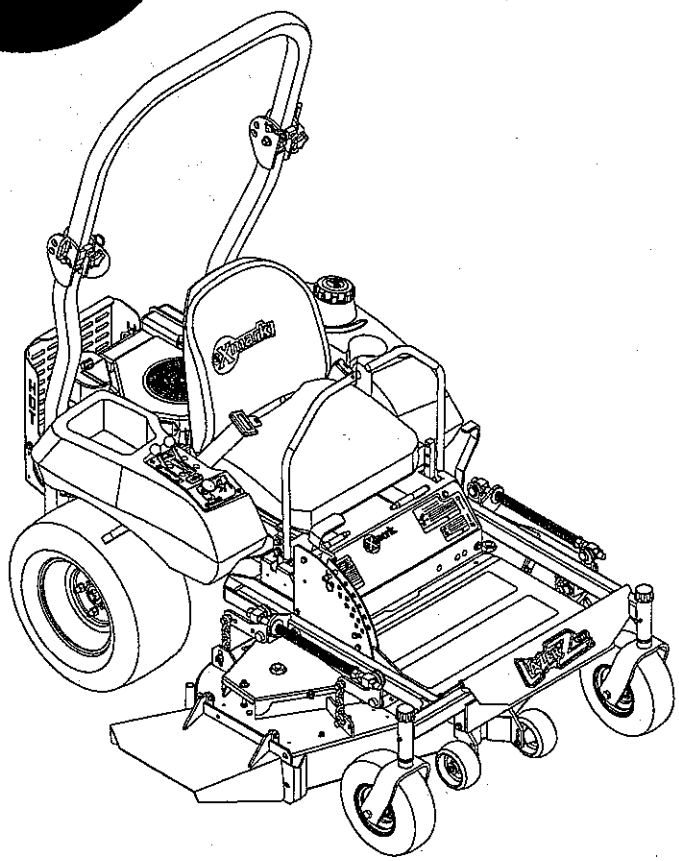
For Serial Nos.
440,000 & Higher

eXmark® MFG. CO. INC.



PARTS MANUAL

LAZER Z® CT

CONGRATULATIONS on the purchase of your new Exmark mower. This product has been carefully designed and manufactured to give you a maximum amount of dependability and years of trouble-free operation. If additional information is needed, or should you require trained mechanic service, contact your authorized Exmark equipment dealer or distributor. If you need to order replacement parts from your dealer, always give the model number and serial number of your mower as well as the part number, description and quantity of the part needed.

The Serial No. plate is located on the right side of the console. For ease of ordering and reference, we suggest that you record the information requested in the following identification table.

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

Model No. _____

Serial No. _____

Engine Model No. and Spec. No. (Code) _____

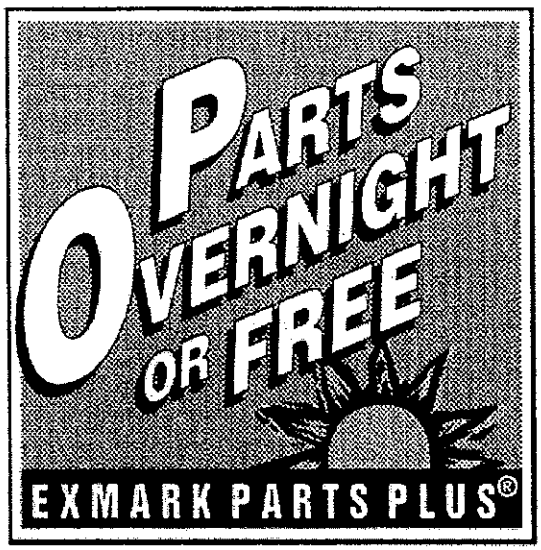
Engine Serial No. (E/No) _____

Date Purchased _____

Part No. 103-4859 Rev. A

EXMARK PARTS PLUS® PROGRAM

EFFECTIVE DATE: September 1, 1995



Program

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!!

How the Program Works

1. If dealer does not have part in stock for a "down" unit at the time of request by customer, the dealer contacts his distributor by 1:00 p.m., local time, and requests Exmark Parts Plus® shipment of six (6) line items or less.

2. Distributor ships part(s) to dealer or customer, as requested by dealer, same day, overnight UPS Distributor bills dealer for part and freight charges where applicable.

3. If distributor does not have the part(s) in stock to satisfy Exmark Parts Plus® order, he contacts Exmark by 3:00 p.m., central time, with an Exmark Parts Plus® order of six (6) line items or less.

4. If order is received by 3:00 p.m. central time, Exmark ships part(s) direct to dealer or customer, as requested by distributor, same day, overnight UPS Exmark bills the distributor for parts and shipping charges, where applicable.

5. The customer pays for the part and freight if it is shipped under the Exmark Parts Plus® and if it arrives in accordance to the program.

6. Who pays for the part and freight if it fails to arrive overnight in accordance to the program?

   A. Under any circumstance the customer does not pay.

   B. If the part does not arrive overnight due to:

      1. The dealer not submitting the Exmark Parts Plus® order to his Exmark distributor by 1:00 p.m., the dealer pays for the part and freight.

      2. The Distributor being unable to ship the part the same day or not submitting the Exmark Parts Plus® order to Exmark by 3:00 p.m., central time, the Distributor pays for the part and freight.

      3. Exmark being unable to ship the part and the Exmark parts order is received by 3:00 p.m., central time, Exmark pays for the part and freight.

      4. If the part does not arrive overnight due to the shipper (UPS), the shipper pays for the freight and Exmark pays for the part.

The following restrictions apply -- The Exmark Parts Plus® Program is available only through participating Exmark Dealers and applies only to orders submitted on this program Monday through Thursday. Parts Plus service is available only in the contiguous 48 United States. UPS has initiated a Saturday delivery program to many areas of the continental United States and can be requested for an overnight shipment on Friday to be delivered Saturday. The next day air charge, plus the Saturday delivery fee will be the responsibility of the purchaser. Exmark Mfg. will assume no responsibility for Saturday delivery shipments. To qualify, all Exmark Parts Plus® orders must be received by Exmark by 3:00 p.m., central time. Orders must be six (6) line items or less. Exclusions from the Exmark Parts Plus® Program are: Any wholegood or accessory in its entirety, engines and engine replacement parts, 5-speed Peerless transmissions and 5-speed transaxles, hydraulic or hydrostatic wheel motors, cutter decks and engine decks or any item exceeding United Parcel Service size and weight restrictions.

Due to UPS restrictions, aerosol spray paint is considered a hazardous material and cannot be shipped via UPS next day or Second Day Air.

Exmark Manufacturing stocks a limited supply of parts for transaxles, pumps and wheel motors. These parts can be ordered for Next Day Air shipment but will not be guaranteed per the Parts Plus Program.

⚠ WARNING

READ OPERATOR'S MANUAL BEFORE OPERATING OR SERVICING EXMARK EQUIPMENT

TABLE OF CONTENTS

Description	Page
44" and 48" Deck Group	3-4
Decal Group	15-16
Electrical Diagram	20
Electrical Group for S/N 457,999 and Lower	18
Electrical Group for S/N 458,000 and Higher	19
Electrical Logic Schematic	21
Engine Group	17
Front Frame Group	5-6
Fuel Group for S/N 457,999 and Lower	11
Fuel Group for S/N 458,000 and Higher	12
Hydraulic Group	13-14
Main Frame Group	7-8
Motion Control Group	10
Park Brake Group	9

44" and 48" DECK GROUP

Item	Part No.	Description	Qty.
1	3296-29	Nut, Nyloc 5/16-18	8
2	3256-3	Washer, 5/16 Std	6
3	103-2970-01	Shield, Belt	2
4	32128-20	Nut, Whizlock 5/16-18	4
5	1-800017	Bolt, HH 5/16-18 x 3 1/4 Tap	2
6	3290-357	Nut, Whizlock 3/8-16	9
7	3256-24	Washer, 3/8 SAE	2
8	1-613098	Pulley, Idler	2
9	1-413113	Bushing, Idler	2
10	323-11	Screw, HH 3/8-16 x 2 1/4	1
11	323-6	Screw, HH 3/8-16 x 1	1
12	98-5975	Washer, Spring Disk 3/8	8
13●	1-653189	Plate, Belt Guide	1
★	103-5668	Plate, Belt Guide	1
14	1-653190	Spacer	1
15	1-413099	Pulley, Idler	1
16	1-413093	Belt, Deck Drive (44")	1
	1-413308	Belt, Deck Drive (48")	1
17●	3296-39	Nut, Nyloc 3/8-16	21
★	3296-39	Nut, Nyloc 3/8-16	20
18●	1-809107	Washer, 3/8 Std Flat Hardened	2
19●	103-4681	Bearing, Pivot	2
20	103-3330	Spring, Extension	1
21	321-1	Screw, HH 1/4-20 x 3/8	1
22✖	103-5698	Kit, Idler Arm (103-4598-01) W/Bearings	1
23●	1-603384	Bushing, Idler Pivot	1
24	1-800811	Screw, HH 7/16-14 x 1 1/2	8
25	32128-37	Nut, Whizlock 7/16-14	16
26	1-633447	Chain, Deck Lift	4
27	103-4667	Asm, Deck (103-4148-01) W/Decals (44")	1
	103-4382	Asm, Deck (103-3846-01) W/Decals (48")	1
28●	1-800805	Screw, HH 3/8-16 x 3 1/2 Gr 8	1
★	323-23	Screw, HH 3/8-16 x 4 1/2 Gr 8	1
29	323-13	Screw, HH 3/8-16 x 2 3/4	2
30	32128-33	Nut, Whizlock 1/4-20	1
31	103-3900	Spacer, Strut	4
32	322-2	Screw, HH 5/16-18 x 5/8	2
33	99-2842	Spacer	3

Item	Part No.	Description	Qty.
34	103-1026	Screw, HH 5/8-11 x 1	3
35	1-603299	Roller, Anti-Scalp	3
36	1-373034	Washer	3
37	322-5	Screw, HH 5/16-18 x 1	2
38	1-402106-01	Wld, Chute Discharge	1
39	323-10	Screw, HH 3/8-16 x 2	2
40	63-8410	Washer	4
41	103-2547	Asm, Cutter Housing	3
42◆	103-4666	Asm, Cutter Housing Complete (44")	3
	103-3207	Asm, Cutter Housing Complete (48")	3
43✚	103-2788	Spindle	3
44	103-2535	Spacer, Guard Bottom	3
45	302-19	Zerk 1/4-28 Str	1
46	1-522480-01	Baffle, Discharge	1
47▲	103-4668	Asm, Deck Complete (44")	1
	103-4366	Asm, Deck Complete (48")	1
48	3217-46	Nut, Hex 3/4-16 Heavy	3
49	103-2802	Washer, Spring Disc 3/4	3
50✚	1-653099	Sheave, Blade Drive (44")	3
✚	1-413424	Sheave, Blade Drive (48")	3
51	323-7	Screw, HH 3/8-16 x 1 1/4	18
52✚	103-1330	Guard, Bearing Top	3
53	1-807268	Key, Machine 1/4 x 3/16 x 1	3
54	1-513208	Washer, Spring Disc 5/8	3
55	103-2529	Blade, Notched (44")	3
	103-2509	Blade, Low Lift (44")	3
■	103-2519	Blade, Mulching (44")	3
	103-1579	Blade, Solid (44")	3
	103-2527	Blade, Notched (48")	3
	103-2507	Blade, Low Lift (48")	3
■	103-2517	Blade, Mulching (48")	3
	103-1577	Blade, Solid (48")	3
56	103-4051	Kit, Antiscalp roller	3
57★	3296-59	Nut, 3/8-16 Nyloc Thin	1
58★	103-2916	Guard, Top	1
59★	103-3506	Seal, Single Lip	1
60★	32120-10	Ring, Retaining	2
61★	103-3504	Bearing, Spherical	2
62★	106-7159	O-ring	2
63★	1-603401	Spacer	1
64★	103-3505	Seal, Double, Lip	1

Exmark red touch up spray paint – P/N 1-850337.

■ Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N MK443(44"),MK483(48")

✚ Apply Mobil HTS grease (P/N 103-5217 1.5 oz packet) (or a food-grade anti-sieze) between the spindles & bearings and spindles & sheaves and under top bearing guard. DO NOT use a copper or nickel based anti-sieze.

◆ Complete cutter housings also include items #54 & #34.

