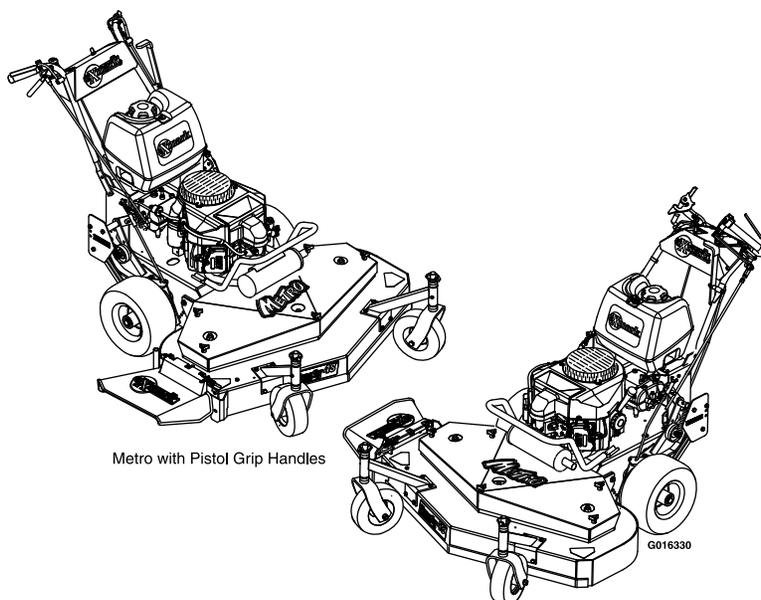




# METRO®

Model No. MG481KA362P—Serial No. 31200000 and Up

Picture below may not reflect actual product.



Metro with Pistol Grip Handles

Metro with ECS Handles

# Parts Manual

# Ordering Replacement Parts

To order replacement parts, please supply the part number, the quantity, and the description of each part desired.

## Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

## Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form a:b. The a represents the reference number of the entire service assembly and the b represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number 6, the tire by 6:1, the valve by 6:2, and the wheel by 6:3. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually. Reference numbers of this type appear in illustration and in parts lists.

## Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form nX y. The n represents the quantity of the part, the X is the multiplication symbol, and the y represents the reference number.

For example, in an illustration, the reference number 2X 37 means that two of the parts identified by reference number 37 are indicated.

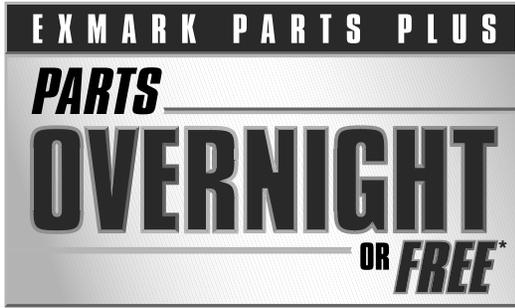
# List of Abbreviations

<b>AR:</b> as required	<b>HJ:</b> hex jam	<b>PTH:</b> phillips truss head
<b>ASM:</b> assembly	<b>HLH:</b> hex lag head	<b>PTO:</b> power-take-off
<b>BBC:</b> blade brake control	<b>HOC:</b> height-of-cut	<b>RH:</b> right hand
<b>BHTF:</b> button head thread forming	<b>HSBH:</b> hex socket button head	<b>ROPS:</b> roll-over protection system
<b>CARR:</b> carriage	<b>HSFH:</b> hex socket flat head	<b>RRB:</b> rear roller brush
<b>CCW:</b> counter clockwise	<b>HSH:</b> hex socket head	<b>SFH:</b> slotted fillister head
<b>CW:</b> clockwise	<b>HWH:</b> hex washer head	<b>SHH:</b> slotted hex head
<b>DEG:</b> degrees	<b>HWHTF:</b> hex washer head thread forming	<b>SHWH:</b> slotted hex washer head
<b>DPA:</b> Dual Point Adjustment	<b>HYD:</b> hydraulic	<b>SPH:</b> slotted pan head
<b>ECM:</b> electronic control module	<b>LH:</b> left hand	<b>SQH:</b> square head
<b>EXT:</b> external	<b>LP:</b> Liquid Propane	<b>SRH:</b> slotted round head
<b>FH:</b> flat head	<b>NI:</b> nylon insert	<b>STD:</b> standard
<b>GA:</b> gauge	<b>NPTF:</b> national pipe thread fine	<b>TAP:</b> self tapping
<b>HD:</b> heavy-duty	<b>PFH:</b> phillips flat head	<b>TTH:</b> torx truss head
<b>HF:</b> hex flange	<b>PPH:</b> phillips pan head	
<b>HH:</b> hex head	<b>PPHTF:</b> phillips pan head thread forming	
<b>HHF:</b> hex head flange	<b>PRH:</b> phillips round head	
<b>HHFTF:</b> hex head flange thread forming		

# Touch Up Paint

Exmark black touch up spray paint – gloss black.

Exmark red touch up paint (spray paint – P/N 1-850337 - .6 oz liquid bottle – P/N 103-9140).

