



**Count on it.**

**Parts Catalog**

**Groundsmaster® 3280-D**

**Traction Unit**

**Model No. 30344—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

**HWTF:** 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

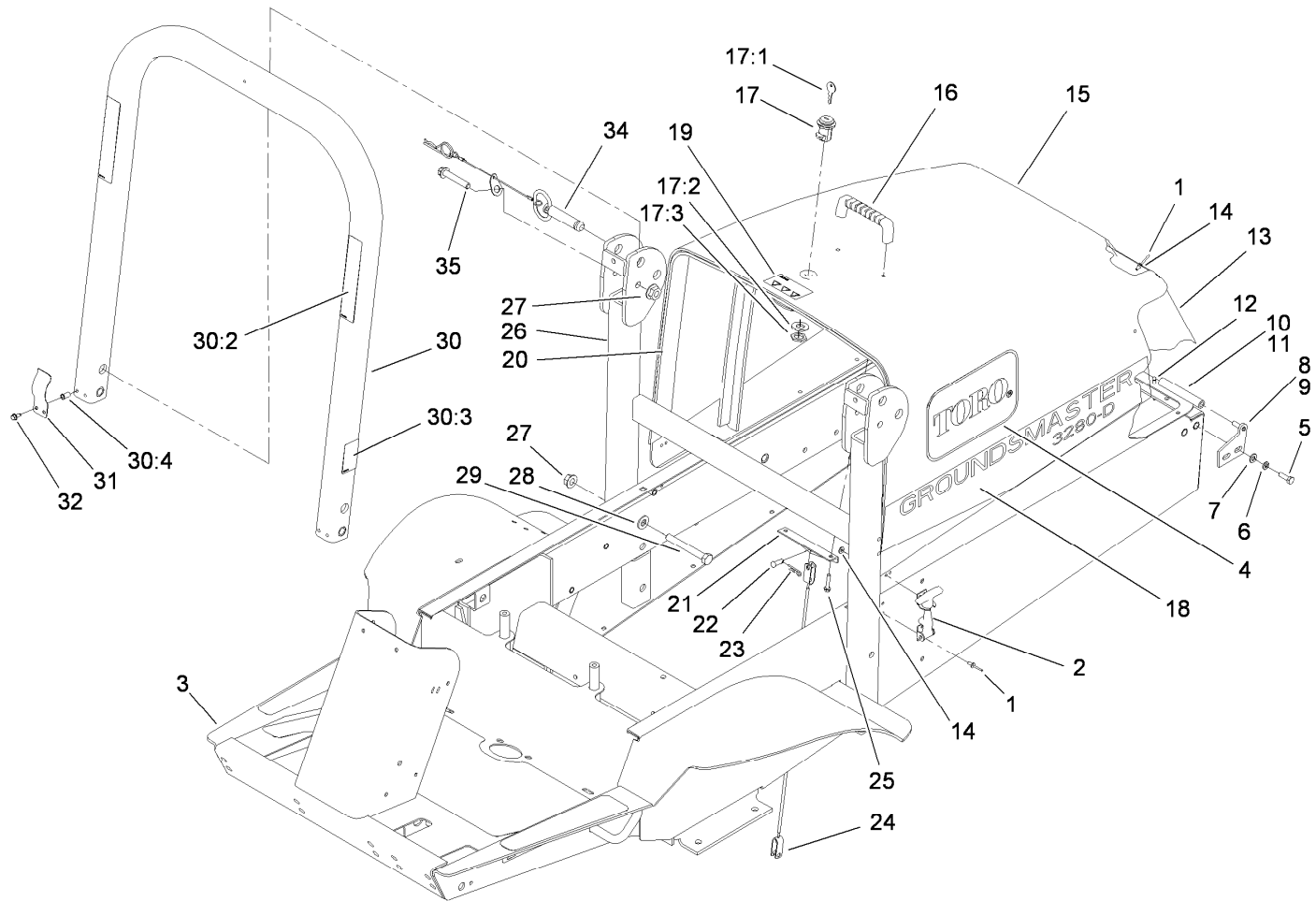
**TAP:** self tapping

**TTH:** torx truss head

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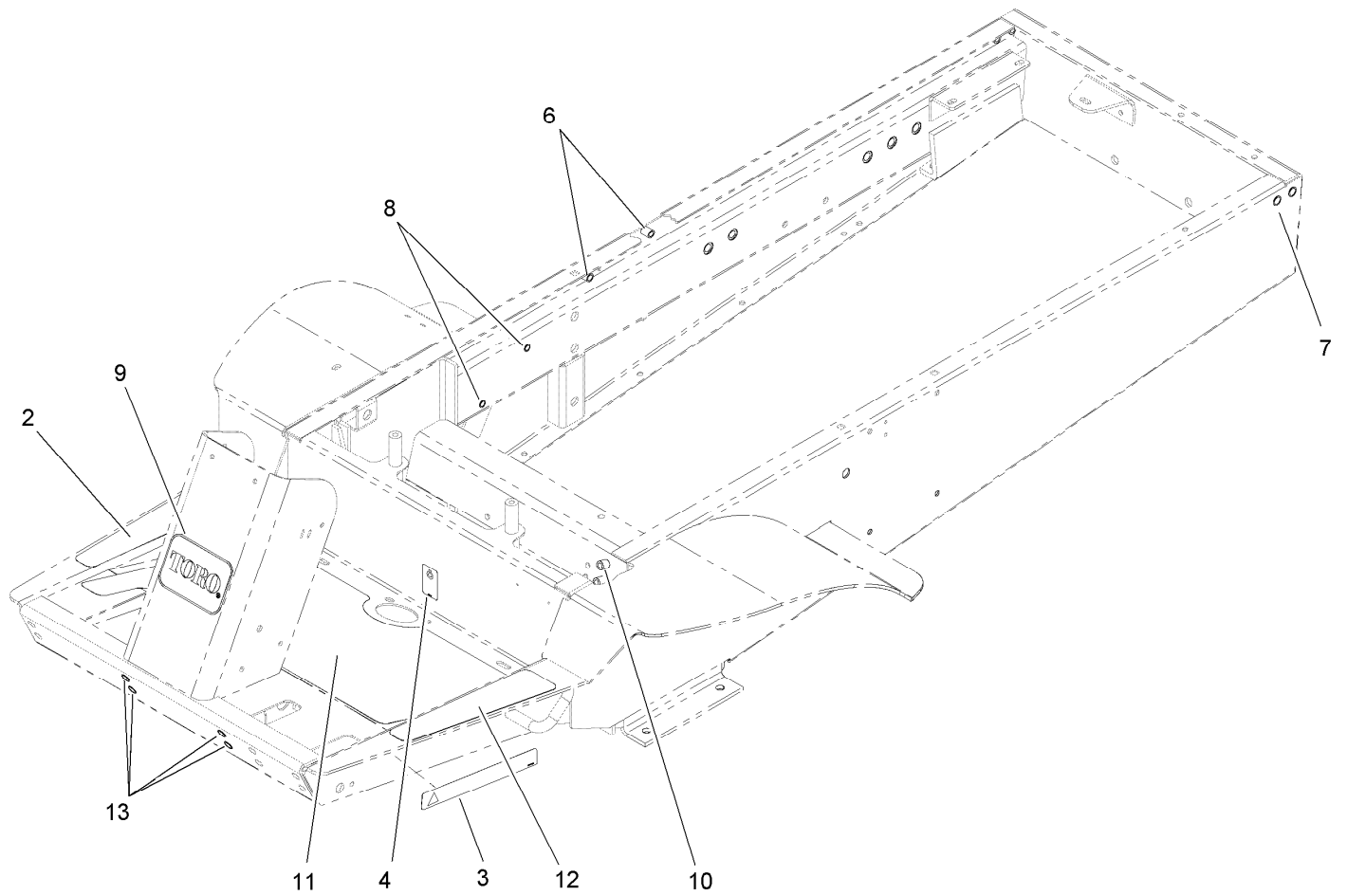
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## Frame and Hood Assembly

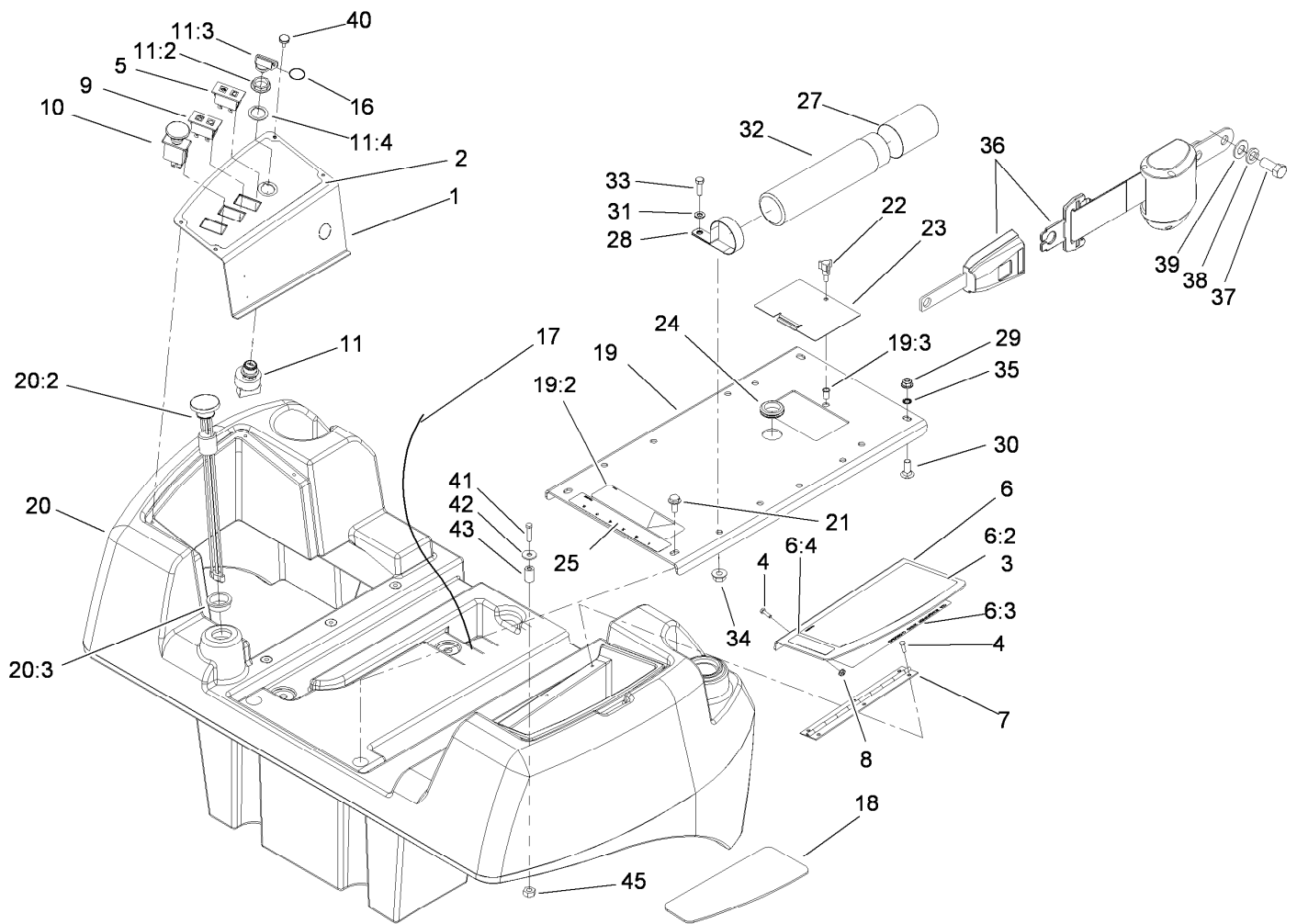
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	3269-4	18	Rivet-Pop	18	108-2067	2	Decal
2	95-6339	2	Latch	19	106-6754	1	Decal-Danger
3	108-2010	1	Frame ASM	20	105-3651	1	Strip-Foam
4	66-6140	2	Decal	21	105-0088-03	1	Bracket-Cable, Hood
5	322-5	4	Screw-HH	22	283-58	2	Pin-Clevis
6	3253-4	4	Washer-Lock	23	3290-307	2	Pin-Hair
7	3256-23	4	Washer-Flat	24	105-3650	1	Cable-Hood
8	105-0003-01	1	RH Hinge Pin ASM	25	46-8092	2	Screw-Plastite
9	105-0004-01	1	LH Hinge Pin ASM	26	110-5693-03	1	Lower ROPS ASM
10	105-4278-03	1	LH Hood Hinge ASM	27	32128-23	6	Nut-HF
11	105-4277-03	1	RH Hood Hinge ASM	28	3256-26	4	Washer-Flat
12	3290-412	12	Rivet	29	325-18	4	Screw-HH
13	105-0006-03	1	Screen-Hood	30	110-5690	1	Upper ROPS ASM
14	3256-14	14	Washer-Flat	30:2	108-2073	2	Decal-Warning
15	104-3485	1	Hood	30:3	108-2074	1	Decal-ROPS
16	65-5100	1	Handle-Door	30:4	32148-11	4	Insert-Threaded
17	98-9315	1	Latch-Locking	31	110-5696	2	Spring-Leaf
17:1	99-8350	2	Key-Latch, Locking	32	32144-10	4	Screw-HWH
17:2		1	Washer-Switch ●	34	103-4553	2	ROPS Fold Pin ASM
17:3		1	Nut-Switch ●	35	325-13	2	Screw-HH

● Not serviced separately



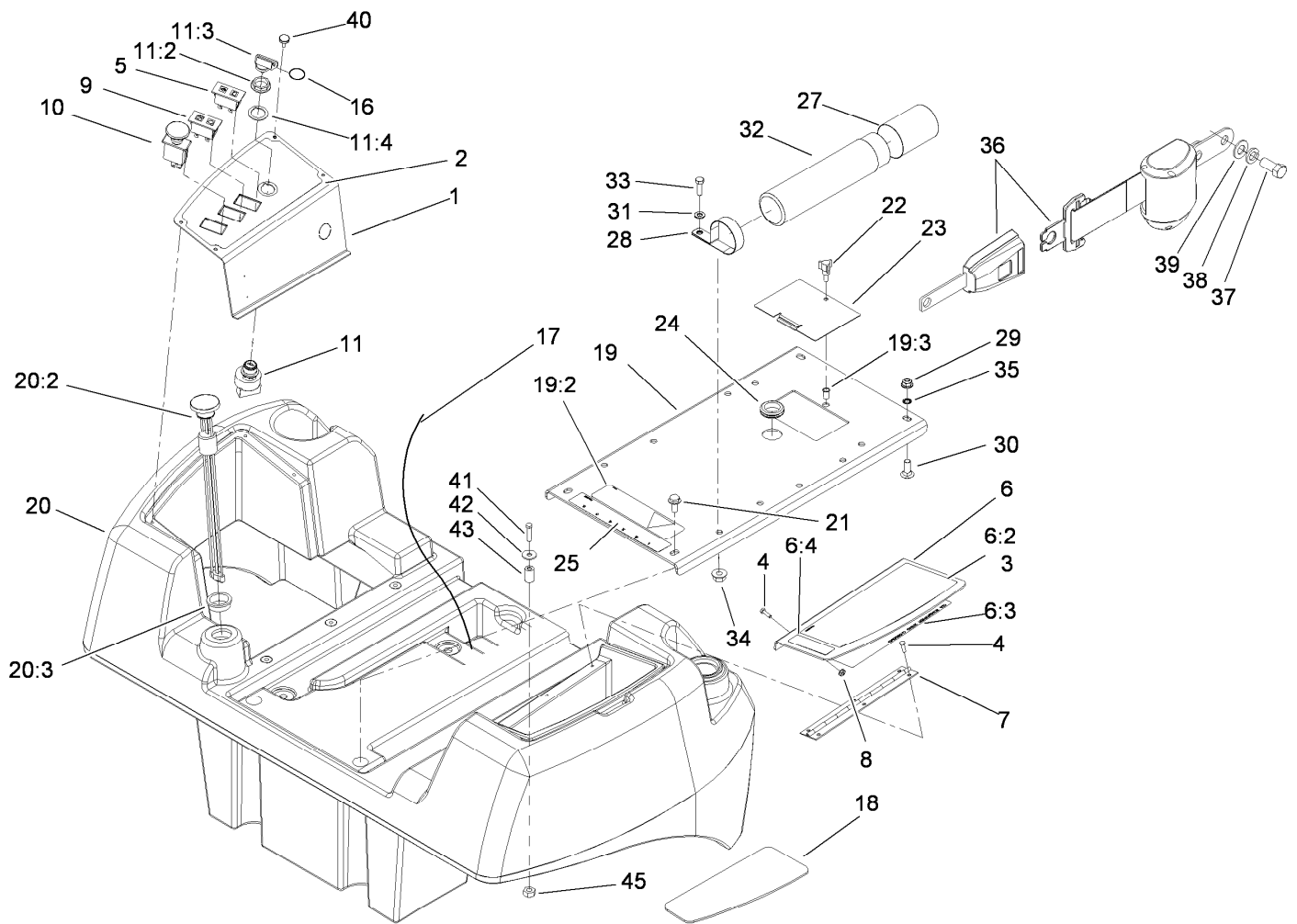
## Frame Assembly No. 108-2010

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2	93-7834	1	Decal-Footrest, RH
3	106-9206	2	Decal-Torque, Wheel
4	93-6686	1	Decal-Oil, HYD
6	32148-9	2	Insert-Nut
7	32148-7	4	Nut-Insert
8	32148-11	2	Insert-Threaded
9	67-1300	1	Decal
10	32148-8	4	Insert-Threaded
11	105-7160	1	Pad-Floor
12	66-3200	1	Tread-Footrest, LH
13	32148-10	4	Insert-Nut



## Fuel Tank and Control Panel Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	108-2017-03	1	Plate-Panel, Control	19:2	93-7841	1	Decal-Warning
2	108-2018	1	Decal-Panel, Control	19:3	32148-6	1	Insert-Nut
3	108-6585	1	Decal-Danger	20	108-6596	1	Fuel Tank ASM
4	112-6349	6	Screw-HWH	20:2	108-2025	1	Gauge-Fuel
5	100-8070	1	Lamp-Warning	20:3	95-8972	1	Grommet
6	108-6581	1	Cover ASM	21	3234-1	2	Screw-HHF
6:2	114-2855	1	Decal-Danger	22	233-70	1	Knob-Star, Three
6:3	115-3027	1	Decal-Service	23	108-2027-03	1	Cover-Bypass
6:4	117-2718	1	Decal-Arrester, Spark	24	240-5	1	Grommet
7	108-2024	1	Hinge	25	105-2511	1	Decal-Instructions, Starting
8	32149-8	3	Nut-Keps	27	104-7048	1	Cap-Housing
9	100-8071	1	Lamp-Warning	28	2412-133	2	R-Clamp
10	93-9999	1	Switch-PTO	29	104-8301	2	Nut-Flange, NI
11	106-5269	1	Ignition Switch ASM	30	3231-2	2	Screw-CARR
11:2	108-8660	1	Nut-Mounting	31	3256-23	2	Washer-Flat
11:3	106-5270	1	Key Set-Ignition	32	104-7050	1	Tube-Manual
11:4	108-8659	1	Washer-Backup	33	322-5	2	Screw-HH
16	98-9321	1	Ring-Key	34	32128-20	2	Nut-HF
17	108-8657	1	Harness-Wire, Seat	35	32151-72	2	Ring-Retaining
18	108-2013	1	Pad-Rubber	36	110-0413	1	Seatbelt-Retractable
19	108-6580	1	Seat Plate ASM	37	3212-4	2	Screw-HH

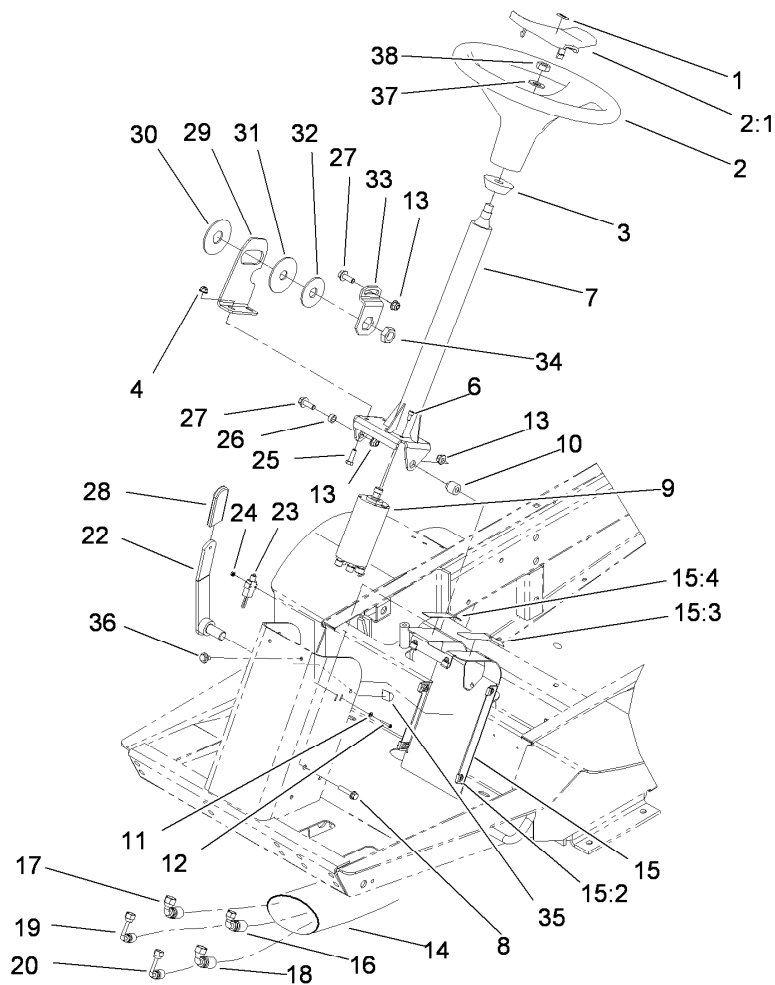


## Fuel Tank and Control Panel Assembly (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
38	3253-6	2	Washer-Lock
39	3256-25	2	Washer-Flat
40	108-8689	4	Screw-Thumb
41	321-9	1	Screw-HH

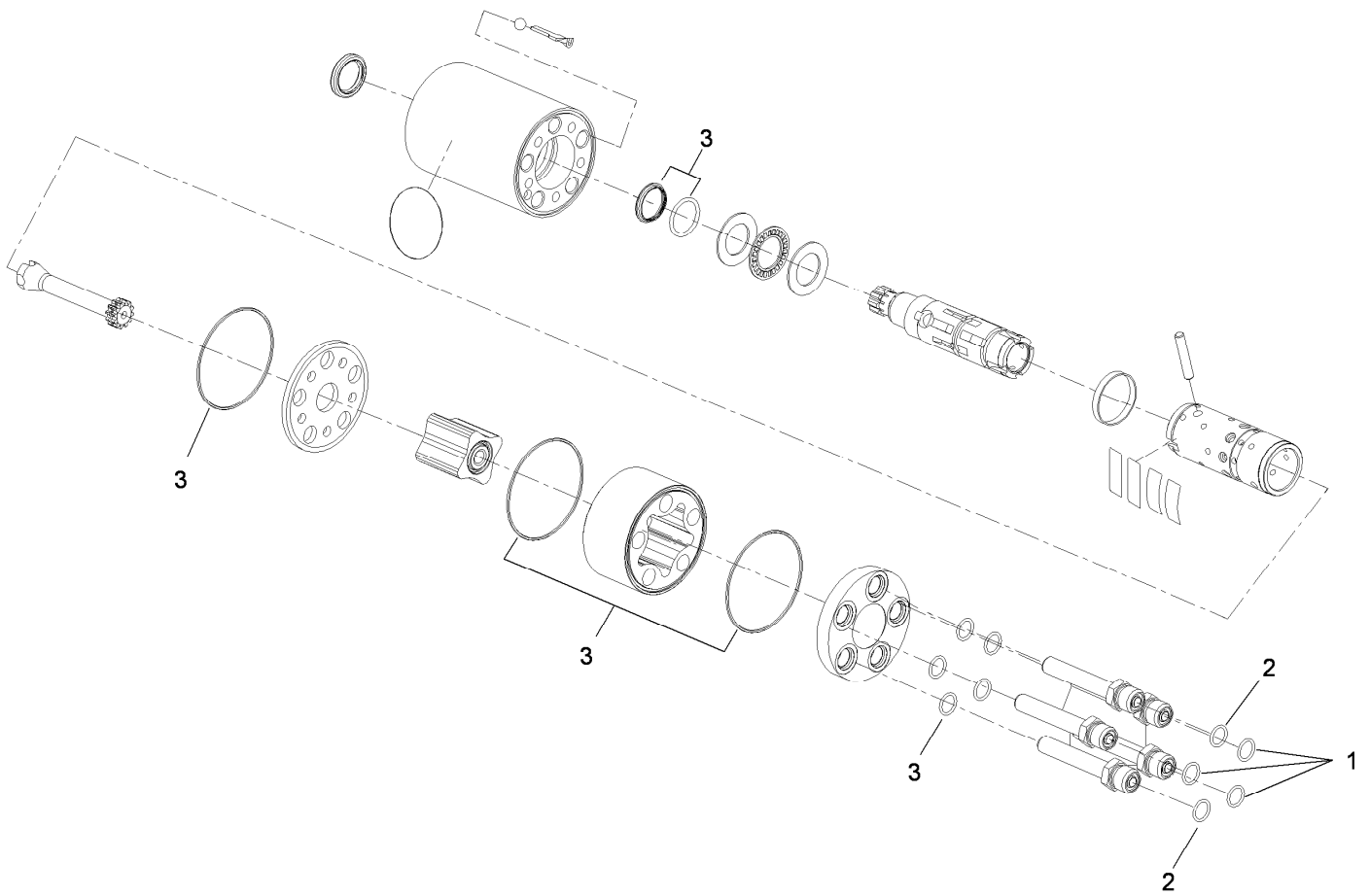
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
42	3256-55	1	Washer-Flat
43	108-9688	1	Spacer
45	3296-42	1	Nut-Lock, NI





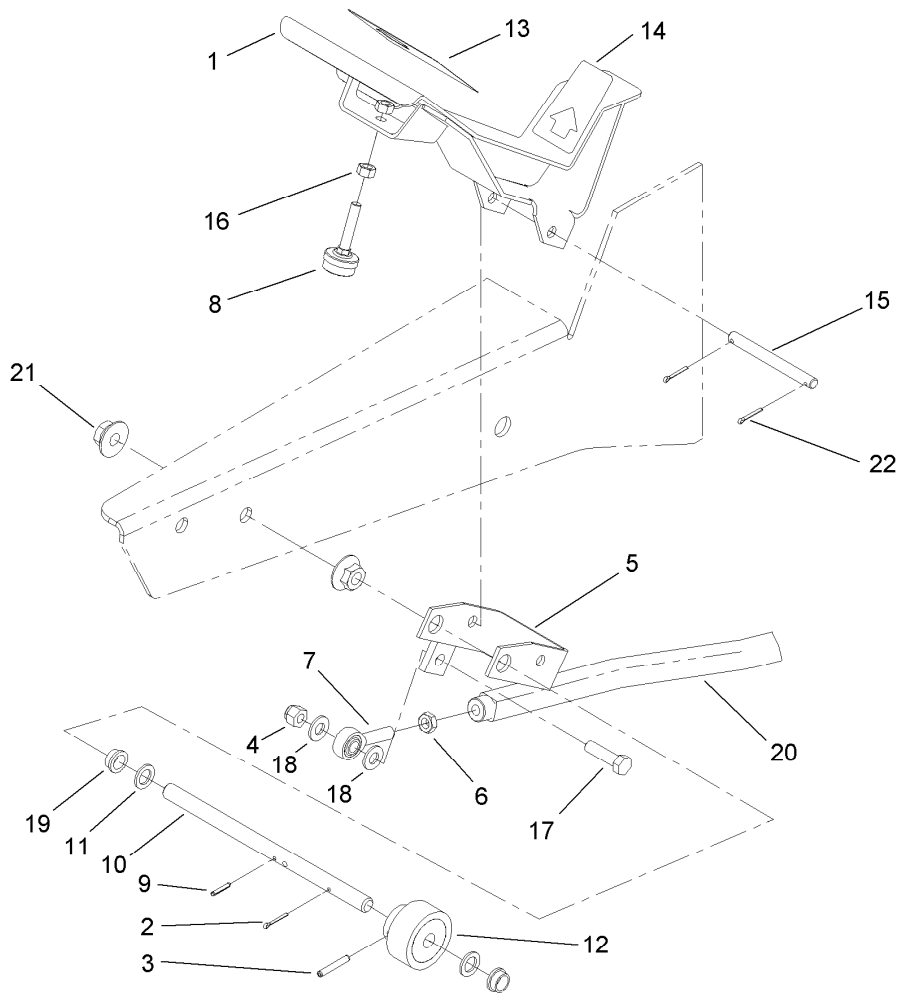
## Power Steering Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	98-1459	1	Decal	18	108-2080	1	Hose ASM
2	98-1471	1	Wheel-Steering	19	108-2086	1	Hose ASM
2:1	98-1468	1	Cover-Wheel, Steering	20	108-2087	1	Hose ASM
3	21-9260	1	Cover-Dust	22	108-6092	1	Lever-Steering, Tilt
4	104-8300	2	Nut-Flange, NI	23	99-3410	1	Switch
6	105-2409	4	Screw-HSH	24	32149-6	2	Nut-Keps
7	114-2884	1	Column ASM	25	322-5	2	Screw-HH
8	3234-18	1	Screw-HHF	26	80-2960	1	Spacer-Tower
9	108-2077	1	Steering Valve ASM	27	3234-42	2	Screw-HHF
10	105-7166	1	Spacer	28	21-1880	1	Grip-Handle
11	3256-53	2	Washer-Flat, #6	29	105-7181-03	1	Plate-Pivot
12	3250-35	2	Screw-PPH	30	31-0390	1	Disc-Friction
13	104-8301	3	Nut-Flange, NI	31	82-9010	1	Disc-Friction
14	44-8530	1	Protector-Sleeve	32	80-2930	1	Washer-Flat
15	105-7180	1	Tower Panel ASM	33	80-2880	1	Bracket-Tilt
15:2	105-7170	6	Nut-Retainer	34	3218-7	1	Nut-Jam
15:3	105-7179	1	Decal-Brake, Parking	35	105-7188	2	Clamp-Adhesive
15:4	82-8940	1	Decal-Steering, Tilt	36	3250-32	6	Screw-PPH
16	108-2089	1	Hose ASM	37	3256-27	1	Washer-Flat
17	108-2081	1	Hose ASM	38	3296-33	1	Nut-Lock, NI