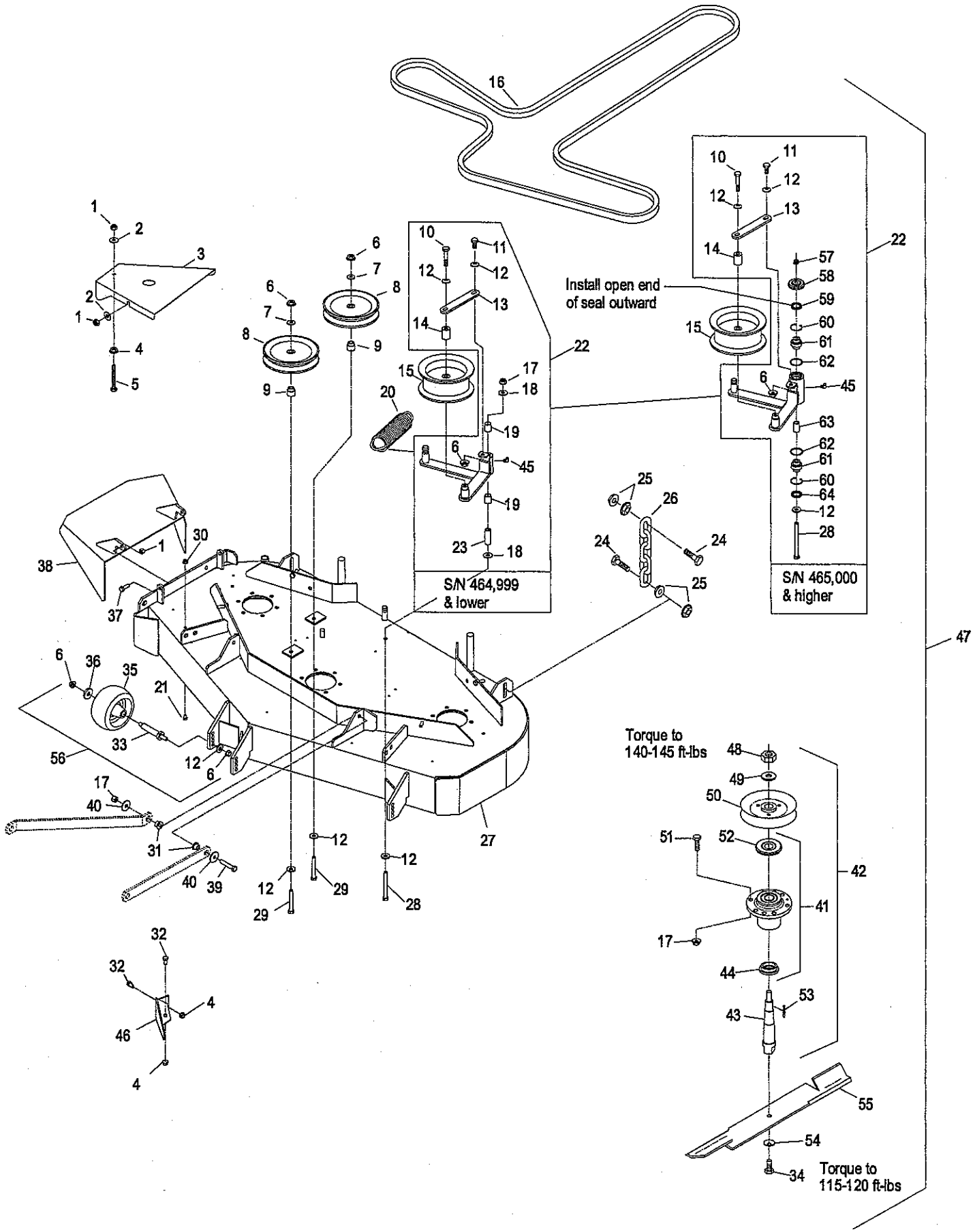
▲ Includes all item shown plus decals. Does not include struts.

● This component is required for units with S/N 464,999 and lower.

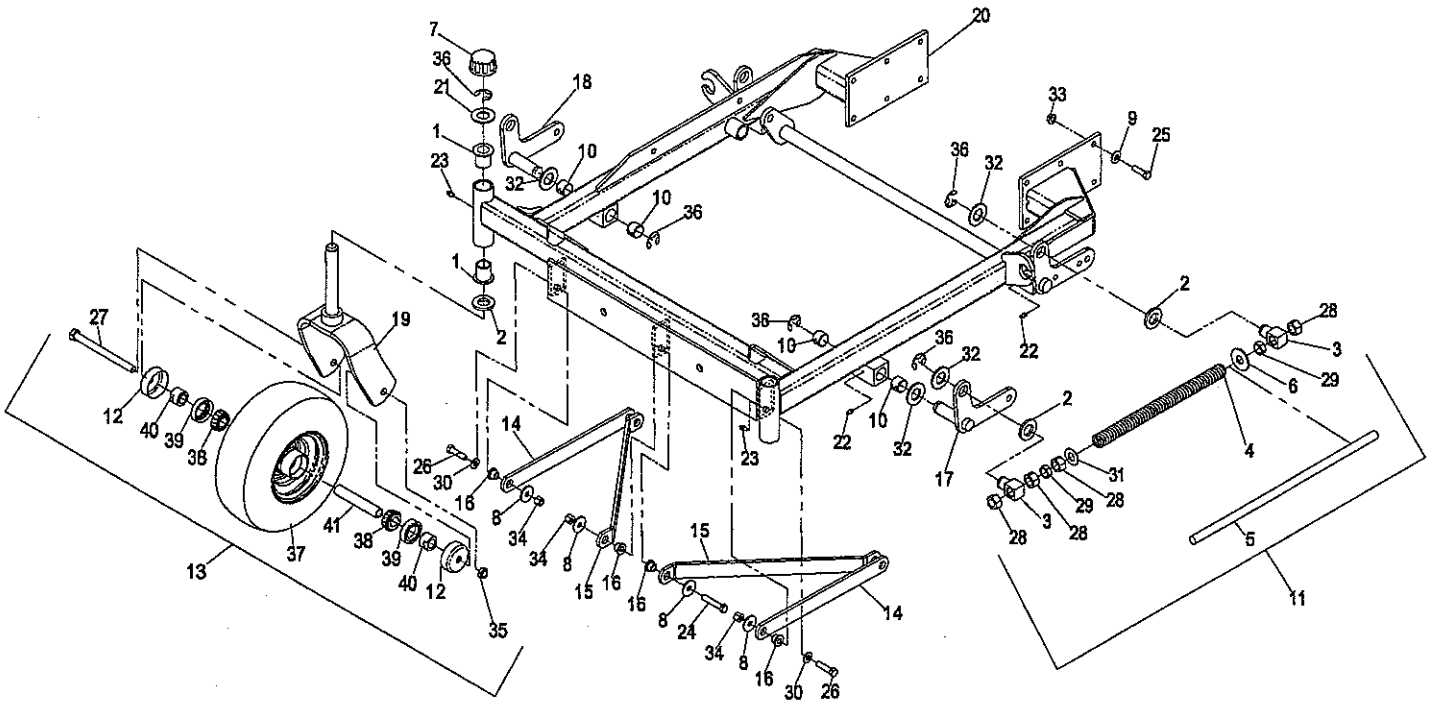
★ This component is required for units with S/N 465,000 and higher.

✖ 103-5698 kit includes components shown for S/N 465,000 and higher and services all serial numbers.

44" and 48" DECK GROUP



FRONT FRAME GROUP



Item	Part No.	Description	Qty.
1	1-303514	Bearing, Flange	4
2	1-513338	Washer	6
3	1-633441	Swivel, Deck Mount	4
4	1-653009	Spring, Deck Support	2
5	1-653011	Rod, Deck Lift	2
6	1-805517	Washer, 5/8 Type B Wide	2
7	61-9780	Cap, Hub	2
8	63-8410	Washer	4
9	98-5975	Washer, Spring Disk 3/8	12
10	103-1982	Bushing, Spring	4
11	103-1987	Asm, Front Spring	2
12	103-2768	Guard, Seal	4
13	103-3800	Asm, Wheel & Brgs 11x4-5	2
14	103-3898 -01	Flat, Strut	2
15	103-3899 -01	Flat, Strut Angle	2
16	103-3900	Spacer, Strut	4
17	103-3902-01	Wld, Shaft LH	1
18	103-3903-01	Wld, Shaft RH	1
19	103-3904 -01	Wld, Caster Fork	2
20*	103-4338 -01	Asm, Front Frame	1
21	104-8076	Washer	2

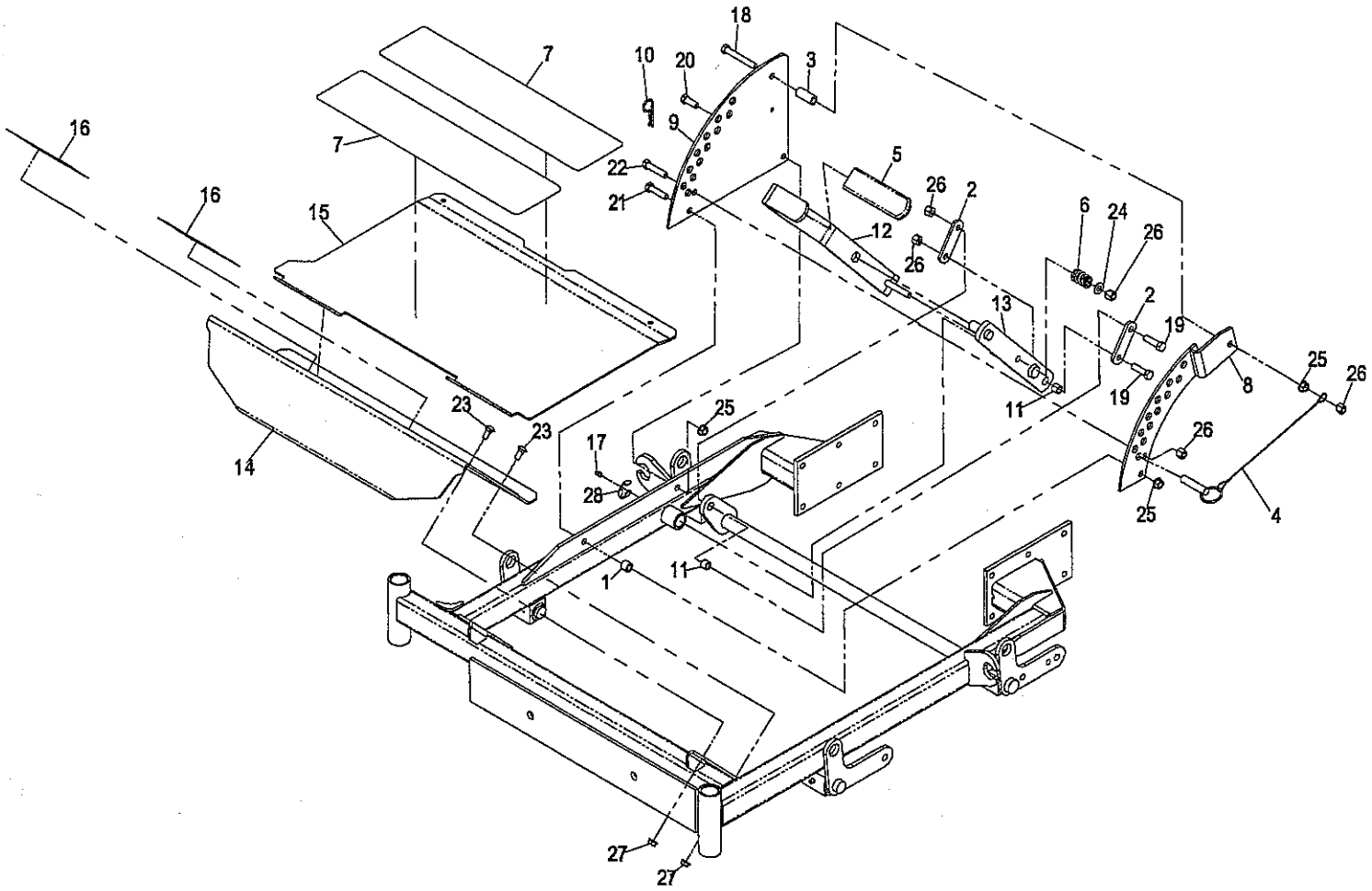
Item	Part No.	Description	Qty.
22	302-19	Zerk 1/4-28 Str	4
23	302-5	Zerk 1/4-28 Str Thrd Forming	2
24	323-10	Screw, HH 3/8-16 x 2	1
25	323-7	Screw, HH 3/8-16 x 1 1/4	12
26	323-8	Screw, HH 3/8-16 x 1 1/2	2
27	325-20	Screw, HH 1/2-13 x 6	2
28	3217-11	Nut, Hex 5/8-11	8
29	3218-6	Nut, Jam 5/8-11	4
30	3256-24	Washer, 3/8 SAE	2
31	3256-27	Washer, 5/8 SAE	2
32	3256-29	Washer-Flat, 15/16 x 1 3/4	6
33	3290-357	Nut, Whizlock 3/8-16	12
34	3296-39	Nut, Nyloc 3/8-16	3
35	3296-45	Nut, Nyloc 1/2-13	2
36	32151-103	E-ring	8
37	1-513032	Tire,11" Pneumatic	2
38	1-633585	Bearing Cone, Tapered	4
39	103-0063	Seal, Double Lip	4
40◆	103-3051	Spacer, Nut	4
41	103-3157	Axle, Caster	2

Exmark red touch up spray paint – P/N 1-850337.