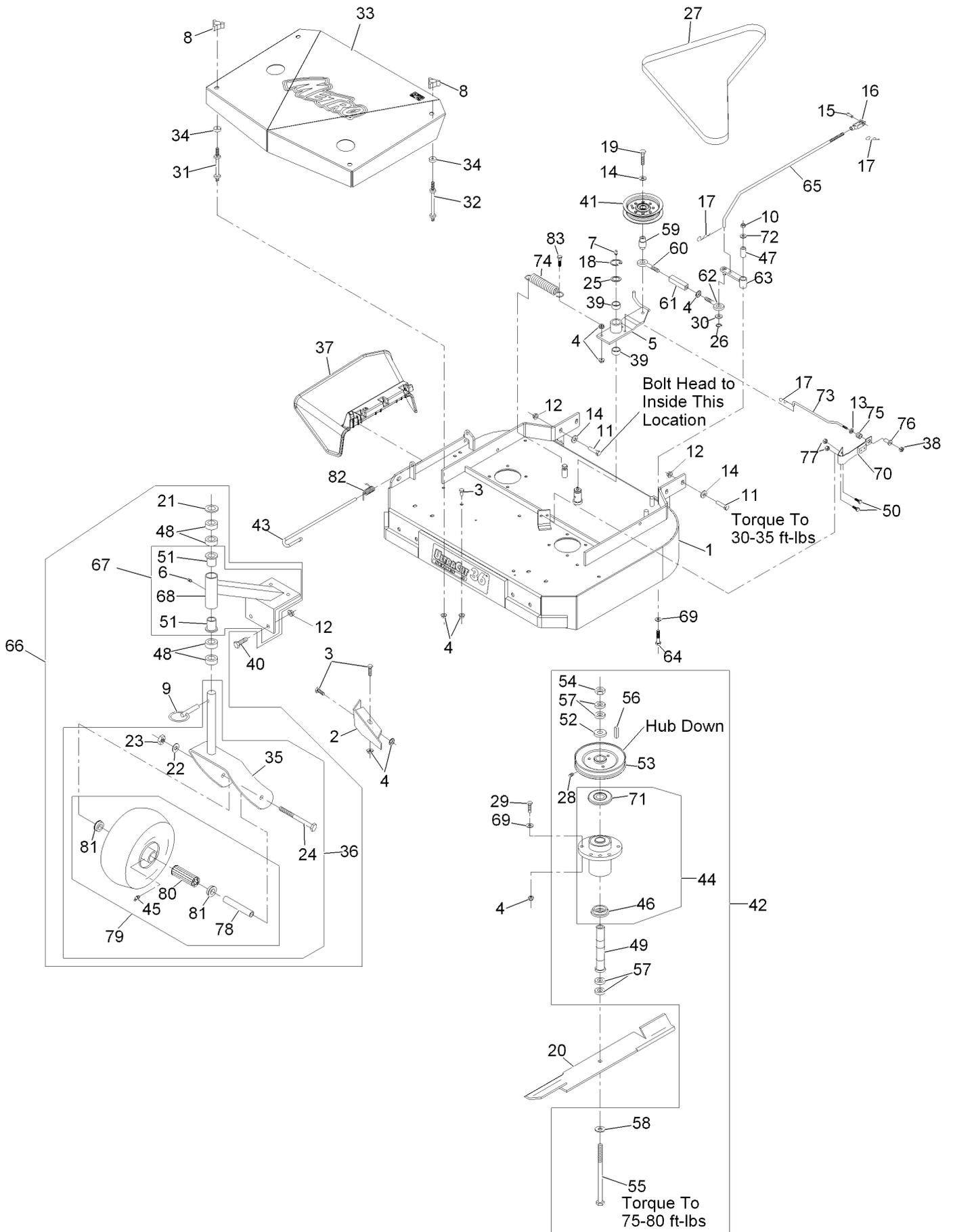


If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

## Contents

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Pistol Grip Upper Handle and Controls ..... 10  
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# Mower Deck Assembly



