Form No. 3471-602 Rev A

TORO®

Count on it.

Parts Catalog

ProCore® 648s

Aerator

Model No. 09960—Serial No. 418200000 and Up

Register at www.Toro.com.
Original Instructions (EN)

CE

3471-602 A

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.

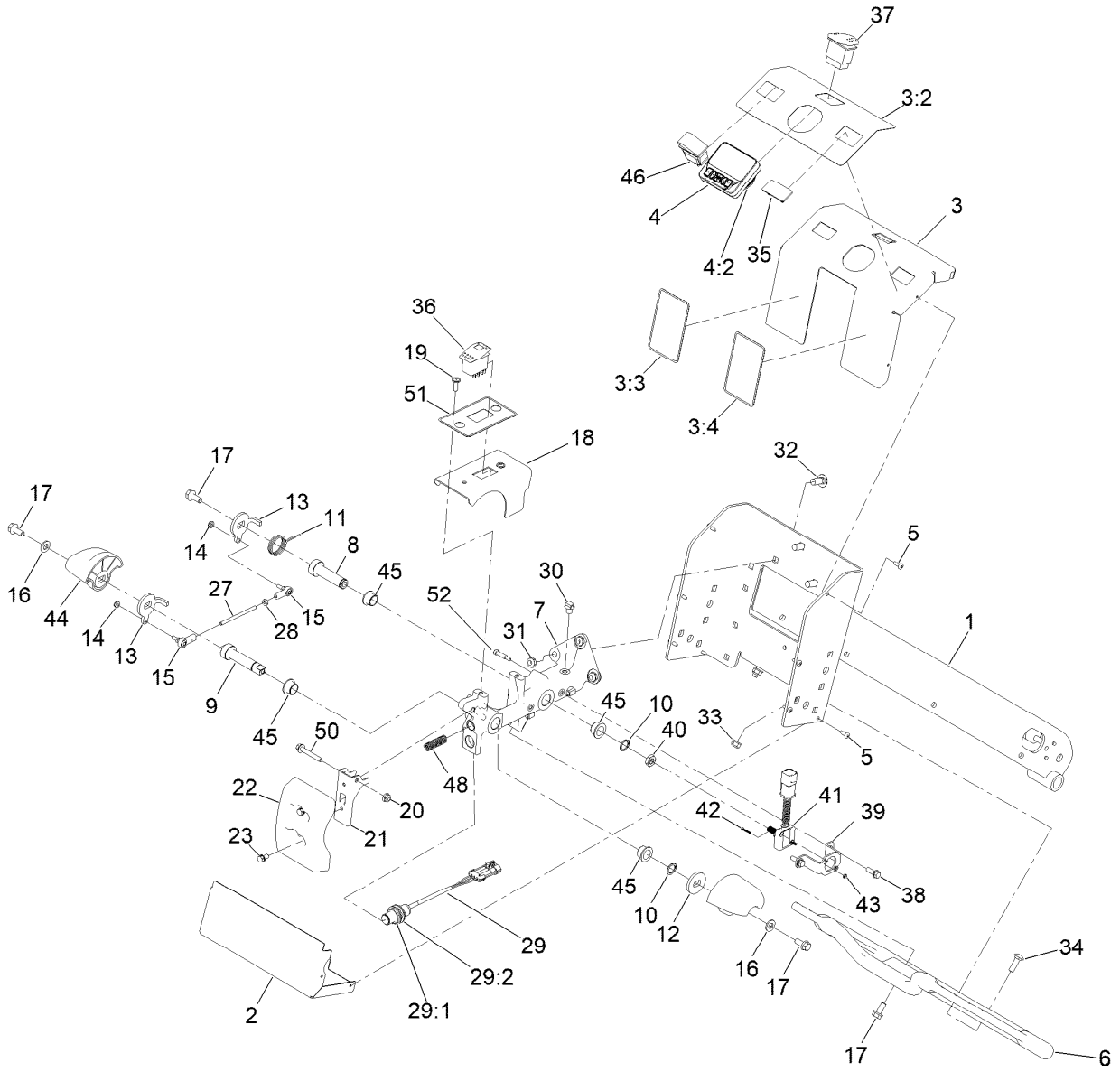
For example, in an illustration, the reference number 2X 37 means that two of the parts identified by reference number 37 are indicated.

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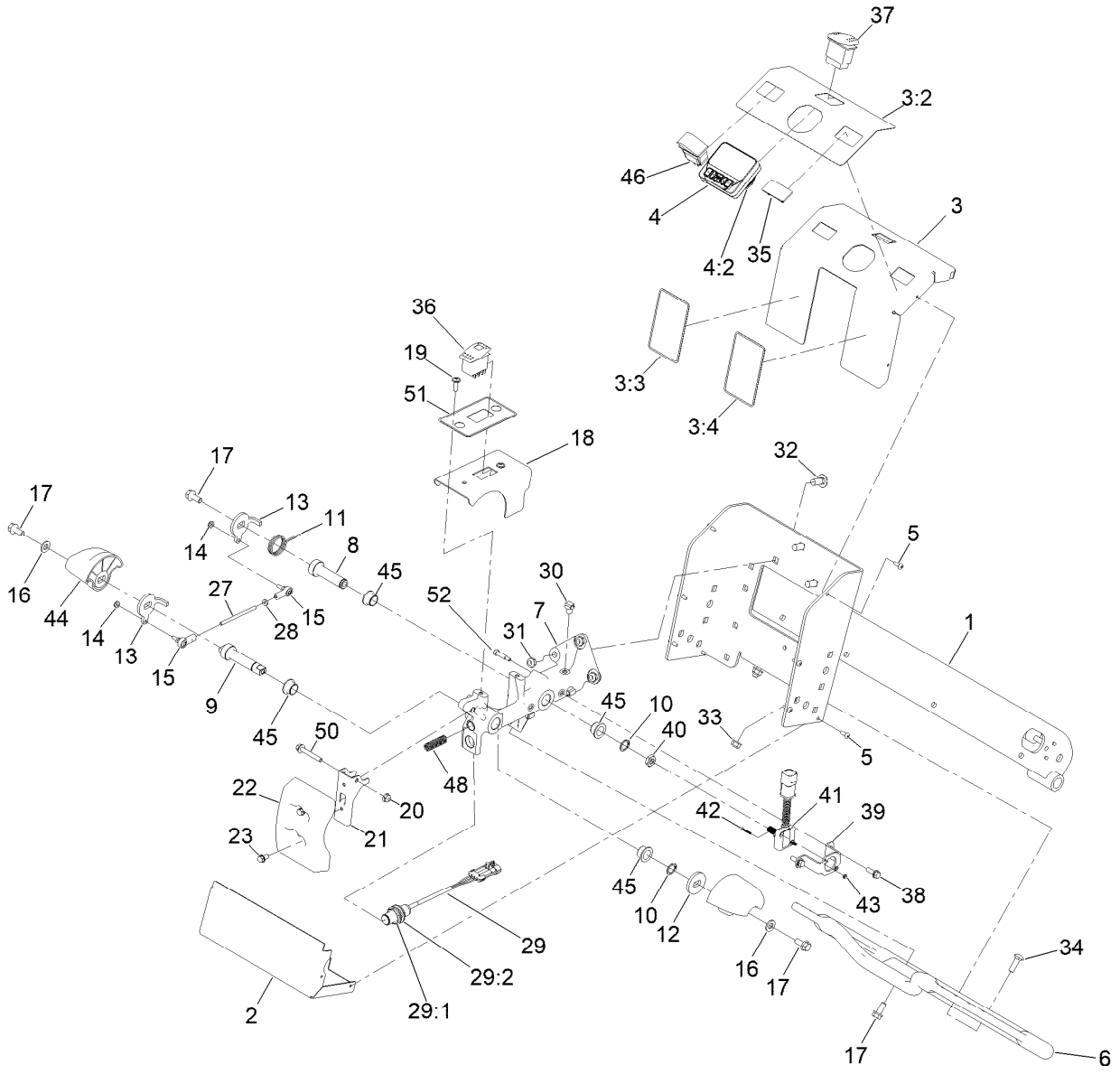
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Control Assembly

Ref.	Part Number	Qty.	Description
1	140-8589-01	1	Control Handle ASM [red]
2	144-9821-03	1	Cover-Controls, Lower
3	144-9840	1	Dash Panel Assembly
3:2	140-8810	1	Decal-Controls
3:3	140-8811	1	Decal-Controls
3:4	140-8812	1	Decal-Controls
4	161-1700	1	Display-LCD
4:2	161-1723	1	Nut-Display
5	105-6849	8	Screw-Forming, Thread
6	140-8929	1	Handle
7	140-8936	1	Hub-Controls
8	140-8590	1	Shaft-Sensor
9	140-8625	1	Shaft-Sensor
10	32151-62	2	Ring-Retaining
11	139-8662	1	Spring-Torsion
12	140-8941	1	Plate-Sensor
13	140-8594	2	Plate-Sensor
14	3296-27	2	Nut-Lock, NI
15	117-9720	2	Ball Joint
16	3256-38	2	Washer-Flat
17	100-1668	4	Screw-HHF

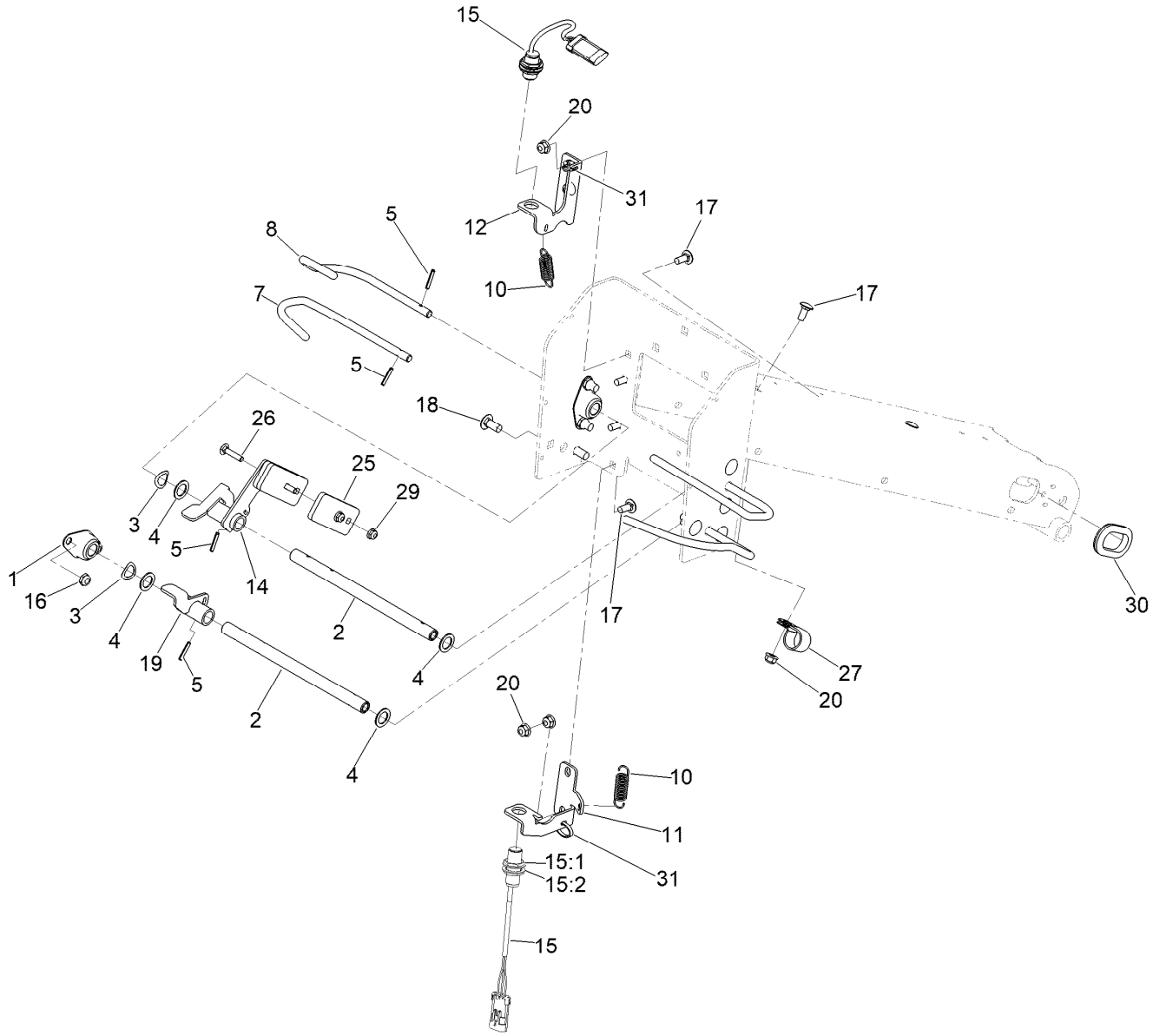
Ref.	Part Number	Qty.	Description
18	140-8631-03	1	Panel-Control
19	92-3911	2	Screw-Hsbfh
20	104-7201	1	Nut-HF, NI
21	140-8629	1	Paddle-Switch
22	140-8632	1	Cover-Switch, Stop
23	137-4795	2	Screw
27	140-8764	1	Rod-Threaded
28	3219-14	1	Nut-Hex
29	115-0282	1	Proximity Sensor ASM
29:1	117-3207	2	Nut-Hex
29:2	117-3208	2	Washer-Lock, Internal Tooth
30	32180-030	3	Clip-Tie
31	3296-59	3	Nut-Lock, NI
32	3231-27	3	Screw-CARR
33	104-8300	2	Nut-HF, NI
34	3230-22	2	Screw-CARR
35	99-7420	1	Plug-Hole
36	100-8490	1	Switch-Rocker, On-None-On
37	95-8999	1	Switch-Rocker, On-None-On



Control Assembly (continued)

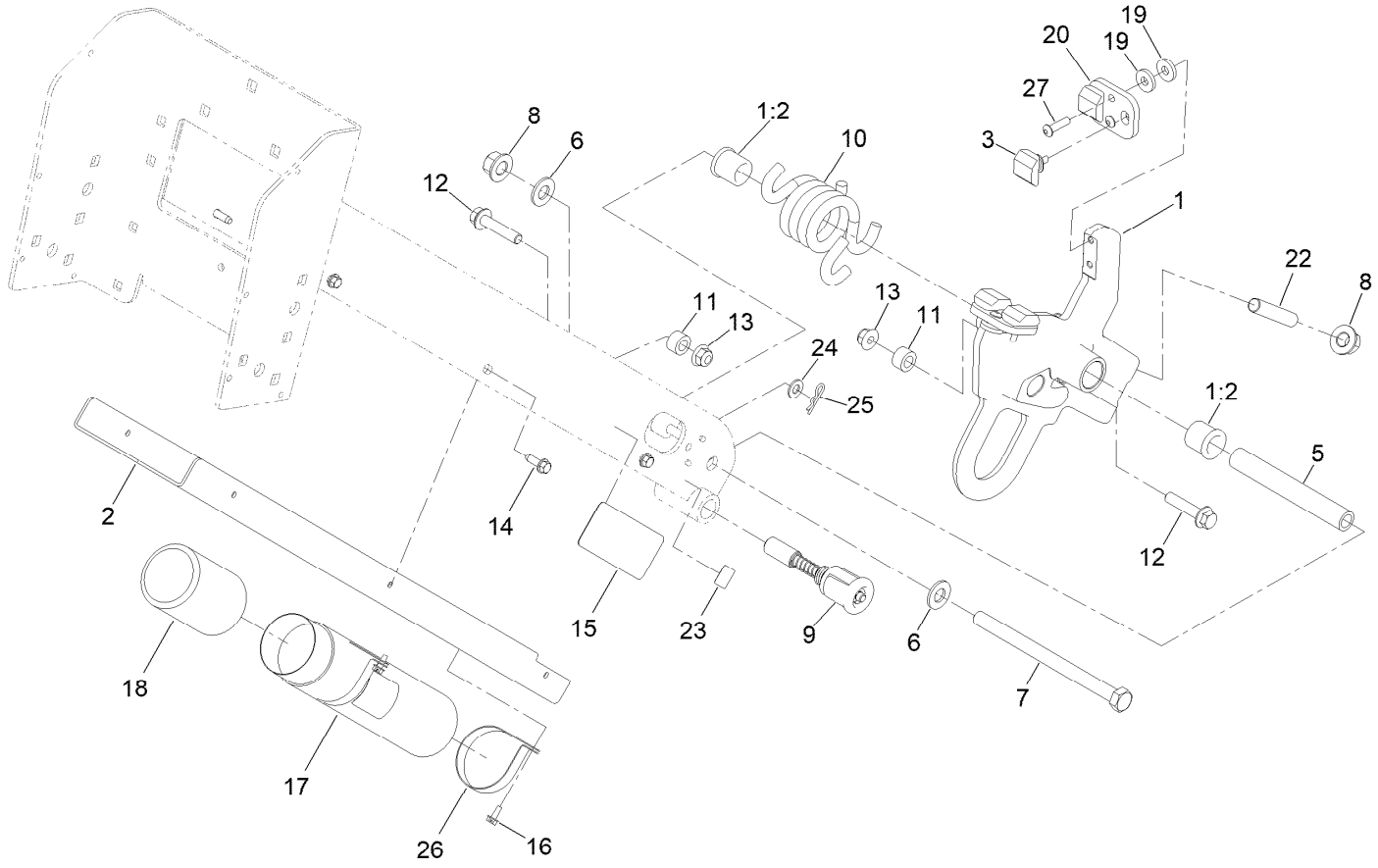
Ref.	Part Number	Qty.	Description
38	117-8304	2	Screw-HHF, Patch
39	140-8776	1	Brkt-Sensor
40	112-8617	1	Nut-Hex
41	138-6252	1	Sensor-Rotary
42	140-8959	2	Screw-Fht
43	3296-52	2	Nut-Lock, NI
44	140-8949	2	Knob-Rotary

Ref.	Part Number	Qty.	Description
45	108-2973	4	Bushing-Flange
46	119-8355	1	Switch-Rocker
48	136-7136	1	Spring-Compression
50	32105-18	1	Screw-HHF
51	140-8813	1	Decal-Controls
52	130-9374	1	Screw-Shoulder



Sensor Mounting Assembly

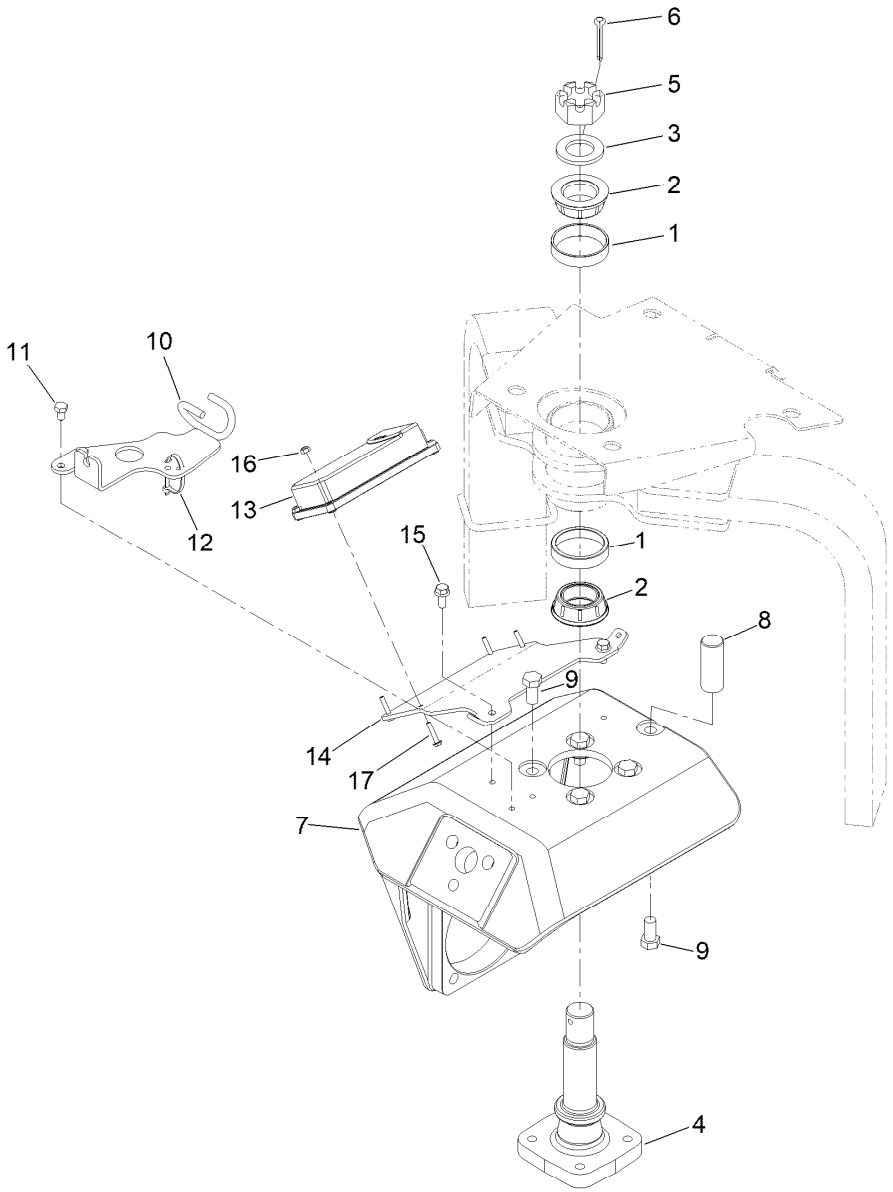
Ref.	Part Number	Qty.	Description
1	256-236	4	Bearing-Mount, Flange
2	140-8639	2	Tube-Bail
3	108-2100	2	Washer-Spring, Curved
4	3256-69	4	Washer-Flat
5	32121-45	6	Pin-Spring
7	144-9842	2	Bail-Aerator, 1
8	144-9844	2	Bail-Aerator, 2
10	136-7153	2	Spring-Extension
11	144-9822	1	Brkt-Sensor, Lower
12	144-9823	1	Brkt-Sensor, Upper
14	140-8930	1	Flag ASM
15	115-0282	2	Proximity Sensor ASM
15:1	117-3207	2	Nut-Hex
15:2	117-3208	2	Washer-Lock, Internal Tooth
16	3296-59	8	Nut-Lock, NI
17	3230-23	6	Bolt-CARR
18	3231-27	8	Screw-CARR
19	140-8920	1	Flag ASM
20	104-8300	6	Nut-HF, NI
25	140-8933	3	Plate-Weight
26	3229-3	2	Screw-CARR
27	2412-39	2	Clamp-R
29	104-7201	2	Nut-HF, NI
30	240-2	1	Grommet-Rubber
31	3290-378	2	Tie-Cable