* Includes frame weldment, plus items #10, #17, #18, #22, #32(2) & #36(2). Does not include grease fittings item #23.

◆ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on spacer nut Item #40.

FRONT FRAME GROUP (cont.)



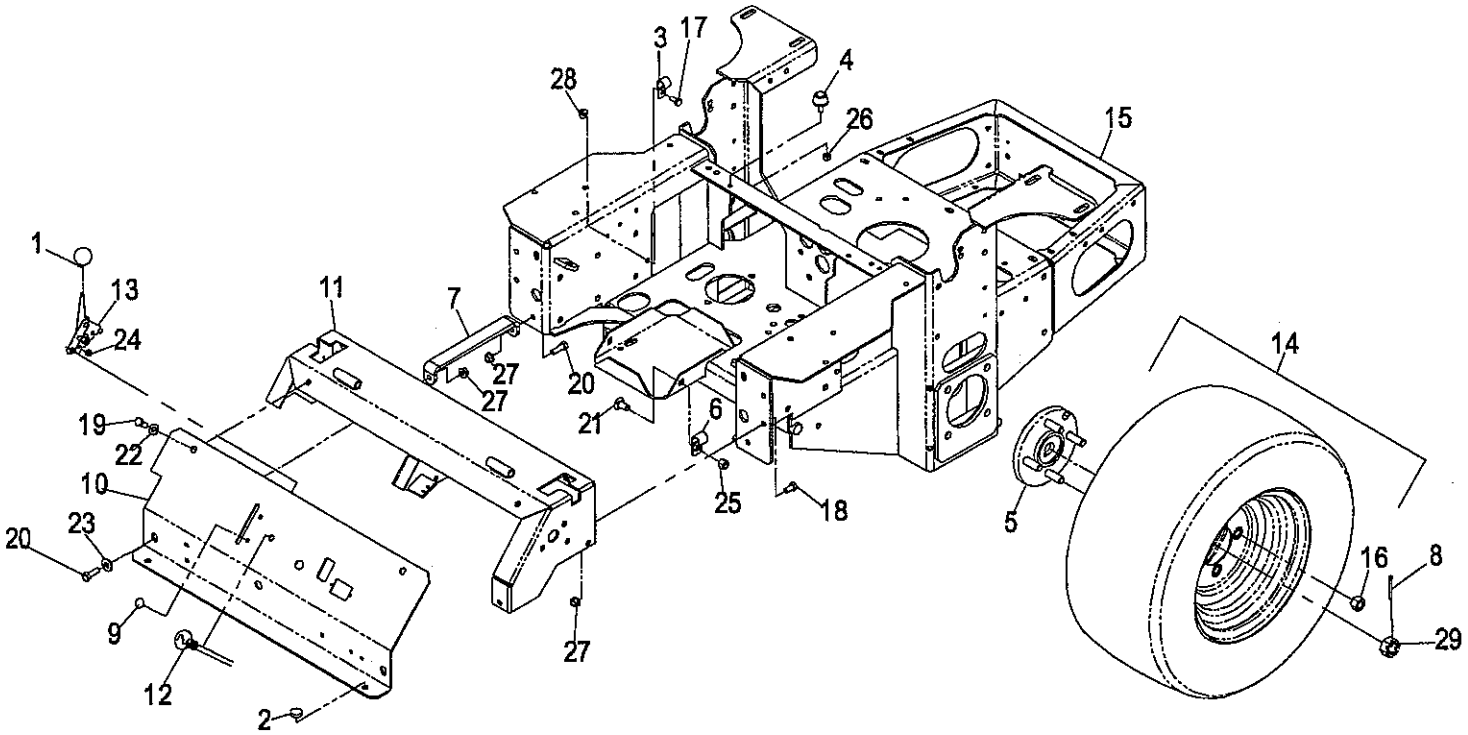
Item	Part No.	Description	Qty.
1	1-413088	Spacer	1
2	1-633068	Arm, Deck Lift	2
3	1-633082	Bushing, Lift Lever	1
4◆	1-633097	Pin, Hitch W/Laynard and Hairpin	1
5	1-633295	Grip, Lift Lever	1
6	1-633325	Spring, Compression	1
7	1-633553	Pad, Anti Skid	2
8	1-652235 -01	Wld, Deck Lift Plate	1
9	1-653230 -01	Plate, Deck Lift	1
10	1-806005	Hairpin Cotter	1
11	103-1918	Bushing	2
12	103-2081	Asm, Lift Lever W/Grip	1
13	103-3718 -03	Wld, Deck Lift Arm	1
14	103-4315	Asm, Floorpan W/Decals & Pads	1

Item	Part No.	Description	Qty.
15	103-4316	Asm, Floorpan W/Decals & Pads	1
16	106-6572	Pad, Anti Skid	2
17	302-19	Zerk 1/4-28 Str	1
18	323-13	Screw, HH 3/8-16 x 2 3/4	1
19	323-29	Screw, HH 3/8-16 x 1 3/8	2
20	323-6	Screw, HH 3/8-16 x 1	1
21	323-8	Screw, HH 3/8-16 x 1 1/2	1
22	323-9	Screw, HH 3/8-16 x 1 3/4	1
23	3230-1	Bolt, Carriage 5/16-18 x 3/4	4
24	3256-24	Washer, 3/8 SAE	1
25	3290-357	Nut, Whizlock 3/8-16	3
26	3296-39	Nut, Nyloc 3/8-16	5
27	32128-20	Nut, Whizlock 5/16-18	4
28	32151-103	E-ring	1

Exmark red touch up spray paint – P/N 1-850337 Includes.

◆ Includes hitch pin plus hairpin item #10.

MAINFRAME GROUP



Item	Part No.	Description	Qty.
1●	1-513592	Knob, Red Throttle	1
2	1-513658	Bumper	2
3	1-513762	Clip, Loom 1/2	1
4	1-523420	Bumper	2
5	1-602997	Hub, W/Studs	2
	1-633926	Studs, Wheel 1/2-20	8
6	1-603727	Clip, Loom	1
7	1-653089-03	Bracket, Instrument Panel	1
8	1-806800	Pin, Cotter 9/64 x 1 1/2	2
9●	1-807513	Bolt, Carriage #10-24 x 1/2	2
10●	103-0724	Asm, Instrument Panel W/Decals	1
★	103-4895	Asm, Instrument Panel W/Decals	1
11	103-3452	Asm, Console W/Decals	1
12●	103-4090	Control, Choke Push/Pull	1
13●	103-4091	Cable, Throttle	1
14	103-3978	Asm, Wheel & Tire	2
	103-4269	Wheel	2

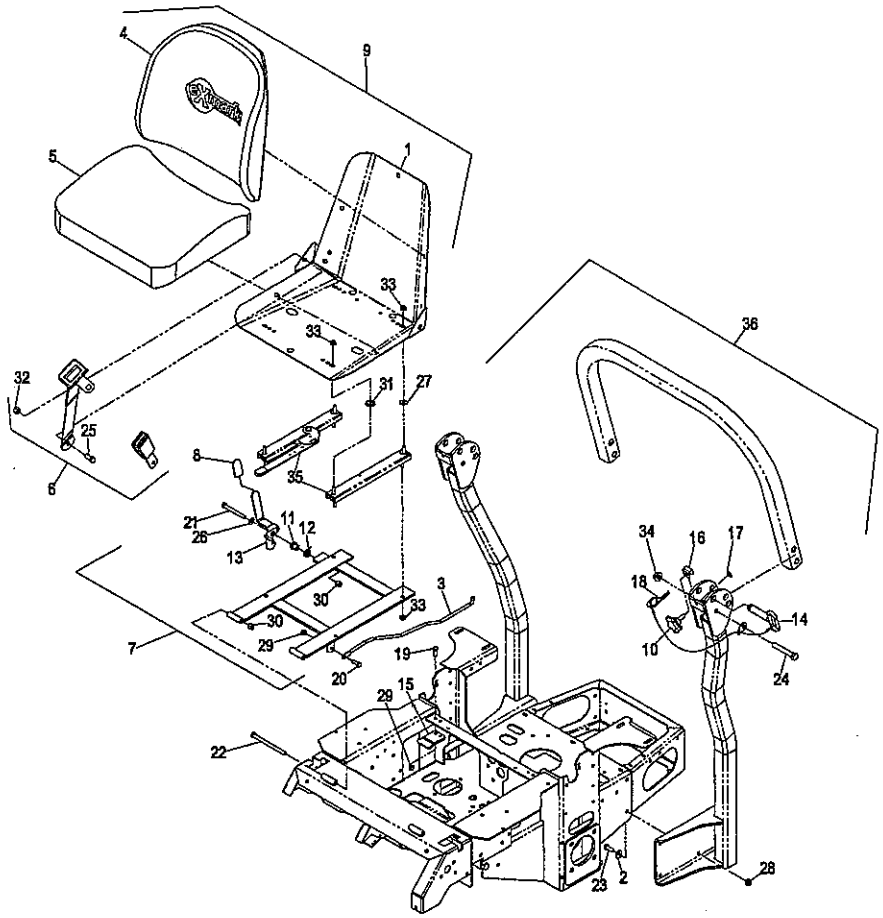
Item	Part No.	Description	Qty.
	103-4270	Tire, 20 x 10.00-10 4 ply	2
15	103-5860-03	Wld, Mainframe	1
16	242-50	Nut, Lug 1/2-20	8
17	321-3	Screw, HH 1/4-20 x 5/8	1
18	322-2	Screw, HH 5/16-18 x 5/8	6
19	322-3	Screw, HH 5/16-18 x 3/4	3
20	322-5	Screw, HH 5/16-18 x 1	2
21	3231-21	Bolt, Carriage 3/8-16 x 3/4	1
22	3256-23	Washer, 5/16 SAE	2
23	3256-3	Washer, 5/16 Std	2
24●	3296-2	Nut, Nyloc #10-20	2
25	3296-39	Nut, Nyloc 3/8-16	1
26	3296-42	Nut, Nyloc 1/4-20	2
27	32128-20	Nut, Whizlock 5/16-18	8
28	32128-33	Nut, Whizlock 1/4-20	1
29	32136-5	Nut, Slotted 3/4-16	2

Exmark black touch up spray paint – gloss black.

● This component is required for units with S/N 457,999 and lower.

★ This component is required for units with S/N 458,000 and higher.

MAINFRAME GROUP (cont.)



Item	Part No.	Description	Qty.
1	1-633859	Frame, Seat	1
2	98-5975	Washer, Spring Disk 3/8	8
3	103-1731	Rod, Seat Retainer	1
4	103-3520	Seat, Back	1
5	103-3521	Seat, Bottom	1
6	103-4469	Asm, Seat Belt	1
7	103-4423	Asm, Seat Frame	1
8	103-4434	Grip, Lever	1
9●	103-4883	Asm, Seat	1
10	106-0887	Knob	2
11	107-0075	Bushing, Latch	1
12	107-0076	Spring, Torsion	1
13	107-3083	Latch	1
14◆	103-4553	Asm, Rops Fold Pin	2
15	103-5961	Catch, Seat Latch	1
16	107-3124	Clip	2
17	107-3154	Nut, Push 3/8-16	2
18	107-3155	Cotter, Hairpin Double Loop	2

Item	Part No.	Description	Qty.
19	322-4	Screw, HH 5/16-18 x 7/8	2
20	322-5	Screw, HH 5/16-18 x 1	1
21	323-20	Screw, HH 3/8-16 x 3-1/4	1
22	323-39	Screw, HH 3/8-16 x 5	2
23	323-6	Screw, HH 3/8-16 x 1	8
24	325-13	Screw-HH 1/2-13 x 3 1/4	2
25	3212-4	Screw-HH 7/16-20 x 1	2
26	3256-24	Washer, 3/8 SAE	1
27	3256-3	Washer, 5/16 Std	2
28	3290-357	Nut, Whizlock 3/8-16	8
29	3296-29	Nut, Nyloc 5/16-18	3
30	3296-39	Nut, Nyloc 3/8-16	3
36	1-543401	Spacer, Seat Track	2
32	3296-7	Nut, Nyloc 7/16-20	2
33	32128-20	Nut, Whizlock 5/16-18	8
34	32128-23	Nut, Hex Flange Side Lock 1/2-13	2
35	1-643255	Track, Seat (4" Adjustable)	1
36✚	FRPSL	Kit, Rops LHP	1

