



Count on it.

Parts Catalog

Groundsmaster® 3500-D

Traction Unit

Model No. 30839—Serial No. 31200001 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

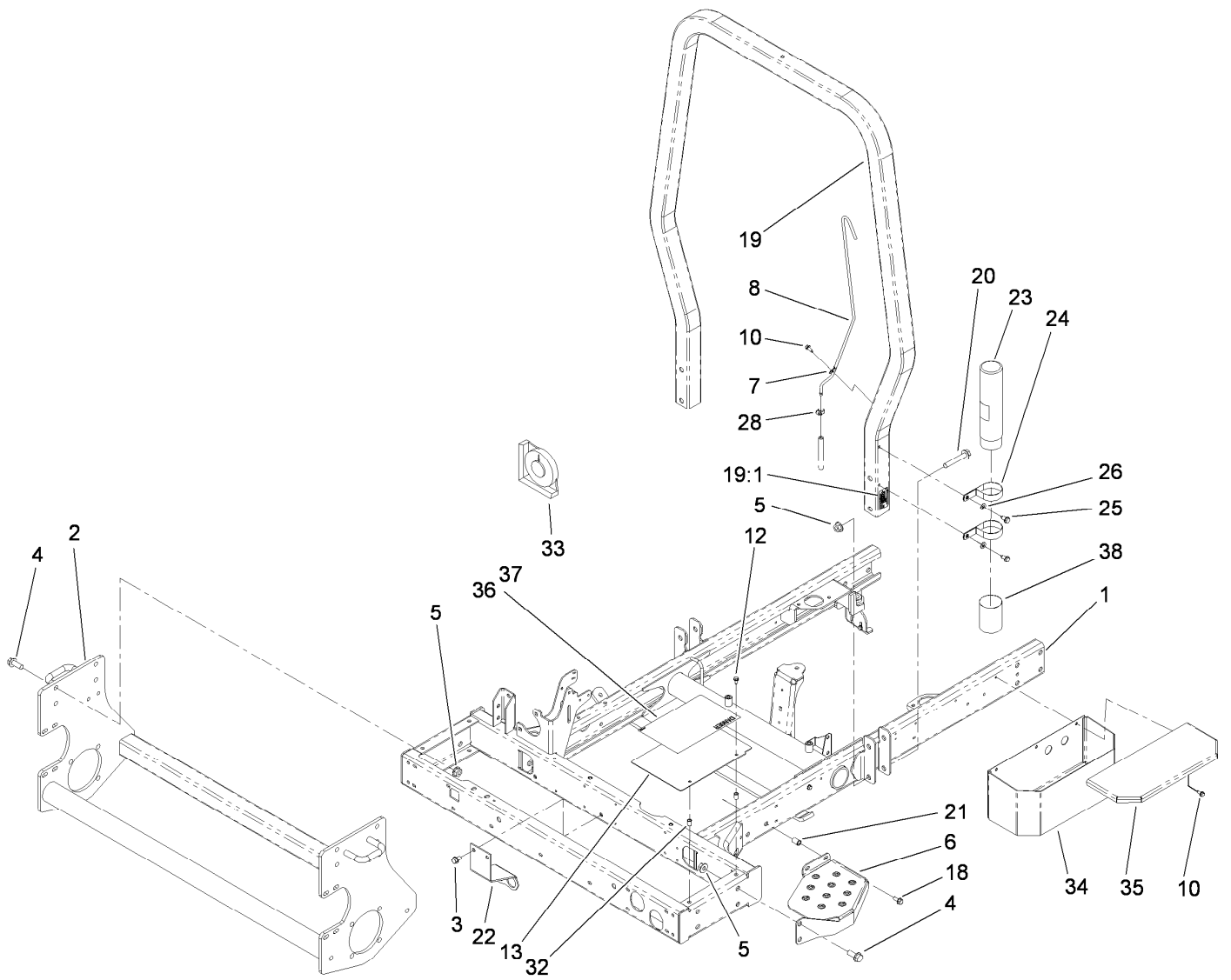
TTH: torx truss head

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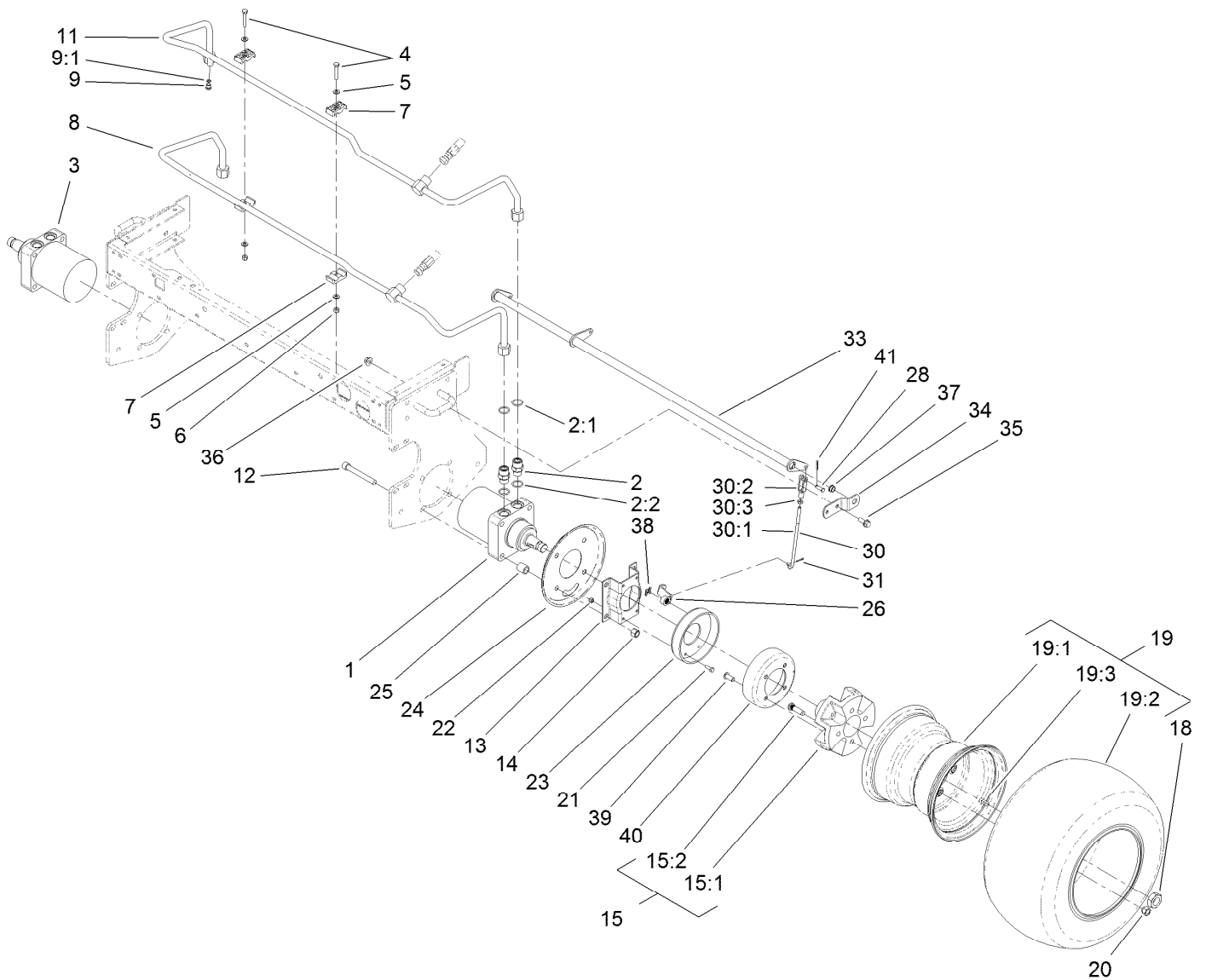
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Frame Assembly

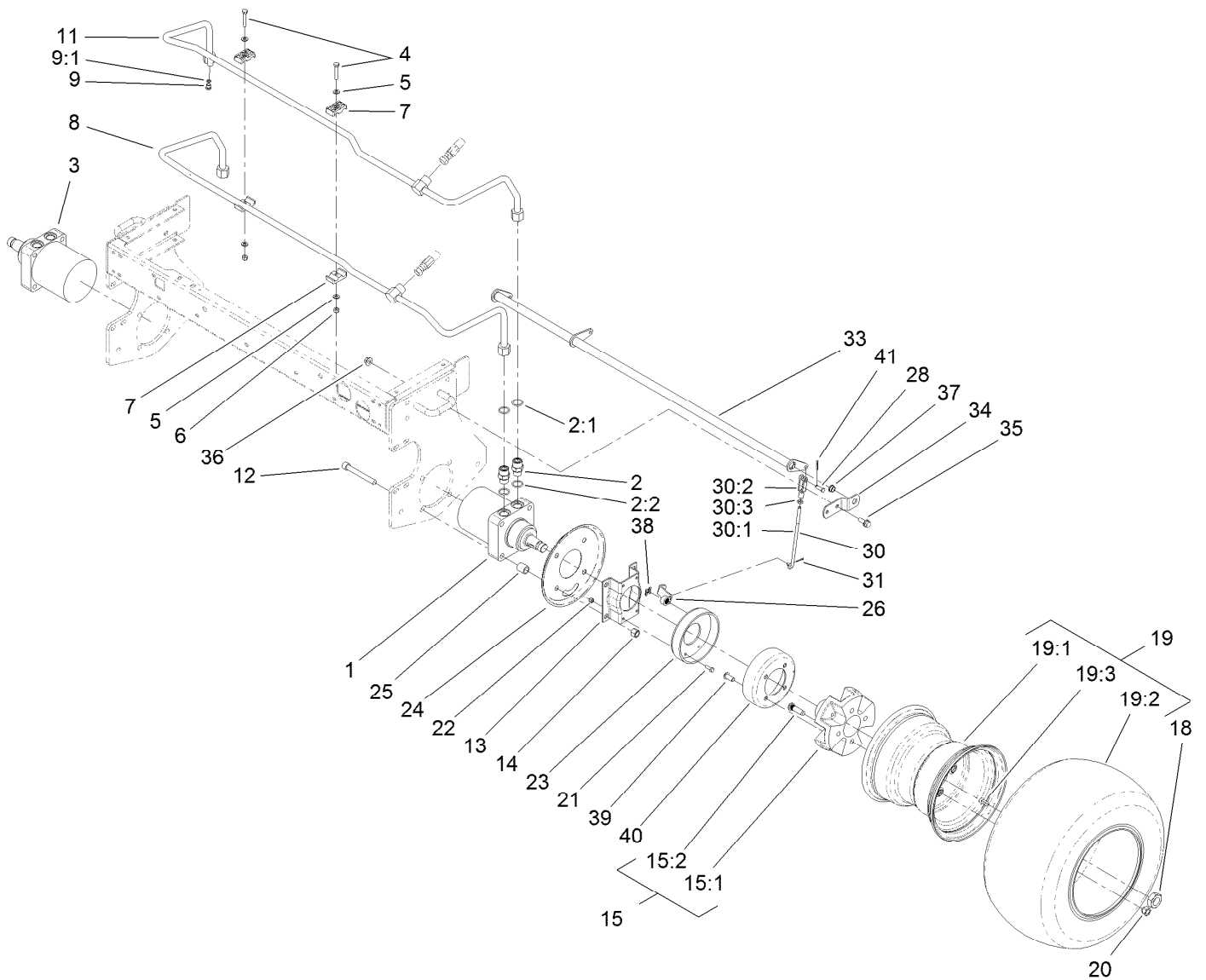
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	99-3610-03	1	Frame ASM	21	32148-8	2	Insert-Threaded
2	95-8568-03	1	Frame-Lower	22	115-3417-03	1	Bracket-Bulkhead, Scissor
3	32144-15	2	Screw-HHFTF	23	104-7050	1	Tube-Manual
4	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	Wheel And Tire 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	119-8238	8	Spacer-Deck Pulley
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	15	2	Wheel Hub / Stud ASM ●	30:2	1-303105	1	Yoke-Adjustable
15:1	104-0462	1	Hub-Wheel, Spacer	30:3	3220-2	1	Nut-Jam

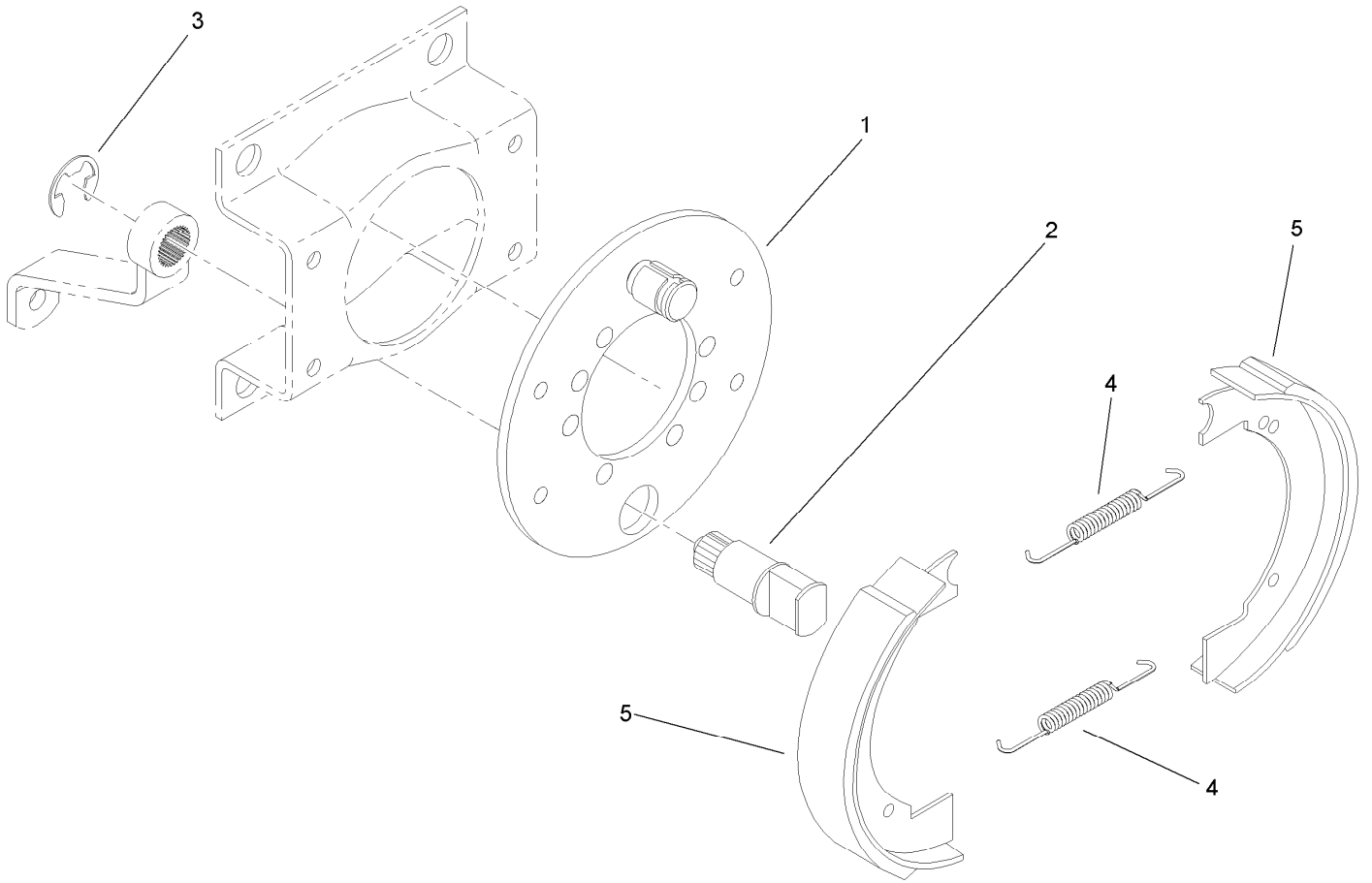
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Front Wheel and Brake Assembly (continued)

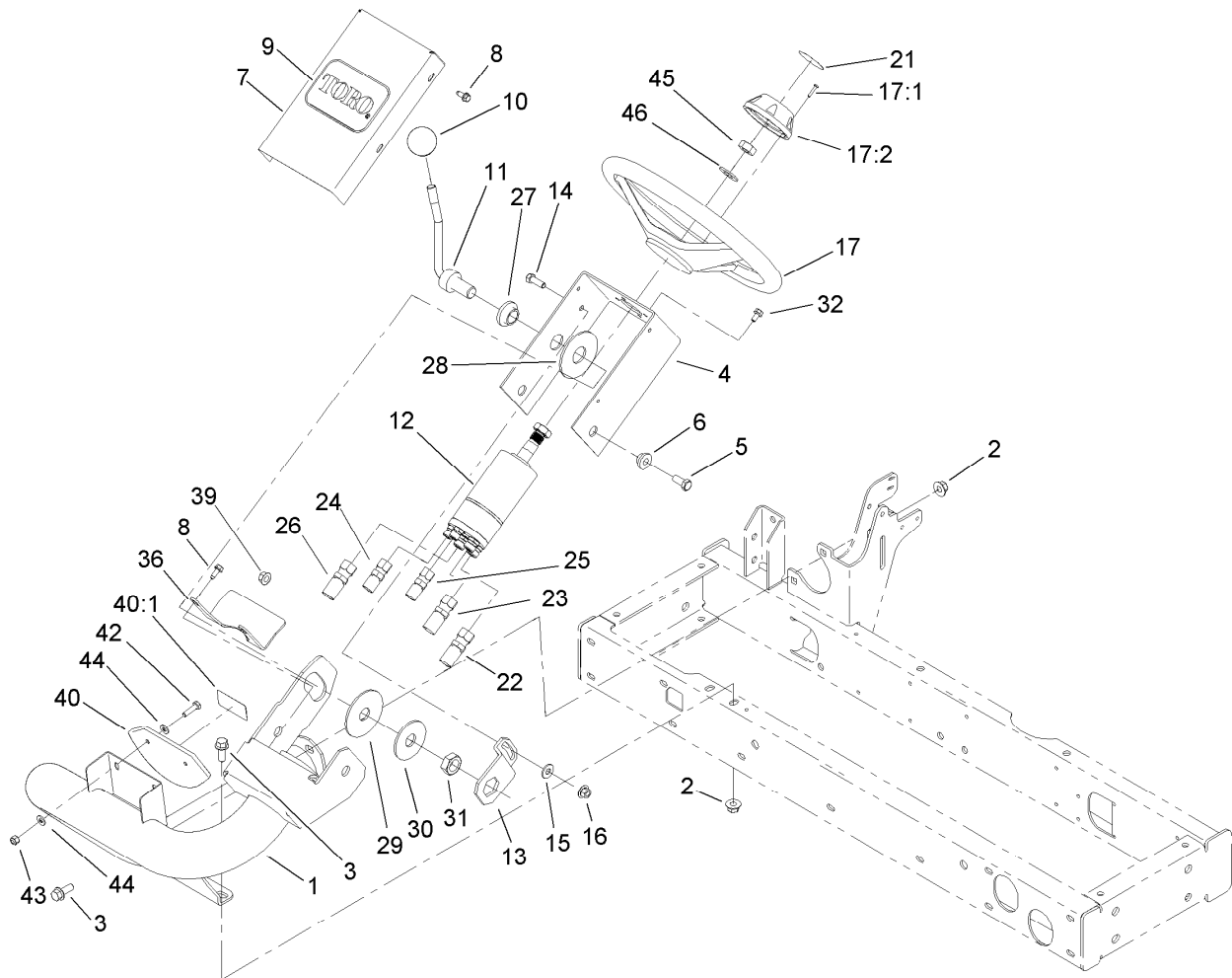
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
31	3272-6	2	Pin-Cotter	37	256-156	2	Bushing-Flange
33	104-4625-03	1	Brake Pivot Shaft ASM	38	104-7706	2	E-Ring, Bowed
34	95-8683	2	Bracket-Pivot, Brake	39	3274-105	8	Screw-HSBH
35	3234-11	4	Screw-HHF	40	104-4809	2	Drum-Brake
36	32128-43	4	Nut-Flange	41	3272-10	2	Pin-Cotter

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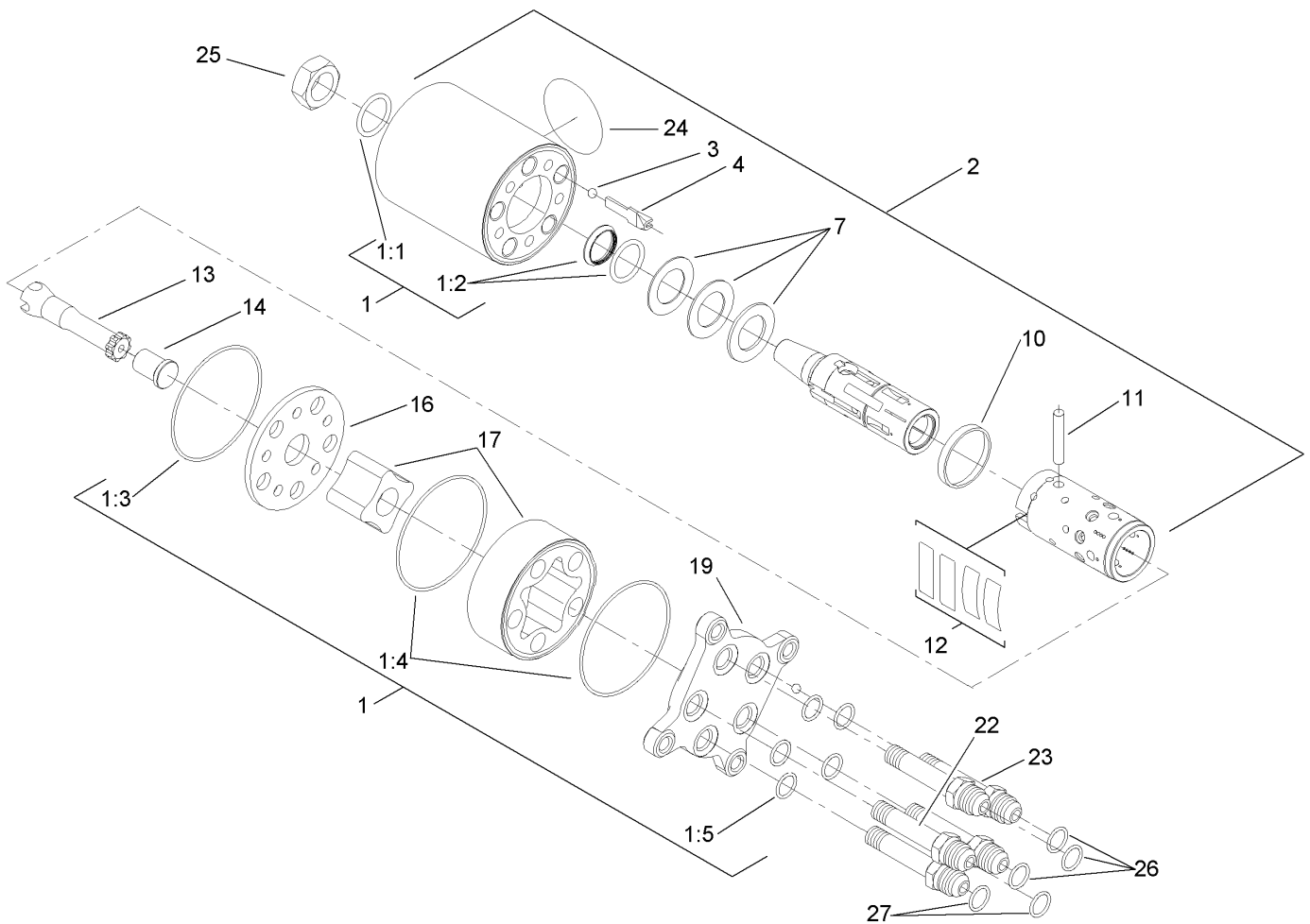
Brake Assembly No. 104-7705

<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

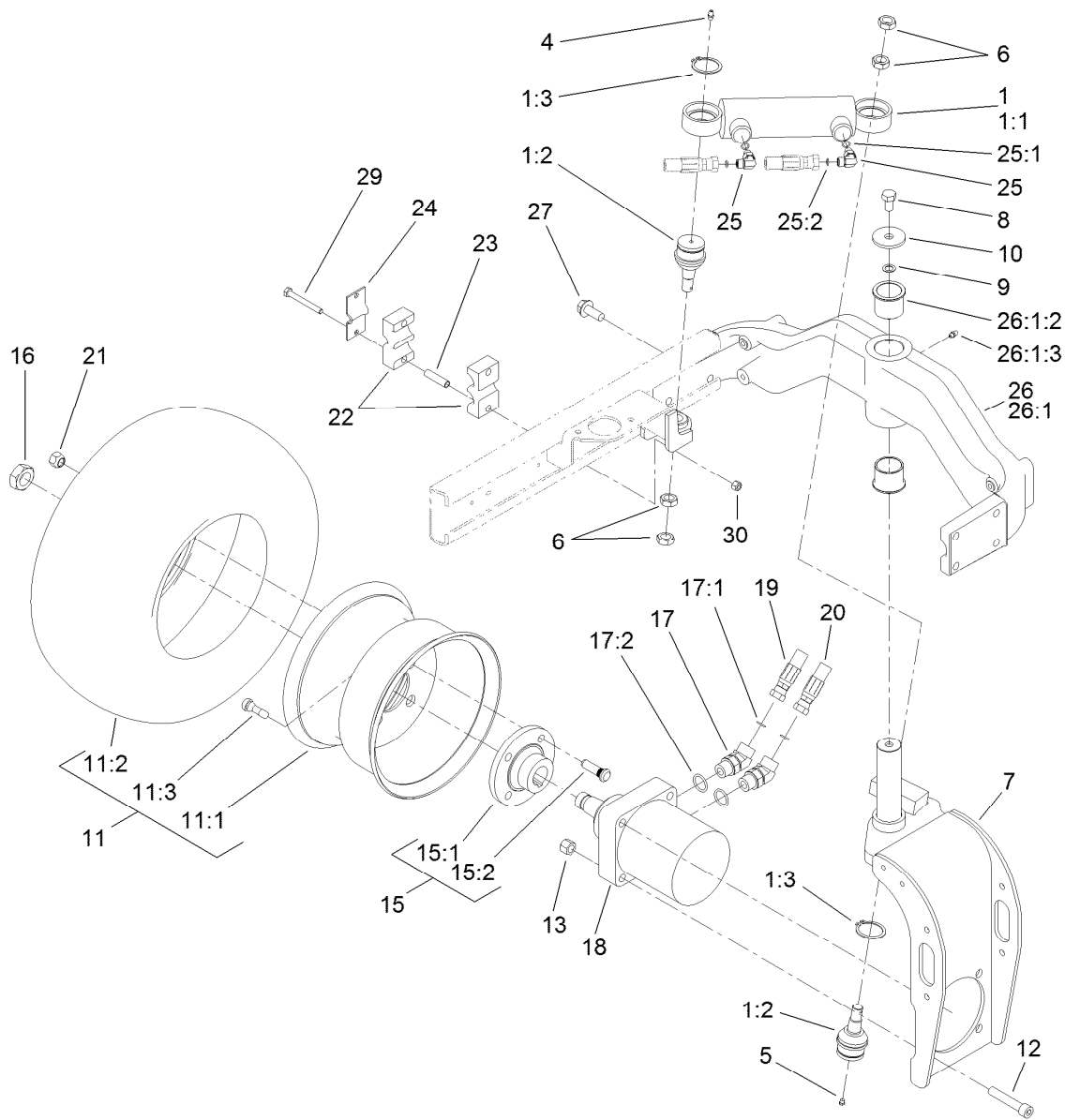
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	105-8536-01	1	Arm-Steering	23	95-8843	1	Hose ASM
2	32128-43	4	Nut-Flange	24	100-4892	1	Hose ASM
3	3234-11	4	Screw-HHF	25	100-4893	1	Hose ASM
4	104-5185-01	1	Bracket-Valve, Steering	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	O-Ring ●
1:4		2	O-Ring ●
1:5		5	O-Ring ●
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

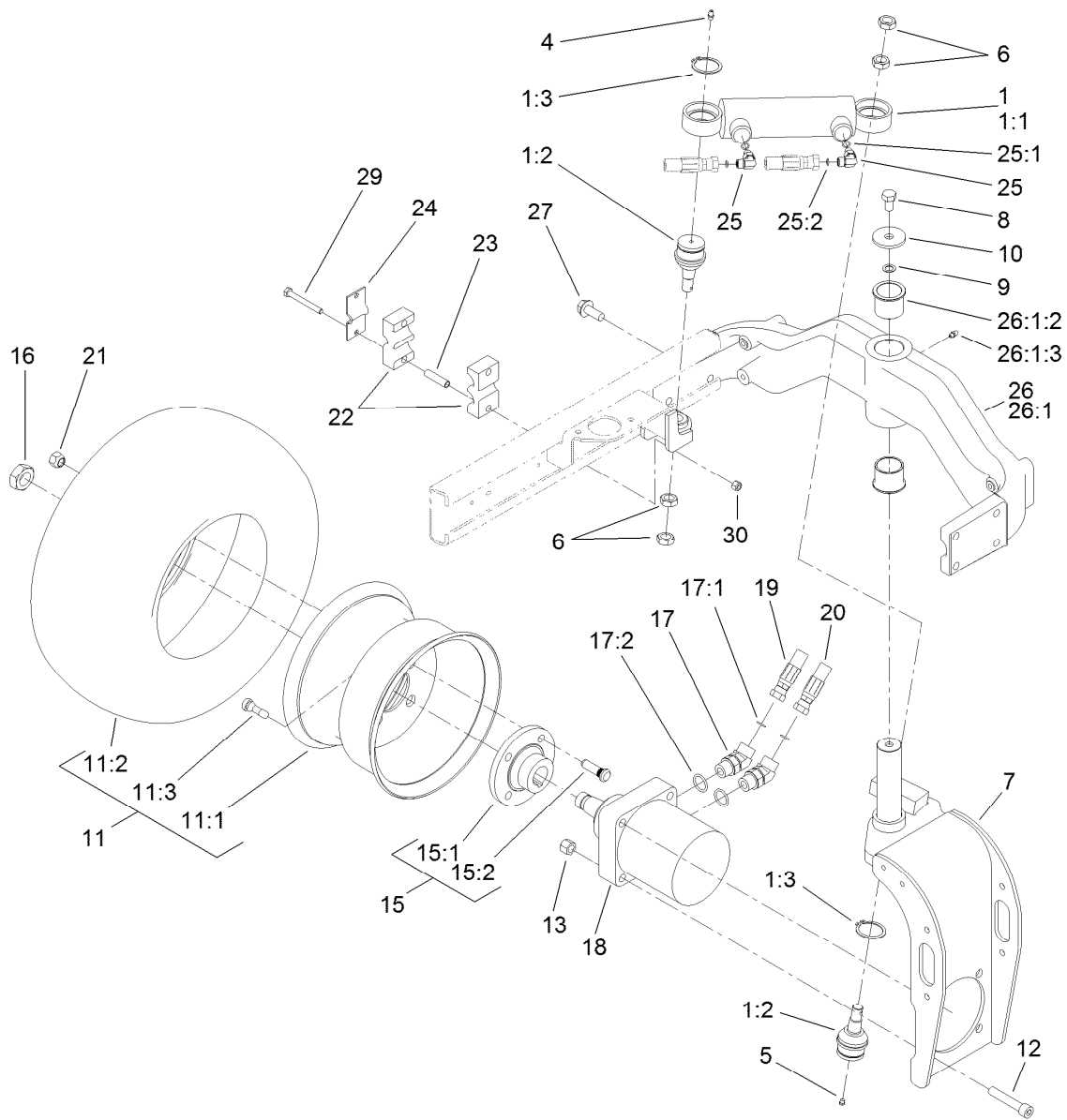
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Rear Fork and Tire Assembly