Column Pivot Assembly

Ref.	*Part Number*	*Qty.*	*Description*
1	144-9845	1	Column Pivot ASM
1:2	117-0826	2	Bushing-Flange
2	140-8751-03	1	Cover-Handle, Lower
3	126-9966	4	Bumper-ROPS
5	140-8549	1	Tube-Pivot
6	3256-26	2	Washer-Flat
7	325-37	1	Screw-HH
8	99-5107	4	Nut-Lock
9	116-0104	1	Pin-Spring
10	140-8768	1	Spring-Torsion
11	140-8770	2	Spacer
12	3234-19	2	Screw-HHF
13	104-8301	2	Nut-HF, NI

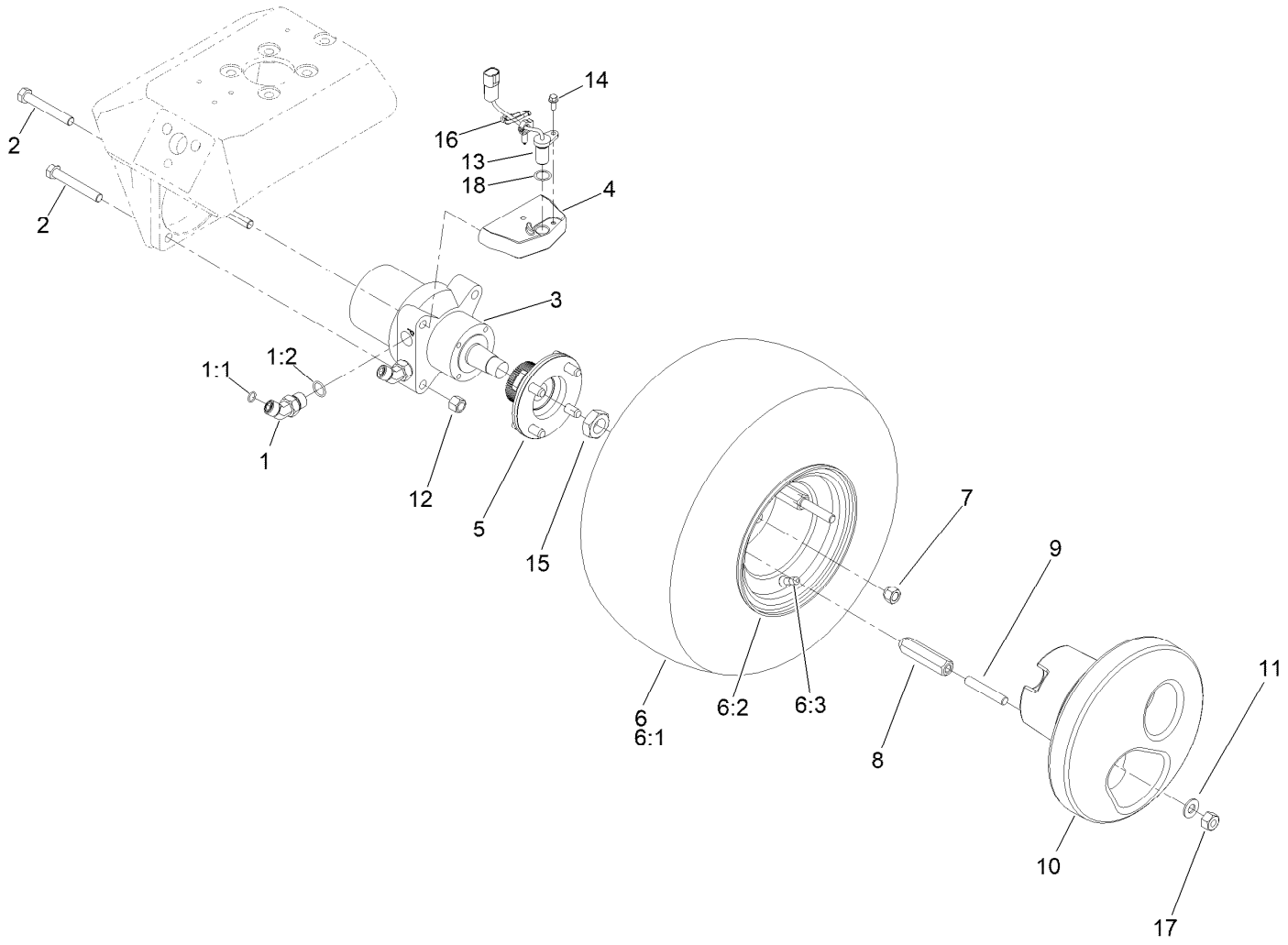
Ref.	*Part Number*	*Qty.*	*Description*
14	32144-44	6	Screw-HWH, Thread Roll
15	140-8963	1	Decal-Parking Brake
16	32104-60	2	Screw-HWH
17	104-7050	1	Tube-Manual
18	104-7048	1	Cap-Housing
19	88-7200	8	Washer-Flat
20	140-8955	2	Plate-Stop
22	144-9825	3	Stud
23	93-9084	1	Decal-Point, Lift
24	3256-23	1	Washer-Plain
25	3290-307	1	Pin-Cotter
26	2412-120	2	Clamp-R
27	3274-65	4	Screw-HSBH



Steering Spindle and Arm Assembly

Ref.	Part Number	Qty.	Description
1	107-7590	2	Cup-Bearing
2	107-7589	2	Cone-Bearing (W/ Seal)
3	107-7597	1	Washer-Plain
4	107-7595-0P	1	Spindle-Steer
5	32136-9	1	Nut-Hex, Slotted
6	3272-37	1	Pin-Cotter
7	144-9881-01	1	Arm-Steering
8	106-8939	1	Stop-Steering
9	325-4	5	Screw-HH

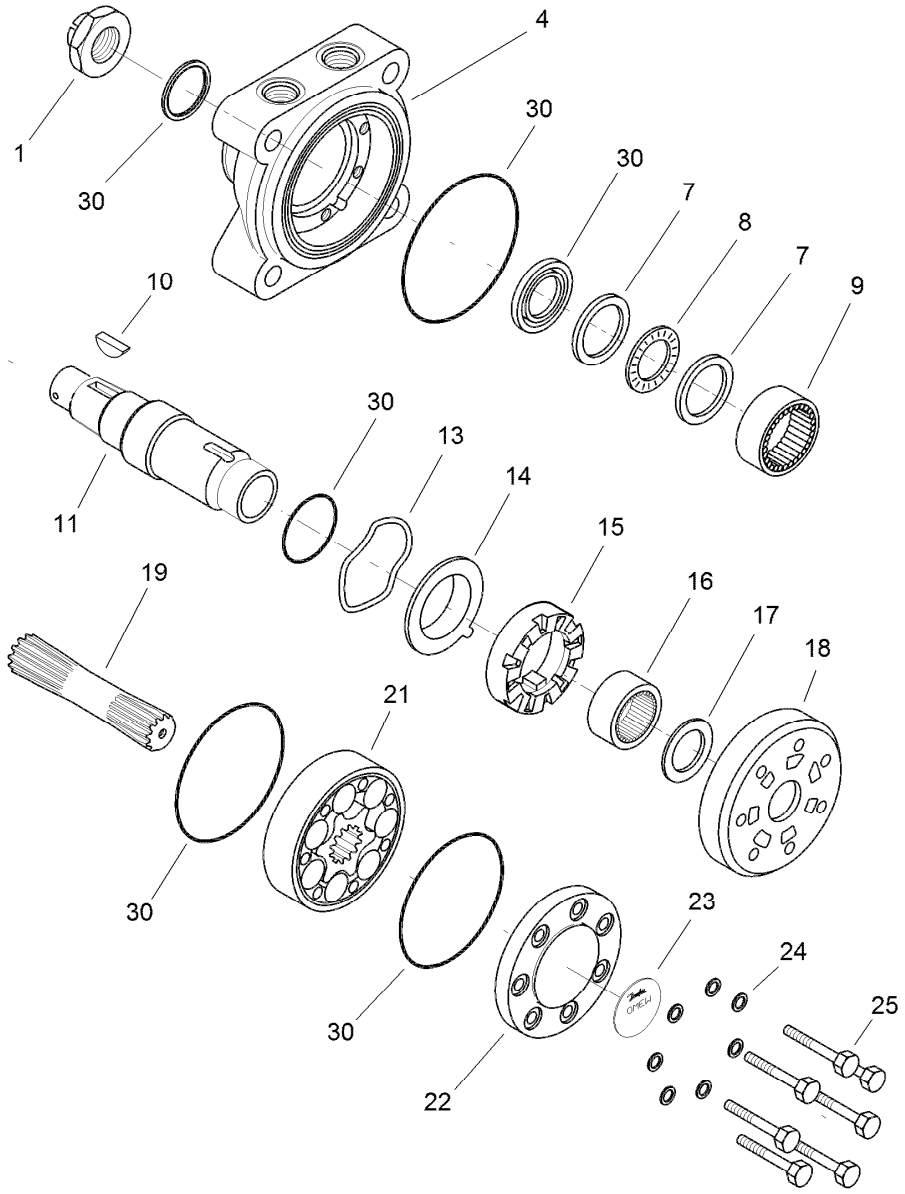
Ref.	Part Number	Qty.	Description
10	139-8664	1	Guide ASM
11	322-1	2	Screw-HH
12	3290-378	2	Tie-Cable
13	161-9001	1	Gateway-Telematics
14	144-9820-01	1	Brkt-Module
15	100-1668	2	Screw-HHF
16	3296-2	4	Nut-Lock, NI
17	131-6456	4	Screw-HWH



Front Drive Assembly

Ref.	Part Number	Qty.	Description
1	340-89	2	Fitting-HYD, 45 DEG
1:1	237-30	1	O-Ring
1:2	237-80	1	O-Ring
2	325-13	4	Screw-HH
3	106-8808	1	HYD Motor ASM
4	144-9879	1	Bracket-Sensor
5	144-9813	1	Hub -Wheel
6	114-4665	1	Tire ASM
6:1	70-8500	1	Tire-Smooth, 4-Ply
6:2	114-4643	1	Wheel
6:3	232-27	1	Stem-Valve
7	139-2564	2	Nut-Lug

Ref.	Part Number	Qty.	Description
8	107-3399	2	Adapter-Weight, Wheel
9	105-1088	2	Stud
10	147-9387	1	Weight-Wheel
11	87-7270	2	Washer-Thrust
12	3296-23	2	Nut-Lock, NI
13	144-9802	1	Sensor-Speed
14	3234-33	1	Screw-HHF
15	26-3790	1	Nut-Lock
16	32180-030	1	Clip-Tie
17	3296-25	2	Nut-Lock, NI
18	139-8694	1	Shim

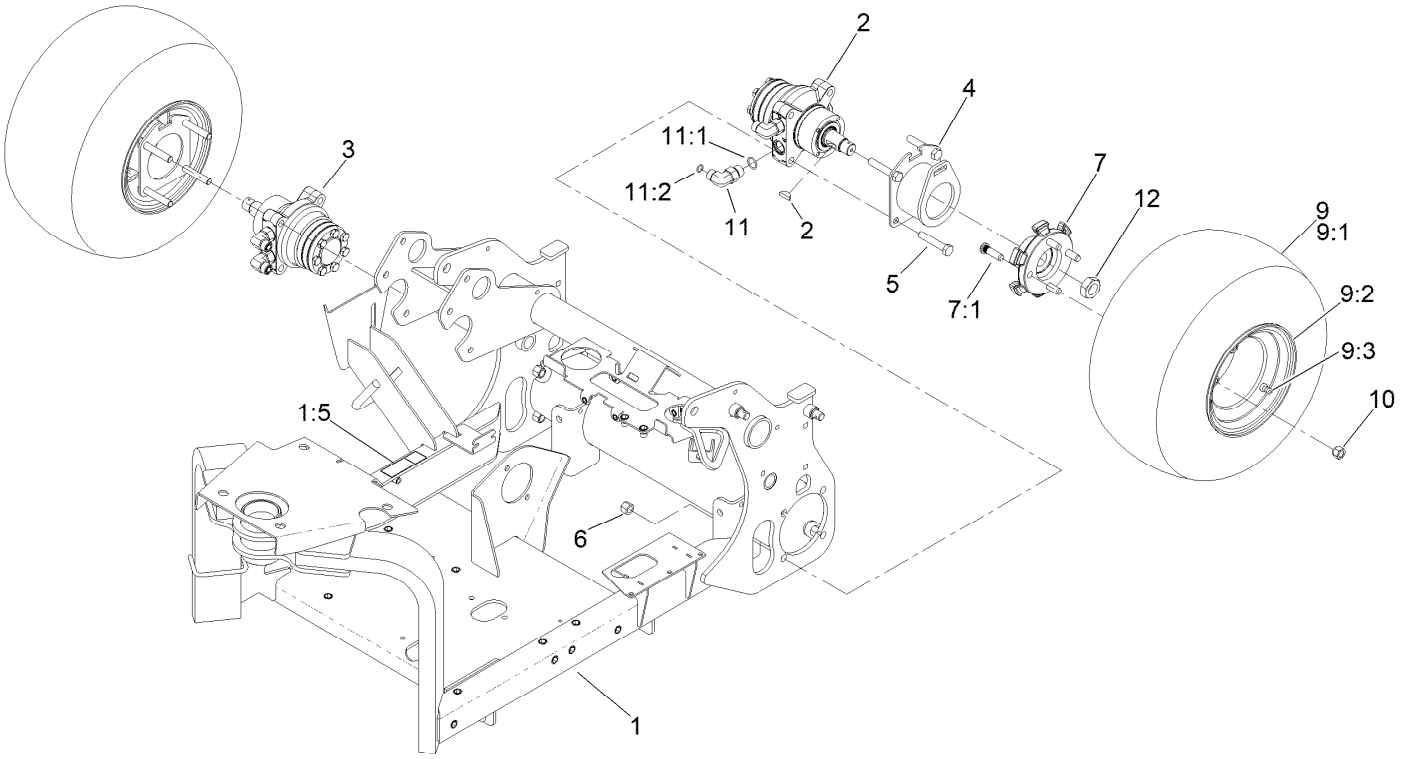


(CCW) Hydraulic Motor Assembly No. 106-8808

Ref.	*Part Number*	*Qty.*	*Description*
1		1	Nut-Castellated ●
4		1	Housing ●
7		2	Race-Bearing ●
8		1	Bearing-Needle, Axial ●
9		1	Bearing-Needle, Radial ●
10	3257-42	1	Key-Woodruff
11		1	Shaft-Tapered ●
13		1	Washer-Spring ●
14		1	Plate-Balance ●
15		1	Disc-Valve ●

Ref.	*Part Number*	*Qty.*	*Description*
16		1	Bearing-Needle, Radial ●
17		1	Race-Bearing ●
18		1	Plate-Distributor ●
19		1	Shaft-Cardan ●
21		1	Gearwheel Set ●
22		1	Cover-End ●
23		1	Plate-Name ●
24		7	Washer ●
25		7	Screw ●
30	109-5966	1	Wheel Motor Seal Kit

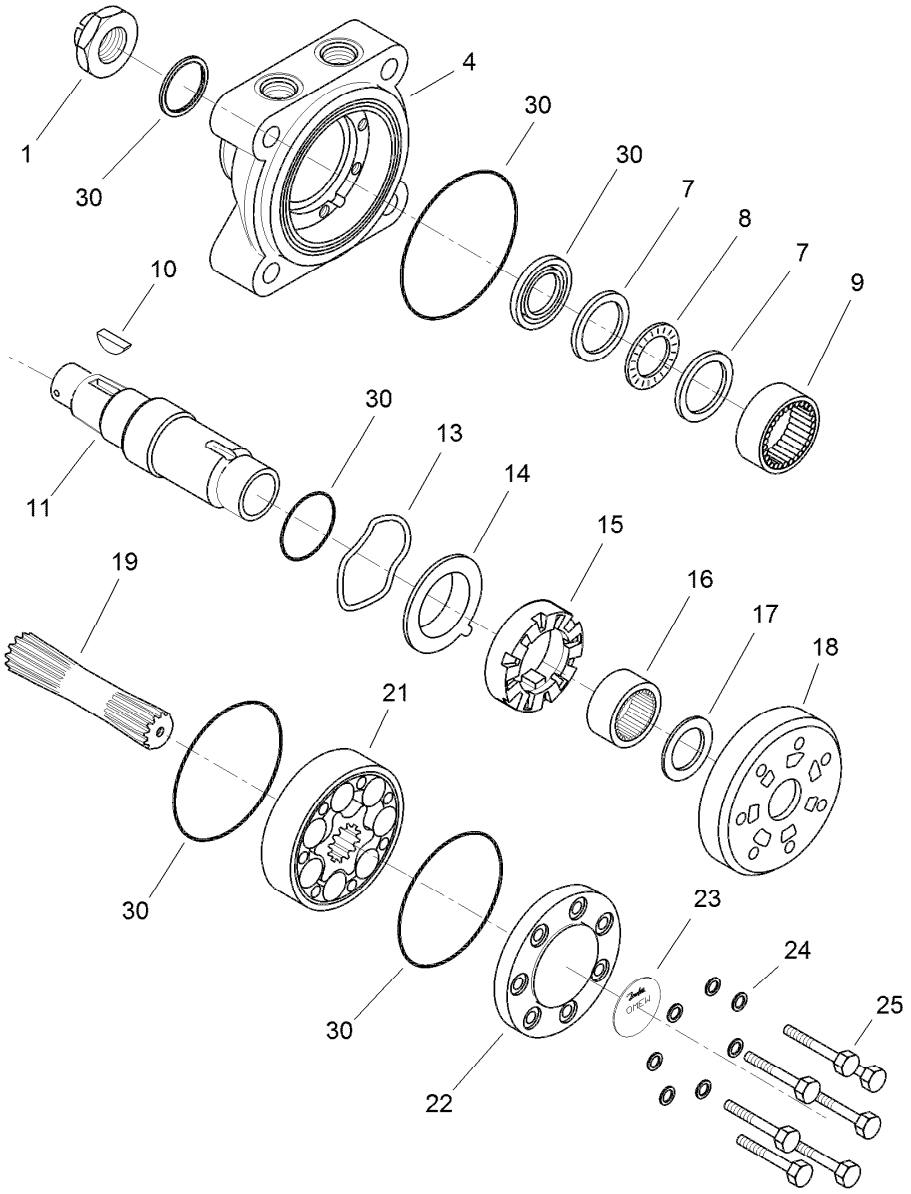
● Not serviced separately



Rear Hydraulic Drive Assembly

Ref.	Part Number	Qty.	Description
1	137-6690	1	Front Frame ASM
1:5	117-4979	1	Decal-Warning
2	106-8806	1	HYD Motor ASM
3	106-8807	1	HYD Motor ASM
4	140-6269	2	Parking Latch Supt
5	325-11	8	Screw-HH
6	3296-23	8	Nut-Lock, NI
7	140-6277	2	Wheel Hub ASM
7:1	10-6830	4	Stud-Type, Drive

