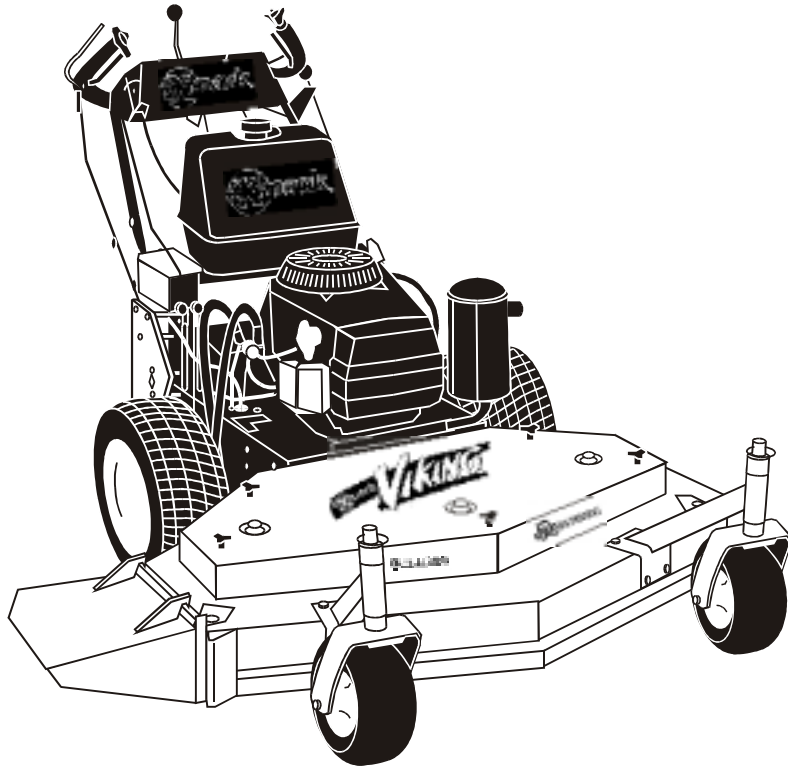


For Serial Nos.
320,000 & Higher



PARTS MANUAL

VIKING HYDRO

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 top front engine frame on the right hand side of the machine. 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. 103-1745 Rev B.

EXMARK PARTS PLUS® PROGRAM

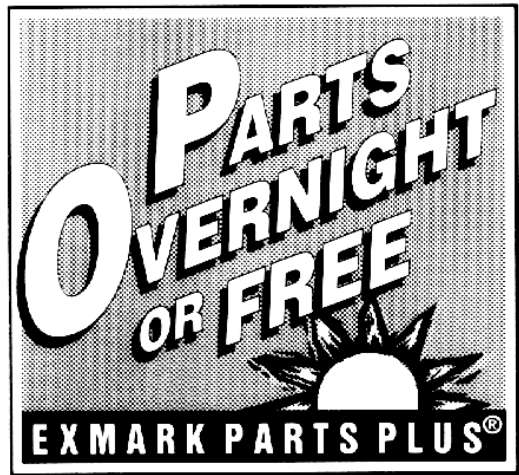
EFFECTIVE DATE: September 1, 1995

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 arrive 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.**

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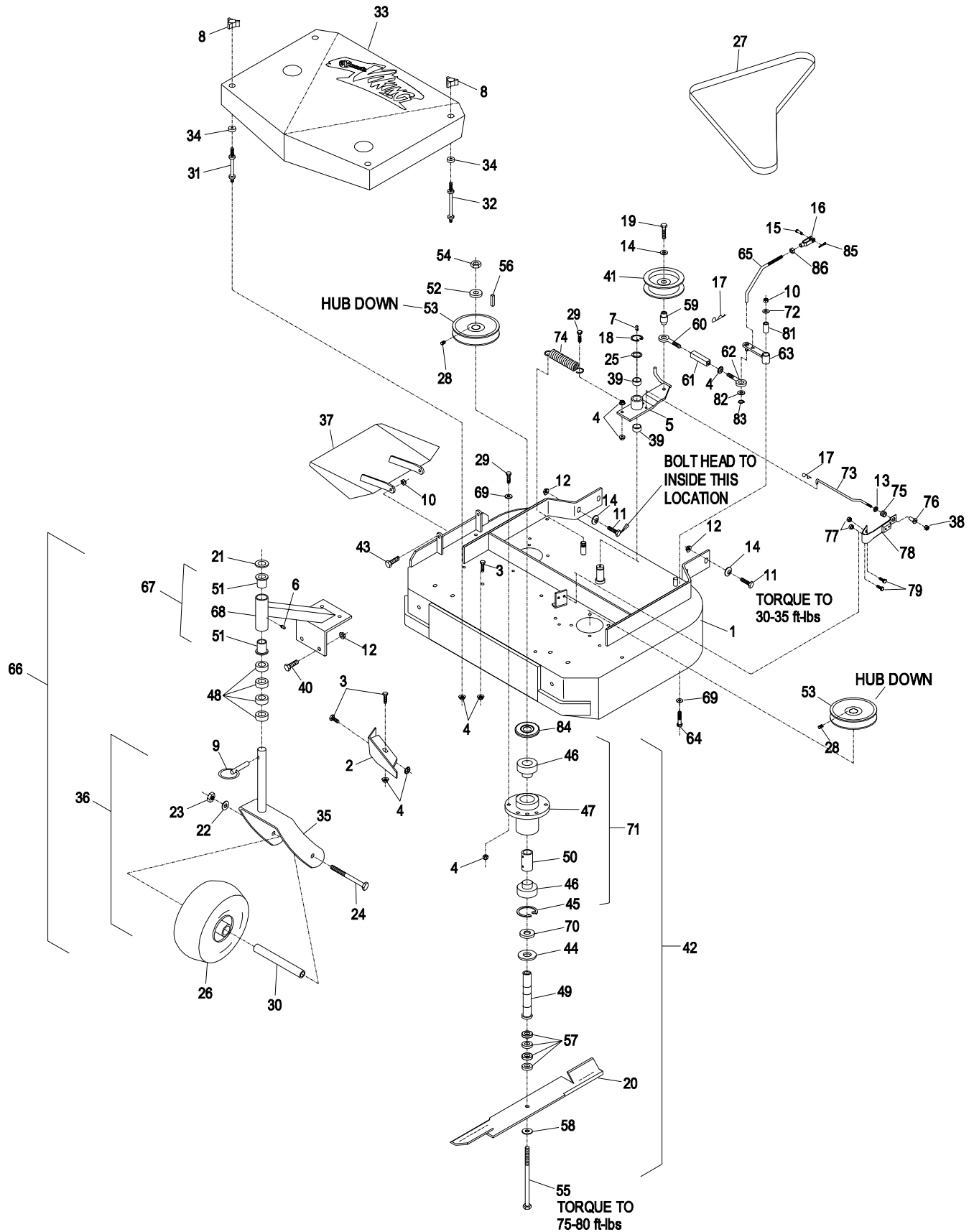
32" & 36" MOWER DECK