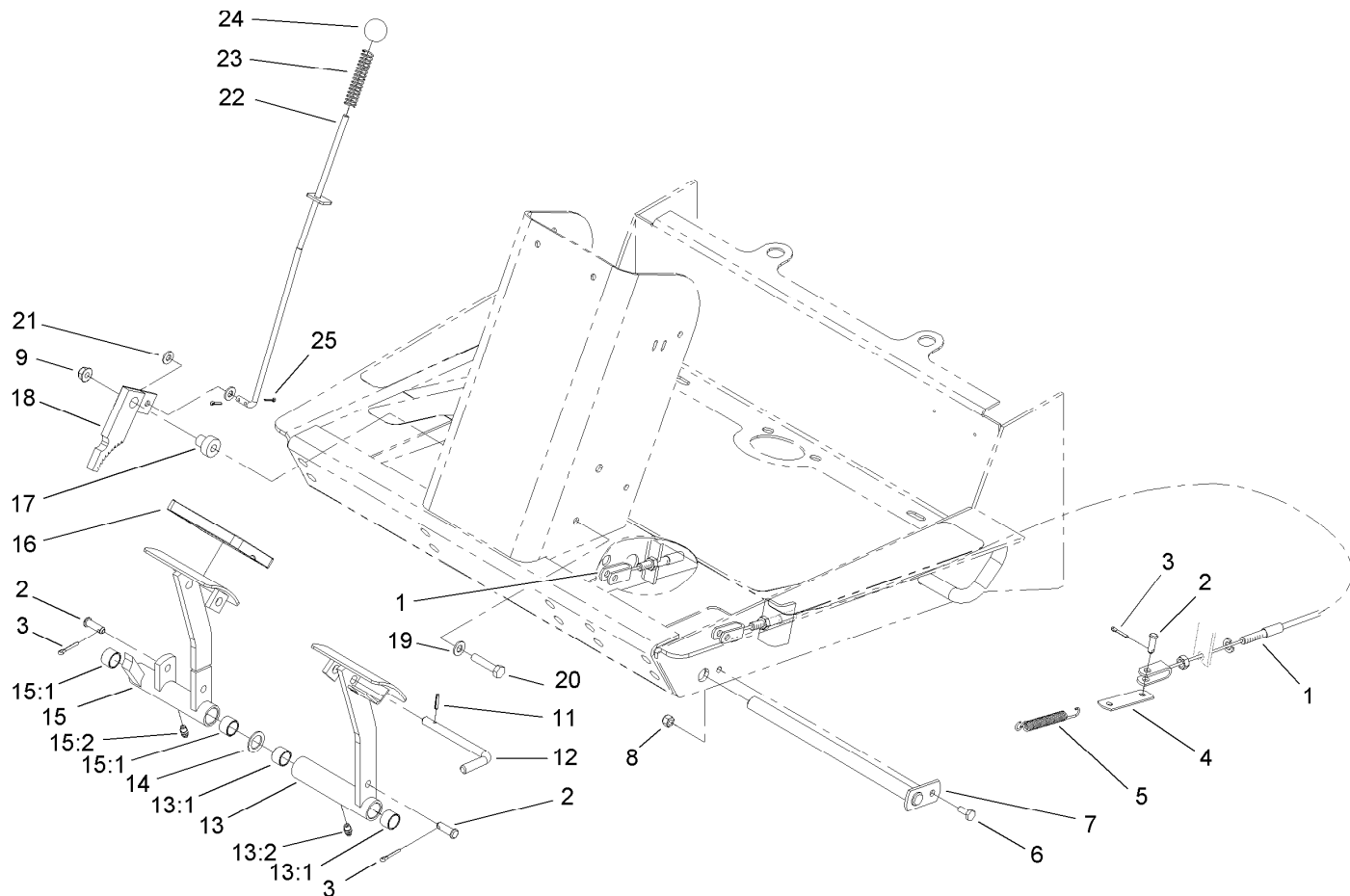
## Steer Valve Assembly No. 108-2077

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	237-21	3	O-Ring
2	237-22	2	O-Ring
3	106-6716	1	Seal Kit



## Traction Pedal Assembly

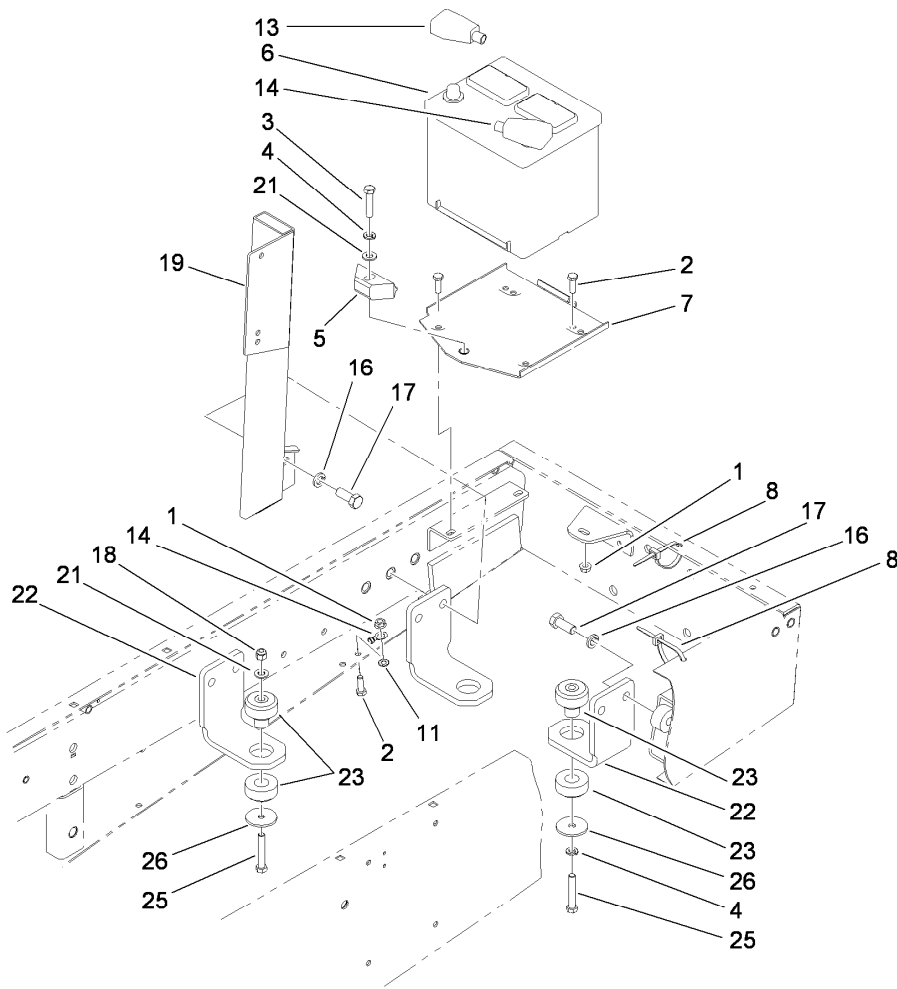
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	105-7150-03	1	Pedal ASM
2	3272-6	1	Pin-Cotter
3	32121-6	1	Pin-Roll, Slotted
4	3296-39	1	Nut-Lock, NI
5	92-8854-03	1	Pivot Bracket ASM
6	3220-3	1	Nut-HJ
7	2411-36	1	Bearing-End, Rod
8	32141-36	1	Screw-Adjustment, Level
9	32121-50	1	Pin-Spring
10	92-5534	1	Shaft-Pedal, Traction
11	5-7570	2	Washer-Flat
12	28-5220	1	Friction Wheel ASM
13	94-3307	1	Pad-Pedal, Traction
14	94-3308	1	Pad-Pedal, Traction
15	92-5537	1	Pin-Pedal, Traction
16	3217-6	2	Nut-Hex
17	323-29	1	Screw-HH
18	3256-24	2	Washer-Flat
19	256-156	2	Bushing-Flange
20	108-8661-03	1	Traction Rod ASM
21	32128-56	2	Nut-HF
22	3272-10	2	Pin-Cotter



## Brake Pedal Assembly

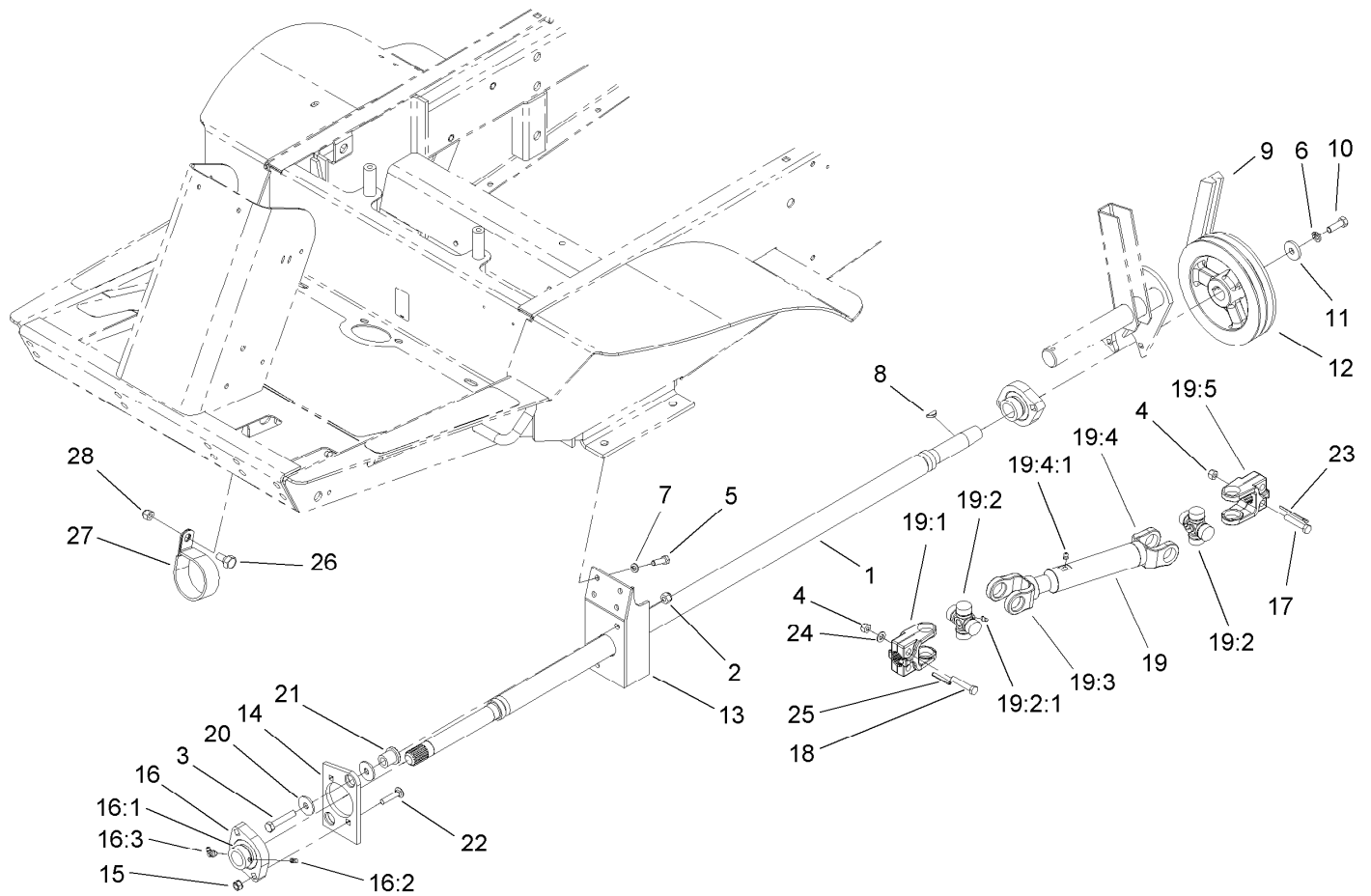
Ref.	Part Number	Qty.	Description
1	108-6556	2	Cable-Brake
2	283-58	4	Pin-Clevis
3	3272-10	4	Pin-Cotter
4	63-6750	2	Link-Cable, Brake
5	3-7243	2	Spring-Extension
6	321-4	1	Screw-HH
7	63-6210-03	1	Pin-Brake
8	3296-42	1	Nut-Lock, NI
9	104-8300	1	Nut-Flange, NI
11	32121-50	1	Pin-Spring
12	63-7880	1	Pin-Latch, Brake
13	63-6180	1	Pedal-Brake, LH
13:1	256-42	2	Bushing
13:2	302-5	1	Fitting-Grease

Ref.	Part Number	Qty.	Description
14	3256-69	2	Washer-Flat
15	63-6190	1	Pedal-Brake, RH
15:1	256-42	2	Bushing
15:2	302-5	1	Fitting-Grease
16	93-8742	2	Footpad-Brake
17	105-7156	1	Spacer
18	63-7900-03	1	Rack ASM
19	3256-23	1	Washer-Flat
20	322-7	1	Screw-HH
21	3256-22	2	Washer-Flat
22	105-7168	1	Rod ASM
23	71-8310	1	Spring-Compression
24	233-17	1	Knob
25	3272-5	2	Pin-Cotter



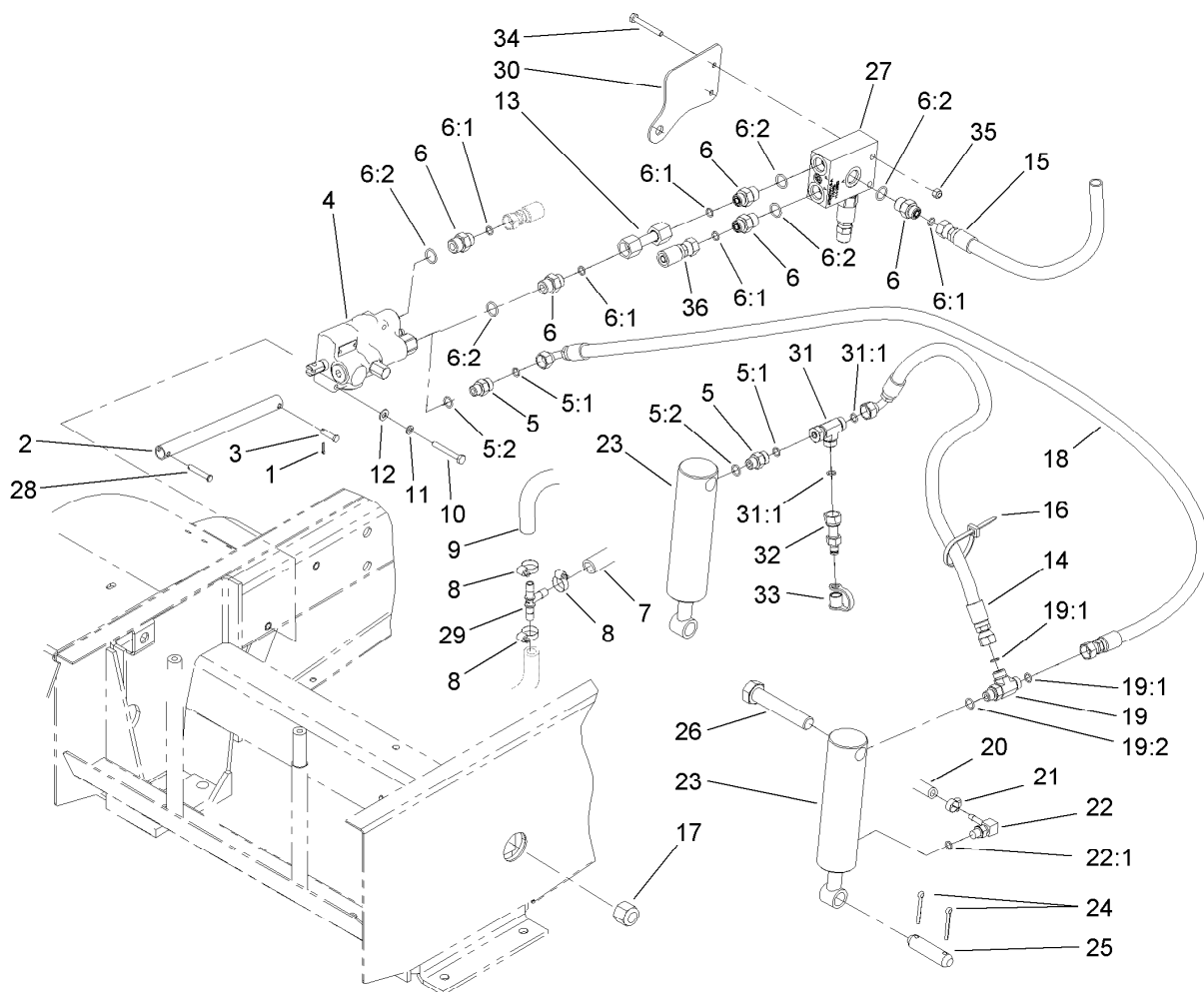
## Battery and Engine Mount Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	32128-20	4	Nut-HF
2	322-5	4	Screw-HH
3	323-9	1	Screw-HH
4	3253-21	2	Washer-Lock
5	66-2490	1	Retainer-Battery
6	106-5187	1	Battery
7	94-7343	1	Battery Base ASM
8	3290-378	2	Tie-Cable
11	3255-8	1	Washer-Lock
13	104-0086	1	Cable-Battery, Positive
14	105-0040	1	Cable-Battery, Negative
16	3253-7	8	Washer-Lock
17	3213-2	8	Screw-HH
18	3296-39	3	Nut-Lock, NI
19	105-2513-03	1	Air Cleaner Mount ASM
21	3256-24	4	Washer-Flat
22	114-2867-03	4	Bracket-Mount, Engine
23	115-0600	4	Mount-Engine
25	323-14	4	Screw-HH
26	63-7400	4	Washer-Rebound



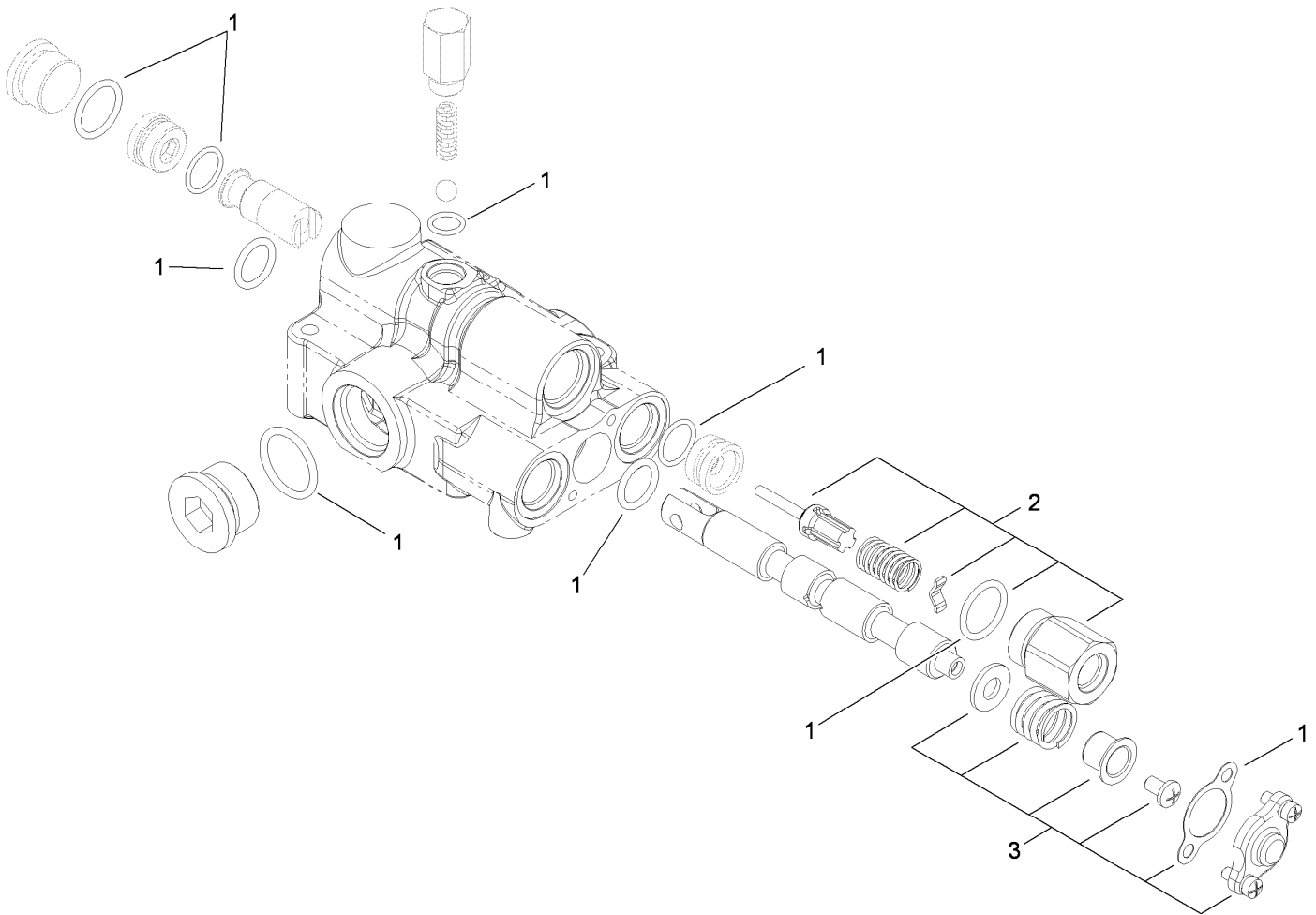
## Power-Take-Off and Shaft Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-8855-03	1	Shaft-PTO	17	322-9	4	Screw-HH
2	3296-39	2	Nut-Lock, NI	18	322-14	1	Screw-HH
3	323-10	2	Screw-HH	19	108-1366	1	PTO Drive Shaft ASM
4	3296-29	5	Nut-Lock, NI	19:1	54-9040	1	Yoke-End
5	322-5	4	Screw-HH	19:2	54-9180	2	U-Joint Kit
6	3253-21	1	Washer-Lock	19:2:1	62-3820	1	Fitting-Grease
7	3253-4	4	Washer-Lock	19:3	108-6550	1	Shaft-Yoke, Slip
8	3257-5	1	Key-Woodruff	19:4	108-6551	1	Tube-Yoke, Slip
9	63-6240	1	V-Belt	19:4:1	302-58	1	Fitting-Straight
10	323-18	1	Screw-HH	19:5	54-9090	1	Yoke-End
11	29-4730	1	Washer-Flat	20	63-8410	4	Washer
12	43-5320-03	1	Pulley-PTO	21	63-9750	2	Mount
13	92-8751-03	1	PTO Bearing Bracket ASM	22	3230-4	2	Screw-CARR
14	84-7580	1	Plate-Support, Bushing	23	3272-15	1	Pin-Cotter
15	32149-1	2	Nut-Keps	24	3256-23	1	Washer-Flat
16	92-8799	1	Bearing-Flange	25	32121-34	1	Pin-Roll
16:1	251-77	1	Collar-Lock, Bearing	26	46-3380	1	Bolt-Shoulder
16:2	3245-35	1	Screw-Set, HSH	27	2412-102	1	Clamp-R
16:3	302-40	1	Fitting-Grease	28	3296-39	1	Nut-Lock, NI



## Hydraulic Cylinder and Lift Arm Assembly

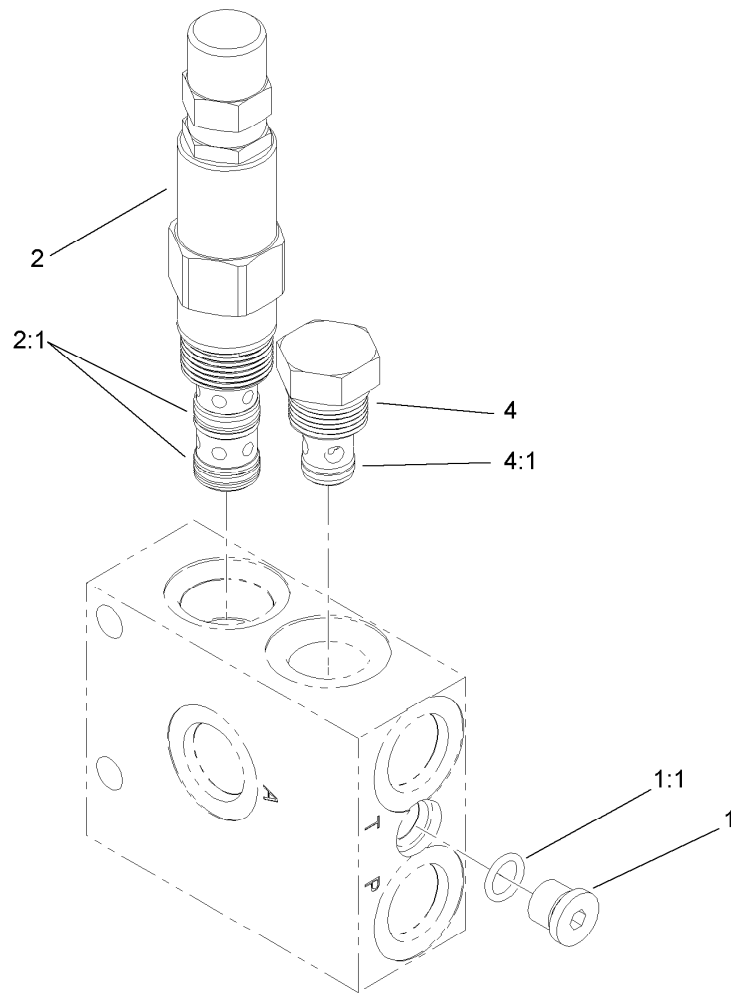
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	3272-5	2	Pin-Cotter	19	340-86	1	Fitting-Tee
2	108-2021-03	1	Tube-Link	19:1	237-22	2	O-Ring
3	283-26	1	Pin	19:2	237-42	1	O-Ring
4	114-2877	1	Valve ASM	20	92-5082	2	Hose-HYD
5	340-2	2	Fitting-HYD, Straight	21	2412-108	2	Clamp-Worm
5:1	237-22	1	O-Ring	22	304-99	2	Stem-Hose
5:2	237-42	1	O-Ring	22:1	237-78	1	O-Ring
6	340-3	5	Adapter	23	63-6630	2	Cylinder-HYD
6:1	237-22	1	O-Ring	24	3272-23	4	Pin-Cotter
6:2	237-79	1	O-Ring	25	27-4240	2	Pin-Cylinder
7	100-5641	1	Hose ASM	26	328-7	2	Screw-HH
8	2412-36	3	Clamp-Hose	27	114-2863	1	Manifold ASM
9	100-5649	1	Hose	28	283-66	1	Pin-Clevis
10	321-18	2	Screw-HH	29	354-107	1	Fitting-HYD, Tee
11	3253-3	2	Washer-Lock	30	114-2870-03	1	Bracket-Mounting
12	3256-22	2	Washer-Flat	31	340-115	1	Fitting-Tee, Swivel Nut
13	114-2869	1	HYD Tube ASM	31:1	237-22	2	O-Ring
14	108-2083	1	Hose ASM	32	86-5480	1	Nipple-Test
15	108-2088	1	Hose ASM	33	354-79	1	Cap-Dust
16	3290-378	2	Tie-Cable	34	321-11	2	Screw-HH
17	3296-51	2	Nut-Lock, NI	35	32128-33	2	Nut-HF
18	108-2082	1	Hose ASM	36	104-0072	1	HYD Hose ASM



## Hydraulic Valve Assembly No. 114-2877

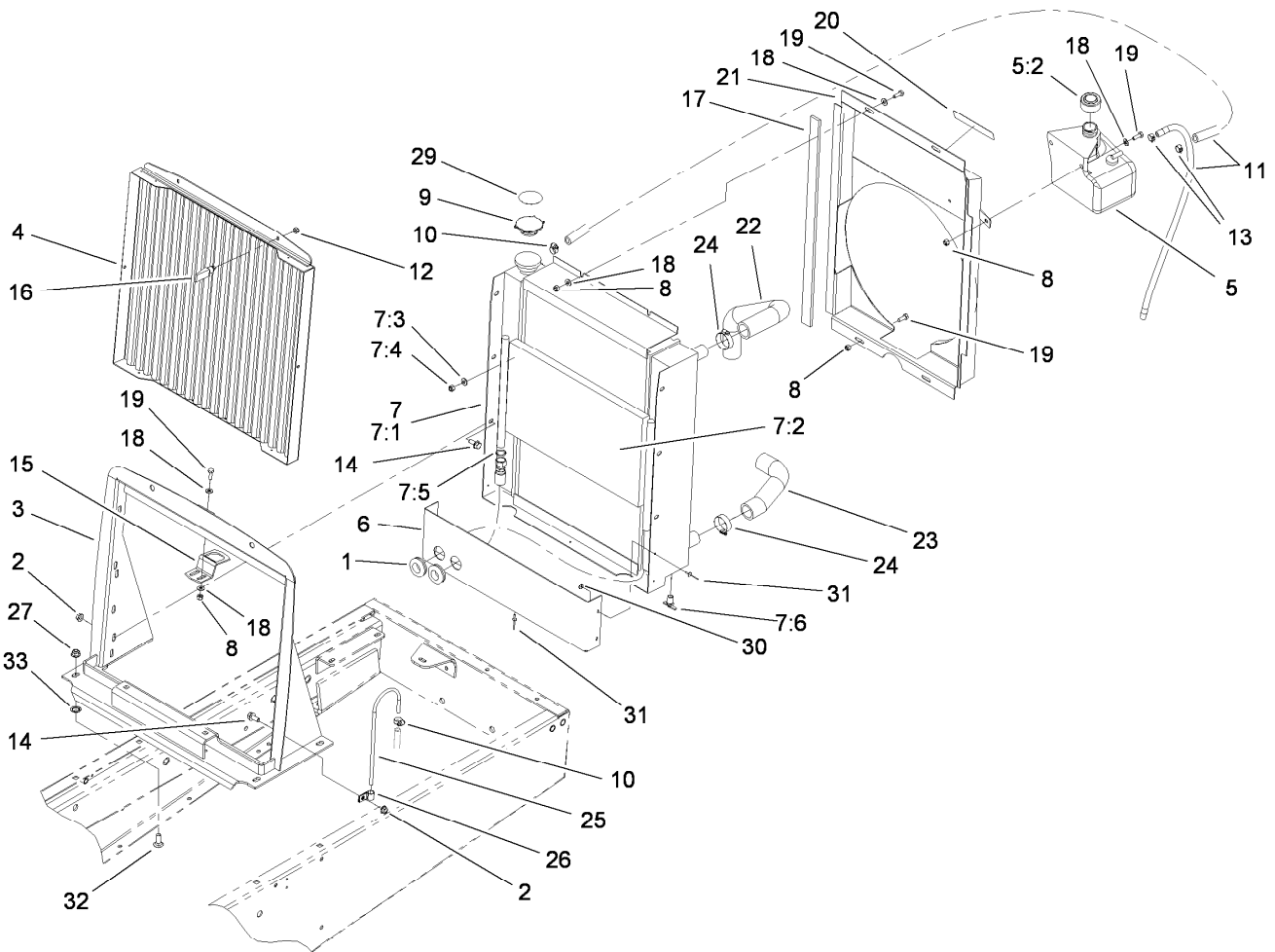
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	110-6442	1	Seal Kit
2	110-6441	1	Pilot Check Kit
3	114-2889	1	Spring Center Kit