Ref.	Part Number	Qty.	Description
9	114-4665	2	Tire ASM
9:1	70-8500	1	Tire-Smooth, 4-Ply
9:2	114-4643	1	Wheel
9:3	232-27	1	Stem-Valve
10	139-2564	8	Nut-Lug
11	340-105	4	Fitting-Elbow, 90 DEG
11:1	237-80	1	O-Ring
11:2	237-30	1	O-Ring
12	26-3790	2	Nut-Lock

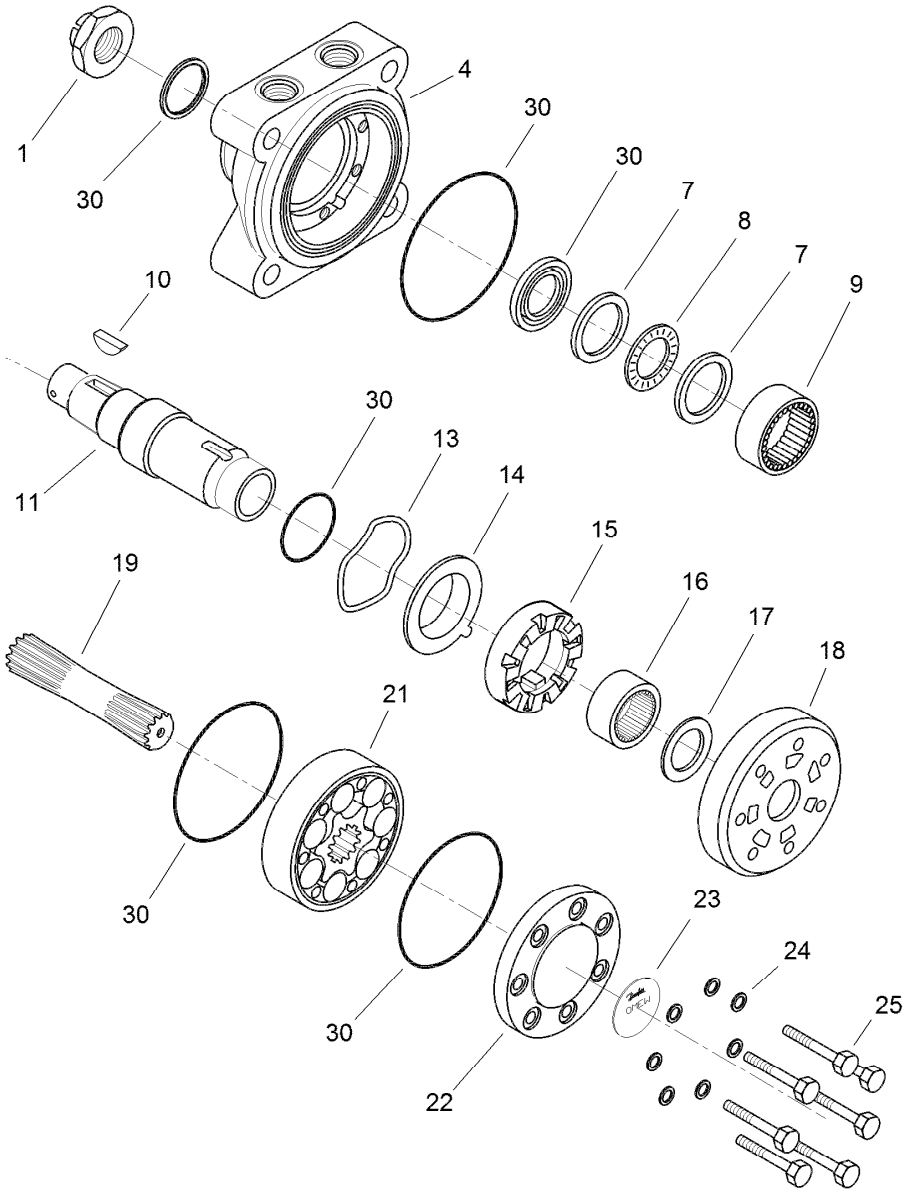


(CCW) Hydraulic Motor Assembly No. 106-8806

Ref.	*Part Number*	*Qty.*	*Description*
1		1	Nut-Castellated ●
4		1	Housing ●
7		2	Race-Bearing ●
8		1	Bearing-Needle, Axial ●
9		1	Bearing-Needle, Radial ●
10	3257-42	1	Key-Woodruff
11		1	Shaft-Tapered ●
13		1	Washer-Spring ●
14		1	Plate-Balance ●
15		1	Disc-Valve ●

Ref.	*Part Number*	*Qty.*	*Description*
16		1	Bearing-Needle, Radial ●
17		1	Race-Bearing ●
18		1	Plate-Distributor ●
19		1	Shaft-Cardan ●
21		1	Gearwheel Set ●
22		1	Cover-End ●
23		1	Plate-Name ●
24		7	Washer ●
25		7	Screw ●
30	109-5966	1	Wheel Motor Seal Kit

● Not serviced separately

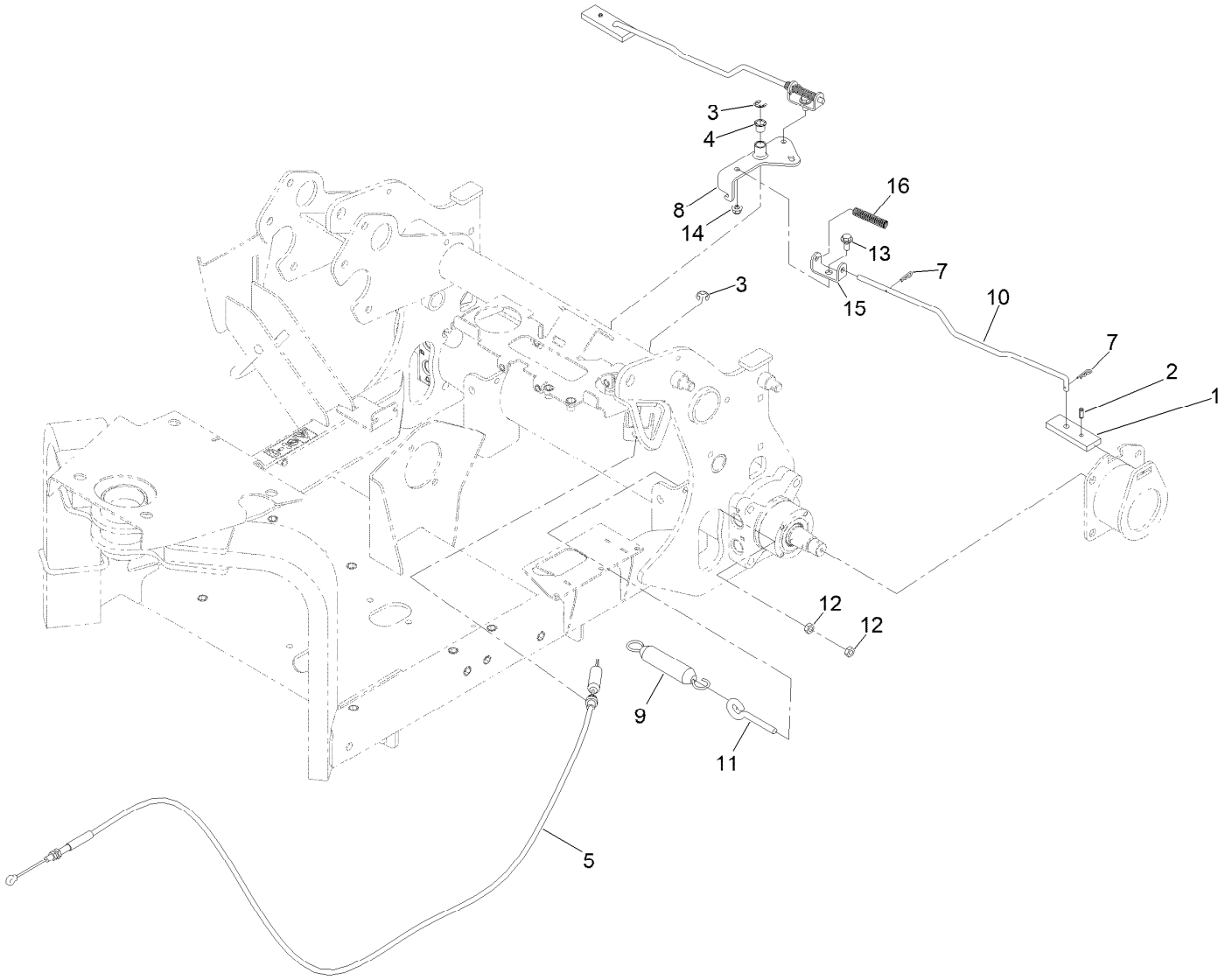


(CW) Hydraulic Motor Assembly No. 106-8807

Ref.	Part Number	Qty.	Description
1		1	Nut-Castellated ●
4		1	Housing ●
7		2	Race-Bearing ●
8		1	Bearing-Needle, Axial ●
9		1	Bearing-Needle, Radial ●
10	3257-42	1	Key-Woodruff
11		1	Shaft-Tapered ●
13		1	Washer-Spring ●
14		1	Plate-Balance ●
15		1	Disc-Valve ●

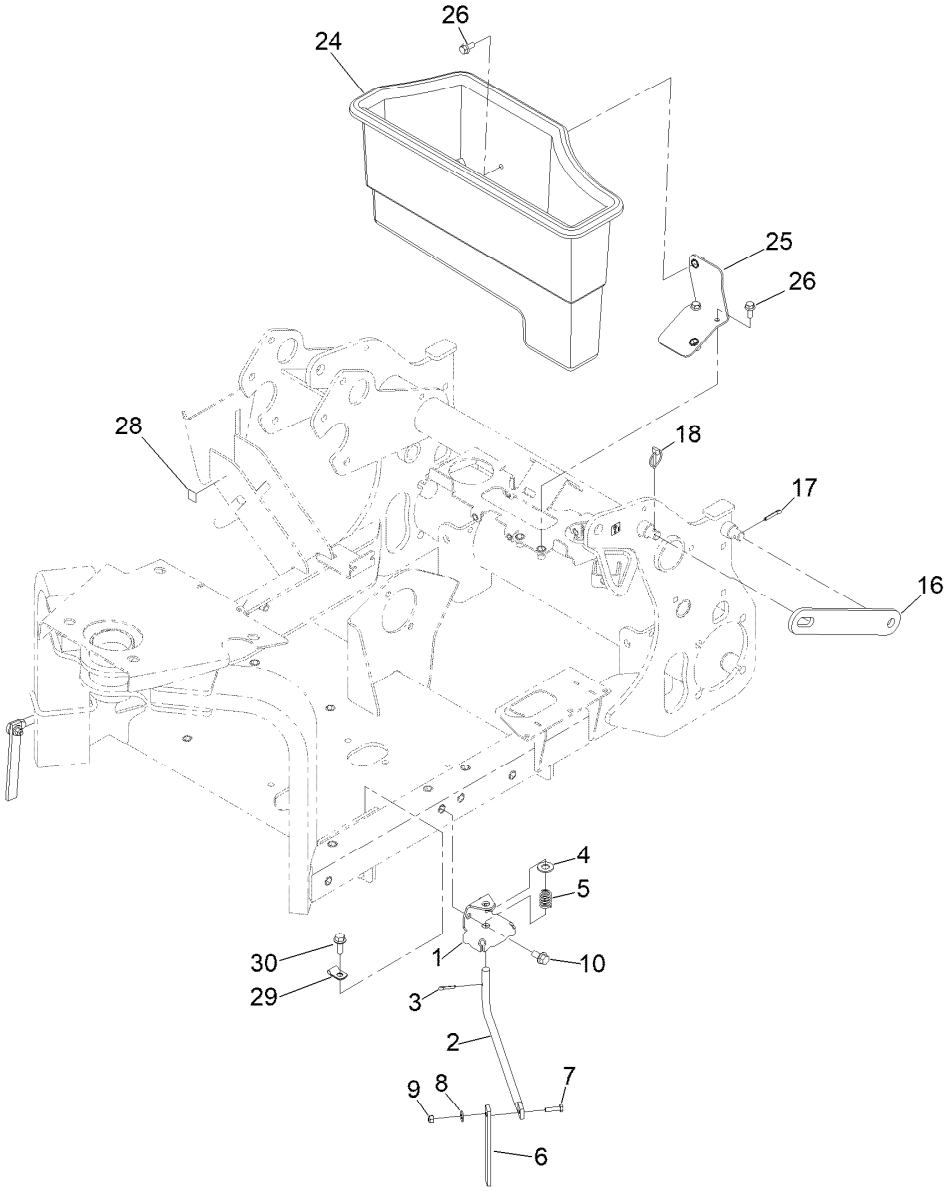
Ref.	Part Number	Qty.	Description
16		1	Bearing-Needle, Radial ●
17		1	Race-Bearing ●
18		1	Plate-Distributor ●
19		1	Shaft-Cardan ●
21		1	Gearwheel Set ●
22		1	Cover-End ●
23		1	Plate-Name ●
24		7	Washer ●
25		7	Screw ●
30	109-5966	1	Wheel Motor Seal Kit

● Not serviced separately



Parking Brake Assembly

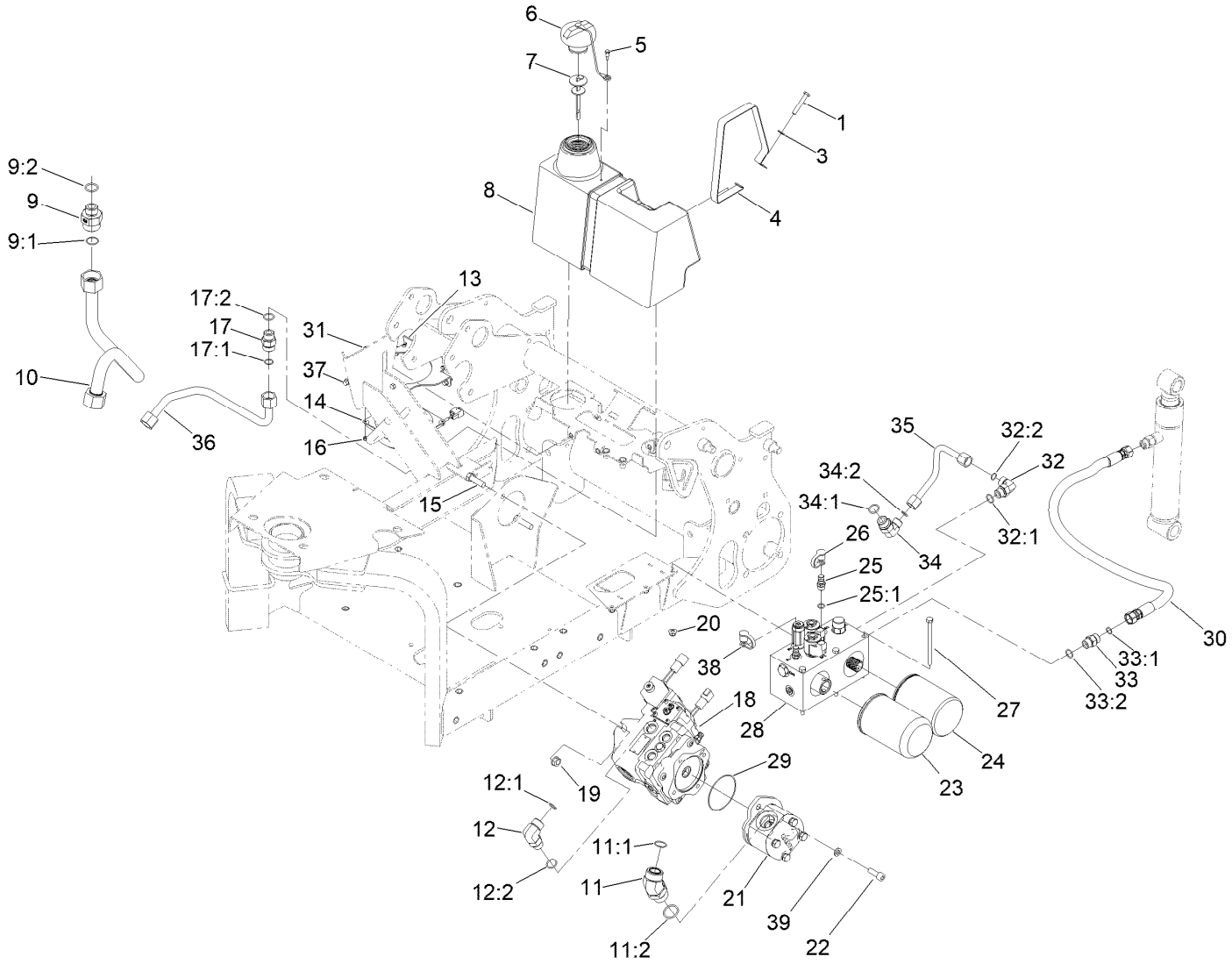
Ref.	*Part Number*	*Qty.*	*Description*
1	106-8885-03	2	Bar-Latch, Parking
2	32121-134	2	Pin-Roll
3	32120-47	2	Ring-Retaining, External
4	256-257	2	Bushing-Nyliner
5	140-8978	1	Cable-Brake
7	3290-307	4	Pin-Cotter
8	140-8586	1	Pivot Latch ASM
9	66-4270	1	Spring-Extension
10	140-8743	2	Link-Latch, Parking
11	94-2547	1	Bolt-Eye
12	3217-7	2	Nut-Hex
13	19-1470	2	Screw-Shoulder
14	104-8300	2	Nut-HF, NI
15	114-0631	2	Clevis-Latch, Parking
16	107-3376	2	Spring-Compression



Lift Linkage Assembly

Ref.	Part Number	Qty.	Description
1	105-1178-01	2	Bracket-Marker
2	105-1179	2	Rod-Marker
3	3272-31	2	Pin-Cotter
4	3256-26	2	Washer-Flat
5	20-6110	2	Spring-Compression
6	59-9460	2	Guide
7	321-6	2	Screw-HH
8	3256-2	2	Washer-Flat
9	3296-42	2	Nut-Lock, NI
10	3234-1	4	Screw-HHF

Ref.	Part Number	Qty.	Description
16	105-0983-01	1	Bar-Prop
17	3272-21	1	Pin-Cotter
18	3290-495	1	Pin-Klik
24	139-8692	1	Bin-Storage
25	144-9882	1	Bin Bracket ASM
26	3234-47	4	Screw-HHF
28	93-9084	2	Decal-Point, Lift
29	2412-112	1	Clamp-R
30	3234-11	1	Screw-HHF