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-2312	Deck(103-2307-01)w/decals & dogleg (36")	1	38	3296-56	Nut,nyloc ¼-20 thin.....	1
	103-2313	Deck(103-2301-01)w/decals & dogleg (32")	1	39	1-323729	Powder metal bearing.....	2
2	1-302189-01	Baffle wldmnt, dogleg	1	40	323-4	3/8-16 x 3/4 HH capscrew	8
3	322-2	Screw, 5/16-18 x 5/8.....	7	41	1-603843	Idler pulley (heavy duty).....	1
4	32128-20	5/16-18 Whizlock nut.....	22	42*	103-2555	Cutter Housing Complete	2
5	1-324408	Engagement arm w/bushing.....	1	43	322-5	5/16-18 x 1 HH capscrew	2
6	302-52	Grease Zerk, 1/8 NPT straight.....	2	44	1-633573	Guard, bottom.....	2
7	302-19	Grease Zerk, 1/4-28 straight.....	1	45	32120-8	Retaining ring	2
8	1-323385	Knob, belt cover.....	4	46	1-513016	Bearing	4
9	1-809020	Quick pin, 10" caster.....	2	47	1-323532	Cutter housing	2
10	3296-29	5/16-18 Nyloc hex nut.....	3	48	1-303314	Spacer, 10" caster	8
11	323-6	3/8-16 x 1 HH capscrew	6	49	1-323529	Tube, spindle	2
12	3290-357	3/8-16 whizlock nut.....	14	50	1-323528	Spacer	2
13	1-323748	Ring, push-on 7/16	1	51	1-303514	Flange , thrust bearing	4
14	98-5975	3/8 Disc spring washer	7	52	1-323339	Retaining washer, sheave	2
15	1-808280	5/16 x 1 Clevis pin	1	53	1-403183	Pulley	2
16	1-303105	Yoke	1	54	3219-6	5/8-18 UNF hex nut	2
17	1-806003	Cotter hairpin.....	2	55	1-800861	5/8-18 x 8 HH Capscrew (Gr 5)	2
18	32151-103	E-Ring for .875 rd.	1	56	1-807267	Key, 1/4 x 3/16 x 1 1/4.....	2
19	702809	3/8-16 x 1 7/8 capscrew.....	1	57	1-323539	Spacer, blade drive.....	8
20	1-633482	Blade, Notched air foil (36").....	2	58	1-513208	5/8 Spring disc washer	2
	1-613251	Blade, Solid air foil (36")	2	59	1-303434	Engagement bushing.....	1
•	1-633484	Blade, Mulching (36")	2	60	1-303348	Eye bolt (left hand thread)	1
	1-633485	Blade, Low Lift (36") optional.....	2	61	1-303236	Turnbuckle body	1
	103-1578	Blade, Bahia (36").....	2	62	1-303238	Eye bolt (right hand thread)	1
	1-413438	Blade, Solid air foil (32")	2	63	1-322235	Assist arm (32" & 36").....	1
	1-323515	Blade, Notched air foil (32").....	2	64	322-10	Screw, 5/16-18 X 2	1
•	1-403148	Blade, Mulching (32")	2	65	1-323174	Assist arm linkage	1
	1-403149	Blade, Low Lift (32") optional.....	2	66	103-2281	Caster/mount, complete	2
	103-1577	Blade, Bahia (32").....	2	67	103-2296	Caster wheel support w/brgs, weighted ..	2
21	1-513338	Washer, special.....	2	68	103-2297-01	Caster wheel support wldmnt, weighted..	2
22	3253-7	1/2 spring lockwasher	2	69	1-303334	5/16 Spring disc washer	9
23	3217-9	1/2-13 Hex nut	2	70	1-323533	Spacer	2
24	325-20	1/2-13 x 6 HH capscrew	2	71	1-634619	Housing w/Brg, Spacer and Ring.....	2
25	1-303352	Washer, spindle.....	1	72	3256-3	Wshr, flat std 5/16	1
26	103-1224	Tire & Wheel Asm.....	2	73	1-323715	Rod, brake 36".....	1
	1-513809	Roller bearing	1		1-323718	Rod, brake 32"	1
	103-2170	Bushing.....	2	74	1-323071	Spring	1
27	1-323735	Drive belt (to blades) 36" Model.....	1	75	1-323747	Spring, compression.....	1
	1-323733	Drive belt, (to blades) 32" Model.....	1	76	1-323746	Spacer, flanged	1
♦28	1-803310	Setscrew, 5/16-18 x 3/8	2	77	3296-42	Nut, nyloc ¼ - 20	2
29	322-6	5/16-18 x 1 1/4 HH capscrew	9	78	1-324372	Pad/spring assy	1
30	103-2169	Spacer, front caster	2	79	321-4	Screw, HHCap ¼-20 X 3/4	2
31	1-303537	Stud, belt shield (short).....	2	81	1-403179	Tube, pivot.....	1
32	1-303536	Stud, belt shield (long).....	2	82	3256-23	Wshr, flt SAE 5/16	1
33	1-302218	Shield (1-302213-01) w/decals, (36") ..	1	83	32120-35	E-ring	1
	103-2589	Shield (1-322149-01) w/decals, (32") ..	1	84	103-1330	Guard,Bearing top	2
34	1-323417	Washer, belt cover mount.....	4	85	3272-5	Cotter pin 3/32 x 1/2	1
35	1-322145-01	Fork wldmnt, caster	2	86	3219-2	5/16-24 Hex nut	1
36	103-1236	Caster wheel assembly.....	2	87▲	103-2171	Kit,semi-pneumatic wheel replacement....	2
37	1-302233-01	Chute	1				

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

- ♦ Use Pro-lock Nut Type (p/n 1-840022 .5 ml tube) on the setscrews
- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N's MK322(32") or MK362(36")
- * Cutter housing complete includes sheave, washer, and nut and does not include blade.
- ▲ 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.