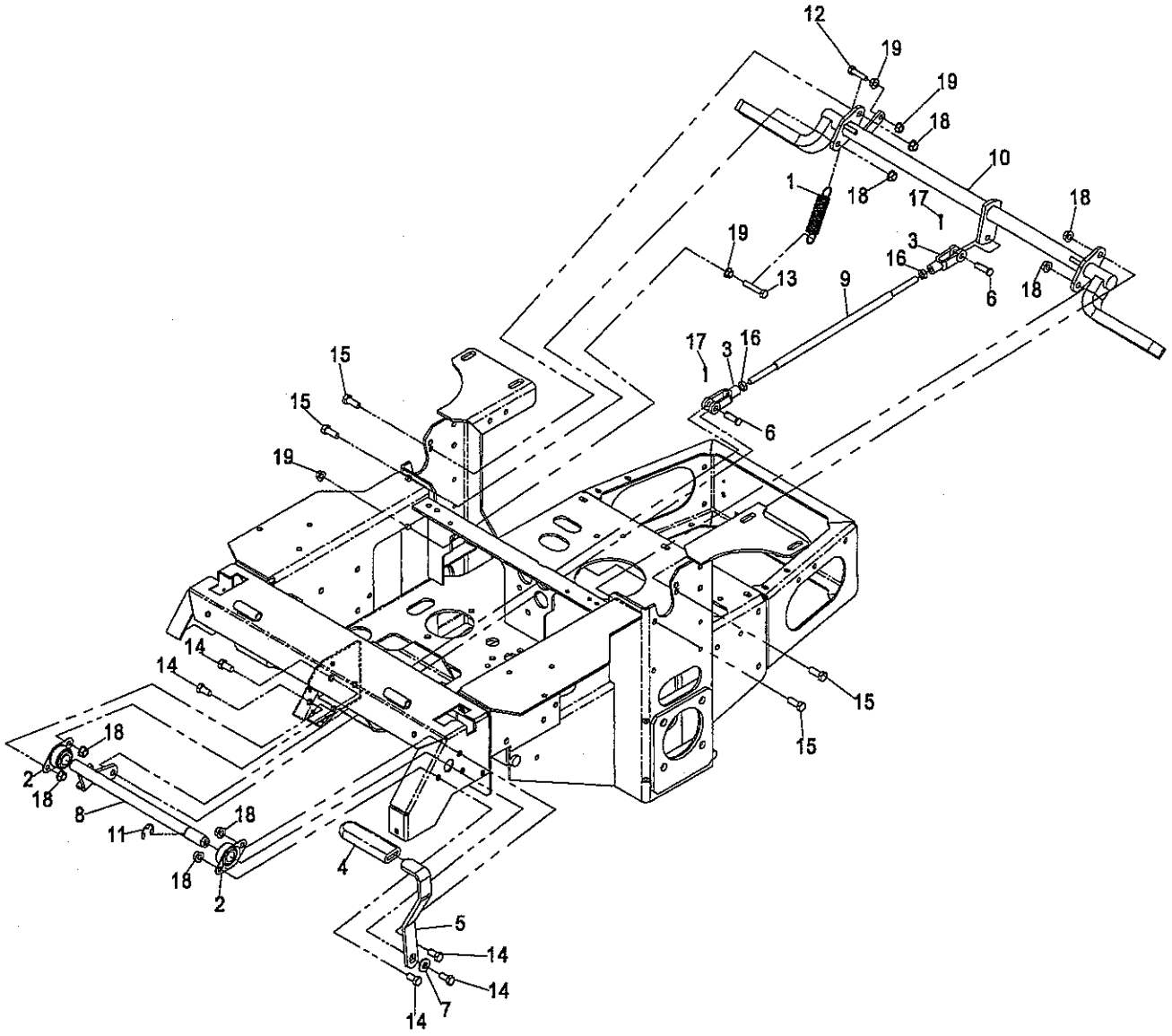
Exmark black touch up spray paint – gloss black.

◆ Includes ROPS fold pin plus hairpin item #18.

✚ 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 #7, catch item #15, and seat belt assembly item #6.

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

PARK BRAKE GROUP

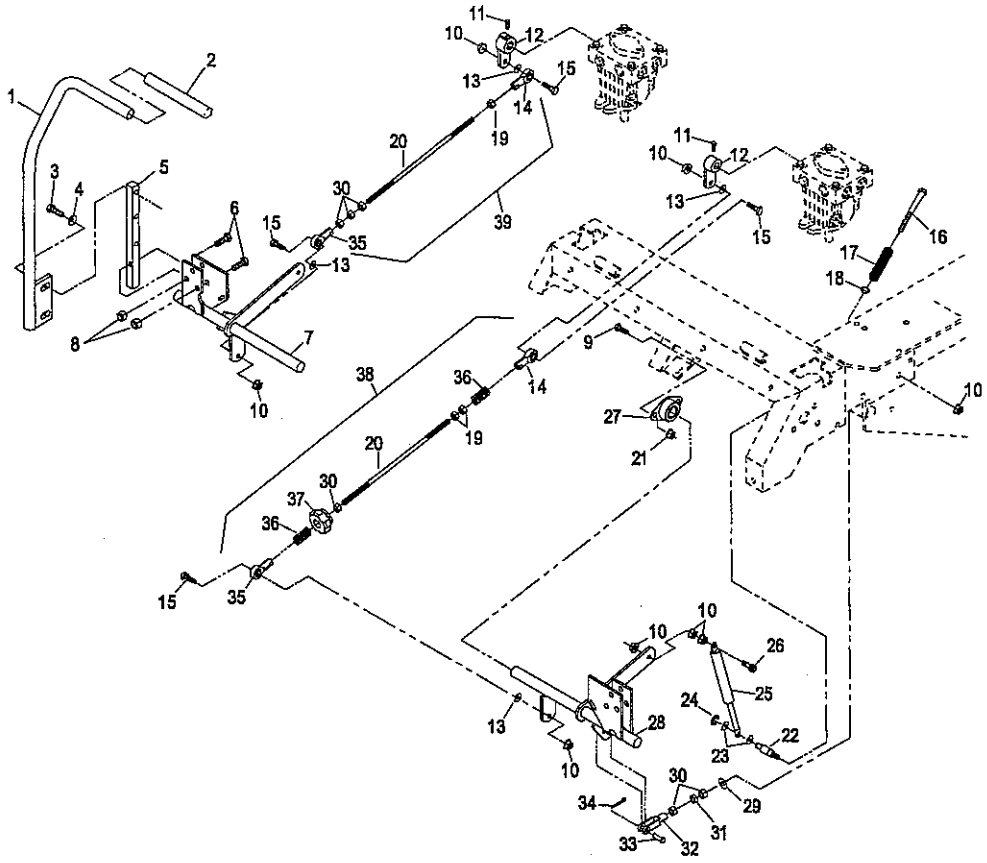


Item	Part No.	Description	Qty.
1	1-323161	Spring	1
2	1-633102	Bearing, Side Flange	2
3	1-633131	Yoke	2
4	1-633268	Grip	1
5	103-4630	Handle, Park Brake W/Grip	1
6	1-808285	Pin, Clevis 3/8 x 1 1/8	2
7	98-5975	Washer, Spring Disk 3/8	1
8	103-3116	Wld, Brake Shaft	1
9	103-3907	Linkage	1
10	103-3960-03	Wld, Brake	1

Item	Part No.	Description	Qty.
11	32151-48	E-Ring	1
12	322-6	Screw, HH 5/16-18 x 1 1/4	1
13	322-9	Screw, HH 5/16-18 x 1 3/4	1
14	323-4	Screw, HH 3/8-16 x 3/4	5
15	323-6	Screw, HH 3/8-16 x 1	4
16	3219-3	Nut, Hex 3/8-24	2
17	3272-10	Pin, Cotter 1/8 x 3/4	2
18	3290-357	Nut, Whizlock 3/8-16	8
19	32128-20	Nut, Whizlock 5/16-18	4

Exmark black touch up spray paint – gloss black.

MOTION CONTROL GROUP



Item	Part No.	Description	Qty.
1	103-0632	Handle W/Grip (RH)	1
*	103-0631	Handle W/Grip (LH)	1
2	1-633257	Grip, Motion Control Handle	2
3	323-6	Screw, HH 3/8-16 x 1	4
4	98-5975	Washer, Spring Disk 3/8	4
5	103-0407	Arm, Control Shaft	2
6	323-9	Screw, HH 3/8-16 x 1 3/4	6
7	103-4773	Bracket, Motion Control (RH)	1
8	3296-39	Nut, Nyloc 3/8-16	6
9	323-4	Screw, HH 3/8-16 x 3/4	8
10	32128-20	Nut, Whizlock 5/16-18	12
11◆	1-803022	Setscrew, 5/16 x 5/8	2
12	103-3717	Arm, Pump Control	2
13	3256-3	Washer, 5/16 Std	4
14	1-633152	Balljoint (LH)	2
15	322-6	Screw, HH 5/16-18 x 1 1/4	4
16	1-603737	Bolt, Neutral Return	2
17	1-603807	Spring	2
18	1-603735	Bushing, Flanged	2
19	1-804524	Nut, Hex 5/16-24 (LH)	3

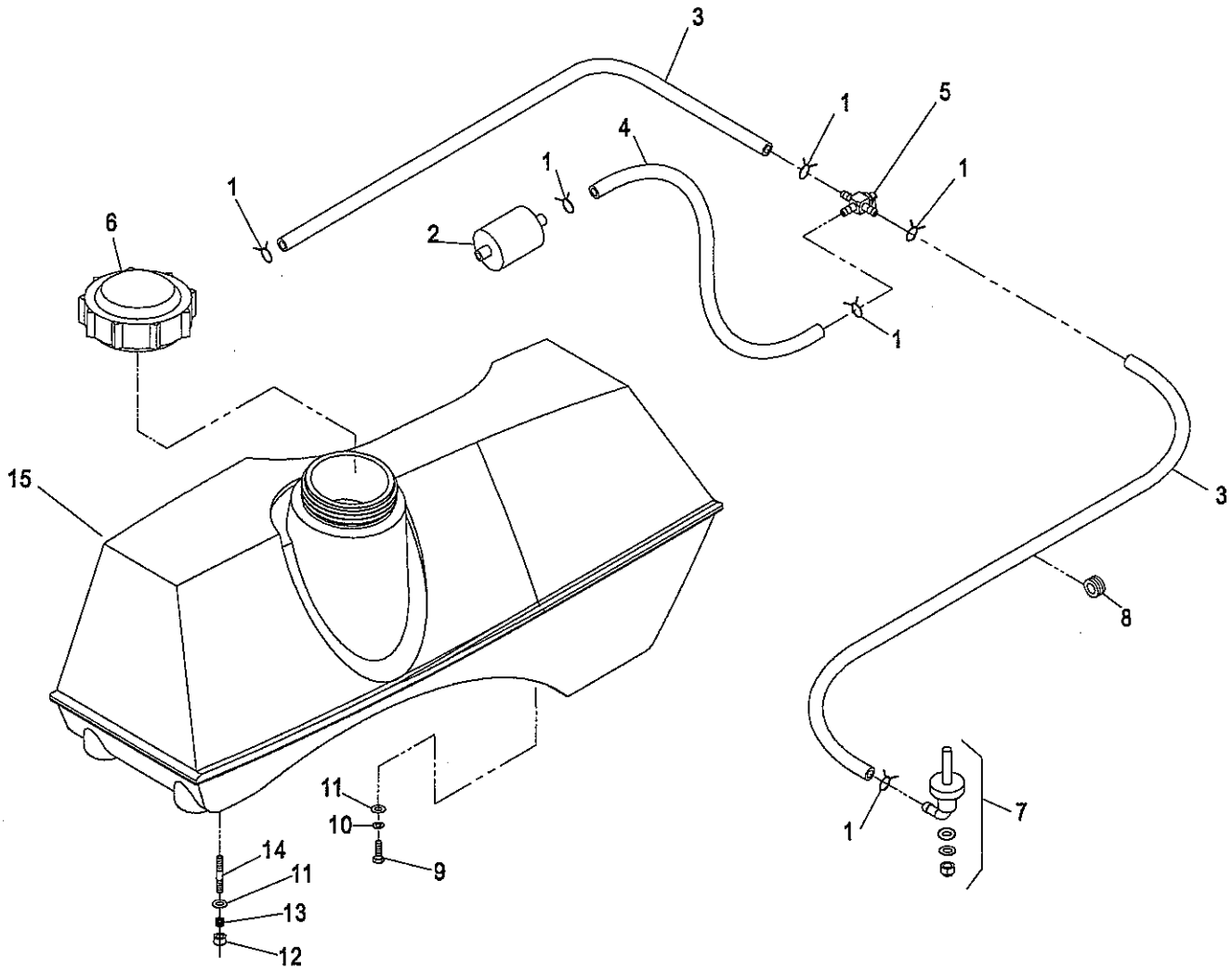
Item	Part No.	Description	Qty.
20	103-3066	Link, Pump Control	2
21	3290-357	Nut, Whizlock 3/8-16	8
22	103-4101	Pin, Damper Anchor	2
23	3256-23	Washer, 5/16 SAE	4
24	32120-35	E-Ring	2
25	103-4079	Damper	2
26	1-403180	Screw, HH 5/16-18 x 1 1/4 Sp	4
27	1-633102	Bearing, Flanged	4
28	103-4774	Bracket, Motion Control (LH)	1
29	3256-2	Washer, 1/4 Std	2
30	3219-2	Nut, Hex 5/16-24	8
31	3220-2	Nut, Jam 5/16-24	2
32	1-303105	Yoke	2
33	1-808280	Pin, Clevis 5/16 x 1	2
34	3272-5	Pin, Cotter 3/32 x 1/2	2
35	1-543017	Balljoint (RH)	2
36	1-323245	Spring, Compression	2
37	103-3060	Knob, Tracking	1
38	103-3063	Asm, Tracking	1
39	103-4327	Asm, Tracking	1

Exmark black touch up spray paint – gloss black.