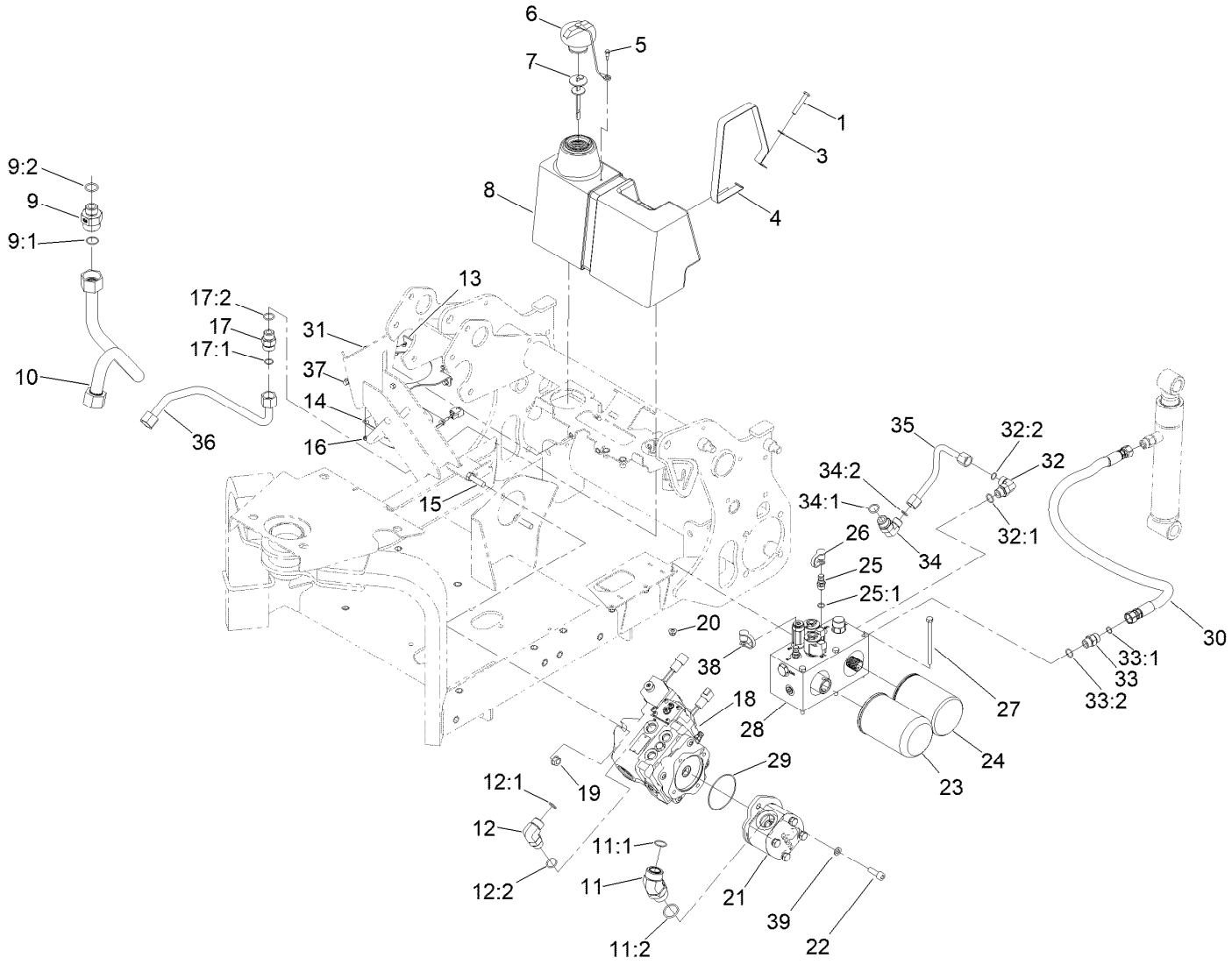


Hydraulic Assembly

Ref.	Part Number	Qty.	Description
1	120-6000	1	Bolt-TAP, HH
3	3256-23	1	Washer-Plain
4	94-4642-03	1	Strap-Tank, HYD
5	57-5420	1	Screw-Shoulder
6	93-7160	1	Cap-Oil, HYD
7	106-8811	1	Dipstick ASM
8	127-4162	1	Reservoir-Oil, HYD
9	87-7290	1	Fitting-STR
9:1	340-65	1	O-Ring
9:2	237-81	1	O-Ring
10	139-8649	1	Hydraulic Tube ASM
11	104-3509	1	Fitting-HYD, 45 DEG
11:1	237-146	1	O-Ring
11:2	340-65	1	O-Ring
12	340-17	1	Fitting-Elbow, 90 DEG
12:1	237-65	1	O-Ring
12:2	237-80	1	O-Ring
13	139-8634-03	1	Bracket-Fan

Ref.	Part Number	Qty.	Description
14	139-8651	1	Fan-Electric
15	324-6	2	Screw-HH
16	3296-1	4	Nut-Lock
17	340-7	1	Fitting-Straight
17:1	237-65	1	O-Ring
17:2	237-80	1	O-Ring
18	140-8564	1	Hydrostat
19	32128-37	2	Nut-HF
20	104-8300	3	Nut-HF, NI
21	140-8836	1	Pump-Gear
22	AU862-10030	2	Screw-HSH
23	75-1310	1	Filter-HYD
24	107-9531	1	Filter-Oil, HYD
25	59-7410	2	Fitting-Diagnostic
25:1	237-42	1	O-Ring
26	354-79	1	Cap-Dust
27	322-38	3	Screw-HH
28	140-8614	1	Manifold

● Not illustrated

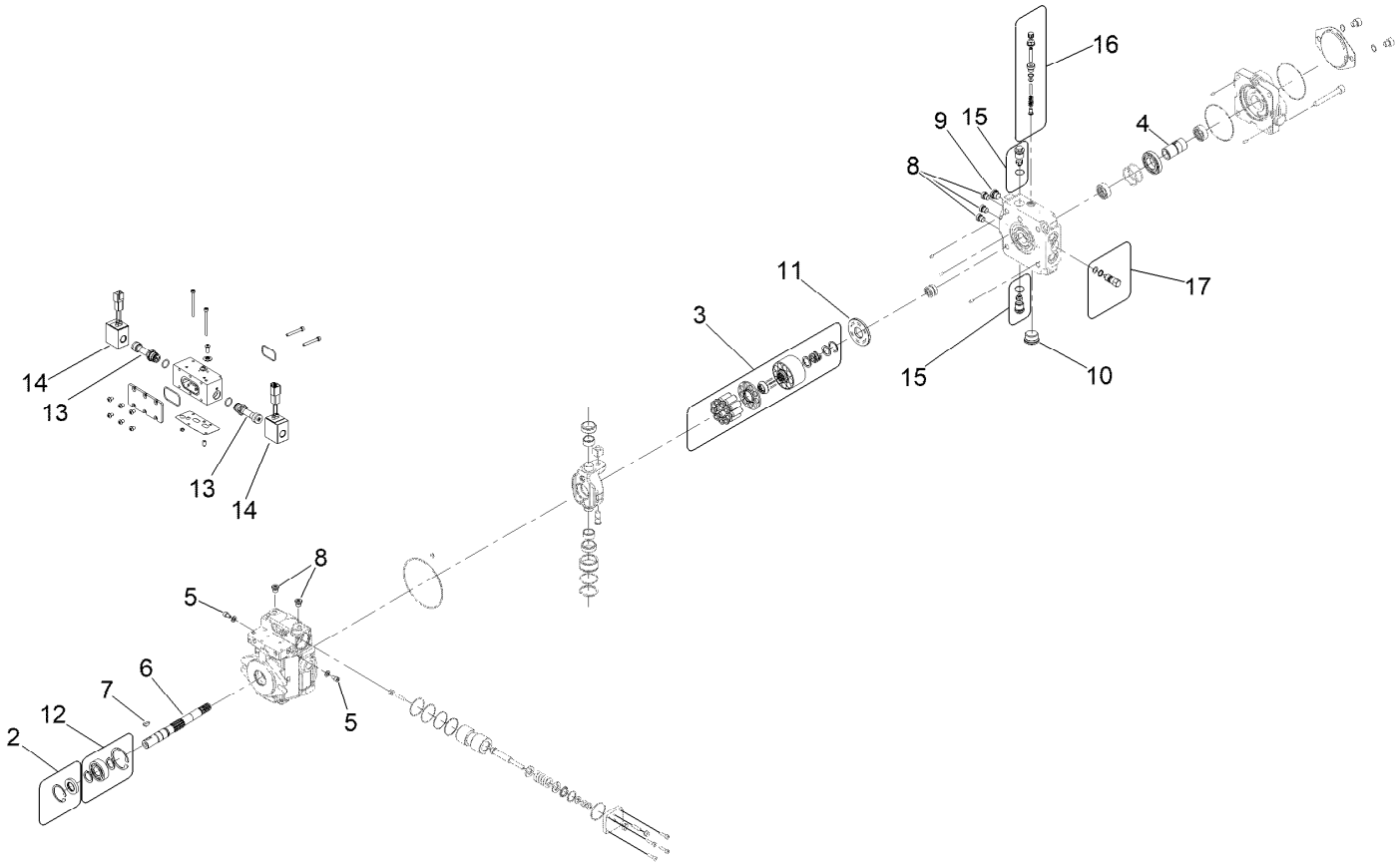


Hydraulic Assembly (continued)

Ref.	Part Number	Qty.	Description
29	353-949	1	O-Ring
30	95-5985	1	Hose-HYD
31	3250-26	4	Screw-PPH
32	340-98	1	Fitting-Elbow, 90 DEG
32:1	237-79	1	O-Ring
32:2	237-30	1	O-Ring
33	340-4	1	Fitting-Straight
33:1	237-30	1	O-Ring
33:2	237-79	1	O-Ring

Ref.	Part Number	Qty.	Description
34	340-105	1	Fitting-Elbow, 90 DEG
34:1	237-80	1	O-Ring
34:2	237-30	1	O-Ring
35	140-8864	1	Hydraulic Tube ASM
36	144-9876	1	Hydraulic Tube ASM
37	137-3111	4	Screw-HHF
38	353-947	1	Cap-Dust, Black
39	33095-00	2	Washer-Flat
99	505-180	12	Oil-HYD, Toro Px ●

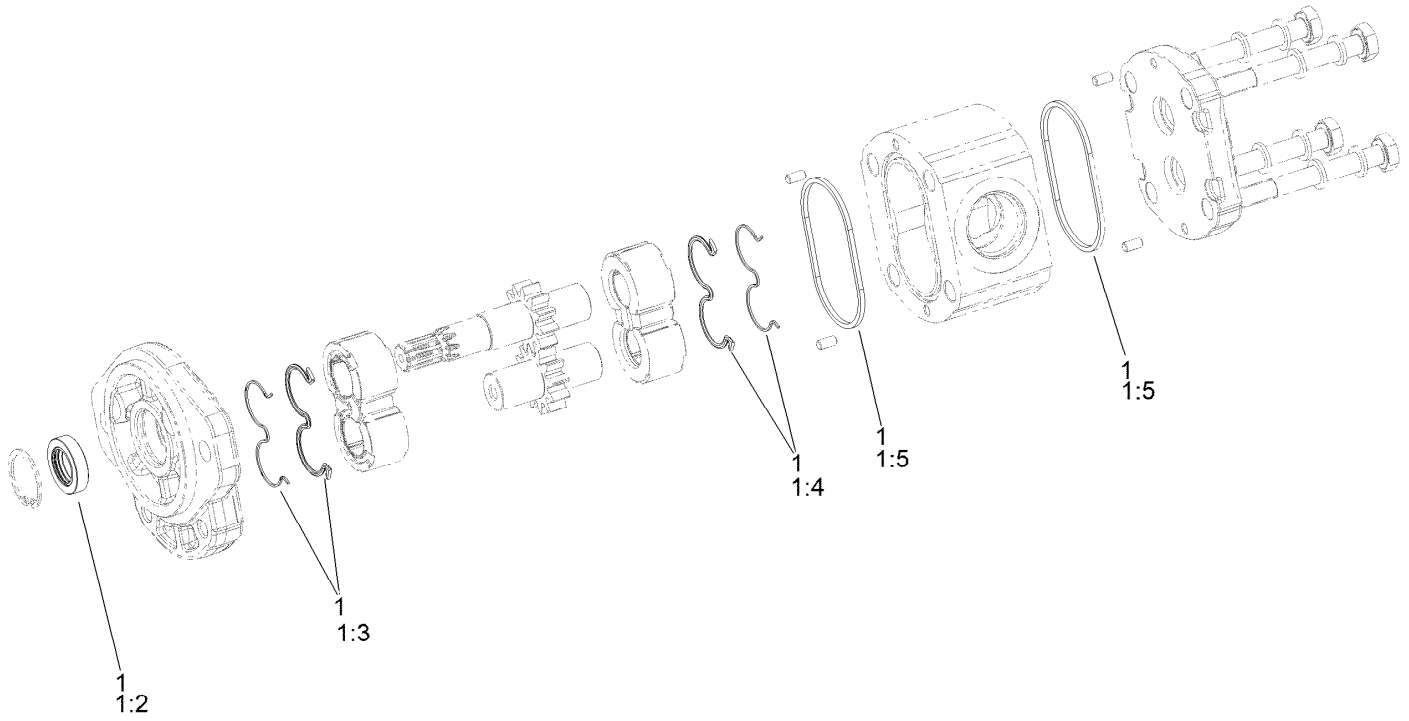
● Not illustrated



Hydrostat Assembly No. 140-8564

Ref.	Part Number	Qty.	Description
1	139-8742	1	Seal Kit ●
2	132-6045	1	Shaft Seal Kit
3	132-6048	1	Rotating Group Kit
4	139-8670	1	Coupling
5	139-8671	2	Screw
6	139-8672	1	Driveshaft-Pump
7	139-8673	1	Key
8	139-8674	3	Plug
9	139-8675	1	Plug
10	139-8676	1	Plug
11	139-8677	1	Valveplate
12	139-8680	1	Driveshaft Bearing Kit
13	139-8681	2	Control Valve
14	139-8682	2	Coil-Control Valve
15	139-8684	2	Main Relief Valve
16	139-8685	1	Charge Relief Valve
17	139-8686	1	Bypass Valve Kit

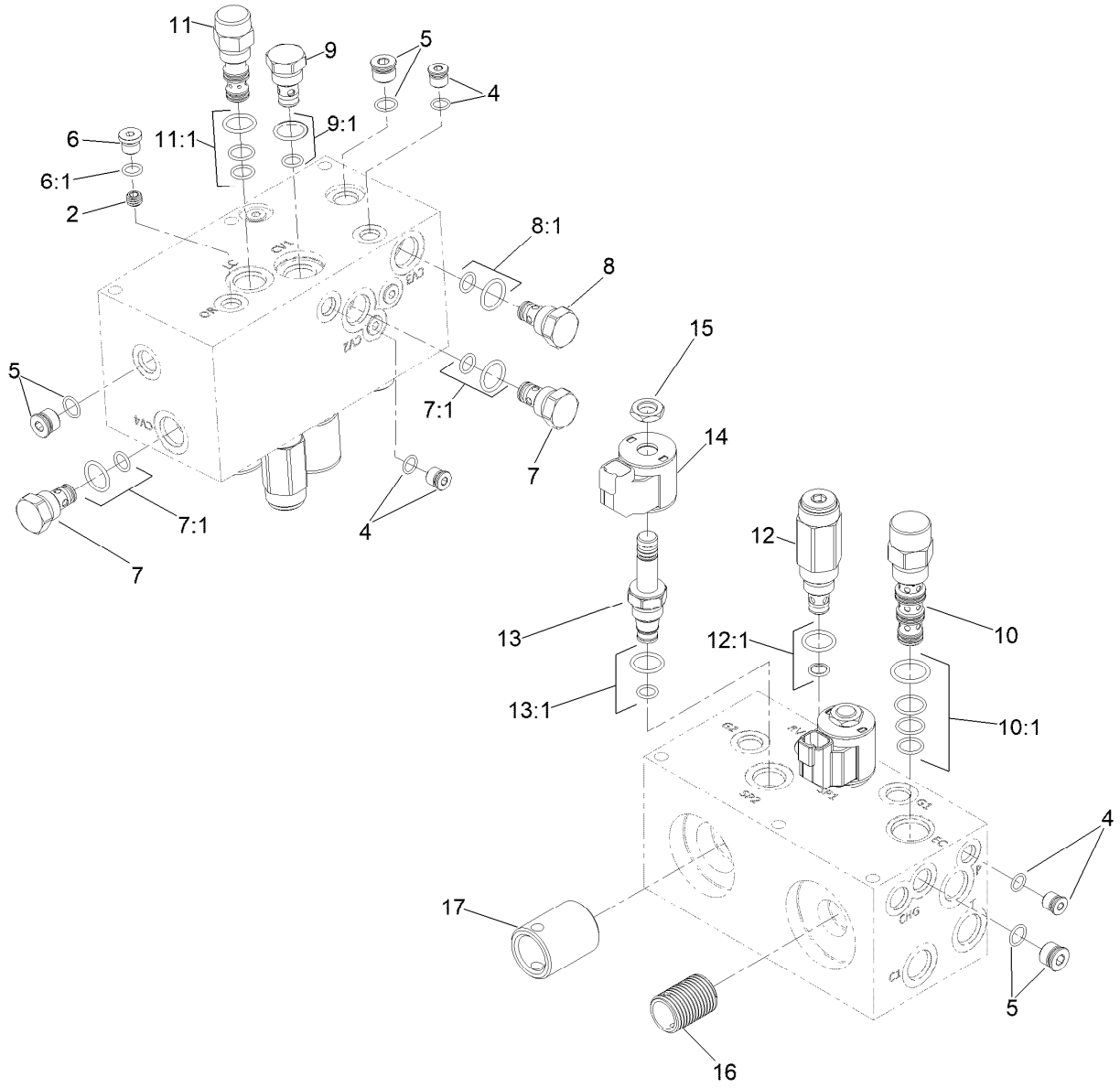
● Not illustrated



Gear Pump Assembly No. 140-8836

Ref.	*Part Number*	*Qty.*	*Description*
1	119-7135	1	Kit-Seal
1:2		1	Shaft Seal ●
1:3		2	Anti-Extrusion Seal ●
1:4		2	Seal ●
1:5		2	Seal Square Section ●

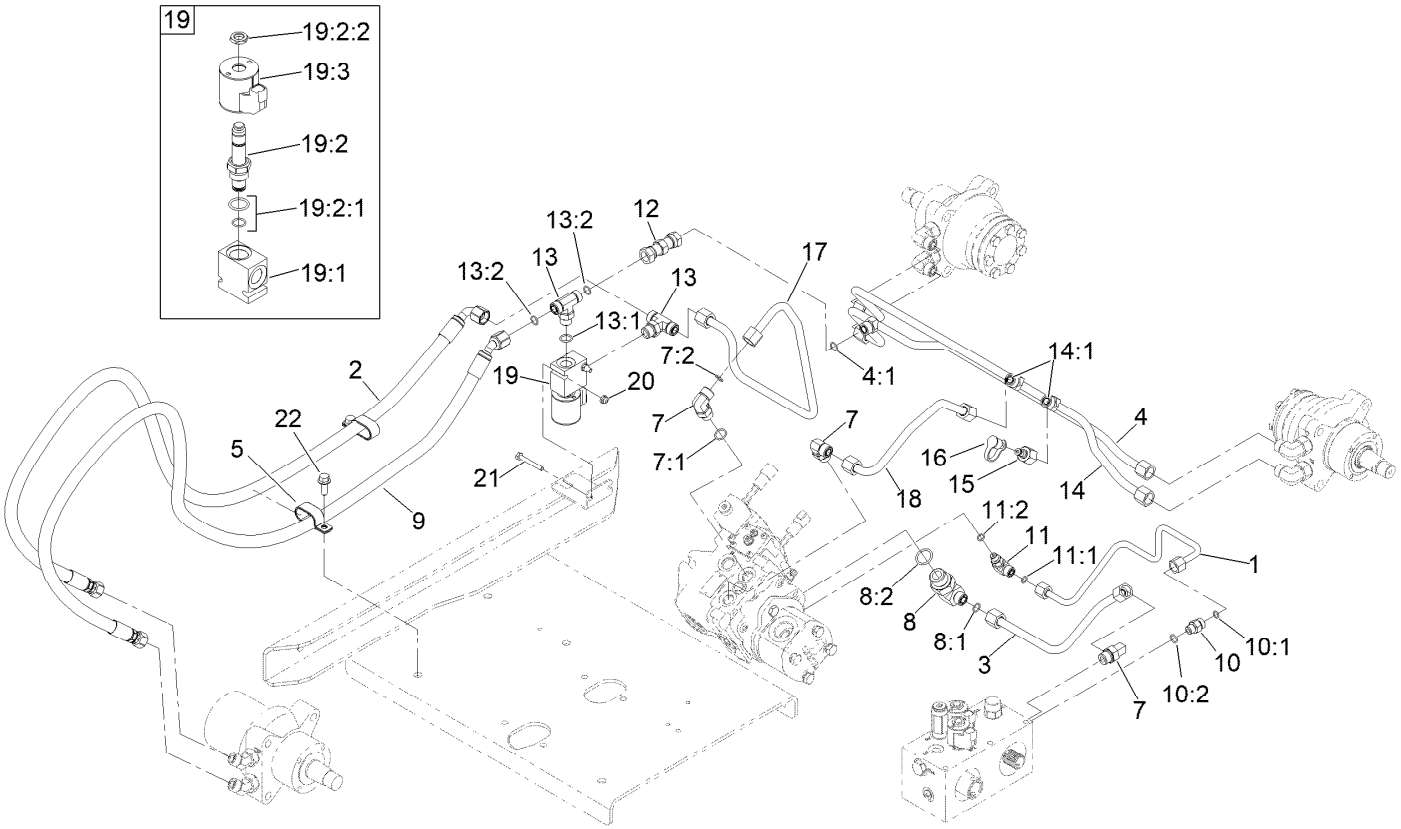
● Not serviced separately



Manifold Assembly No. 140-8614

Ref.	*Part Number*	*Qty.*	*Description*
2	110-0495	1	Plug-Orifice (0.050 Inch)
4	112-9212	6	Plug
5	112-9213	3	Plug
6	139-8642	1	Plug-Socket, SAE
6:1	139-8643	1	Seal Kit
7	107-7524	2	Check Valve ASM
7:1	105-9156	1	Seal Kit
8	139-1213	1	Valve-Check
8:1	105-9156	1	Seal Kit
9	105-9321	1	Check Valve ASM
9:1	105-9156	1	Seal Kit
10	139-8632	1	Spool Valve