32" & 36" MOWER DECK



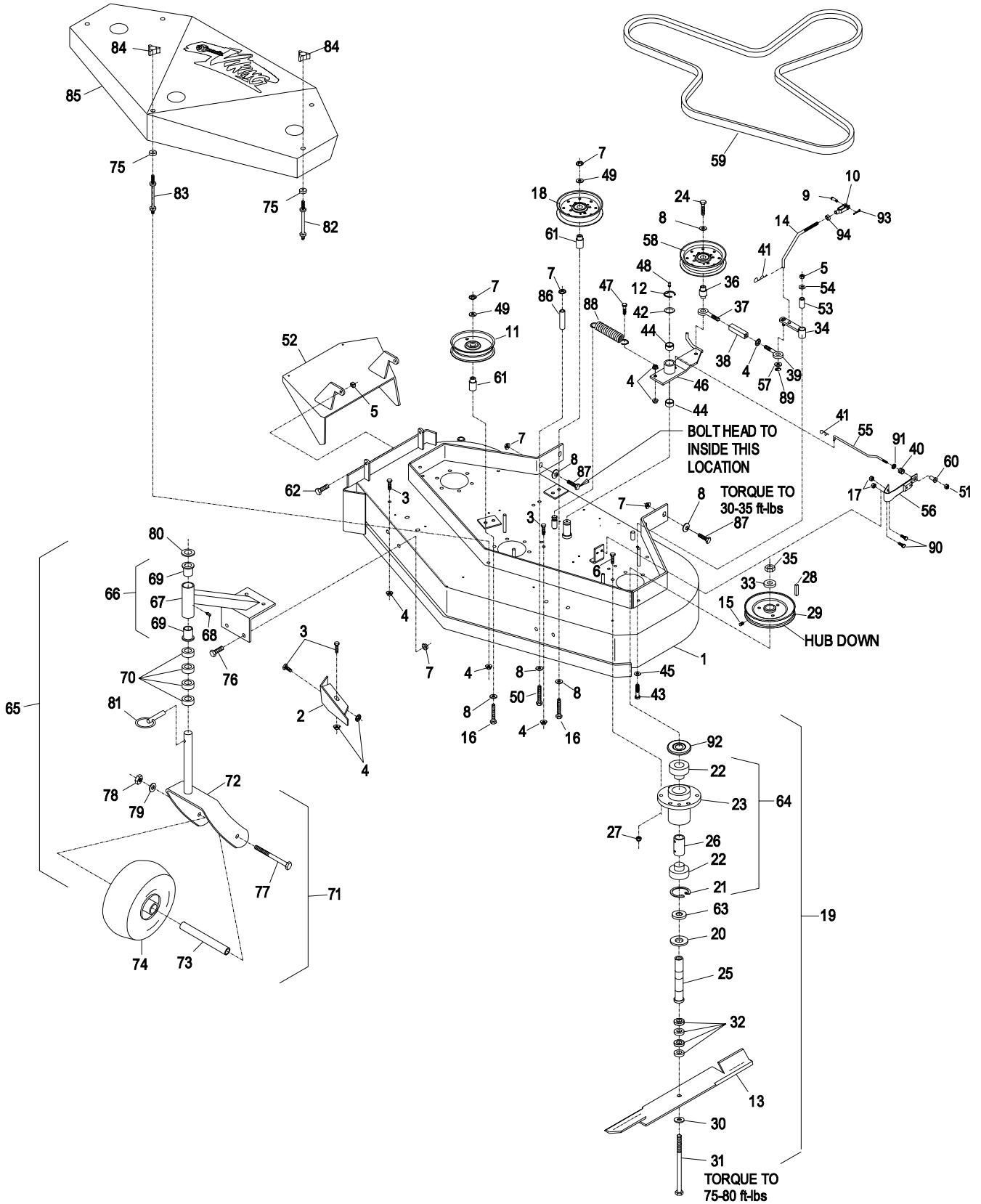
48" MOWER DECK

Ref. No.	Qty.	Part No.	Description	Req'd.	Ref. No.	Part No.	Description	Qty.	Req'd.
1	1	1-404257	Deck (1-402108-01) w/decals & dogleg ..	1	48	302-19	Zerk 1/4-28 strt	1	
2	1	1-402107-01	Baffle, dogleg	1	49	3256-24	3/8 Flatwasher.....	2	
3	4	322-2	5/16-18 x 5/8 HH capscrew	4	50	323-20	3/8-16 x 3 1/4 HH capscrew.....	1	
4	12	32128-20	5/16-18 Whizlock nut.....	12	51	3296-56	Nut, nyloc 1/4-20 thin	1	
5	3	3296-29	5/16-18 Nyloc hex nut.....	3	52	1-402106-01	Chute wldmt	1	
6	18	323-7	3/8-16 x 1 1/4 HH capscrew.....	18	53	1-403179	Tube, pivot	1	
7	17	3290-357	3/8-16 whizlock nut.....	17	54	3256-3	Washer, Flat Std 5/16	1	
8	10	98-5975	3/8 disc spring washer.....	10	55	1-323714	Rod brake 48" LH	1	
9	1	1-808280	5/16 x 1 Clevis pin	1	56	1-324372	Pad/spring assy.....	1	
10	1	1-303105	Yoke	1	57	3256-23	5/16 SAE flat washer.....	1	
11	1	1-613098	Idler pulley "V"	1	58	1-603843	Pulley, idler (heavy duty).....	1	
12	1	32151-103	E-Ring for .875 rd.	1	59	1-403174	Drive belt (main deck)	1	
13	3	1-323515	Blade, Notched air foil	3	60	1-323746	Spacer, flanged	1	
	3	1-413438	Blade, Solid air foil	3	61	1-403184	Bushing	2	
	3	1-403148	Blade, mulching	3	62	322-5	5/16-18 x 1 HH capscrew.....	2	
	3	1-403149	Blade, Low Lift (optional).....	3	63	1-323533	Spacer.....	3	
	3	103-1577	Blade, Bahia	3	64	1-634619	Housing w/Brg, Spacer and Ring	3	
14	1	1-323174	Assist arm linkage	1	65	103-2281	Caster/mount, complete	2	
15♦	3	1-803310	Setscrew, 5/16-18 x 3/8	3	66	103-2296	Caster wheel support w/brgs, weighted ..	2	
16	2	323-13	3/8-16 x 2 3/4 HH capscrew	2	67	103-2297-01	Caster wheel support wldmnt, weighted .	2	
17	2	3296-42	Nut, nyloc 1/4 - 20.....	2	68	302-52	Grease zerk, 1/8 N.P.T.....	2	
18	1	1-403186	Idler pulley	1	69	1-303514	Flange, thrust bearing	4	
19*	3	103-2555	Cutter Housing Complete	3	70	1-303314	Spacer, 10" caster.....	8	
20	3	1-633573	Guard, bottom.....	3	71	103-1236	Caster wheel assembly	2	
21	3	32120-8	Retaining ring	3	72	1-322145-01	Fork wldmnt, caster	2	
22	6	1-513016	Bearing	6	73	103-2169	Spacer, front caster.....	2	
23	3	1-323532	Cutter housing	3	74	103-1224	Tire & Wheel Asm	2	
24	1	702809	3/8-16 x 1 7/8 HH Capscrew.....	1		1-513809	Roller bearing.....	2	
25	3	1-323529	Cutter spindle tube	3		103-2170	Bushing	4	
26	3	1-323528	Spacer	3	75	1-323417	Washer, belt cover mount	5	
27	18	3296-39	Nut, nylock 3/8-16.....	18	76	323-4	3/8-16 x 3/4 HH capscrew	8	
28	3	1-807267	Key, 1/4 x 3/16 x 1 1/4	3	77	325-20	1/2-13 x 6 HH capscrew	2	
29	3	1-403183	Pulley.....	3	78	3217-9	1/2-13 Hex nut.....	2	
30	3	1-513208	5/8 Spring disc washer	3	79	3253-7	1/2 spring lockwasher	2	
31	3	1-800861	5/8-18x8 HH Capscrew(Gr5)	3	80	1-513338	Washer, special	2	
32	12	1-323539	Spacer, blade drive.....	12	81	1-809020	Quick pin, 10" caster	2	
33	3	1-323339	Washer, retainer (sheave).....	3	82	1-303537	Stud, belt shield (short)	2	
34	1	1-322230	Assist arm	1	83	1-303536	Stud, belt shield (long)	3	
35	3	3219-6	5/8-18 UNF hex nut	3	84	1-323385	Knob, belt cover	5	
36	1	1-303434	Engagement bushing.....	1	85	1-404237	Shield (1-402100-01) w/decals	1	
37	1	1-303348	Eye bolt (left hand thread)	1	86	1-403188	Spacer, belt guide	1	
38	1	1-303236	Turnbuckle body	1	87	323-6	3/8-16 x 1 HH capscrew	6	
39	1	1-303238	Eye bolt (right hand thread)	1	88	1-323071	Spring 5sp/dr idler	1	
40	1	1-323747	Spring, compression	1	89	32120-35	E - ring	1	
41	2	1-806003	Cotter hairpin	2	90	321-4	1/4-20 X 3/4 HH capscrew.....	2	
42	1	1-303352	Washer, spindle.....	1	91	1-323748	Ring, push-on 7/16.....	1	
43	1	322-10	Screw, 5/16-18 X 2	1	92	103-1330	Guard,Bearing top.....	3	
44	2	1-323729	Powder metal bearing.....	2	93	3272-5	Cotter pin 3/32 x 1/2.....	1	
45	1	1-303334	Washer, Sprg Disc 5/16.....	1	94	3219-2	5/16-24 Hex nut.....	1	
46	1	1-402109	Engagmt. arm w/bushings	1	95▲	103-2171	Kit,semi-pneumatic whl replacement.....	1	
47	1	322-6	5/16-18 1 1/4 HH capscrew	1					

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

- ♦ Use Pro-lock Nut Type (p/n 1-840022 .5 ml tube) on the setscrews
- Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N's MK483
- * Cutter housing complete includes sheave, washer, and nut and does not include blade.
- ▲ 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