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	Wheel And Tire 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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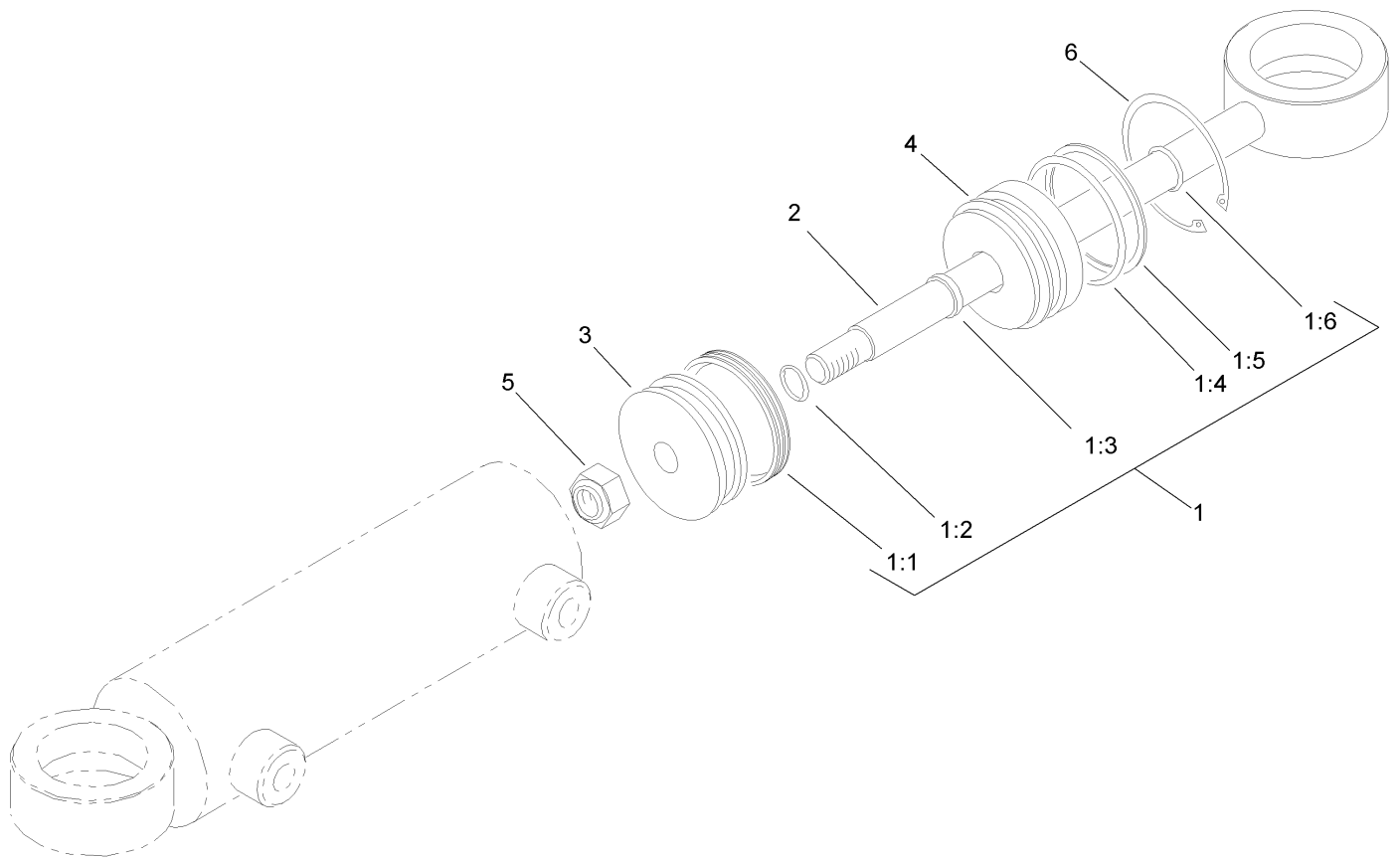


Rear Fork and Tire Assembly (continued)

Ref.	Part Number	Qty.	Description
26:1		1	Rear Casting ASM ●
26:1:2	95-8805	2	Bushing
26:1:3	302-5	1	Fitting-Grease

Ref.	Part Number	Qty.	Description
27	3234-38	8	Screw-HHF
29	322-13	2	Screw-HH
30	3296-29	2	Nut-Lock, NI

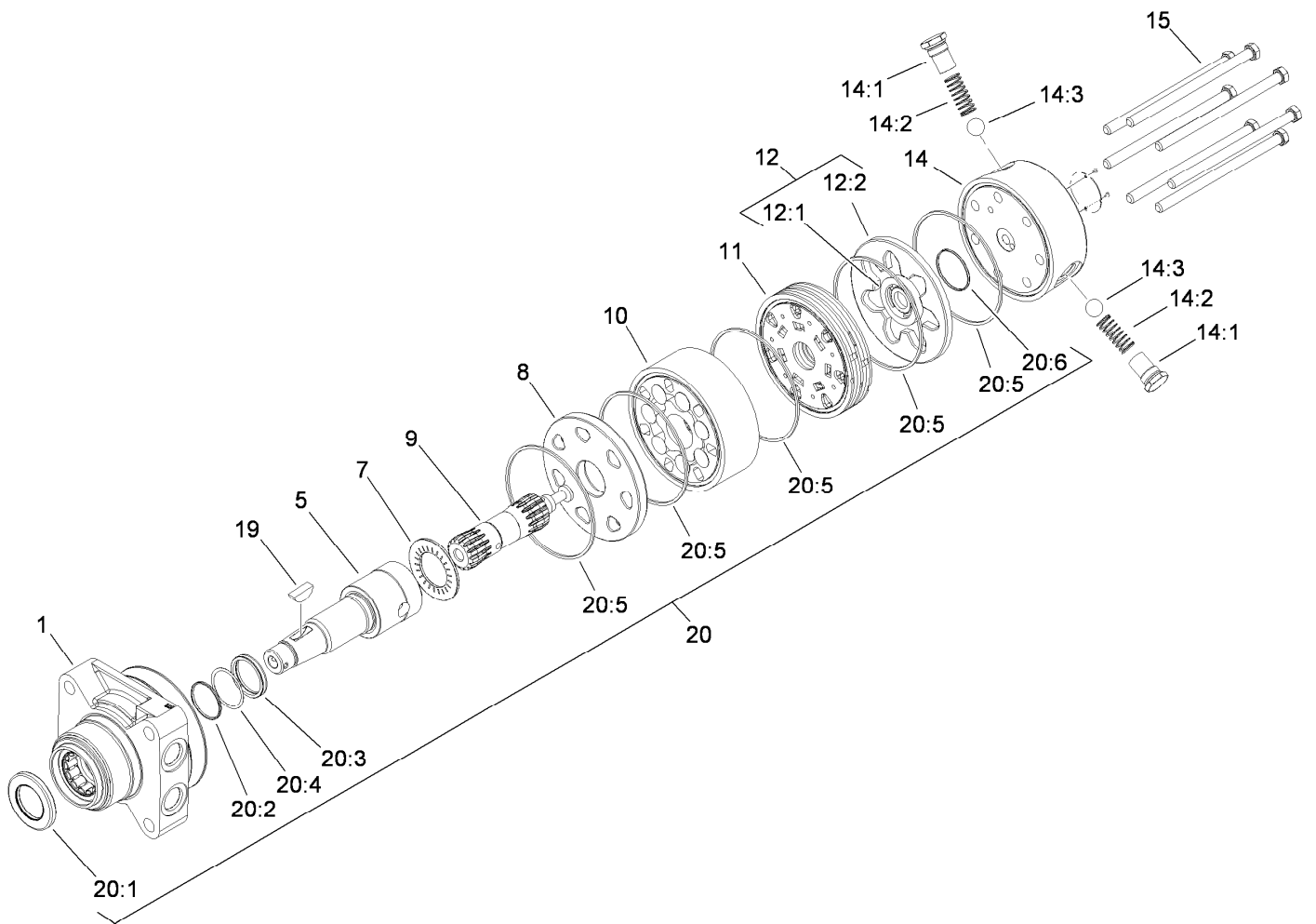
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Hydraulic Cylinder Assembly No. 94-8141

<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 ●

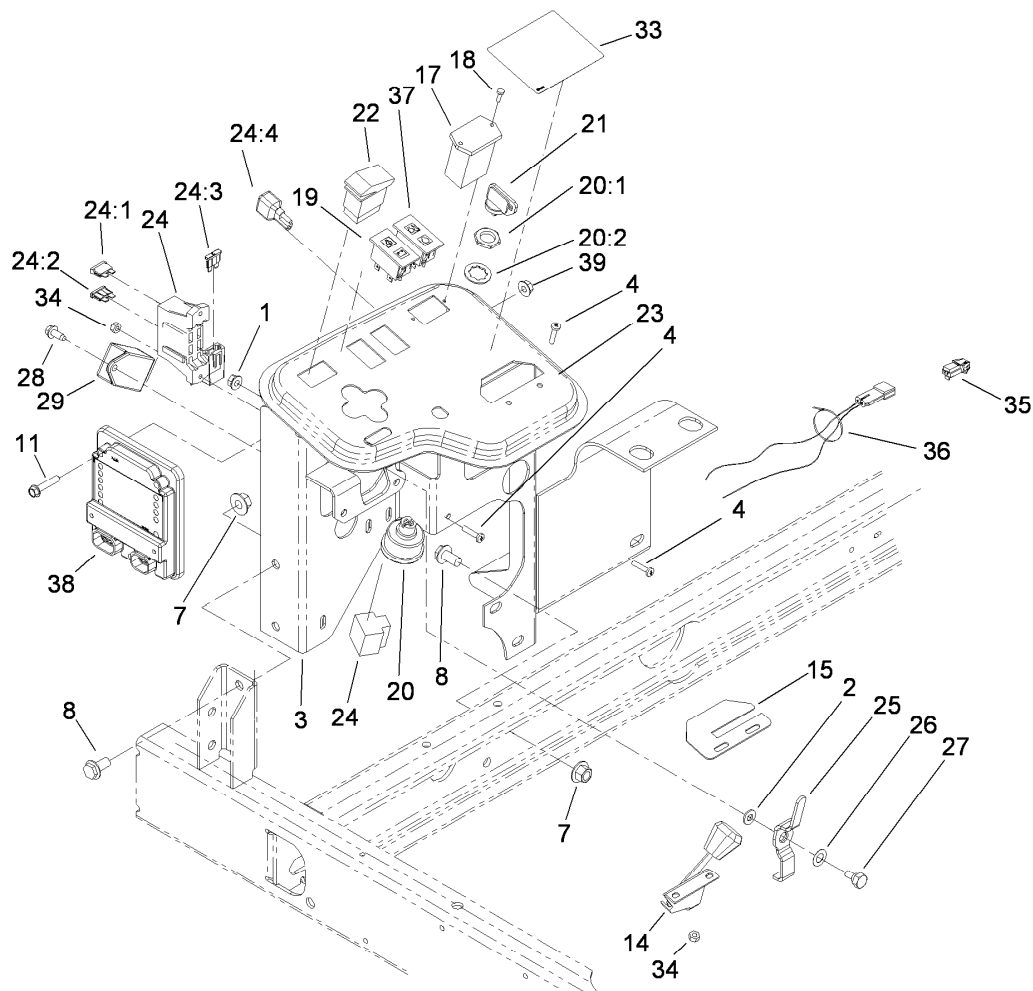
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Hydraulic Motor Assembly No. 95-8694

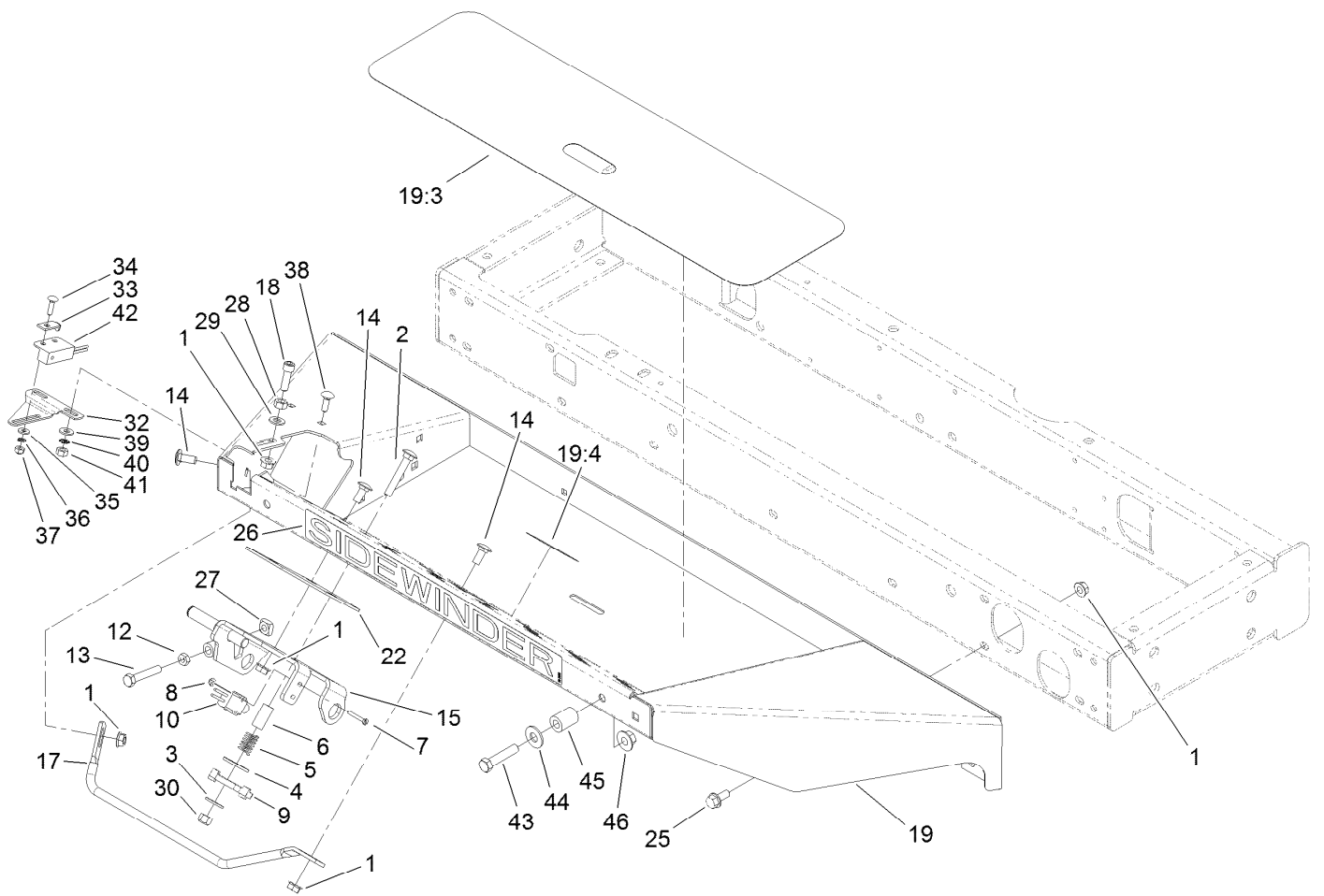
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	76-0810	1	Housing ASM	14:2	99-3541	1	Spring
5	99-3090	1	Shaft-Coupling	14:3	99-3540	1	Ball
7	76-0850	1	Bearing-Thrust	15	99-3536	7	Screw-HH
8	76-0870	1	Plate-Wear	19	3257-42	1	Key-Woodruff
9	99-3537	1	Link-Drive	20	94-8178	1	Seal Kit
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 ●				

● Not serviced separately



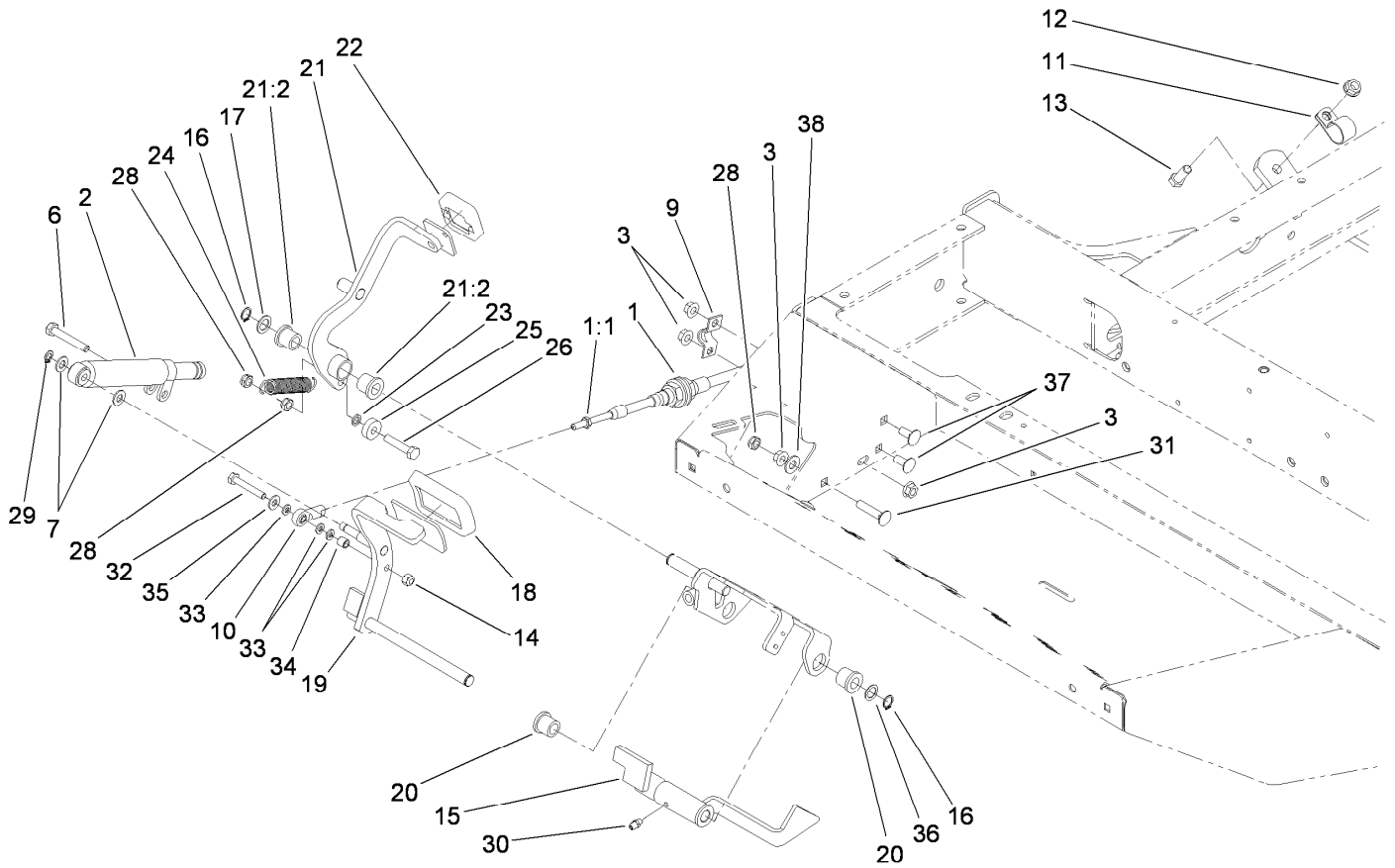
Control Panel Assembly

<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				



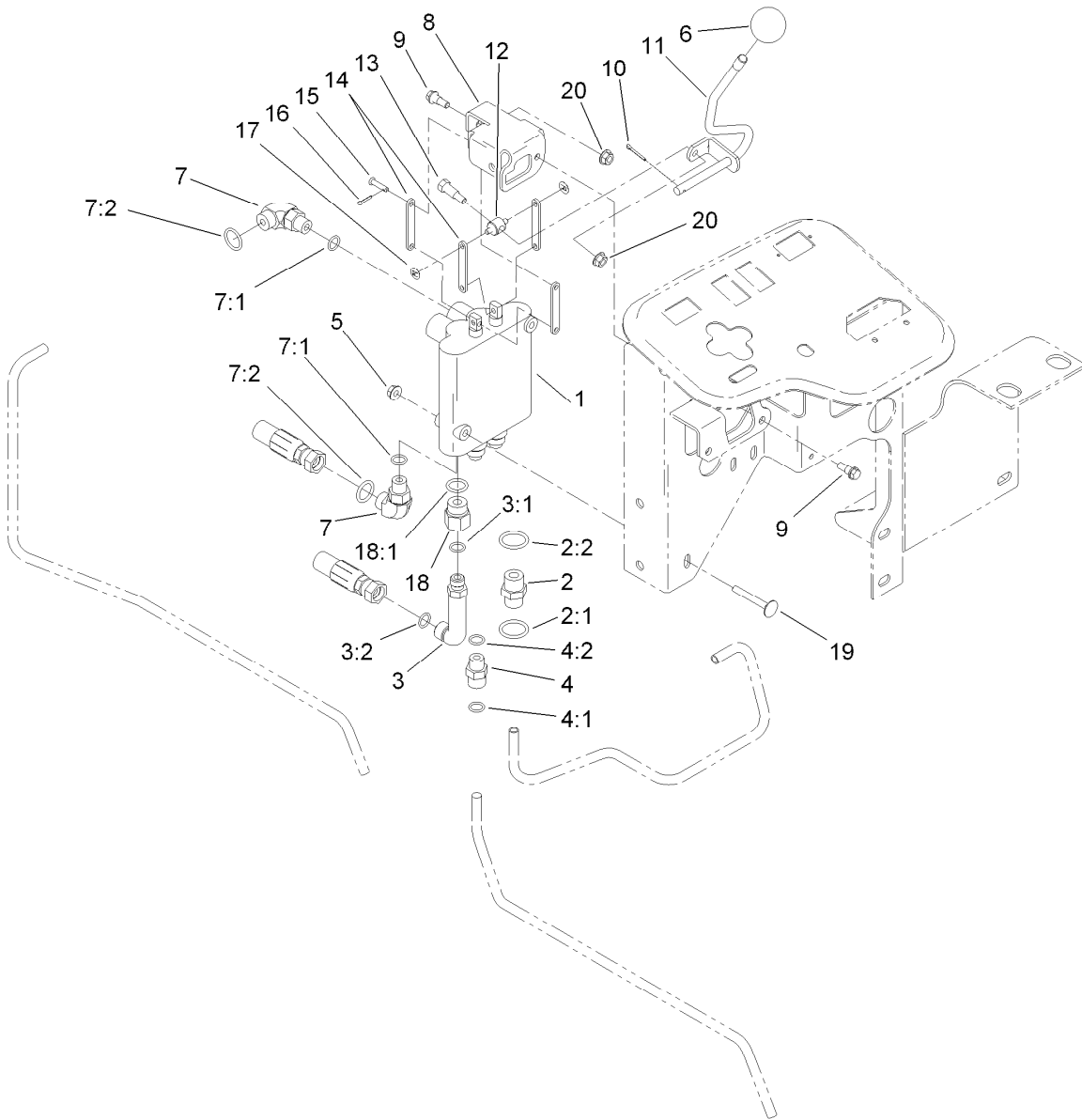
Front Platform Assembly

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



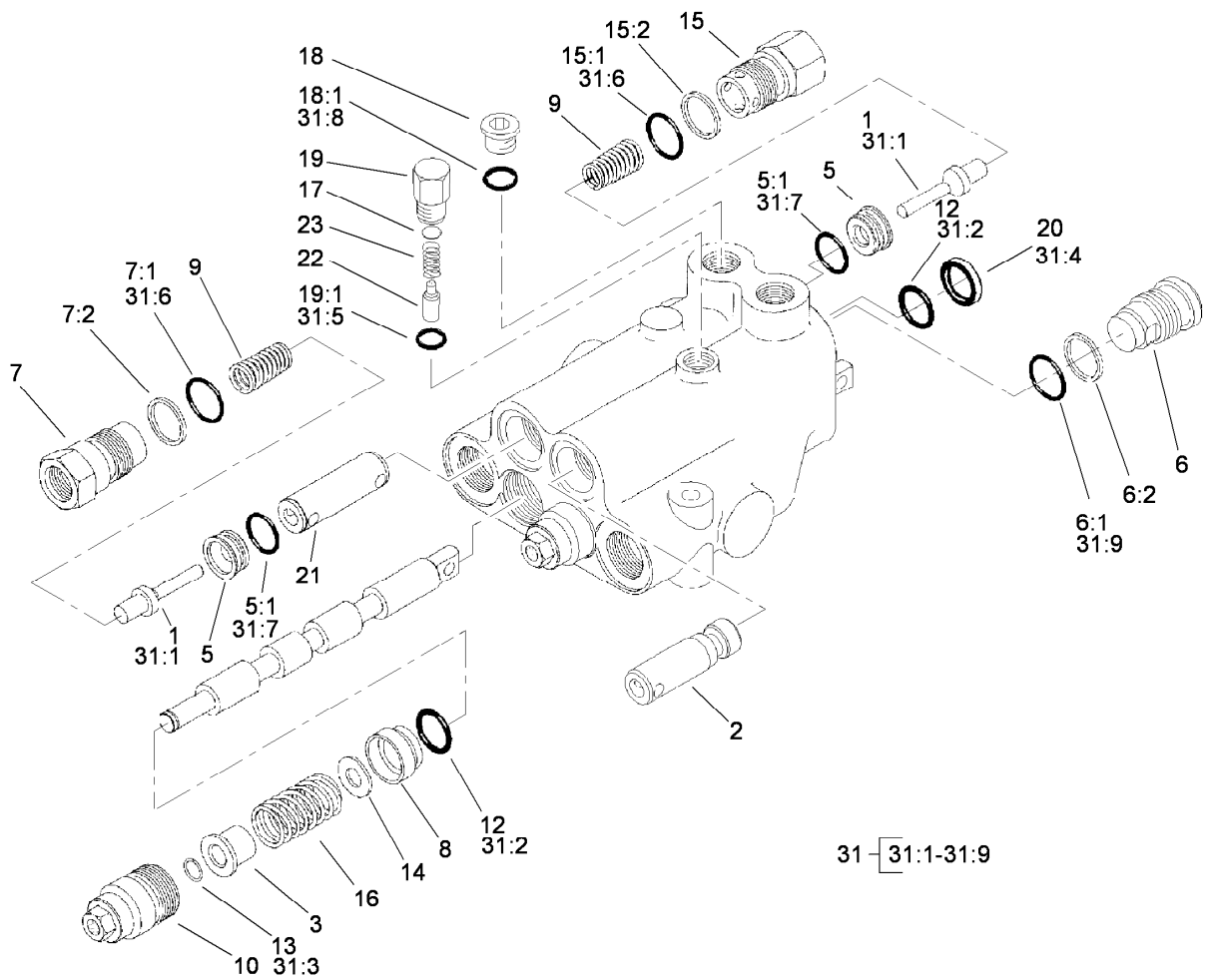
Traction Pedal Assembly

<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

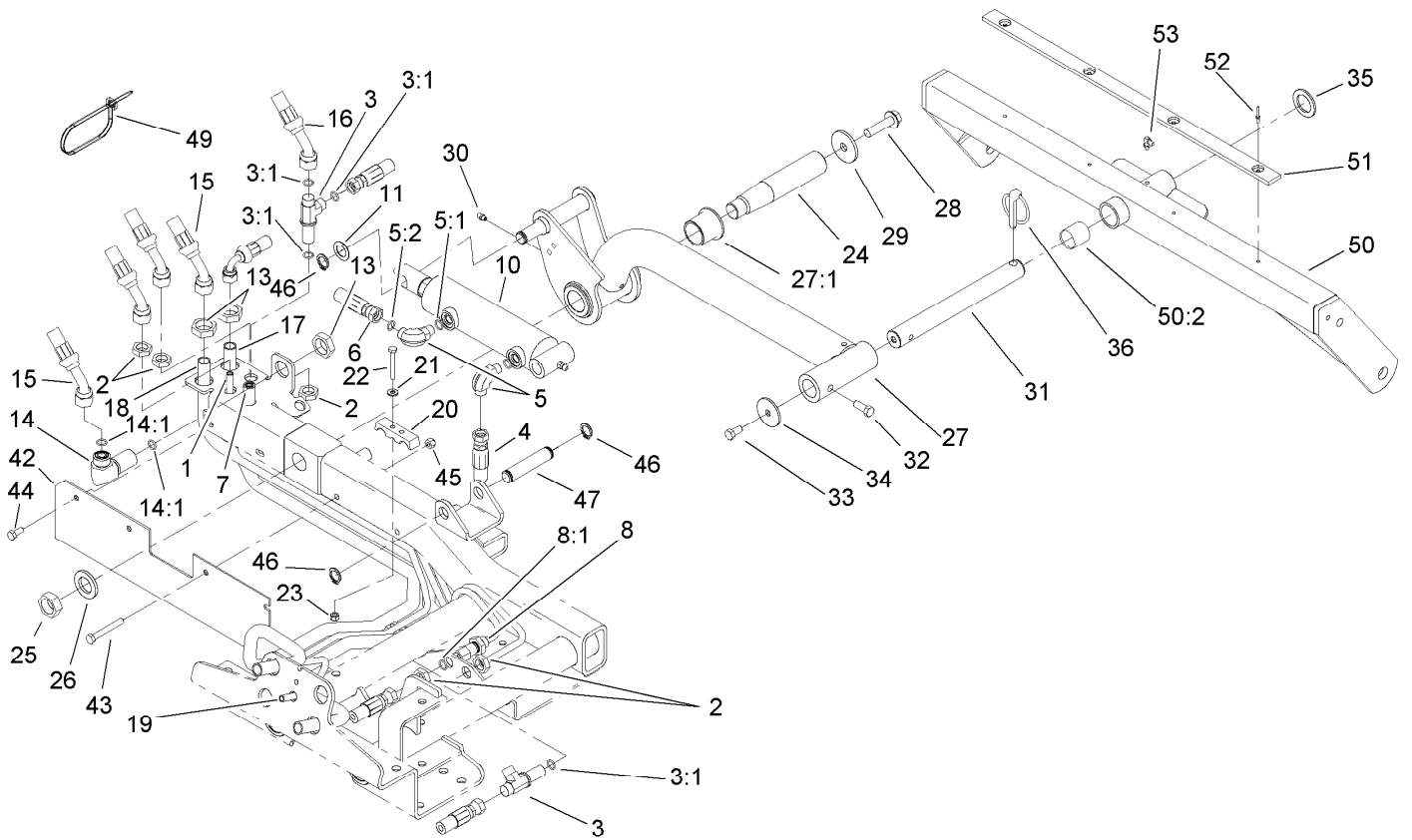
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	95-8581	1	2-Spool Control Valve ASM	8	95-8633	1	Bracket-Valve, Actuator
2	340-3	1	Adapter	9	42-3560	2	Bolt-Shoulder
2:1	237-22	1	O-Ring	10	3272-6	1	Pin-Cotter
2:2	237-79	1	O-Ring	11	95-8635	1	Lever-Valve
3	69-4320	1	Fitting-HYD, 90 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	283-16	3	Pin-Clevis
4:1	237-22	1	O-Ring	16	3272-1	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				



Valve Assembly No. 95-8581

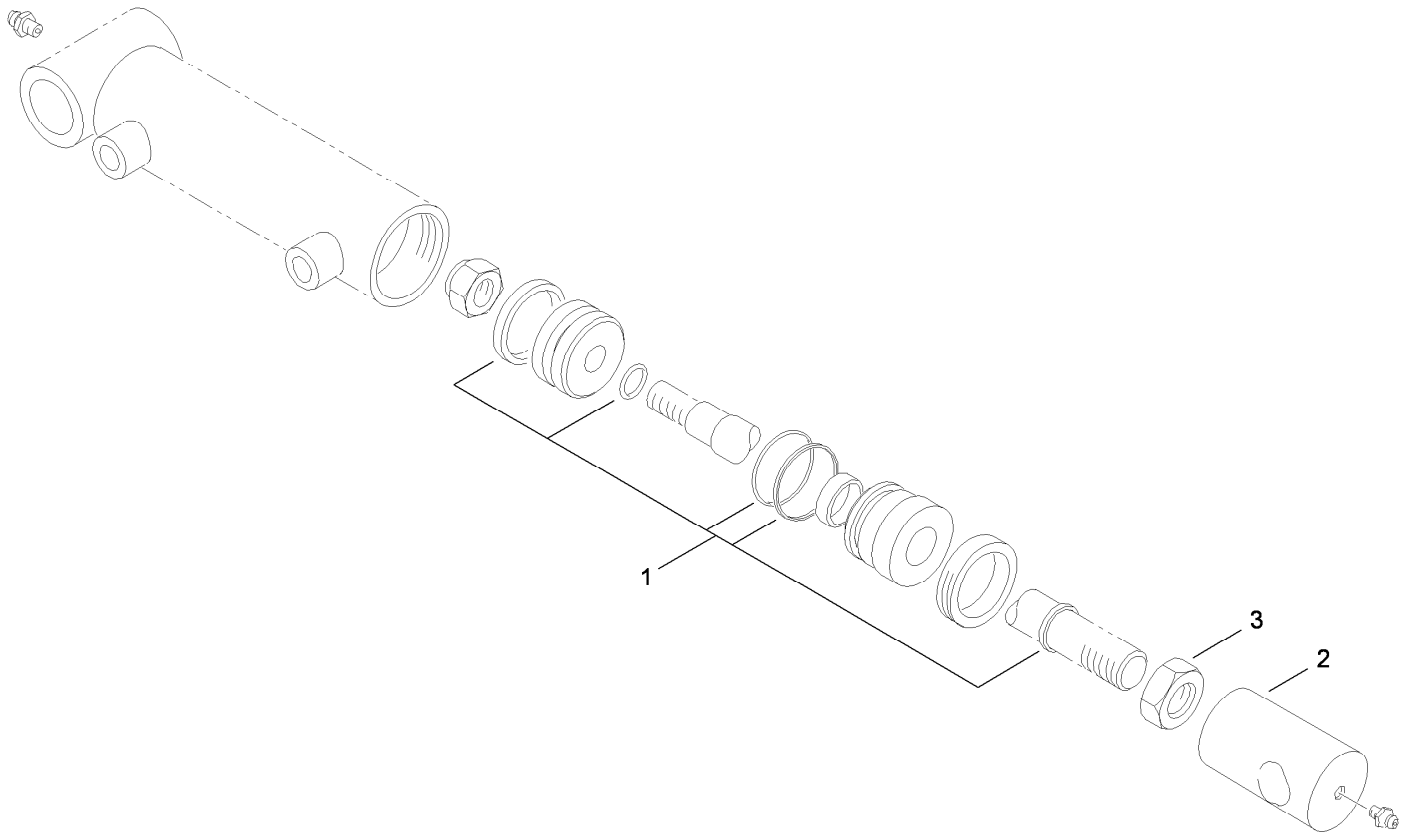
Ref.	Part Number	Qty.	Description
1	58-6290	3	Poppet
2	69-1840	1	Plunger
3	58-6310	2	Spacer
5	58-6330	3	Seat
5:1	58-6340	1	O-Ring
6	58-6350	1	Plug
6:1	60-5720	1	O-Ring
6:2	58-6370	1	Washer
7	69-1800	2	Plug ASM
7:1	60-5720	1	O-Ring
7:2	58-6370	1	Washer
8	58-6400	2	Bushing
9	69-1810	3	Spring
10	58-6420	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