## Hydraulic Manifold Assembly No. 114-2863

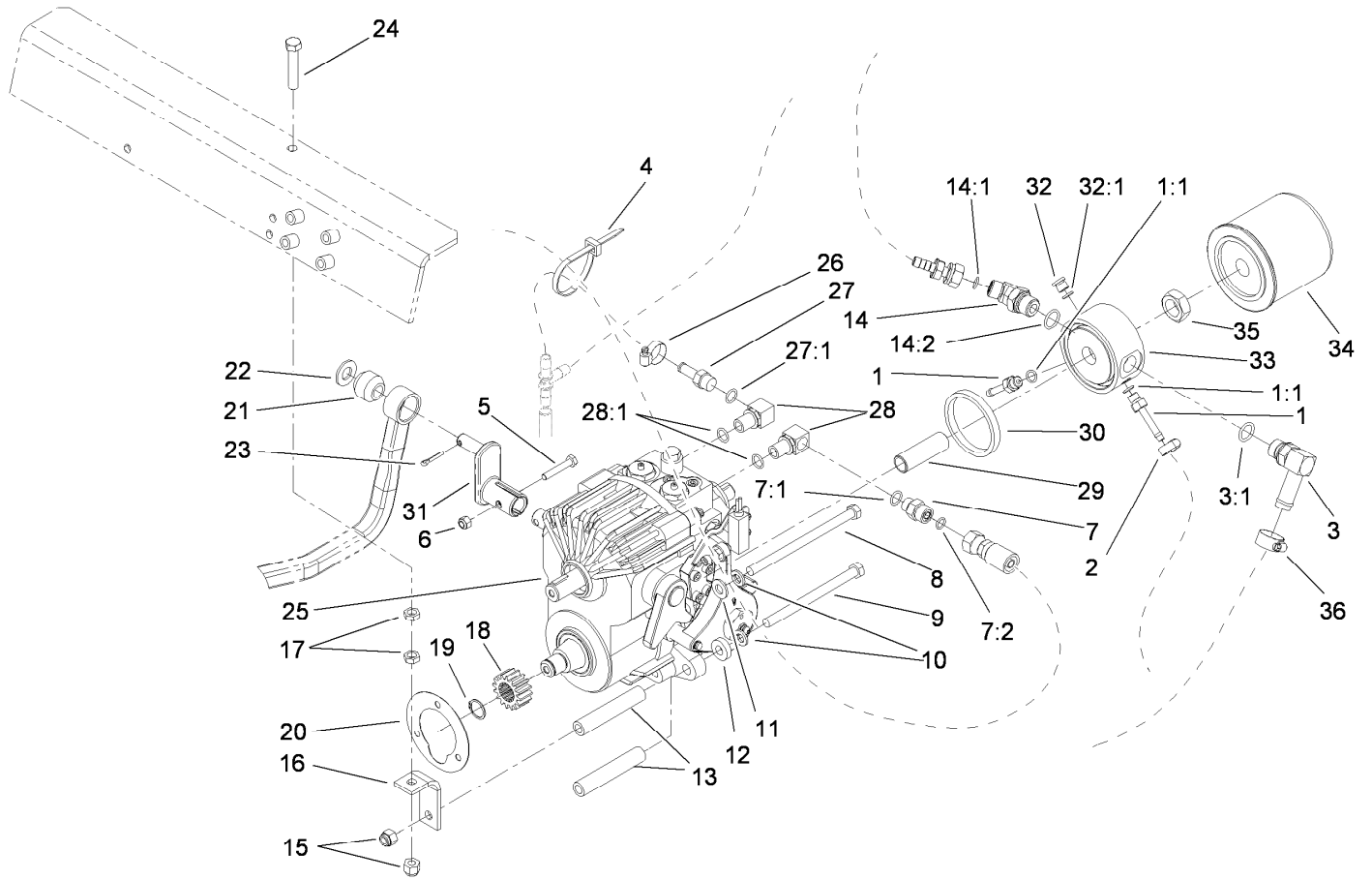
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	353-990	1	Plug
1:1	237-78	1	O-Ring
2	114-2888	1	Valve-Logic, Adjustable
2:1	119-2159	1	Seal Kit
4	114-2873	1	Check Valve
4:1	105-9156	1	Seal Kit



## Radiator Assembly

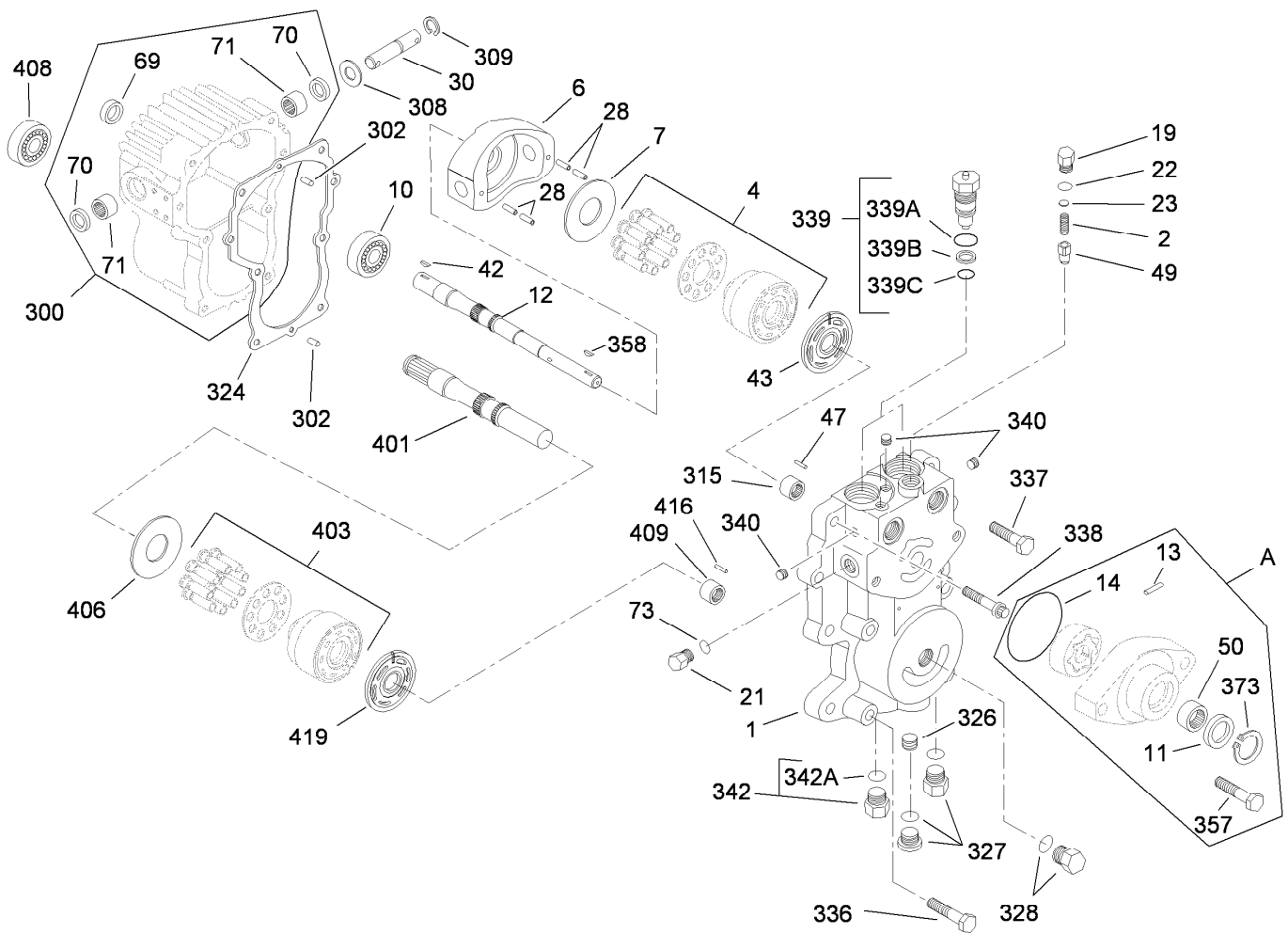
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	240-4	2	Grommet-Rubber	14	3234-5	6	Screw-HHF
2	32128-20	6	Nut-HF	15	98-9316	1	Latch-Hood
3	110-9668-03	1	Radiator Support ASM	16	74-5950	2	Latch-Swell
4	108-2062-03	1	Screen ASM	17	108-9683	2	Strip-Foam
5	93-5975	1	Coolant Reservoir ASM	18	3256-22	14	Washer-Flat
5:2	93-5960	1	Cap-Reservoir	19	321-4	8	Screw-HH
6	110-9663-03	1	Shield-Radiator, Bottom	20	93-7272	1	Decal-Warning
7		1	Radiator / Oil Cooler ASM ●	21	108-9678-03	1	Fan Shroud ASM
7:1	105-4289	1	Radiator	22	104-3443	1	Hose-Radiator, Upper
7:2	105-4290	1	Cooler-Oil	23	104-3442	1	Hose-Radiator, Lower
7:3	3253-4	4	Washer-Lock	24	2412-34	4	Clamp-Hose
7:4	3217-6	4	Nut-Hex	25	66-3180	1	Tube-Vent
7:5	237-22	2	O-Ring	26	2412-103	2	Clamp
7:6	304-46	1	Draincock	27	104-8301	4	Nut-Flange, NI
8	3296-42	8	Nut-Lock, NI	29	106-5976	1	Decal-Warning
9	66-3240	1	Cap-Radiator	30	3269-10	2	Washer-Back
10	2412-108	2	Clamp-Worm	31	3269-13	5	Rivet-Pop
11	109-0308	2	Hose-Fuel	32	3231-2	4	Screw-CARR
12	1-804254	2	Nut-Lock, HH	33	32151-72	4	Ring-Retaining
13	92-2379	2	Clamp-Hose				

● Not serviced separately



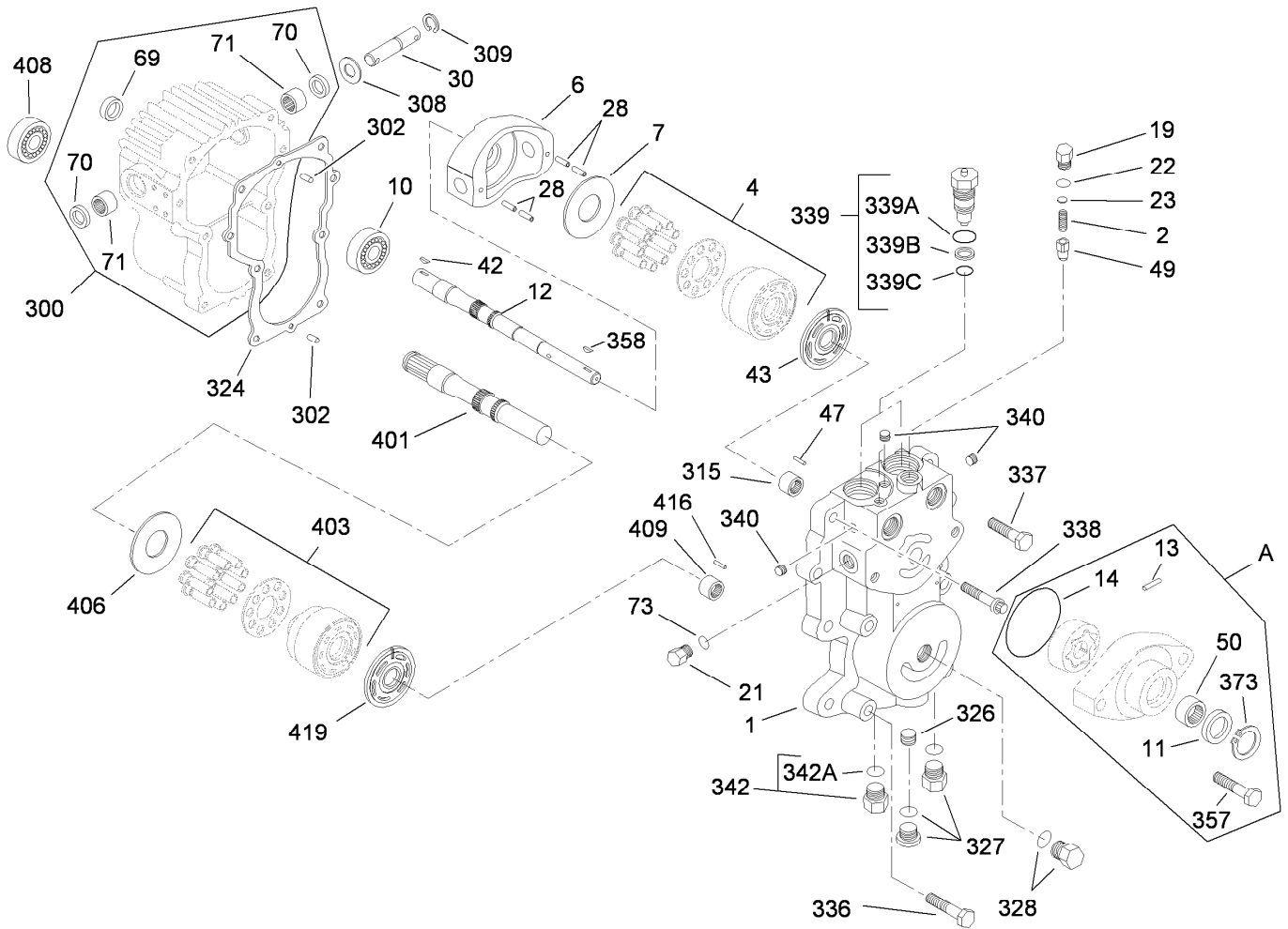
## Transmission Installation Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-5512	2	Fitting-Hose, Barbed	18	86-7220	1	Gear-Pinion
1:1	237-78	1	O-Ring	19	32120-72	1	Ring-Snap
2	2412-108	2	Clamp-Worm	20	27-3690	1	Gasket-Transmission
3	92-5086	1	Fitting-Elbow, 90 DEG	21	23-2270	1	Bushing-Rubber
3:1	237-79	1	O-Ring	22	3256-26	1	Washer-Flat
4	3290-378	2	Tie-Cable	23	3272-10	1	Pin-Cotter
5	321-9	1	Screw-HH	24	67-1900	1	Screw-HH
6	3296-42	1	Nut-Lock, NI	25	117-0849	1	Transmission ASM
7	82-8530	1	Fitting-Straight	26	2412-36	1	Clamp-Hose
7:1	237-42	1	O-Ring	27	353-979	1	Fitting-Straight
7:2	237-22	1	O-Ring	27:1	237-42	1	O-Ring
8	27-9620	1	Screw-HH	28	66-3110	2	Fitting-HYD, 90 DEG
9	323-39	3	Screw-HH	28:1	237-42	1	O-Ring
10	3253-21	4	Washer-Lock	29	92-5085	1	Union-Filter
11	3256-24	1	Washer-Flat	30	92-5087	1	Seal-Adaptor, Filter
12	5-0652	1	Spacer	31	112-5098	1	Pump Lever
13	27-3680	4	Spacer-Mounting	32	353-990	1	Plug
14	340-138	1	Fitting-HYD, 45 DEG	32:1	237-78	1	O-Ring
14:1	237-79	1	O-Ring	33	92-5076	1	Adapter-Filter
14:2	237-22	1	O-Ring	34	23-2300	1	Filter-Oil, Transmission
15	3296-39	2	Nut-Lock, NI	35	3220-7	1	Nut-Jam
16	63-7170	1	Anchor-Transmission	36	2412-119	1	Clamp-Hose, Worm Drive
17	3218-3	2	Nut-Jam				



## Center Section Assembly Transmission Assembly No. 117-0849

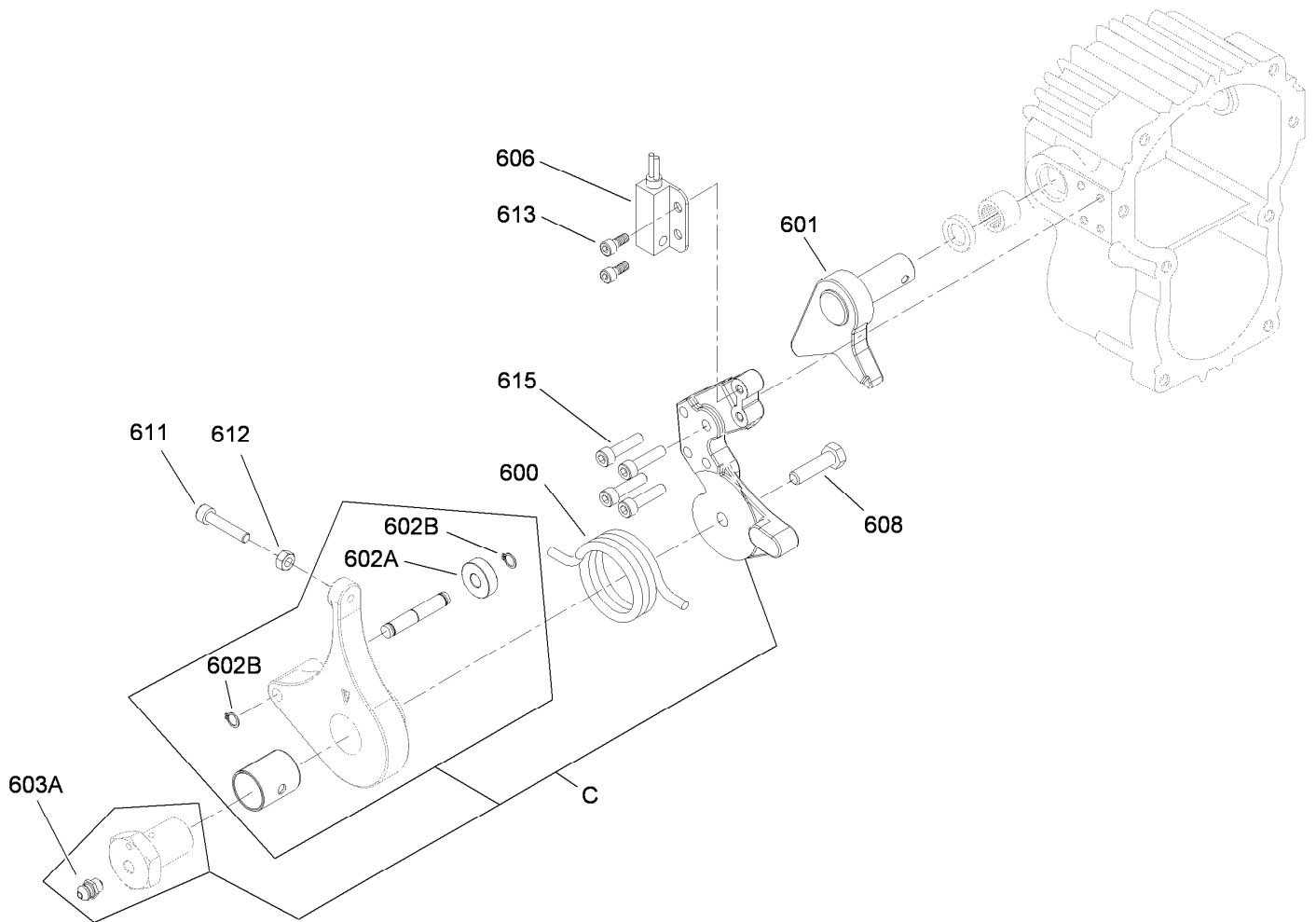
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	92-5716	1	Section-Center	300	110-3052	1	Housing ASM
2	25-2570	1	Spring-Valve	302	353-599	2	Pin-Dowel
4	48-1800	1	Cylinder Block Kit	308	25-2510	1	Washer-Flat
6	25-2450	1	Plate-Swash, Variable	309	32151-46	1	Ring-Retaining
7	25-2380	1	Plate-Thrust	315	25-3300	1	Bearing-Needle
A	117-6988	1	Charge Pump Kit	324	28-3340	1	Gasket
10	251-8	1	Bearing-Ball	326	107-4370	1	Plug-Expansion
11	94-2975	1	Seal-Shaft	327	67-9090	1	Plug ASM
12	28-3640	1	Shaft-Pump	328	28-3440	1	Plug-Threaded
13	38-2680	1	Pin	336	323-10	4	Screw-HH
14	28-3520	1	O-Ring	337	75-0110	2	Capscrew-HH
19	25-2460	1	Plug-HH	338	28-3530	2	Capscrew
21	25-2460	1	Plug-HH	339	49-7830	2	Check Valve Kit
22	28-3400	1	O-Ring	339A	28-3570	2	O-Ring
23	25-2470	1	Pack-Shim	339B	28-3580	2	Ring-Back Up
28	83-3880	4	Pin-Spring	339C	28-3590	2	O-Ring
30	28-3670	1	Shaft-Trunnion	340	75-0160	4	Plug-Pipe
42	3257-5	1	Key-Woodruff	342	28-3440	2	Plug-Threaded
43	110-3051	1	Plate-Valve	342A	75-0240	2	O-Ring
47	25-2430	1	Pin-Dowel	357	92-1773	2	Screw-HHF
49	67-8070	1	Cone-Relief, Charge	358	3257-5	1	Key-Woodruff
50	28-3480	1	Bearing	373	94-2976	1	Ring-Retaining
69	93-4133	1	Seal-Lip	401	49-8200	1	Shaft-Motor
70	103461	2	Seal	403	48-1800	1	Cylinder Block Kit
71	252-82	2	Bearing-Needle	406	25-2380	1	Plate-Thrust
73	28-3400	1	O-Ring	408	28-3300	1	Bearing-Roller



## Center Section Assembly Transmission Assembly No. 117-0849 (continued)

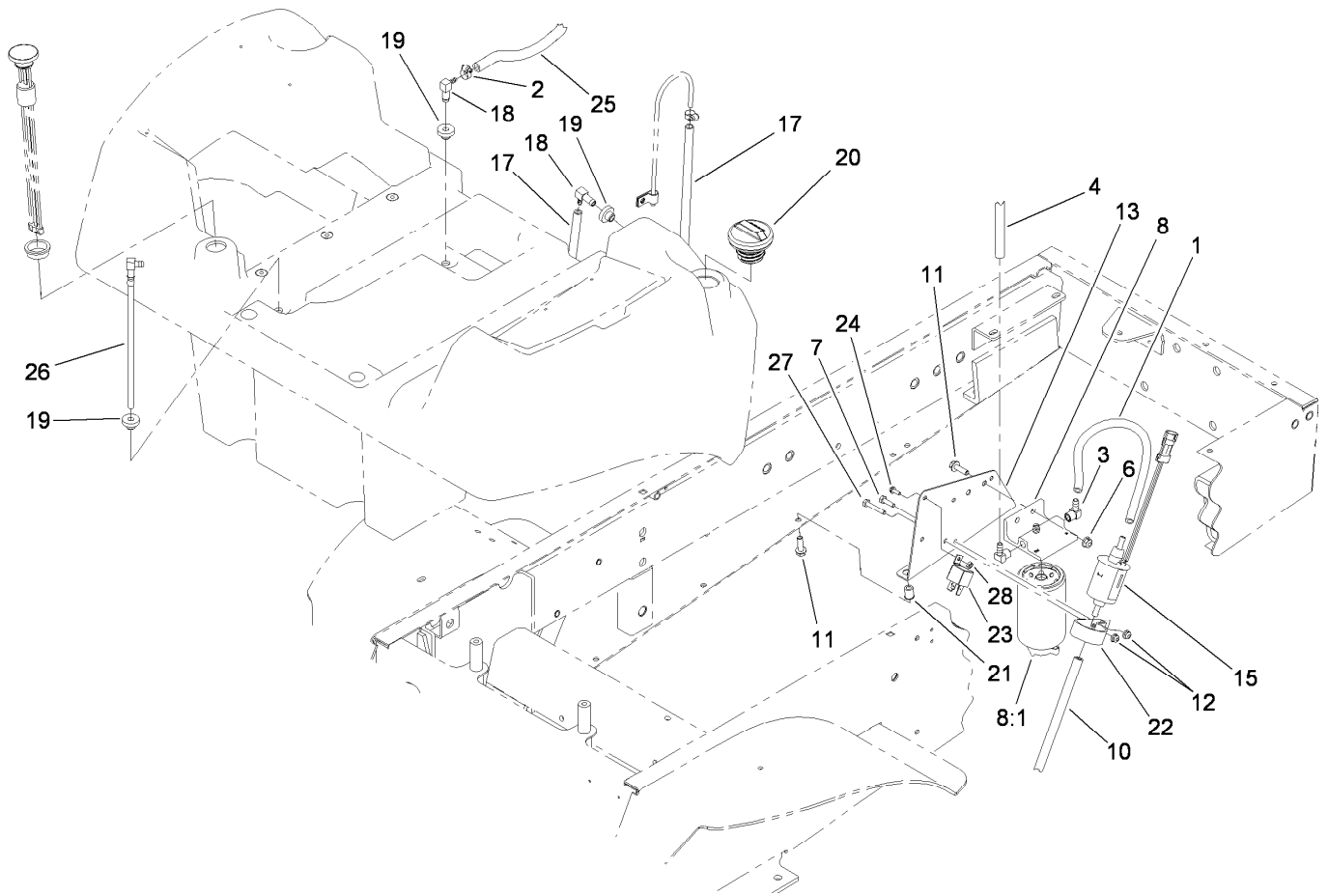
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
409	25-3300	1	Bearing-Needle

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
416	25-2430	1	Pin-Dowel
419	28-3380	1	Plate-Valve, Motor



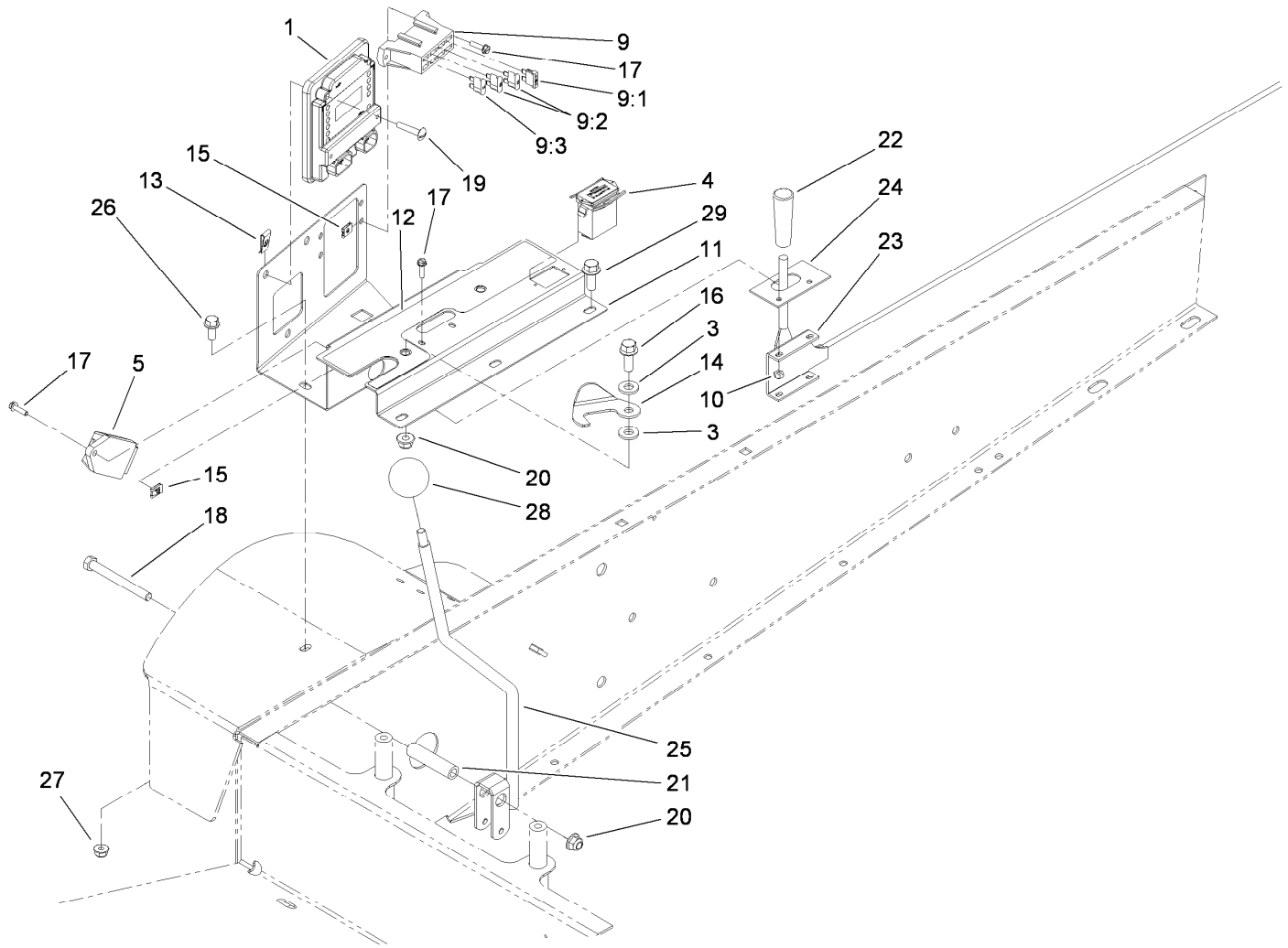
## Neutral Return Arm Assembly Transmission Assembly No. 117-0849

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
C	110-5685	1	Neutral Return ASM
600	110-3053	1	Spring-Return, Neutral
601	110-3054	1	Cam-Trunnion
606	100-1270	1	Switch-Proximity
608	33114-030	1	Screw-HH
611	110-3060	1	Screw-HSH
612	33013-00	1	Nut-Hex
613	110-3061	2	Screw-HSH
615	48-7850	4	Capscrew
602A	251-259	1	Bearing-Ball
602B	110-3056	2	Ring-Retaining
603A	110-3058	1	Fitting-Lube



## Fuel Delivery System Assembly

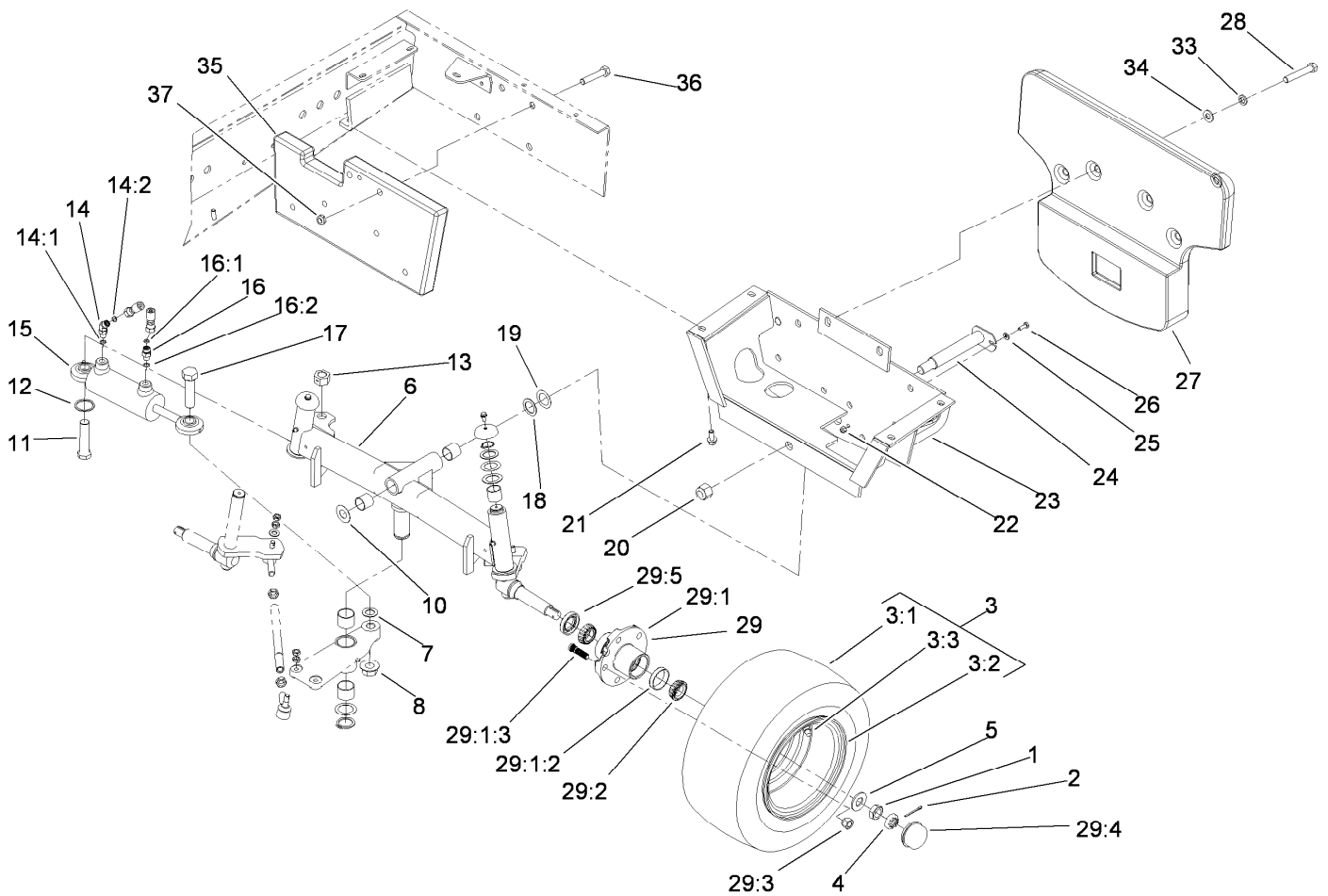
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	110-4105	1	Hose-Fuel	17	109-0273	1	Hose-Fuel
2	2412-108	9	Clamp-Worm	18	104-5228	2	Fitting-Elbow, 90 DEG
3	353-781	2	Fitting-Elbow	19	46-6560	3	Bushing
4	106-1126	1	Hose-Fuel	20	115-5305	1	Cap-Fuel
6	104-8300	2	Nut-Flange, NI	21	32148-7	2	Nut-Insert
7	321-5	1	Screw-HH	22	110-8817	1	Bracket-Pump, Fuel
8	110-9044	1	Filter-Seperator	23	99-7435	1	Relay-Power
8:1	110-9049	1	Filter-Spin On	24	32105-23	1	Screw
10	110-4172	1	Hose-Fuel	25	108-9698	1	Hose-Fuel
11	3234-17	4	Screw-HHF	26	110-9689	1	Pipe-Stand
12	104-7201	2	Nut-HF	27	321-9	1	Screw-HH
13	114-2854-03	1	Bracket-Support	28	3296-2	1	Nut-Lock, NI
15	110-8806	1	Pump-Fuel				



