



FRONTRUNNER™ AIR-COOLED MODELS

**For Serial Nos.
720,000 & Higher**
Part No. 4500-219 Rev. A

Parts Manual

EXMARK PARTS PLUS

PARTS
OVERNIGHT
OR *FREE**

If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

**READ OPERATOR'S MANUAL BEFORE
OPERATING OR SERVICING EXMARK EQUIPMENT.**

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
Auxiliary Hydraulic Group	17
Decals	23
Electrical Diagram 23HP & 27HP	19
Electrical Diagram 31HP	20
Electrical Logic Schematic 23HP & 27HP	21
Electrical Logic Schematic 31HP	22
Electrical Group	18
Engine Group 23HP & 27HP	13
Engine Group 31HP	14
Fuel Group	12
Hydraulic Group	15-16
Main Frame Group	3-6
Motion Control Group	11
Park Brake Group	10
PTO Drive Group	9
Rear Frame Group 23HP	7
Rear Frame Group 27HP & 31HP	8

MAIN FRAME GROUP

Item	Part No.	DESCRIPTION	Qty.
1	1-323142	Nut, Push 1/2	2
2	109-2365	Bumper	4
3	109-3339	Asm, Wheel & Tire (23HP).....	2
	1-633008	Tire, 23x10.5-12 4 Ply	2
	109-3338	WheWel	2
4	1-633859	Frame, Seat	1
5	1-803035	Rivet 3/16 x 1/4	9
6	98-5975	Washer, Spring Disc 3/8	8
7	103-0291	Cushion, Armrest LH	1
8	103-0292	Cushion, Armrest RH	1
9	103-2882	Decal, Exmark Logo	2
10	103-3520	Seat, Back	1
11■	103-4553	Asm, ROPS Fold Pin	2
12	1-543401	Spacer, Seat Track	2
13	103-8383	Screw, HWH 1/4-20 x 3/4 Tapite	11
14	103-5161	Link, Seat Stop	2
15+	103-6761	Asm, Seat Frame	1
16	103-6765-03	Latch, Seat	1
17	32128-33	Nut, Whizlock 1/4-20	2
18	9264964	Bolt, HWH 5/16-18 x 3/4 Tap	4
19	32128-20	Nut, Whizlock 5/16-18	16
20	3296-73	Nut, Nyloc 1/4-20	2
21	103-8316	Spring	1
22	103-8826	Link, Lower Seat Stop	2
23	103-6761	Plate, Seat Mount	1
24	1-633080	Bushing	2
25◆	109-2817	Kit, ROPS	1
26	107-2102	Decals, Warning	1
27	107-3155	Cotter, Hair Pin Double Loop	2
28	109-3633-03	Spacer, Seat Mount	2

Item	Part No.	DESCRIPTION	Qty.
29	3296-7	Nut, Nyloc 7/16-20	2
30	109-0768	Skirt, Rubber	1
31	109-3547	Asm, Front Console W/Decal	1
32	109-2008	Cushion, Seat Bottom/W Switch	1
33	109-2009	Grp, Seat Track	1
34●	109-2005	Asm, Seat W/Decal	1
35	109-2360	Decal, Top Console	1
36	3256-14	Washer, #10 Std	9
37	3296-39	Nut, Nyloc 3/8-16	4
38	109-3637	Decal, Service Aid	1
39	110-0883	Kit, Seatbelt	1
40	242-50	Nut, Lug 1/2-20	8
41	283-69	Pin, Clevis 1/2 x 3 1/2	2
42	322-5	Screw, HH 5/16-18 x 1	8
43	322-7	Screw, HH 5/16-18 x 1 1/2	2
44	323-6	Screw, HH 3/8-16 x 1	2
45	323-8	Screw, HH 3/8-16 x 1 1/2	8
46	323-9	Screw, HH 3/8-16 x 1 3/4	2
47	3212-4	Screw, HH 7/16-20 x 1	2
48	3296-29	Nut, Nyloc 5/16-18	4
49	3256-3	Washer, 5/16 Std	6
50	3256-4	Washer, 3/8 Std	1
51	3290-357	Nut, Whizlock 3/8-16	8
52	109-3479	Asm, Wheel & Tire (LH) (27 & 31HP)	1
	109-3156	Wheel	1
	103-6771	Tire, 24x12-12 4 Ply	1
53	109-3478	Asm, Wheel & Tire (RH) (27 & 31HP)....	1
	109-3156	Wheel	1
	103-6771	Tire, 24x12-12 4 Ply	1

Exmark black touch up spray paint – Gloss black

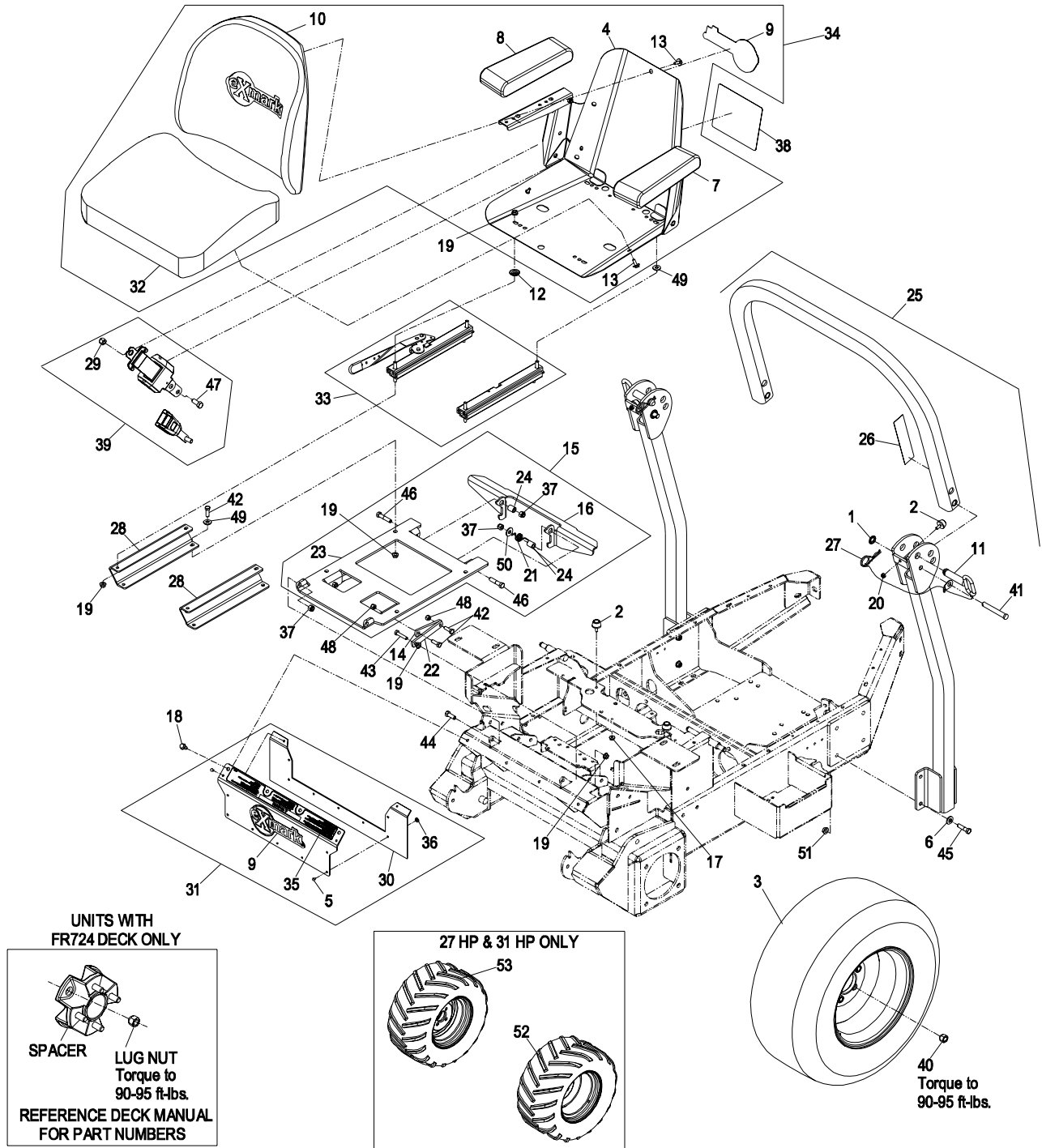
■ Includes ROPS fold pin plus hairpin, item #27.

◆ Rollover protection frame is serviced as a complete assembly only. Includes complete ROPS frame, mounting hardware, fold pivot and locking hardware, seat frame assembly item #15 and seat belt assembly item #39.

● Includes armrests and seat back decal. Does not include seat belt or tracks.

+ Does not include item #19 or #48.

MAIN FRAME GROUP



MAIN FRAME GROUP (cont.)

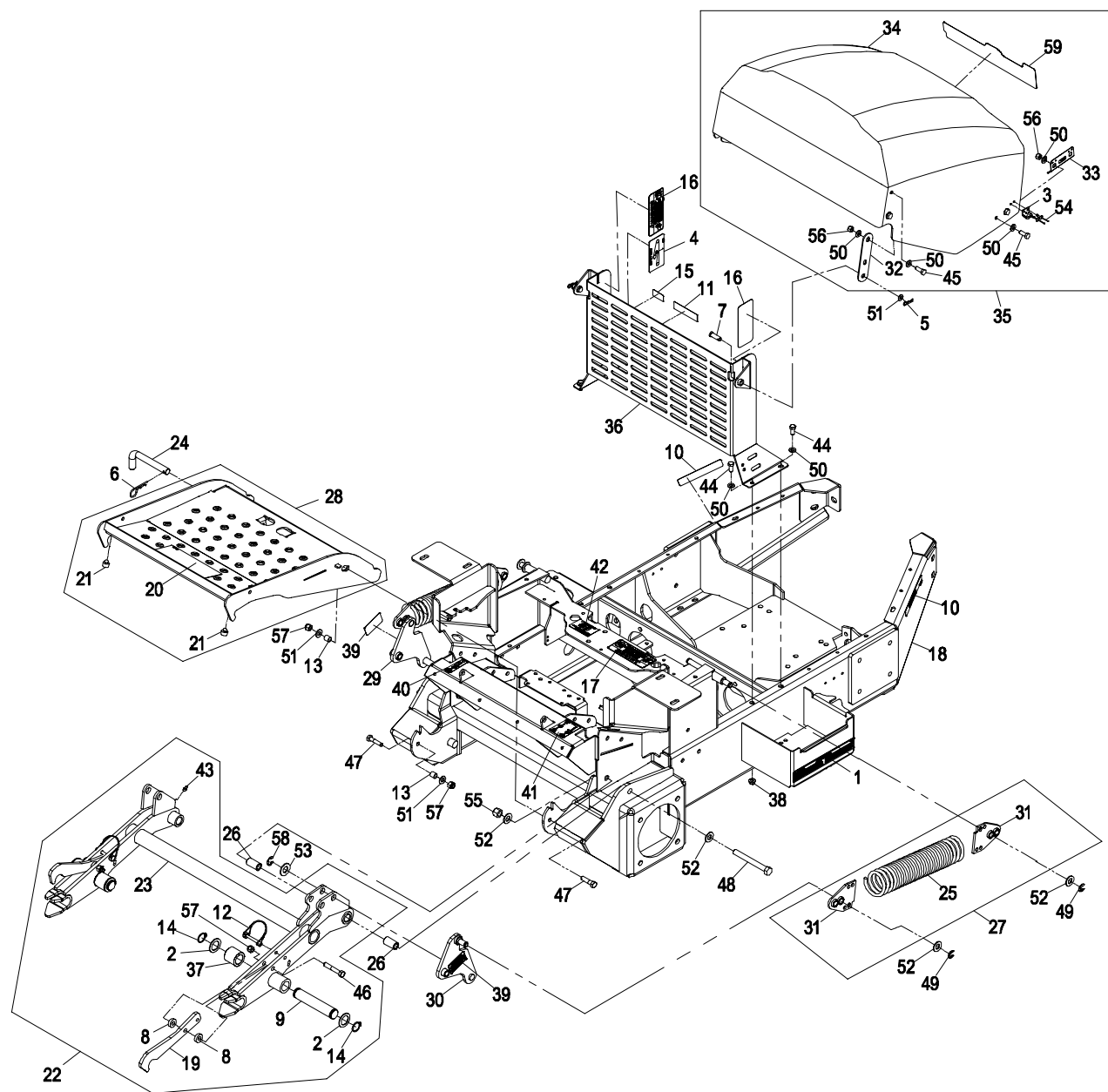
Item	Part No.	DESCRIPTION	Qty.
1	1-513747	Decal, Battery	1
2	1-523157	Washer	4
3	1-643189	Keeper, Rubber Latch	2
4	1-643339	Belt Routing, Decal	1
5	1-806003	Hairpin, Cotter	2
6	1-806005	Hairpin, Cotter	1
7	1-808285	Pin, Clevis 3/8 x 1 1/8	2
8	5-0652	Spacer	4
9	93-2699	Pin	2
10	98-4361	Decal, Warning	2
11	98-5954	Decal, Danger	1
12	100-1663	Pin	2
13	103-1166	Tube, Pump Link Spacer	2
14	32151-36	Ring, Retaining	4
15	103-3270	Decal, 3750 Rpm	1
16	103-5881	Decal, Guard	2
17	103-7218	Decal, Pump Fan Warning	1
18	109-6069	Asm, Frame W/Decals	1
19	103-9727	Latch, Hitch	2
20	107-2112	Decal, Danger	1
21	107-8042	Bumper, Rubber	2
22	109-0075	Asm, Hitch	1
23	109-0080-03	Wld, Hitch	1
24	109-0325	Pin, Full Fold	1
25	109-0411	Spring	2
26	109-0435	Bushing	4
27	109-0450	Asm, Spring	2
28	109-2772	Asm, Floorpan W/Decal	1
29	109-2773	Asm, Spring Bellcrank W/Decal (RH)	1
30	109-2774	Asm, Spring Bellcrank W/Decal (LH)	1
31	109-0634	Wld, Spring Anchor	4

