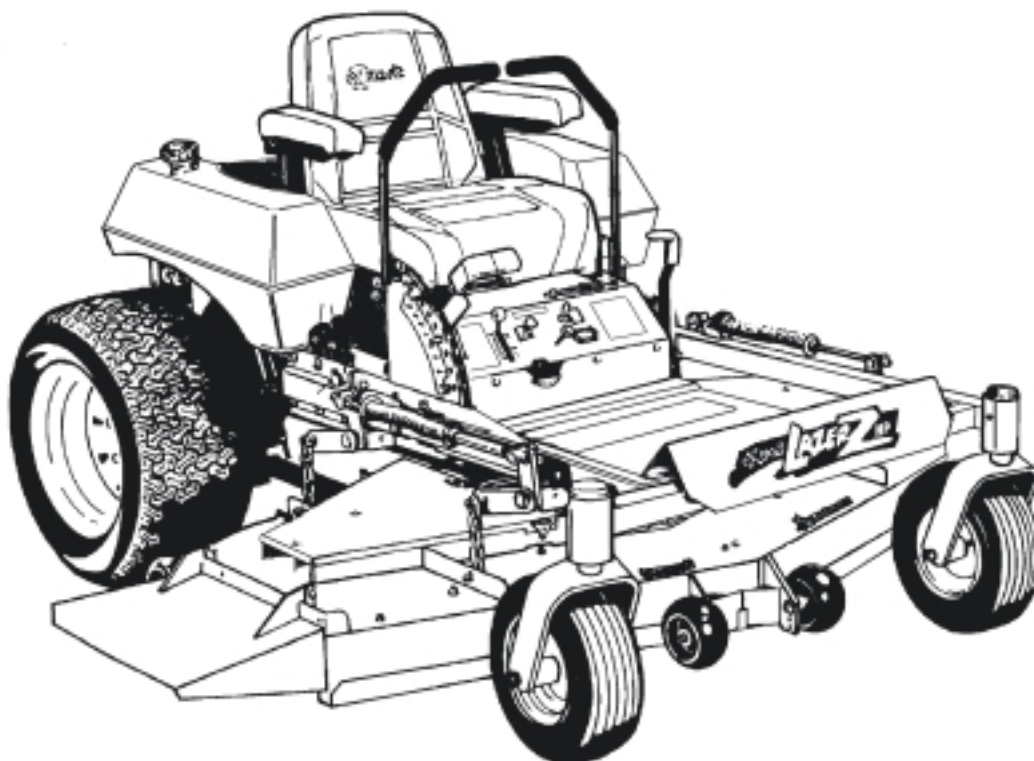


For Serial Nos.
220,000 & Higher



PARTS MANUAL

LAZER Z™ HP

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.

Model No. _____

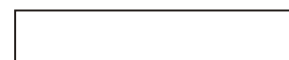
Serial No. _____

Engine Model No. _____

Engine Serial No. _____

Date Purchased _____

Paste Label From
Literature Packet Here



EXMARK PARTS PLUS® PROGRAM

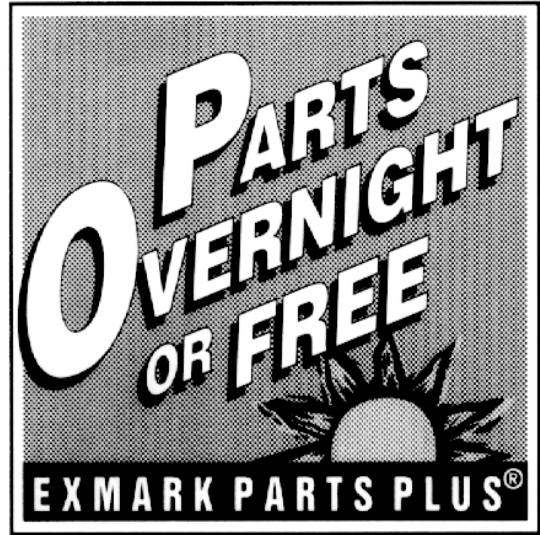
EFFECTIVE DATE: September 1, 1995

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.



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

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
44" and 48" Deck Group	3-4
52" Deck Group	5-6
Decal Group.....	16
Electrical Diagram.....	18-19
Electrical Group	17
Engine Group.....	15
Front Frame Group	7-8
Fuel Group.....	10
Hydraulic Group	13-14
Main Frame Group.....	9
Motion Control Levers	12
Park Brake Group	11

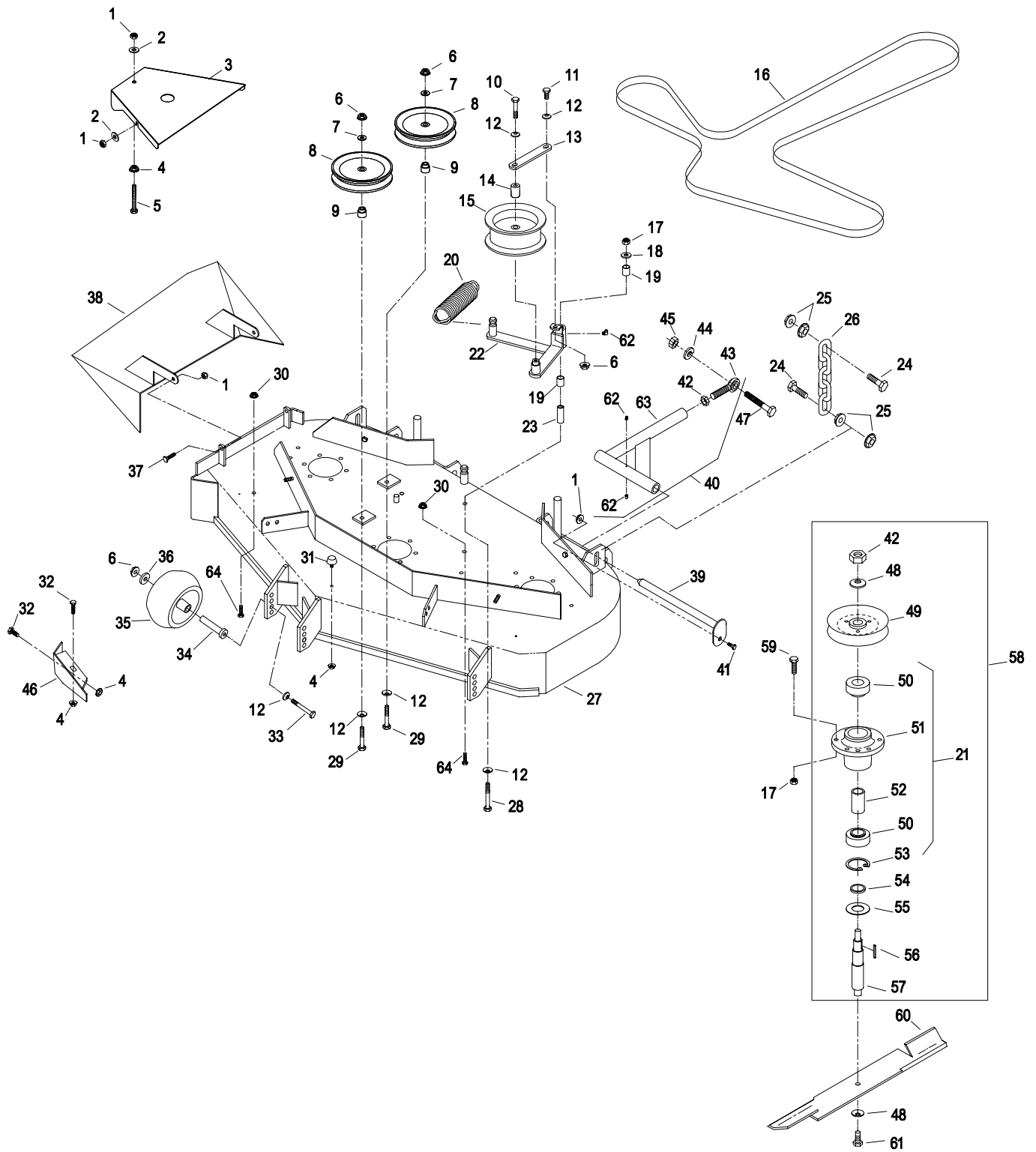
44" and 48" DECK GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	804256	Nut, nyloc 5/16-18	10	37	800273	Screw, 5/16-18 x 1	2
2	805258	Washer, 5/16 std flat	6	38	402106	Chute wldmt, discharge (44")(48") .	1
3	653482	Shield, belt	2	39	632199	Pin wldmt, deck strut	2
4	809001	Nut, whizlock 5/16-18	5	40	634726	Strut wldmt, assembly	2
5	800017	Bolt, 5/16 x 3 ¼ tap	2	41	800271	Screw, 5/16-18 x 3/4	2
6	809007	Nut, whizlock 3/8-16	6	42	804510	Nut, 5/8-18	5
7	805259	Washer, 3/8 SAE flat	2	43	633029	Spherical rod end	2
8	613098	Pulley, Idler	2	44	805010	Washer, lock 5/8	2
9	413113	Bushing, Idler	2	45	804522	Nut, 5/8-11	2
10	800297	Screw, 3/8-19 x 2 ¼	1	46	522480	Baffle, discharge	1
11	800292	Screw, 3/8-16 x 1	1	47	800344	Screw, 5/8-11 x 6	2
12	303327	Washer, disc spring 3/8	8	48	513208	Washer, spring disc.	6
13	653189	Plate, Belt guide	1	49*	413424	Sheave, w/hub 6 5/16" O.D. (48")....	3
14	653190	Spacer	1		653099	Sheave, w/hub 6" O.D. (44").....	3
15	413099	Pulley, Idler.....	1	50	513016	Bearing.....	6
16	413308	Belt, deck drive (48")	1	51	323532	Housing, spindle.....	3
	413093	Belt, deck drive (44")	1	52	323528	Spacer, bearing.....	3
17	804257	Nut, nyloc 3/8-16	19	53	808502	Ring, snap	3
18	805260	Washer, 3/8 std flat	1	54	323533	Spacer.....	3
19	513034	Bearing, pivot	2	55	633573	Guard, bearing-bottom	3
20	633151	Spring, extension	1	56	807268	Key, machine	3
21	634619	Housing, w/bearing,spacer,&ring..	3	57	413330	Shaft, spindle	3
22	652192	Idler arm wldmt.....	1	58	414335	Housing, cutter assy (complete)(48")	3
	654193	Idler arm wldmt w/bushings.....	1		654206	Housing, cutter assy (complete)(44")	3
23	603384	Bushing, idler pivot.....	1	59	800293	Screw, 3/8-16 x 1 1/4	18
24	800811	Screw, 7/16-14 x 1 1/2	8	60	323515	Blade, 16.25 notched air foil (48").....	3
25	809073	Nut, whizlock 7/16-14	1		413438	Blade, 16.25 solid air foil (48").....	3
26	633447	Chain, deck lift.....	4	●	403148	Blade, 16.25 mulching (48")	6
27	651312	Deck wldmt (652311) w/decals			403149	Blade, 16.25 low lift (optional)(48").....	3
		& discharge baffle (48").....	16		653101	Blade, 15.25 notched air foil (44").....	3
	654175	Deck wldmt (652124) w/decals .		●	653178	Blade, 15.25 solid air foil (44").....	3
		& discharge baffle (44").....	1		653102	Blade, 15.25 mulching (44")	3
28	800805	Screw, 3/8-16 x 3 1/2	1		653179	Blade, 15.25 low lift (optional)(44").....	3
29	800299	Screw, 3/8-16 x 2 3/4	2	61	800848	Screw, 5/8-11 x 1 Gr 8	3
30	809012	Nut, whizlock ¼-20 (48")	4	62	811006	Zerk, ¼-18 straight.....	5
	809012	Nut, whizlock ¼-20 (44")	1	63	632690	Strut wldmt	2
31	543963	Bumper, rubber	1	64	800263	Screw, ¼ x 3/8 (48")	4
32	800270	Screw, 5/16-18 x 5/8	2		800263	Screw, ¼ x 3/8 (44")	1
33	800807	Screw, 3/8-16 x 4 gr 8	3	65	654550	Deck complete service (44")	1
34	603602	Bushing, roller	3	66	654551	Deck complete service (48")	1
35	603299	Roller, anti-scalp	3				
36	373034	Washer, swivel.....	3				

- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N's MK483(48") & MK443(44")
- Exmark red touch up spray paint – P/N 850337
- The following complete deck assemblies are available for service: 48" Deck – P/N 654551
- 44" Deck – P/N 654550

* Use antiseize on bore of sheaves

44" and 48" DECK GROUP



52" DECK GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	804256	Nut, nyloc 5/16-18	10	34	603602	Bushing, roller	5
2	805258	Washer, 5/16 std flat	6	35	603299	Roller, anti-scalp	5
3	653482	Shield, belt	2	36	373034	Washer, swivel	5
4	809001	Nut, whizlock 5/16-18	7	37	800273	Screw, 5/16-18 x 1	2
5	800017	Bolt, 5/16 x 3 ¼ tap	2	38	652375	Chute wldmt, dishcharge	1
6	809007	Nut, whizlock 3/8-16	8	39	632199	Pin wldmt, deck strut	2
7	805259	Washer, 3/8 SAE flat	2	40	634726	Strut wldmt, assembly	2
8	613098	Pulley, Idler	2	41	800271	Screw, 5/16-18 x 3/4	2
9	413113	Bushing, Idler	2	42	804510	Nut, 5/8-18	5
10	800297	Screw, 3/8-19 x 2 ¼	1	43	633029	Spherical rod end	2
11	800292	Screw, 3/8-16 x 1	1	44	805010	Washer, lock 5/8	2
12	303327	Washer, disc spring 3/8	10	45	804522	Nut, 5/8-11	2
13	653189	Plate, Belt guide	1	46	602913	Baffle, discharge	1
14	653190	Spacer	1	47	800344	Screw, 5/8-11 x 6	2
15	413099	Pulley, Idler	1	48	513208	Washer, spring disc	6
16	653368	Belt, deck drive	1	49*	653386	Sheave, w/hub 6 5/16" O.D.	3
17	804257	Nut, nyloc 3/8-16	19	50	513016	Bearing	6
18	805260	Washer, 3/8 std flat	1	51	323532	Housing, spindle	3
19	513034	Pivot, Bearing	2	52	323528	Spacer, bearing	3
20	633151	Spring, extension	1	53	808502	Ring, snap	3
21	634619	Housing, with bearing, spacer, & ring	3	54	323533	Spacer	3
22	652192	Idler arm wldmt	1	55	633573	Guard, bearing-bottom	3
	654193	Idler arm wldmt w/bushings	1	56	807268	Key, machine	3
23	603384	Bushing, idler pivot	1	57	413330	Shaft, spindle	3
24	800811	Screw, 7/16-14 x 1 1/2	8	58	654586	Housing, cutter assy (complete) .	3
25	809073	Nut, whizlock 7/16-14	16	59	800293	Screw, 3/8-16 x 1 1/4	18
26	633447	Chain, deck lift	4	60	633482	Blade, 18.0 notched air foil	3
27	654478	Deck wldmt (652418) w/decals & discharge baffle (48")	1		613251	Blade, 18.0 solid air foil	3
28	800805	Screw, 3/8-16 x 3 1/2	1	●	633484	Blade, 18.0 mulching	3
29	800299	Screw, 3/8-16 x 2 3/4	2		633485	Blade, 18.0 low lift (optional)	3
30	809012	Nut, whizlock ¼-20	4	61	800848	Screw, 5/8-11 x 1 gr 8	3
31	543963	Bumper, rubber	2	62	811006	Zerk, ¼-18 straight	5
32	800270	Screw, 5/16-18 x 5/8	3	63	632690	Strut wldmt	2
33	800807	Screw, 3/8-16 x 4 gr 8	5	64	800263	Screw, ¼ x 3/8	4

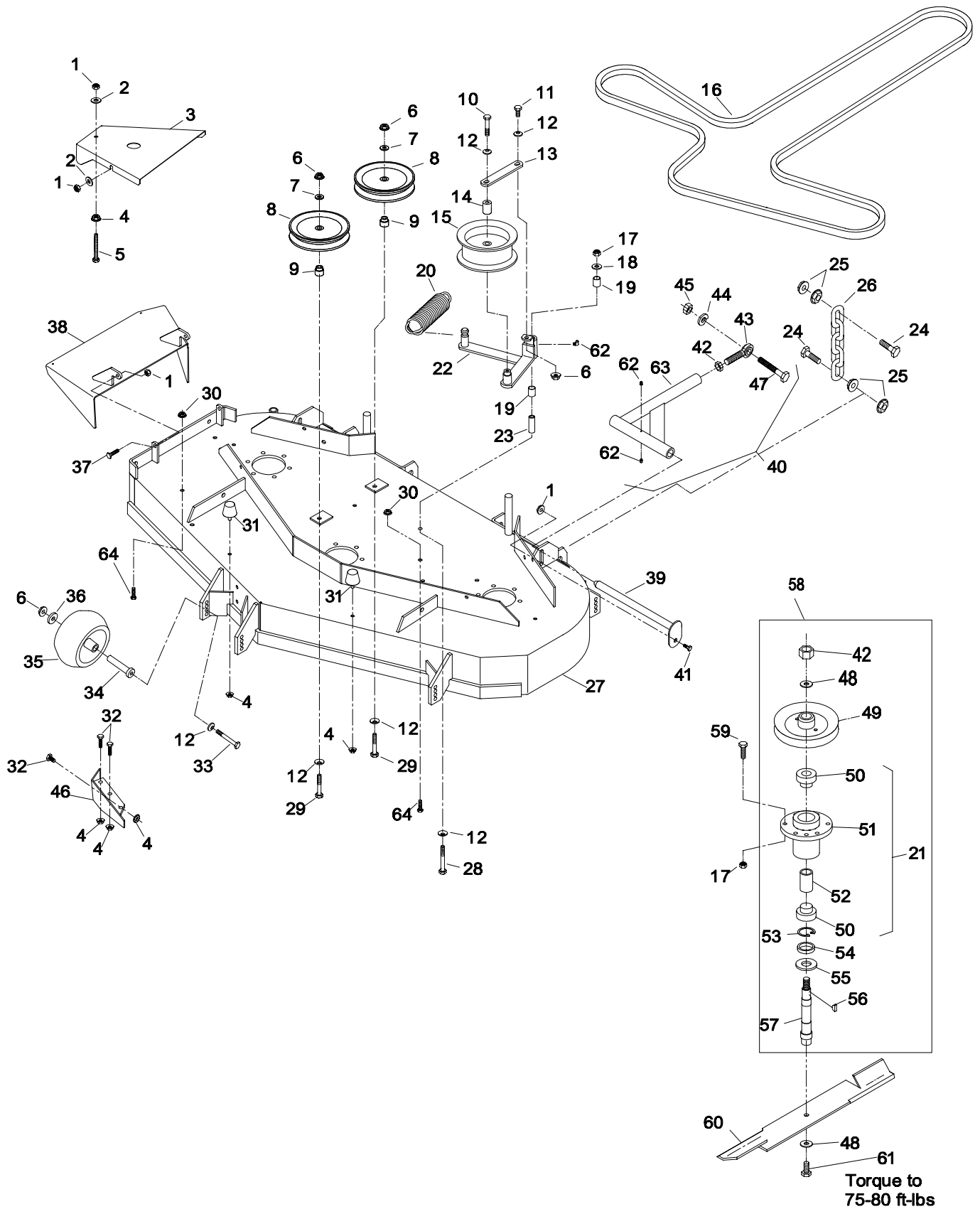
- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N's MK483(48") & MK443(44")

Exmark red touch up spray paint – P/N 850337

A complete deck assembly is available for service P/N 654552

- * Use antiseize on bore of sheaves.

