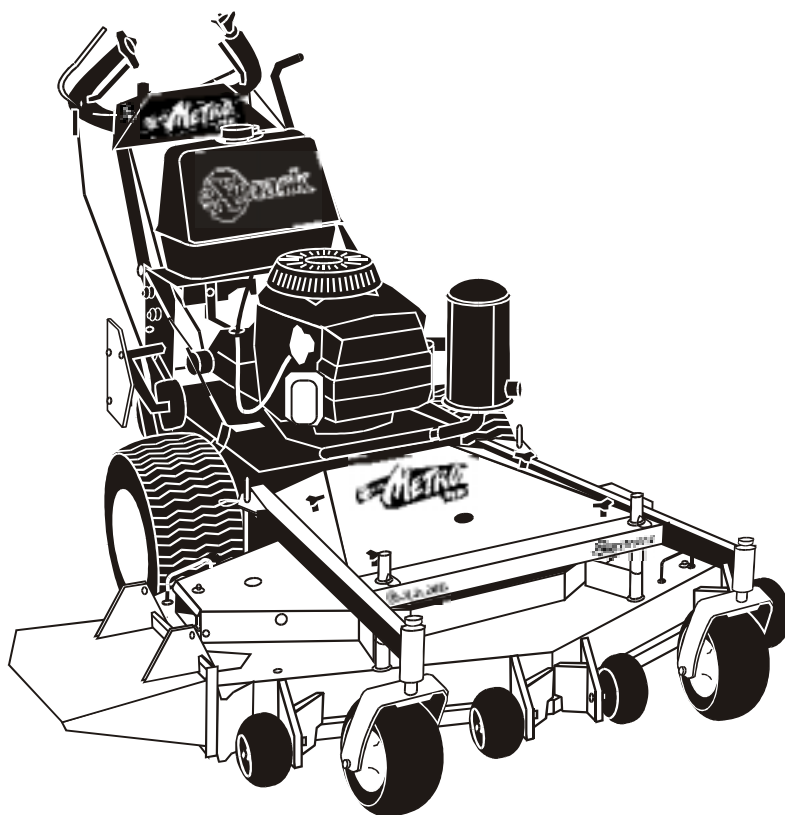


For Serial Nos.
320,000 & Higher



PARTS MANUAL

METRO[®] 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 next to the fuel tank on the top left-hand side of the fuel tank support.

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 48 contiguous 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>
Decals	13
Engine Deck Group	7-10
48" Mower Deck	5-6
36" Mower Deck	3-4
Upper Handles & Controls, ECS.....	11-12
Wiring Diagram.....	14