Item	Part No.	DESCRIPTION	Qty.
32	109-1256-03	Arm, Pivot	2
33	109-1257-03	Hook, Hood	2
34	109-2114	Decal, Frontrunner	1
35	109-2857	Asm, Hood	1
36	109-2777	Asm, Hood Support W/Decals	1
	109-6070	Asm, Hood Support W/Decals (27 & 31 HP)	1
37	109-2004	Roller, Lock Lever	2
38	32128-20	Nut, Whizlock 5/16-18	4
39	109-2355	Decal, Spring Loaded	2
40	109-2356	Decal, Motion Control	1
41	109-2357	Decal, Motion Cntl/Park Brake	1
42	109-2396	Decal, Pump Drive Release	1
43	302-19	Zerk, 1/4-28 Str	2
44	322-3	Screw, HH 5/16-18 x 3/4	4
45	322-4	Screw, HH 5/16-18 x 7/8	8
46	323-11	Screw, HH 3/8-16 x 2 1/4	2
47	323-8	Screw, HH 3/8-16 x 1 1/2	2
48	325-18	Screw, HH 1/2-13 x 4 1/2	2
49	32120-47	Ring, Retaining	4
50	3256-23	Washer, 5/16 SAE	20
51	3256-24	Washer, 3/8 SAE	4
52	3256-26	Washer, 1/2 SAE	8
53	3256-27	Washer, 5/8 SAE	2
54	3269-24	Rivet	4
55	3296-23	Nut, Nyloc 1/2-13	2
56	3296-29	Nut, Nyloc 5/16-18	8
57	3296-39	Nut, Nyloc 3/8-16	4
58	32120-19	E-Ring	2
59	109-2114	Decal, FrontRunner	1

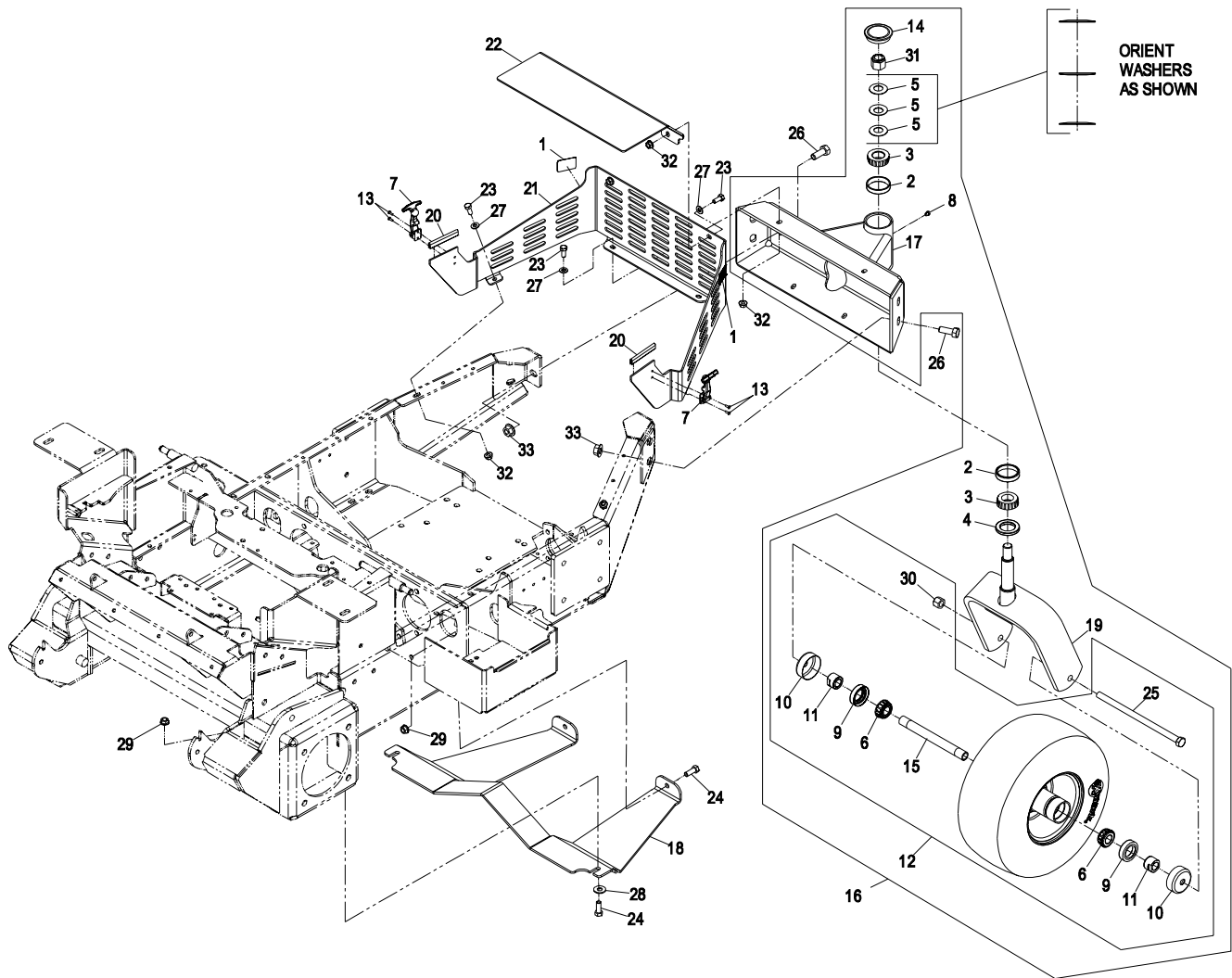
Exmark red touch up paint (spray paint - P/N 1-850337 - .6 oz liquid bottle - P/N 103-9140).

Exmark black touch up spray paint – Gloss black

MAIN FRAME GROUP (cont.)



REAR FRAME GROUP 23HP

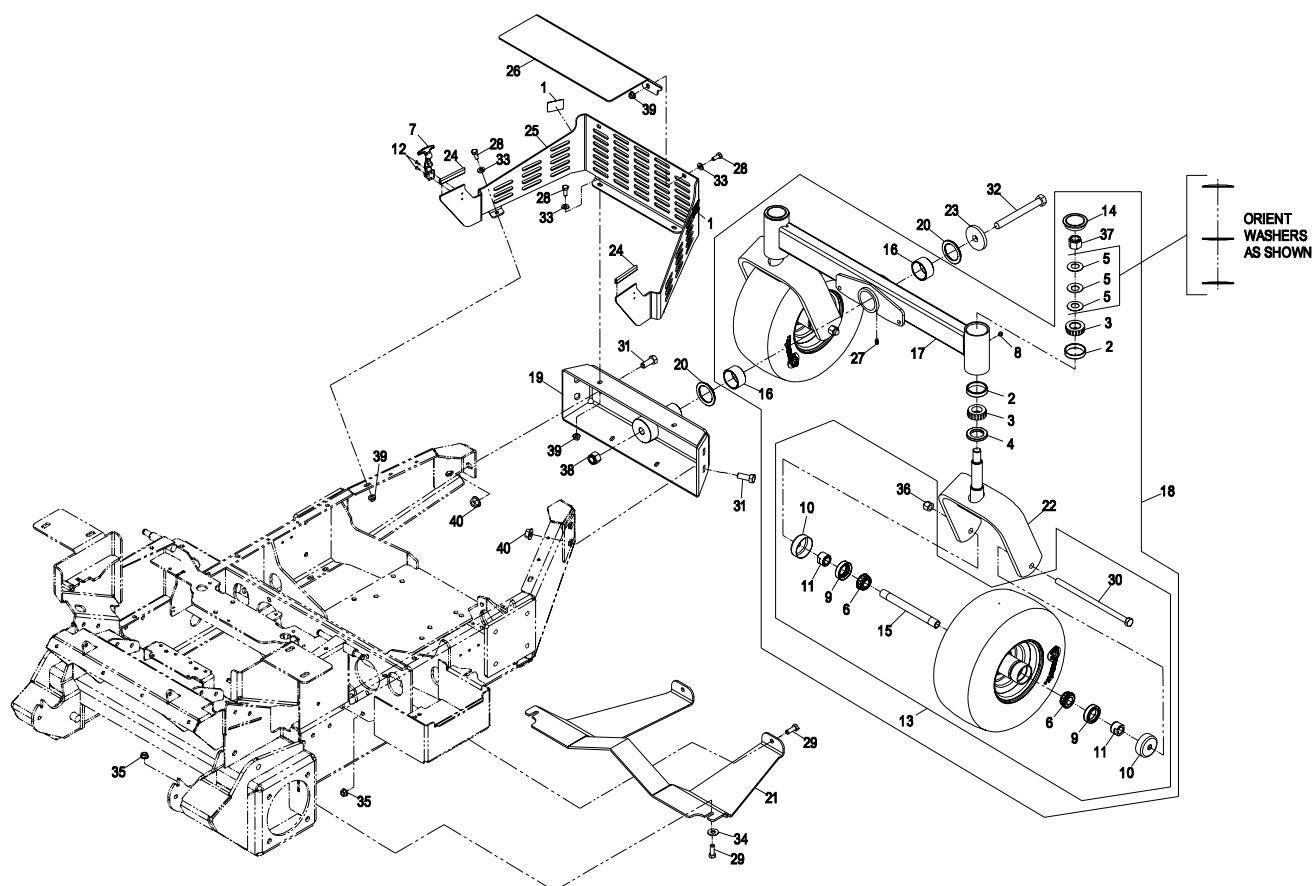


Item	Part No.	Description	Qty.
1	1-513746	Decal, Muffler.....	2
2	1-543508	Cup, Bearing Tapered Roller.....	2
3	1-543509	Cone, Bearing Tapered Roller.....	2
4	1-543511	Seal, Grease.....	1
5	1-633508	Washer, Spring Disc.....	3
6	1-633585	Bearing, Cone Tapered Roller.....	2
7	1-643188	Latch.....	2
8	1-811010	Plug.....	1
9	103-0063	Seal, Double Lip.....	2
10	103-2768	Guard, Seal.....	2
11	103-3051	Spacer, Nut.....	2
12	103-3799	Asm, Caster Wheel.....	1
13	923786	Rivet.....	4
14	103-4882	Cap, Grease.....	1
15	103-5156	Axle, Caster.....	1
16	103-6704	Asm, Single Tailwheel.....	1
17	103-6748-03	Wld, Rear Caster Hub.....	1

Item	Part No.	Description	Qty.
18	103-9789-03	Guard, Hose.....	1
19	103-9868-03	Wld, Caster Fork.....	1
20	105-7699	Strip, Seal.....	2
21	109-2769	Kit, Rear Guard.....	1
22	109-0414-03	Cover, Muffler.....	1
23	322-3	Screw, HH 5/16-18 x 3/4.....	5
24	323-6	Screw, HH 3/8-16 x 1.....	4
25	325-39	Screw, HH 1/2-13 x 9 1/2.....	1
26	325-5	Screw, HH 1/2-13 x 1 1/4.....	6
27	3256-23	Washer, 5/16 SAE.....	5
28	3256-4	Washer, 3/8 Std.....	2
29	3290-357	Nut, Whizlock 3/8-16.....	4
30	3296-23	Nut, Nyloc 1/2-13.....	1
31	3296-51	Nut, Nyloc 3/4-10.....	1
32	32128-20	Nut, Whizlock 5/16-18.....	5
33	32128-49	Nut, Whizlock 1/2-13.....	6