52" DECK GROUP

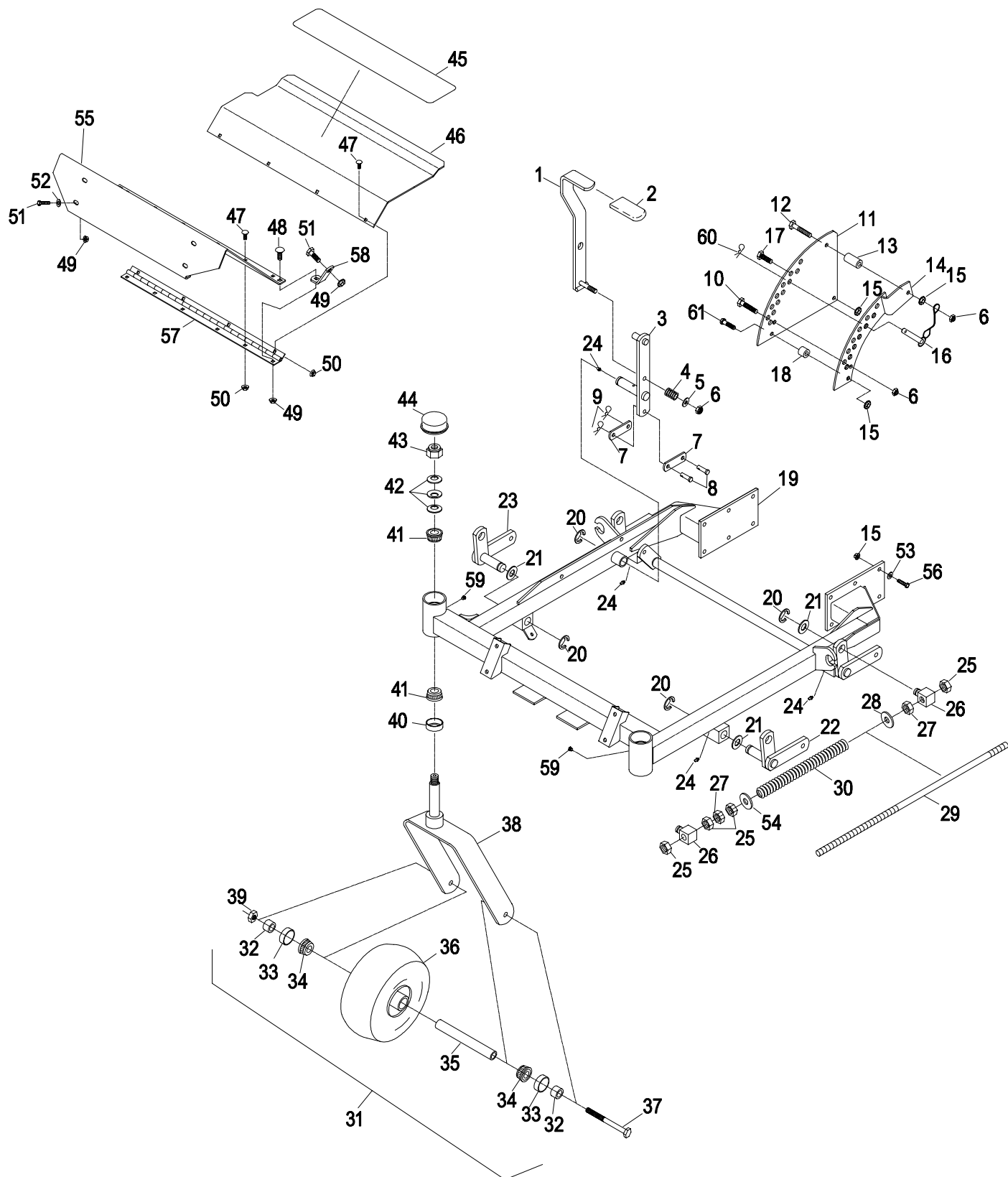


FRONT FRAME GROUP

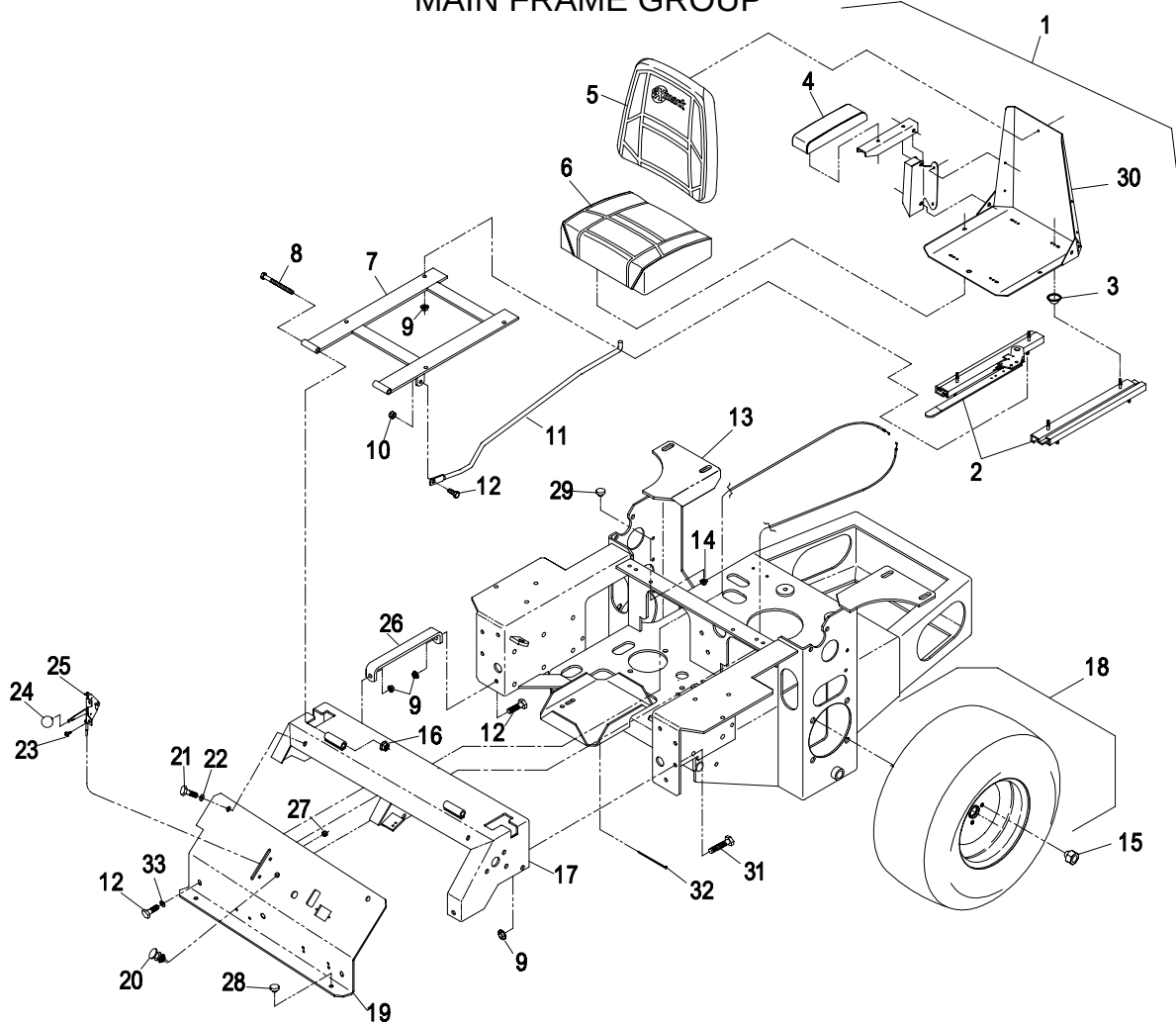
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	652023	Lever wldmt, lift.....	1	33	633580	Seal, bearing.....	4
2	633295	Grip, lift lever	1	34	633585	Bearing, cone.....	4
3	652027	Arm wldmt, deck lift	1		633584	Bearing, cup.....	2
4	633325	Spring, compression.....	1	35	633579	Spacer, front caster	2
5	805259	Washer, 3/8 SAE	1	36	633582	Wheel & tire assy.....	2
6	804257	Nut, nyloc 3/8-16.....	3		633002	Tire, 13x5.0-6 4 ply	2
7	633068	Arm, deck lift.....	2		633583	Wheel.....	2
8	808284	Clevis, pin 3/8 x 1	2	37	800339	Screw, 1/2-13 x 7 1/2	2
9	806003	Hairpin, cotter	2	38	632511	Caster wldmt	2
10	800295	Screw, 3/8-16 x 1 3/4	1	39	804269	Nut, nyloc 1/2-13 (light thin)	2
11	653230	Plate, deck lift	1	40	543511	Seal, grease.....	2
12	800299	Screw, 3/8-16 x 2 3/4.....	1	41	543509	Bearing cone, tapered roller.....	4
13	633082	Bushing, lift lever	1		543508	Bearing cup, tapered roller	4
14	652235	Plate wldmt, deck lift.....	1	42	633508	Washer, spring disk	6
15	809007	Nut, whizlock 3/8-16	15	43	804266	Nut, nyloc 3/4-10.....	2
16	633097	Hitch pin w/lanyard	1	44	543513	Cap, grease	2
17	800292	Screw, 3/8-16 x 1.....	1	45	633553	Pad, anti-skid	2
18	413088	Bushing, lift lever	1	46	99-3869	Floorpan.....	1
19	652447	Frame wldmt, front 44"/48"	1	47	807528	Bolt, carriage 1/4-20 x 1/2.....	10
	652372	Frame wldmt, front 52"	1	48	807503	Bolt, carriage 5/16-18 x 3/4.....	2
20	808505	E-ring	7	49	809001	Nut, whizlock 5/16-18.....	8
21	805271	Washer, 7/8 SAE flat.....	6	50	809012	Nut, whizlock 1/4-20.....	10
22	652013	Shaft wldmt, deck lift LH.....	1	51	800271	Screw, 5/16-18 x 3/4 (44"& 48")	14
23	652014	Shaft wldmt, deck lift RH	1	52	805257	Washer, 5/16 SAE flat (44"&48")...4	
24	811006	Zerk, 1/4-28 straight	5	53	303327	Washer, 3/8 disc spring	12
25	804522	Nut, 5/8-11 regular.....	8	54	805267	Washer, 5/8 SAE flat	2
26	633441	Swivel, deck mount.....	4	55	99-3868	Floorpan, front.....	1
27	804755	Jam nut, 5/8-11.....	4	56	800293	Screw, 3/8-16 x 1 1/4	12
28	805517	Washer, 5/8 std flat	2	57	653049	Hinge, floorpan (piano)	1
29	653011	Rod, deck lift.....	2	58	99-3870	Bracket, floorpan	2
30	653009	Spring, deck support.....	2	59	811010	Plug.....	2
31	634662	Caster wheel assy	2	60	806005	Hairpin, cotter (service only)	1
32	633581	Spacer, bearing	4	61	800294	Screw, cap HH3/8-16 x 1 1/2	1