## Lower 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	106-9277	1	Module-Control, Standard	16	3234-11	1	Screw-HHF
3	66-2920	2	Washer-Friction	17	32105-13	5	Screw-HWH
4	1-513374	1	Meter-Hour	18	323-15	1	Screw-HH
5	98-7611	1	Controller-Glow	19	3258-19	3	Screw
9	114-3398	1	Harness-Wire	20	104-8301	2	Nut-Flange, NI
9:1	94-6710	1	Fuse-2 Amp	21	84-2350	1	Spacer-Long
9:2	218-578	2	Fuse-Blade, 10 Amp	22	233-39	1	Knob-Control
9:3	109355	1	Fuse-Blade, 15 Amp	23	117-0824	1	Control-Throttle, Diesel
10	3296-2	2	Nut-Lock, NI	24	108-2034-03	1	Plate-Throttle
11	108-2030-03	1	Cover-Lower	25	108-2035-03	1	Lift Lever ASM
12	108-2031	1	Decal-Panel, Lower	26	3234-5	1	Screw-HHF
13	3290-199	3	Nut-Speed	27	104-8300	1	Nut-Flange, NI
14	108-2032	1	Latch-Lever	28	233-21	1	Knob
15	107-1013	8	Nut-Speed, U-Type	29	3234-14	3	Screw-HHF

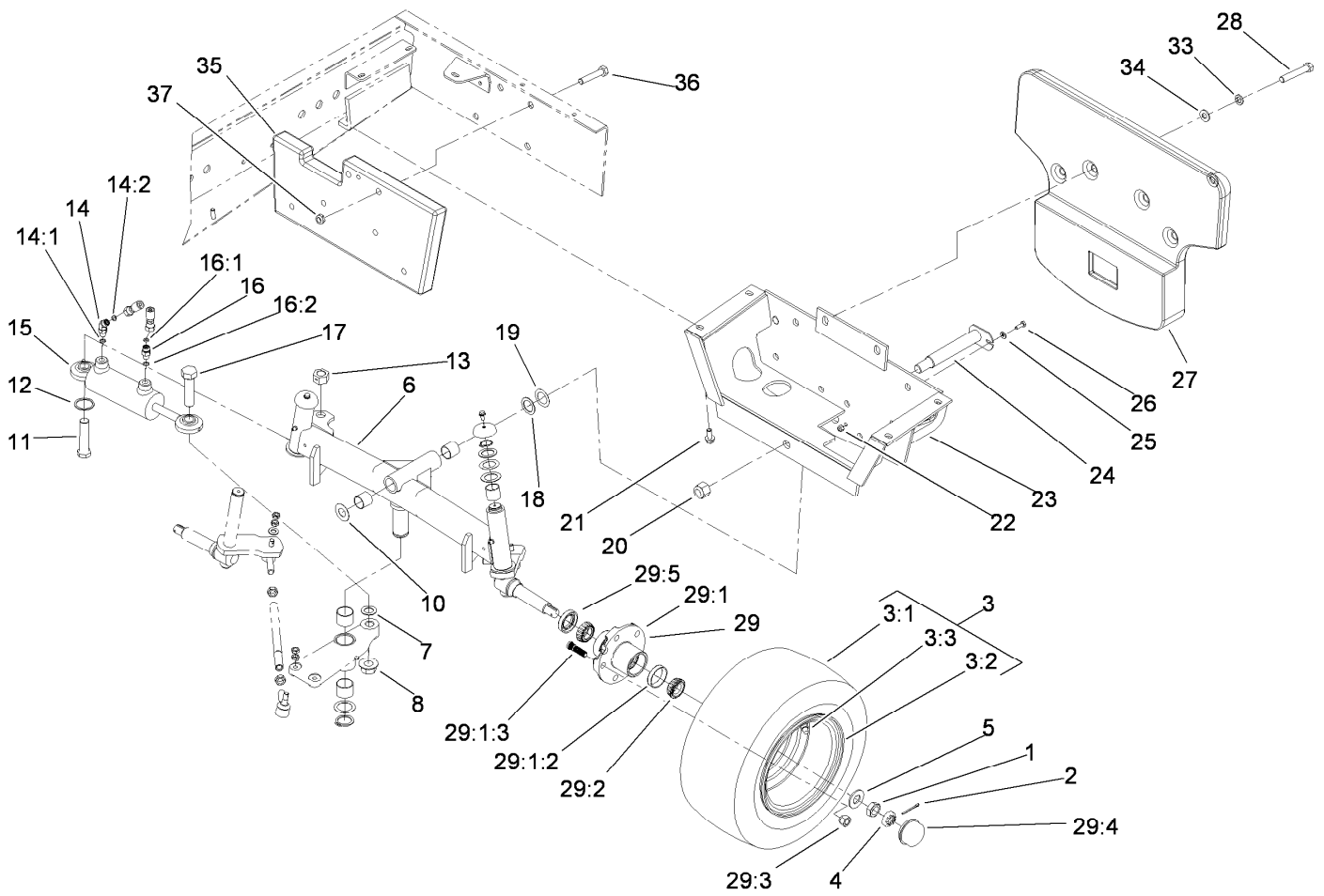




## Rear Axle and Tire Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	3220-7	2	Nut-Jam	16	340-92	1	Fitting-HYD, Straight
2	3272-13	2	Pin-Cotter	16:1	237-78	1	O-Ring
3		2	Wheel And Tire ASM ●	16:2	237-21	1	O-Ring
3:1	231-105	1	Tire-Ribbed	17	328-25	1	Screw-HH
3:2	107-9059	1	Wheel	18	10-8110	1	Washer-Thrust
3:3	232-35	1	Valve Stem And Cap ASM	19	56-2460	2	Washer-Flat
4	93-0307	2	Nut-Lock, Retainer	20	3296-51	1	Nut-Lock, NI
5	93-0309	2	Washer-Tab	21	3234-25	4	Screw-HHF
6		1	Rear Axle ASM ●	22	3296-42	1	Nut-Lock, NI
7	67-9410	1	Washer	23	63-6430-03	1	Frame-Rear
8	32128-45	1	Locknut-Flange	24	63-6770-03	1	Pin-Masked
10	71-4540	1	Washer-Thrust	25	3256-22	1	Washer-Flat
11	67-7300	1	Screw-HH	26	321-4	1	Screw-HH
12	67-7250	1	Spacer-Ring	27	110-9666-01	1	Weight-Rear
13	32153-6	1	Nut-Lock	28	325-14	4	Screw-HH
14	340-103	1	Fitting-HYD, 45 DEG	29		2	Hub ASM ●
14:1	237-78	1	O-Ring	29:1	117-8963	1	Hub ASM
14:2	237-21	1	O-Ring	29:1:2	254-72	2	Bearing-Cup, Tapered
15	115-4525	1	Cylinder ASM	29:1:3	114-3918	5	Stud-Wheel

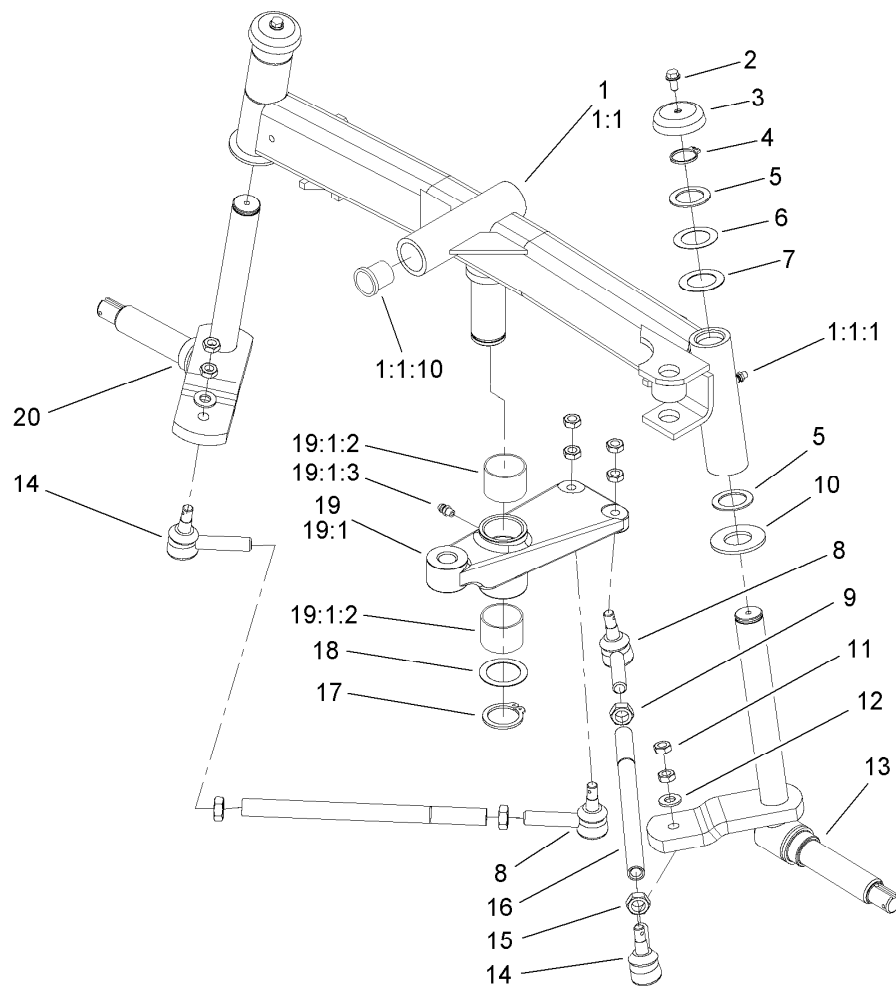
● Not serviced separately



## Rear Axle 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>
29:2	254-94	2	Bearing-Cone, Tapered	34	3256-26	4	Washer-Flat
29:3	242-50	5	Nut-Lug	35	110-1995-03	1	Weight-Rear, Inside
29:4	241-119	1	Cap-Dust	36	325-10	2	Screw-HH
29:5	112-1690	1	Seal-Oil	37	3296-45	2	Nut-Lock, NI
33	3253-7	4	Washer-Lock				

● Not serviced separately

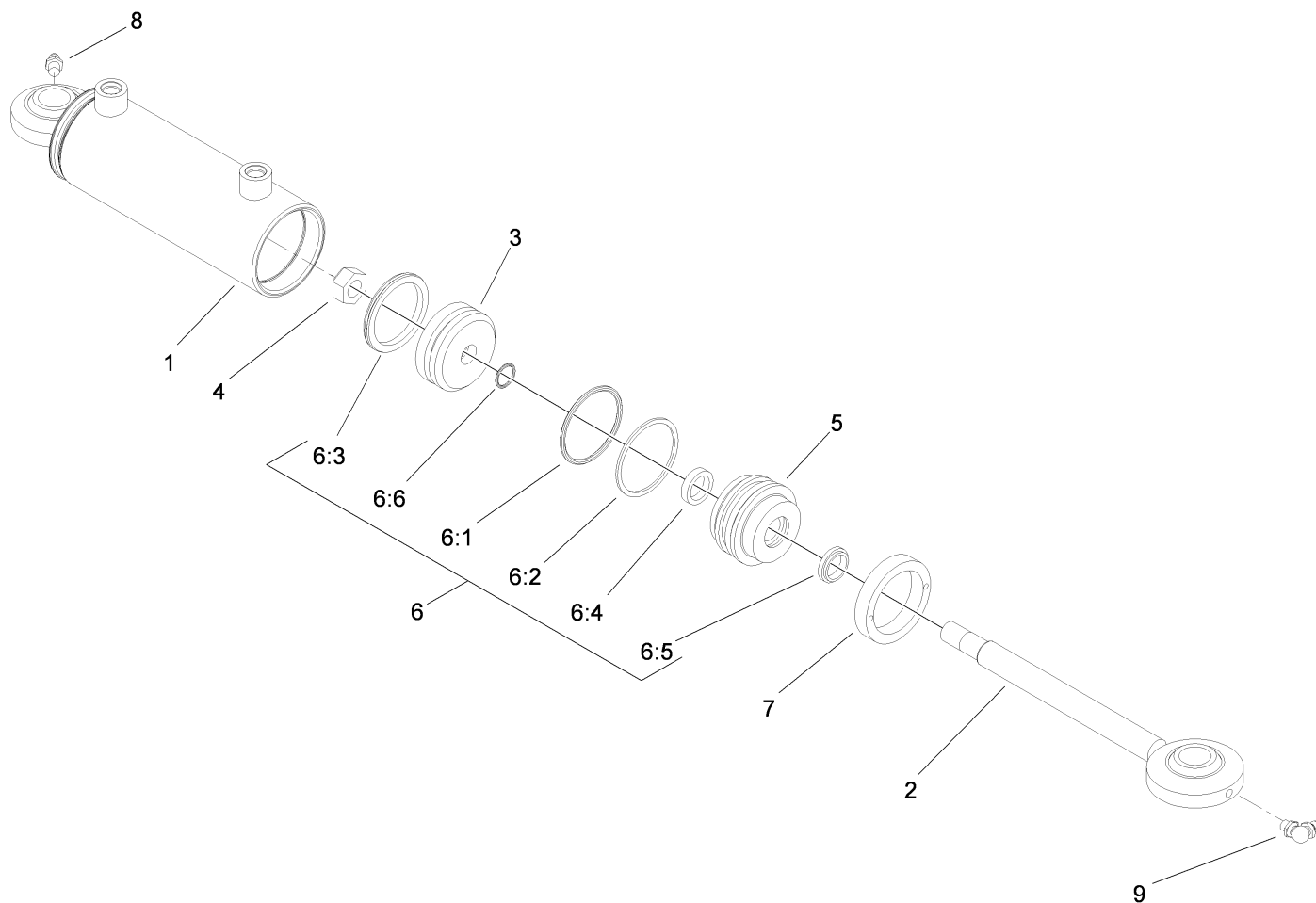


## Rear Axle Assembly

Ref.	Part Number	Qty.	Description
1	76-3000-03	1	Rear Axle ASM
1:1		1	Axle-Rear ●
1:1:1	302-5	3	Fitting-Grease
1:1:10	67-1750	6	Bushing
2	3234-13	2	Screw-HHF
3	66-2990-03	2	Cap-Spindle
4	32151-36	2	Ring-Retaining
5	10-8110	4	Washer-Thrust
6	56-2460	2	Washer-Flat
7	5-1226	2	Washer
8	110-9686-03	2	LH Ball Joint ASM
9	3220-12	2	Nut-HJ (LH Thread)
10	256-121	2	Washer-Thrust

Ref.	Part Number	Qty.	Description
11	3220-3	8	Nut-HJ
12	3256-24	2	Washer-Flat
13	107-2943-03	1	RH Spindle ASM
14	110-9685-03	2	RH Ball Joint ASM
15	3220-5	2	Nut-Jam
16	63-6880	2	Tie Rod-Steering
17	32151-77	1	Ring-Retaining, EXT
18	76-2980	1	Washer-Thrust
19	100-6598-03	1	Steering Pivot ASM
19:1		1	Pivot-Steering ●
19:1:2	76-2970	2	Bushing-Straight
19:1:3	302-5	1	Fitting-Grease
20	107-2942-03	1	LH Spindle ASM

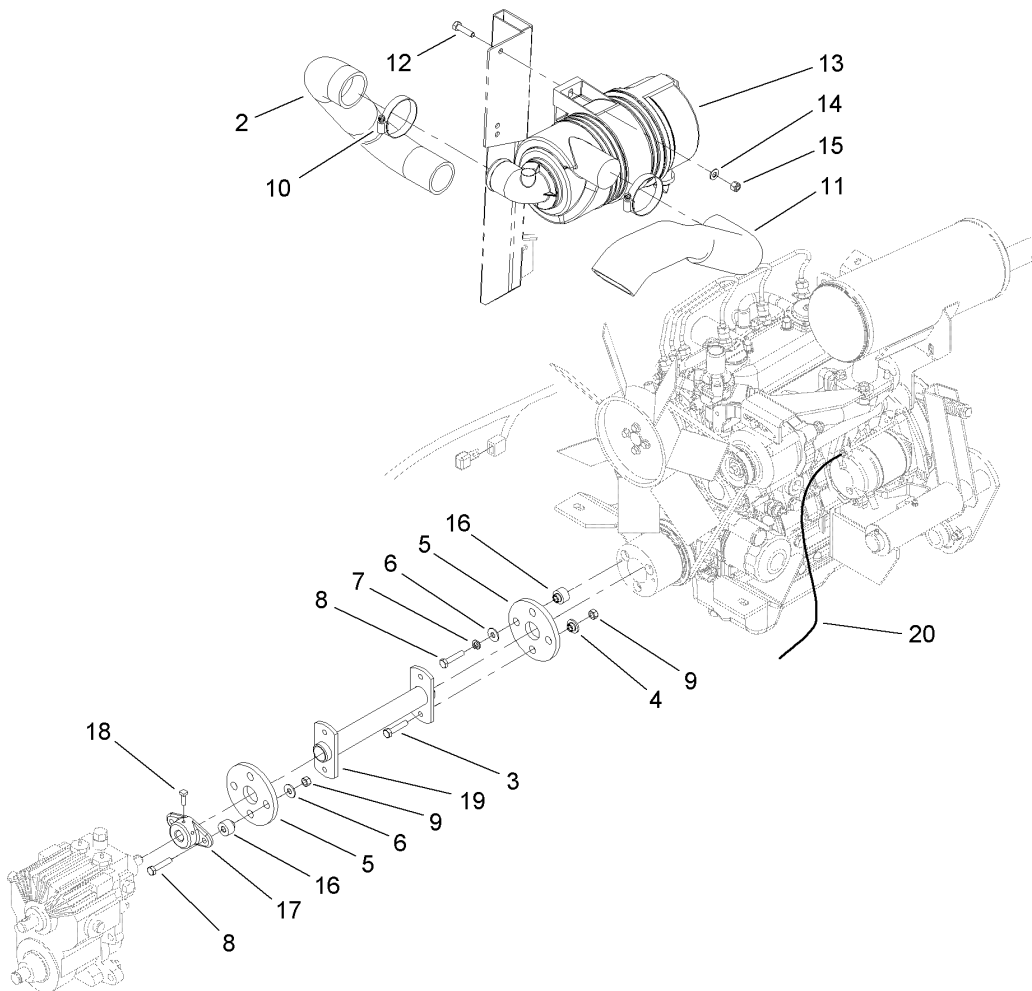
● Not serviced separately



## Steering Cylinder Assembly No. 115-4525

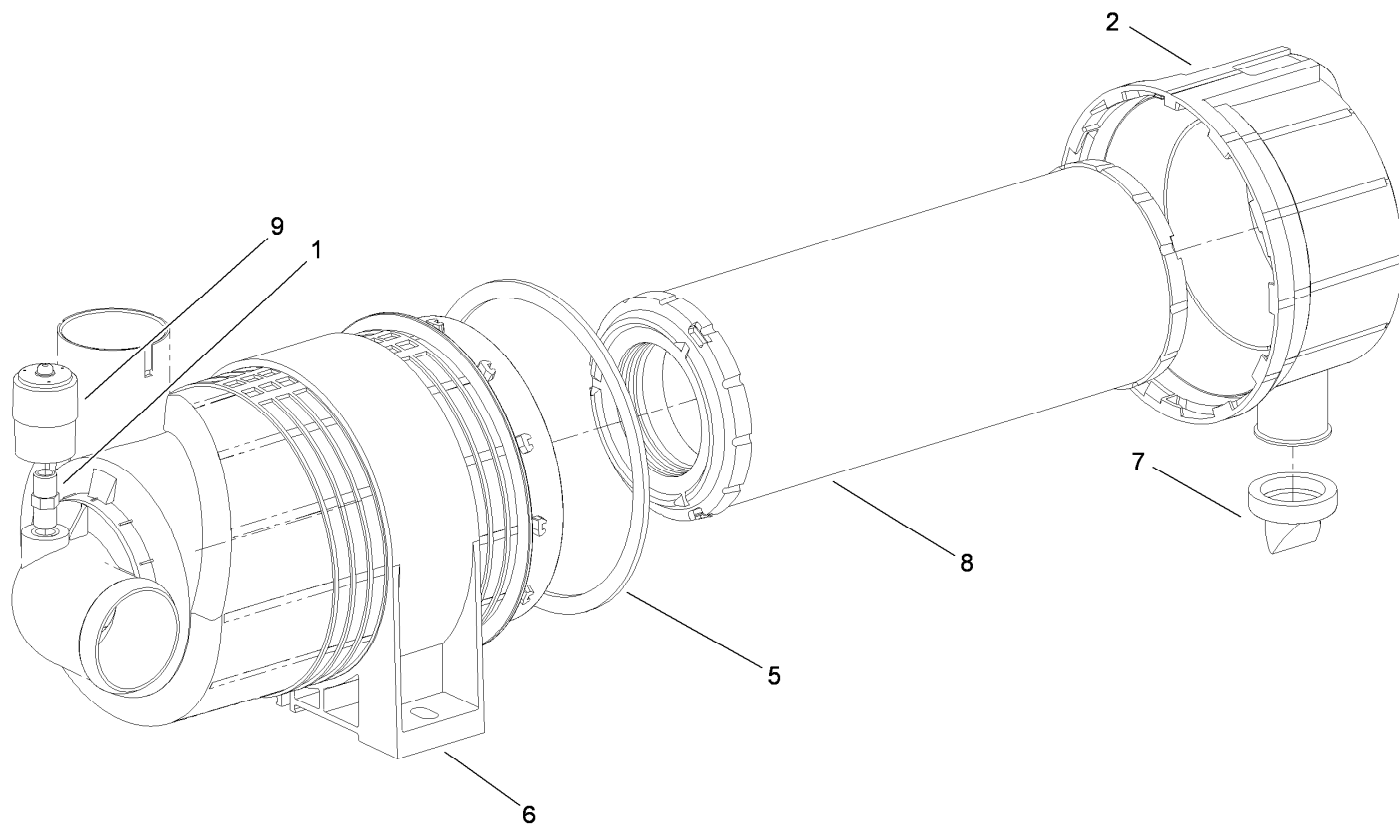
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1		1	Barrel Assembly ●
2		1	Shaft Assembly ●
3		1	Piston ●
4		1	Nut-Lock ●
5		1	Head ●
6	115-4526	1	Seal Kit
6:1		1	Ring-Retaining ●
6:2		1	Backup ●
6:3		1	Bp Seal ●
6:4		1	Bs-Seal ●
6:5		1	Dust Seal - Dt ●
6:6		1	Ring-Retaining ●
7		1	Collar-Internal ●
8	302-5	1	Fitting-Grease
9	302-40	1	Fitting-Grease

● Not serviced separately



## Air Cleaner and Drive Coupling Assembly

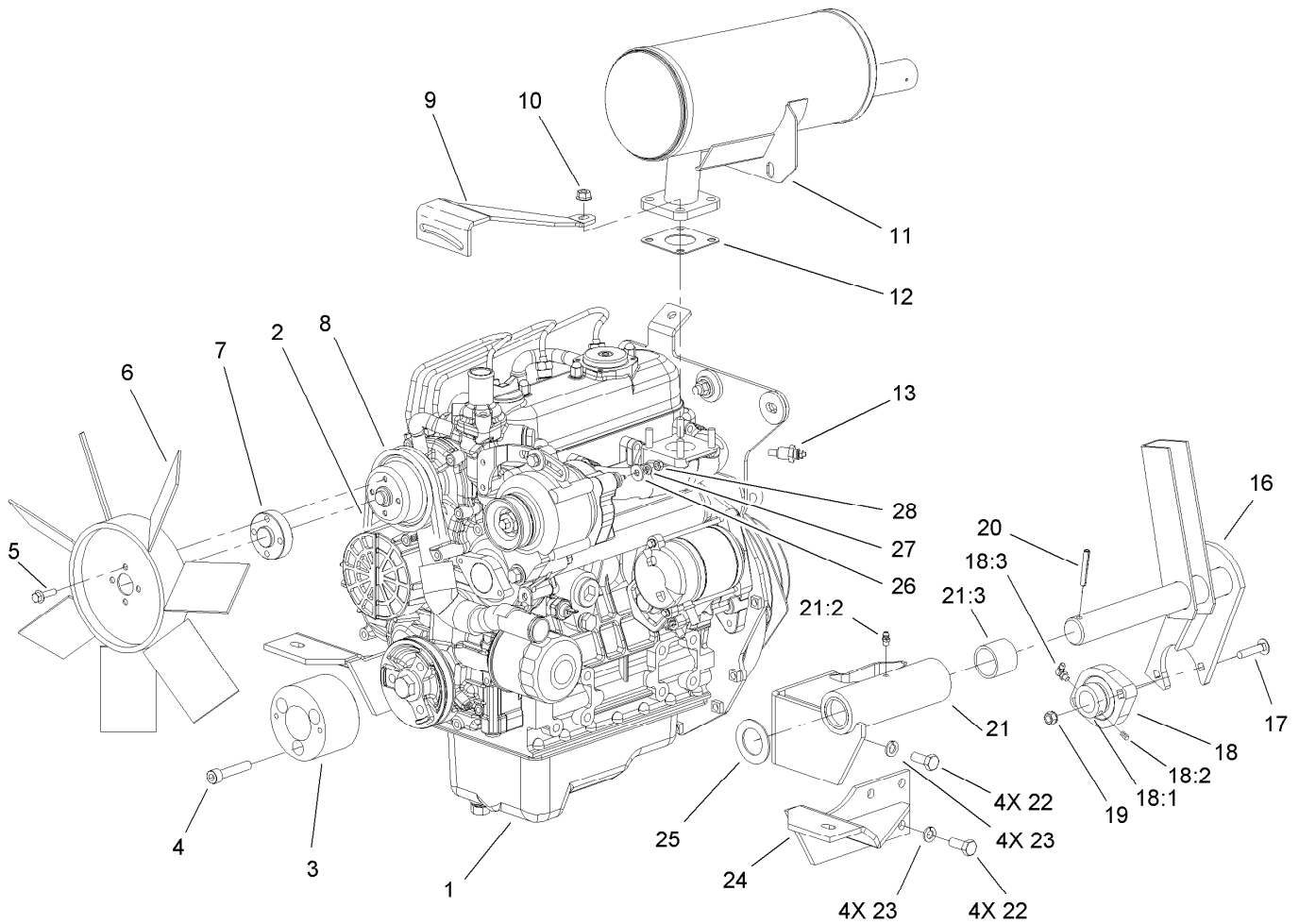
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
2	104-3446	1	Hose-Outlet, Air
3	3210-5	4	Screw-HH
4	27-6600	4	Spacer-Coupling
5	115-4523	2	Coupling-Rubber
6	3256-71	4	Washer-Flat
7	3253-4	2	Washer-Lock
8	3210-8	4	Screw-HH
9	32152-5	6	Nut-Hex
10	2412-42	3	Clamp-Hose
11	104-3444	1	Hose-Inlet, Air
12	322-6	2	Screw-HH
13	104-3427	1	Air Cleaner ASM
14	3256-23	2	Washer-Flat
15	3296-29	2	Nut-Lock, NI
16	27-6590	4	Spacer-Coupling, Rubber
17	27-4370	1	Hub-Pump
18	3241-6	2	Screw-SQH
19	104-3401-03	1	Drive Shaft ASM
20	99-3441	1	Harness-Wire, Fusible Link



## Air Cleaner Assembly No. 104-3427

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	105-4292	1	Nipple-Pipe
2	104-0497	1	Cover ASM
5	104-4897	1	Gasket
6	98-4525	1	Bracket-Cleaner, Air
7	104-0498	1	Valve-Vacuator
8	108-3810	1	Filter-Air
9	93-9164	1	Indicator-Mini