## Mower Deck Assembly (continued)

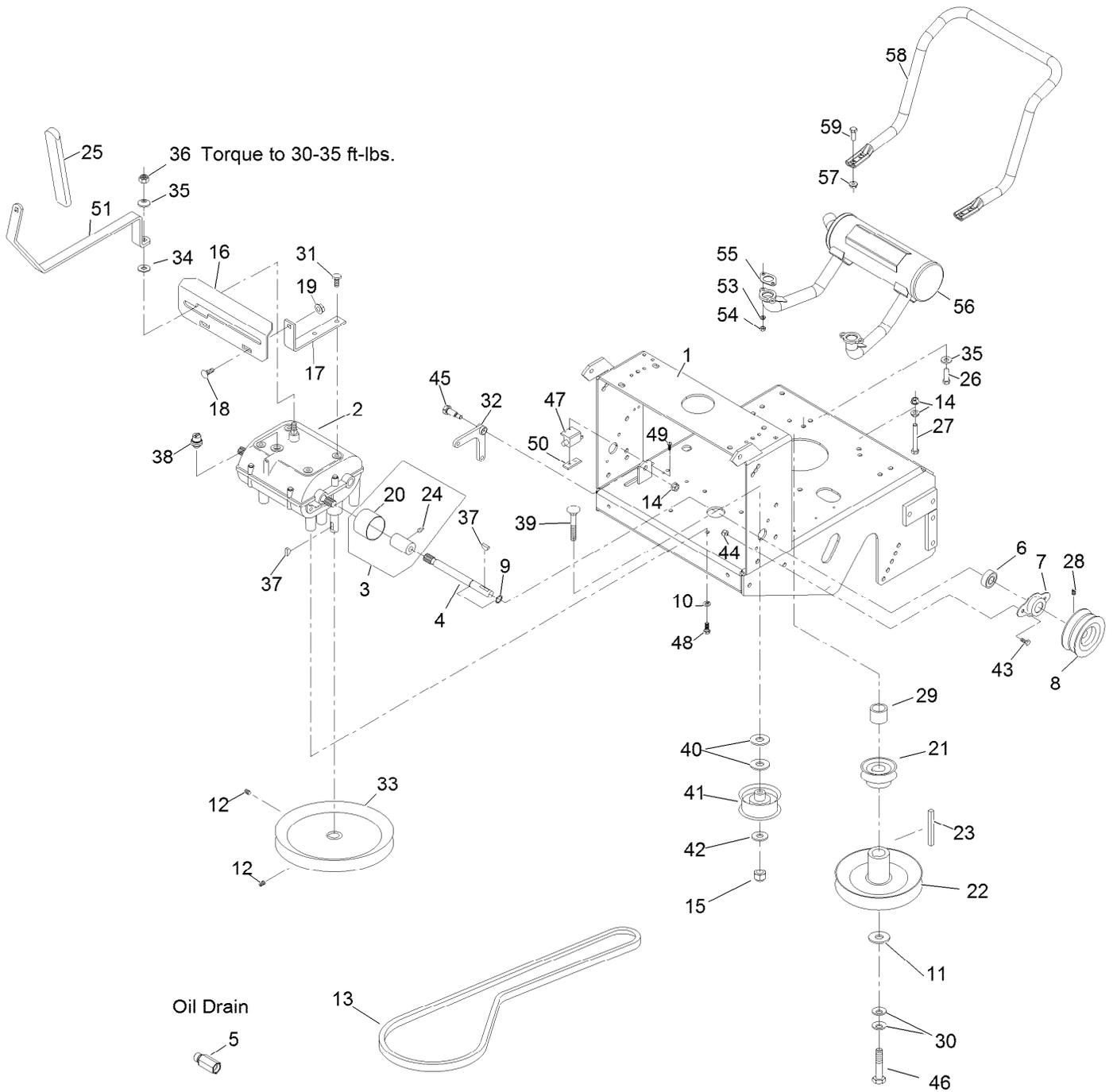
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	103-2312	1	Deck (116-0616-01) W/Decals, Dogleg, & Discharge Deflector	41	116-3626	1	Pulley-Idler
2	1-302189-01	1	Baffle-Dogleg	42	103-8387	2	Asm, Cutter Housing Complete
3	322-2	7	Screw-HH 5/16-18 X 5/8	43	109-8854	1	Pin-Chute
4	32128-20	22	Nut-Whizlock 5/16-18	44	103-8280	2	Kit, Cutter Housing ▲
5	103-3600	1	Idler Arm ASM	45	302-61	2	Zerk-45° 1/4-28
6	302-52	2	Zerk-1/8-27 Str	46	103-2535	2	Spacer-Guard Bottom
7	302-19	1	Zerk-1/4-28 Str	47	1-403179	1	Tube-Pivot
8	1-323385	4	Knob-3 Prong	48	1-303314	8	Spacer-Caster
9	1-809020	2	Pin	49	1-323529	2	Tube-Spindle, Short ▲
10	3296-29	1	Nut-Nyloc 5/16-18	50	321-4	2	Screw-HH 1/4-20 X 3/4
11	323-8	8	Screw-HH 3/8-16 X 1 1/2	51	1-303514	4	Bearing-Flanged
12	3290-357	16	Nut-Whizlock 3/8-16	52	1-323339	2	Washer
13	1-323748	1	Ring-Push On	53	1-403183	2	Sheave
14	98-5975	9	Washer-Spring Disc 3/8	54	3219-6	2	Nut-Hex 5/8-18
15	1-808280	1	Pin-Clevis 5/16 X 1 49/64	55	1-800861	2	Screw-Cap, HH
16	1-303105	1	Yoke-Adjustable	56	1-807267	2	Key-Machine 1/4 X 3/16 X 1 1/4
17	1-806003	3	Hairpin-Cotter	57	1-323539	8	Spacer-Blade Drive
18	32151-103	1	E-Ring	58	1-513208	2	Washer-Spring Disc 5/8
19	702809	1	Screw-HH	59	1-303434	1	Bushing-Engagement
20	103-6584	2	Blade, Notched	60	1-303348	1	Eyebolt-Thread, LH
20	103-6582	2	Blade, Mulching ■	61	1-303236	1	Body-Turnbuckle
20	103-6580	2	Blade, Low Lift	62	1-303238	1	Eyebolt-Thread, RH
20	103-1578	2	Blade, Solid	63	1-322235	1	Arm-Assist
20	116-5176	2	Blade, Extreme (36 )	64	322-10	1	Screw-HH 5/16-18 X 2
21	1-513338	2	Washer	65	1-323303	1	Linkage-Arm
22	3253-7	2	Washer-Lock 1/2	66	103-1238	2	Asm , Caster/Mount Complete
23	3217-9	2	Nut-Hex 1/2-13	67	1-302203	2	Support ASM
24	325-20	2	Screw-HH 1/2-13 X 6	68	1-302194-01	2	Support-Caster
25	1-303352	1	Washer-Spindle	69	1-303334	9	Washer-Spring Disc 5/16
26	32120-35	1	E-Ring	70	1-324372	1	Pad And Spring ASM
27	1-323733	1	Drive Belt (To Blades) 36 Model	71	103-1330	2	Guard-Bearing Top ▲
28	3246-18	2	Setscrew-5/16-18 X 3/8 ●	72	3256-3	1	Washer-5/16 Std
29	322-6	9	Screw-HH 5/16-18 X 1 1/4	73	1-323715	1	Rod-Brake
30	3256-23	1	Washer-5/16 Sae	74	1-323071	1	Spring-Extension
31	1-303537	2	Stud-Shield, Belt (Short)	75	1-323747	1	Spring-Compression
32	1-303536	2	Stud-Shield, Belt (Long)	76	1-323746	1	Spacer-Flanged
33	116-2706	1	Shield (1-302213-01) W/Decals	77	3296-42	2	Nut-Nyloc 1/4-20
34	1-323417	4	Washer-Belt Shield	78	1-513547	2	Spacer
35	1-322145-01	2	Fork	79	103-2171	2	Kit, Tire & Wheel Asm W/ Spacer
36	103-1236	2	Asm, Caster Wheel Assembly	80	1-513809	1	Bearing
37	109-5151	1	Deflector-Discharge	81	1-513810	4	Bushing-Flanged
38	3296-56	1	Nut-Nyloc 1/4-20 Thin	82	116-0962	1	Spring, Torsion
39	1-323729	2	Sleeve-Bearing	83	116-3515	1	Screw,HH Special 5/16-18 X 1.25
40	323-4	8	Screw-HH 3/8-16 X 3/4				

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

■ Requires installation of mulch kit for proper mulching. See your Exmark dealer for details.

▲ Apply Mobil HTS grease (P/N 103-5217 1.5 oz packet) (or a food-grade anti-seize). See operator s manual for locations.