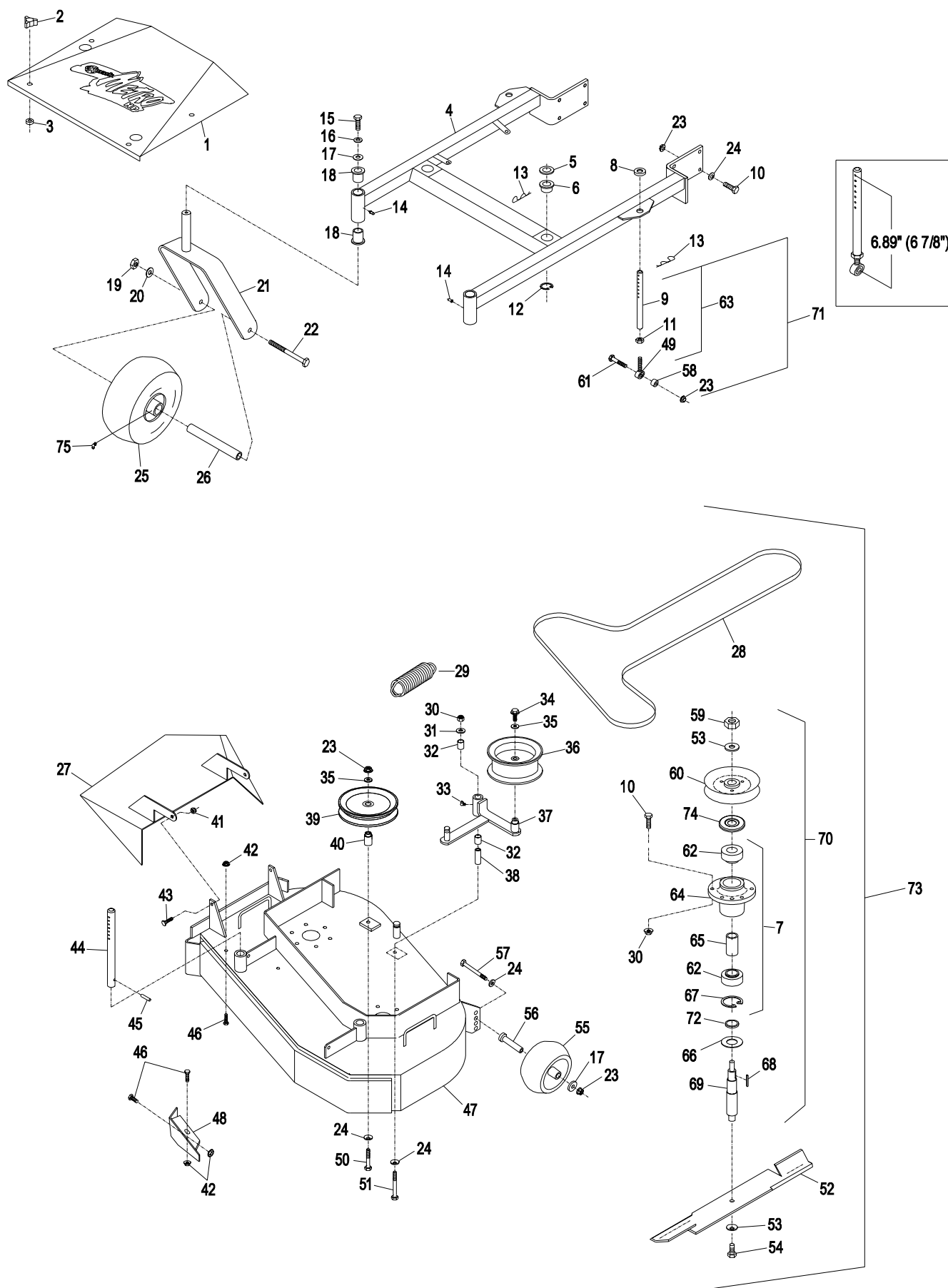
36" MOWER DECK

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-414386	Shield, belt w/decals	1	40	1-413113	Bushing, Idler	1
	1-413098-01	Shield, belt	1	41	3296-29	Nut, Nyloc 5/16-18	2
2	1-323385	Knob, belt shield	4	42	32128-20	Nut, Whizlock 5/16-18.....	3
3	1-323417	Washer, belt shield	4	43	322-5	Screw, Hex Cap 5/16-18 x 1	2
4	1-414309	Support wld w/bushings&decals...	1	44	1-603001	Rod, Deck Support.....	2
	1-412108-01	Support weldment.....	1	45	1-806332	Rollpin, 1/4x1 ½	2
5	1-413425	Spacer, Front Deck Support	2	46	322-2	Screw, Hex Cap 5/16-18 x 5/8	3
6	1-513336	Bushing, deck support.....	2	47	1-414383	Deck weldmt w/decals, discharge Baffle & support rods	1
7	1-634619	Housing w/Brgs, Spacer & Ring...	2		1-412104-01	Deck weldmt.....	1
8	1-323539	Spacer.....	2	48	1-522480-01	Baffle, discharge	1
9	1-413525	Link, Deck Support.....	2	49	1-613204	Ball Joint.....	2
10	323-7	Screw, Hex Cap 3/8-16 x 1 1/4....	20	50	323-13	Screw, Hex Cap 3/8-16 x 2 3/4	1
11	3219-3	Nut, Reg Hex 3/8-24	2	51	1-800805	Screw, Hex Cap 3/8-16 x 3 ½ G8	1
12	32120-33	Ring, Retaining	2	52	1-633482	Blade, 18.00 notched air foil.....	2
13	1-806009	Hairpin, Cotter .177 #206.....	4		1-613251	Blade, 18.00 solid air foil.....	2
14	302-52	Zerk, Straight 1/8.....	2		1-633484	Blade, 18.00 mulching.....	2
15	323-6	Screw, Hex Cap 3/8-16x1	2		1-633485	Blade, 18.00 low lift (optional)	2
16	3253-5	Washer, 3/8 heavy spring	2		103-1578	Blade, 18.00 bahia.....	2
17	1-373034	Washer, Swivel.	3	53	1-513208	Washer, Spring disc.....	4
18	1-303514	Bearing, Flange.....	4	54	103-1026	Screw, Hex Cap 5/8-11 x 1 G8	2
19	3217-9	Nut, Reg Hex ½-13	2	55	1-603299	Roller, antiscalp.....	1
20	3253-7	Washer, Lock Hlcl Spg ½ Reg....	2	56	1-603602	Bushing, roller	1
21	1-522143-01	Caster weldment.....	2	57	98-5961	Screw, Hex Cap 3/8-16x4 Gr. 8...	1
22	325-20	Screw, Hex Cap ½-13x6	2	58	1-603050	Bushing Spacer.....	2
23	3290-357	Nut, Whizlock 3/8-16.....	12	59	3219-6	Nut, Reg hex 5/8-18.....	2
24	98-5975	Washer, Disc Spring 3/8.....	11	60	1-413424	Sheave w/Hub	2
25	103-1224	Tire & Wheel Asm(semi-pneumatic) .	2	61	323-9	Screw, hex Cap 3/8-16x1 3/4.....	2
	1-513809	Roller Bearing	2	62	1-513016	Bearing	4
❖	103-2170	Bushing (semi-pneumatic)	4	63▲	1-414521	Link, Assembly.....	2
26■	103-2169	Spacer (semi-pneumatic)	2	64	1-323532	Housing, Spindle	2
27	103-2431-01	Chute weldment, discharge	1	65	1-323528	Spacer, Bearing	2
28	1-413094	Belt, deck drive.....	1	66	1-633573	Guard, Bearing-Bottom	2
29	1-633151	Spring, extension	1	67	32120-8	Ring, Snap	2
30	3296-39	Nut, Nyloc 3/8-16.....	13	68	1-807268	Key, machine	2
31	3256-4	Washer, Flat Std 3/8.....	1	69	1-413330	Shaft, Spindle	2
32	1-513034	Pivot Bearing.....	2	70	1-414335	Housing,Cutter assembly.....	2
33	302-40	Zerk, 90 degree ¼-28	1	71	1-611216	Kit, Link Assembly.....	2
34	3234-11	Bolt, Hex Whizlock 3/8-16x1.....	1	72	1-323533	Spacer.....	2
35	3256-24	Washer, Flat 3/8 SAE	2	73	103-0320	Assembly,Cutting deck complete.	1
36	1-413099	Pulley, Idler.....	1	74	103-1330	Guard,bearing top	2
37	1-412134-03	Arm, weldmt.....	1	75	302-61	Zerk, 45 degree ¼-28	2
	1-414144	Arm, weldmt w/bushings	1	76□	103-2171	Kit,semi-pneumatic wheel replacement...	1
38	1-603384	Bushing, Idler Pivot.....	1				
39	1-613098	Pulley, Idler	1				

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

- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N MK363(36")
- ▲ Link assembly must be assembled to 6.89" (or approximately 6 7/8") length between center of ball joint and center of furthest hole. See diagram on next page.
- ❖ Bushing for semi-pneumatic caster tires can be identified by a groove on the face.
- Front caster spacer for semi-pneumatic caster tires can be identified by yellow zinc plating.
- Kit 103-2171 used to install semi-pneumatic casters on machines originally fitted with pneumatic casters. Includes 103-1224 & 103-2169. Order 2 per machine.

