kit.....	30058
Premium Seat Kit.....	30629
27in Rotary Cutting Unit.....	30834
Leaf Mulching Kit	30836
Work Light Kit	30841



Count on it.