Exmark red touch up spray paint – P/N 850337

FRONT FRAME GROUP



MAIN FRAME GROUP

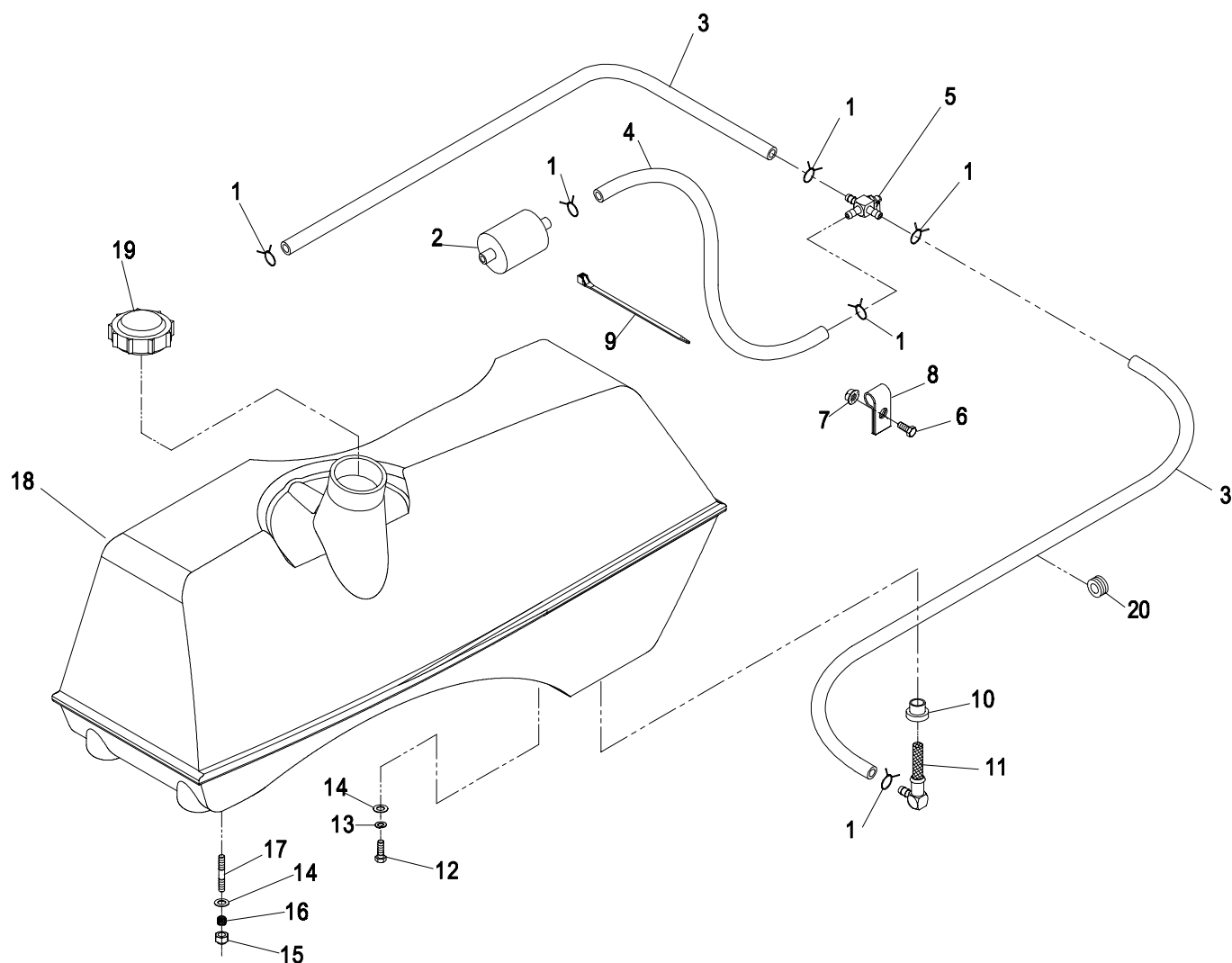


Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	634691	Seat, complete w/armrests	1	18	653010	Wheel/tire assy (44" deck)	2
2	643255	Track, seat (4" adjustable)	1		653159	Wheel/tire assy (48" & 52" deck) ..	2
3	543401	Spacer, seat track	4		653158	Wheel (44" deck)	2
4	543409	Cushion, armrest (RH)	1		653161	Wheel (48" & 52" deck)	2
	* 543411	Cushion, armrest (LH)	1		653160	Tire, 23 x 9.5-12 4 ply	2
5	543408	Cushion, backrest	1	19	653243	Panel, instrument	1
6	543407	Cushion, seat	1	20	603336	Cable, choke	1
7	632187	Frame, seat mount	1	21	800271	Screw, 5/16-18 x 3/4	3
8	800306	Screw, 3/8-16 x 5	2	22	805257	Washer, flat 5/16 SAE	2
9	809001	Nut, whizlock 5/16-18	12	23	807513	Bolt, carriage #10-24 x 1/2	2
10	804256	Nut, nyloc 5/16-18	1	24	513592	Ball, (red) throttle cable	1
11	653495	Rod, seat hold up	1	25	633696	Cable, throttle	1
12	800273	Screw, 5/16-18 x 1	3	26	653089	Bracket, instrument panel	1
13	652470	Frame, engine deck	1	27	804252	Nut, nyloc #10-24	2
14	809012	Nut, whizlock 1/4-20	2	28	513658	Bumper	2
15	513011	Nut, wheel 1/2-20	8	29	523420	Bumper, rubber	2
16	804257	Nut, nyloc 3/8-16	2	30	633859	Seat frame	1
17	652242	Console wldmt, front	1	31	800270	Screw, 5/8-18 x 5/8	6
				32	303335	Tie, plastic	1
				33	805258	Washer, flat std 5/16	2

*Not Illustrated

Exmark black touch up spray paint – gloss black

FUEL GROUP



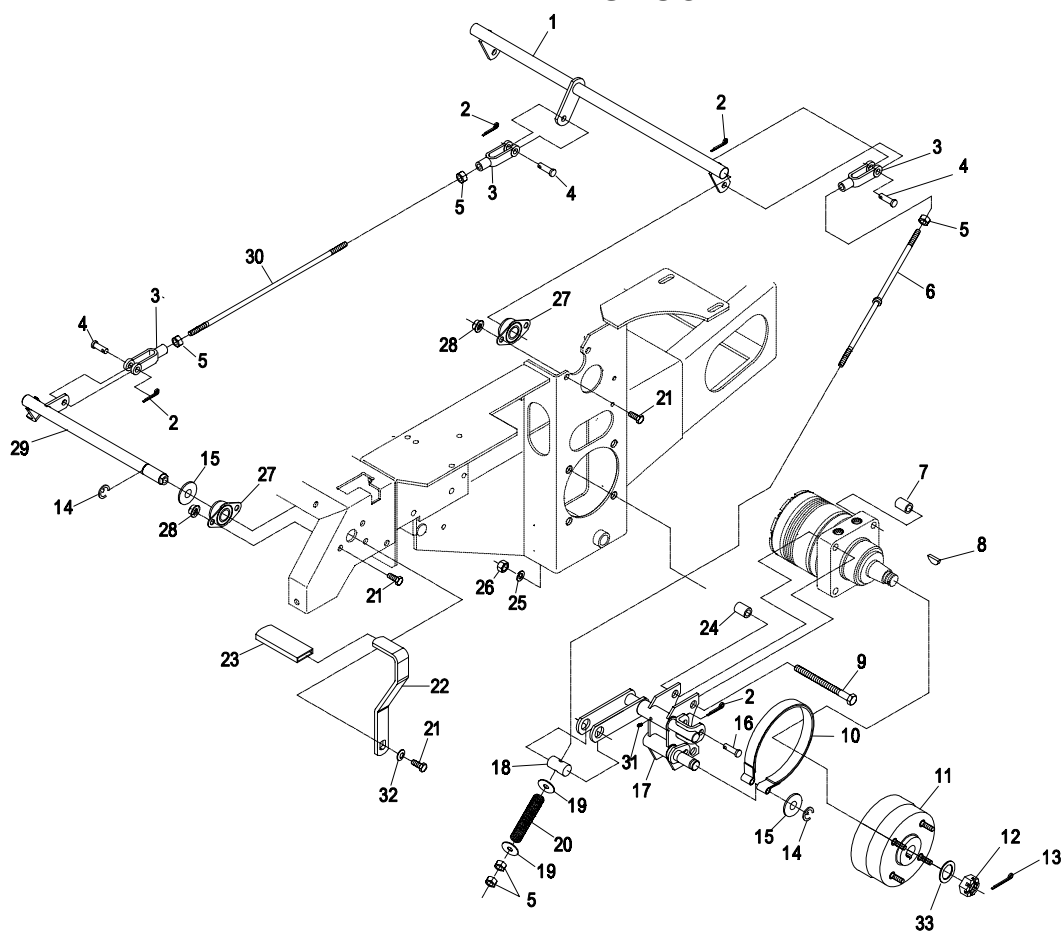
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	303077	Clamp, fuel line.....	6	11	543277	Elbow, strainer	2
2	◆ Kohler	Part No. 2405002 Fuel filter	1	12	800271	Screw, 5/16-18 x 3/4	4
	Kawasaki	Part No. 49019-7001 Fuel filter.....	1	13	805005	Washer, lock 1/4	4
3	543526	Fuel line	2	14	805257	Washer, 5/16 SAE	8
4	633348	Fuel line	1	15	804267	Nut, nyloc 5/16-18	4
5	633347	Valve, fuel	1	16	633349	Spring, fuel tank	4
6	800252	Screw, 1/4-20 x 3/4 (18 Koh only)	1	17	◇ 633023	Stud, fuel tank	4
7	804255	Nut, whizlock 1/4-20(18 Koh only)....	1	18	* 653568	Tank, fuel (LH)	1
8	513762	Clip, loom .50 (18 Koh only)	1		653569	Tank, fuel (RH)	1
9	303335	Plastic tie (large)	1	19	513508	Cap, fuel tank.....	2
10	513645	Bushing.....	2	20	543296	Grommet, fuel line	2

* Not Illustrated

◇ Use Pro-Lock, Nut Type (P/N 840022, .5ml tube) on stud threads going into tank.

