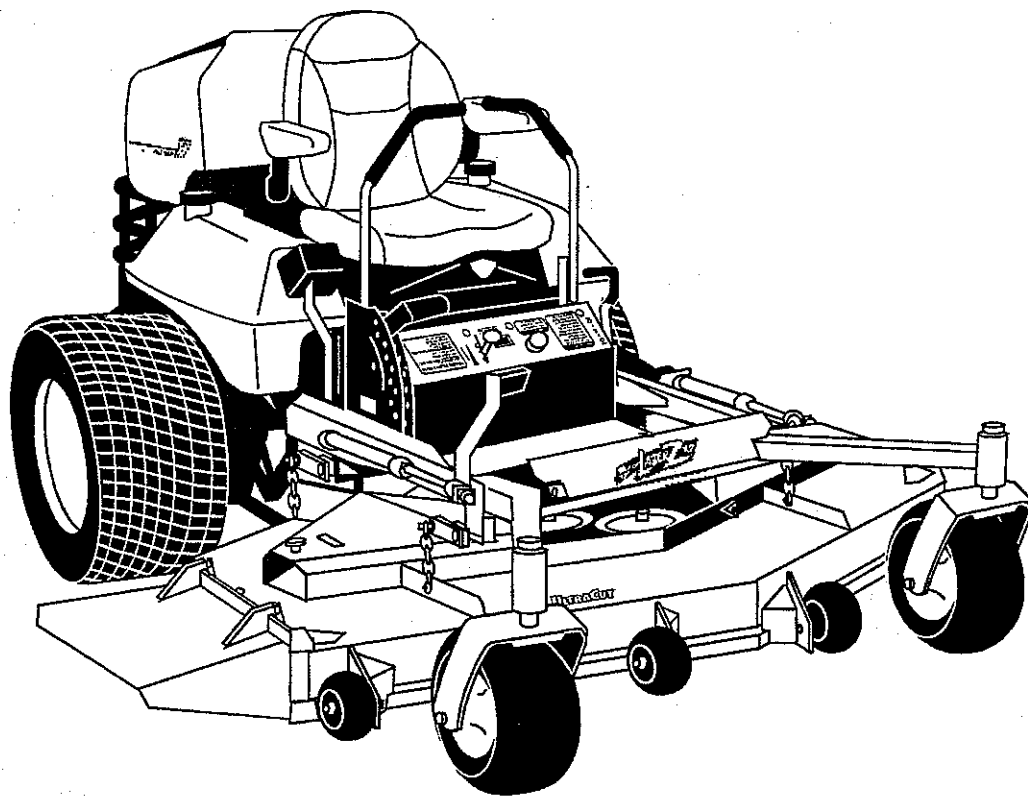


For Serial Nos.
370,000 & Higher



PARTS MANUAL

LAZER Z[®] XP

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 _____

EXMARK PARTS PLUS® PROGRAM

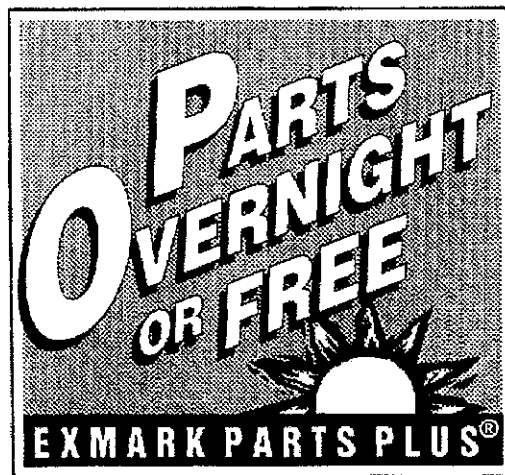
EFFECTIVE DATE: September 1, 1995

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 3:00p.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.**

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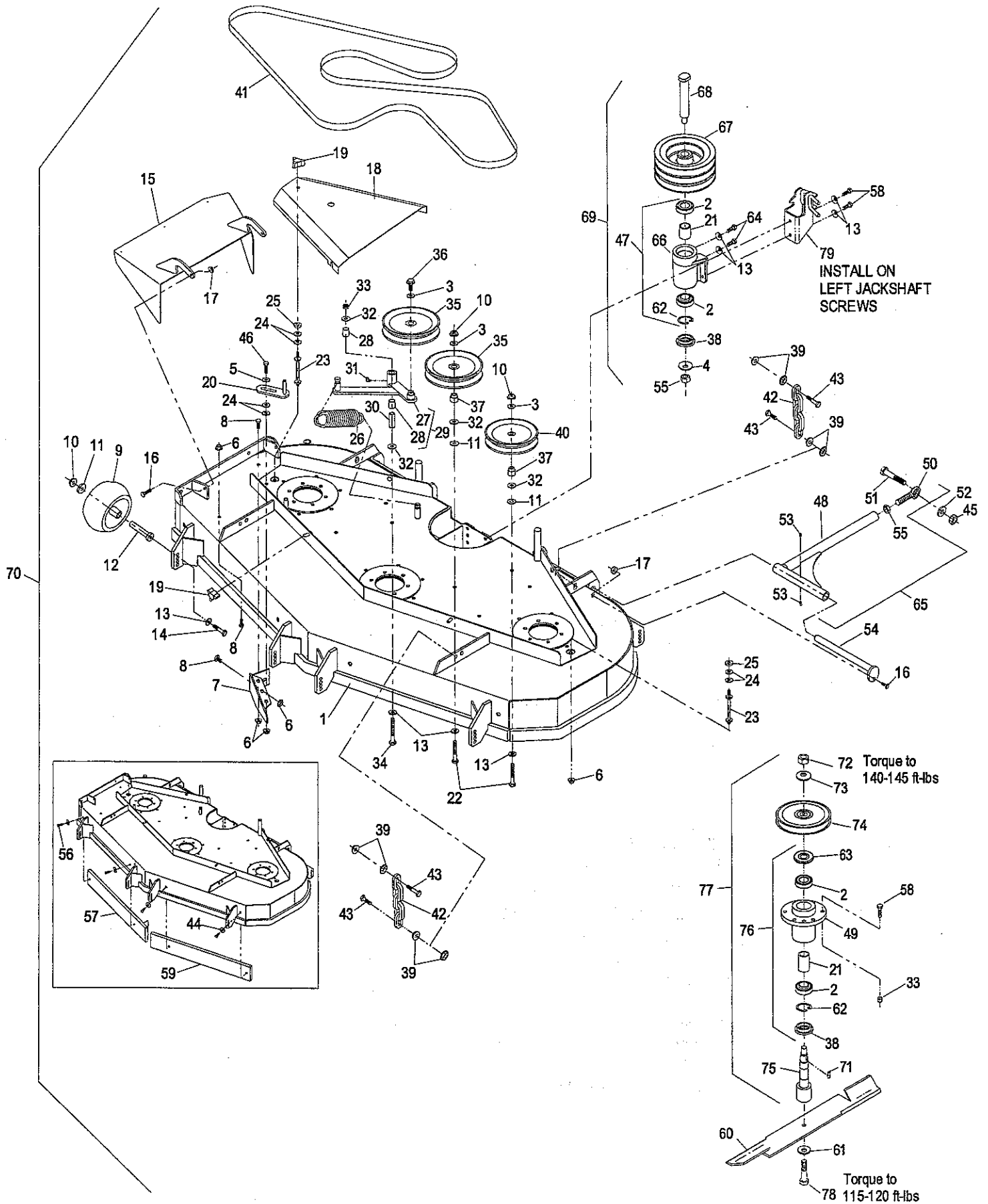
60" DECK GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-1423-01	Deck wldmt, 60	1	41	1-633127	Belt, blade drive 60" deck.....	1
	103-1589	Deck wldmt, 60 w/decals	1	42	1-633447	Chain	4
2+	103-2477	Bearing, ball	8	43	103-1898	Screw, 7/16-14 x 1-5/8 sp	8
3	3256-24	Washer, 3/8 SAE	3	44	1-513435	Washer, 1/2 disc spring	4
4	1-513208	Washer, disc Spring	1	45	3217-11	Nut, 5/8-11 hex.....	2
5	1-303334	Washer, 5/16 disc spring	1	46	322-6	Screw, 5/16-18 x 1 1/4	1
6	32128-20	Nut, 5/16-18 whizlock	6	47	103-2544	Asm, jackshaft hsg w/brgs ...	1
7	1-602913-01	Baffle wldmt, discharge.....	1	48	103-1355-01	Strut wldmt, deck	2
8	322-2	Screw, 5/16-18 x 5/8	3	49	1-323532	Housing, bearing.....	3
9★	1-603299	Roller, antiscalp	6	50	1-633029	Spherical rod end	2
10	3290-357	Nut, 3/8-16 whizlock	8	51	327-28	Screw, 5/8-11 x 5 1/2	2
11	1-373034	Washer, pivot.....	8	52	3253-8	Lockwasher, 5/8 reg.spring ...	2
12	1-603602	Bushing, roller.....	6	53	302-19	Zerk, 1/4-28 straight.....	4
13	98-5975	Washer, 3/8 disc spring.....	13	54	1-632199-01	Pin wldmt, deck strut	2
14	98-5961	Screw, 3/8-16 x 4 gr 8.....	6	55	3219-6	Nut, 5/8-18 hex.....	3
15	103-1469-01	Chute, discharge 60"	1	56	325-4	Screw, 1/2-13 x 1	4
16	322-5	Screw, 5/16-18 x 1	4	57	103-1522-01	Weight Bar wldmt	1
17	3296-29	Nut, 5/16-18 nyloc.....	4	58	323-7	Screw, 3/8-16 x 1 1/4	20
18	1-633084-01	Shield, belt 60" (RH)	1	59	103-1515-01	Weight Bar.....	1
	103-1470-01	Shield, belt 60" (LH)	1	60	103-2530	Blade, notched	3
19	1-323385	Knob, belt shield	6		103-2510	Blade, low lift.....	3
20	1-322110	Belt guide wldmt	1	+	103-0301	Blade, mulching	3
21	103-2534	Spacer, bearing	4		103-1580	Blade, solid	3
22	323-11	Screw, 3/8-16 x 2 1/4	2	61	103-0865	Washer, disc spring	3
23	1-303537	Stud, belt shield	2	62	32120-8	Snap Ring.....	4
24	3256-3	Washer 5/16 std flat.....	6	63+	103-1330	Guard, bearing top	3
25	1-323417	Washer, rubber.....	2	64	323-6	Screw, 3/8-16 x 1	2
26	103-3330	Spring, extension	1	65	103-1356	Strut wldmt S/A	2
27	1-632119-01	Arm wldmt, deck idler	1	66	103-0280	Housing, Jackshaft	1
28	1-513034	Bearing, pivot.....	2	67+	103-0924	Sheave, Jackshaft Triple.....	1
29	1-634244	Arm wldmt/brg sub-assy	1	68+	103-0926	Jackshaft	1
30	1-603044	Bushing, idler pivot.....	1	69	103-0929	Jackshaft Assy	1
31	302-40	Zerk, 1/4-20 90°.....	1	70▽	103-1588	Complete Deck Assy.....	1
32	3256-4	Washer, 3/8 std flat.....	4	71	103-2982	Key, 1/4 x 3/16 x 3/4.....	3
33	3296-39	Nut, 3/8-16 nyloc.....	19	72	3217-46	Nut, HH 3/4-16 heavy.....	3
34	323-13	Screw, 3/8-16 x 2 3/4 flange..	1	73	103-2802	Washer, disc spring 3/4	3
35	1-633109	Idler pulley 6.00 dia flat.....	2	74+	103-2794	Sheave, blade drive.....	3
36	3234-11	Bolt, 3/8-16 x 1 flange.....	1	75+	103-2785	Spindle	3
37	1-633456	Bushing, Idler	2	76	103-2547	Cutter housing asm	3
38	103-2535	Spacer, guard bottom	4	77■	103-3200	Cutter housing complete	3
39	32128-37	Nut, 7/16-14 whizlock	16	78	103-0862	Screw, 5/8-18 x 2 3/4	3
40	1-603805	Idler pulley 5.06 O.D. V.....	1	79	103-3445-01	Guard, Jackshaft Belt	1

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

- ✦ Apply Mobil HTS grease (or a food-grade antisieze) between the jackshaft and bearings, jackshaft and sheaves, spindles and bearings, spindles and sheaves, and under top bearing guard. DO NOT use a copper or nickel based antisieze.
- ▽ Complete deck assembly does not include items 39, 42, & 43, but does include 2 belts (Item 69, p. 13).
- ★ Kit 103-3168 includes antiscalp roller, bushing, and mounting hardware.
- ✦ Requires installation of Micro-Mulch accessory for proper mulching. Mulch kit P/N MK604.
- Complete cutter housings also include Items 61 & 78.