* Not Illustrated.

◆ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on setscrews.

FUEL GROUP FOR S/N 457,999 and LOWER

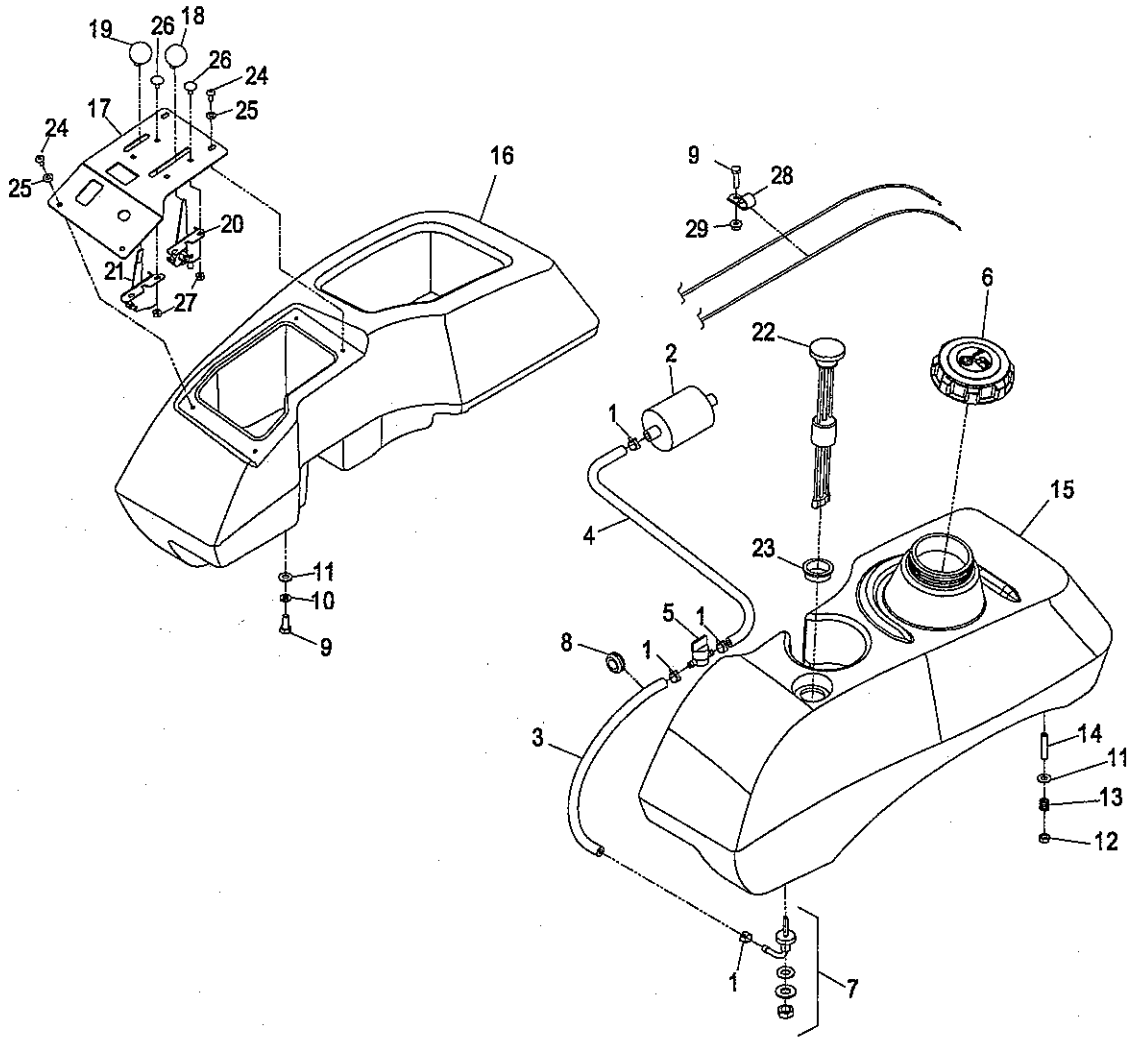


Item	Part No.	Description	Qty.
1	1-303077	Clamp, Fuel Line	6
2◆	**Kohler**	Part No. 2405002 Fuel Filter	1
3	1-543526	Fuel Line	2
4	103-1419	Fuel Line	1
5	1-633347	Valve, Fuel	1
6	103-2107	Cap, Fuel Tank	2
7▼	103-2605	Fitting, Fuel Bulkhead W/Strainer	2
	103-2784	O-Ring	2
8	1-543296	Grommet, Fuel Line	2

Item	Part No.	Description	Qty.
9	322-3	Screw, HH 5/16-18 x 3/4	4
10	1-805005	Washer, Lock 5/16 Heavy	4
11	3256-23	Washer, 5/16 SAE	8
12	3296-47	Nut, Nyloc 5/16-18	4
13	1-633349	Spring	4
14✧	1-633023	Stud	4
15*★	103-2122	Asm, Tank Fuel (LH)	1
★	103-2123	Asm, Tank Fuel (RH)	1

* Not illustrated.
✧ Use Pro-Lock, Retaining Type (P/N 1-840023, .5ml tube) on stud threads going into tank.
◆ Refer to Engine Owner's Manual (Fuel filter **MUST** be 15 Micron or smaller).
★ Includes tank, cap, fitting, and studs.
▼ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on fuel fitting.

FUEL GROUP FOR S/N 458,000 and HIGHER



Item	Part No.	Description	Qty.
1	1-303077	Clamp, Fuel Line	4
2✦	**Kohler**	Part No. 2405002 Fuel Filter	1
3	1-303472	Fuel Line	1
4	1-603955	Fuel Line	1
5	1-603770	Valve, Fuel	1
6	103-2107	Cap, Fuel Tank	1
7▼	103-2605	Fitting, Fuel Bulkhead W/Strainer	1
	103-2784	O-Ring	1
8	1-543296	Grommet, Fuel Line	1
9	322-3	Screw, 5/16-18 x 3/4	5
10	1-805005	Washer, Lock 5/16	4
11	3256-23	Washer, 5/16 SAE	8
12	3296-47	Nut, Nyloc 5/16-18	4
13	1-633349	Spring, Fuel Tank	4
14✧	1-633023	Stud, Fuel Tank	4

Item	Part No.	Description	Qty.
15★	103-5995	Asm, Tank Fuel (LH)	1
16★	103-5998	Asm, Tank (RH)	1
17	103-4896	Asm, Control Panel W/Decals	1
18	1-513592	Knob, Red (Throttle)	1
19	1-513593	Knob, Black (Choke)	1
20	103-5809	Cable, Throttle	1
21	103-5810	Cable, Choke	1
22	103-5797	Gage, Fuel	1
23	95-8972	Grommet	1
24■	32122-30	Screw, PTH #10-24 x 1/2	4
25	1-303435	Washer, Spring Disk 1/4	4
26	1-807513	Bolt, Carriage #10-24 x 1/2	4
27	3296-2	Nut, Nyloc #10-24	4
28	1-633396	Clip, Loom 5/8	1
29	32128-20	Nut, Whizlock 5/16-18	1

✧ Use Pro-Lock, Retaining Type (P/N 1-840023, .5ml tube) on stud threads going into tank.
✦ Refer to Engine Owner's manual. (Fuel fliter **Must** be 15 Micron or smaller).
★ Includes tank and studs. LH tank also includes cap, fitting and fuel gauge.
▼ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on fuel fitting.
■ Snug fit only on slotted holes, **Do Not Overtighten**, tank must be able to expand.

HYDRAULIC GROUP

Item	Part No.	Description	Qty.
1	103-1947	Asm, Reservoir W/Decal	1
2	103-1948	Cap, Hydraulic Reservoir	1
3	103-1949	Gasket, Reservoir Cap	1
4	321-6	Screw, HH 1/4-20 x 1	2
5	3256-22	Washer, Flat 1/4 SAE	2
6	103-3071-03	Wld, Reservoir Stand	1
7	103-1801	Adapter, Straight	1
	1-603921	O-Ring	1
8	103-1912	Adapter, Straight	1
	1-603921	O-Ring	1
9	103-1716	Clamp, Hose 17/32	3
10	103-1988	Clamp, Hose 11/16	3
11	103-3077	Asm, Supply Hose	1
12	103-2889	Asm, Filter Head	1
	103-1912	Adapter, Straight	2
	1-603921	O-Ring	1
13	321-3	Screw, HH 1/4-20 x 5/8	2
14	322-5	Screw, HH 5/16-18 x 1	1
15	1-805004	Washer, Lock 1/4 Heavy	2
16	1-513211	Element, Oil Filter	1
▼	1-523541	Element, Oil Filter (Winter)	1
17	103-2930	Asm, Charge Hose	1
18	103-2357	Asm, Case Drain Hose	1
19	103-4021	Hose, RH Rear	1
20	1-653187	Hose, RH Front	2
21	103-2153	Elbow, 90° (LH Wheel Motor)	2
	1-603920	O-Ring	1
	1-603992	O-Ring	1
22	103-4695	Motor, Wheel	2
	1-000138	Kit, Bearing	1
	1-000119	Kit, Seal	1
23	103-1799	Elbow, 90°	2
	1-603921	O-Ring	1
24	1-807272	Key 5 x 5 x 25mm	2
25	103-1802	Elbow, 90°	2
	1-603921	O-Ring	1
26	322-3	Screw, HH 5/16-18 x 3/4	1
27	32128-20	Nut, Whizlock 5/16-18	2
28	103-4040	Pump, Hydro	2
	103-2664	Kit, Input Shaft 10A	1
	94-6922	Kit, Thrust Bearing 10A	1
	103-2666	Kit, Cylinder Block 10A	1

Item	Part No.	Description	Qty.
	105-6184	Kit, Overhaul Seal	1
	103-4237	Kit, Shock Valve 2300psi	1
29	103-4022	Hose, LH Rear	1
30	103-4797	Elbow, 90° (RH Wheel Motor)	2
	1-603920	O-Ring	1
	1-603992	O-Ring	1
31●	3290-357	Nut, Whizlock 3/8-16	7
★	3290-357	Nut, Whizlock 3/8-16	6
32	323-7	Screw, HH 3/8-16 x 1 1/4	4
33	103-1940	Adapter, Straight Long	3
	1-603920	O-Ring	1
	1-603992	O-Ring	1
34◆	1-803050	Setscrew, 5/16-18 x 3/4	4
35	1-653156	Sheave, Pump Drive 44" & 48"	2
36	103-1767	Spring	1
37	3296-39	Nut, Nyloc 3/8-16	1
38	98-5975	Washer, Spring Disk 3/8	1
39●	63-8410	Washer.	1
40●	103-4681	Bearing	2
41✖	103-5699	Kit, Idler Arm W/Bearings	1
42	302-40	Zerk, 90° 1/4-28	1
43●	323-9	Screw, HH 3/8-16 x 1 3/4	2
★	323-9	Screw, HH 3/8-16 x 1 3/4	1
44●	323-13	Screw, HH 3/8-16 x 2 3/4	1
★	323-15	Screw, HH 3/8-16 x 3 1/2	1
45	3256-4	Washer, 3/8 Std	1
46●	1-603044	Bushing, Idler Pivot	1
47●	1-603496	Bushing, Idler	1
48	1-603843	Pulley, Idler	1
49	3256-24	Washer, 3/8 SAE	1
50	103-4760	Belt, Pump	1
51	103-4020	Adapter, Straight	1
	1-603920	O-Ring	1
	1-603992	O-Ring	1
52★	103-3506	Seal, Single Lip	1
53★	32120-10	Ring, Retaining	2
54★	103-3504	Bearing, Spherical	2
55★	106-7159	O-ring	2
56★	103-5677	Spacer	1
57★	103-3505	Seal, Double, Lip	1
58★	3234-11	Screw, HH Whizlock 3/8-16 x 1	1