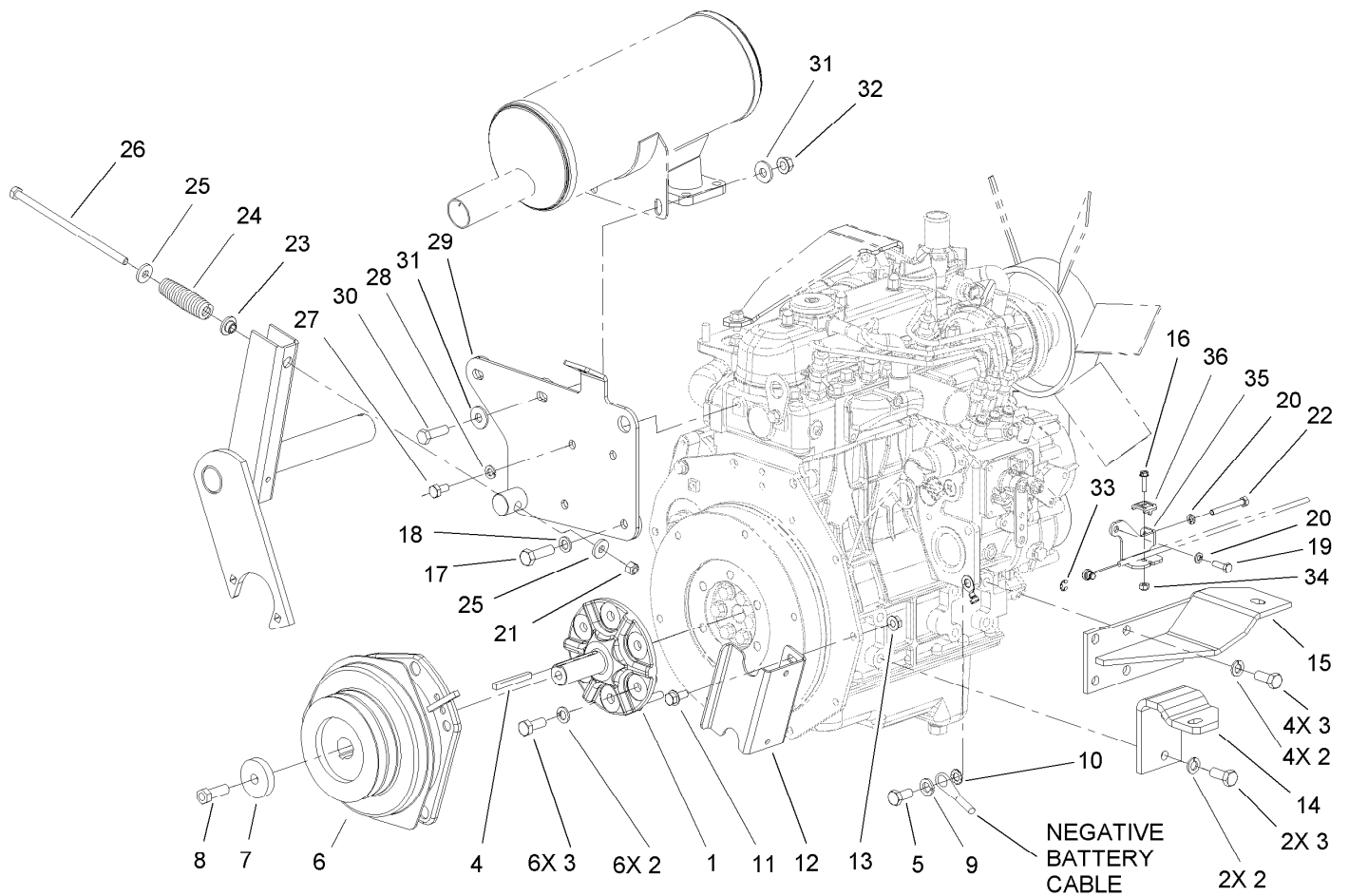


## Engine, Fan and Muffler Assembly

Ref.	Part Number	Qty.	Description
1	114-2890	1	Engine ASM
2	104-3494	1	Belt-V
3	104-1723	1	Adapter-Front Drive
4	3274-106	3	Screw-HSH
5	33103-020	4	Screw-HHF
6	104-4246	1	Fan-Engine
7	104-4247	1	Spacer-Fan
8	104-3497	1	Pulley-Fan
9	105-2556-03	1	Brace-Alternator, Upper
10	33004-00	4	Nut-HF
11	108-1363	1	Muffler-Exhaust
12	98-9611	1	Gasket
13	108-8682	1	Thermoswitch
16	106-4381-03	1	PTO Tension Shaft ASM
17	3230-4	2	Screw-CARR
18	92-8799	1	Bearing-Flange

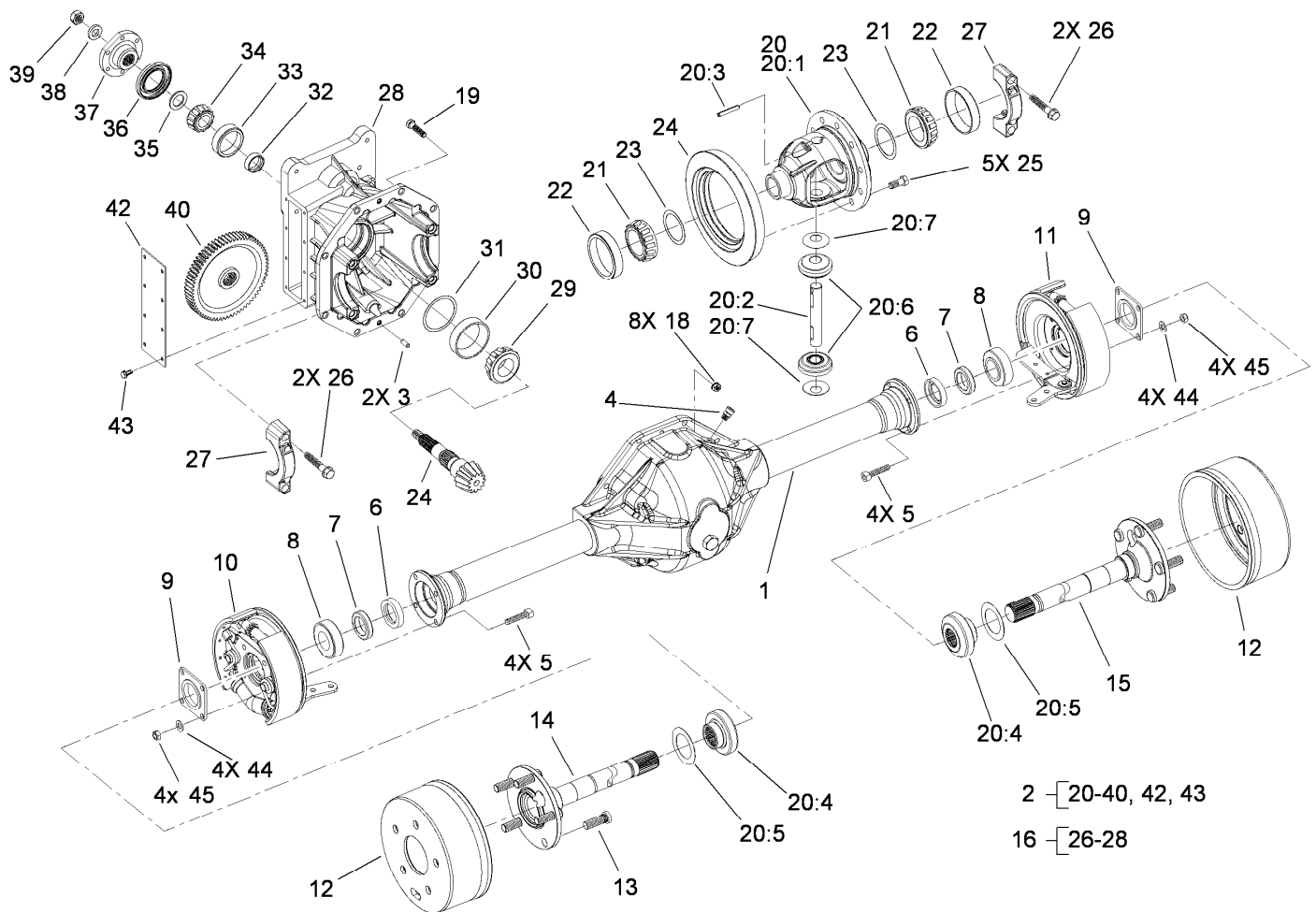
Ref.	Part Number	Qty.	Description
18:1	251-77	1	Collar-Lock, Bearing
18:2	3245-35	1	Screw-Set, HSH
18:3	302-40	1	Fitting-Grease
19	32149-1	2	Nut-Keps
20	32121-32	1	Pin-Roll
21	117-0841	1	LH Rear Engine Mount ASM
21:2	302-5	1	Fitting-Grease
21:3	256-299	2	Bushing-Straight
22	43-0090	8	Screw-HH
23	42-9600	8	Washer-Lock, Spring
24	117-0831-03	1	LH Front Engine Mount ASM
25	3-4324	1	Washer-Flat
26	3256-22	1	Washer-Flat
27	43-5930	1	Washer-Lock, Spring
28	33013-00	1	Nut-Hex





## Engine and Clutch 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	104-1715	1	Hub-Clutch	19	48-7630	1	Screw
2	42-9600	12	Washer-Lock, Spring	20	48-8020	2	Washer-Spring
3	43-0090	12	Screw-HH	21	3296-29	1	Nut-Lock, NI
4	63-8150	1	Key-Square	22	33113-050	1	Screw-HH
5	63-7790	1	Screw-Cap	23	27-6600	1	Spacer-Coupling
6	107-9061	1	Electric Clutch / Brake ASM	24	21-0400-01	1	Spring-Compression
7	105-3698	1	Spacer	25	4-2390	2	Washer-Flat
8	3212-5	1	Screw-HH	26	110-9696	1	Bolt-HH
9	3253-6	1	Washer-Lock	27	33114-016	2	Screw-HH
10	3255-9	1	Washer-Lock	28	3253-4	2	Washer-Lock
11	3234-5	2	Screw-HHF	29	108-6561-03	1	Muffler Mount ASM
12	108-6586-03	1	Stop-Clutch	30	323-44	2	Screw-HH
13	32128-25	2	Nut-HF	31	80-6990	4	Washer-Hardened
14	104-1713-03	1	Mount-Engine, RH Rear	32	32128-21	2	Nut-HF
15	117-0836-03	1	RH Front Engine Mount ASM	33	701197	1	E-Ring
16	32105-13	1	Screw-HWH	34	3296-2	1	Nut-Lock, NI
17	56-2140	2	Screw-HH	35	110-9682-03	1	Bracket-Throttle
18	48-9590	2	Washer-Lock	36	81-1690	1	Clamp-Cable



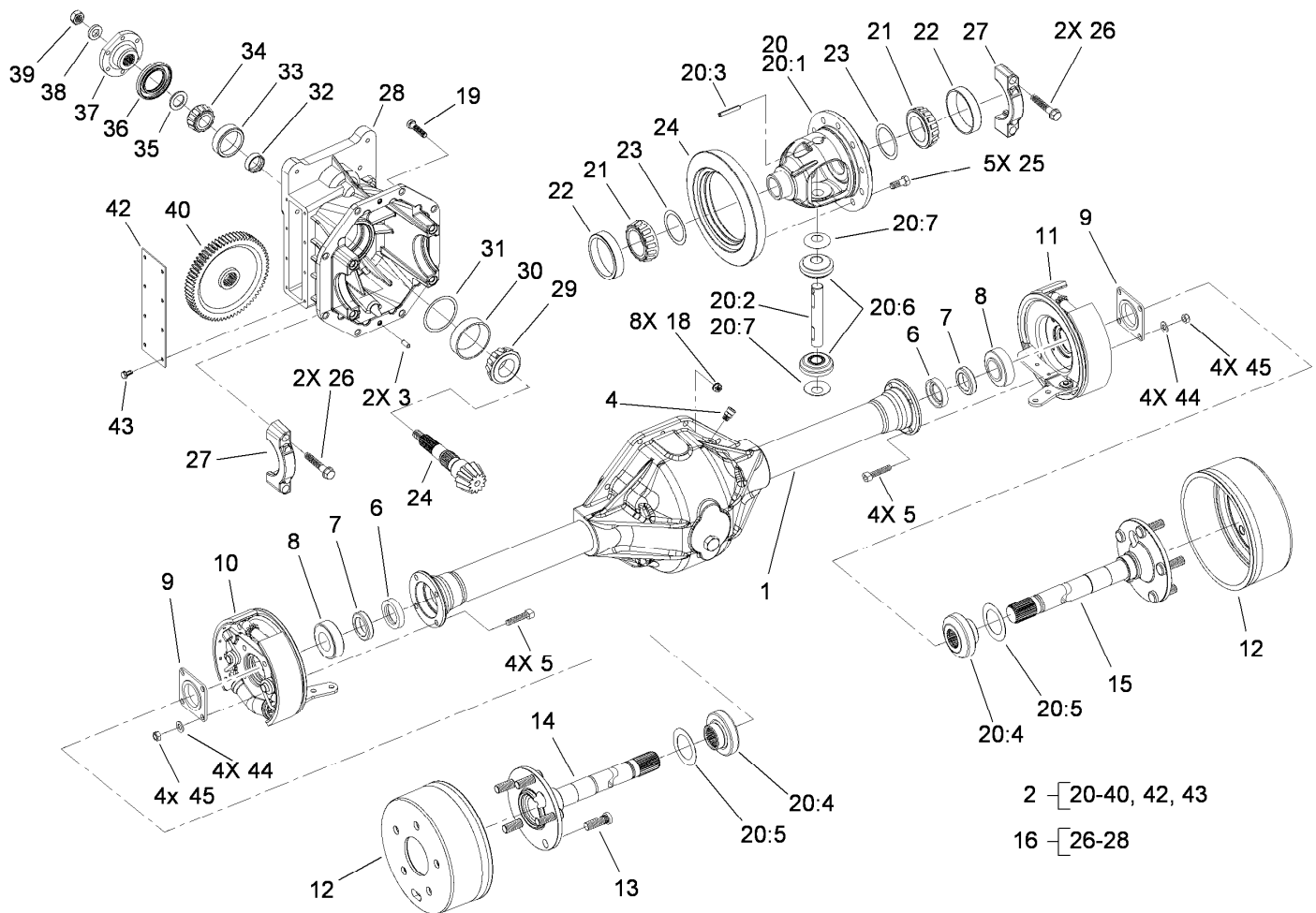
2 [20-40, 42, 43  
16 [26-28

## Front Axle Assembly No. 108-6599-03

Ref.	Part Number	Qty.	Description
1	110-9670	1	Lower Housing ASM
2	92-4907	1	Differential Carrier ASM
3	21-8270	2	Pin-Dowel
4	72-9420	1	Vent
5	94-6934	8	Screw-HH
6	24-8840	2	Ring-Retaining, Wheel Bearing
7	99-6969	2	Seal-Oil, Wheel End
8	21-8180	2	Bearing ASM
9	28-0670	2	Seal-Grease
10		1	Brake ASM, RH ●
11		1	Brake ASM, LH ●
12	110-3072	2	Drum-Brake
13	106-9205	10	Stud-Wheel
14	110-3073	1	Shaft-Axle, RH
15	110-3074	1	Shaft-Axle, LH
16	110-3076	1	Carrier ASM
18	32149-5	8	Nut-Keps
19	3210-8	8	Screw-HH
20	110-4136	1	Differential Case ASM
20:1	21-7670	1	Case-Differential
20:2	21-7700	1	Shaft-Mate, Pinion
20:3	42150	1	Pin-Lock, Pinion
20:4	110-3078	2	Gear-Differential
20:5	110-3077	2	Washer-Thrust
20:6	110-3079	2	Pinion-Differential

Ref.	Part Number	Qty.	Description
20:7	21-7730	2	Washer-Thrust, Pinion
21	254-65	2	Bearing-Roller, Cone
22	254-66	2	Cup-Bearing, Roller
23	21-8090	1	Shim-Bearing, Differential (.003)
23	21-8100	1	Shim-Bearing, Differential (.005)
23	21-8110	1	Shim-Bearing, Differential (.010)
23	21-8120	1	Shim-Bearing, Differential (.030)
24	92-1676	1	Gear And Pinion ASM
25	21-7770	5	Screw-Gear, Drive
26	92-1773	4	Screw-HHF
27		1	Cap-Bearing ●
28		1	Housing ●
29	43-6760	1	Bearing-Roller, Cone Taper
30	43-6750	1	Bearing-Taper, Cup
31	43-6713	1	Shim-Pinion (.030)
31	43-6712	1	Shim-Pinion (.010)
31	43-6711	1	Shim-Pinion (.005)
31	43-6710	1	Shim-Pinion (.003)
32	21-8020	1	Spacer-Bearing
33	254-90	1	Bearing-Cup
34	254-91	1	Cone-Bearing
35	72-3588	1	Shim-Bearing, Front (.131)

● Not serviced separately

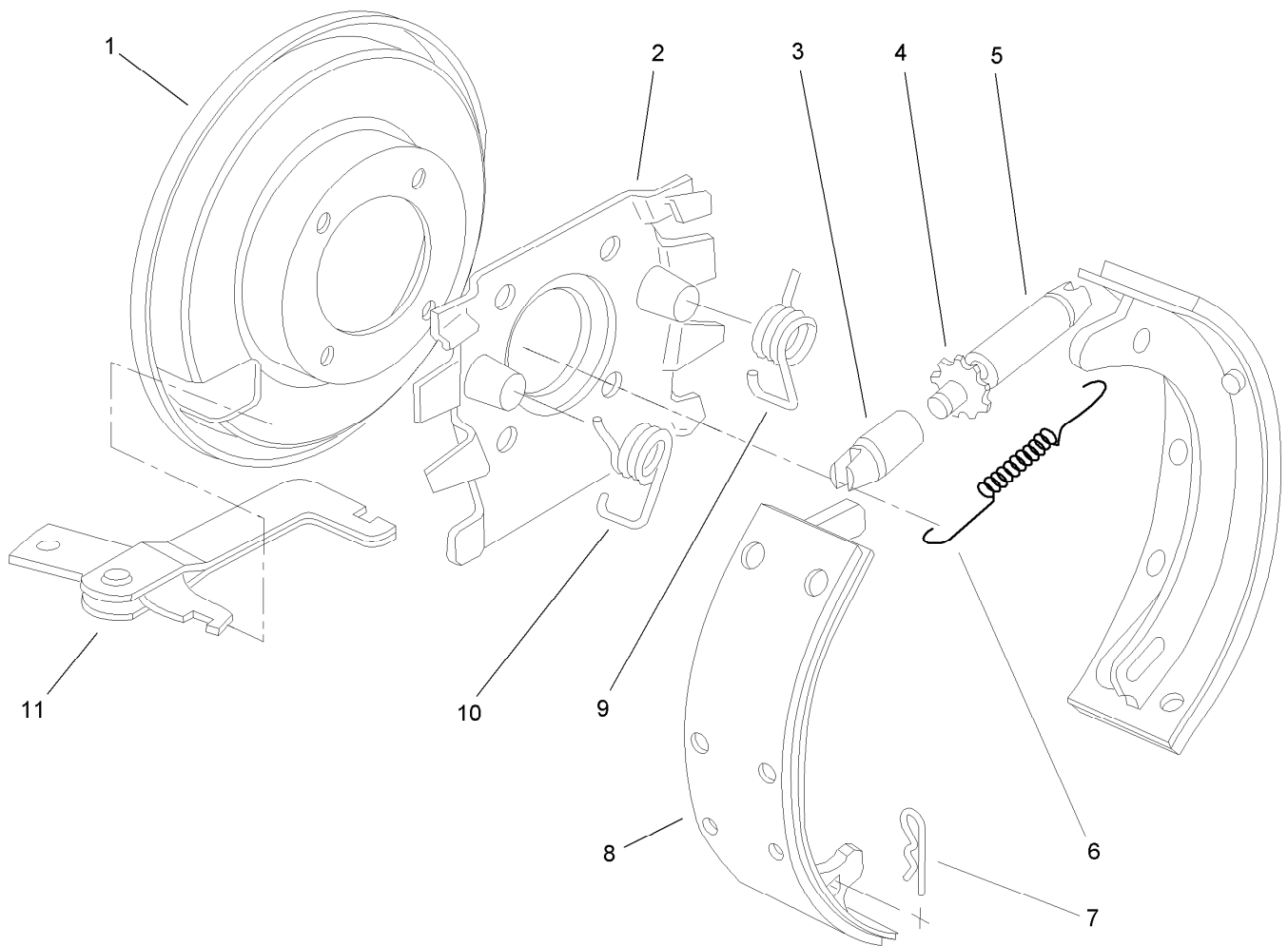


2 [20-40, 42, 43  
16 [26-28

## Front Axle Assembly No. 108-6599-03 (continued)

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
35	72-3590	1	Shim-Bearing, Front (.133)	35	72-3593	1	Shim-Bearing, Front (.139)
35	72-3587	1	Shim-Bearing, Front (.129)	35	72-3592	1	Shim-Bearing, Front (.137)
35	72-3594	1	Shim-Bearing, Front (.141)	35	72-3591	1	Shim-Bearing, Front (.135)
35	72-3595	1	Shim-Bearing, Front (.143)	35	72-3581	1	Shim-Bearing, Front (.114)
35	72-3596	1	Shim-Bearing, Front (.145)	35	72-3582	1	Shim-Bearing, Front (.116)
35	72-3597	1	Shim-Bearing, Front (.147)	35	72-3583	1	Shim-Bearing, Front (.118)
35	72-3598	1	Shim-Bearing, Front (.149)	35	72-3584	1	Shim-Bearing, Front (.120)
35	72-3600	1	Shim-Bearing, Front (.151)	35	72-3585	1	Shim-Bearing, Front (.125)
35	72-3578	1	Shim-Bearing, Front (.110)	35	72-3586	1	Shim-Bearing, Front (.127)
35	72-3580	1	Shim-Bearing, Front (.112)	36	71-4330	1	Seal
35	72-3577	1	Shim-Bearing, Front (.108)	37	68-7010	1	Flange
35	72-3576	1	Shim-Bearing, Front (.106)	38	71-4340	1	Washer
35	72-3575	1	Shim-Bearing, Front (.104)	39	71-4350	1	Nut
35	72-3574	1	Shim-Bearing, Front (.102)	40	86-7230	1	Gear-Input, Transmission
35	72-3573	1	Shim-Bearing, Front (.100)	42	21-7830	1	Cover-Gear
35	72-3572	1	Shim-Bearing, Front (.098)	43	32144-112	8	Screw-HWH
35	72-3571	1	Shim-Bearing, Front (.096)	44	94-6936	8	Washer-Hardened
35	72-3570	1	Shim-Bearing, Front (.094)	45	94-6935	8	Locknut

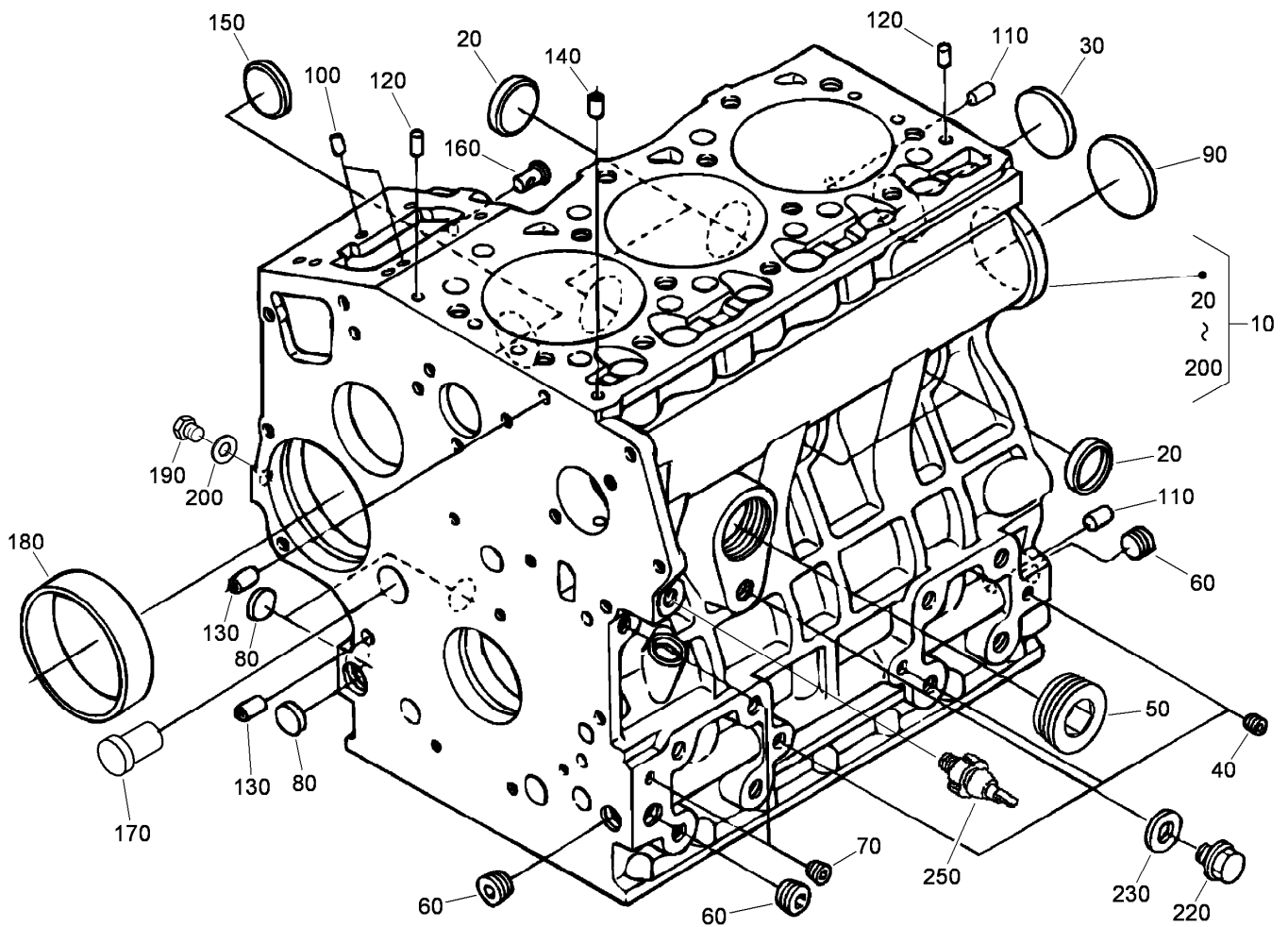
● Not serviced separately



## Right and Left Hand Brake Assembly

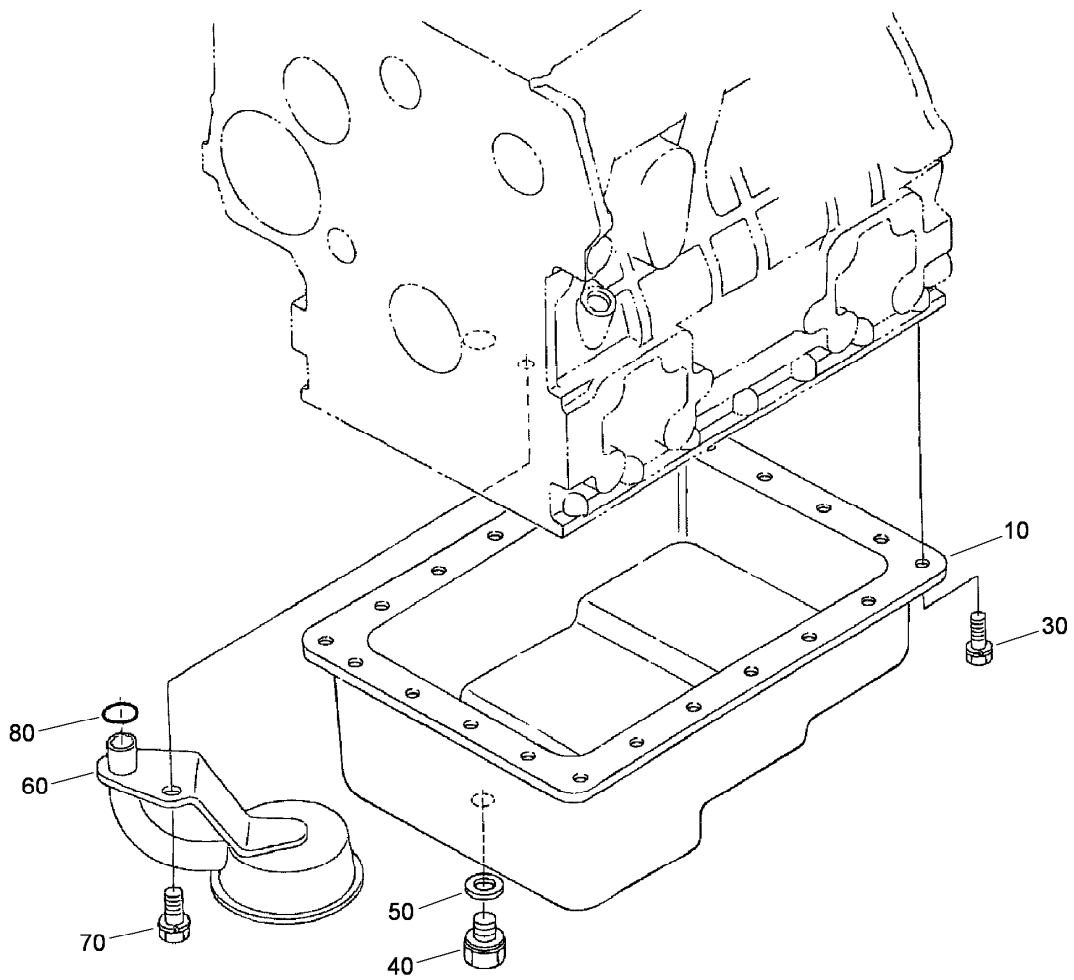
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	21-9450	1	Shield-Dust
2	43-6810	1	Spider-Torque
3	21-9390	1	Socket-Screw, Adjusting
4	21-9370	1	Screw-Adjusting
5	21-9380	1	Nut-Pivot
6	21-9440	1	Spring-Screw, Adjusting
7	21-9460	2	Retainer-Lever, Brake
8	84-8600	1	Set-Shoes, Lined
9	21-9430	1	Spring-Return, RH
10	21-9420	1	Spring-Return, LH
11	24-9180	1	Strut And Lever ASM
12	92-8775	1	Liquid Gasket Kit ●

● Not illustrated



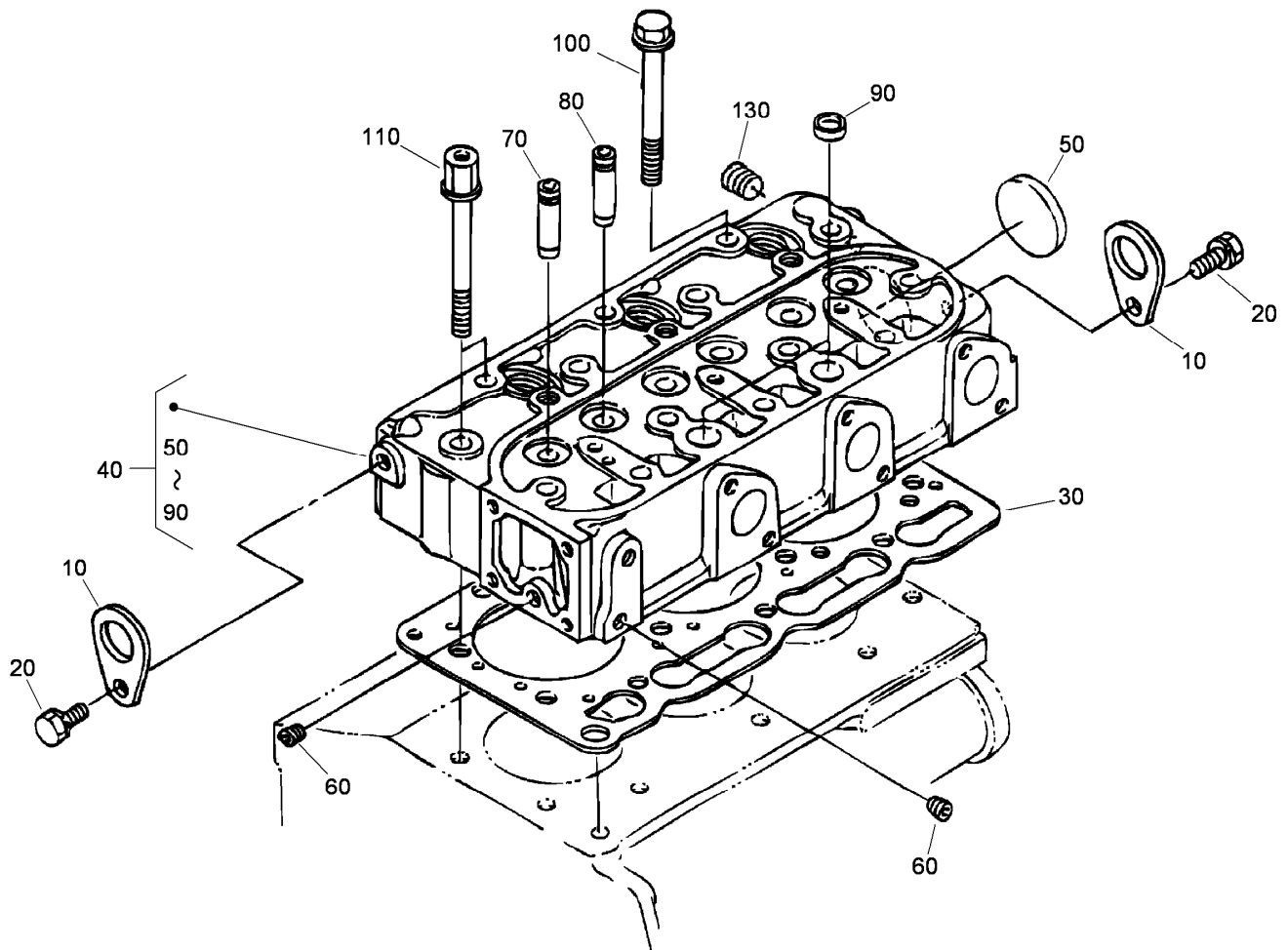
## Crankcase Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6571	1	Crankcase ASM
20	98-9398	4	Cap-Sealing
30	98-7539	1	Cap-Sealing
40	98-9687	3	Plug
50	105-3779	1	Plug
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	98-7504	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
250	98-9416	1	Switch-Oil