Exmark black touch up spray paint – Gloss black

REAR FRAME GROUP 27HP & 31HP

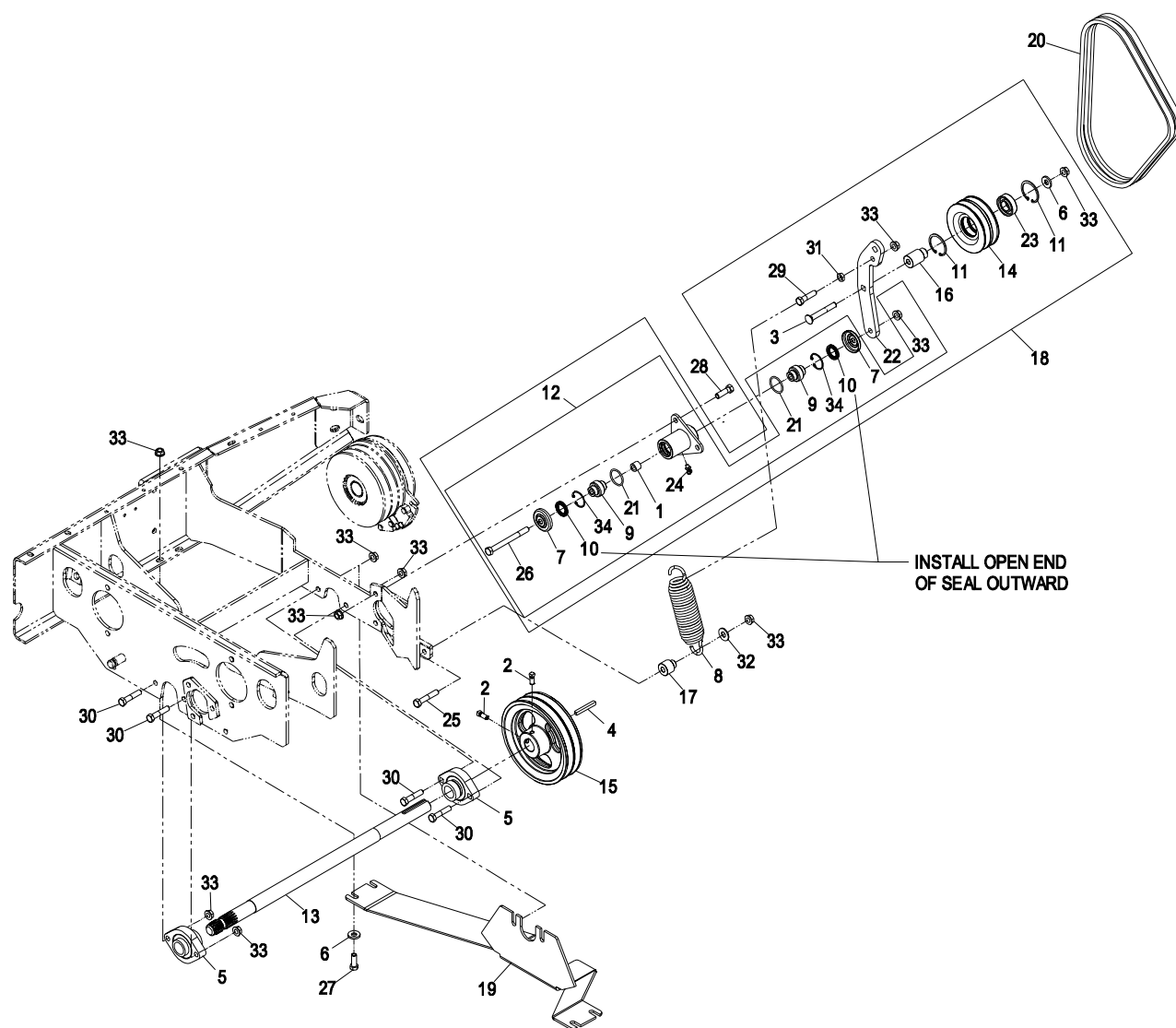


Item	Part No.	Description	Qty.
1	1-513746	Decal, Muffler.....	2
2	1-543508	Cup, Bearing Tapered Roller.....	4
3	1-543509	Cone, Bearing Tapered Roller.....	4
4	1-543511	Seal, Grease.....	2
5	1-633508	Washer, Spring Disc.....	6
6	1-633585	Bearing, Cone Tapered Roller.....	4
7	1-643188	Latch.....	2
8	1-811010	Plug.....	2
9	103-0063	Seal, Double Lip.....	4
10	103-2768	Guard, Seal.....	4
11	103-3051	Spacer, Nut.....	4
12	923786	Rivet.....	4
13	103-3799	Asm, Caster Wheel.....	2
14	103-4882	Cap, Grease.....	2
15	103-5156	Axle, Caster.....	2
16	103-6825	Bearing, Sleeve.....	2
17	103-7957-03	Wld, Dual Caster Tube.....	1
18	103-8347	Asm, Dual Rear Wheels.....	1
19	103-9045-03	Wld, Rear Frame Dual Wheel.....	1
20	103-9051	Bearing, Thrust.....	2
21	103-9789-03	Guard, Hose.....	1

Item	Part No.	Description	Qty.
22	103-9868-03	Wld, Caster Fork.....	2
23	103-9974	Washer.....	1
24	105-7699	Strip, Seal.....	2
25	109-2769	Asm, Rear Guard W/Decals (27 HP).....	1
	109-6071	Asm, Rear Guard W/Decals (31 HP).....	1
26	109-0414-03	Cover, Muffler (27 HP).....	1
	109-5580-03	Cover, Muffler (31 HP).....	1
27	302-19	Zerk, 1/4-28 Str.....	1
28	322-3	Screw, HH 5/16-18 x 3/4.....	5
29	323-6	Screw, HH 3/8-16 x 1.....	4
30	325-39	Screw, HH 1/2-13 x 9 1/2.....	2
31	325-5	Screw, HH 1/2-13 x 1 1/4.....	6
32	327-24	Screw, HH 5/8-11 x 5 3/4.....	1
33	3256-23	Washer, 5/16 SAE.....	5
34	3256-4	Washer, 3/8 Std.....	2
35	3290-357	Nut, Whizlock 3/8-16.....	4
36	3296-23	Nut, Nyloc 1/2-13.....	2
37	3296-51	Nut, Nyloc 3/4-10.....	2
38	3296-53	Nut, Nyloc 5/8-11.....	1
39	32128-20	Nut, Whizlock 5/16-18.....	5
40	32128-49	Nut, Whizlock 1/2-13.....	6

Exmark black touch up spray paint – Gloss black

PTO DRIVE GROUP



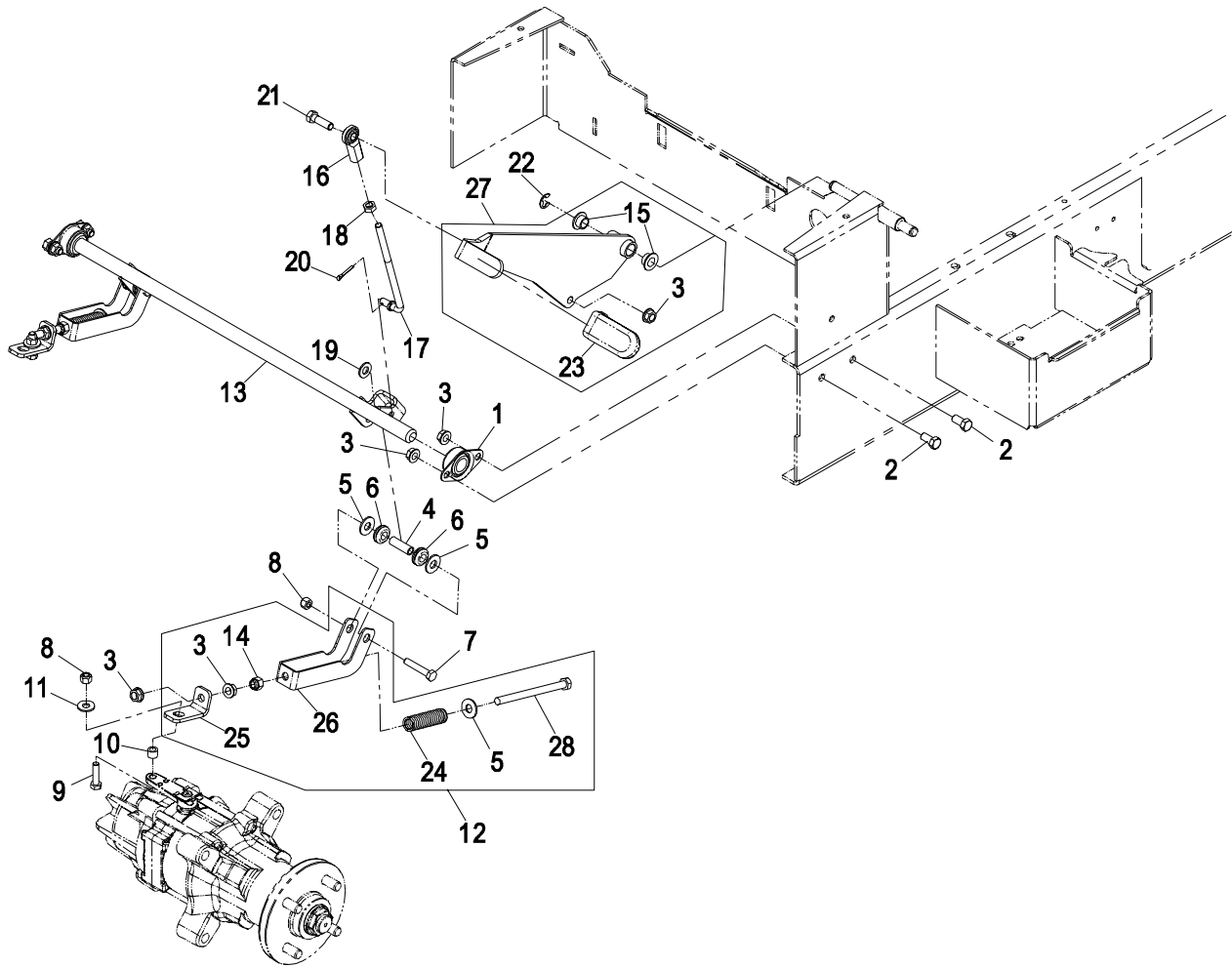
Item	Part No.	DESCRIPTION	Qty.
1	1-413088	Spacer	1
2▲	1-803050	Setscrew, 5/16-18 x 3/4	2
3	1-807525	Bolt, Carriage 3/8-16 x 2 3/4	1
4	5-1336	Key, Machine 1/4 x 1/4 x 2	1
5	92-8799	Bearing, Flanged.....	2
6	98-5975	Washer, Spring Disc 3/8	5
7	103-2916	Guard, Top.....	2
8	103-3330	Spring, Extension.....	1
9	103-3504	Bearing, Spherical.....	2
10	103-3506	Seal, Single Lip.....	2
11	32151-13	Ring, Retaining	2
12	103-6409	Asm, Pump Idler	1
13	103-6779-03	Shaft, Line	1
14	103-6813	Pulley, Idler	1
15	103-6814	Sheave	1
16	103-6836	Spacer	1
17	103-8012	Spacer, Spring	1

Item	Part No.	DESCRIPTION	Qty.
18	103-8073	Asm, Linedrive Idler.....	1
19	103-8366-03	Guard, Linedrive	1
20	109-7588	Belts, Matched Pair	1
21	106-7159	O-Ring	2
22	109-0431-03	Arm, Idler.....	1
23	251-347	Bearing, Ball Deep Groove	1
24	302-40	Zerk, 90° 1/4-28.....	1
25	323-10	Screw, HH 3/8-16 x 2.....	1
26	323-16	Screw, HH 3/8-16 x 4.....	1
27	323-6	Screw, HH 3/8-16 x 1.....	4
28	323-7	Screw, HH 3/8-16 x 1 1/4.....	3
29	323-8	Screw, HH 3/8-16 x 1 1/2.....	1
30	323-9	Screw, HH 3/8-16 x 1 3/4.....	4
31	3218-3	Nut, Jam 3/8-16.....	1
32	3256-4	Washer, 3/8 Std.....	1
33	3290-357	Nut, Whizlock 3/8-16	15
34	32120-10	Ring, Retaining	2

Exmark black touch up spray paint – Gloss black

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on setscrew, item #2.