60" DECK GROUP



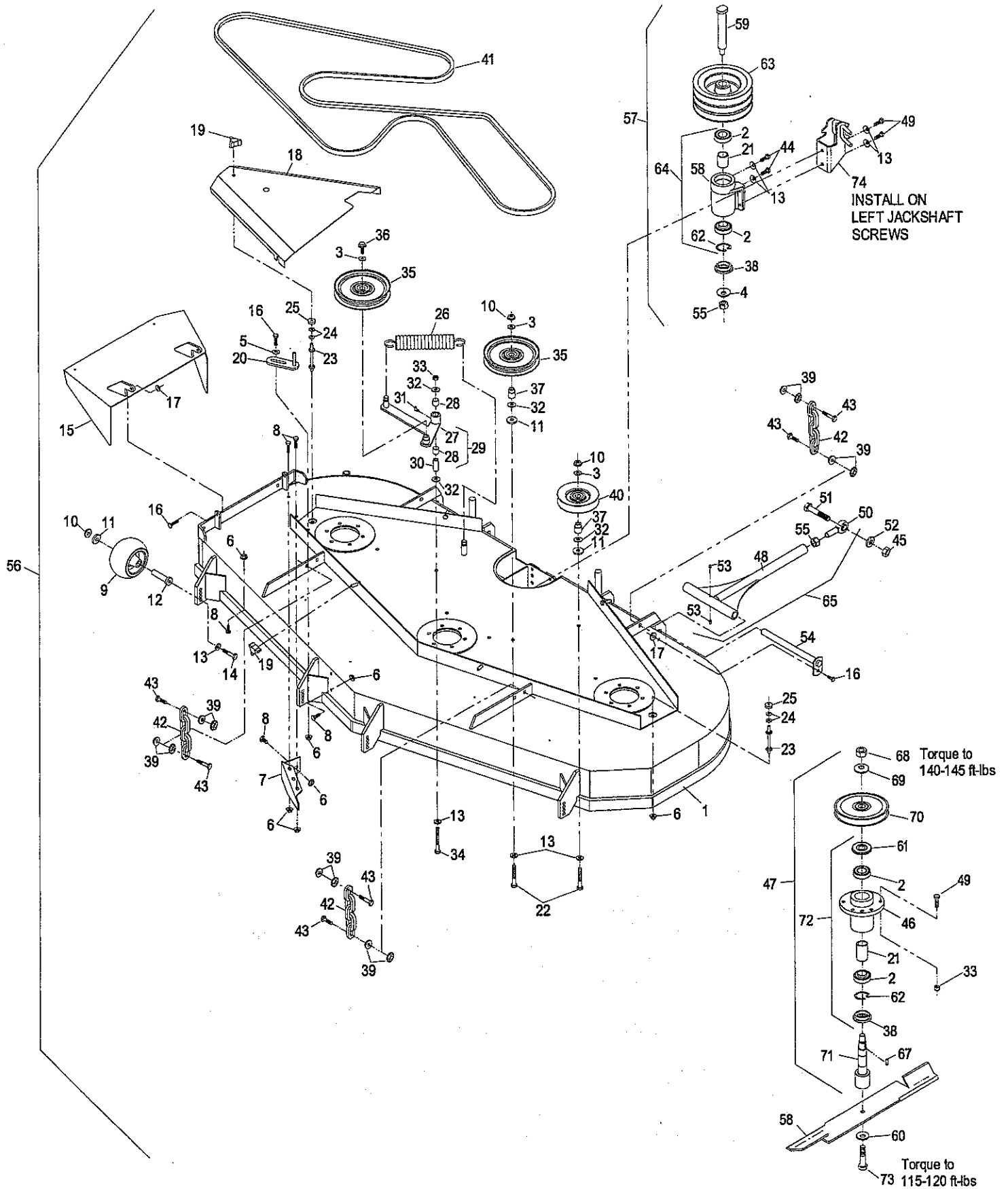
72" DECK GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-3032-01	Deck wldmt, 72	1	39	32128-37	Nut, 7/16-14 whizlock.....	16
	103-1591	Deck wldmt, 72 w/decals	1	40	1-603805	Idler pulley 5.06 O.D. V	1
2+	103-2477	Bearing, ball	8	41	1-643052	Belt, blade drive 72" deck	1
3	3256-24	Washer, 3/8 SAE	3	42	1-633447	Chain.....	4
4	1-513208	Washer, disc Spring	1	43	103-1898	Screw, 7/16-14 x 1-5/8 sp.....	8
5	1-303334	Washer, 5/16 disc spring	1	44	323-6	Screw, 3/8-16 x 1	2
6	32128-20	Nut, 5/16-18 whizlock	9	45	3217-11	Nut, 5/8-11 hex	2
7	1-602913-01	Baffle wldmt, discharge.....	1	46	1-323532	Housing, bearing	3
8	322-2	Screw, 5/16-18 x 5/8	6	47■	103-3206	Cutter housing complete	3
9★	1-603299	Roller, antiscalp	6	48	103-0100-01	Strut wldmt, deck	2
10	3290-357	Nut, 3/8-16 whizlock	8	49	323-7	Screw, 3/8-16 x 1 1/4.....	20
11	1-373034	Washer, pivot.....	8	50	1-633029	Spherical rod end	2
12	1-603602	Bushing, roller	6	51	327-28	Screw, 5/8-11 x 5 1/2.....	2
13	98-5975	Washer, 3/8 disc spring	13	52	3253-8	Lockwasher, 5/8 reg.spring ..	2
14	98-5961	Screw, 3/8-16 x 4 gr 8.....	6	53	302-19	Zerk, 1/4-28 straight	4
15	1-642071-01	Chute, discharge 72"	1	54	1-632199-01	Pin wldmt, deck strut.....	2
16	322-5	Screw, 5/16-18 x 1	5	55	3219-6	Nut, 5/8-18 hex	3
17	3296-29	Nut, 5/16-18 nylock	4	56▽	103-1590	Complete Deck Assy	1
18	1-643076-01	Shield, belt 72" (RH)	1	57	103-0929	Jackshaft Assy	1
	1-643075-01	Shield, belt 72" (LH)	1	58	103-2531	Blade, notched.....	3
19	1-323385	Knob, belt shield	6		103-2511	Blade, low lift	3
20	1-322110	Belt guide wldmt	1	+	103-2521	Blade, mulching	3
21	103-2534	Spacer, bearing	4		103-1581	Blade, solid	3
22	323-11	Screw, 3/8-16 x 2 1/4.....	2	59+	103-0926	Jackshaft	1
23	1-303537	Stud, belt shield	2	60	103-0865	Washer, disc spring	3
24	3256-3	Washer 5/16 std flat.....	4	61+	103-1330	Guard, bearing top	3
25	1-323417	Washer, rubber.....	2	62	32120-8	Snap Ring.....	4
26	103-3330	Spring, extension	1	63+	103-0924	Sheave, Jackshaft Triple	1
27	1-632119-01	Arm wldmt, deck idler.....	1	64	103-0280	Housing, Jackshaft	1
28	1-513034	Bearing, pivot.....	2	65	103-0840	Strut wldmt S/A	2
29	1-634244	Arm wldmt/brg sub-assy	1	66	103-2544	Asm, jackshaft hsg w/ brgs..	1
30	1-603044	Bushing, idler pivot.....	1	67	103-2982	Key, 1/4 x 3/16 x 3/4	3
31	302-40	Zerk, 1/4-20 90°	1	68	3217-46	Nut, HH 3/4-16 heavy	3
32	3256-4	Washer, 3/8 std flat.....	4	69	103-2802	Washer, disc spring 3/4.....	3
33	3296-39	Nut, 3/8-16 nylock	19	70+	103-2795	Sheave, blade drive.....	3
34	323-13	Screw, 3/8-16 x 2 3/4.....	1	71+	103-2785	Spindle.....	3
35	1-633109	Idler pulley 6.00 dia flat.....	2	72	103-2547	Cutter housing asm	3
36	3234-11	Bolt, 3/8-16 x 1 flange.....	1	73	103-0862	Screw, 5/8-18 x 2 3/4.....	3
37	1-633456	Bushing, Idler	2	74	103-3445-01	Guard,Jackshaft Belt.....	1
38	103-2535	Spacer, guard bottom	4				

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

- ✦ Apply Mobil HTS grease (or a food-grade antisieze) between the jackshaft and bearings, jackshaft and sheaves, spindles and bearings, spindles and sheaves, and under top bearing guard. DO NOT use a copper or nickel based antisieze.
- ▽ Complete deck assembly does not include items 39, 42, & 43, but does include 2 belts (Item 69, p. 13).
- ★ Kit 103-3168 includes antiscalp roller, bushing, and mounting hardware.
- ✦ Requires installation of Micro-Mulch accessory for proper mulching. Mulch Kit P/N MK724.
- Complete cutter housings also include Items 60 & 74.

72" DECK GROUP



FRONT FRAME GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-2478-01	Frame wldmt, front 60".....	1	35	103-1474-01	Caster wldmt.....	2
	103-2479-01	Frame wldmt, front 72".....	1	36	3296-51	Nut, 3/4-10 nyloc.....	2
2	302-19	Zerk, 1/4-28 straight	5	37	1-633508	Washer, spring disk.....	6
3	103-1502	Asm, Floorpan (103-1490-01) w/decals and pads	1	38	325-39	Screw, 1/2-13 x 9 1/2	2
4	1-633553	Pad, anti skid	2	39	1-811010	Plug	2
5	103-2084	Lever w/grip	1	40◇	103-0069	Caster wheel assy	2
	103-2083-03	Lever wldmt, lift	1	41	3296-23	Nut, 1/2-13 nyloc	2
6	1-633295	Grip, lift lever	1	42◇	1-633959	Spacer, front caster	2
7	103-2064-03	Arm wldmt, deck lift	1	43	103-0063	Seal, bearing.....	4
8	1-633325	Spring, compression.....	1	44	1-633585	Bearing cone.....	4
9	3256-24	Washer, 3/8 SAE flat	1	45◇	1-633581	Spacer, bearing.....	4
10	3296-39	Nut, nyloc 3/8-16.....	6	46◇	103-0065	Wheel & tire assy	2
11	32151-103	E-ring	5		1-523009	Tire, 13x6.5-6 4 ply	2
12	1-633068	Arm, deck lift.....	2		103-0071	Wheel.....	2
13	1-633889-01	Plate, deck lift	1		1-633584	Bearing cup.....	4
14	1-632899-01	Plate wldmt, deck lift.....	1	47	103-1918	Bushing	2
15	1-633082	Bushing, lift lever	1	48	323-29	Screw, 3/8-16 x 1 3/8.....	2
16	1-633080	Bushing, lift lever	1	49	32151-29	Ring, retaining	2
17	323-13	Screw, 3/8-16 x 2 3/4.....	1	50	3274-18	Screw, 5/16-18 x 1 1/4	2
18	1-633097	Hitch pin w/lanyard	1	51	103-2437	Cup holder assy	1
19	1-806005	Hairpin cotter (serv only) ...	1	52	321-2	Screw, 1/4-20 x 1/2	1
20	323-9	Screw, 3/8-16 x 1 3/4.....	2	54	3218-2	Jam nut, 5/16-18.....	2
21	98-5975	Washer, 3/8 disc spring.....	16	55	103-1955-01	Weldmt, front lift shaft (LH)	1
22	3290-357	Nut, whizlock 3/8-16	19	56	103-2013-01	Weldmt, front lift w/lever(RH)	1
23	323-6	Screw, 3/8-16 x 1	7	57	1-523157	Washer, spacer.....	2
24	323-7	Screw, 3/8-16X1 1/4	12	58	32128-33	Nut, whizlock 1/4-20	1
25	3256-29	Washer, 7/8 SAE flat.....	4	59	103-2047	Asm, deck lift spring.....	1
26	1-633096	Rod, deck lift.....	2	60	3296-59	Nut, nyloc 3/8-16 (light thin)	1
27	3217-11	Nut, 5/8-11 regular.....	6	61	100-2333-01	Weight bar, 60" & 72"	1
28	1-633441	Swivel, deck mount.....	4	62	99-4646-01	Weight bar, (60").....	1
29	3256-7	Washer, 5/8 std flat	4	63	323-8	Screw, 3/8-16 x 1 1/2 (60") ...	4
30	1-643015	Spring, deck support	2	64★	103-2768	Guard, Seal.....	4
31	3218-6	Jam nut, 5/8-11.....	6	65★	103-5188	Asm, Caster Wheel w/Axle	2
32	1-543513	Cap, grease.....	2	66★	103-5156	Axle, Caster	2
33	1-543509	Bearing cone,tapered roller	4	67★+	103-3051	Spacer, Nut	4
	1-543508	Bearing cup, tapered roller	4	68★	103-5179	Asm, Wheel & Tire	2
34	1-543511	Seal, grease	2		1-633584	Bearing cup.....	4
				69	106-6572	Pad, Antiskid	2

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

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

Two different versions of the caster wheel assemblies have been used on Lazer units. They are listed as assembly "A" and "B" in the diagram on the next page. Reference the diagram to determine the components for the appropriate assembly.

The items with visible differences are: Caster assembly "A" has a round spacer (item 45) with no seal guard. Caster assembly "B" has a seal guard (item 64) and spacer nut with wrench flats (item 67).

◇ Component required for Caster assembly "A" only.

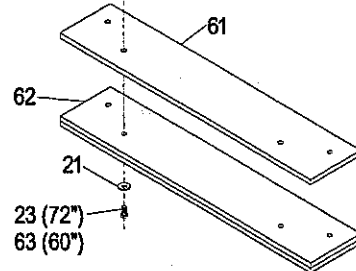
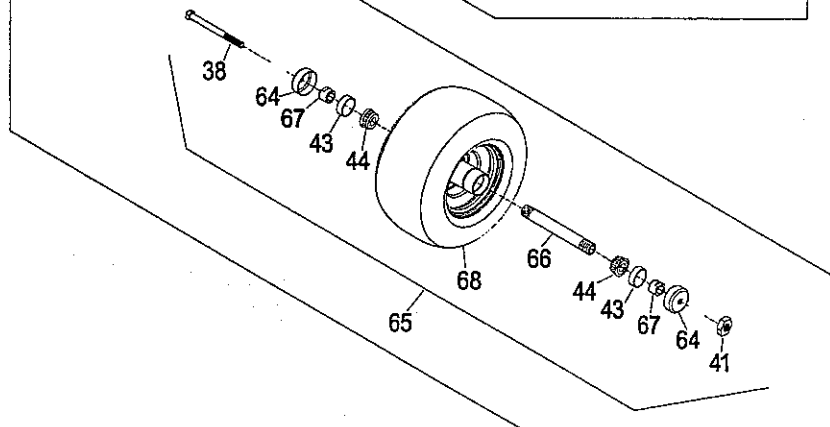
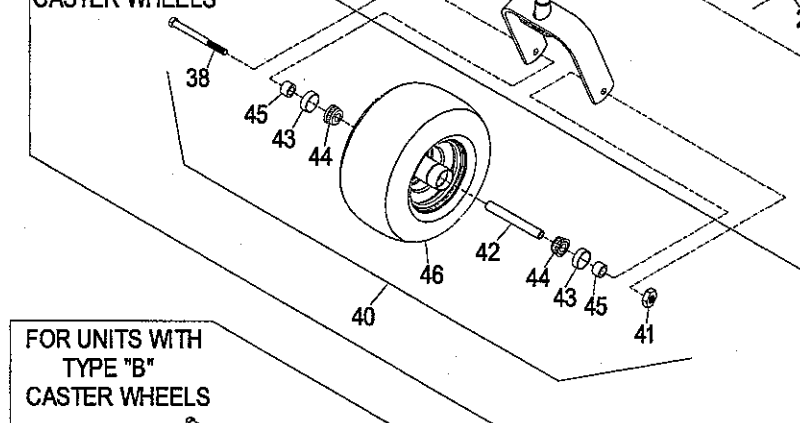
★ Component required for Caster assembly "B" only.

Exploded view diagram of a front frame assembly. The diagram shows various components and their assembly relationships, indicated by dashed lines. Key parts include:

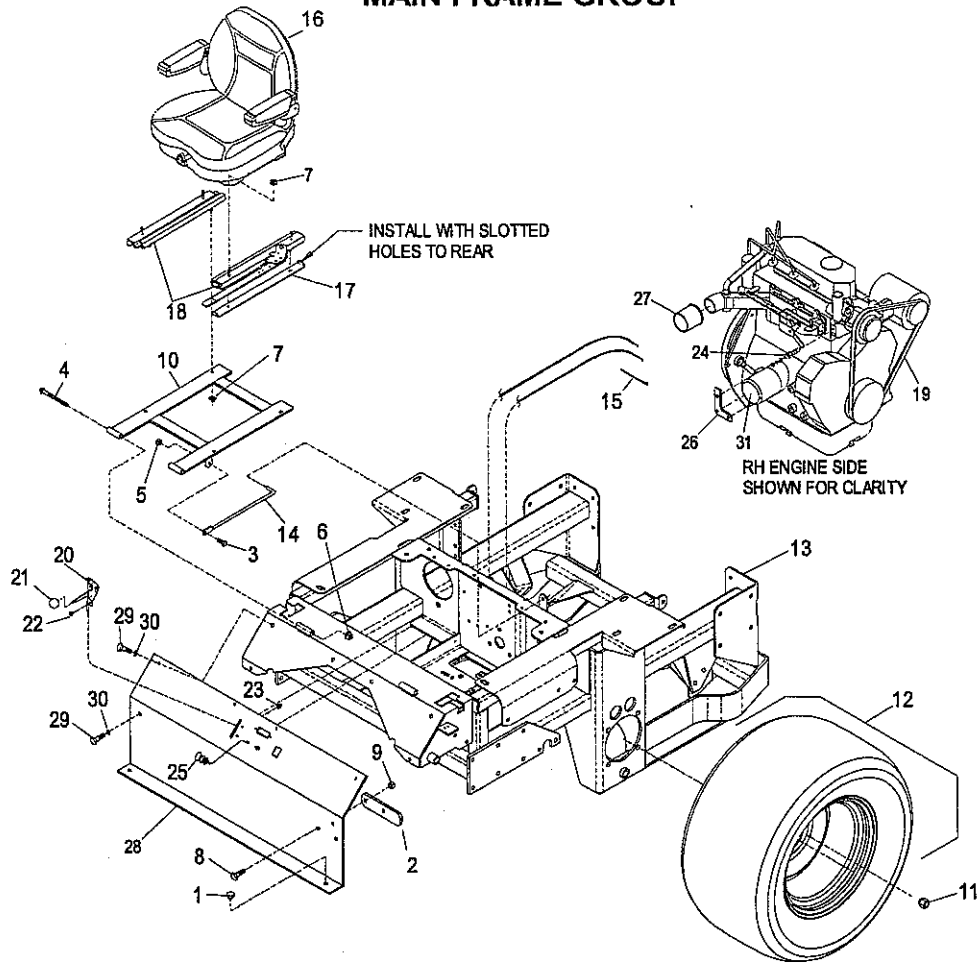
- Frame Members:** 1 (Main frame rail), 2 (Lower frame rail), 3 (Side plate), 4 (Top plate), 5 (Upright), 6 (Bracket), 7 (Bracket), 8 (Pin), 9 (Pin), 10 (Pin), 11 (Pin), 12 (Pin), 13 (Bracket), 14 (Bracket), 15 (Bracket), 16 (Bracket), 17 (Bracket), 18 (Bracket), 19 (Bracket), 20 (Bracket), 21 (Bracket), 22 (Bracket), 23 (Bracket), 24 (Bracket), 25 (Bracket), 26 (Bracket), 27 (Bracket), 28 (Bracket), 29 (Bracket), 30 (Bracket), 31 (Bracket), 32 (Bracket), 33 (Bracket), 34 (Bracket), 35 (Bracket), 36 (Bracket), 37 (Bracket), 38 (Bracket), 39 (Bracket), 40 (Bracket), 41 (Bracket), 42 (Bracket), 43 (Bracket), 44 (Bracket), 45 (Bracket), 46 (Bracket), 47 (Bracket), 48 (Bracket), 49 (Bracket), 50 (Bracket), 51 (Bracket), 52 (Bracket), 53 (Bracket), 54 (Bracket), 55 (Bracket), 56 (Bracket), 57 (Bracket), 58 (Bracket), 59 (Bracket), 60 (Bracket), 61 (Bracket), 62 (Bracket), 63 (Bracket), 64 (Bracket), 65 (Bracket), 66 (Bracket), 67 (Bracket), 68 (Bracket), 69 (Bracket).
- Fasteners:** 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69.
- Other Components:** 51 (Cylindrical part), 52 (Pin), 53 (Pin), 54 (Pin), 55 (Pin), 56 (Pin), 57 (Pin), 58 (Pin), 59 (Pin), 60 (Pin), 61 (Pin), 62 (Pin), 63 (Pin), 64 (Pin), 65 (Pin), 66 (Pin), 67 (Pin), 68 (Pin), 69 (Pin).