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

PARK BRAKE GROUP

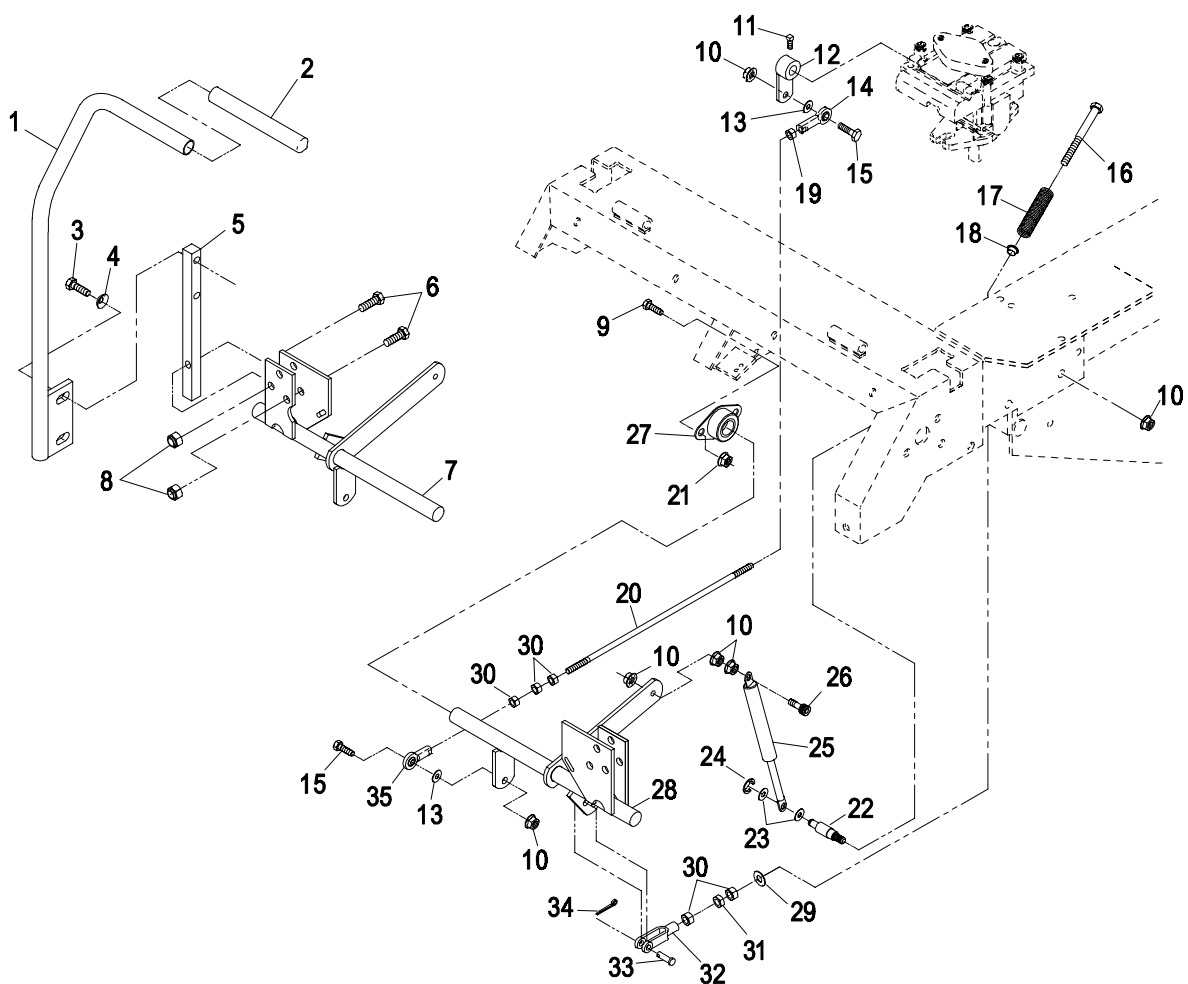


Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	652073	Crank wldmt, brake	1	17	652134	Bracket wldmt, brake LH.....	1
2	806761	Pin, cotter 1/8 x 3/4.....	6		* 652135	Bracket wldmt, brake RH	1
3	633131	Yoke	4		* 652378	Bracket wldmt, brake LH 52" .	1
4	808285	Pin, clevis 3/8 x 1 1/8.....	4		* 652379	Bracket wldmt, brake RH 52" .	1
5	804525	Nut, 3/8-24.....	8	18	633144	Pin, trunion.....	2
6	633477	Rod, brake.....	2	19	805260	Washer, 3/8 std.....	4
7	653068	Spacer (long) 44"/48" deck	4	20	633454	Spring, brake rod	2
	* 653380	Spacer (long) 52" deck	4	21	800290	Screw, 3/8-16 x 3/4	9
8	807020	Woodruff key, 5/16 x 1	1	22	653074	Lever, brake.....	1
9	800338	Screw, 1/2-13x3.25 G5(44"&48") .	8	23	633268	Grip, brake lever	1
	800348	Screw, 1/2-13x4.25 G5 (52")	8	24	653069	Spacer (short) 44"/48" deck...	4
10	633693	Band, brake	2		* 653381	Spacer (short) 52" deck	4
11	634927	Hub & drum w/studs, wheel.....	2	25	805008	Washer, lock 1/2	8
	633926	Stud, wheel.....	8	26	804509	Nut, 1/2-13	8
12	809036	Nut, slotted 1.00-20	2	27	633102	Bearing, flange.....	4
13	806800	Pin, cotter 9/64 x 1 1/2.....	2	28	809007	Nut, whizlock 3/8-16.....	8
14	808514	E-ring, retaining	3	29	652085	Shaft wldmt, brake	1
15	805269	Washer, 3/4 SAE flat	3	30	653061	Linkage, brake handle	1
16	808283	Pin, clevis 3/8 x 2.....	2	31	811007	Zerk, grease.....	2
				32	303327	Washer, disc spring 3/8	1
				33	523157	Washer, spacer	2

*Not Illustrated

Exmark black touch up spray paint – gloss black

MOTION CONTROL LEVERS



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	634259	Handle w/grip (RH)	1	17	603807	Spring, (neutral return)	2
	632193	Handle, motion control (RH) ...	1	18	603735	Bushing, nylon (reverse ind.) ..	2
	* 634258	Handle w/grip (LH)	1	19	804524	Nut, 5/16-24 (LH)	2
	632191	Handle, motion control (LH)....	1	20	653046	Link, pump control.....	2
2	633257	Grip, motion control handle....	2	21	809007	Nut, whizlock 3/8-16.....	8
3	800292	Screw, 3/8-16 x 1	4	22	653316	Pin, Damper Anchor.....	2
4	303327	Washer, disc spring 3/8	4	23	805257	Washer, 5/16 SAE	4
5	633177	Arm, control shaft.....	2	24	808512	E-ring.....	2
6	800295	Screw, 3/8-16 x 1 3/4	6	25	523027	Damper	2
7	652466	Bracket, motion control (RH) .	1	26	403180	Screw, 5/16-18 x 1 1/4 special..	4
8	804257	Nut, nyloc 3/8-16	6	27	633102	Bearing, flanged	4
9	800290	Screw, 3/8-16 x 3/4	8	28	652467	Bracket, motion control (LH) ...	1
10	809001	Nut, whizlock 5/16-18.....	12	29	805256	Washer, 1/4	2
11	♦ 803022	Setscrew, 5/16 x 5/8	2	30	804521	Nut, 5/16-24	10
12	653092	Arm, pump control	2	31	804758	Nut, jam 5/16-24	2
13	805258	Washer, 5/16 std.....	4	32	303105	Yoke.....	2
14	633152	Ball joint (LH)	2	33	808280	Pin, clevis 5/16 x 1	2
15	800274	Screw, 5/16-18 x 1 1/4	4	34	806753	Pin, cotter 3/32 x 1/2	2
16	603737	Bolt, (neutral return)	2	35	543017	Ball joint (RH)	2

*Not Illustrated

♦ Use Pro-Lock, Nut Type (P/N 840022, .5ml tube) on setscrews
Exmark black touch up spray paint – gloss black