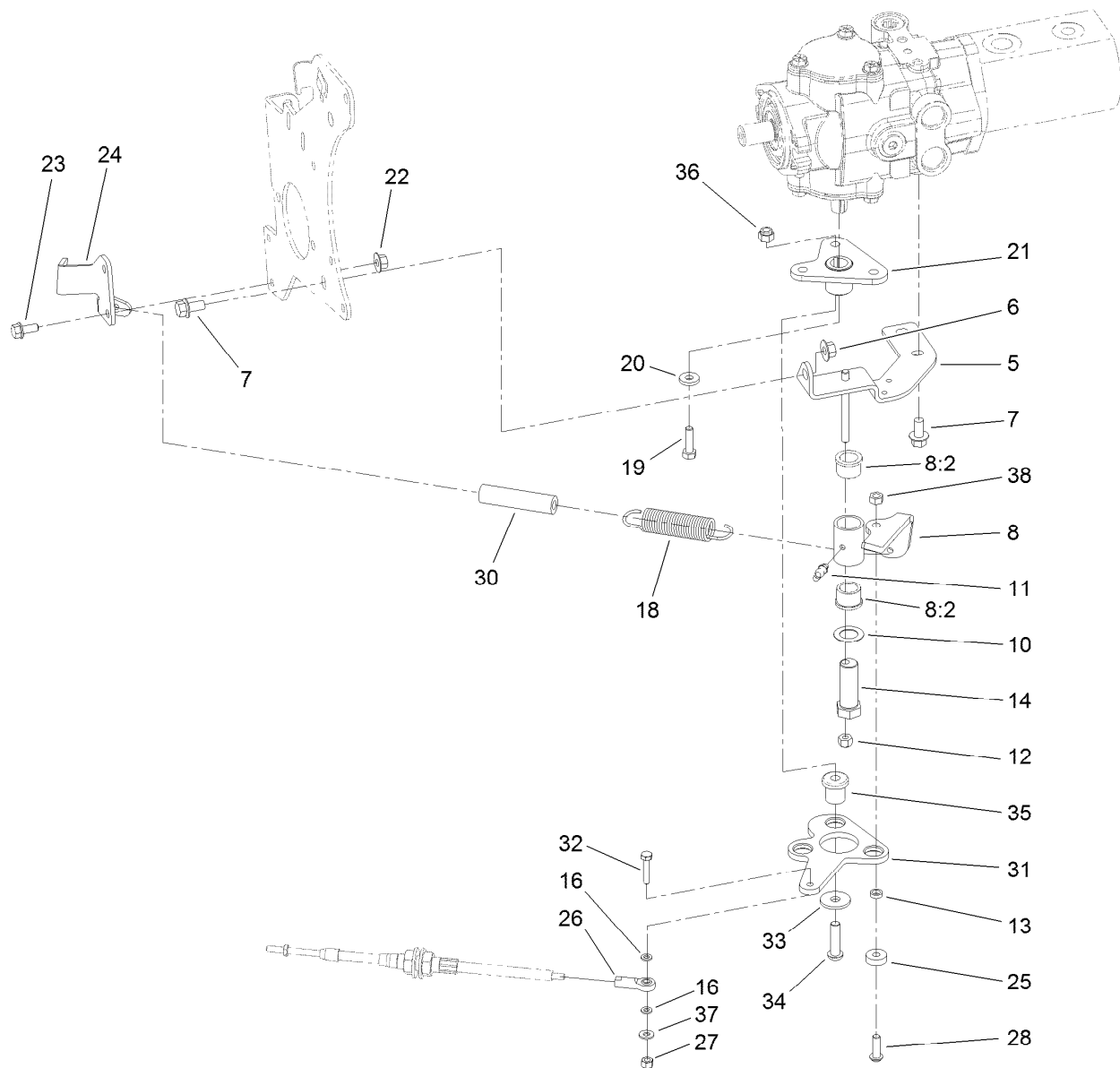
Rear Lift Arm Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
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



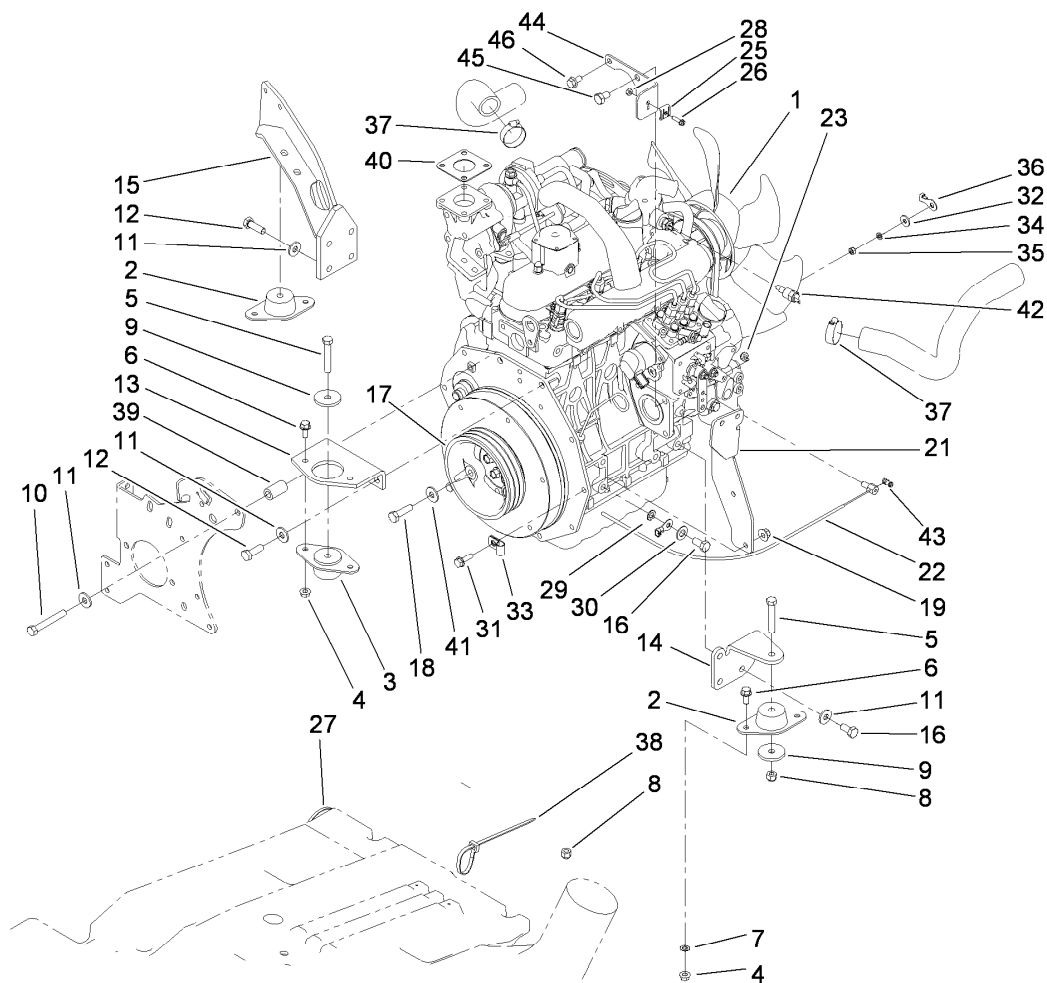
Hydraulic Cylinder Assembly No. 112-9916

<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



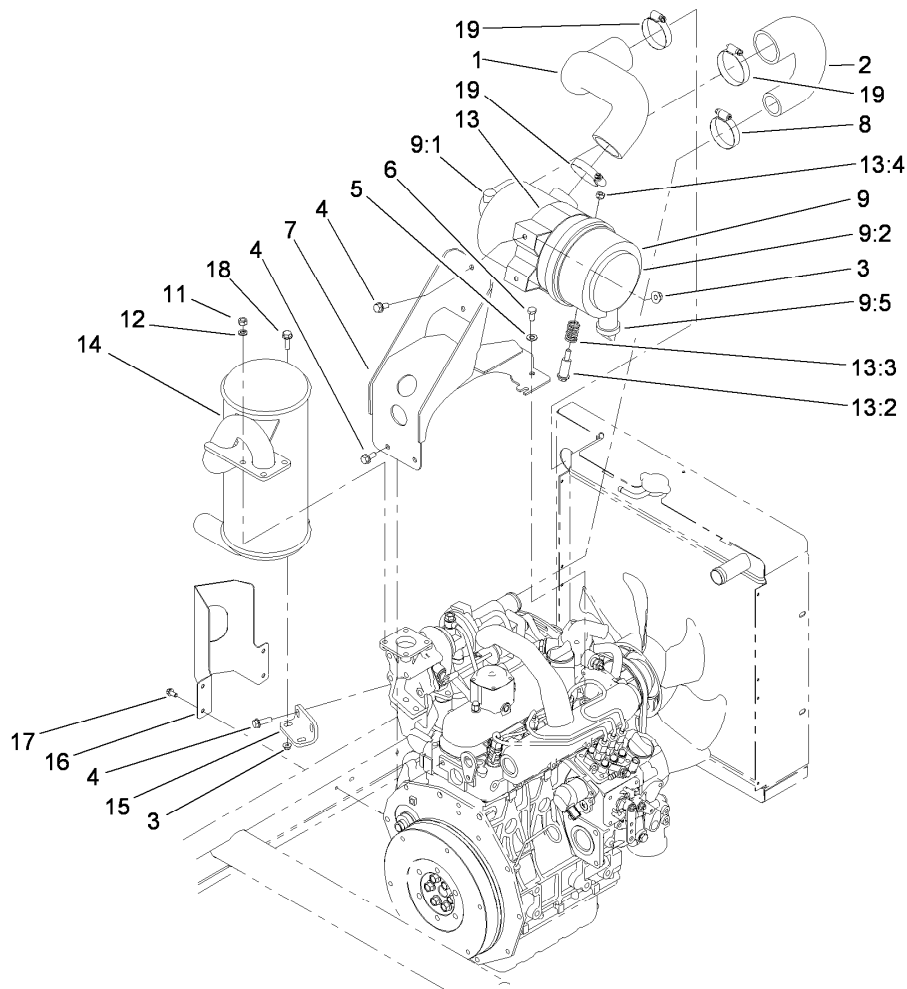
Neutral Arm Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
5	95-8960-03	1	Bracket-Neutral	23	3234-5	2	Screw-HHF
6	32128-43	1	Nut-Flange	24	104-0464-03	1	Bracket-Support, Cable
7	3234-1	3	Screw-HHF	25	251-259	1	Bearing-Ball
8	104-0422	1	Neutral Arm ASM	26	2411-41	1	Rod End-Ball Joint
8:2	256-113	2	Bushing-Flange	27	3296-42	1	Nut-Lock, NI
10	3-6498	1	Washer-Thrust	28	3274-104	1	Screw-HSBH
11	302-60	1	Fitting-Grease	30	99-3556	1	Hose
12	3296-29	1	Nut-Lock, NI	31	99-3594-03	1	Lever-Pump
13	100-4817	1	Spacer-Bearing	32	321-8	1	Screw-HH
14	76-8640	1	Stud-Traction	33	2844	3	Washer
16	33093-00	2	Washer-Flat	34	95-3857	3	Screw-HSBH
18	94-1369	1	Spring-Extension	35	63-9750	3	Mount
19	3210-6	1	Screw-HH	36	3296-39	3	Nut-Lock, NI
20	88-7200	1	Washer-Flat	37	3256-22	1	Washer-Flat
21	99-3598-03	1	Hub ASM	38	32153-3	1	Nut-Hex, Side Deform
22	32128-44	2	Nut				



Engine Assembly

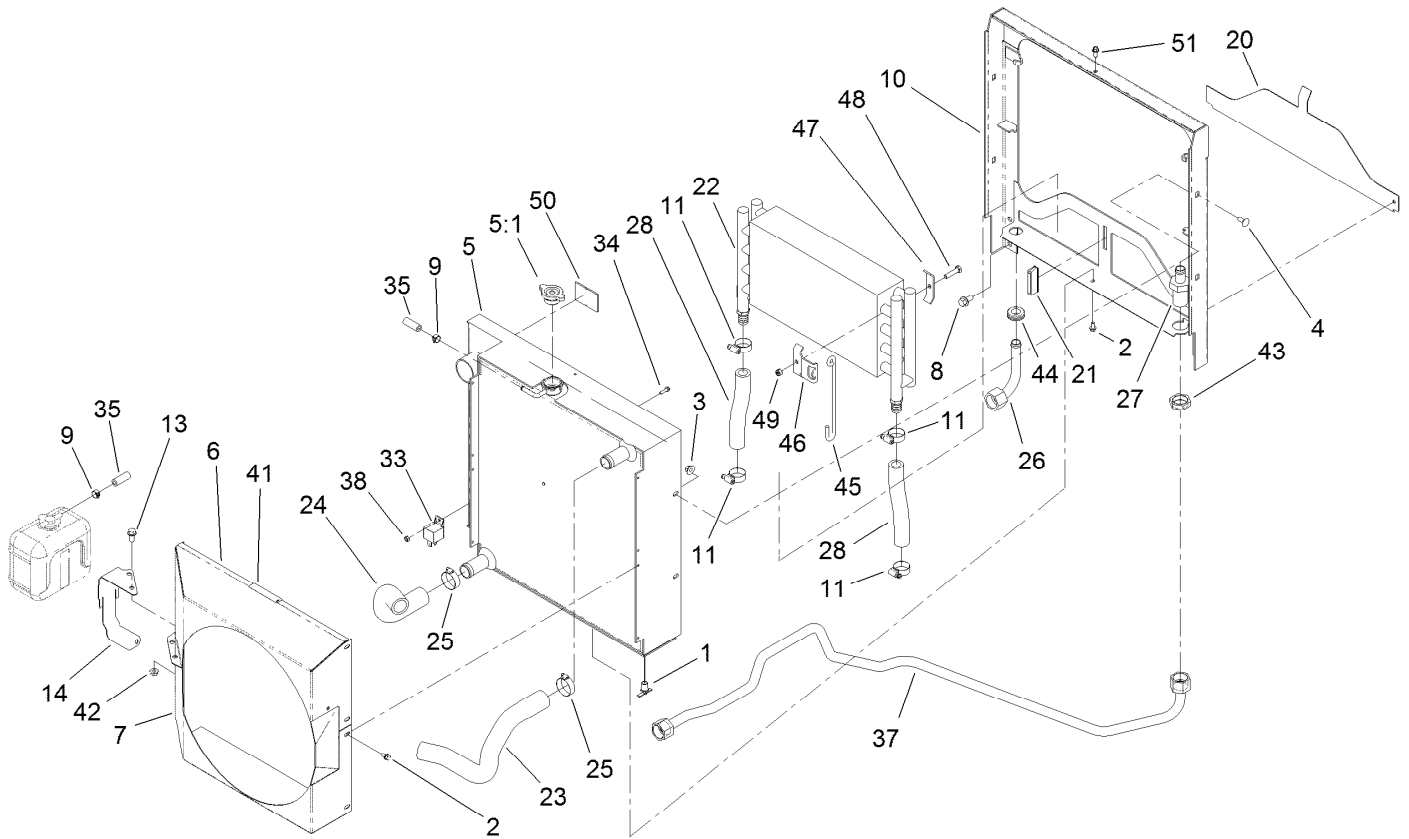
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	112-9908	1	Engine ASM	25	81-1690	1	Clamp-Cable
2	83-1030	2	Mount-Engine	26	32105-13	1	Screw-HWH
3	93-5265	1	Mount-Engine	27	3290-379	2	Tie-Cable
4	32128-20	6	Nut-HF	28	3296-2	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	Tie-Cable
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

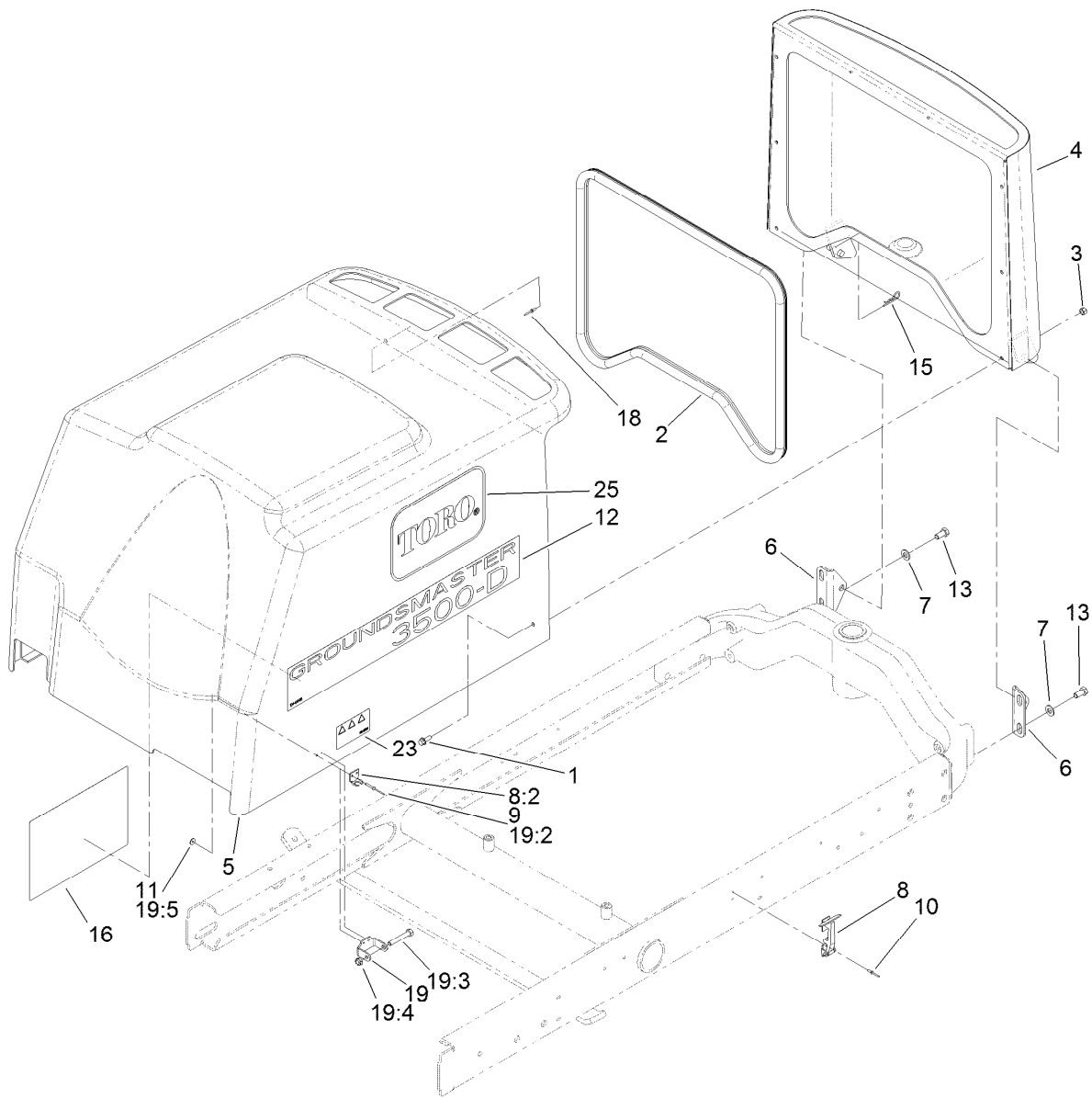
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	104-0420	1	Hose-Air Intake, Upper	9:7	104-4897	1	Gasket ●
2	112-9910	1	Hose-Air Intake, Lower	11	33014-00	4	Nut-Hex
3	32128-44	6	Nut	12	3253-4	4	Washer-Lock
4	3234-5	3	Screw-HHF	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

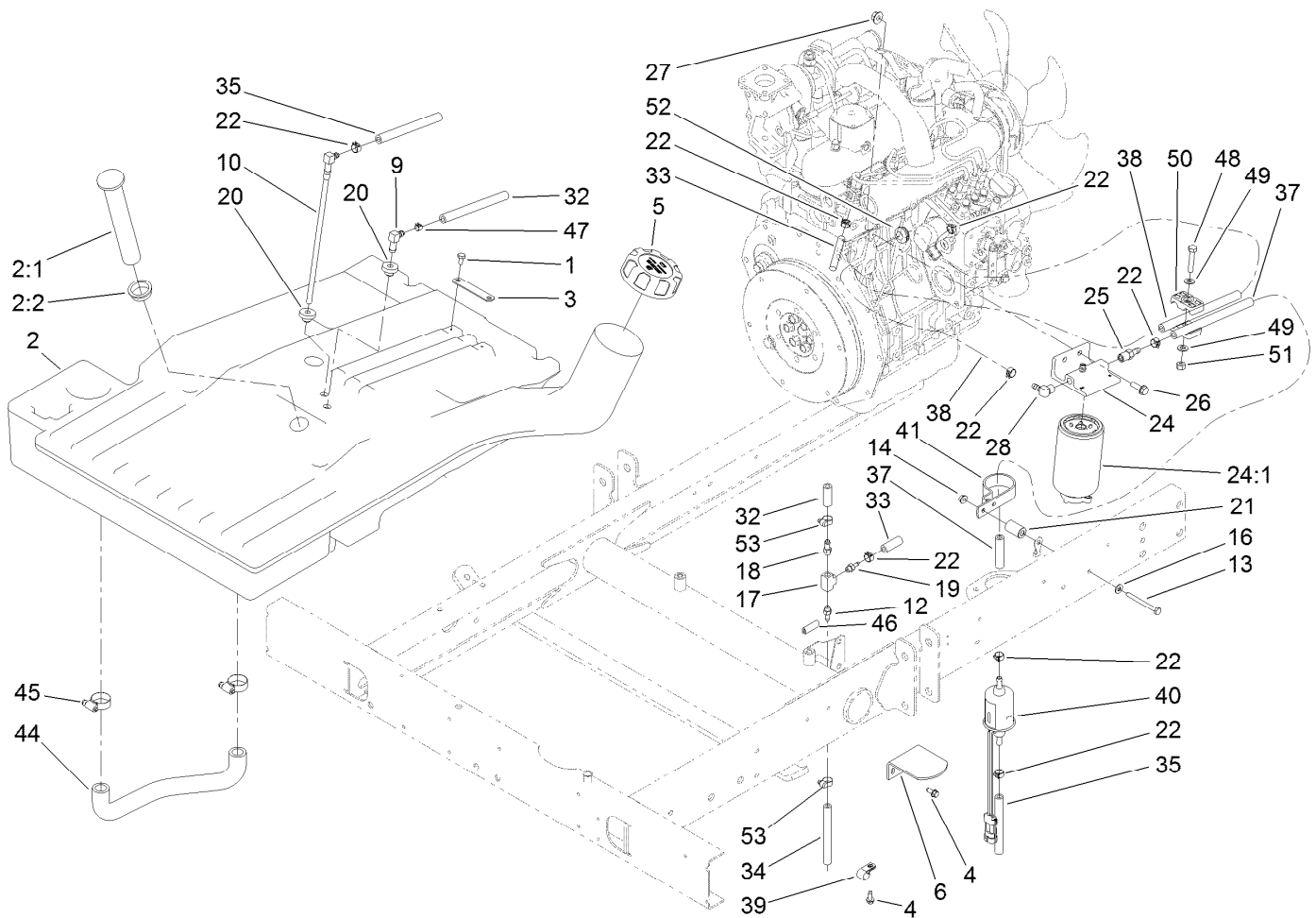
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	304-46	1	Draincock	26	99-3644	1	Filter Head Tube ASM
2	32104-116	10	Screw-HF	27	100-4925	1	Fitting-Bulkhead
3	32128-44	4	Nut	28	99-3646	2	Hose-Cooler, Oil
4	3230-1	4	Bolt-CARR	33	99-7435	1	Relay-Power
5	117-5135	1	Radiator	34	32105-13	1	Screw-HWH
5:1	117-5138	1	Cap-Radiator	35	109-0274	1	Hose-Fuel
6	100-4885-03	1	Shroud-Fan, Top	37	115-3489	1	Tube ASM
7	119-2008-03	1	Shroud-Fan, Lower	38	3296-2	1	Nut-Lock, NI
8	3234-1	4	Screw-HHF	41	93-6681	1	Decal-Warning, Fan
9	92-2379	2	Clamp-Hose	42	32128-20	2	Nut-HF
10	104-4855-03	1	Radiator Frame ASM	43	340-126	1	Nut-Bulkhead
11	2412-129	4	Clamp-Hose	44	100-4866	1	Grommet
13	3234-5	2	Screw-HHF	45	100-4858	2	Form-Wire
14	100-4899-03	1	Bracket-Reservoir	46	100-4859	2	Bracket-Cooler, Keeper
20	95-8702-03	1	Shield-Radiator, Lower	47	100-4860	2	Bracket-Clamp
21	99-3497	1	Magnet	48	322-17	2	Screw-HH
22	100-4869	1	Cooler-Oil	49	3296-47	2	Nut-Lock, NI
23	104-0454	1	Hose-Radiator, Upper	50	104-9459	2	Seal-Foam
24	100-4809	1	Hose-Radiator, Lower	51	119-2038	1	Screw-HWH
25	2412-34	2	Clamp-Hose				



Hood and Screen Assembly

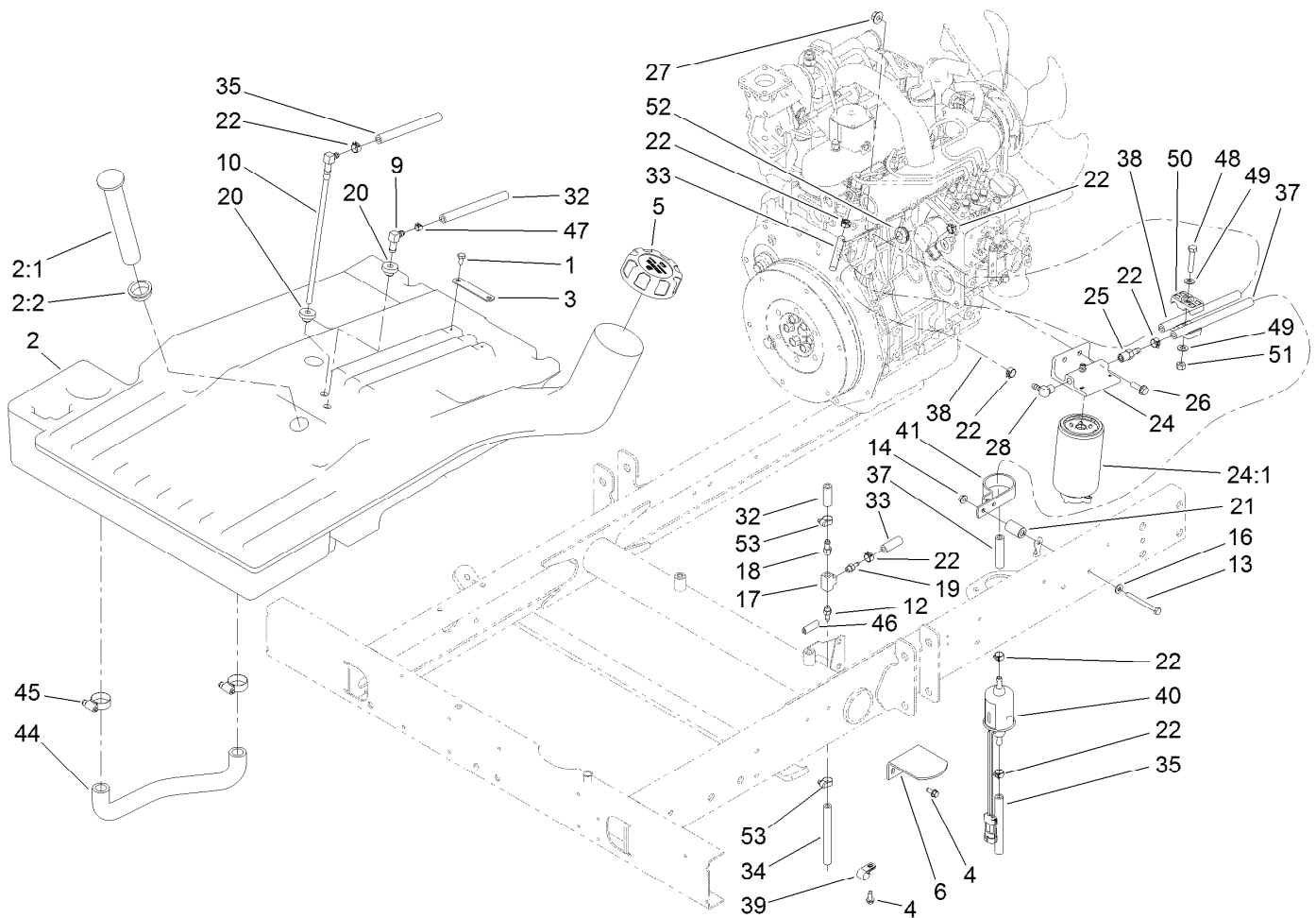
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	3234-4	6	Screw-HHF	12	104-5152	2	Decal-Hood
2	100-4932	1	Trim-Seal	13	323-6	4	Screw-HH
3	3296-42	6	Nut-Lock, NI	15	3290-467	1	Pin-Hair
4	104-4853-03	1	Hood Screen ASM	16	117-5103	1	Decal-Service
5	100-4855	1	Hood	18	3269-21	2	Rivet-Pop
5:1	106-8115	1	Heat Tape Repair Kit ●	19	119-2004	1	Ce Latch Kit
6	95-8728	2	Bracket-Pivot, Hood	19:2	107-0333	2	Rivet-Pop
7	3256-24	8	Washer-Flat	19:3	322-10	1	Screw-HH
8	59-9740	2	Flex Draw Latch ASM	19:4	3296-47	1	Nut-Lock, NI
8:2	249-40	1	Keeper	19:5	3269-10	2	Washer-Back
9	107-0333	4	Rivet-Pop	23	106-6754	1	Decal-Danger
10	3290-55	4	Rivet-Pop	25	66-6140	2	Decal
11	3269-10	4	Washer-Back				