PARK BRAKE GROUP

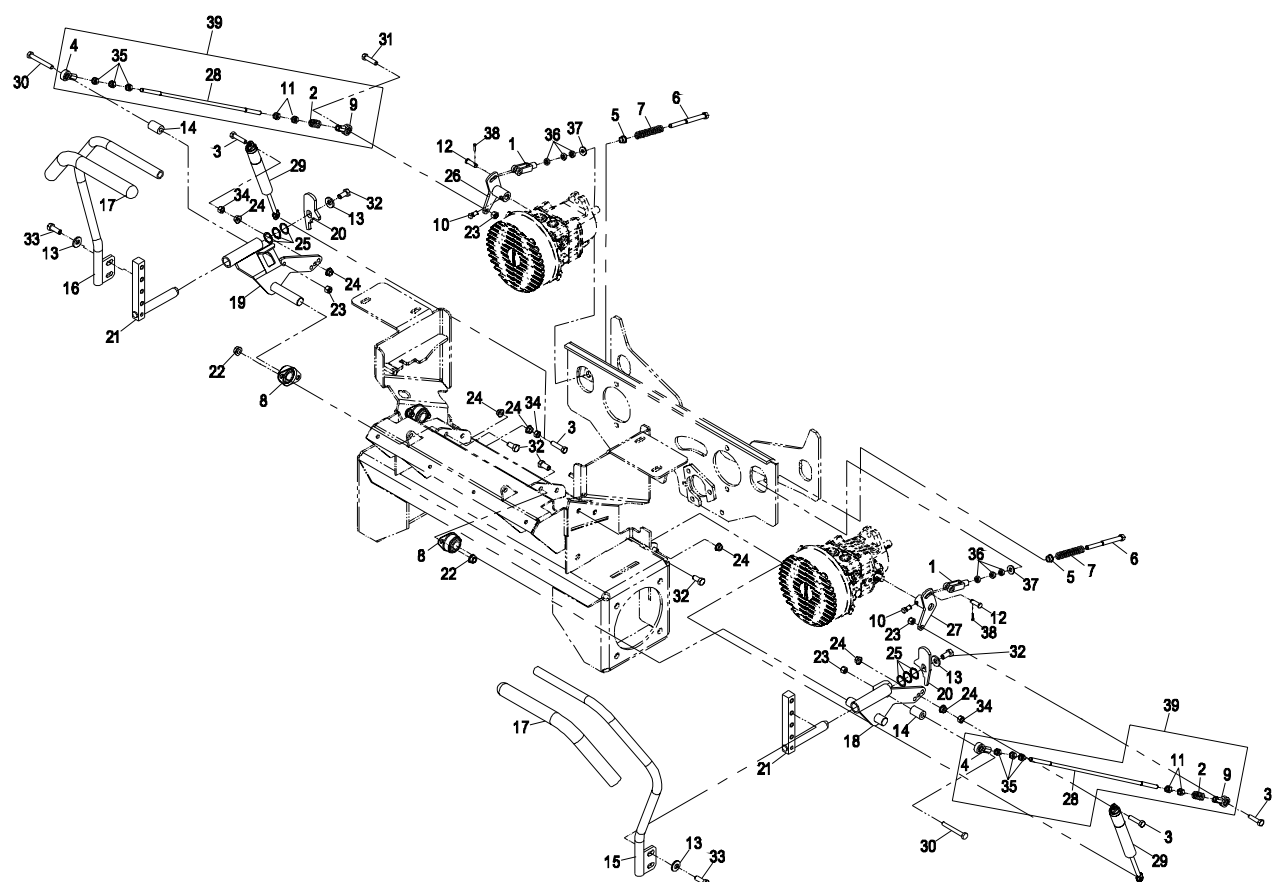


Item	Part No.	DESCRIPTION	Qty.
1	1-633102	Bearing, Flanged.....	2
2	323-4	Screw, HH 3/8-16 x 3/4	4
3	3290-357	Nut, Whizlock 3/8-16.....	9
4	109-0262	Spacer	2
5	3256-4	Washer, 3/8 Std	6
6	1-633630	Grommet.....	4
7	322-9	Screw, HH 5/16-18 x 1 3/4	2
8	3296-29	Nut, Nyloc 5/16-18	4
9	322-6	Screw, HH 5/16-18 x 1 1/4	2
10	103-0126	Bushing.....	2
11	3256-3	Washer, 5/16 Std	2
12	109-0132	Asm, Brake Linkage.....	2
13	103-8625-03	Wld, Brake Cross Shaft	1
14	3296-59	Nut, Nyloc 3/8-16 Thin	2

Item	Part No.	DESCRIPTION	Qty.
15	1-513140	Bearing	2
16	103-0608	Balljoint.....	1
17	103-4399	Rod, Linkage Brake	1
18	3219-3	Nut, Hex 3/8-24.....	1
19	3256-24	Washer, 3/8 SAE.....	1
20	3272-10	Pin, Cotter 1/8 x 3/4	1
21	323-7	Screw, HH 3/8-16 x 1 1/4	1
22	32120-47	Ring, Retaining	1
23	1-633268	Grip, Brake Lever.....	1
24	103-4388	Spring	2
25	109-0130	Link, Brake	2
26	109-0131	Clevis, Brake	2
27	109-1192	Asm, Brake Lever W/Grip & Bearings....	1
28	323-39	Screw, HH 3/8-16 x 5.....	2

Exmark black touch up spray paint – Gloss black

MOTION CONTROL GROUP



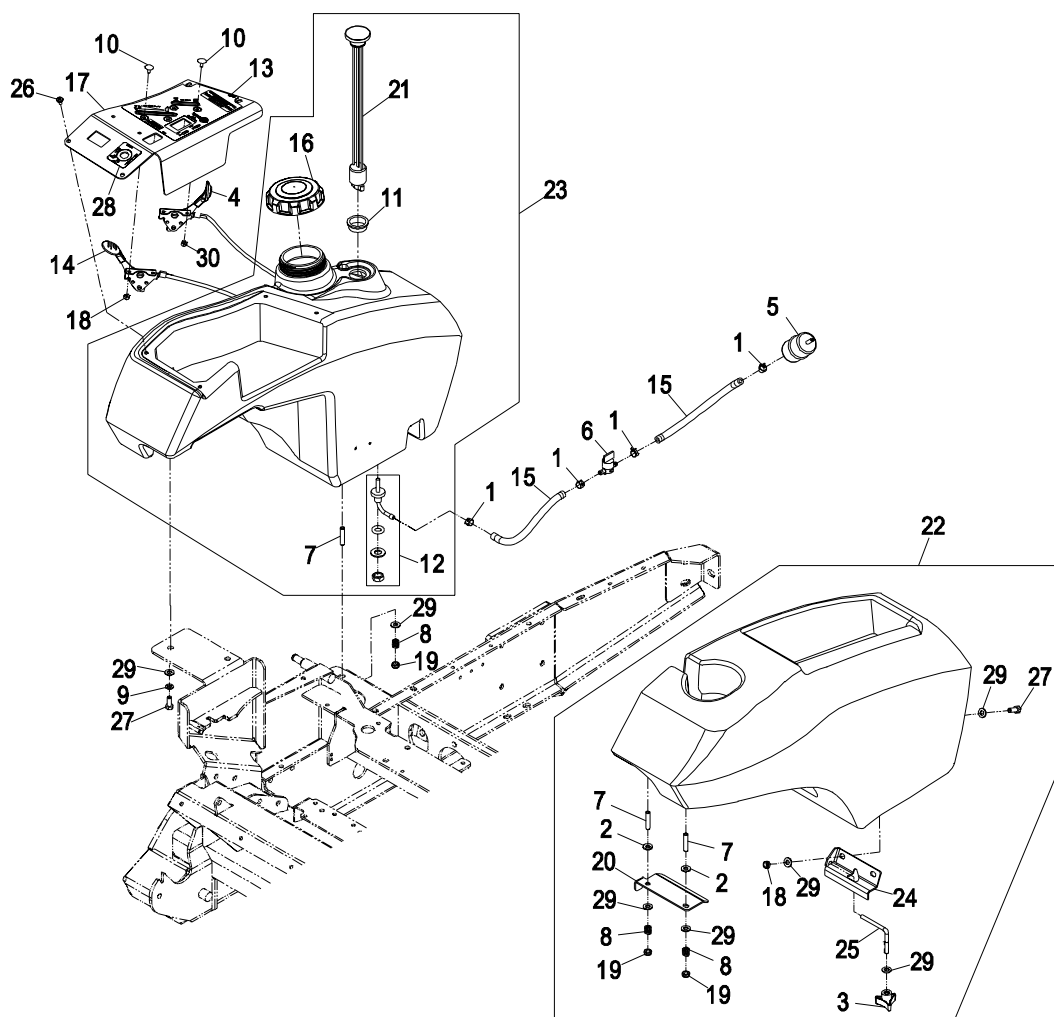
Item	Part No.	Description	Qty.
1	1-303105	Yoke, Adjustable	2
2	1-323245	Spring, Compression	2
3	1-403180	Screw, HH 5/16-18 X 1 1/4 Sp	4
4	1-543017	Balljoint	2
5	1-603735	Bushing, Flanged	2
6	1-603737	Bolt, Neutral Return	2
7	1-603807	Spring	2
8	1-633102	Bearing, Flanged	4
9	1-633152	Balljoint, (LH)	2
10▲	1-803022	Setscrew, 5/16-18 X 5/8	2
11	1-804524	Nut, Hex 5/16-24 (LH)	4
12	1-808280	Pin, Clevis 5/16 X 1	2
13	98-5975	Washer, Spring Disc 3/8	6
14	103-1361	Spacer	2
15	103-3457	Asm, Handle W/Grip (LH)	1
16	103-3458	Asm, Handle W/Grip (RH)	1
17	103-3456	Grip, Control Lever	2
18	109-3623	Wld, Lever Control (LH)	1
19	109-3622	Wld, Lever Control (RH)	1
20	103-8262	Tab, Motion Cntrl	2
21	109-3618	Wld, Control Shaft	2
22	3290-357	Nut, Whizlock 3/8-16	8

Item	Part No.	Description	Qty.
23	3296-29	Nut, Nyloc 5/16-18	4
24	32128-20	Nut, Whizlock 5/16-18	8
25	106-5335	Washer, Wave	6
26	109-0558-03	Wld, Pump Ctrl (RH) (23HP)	1
	103-8286-03	Wld, Pump Ctrl (RH) (27HP)	1
27	109-0559-03	Wld, Pump Ctrl (LH) (23HP)	1
	103-8285-03	Wld, Pump Ctrl (LH) (27HP)	1
28	109-1198	Link, Tracking Rod (23HP)	2
	103-8300	Link, Tracking Rod (27HP)	2
29	109-2339	Damper, Motion Control	2
30	322-12	Screw, HH 5/16-18 X 2 1/2	2
31	322-6	Screw, HH 5/16-18 X 1 1/4	2
32	323-4	Screw, HH 3/8-16 X 3/4	10
33	323-6	Screw, HH 3/8-16 X 1	4
34	3217-6	Nut, Hex 5/16-18	4
35	3219-2	Nut, Hex 5/16-24	6
36	3220-2	Nut, Jam 5/16-24	6
37	3256-2	Washer, 1/4 Std	2
38	3272-5	Pin, Cotter 3/32 X 1/2	2
39	109-2583	Asm, Tracking Rod (23HP)	2
	109-2582	Asm, Tracking Rod (27HP)	2

Exmark black touch up spray paint – Gloss black.

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on screw, item #10 & screw, item #32 going into control shaft weldment item #21.

FUEL GROUP



Item	Part No.	Description	Qty.
1	1-303077	Clamp, Fuel Line.....	4
2	1-303334	Washer, Spring Disc 5/16	2
3	1-323385	Knob, 3 Prong.....	1
4	109-7416	Control, Choke.....	1
5+	Kohler	Part No. 2405010 Fuel Filter	1
	Briggs	Part No. 695327 Fuel Filter	1
6	1-603770	Valve, Fuel.....	1
7■	1-633023	Stud, Fuel Tank	4
8	1-633349	Spring, Compression	4
9	1-805005	Washer, Lock 5/16 Heavy.....	2
10	1-807513	Bolt, Carriage #10-24 x 1/2	4
11	95-8972	Grommet.....	1
12▲	103-2605	Fitting, Fuel Bulkhead W/Strainer	1
	103-2784	O-Ring	1
13	109-7413	Decal, Console	1
14	109-7415	Control, Throttle	2

Item	Part No.	Description	Qty.
15	109-0303	Hose, Fuel Line 7"	2
16	109-0346	Cap, Fuel (Gas).....	1
17	109-4714	Console	1
18	3296-2	Nut, Nyloc #10-24	4
19	3296-47	Nut, Nyloc 5/16-18 Thin	6
20	109-1202	Hook, Fender.....	1
21	109-1213	Gauge, Fuel.....	1
22	109-1226	Asm, Fender.....	1
23	109-3627	Asm, Fuel Tank	1
24	109-2572	Bracket, Fender.....	1
25	109-2652	Bolt, Fender.....	1
26◆	109-2661	Screw, PPH #10-24 x 1/2.....	4
27	322-3	Screw, HH 5/16-18 x 3/4.....	4
28	109-2358	Decal, Ignition.....	1
29	3256-23	Washer, 5/16 SAE.....	11

Exmark black touch up spray paint – Gloss black

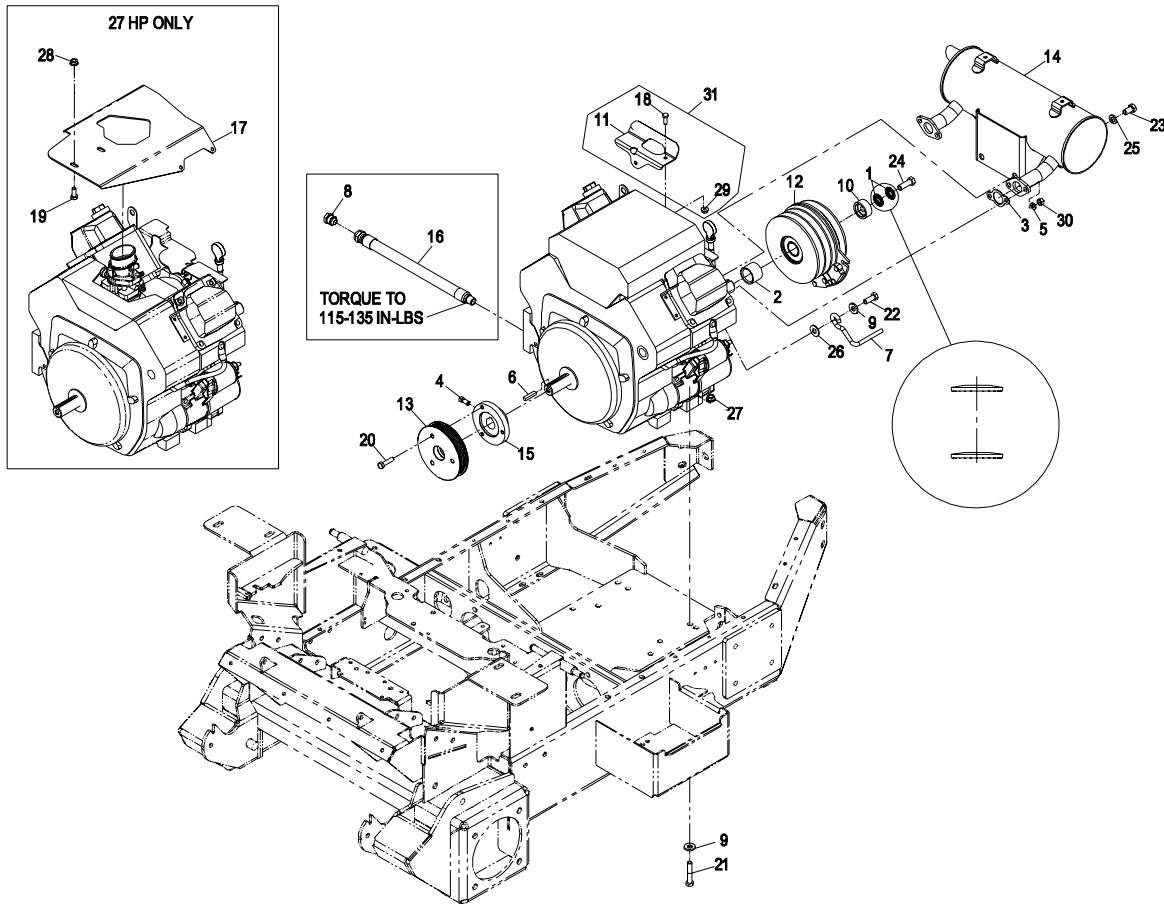
■ Use Pro-Lock, Retaining Type (P/N 1-840023, .5ml tube) on stud threads, item #7 going into the tank.