# Engine Deck Assembly



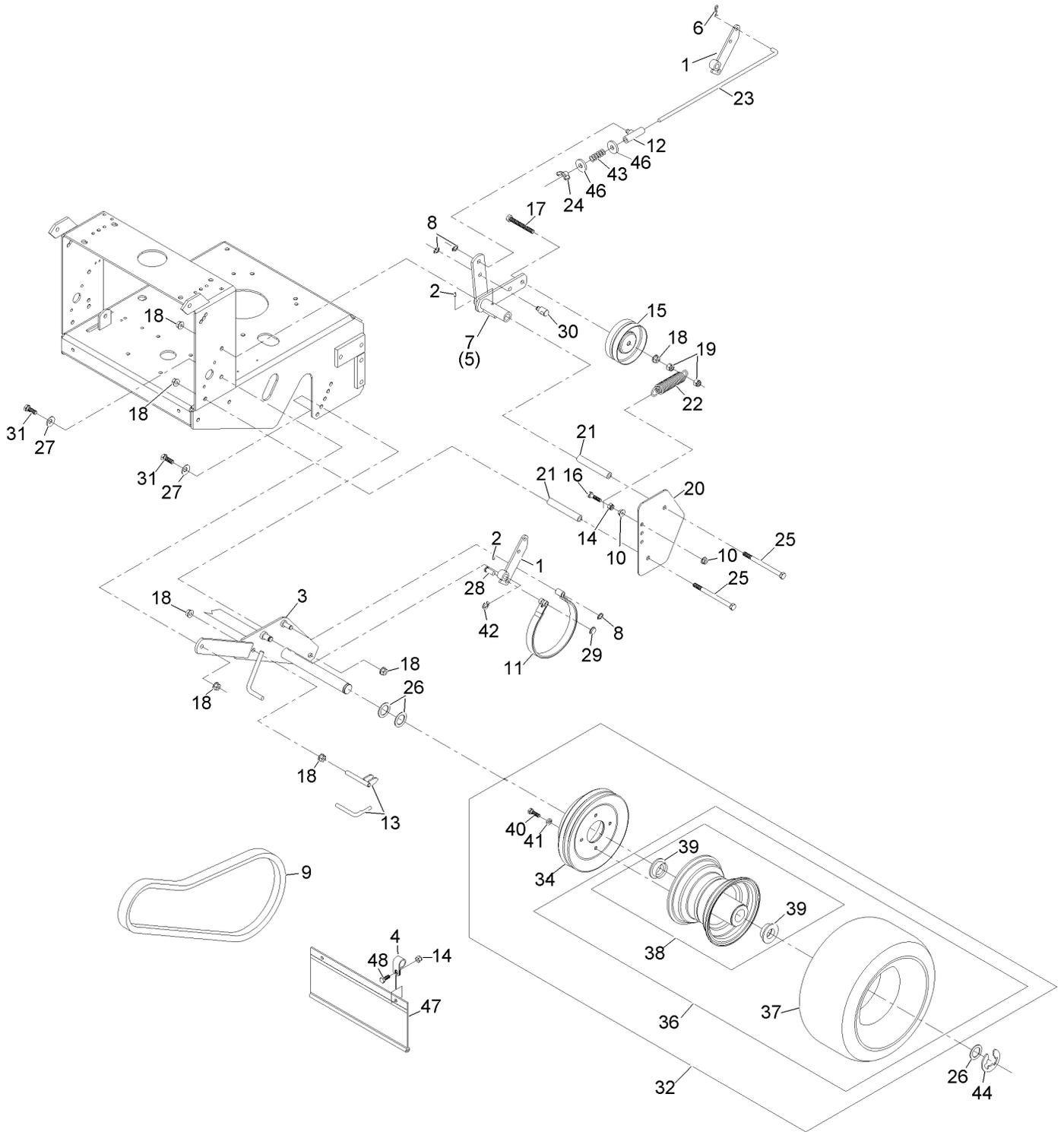
## Engine Deck Assembly (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	116-6131	1	Rear Deck (116-6084-01) W/Decals	29	1-633453	1	Spacer-Clutch
2	1-323500	1	Transmission	30	1-603610	2	Washer-Spring
3	1-324340	2	Asm, Coupling, W/Guard And Zerk	31	9264964	4	Screw-HWH, Thread Cut
4	1-323502	2	Shaft-Transmission	32	1-303186	1	Bellcrank
5	103-2587	1	Adapter	33	1-323278	1	Sheave-Transmission ●
6	1-323252	2	Bearing-Shaft ●	34	1-323379	1	Washer
7	1-323254	2	Flange-Output	35	98-5975	5	Washer-Belleville
8	103-6511	2	Sheave-Transmission ●	36	3296-6	1	Nut-Lock
9	32151-62	2	Ring-Retaining	37	3257-5	3	Key-Woodruff
10	1-805005	4	Washer-Lock	38	1-303282	1	Switch-Start, Neutral
11	1-373034	1	Washer	39	3231-6	1	Screw-CARR
12	3245-41	2	Screw-HSH ■	40	3256-5	2	Washer-Flat
13	1-323280	1	Belt, Transmission	41	1-323285	1	Pulley-Idler, Flat
14	3290-357	3	Nut-HHF, Whiz	42	3256-24	1	Washer-Flat
15	3296-39	1	Nut-Lock, NI	43	321-3	4	Screw-HH
16	103-3498	1	Shifter Plate (1-323387-03) W/Decals	44	3296-42	4	Nut-Lock, NI
17	1-323389-03	2	Bracket-Plate, Shift	45	1-603403	1	Bolt-Shoulder
18	3230-1	2	Bolt-CARR	46	116-3702	1	Screw-HH ■
19	32128-20	2	Nut-HF	47	1-513051	1	Switch-Open, Normally
20	51-4220	2	Guard-Coupler	48	322-3	4	Screw-HH
21	103-1666	1	Sheave-Transmission ●	49	3290-500	2	Screw-PPH
22	103-1668	1	Sheave ●	50	1-633181	1	Plate-Tapped
23	103-4177	1	Key	51	103-1606	1	Asm Shift Lever, W/Grip
24	302-19	2	Fitting-Grease	53	114-3550	4	Washer-Lock, Spring
25	103-1733	1	Grip	54	114-3549	4	Nut
26	323-7	4	Screw-HH	55	1-653313	2	Gasket-Exhaust
27	323-13	1	Screw-HH	56	116-3734	1	Muffler (32 & 36 )
28	3246-18	2	Setscrew ■	57	104-8301	4	Nut-Flange, NI
				58	116-6278-03	1	Guard-Muffler
				59	323-6	4	Screw-HH

● Apply anti-seize compound in bore.