● Not illustrated



Fuel System Assembly

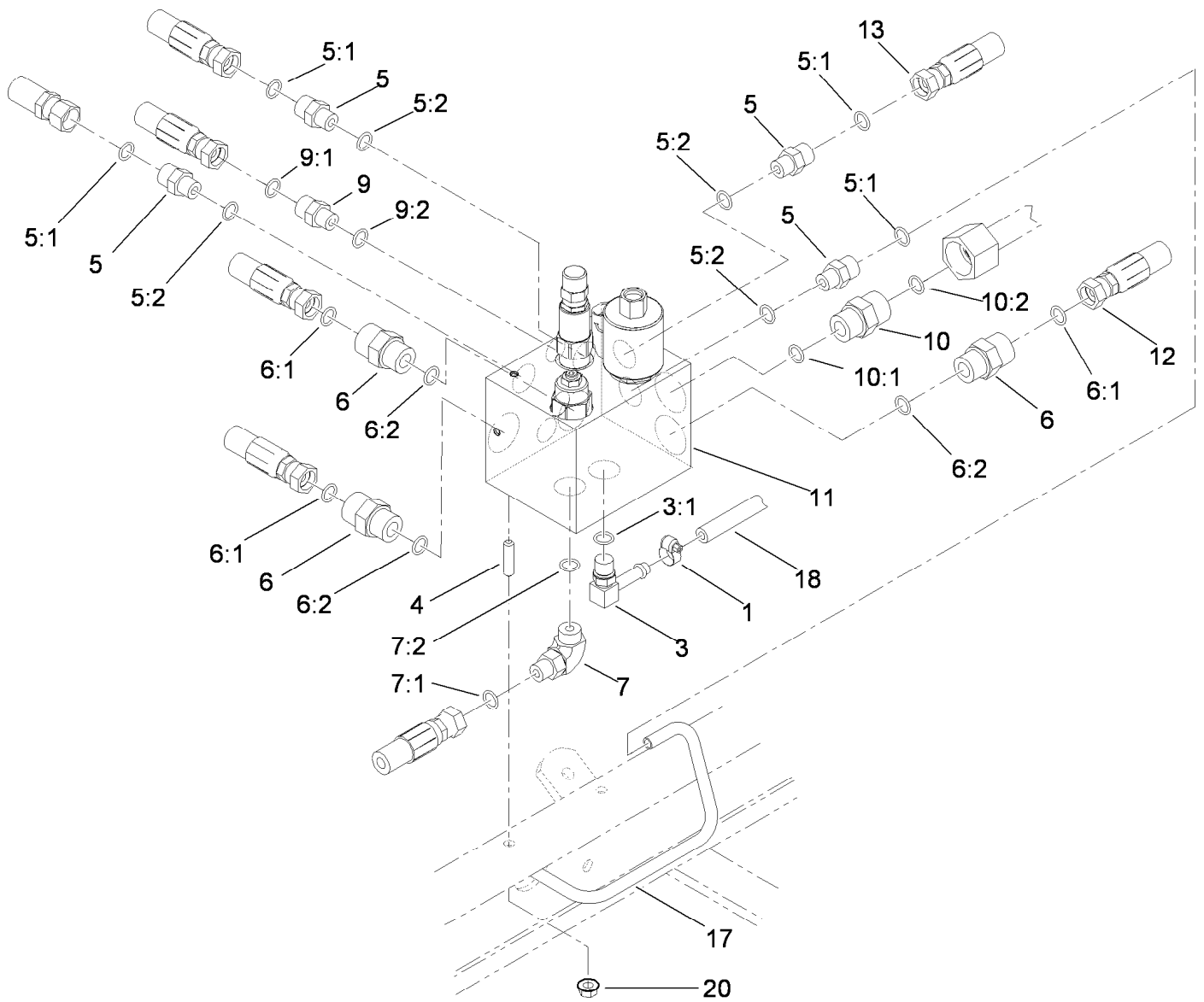
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	321-2	2	Screw-HH	24:1	110-9049	1	Filter-Spin On
2	105-7865	1	Tank-Fuel	25	353-783	1	Fitting-Straight
2:1	95-8971	1	Guage-Fuel	26	3234-17	2	Screw-HHF
2:2	95-8972	1	Grommet	27	32128-44	2	Nut
3	95-8881	1	Strap-Line, Fuel	28	353-781	1	Fitting-Elbow
4	32144-10	3	Screw-HWH	32	110-6187	1	Hose-Fuel
5	114-5064	1	Cap-Biodiesel	33	110-8751	1	Hose-Fuel
6	95-8968-03	1	Support-Tank, Fuel	34	110-5701	1	Hose-Fuel
9	46-6550	1	Fitting-Elbow, 90 DEG	35	110-4100	1	Hose-Fuel
10	110-9689	1	Pipe-Stand	37	110-4109	1	Hose-Fuel
12	304-73	1	Connector-Hose	38	110-4113	1	Hose-Fuel
13	321-14	1	Screw-HH	39	2412-73	1	Clamp-R
14	32128-33	1	Nut-HF	40	110-8806	1	Pump-Fuel
16	3256-22	1	Washer-Flat	41	110-8817	1	Bracket-Pump, Fuel
17	354-20	1	Fitting-Tee	44	105-4094	1	Hose-Formed
18	354-21	1	Fitting-Barbed	45	2412-129	2	Clamp-Hose
19	354-22	1	Fitting-Barbed	46	110-8754	1	Trim
20	46-6560	2	Bushing	47	2412-80	2	Clamp-Hose
21	77-3180	1	Spacer	48	322-8	1	Screw-HH
22	92-2379	7	Clamp-Hose	49	3256-23	2	Washer-Flat
24	110-9044	1	Filter-Seperator	50	56-7971	2	Clamp-Tube



Fuel System Assembly (continued)

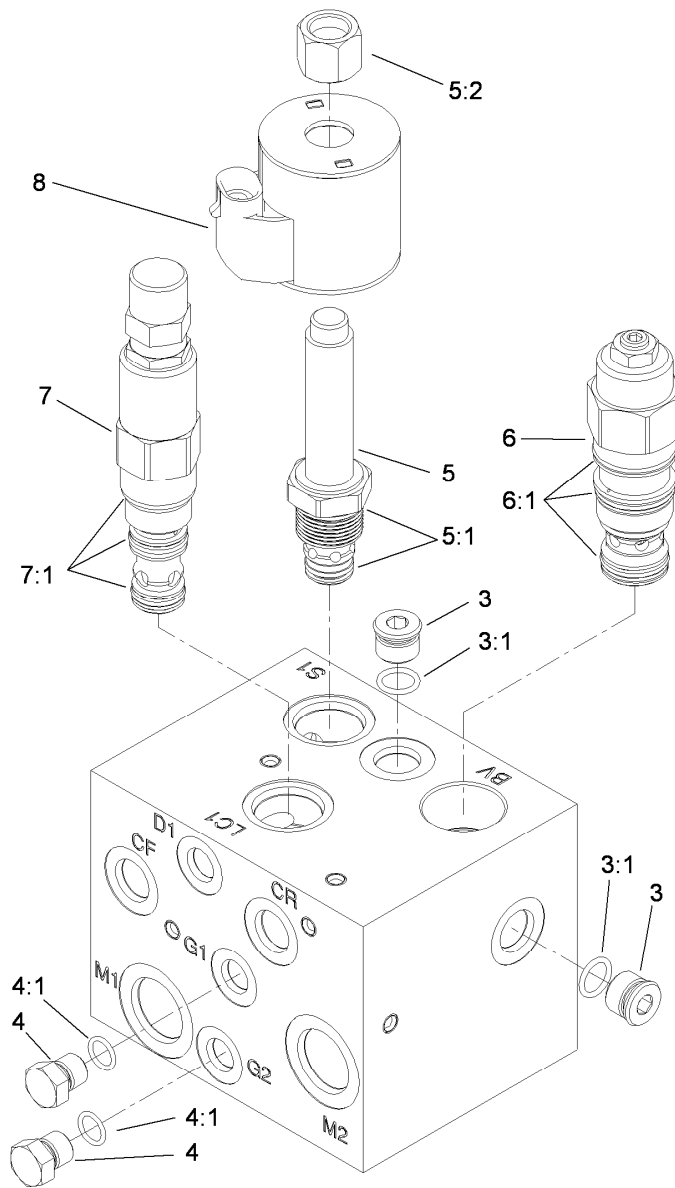
Ref.	Part Number	Qty.	Description
51	3296-29	1	Nut-Lock, NI

Ref.	Part Number	Qty.	Description
52	1-543296	1	Grommet
53	2412-108	2	Clamp-Worm



Manifold Block Installation Assembly

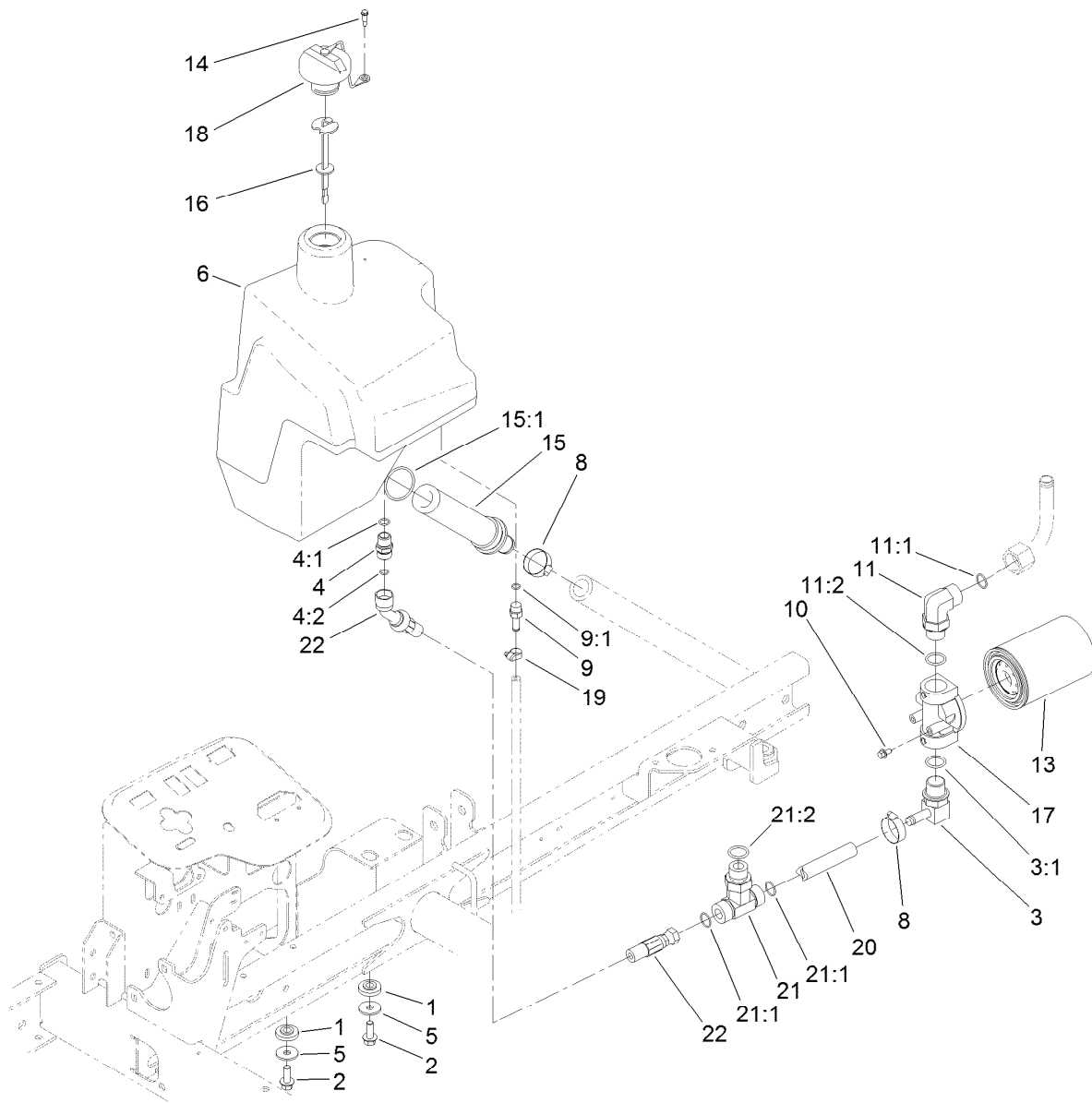
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	2412-36	1	Clamp-Hose	9	340-92	1	Fitting-HYD, Straight
3	100-4887	1	Fitting-Barbed, 90 DEG	9:1	237-78	1	O-Ring
3:1	237-42	1	O-Ring	9:2	237-21	1	O-Ring
4	104-0430	2	Stud	10	340-66	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

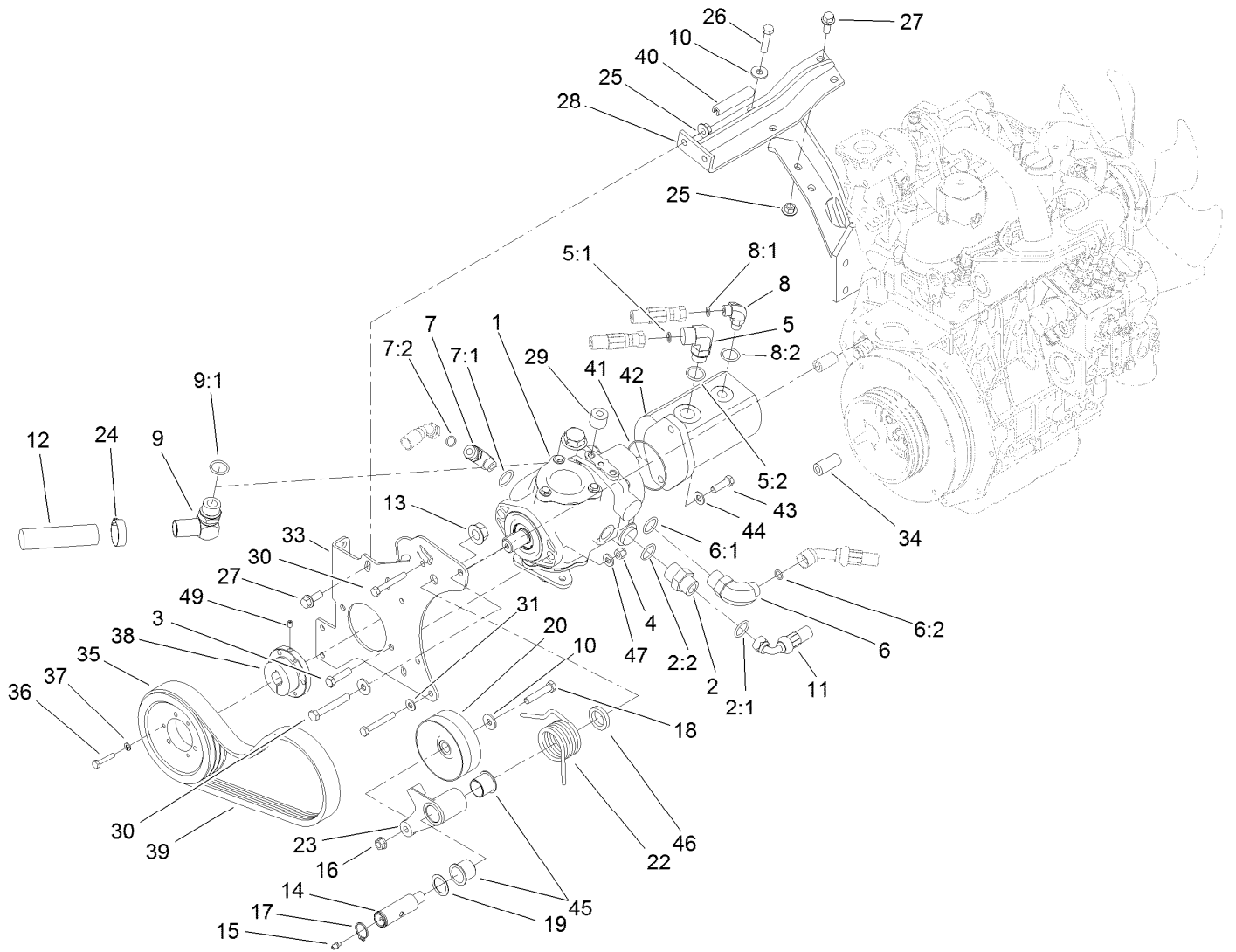
Ref.	Part Number	Qty.	Description
3	106-1026	2	Plug-HYD
3:1	237-42	1	O-Ring
4	117-0115	2	Plug-HYD
4:1	237-78	1	O-Ring
5	110-8768	1	Valve-Relief, Solenoid
5:1	110-6316	1	Seal Kit ●
5:2	110-2635	1	Nut-Coil
6	117-5110	1	Valve-Counterbalance
6:1	117-5111	1	Seal Kit
7	119-2011	1	Valve-Logic, Adjustable
7:1	119-2159	1	Seal Kit
8	110-6344	1	Coil-12V, Dc

● Not illustrated



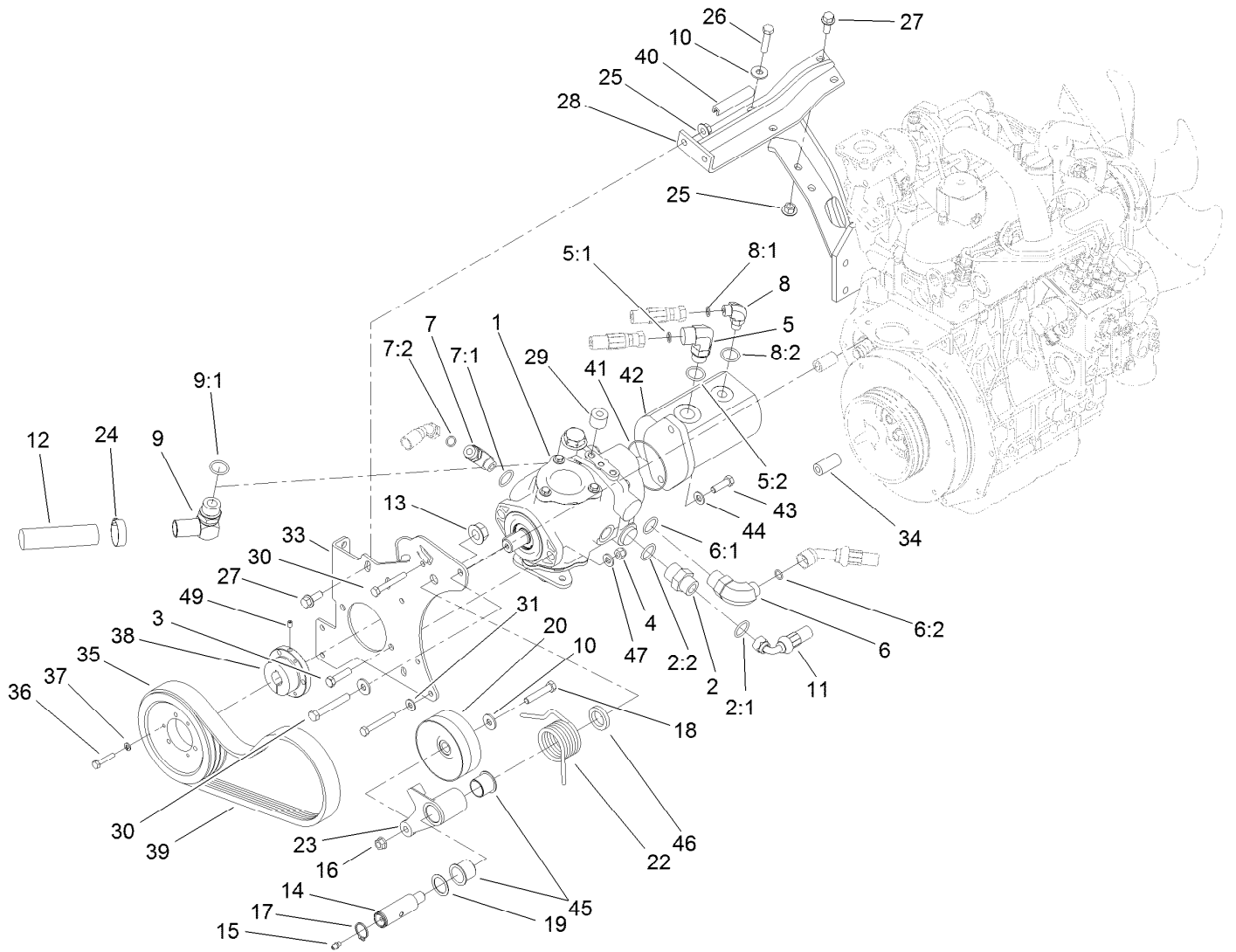
Hydraulic Tank Assembly

<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	11:1	237-58	1	O-Ring
2	3234-11	4	Screw-HHF	11:2	237-81	1	O-Ring
3	353-987	1	Fitting-HYD, 90 DEG (Barbed)	13	86-3010	1	Filter-Oil
3:1	237-81	1	O-Ring	14	57-5420	1	Screw-Shoulder
4	100-4890	1	Fitting-Check	15	104-7546	1	Strainer-Tank
4:1	237-79	1	O-Ring	15:1	340-136	1	O-Ring
4:2	237-30	1	O-Ring	16	119-6968	1	Dipstick-Oil
5	63-8410	4	Washer	17	92-5821	1	Filter Head ASM
6	104-4840	1	Tank-HYD	18	93-7160	1	Cap-Oil, HYD
8	2412-34	2	Clamp-Hose	19	2412-36	1	Clamp-Hose
9	353-979	1	Fitting-Straight	20	104-0486	1	Hose ASM
9:1	237-42	1	O-Ring	21	104-4836	1	Fitting-Tee
10	3234-13	2	Screw-HHF	21:1	237-58	2	O-Ring
11	340-142	1	Fitting-HYD, 90 DEG	21:2	237-81	1	O-Ring
				22	104-0487	1	Hose ASM



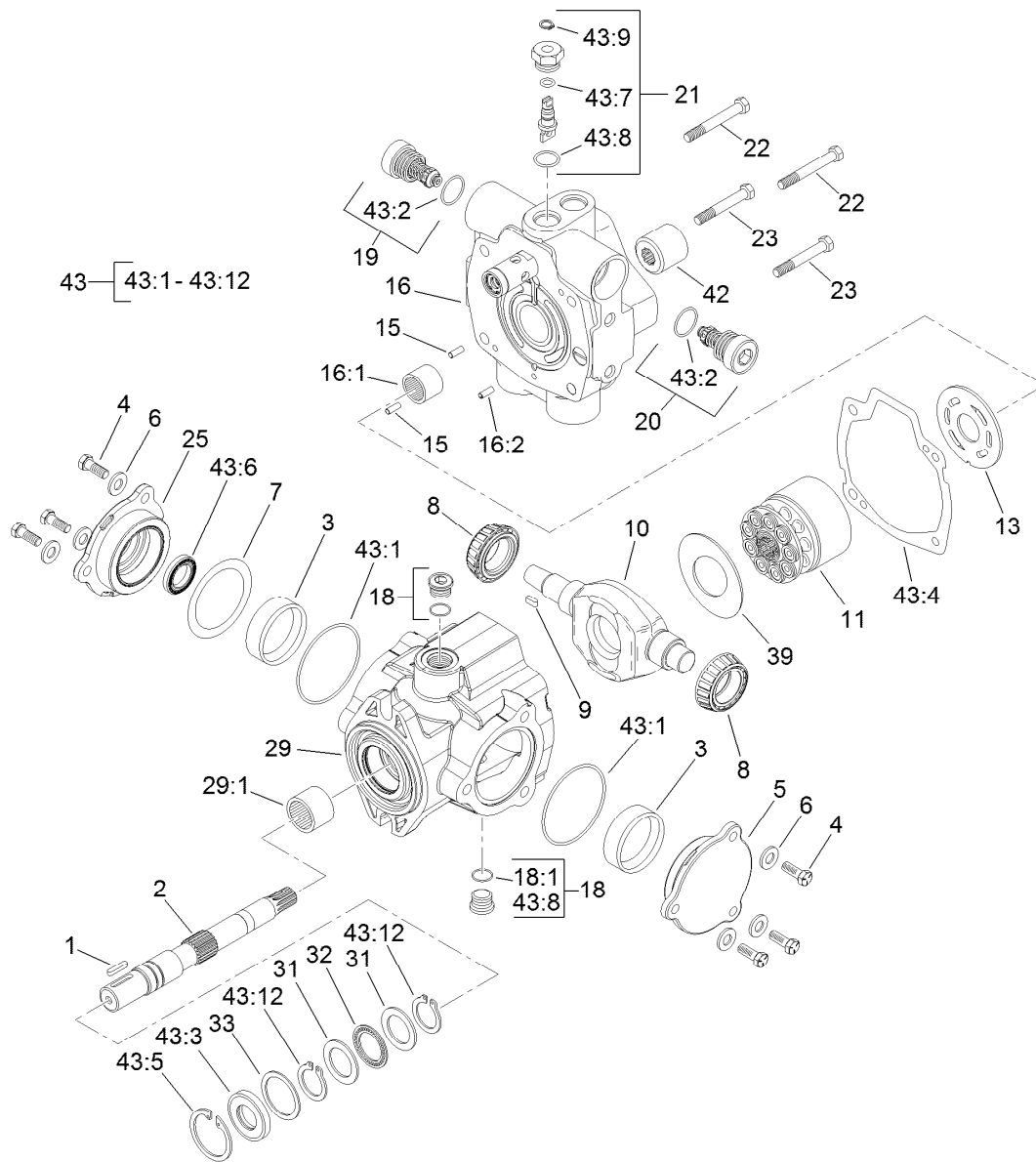
Hydrostat Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	104-4890	1	Piston Pump ASM	11	105-1214	1	Hose ASM
2	340-8	1	Adapter	12	104-5486	1	Hose
2:1	237-65	1	O-Ring	13	32128-54	1	Nut-HF
2:2	237-81	1	O-Ring	14	99-3624	1	Shaft-Pivot, Idler
3	323-8	2	Screw-HH	15	302-5	1	Fitting-Grease
4	3296-39	2	Nut-Lock, NI	16	32128-21	1	Nut-HF
5	340-17	1	Fitting-HYD, 90 DEG	17	32151-36	1	Ring-Retaining
5:1	237-65	1	O-Ring	18	323-10	1	Screw-HH
5:2	237-80	1	O-Ring	19	74-1810	1	Washer
6	340-139	1	Fitting-HYD, 90 DEG	20	107-7834	1	Pulley-Idler
6:1	237-81	1	O-Ring	22	115-3488	1	Spring-Torsion
6:2	237-65	1	O-Ring	23	99-3623-03	1	Arm-Idler
7	340-18	1	Fitting-HYD, 90 DEG	24	2412-34	1	Clamp-Hose
7:1	237-79	1	O-Ring	25	32128-43	4	Nut-Flange
7:2	237-22	1	O-Ring	26	323-19	2	Screw-HH
8	340-77	1	Fitting-HYD, 90 DEG	27	3234-11	4	Screw-HHF
8:1	237-22	1	O-Ring	28	99-3436-03	1	Support-Pump
8:2	237-42	1	O-Ring	29	99-3440	2	Spacer
9	95-3502	1	Fitting-Elbow	30	33114-060	4	Screw-HH
9:1	237-81	1	O-Ring	31	87-8640	3	Washer-Flat
10	80-6990	3	Washer-Hardened	33	95-8933-03	1	Plate-Mount, Pump



Hydrostat 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>
34	95-8941	4	Spacer-Mount, Pump	42	108-9036	1	HYD Gear Pump ASM
35	99-3620	1	Pulley-3V, Pump	43	323-7	2	Screw-HH
36	321-13	3	Screw-HH	44	3256-24	2	Washer-Flat
37	3253-3	3	Washer-Lock	45	99-3631	2	Bushing-Flange
38	100-4813	1	Bushing-Lock, Taper	46	99-3625	1	Spacer-Arm, Idler
39	99-3619	1	Belt-3V	47	100-4852	2	Washer-Hardened
40	70-2041	1	Trim	49	3245-7	1	Screw-Set
41	353-949	1	O-Ring				

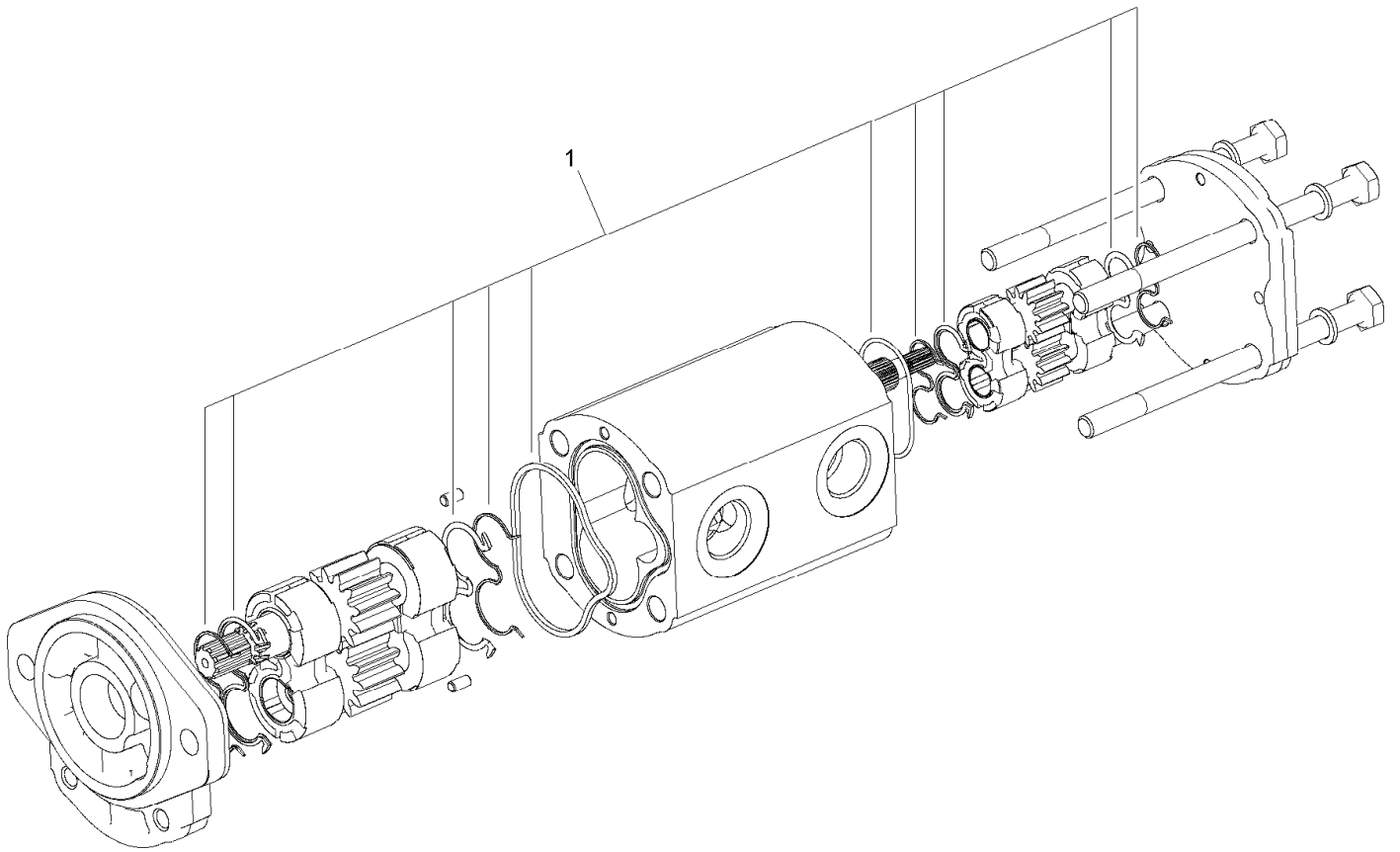


Hydraulic Pump Assembly No. 104-4890

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	94-3645	1	Key	19	104-4889	1	Relief Valve ASM
2	94-6359	1	Shaft-Drive	20	105-3812	1	Valve-Check
3	104-4046	2	Bearing-Cup	21	105-3811	1	Valve-Bypass
4	98-4640	6	Screw-Cap	22	76-6170	2	Capscrew
5	98-4644	1	Plate-Cover	23	76-6160	2	Capscrew
6	105-9762	6	Washer	25	98-4645	1	Plate-Cover
7	100-3182	2	Shim Kit	29	100-3176	1	Housing ASM
8	98-4639	2	Bearing-Cone	29:1	94-6363	1	Bearing
9	94-3646	1	Key	31	252-71	2	Washer-Thrust
10	104-4888	1	Swashplate	32	252-66	1	Bearing-Thrust
11	76-6070	1	Rotating Kit	33	33-3720	1	Washer
13	104-0429	1	Plate-Valve	39	98-4635	1	Insert-Plate, Cam
15	76-6150	2	Pin-Dowel	42	74-9040	1	Coupler
16	105-3813	1	Endcover Sub ASM	43	120-5754	1	Seal Kit
16:1	94-6368	1	Bearing	43:1		2	Ring-Retaining ■
16:2		1	Pin-Roll ■	43:2		2	Ring-Retaining ■
18	74-9280	2	Plug ASM	43:3		1	Seal-Shaft ■
18:1		1	Ring-Retaining ■	43:4		1	Gasket ■