Exmark red touch up spray paint – P/N 1-850337

▼ Use only for operation below 32°F (0°C)

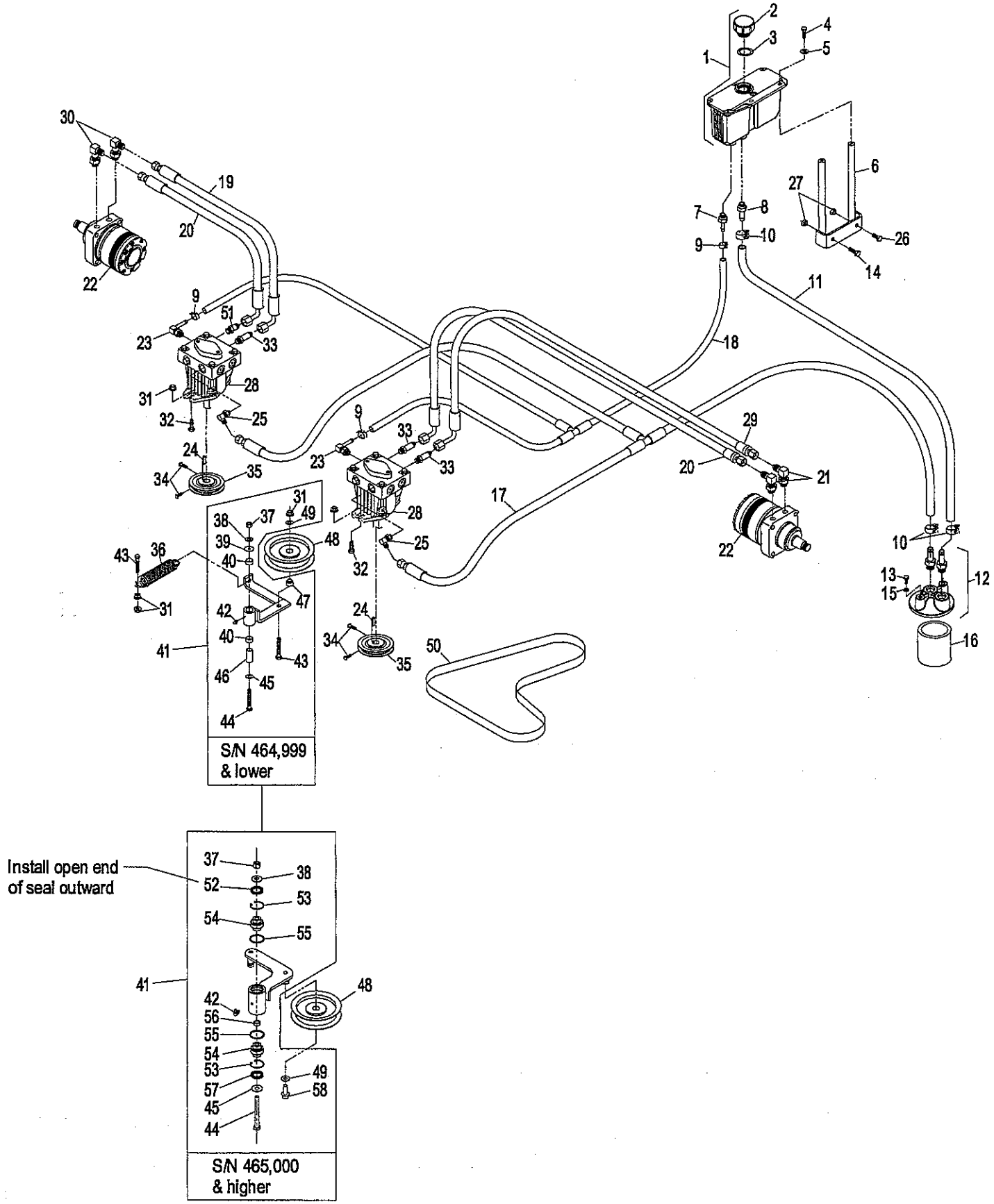
◆ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on setscrews.

● This component is required for units with S/N 464,999 and lower.

★ This component is required for units with S/N 465,000 and higher.

✖ 103-5699 kit includes components shown for S/N 465,000 and higher and services all serial numbers.

HYDRAULIC GROUP



DECAL GROUP

Item	Part No.	Description	Qty.
1▲	103-3995	Decal, Console	1
2	107-2112	Decal, Danger Slope	1
3	1-523552	Decal, Hyd Tank/Hot Surface	1
4	103-2644	Decal, Exhaust system	1
5	103-1077	Decal, Bolt Torque	1
6	1-513742	Decal, No Step	2
7	1-633922	Decal, Anti-Scalp	1
8	1-513748	Decal, Guard	1
9	1-653147	Decal, Deck Height	1
10	1-513746	Decal, Muffler	1
11	1-653477	Decal, Belt Routing	1
12	1-303508	Decal, Discharge Warning	1
13	1-403005	Decal, Danger	2
14	1-303520	Decal, Trivantage	1
15	1-523417	Decal, Commercial 44	1

Item	Part No.	Description	Qty.
16	1-403131	Decal, Commercial 48	1
17	103-4112	Decal, LCT Model	1
18	107-2102	Decal, Rops Folding	1
19●	103-4337	Decal, Check Service	1
20	103-2882	Decal, Exmark Logo	1
21	98-5954	Decal, Missing Cover	2
22	1-643401	Decal, Mercury Switch	1
23★	103-6318	Decal, Check Service	1
24■	103-4903	Decal, Ignition/PTO	1
25■	103-4892	Decal, Throttle LHP	1
26▲	103-0262	Decal, Fuel Valve	1
27	103-1997	Decal, Top Console	1
28■	103-4930	Decal, Choke	1
29■	103-4891	Decal, Console	1
	103-5996	Decal Kit	1

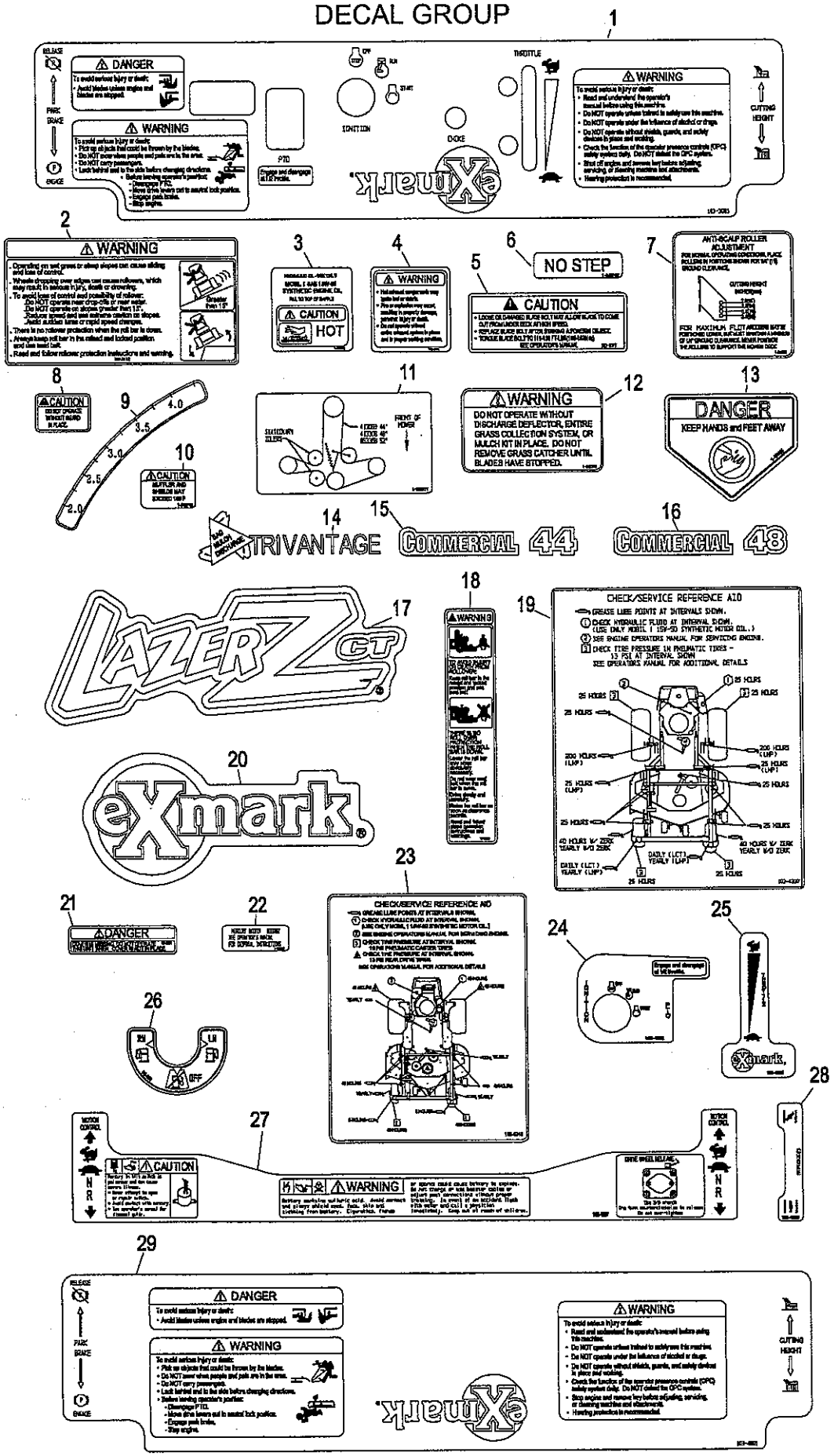
▲ This component is required for units with S/N 457,999 and lower.

■ This component is required for units with S/N 458,000 and higher.

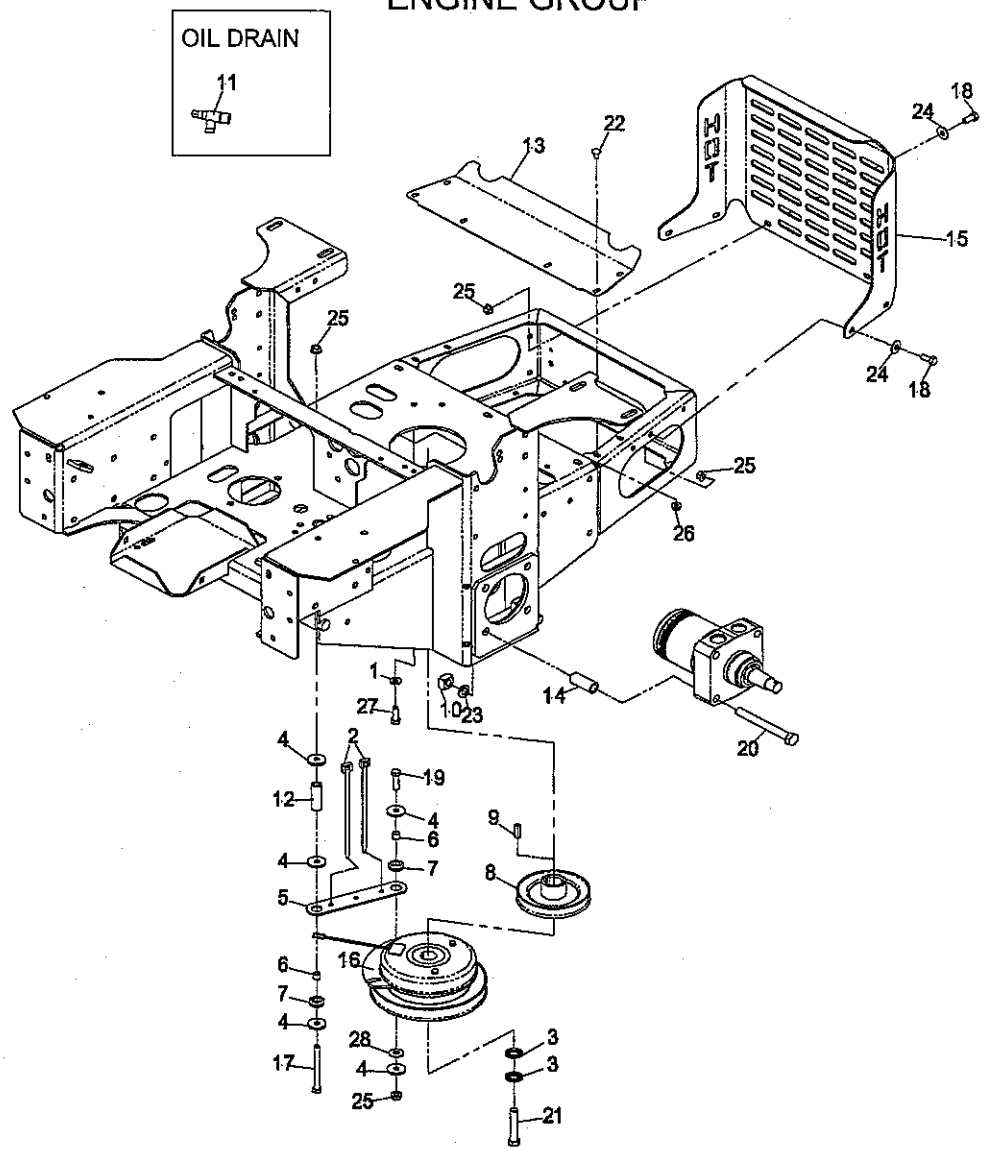
● This component is required for units with S/N 464,999 and lower.