Partial text label: "S WITH A WHEELS"

**FOR UNITS WITH
TYPE "B"
CASTER WHEELS**



MAIN FRAME GROUP



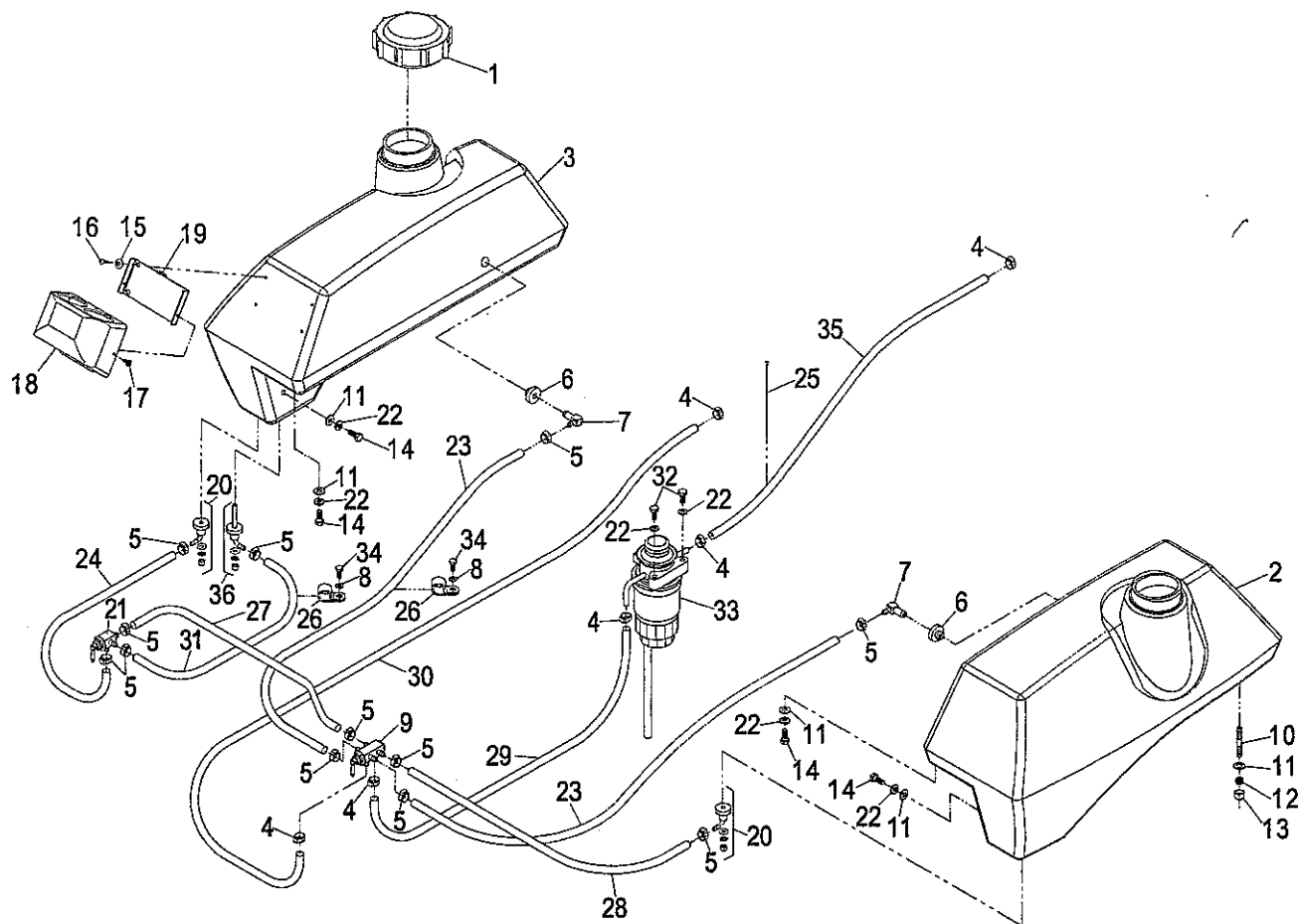
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-513658	Bumper	2		1-631842	Kit, Armrest Pad w/hardware	1
2	1-633964-03	Stop, Park Brake.....	1		1-631846	Kit, Damper w/hardware.....	1
3	322-5	Screw, 5/16-18 x 1.....	1		1-631847	Kit, Rollers,bumprs&hrdwre ..	1
4	323-39	Screw, 3/8-16 x 5.....	2		1-631848	Kit, Spring,Cable & hardware	1
5	3296-29	Nut, nyloc 5/16-18.....	1		1-631849	Kit, Knob,Shaft & hardware...	1
6	3296-39	Nut, nyloc 3/8-16.....	2		1-643281	Switch, Seat	1
7	32128-20	Nut, whizlock 5/16-18	8	17	1-633872-03	Stop, seat	2
8	323-6	Screw, 3/8-16 x 1	2	18	1-643255	Track, seat.....	1
9	3290-357	Nut, whizlock 3/8-16	2	19	Briggs & Stratton P/N 820271	Engine V-belt	1
10	1-632187-03	Frame, seat mount.....	1	20	103-1450	Cable, throttle	1
11	242-50	Nut, wheel 1/2-20	8	21	1-513592	Ball, (red) throttle cable	1
12	103-2743	Wheel/tire assy.....	2	22	1-807513	Screw, carr #10-24	1
	103-2744	Tire, 24x12-12 4 ply	2	23	3296-2	Nut, nylock #10-24.....	2
	1-633992	Wheel	2	24▽	103-0949	Sender, temperature 1/8 NPT	1
13	103-3344	Asm, engine deck (103-0073-03) w/decals.....	1	25	103-1449	Cable, choke (gas)	1
14	103-1408	Rod, seat hold-up	1	26	103-1409-03	Spacer, rear engine RH (gas)	1
15	1-303335	Tie, Plastic (large).....	1	27	103-1451	Bushing, intake manifold (gas)	1
16	1-633821	Seat, suspension	1	28	103-3337	Asm, console(103-1354-03)w/decals	1
	1-631845	Kit, Pan w/seat & back	1	29	322-3	Screw, 5/16-18 x 3/4	6
	1-631844	Kit, Armrest Assy.....	1	30	3256-23	Washer, 5/16 SAE	6
	1-631843	Kit, Boot, upper & lower wire.	1	31✕	Briggs & Stratton P/N 820314	Oil Filter.....	1
				Note: Do Not Use Briggs & Stratton 491056			

Exmark black touch up spray paint – gloss black

✕ Refer to Engine Owner's Manual.

▽ Use Teflon pipe sealant on pipe threads on temperature sending unit.

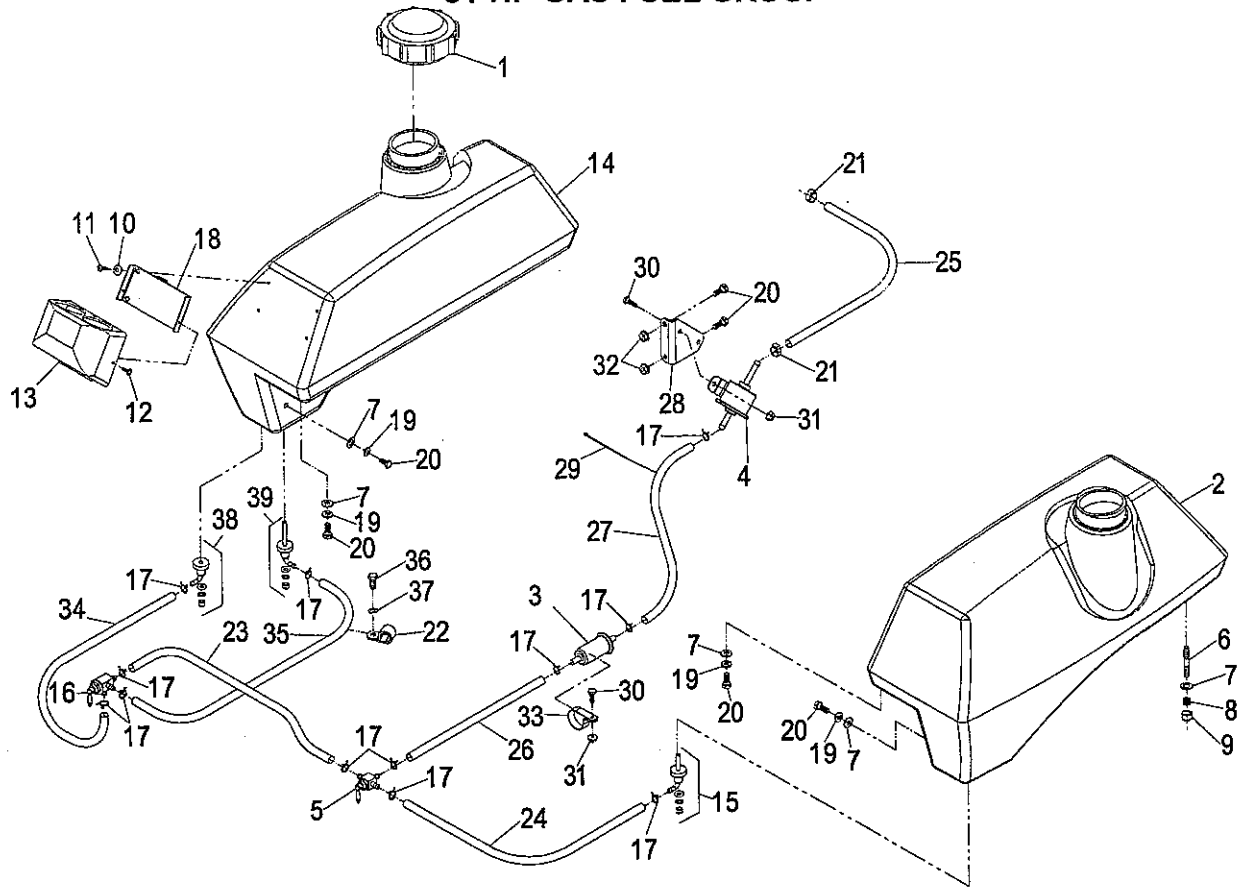
27 HP DIESEL FUEL GROUP



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-2108	Cap, diesel fuel tank.....	2	20★	103-2615	Fitting, fuel bulkhead	2
2*	103-2144	Tank, fuel (LH)	1		103-2784	O-ring.....	1
3*	103-2145	Tank, fuel w/ reserve (RH) .	1	21	103-1379	Valve, fuel reserve.....	1
4▲	1-643277	Clamp, .31 I.D. fuel hose....	6	22	1-805005	Washer, lock 5/16	6
5▲	1-643293	Clamp, .25 I.D. fuel hose....	12	23	1-633348	Hose, fuel .25 x 36.25	2
6	1-513645	Bushing, fuel valve	2	24	1-543456	Hose, fuel .25 x 22.0	1
7	1-643172	Elbow, 90°	2	25	1-303335	Plastic Tie	1
8	1-805004	Washer, lock 1/4	2	26	1-513762	Clip, loom .50.....	2
9	1-643234	Valve, fuel dual flow	1	27	1-303306	Hose, fuel .25 x 10.5	1
10◆	1-633023	Stud, fuel tank	6	28	1-303472	Hose, fuel .25 x 19.0	1
11	3256-23	Washer, flat SAE 5/16	10	29	103-1335	Hose, fuel .31 x 16.0	1
12	1-633349	Spring, fuel tank	6	30	103-1428	Hose, fuel .31 x 47.0	1
13	3296-47	Nut, thin nyloc 5/16-18	6	31	1-543526	Hose, fuel .25 x 24.0	1
14	322-3	Screw, 5/16-18 x 3/4	4	32	33114-020	Screw, M8-1.25 x 20mm ...	2
15	1-303435	Washer, disc spring 1/4	4	33✕	Briggs & Stratton P/N 820311 fuel filter		1
16▽	3290-500	Screw, Machine 10-24x5/8. .	4	34	321-3	Screw, 1/4-20 x 5/8.....	2
17	1-802002	Screw, thr. cut 10-32x1/2 ...	3	35	103-1693	Hose, fuel .31 x 41"	1
18	1-643013	Cover, guage.....	1	36★	103-2616	Fitting, fuel bulkhead long.....	1
19	1-643014-03	Bracket, guage mount	1		103-2784	O-ring.....	1

- ◆ Use Prolock, Retaining type (Part No. 1-840023), .5cc tube on stud threads going into the tank.
- ✕ Refer to Engine Owner's Manual.
- ▽ Snug fit only on slotted holes, **Do Not Overtighten**, tank must be able to expand.
- ▲ Clamps require special pliers P/N 1-643394 (Oetiker P/N 14100118 or Kohler P/N 2445505) for installation.
- ★ Use Prolock, Nut type (Part No. 1-840022), .5 ml tube on fuel fitting.
- * Includes tank, cap, fittings, and studs.