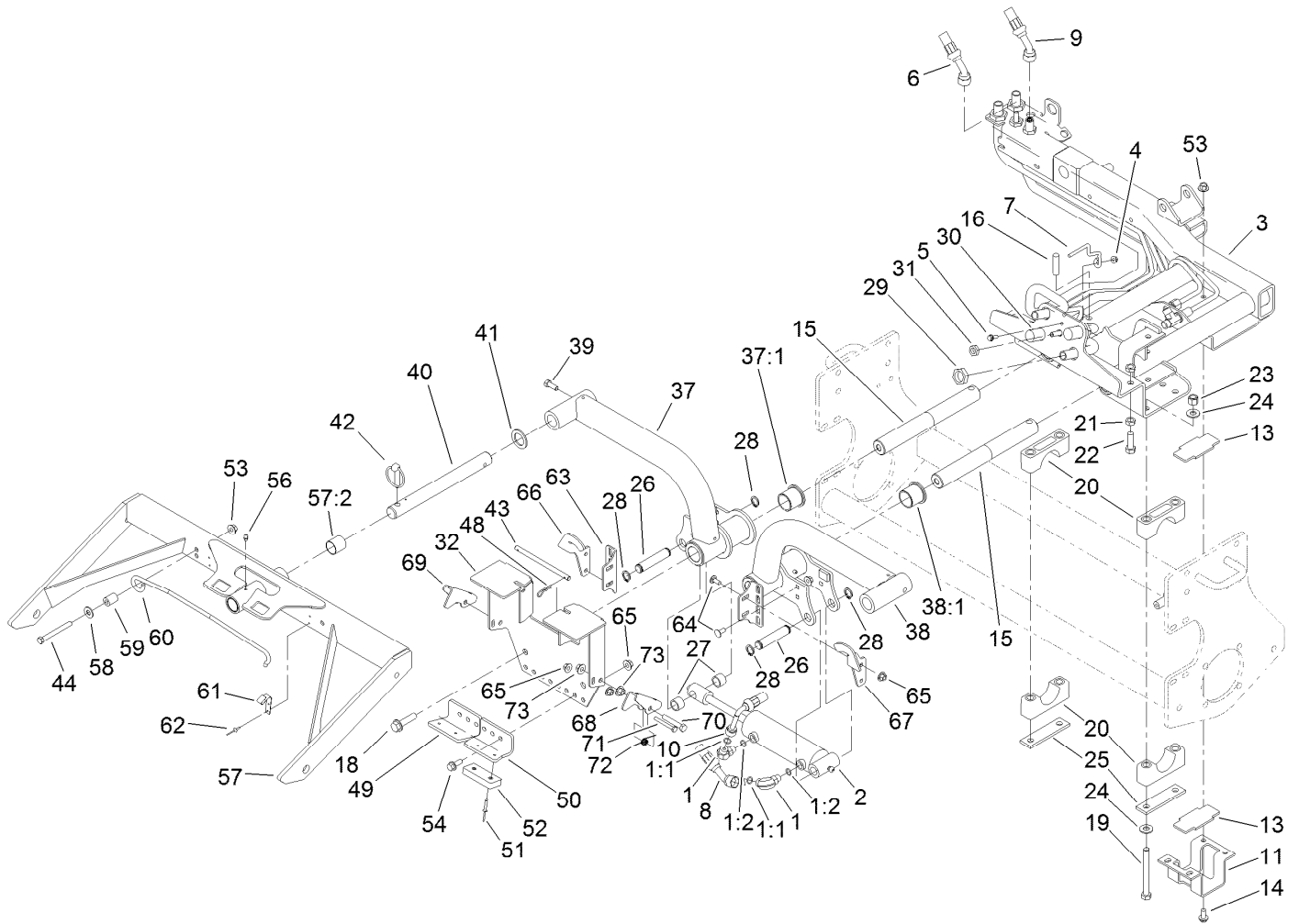
● Not illustrated

■ Not serviced separately



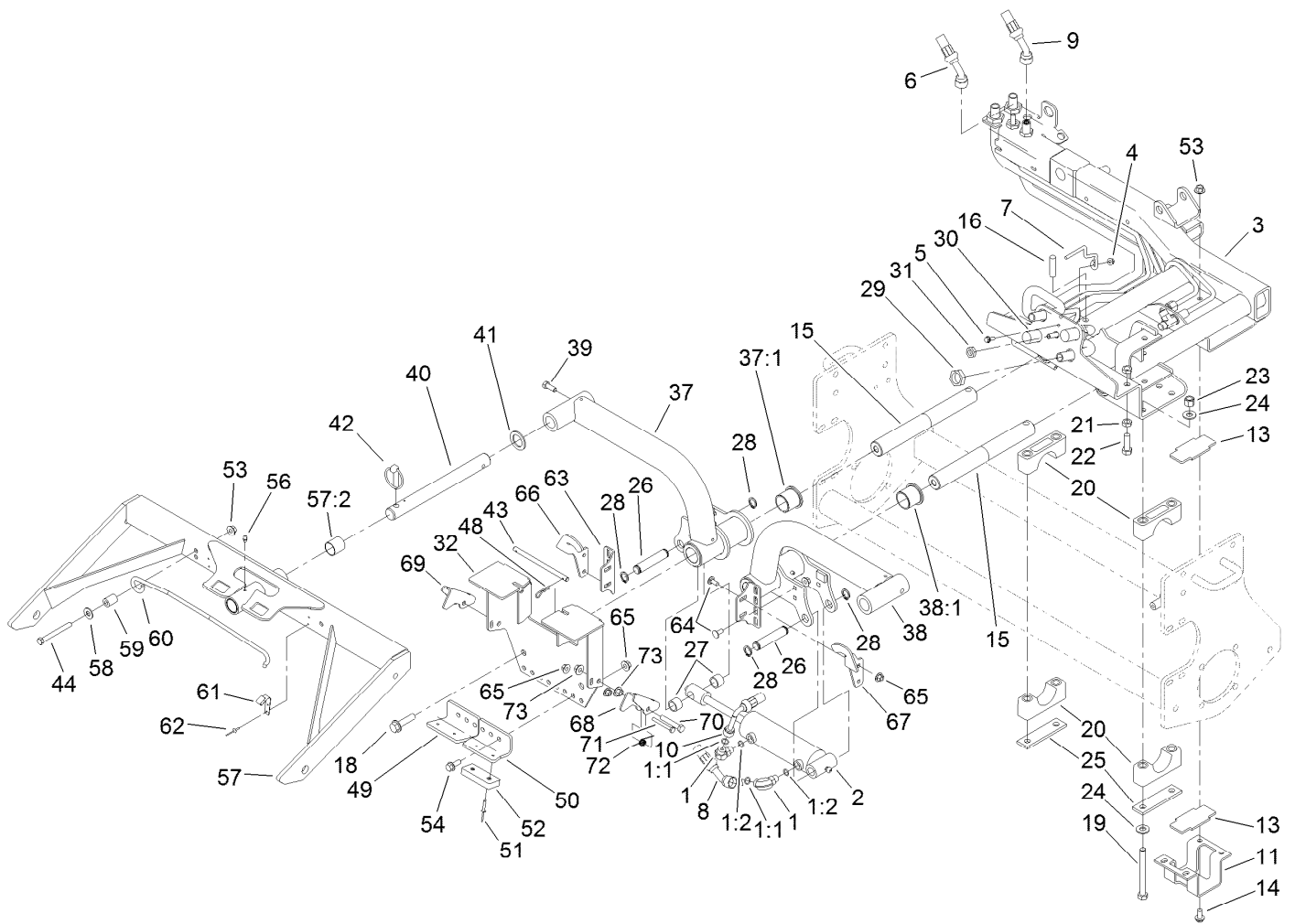
Hydraulic Gear Pump Assembly No. 108-9036

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



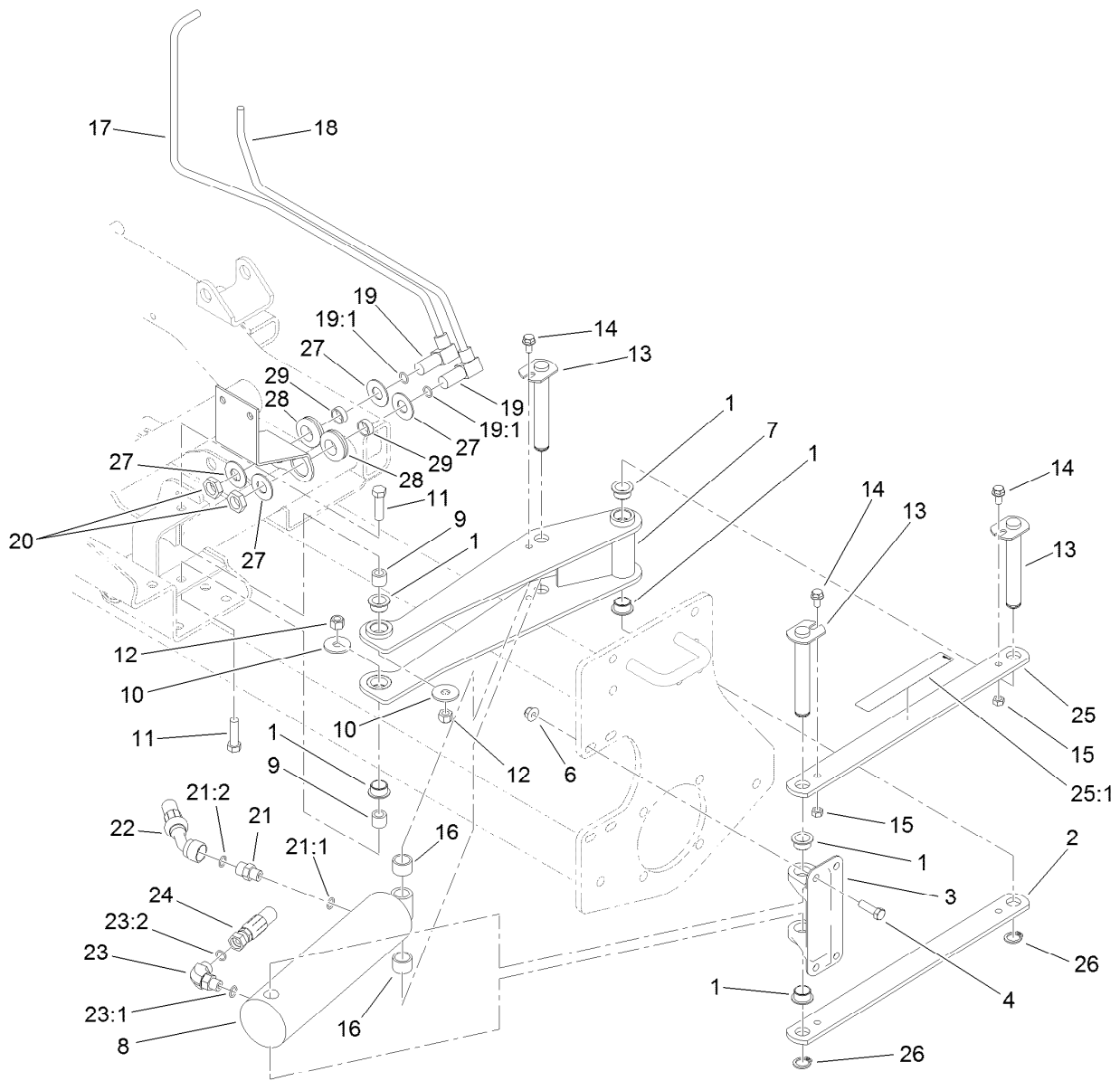
Carrier Assembly

<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	340-77	2	Fitting-HYD, 90 DEG	22	325-7	2	Screw-HH
1:1	237-22	1	O-Ring	23	3296-23	8	Nut-Lock, NI
1:2	237-42	1	O-Ring	24	87-7270	16	Washer-Thrust
2	112-9916	1	HYD Cylinder ASM	25	99-3373	4	Bar-Support, Slide
3	100-4939-03	1	Sidewinder Carrier ASM	26	95-8575	2	Pin
4	32128-33	1	Nut-HF	27	75-9590	2	Spacer-Cylinder
5	3234-4	1	Screw-HHF	28	32120-93	4	Ring-Retaining
6	95-8822	1	Hose ASM	29	340-74	4	Nut-Lock, Bulkhead
7	99-3433	1	Wire-Center	30	99-3640	1	Tube ASM
8	104-0405	1	Hose ASM	31	340-78	1	Nut-Lock, Bulkhead
9	95-8821	1	Hose ASM	32	104-4820-03	1	Bracket-Stop, Carrier
10	104-0406	1	Hose ASM	37	115-3462	1	RH Liftarm ASM
11	104-0416-03	1	Bracket-Slide	37:1	69-6470	2	Bushing-Castor
13	104-0417	2	Slide-Plastic	38	115-3461	1	LH Liftarm ASM
14	3234-11	4	Screw-HHF	38:1	69-6470	2	Bushing-Castor
15	95-8531	2	Shaft-Pivot, Liftarm	39	323-6	2	Screw-HH
16	32121-122	2	Pin-Roll	40	95-8979	2	Shaft
18	3234-27	2	Screw-HHF	41	3-6781	2	Washer-Thrust
19	325-19	8	Screw-HH	42	283-71	2	Pin-Lynch
20	104-4865	8	Cap-Bearing	43	104-0472	1	Rod
21	3218-5	4	Nut-Jam	44	323-42	2	Screw-HH



Carrier Assembly (continued)

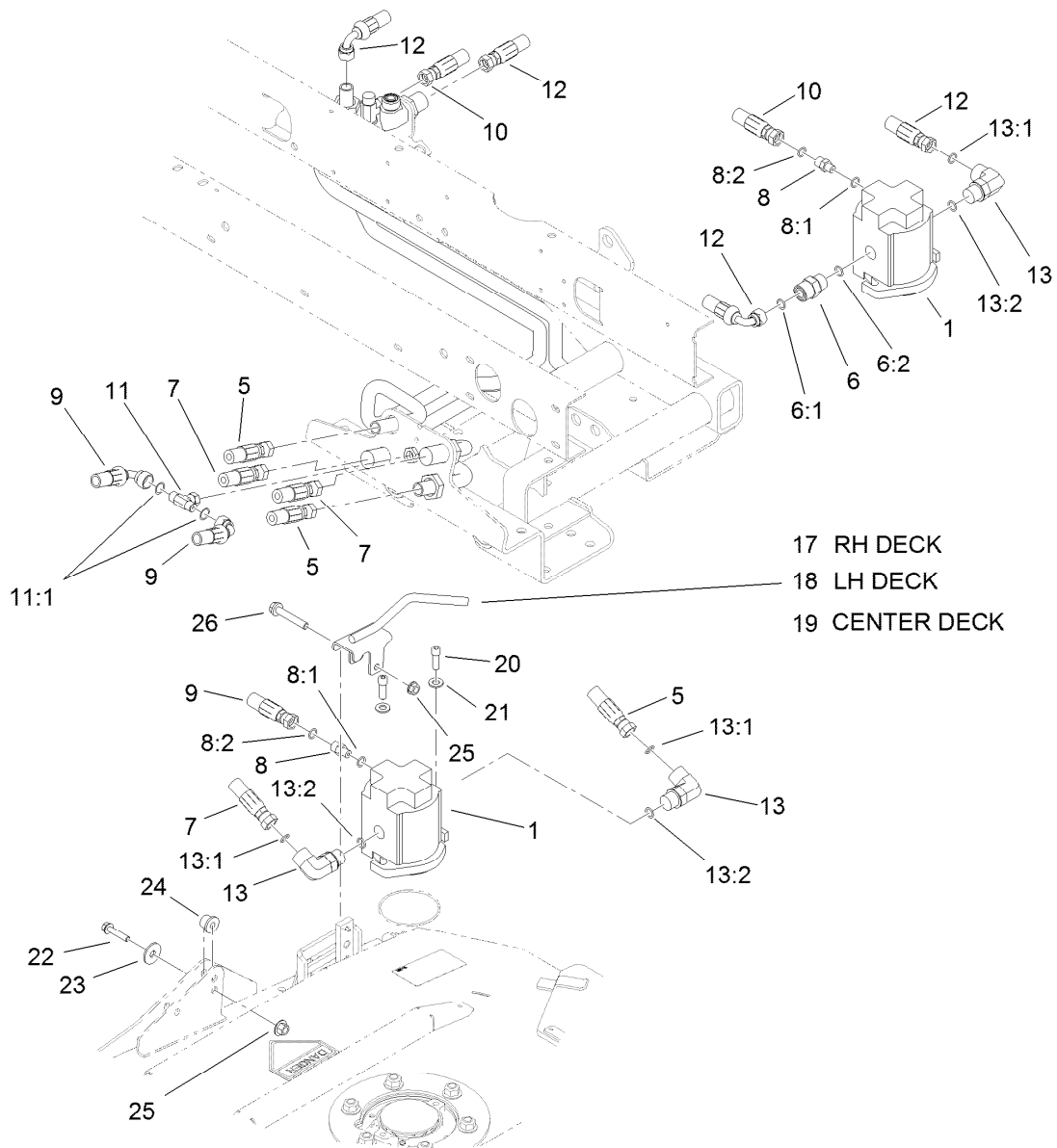
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
48	3290-467	2	Pin-Hair	61	104-4237	2	Clip-Rod
49	110-8793-03	1	Stop-Deck, RH	62	3290-271	4	Rivet-Pop
50	110-8794-03	1	Stop-Deck, LH	63	104-4828-03	2	Bracket-Actuator
51	3269-11	4	Rivet-Pop	64	3230-23	8	Screw-CARR
52	86-5350	2	Bumper-Rubber	65	32128-44	12	Nut
53	104-8301	6	Nut-Flange, NI	66	104-4826-03	1	Actuator-RH
54	3234-11	4	Screw-HHF	67	104-4827-03	1	Actuator-LH
56	302-5	2	Fitting-Grease	68	104-4819-03	1	Bracket-Pivot, LH
57	110-8787	2	Front Carrier Frame ASM	69	104-4825-03	1	Bracket-Pivot, RH
57:2	108-4000	2	Bushing	70	323-11	2	Screw-HH
58	93-8806	2	Washer-Hardened	71	322-11	2	Screw-HH
59	104-4613	2	Tube-Latch	72	104-4821	2	Spring-Torsion
60	104-4612	2	Rod-Latch	73	32128-43	8	Nut-Flange



Scissor Assembly

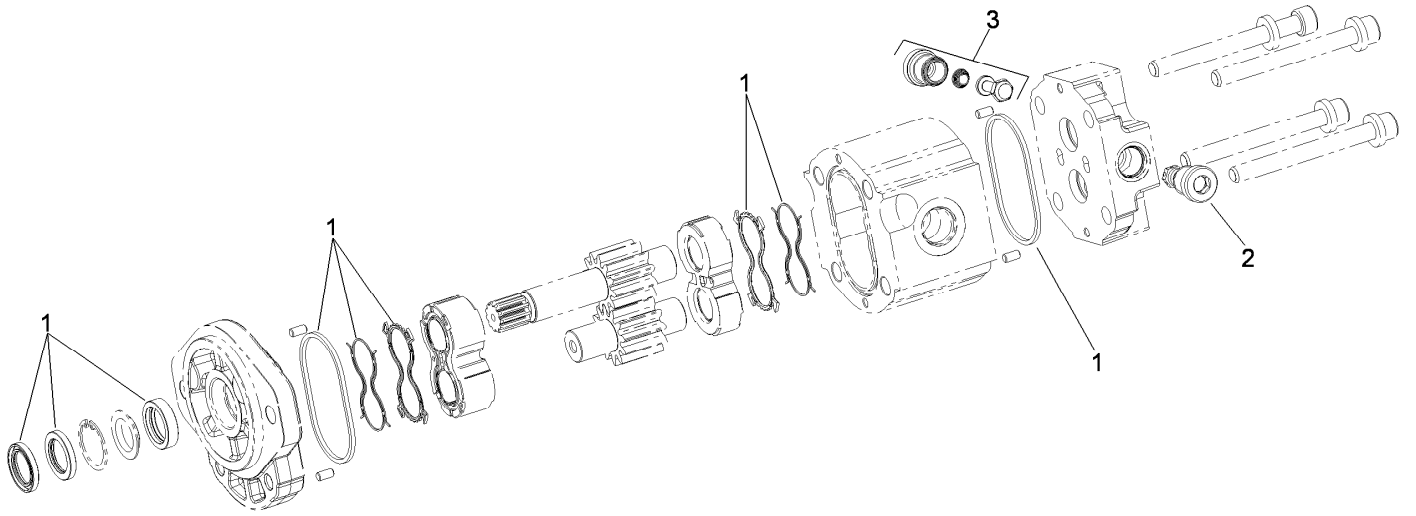
Ref.	Part Number	Qty.	Description
1	95-8526	6	Bushing-Plastic
2	95-8527-03	1	Link-Scissor
3	95-8883	1	Mount-Scissor
4	323-7	4	Screw-HH
6	104-8301	4	Nut-Flange, NI
7	95-8521-03	1	Frame-Scissor
8	95-8512	1	Cylinder-HYD
9	95-8603	2	Spacer
10	87-5330	2	Washer
11	324-6	2	Screw-HH
12	3296-48	2	Nut-Lock, NI
13	95-8529	3	Pin
14	3234-14	3	Screw-HHF
15	32152-1	3	Nut-Lock, Cone
16	46-6350	2	Spacer
17	95-8790	1	Tube ASM
18	95-8791	1	Tube ASM

Ref.	Part Number	Qty.	Description
19	340-154	2	Union-Bulkhead
19:1	237-22	2	O-Ring
20	340-70	2	Nut-Lock
21	85-9720	1	Fitting-Orificed (.060)
21:1	237-78	1	O-Ring
21:2	237-21	1	O-Ring
22	95-8838	1	Hose ASM
23	340-132	1	Fitting-HYD, 90 DEG
23:1	237-78	1	O-Ring
23:2	237-21	1	O-Ring
24	95-8839	1	Hose ASM
25	99-3505	1	Scissors Link ASM
25:1	94-3353	1	Decal-Point, Pinch
26	32120-93	2	Ring-Retaining
27	69-8940	4	Washer
28	240-4	2	Grommet-Rubber
29	69-8970	2	Spacer



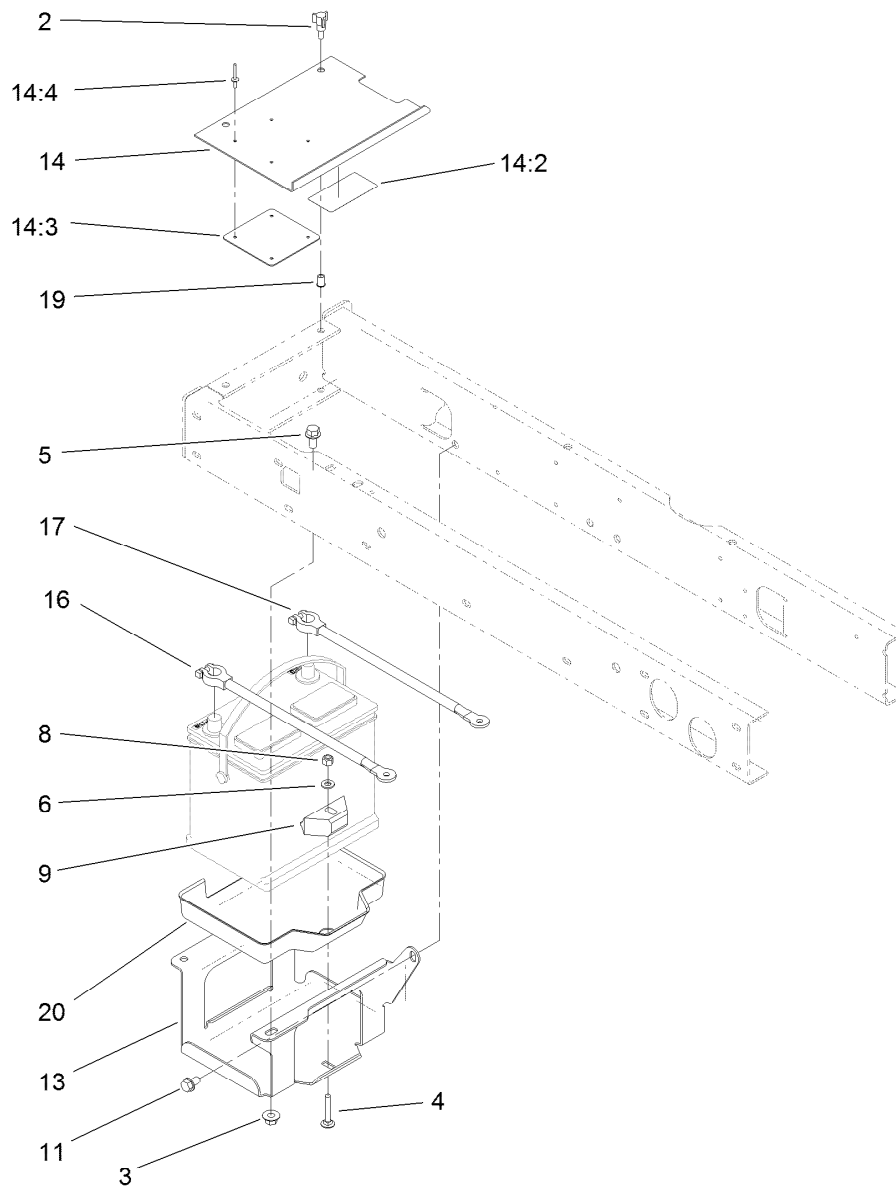
Rotary Motor Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	117-5141	3	Motor-HYD	13	340-17	5	Fitting-HYD, 90 DEG
5	105-1216	2	Hose ASM	13:1	237-65	1	O-Ring
6	340-7	1	Adapter	13:2	237-80	1	O-Ring
6:1	237-65	1	O-Ring	17	112-9901-03	1	RH Foot Guard ASM
6:2	237-80	1	O-Ring	18	112-9902-03	1	LH Foot Guard ASM
7	105-1215	2	Hose ASM	19	112-9900-03	1	Guard-Foot
8	340-92	3	Fitting-HYD, Straight	20	3274-7	6	Screw-HSH
8:1	237-78	1	O-Ring	21	3256-24	6	Washer-Flat
8:2	237-21	1	O-Ring	22	323-52	6	Screw-HH
9	104-1080	2	Hose ASM	23	93-8806	6	Washer-Hardened
10	100-4876	1	Hose ASM	24	95-8803	6	Bushing-Flange
11	99-3477	1	Fitting-Tee	25	104-8301	10	Nut-Flange, NI
11:1	237-42	2	O-Ring	26	323-11	4	Screw-HH
12	100-4880	2	Hose ASM				



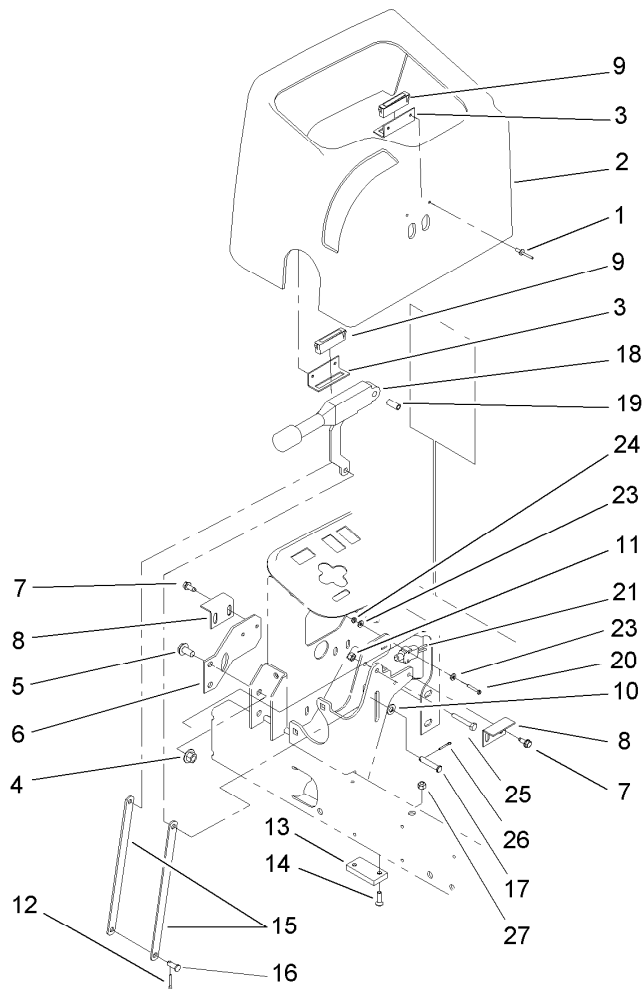
Gear Motor Assembly No. 117-5141

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	117-0235	1	Seal Kit
2	107-7820	1	Valve-Relief
3	107-7821	1	Valve-Anticavitation



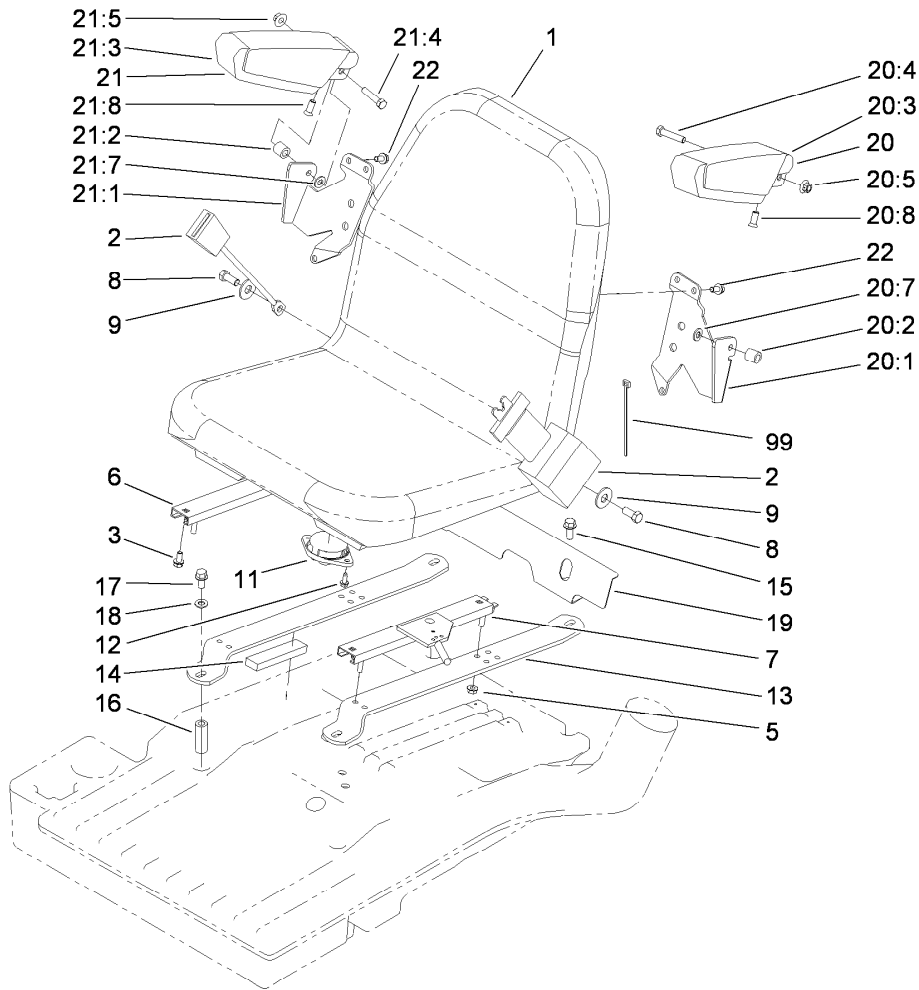
Battery Assembly

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



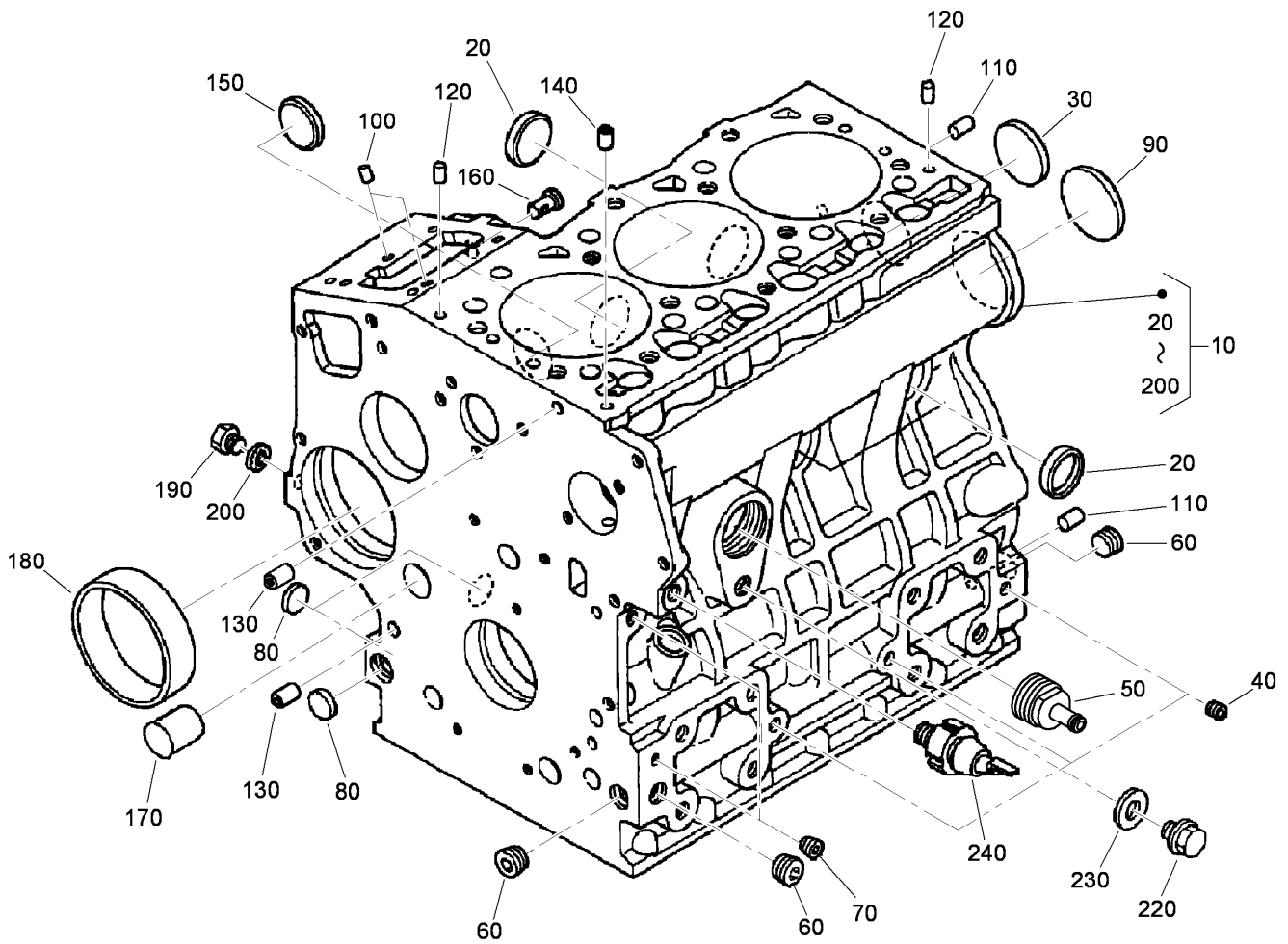
Parking Brake Assembly

<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	3	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