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on fuel fitting, item #11.

+ Refer to Engine Owner's Manual (Fuel Filter **Must** be 15 Micron or smaller).

◆ Snug fit only on slotted holes, **Do Not Overtighten**, tank must be able to expand.

ENGINE GROUP 23HP & 27HP



Item	Part No.	Description	Qty.
1	1-603610	Washer, Spring Disc 7/16	2
2	1-633179	Spacer	1
3	1-653291	Gasket, Exhaust Manifold	2
4▲	1-803050	Setscrew, 5/16-18 x 3/4	2
5	1-805005	Washer, Lock 5/16 Heavy	4
6	13-2840	Key, Machine 1/4 x 1/4 x 1 1/4	1
7	52-4780	Rod, Belt	1
8+	109-1012	Plug, Oil Drain	1
9	98-5975	Washer, Spring Disc 3/8	5
10	103-0152	Keeper, Clutch	1
11	103-3535	Kit, Cable Heat Shield	1
12	109-6627	Kit, Clutch	1
13	103-6774	Sheave	1
14◆	103-7480	Kit, Muffler	1
15	103-8813	Hub, Adapter	1
16	109-2987	Asm, Hose Oil Drain W/Plug	1

Item	Part No.	Description	Qty.
17	109-1830-03	Bracket, Air Cleaner (27HP)	1
18	321-4	Screw, HH 1/4-20 x 3/4	1
19	322-3	Screw, HH 5/16-18 x 3/4 (27HP)	2
20▲	322-5	Screw, HH 5/16-18 x 1	3
21▲	323-10	Screw, HH 3/8-16 x 2	4
22	323-6	Screw, HH 3/8-16 x 1	1
23	324-2	Screw, HH 7/16-14 x 3/4	2
24▲	3212-5	Screw, HH 7/16-20 x 1 1/4	1
25	3253-6	Washer, Lock 7/16	2
26	3256-4	Washer, 3/8 Std	1
27	3290-357	Nut, Whizlock 3/8-16	4
28	32128-20	Nut, Whizlock 5/16-18 (27HP)	2
29	32128-33	Nut, Whizlock 1/4-20	1
30	33014-00	Nut, Hex M8-1.25	4
31	103-3535	Kit, Cable Heat Shield	1

Exmark black touch up spray paint – gloss black.

✚ Use a Teflon Pipe Sealant or equivalent on threads.

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on screws, item #4, #20, #21 & #24

◆ Includes item #3.

23HP Kohler Replacement Parts List

(Refer to Engine Owner's Manual)

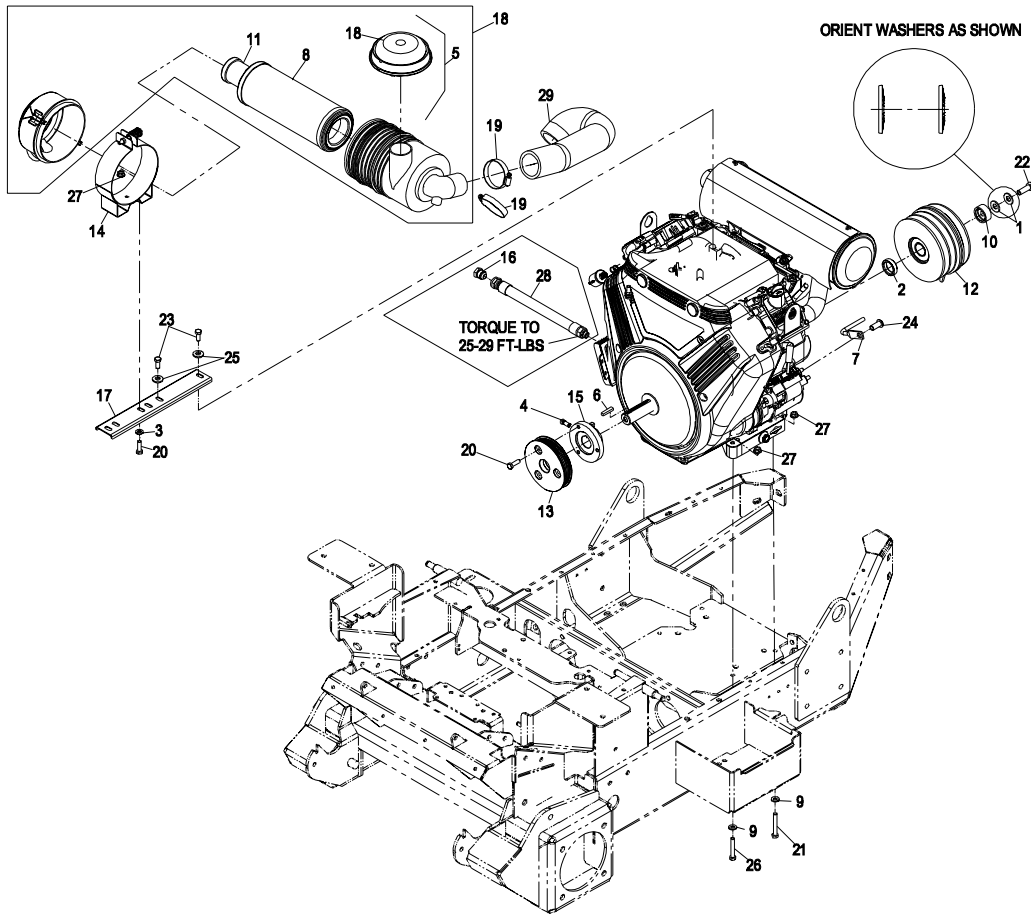
Description	Kohler Part No.
Engine Oil Filter	5205002-S
Engine Air Filter	2408303-S
Safety Filter	2508305-S

27 HP Kohler Replacement Parts List

(Refer to Engine Owner's Manual)

Description	Kohler Part No.
Engine Oil Filter	5205002-S
Engine Air Filter	2508301
Safety Filter	2508304

ENGINE GROUP 31HP



Item	Part No.	Description	Qty.
1	1-603610	Washer, Spring Disc 7/16	2
2	109-6874	Spacer, XP A/C Clutch Inner.....	1
3	3256-23	Washer, 5/16 SAE	2
4▲	1-803050	Setscrew, 5/16-18 x 3/4	2
5	100-2436	Asm, Hood Air Intake W/Clamp	1
6	13-2840	Key, Machine 1/4 x 1/4 x 1 1/4	1
7	109-5584	Anchor, Clutch	1
8	103-1327	Filter, Air	1
9	1-303334	Washer, Spring Disc 5/16	4
10	103-0152	Keeper, Clutch	1
11	103-1326	Filter, Safety Air	1
12	109-6627	Kit, Clutch	1
13	103-6774	Sheave	1
14	103-1058	Bracket, Air Filter	1
15	109-5823	Hub, Adapter.....	1

Item	Part No.	Description	Qty.
16+	109-1012	Plug, Oil Drain	1
17	109-5583-03	Bracket, Air Cleaner.....	1
18	103-5178	Asm, Canister Air Filter W/Hood.....	1
19	2412-42	Clamp, Hose.....	2
20▲	322-5	Screw, HH 5/16-18 x 1	5
21	322-11	Screw, HH 5/16-18 x 2 1/4	1
22▲	3212-5	Screw, HH 7/16-20 x 1 1/4	1
23	48-7710	Screw, HH M8-1.25 x 20mm	2
24▲	3274-105	Screw, Button Head 7/16-14 x 1	1
25	98-5975	Washer, Spring Disc 3/8.....	2
26	322-10	Screw, HH 5/16-18 x 2.....	3
27	32128-20	Nut, Whizlock 5/16-18	6
28+	109-4324	Asm, Hose Oil Drain	1
29	109-5585	Hose, Air Intake.....	1

Exmark black touch up spray paint – gloss black.

✚ Use a Teflon Pipe Sealant or equivalent on threads.

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on screws, item #4, #20, #22 & #24

31HP Briggs & Stratton Replacement Parts List

(Refer to Engine Owner's Manual)

<u>Description</u>	<u>Briggs Part No.</u>
Engine Oil Filter.....	492932

HYDRAULIC GROUP

Item	Part No.	Description	Qty.
1	1-413088	Spacer	1
2	1-603990	Adapter, Straight (23HP)	8
	1-603992	O-Ring (37° Flare #8)	1
	1-603920	O-Ring (SAE #8)	1
3	109-4076	Sheave, Idler	1
4	1-805004	Washer, Lock 1/4 Heavy	2
5	1-807272	Key, 5mm x 5mm x 25mm (23HP)	2
	103-2739	Key, 5mm x 5mm x 32mm (27 & 31HP)	2
6▲	30-1710	Setscrew, 5/16-18 x 1	4
7	98-5975	Washer, Spring Disc 3/8	1
8	103-1828	Adapter, Running Tee	3
	1-603921	O-Ring (SAE #6)	1
9	103-1947	Asm, Hydraulic Reservoir	
		W/Decal (23HP)	1
	109-0582	Asm, Hydraulic Reservoir	
		W/Decal (27 & 31HP)	1
10	103-7615	Asm, Cap W/Gasket	1
11	103-1949	Gasket, Reservoir Cap	1
12	103-1988	Clamp, Hose 11/16	6
13	103-2146	Element Hydraulic Oil Filter	1
14	103-2155	Adapter, 90°	2
15	103-2156	Adapter, Straight (23HP)	3
	103-1020	O-Ring (37° Flare #6)	1
	1-603921	O-Ring (SAE #6)	1
	1-603990	Adapter, Straight (27 & 31HP)	3
	103-1020	O-Ring (37° Flare #6)	1
	1-603920	O-Ring (SAE #8)	1
16	103-2259	Head, Filter	1
17	103-2916	Guard, Top	2
18	103-3330	Spring, Extension	1
19	103-3504	Bearing, Spherical	2
20	103-3506	Seal, Single Lip	2
21	103-6409	Kit, Pump Idler	1
22	1-303287	Tie, Cable 5 1/2 (Small)	1
23	103-8011	Spacer, Spring	1
24■	103-9196	Pump, Hydro W/Fan (LH) (23HP)	1
+	103-8357	Pump, Hydro W/Fan (LH) (27 & 31HP)	1
25■	103-9197	Pump, Hydro W/Fan (RH) (23HP)	1
+	103-8358	Pump, Hydro W/Fan (RH) (27 & 31HP)	1
26	106-7159	O-Ring	2
27	109-5949-03	Arm, Idler	1

Item	Part No.	Description	Qty.
28	109-0816	Belt	1
29	109-0899	Hose, Hydraulic	1
30	109-0900	Hose, Hydraulic	1
31	109-0901	Hose, Hydraulic	1
32	109-0902	Hose, Hydraulic	1
33	109-1008	Hose, Case Drain	2
34	109-1009	Hose, Hydraulic	1
35	109-1010	Hose, Hydraulic	1
36●	109-1055	Motor, Wheel (RH) (23HP)	1
●	103-9519	Motor, Wheel (RH) (27HP & 31HP)	1
37●	109-1056	Motor, Wheel (LH) (23HP)	1
●	103-9520	Motor, Wheel (LH) (27 & 31HP)	1
38	109-1217	Adapter, 90° (23HP)	2
	103-2153	Adapter, 90° (27HP & 31HP)	2
	103-1020	O-Ring (37° Flare #6)	1
	1-603920	O-Ring (SAE #8)	1
39	109-2201	Sheave (23HP)	2
	109-2202	Sheave (27HP & 31HP)	2
40	109-2655	Hose, Hydraulic (23HP)	1
	109-4644	Hose, Hydraulic (27HP & 31HP)	1
41	109-2656	Hose, Hydraulic (23HP)	1
	109-4645	Hose, Hydraulic (27HP & 31HP)	1
42	302-40	Zerk, 90° 1/4-28	1
43	321-3	Screw, HH 1/4-20 x 5/8	2
44	321-6	Screw, HH 1/4-20 x 1	2
45	323-16	Screw, HH 3/8-16 x 4	1
46	323-7	Screw, HH 3/8-16 x 1 1/4	7
47	325-10	Screw, HH 1/2-13 x 2 1/2	8
48	3231-10	Bolt, Carriage 3/8-16 x 3	1
49	3231-6	Bolt, Carriage 3/8-16 x 2	1
50	3256-22	Washer, 1/4 SAE	2
51	3256-26	Washer, 1/2 SAE	8
52	3256-4	Washer, 3/8 Std. As Req'd.	
53	3290-357	Nut, Whizlock 3/8-16	6
54	32120-10	Ring, Retaining	2
55	32128-33	Nut, Whizlock 1/4-20	2
56	32128-49	Nut, Whizlock 1/2-13	8
57	1-523552	Decal, Hydraulic Tank	1
58	32128-43	Nut, Whizlock 3/8-16	4
59	3256-24	Washer	1

Exmark black touch up spray paint – gloss black.