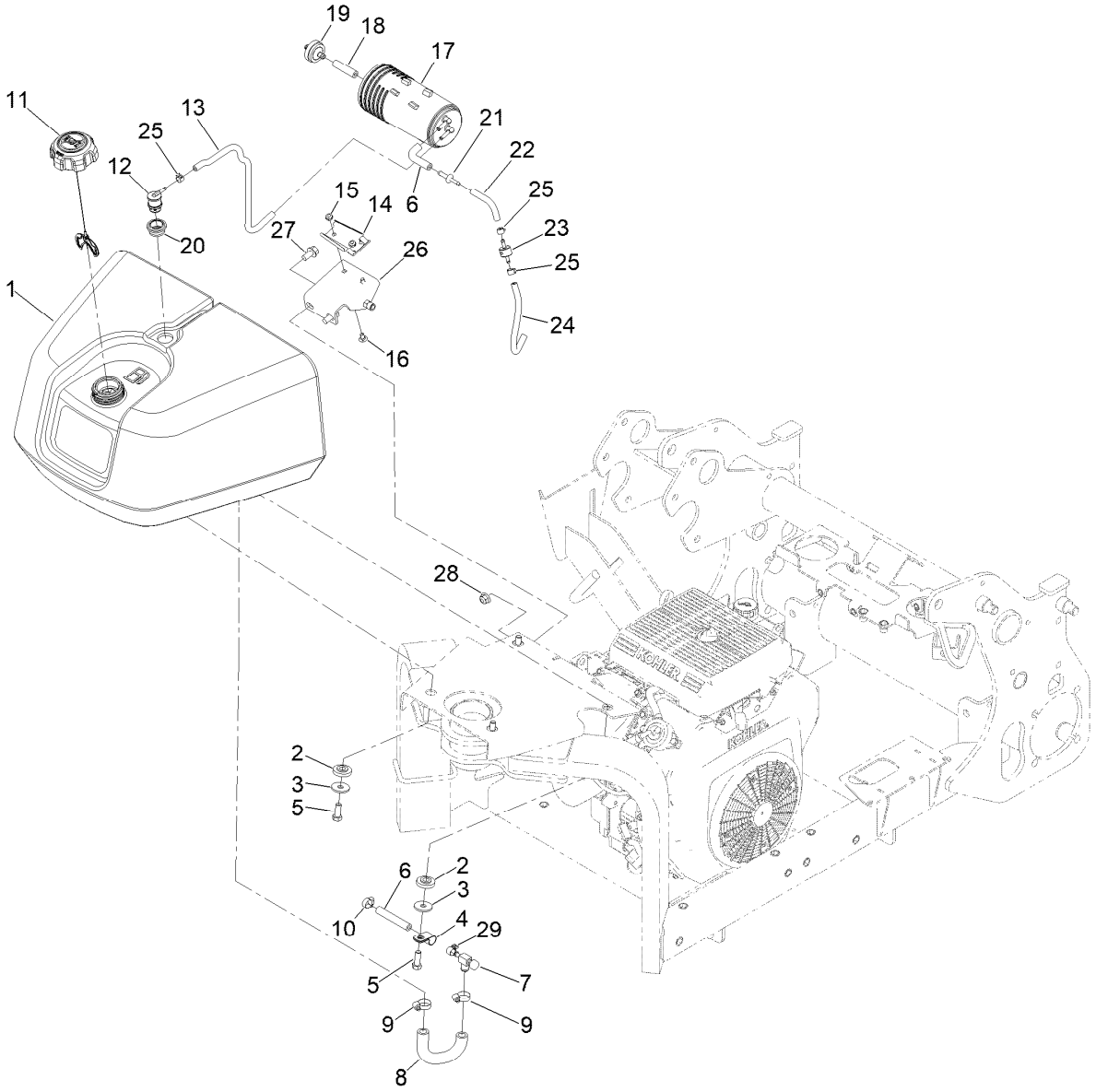
Ref.	*Part Number*	*Qty.*	*Description*
10:1	110-8908	1	Spool Valve Seal Kit
11	139-8631	1	Pilot Logic Element
11:1	110-8773	1	Seal Kit
12	139-8630	1	Valve-Relief
12:1	105-9156	1	Seal Kit
13	139-8629	2	Valve-Electro Proportional
13:1	105-9156	1	Seal Kit
14	112-0197	2	E Coil-12V DC
15	110-2634	2	Nut-Coil
16	139-8633	1	Nipple-Filter
17	125-7551	1	Nipple-Filter



Hydraulic Hose and Tube Assembly

Ref.	*Part Number*	*Qty.*	*Description*
1	140-8866	1	Hydraulic Tube ASM
2	139-7974	1	HYD Hose ASM
3	140-8865	1	Hydraulic Tube ASM
4	106-8818	1	Tube ASM
4:1	237-30	1	O-Ring
5	106-8829	2	R Clamp-Double
7	340-98	3	Fitting-Elbow, 90 DEG
7:1	237-79	1	O-Ring
7:2	237-30	1	O-Ring
8	340-105	1	Fitting-Elbow, 90 DEG
8:1	237-80	1	O-Ring
8:2	237-30	1	O-Ring
9	144-9869	1	Hydraulic Hose ASM
10	340-2	1	Fitting-Straight
10:1	237-22	1	O-Ring
10:2	237-42	1	O-Ring
11	340-97	1	Fitting-Elbow, 90 DEG
11:1	237-22	1	O-Ring
11:2	237-78	1	O-Ring
12	115-9036	1	Fitting-Straight Union

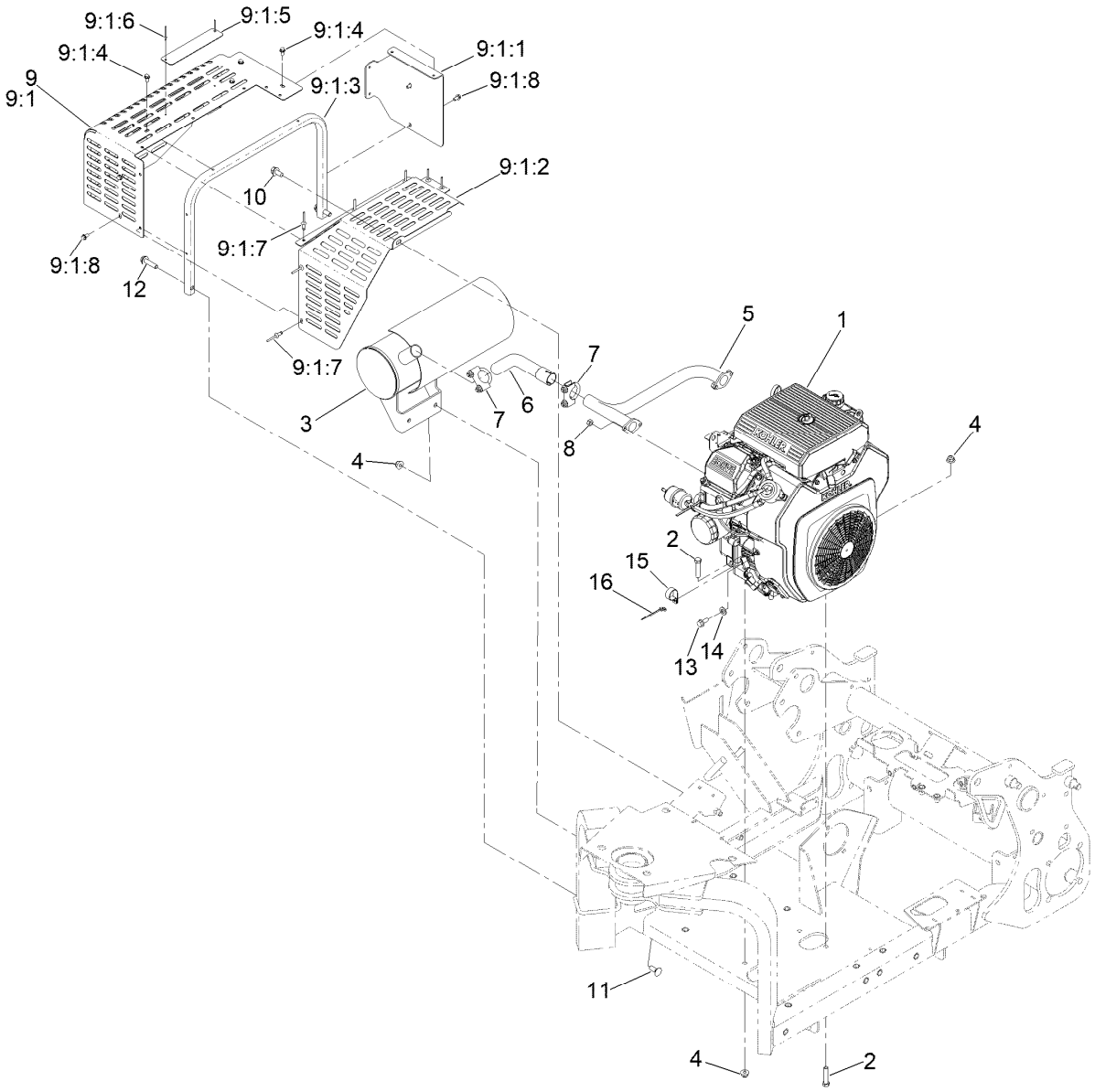
Ref.	*Part Number*	*Qty.*	*Description*
13	340-157	2	Fitting-HYD, Tee
13:1	237-79	1	O-Ring
13:2	237-30	2	O-Ring
14	140-8855	1	Hydraulic Tube ASM
14:1	237-30	2	O-Ring
15	100-5616	1	Fitting
16	354-79	1	Cap-Dust
17	140-8862	1	Hydraulic Tube ASM
18	144-9803	1	Hydraulic Tube ASM
19	140-8867	1	Manifold-Traction
19:1	T56054034	1	Body-Valve, Hydraulic
19:2	T56054036	1	Valve-HYD, Solenoid (W/O Coil)
19:2:1	110-2633	1	Seal Kit
19:2:2	110-2634	1	Nut-Coil
19:3	119-4619	1	Coil-Solenoid
20	104-7201	2	Nut-HF, NI
21	321-11	2	Screw-HH
22	3234-11	2	Screw-HHF



Fuel System Assembly

Ref.	Part Number	Qty.	Description
1	115-5387	1	Tank-Fuel
2	240-11	4	Bushing-Flange
3	63-8410	4	Washer
4	2412-41	1	Clamp-R
5	323-6	4	Screw-HH
6	114-3765	2	Hose-Fuel
7	83-1390	1	Valve-Shut-Off, Fuel
8	108-6818	1	Hose-Fuel, Molded
9	2412-36	2	Clamp-Hose
10	2412-108	1	Clamp-Worm
11	137-4127	1	Cap-Fuel
12	114-0285	1	Valve-Rollover
13	115-4735	1	Hose-Fuel
14	114-0292	1	Bracket-Canister, Carbon
15	3296-56	2	Nut-Lock, NI

Ref.	Part Number	Qty.	Description
16	3229-10	2	Screw-CARR
17	117-1221	1	Canister-Carbon, 800Cc
18	99-9415	1	Hose-Fuel
19	115-7854	1	Filter-Fuel, Inline
20	114-0284	1	Grommet
21	121-0743	1	Adapter-Orifice
22	115-4736	1	Hose-Fuel
23	133-8499	1	Valve-Check, Vacuum
24	51-3217	1	Hose-Fuel
25	2412-146	3	Clamp-Hose
26	144-9870	1	Canaster Bracket ASM
27	3234-1	2	Screw-HHF
28	104-8301	2	Nut-HF, NI
29	145-4564	1	Clamp-Band, Screw

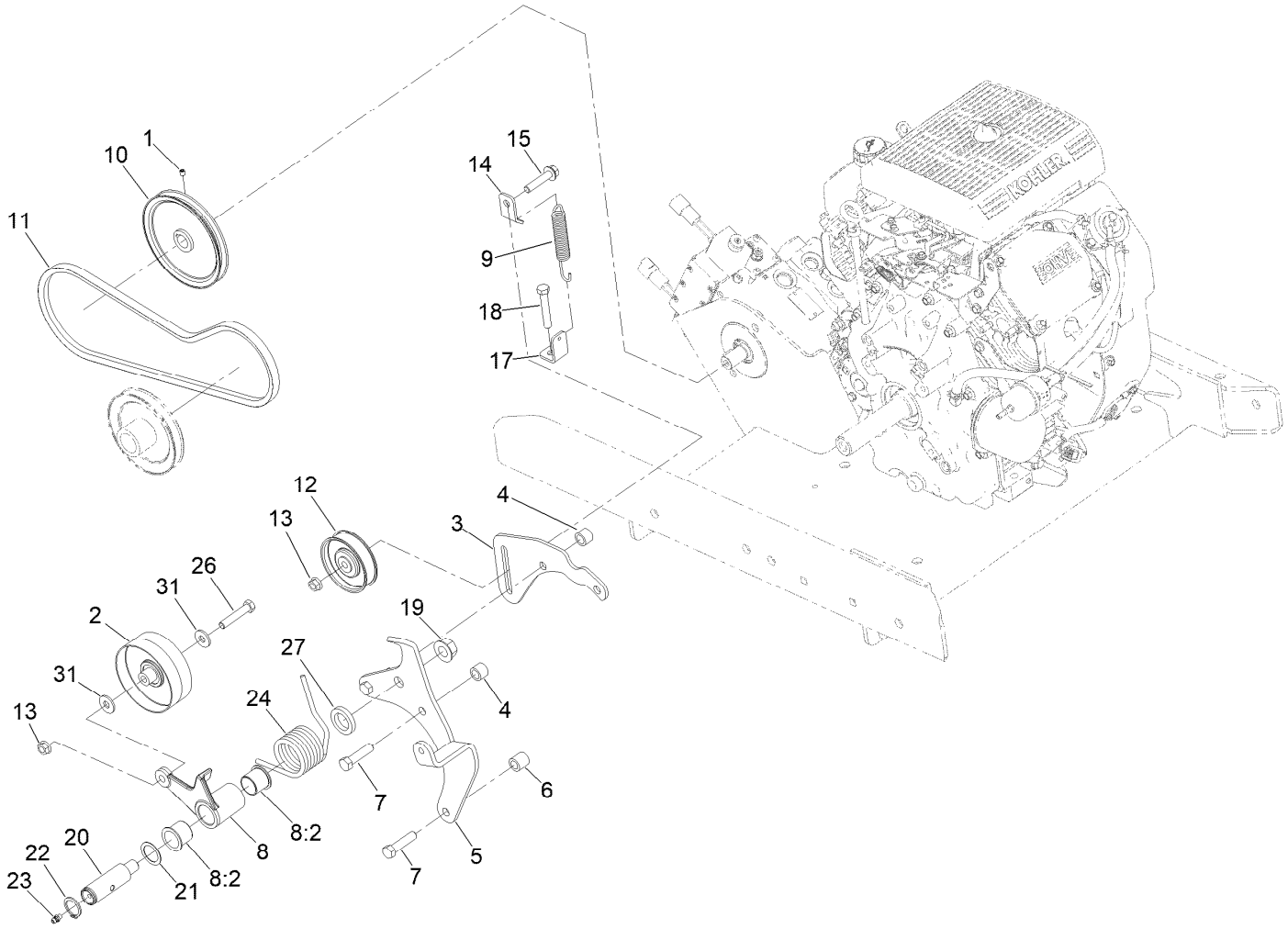


Engine and Muffler Assembly

Ref.	Part Number	Qty.	Description
1	161-9175	1	Engine-Kohler, Ch680-3165
2	323-9	4	Screw-HH
3	106-8859	1	Muffler-Exhaust
4	104-8301	6	Nut-HF, NI
5	106-8858	1	Manifold-Exhaust
6	106-8857	1	Elbow-Exhaust
7	104-4090	2	Clamp-Muffler
8	33014-00	4	Nut-Hex
9	107-7546SP	1	Shield ASM
9:1		1	Shield ASM ■
9:1:1	106-8903-01	1	Shield-Muffler
9:1:2	106-8904-03	1	Shield-Clutch
9:1:3	106-8848-01	1	Tube-Shield, Muffler
9:1:4	106-8906-01	1	Bracket-Shield, Muffler
9:1:5	140-8962	1	Artwork-Plate, Warning, Procore
9:1:6	3269-32	2	Rivet-Pop
9:1:7	93-8744	7	Rivet-Blind
9:1:8	32144-4	10	Screw-HWH
10	3234-1	1	Screw-HHF
11	3231-2	2	Bolt-CARR
12	3234-18	2	Screw-HHF
13	33104-020	1	Screw-HHF
14	33095-00	1	Washer-Flat
15	2412-106	1	Clamp-R
16	3290-381	2	Tie-Cable
99	505-117	2	Oil-Engine ●