HYDRAULIC GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	513167	Cap, hydraulic reservoir	1	27	513840	Elbow, 90°	2
2	523103	Gasket, tank cap	1		603921	O-ring	1
3	800260	Screw, 1/4-20 x 2 1/2	2	28	603841	Pump, hydro	2
4	809012	Nut, whizlock 1/4-20	2	29	413273	Hose, lo pressure	2
5	* 512166	Reservoir, hydraulic fluid	1	30	653187	Hose, RH rear 44" & 48"	1
6	603987	Elbow, 90°	1		653437	Hose, RH rear 52"	1
7	654320	Hose, supply	1	31	809007	Nut, whizlock 3/8-16	7
8	654509	Hose, charge line	1	32	800293	Screw, 3/8-16 x 1 1/4	4
9	800273	Screw, 5/16-18 x 1	2	33	513034	Bearing	2
10	513510	Connector, male	1	34	652142	Arm wldmnt, idler	1
11	* 603720	Head, filter	1	35	811008	Zerk, 90° 1/4-28	1
12	809001	Nut, whizlock 5/16-18	2	36	603044	Bushing, idler pivot	1
13	513211	Element, oil filter	1	37	805260	Washer, 3/8 std flat	1
	∇523541	Element, oil filter (winter)	1	38	800299	Screw, 3/8-16 x 2 3/4	1
14	653186	Hose, RH front 44" & 48"	1	39	800295	Screw, 3/8-16 x 1 3/4	2
	653436	Hose, RH front 52"	1	40	603843	Pulley, idler	1
15	653409	Hose, LH top 44" & 48"	1	41	805259	Washer, 3/8 SAE flat	1
	653434	Hose, LH top 52"	1	42	654143	Arm, idler w/bearings	1
16	633605	Elbow, 90° (RH)	2	43	807272	Key 5 x 5 x 25 mm	2
	603919	Boss O-ring	1	44	◇ 806050	Setscrew, .312-18 x .75	4
	603992	Flare O-ring	1	45	653156	Sheave, pump drive 44"&48"	2
17	523328	Wheel motor	2		413010	Sheave, pump drive 52"	2
	000139	Kit, bearing	1	46	603414	Spring, extension	1
	000099	Kit, seal	1	47	804257	Nut, nyloc 3/8-16	1
18	603990	Adapter, straight thread	4	48	653163	Belt, pump drive 44"&48"	1
	603920	Boss O-ring	1		653416	Belt, pump drive 52"	1
	603992	Flare O-ring	1	49	801063	Screw, 1/4-20 x 2 pan head	2
19	603989	Elbow, 90°	2	50	804255	Nut, nyloc 1/4-20	2
	603923	O-ring	1	51	613073	Grip, dump valve	2
20	632285	Hose assy, lo pressure 11.5" gray ..	1	52	213069	Washer, #10 x 1 1/2	1
21	654144	Hose, case drain	1	53	303327	Washer, disc spring	1
22	632286	Hose assy, lo pressure 4.5" gray	1	54	603988	Elbow, 90°	1
23	603826	Clamp, hose (1/2)	3	55	603496	Bushing, idler	1
24	603722	Fitting, hose tee (1/4 I.D. hose)	1	56	653410	Hose, LH bottom 44" & 48"	1
25	603827	Clamp, hose (5/8)	5		653435	Hose, LH bottom 52"	1
26	603721	Fitting, hose tee (3/8 I.D. hose)	1	57	633786	Elbow 90° long stem (LH)	2

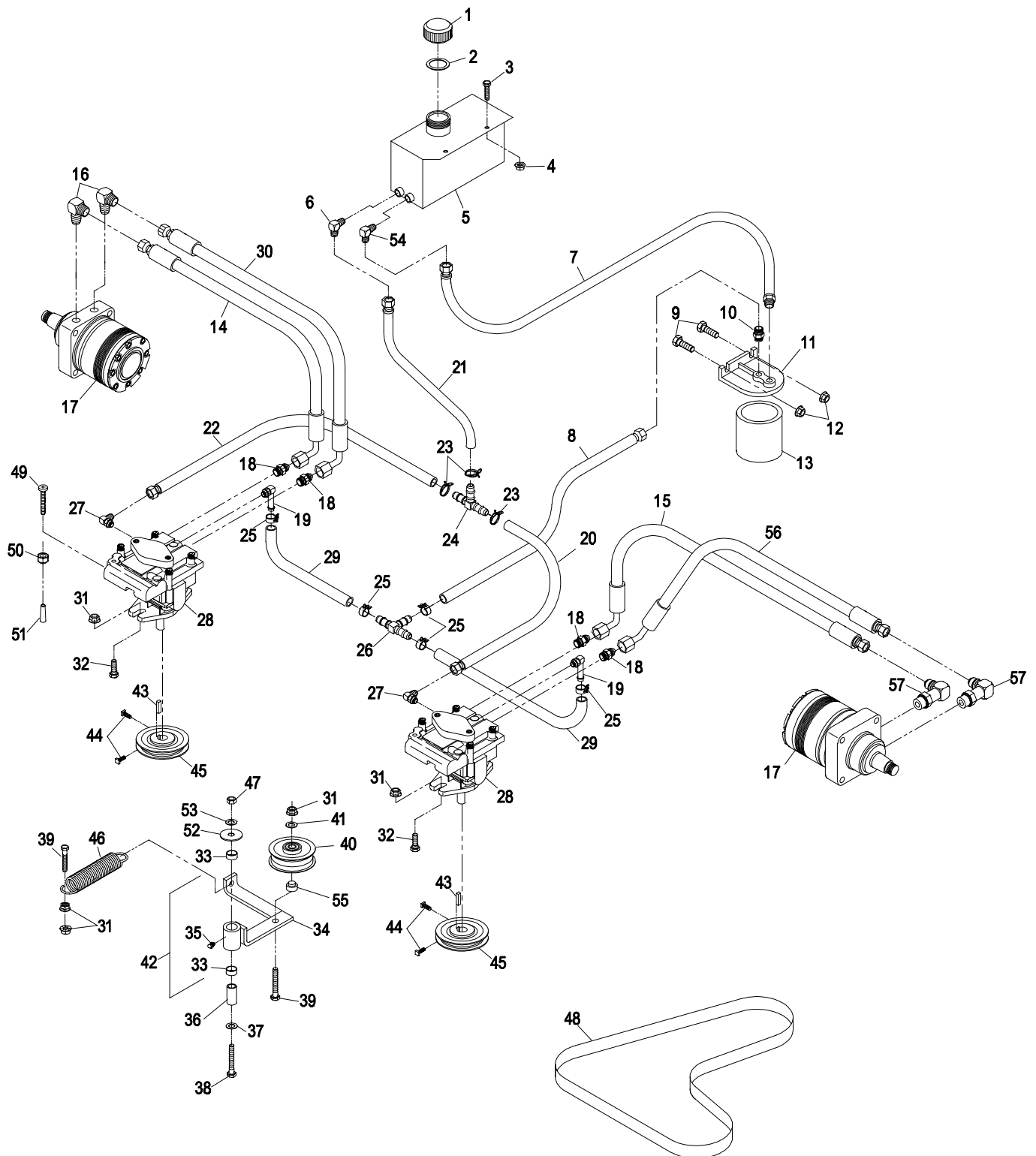
* Use Teflon Pipe Sealant or equivalent on hydraulic reservoir and filter head fittings.

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

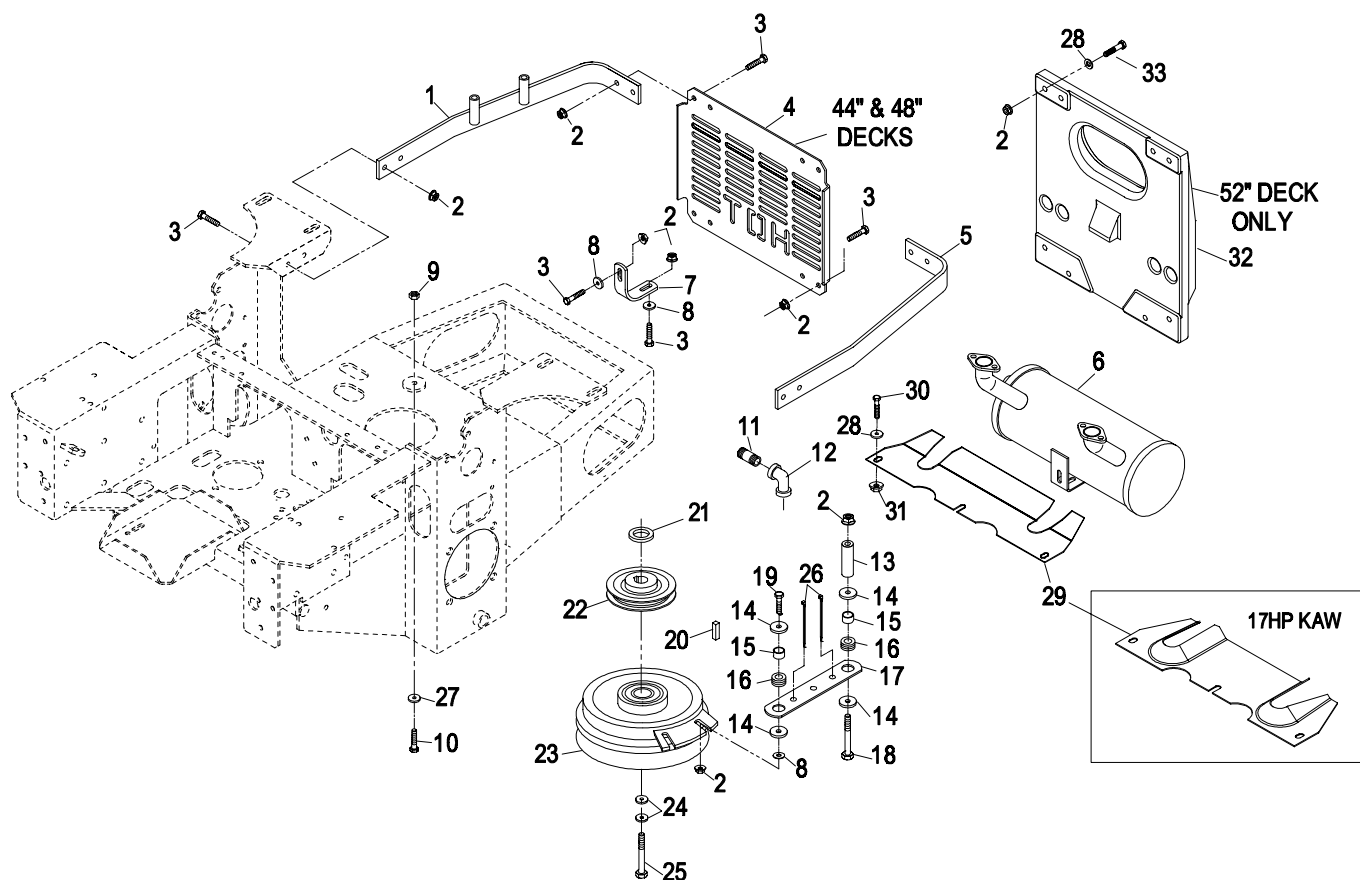
Exmark red touch up spray paint – P/N 850337