36" MOWER DECK



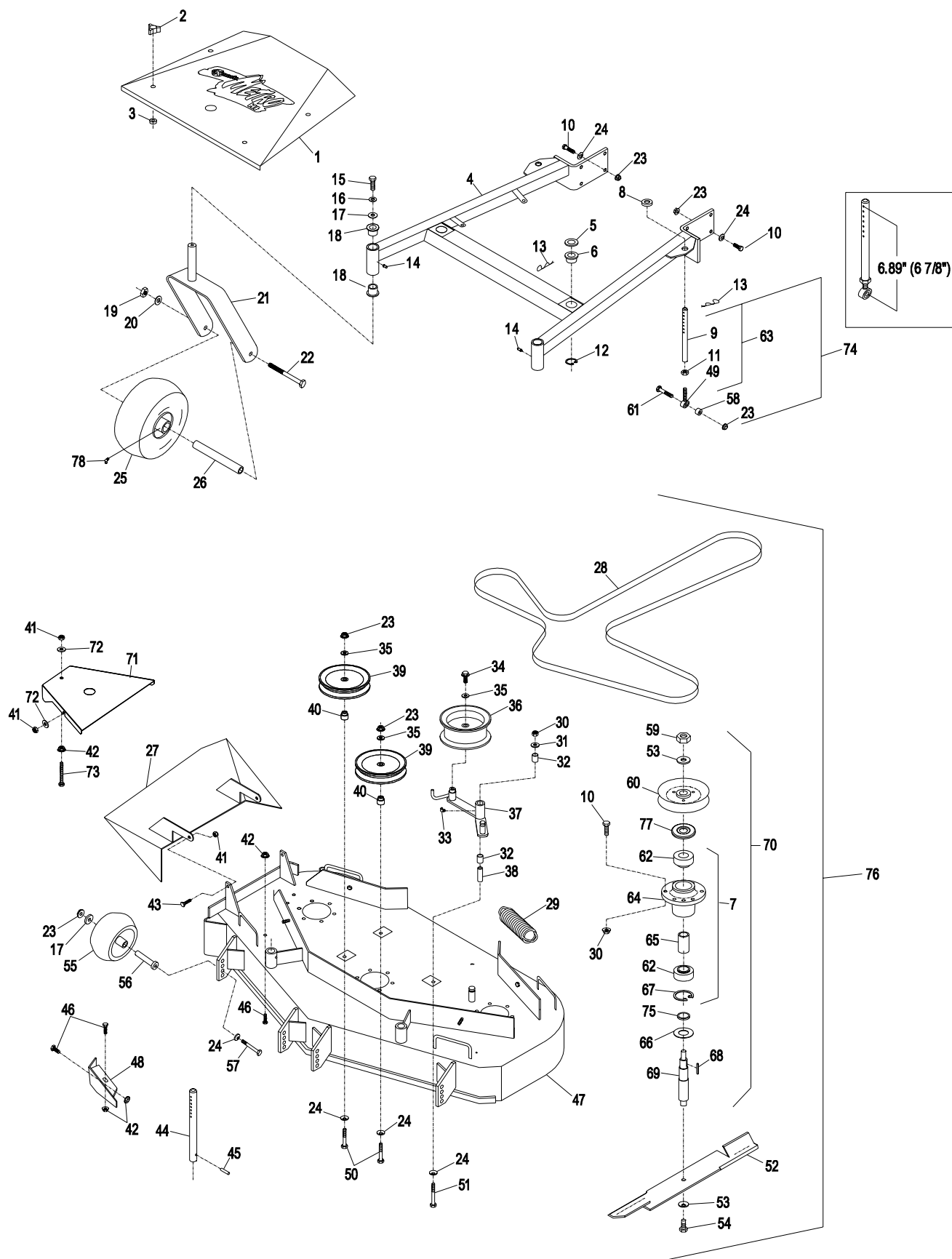
48" MOWER DECK

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-414387	Shield, belt w/decals	1	41	3296-29	Nut, Nyloc 5/16-18	8
	1-413101-01	Shield, belt	1	42	32128-20	Nut, Whizlock 5/16-18.....	5
2	1-323385	Knob, belt shield	4	43	322-5	Screw, Hex Cap 5/16-18 x 1	2
3	1-323417	Washer, belt cover.....	4	44	1-603001	Rod, Deck Support.....	2
4	1-414310	Support wld w/bushings & decals 1	1	45	1-806332	Rollpin, 1/4x1 1/2	2
	1-412110-01	Support weldmt.....	1	46	322-2	Screw, Hex Cap 5/16-18 x 5/8.....	3
5	1-413425	Spacer, Front Deck Support	2	47	1-414384	Deck weldmt w/decals, discharge	
6	1-513336	Bushing, deck support.....	2			Baffle & support rods	1
7	1-634619	Housing w/Brgs, Spacer & Ring... 3			1-412106-01	Deck weldmt.....	1
8	1-323539	Spacer.....	2	48	1-522480-01	Baffle, discharge	1
9	1-413525	Link, Deck Support.....	2	49	1-613204	Ball Joint.....	2
10	323-7	Screw, Hex Cap 3/8-16 x 1 1/4.....	26	50	323-13	Screw, Hex Cap 3/8-16 x 2 3/4	2
11	3219-3	Nut, Reg Hex 3/8-24	2	51	1-800805	Screw, Hex Cap 3/8-16 x 3 1/2 G8 1	
12	32120-33	Ring, Retaining	2	52	1-323515	Blade, 16.25 notched air foil.....	3
13	1-806009	Hairpin, Cotter .177 #206.....	4		1-413438	Blade, 16.25 solid air foil.....	3
14	302-52	Zerk, Straight 1/8.....	2	•	1-403148	Blade, 16.25 mulching.....	3
15	323-6	Screw, Hex Cap 3/8-16x1	2		1-403149	Blade, 16.25 low lift (optional)	3
16	3253-5	Washer, 3/8 heavy spring	2		103-1577	Blade, 16.25 bahia	3
17	1-373034	Washer, Swivel.....	6	53	1-513208	Washer, Spring disc.....	6
18	1-303514	Bearing, Flange.....	4	54	103-1026	Screw, Hex Cap 5/8-11 x 1 G8	3
19	3217-9	Nut, Reg Hex 1/2-13	2	55	1-603299	Roller, antiscalp.....	4
20	3253-7	Washer, Lock Hlcl Spg 1/2 Reg....	2	56	1-603602	Bushing, roller	4
21	1-522143-01	Caster weldment.....	2	57	98-5961	Screw, Hex Cap 3/8-16x4 Gr. 8... 4	
22	325-20	Screw, Hex Cap 1/2-13x6	2	58	1-603050	Bushing Spacer.....	2
23	3290-357	Nut, Whizlock 3/8-16.....	16	59	3219-6	Nut, Reg hex 5/8-18	3
24	98-5975	Washer, Disc Spring 3/8	15	60	1-413424	Sheave w/Hub	3
25	103-1224	Tire & Wheel Asm (semi pneumatic). 2		61	323-9	Screw, hex Cap 3/8-16x1 3/4.....	2
❖	1-513809	Roller Bearing.....	2	62	1-513016	Bearing	6
26■	103-2170	Bushing (semi-pneumatic)	4	63◆	1-414521	Link, Assembly.....	2
	103-2169	Spacer (semi-pneumatic).....	2	64	1-323532	Housing, Spindle	3
27	103-2431-01	Chute weldment, discharge	1	65	1-323528	Spacer, Bearing	3
28	1-413093	Belt, deck drive.....	1	66	1-633573	Guard, Bearing-Bottom	3
29	1-633151	Spring, extension	1	67	32120-8	Ring, Snap	3
30	3296-39	Nut, Nyloc 3/8-16	19	68	1-807268	Key, machine	3
31	3256-4	Washer, Flat Std 3/8	1	69	1-413330	Shaft, Spindle	3
32	1-513034	Pivot Bearing.....	2	70	1-414335	Housing, Cutter Assembly.....	3
33	302-40	Zerk, 90 degree 1/4-28	1	71	1-653482-01	Shield, Belt.....	2
34	3234-11	Bolt, Hex Whizlock 3/8-16x1.....	1	72	3256-3	Washer, Flat Std 5/16	6
35	3256-24	Washer, Flat 3/8 SAE	3	73	1-800017	Bolt, Hex Tap 5/16-18 3 1/4	2
36	1-413099	Pulley, Idler	1	74	1-611216	Kit, Link Assembly.....	2
37	1-412394	Arm, weldmt.....	1	75	1-323533	Spacer.....	3
	1-414398	Arm, weldmt w/bushings	1	76	103-0321	Assembly,Cutting deck complete. 1	
38	1-603384	Bushing, Idler Pivot.....	1	77	103-1330	Guard,bearing top	3
39	1-613098	Pulley, Idler	2	78	302-61	Zerk, 45 degree 1/4-28	2
40	1-413113	Bushing, Idler	2	79□	103-2171	Kit,semi-pneumatic wheel replacement... 1	

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

- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N MK483(48")
- ◆ Link assembly must be assembled to 6.89" (or approximately 6 7/8") length from center of ball joint to center of furthest hole. See diagram on next page.
- ❖ Bushing for semi-pneumatic caster tires can be identified by a groove on the face.
- Front caster spacer for semi-pneumatic caster tires can be identified by yellow zinc plating.
- Kit 103-2171 used to install semi-pneumatic casters on machines originally fitted with pneumatic casters. Includes 103-1224 & 103-2169. Order 2 per machine.