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

# Engine Deck Assembly (cont.)

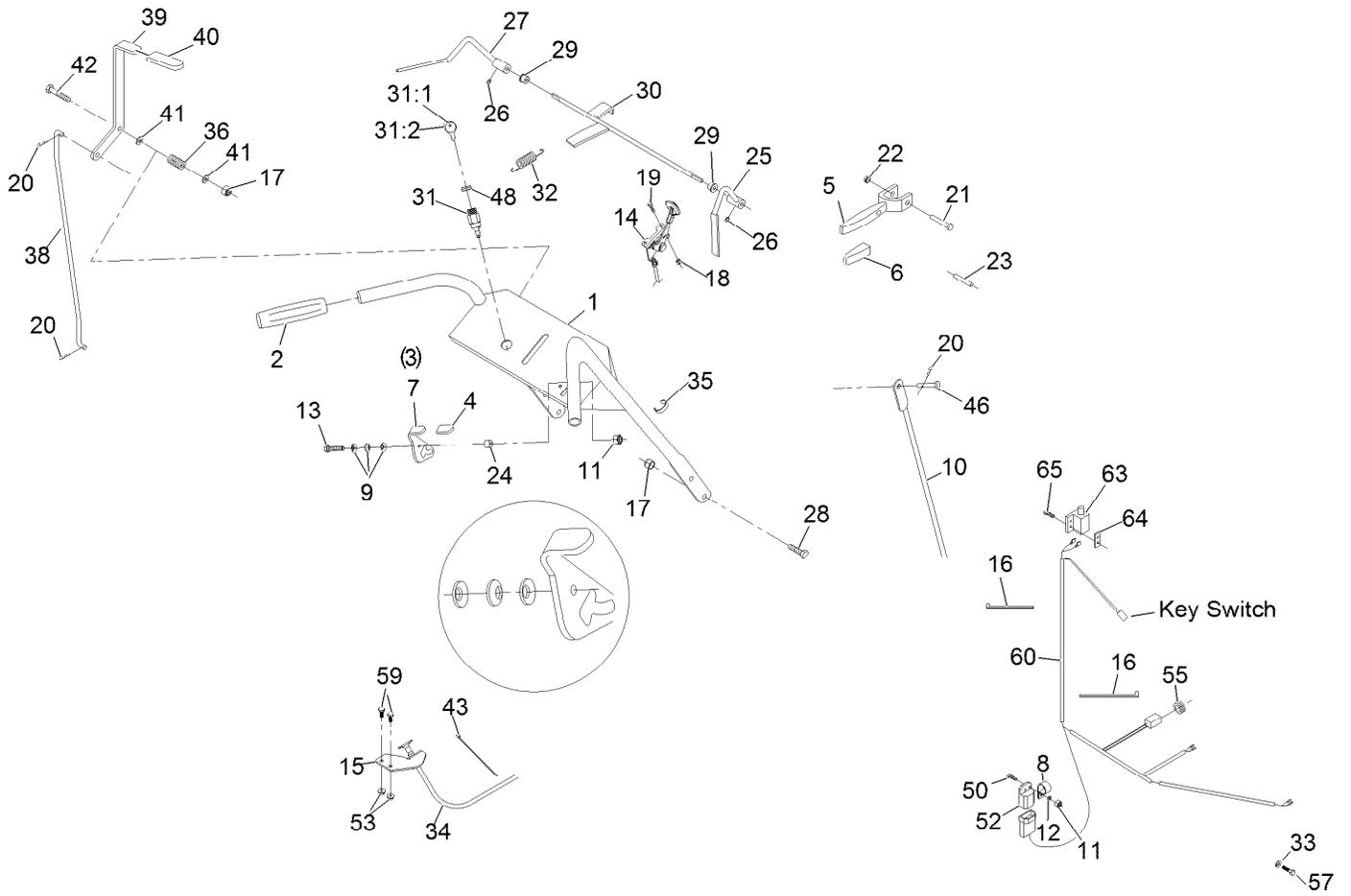


## Engine Deck Assembly (cont.) (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	103-1611-03	2	Arm-Brake	24	1-513959	2	Wingnut-Nyloc 5/16
2	302-19	4	Zerk-1/4-28 Str	25	323-39	4	Screw-HH 3/8-16 X 5
3	1-322117-03	1	Axle	26	1-523157	1	Washer ●
4	2412-104	2	Clamp-R	26	1-543436	1	Washer-Spacer ●
5	103-1615-03	1	Arm-Idler, LH	27	98-5975	4	Washer-Spring Disc 3/8
6	1-806003	2	Hairpin-Cotter	28	1-323307	2	Pin-Clevis 1/2 X 1
7	103-1616-03	1	Arm-Idler, RH	29	1-803051	2	Nut-Push 3/8
8	32151-47	6	Ring-Retaining	30	103-1864	2	Swivel-Lever, Drive
9	1-323288	2	Belt, Wheel Drive (36"&48" Models)	31	323-6	4	Screw-HH 3/8-16 X 1
10	32128-20	4	Nut-Whizlock 5/16-18	32	109-4721	2	Asm, Wheel Drive (36"&48" Models)
11	1-323262	2	Band-Brake	34	109-4359	2	Drum And Sheave ASM
12	110-5866	2	Swivel-Brake	36	1-323719	2	Wheel And Tire ASM
13	1-412358	2	Scraper	37	1-323720	1	Tire-Turfmaster
14	3296-29	4	Nut-Nyloc 5/16-18	38	1-323328	1	Wheel And Hub ASM
15	1-323277	2	Idler-Wheel, Drive	39	1-323329	4	Bearing-Flanged
16	322-6	2	Screw-HH 5/16-18 X 1 1/4	40	322-5	8	Screw-HH 5/16-18 X 1
17	99-8664	2	Bolt-HH 3/8-16 X 3 Tap	41	1-805005	8	Washer-Lock 5/16 Heavy
18	3290-357	14	Nut-Whizlock 3/8-16	42	32120-47	2	Ring-Retaining
19	3296-39	4	Nut-Nyloc 3/8-16	43	1-323245	2	Spring-Compression
20	1-323287-01	2	Shield-Wheel, Drive	44	1-808519	2	Ring-Snap
21	1-323283	4	Spacer-Shield	46	3256-23	4	Washer-5/16 Sae
22	1-603402	2	Spring-Extension	47	98-3259	1	Shield-Trailing
23	1-323548	2	Linkage-Brake	48	322-3	2	Screw-HH 5/16-18 X 3/4