● Not illustrated

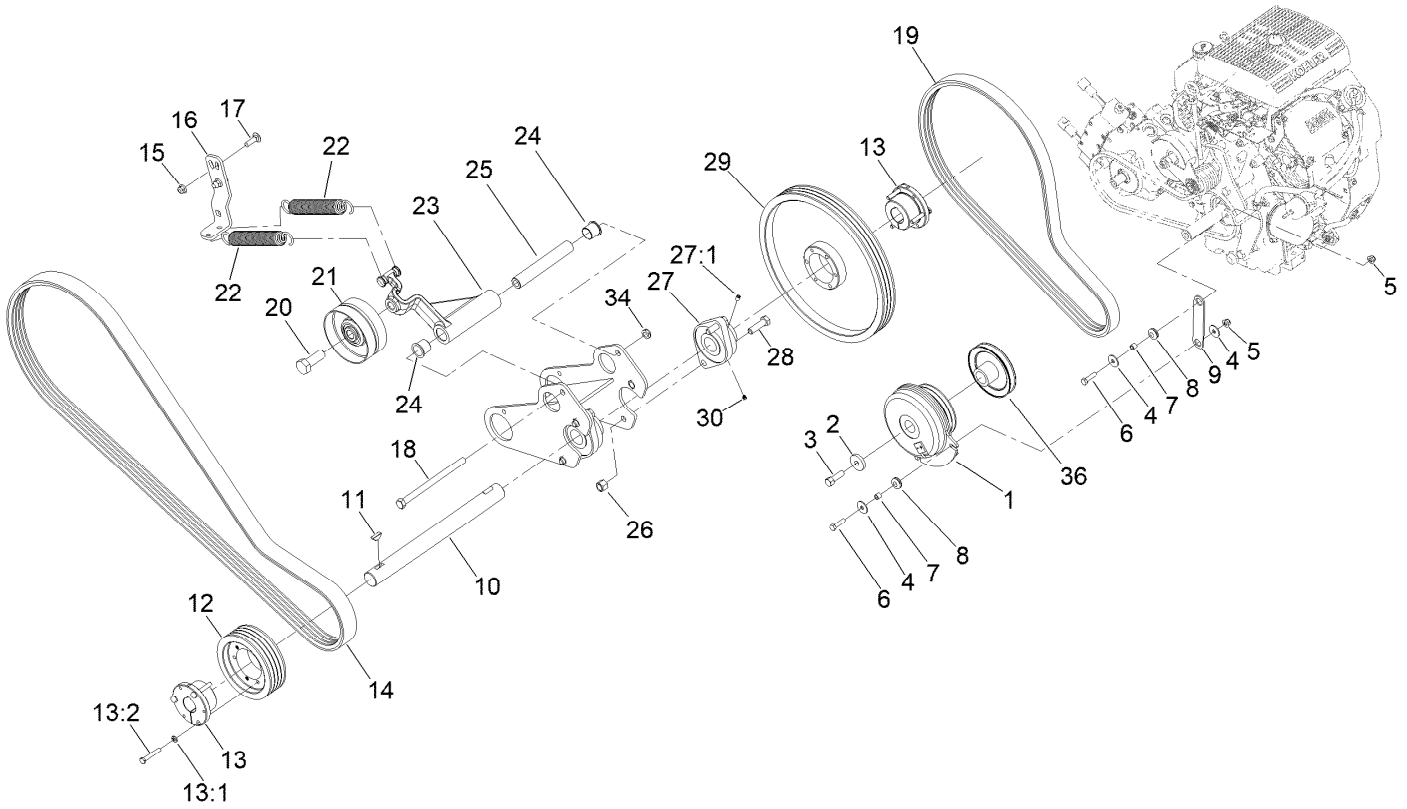
■ Not serviced separately



Idler, Pulley and Belt Assembly

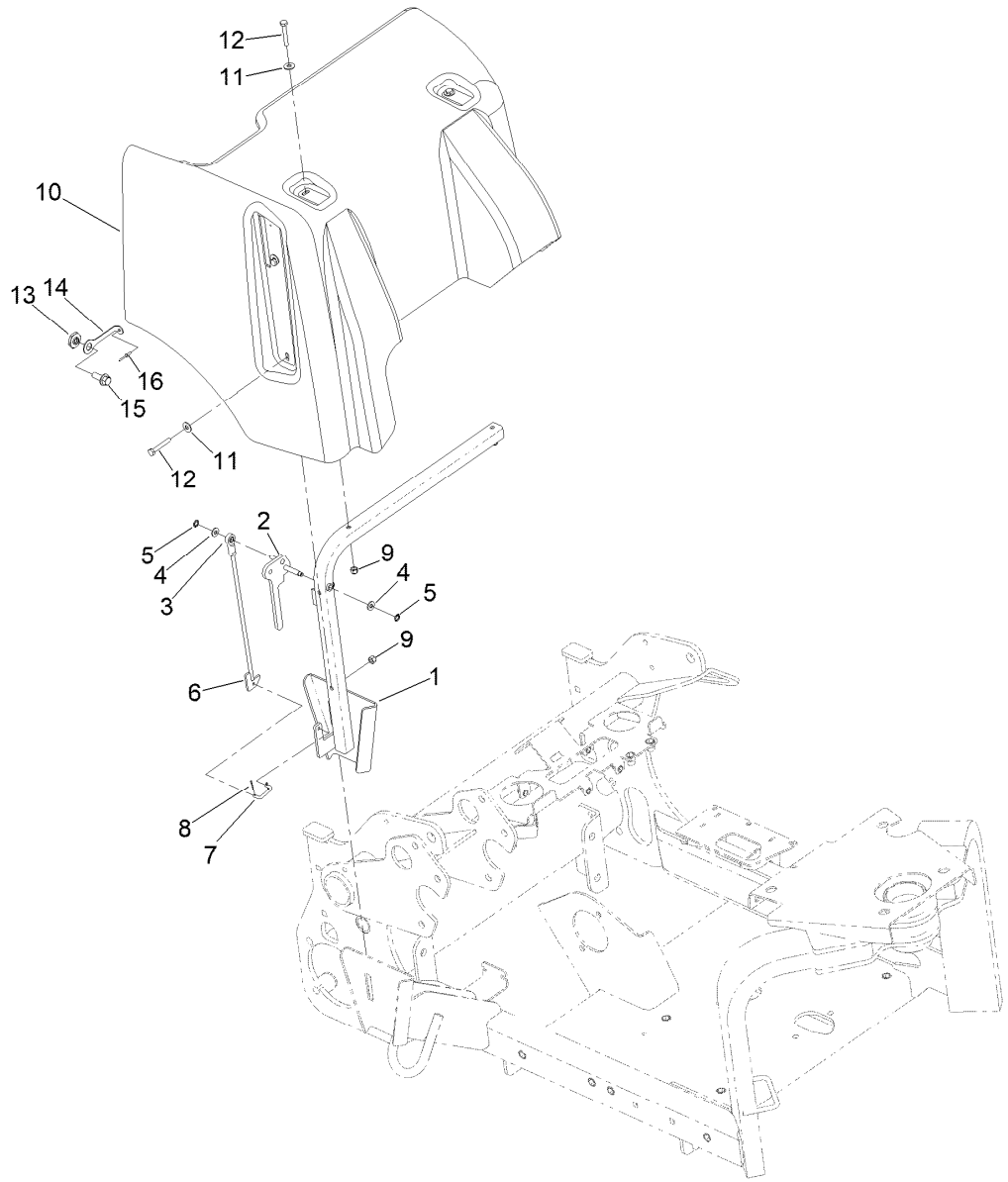
Ref.	Part Number	Qty.	Description
1	3245-7	2	Screw-Set
2	139-6031	1	Pulley-Idler
3	105-1085-03	1	Support-Idler
4	68-5440	2	Spacer
5	115-4724-03	1	Bracket-Mounting, Idler
6	105-0985	1	Spacer-Support, Idler
7	324-7	3	Screw-HH
8	137-1653	1	Idler Arm ASM
8:2	126-1963	2	Bushing-Pivot
9	106-4502	1	Spring-Scraper
10	137-6686	1	Pulley
11	107-7513	1	V-Belt
12	112426	1	Pulley-Idler
13	32128-21	2	Nut-HF Lock

Ref.	Part Number	Qty.	Description
14	107-7588	1	Bracket-Spring
15	3234-19	1	Screw-HHF
17	107-7583	1	Bracket-L
18	104-3396	1	Screw-HH
19	32128-54	1	Nut-HF
20	99-3624	1	Shaft-Pivot, Idler
21	74-1810	1	Washer
22	32151-36	1	Ring-Retaining
23	302-5	1	Fitting-Grease
24	115-3488	1	Spring-Torsion
26	323-10	1	Screw-HH
27	99-3625	1	Spacer-Arm, Idler
31	80-6990	2	Washer-Hardened



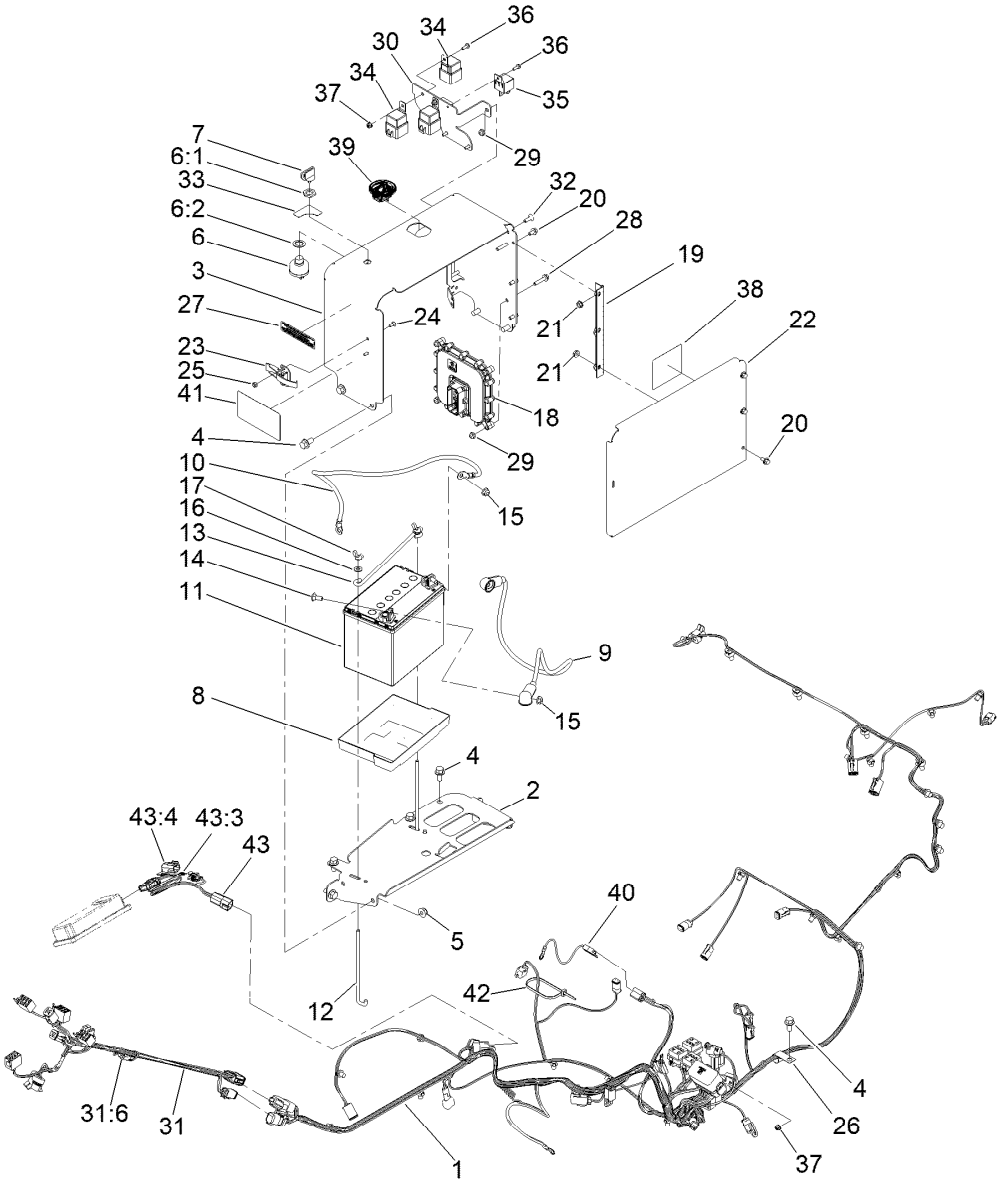
Clutch Assembly

Ref.	Part Number	Qty.	Description
1	138-5986	1	Clutch-Electric
2	1-543610	1	Washer-Flat
3	26-0671	1	Screw-HH
4	3256-82	3	Washer-Flat
5	104-8300	2	Nut-HF, NI
6	322-6	2	Screw-HH
7	1-633545	2	Spacer
8	1-633630	2	Grommet
9	107-3382	1	Strap-Clutch
10	105-0975	1	Jackshaft
11	3257-42	2	Key-Woodruff
12	140-8880	1	Pulley-3V, 4 Groove
13	59-3790	2	Bushing-Lock, Taper
13:1	3253-4	3	Washer-Lock
13:2	120-6000	3	Bolt-TAP, HH
14	140-8882	1	Belt-V, Banded
15	104-8301	2	Nut-HF, NI
16	105-1118-03	1	Arm-Spring, Idler
17	3231-25	2	Bolt-CARR
18	325-36	1	Screw-HH
19	105-0989	1	Belt-3V
20	328-24	1	Screw-HH
21	100-7631	1	Pulley-Idler
22	106-8933	2	Spring-Extension
23	105-1132-03	1	Arm-Idler
24	126-1963	2	Bushing-Pivot
25	105-1172	1	Tube-Pivot, Idler
26	3296-23	4	Nut-Lock, NI
27	105-0962	2	Bearing-Mount, Flange
27:1	3246-17	1	Setscrew-HSH
28	325-7	4	Screw-HH
29	105-0977	1	Pulley-3V
30	302-59	2	Plug-EXT Hex Spl
34	3296-45	1	Nut-Hex
36	107-3379	1	Pulley



Hood Assembly

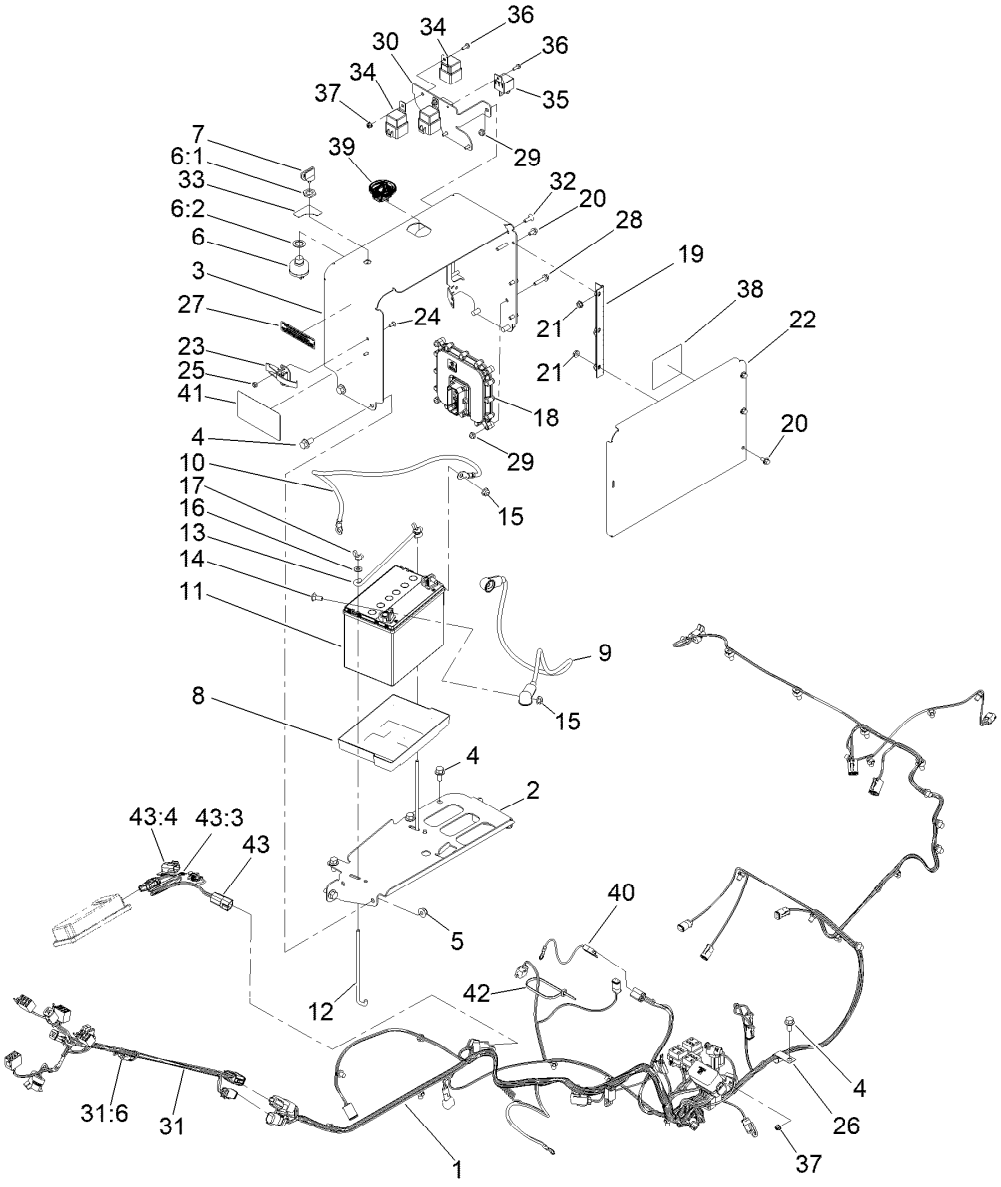
Ref.	Part Number	Qty.	Description
1	106-8846-03	1	Frame-Hood
2	115-4737-03	1	Lever-Hood
3	2411-41	1	Rod End-Ball Joint
4	3256-22	2	Washer-Flat
5	104-8310	2	Ring-Retaining
6	106-8928	1	Hook ASM
7	69-9140	1	Link-Lever, Valve
8	3272-1	2	Pin-Cotter
9	3296-42	4	Nut-Lock, NI
10	140-8780	1	Hood-Front
11	100-2400	4	Washer
12	321-10	4	Screw-HH
13	117-8347	1	Nut-Shoulder
14	117-8339	1	Lanyard-3 Inch
15	3234-42	1	Screw-HHF
16	3290-55	1	Rivet-Pop



Electrical Assembly

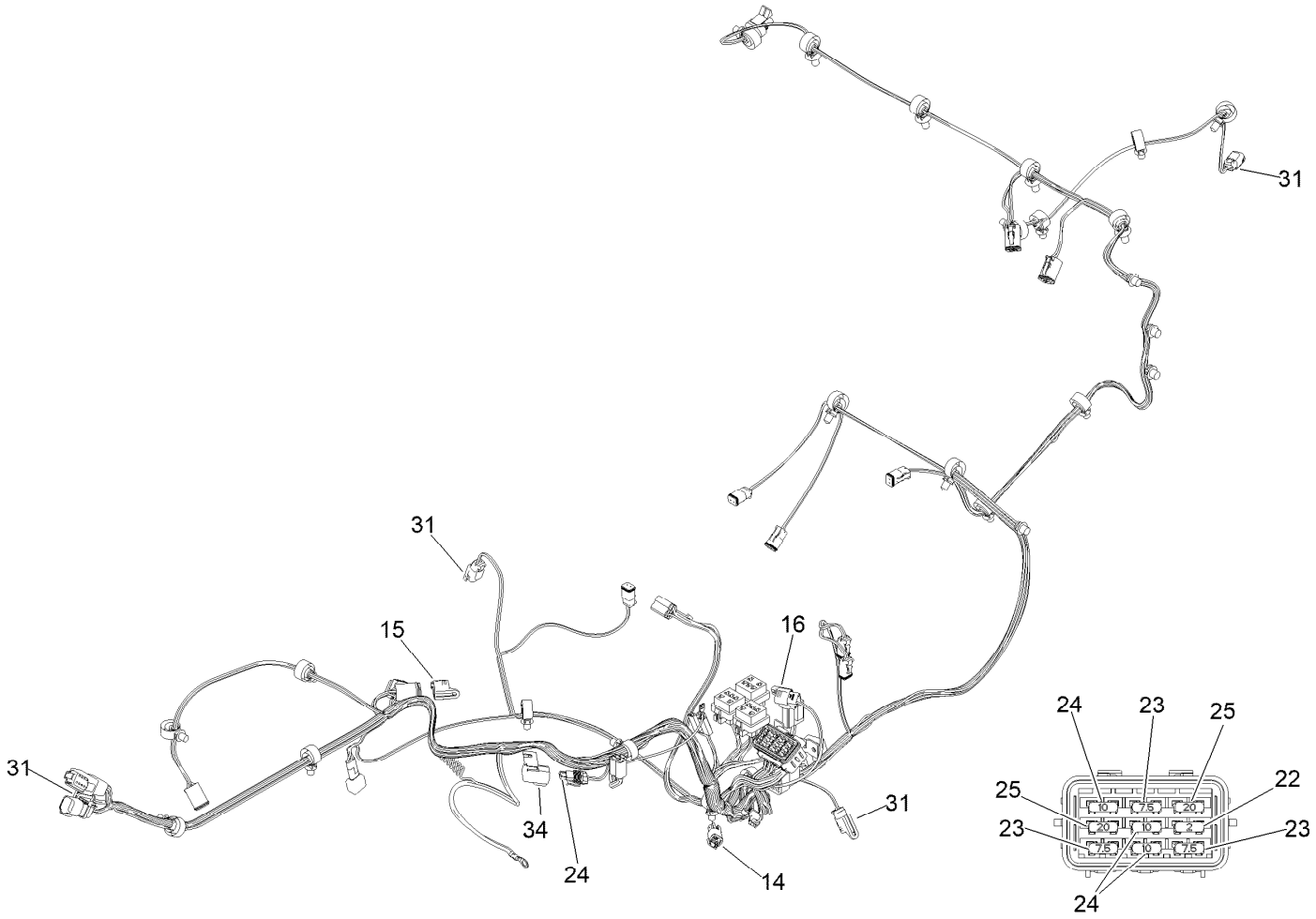
Ref.	Part Number	Qty.	Description
1	122-1868	1	Harness-Wire, Pc648 Whm
2	140-8845-01	1	Base-Battery
3	140-8621-01	1	Console
4	3234-1	10	Screw-HHF
5	104-8301	4	Nut-HF, NI
6	83-0020	1	Switch-Ignition
6:1	218-461	1	Nut-HH
6:2	3254-5	1	Washer-Lock
7	63-8360	1	Key-Ignition
8	106948	1	Tray-Battery
9	106-8945	1	Cable-Battery, Positive
10	106-8946	1	Cable-Battery, Negative
11	99-7421	1	Battery- Wet, 12V, 300 CCA
12	100-6435	2	Post-Battery
13	100-6434	1	Rod-Hold Down, Battery
14	3230-1	2	Bolt-CARR
15	104-8300	2	Nut-HF, NI
16	3256-23	2	Washer-Plain
17	1-543792	2	Wingnut
18	127-2770	1	Controller
19	106-8908	1	Hinge-Console

Ref.	Part Number	Qty.	Description
20	3234-13	6	Screw-HHF
21	32128-33	6	Nut-HF
22	140-8701-01	1	Cover-Console
23	249-21	1	Clamp-Slotted
24	104-1450	2	Bolt-CARR
25	3296-2	2	Nut-Lock, NI
26	2412-150	1	Clip-J
27	133-8062	1	Decal-Spark Arrestor
28	127-8639	4	Screw-HHF
29	104-7201	5	Nut-HF, NI
30	140-8754	1	Brkt-Controls
31	122-2170	1	Harness-Wire, Pc648, Console
31:6	32180-282	1	Conn, Res, 120 Ohm
32	1-807512	1	Bolt-CARR
33	130-7360	1	Decal-Ignition
34	99-7430	4	Relay-Mini
35	99-7435	1	Relay
36	32105-23	5	Screw
37	120-4578	5	Nut-HF
38	139-8740	1	Decal-Fuse