48" MOWER DECK

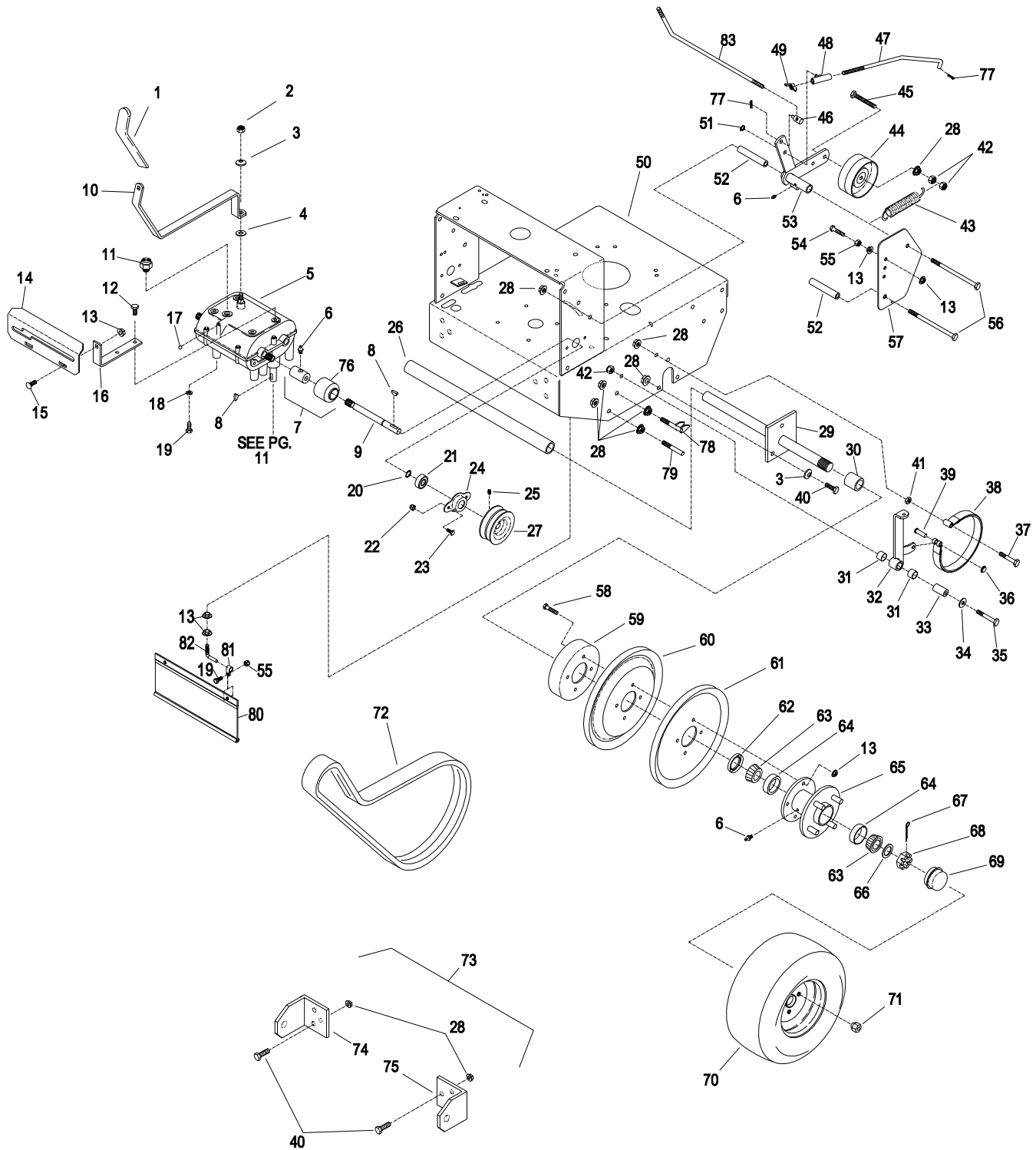


ENGINE DECK GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-1733	Grip Foam	1	44	1-323277	Idler, Wheel Drive	2
2	3296-6	Nut, Nyloc 3/8-24.....	1	45	99-8664	Bolt, Hex Tap 3/8-16x3.....	2
3	98-5975	Washer, Disc Spring 3/8	7	46	103-1618	Swivel, Short.....	2
4	1-323379	Washer, Shifter Lever	1	47	103-1700	Linkage, Brake	2
5	1-323500	Transmission, Peerless.....	1	48	1-322125	Swivel, weldmt Brake Linkage	2
6	302-19	Zerk, Straight ¼-28 5/32.....	6	49	1-513959	Wingnut, Nyloc 5/16	4
7	1-324340	Coupling, w/guard & zerk	2	50	1-412518-01	Deck, weldment Engine	1
8	3257-5	Key Woodruff #9 3/4x3/16.....	3	51	32151-47	Ring, Klip 3/8.....	2
9	1-323502	Shaft,Trans. Output 9 spline	2	52	1-323283	Spacer, Shield.....	4
10	103-1606	Lever, Shift w/grip.....	1	53	103-1703-03	Arm, weldment RH (shown)...	1
11	1-303282	Switch, Neutral Start.....	1		103-1702-03	Arm, weldment LH	1
12	9264964	Screw, Hex Tap 5/16-18x3/4....	4	54	322-7	Screw,Hex Cap 5/16-18x1½ ..	2
13	32128-20	Nut, whizlock 5/16-18.....	18	55	3296-29	Nut, Nyloc 5/16-18	4
14	1-323387-03	Plate, Shifter.....	1	56	323-39	Screw, Hex Cap 3/8-16x5	4
15	3230-1	Bolt, Carriage 5/16-18x3/4.....	2	57	1-413359-01	Shield, Wheel Drive	2
16	1-323389-03	Leg, Shifter Plate.....	2	58	322-6	Screw,Hex Cap 5/16-18x1¼ ..	8
17	1-323526	Ball, Stainless Steel.....	1	59	1-323261	Brake Drum.....	2
18	1-805005	Washer, Lock Hlcl Spg 5/16.....	4	60	1-413331	Sheave, Wheel Drive w/offset	2
19	322-3	Screw, Hex Cap 5/16-18x3/4 ...	6	61	1-413332	Sheave, Wheel Drive	2
20	32151-62	Ring, Retaining.....	2	62	1-543511	Seal, Grease	2
21	1-323252	Bearing, Transmission Shaft....	2	63	1-543509	Cone, Bearing L44643	4
22	3296-42	Nut, Nyloc ¼-20.....	4	64	1-543508	Cup, Bearing L44610	4
23	321-3	Screw, Hex Cap ¼-20x5/8	4	65	1-413333	Wheel, Hub w/cups	2
24	1-323254	Flange, Output.....	2		1-633926	Stud, wheel (1 ½")	8
25	1-803310	Screw, Set 5/16-18x3/8.....	2	66	1-523157	Washer, Spacer	2
26	1-413355-03	Sleeve, Axle	1	67	1-806800	Pin, Cotter 9/64x1 1/2.....	2
27	1-413334-03	Sheave, Transmission Output..	2	68	1-809082	Nut, Slotted Hex	2
28	3290-357	Nut, Whizlock 3/8-16.....	26	69	1-543513	Cap, Grease	2
29	1-412376-03	Axle Weldment.....	2	70	1-413473	Wheel & Tire Assembly	2
30	1-543556	Spacer, Wheel.....	2		1-413474	Tire 16x6.50 – 8	2
31	1-413347	Bushing, Sleeve	4		1-603715	Wheel	2
32	103-1695	Lever,Brake RH w/bush.(shown)	1	71	242-50	Nut, Wheel ½-20	8
	103-1694	Lever,Brake LH w/bushings	1	72	1-413341	Belt, Wheel Drive Banded	2
33	1-413344	Bushing, Pivot	2	73	1-411255	Kit, Sulky Hitch	1
34	3256-4	Washer, Flat Std 3/8.....	2	74	1-413252	Bracket, Sulky LH.....	1
35	323-10	Screw, Hex Cap 3/8-16x2	2	75	1-413254	Bracket, Sulky RH	1
36	1-803051	Nut, Push .38.....	2	76	51-4220	Guard, coupler	1
37	323-9	Screw, Hex Cap 3/8-16x1 3/4 ..	2	77	1-806003	Cotter, Hairpin .0585 #2.....	3
38	1-323262	Brake Band	2	78	1-412358	Scraper, weldment	2
39	1-323307	Pin, Clevis	2	79	1-413353	Pin, Threaded.....	2
40	323-6	Screw, Hex Cap 3/8-16x1	12	80	98-3259	Shield, Trailing.....	1
41	3218-3	Nut, Jam 3/8-16.....	2	81	1-413510	Clip, Loom .50	2
42	3296-39	Nut, Nyloc 3/8-16.....	6	82	1-413511	Hanger, Drag Shield.....	2
43	1-603402	Spring, Extension	2	83	103-1701	Linkage,Drive	2