▲ Use Prolock, Nut Type (P/N 1-840022, .5ml tube) on setscrews, items #6.

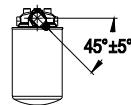
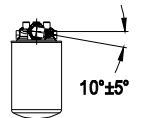
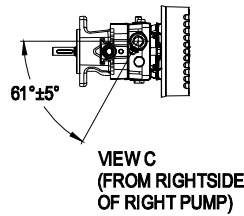
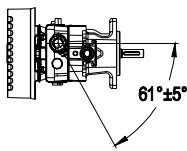
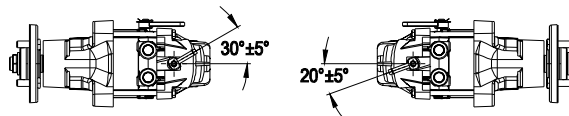
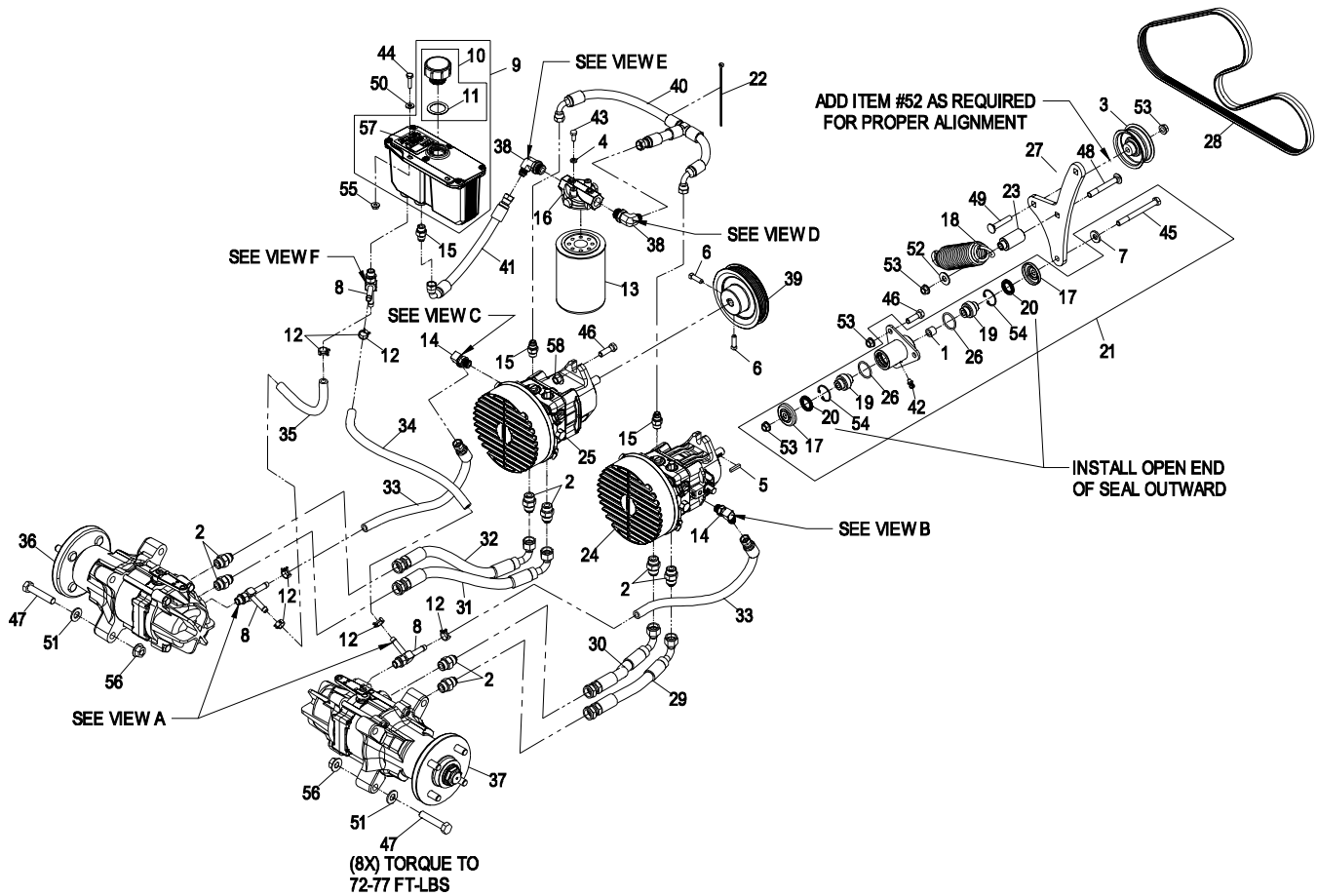
● Wheel Motor Service Kits		
Part No.	Description	Qty.
103-9762	Kit, Seal	1
103-9763	Handle, Actuating	1
103-9764	Clip, Retaining	1

● Wheel Motor Service Kits		
Part No.	Description	Qty.
103-9765	Nut, Hex Toplock 1-20UNEF-2B	1
103-4242	Asm, Wheel Hub W/Studs	1
103-7447	Stud, Wheel 1/2-20 x 1/2	4

■ Hydro Pump Service Kits 23HP		
Part No.	Description	Qty.
103-7441	Bearing, Input Shaft PJ	1
103-7443	Kit, Cylinder Block 12CC PJ	1
103-8448	Bearing, Thrust PJ	1
105-6184	Kit, Overhaul Seal PJ	1
103-7488	Fan, Pump Cooling	1
103-7489	Guard, Pump Fan	1

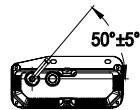
+ Hydro Pump Service Kits 27HP & 31HP		
Part No.	Description	Qty.
109-2863	Bearing, Input Shaft PR	1
109-2864	Kit, Cylinder Block 16CC PR	1
109-2865	Bearing, Thrust PR	1
109-2866	Kit, Overhaul Seal PR	1
109-2867	Plate, Valve PR	1
103-7488	Fan, Pump Cooling	1
103-7489	Guard, Pump Fan	1

HYDRAULIC GROUP



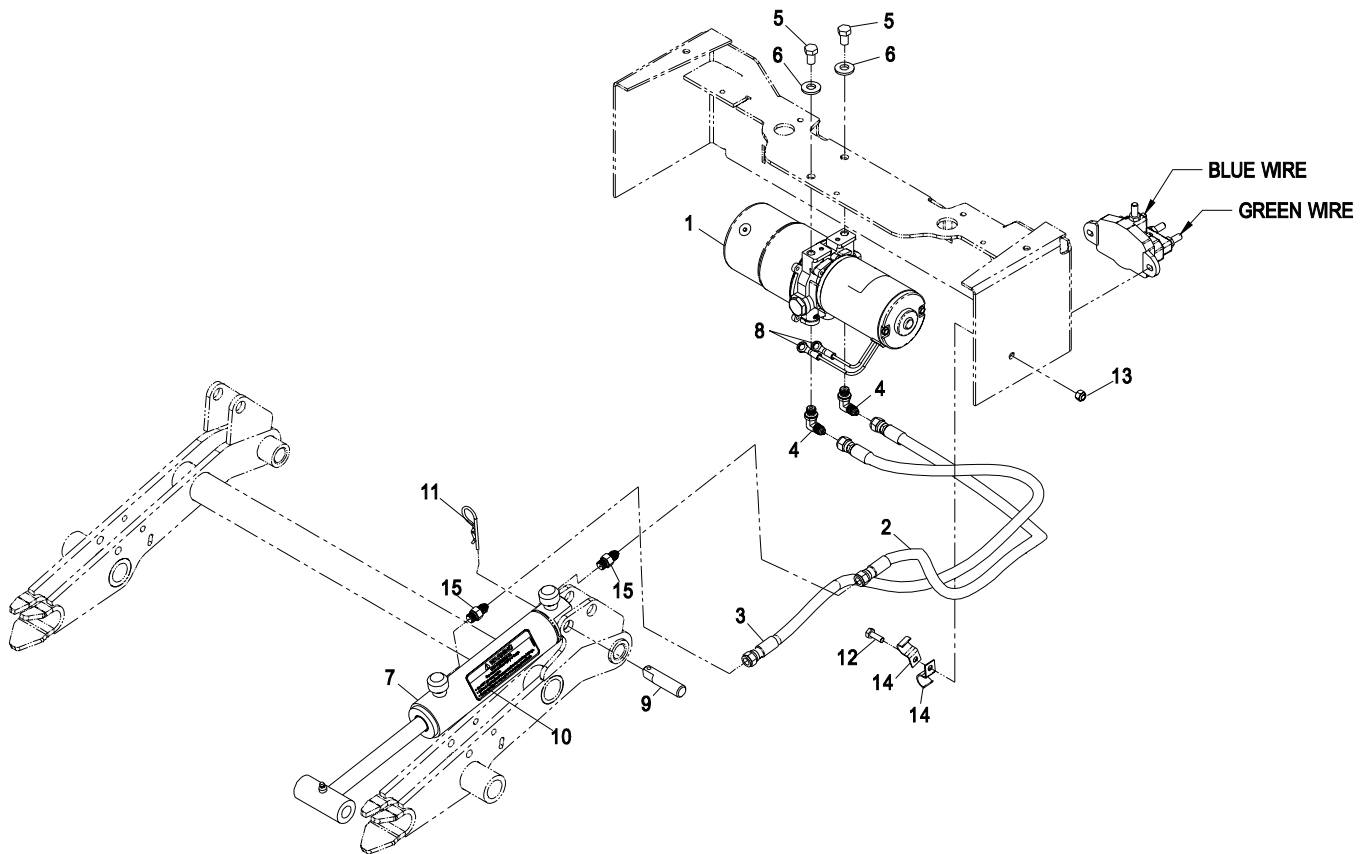
VIEW D
(FROM LEFTSIDE
OF FILTER HEAD)

VIEW E
(FROM RIGHTSIDE
OF FILTER HEAD)



VIEW F
(FROM BOTTOM)

AUXILIARY HYDRAULIC GROUP

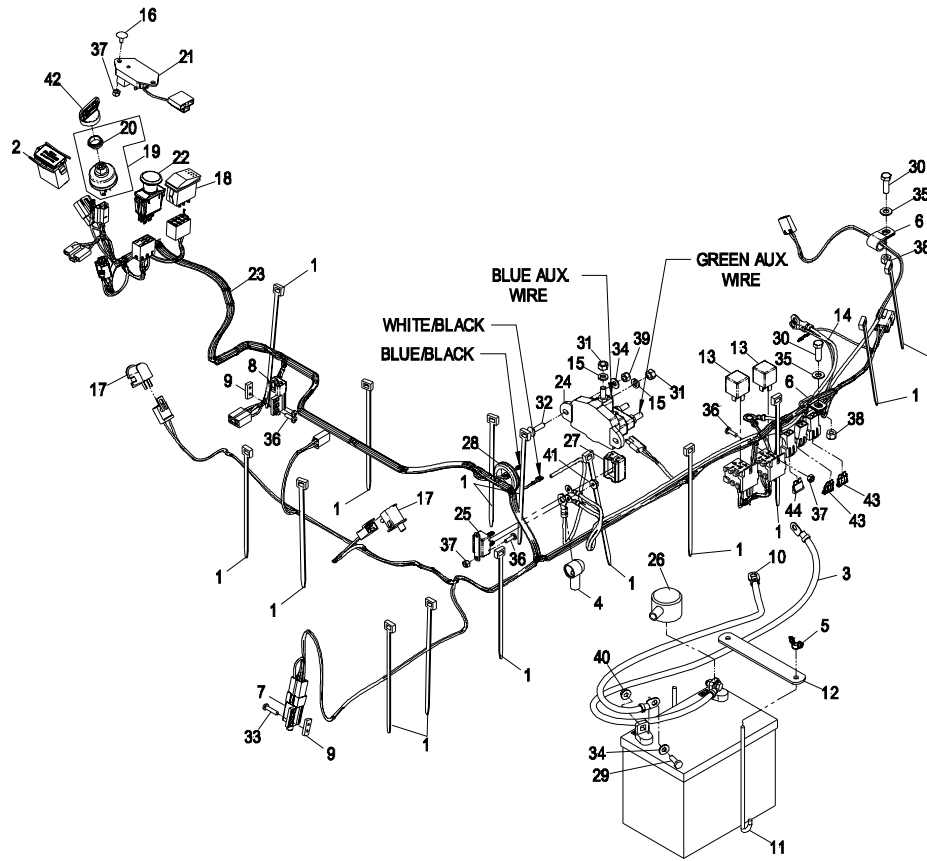


Item	Part No.	Description	Qty.
1▲	109-2853	Asm, Hydraulic Power Unit	1
2	109-2015	Hose, Hydraulic.....	1
3	109-2016	Hose, Hydraulic.....	1
4	109-0760	Adapter, 90°	2
	109-1284	O-Ring (37° Flare #4).....	1
	1-603923	O-Ring (SAE #4).....	1
5	323-4	Screw, HH 3/8-16 x 5/8	2
6	98-5975	Washer, Spring Disc 3/8	2
7	109-2812	Asm, Cylinder W/Decal.....	1
	109-2856	Kit, Hyd Cylinder Seal	1

▲ Includes item #8.