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

HYDRAULIC GROUP



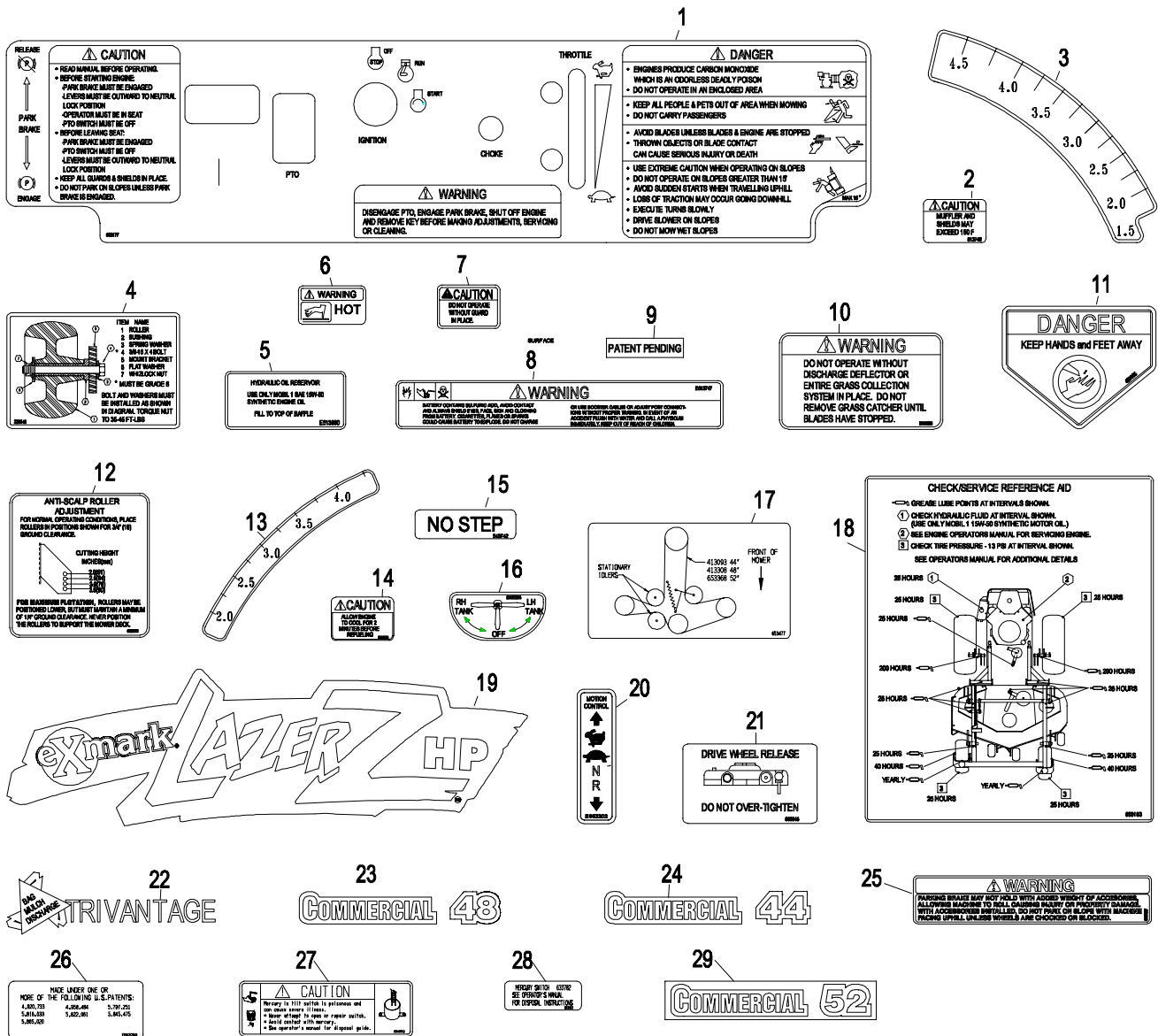
ENGINE GROUP



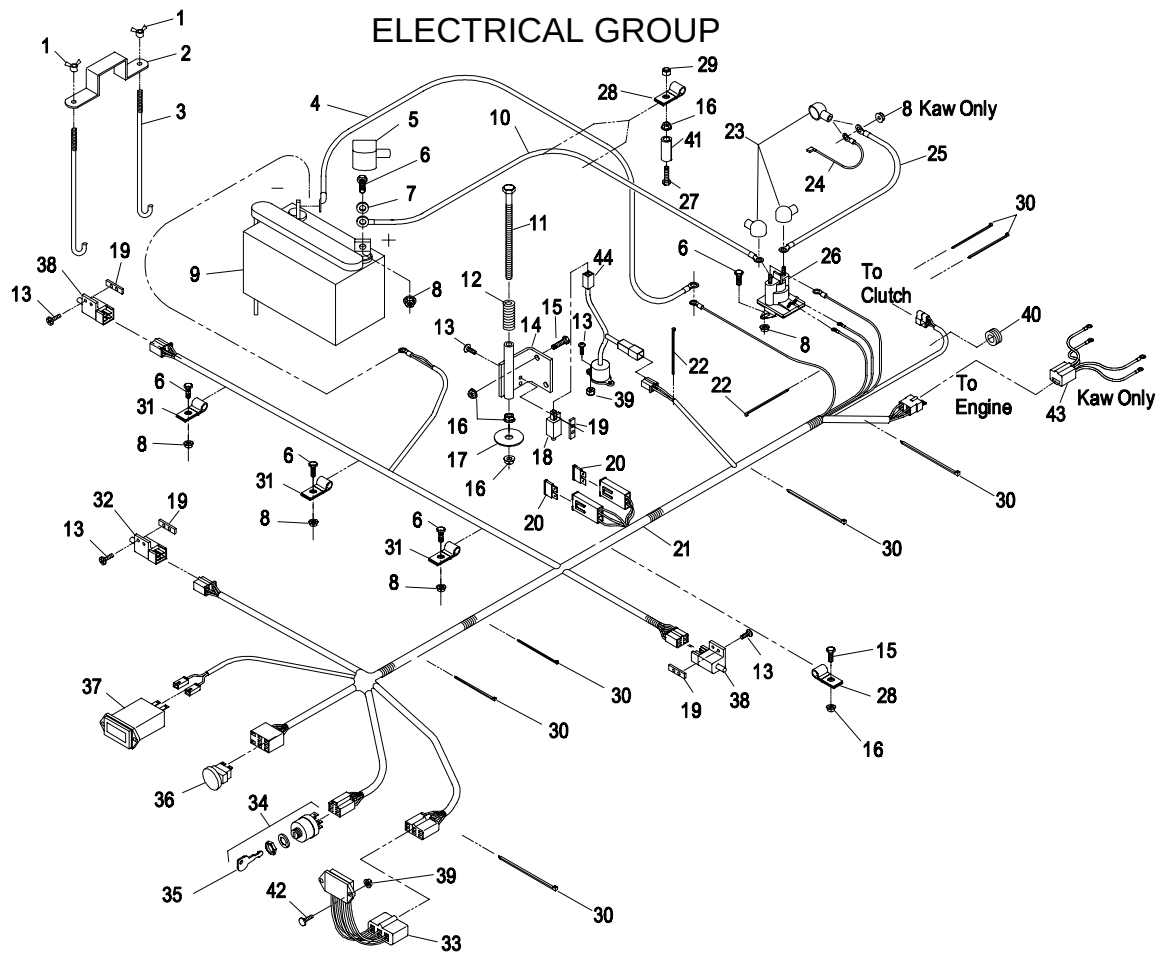
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	652146	Strap wldmt, engine guard.....	1	17	633543	Strap, clutch/brake	1
2	809001	Nut, whizlock 5/16-18	16	18	800283	Screw, 5/16-18 x 3 1/2	1
3	800271	Screw, 5/16-18 x 3/4 (44"&48")	14	19	800274	Screw, 5/16 NC x 1 1/4	1
	800271	Screw, 5/16-18 x 3/4 (52")	6	20	807259	Key	1
4	653095	Shield, engine guard (44"& 48") ..	1	21	543214	Spacer, crankshaft	1
5	653093	Strap, engine guard	1	22	653035	Sheave, pump drive	1
6	653194	Muffler (17hp Kaw Only)	1	23	653048	Clutch	1
	653195	Muffler (18-23hp Koh Only)	1	24	603610	Washer, disc spring 7/16	2
	653260	Muffler (19-23hp Kaw Only)	1	25	◆ 800820	Screw, 7/16-20 x 3 (Kaw)	1
7	653196	Bracket, muffler support	1		◆ 800819	Screw, 7/16-20 x 2 1/2(Koh)	1
8	805258	Washer, 5/16 std flat	2	26	303335	Plastic tie (large)	2
9	804256	Nut, nyloc 5/16-18 (Kaw)	4	27	303334	Washer, spring disc	4
	809001	Nut, whizlock 5/16-18 (Koh)	4	28	805257	Washer, 5/16 SAE flat (44"&48") ..	3
10	800276	Screw, 5/16-18 x 1 3/4	4		805257	Washer, 5/16 SAE flat (52")	11
11	543064	Pipe Nipple (Koh)	1	29	653565	Shield, heat (17hp Kaw)	1
12	303428	Elbow, 90° (Koh)	1		653539	Shield, heat (All except 17hp Kaw)	1
13	523406	Bushing, seat mount	1	30	807503	Bolt, carriage 5/16-18 x 3/4	3
14	613235	Washer	4	31	804256	Nut, nyloc 5/16-18	3
15	633545	Spacer, grommet	2	32	653549	Counterweight, 60# (52")	1
16	633630	Grommet	2	33	800275	Screw,CapHH 5/16-18x1 1/2 (52")..	8