- ◇ Use Pro-lock (Nut type) Part No. 1-840022 (.5ml tube) on setscrew threads.
 Exmark red touch up spray paint - P/N 1-850337
 Exmark black touch up spray paint – Gloss Black

ENGINE DECK GROUP



ENGINE DECK GROUP (CONT.)

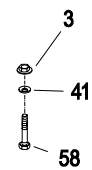
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	323-11	Screw, 3/8-16 x 2-1/4	7	31	1-806003	Pin, Hair Cotter .0585 #2	1
2	3256-3	Washer, Flat Std 5/16	2	32	1-413282	Linkage, Lower	1
3	32128-20	Nut, Whizlock 5/16-18	11	33	1-414143	Link Pivot w/Bearing	1
4	1-413009-01	Plate, Guard	1	34	302-19	Zerk, Straight 1/4-28	1
5 *	1-800521	Screw, Hex Cap 3/8-24x1G8 ..	1	35	1-603044	Bushing, Idler Pivot	1
6	98-5975	Washer, Disc Spring 3/8	2	36	3231-6	Bolt, Carr. SSN 3/8-16x2	1
7	1-373034	Washer, Swivel	2	37	322-6	Screw, Hex Cap 5/16-18x1 1/4 ..	1
8	322-3	Screw, Hex Cap 5/16-18x3/4 ..	1	38	321-6	Screw, Hex Cap 1/4-20x1	2
9 ▲	1-412031	Sheave, w/drum (36")	1	39	32128-33	Nut, Whizlock 1/4-20	4
▲	1-513113	Sheave, w/drum (48")	1	40	1-523498	Spring, Motion Control	1
10	1-807259	Key, Mach 1/4x1 1/4x1	1	41	1-303334	Washer, Disc Spring 5/16	5
11	1-412138-03	Pivot Pin weldment	1	42 *	3212-10	Screw, Hex cap 7/16-20x2 1/2 ..	1
12	1-413062	Band, Brake Clutch	1	43	1-603610	Disc, Spring 7/16	2
13	3296-39	Nut, Nyloc 3/8-16	5	44	1-603609	Bushing, Clutch Keeper	1
14	1-413235	Washer, Spacer	1	45 ▲	1-413339	Sheave, Engine	1
15	1-413207	Pivot, Bearing	2	46	1-807264	Key, Machine 1/4 x 1/4 x 2 5/8 ..	1
16	1-412417-03	Arm weldment, Clutch	1	47	1-412325	Guide, Belt weldment	1
	1-414418	Clutch Arm w/Bearings	1	48	1-413096	Belt, Blade Clutch	1
17	1481	Zerk, 1/4-28x45	1	49 ▲	1-323278	Sheave, Transmission	1
18 ▲	1-413111	Bearing, Clutch Shaft	2	50 *	3245-41	Screw, Set 1/4-20x3/8	2
19	32120-8	Ring, Snap	2	51	3256-5	Washer, Flat Std 7/16	2
20	1-413012	Spacer, Bearing Clutch	1	52	3256-24	Washer, Flat SAE 3/8	1
21	1-523157	Washer, Spacer	1	53	1-323285	Idler, Transmission Drive	1
22	1-412011	Sheave w/shaft	1	54 *	1-803310	Screw, Set 5/16-18x3/8	1
23	1-413049-01	Plate, Clutch Pivot	1	55 ▲	103-1666	Sheave, Transmission Drive ..	1
24	3290-357	Nut, Whizlock 3/8-16	3	56	1-413340	Spacer, Crankshaft	1
25	3296-29	Nut, Nyloc 5/16-18	1	57	1-323280	Belt, Transmission Drive	1
26	1-213069	Washer, Strut	1	58	322-7	Screw, Hex Cap 5/16-18x1 1/2 ..	4
27	1-513113	Spring, Belt Tension	1	59	323-8	Screw, Hex Cap 3/8-16x1 1/2 ..	2
28	1-543007	Spacer, Clutch Anchor	1	60	103-1965	Valve, oil drain	1
29	3256-4	Washer, Flat Std 3/8	1	61	103-1966	Adapter, M20-2.5 / 3/8 NPT ...	1
30	1-513034	Pivot, Bearing	2	62	103-1964	Hose, 24" oil drain	1

- ▲ Use anti-seize compound in the following locations:
- ◆ Between the sheave and the engine crankshaft.
 - ◆ Between the sheave w/shaft and the bearing bores.
 - ◆ Between the sheave w/shaft and the sheave w/drum.
 - ◆ Between the transmission shaft and the sheave.

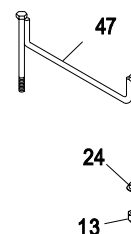
- * Use Pro-lock (Nut type) Part No. 1-840022 (.5ml tube) in the following locations:
- ◆ On setscrew locations.
 - ◆ On sheave retaining bolt in engine crankshaft.
 - ◆ On sheave retaining bolt on clutch arm.