● QTY As Required

# Pistol Grip Upper Handle and Controls



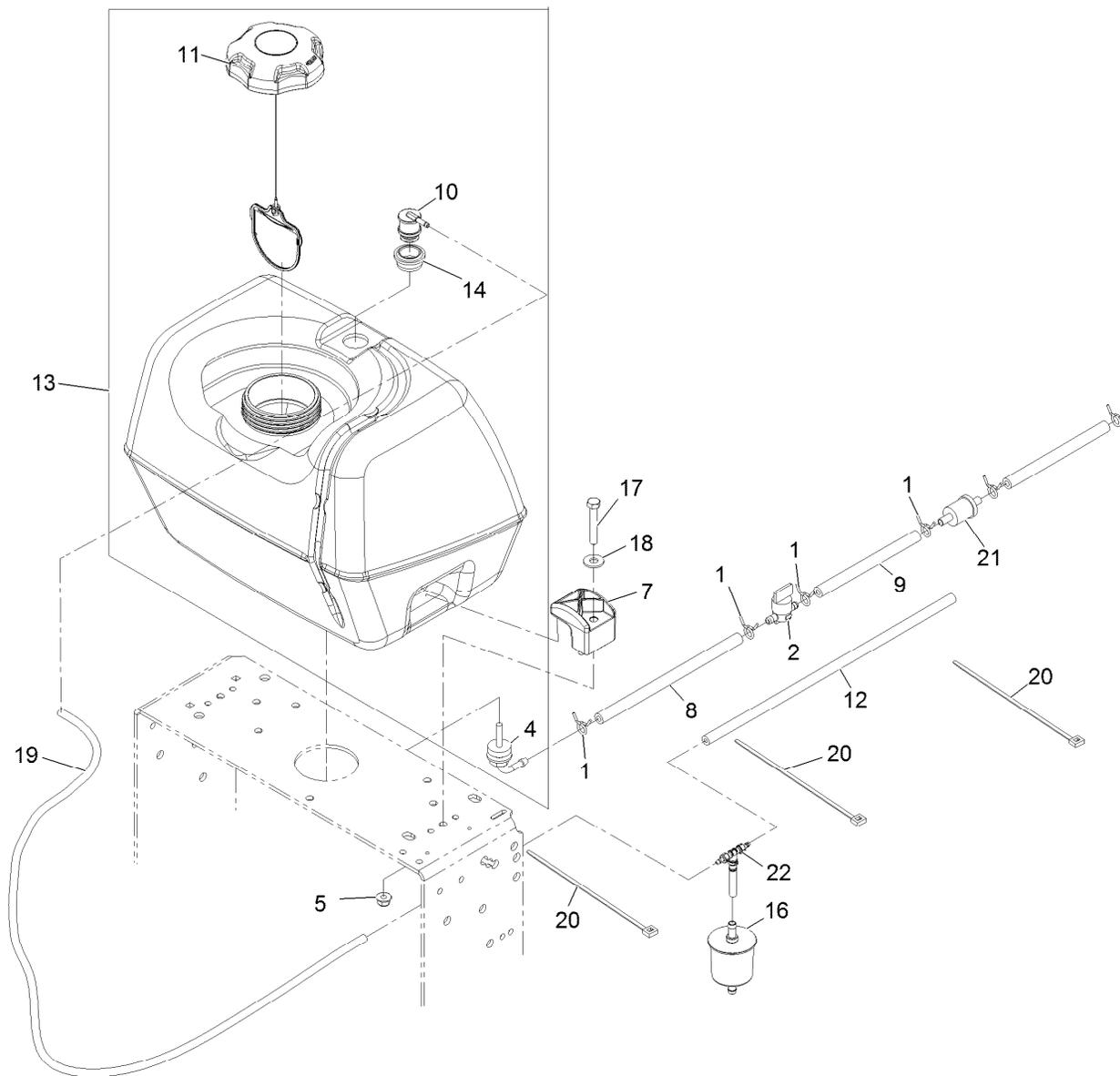
## Pistol Grip Upper Handle and Controls (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	109-4695	1	Kit, Handle (109-4682-03) W/Decals	29	1-303365	2	Bushing-Nylon
2	1-303097	2	Grip-Handle	30	1-322192-03	1	Rod, Connecting
3	1-324279	1	LH Thumb Latch ASM ●	31	1-403121	1	Switch-Key
4	1-303019	2	Grip-Latch	31:1	1-603511	1	Key-Ignition
5	1-302006	2	Drive Lever ASM	31:2	103-2106	1	Key-Exmark Logo
6	1-303021	2	Grip-Lever, Drive	32	1-303363	1	Spring-Extension
7	1-324280	1	RH Thumb Latch ASM	33	33094-00	1	Washer
8	1-323229	1	Clip-Loom 3/8	34	103-1796	1	Cable-Choke
9	1-303435	6	Washer-Spring Disc 1/4	35	1-303088	1	Clip-Cable
10	1-323359	2	Linkage-Wheel, Drive	36	1-303160	1	Spring-Compression
11	3296-42	3	Nut-Nyloc 1/4-20	38	1-323298	1	Linkage-Blade, Upper
12	3256-22	1	Washer-1/4 Sae	39	116-6331	1	Asm-Lever W/Grip
13	321-18	2	Screw-HH 1/4-20 X 2 1/4	40	1-303020	1	Grip-Lever
14	116-2426	1	Cable, Throttle	41	3256-4	2	Washer-3/8 Std
15	103-1797-01	1	Bracket-Cable, Choke	42	323-10	1	Screw-HH 3/8-16 X 2
16	1-303287	5	Tie-Cable 5 1/2 (Small)	43	1-303335	1	Tie-Cable 7 15/16 (Large)
17	3296-39	5	Nut-Nyloc 3/8-16	46	1-808286	2	Pin-Clevis
18	3296-2	2	Nut-Nyloc #10-24	48	103-0498	1	Nut-Ignition
19	1-807513	2	Bolt-Carriage #10-24 X 1/2	50	321-4	1	Screw-HH 1/4-20 X 3/4
20	1-806003	4	Hairpin-Cotter	52	1-323430	1	Module-Interlock
21	1-808250	2	Pin-Lever, Drive	53	32128-33	2	Nut-Whizlock 1/4-20
22	1-803001	2	Nut	55	1-543296	1	Grommet
23	1-806340	2	Pin-Roll	57	33114-016	1	Screw-HH M8-1.25 X 16Mm
24	1-323549	2	Spacer	59	321-3	2	Screw-HH 1/4-20 X 5/8
25	1-412185-03	1	Lever-RH ▲	60	116-2661	1	Harness-Wire
26	1-803322	2	Setscrew-5/16-24 X 5/16 ■	63	1-513051	1	Switch-N.O.
27	1-412183-03	1	Lever-LH ▲	64	1-633181	1	Plate-Tapped
28	323-6	4	Screw-HH 3/8-16 X 1	65	3290-500	2	Screw-PPH #10-24 X 5/8