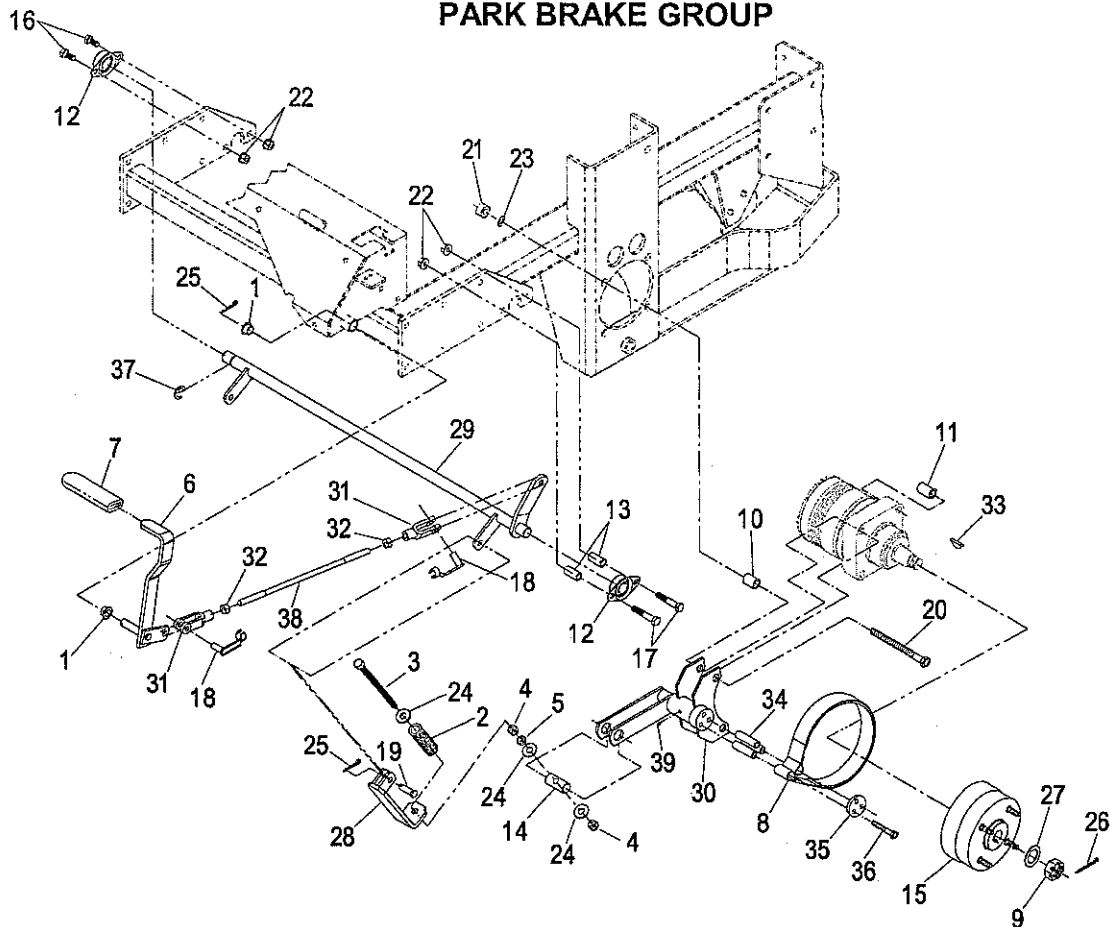
31 HP GAS FUEL GROUP



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-2107	Cap, fuel tank.....	2	21▲	1-643293	Clamp, .25 I.D. fuel hose ..	2
2*	103-2132	Asm, tank fuel (LH).....	1	22	1-513762	Clip, Loom .50	1
3▣	Briggs & Stratton	fuel filter P/N 498688	1	23	1-303306	Hose, fuel .25 x 10.5	1
4▣	Briggs & Stratton	fuel pump P/N 825232	1	24	1-303472	Hose, fuel .25 x 19.0	1
5	1-633347	Valve, fuel	1	25	1-303022	Hose, fuel .25 x 8.5	1
6♦	1-633023	Stud, fuel tank.....	6	26	1-513581	Hose, fuel .25 x 18.0	1
7	3256-23	Washer, 5/16 SAE	10	27	103-1419	Hose, fuel .25 x 32.0	1
8	1-633349	Spring, fuel tank.....	6	28	103-1240-03	Angle, fuel pump mtg	1
9	3296-47	Nut, thin nyloc 5/16-18	6	29	1-303335	Plastic tie	1
10	1-303435	Washer, disc spring 1/4	4	30	321-4	Screw, 1/4-20 x 3/4.....	3
11▽	3290-500	Screw, Machine 10-24x5/8	4	31	32128-33	Nut, whizlock 1/4-20	3
12	1-802002	Screw, thd. cut 10-32x1/2 .	3	32	32128-20	Nut, whizlock 5/16-18	2
13	1-643013	Cover, guages.....	1	33	103-1435	Clip, loom 1.69.....	1
14*	103-2143	Asm, tank fuel w/ reserve (RH)...	1	34	1-543456	Hose, fuel .25 x 22.0	1
15★	103-2605	Fitting, fuel bulkhead w/strainer .	1	35	1-543526	Hose, fuel .25 x 24.0	1
	103-2784	O-ring	1	36	321-3	Screw, 1/4-20 x 5/8.....	1
16	103-1379	Valve, fuel reserve	1	37	1-805004	Washer, lock 1/4	1
17	1-303077	Clamp, fuel line	12	38★	103-2615	Fitting, fuel bulkhead	1
18	1-643014-03	Bracket, guage mount.	1		103-2784	O-ring	1
19	1-805005	Washer, disc spring 5/16... 4		39★	103-2616	Fitting, fuel bulkhead long	1
20	322-3	Screw, 5/16-18 x 3/4.....	6		103-2784	O-ring	1

- ◆ Use Prolock, Retaining type (Part No. 1-840023), .5cc tube on stud threads going into the tank.
- ▽ Snug fit only on slotted holes, **Do Not Overtighten**, tank must be able to expand.
- ▣ Refer to Engine Owner's Manual.
- ▲ Clamps require special pliers P/N 1-643394 (Oetiker P/N 14100118 or Kohler P/N 2445505) for installation.
- ★ Use Prolock, Nut type (Part No. 1-840022), .5 ml tube on fuel fitting.
- * Includes tank, cap, fittings, and studs.

PARK BRAKE GROUP



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-513140	Bushing.....	2	20	325-17	Screw, 1/2-13 x 4 (60").....	8
2	1-633454	Spring, brake rod	2		325-20	Screw, 1/2-13 x 6 (72").....	8
3	323-58	Bolt, Tap 3/8-16 x 6	2	21	103-0131	Nut, sq reg 1/2-13 UNC-2B	8
4	3296-39	Nut, nyloc 3/8-16.....	4	22	3290-357	Nut, whizlock 3/8-16	4
5	3218-3	Nut, Jam 3/8-16	2	23	3253-7	Washer, lock 1/2	8
6	103-0197	Lever w/grip	1	24	3256-4	Washer, 3/8 std	6
	103-0201-03	Lever, brake	1	25	3272-10	Pin, cotter 1/8 x 3/4	3
7	1-633268	Grip, brake lever	1	26	1-806800	Pin, cotter 9/64 x 1 1/2	2
8	103-0355	Band, Brake	2	27	1-523157	Washer, spacer.....	2
9	1-809036	Nut, slotted 1.00-20	2	28	103-1117-03	Lower brake linkage.....	2
10	1-633380	Spacer (short)(60")	4	29	103-0198-03	Brake shaft	1
	1-633060	Spacer (short)(72")	4	30	103-0810-03	Bracket, brake (72")	2
11	1-633382	Spacer (long)(60").....	4		103-0844-03	Bracket, brake (60")	2
	1-633062	Spacer (long)(72").....	4	31	1-633131	Yoke	2
12	1-633102	Bearing, flange.....	2	32	3219-3	Nut, 3/8-24	2
13	103-0051	Spacer, brake retainer	2	33	3257-42	Woodruff key, 5/16 x 1	2
14	1-633144	Pin, trunion.....	2	34	103-0384	Spacer	6
15	103-0590	Hub & drum w/studs, wheel	2	35	103-0374	Retainer, Brake Band	2
♦	1-633926	Studs, wheel	8	36	322-9	Screw, HH .312-18x1.75	6
16	323-4	Screw, 3/8-16 x 3/4	2	37	32151-48	E-Ring, retaining.....	1
17	323-10	Screw, 3/8-16 x 2	2	38	103-1708	Rod, brake.....	1
18	103-2399	Pin, clevis spring 3/8.....	2	39	1481	Zerk, 1/4-28 45° (60")	2
19	1-808284	Pin, clevis 3/8 x 1	2		302-19	Zerk, 1/4-28 straight (72")	2

♦ Not Illustrated

Exmark black touch up spray paint - gloss black

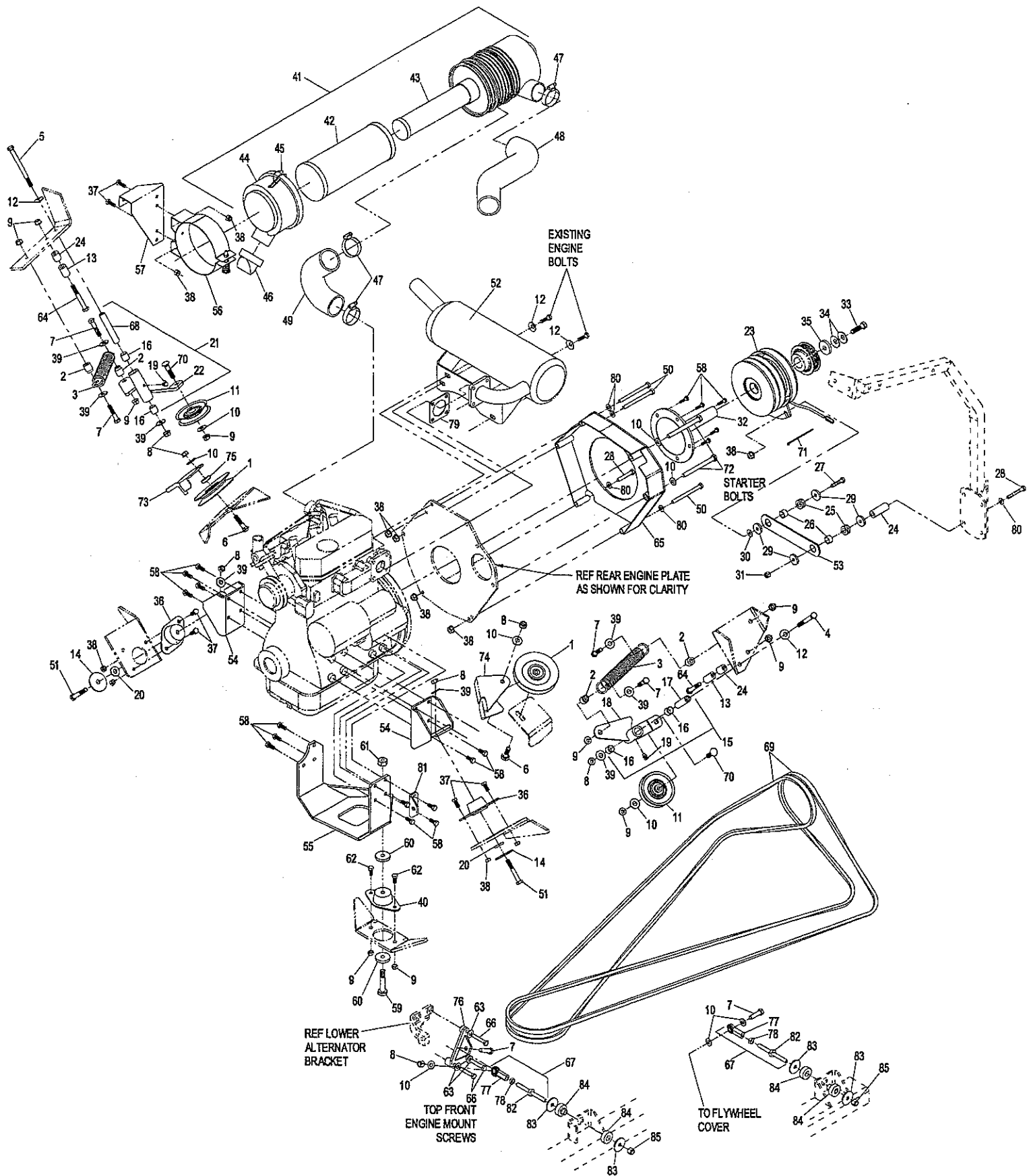
COMMON ENGINE DECK GROUP

Ref No.	Part No.	Description	Qty. Req'd.	Ref No.	Part No.	Description	Qty. Req'd.
1	103-0984	Sheave, Stationary idler	2	44	103-1060	Cover, Air filter w/latch	1
2	103-1503	Spacer, Belt tightener	4	45	1-643283	Latch, Air cleaner	1
3	103-1767	Spring, Belt tightener	2	46	87-9400	Valve, Vacuator	1
4	323-16	Screw, 3/8-16 x 4	1	47	2412-42	Clamp, Air cleaner hose ...	3
5	323-23	Screw, 3/8-16 x 4 1/2	1	48	103-0920	Hose, Plenum to air cleaner 1	1
6	3231-40	Bolt, Carr 3/8-16 x 2 1/4....	2	49	103-0921	Hose, Air cleaner to engine 1	1
7▽	323-8	Screw, 3/8-16 x 1 1/2	6	50	322-14	Screw, 5/16-18 x 3	3
8	3296-39	Nut, nylock 3/8-16	7	51	323-12	Screw, 3/8-16 x 2 1/2	2
9	3290-357	Nut, whizlock 3/8-16	9	52	103-2592	Kit, Muffler	1
10	3256-24	Washer, flat SAE 3/8	7	53	103-0192-03	Strap, Clutch/brake	1
11	103-0983	Sheave, tightener	2	54	103-0839-03	Mount, Engine LH & RH ...	2
12	98-5975	Washer, 3/8 disc spring	4	55	103-0870-03	Mount, Rear engine	1
13	103-1361	Spacer, stop bolt	2	56	103-1058	Bracket, Air filter	1
14	83-1040	Washer, Side mnt fail-safe 2	2	57	103-0953-03	Mount, Air filter	1
15	103-4178	Asm, Tightener w/bshgs LH 1	1	58▽	33114-020	Screw, M8-1.25 x 20mm... 18	18
16	1-513034	Bearing, Sleeve	4	59	325-10	Screw, 1/2-13 x 2 1/2	1
17	103-0919	Bushing, Tightener pivot LH 1	1	60	86-1990	Washer, Thrust	2
18	103-4165-03	Asm, Tightener LH	1	61	3296-23	Nut, Nyloc 1/2-13	1
19	302-40	Zerk, 1/4-20 90°	2	62	323-5	Screw, 3/8-16 x 7/8	2
20	66-6480	Washer, Side mnt spacer . 2	2	63	1-303334	Washer, 5/16 disc spring ..	3
21	103-0986	Asm, Tightener w/bshgs RH 1	1	64	323-13	Screw, 3/8-16 x 2 3/4	2
22	103-0204-03	Asm, Tightener RH	1	65	103-3573-03	Wld, flywheel cover	1
23	103-0083	Asm, Clutch w/tie Warner . 1	1	66	33114-045	Screw, M8-1.25 x 45mm... 3	3
24	103-0193	Spacer, Clutch strap	3	67	103-3745	Asm, A-T Link	2
25	1-633630	Grommet	2	68	103-0040	Bushing, Tightener pivot RH 1	1
26	1-633545	Spacer, Grommet	2	69	103-0881	Belt, mule drive	2
27	322-6	Screw, 5/16-18 x 1 1/4	1	70	3231-4	Bolt, Carr 3/8 x 1 1/2	2
28	322-12	Screw, 5/16-18 x 2 1/2	2	71	1-303335	Tie, plastic	2
29	1-613235	Washer	4	72	56-2150	Screw, M10-1.25 x 80mm. 2	2
30	3256-3	Washer, Flat std 5/16	1	73	103-4039-03	Wld, XP RH Sheave Guard 1	1
31	3296-29	Nut, Nyloc 5/16-18	1	74	103-4011-03	Wld, XP LH Sheave Guard 1	1
32	103-0286	Shaft, Engine stub	1	75	103-3186	Spacer, RH Sheave Guard 1	1
33	3212-6	Screw, 7/16-20 x 1 1/2	1	76	103-3556-03	Wld, Front A-T Eng Brkt ...	1
34	1-603610	Washer, Spring disc 7/16 . 2	2	77	103-0608	Rod End, 3/8-24 Female... 2	2
35	1-543610	Washer, Clutch	1	78	3220-3	Nut, 3/8-24 Jam	2
36	103-2613	Isolator, LH/RH	2	79	103-1385	Gasket, Muffler	1
37	322-3	Screw, 5/16-18 x 3/4	6	80	3256-23	Washer, Flat SAE 5/16	4
38	32128-20	Nut, Whizlock 5/16-18	11	81	103-3908	Bracket, Ground	1
39	3256-4	Washer, Flat std 3/8	8	82	103-3567	Link, A-T	2
40	103-1022	Isolator, Rear	1	83	93-6099	Washer, 3/8 ID x 1.5 OD ..	4
41	103-1057	Asm, 5" canister air filter ...	1	84	103-3568	Isolator, A-T Link	2
42	103-1327	Filter, Air	1	85	3296-6	Nut, Nyloc 3/8-24	2
43	103-1326	Filter, Safety air	1				

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▽ Use Prolock, Nut type (Part No. 1-840022) on screws threaded into block, and rear A-T link to Rear Engine Bracket screw.