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

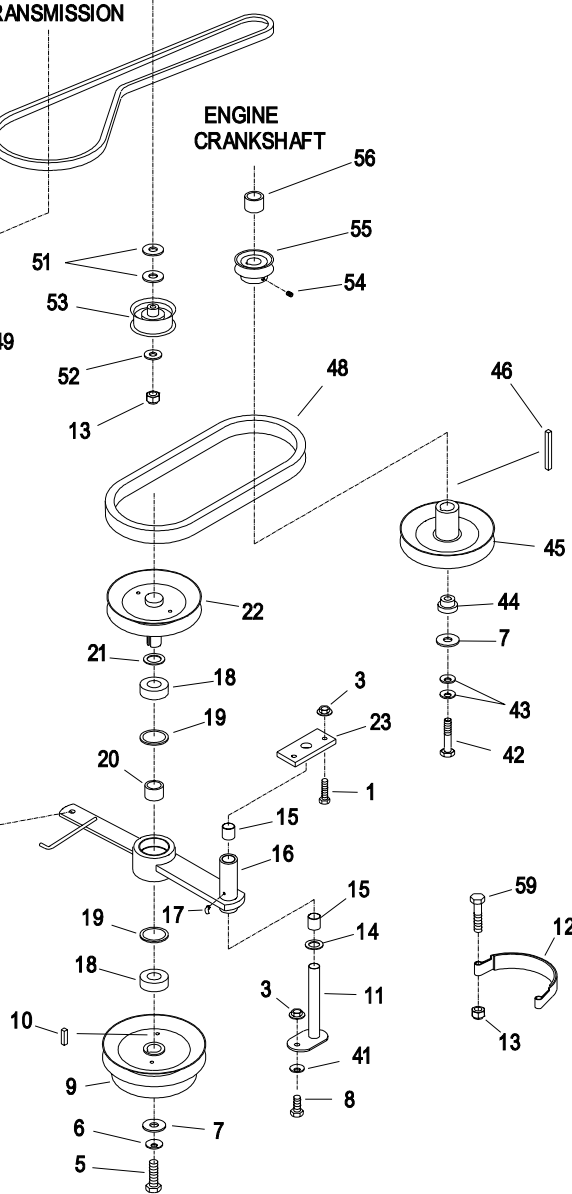
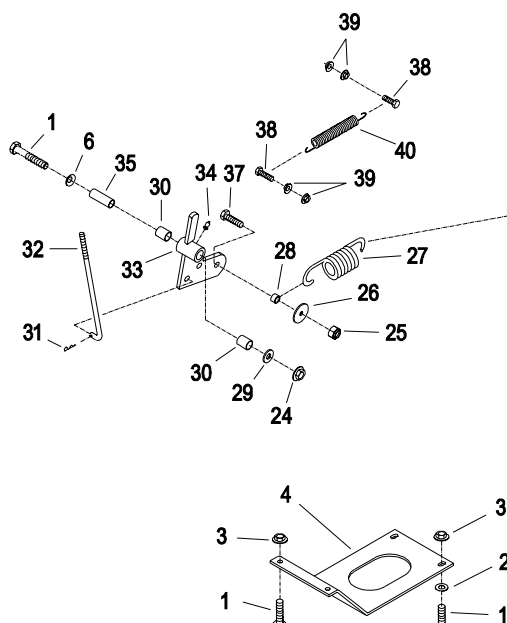
Diagram illustrating the installation of a screw (36) into the side panel of the unit.



TRANSMISSION



ENGINE CRANKSHAFT



ECS UPPER HANDLES and CONTROLS

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1▽	103-1566-03	Lever, weldment OPC LH.....	1	38	1-603770	Valve, Fuel	1
2	1-303365	Bushing, Nylon.....	2	39	1-303022	Hose, Fuel line 12"	1
3♦	1-803322	Screw, Set .312-24x.312	2	40	Kawasaki PN 41019-1055 w/6" fuel line	1	
4	103-0769-03	Rod weldment, OPC	1	41•	103-1710	Harness, Wiring	1
5	1-303363	Spring, Actuator	1	42	3256-2	Washer, Flat Std 1/4	1
6	1-513592	Knob, Ball Red	1	43	1-403121	Switch, On/Off	1
7	1-807513	Bolt, Carr. #10-24x1/2 G2.....	2		1-603511	Key, ignition.....	1
8	3296-2	Nut, Nyloc #10-24	2		103-2106	Key, Exmark logo.....	1
9	1-633696	Cable, Throttle Control	1	44	321-4	Screw, Hex Cap ¼-20x3/5.....	1
10▽	103-1567-03	Lever, weldment OPC RH	1	45	1-633181	Plate, Tapped.....	2
11	1-303020	Grip, Lever	1	46	3290-357	Nut, Whizlock 3/8-16.....	4
12	1-414234	Clutch Lever w/Grip	1	47	3290-500	Scrw,Mach CRPH 10-24x5/8	4
13	3296-39	Nut, Nyloc 3/8-16	3	48	1-513051	Switch, Neutral Lockout	2
14	3256-24	Washer, Flat SAE 3/8	2	49	1-323229	Clip, 3/8 Loom.....	2
15	103-0027	Spacer	2	50	1-303287	Tie, Plastic	5
16	1-806003	Pin, Hair Cotter .0585 #2	1	51	1-323430	Module, Wiring Harness	1
17	103-1149	Linkage, Upper	1	52	323-11	Screw,3/8-16 x 2 1/4	1
18	1-413279	Turnbuckle, 3/8-16 SS.....	1	53	323-10	Screw,3/8-16 x 2	2
19	3217-7	Nut, Reg Hex 3/8-16	1	54	1-413152	Bearing	4
20	103-0815	Grip, Handle	2	55	103-0771-03	Lever,drive LH	1
21	1-303435	Washer, Disc Spring 1/4.....	6	56	3219-3	Nut,3/8-24 reg hex	2
22	103-1631	Latch, thumb LH	1	57	321-14	Screw,1/4-20 x 2 3/4	2
	103-1630	Latch, thumb RH (shown).....	1	58	32128-33	Nut,1/4-20 whizlock	12
23	3296-42	Nut, Nyloc ¼-20	3	59	103-0464	Pin,1/8 x 1/3 spring	2
24	103-0770-03	Handle weldment(1-412449) ..	1	60	3256-22	Washer,1/4 SAE flat	10
25	98-5975	Washer, Disc Spring 3/8.....	4	61	103-0235	Screw,1/4-20 x 1 1/8 w/nylon	2
26	323-6	Screw, Hex Cap 3/8-16x2 ½..	4	62	103-0772-03	Lever,drive RH	1
27	1-513508	Cap, Fuel Tank	1	63	3220-3	Nut,3/8-24 jam	4
28	1-413179	Tank, Fuel Intermediate.....	1	64	103-0546-03	Wld,upper handle console	1
29▽	1-633023	Stud.....	2	65	3256-23	Washer,5/16 SAE flat	4
30	1-633349	Spring, Fuel tank.....	2	66	321-3	Screw,1/4-20 x 5/8	10
31	1-805005	Wshr,Lock Hlcl Spg 5/16 Hvy ..	2	67	103-1915	Asm,drive lever RH	1
32	3296-47	Nut, Nyloc 5/16-18	2		103-1916	Asm,drive lever LH	1
33	322-3	Screw, Hex Cap 5/16-18x¾... ..	2	68	103-0608	Joint,.375 ball end	2
34	1-513645	Bushing, Fuel Valve	1	69	103-0489-03	Bracket,opc axle	1
35	1-543277	Elbow w/Screen	1	70	103-1796	Cable,choke push/pull	1
36	1-303077	Clamp, Fuel line	4	71	103-1797-01	Bracket,choke cable	1
37	1-603955	Hose, Fuel line 6"	1				