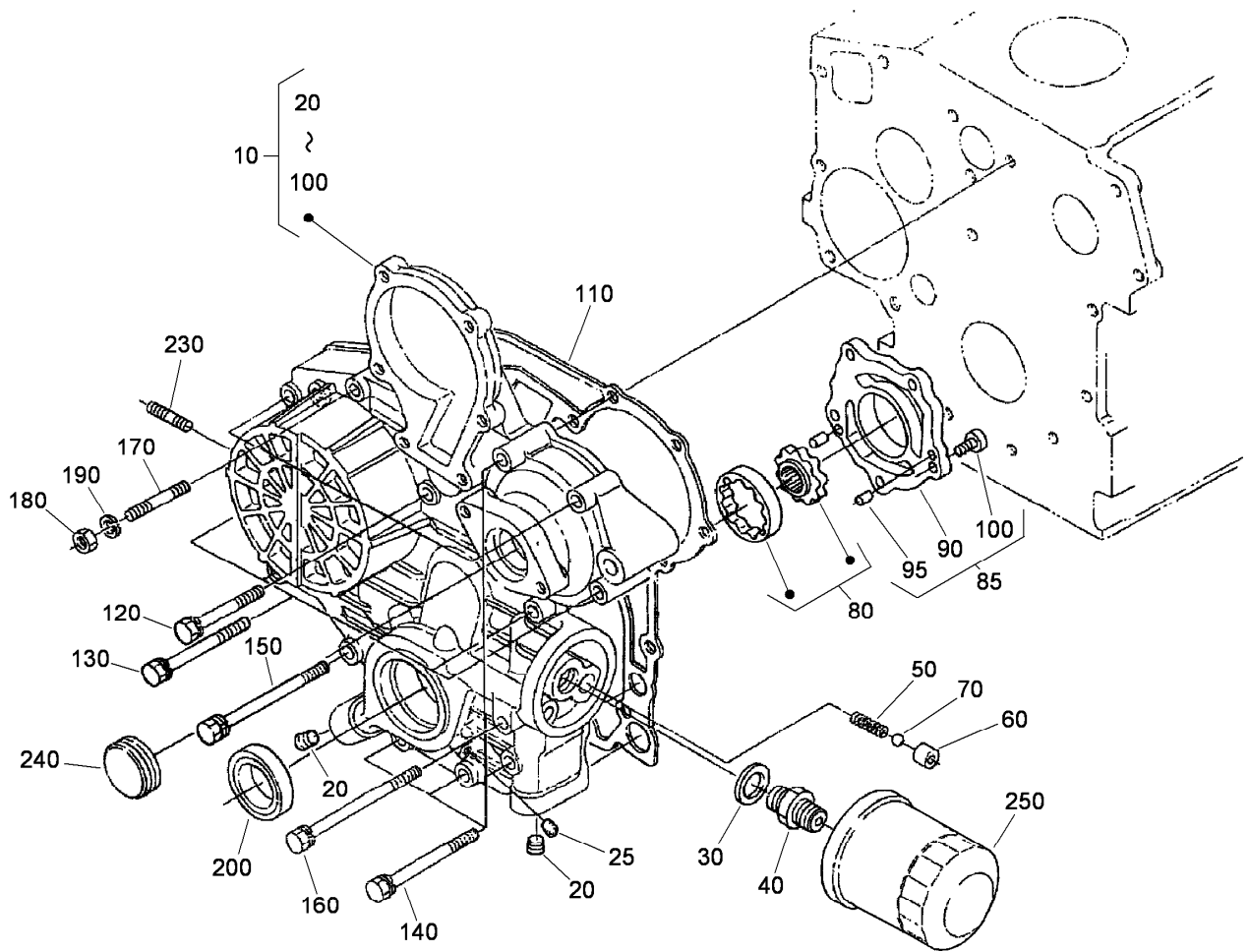
## Oil Pan Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	104-3495	1	Pan-Oil
30	107-9065	22	Bolt
40	114-8151	1	Plug-Drain
50	98-7524	1	Gasket
60	104-3496	1	Filter-Pickup, Oil
70	98-7526	1	Bolt
80	105-3776	1	O-Ring



## Cylinder Head Assembly

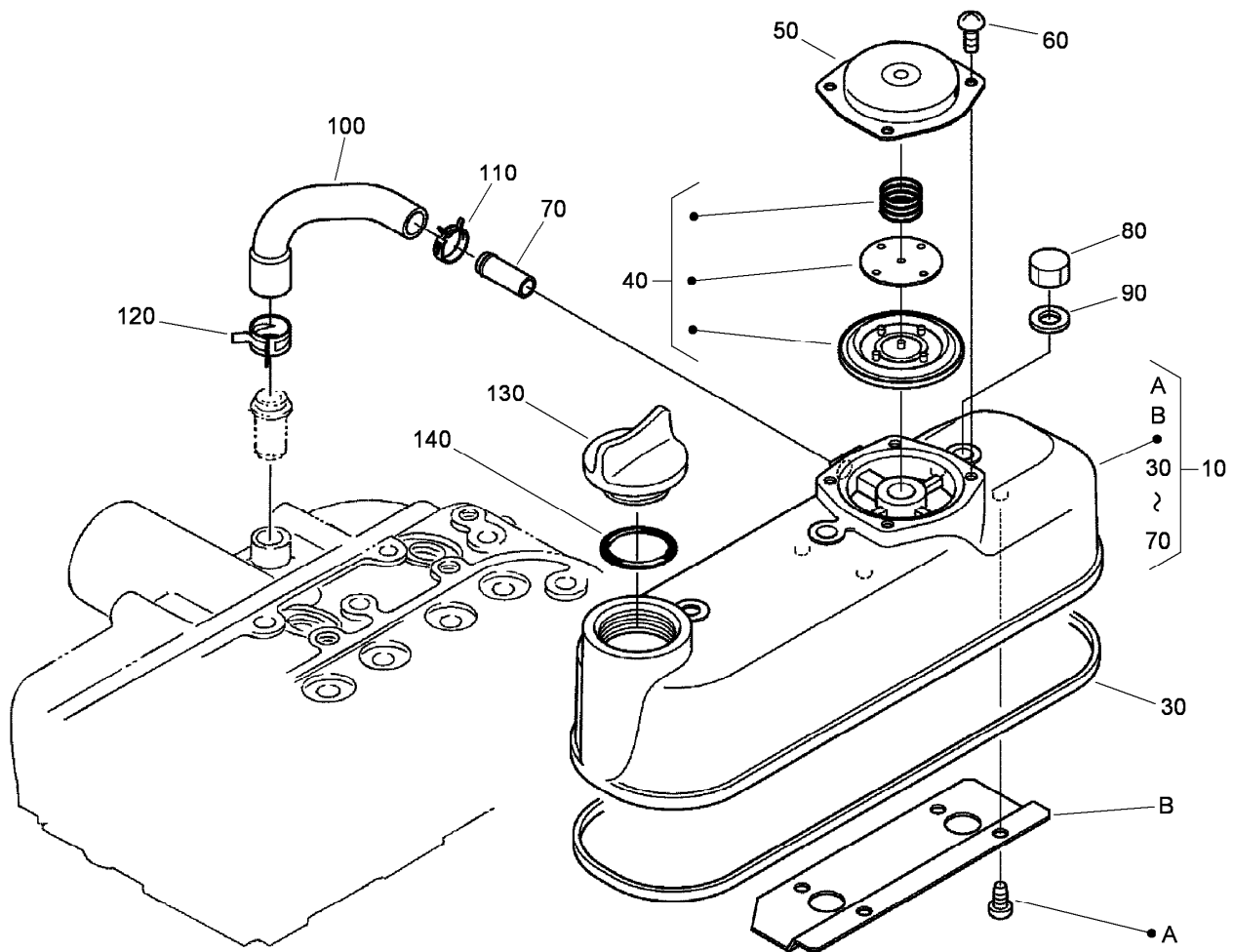
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-7531	2	Hook-Engine
20	100-9195	2	Bolt
30	108-6573	1	Gasket-Head, Cylinder
40	108-6574	1	*obs* Cylinder Head ASM
50	105-3705	1	Cap-Sealing
60	98-9687	2	Plug
70	107-9066	3	Guide-Valve, Inlet
80	107-9067	3	Guide-Valve, Exhaust
90	98-9389	2	Cap-Sealing
100	98-9479	1	Bolt-Head, Cylinder
110	98-9647	2	Bolt-Head, Cylinder
130	98-9444	1	Plug



## Gear Case Assembly

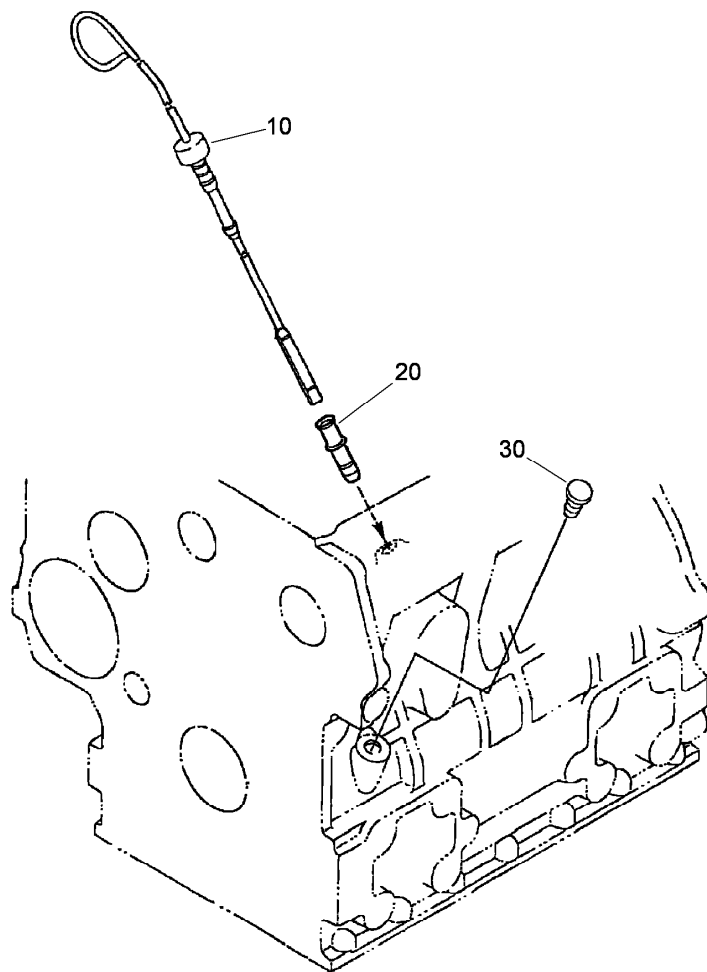
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	115-4105	1	Gear Case ASM	110	98-9633	1	Gasket-Case, Gear
20	98-9598	2	Plug	120	107-9073	3	Bolt
25	98-7487	1	Plug	130	105-3797	4	Bolt
30	98-7562	1	Washer-Plain	140	98-9356	4	Bolt
40	98-9388	1	Joint-Pipe	150	107-9074	1	Bolt
50	98-9544	1	Spring	160	98-9586	1	Bolt
60	98-9543	1	Seat-Valve	170	105-3709	1	Stud
70	98-9380	1	Ball	180	98-7572	1	Nut
80	98-9540	1	Oil Pump Rotor ASM	190	98-7699	1	Washer-Spring
85	115-4501	1	Pump Cover ASM	200	98-9482	1	Seal-Oil
90	107-9069	1	Cover-Pump, Oil	230	105-3710	2	Stud
95	107-9072	2	Pin-Straight	240	98-9641	1	Cover-Case, Gear
100	107-9071	5	Screw	250	108-3841	1	Filter-Oil





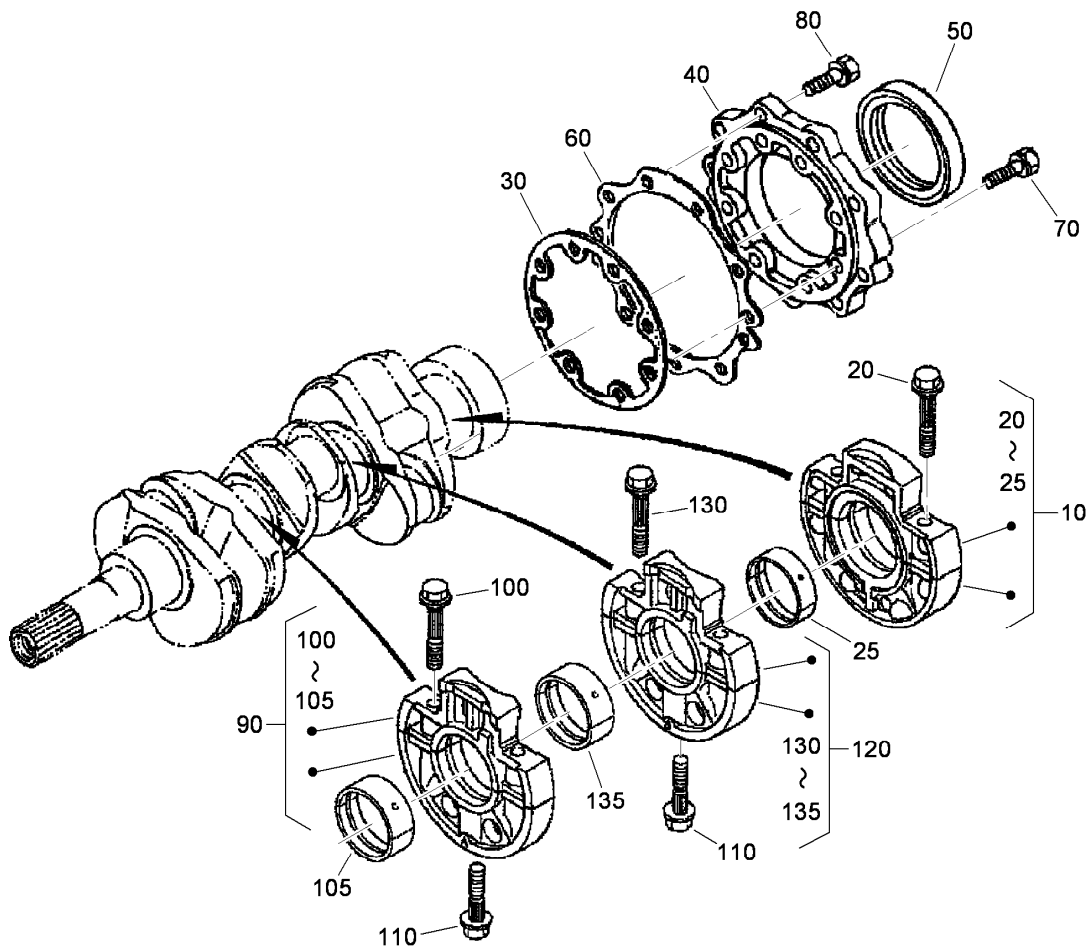
## Cylinder Head Cover Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6575	1	Cylinder Head Cover ASM
30	98-9615	1	Gasket-Cover, Head
40	108-2861	1	Breather Valve ASM
50	110-3714	1	Cover-Breather
60	98-9364	4	Screw (With Washer)
70	98-7766	1	Pipe-Return, Water
80	98-9455	3	Nut-Cap
90	98-9454	3	Gasket
100	108-2858	1	Tube-Breather
110	108-2859	1	Clamp-Hose
120	108-2860	1	Clamp-Hose
130	107-9075	1	Plug-Filler, Oil
140	99-3446	1	O-Ring



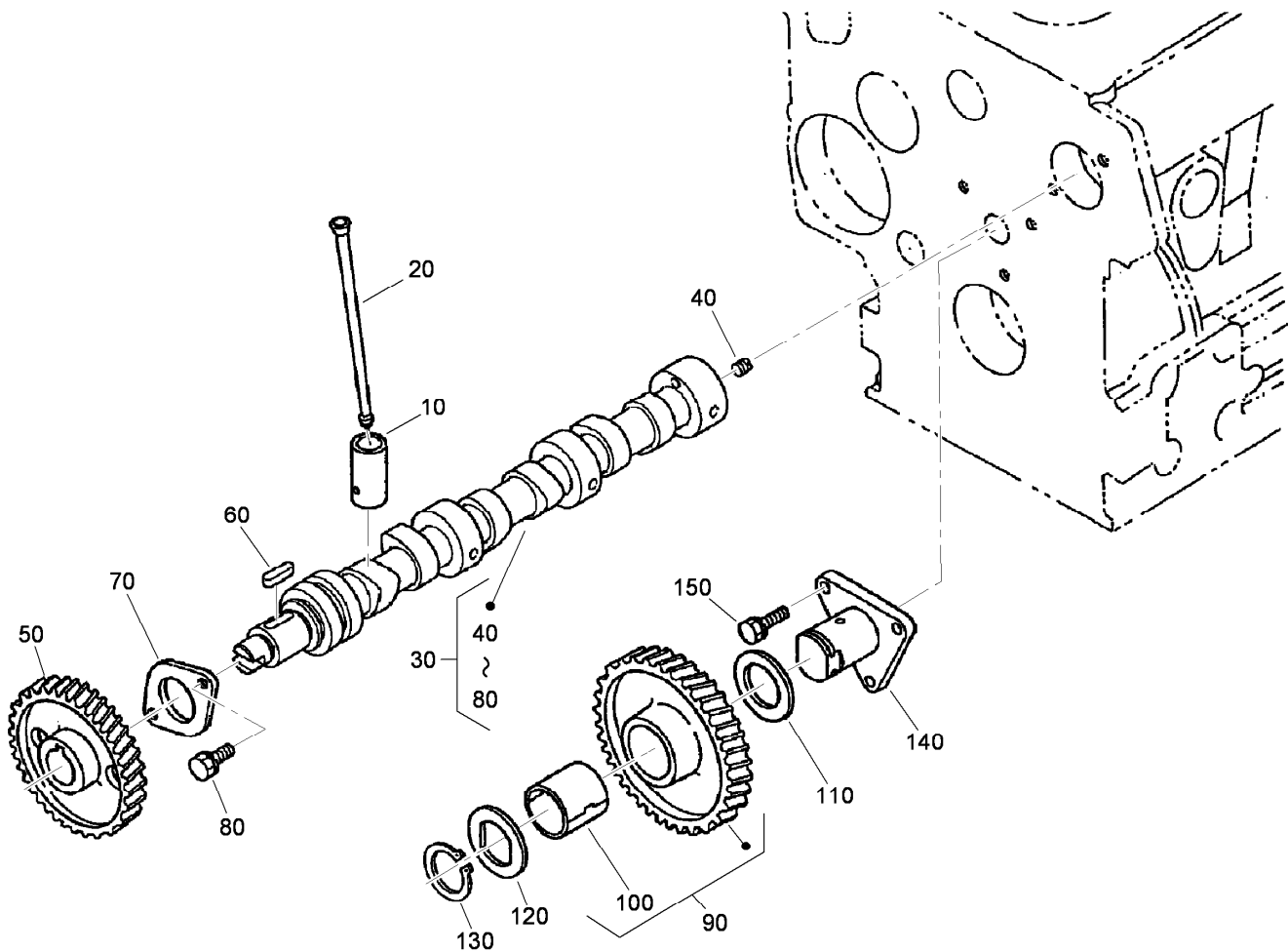
## Dipstick and Guide Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-9076	1	Gauge-Oil
20	105-4580	1	Guide-Gauge, Oil
30	110-3720	1	Plug-Gauge, Oil



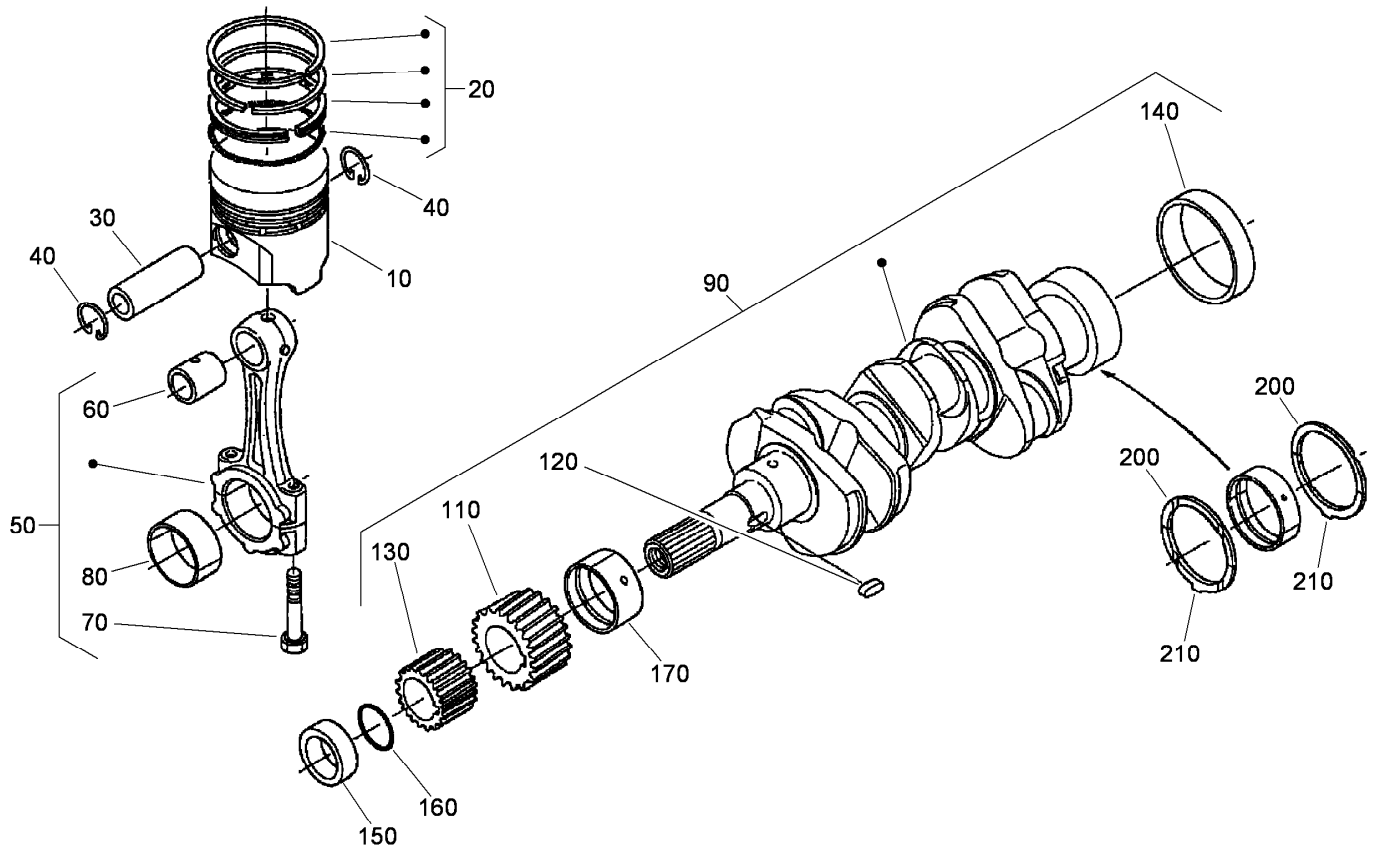
## Main Bearing Case Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7026	1	Wheel Bearing Case ASM
20	98-9484	6	Bolt-Case, Bearing
25	112-7006	1	Bearing-Main (STD)
25	112-7007	1	Metal-Crankshaft (.2Mm)
25	112-7008	1	Metal-Crankshaft (.4Mm)
30	98-9634	1	Gasket-Case, Bearing
40	98-9487	1	Cover-Case, Bearing
50	112-0180	1	Seal-Oil
60	98-9635	1	Gasket-Cover, Bearing Case
70	98-9352	8	Bolt
80	98-7568	9	Bolt
90	115-4106	1	Main Bearing Case ASM
100	98-9484	2	Bolt-Case, Bearing
105	98-9524	1	Metal-Crankshaft (STD Set)
105	98-9530	1	Bearing-Main (0.2Mm)
105	98-9531	1	Bearing-Main (0.4Mm)
110	98-9485	2	Bolt-Case, Bearing
120	115-4107	1	Main Bearing Case ASM
130	98-9484	2	Bolt-Case, Bearing
135	98-9524	1	Metal-Crankshaft (STD Set)
135	98-9530	1	Bearing-Main (0.2Mm)
135	98-9531	1	Bearing-Main (0.4Mm)



## Cam Shaft and Idle Gear Assembly

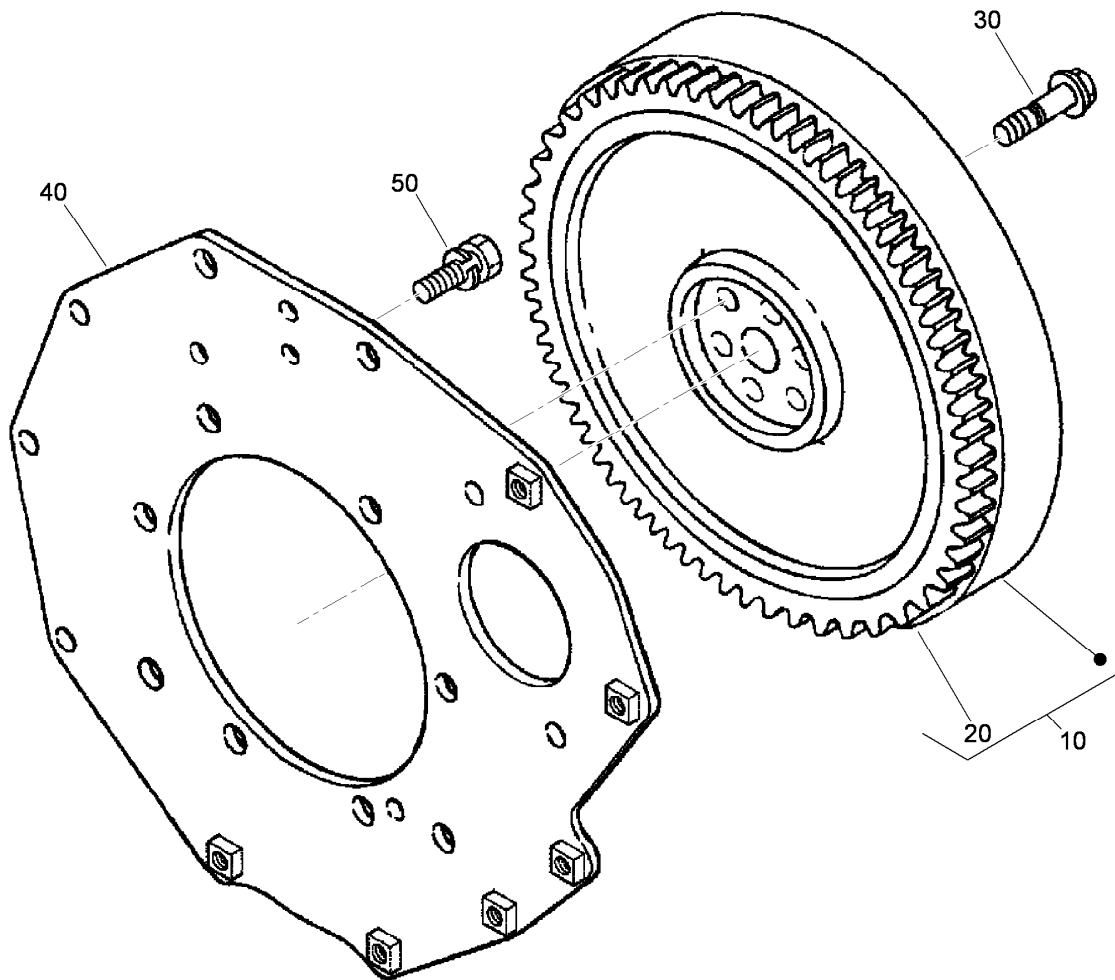
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-0185	6	Tappet
20	98-9509	6	Rod-Push
30	108-6576	1	Camshaft ASM
40	98-7449	1	Screw-Set
50	98-9512	1	Gear-Cam
60	98-9378	1	Key-Feather
70	98-9510	1	Stopper-Camshaft
80	98-9351	2	Bolt
90	98-9649	1	Idle Gear ASM
100	98-9650	1	Bushing-Gear, 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