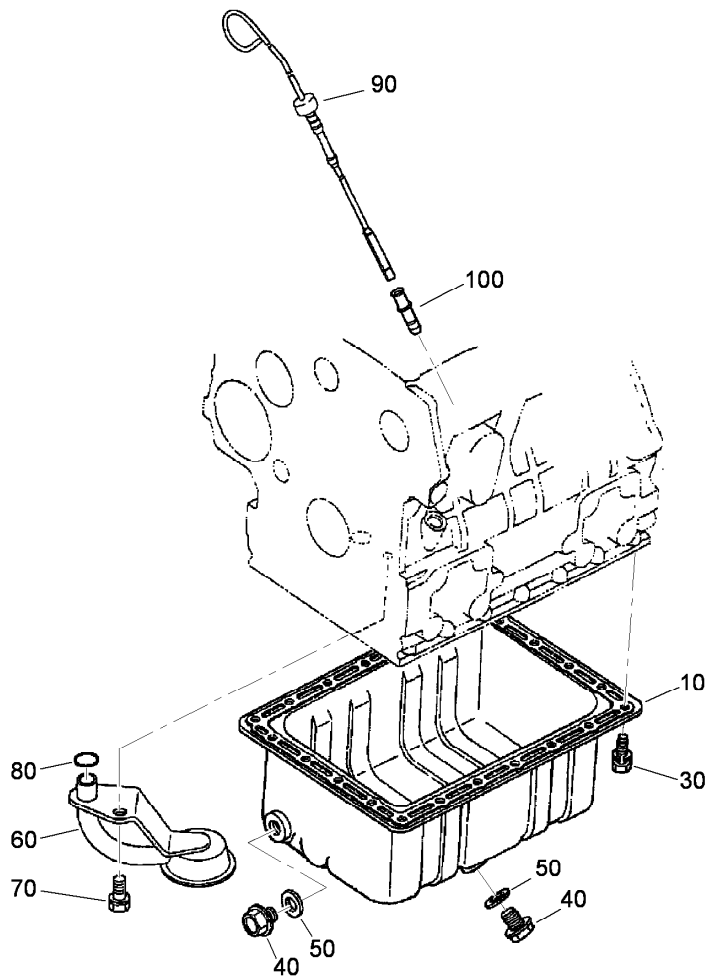
Seat Mounting Assembly

<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	Tie-Cable
20	92-7307	1	LH Armrest ASM				



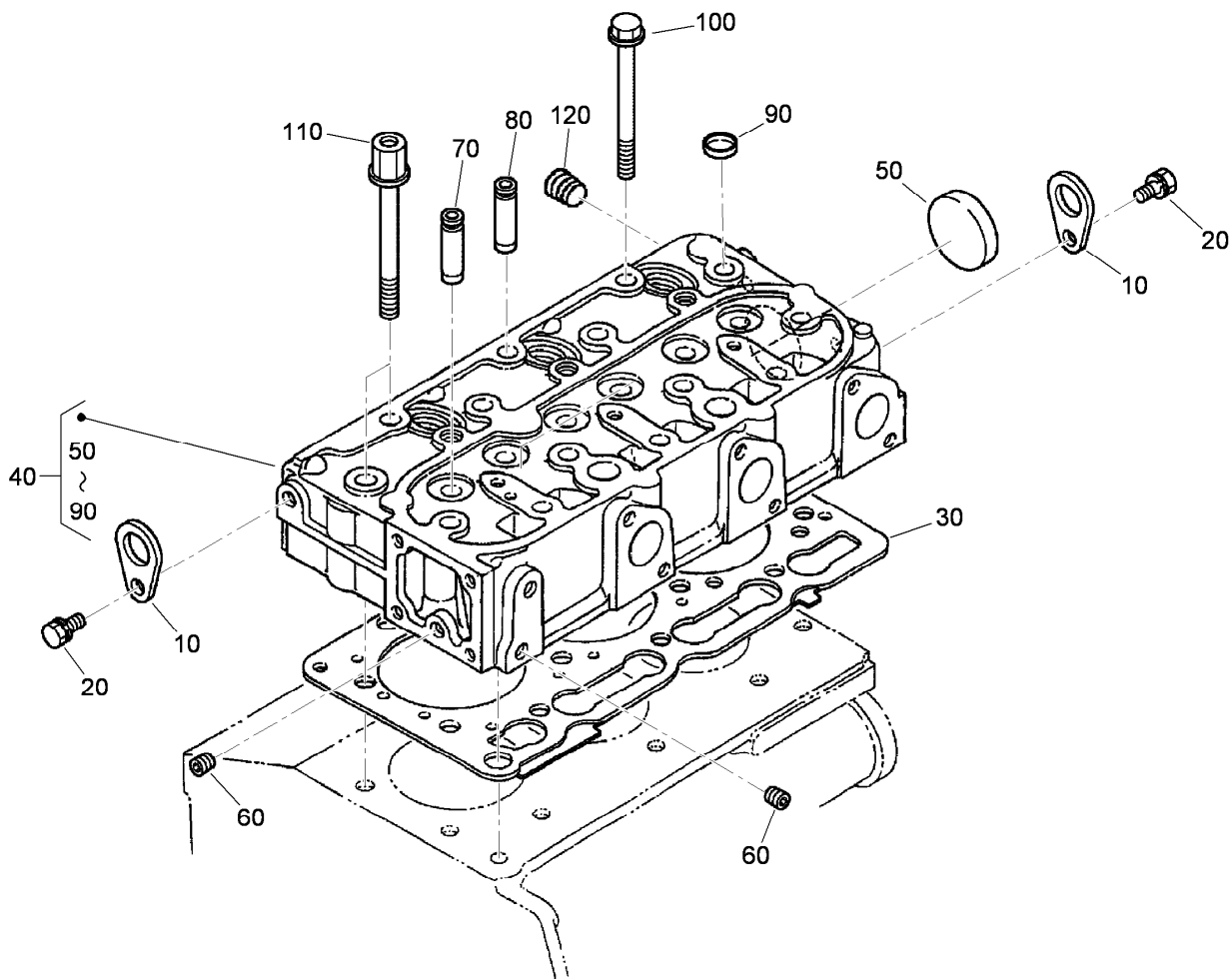
Crankcase Assembly

<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



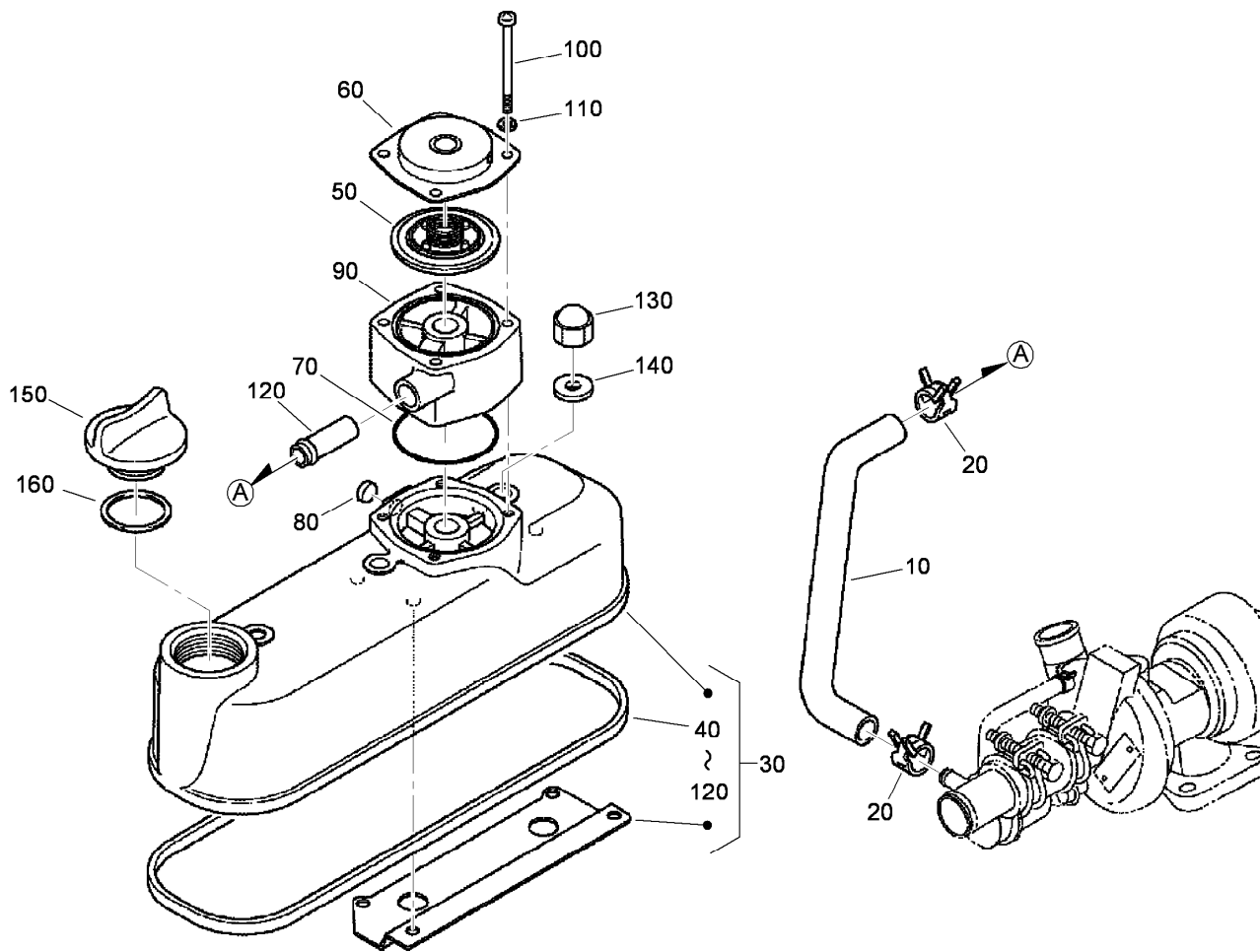
Dipstick, Guide and Oil Pan Assembly

<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	*obs* 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



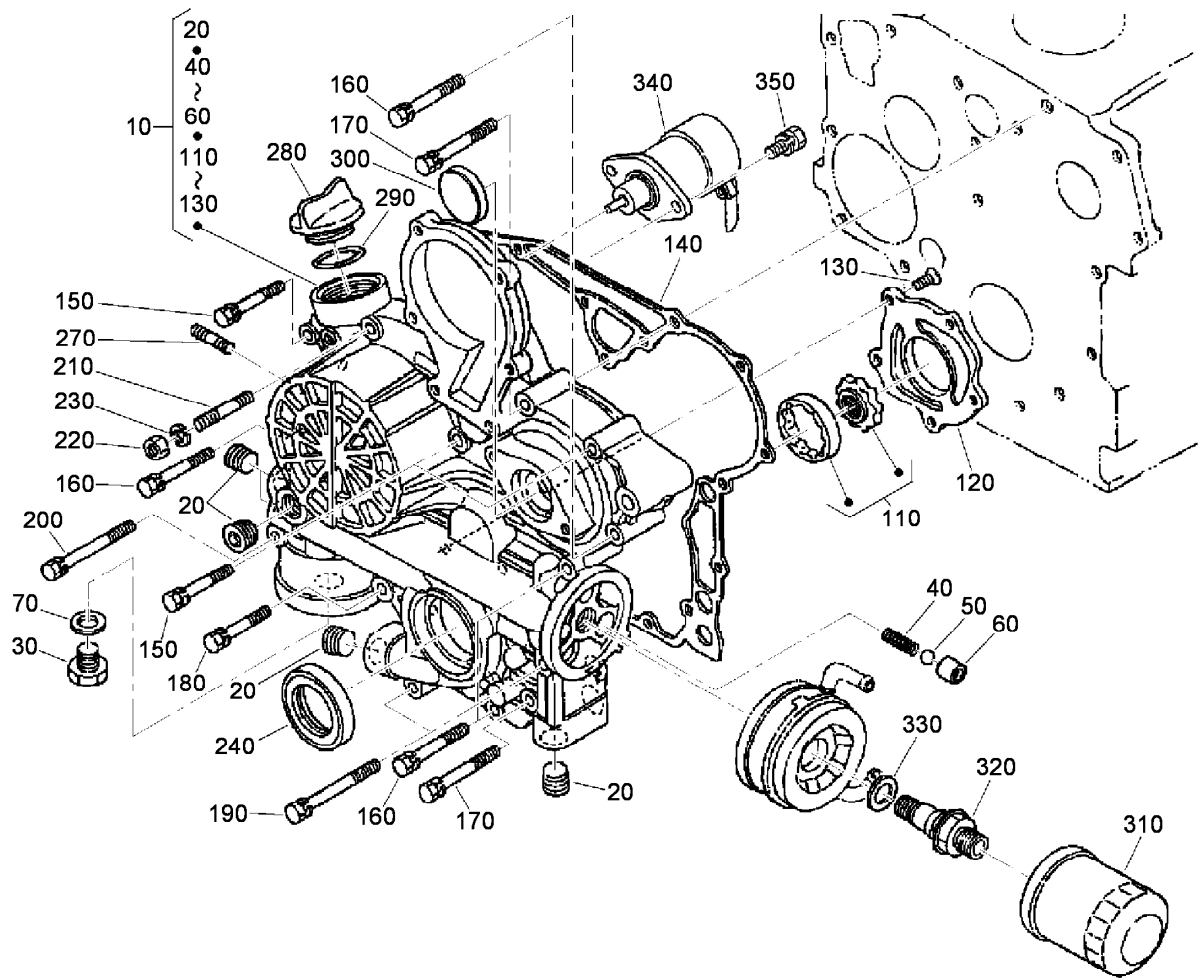
Cylinder Head Assembly

<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

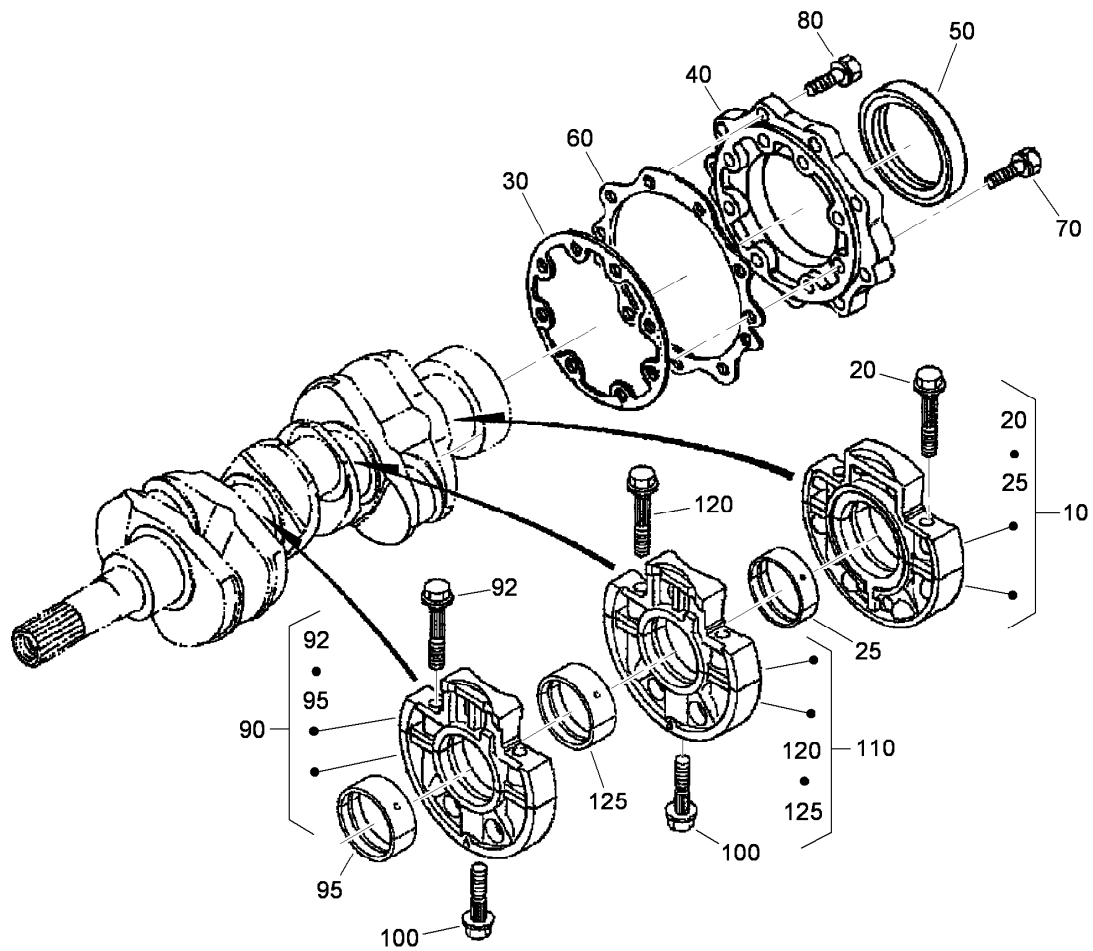
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	115-3040	1	Tube-Breather
20	108-2859	2	Clamp-Hose
30	115-3041	1	Cylinder Head Cover ASM
40	98-9615	1	Gasket-Cover, Head
50	110-3715	1	Valve-Breather
60	110-3714	1	Cover-Breather
70	110-3846	1	O Ring-Breather
80	115-3042	1	Cap-Sealing
90	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

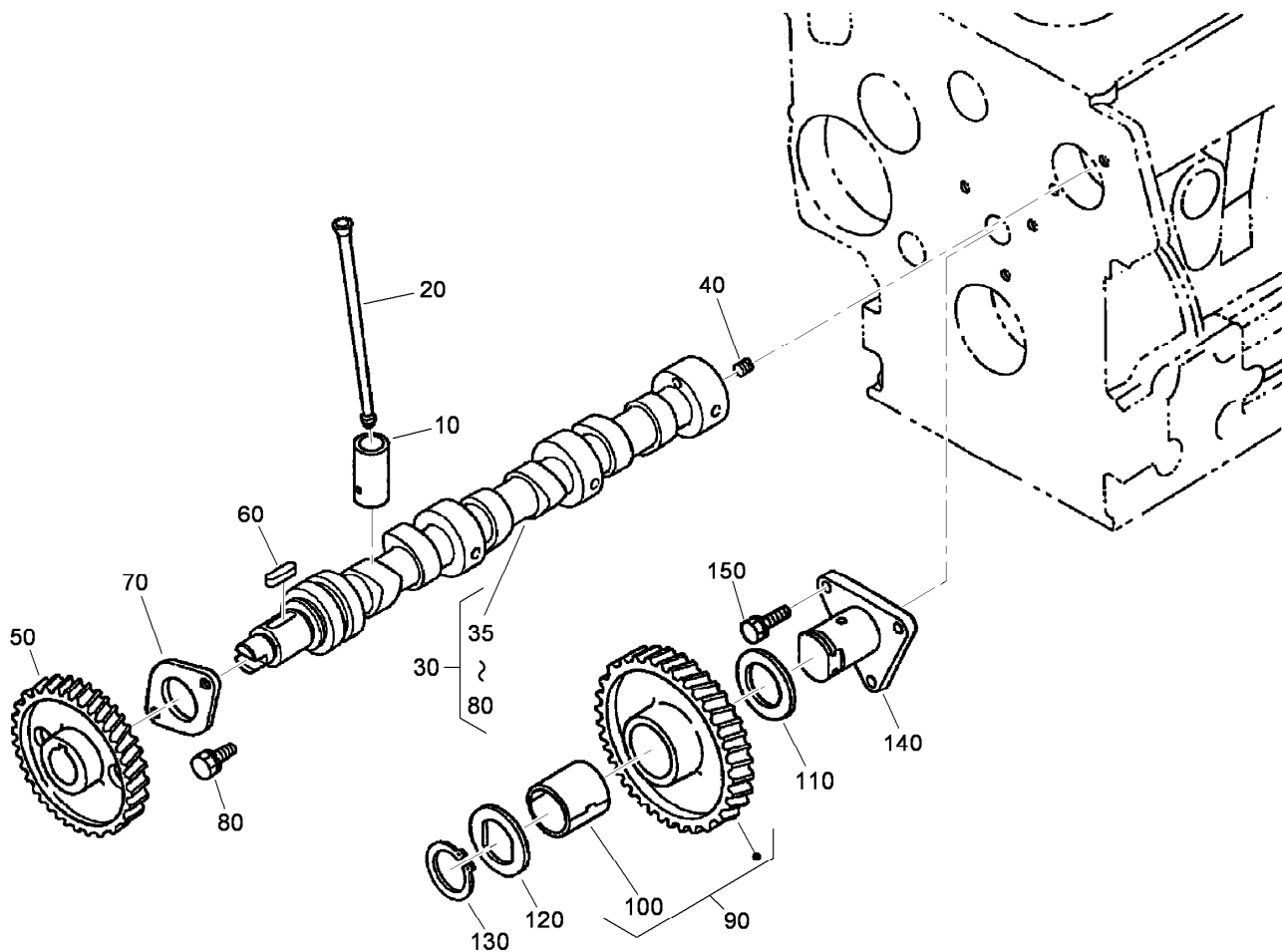
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-7825	1	Gear Case ASM
20	98-9598	5	Plug
30	99-3450	1	Plug
40	98-9544	1	Spring
50	98-9543	1	Seat-Valve
60	98-9380	1	Ball
70	99-3451	1	Plug-Packing
110	98-9540	1	Oil Pump Rotor ASM
120	105-3708	1	Cover-Pump, Oil
130	98-9592	5	Screw
140	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



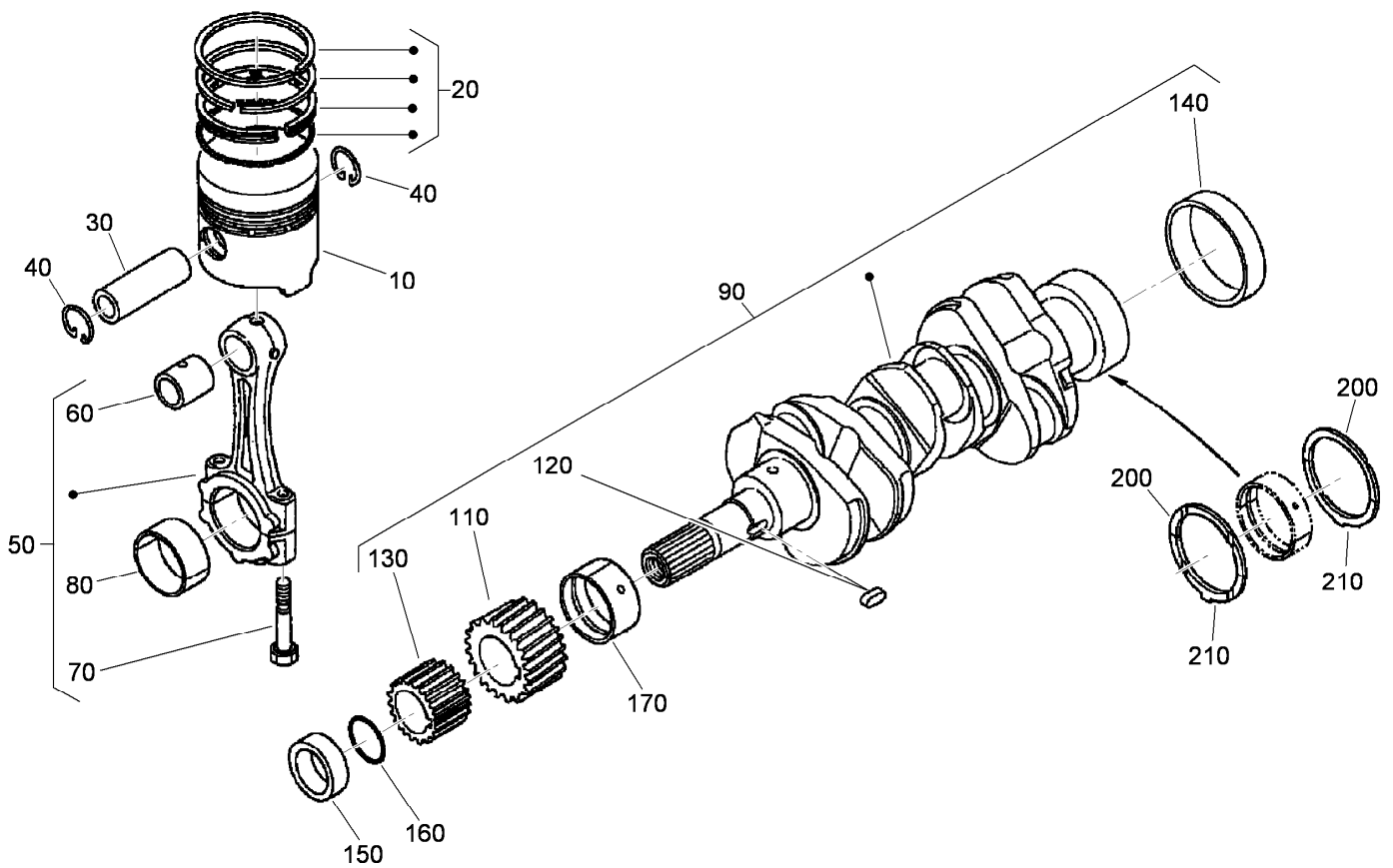
Main Bearing Case Assembly

Ref.	Part Number	Qty.	Description
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

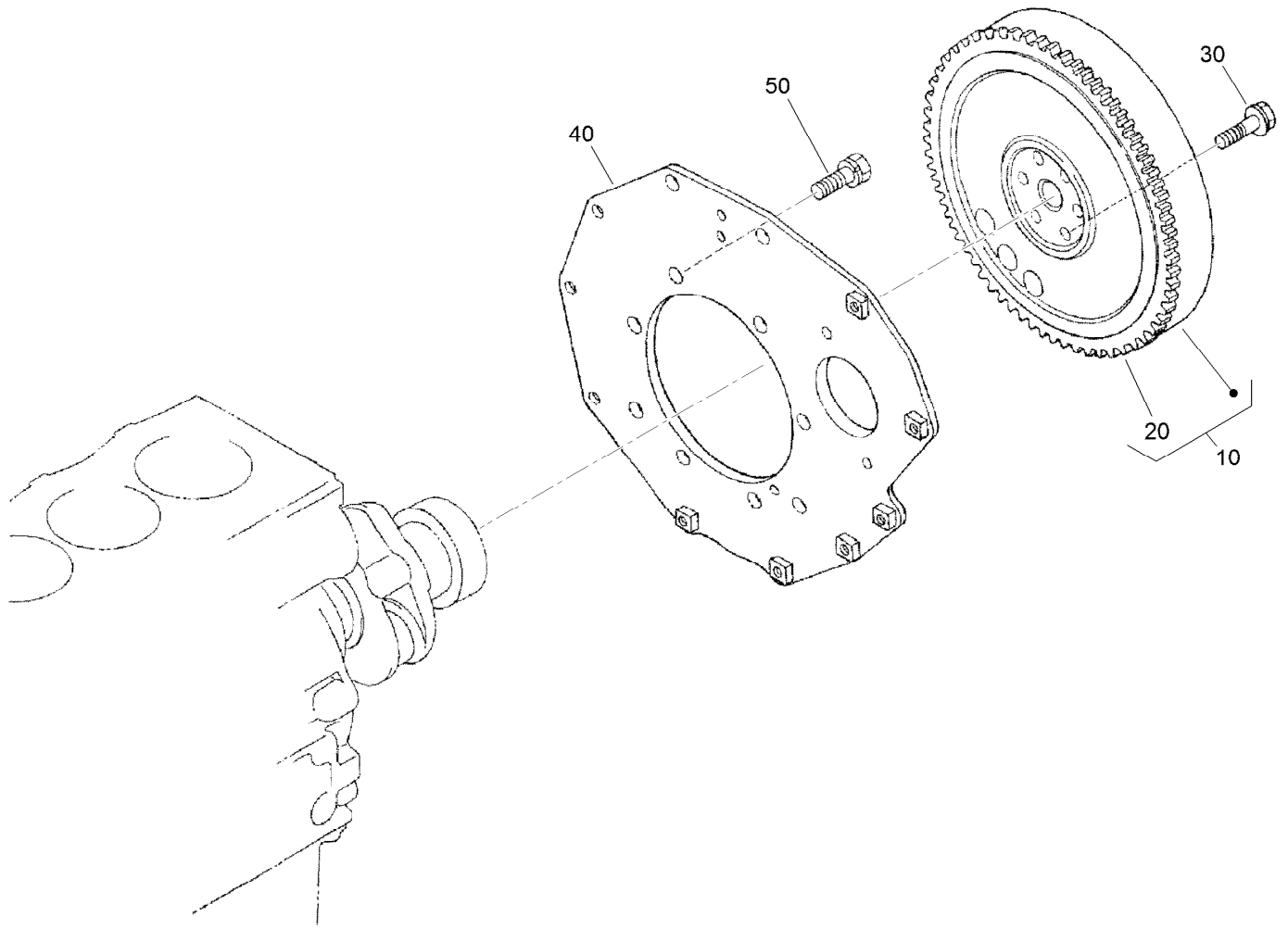
Ref.	Part Number	Qty.	Description
10	112-0185	6	Tappet
20	98-9509	6	Rod-Push
30	112-7029	1	Camshaft ASM
35	108-1403	1	Camshaft
40	98-7449	1	Screw-Set
50	98-9512	1	Gear-Cam
60	98-9378	1	Key-Feather
70	98-9510	1	Stopper-Camshaft
80	98-7692	2	Bolt
90	98-9649	1	Idle Gear ASM
100	98-9650	1	Bushing-Gear, Idle
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

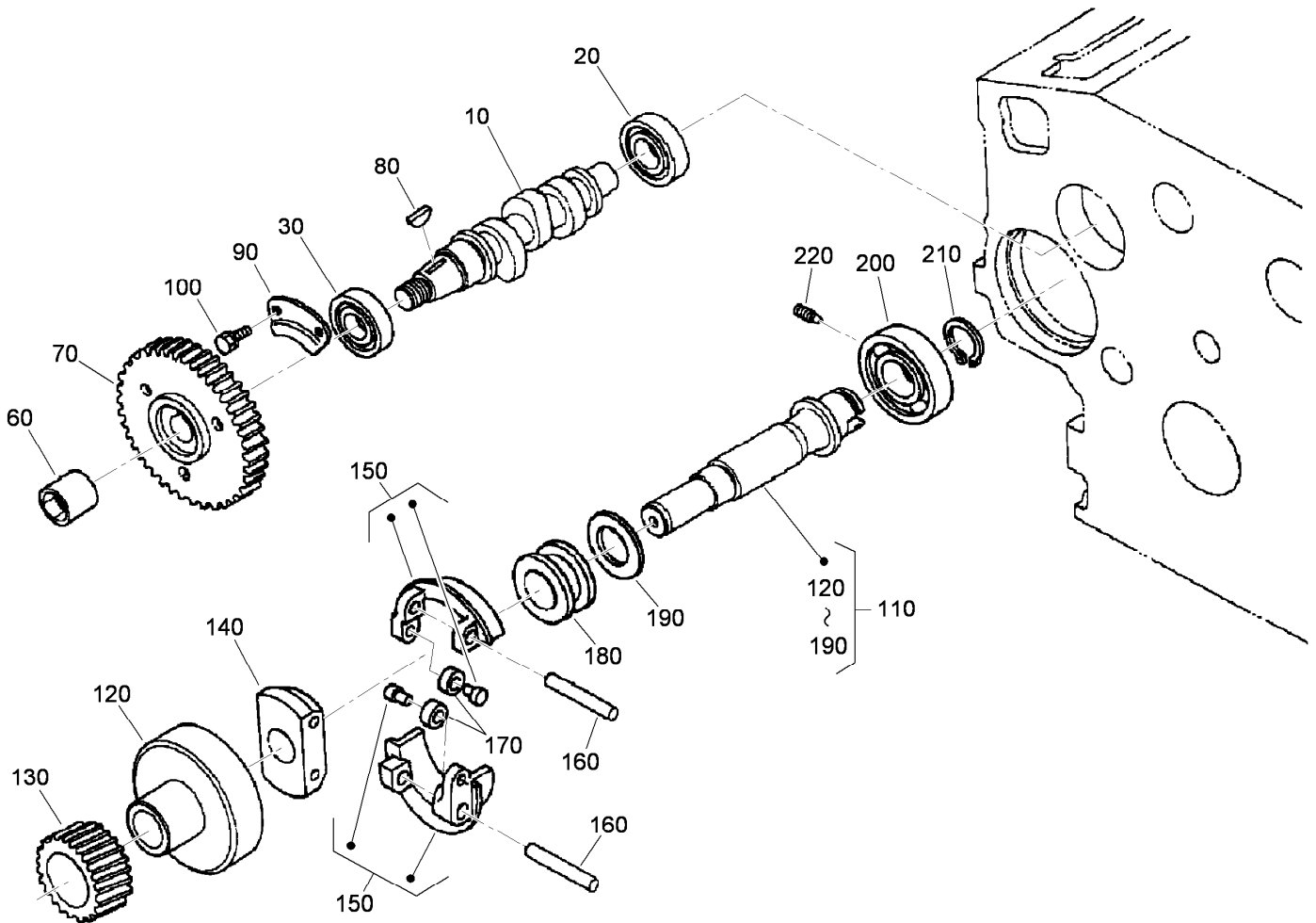
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9550	3	Piston (STD)
10	108-1417	3	Piston (0.5Mm)
20	98-9551	3	Piston Ring ASM (STD)
20	108-1404	3	Piston Ring ASM (0.5Mm)
30	98-9513	3	Pin-Piston
40	98-9514	6	Circlip-Pin, Piston
50	98-9552	3	Connecting Rod ASM
60	115-3014	3	Bushing-Pin, Piston
70	98-9517	6	Bolt-Rod, Connecting
80	98-9553	3	Bearing-Rod (STD)
80	108-1405	3	Metal-Crankpin (-0.2Mm)
80	108-1406	3	Metal-Crankpin (-0.4Mm)
90	98-9642	1	Crankshaft ASM
110	98-9532	1	Gear-Crankshaft