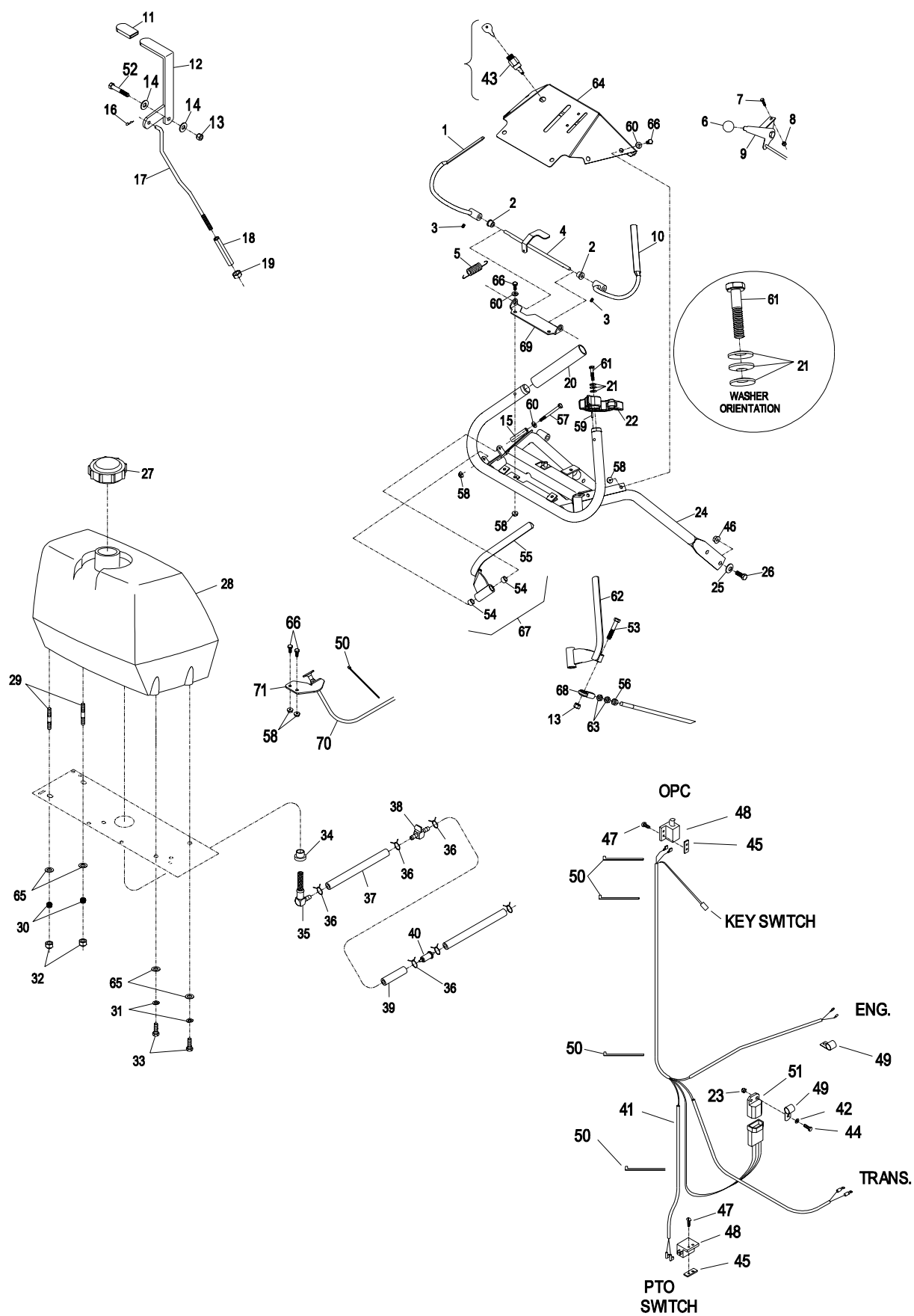
♦ Use Pro-Lock nut type, Part no. 1-840022 (.5cc tube) on setscrew threads and on shifter knob threads.

▽ Use Pro-Lock retaining type, Part no. 1-840023 (.5cc tube) on inside of bore of OPC hub and on fuel tank studs.

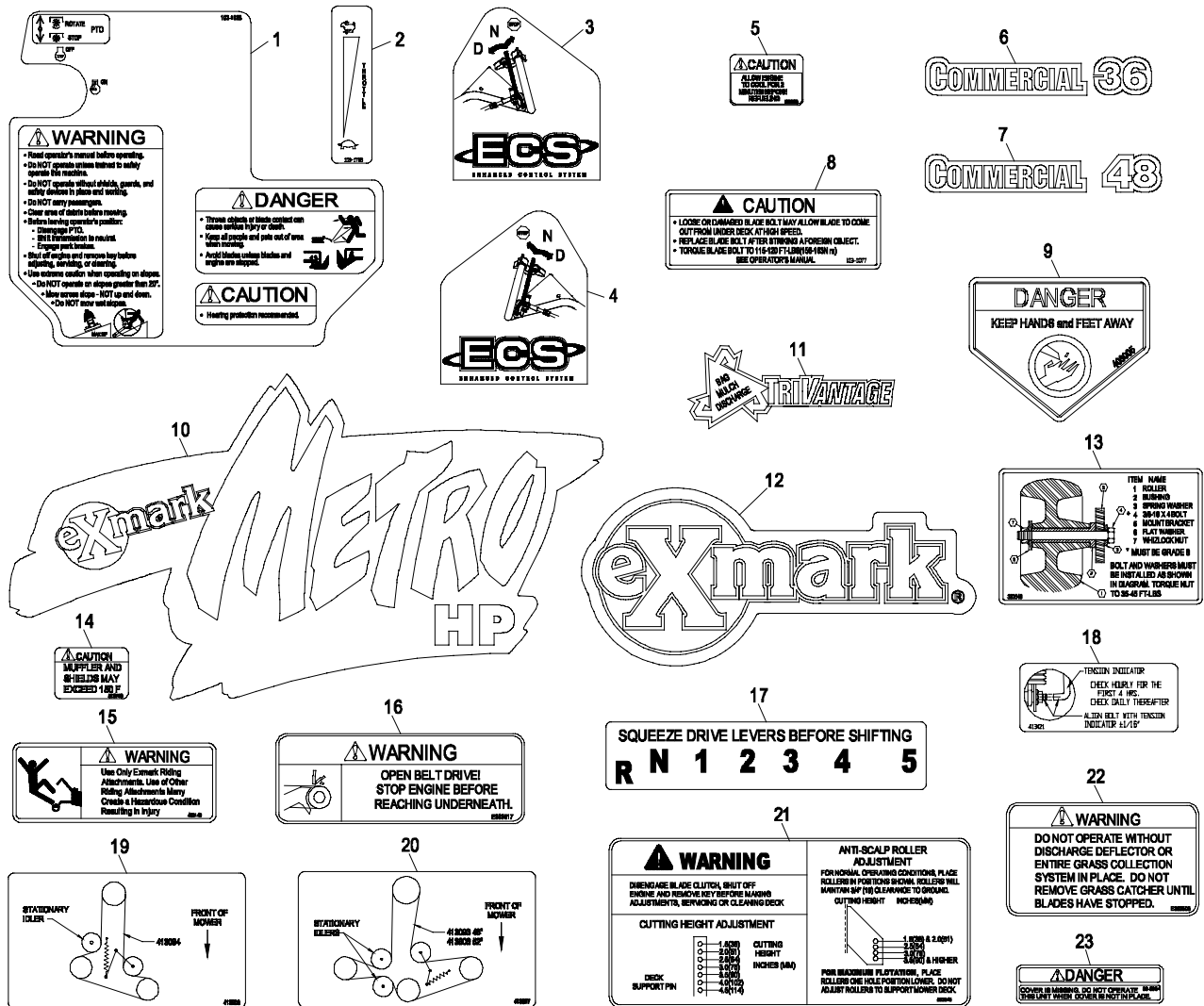
• Use dielectric grease on all electrical connectors.