● Not illustrated

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

▲ Use Pro-Lock retaining type, Part no. 1-840023 (.5cc tube) on inside of bore of OPC hub.



## Fuel Tank Assembly

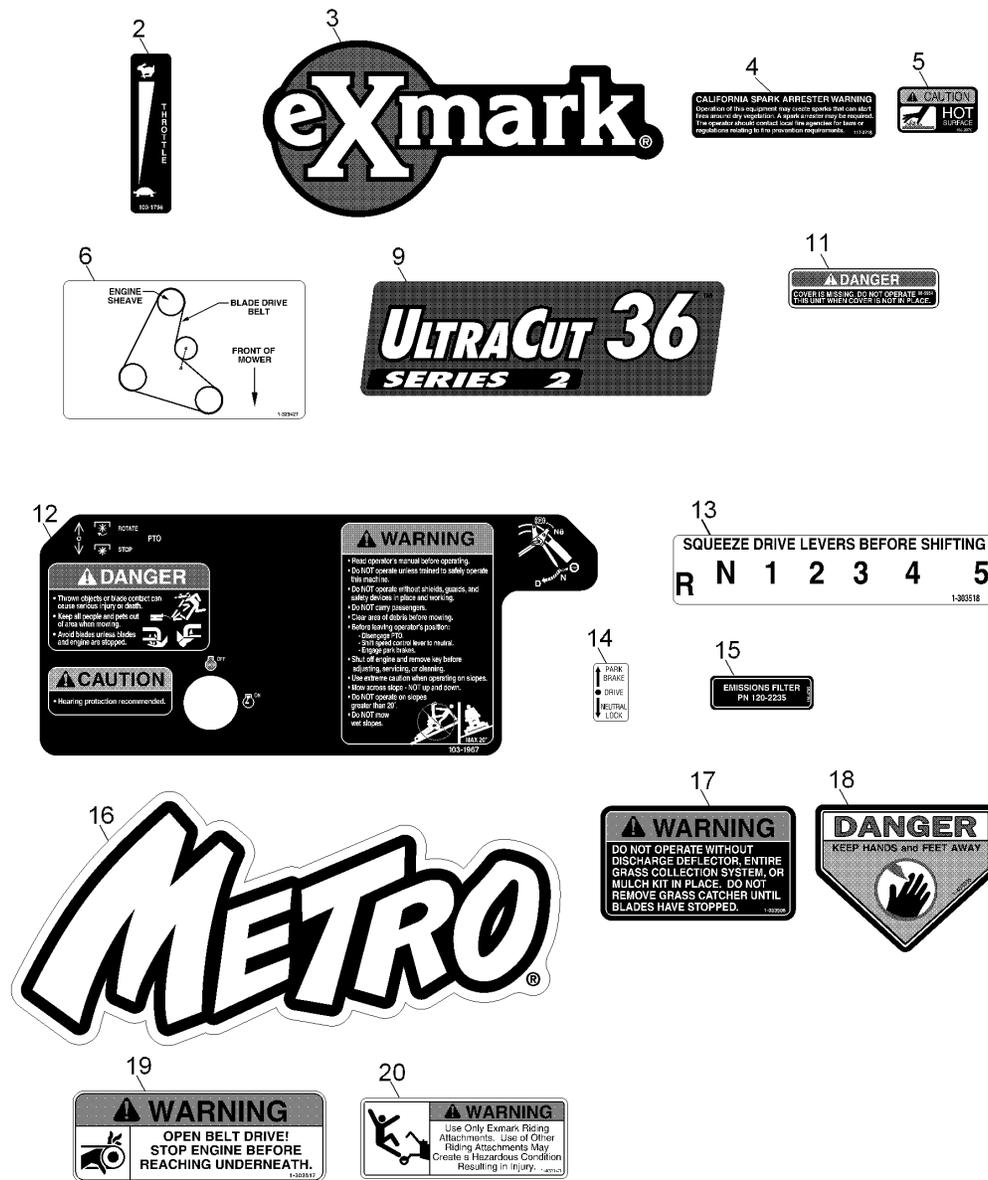
Ref.	Part Number	Qty.	Description
1	2412-98	4	Clamp-Hose
2	1-603770	1	Valve-Fuel
4	103-2605	1	Fitting-Fuel Bulkhead W/Strainer ▲
5	104-8300	2	Nut-Nyloc 5/16-18 Fig
7	107-4543	2	Clamp
8	109-0650	1	Hose-Fuel
9	99-9415	1	Hose-Fuel
10	114-0285	1	Valve-Rollover
11	120-5461	1	Cap-Fuel, Ratcheting
12	115-7872	1	Hose-Fuel

Ref.	Part Number	Qty.	Description
13	116-3656	1	Asm-Fuel Tank
14	114-0284	1	Grommet
16	120-2235	1	Filter-Air
17	322-10	2	Screw-HH 5/16-18 X 2
18	3256-3	2	Washer-5/16 Std
19	116-4346	1	Hose-Emissions
20	1-303335	3	Tie-Cable 7 15/16 (Large)
21		1	Pn 41019-1055 Filter W/6In Fuel Line ■●
22	116-5464	1	ASM, Tee And Check