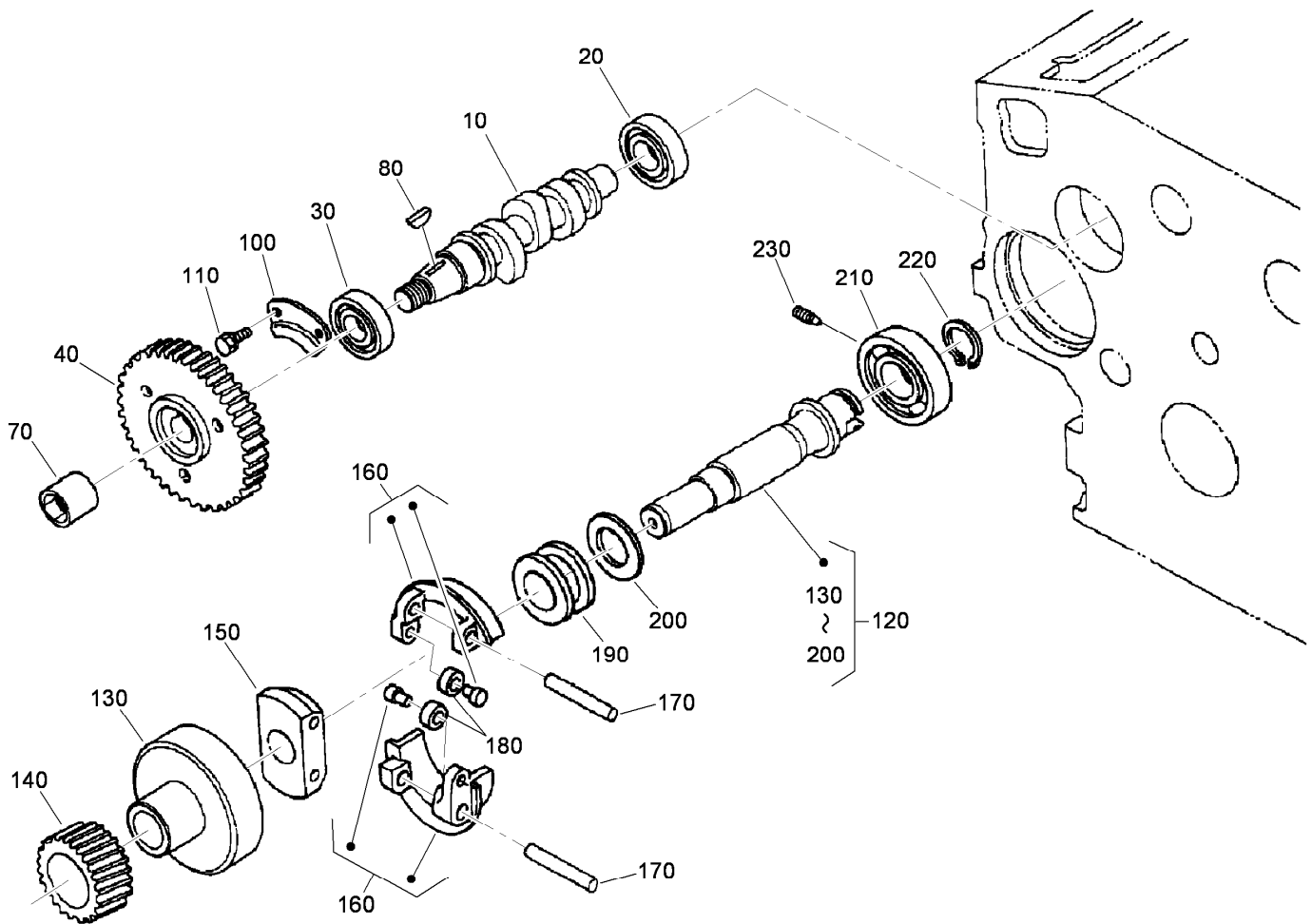
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-8415	3	Piston ASM
10	112-8404	3	Piston (STD)
20	98-9619	3	Piston Ring ASM (0.5Mm)
20	98-9618	3	Piston Ring ASM (STD)
30	98-9513	3	Pin-Piston
40	98-9514	6	Circlip-Pin, Piston
50	115-3013	3	Connecting Rod ASM
60	115-3014	3	Bushing-Pin, Piston
70	98-9517	6	Bolt-Rod, Connecting
80	98-9520	3	Bearing-Rod (0.4Mm)
80	98-9519	3	Bearing-Rod (0.2Mm)
80	98-9518	3	Metal-Crankpin (STD)
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	98-9523	1	Metal Crankshaft (STD)
170	98-9528	1	Bearing-Main (0.2Mm)
170	98-9529	1	Bearing-Main (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)



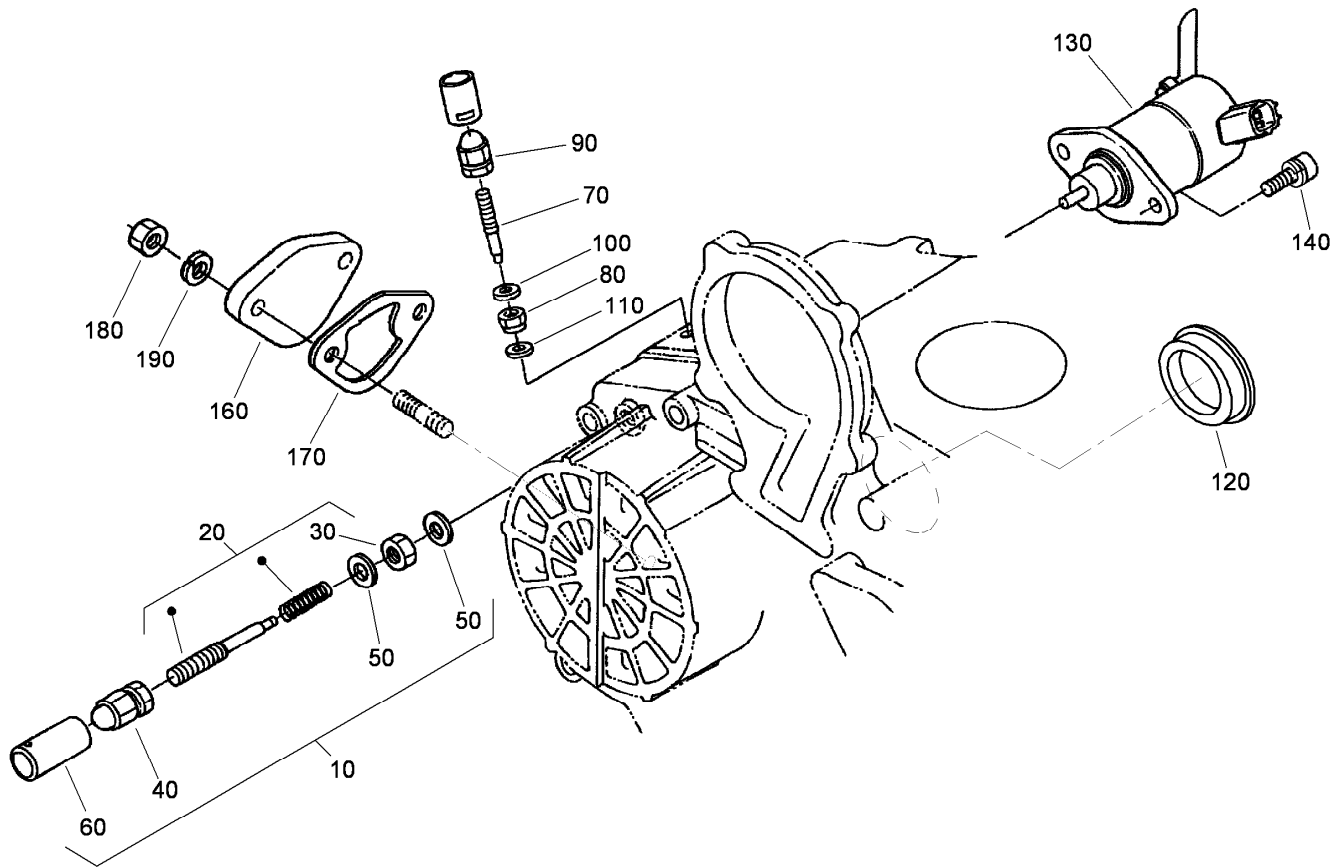
## Flywheel Assembly

<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

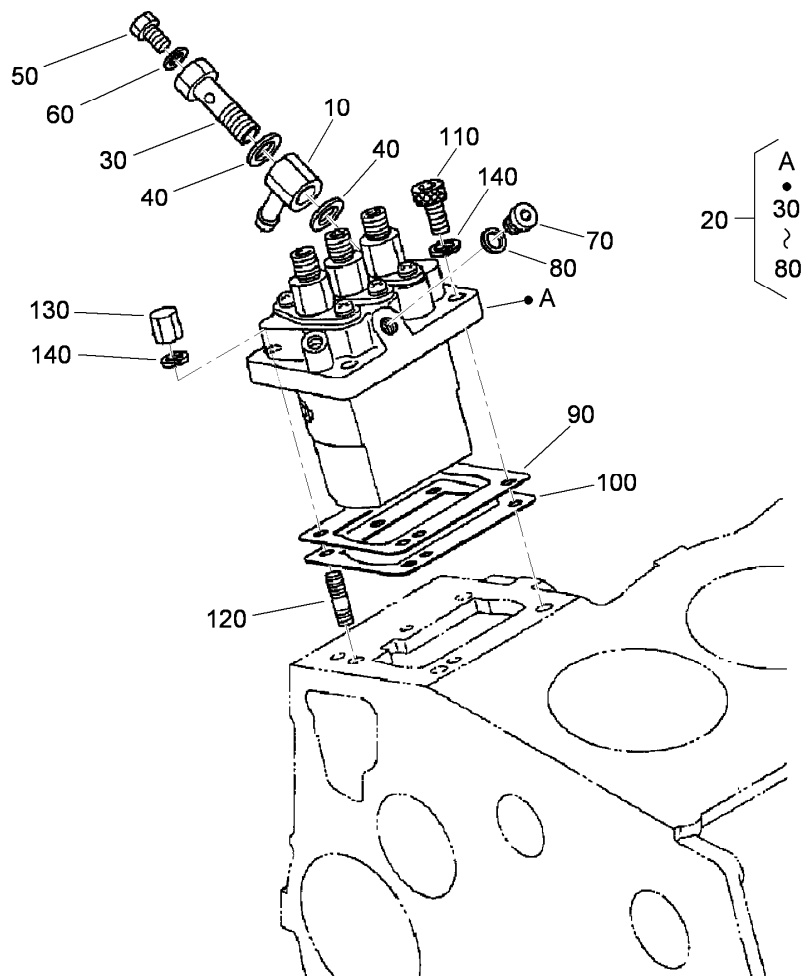
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9459	1	Camshaft-Fuel
20	107-9077	1	Bearing-Ball
30	107-9078	1	Bearing-Ball
40	98-9669	1	Gear-Pump, Injection
70	98-9590	1	Nut-Cap
80	98-9595	1	Key-Woodruff
100	98-9511	1	Stopper-Fuel, Camshaft
110	98-9350	2	Bolt
120	98-9644	1	Governor Shaft ASM
130	98-9562	1	Holder-Gear, Governor
140	98-9673	1	Gear-Governor
150	98-9561	1	Holder-Weight, Governor
160	98-9559	2	Governor Weight ASM
170	98-9560	2	Shaft-Weight, Governor
180	98-9692	2	Roller
190	98-9563	1	Sleeve-Governor
200	98-9564	1	Washer-Thrust
210	107-9079	1	Bearing-Ball
220	98-9657	1	Circlip-Shaft, Governor
230	98-9565	1	Screw-Set



## Idle Apparatus and Stop Solenoid Assembly

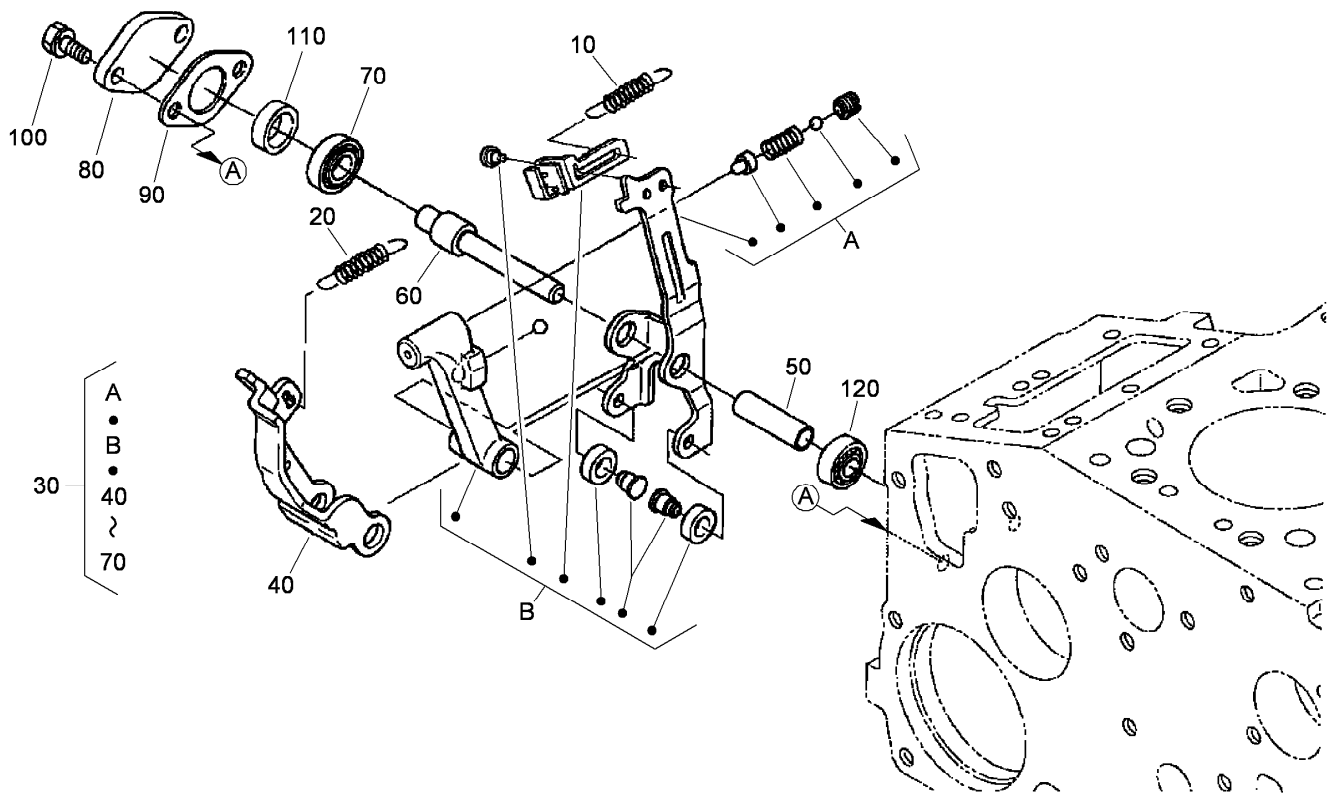
Ref.	Part Number	Qty.	Description
10	98-9678	1	Idle Apparatus ASM
20	112-7014	1	Adjusting Bolt ASM
30	98-9439	1	Nut
40	112-0181	1	Nut
50	98-7654	2	Gasket
60	98-7656	1	Cap
70	112-7015	1	Bolt-Adjusting
80	99-3512	1	Nut
90	112-0181	1	Nut
100	98-7654	1	Gasket
110	107-9081	1	Gasket
120	112-7016	1	Cover-Pump
130	104-5155	1	Solenoid-Stop
140	115-3039	2	Bolt-HSH
160	99-3514	1	Cover
170	98-9636	1	Gasket-Pump, Fuel
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring





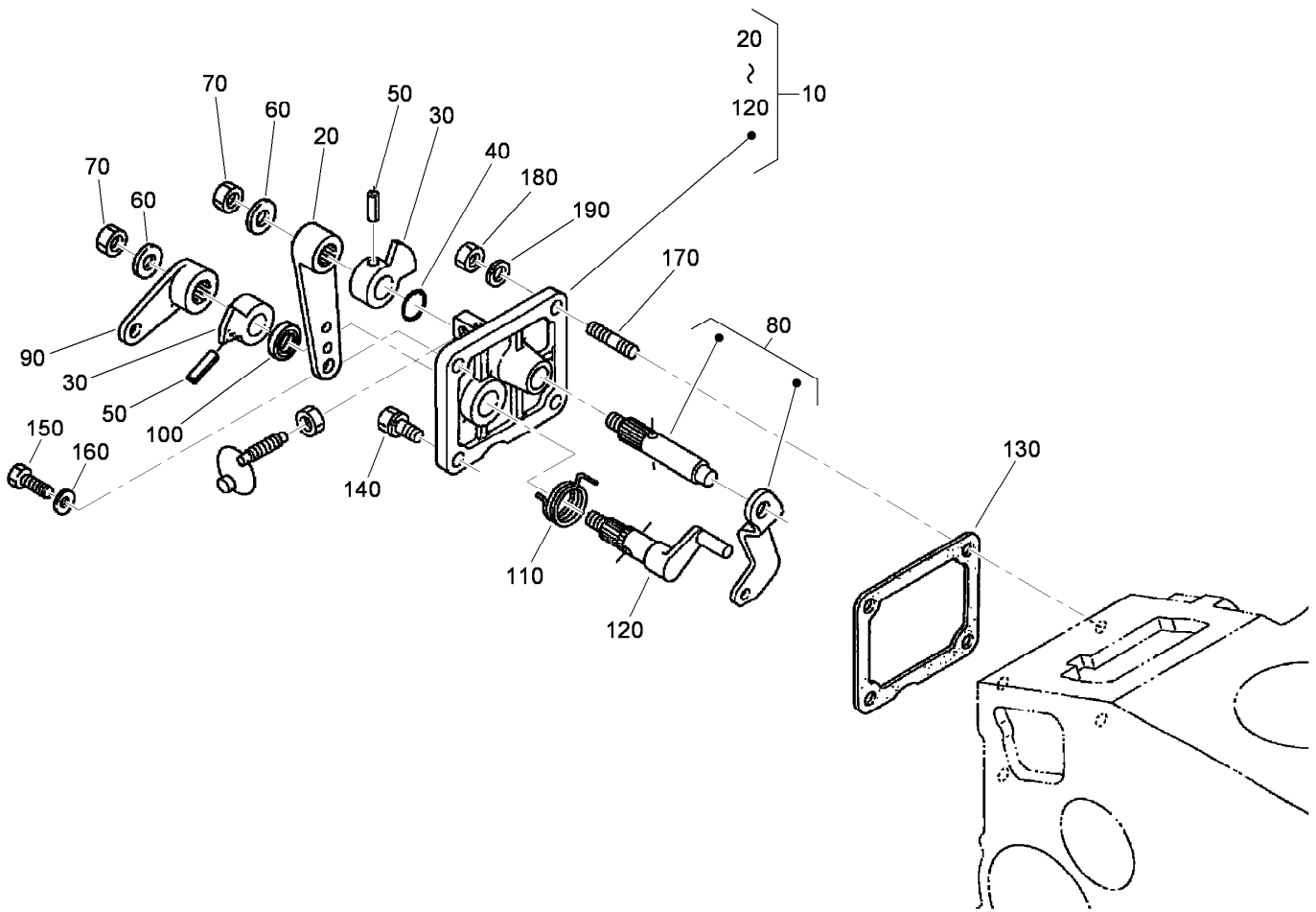
## Injection Pump Assembly

<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



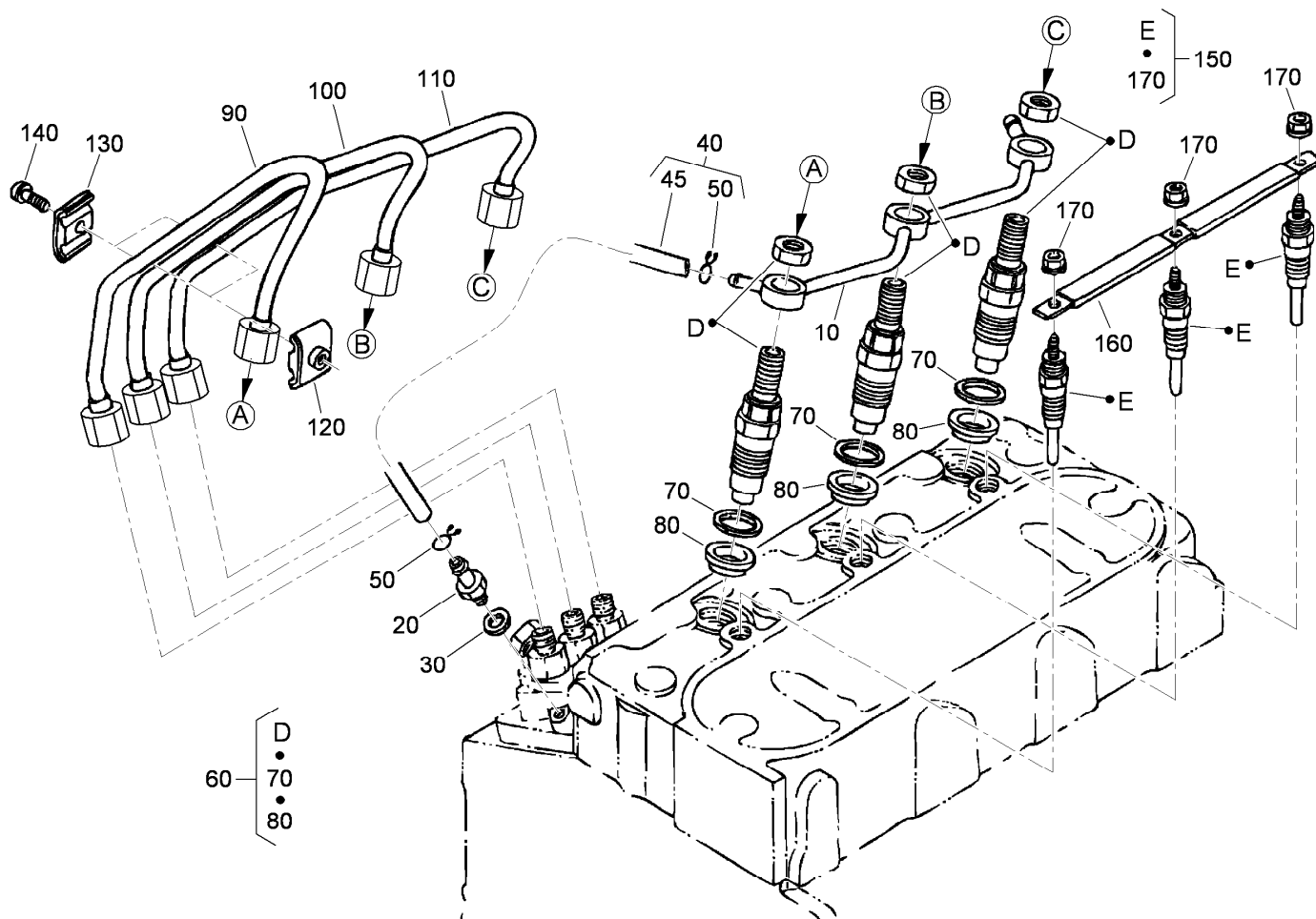
## Governor Assembly

<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	98-9569	1	Cover-Shaft, Fork Lever
90	98-9682	1	Gasket
100	98-9351	2	Bolt
110	98-9567	1	Collar
120	98-9571	1	Bearing-Miniaturize



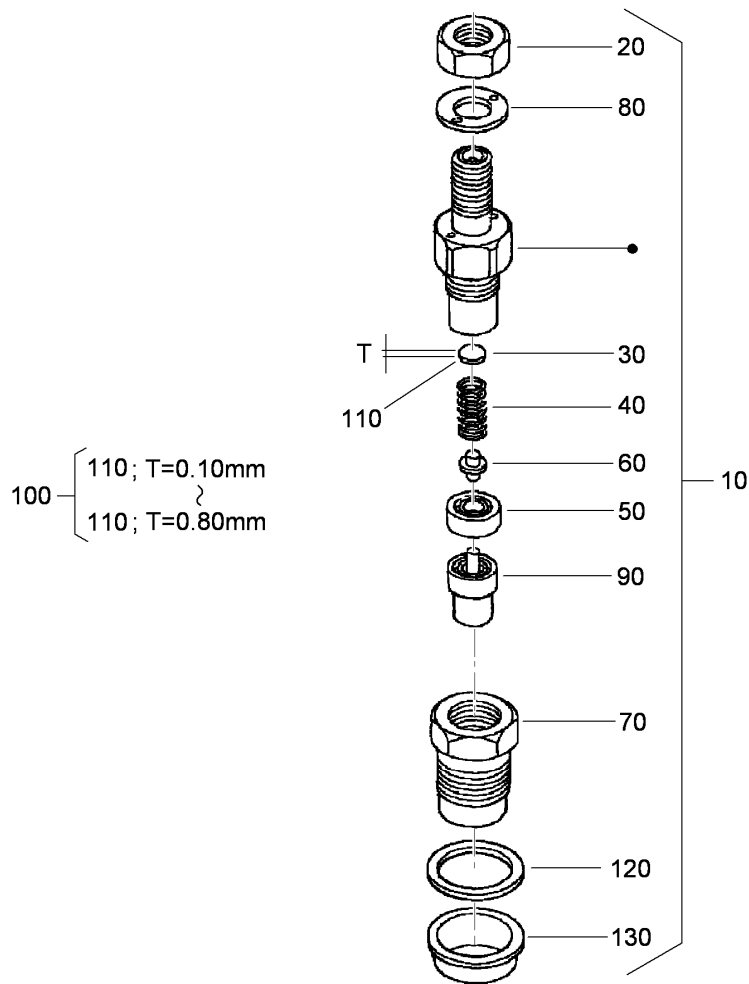
## Speed Control Plate Assembly

<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	2	Gasket
170	105-3710	2	Stud
180	98-7572	2	Nut
190	98-7699	2	Washer-Spring



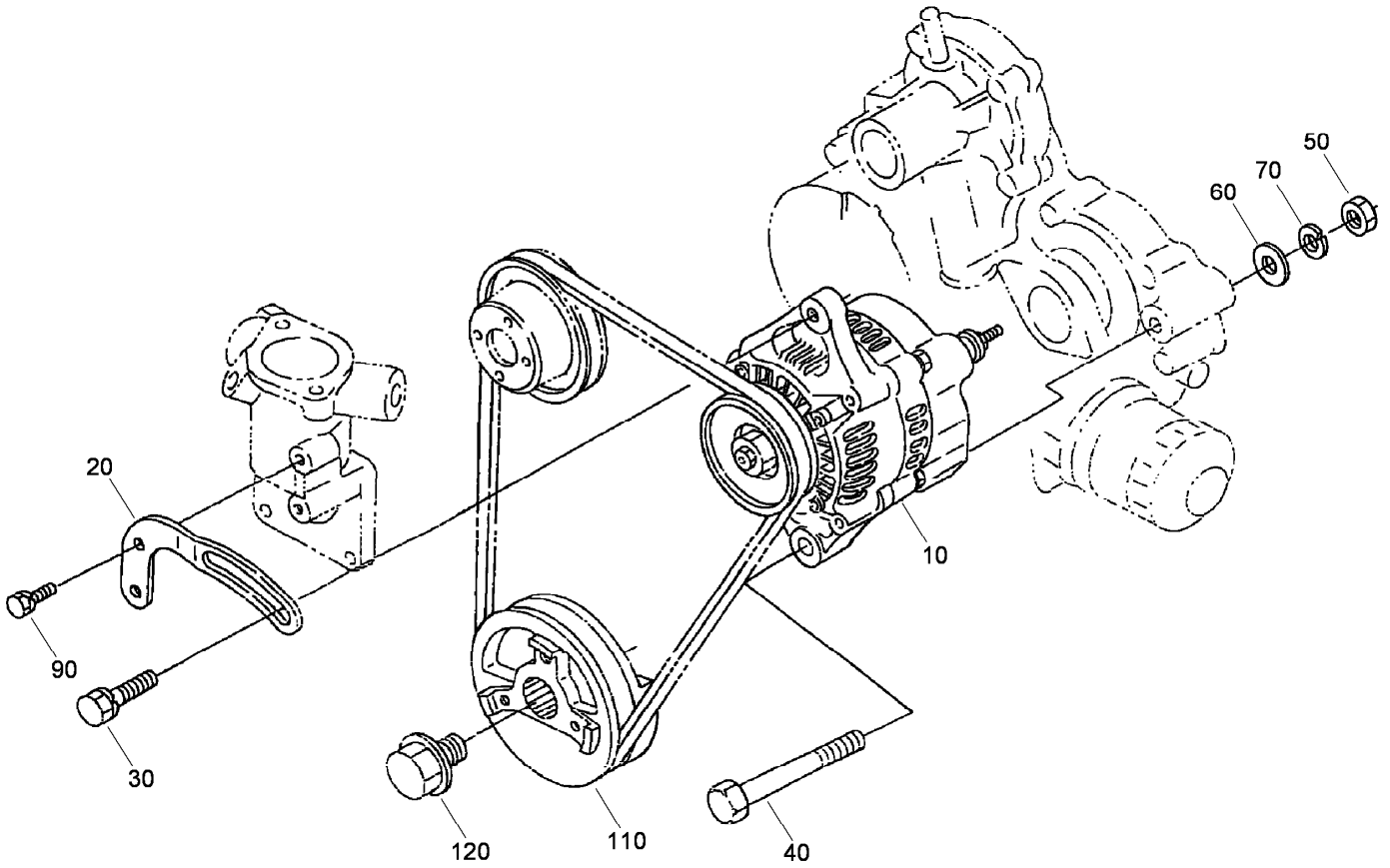
## Nozzle Holder and Glow Plug Assembly

Ref.	Part Number	Qty.	Description
10	98-9620	1	Overflow Pipe ASM
20	98-9431	1	Screw-Bleeder, Air
30	98-7654	1	Gasket
40	98-9420	1	Overflow Pipe ASM
45	112-0182	1	Pipe-Overflow
50	98-7671	2	Clip-Pipe
60	108-2866	3	Nozzle Holder Kit
70	98-7676	3	Gasket
80	98-7677	3	Seal-Heat
90	98-9653	1	Pipe-Injection
100	98-9654	1	Pipe-Injection
110	98-9655	1	Pipe-Injection
120	98-7682	2	Clamp-Pipe
130	98-7683	2	Clamp-Pipe
140	98-7684	2	Screw (W/Washer)
150	115-3019	3	Plug-Glow
160	98-9631	1	Cord-Plug, Glow
170	99-8377	3	Nut-Flange