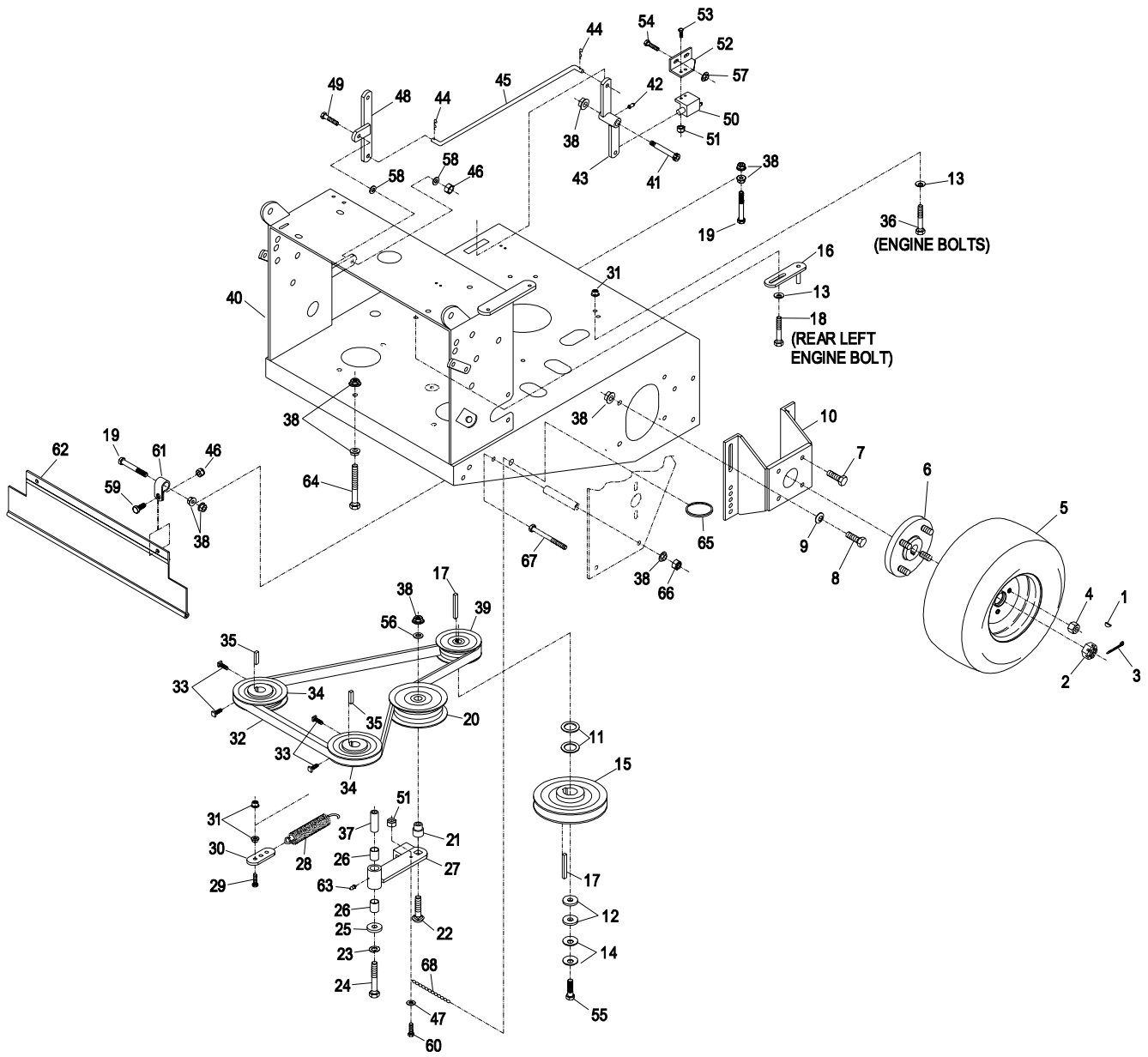
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-807019	Key, woodruff 1 x 1/4.....	2	30	1-603801	Anchor, spring.....	1
2	1-803040	Nut, slotted 3/4-16	2	31	32128-20	Nut, whizlock 5/16-18(Kaw)	6
3	1-806800	Pin, cotter 9/64 x 1-1/2	2		32128-20	Nut, whizlock 5/16-18(Koh).	2
4	242-50	Nut, wheel 1/2-20	8	32	1-653163	Belt, pump drive	1
5	1-413473	Tire & Wheel Assembly (36" & 48")	2	33∇	1-803050	Setscrew, 5/16-18 x 3/4	4
	1-413474	Tire 16 x 6.50-8 (36" & 48") .	1	34	1-413010	Sheave - pump.....	2
	1-603715	Wheel (36" & 48")	1	35	1-807272	Key, 5mm sq. x 25mm	2
	103-2292	Tire & Wheel Assembly (32")	2	36	322-7	Screw, 5/16-18 x 1 1/2 (Kaw) .	3
	103-2305	Tire 16 x 4.80-8 (32")	1		33114-025	Screw, M8-1.25 x25mm (Koh)	3
	103-2306	Wheel (32")	1	37	1-603044	Bushing - Idler pivot	1
6	1-602997	Hub, tapered(4 bolt)w/stds	2	38	3290-357	Nut, whizlock 3/8-16	19
	1-633926	Stud, wheel 1/2-20	8	39◆	1-653035	Pulley, pump drive.....	1
7	3234-12	Screw, whizlock 3/8-16x3/4	8	40	103-2287-01	Deck, engine wldmt	1
8	323-6	Screw, 3/8-16 x 1	8	41	1-809062	Bolt, .500 x 1.75(shoulder)	1
9	98-5975	Washer, 3/8 spring disc....	8	42	302-40	Zerk	1
10	103-2289-01	Mount, motor (32")	2	43	1-322108	Bellcrank assy. w/zerk	1
	1-322162-01	Mount, motor (36")	2		1-322086-01	Bellcrank weldmt.....	1
	1-402062-01	Mount, motor (48")	2	44	1-806003	Hairpin.....	2
11	1-523157	Washer, spacer	2	45	1-323172	Linkage, blade engmnt.	1
12	1-373034	Washer, swivel	2	46	3296-29	Nut, nyloc 5/16-18	3
13	1-303334	Washer, 5/16 spring disc..	4	47	3256-14	Washer, #10.....	1
14	1-603610	Washer, 7/16 spring disc..	2	48	1-322090-01	Bellcrank	1
15◆	103-1667	Sheave, blade drive 7.33 OD (32" & 48").....	1	49	322-6	Screw, 5/16-18 x 1 1/4	1
◆	103-1668	Sheave, blade drive 6.71 OD (36")	1	50	1-513051	Switch, blade engagement	1
16	1-322110	Guide, Belt.....	1	51	3296-2	Nut nyloc 10-24	3
17	1-807259	Key, 1/4 sq. x 1	2	52	1-323213	Bracket, switch.....	1
18	322-9	Screw, 5/16-18 x 1 3/4 (Kaw)	1	53	3290-500	Screw, 10-24 x 5/8	2
	33114-030	Screw, M8-1.25 x 30mm (Koh) ..	1	54	321-3	Screw, 1/4-20 x 5/8	2
19	323-13	Screw, 3/8-16 x 2 3/4.....	3	55∇	3212-6	Screw, 7/16-20 x 1 1/2	1
20	1-603843	Idler, pulley	1	56	3256-24	Washer, 3/8 (SAE)	1
21	1-603496	Bushing, idler.....	1	57	32128-33	Nut, whizlock 1/4-20.....	2
22	3231-29	Screw, 3/8-16x1-3/4 Carr.	1	58	3256-23	Washer, 5/16 SAE flat.....	2
23	3253-5	Lockwasher, 3/8	1	59	322-3	Screw, 5/16-18 x 3/4	2
24	323-12	Screw, 3/8-16 x 2-1/2	1	60	1-809069	Screw, 10-24x7/8HxSktHd	1
25	1-373034	Washer, swivel	1	61	1-413510	Clip, loom 1/2	2
26	1-513034	Bearing, pivot	2	62	103-2056	Shield, Trailing	1
27	1-602521	Arm, assy idler (w/brgs)....	1	63	302-19	Zerk, 1/4-28 STRT	1
	1-602458-01	Arm, assy idler (w/o brgs)	1	64	323-11	Screw, 3/8-16 x 2 1/4	1
28	1-603402	Spring, extension.....	1	65	1-323366	Split ring	1
29	322-5	Screw, 5/16-18 x 1	1	66	3296-39	Nut, 3/8-16 nyloc	1
				67	323-23	Screw, 3/8-16 x 4 1/2	1
				68	1-323365	Chain, twist link	1

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

◆ Use anti-seize compound on pulley bore.

∇ Use Pro-Lock (nut type, Part no. 1-840022, 5 ml tube) on setscrew threads and on sheave retaining bolt in engine crankshaft.

ENGINE DECK GROUP



ENGINE DECK GROUP (cont.)