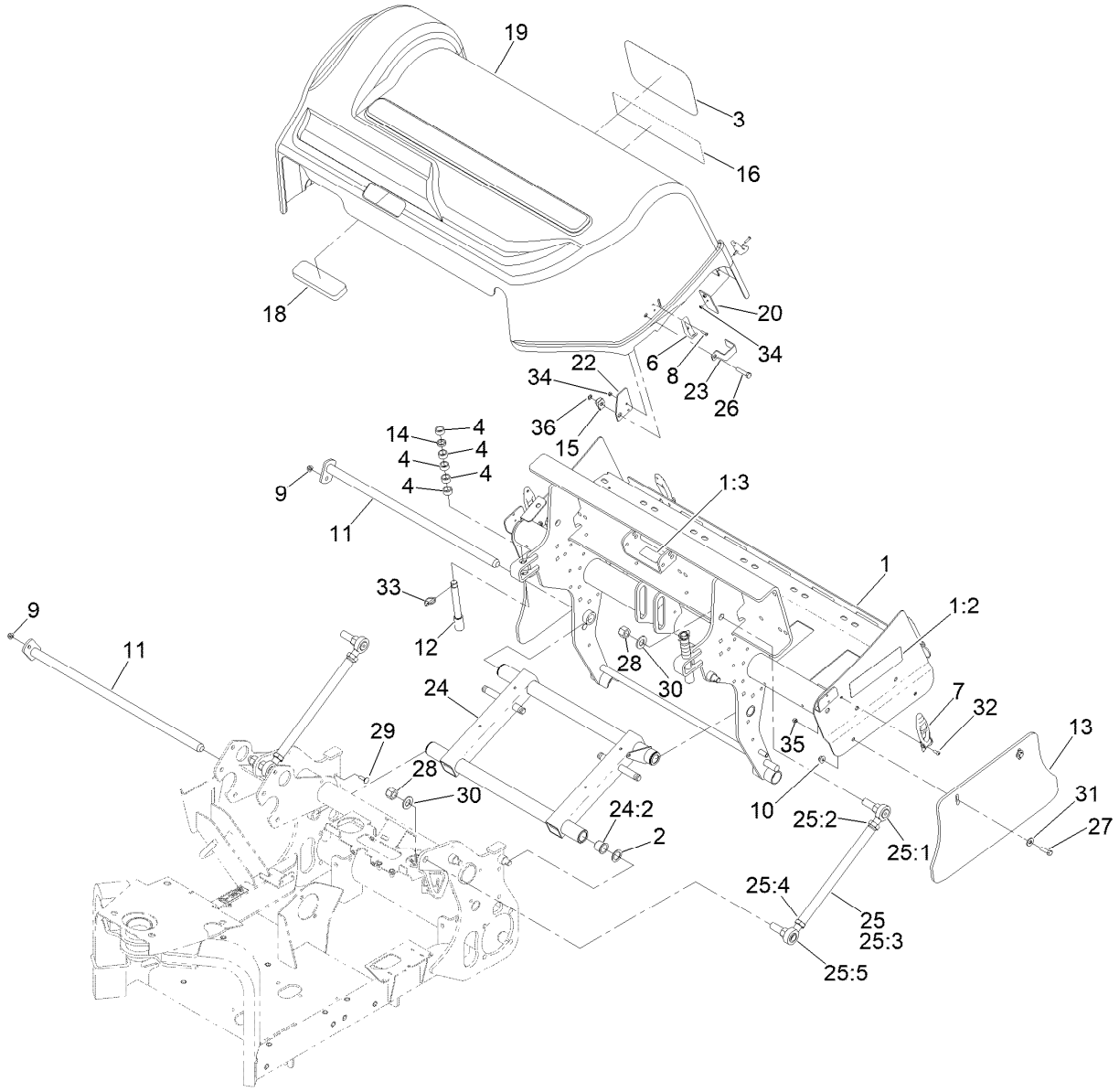
Electrical Assembly (continued)

Ref.	Part Number	Qty.	Description
39	161-6970	1	Tachometer-Inductive, Round
40	108-9455	1	Harness-Wire, Fusible Link
41	139-8653	1	Decal -Service Instructions
42	3290-379	9	Tie-Cable
43	122-2160	1	Harness-Wire
43:3	121-8861	1	Fuse-Mini Blade, 2 Amp
43:4	32180-101	1	Cover-Fuse, Single



Wire Harness Assembly No. 122-1868

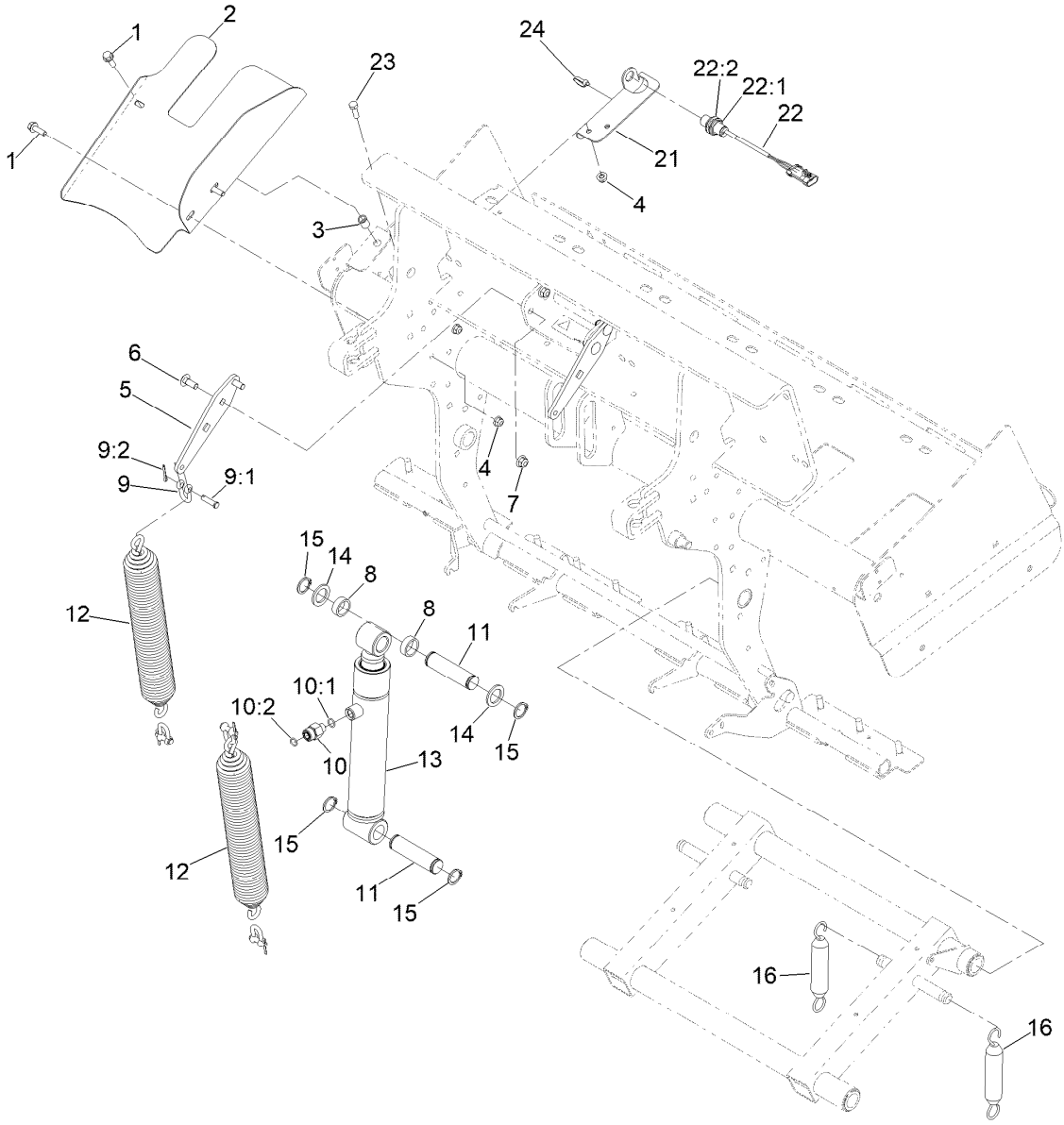
Ref.	*Part Number*	*Qty.*	*Description*
14	32180-282	1	Conn, Res, 120 Ohm
15	32180-156	1	Cap-Plug, 6 Way
16	32180-089	1	Cap-Plug, 3 Way
22	121-8861	1	Fuse-Mini Blade, 2 Amp
23	121-8865	3	Fuse-Mini Blade, 7.5 Amp
24	121-8866	4	Fuse-Mini Blade, 10 Amp
25	121-8868	2	Fuse-Mini Blade, 20 Amp
31	32180-091	4	Cap-Dust, 2 Way
34	32180-101	1	Cover-Fuse, Single



Rear Frame and Hood Assembly

Ref.	Part Number	Qty.	Description
1	140-8571	1	Rear Frame ASM
1:2	140-8960	3	Decal-Warning, Procore
1:3	93-6696	1	Decal-Warning
2	10-8110	4	Washer-Thrust
3	67-7310	1	Decal
4	74-3730	10	Spacer-Spindle, Rear
6	103-2897	4	Latch-Catch
7	103-2898	4	Latch-Rubber
8	104-2408	8	Screw-HSBH
9	104-8300	2	Nut-HF, NI
10	104-8301	4	Nut-HF, NI
11	105-0950	2	Pivot Shaft ASM
12	105-1004	2	Pin-Stop, Depth
13	105-1069	2	Shield-Side
14	105-3828	2	Spacer
15	105-4886	2	Nut-Tinnerman
16	140-8964	1	Decal-Procore 648S
18	107-7507	3	Pad-Foam
19	144-9858	1	Hood - Rear
20	110-1499	2	Plate-Reinforcement
22	110-4672	2	Plate-Reinforcement

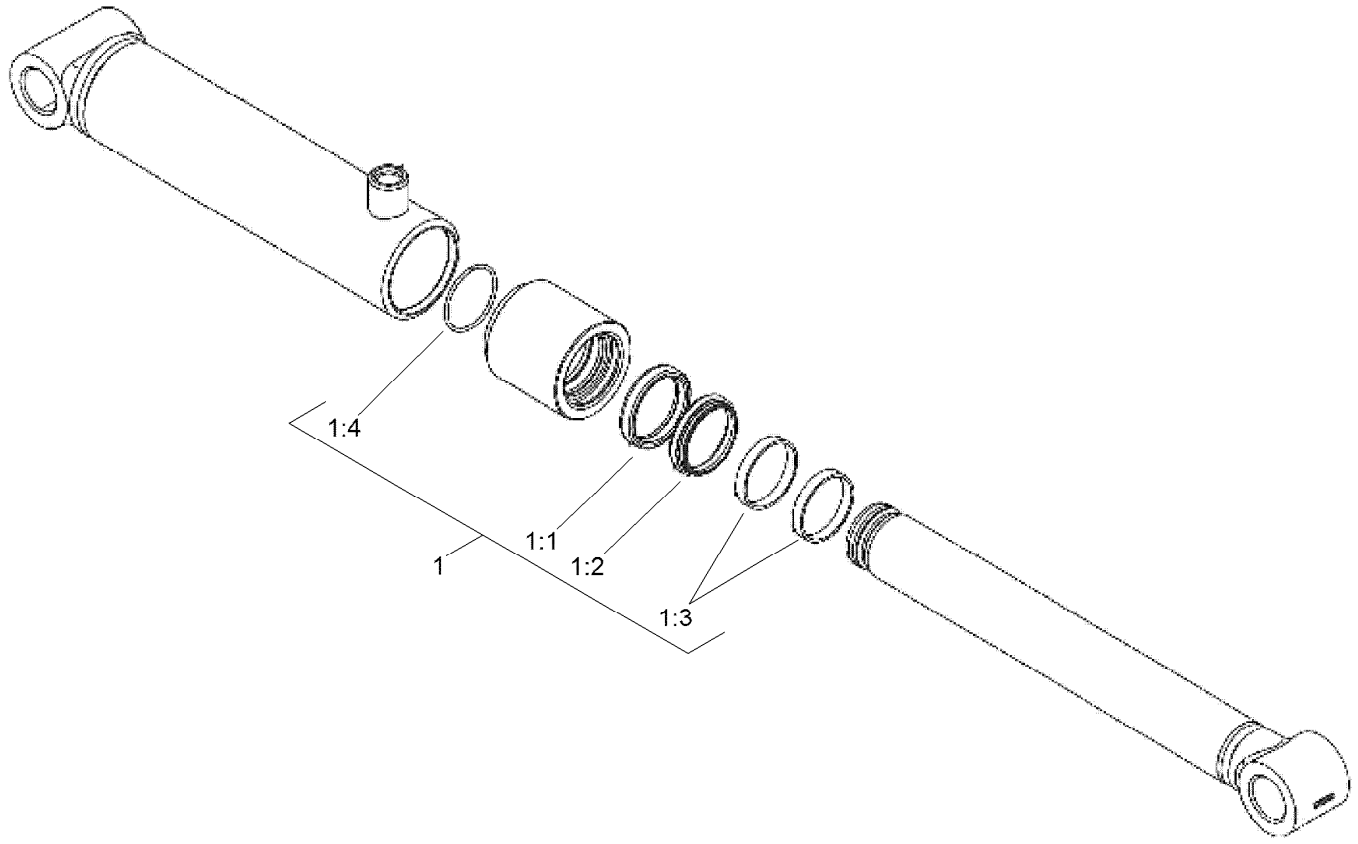
Ref.	Part Number	Qty.	Description
23	110-4673	2	Lock-Latch, CE
24	139-7991	1	H-Frame ASM
24:2	126-1963	4	Bushing-Pivot
25	114-2702	2	Link ASM
25:1	105-1025	1	End-Rod
25:2	3220-17	1	Nut-Jam, LH
25:3	105-1007	1	Link-Upper
25:4	3220-7	1	Nut-Jam
25:5	2411-40	1	End-Rod
26	323-53	2	Screw-HH
27	323-7	4	Screw-HH
28	3296-50	4	Nut-Lock, NI
29	3230-2	2	Bolt-CARR
30	92-5836	4	Washer
31	3256-4	4	Washer-Flat
32	3274-31	4	Screw-HSBH
33	3290-495	2	Pin-Klik
34	3296-2	8	Nut-Lock, NI
35	3296-42	4	Nut-Lock, NI
36	32151-72	2	Ring-Retaining



Belt Shield Assembly

Ref.	Part Number	Qty.	Description
1	3234-17	3	Screw-HHF
2	105-1092-01	1	Shield-Top, Belt
3	32148-7	1	Nut-Clinch
4	104-8300	4	Nut-HF, NI
5	105-1190-01	2	Plate-Tension, Spring
6	3231-2	4	Bolt-CARR
7	104-8301	4	Nut-HF, NI
8	88-7530	2	Spacer
9	282-4	4	Shackle
9:1	283-6	1	Pin-Clevis
9:2	3272-11	1	Pin-Cotter
10	340-5	1	Fitting-Straight
10:1	237-42	1	O-Ring

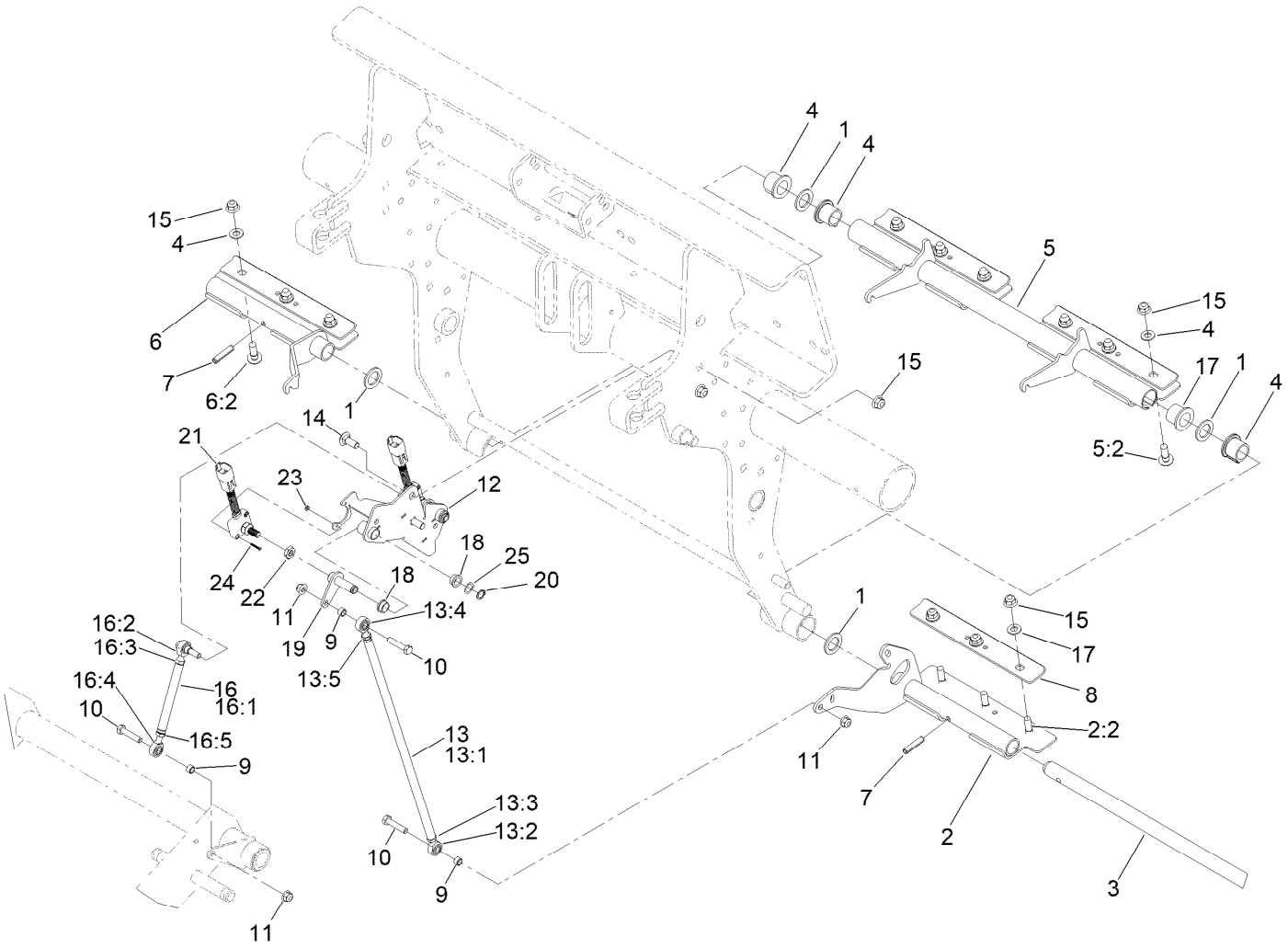
Ref.	Part Number	Qty.	Description
10:2	237-30	1	O-Ring
11	105-1031	2	Pin-Cylinder
12	105-1156-03	2	Spring-Extention
13	140-2205	1	Cylinder-Hydraulic
14	256-115	2	Washer-Thrust
15	32151-36	4	Ring-Retaining
16	66-4270	2	Spring-Extension
21	140-2277	1	Bracket-Sensor
22	115-0282	1	Proximity Sensor ASM
22:1	117-3207	2	Nut-Hex
22:2	117-3208	2	Washer-Lock, Internal Tooth
23	322-5	2	Screw-HH
24	3290-378	1	Tie-Cable



Hydraulic Cylinder Assembly No. 140-2205

Ref.	*Part Number*	*Qty.*	*Description*
1	140-2207	1	Seal Kit
1:1		1	Rod Seal ●
1:2		1	Rod Wiper ●
1:3		2	Wear Ring ●
1:4		1	Wire Ring ●