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
120	98-9666	1	Key
130	98-9542	1	Gear-Drive, Oil Pump
140	98-9522	1	Sleeve-Crankshaft
150	98-9521	1	Collar-Crankshaft
160	105-3783	1	O-Ring
170	112-7005	1	Bearing-Main (STD)
170	112-7009	1	Metal-Crankpin (-0.2Mm)
170	112-7010	1	Metal-Crankpin (-0.4Mm)
200	98-9413	2	Bearing-Thrust (STD)
200	98-9414	2	Bearing-Thrust (0.2Mm)
200	98-9415	2	Bearing-Thrust (0.4Mm)
210	98-9688	2	Bearing-Thrust (STD)
210	98-9689	2	Bearing-Thrust (0.2Mm)
210	98-9690	2	Bearing-Thrust (0.4Mm)



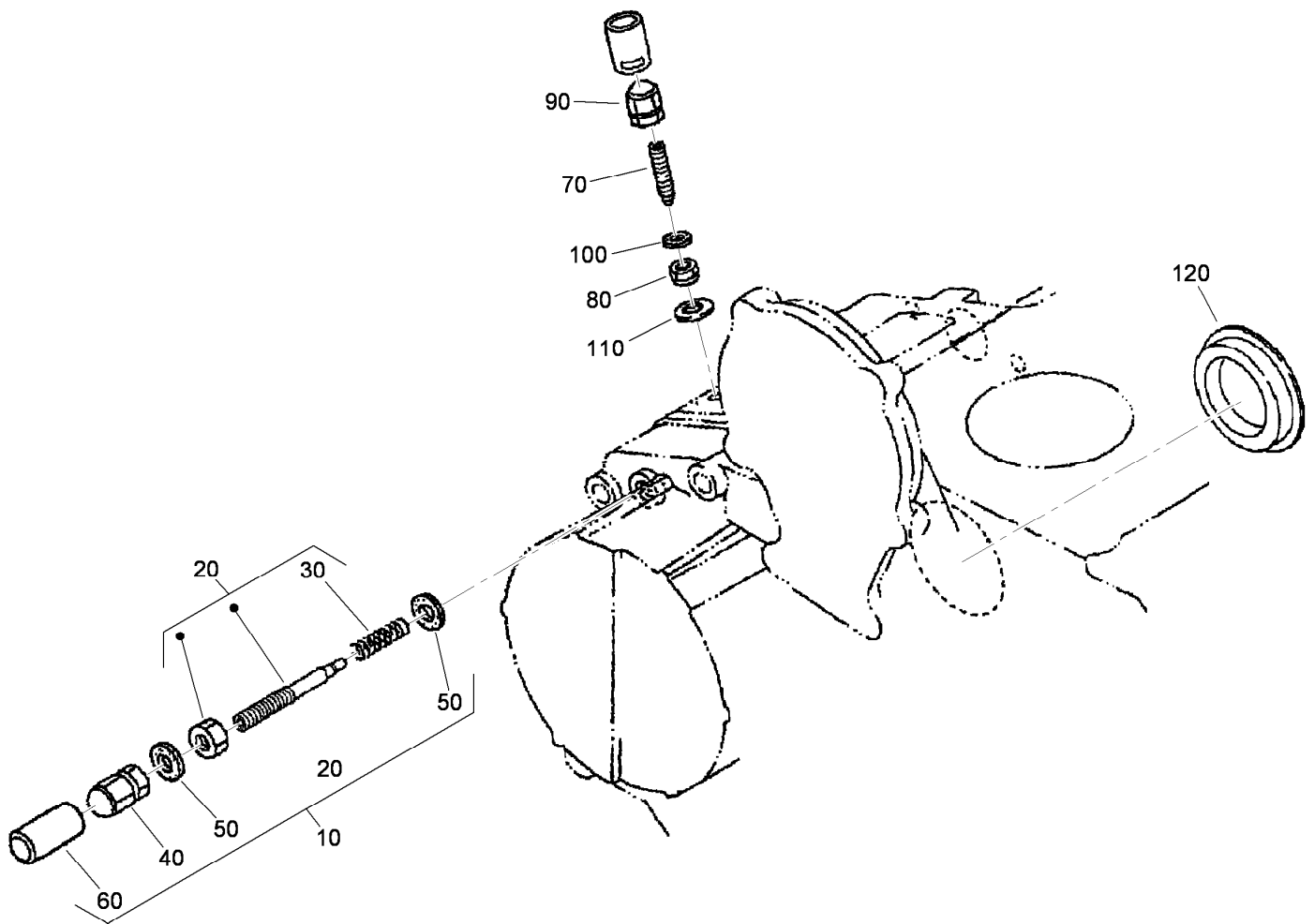
Flywheel Assembly

<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



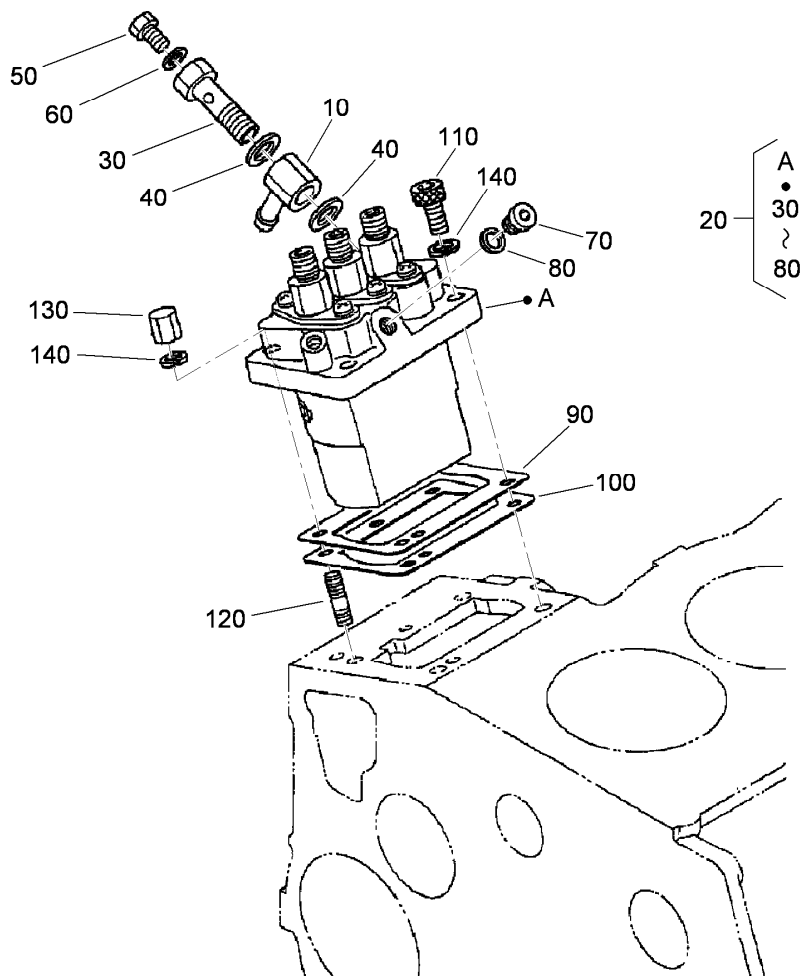
Fuel Camshaft and Governor Shaft Assembly

<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



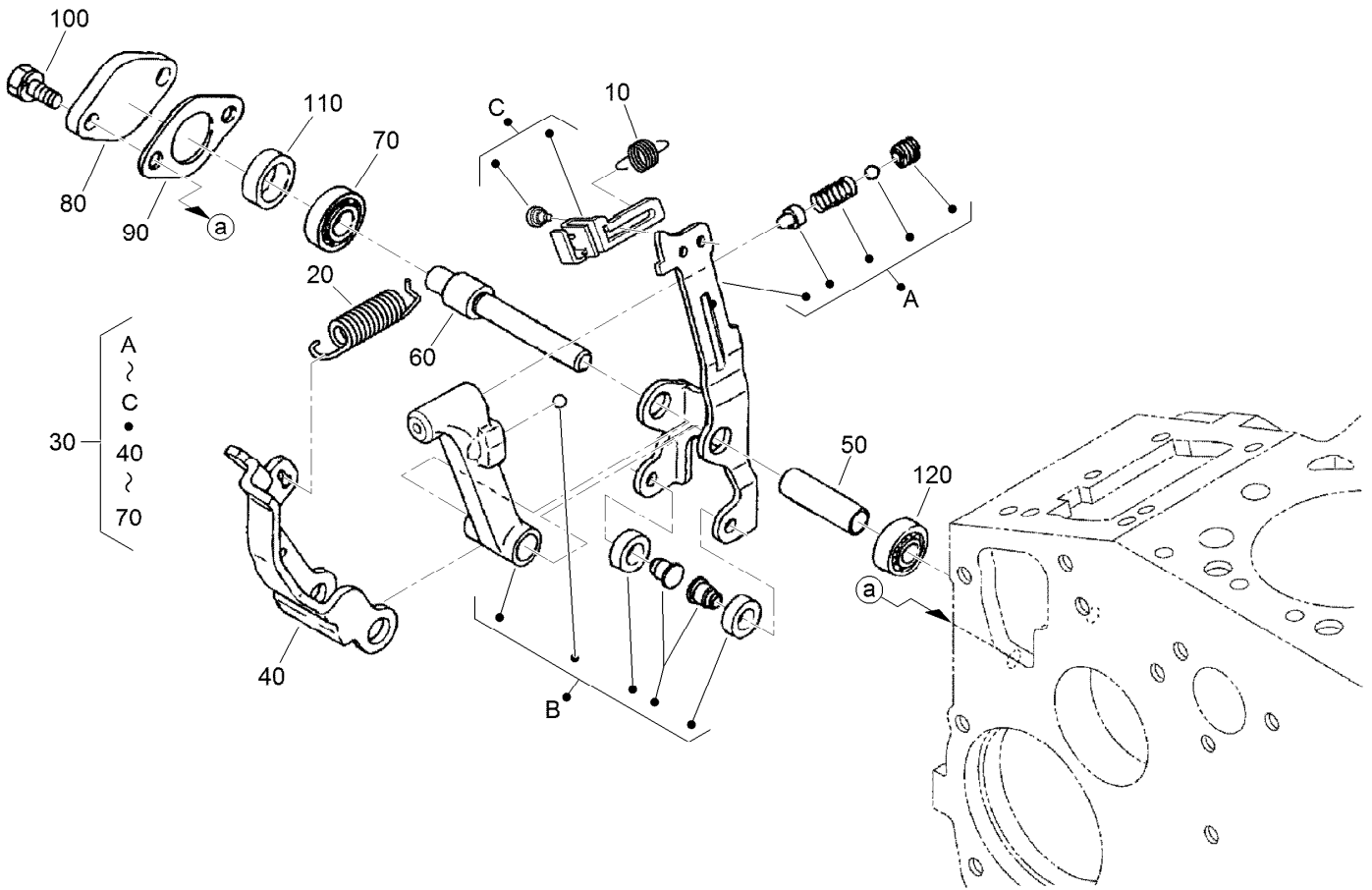
Idle Apparatus Assembly

<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



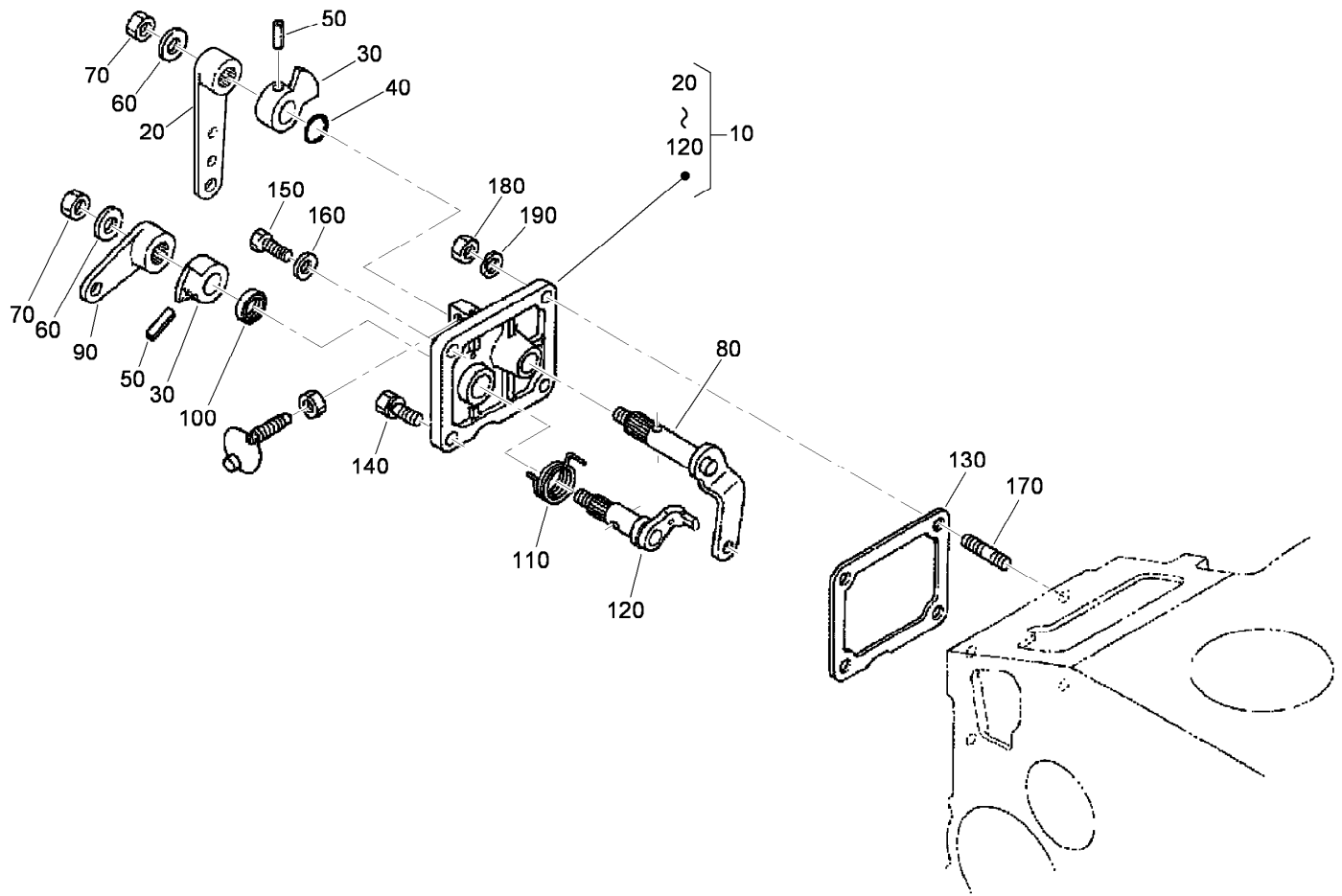
Injection Pump Assembly

<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



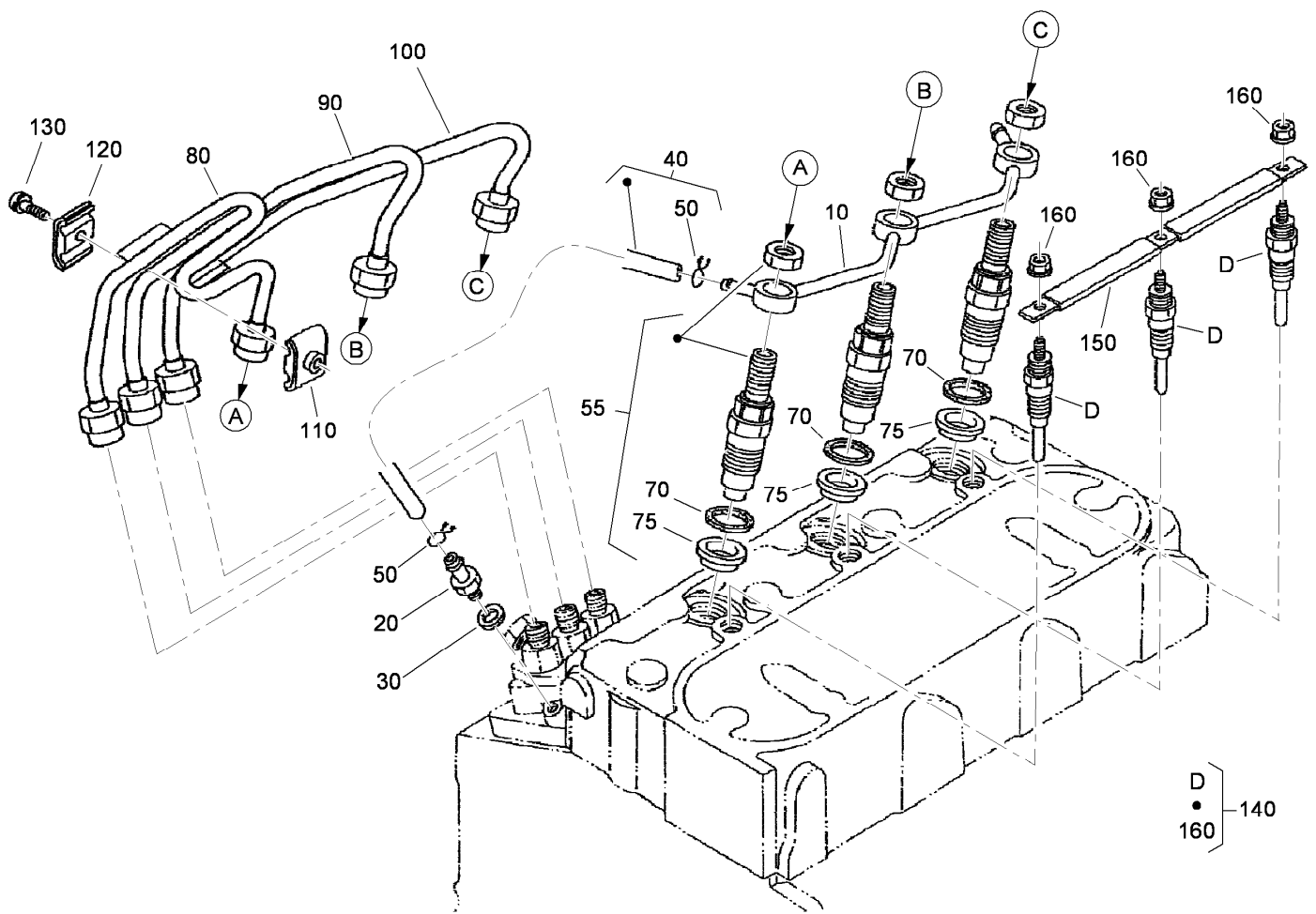
Governor Assembly

Ref.	Part Number	Qty.	Description
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