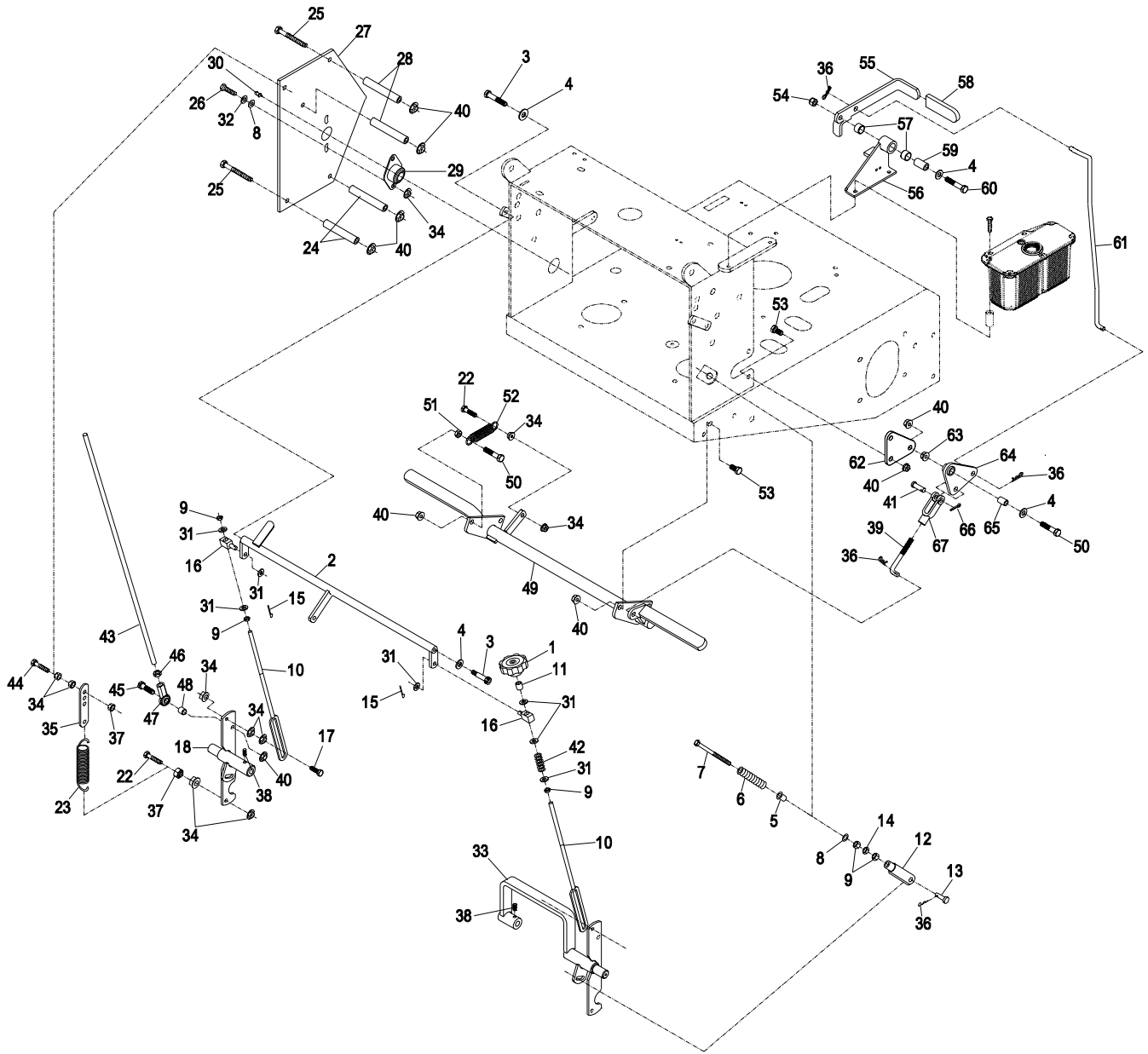
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-413151	Knob, tracking.....	1	36	1-806003	Hairpin.....	5
2	1-412203-01	Crank weldmt	1	37	3296-29	Nut, nyloc 5/16-18.....	4
3*	1-809056	Bolt, .375 x .375 (shoulder)	2	38*	1-803022	Setscrew, 5/16-18 x 5/8.....	2
4	3256-24	Washer, 3/8 SAE flat.....	4	39	1-413489	Linkage, lower brake.....	1
5	1-603735	Bushing, nylon flanged	2	40	3290-357	Nut, whizlock 3/8-16.....	16
6	103-0265	Spring, neutral return.....	2	41	1-808285	Pin, clevis 3/8 x 1 1/8.....	1
7	1-603737	Bolt, neutral return.....	2	42	1-323245	Spring.....	1
8	3256-2	Washer, 1/4(std).....	6	43	103-1734	Linkage, drive.....	2
9	3219-2	Nut, 5/16-24.....	7	44	1-800016	Tapbolt, 5/16-18 x 1 1/4.....	2
10	1-413350	Rod, control arm	2	45	323-8	Screw, 3/8-16 x 1 1/2.....	2
11	1-603903	Spacer	1	46	3220-16	Nut, jam 3/8-24 LH.....	2
12	1-303105	Yoke, adjustable	2	47	103-1167	Joint, .375 LH ball end	2
13	1-808280	Pin, clevis 5/16-1	2	48	103-1166	Tube, pump link spacer	2
14	3220-2	Nut, jam 5/16-24.....	2	49	103-2299-03	Brake wldmt, 32".....	1
15	3272-5	Pin, cotter 3/32 x 1/2.....	2		103-2085-03	Brake wldmt, 36".....	1
16	1-603676	Swivel	2		103-2004-03	Brake wldmt, 48".....	1
17	1-403180	Screw, 5/16-18x1 3/8 special	2	50	323-9	Screw, 3/8-16 x 1 3/4.....	2
18	103-1190-01	Arm weldmt, LH	1	51	3218-3	Nut, jam 3/8-16	1
19	103-1964	Hose, 24" oil drain	1	52	1-323161	Spring.....	1
20∇	103-1965	Valve, oil drain	1	53	323-4	Screw, 3/8-16 x 3/4.....	5
21	103-1966	Adapter, M20-2.5 / 3/8 NPT (Kaw)	1	54	3296-39	Nut, 3/8-16 nyloc.....	1
22	322-6	Screw, 5/16-18 x 1-1/4.....	3	55	1-412501-03	Park brake lever wldmt.....	1
23	1-603693	Spring, extension.....	2	56	1-414504	Wldmt, bracket w/ bushings	1
24	1-323197-01	Spacer, short.....	4	57	1-413347	Sleeve, bushing	2
25	323-16	Screw, 3/8-16 x 4.....	7	58	1-303020	Grip, lever	1
26	322-3	5/16-18 x 3/4	4	59	1-413344	Bushing, pivot	1
27	1-413201-01	Shield, hydro control.....	2	60	323-10	Screw, 3/8-16 x 2.....	1
28	1-323195-01	Spacer, long	4	61	1-413496	Linkage, upper brake	1
29	1-633102	Bearing, flange	2	62	1-413497	Bracket, bellcrank	1
30	302-19	Zerk, 1/4-28	2	63	32128-21	Nut, hex flange lock 3/8-16	1
31	3256-23	Washer, 5/16 (SAE)	7	64	1-414508	Bellcrank, w/ bushings	1
32	1-805005	Lockwasher, 5/16 (heavy)	4	65	1-303548	Bushing, plastic.....	1
33	103-1191-01	Arm weldmt, RH	1	66	3272-10	Pin, cotter 1/8 x 3/4.....	1
34	32128-20	Nut, whizlock 5/16	20	67	1-633131	Yoke, brake linkage	1
35	1-613089	Anchor, spring	2				

Exmark red touch up spray paint - PN 1-850337

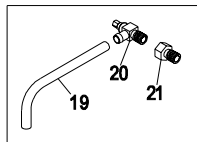
* Use Pro-Lock nut type, Part No. 1-840022 (.5 ml tube) on shoulder bolts & setscrew threads.

∇ Use a Teflon Pipe Sealant or equivalent on pipe threads.

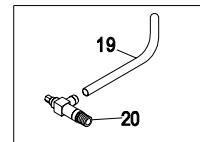
ENGINE DECK GROUP (cont.)