★ This component is required for units with S/N 465,000 and higher.

DECAL GROUP


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
DANGER
WARNING
CAUTION
HOT
NO STEP
DO NOT OPERATE WITHOUT DISCHARGE DEFLECTOR, ENTIRE GRASS COLLECTION SYSTEM, OR MULCH KIT IN PLACE. DO NOT REMOVE GRASS CATCHER UNTIL BLADES HAVE STOPPED.
KEEP HANDS and FEET AWAY
TRIVANTAGE
COMMERCIAL 44
COMMERCIAL 48
LAZER Z CT
eXmark
CHECK/SERVICE REFERENCE AID
PARK BRAKE
ENGAGE
RELEASE
CUTTING HEIGHT
THROTTLE
IGNITION
PTO
MOTION CONTROL
N
R

ENGINE GROUP



Item	Part No.	Description	Qty.
1	1-303334	Washer, Spring Disk 5/16	4
2	1-303335	Tie, Cable 7 15/16 (Large)	2
3	1-603610	Washer, Spring Disk 7/16	2
4	1-613235	Washer	5
5	1-633543-03	Strap, Clutch/Brake	1
6	1-633545	Spacer, Grommet	2
7	1-633630	Grommet, Brake	2
8	1-653035	Sheave, W/Hub	1
9	1-807259	Key, Machine 1/4 x 1/4 x 1	1
10	103-0131	Nut, Square 1/2-13	8
11▼	103-1965	Valve, Oil Drain	1
12	103-2614	Spacer	1
13	103-2740-03	Deflector, Short	1
14	103-4042	Spacer, Wheel Motor	8

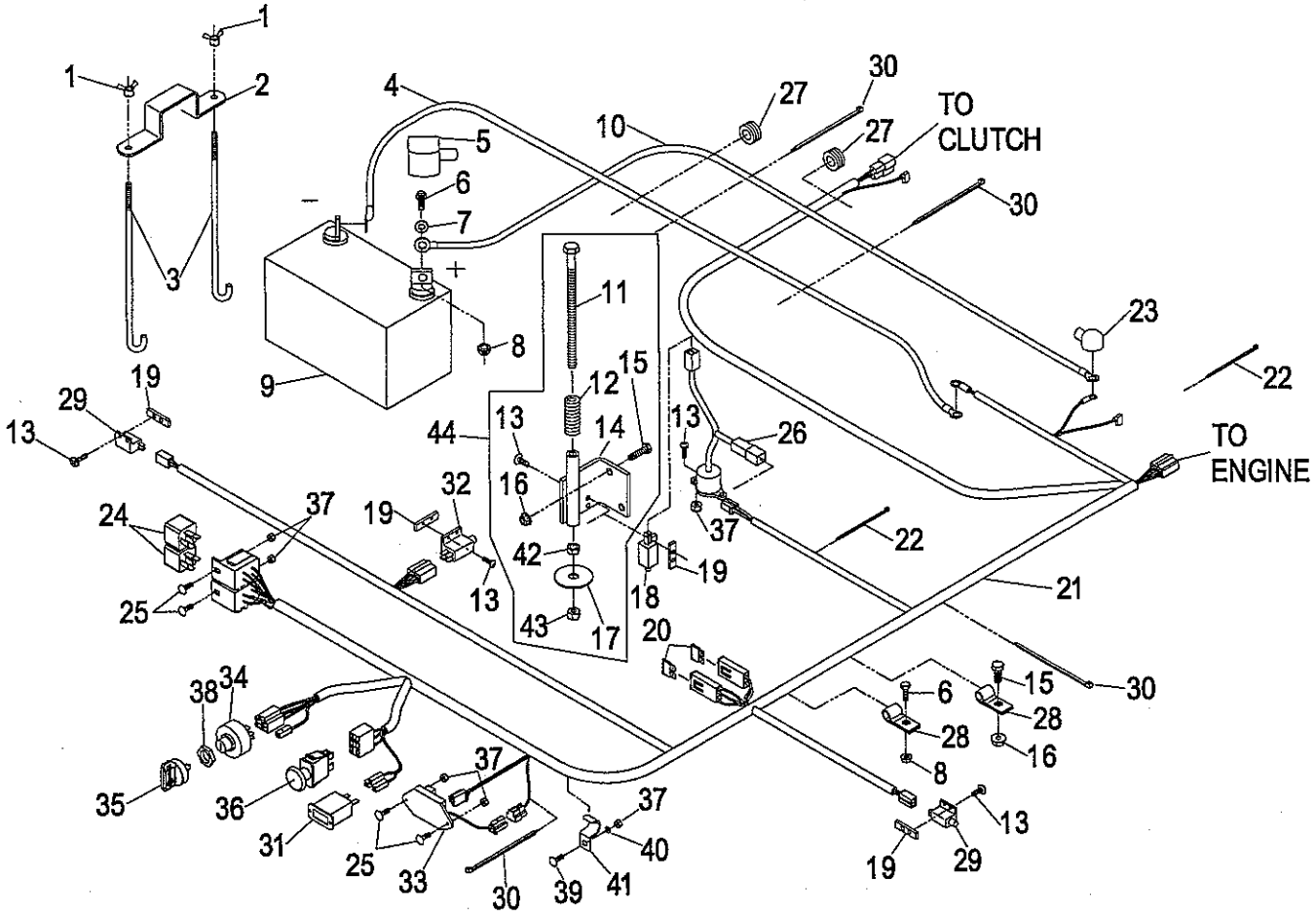
Item	Part No.	Description	Qty.
15	103-4048-03	Bumper, Rear	1
16	104-3624	Clutch, Electric, PTO	1
17	322-22	Screw, HH 5/16-18 x 3 1/2	1
18	322-3	Screw, HH 5/16-18 x 3/4	6
19	322-6	Screw, HH 5/16-18 x 1 1/4	1
20	325-18	Screw, HH 1/2-13 x 4 1/2	8
21◆	3212-10	Screw, HH 7/16-20 x 2 1/2	1
22	3229-10	Bolt, Carriage 1/4-20 x 3/4	4
23	3253-7	Washer, Lock 1/2	8
24	3256-24	Washer, 3/8 SAE	6
25	32128-20	Nut, Whizlock 5/16-18	8
26	32128-33	Nut, Whizlock 1/4-20	4
27	33114-025	Screw, HH M8-1.25 x 25mm	4
28	3256-3	Washer, 5/16 Std	1

Exmark black touch up spray paint – gloss black.

▼ Use a Teflon Pipe Sealant or equivalent on threads of drain valve.

◆ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on clutch bolt.

ELECTRICAL GROUP FOR S/N 457,999 and LOWER

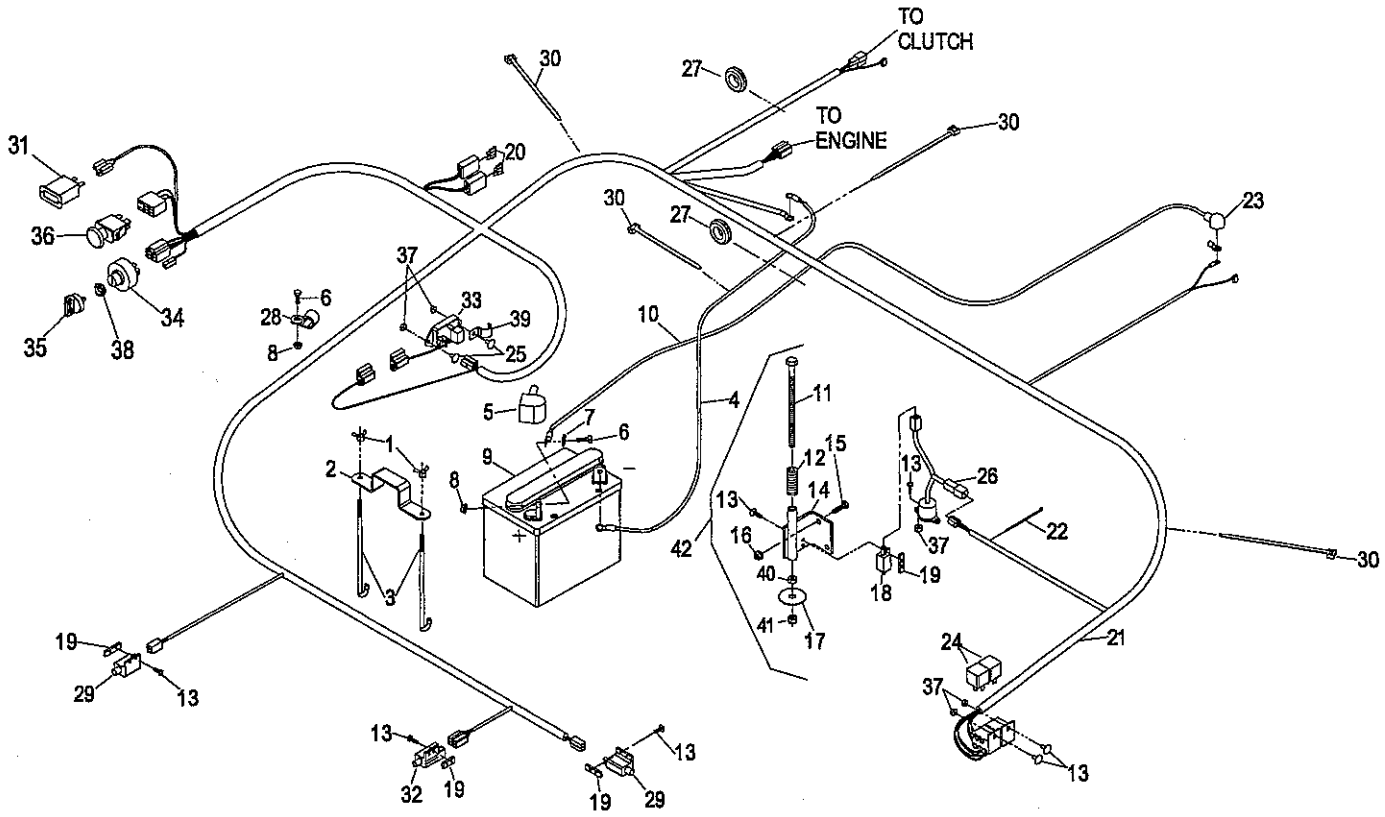


Item	Part No.	Description	Qty.
1	1-543792	Wingnut, Nyloc 1/4-20	2
2	1-633652-03	Strap, Battery Holdown	1
3	1-633651	Bolt, Battery Holdown	2
4	1-543767	Cable, Ground (-)	1
5	1-543391	Insulator, Battery	1
6	321-4	Screw, HH 1/4-20 x 3/4	3
7	3256-2	Washer, 1/4 Std	2
8	32128-33	Nut, Whizlock 1/4-20	3
9	103-0293	Battery, 12V	1
10	1-523281	Cable, Battery (+)	1
11	1-800282	Screw, HH 5/16-18 x 7	1
12	1-523415	Spring	1
13	3290-500	Screw, PPH #10-24 x 5/8	10
14	1-652072-03	Bracket Wldmt, Seat Switch	1
15	322-3	Screw, HH 5/16-18 x 3/4	3
16	32128-20	Nut, Whizlock 5/16-18	3
17	1-653036	Washer	1
18	1-513152	Switch, Seat	1
19	1-633181	Plate	4
20	1-816001	Fuse-20 Amp	2
21◆	103-4049	Harness, Wiring	1
22	1-303287	Tie, Cable 5 1/2 (Small)	2
23	1-543393	Insulator, Solenoid (+) 1	1

Item	Part No.	Description	Qty.
24	1-643275	Relay, 12 V	2
25	1-807513	Bolt, Carriage #10-24 x 1/2	4
26	1-633782	Switch, Tilt	1
27	1-543286	Grommet	2
28	1-633396	Clip, Loom 5/8	2
29	1-513051	Switch, Drive Lever N.C	2
30	1-303335	Tie, Cable 7 15/16 (Large)	4
31	1-513374	Meter, Engine Hours	1
32	1-633111	Switch, Brake N.O./N.C..	1
33	100-6186	Module, Seat Delay	1
34	103-0206	Switch, Ignition W/Keys	1
35	103-2106	Key, Exmark Logo	1
	1-603511	Key, Ignition	1
36	1-633673	Switch, Blade	1
37	3296-2	Nut, Nyloc #10-20	7
38	103-0498	Nut, Ignition	1
39	1-807533	Bolt, Carriage 10-24 x 5/8	1
40	3256-14	Washer, #10 Std	1
41	103-1193	Clip, Loom Half	1
42	3217-6	Nut, Hex 5/16-18	1
43	3296-29	Nut, Nyloc 5/16-18	1
44	103-5685	Asm, Seat Switch Actuator	1

◆ Use dielectric grease on all wiring harness connectors.