Item	Part No.	Description	Qty.
8	109-2663	Terminal, Ring 5/16	2
9	109-1180	Pin, Cylinder Mount	1
10	109-2377	Decal, High Pressure Oil	1
11	1-806005	Hairpin, Cotter	1
12	321-4	Screw, HH 1/4-20 x 3/4.....	1
13	3296-42	Nut, Nyloc 1/4-20.....	1
14	103-1193	Clip, Loom	2
15	109-2017	Adapter, Straight	2
	109-1284	O-Ring (37° Flare #4)	1
	1-603923	O-Ring (SAE #4).....	1

ELECTRICAL GROUP



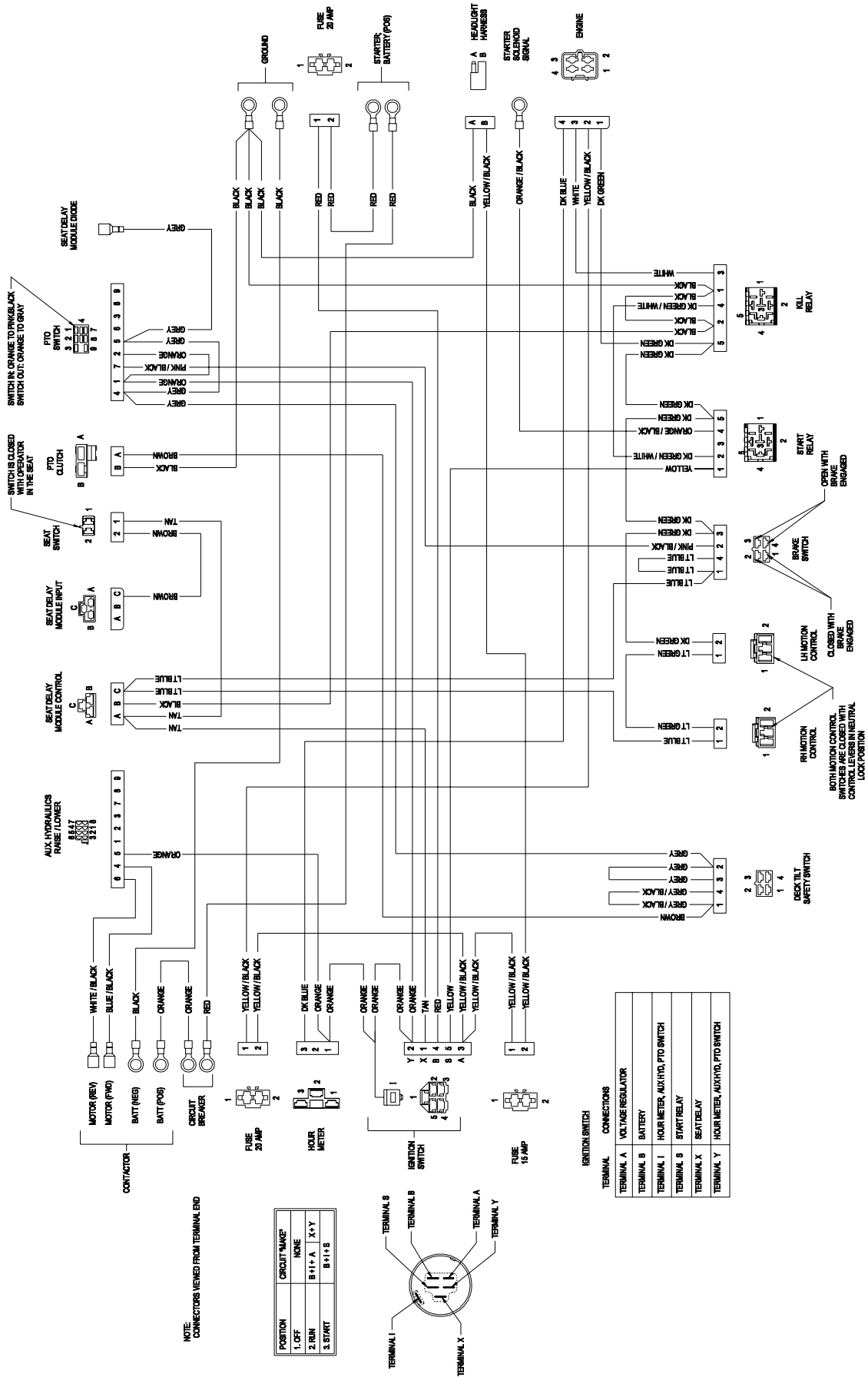
Item	Part No.	Description	Qty.
1	1-303335	Tie, Cable 7 5/16 (Large)	14
2	1-513374	Meter, Engine Hours	1
3■	109-7608	Cable, Battery (+).....	1
4	1-543393	Insulator, Solenoid	2
5	1-543792	Wingnut, Nyloc 1/4-20.....	2
6	1-603727	Clip, Loom	2
7	1-633110	Switch	1
8	1-633111	Switch	1
9	1-633181	Plate, Tapped	2
10	1-633307	Cable, Ground (-).....	1
11	1-633651	Bolt Battery Hold Down	2
12	107-9277-03	Strap, Battery Hold Down.....	1
13	1-643275	Relay, 12VDC 40 Amp (23HP & 27HP).....	2
	1-643275	Relay, 12VDC 40 Amp (31HP).....	3
14	109-2589	Harness, Auxiliary Hydraulics.....	1
15	1-805005	Washer, Lock 5/16 Heavy.....	4
16	1-807513	Bolt, Carriage #10-24 x 1/2	2
17	82-2190	Switch	2
18	109-4813	Switch	1
19	109-4736	Asm, Switch W/Nut.....	1
20	103-0498	Nut, Ignition.....	1
21	103-5218	Module, Seat Delay.....	1
22	103-5221	Switch, PTO.....	1
23◆	103-9268	Harness, Wiring (23HP & 27HP).....	1
	109-5593	Harness Wiring (31HP).....	1

Item	Part No.	Description	Qty.
24	109-0742	Contactor, Reversing Polarity	1
25	109-2398	Breaker, Circuit 40A.....	1
26	109-2407	Insulator, Battery (+)	1
27	109-2571	Cover, Circuit Breaker	1
28	240-3	Grommet	1
29	321-4	Screw, HH 1/4-20 x 3/4	2
30	322-5	Screw, HH 5/16-18 x 1	2
31	3219-2	Nut, Hex 5/16-24.....	4
32	3229-2	Bolt, Carriage 1/4-20 x 1	2
33	3250-27	Screw, PPH #10-24 x 7/8.....	2
34	3256-22	Washer, 1/4 SAE.....	4
35	3256-23	Washer, 5/16 SAE	2
36	3290-500	Screw, PPH #10-24 x 5/8.....	6
37	3296-2	Nut, Nyloc #10-24	6
38	3296-29	Nut, Nyloc 5/16-18	2
39	3296-42	Nut, Nyloc 1/4-20	2
40	32128-33	Nut, Whizlock 1/4-20	2
41	32149-8	Nut, Keps 10-32 Unf YZ.....	2
42	103-2106	Key, Exmark Logo	1
43	1-816001	Fuse, 20 Amp (23HP & 27HP).....	2
	1-816001	Fuse, 20 Amp (31HP).....	1
44	109355	Fuse, 15 Amp	1
45	1-816003	Fuse, 30 Amp (31HP).....	1

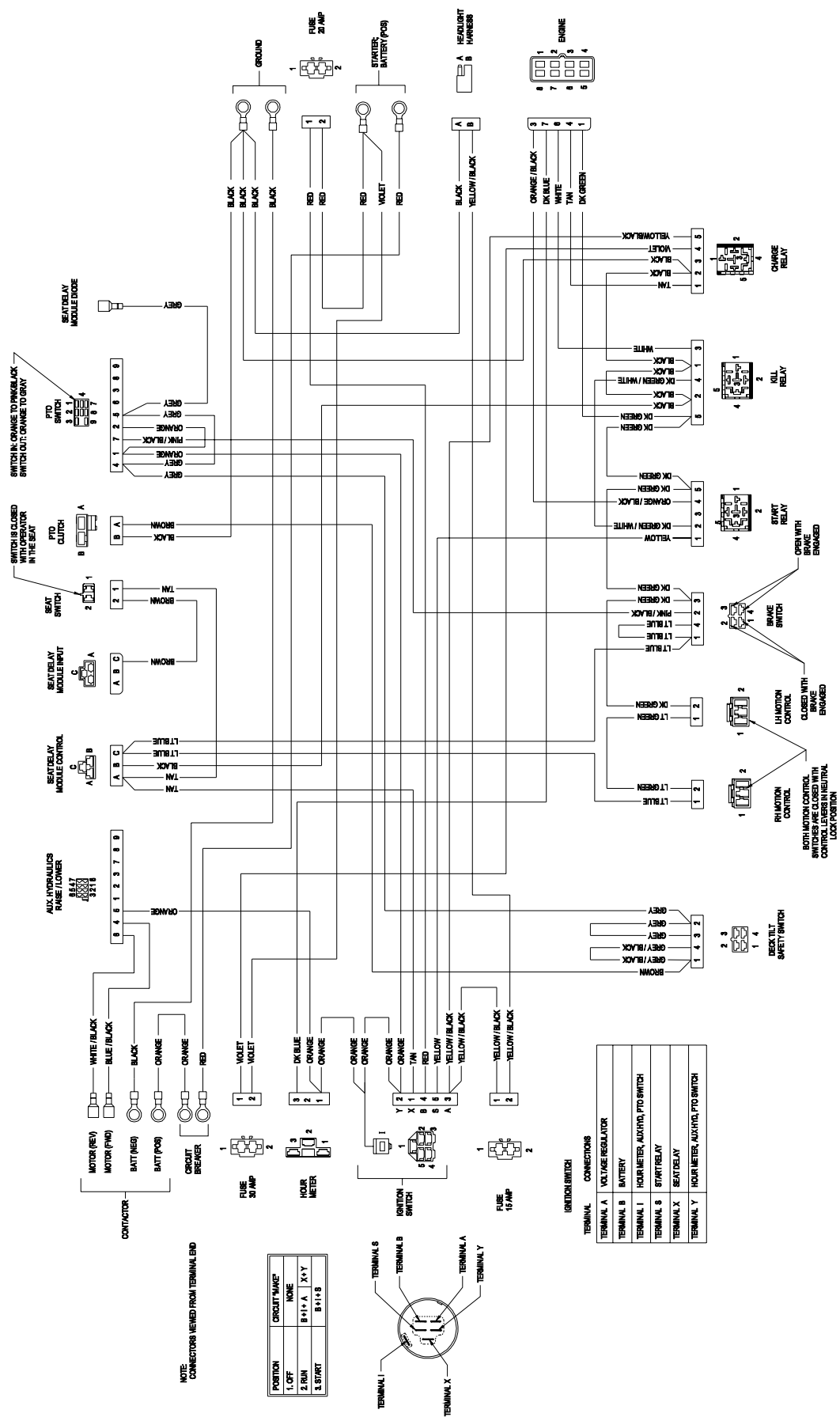
Exmark black touch up spray paint – gloss black.

- ◆ Use dielectric grease on all wiring harness connectors.
- Includes items 4 & 26.