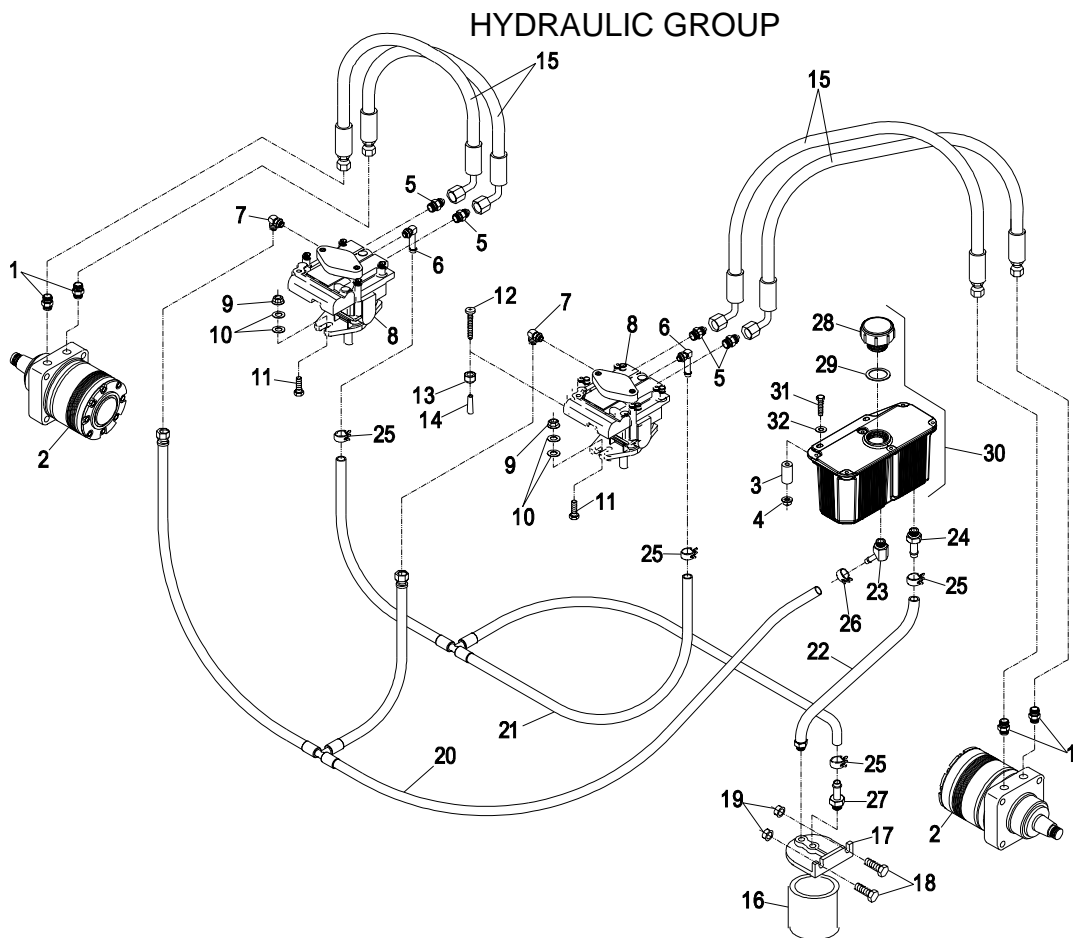


OIL DRAIN - KAWASAKI



OIL DRAIN - KOHLER





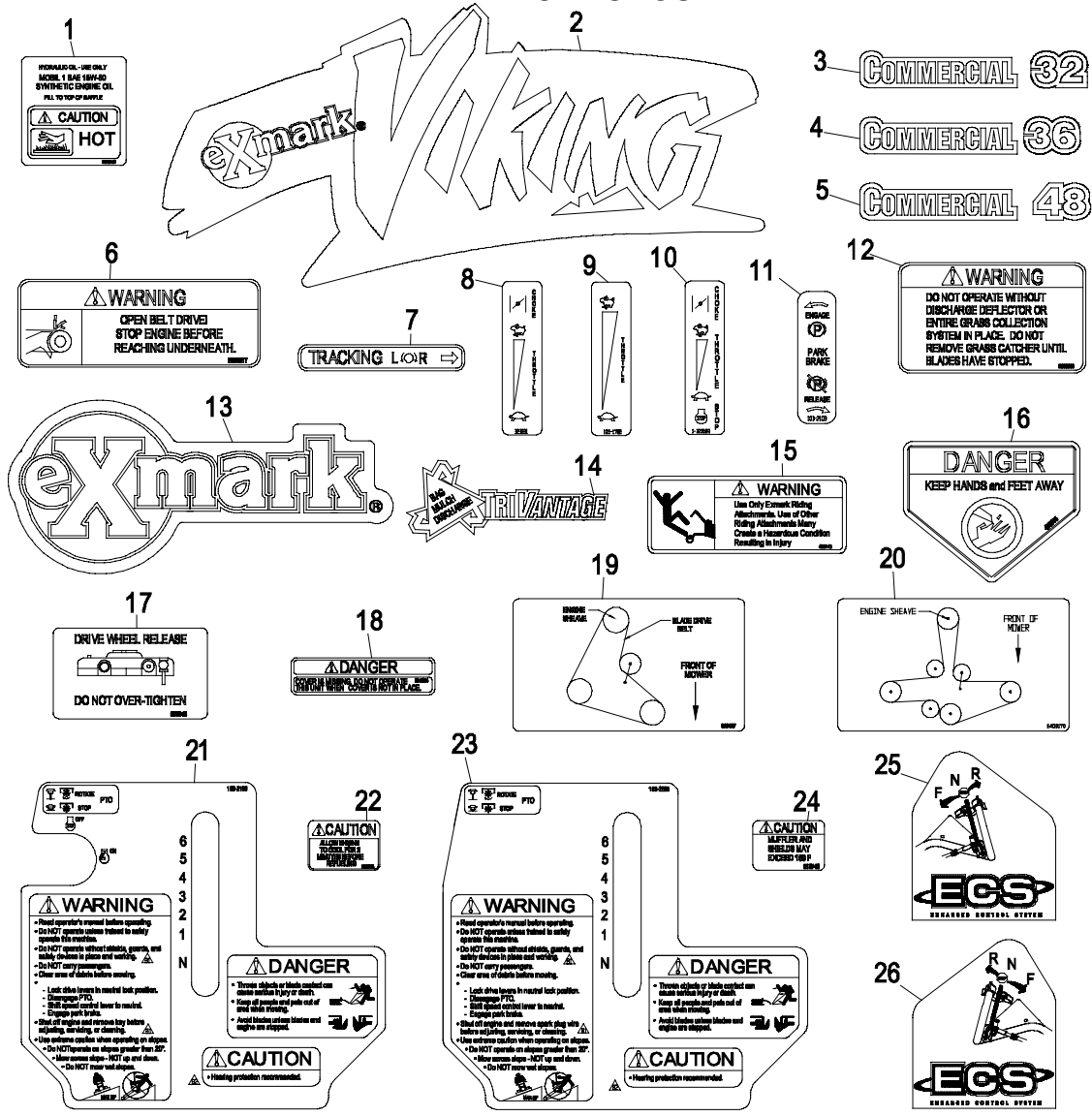
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-603991	Fitting, straight connector...	4	15	1-403102	Hose, high pressure.....	4
	1-603919	Boss O-Ring.....	1	16	1-513211	Element, oil filter	1
	1-603992	Flare O-Ring.....	1	▽	1-523541	Element, oil filter(winter)	1
2	1-603718	Wheel motor.....	2	17*	1-603720	Head, filter.....	1
	1-000138	Kit, Bearing.....	1	18	322-5	Screw, 5/16-18 x 1	2
	1-000119	Kit, seal.....	1	19	32128-20	Nut, whizlock 5/16-18.....	2
3	103-2191	Spacer, hydraulic tank.....	2	20	103-2073	Asm, case drain hose	1
4	32128-33	Nut, whizlock 1/4-20.....	2	21	103-2057	Asm, charge hose.....	1
5	1-603990	Adapter, straight thread.....	4	22	103-1805	Asm, charge hose.....	1
	1-603920	Boss O-Ring.....	1	23	103-2112	Elbow, 45°.....	1
	1-603992	Flare O-Ring.....	1		1-603921	O-Ring.....	1
6	1-603989	Elbow, 90°	2	24	103-1912	Adapter, straight.....	1
	1-603923	O-Ring.....	1		1-603921	O-Ring.....	1
7	1-513840	Elbow - 90°.....	2	25	103-1988	Clamp, hose (11/16)	4
	1-603921	O-Ring.....	1	26	103-1716	Clamp, hose (17/32)	1
8	1-613042	Pump, hydro.....	2	27	103-1804	Adapter, straight.....	1
9	3290-357	Nut, whizlock 3/8-16.....	4	28	103-1948	Cap, hydraulic reservoir	1
10	3256-3	Washer, 5/16 std.....	8	29	103-1949	Gasket, reservoir cap.....	1
11	323-7	Screw, 3/8-16 x 1-1/4	4	30	103-1947	Reservoir, hydraulic fluid....	1
12	1-801063	Screw, 1/4-20x2 pan head .	2	31	321-15	Screw, 1/4-20 x 2 1/2.....	2
13	3296-42	Nut, nylock 1/4-20	2	32	3256-22	Washer, ¼ SAE flat	2
14	1-613073	Grip, dump valve	2				

Emark black touch up spray paint - gloss black

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

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

DECAL GROUP



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-523552	Decal, Hydraulic Tank	1	15	1-403143	Decal, Sulky Warning	1
2	1-323319	Decal, Large Vik Hydro	1	16	1-403005	Decal, Danger (32"&36")	1
3	1-323410	Decal, Commercial "32"	1	1-403005	Decal, Danger (48")	2	
4	1-323411	Decal, Commercial "36"	1	17	1-603845	Decal, Drive Wheel Release ..	1
5	1-403131	Decal, Commercial "48"	1	18	98-5954	Decal, Missing Cover	1
6	1-303517	Decal, Belt Drive	1	19	1-323427	Decal, Belt routing (32"&36") ..	1
7	1-303520	Decal, TriVantage	1	20	1-403170	Decal, Belt routing (48")	1
8●	1-323691	Decal, Throttle/Choke (Kaw) ..	1	21	103-2196	Decal, Console (Kaw)	1
9∇	103-1798	Decal, Throttle (Kaw)	1	22	1-303293	Decal, Caution 2 min cool	1
10	1-323689	Decal, Throttle/Choke (Koh)..	1	23	103-2295	Decal, Console (Koh)	1
11	103-2103	Decal, Park Brake	1	24	1-513746	Decal, Muffler	1
12	1-303508	Decal, Discharge Warning	1	25	103-2242	Decal, LH ECS Instruction	1
13	103-1983	Decal, Exmark Logo	1	26	103-2243	Decal, RH ECS Instruction ...	1
14	1-413214	Decal, Tracking	1	103-2588	Decal Kit, Viking Hydro		

- For 15 HP Kaw units with combined throttle/choke control – Engine Code FH451V - AS04
- ∇ For 15 HP Kaw units with separate choke control – Engine Code FH451V - BS04