ELECTRICAL GROUP FOR S/N 458,000 and HIGHER

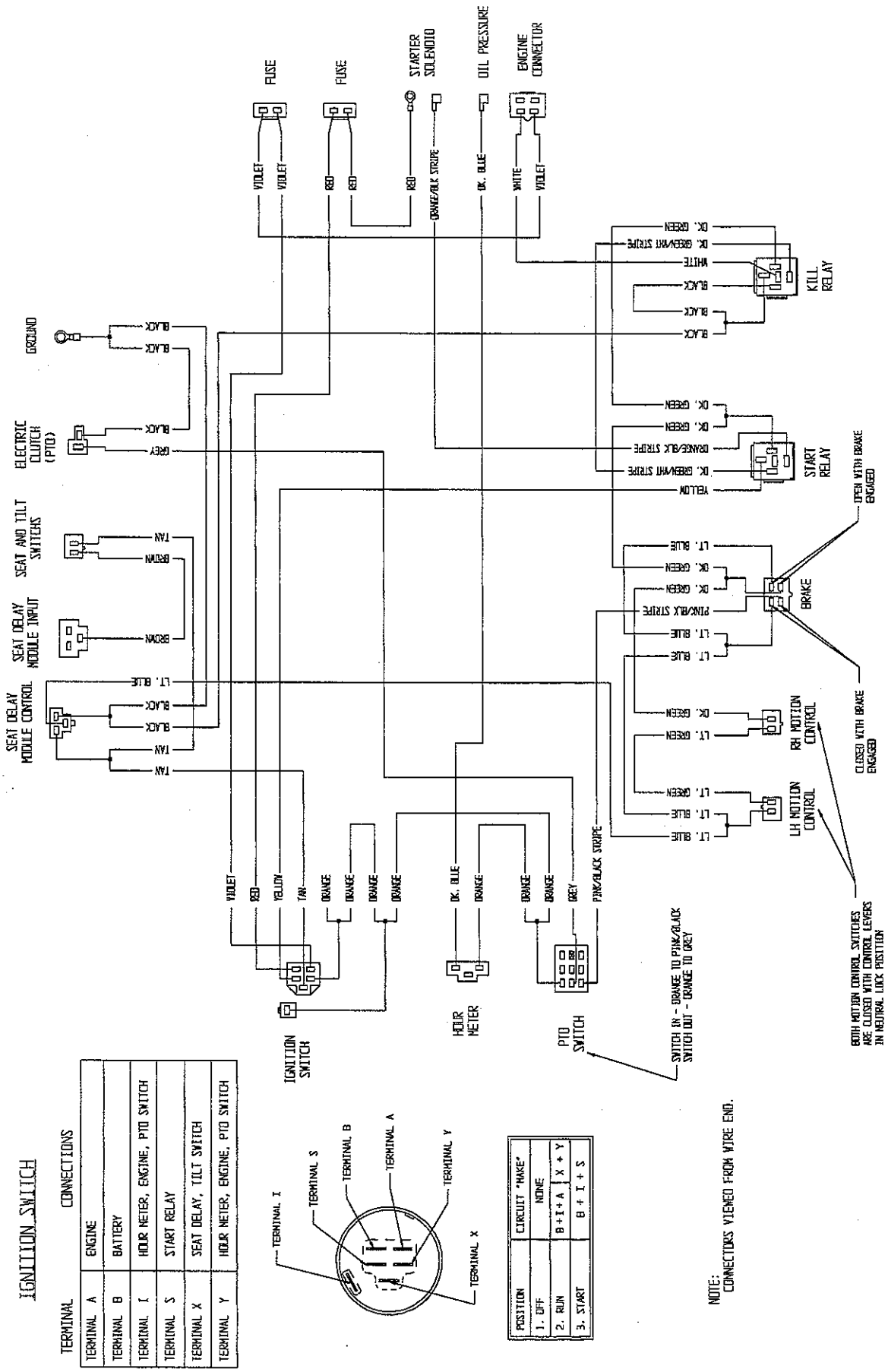


Item	Part No.	Description	Qty.
1	1-543792	Wingnut, Nyloc 1/4-20	2
2	1-633652-03	Strap, Battery Holdown	1
3	1-633651	Bolt, Battery Holdown	2
4	1-543767	Cable, Ground (-)	1
5	1-543391	Insulator, Battery	1
6	321-4	Screw, HH1/4-20 x 3/4	3
7	3256-2	Washer, 1/4 Flat	2
8	32128-33	Nut, Whizlock 1/4-20	3
9	103-0293	Battery, 12V	1
10	1-523281	Cable, Battery (+)	1
11	1-800282	Screw, HH 5/16-18 x 7	1
12	1-523415	Spring, Seat Switch	1
13	3290-500	Screw, PPH #10-24 x 5/8	12
14	1-652072-03	Bracket Wldmt, Seat Switch	1
15	322-3	Screw, HH 5/16-18 x 3/4	2
16	32128-20	Nut, Whizlock 5/16-18	2
17	1-653036	Washer	1
18	1-513152	Switch, Seat	1
19	1-633181	Plate	4
20	1-816001	Fuse-20 Amp	2
21◆	103-5811	Harness, Wiring	1
22	1-303287	Tie, Cable 5 1/2 (Small)	1

Item	Part No.	Description	Qty.
23	1-543393	Insulator, Solenoid (+)	1
24	1-643275	Relay, 12 V	2
25	1-803075	Screw, Truss Head #10-24 X 3/4	2
26	1-633782	Switch, Tilt	1
27	1-543286	Grommet	2
28	1-633396	Clip, Loom 5/8	1
29	1-513051	Switch, Drive Lever N.C.	2
30	1-303335	Plastic Tie, 7 15/16 (Large)	4
31	1-513374	Meter, Engine Hours	1
32	1-633111	Switch, Brake N.O./N.C..	1
33	100-6186	Module, Seat Delay	1
34	103-0206	Switch, Ignition W/Keys	1
35	103-2106	Key, Exmark Logo	1
	1-603511	Key, Ignition	1
36	1-633673	Switch, Blade	1
37	3296-2	Nut, Nyloc #10-20	6
38	103-0498	Nut, Ignition	1
39	103-1193	Clip, Loom Half	1
40	3217-6	Nut, Hex 5/16-18	1
41	3296-29	Nut, Nyloc 5/16-18	1
42	103-5685	Asm, Seat Switch Actuator	1

◆ Use dielectric grease on all wiring harness connectors.

KOHLER ELECTRICAL DIAGRAM



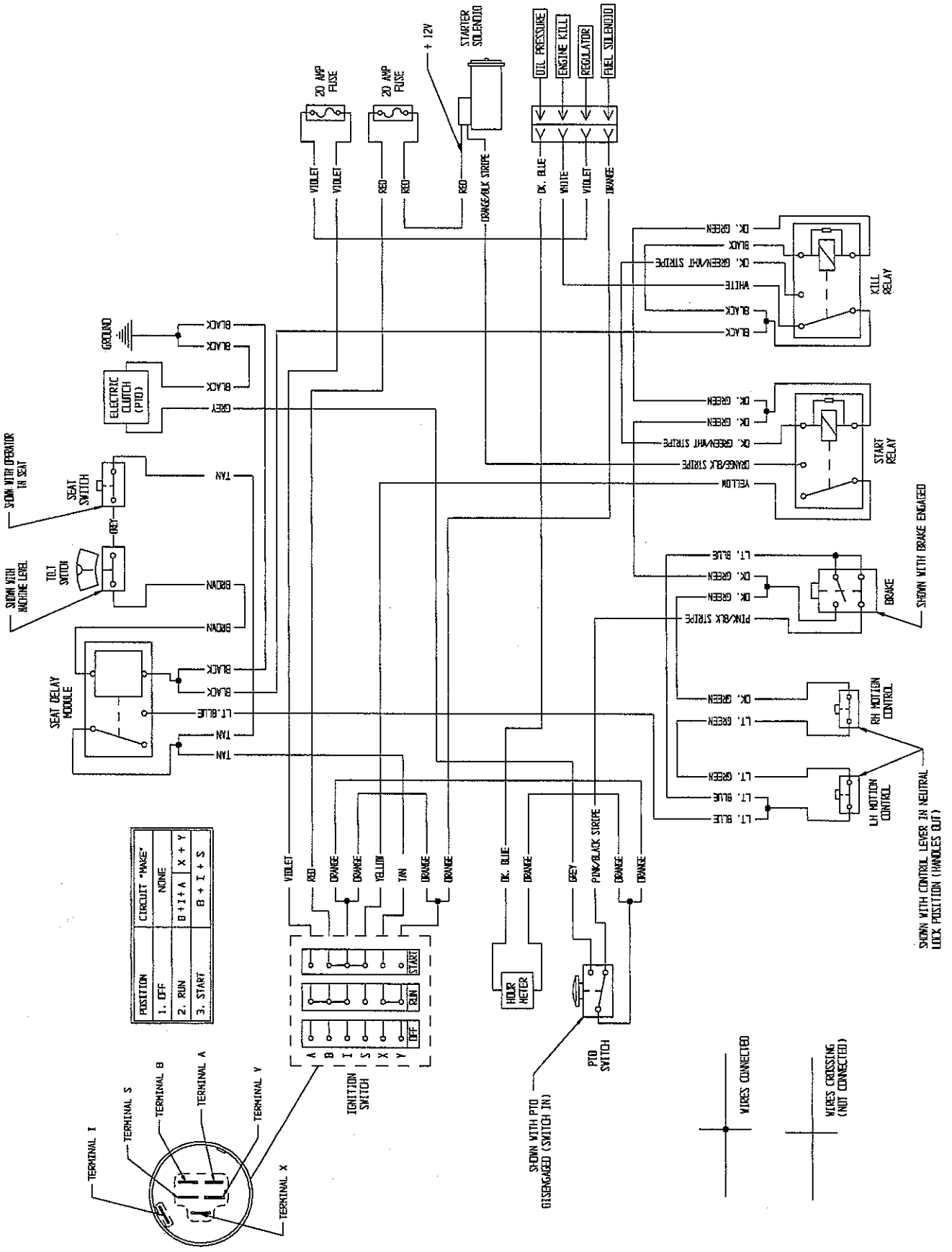
IGNITION SWITCH

TERMINAL	CONNECTIONS
TERMINAL A	ENGINE
TERMINAL B	BATTERY
TERMINAL I	HOUR METER, ENGINE, PTO SWITCH
TERMINAL S	START RELAY
TERMINAL X	SEAT DELAY, TILT SWITCH
TERMINAL Y	HOUR METER, ENGINE, PTO SWITCH

POSITION	CIRCUIT "MAKE"	
1. OFF	NONE	
2. RUN	B+I+A	X + Y
3. START	B + I + S	

NOTE:
CONNECTORS VIEWED FROM WIRE END.

KOHLER ELECTRICAL SCHEMATIC



SERVICE RECORD

Date	Description of Work Done	Service Done By

SEE EXMARK'S COMPLETE LINE OF PRODUCTS FOR TURF CARE

LAZER Z®	LAZER Z® HP
LAZER Z® XP	LAZER Z® CT
TURF RANGER®	VIKING HYDRO
TURF TRACER®	TURF TRACER® HP
METRO®	METRO® HP
ULTRA VAC™	ULTRA VAC™ QDS
GRASS CATCHER	MICRO-MULCH ™ ACCESSORY

SELF STEERING SULKY

©1997 - 2003
EXMARK MFG. CO. INC.
INDUSTRIAL PARK BOX 808
BEATRICE, NE 68310
ALL RIGHTS RESERVED

PART NO. 103-4859 Rev. A
(402) 223-6300
FAX (402) 223-5489

PRINTED IN U.S.A.

exmark MFG. CO.