◆ Use Pro-Lock, Nut Type (P/N 840022, .5ml tube) on clutch bolt
Exmark black touch up spray paint – gloss black

DECAL GROUP



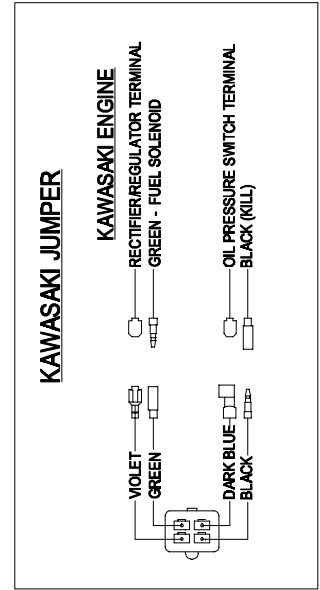
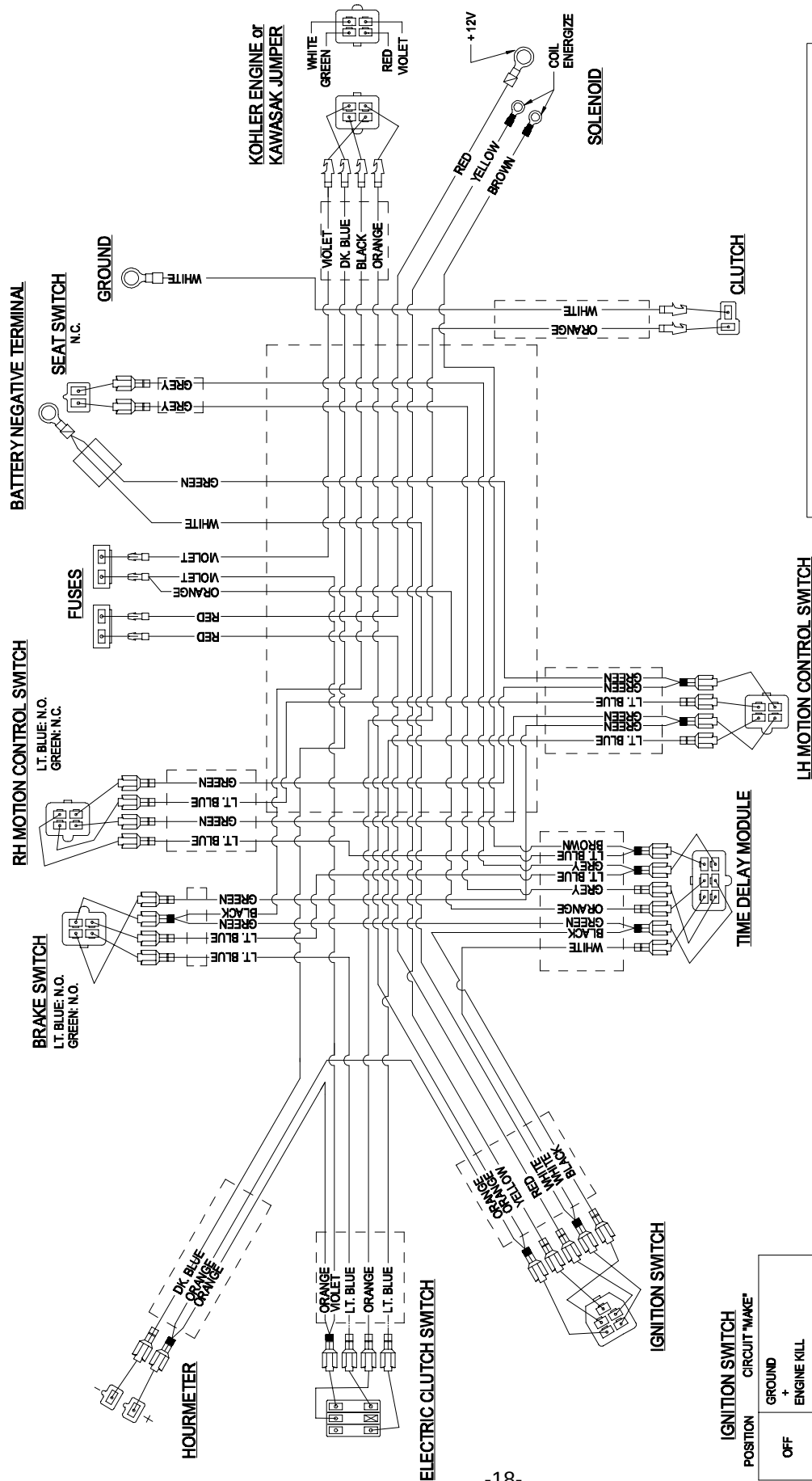
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	653245	Decal, Panel.....	1	16	633346	Decal, Fuel Valve	1
2	513746	Decal, Muffler.....	2	17	653477	Decal, Belt Routing	1
3	653140	Decal, Deck Height	1	18	653183	Decal, Check Service	1
4	323540	Decal, Roller Mounting.....	1	19	653139	Decal, Swash	2
5	513890	Decal, Hydraulic Tank.....	1	20	633354	Decal, Motion Control	2
6	633770	Decal, Hot Surface	1	21	603845	Decal, Hydro Drive Release ...	1
7	513748	Decal, Guard.....	1	22	303520	Decal, Trivantage	1
8	513747	Decal, Battery	1	23	403131	Decal, Commercial 48.....	1
9	373066	Decal, Patent Pending	2	24	523417	Decal, Commercial 44.....	1
10	303508	Decal, Discharge Warning	1	25	633827	Decal, Park Brake Warning ...	1
11	403005	Decal, Danger	2	26	643289	Decal, Patent No	1
12	633922	Decal, Anti-Scalp	1	27	643372	Decal, Hazardous Material.....	1
13	653147	Decal, Deck Height	1	28	643401	Decal, Mercury switch	1
14	303293	Decal, 2 Minute Cool.....	2	29	654520	Decal Kit.....	1
15	513742	Decal, No Step.....	2		403132	Decal, Commercial 52.....	1



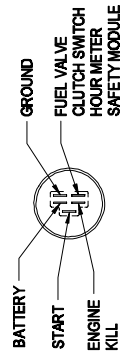
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	543792	Wingnut, nyloc ¼-20	2	23	543393	Insulator, solenoid (+).....	3
2	633652	Strap, battery holdown	1	24	543094	Wire, starter solenoid (Koh only) .	1
3	633651	Bolt, battery holdown.....	2	25	633306	Cable, starter (+)	1
4	523282	Cable, ground (-).....	1	26	513075	Switch, 12V solenoid	1
5	543391	Insulator, battery	1	27	800279	Screw, 5/16-18 x 2 1/2	1
6	800252	Screw, ¼-20 x 3/4	7	28	633396	Clip, loom 5/8	2
7	805256	Washer, ¼ flat	2	29	804256	Nut, nyloc 5/16-18	1
8	809012	Nut, ¼-20 whizlock	7	30	303335	Plastic tie, large (Kaw).....	8
	809012	Nut, ¼-20 whizlock (Kaw only)..	8		303335	Plastic tie, large (Koh)	7
9	603479	Battery, 12V	1	31	323229	Clip, loom 3/8	3
10	523281	Cable, battery (+)	1	32	633110	Switch, brake N.O./N.O.....	1
11	800282	Screw, 5/16-18 x 7	1	33	543316	Module, safety interlock.....	1
12	523415	Spring, seat switch.....	1	34	543070	Switch, ignition w/keys.....	1
13	803028	Screw, #10-24 x 5/8	10	35	603511	Keys, ignition	1
14	652072	Bracket wldmt, seat switch	1	36	633673	Switch, blade	1
15	800271	Screw, 5/16-18 x 3/4	3	37	513374	Meter, engine hours	1
16	809001	Nut, whizlock 5/16-18.....	6	38	633111	Switch, drive lever N.O./N.C....	2
17	653036	Washer	1	39	804252	Nut, nyloc #10-20	4
18	513152	Switch, seat.....	1	40	543286	Grommet	1
19	633181	Plate.....	4	41	633082	Spacer	1
20	816001	Fuse-20 amp.....	2	42	807533	Carriage Bolt, #10-24 x 5/8	2
21	653154	Harness, wiring	1	43	613262	Wiring Harness (Kaw only).....	1
22	303287	Plastic tie, small	2	44	633782	Switch, Tilt.....	1

◆ Use dielectric grease on all wiring harness connectors.

ELECTRICAL DIAGRAM



CONNECTORS VIEWED FROM WIRE END.
N.C. = NORMALLY CLOSED
N.O. = NORMALLY OPEN



IGNITION SWITCH	
POSITION	CIRCUIT "MAKE"
OFF	GROUND + ENGINE KILL
ON	BATTERY + FUEL VALVE CLUTCH SWITCH HOURMETER SAFETY MODULE
START	BATTERY/BATTERY + START FUEL VALVE CLUTCH SWITCH HOUR METER SAFETY MODULE

**SEE EXMARK'S COMPLETE
LINE OF PRODUCTS FOR TURF CARE**

LAZER Z™

LAZER Z™ HP

TURF RANGER®

TURF TRACER®

TURF TRACER® HP

VIKING HYDRO

METRO™

METRO™ HP

SELF STEERING SULKY

GRASS CATCHER

MICRO-MULCH™ ACCESSORY

©1997,1998, 1999
EXMARK MFG. CO. INC.
INDUSTRIAL PARK BOX 808
BEATRICE, NE 68310
ALL RIGHTS RESERVED

PART NO. 850668
(402) 223-6300
FAX (402) 223-5489
PRINTED IN U.S.A.