COMMON ENGINE DECK GROUP



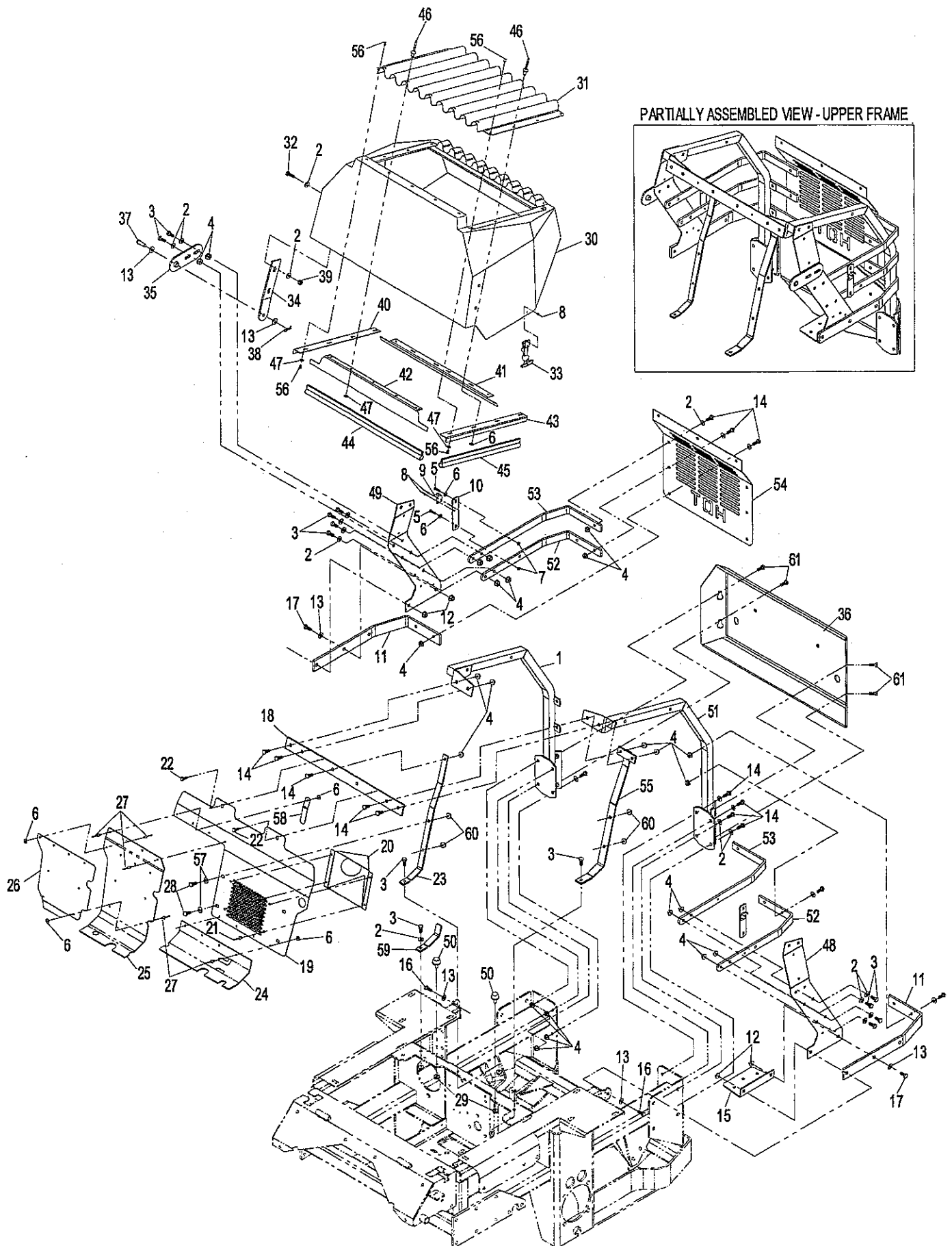
UPPER FRAME GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-0146-03	Frame, Rear upper RH	1	31	1-633864-03	Screen, Radiator	1
2	3256-23	Washer, Flat SAE 5/16	42	32	322-4	Screw, 5/16-18 x 7/8	4
3	322-3	Screw, 5/16-18 x 3/4	19	33	1-643188	Latch, EPDM Rubber	2
4	32128-20	Nut, Whizlock 5/16-18	41	34	1-633885-03	Plate, Hood Hinge	2
5	1-803075	Screw, 10-24x3/4 crosstruss	4	35	1-632986-03	Shackle, Hood Hinge	2
6	3256-14	Washer, Flat std #10	27	36	103-1479-03	Bumper, Rear	1
7	3296-2	Nut, Nyloc #10-24	4	37	1-808285	Pin, Clevis 3/8 x 1 1/8	2
8	923786	Pop Rivet	8	38	1-806003	Pin, Hair Cotter .080 #2	2
9	1-643189	Keeper, Rubber Latch	2	39	3296-29	Nut, Nyloc 5/16-18	4
10	1-633877-03	Bar, Latch Hook	2	40	1-643106-03	Angle, Rad. Trim Side RH	1
11	103-0941-03	Bar, Rad. mounting frame.	2	41	1-643108-03	Angle, Rad. Trim Bottom	1
12	3290-357	Nut, Whizlock 3/8-16	4	42	1-643107-03	Angle, Rad. Trim Top	1
13	3256-24	Washer, Flat SAE 3/8	4	43	1-643105-03	Angle, Rad. Trim Side LH	1
14	322-5	Screw, 5/16-18 x 1	21	44	1-643187	Seal, Trim 20"	2
15	103-2603-03	Bracket, Bottle	1	45	1-643186	Seal, Trim 14"	2
16	323-7	Screw, 3/8-16 x 1 1/4	2	46	1-803072	Rivet, Bulbex .19 x 1.07	15
17	323-6	Screw, 3/8-16 x 1	2	47	1-303435	Washer, Spring Disc .25	7
18	103-0963-03	Bar, Radiator rear mount ..	1	48	103-0954-03	Mount, side LH	1
19	103-3345	Asm, Air deflector (103-0951-03) w/decals	1	49	103-0955-03	Mount, side RH	1
20	103-0964-03	Plenum, Air intake	1	50	1-523420	Bumper, Rubber	2
21	3269-3	Pop Rivet	4	51	103-0145-03	Frame, Rear upper LH	1
22	49-2040	Screw, Tapping 1/4-20x3/4	2	52	103-0942-03	Rib, Bottom	2
23	103-0945-03	Brace, Radiator RH	1	53	103-0943-03	Rib, Top	2
24	103-1001	Shield, Engine	1	54	103-0939-03	Guard, Muffler	3
25	103-1002	Shield, Air cleaner	1	55	103-0094-03	Brace, Rad. & mtg bar	1
26	103-1003-03	Plate, Shield lift	1	56	103-1363	Rivet, 1/4 ratchet	4
27	1-803035	Rivet, Pop 3/16x1/4 alum ..	16	57	3256-22	Washer, flat SAE 1/4	4
28	321-4	Screw, 1/4-20 x 3/4	4	58	1-523285	Clip, Baffle	1
29	3296-42	Nut, Nyloc 1/4-20	2	59	103-1458-03	Tab, Air cleaner shield	1
30	1-633857	Hood, Engine compartment	1	60	32128-33	Nut, whizlock 1/4-20	4
☆	103-1044	Hood, with decals	1	61	3234-47	Screw, Flange 5/16-18x3/4...	4

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☆ Hood only comes with black logo decal, side decals need to be ordered separately.

UPPER FRAME GROUP



PARTIALLY ASSEMBLED VIEW - UPPER FRAME

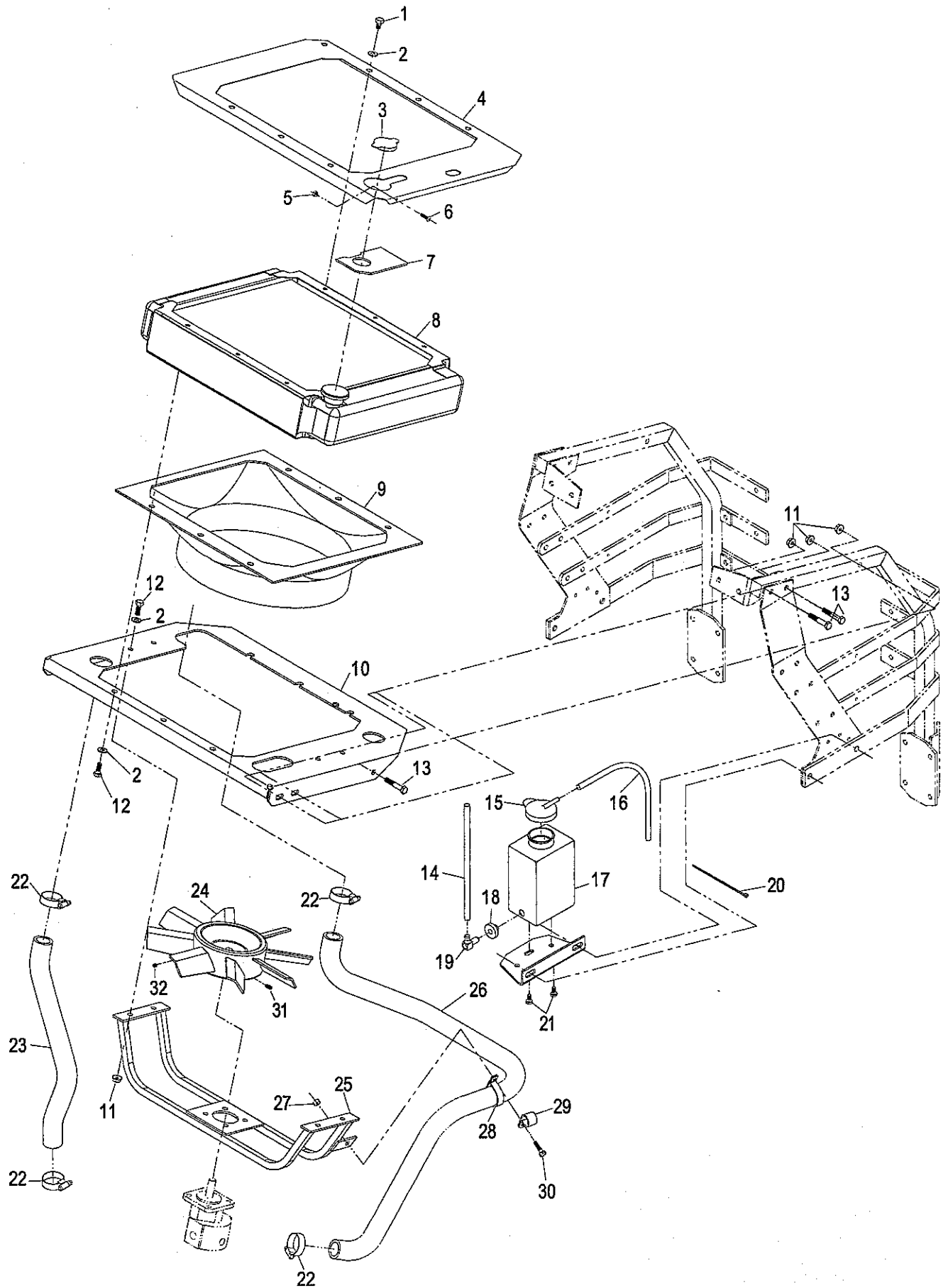
ENGINE COOLING GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	322-1	Screw,5/16-18 x 1/2.....	6	16	1-643131	Hose,.25 ID x 22.00	1
2	3256-23	Washer,flat	12	17	1-643163	Tank,overflow	1
3	1-643161	Cap,radiator	1	18	1-513645	Bushing,valve fuel.....	1
4	103-3347	Asm, radiator top (103-0940-03) w/decals	1	19	1-643259	Fitting,elbow.....	1
5	3296-2	Nut,nyloc #10-24	1	20	1-303287	Tie,plastic 5.5 x .044 x .1 ...	3
6	1-803075	Screw,#10-24x.75 crosstruss	1	21	321-2	Screw,1/4-20 x 1/2.....	2
7	103-1352	Shield,radiator fill neck	1	22	1-633989	Clamp,hose.....	4
8	103-0891	Radiator,IHT #DA12-109001	1	23	103-2505	Hose,engine outlet.....	1
9	103-0898	Shroud,engine cooling.....	1	24	103-0892	Fan,crowley	1
10	103-3348	Asm, radiator bottom (103-0948-03) w/decals	1	25	103-0086-03	Wld,fan motor mount.....	1
11	32128-20	Nut,whizlock 5/16-18	10	26	103-0922	Hose,engine inlet	1
12	322-3	Screw,5/16-18 x 3/4	10	27	3296-42	Nut,nyloc 1/4-20.....	1
13	322-9	Screw,5/16-18 x 1 3/4.....	6	28	103-0113	Clip,loom 1.38.....	1
14	103-1445	Hose,.31 ID x 37.00.....	1	29	1-513762	Clip,loom .50.....	1
15	1-643164	Cap,tank overflow.....	1	30	321-6	Screw,1/4-20 x 1.0.....	1
				31	3245-44	Setscrew 1/4-20 x 3/8	1
				32*	909848	Setscrew,1/4-20 x 1/4.....	1

* Setscrew is installed over keyway.