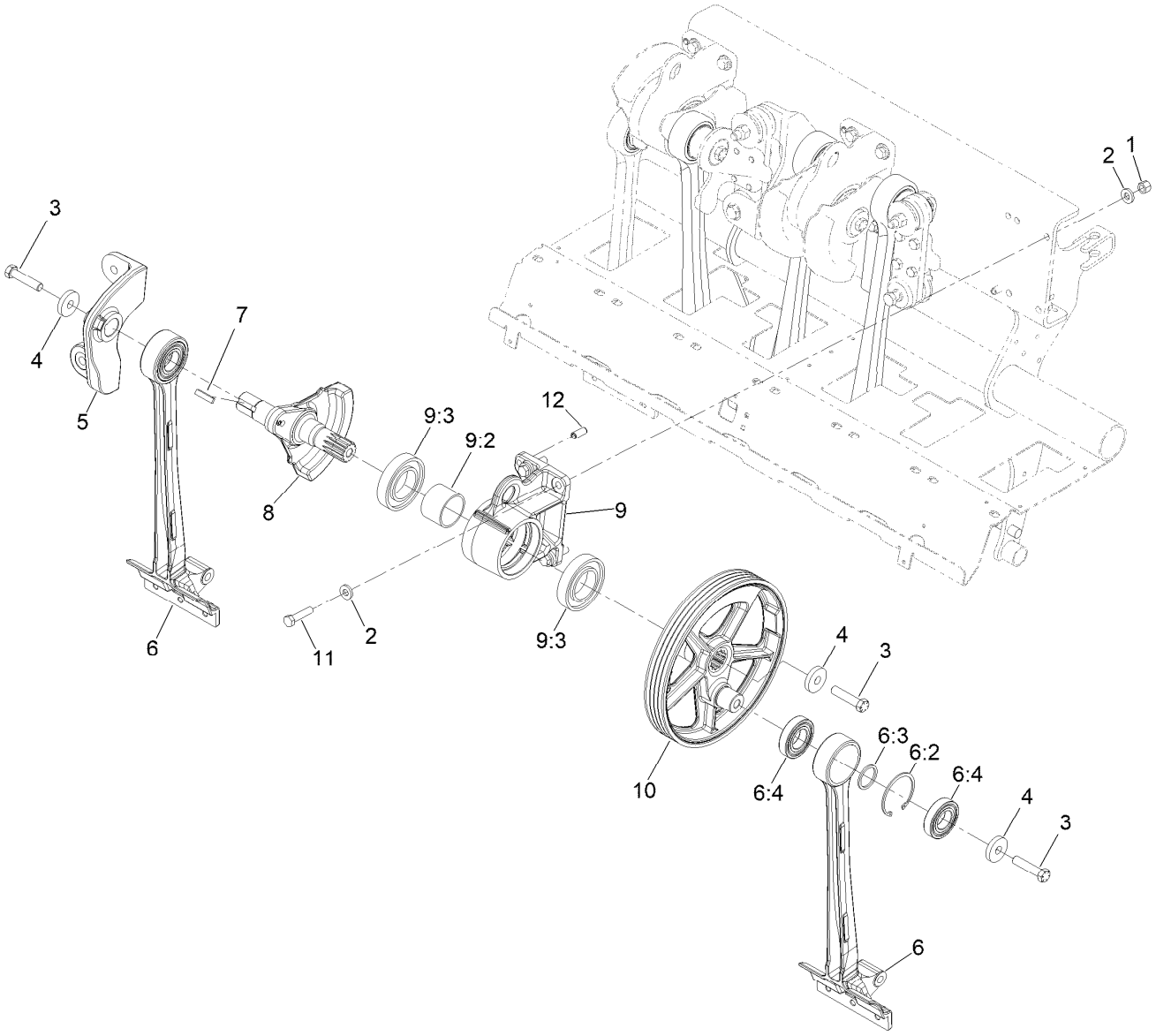
● Not serviced separately



Turf Guard Mount Assembly

Ref.	Part Number	Qty.	Description
1	3-7898	4	Washer-Thrust
2	140-6451	1	Bracket ASM-Turf Guard, LH
2:2	125-3318	3	Screw-Neck, Rib
3	105-1024	1	Shaft-Guard, Turf
4	107-7581	4	Bushing-Flange, Keyed
5	140-6460	1	Bracket ASM-Turf Guard, Center
5:2	125-3318	6	Screw-Neck, Rib
6	140-6450	1	Bracket ASM-Turf Guard, RH
6:2	125-3318	3	Screw-Neck, Rib
7	32121-25	2	Pin-Roll
8	110-4274-03	4	Clamp-Guard, Turf
9	92-3133	4	Spacer-Lever, Traction
10	322-7	4	Screw-HH
11	104-8300	4	Nut-HF, NI
12	140-8661-01	1	Sensor Bracket ASM
13	140-2252	1	Control Rod ASM
13:1	139-7994	1	Rod-Control, Depth
13:2	2411-52	1	Bearing-Rod End, RH
13:3	3220-2	1	Nut-Hex Jam

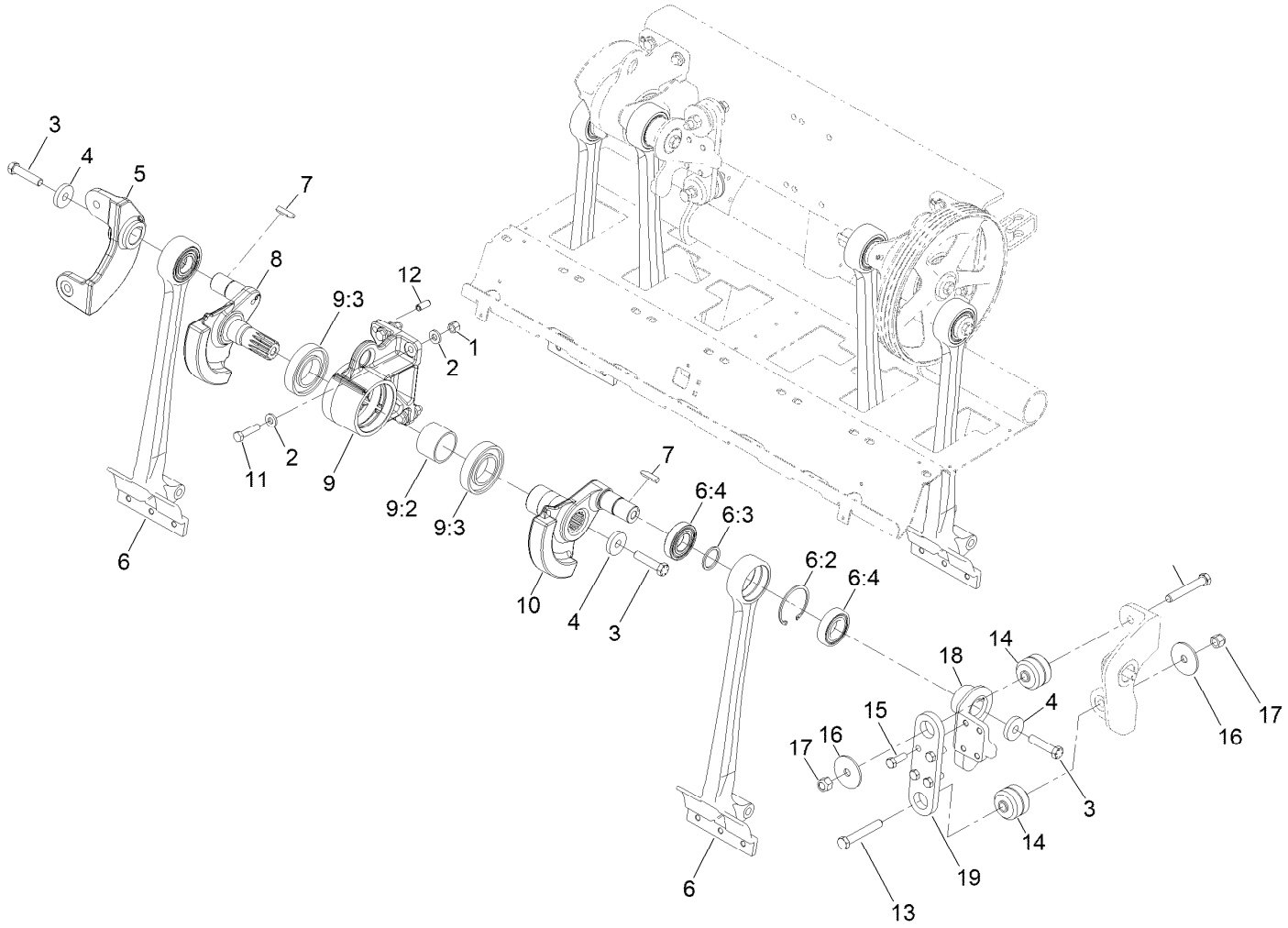
Ref.	Part Number	Qty.	Description
13:4	2411-53	1	Bearing-Rod End, LH
13:5	3220-20	1	Nut-Jam
14	3231-2	2	Bolt-CARR
15	104-8301	14	Nut-HF, NI
16	140-8619	1	Control Rod ASM
16:1	140-8618	1	Rod-Control, Sensor
16:2	2411-52	1	Bearing-Rod End, RH
16:3	3220-2	1	Nut-Hex Jam
16:4	2411-53	1	Bearing-Rod End, LH
16:5	3220-20	1	Nut-Jam
17	3256-24	12	Washer-Plain
18	256-156	4	Bushing-Flange
19	139-7999	2	Lever ASM
20	32151-61	2	Ring-Retaining
21	122-0914	2	Sensor-Rotary, Body/Magnet Matched Set
22	112-8617	2	Nut-Hex
23	3296-52	4	Nut-Lock, NI
24	140-8959	4	Screw-Fht
25	108473	2	Washer-Wave



RH Crankarm Assembly

Ref.	Part Number	Qty.	Description
1	3296-23	4	Nut-Lock, NI
2	107-3395	8	Washer-Hardened
3	110-4614	3	Screw-HH
4	105-1016	3	Washer-Hardened
5	110-4567	1	Coupling-No. 2
6	140-8809	2	Stomper Arm ASM
6:2	32151-76	1	Ring-Retaining, Internal
6:3	110-4557	1	Spacer-Bearing
6:4	140-8808	2	Bearing

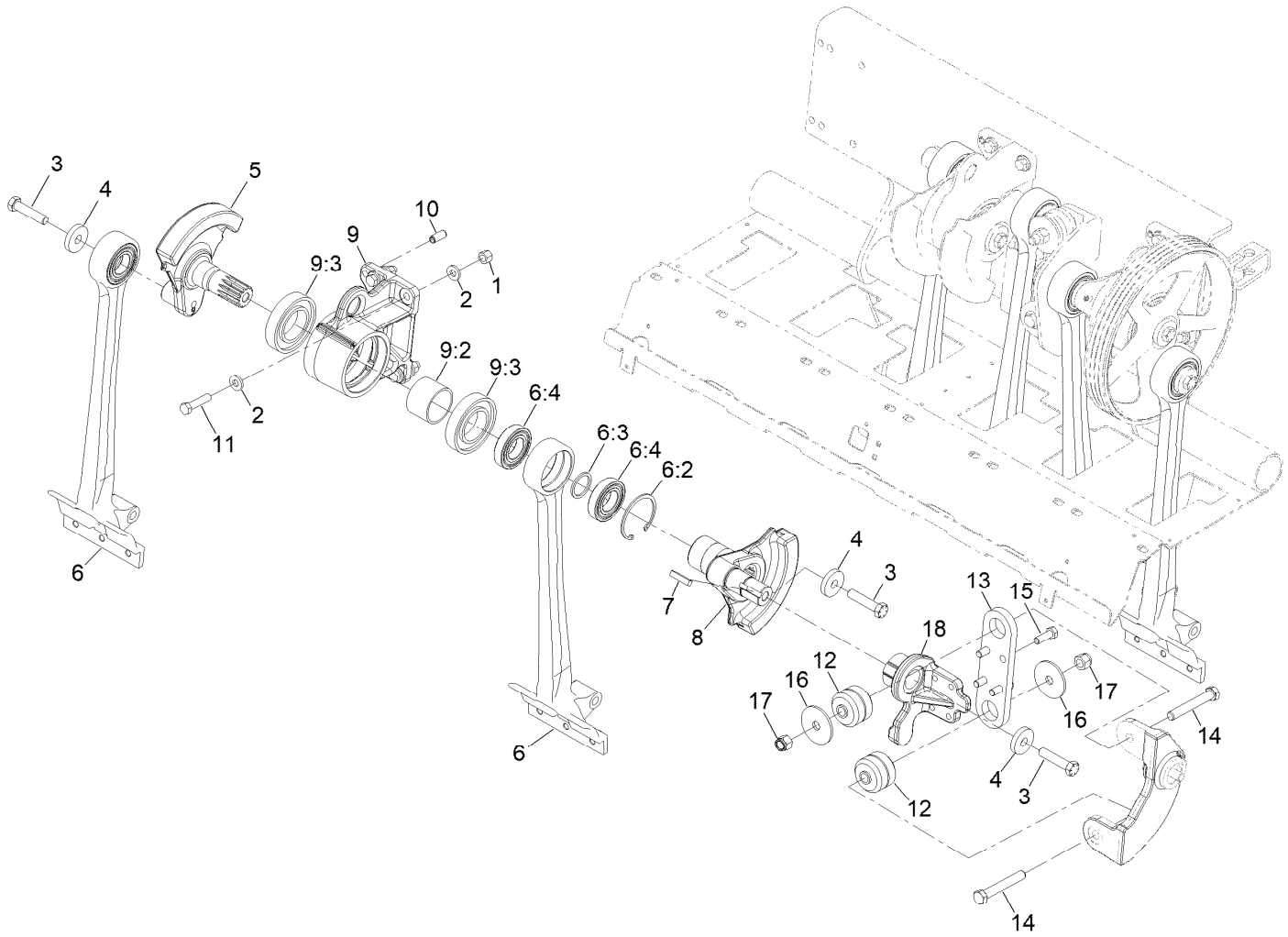
Ref.	Part Number	Qty.	Description
7	110-4546	1	Key-Square
8	110-4571	1	Crankarm-No. 2, 4, 6
9	115-4703	1	Housing ASM
9:2	105-1017	1	Spacer
9:3	105-0965	2	Bearing-Ball
10	114-1458	1	Pulley-Crankshaft
11	325-9	4	Screw-HH
12	105-1041	2	Pin-Spring



Center Crankarm Assembly

Ref.	Part Number	Qty.	Description
1	3296-23	4	Nut-Lock, NI
2	107-3395	8	Washer-Hardened
3	110-4614	3	Screw-HH
4	105-1016	3	Washer-Hardened
5	110-4569	1	Coupling-No.4
6	140-8809	2	Stomper Arm ASM
6:2	32151-76	1	Ring-Retaining, Internal
6:3	110-4557	1	Spacer-Bearing
6:4	140-8808	2	Bearing
7	110-4546	2	Key-Square
8	110-4571	1	Crankarm-No. 2, 4, 6
9	115-4703	1	Housing ASM

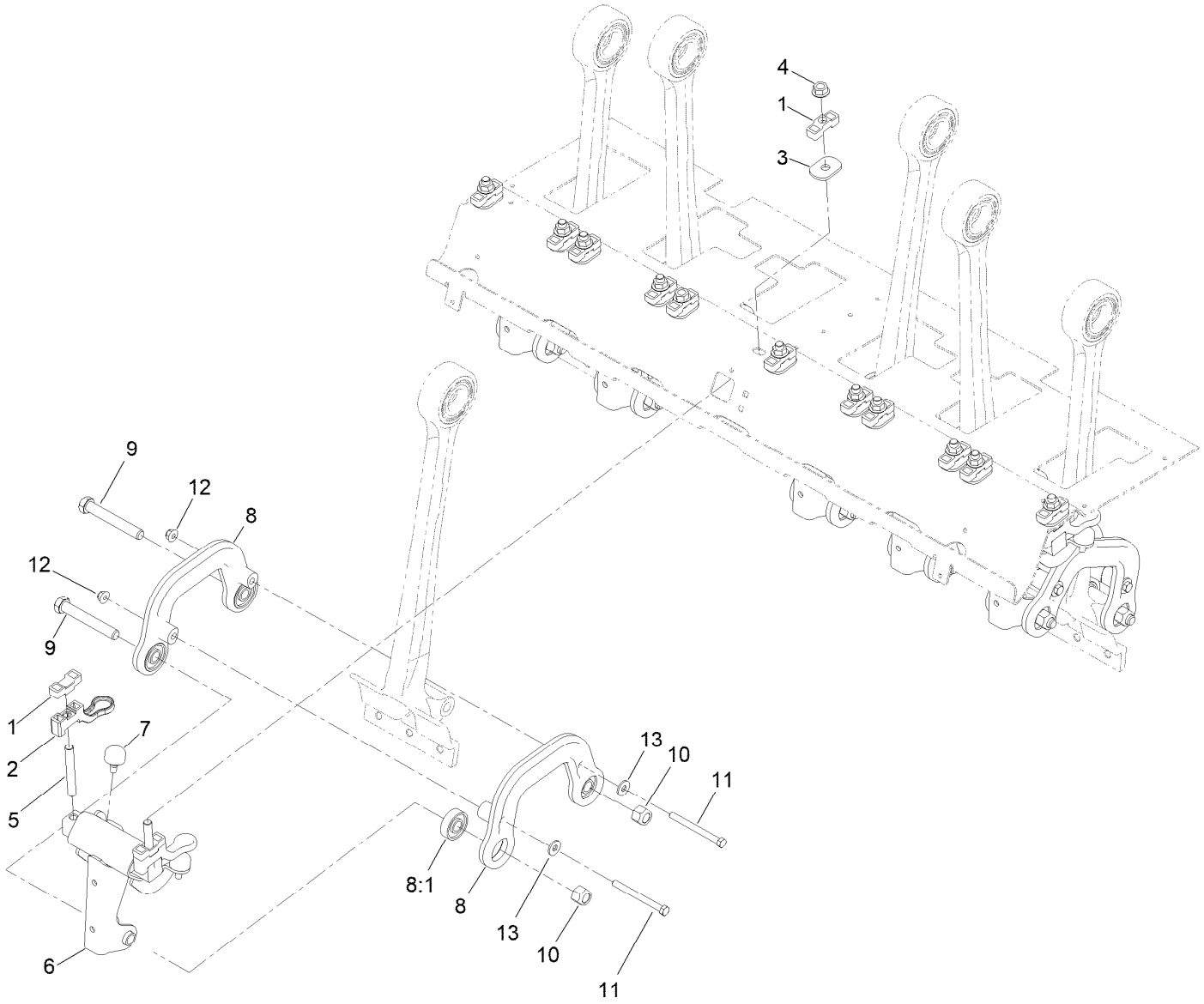
Ref.	Part Number	Qty.	Description
9:2	105-1017	1	Spacer
9:3	105-0965	2	Bearing-Ball
10	110-4572	1	Crankarm-No. 3, 5, 7
11	325-9	4	Screw-HH
12	105-1041	2	Pin-Spring
13	327-29	2	Screw-HH
14	105-0963	2	Mount-ISO, Crank
15	325-6	4	Screw-HH
16	110-4549	2	Washer-Snubbing
17	3296-53	2	Nut-Lock, NI
18	110-4568	1	Coupling-No. 3
19	105-0974-03	1	Plate-Coupling



LH Crankarm Assembly

Ref.	Part Number	Qty.	Description
1	3296-23	4	Nut-Lock, NI
2	107-3395	8	Washer-Hardened
3	110-4614	3	Screw-HH
4	105-1016	3	Washer-Hardened
5	110-4576	1	Crankarm-No.6
6	140-8809	2	Stomper Arm ASM
6:2	32151-76	1	Ring-Retaining, Internal
6:3	110-4557	1	Spacer-Bearing
6:4	140-8808	2	Bearing
7	110-4546	1	Key-Square
8	110-4572	1	Crankarm-No. 3, 5, 7
9	115-4703	1	Housing ASM

Ref.	Part Number	Qty.	Description
9:2	105-1017	1	Spacer
9:3	105-0965	2	Bearing-Ball
10	105-1041	2	Pin-Spring
11	325-9	4	Screw-HH
12	105-0963	2	Mount-ISO, Crank
13	105-0974-03	1	Plate-Coupling
14	327-29	2	Screw-HH
15	325-6	4	Screw-HH
16	110-4549	2	Washer-Snubbing
17	3296-53	2	Nut-Lock, NI
18	110-4570	1	Coupling-No.5



Damper Link Assembly

Ref.	*Part Number*	*Qty.*	*Description*
1	110-4507	24	Standoff-Rotolink
2	110-4506	12	Bumper-Rotolink
3	107-7543	12	Washer-Hardened
4	32128-23	12	Nut-HF
5	110-4504	12	Stud
6	106-8922	6	Damper
7	87-2440	12	Bumper-Rubber
8	140-6194	12	Link ASM-Damper
8:1	251-311	2	Bearing-Ball
9	327-29	12	Screw-HH
10	3296-53	12	Nut-Lock, NI
11	323-16	12	Screw-HH
12	104-8301	12	Nut-HF, NI
13	80-6990	12	Washer-Hardened

Attachments and Accessories

For 09960 ProCore 648s Aerator

Product Name	Model/Part
Windrower Kit	09220
Tire Scraper Kit	09225
Rear Roller Kit	09234
Four-Tine Head Quick Lock	09719
2 x 5 Mini Tine Head	09736
1 x 6 Mini Tine Head	09737
Needle Tine Head	09739
3/4in Three-Tine Head	09794
3/4in Four-Tine Head	09796
7/8in Three-Tine Head	09797
Light Kit-Procore 648s (09960)	09962
Yellow Hydraulic Fluid Cap (Tethered)	107-2174
Premium All Purpose Grease (Tube)	108-1190
Wireless Hourmeter	115-4754
Inline Fuel Filter	115-7854
Turf Guard 3 Tine (Short)	120-1044
Turf Guard 4 Tine (Short)	120-1045
4-Tine Turf Guard (long)	120-1046
Turf Guard 5 Tine (Short)	120-1047
Turf Guard 6 Tine (Short)	120-1050
3-Tine Turf Guard (long)	120-1051
5-Tine Turf Guard (long)	120-1052
6-Tine Turf Guard (long)	120-1053
Premium Engine Oil 10w30 (55 Gallon Drum)	121-6392
Premium Engine Oil 10w30 (5 Gallon Pail)	121-6393
Head Bearing Kit	131-4876
PX Hydraulic Fluid (5 Gal)	133-8086
PX Hydraulic Fluid (55 Gal)	133-8087
Toro Red 12oz Aerosol Can	361-10
New Red Paint - Gallon	361-11
Dark Metallic Gray Aerosol Paint	361-12
Semi-Gloss Black Spray Paint	361-9
Air Dry Red Paint - Qt	5340
Exhaust Silencer Screen	93-9911

Notes:



Count on it.