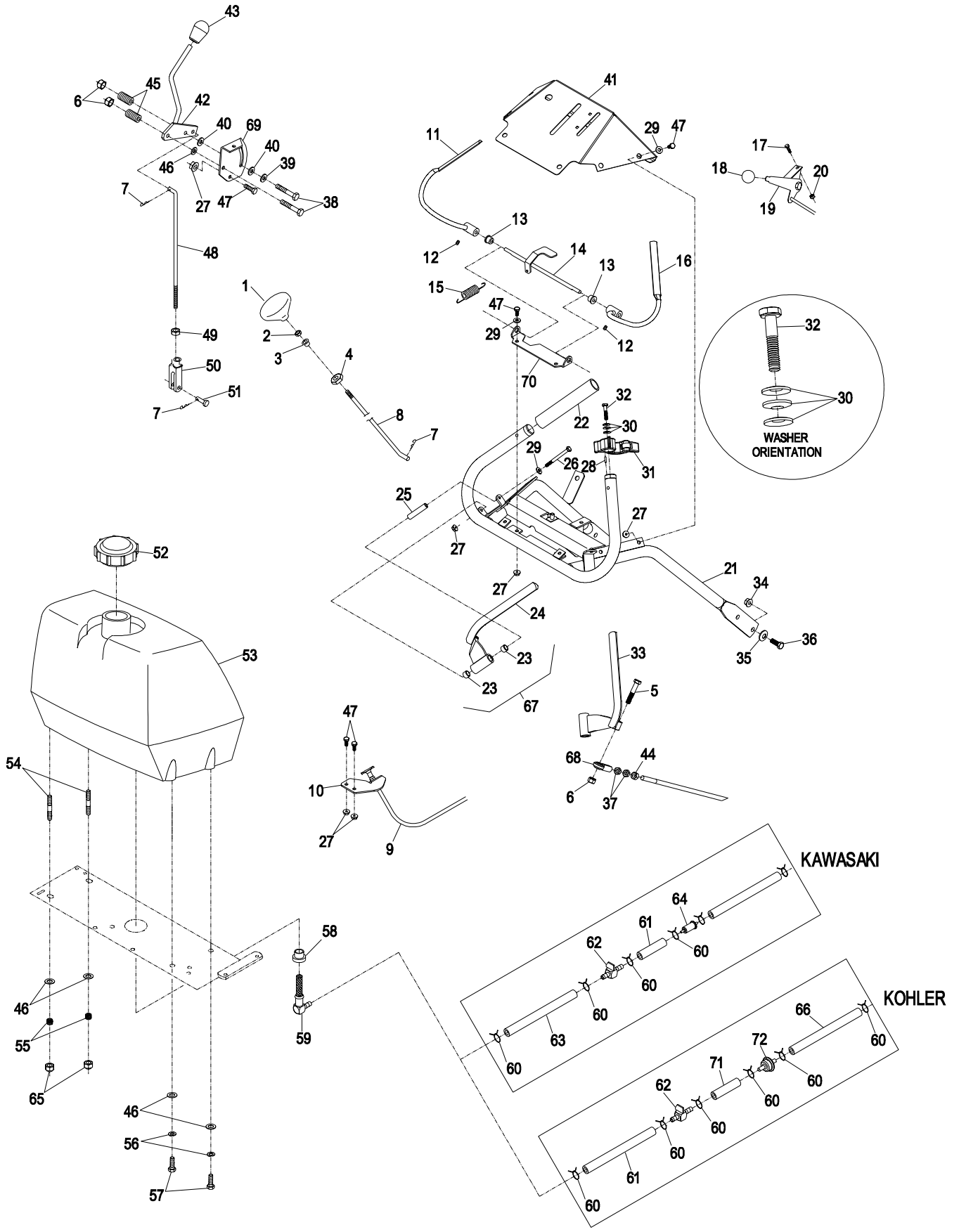
ECS UPPER HANDLE and CONTROLS

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-323134	Knob, (push/pull)	1	37	3220-3	Nut, jam 3/8-24.....	4
2	3218-2	Nut, jam 5/16-18..	1	38	322-10	Screw, 5/16-18 x 2	2
3	1-323143	Bushing, nylon .38 I.D.	1	39	1-603716	Washer, friction disc.....	1
4	1-323142	Push Nut (.50 shaft)	1	40	1-323244	Washer, friction	2
5	322-9	Screw, 5/16-18 x 1 3/4	2	41	103-0546-03	Wld,upper handle console .	1
6	3296-29	Nut, 5/16-18 nylock	4	42	103-0773	Speed shift weldmt.....	1
7	1-806003	Hairpin cotter	3	43	103-0423	Knob .38-16 nyloc	1
8	103-2193	Link, blade engagement.....	1	44	3219-3	Nut,reg hex 3/8-24	2
9*	103-1796	Cable, choke (Kaw)	1	45	1-323245	Spring, compression	2
10*	103-1797-01	Bracket, choke cable (Kaw)	1	46	3256-23	Washer 5/16 SAE flat.....	5
11∇	103-1566-03	Lever weldmt opc LH	1	47●	321-3	Screw, 1/4-20 x 5/8 (Kaw)..	10
12◆	1-803322	Setscrew, 5/16-24 x 5/16....	2	*	321-3	Screw, 1/4-20 x 5/8 (Kaw)..	12
13	1-303365	Bushing, nylon	2		321-3	Screw, 1/4-20 x 5/8 (Koh) ..	10
14	103-0769-03	Lever axle weldmt, opc	1	48	1-323522	Rod, speed control	1
15	1-303363	Spring, opc extension.....	1	49	3220-2	Nut, 5/16-24 jam.....	1
16∇	103-1567-03	Lever weldmt, opc RH.....	1	50	1-303105	Yoke	1
17	1-807513	Bolt, #10-24 x 1/2 carriage .	2	51	1-808280	Clevis pin 5/16 x 1	1
18	1-513592	Knob, red throttle	1	52	1-513508	Cap, fuel.....	1
19●	1-413428	Cable, throttle/choke (Kaw)..	1	53	1-413179	Tank, fuel	1
*	1-633696	Cable, throttle (Kaw).....	1	54∇	1-633023	Stud, fuel tank	2
	1-323322	Cable, throttle/choke (Koh) ..	1	55	1-633349	Spring, fuel tank	2
20	3296-2	Nut, #10-24 nylock	2	56	1-805005	Washer, 5/16 hvy lock.....	2
21	103-2194-03	Handle wld, upper ECS	1	57	322-3	Screw, 5/16-18 x 3/4.....	2
22	103-0815	Grip, handle bar.....	2	58	1-513645	Bushing, fuel valve	1
23	1-413152	Bearing	4	59	1-543277	Elbow, fuel tank.....	1
24	103-2466-03	Lever, drive LH	1	60	1-303077	Clamp, fuel line (Kaw)	4
25	103-0027	Bushing, drive lever	2		1-303077	Clamp, fuel line (Koh).....	6
26	321-14	Screw,1/4-20 x 2 3/4	2	61	1-603955	Hose, fuel line 6"	1
27●	32128-33	Nut, 1/4-20 whizlock (Kaw). 12		62	1-603770	Valve, fuel.....	1
*	32128-33	Nut, 1/4-20 whizlock (Kaw). 14		63	1-303022	Hose, fuel line 8.5"	1
	32128-33	Nut, 1/4-20 whizlock (Koh) . 12		64	Kawasaki PN 41019-1055 filter w/6" fuel line..	1	
28	103-0464	Pin,1/8 x 1/2 spring.....	2	65	3296-47	Nut, nyloc thin 5/16-18	2
29	3256-22	Washer 1/4 SAE flat.....	10	66	1-603954	Hose, fuel line 13.75"	1
30	1-303435	Washer, 1/4 disc spring	6	67	103-2513	Asm, Drive Lever RH	1
31	103-1371	Thumb latch asm RH(shown)	1		103-2514	Asm, Drive Lever LH	1
	103-1372	Thumb latch asm LH.....	1	68	103-2463	Joint,.31 ball end	2
32◆	103-0235	Screw, 1/4-20 x 1-1/8 w/nylon	2	69	103-0503	Bracket,shifter slide	1
33	103-2465-03	Lever,drive RH	1	70	103-0489-03	Bracket,opc axle	1
34	3290-357	Nut, 3/8-16 whizlock	4	71	1-603776	Hose, fuel line 2.5"	1
35	98-5975	Washer, 3/8 disc spring	4	72	1-303197	Filter, fuel	1
36	323-6	Screw, 3/8-16 x 1	4				