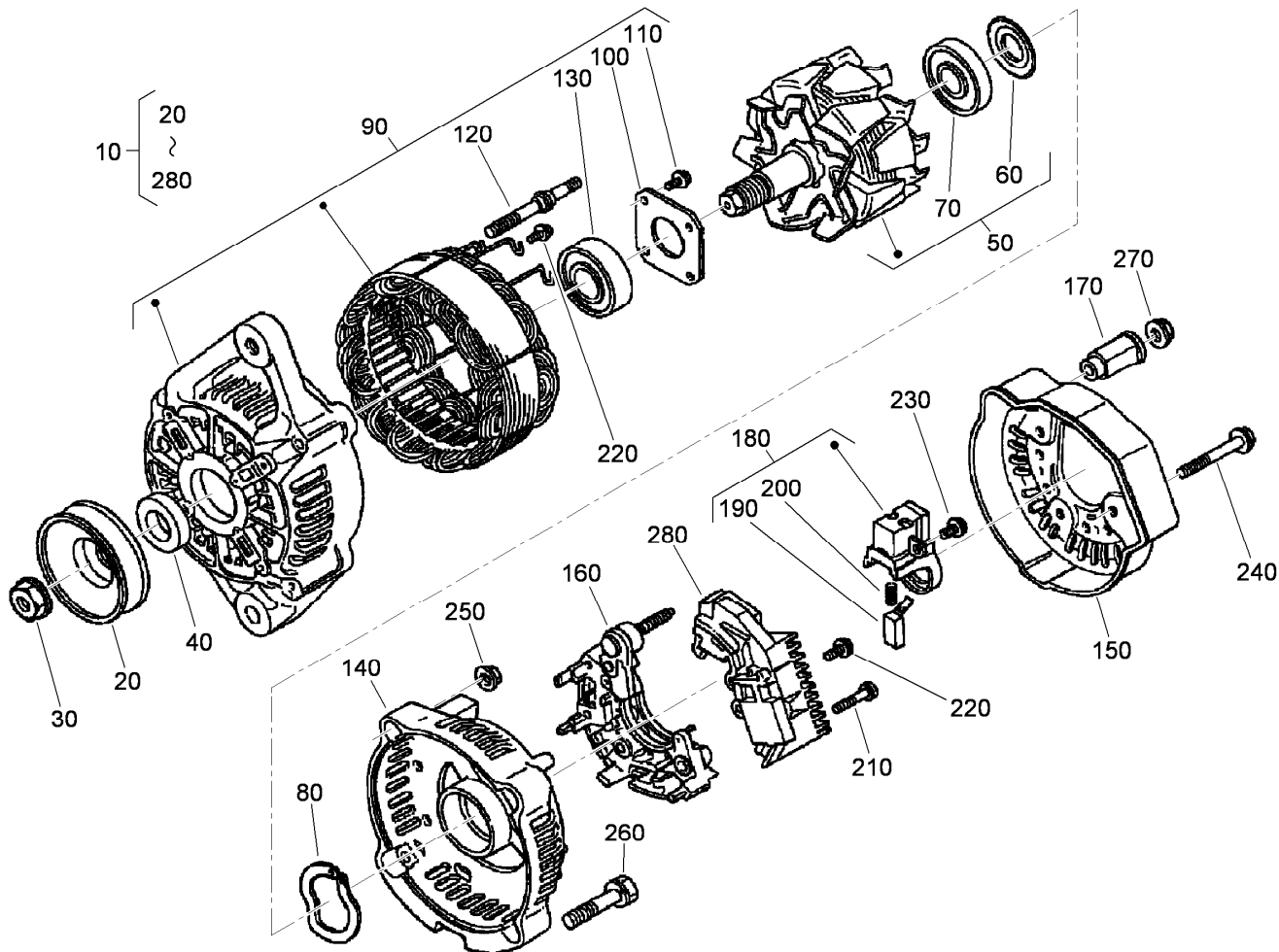
## Nozzle Holder Assembly

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

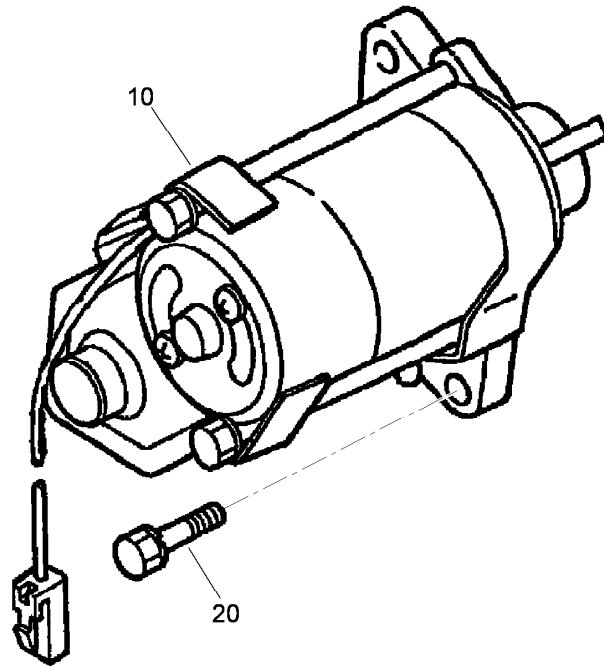
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9474	1	Alternator ASM
20	98-9573	1	Stay-Dynamo
30	108-7088	1	Bolt
40	98-9360	1	Bolt
50	98-7737	1	Nut
60	3256-24	1	Washer-Flat
70	98-7738	1	Washer-Spring
90	98-7692	1	Bolt
110	98-9473	1	Pulley-Drive, Fan
120	98-9585	1	Bolt



## Alternator Components Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9474	1	Alternator ASM
20	98-9453	1	Pulley-Dynamo
30	98-7708	1	Nut
40	98-7709	1	Collar
50	107-0136	1	Rotor ASM
60	98-7711	1	Cover-Bearing
70	107-0138	1	Bearing-Ball
80	98-7713	1	Washer-Thrust
90	107-0139	1	Drive End Frame ASM
100	98-7715	1	Plate-Retainer
110	98-7716	4	Screw-Head, Round
120	98-7717	2	Bolt-Through
130	107-0137	1	Bearing-Ball
140	107-9087	1	Frame-End

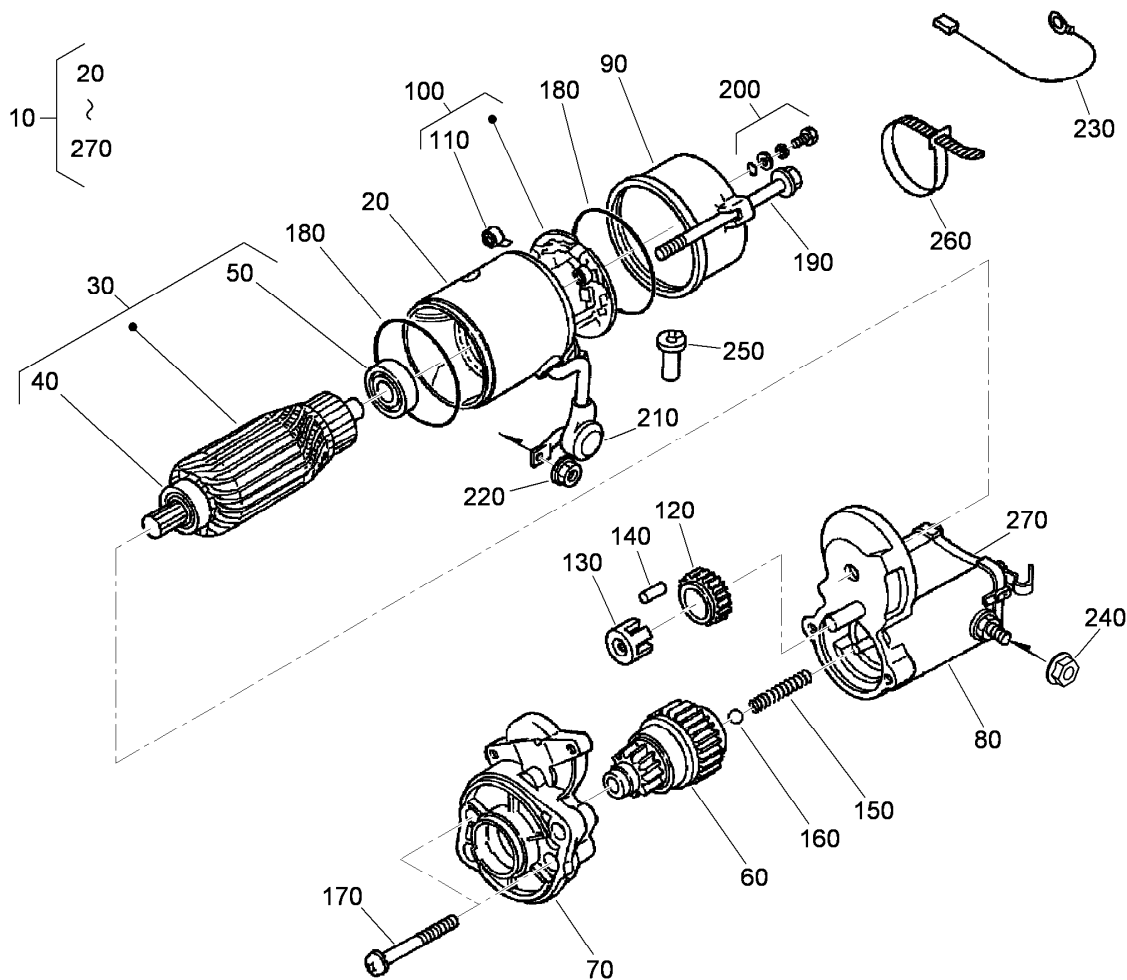
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
150	107-0140	1	Cover-End
160	98-7721	1	Rectifier ASM
170	98-7722	1	Bushing-Insulation
180	107-0141	1	Brush Holder ASM
190	98-7724	2	Brush
200	98-7725	2	Spring-Brush
210	98-7726	2	Screw-Head, Round
220	98-7727	6	Screw-Head, Round
230	98-7728	1	Screw-Head, Round
240	98-7729	3	Bolt
250	98-7730	2	Nut
260	98-7731	2	Bolt
270	98-7732	1	Nut
280	110-3799	1	Regulator ASM



## Starter Assembly

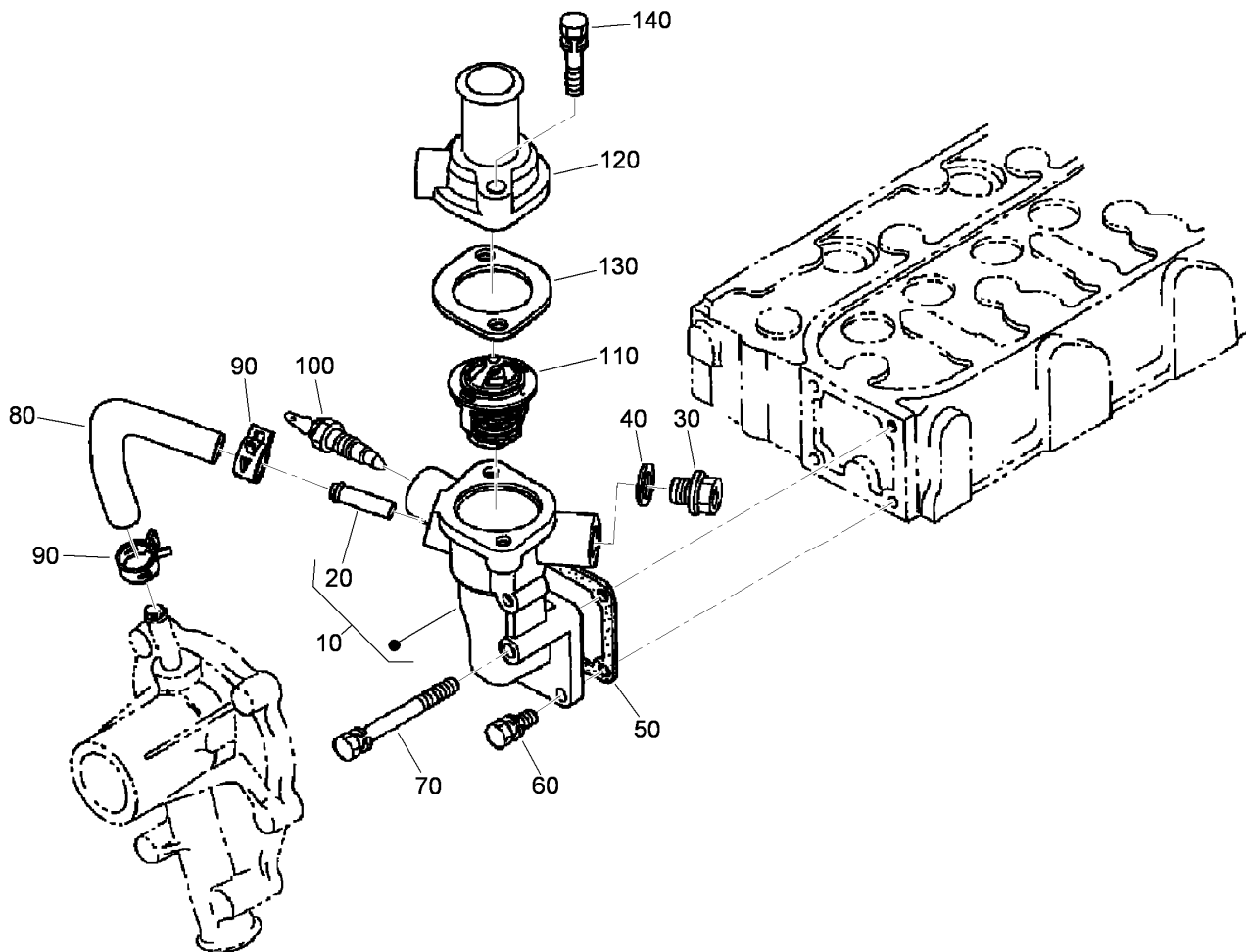
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	98-9705	1	Starter ASM
20	98-7697	2	Bolt





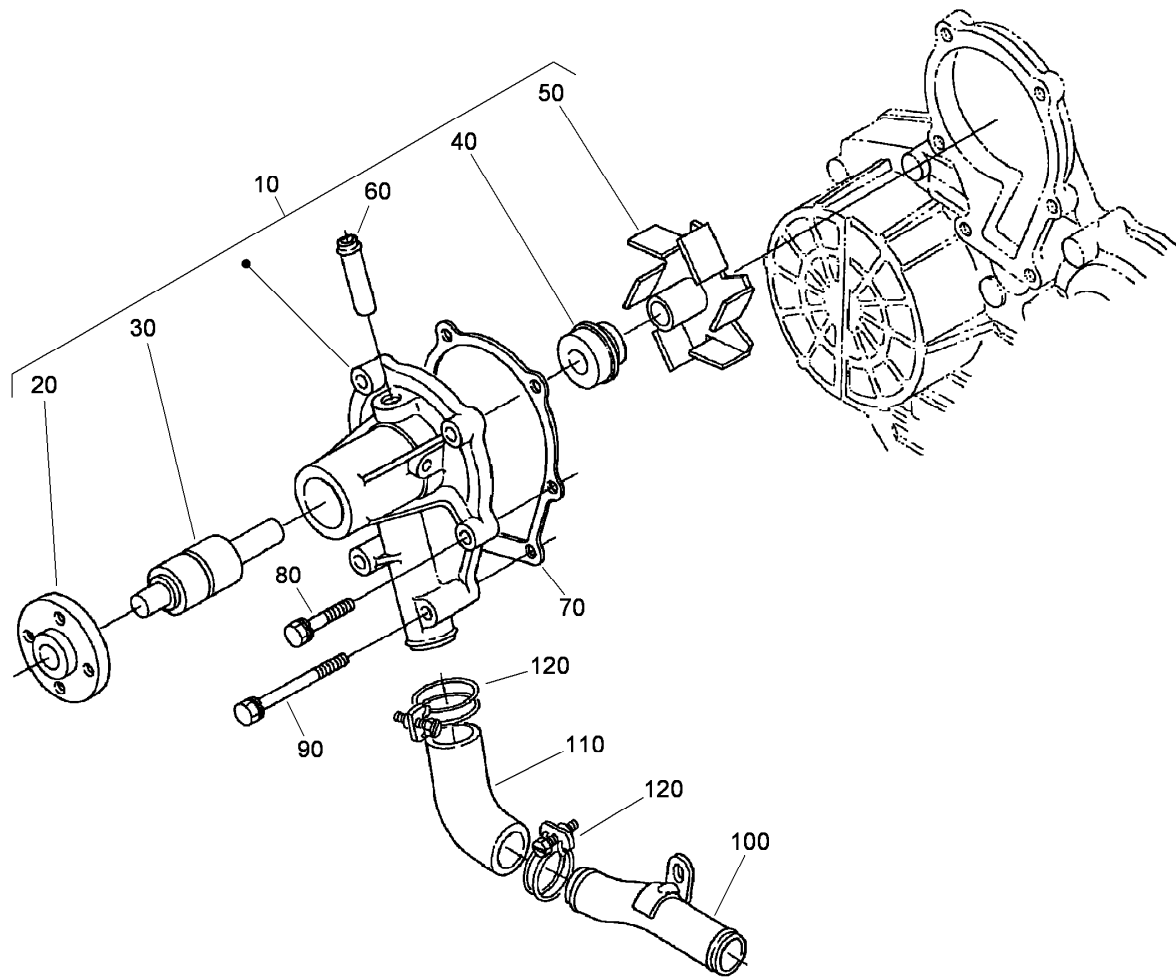
## Starter (Component Part) Assembly

<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	98-9705	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				



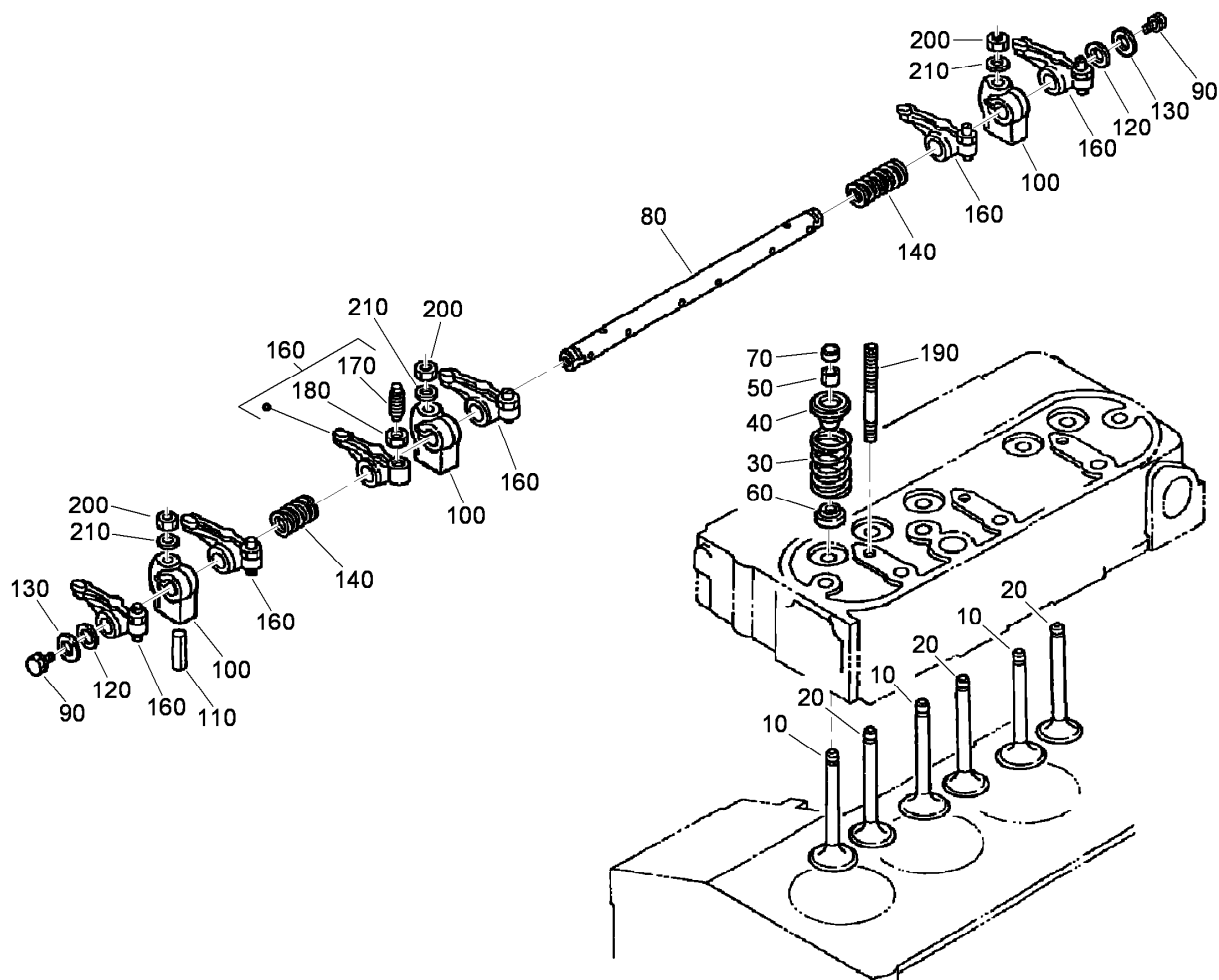
## Water Flange and Thermostat Assembly

<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	98-9719	1	Thermoswitch
110	98-7778	1	Thermostat ASM
120	98-9471	1	Cover-Thermostat
130	105-3748	1	Gasket-Thermostat
140	98-7777	2	Bolt



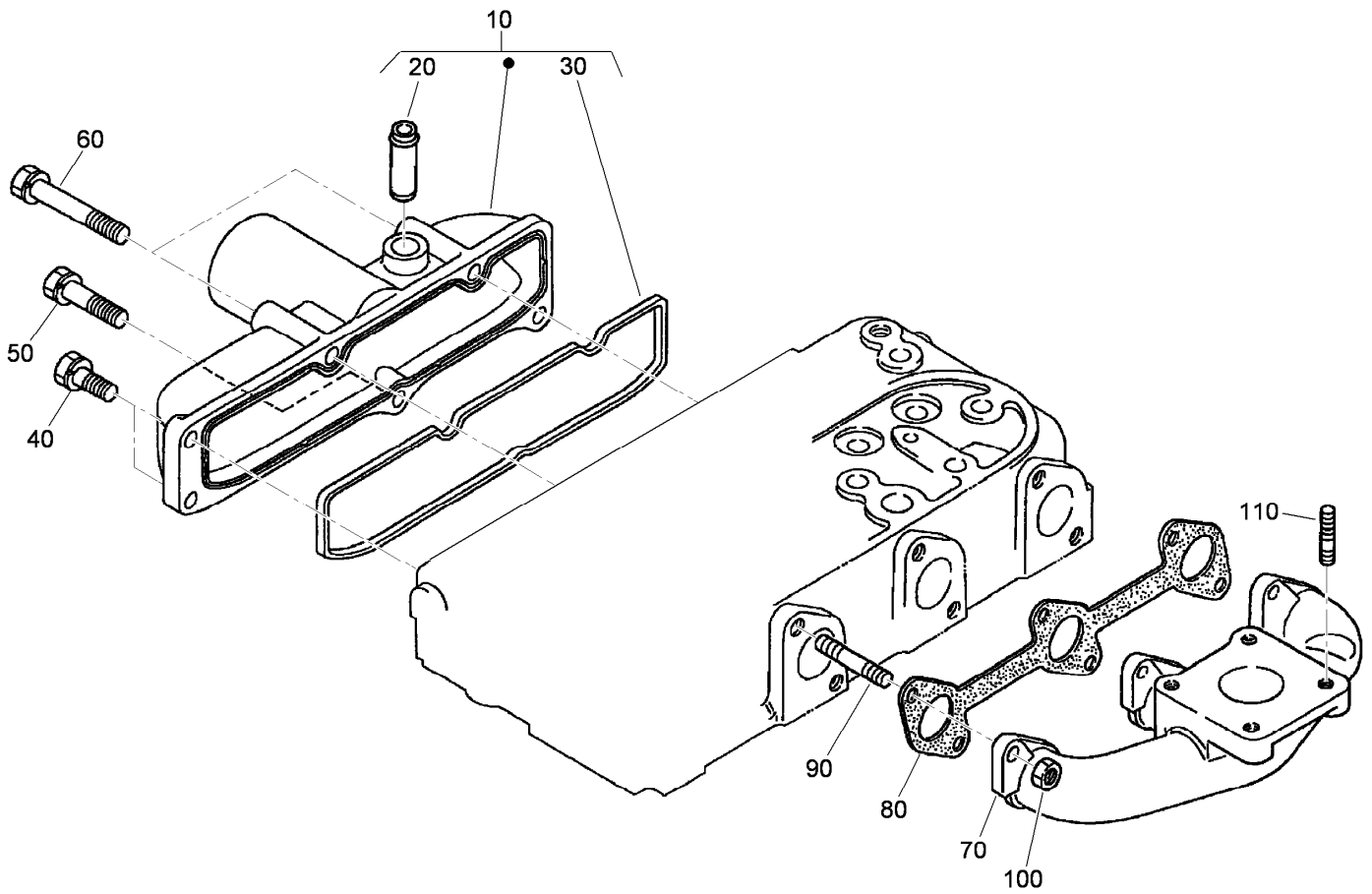
## Water Pump Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-9089	1	Water Pump ASM
20	99-3516	4	Flange-Pump, Water
30	99-3517	1	Bearing-Pump, Water
40	105-3750	1	Mechanical Seal ASM
50	112-8403	1	Impeller ASM
60	100-1932	1	Pipe-Return, Water
70	99-3454	1	Gasket-Pump, Water
80	98-9353	4	Bolt
90	107-9090	2	Bolt
100	98-9716	1	Pipe-Water
110	107-9091	1	Pipe-Water
120	98-9717	2	Clamp



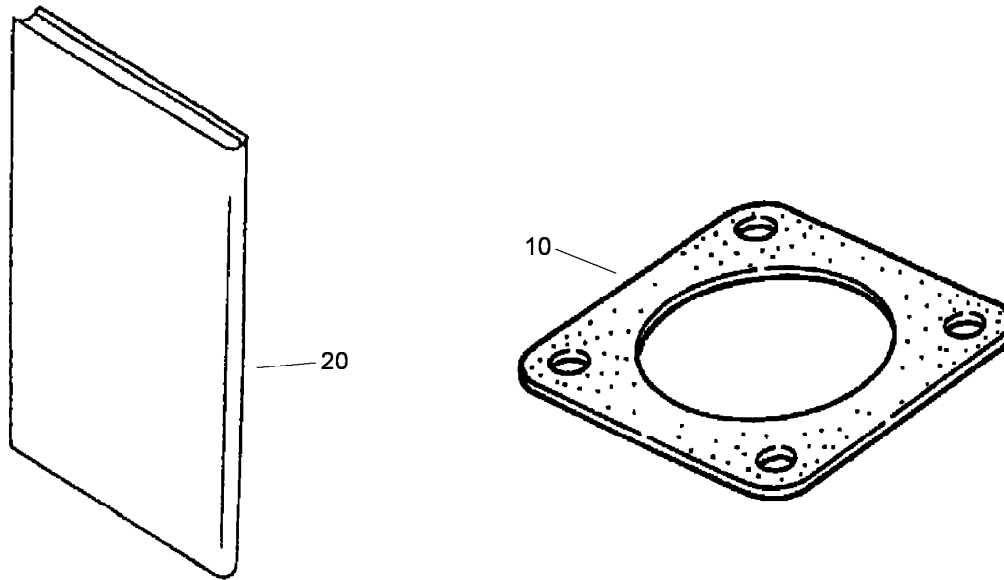
## Valve and Rocker Arm Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	112-7018	3	Valve-Inlet
20	98-9495	3	Valve-Exhaust
30	98-9648	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	3256-1	2	Washer-Flat
140	98-9504	2	Spring-Arm, Rocker
160	98-9501	6	Rocker Arm ASM
170	98-9502	6	Screw-Adjusting
180	98-9503	6	Nut
190	98-9506	3	Stud
200	98-9393	3	Nut
210	98-9385	3	Washer-Flat



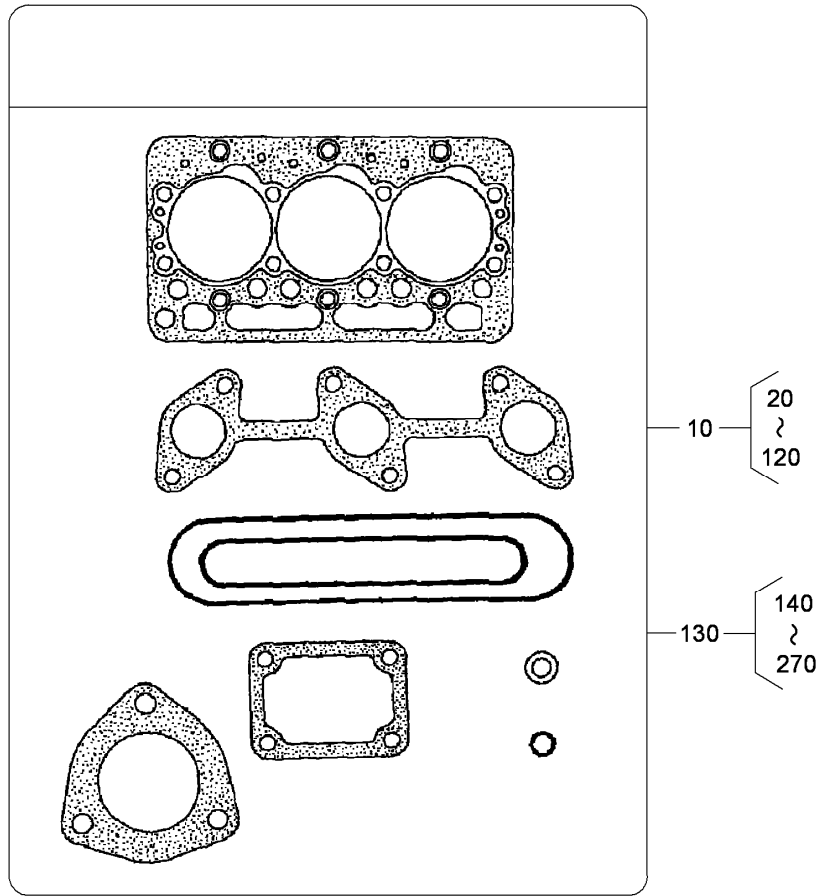
## Inlet and Exhaust Manifold Assembly

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	108-6577	1	Inlet Manifold ASM
20	98-9492	1	Joint-Pipe, Breather
30	98-9609	1	Gasket-Manifold, Inlet
40	98-7605	3	Bolt
50	98-9353	1	Bolt
60	105-3797	2	Bolt
70	107-9093	1	Manifold-Exhaust
80	99-8327	1	Gasket-Manifold, Exhaust
90	98-9588	6	Stud
100	98-9665	6	Nut
110	98-7769	4	Stud



## Muffler Gasket and Operator Manual

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	99-8343	1	Gasket-Muffler
20	99-8954	1	Manual-Kubota



## Upper and Lower Gasket Kits

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
10	107-7848	1	Upper Gasket Kit
130	107-9095	1	Lower Gasket Kit

# Attachments and Accessories

## For 30344 Groundsmaster 3280-D Traction Unit

<b>Product Name</b>	<b>Model/Part</b>
Premium Engine Oil, 10w30 (55 Gallon Drum) .....	108-1179
Premium Engine Oil, 10w30 (5 Gallon Pail) .....	108-1180
Premium Engine Oil, 15w40 (55 Gallon Drum) .....	108-1181
Premium Engine Oil, 15w40 (5 Gallon Pail) .....	108-1182
Premium Transmission/Hydraulic Tractor Fluid (55 Gallon Drum).....	108-1183
Premium Transmission/Hydraulic Tractor Fluid (5 Gallon Pail) .....	108-1184
Premium All Purpose Grease (Tube) .....	108-1190
Armrest Adapter Kit .....	108-9687
Wheel Weight Kit .....	11-0440
Auxiliary Valve Kit .....	110-5670
Implement Flow Control Kit.....	110-5699
Blower Drive and Mounting Kit.....	110-8539
Attachment Frame Kit .....	110-8540
5 inch Air Cleaner Safety Element .....	114-4057
Snowthrower Drive and Mounting Kit.....	114-4140
V-Plow Mounting Kit.....	115-4917
Mounting Kit (for Model 30823).....	115-4929
Model 2670 Debris Blower Mounting Kit (2XX) .....	115-4932
Model 2670 Debris Blower Mounting Kit (3XX) .....	115-4935
Wheel .....	119-2863
Wheel and Tire ASM.....	119-2864
Tire .....	231-95
Rear Weight Kit.....	24-5780
400-Hour Filter Maintenance Kit .....	30051
Mechanical Seat Suspension Kit .....	30312
Pneumatic Seat Suspension Kit.....	30313
15 Cubic Foot Bagger Kit.....	30356
60 Inch Blower Kit.....	30357
Bimini Sunshade for 2-Post Roll-Over Protection System.....	30358
Hardtop Sunshade.....	30359
60 Inch Side Discharge Mower .....	30366
72 Inch Side Discharge Mower .....	30368
Auxiliary Power Unit.....	30382
Cab ASM .....	30391
Standard Seat Kit.....	30398
62 Inch Base Mower .....	30403
72 Inch Base Mower .....	30404
52 Inch Blower Kit.....	30502
62 Inch Blower Kit.....	30506
62 Inch Side Discharge Deck.....	30551
52 Inch Side Discharge Mower .....	30555
Arm Rest Kit.....	30707
48 inch V-Plow .....	30750
Debris Blower .....	30823
Tire .....	69-9880
Spark Arrestor Screen .....	75-6880
Weight-Wheel.....	77-6700





**Notes:**

**Notes:**



**Count on it.**