Exmark black touch up spray paint - Gloss black

ECS UPPER HANDLES and CONTROLS



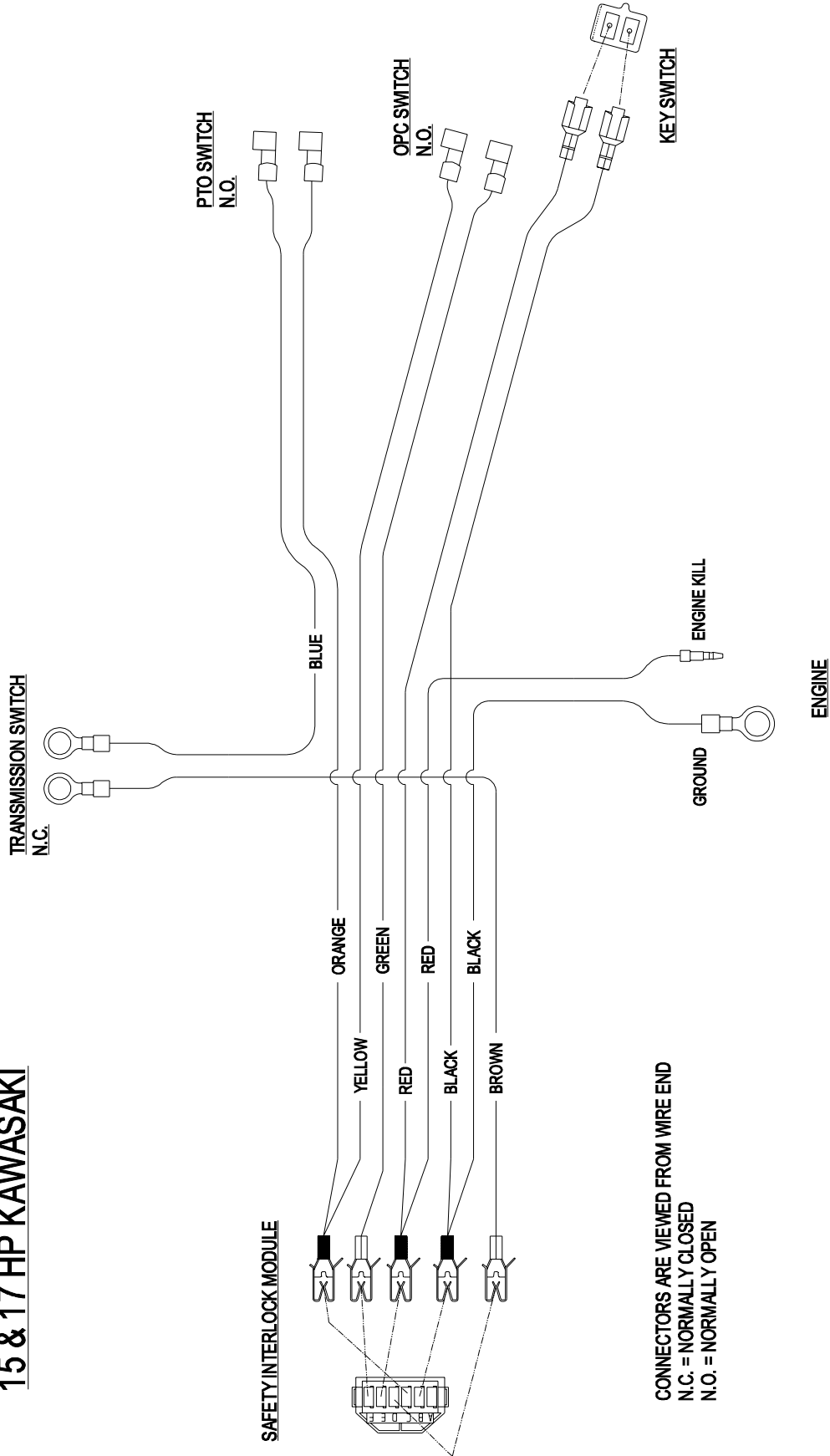
DECALS



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-1623	Decal, Console	1	14	1-513746	Decal, Muffler	2
2	103-1798	Decal, Throttle	1	15	1-403143	Decal, Sulky Warning	1
3	103-2244	Decal, LH ECS Instruction	1	16	1-303517	Decal, Belt Drive	1
4	103-2245	Decal, RH ECS Instruction ...	1	17	1-303518	Decal, Shifter	1
5	1-303293	Decal, 2 Min Cool	1	18	1-413421	Decal, Indicator	1
6	1-323411	Decal, Commercial 36	1	19	1-413206	Decal, Belt Routing(36")	1
7	1-403131	Decal, Commercial 48	1	20	1-413327	Decal, Belt Routing(48")	1
8	103-1077	Decal, Bolt Torque	1	21	1-553049	Decal, Mower deck	1
9	1-403005	Decal, Danger	2	22	1-303508	Decal, Discharge Warning ...	1
10	1-413371	Decal, MHP-swash	1	23	98-5954	Decal, Missing cover (36") ...	1
11	1-303520	Decal, Trivantage	1		98-5954	Decal, Missing cover (48") ...	3
12	103-1983	Decal, Sm Metro Console	1		1-414395	Decal Kit	1
13	1-323540	Decal, Roller Mounting	1				

15 & 17 HP KAWASAKI

WIRING DIAGRAM



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

LAZER Z[®]

LAZER Z[®] HP

LAZER Z[®] XP

EXPLORER[®]

TURF RANGER[®]

TURF TRACER[®]

TURF TRACER[®] HP

VIKING HYDRO

METRO[®]

METRO[®] HP

SELF STEERING SULKY

ULTRA VAC[™]

GRASS CATCHER

MICRO-MULCH[™] ACCESSORY

©1997,1998, 1999, 2000, 2001, 2002
EXMARK MFG. CO. INC.
INDUSTRIAL PARK BOX 808
BEATRICE, NE 68310
ALL RIGHTS RESERVED

PART NO. 103-1714
(402) 223-6300
FAX (402) 223-5489

PRINTED IN U.S.A.