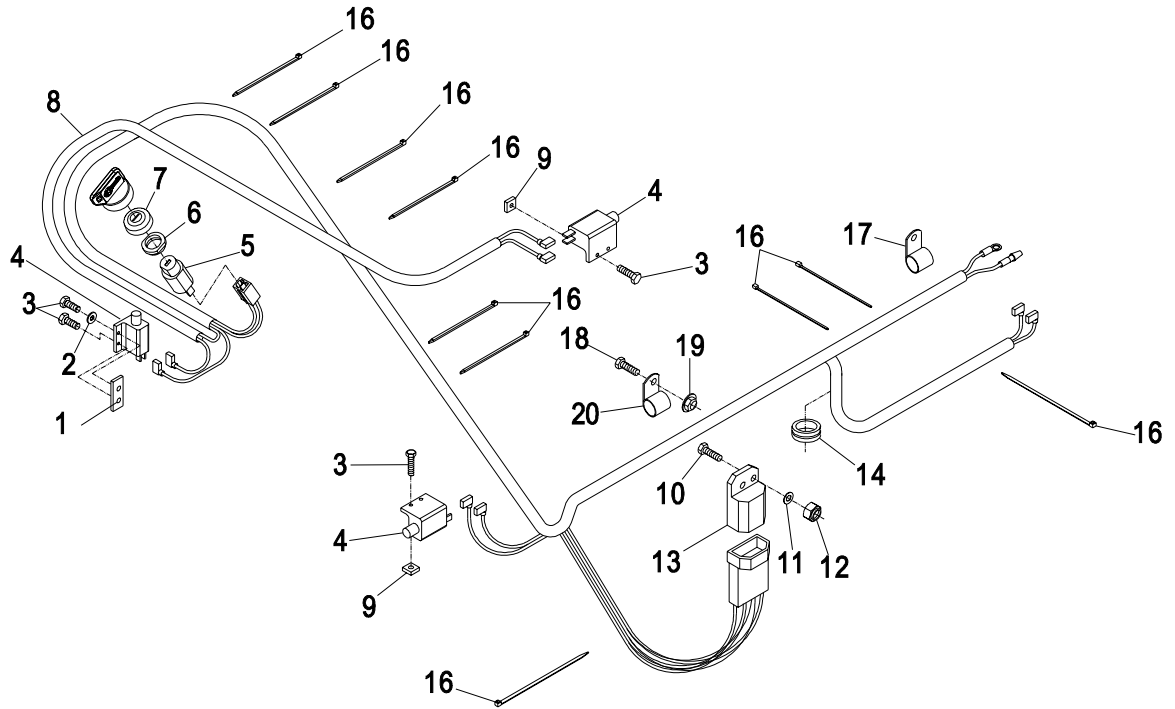
Exmark black touch up spray paint - Gloss black

- ◆ Use Pro-Lock nut type, Part no. 1-840022 (.5cc tube) on setscrew threads and on thumb latch screws.
- ∇ Use Pro-Lock retaining type, Part no. 1-840023 (.5cc tube) on inside of bore of OPC hub and on fuel tank studs.
- For 15 HP Kaw units with combined throttle/choke control – Engine Code FH451V – AS04
- * For 15 HP Kaw units with separate choke control – Engine Code FH451V – BS04

ECS UPPER HANDLE and CONTROLS



ELECTRICAL GROUP

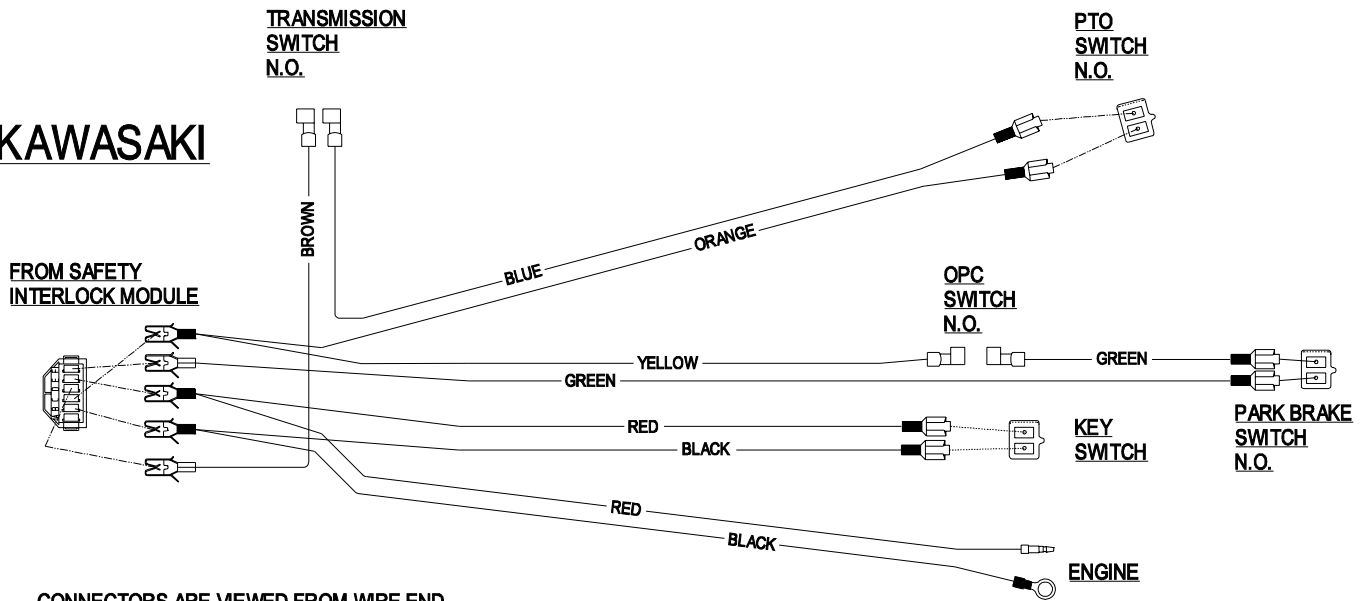


Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-633181	Plate, tapped	1	9	1-804002	Nut, square 10-24	4
2	3256-14	Washer, flat #10	1	10	321-4	Screw, 1/4-20 x 3/4	1
3	3290-500	Screw, #10-24 x 5/8	6	11	3256-23	Washer, 1/4 SAE flat	1
4	1-513051	Switch, N.O.	3	12	3296-42	Nut, nyloc 1/4-20	1
5	1-403121	Switch, on/off w/ keys (Kaw)	1	13	1-323430	Module, interlock.	1
	1-603511	Key, on/off (Kaw)	1	14	1-543296	Grommet	1
	103-2106	Key, Exmark logo (Kaw)	1	16	1-303287	Tie, plastic (small)	10
6	103-0498	Nut, ignition switch (Kaw) ...	1	17	1-323229	Clip, loom .38 (Kaw)	1
7	103-0499	Seal, ignition switch (Kaw) .	1	18	321-3	Screw, 1/4-20 x 5/8	1
8*	103-2007	Harness, wire (Kaw)	1	19	32128-33	Nut, whizlock 1/4-20	1
*	103-2286	Harness, wire (Koh)	1	20	1-603727	Clip, loom .56	1

* Use dielectric grease on all wiring harness connectors.

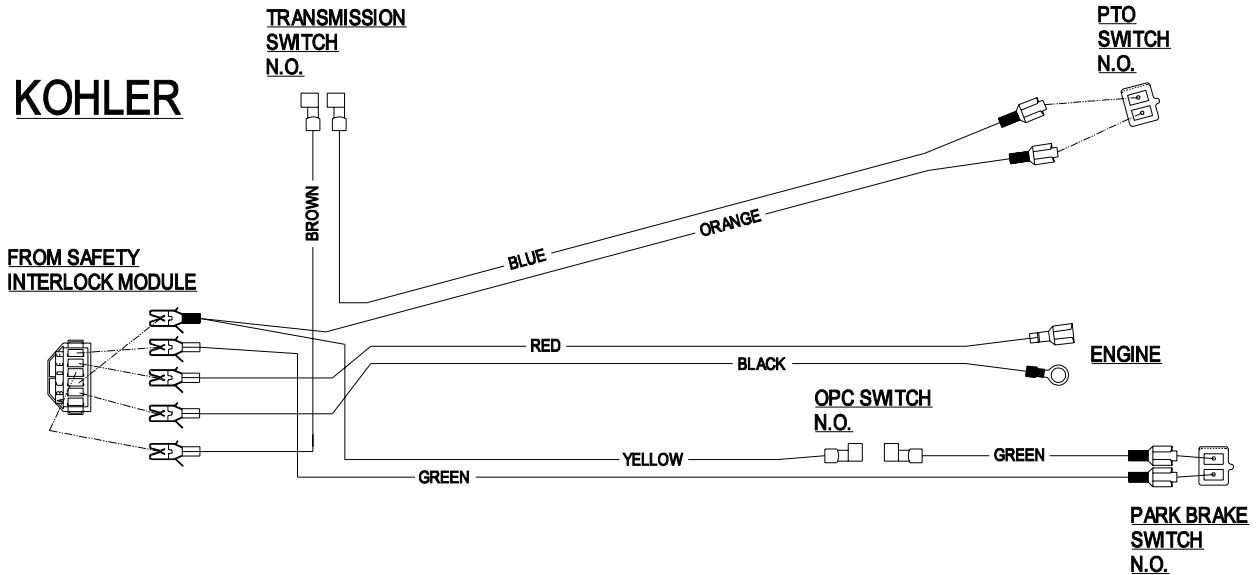
WIRING DIAGRAMS

KAWASAKI



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

KOHLER



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

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PRINTED IN U.S.A.