Exmark black touch up spray paint – gloss black

ENGINE COOLING GROUP



HYDRAULIC GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	103-2978	Pump, hydro LH.....	1	47	103-2153	Elbow,90°3/4JICx3/4O-rg	2
2	103-2979	Pump, hydro RH	1		1-603992	O-Ring (37° flare #8)	1
	100-6110	Kit, seal service 21L.....	1		1-603920	O-Ring (SAE #8).....	1
	100-2669	Kit, input shaft 21L	1	48V	103-2154	Fitting, run tee 3/8"	1
	103-2670	Kit, thrust bearing 21L.....	1		103-1020	O-Ring (37° flare #6)	1
	103-2668	Kit, cylinder block 21L.....	1	49	103-2155	Elbow,90°9/16JICx9/16O-rg	1
	103-2667	Kit, valve plate 21L.....	1		103-1020	O-Ring (37° flare #6)	1
3	103-2489	Motor, wheel drive	2		1-603921	O-Ring (SAE #6).....	1
	1-000099	Kit, seal.....	1	50	103-2156	Fitting, strt9/16JICx9/16O-rg	1
	1-000139	Kit, bearing	1		103-1020	O-Ring (37° flare #6)	1
4	103-0893	Motor, hydraulic fan	1		1-603921	O-Ring (SAE #6).....	1
	103-1865	Kit,seal service (fan motor)	1	51	103-2157	Fitting, strt9/16JICx7/16O-rg.....	1
5	103-1325	Pump, hydraulic fan	1		103-1020	O-Ring (37° flare #6)	1
	103-1866	Kit,seal service (fan pump)	1		1-603923	O-Ring (SAE #4).....	1
6	32128-20	Nut, whizlock 5/16-18.....	10	52	103-2159	Fitting, run tee 3/4"	1
7	103-0049	Sheave, hydro pump idler	1		1-603992	O-Ring (37° flare #8)	2
8	323-11	Screw, 3/8-16 x 2 1/4.....	1		1-603920	O-Ring (SAE #8).....	1
9	3256-24	Washer, 3/8 SAE	2	53	103-2315	Elbow,90°3/4JICx3/4 Swvl.....	1
10	3290-357	Nut, whizlock 3/8-16	8		1-603992	O-Ring (37° flare #8)	1
11	103-1448	Asm, tightener.....	1	54	1-603990	Fitting, strt 3/4JICx3/4O-rg.....	5
12	1-323729	Bearing, sleeve	2		1-603992	O-Ring (37° flare #8)	1
13	103-1415-03	Tightener	1		1-603920	O-Ring (SAE #8).....	1
14	93-6099	Washer, 3/8 x 1.50 O.D.	1	55	1-633605	Elbow, 90° 3/4JICx7/8O-rg	4
15	323-4	Screw, 3/8-16 x 3/4.....	4		1-603992	O-Ring (37° flare #8)	1
16	103-1338	Sheave, fan pump driven	1		1-603919	O-Ring (SAE #10).....	1
17	103-1478-03	Tightener, spindle	1	56	103-3110	Filter, Hydraulic inline	1
18	302-40	Zerk, 90° 1/4-28.....	2	57	103-2148	Hose, hi-pressure fan pump	1
19	13-2840	Key, square 1/4 x 1 1/4	1	58	1-323241	Hose, fan motor return	1
20	103-1339	Sheave, fan pump drive	1	59	103-2172	Hose, pump case drain.....	1
21	103-1422	Spacer, fan pump drive.....	1	60	103-2173	Hose, fan case drain.....	1
22	323-9	Screw, 3/8-16 x 1 3/4.....	3	61	103-2174	Hose, tank return.....	1
23	3246-6	Setscrew, 5/16 x 3/4	2	62	103-1471	Hub, hydro pump sheave.....	2
24	103-1297	Belt, fan pump drive	1	63	103-1472	Sheave, hydro pump.....	2
25	98-5975	Washer, disc spring 3/8	1	64	1-633167	Sheave, fan pump idler.....	1
26	103-1421	Hub, engine sheave	1	65	323-14	Screw, 3/8-16 x 3	1
27	103-1426	Sheave, engine.....	1	66	3296-29	Nut, Nyloc 5/16-18	1
28	103-1459	Pin, spring roll 1/4	1	67	103-2268	Asm, filter inlet hose	1
29	323-6	Screw, 3/8-16 x 1.....	1	68	1-513034	Bearing, sleeve.....	2
30	3256-23	Washer, 5/16 SAE	4	69	103-3349	Asm, Idler Arm (103-1417-03)	
31	33114-020	Screw, M8-1.25 x 20	4			w/decals & bearings	1
32	103-2600	Belt, hydro pump drive	1	70	1-603384	Bushing, tightener pivot	1
33	103-0973	Hose, wheel motor (72")	4	71	103-2104	Clamp,hose .89 max dia	1
	103-0972	Hose, wheel motor (60")	4	72	1-643312	Clamp, 1.00	1
34	103-2146	Element, hydraulic oil filter	1	73	1-633396	Clamp, .69.....	2
35	1-513167	Cap, hydraulic tank	1	74	103-3346	Asm, hydraulic reservoir	
36	1-523103	Gasket, tank cap.....	1			(103-2149-03) w/decals.....	1
37	1-803050	Setscrew, 5/16-18 x 3/4	4	75	322-4	Screw, 5/16-18 x 7/8.....	11
38	103-2739	Key, 5mm x 5mm x 32mm.....	2	76	103-1299-03	Plate, fan pump mounting.....	1
39	321-3	Screw, 1/4-20 x 5/8.....	2	77	1-805005	Lockwasher, 5/16	6
40	1-805004	Lockwasher, 1/4.....	2	78	322-2	Screw, 5/16-18 x 5/8.....	6
41	325-5	Screw, 1/2-13 x 1 1/4.....	4	79	1-603414	Spring, fan pump tightener.....	1
42	32128-49	Nut, whizlock 1/2-13.....	4	80	103-1575	Spacer, fan pump spring.....	2
43V	103-1012	Elbow,90°9/16JICx3/8NPT.....	1	81	3256-4	Washer, 3/8 std.....	3
44	103-1014	Elbow,90°9/16JICx3/4O-rg.....	2	82*	103-1709	Asm, charge hose.....	1
	1-603920	O-Ring (SAE #8).....	1	83	103-2269	Asm, pump inlet.....	1
45V	103-2151	Elbow,45°9/16JICx3/8NPT.....	1	84	103-2259	Filter head	1
	103-1020	O-Ring (37° flare #6).....	1	85	103-1767	Spring, Hydro drive tightener	1
46V	103-2152	Elbow,90°1/2T x 1/2NPT.....	1	86	32150-1	Key, fan pump or motor	2

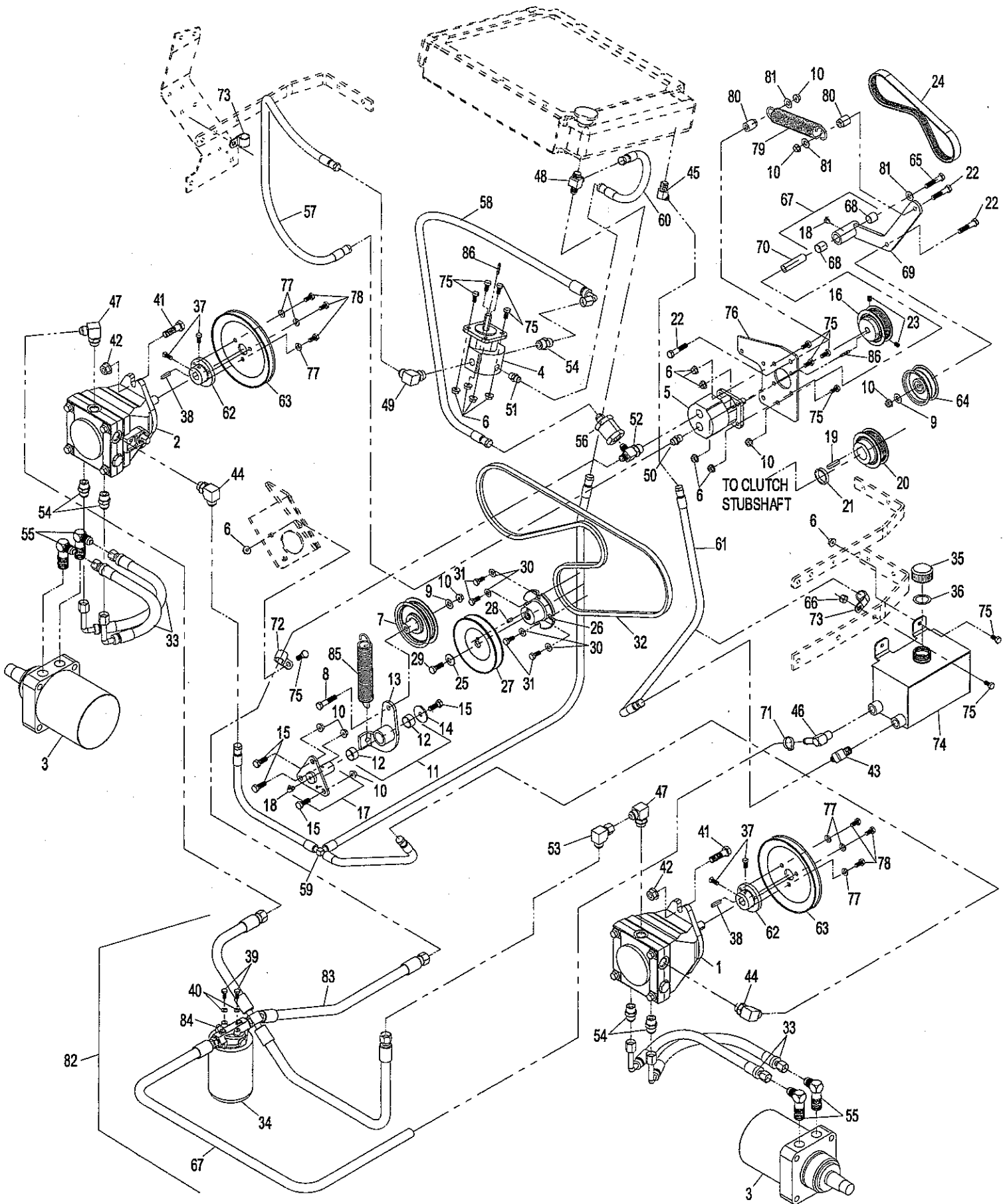
◊ Use Pro-Lock, Nut Type (P/N 1-840022, 5 ml tube) on setscrews.

▽ Use Teflon pipe sealant on pipe threads in reservoir and cooler.

* Charge hose assembly includes items 67,83, & 84 only.

Exmark black touch up spray paint - gloss black

HYDRAULIC GROUP

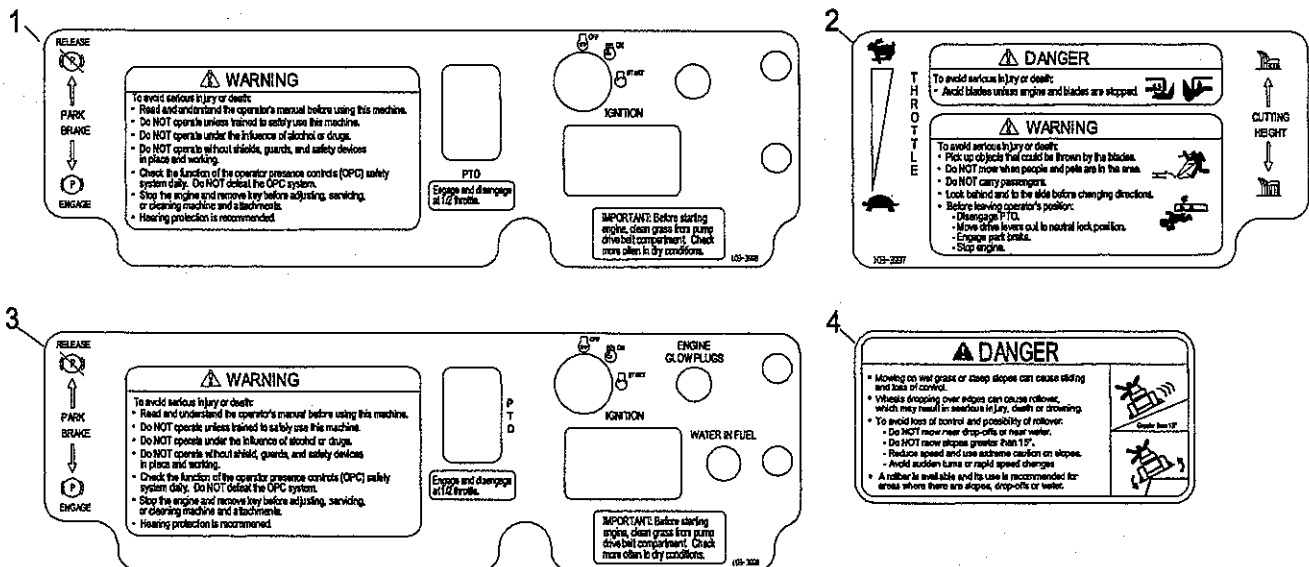


DECAL GROUP

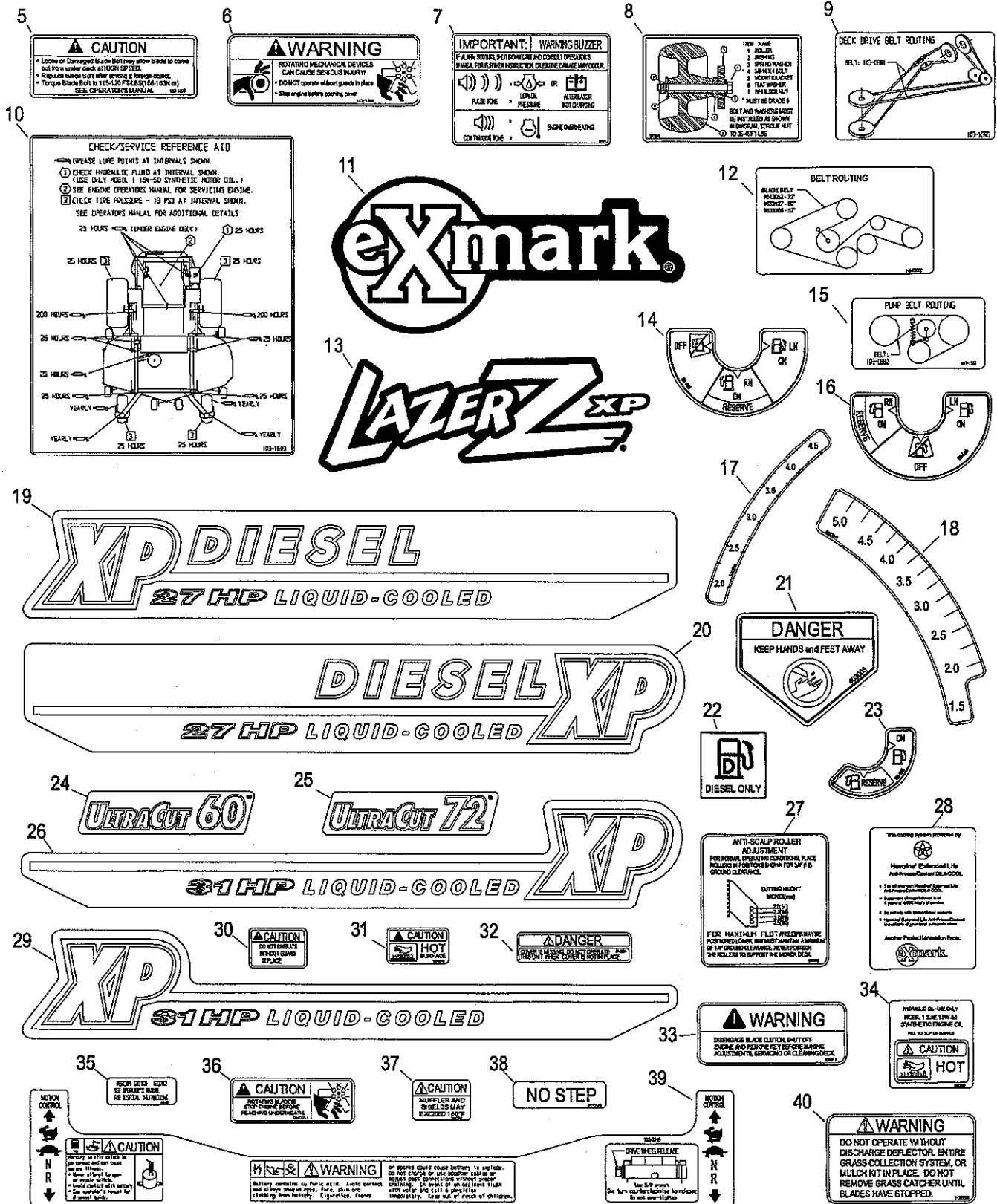
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1♦	103-3996	Decal, Console	1	22♦	103-1636	Decal, Diesel only.....	2
2	103-3997	Decal, Console Throttle	1	23	103-1365	Decal, Fuel valve reserve...	1
3♦	103-3998	Decal, Console (Diesel).....	1	24	103-1146	Decal, Ultracut 60.....	1
4	106-6571	Decal, Console	1	25♦	103-1147	Decal, Ultracut 72.....	1
5	103-1077	Decal, Bolt torque	1	26	103-1162	Decal, Hood 31HP XP RH .	1
6	103-0368	Decal, Rotating devices	1	27	1-633922	Decal, Anti-scalp	1
7	103-3276	Decal, Warning buzzer	1	28	103-0223	Decal, Havoline coolant.....	1
8	1-323540	Decal, Roller mounting	1	29♦	103-1161	Decal, Hood 31HP XP LH..	1
9	103-1596	Decal, Belt routing	1	30	1-513748	Decal, Guard.....	1
10	103-1593	Decal, Check service.....	1	31	103-2076	Decal, Caution hot surface.	2
11	1-653546	Decal, Exmark logo	1	32	98-5954	Decal, Missing cover.....	3
	103-3999	Decal, Exmark logo	1	33	1-633313	Decal, Warning.....	1
12	1-643222	Decal, Belt routing.....	1	34	1-523552	Decal, Hyd tank/hot surface	1
13	103-3125	Decal, Lazer XP model	1	35	1-643401	Decal, Mercury switch	1
14♦	103-1505	Decal, Fuel valve XPD	1	36	1-643253	Decal, Radiator fan	2
15	103-1592	Decal, Belt routing XP	1	37	1-513746	Decal, Muffler	1
16♦	103-1506	Decal, Fuel valve XPG	1	38	1-513742	Decal, No step.....	2
17	1-633706	Decal, Deck height.....	1	39	103-0245	Decal, Top console	1
18	1-633345	Decal, Deck height.....	1	40	1-303508	Decal, Discharge warning.....	1
19♦	103-1163	Decal, Hood 27HP XP LH..	1		103-1649	Decal kit, XP.....	1
20♦	103-1164	Decal, Hood 27HP XP RH .	1				
21	1-403005	Decal, Danger	2				