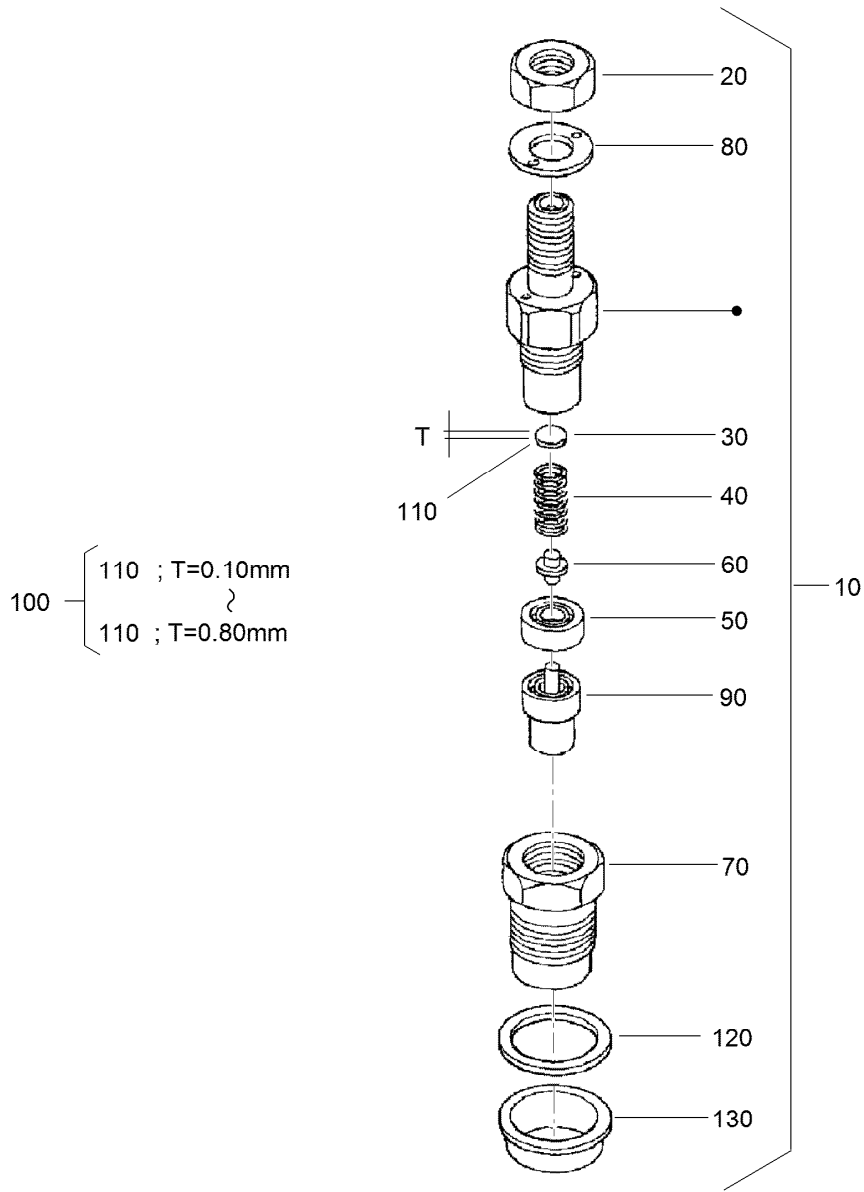
Speed Control Plate Assembly

<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



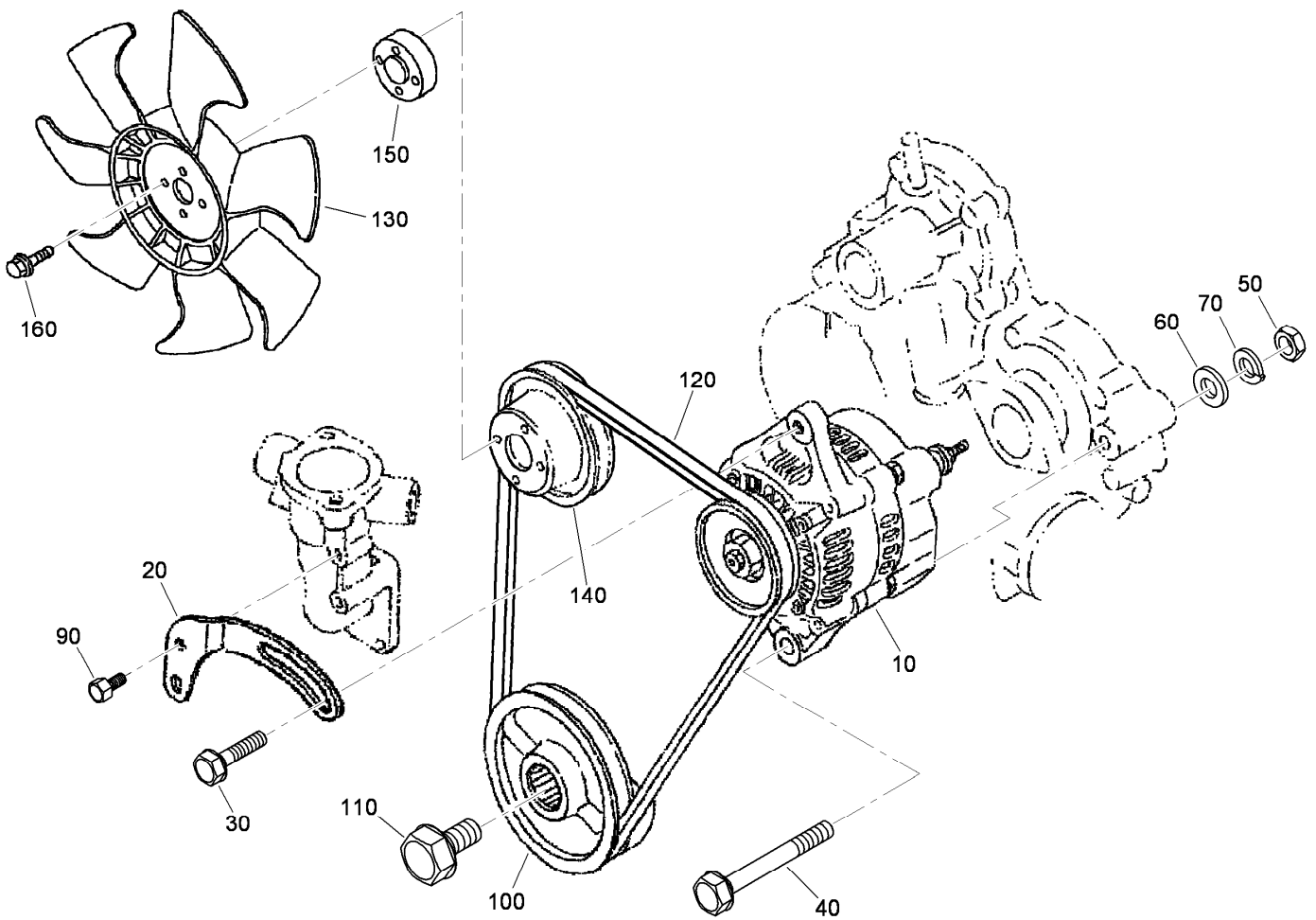
Nozzle Holder and Glow Plug Assembly

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



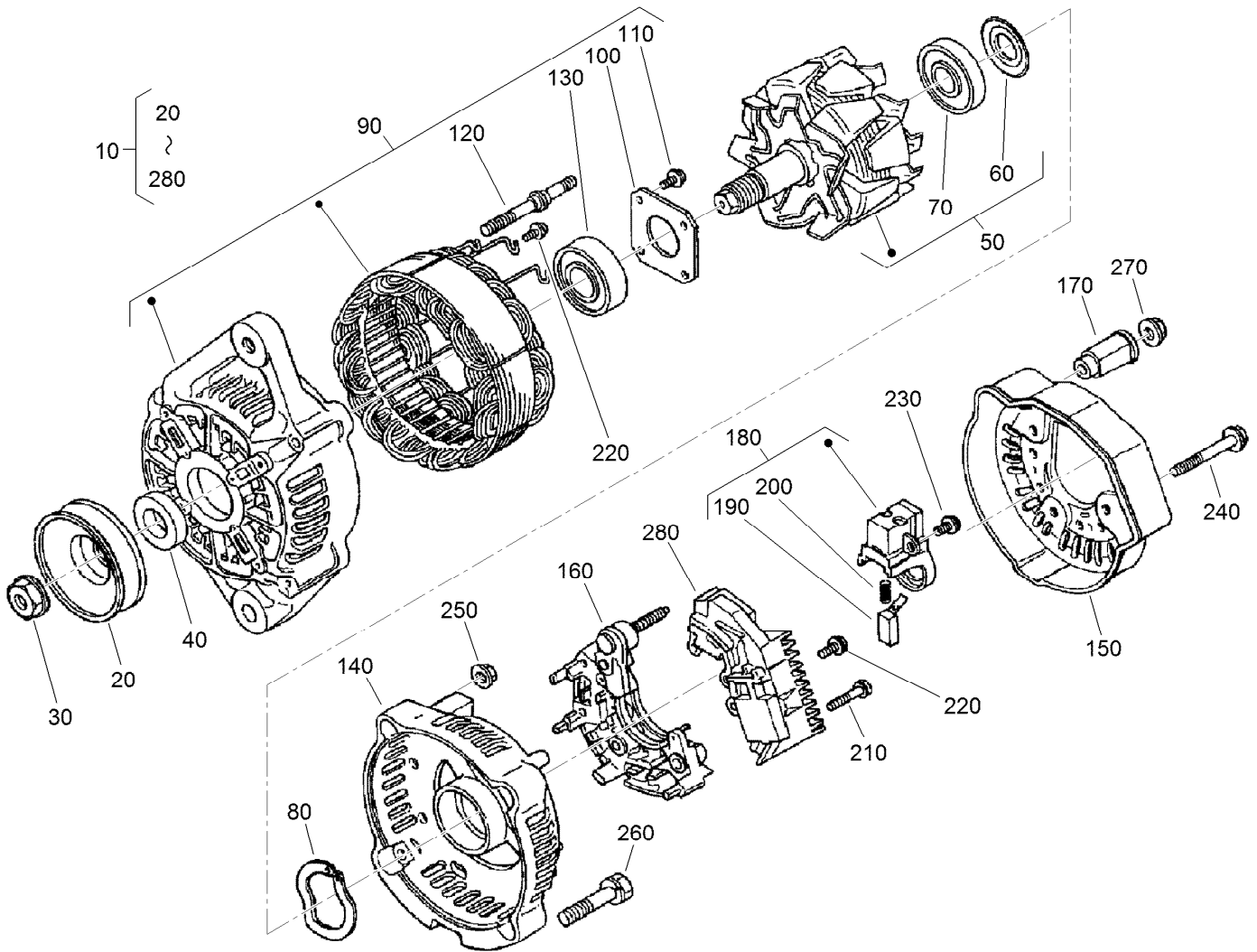
Nozzle Holder Assembly

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



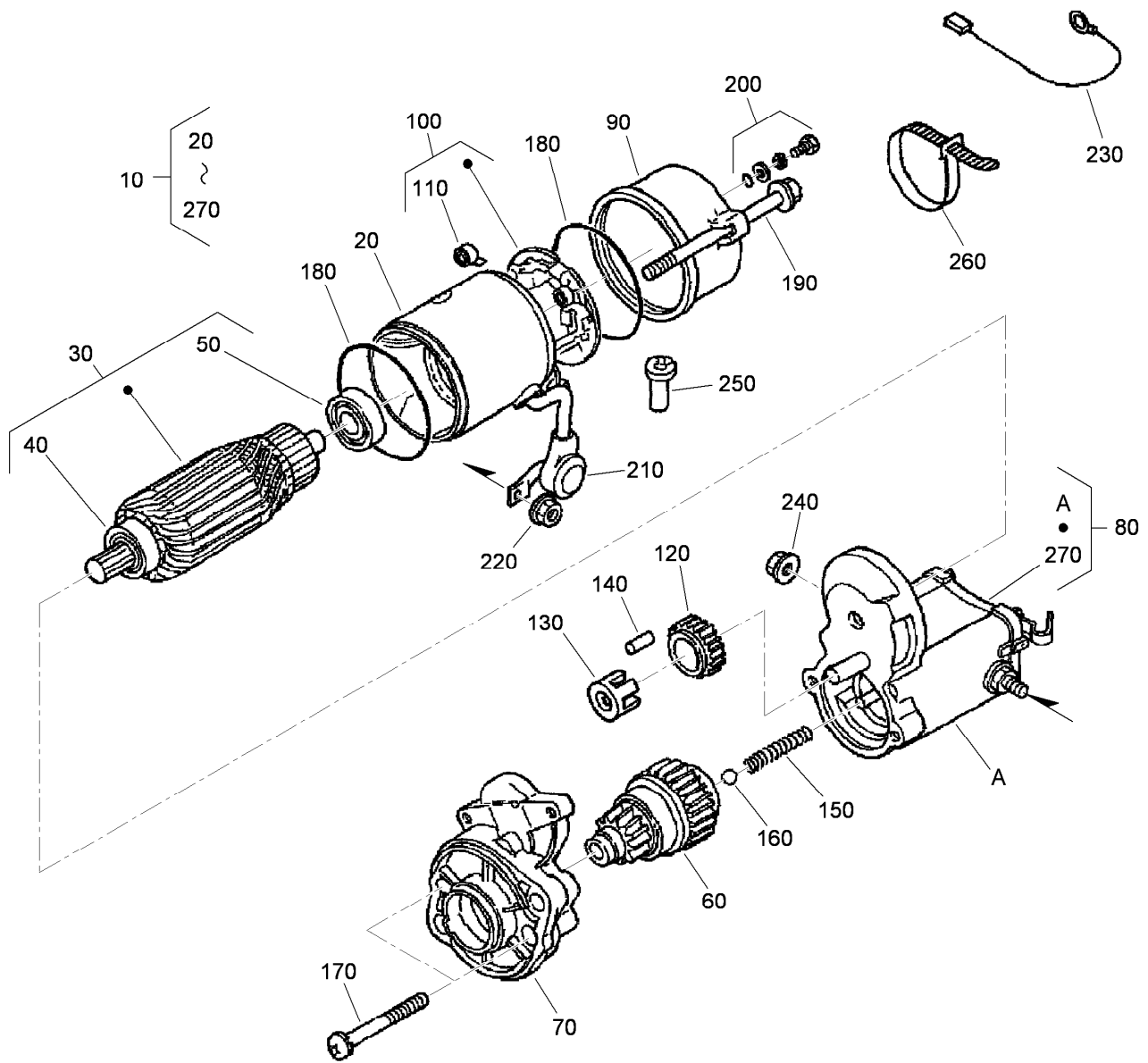
Alternator and Pulley Assembly

<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



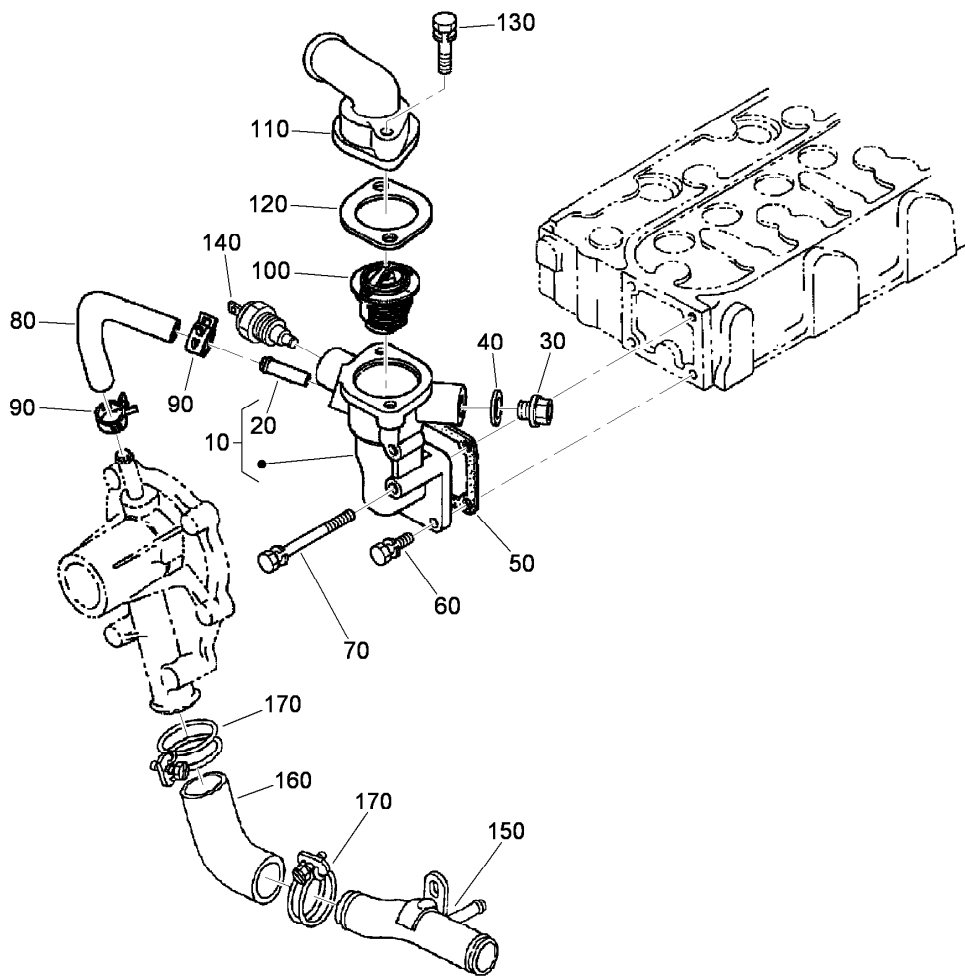
Alternator Components Assembly

<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



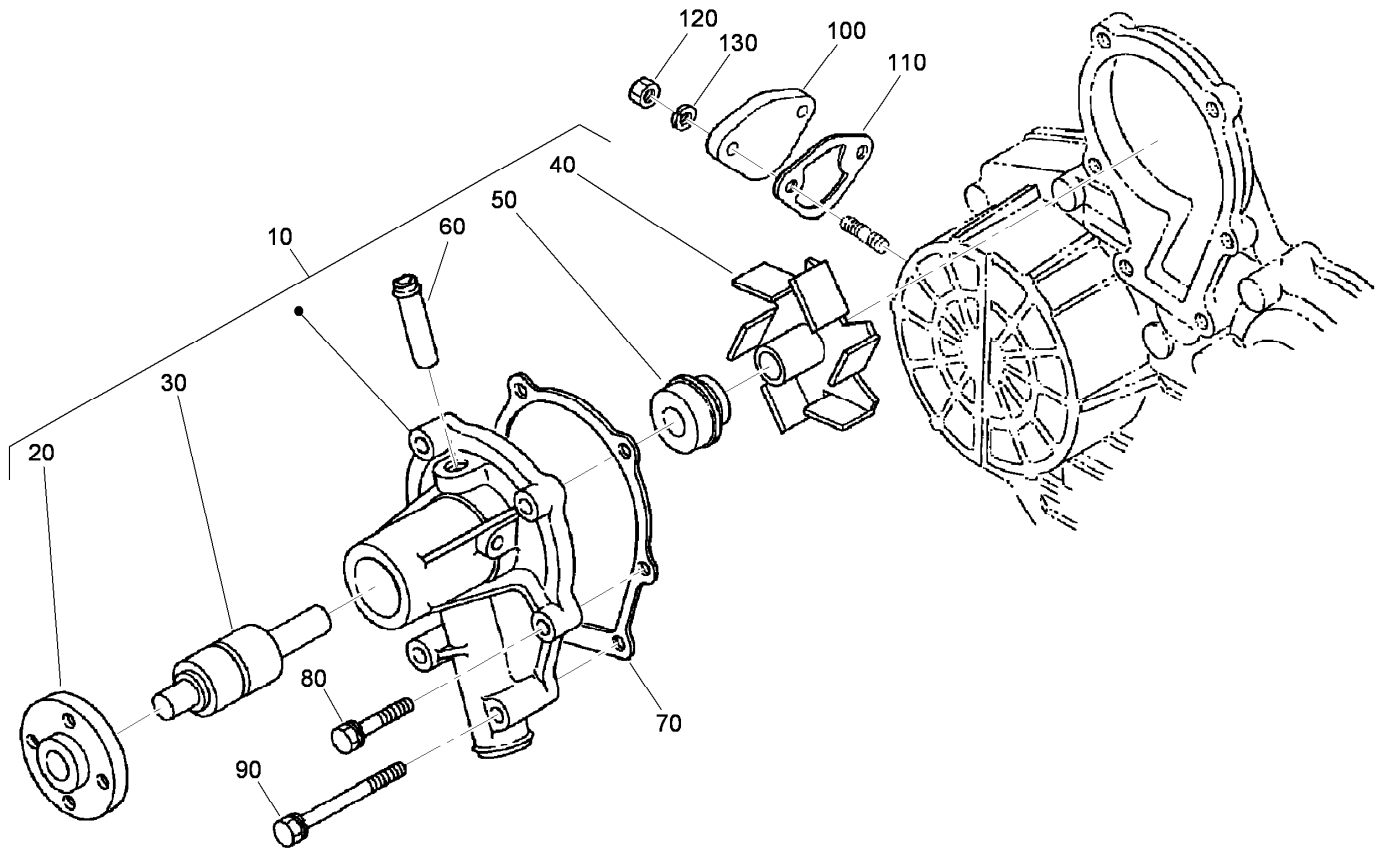
Starter (Component Part) Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
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				



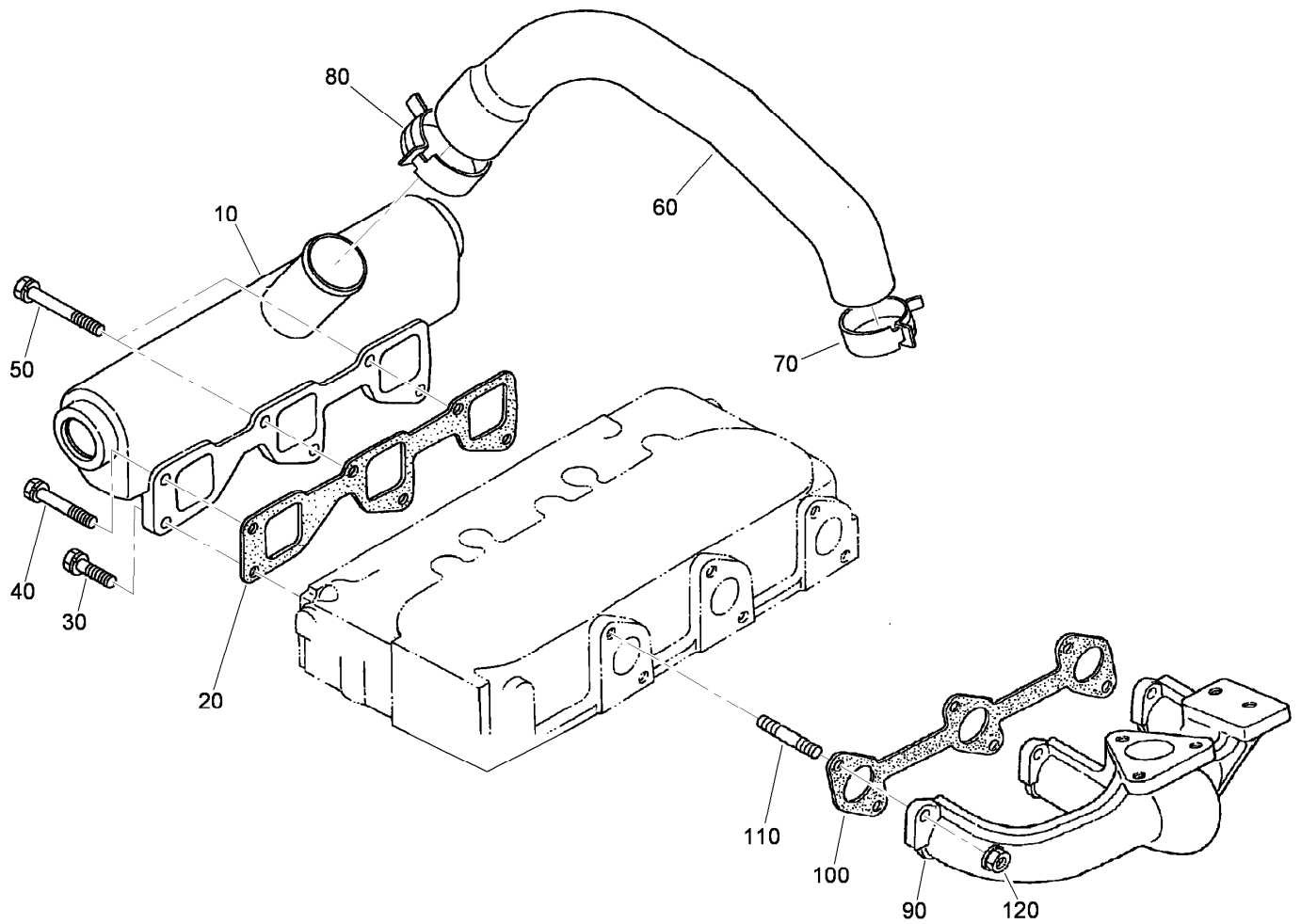
Water Flange and Thermostat Assembly

<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



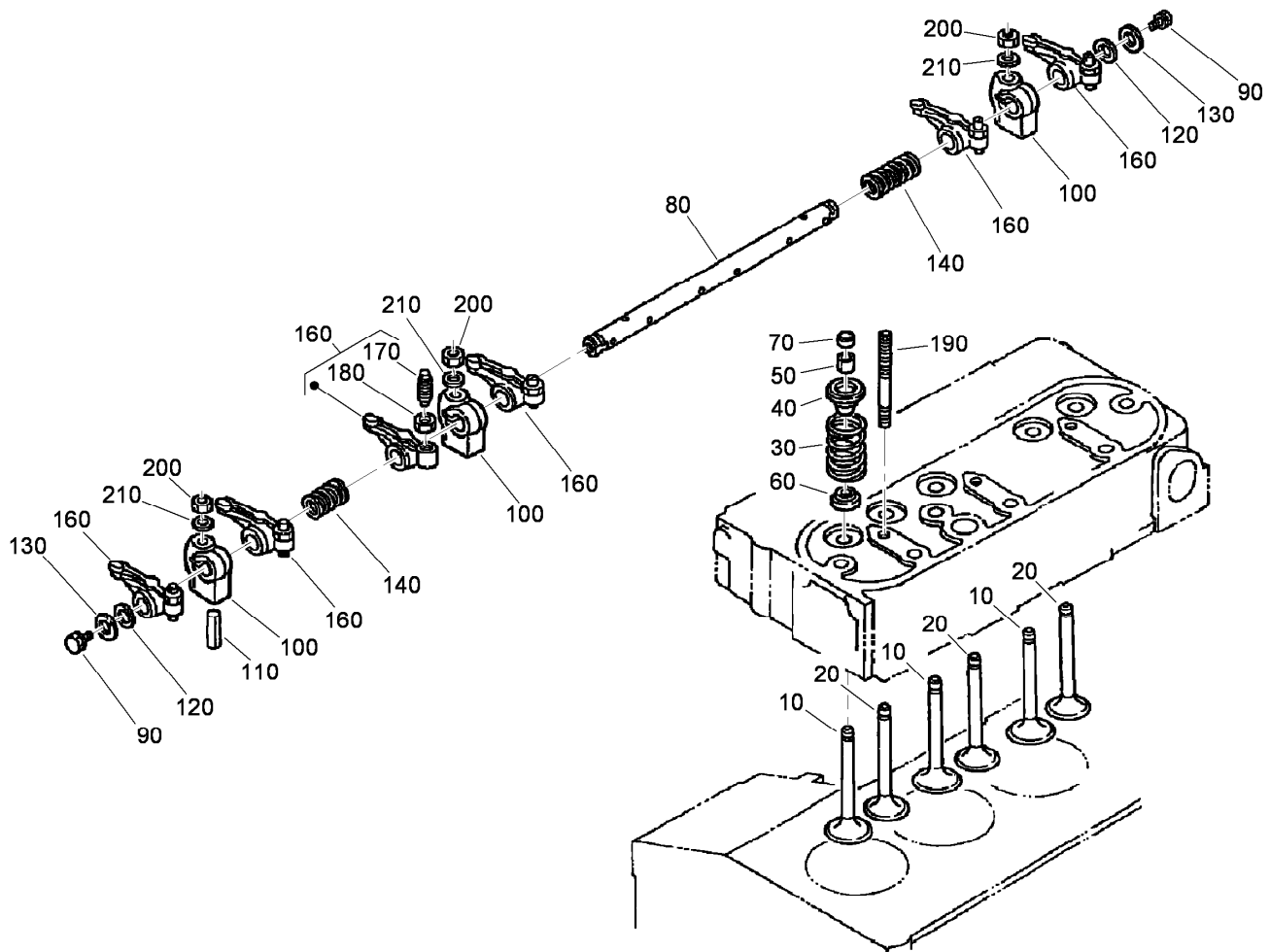
Water Pump and Fuel Pump Cover Assembly

<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



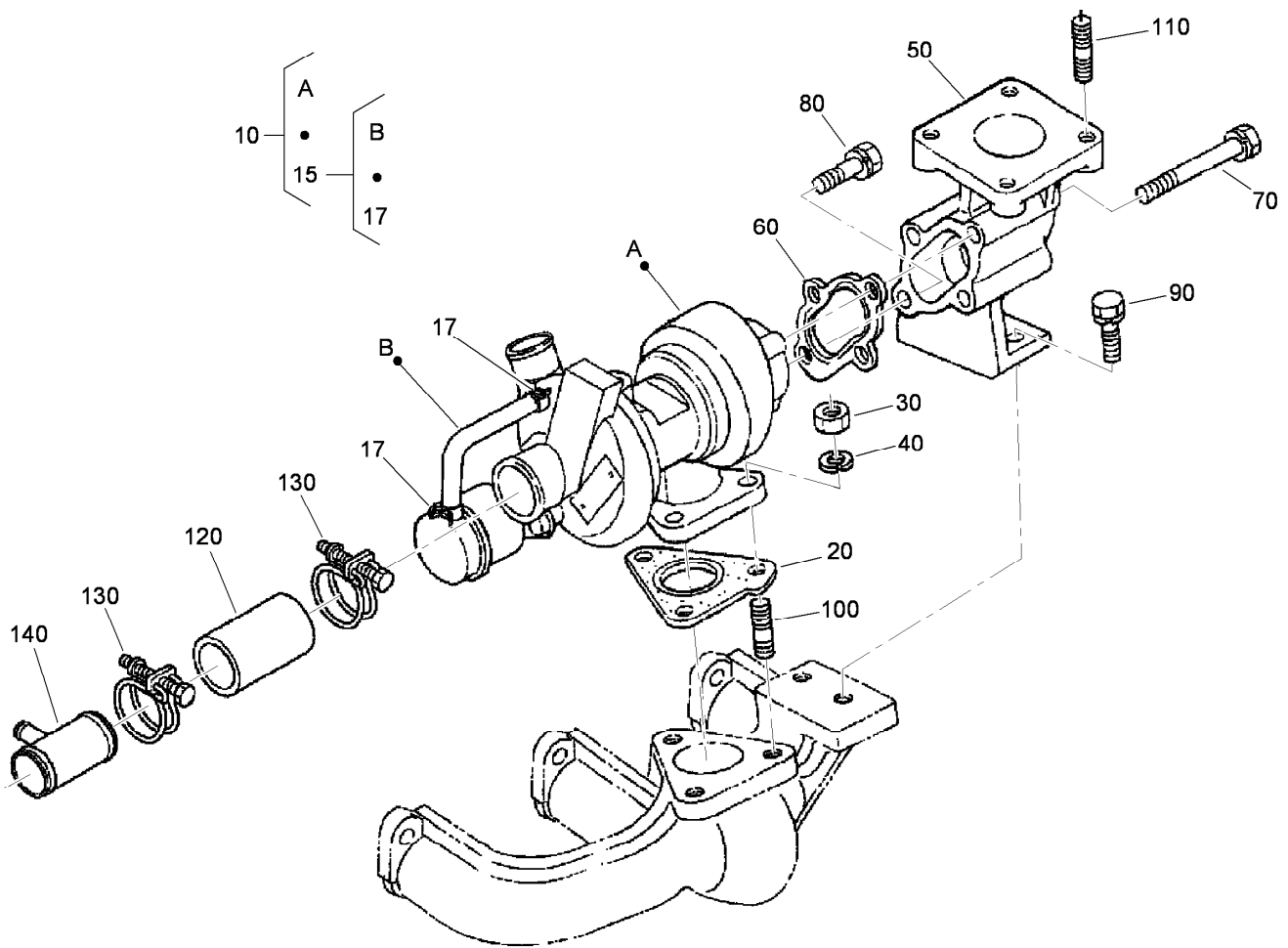
Inlet and Exhaust Manifold Assembly

<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



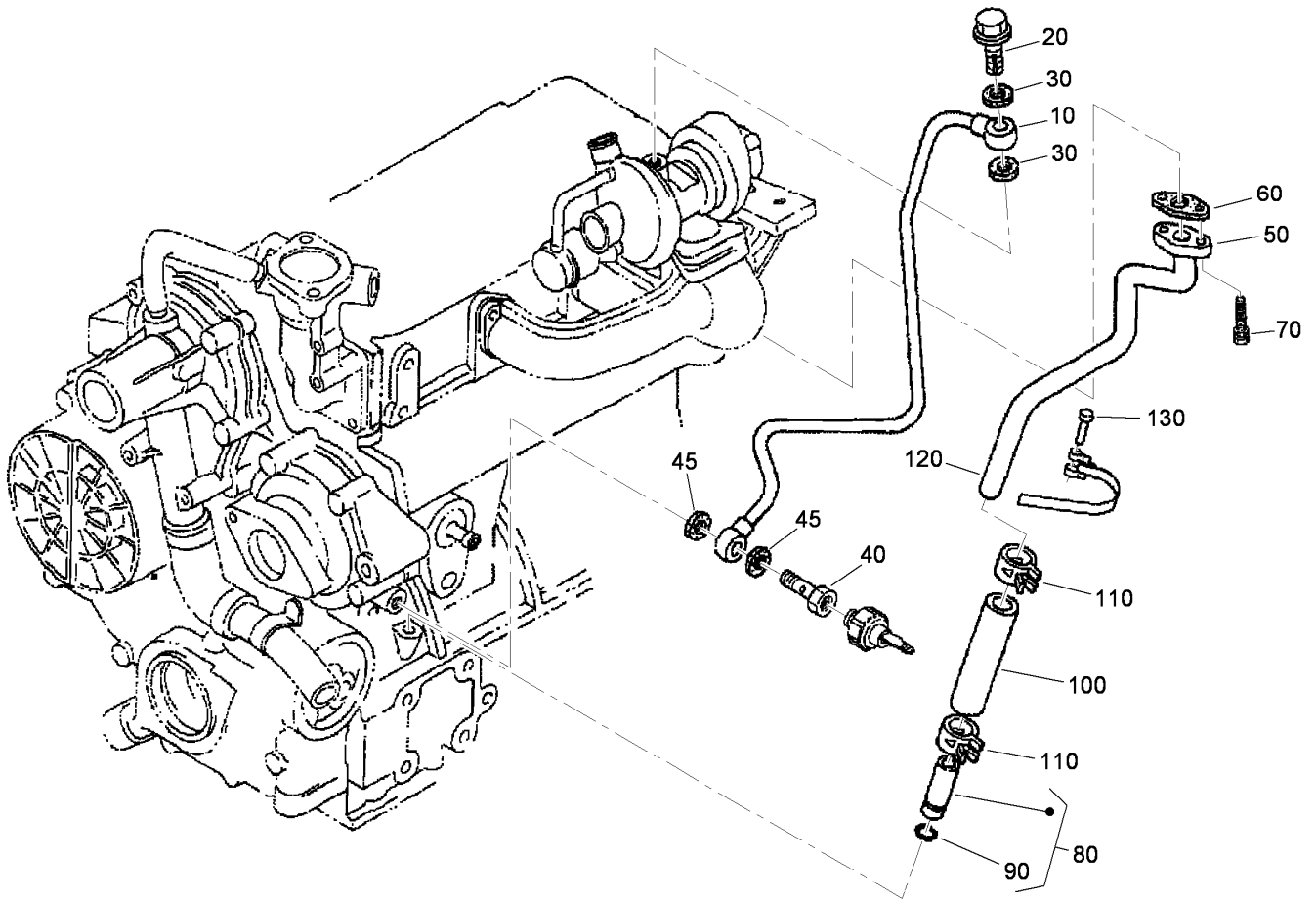
Valve and Rocker Arm Assembly

<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



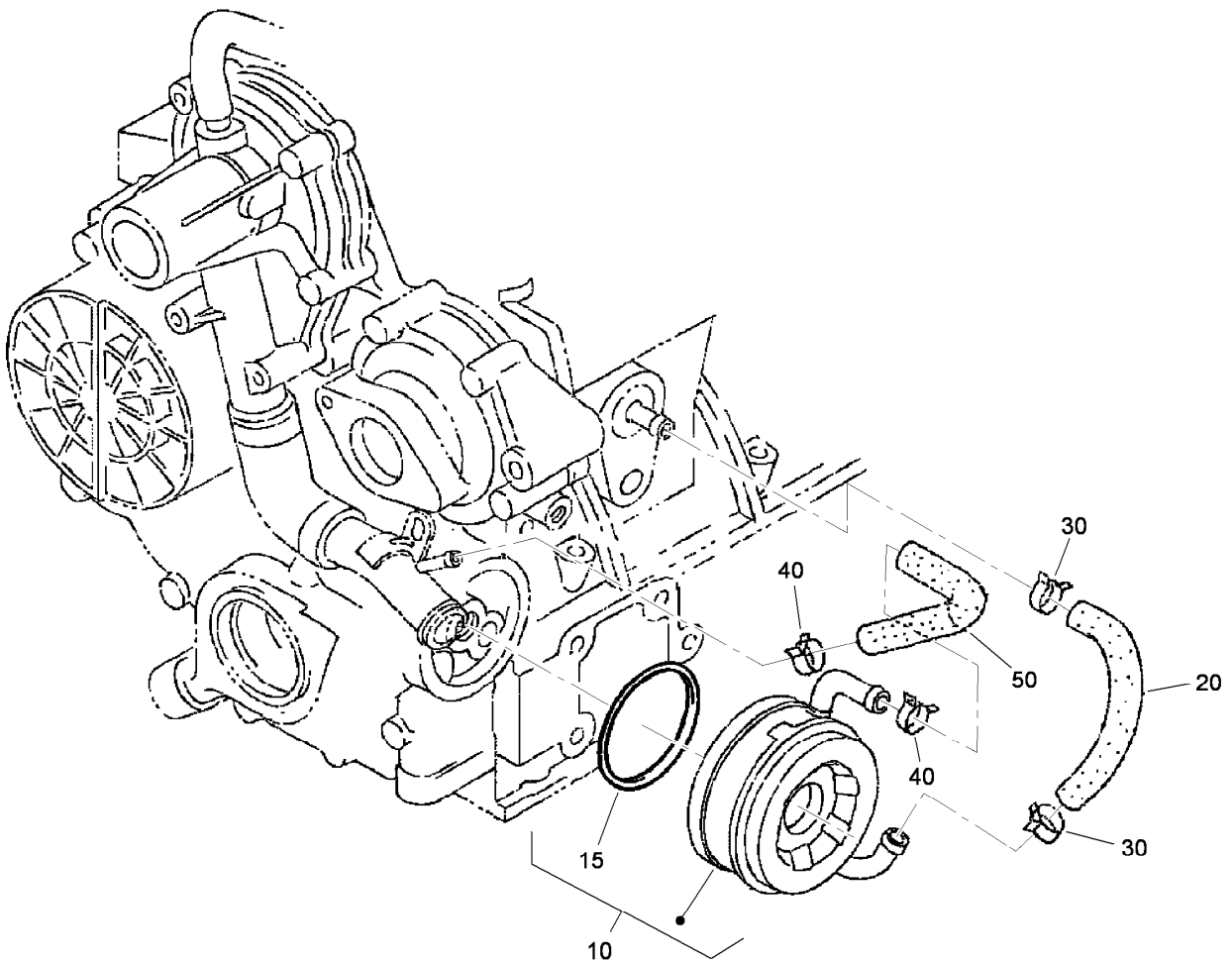
Turbo Charger Assembly

<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



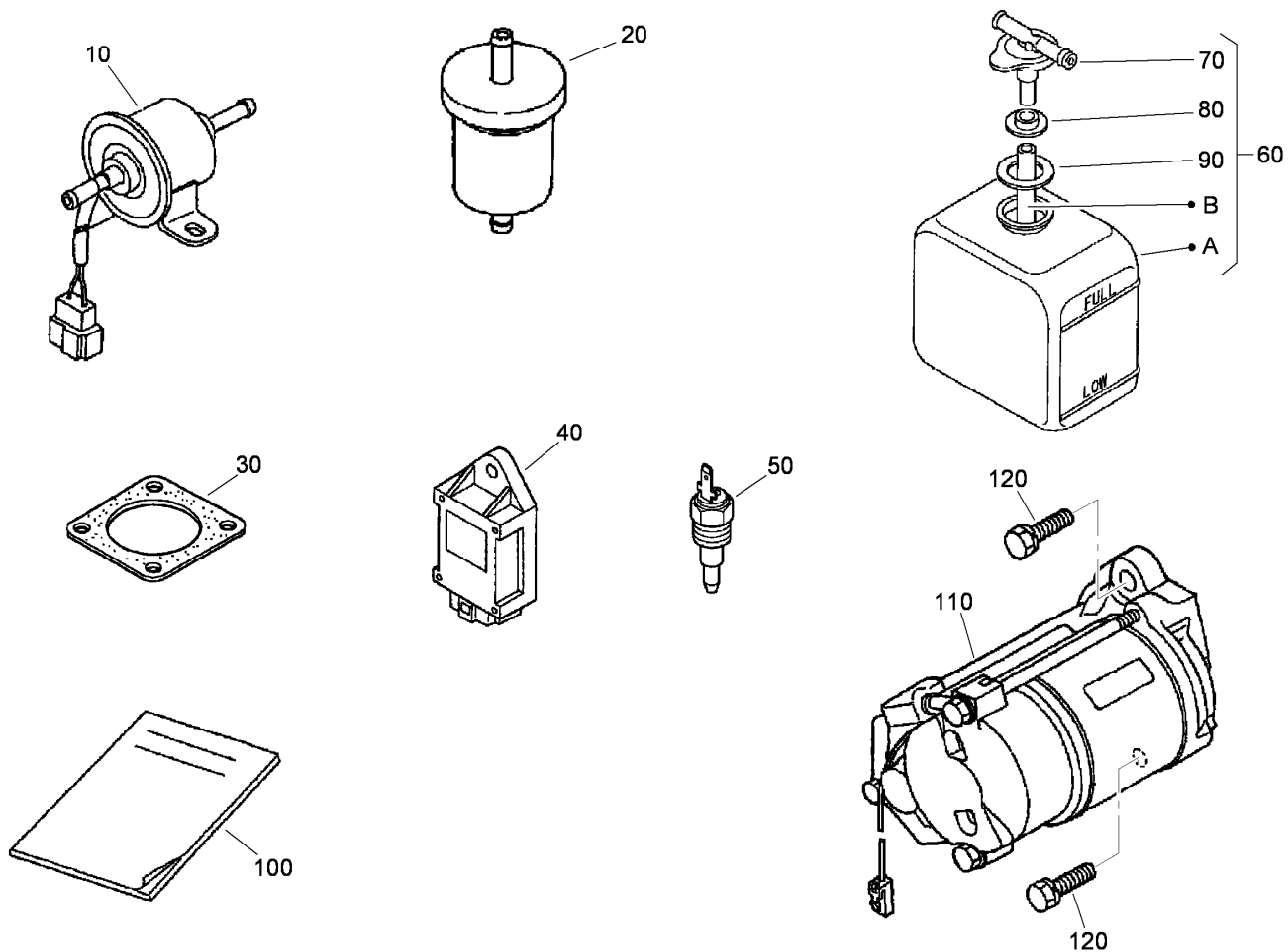
Oil Pipe (Turbo Charger) Assembly

<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



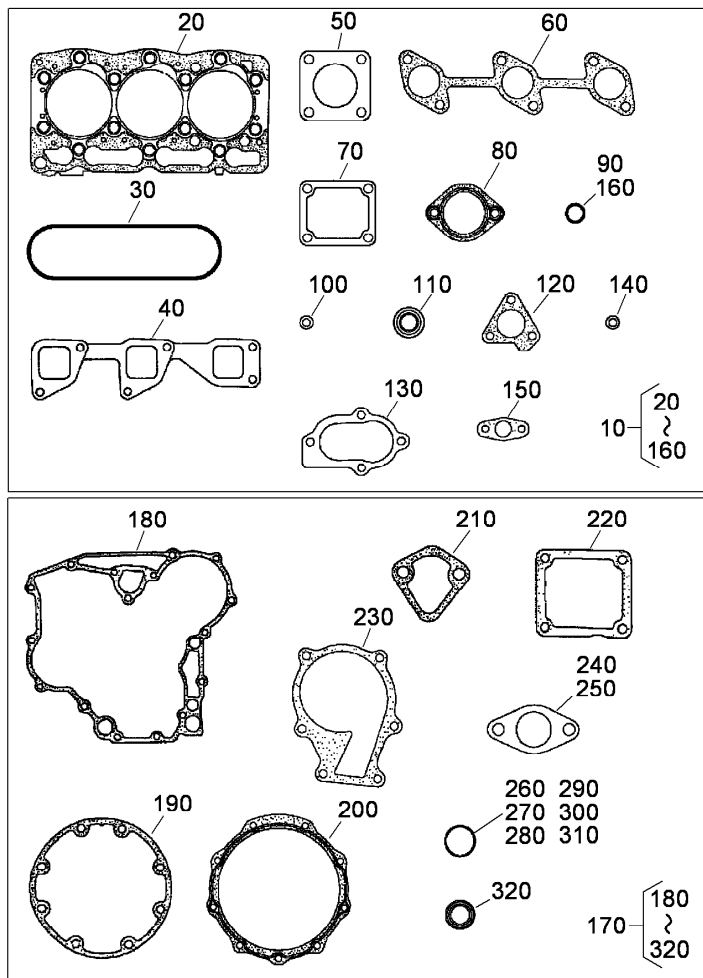
Oil Cooler Assembly

<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

Notes:

Notes:



Count on it.