ELECTRICAL DIAGRAM – 23HP & 27HP



ELECTRICAL DIAGRAM – 31HP

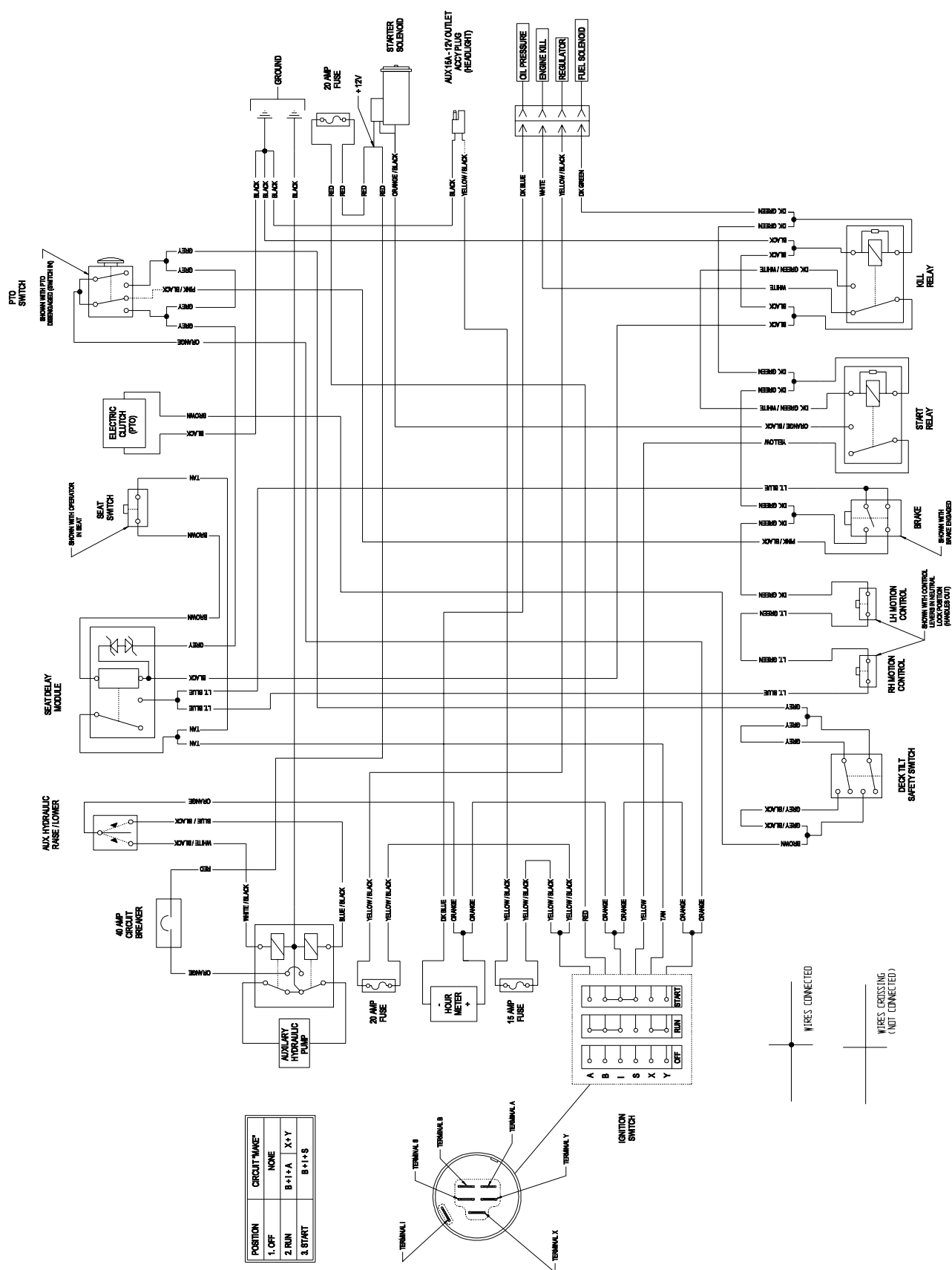


NOTE
CONNECTIONS WEREN FROM TERMINAL END

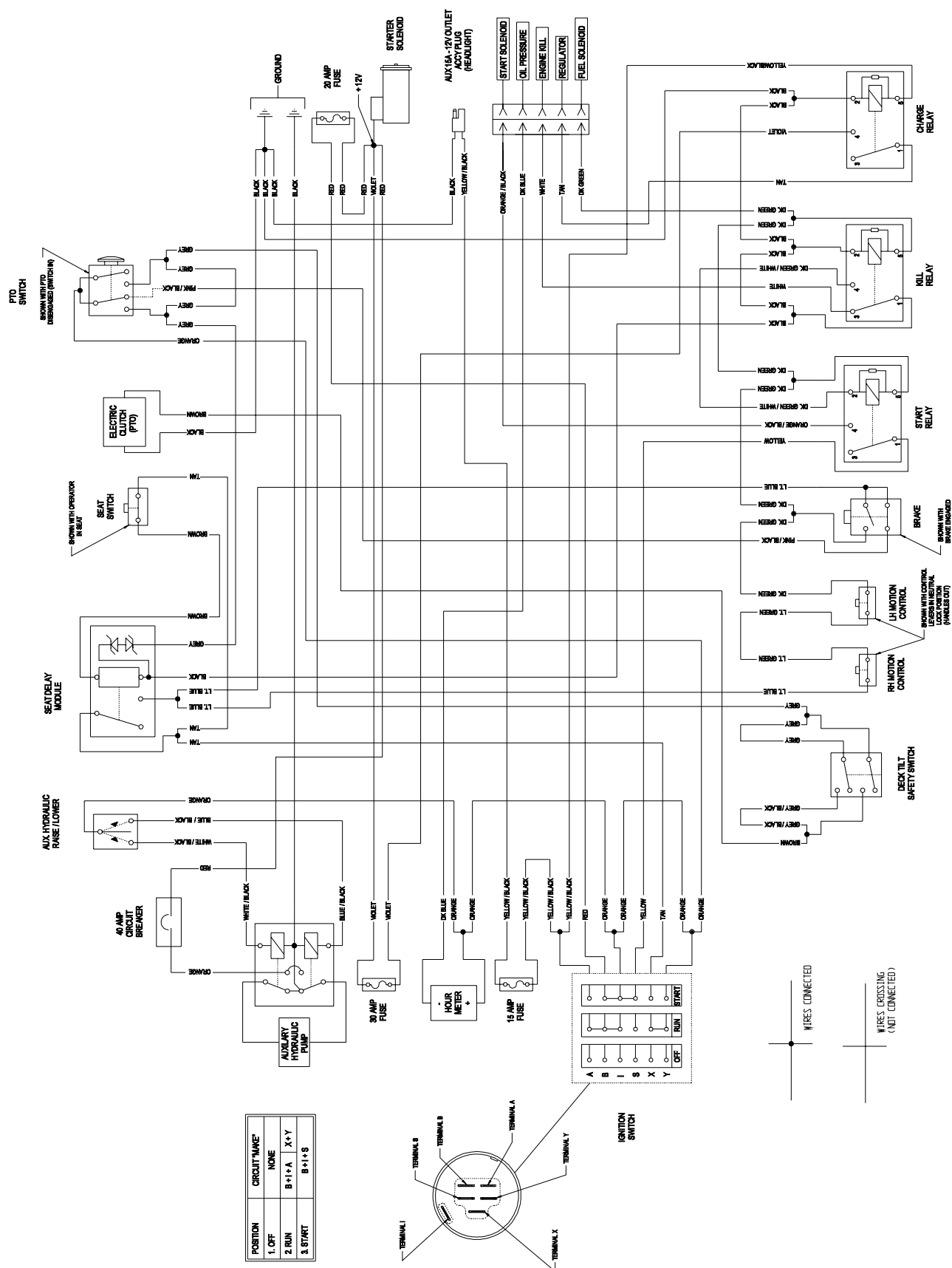
POSITION	CIRCUIT NAME
1. OFF	NONE
2. RUN	B+ to A X to Y
3. START	B+ to B

TERMINAL	CONNECTIONS
TERMINAL A	VOLTAGE REGULATOR
TERMINAL B	BATTERY
TERMINAL I	HOUR METER, AUX HYD, PTO SWITCH
TERMINAL X	SEAT RELAY
TERMINAL Y	SEAT RELAY
TERMINAL A	HOUR METER, AUX HYD, PTO SWITCH

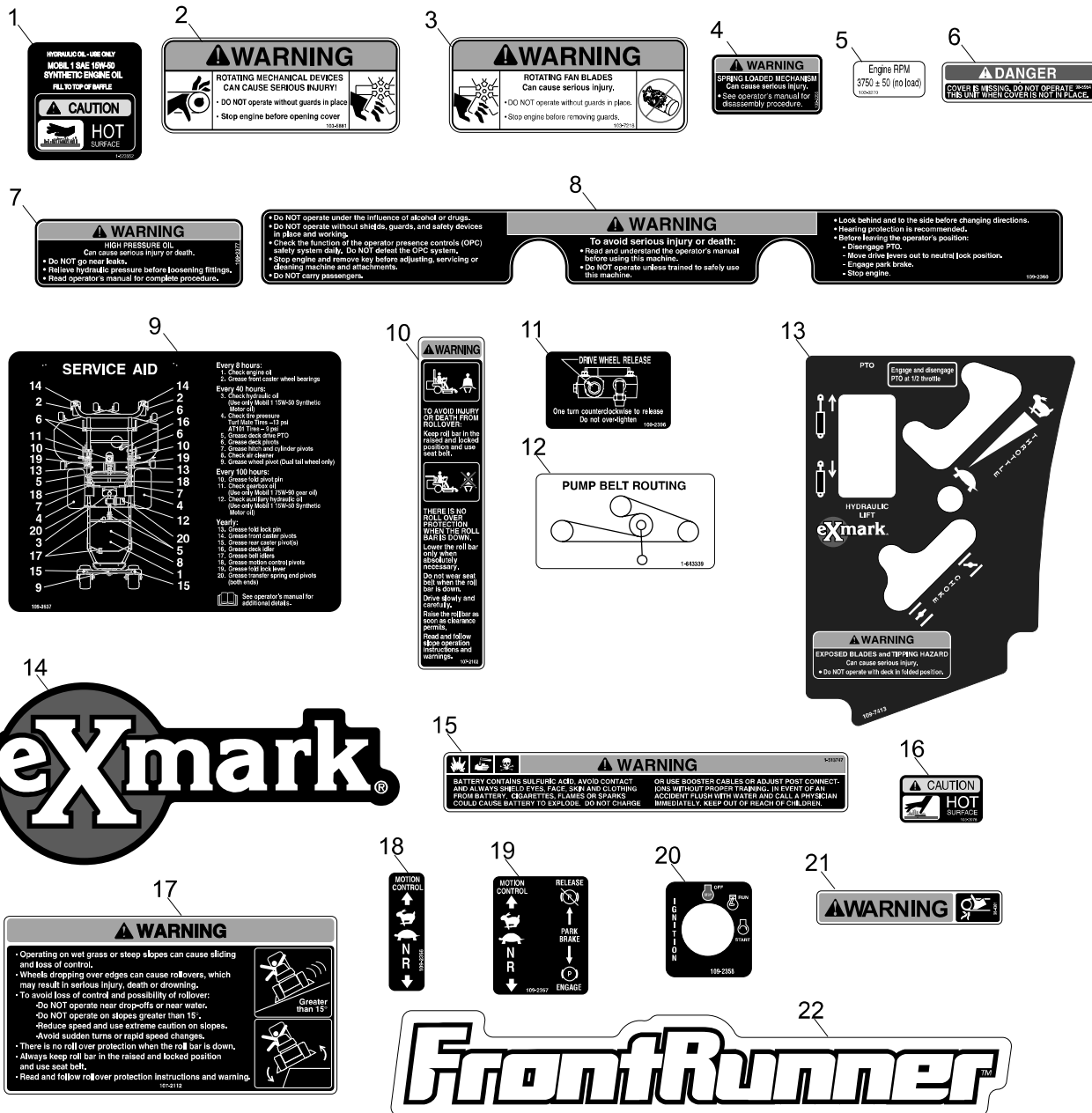
ELECTRICAL LOGIC SCHEMATIC – 23HP & 27HP



ELECTRICAL LOGIC SCHEMATIC – 31HP



DECALS GROUP



Item	Part No.	Description	Qty.
1	1-523552	Decal, Hydraulic Tank	1
2	103-5881	Decal, Rotating Devices	2
3	103-7218	Decal, Pump Fan Warning	1
4	109-2355	Decal, Spring Loaded	2
5	103-3270	Decal, 3750 Rpm	1
6	98-5954	Decal, Missing Cover	1
7	109-2377	Decal, High Pressure Oil	1
8	109-2360	Decal, Top Console	1
9	109-3637	Decal, Service Aid	1
10	107-2102	Decal, Folding Rops Warning	1
11	109-2396	Decal, Pump Drive Release	1
12	1-643339	Decal, Routing Belt	1

Item	Part No.	Description	Qty.
13	109-7413	Decal, Console	1
14	103-2882	Decal, Exmark Logo	2
15	1-513747	Decal, Battery	1
16	103-2076	Decal, Caution Hot Surface	2
17	107-2112	Decal, Warning	1
18	109-2356	Decal, Motion Control	1
19	109-2357	Decal, Motion Cntl/Park Brk	1
20	109-2358	Decal, Ignition	1
21	98-4361	Decal, Warning	2
22	109-2114	Decal, Frontrunner	2
	109-2851	Kit, Decal	

SERVICE RECORD

[illegible]

NOTES

NOTES

SEE EXMARK'S COMPLETE LINE OF ACCESSORIES

MID-MOUNT RIDING ACCESSORIES

CUSTOM RIDE SEAT SUSPENSION SYSTEM	ROLL OVER PROTECTION SYSTEM (ROPS)
DECK LIFT ASSIST KIT	SNOW BLADE
HITCH KIT	SUN SHADE
LAZERLOCKER	TRASH CONTAINER
LIGHT KIT	TURF STRIPER
MICRO-MULCH SYSTEM	ULTRA VAC COLLECTION SYSTEM
OPERATOR CONTROLLED DISCHARGE	ULTRA VAC QUICK DISPOSAL SYSTEM

OUT-FRONT RIDING ACCESSORIES

CUSTOM RIDE SEAT SUSPENSION SYSTEM	SNOW BLADE
DUAL-TAIL WHEEL	SNOWBLOWER
FLOOR PAN EXTENDER	SUN SHADE
HITCH KIT	TRASH CONTAINER
LIGHT KIT	ULTRA VAC COLLECTION SYSTEM
MICRO-MULCH SYSTEM	ULTRA VAC QUICK DISPOSAL SYSTEM
ROLL OVER PROTECTION SYSTEM (ROPS)	WEATHER CAB
ROTARY BROOM	

WALK-BEHIND ACCESSORIES

GRASS CATCHER	TURF STRIPER
LAZERLOCKER	STANDON
MICRO-MULCH SYSTEM	

Place Model No. and Serial No.
Label Here (Included in the Literature
Pack or Fill in Below)

Model No. _____

Serial No. _____

Date Purchased _____

Engine Model No. and Spec. No. _____

Engine Serial No. (E/No) _____

© 2005–2008 Exmark Mfg. Co., Inc.
Industrial Park Box 808
Beatrice, NE 68310
All Rights Reserved

Part No. 4500-219 Rev. A
(402) 223-6300
Fax (402) 223-5489
Printed In USA.



www.exmark.com