♦ Lazer XP Diesel models only

♦ Lazer XP Gas models only



DECAL GROUP

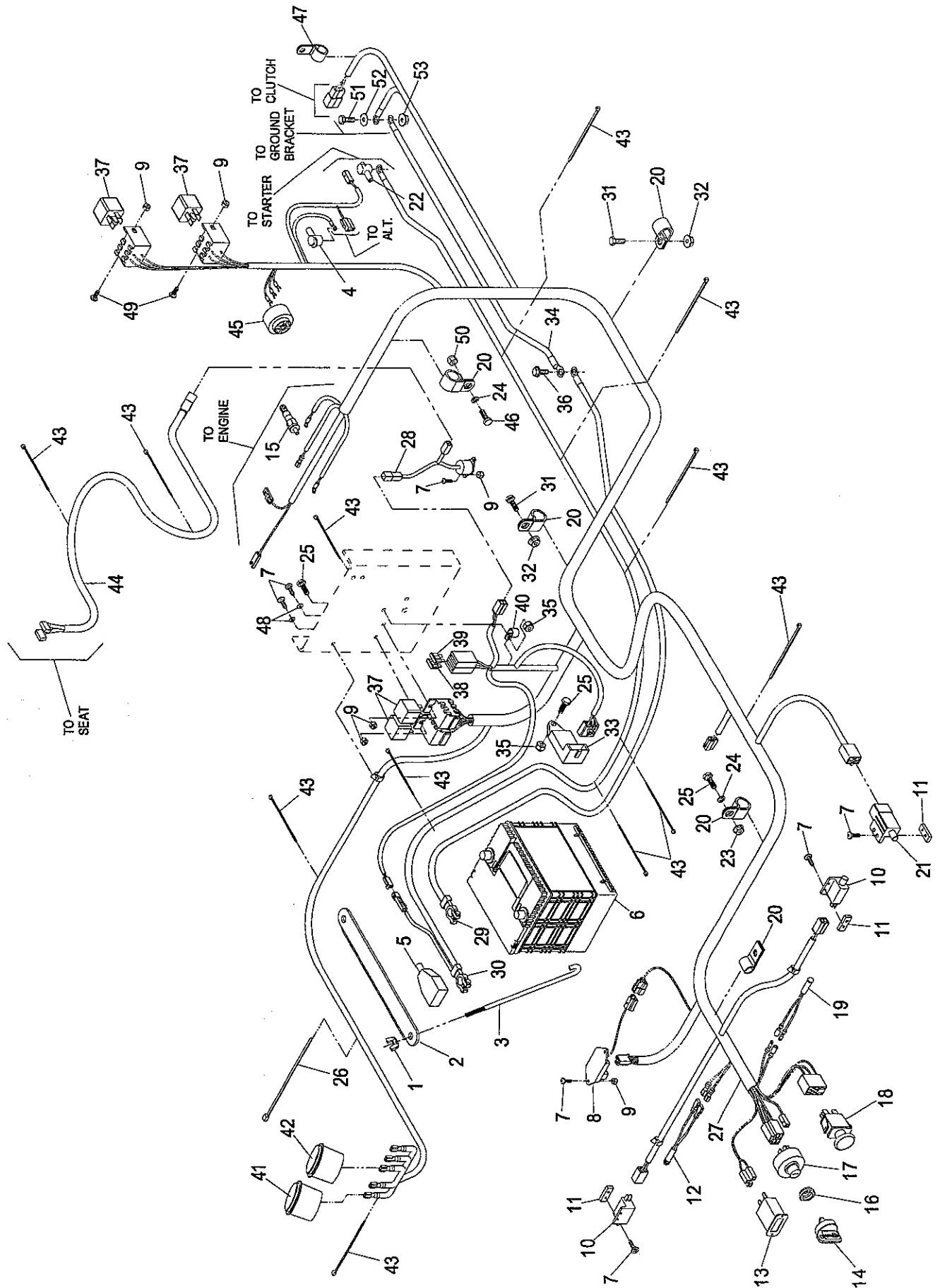


27 HP DIESEL ELECTRICAL GROUP

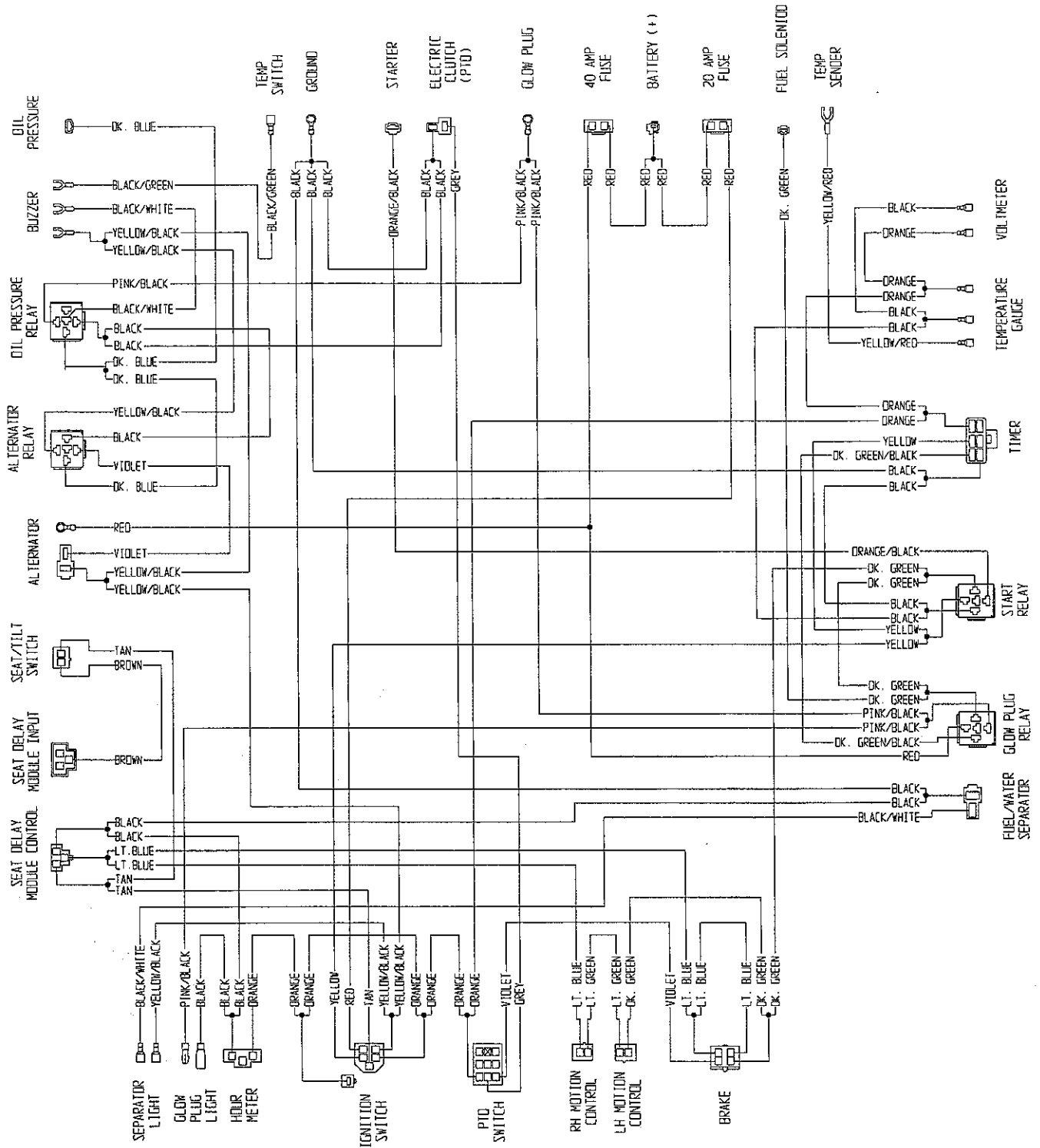
Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-543792	Wingnut, nyloc	2	28	1-633782	Switch, tilt	1
2	103-1311-03	Holddown, battery	1	29	103-1159	Cable, battery ground (-)	1
3	103-1312	Bolt, battery holddown	2	30*	103-1160	Cable, starter(+) w/insulators .	1
4	1-643178	Insulator, alternator (+)	1	31	322-3	Screw, 5/16-18 x 3/4	2
5	103-1340	Insulator, battery terminal ...	1	32	32128-20	Nut, 5/16-18 whizlock	2
6★		Battery, 12V SAE post	1	33⊗	Briggs & Stratton P/N 820373		
7	3290-500	Screw, #10-24 x 5/8	12			Module, pre-heat timer	1
8	100-6186	Module, seat delay	1	34	103-1349	Cable, engine ground (-)	1
9	3296-2	Nut, #10-24 Nyloc	8	35	3296-42	Nut, 1/4-20 Nyloc	2
10	1-513051	Switch, drive lever N.O.	2	36	32144-70	Screw, 5/16-18 x 3/4 taptite..	1
11	1-633181	Plate, tapped	3	37	1-643275	Relay, 12V	4
12	1-643267	Indicator, red LED	1	38	1-816001	Fuse, 20 amp	1
13	1-513374	Meter, engine hours	1	39	103-1368	Fuse, 40 amp	1
14	103-2106	Key, Exmark logo	1	40	1-513762	Clip, loom .50	1
	1-603511	Key, ignition	1	41	1-643037	Guage, Voltmeter	1
15□	103-0949	Sender, temperature 1/8 NPT	1	42	1-643021	Guage, Temperature	1
16	103-0498	Nut, ignition	1	43	1-303335	Plastic tie (medium)	12
17	103-0206	Switch, ignition w/ keys	1	44	103-1227	Wiring harness, seat	1
18	1-633673	Switch, PTO	1	45	103-0205	Alarm, dual tone	1
19	103-1320	Indicator, amber LED	1	46	33113-020	Screw, M6x1 x 20mm	1
20	1-633396	Clip, loom .69	5	47	1-603727	Clip, loom .50	1
21	1-633111	Switch, brake N.O./N.C.	1	48	3256-14	Washer, #10 SAE	2
22	103-1420	Insulator, starter (+)	1	49	1-803071	Screw, #10-24 x 1/2	2
23	32128-33	Nut, 1/4-20 whizlock	1	50	33023-00	Nut, M6 Nyloc	1
24	3256-22	Washer, 1/4 SAE	2	51	323-6	Screw, 3/8-16 x 1	1
25	321-4	Screw, 1/4-20 x 3/4	3	52	3256-24	Washer, Flat SAE 3/8	1
26	1-643115	Plastic tie (large)	1	53	3290-357	Nut, whizlock 3/8-16	1
27♦	103-3296	Harness, wiring	1				

- ♦ Use dielectric grease on all wiring harness connectors.
- ★ 12 Volt battery, BCI group size 26, 550 cca. For warranty and/or direct replacement contact Douglas Battery at 1-800-DOUGLAS.
- ⊗ Refer to Engine Owner's Manual.
- * Starter Cable includes insulators 103-1340 & 103-1420.
- Use Teflon pipe sealant on pipe threads on temperature sending unit.

27 HP DIESEL ELECTRICAL GROUP

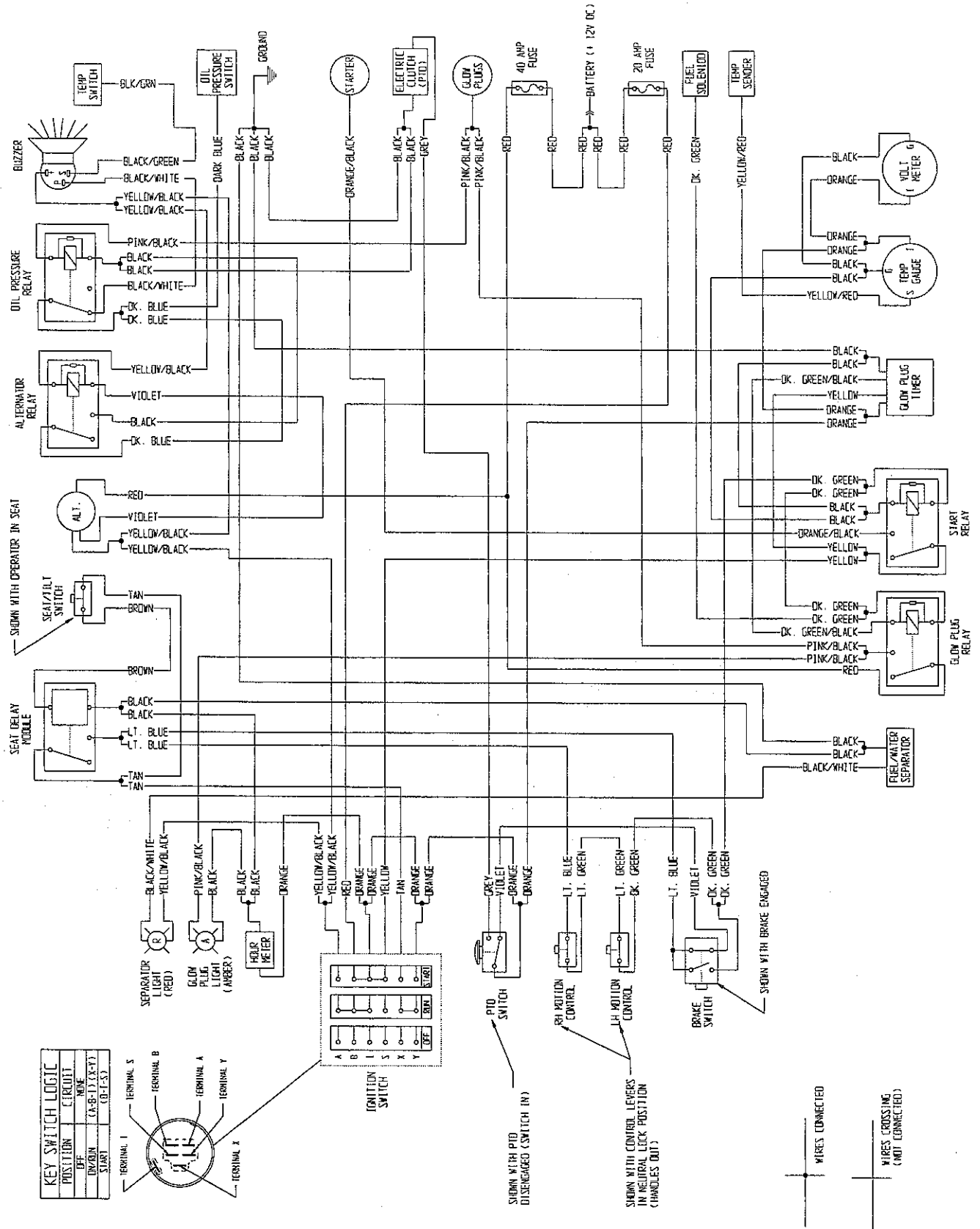


27 HP DIESEL WIRE HARNESS DIAGRAM



NOTE:
CONNECTORS VIEWED FROM WIRE END

27 HP DIESEL ELECTRICAL LOGIC SCHEMATIC



31 HP GAS ELECTRICAL GROUP

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-543792	Wingnut, nyloc.....	2	27	103-1159	Cable, battery ground (-)	1
2	103-1311-03	Holddown, battery.....	1	28*	103-1160	Cable, starter(+) w/insulators.	1
3	103-1312	Bolt, battery holddown	2	29	32144-70	Screw, 5/16-18 x 3/4 taptite .	1
4	103-1340	Insulator, battery terminal ...	1	30	103-1349	Cable, engine ground (-)	1
5★		Battery, 12V SAE post.....	1	31	1-603727	Clip, loom .50	1
6	3290-500	Screw, #10-24 x 5/8.....	12	32	33113-020	Screw, M6x1 x 20mm	1
7	100-6186	Module, seat delay.....	1	33	1-633782	Switch, tilt	1
8	3296-2	Nut, #10-24 nyloc.....	7	34	1-513762	Clip, loom .50	1
9	1-633181	Plate, tapped	3	35	103-1368	Fuse, 40 amp	1
10	1-513051	Switch, drive lever N.O.	2	36	1-816001	Fuse, 20 amp	1
11	1-513374	Meter, engine hours.....	1	37	1-643275	Relay, 12V.....	3
12	103-2106	Key, Exmark logo	1	38	3296-42	Nut, 1/4-20 nyloc.....	3
	1-603511	Key, ignition	1	39⊗	Briggs & Stratton P/N 825273		
13□	103-0949	Sender, temperature 1/8 NPT	1			Module, ignition processor .	1
14	103-0498	Nut, ignition.....	1	40	321-6	Screw, 1/4-20 x 1	2
15	103-0206	Switch, ignition w/ keys.....	1	41	103-1227	Wiring harness, seat	1
16	1-633673	Switch, PTO.....	1	42	103-0205	Alarm, dual tone	1
17	1-633396	Clip, loom .69.....	6	43	1-643178	Insulator, alternator(+).....	1
18	1-633111	Switch, brake N.O./N.C.	1	44	103-1420	Insulator, starter(+).....	1
19	32128-33	Nut, 1/4-20 whizlock	1	45	1-643037	Guage, Voltmeter	1
20	3256-22	Washer, 1/4 SAE.....	4	46	1-643021	Guage, Temperature.....	1
21	321-4	Screw, 1/4-20 x 3/4	2	47	3256-14	Washer, #10 SAE	2
22	1-643115	Plastic tie (large).....	1	48	33023-00	Nut, M6 Nyloc.....	1
23	32128-20	Nut, 5/16-18 whizlock	2	49	1-803071	Screw, #10-24 x 1/2	1
24	322-3	Screw, 5/16-18 x 3/4.....	2	50	323-6	Screw, 3/8-16 x 1	1
25	1-303335	Plastic tie (medium).....	15	51	3256-24	Washer, Flat SAE 3/8	1
26♦	103-3297	Harness,wiring.....	1	52	3290-357	Nut,whizlock 3/8-16.....	1

♦ Use dielectric grease on all wiring harness connectors.