● Not serviced separately

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

■ Obtain parts from [www.kawpowerpc.com](http://www.kawpowerpc.com)



## Decals

Ref.	Part Number	Qty.	Description
2	103-1798	1	Decal, Throttle
3	103-2882	1	Decal, Exmark Logo
4	117-2718	1	Decal-Arrester, Spark
5	103-2076	1	Decal-Caution
6	1-323427	1	Decal, Belt Routing
9	116-4694	1	Decal-Ultracut 36 Series 2
11	98-5954	1	Decal-Cover, Missing
12	103-1967	1	Decal, Console
13	1-303518	1	Decal, Shifter

Ref.	Part Number	Qty.	Description
14	1-323550	2	Decal, Neutral/Brake
15	116-4769	1	Decal-Filter, Emissions
16	103-2920	1	Decal, Metro Model
17	1-303508	1	Decal-Warning, Discharge
18	1-403005	1	Decal-Danger
19	1-303517	1	Decal, Belt Drive
20	1-403143	1	Decal, Sulky Warning
99	103-2640	1	Decal, Kit ●

● Not illustrated

**Notes:**

# EXMARK® MAINTENANCE

## MAXIMIZE THE PERFORMANCE OF YOUR EXMARK.

### **4-CYCLE PREMIUM ENGINE OIL**

Part No. 116-3373

Both SAE 30 and SAE 10W-30 in one bottle.

Contains increased levels of zinc and phosphorus for better lubricity.

No Viscosity Index Improvers that tend to shear down in high heat.

Synthetic formulation.

Gas & Diesel compatible.

Anti-corrosion additives.

API 'SL' and JASO rated with wet clutch compatibility for other machines.

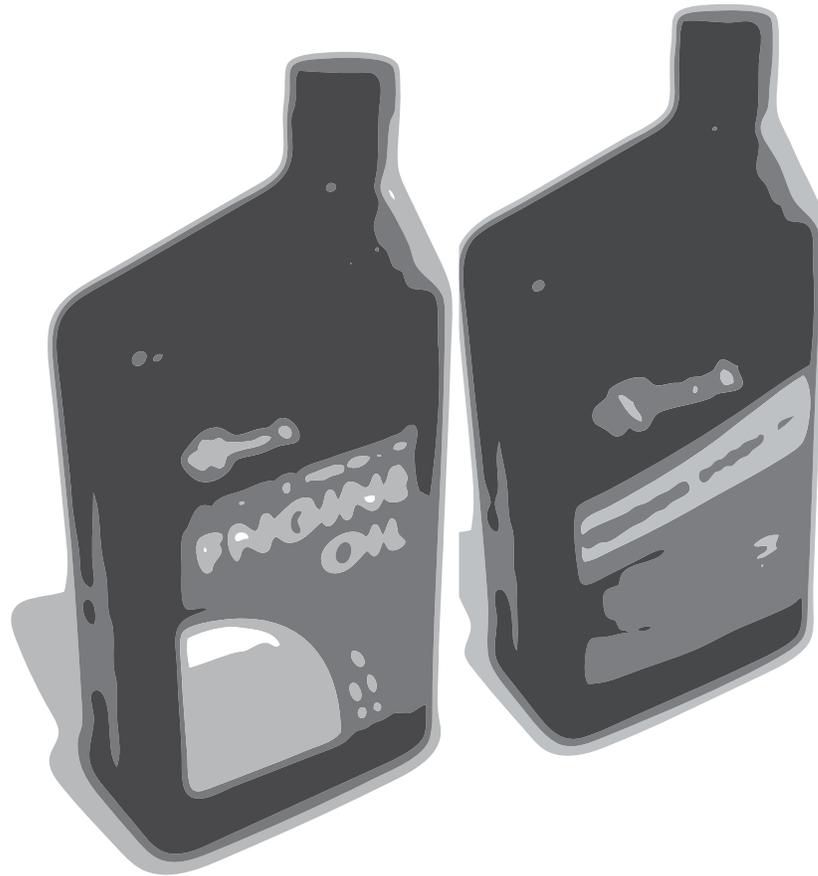
### **PREMIUM HYDRO OIL**

Part No. 109-9828

Commercial quality for tough, high-heat conditions.

Designed specifically for zero-turn mower hydraulic systems.

Superior shear resistance under heavy loads.



Available from your local Exmark dealer. Find your closest dealer at [exmark.com](http://exmark.com)

## EXMARK ACCESSORIES AND OPTIONS\*

### MID-MOUNT RIDING ACCESSORIES AND OPTIONS

CUSTOM RIDE SEAT SUSPENSION SYSTEM	OPERATOR CONTROLLED DISCHARGE
FULL SUSPENSION SEAT	SUN SHADE
DECK LIFT ASSIST KIT	TRASH CONTAINER
HITCH KIT	TURF STRIPER
LIGHT KIT	ULTRA VAC COLLECTION SYSTEM
12V POWER PORT	ULTRA VAC QUICK DISPOSAL SYSTEM
MICRO-MULCH SYSTEM	

### OUT-FRONT RIDING ACCESSORIES AND OPTIONS

CUSTOM RIDE SEAT SUSPENSION SYSTEM	SNOW BLADE
DUAL-TAIL WHEEL	SNOWBLOWER
FLOOR PAN EXTENDER	SUN SHADE
HITCH KIT	TRASH CONTAINER
LIGHT KIT	ULTRA VAC COLLECTION SYSTEM
MICRO-MULCH SYSTEM	ULTRA VAC QUICK DISPOSAL SYSTEM
ROLL OVER PROTECTION SYSTEM (ROPS)	WEATHER CAB

### WALK-BEHIND ACCESSORIES AND OPTIONS

GRASS CATCHER	TURF STRIPER
MICRO-MULCH SYSTEM	STANDON

\*Some accessories and options not available for some models.

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

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Engine Model No. and Spec. No. \_\_\_\_\_

Engine Serial No. (E/No) \_\_\_\_\_

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