★ 12 Volt battery, BCI group size 26, 550 cca. For warranty and/or direct replacement contact Douglas Battery at 1-800-DOUGLAS.

⊗ Refer to Engine Owner's Manual.

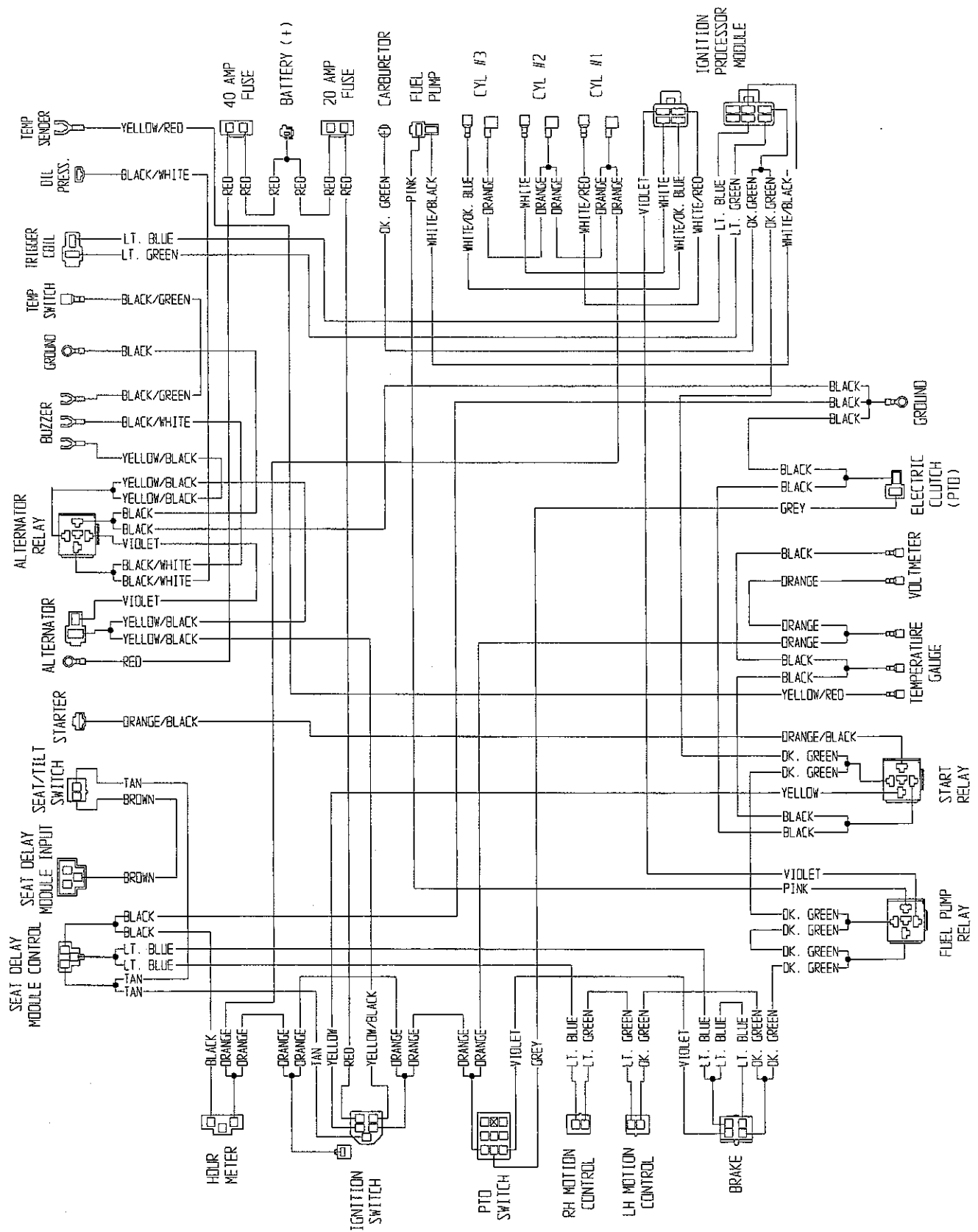
* Starter Cable includes insulators 103-1340 & 103-1420.

□ Use Teflon pipe sealant on pipe threads on temperature sending unit.

This is a detailed technical wiring diagram of a vehicle's electrical system. The diagram illustrates the following components and their interconnections:

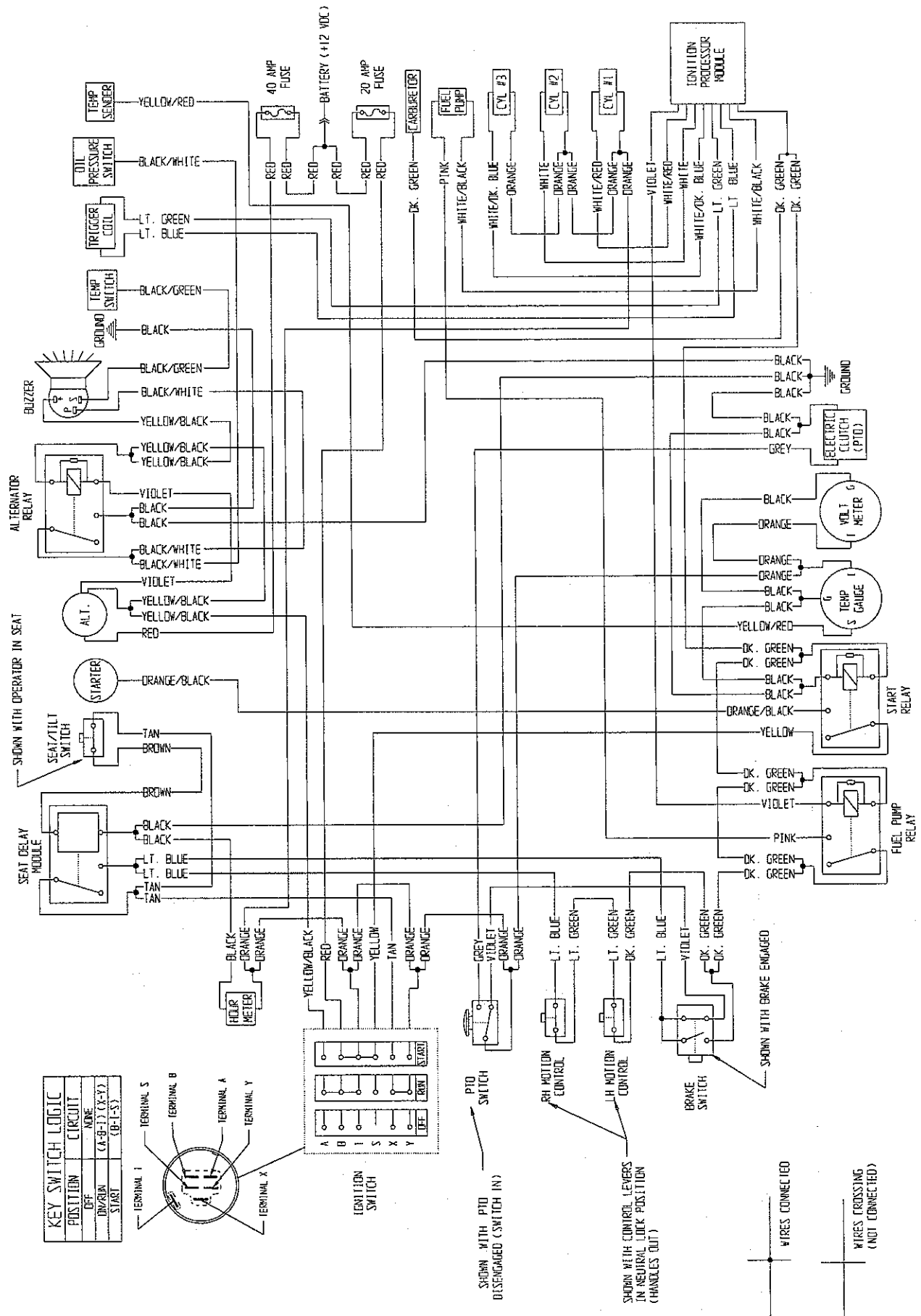
- Power Sources:** A battery (5) and an alternator (16) are shown. The alternator is connected to the battery via a main power line (25).
- Engine and Fuel System:** The engine (1) is connected to the alternator (16) and the fuel pump (42). The fuel pump is connected to the engine (1) and the fuel tank (45).
- Starter and Clutch:** The starter (37) is connected to the battery (5) and the clutch (31). The clutch is connected to the starter (37) and the engine (1).
- Lighting and Signals:** Various lights and signals are shown, including headlights (11, 12), taillights (13, 14), and a seat light (41). These are connected to the main power line (25) and ground (24).
- Wiring and Grounding:** The diagram shows a complex network of wires (25) connecting all components. Grounding points (24) are indicated throughout the system.
- Labels and Annotations:** Numerous numbered components (1-52) are labeled. Key annotations include "TO ENGINE", "TO CLUTCH", "TO STARTER", "TO ALT.", "TO FUEL PUMP", "TO SEAT", and "TO GROUND BRACKET".

31 HP GAS WIRE HARNESS DIAGRAM

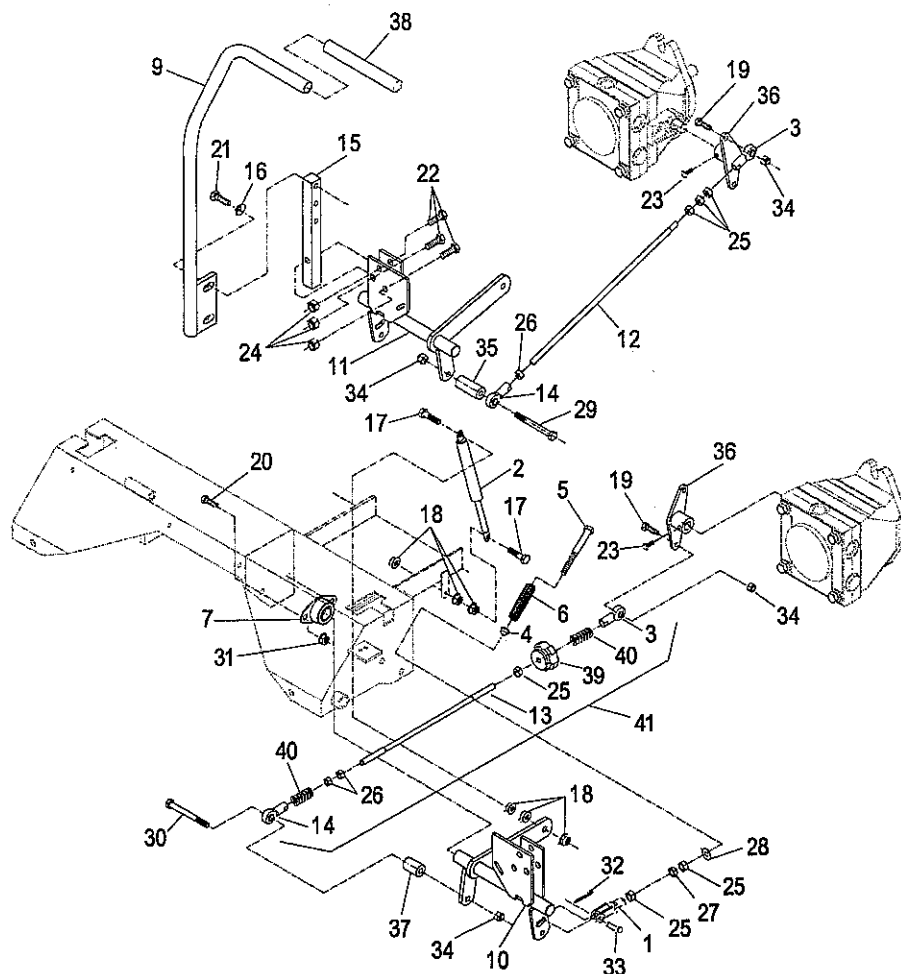


NOTE:
CONNECTORS VIEWED FROM WIRE END

MOTION CONTROL LEVERS



MOTION CONTROL LEVERS



Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-303105	Yoke.....	2	21	323-6	Screw, 3/8-16 x 1	4
2	103-2913	Damper	2	22	323-9	Screw, 3/8-16 x 1 3/4	6
3	1-543017	Ball joint (RH).....	2	23	1-803022	Set screw, 5/16 x 5/8	2
4	1-603735	Bushing, nylon	2	24	3296-39	Nut, nyloc 3/8-16	6
5	1-603737	Bolt, (neutral return).....	2	25	3219-2	Nut, 5/16-24.....	8
6	1-603807	Spring, (neutral return).....	2	26	1-804524	Nut, 5/16-24 LH	3
7	1-633102	Bearing, flanged.....	4	27	3220-2	Nut, jam 5/16-24.....	2
8*	103-0631	LH Lever/Grip asm	1	28	3256-2	Washer, 1/4	2
	103-0409-03	Handle, motion control (LH)	1	29	322-14	Screw, 5/16-18 x 3	1
9	103-0632	RH Lever/Grip asm	1	30	322-12	Screw, 5/16-18 x 2 1/2	1
	103-0410-03	Handle, motion control (RH)	1	31	3290-357	Nut, whizlock 3/8-16.....	8
10	103-0062	Bracket, motion control (LH)	1	32	3272-5	Pin, cotter 3/32 x 1/2	2
11	103-0199	Bracket, motion control (RH)	1	33	1-808280	Pin, clevis 5/16 x 1	2
12	103-0918	Link, hydro connecting (RH)	1	34	3296-29	Nut, nyloc 5/16-18	4
13	103-3065	Link, hydro connecting (LH)	1	35	103-0057	Spacer, hyd control (RH)....	1
14	1-633152	Ball joint (LH)	2	36	103-0194-03	Arm, pump control.....	2
15	103-0407	Arm, control shaft	2	37	103-1361	Spacer, hyd control (LH)....	1
16	98-5975	Washer, disc spring 3/8	4	38	1-633257	Grip, motion control handle	2
17	1-403180	Screw, 5/16-18 x 1 3/8(gm)	4	39	103-3060	Knob, tracking	1
18	32128-20	Nut, 5/16-18.....	12	40	1-323245	Spring, compression.....	2
19	322-6	Screw, 5/16-18 x 1 1/4.....	2	41	103-3062	Asm, tracking rod linkage...	1
20	323-4	Screw, 3/8-16 x 3/4.....	8				

* Not Illustrated.

Exmark black touch up spray paint - gloss black

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

NOTES

NOTES

SERVICE RECORD

[illegible]

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