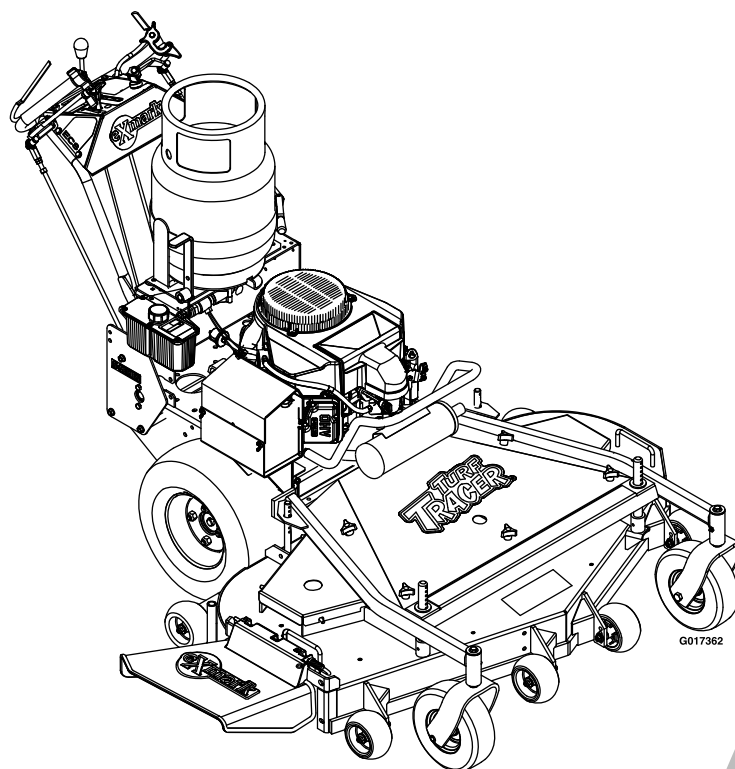




# **TURF TRACER® S-SERIES LP**

**Model No. TTS600PKAE483—Serial No. 31200000 and Up**

Picture below may not reflect actual product.



# Parts Manual

Part No. 4501-051 Rev. A

# 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).

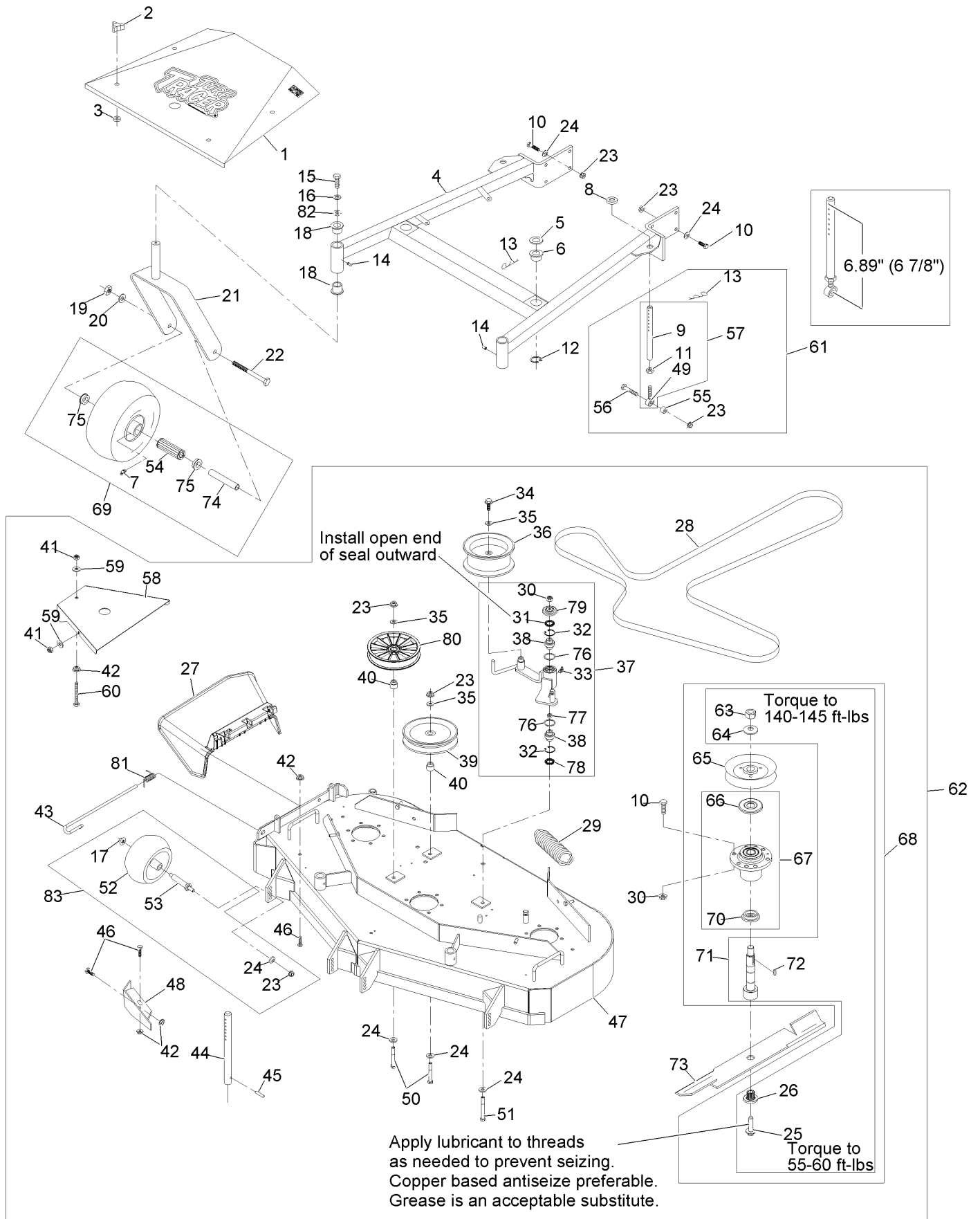


If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

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# Mower Deck Assembly



## Mower Deck Assembly (continued)

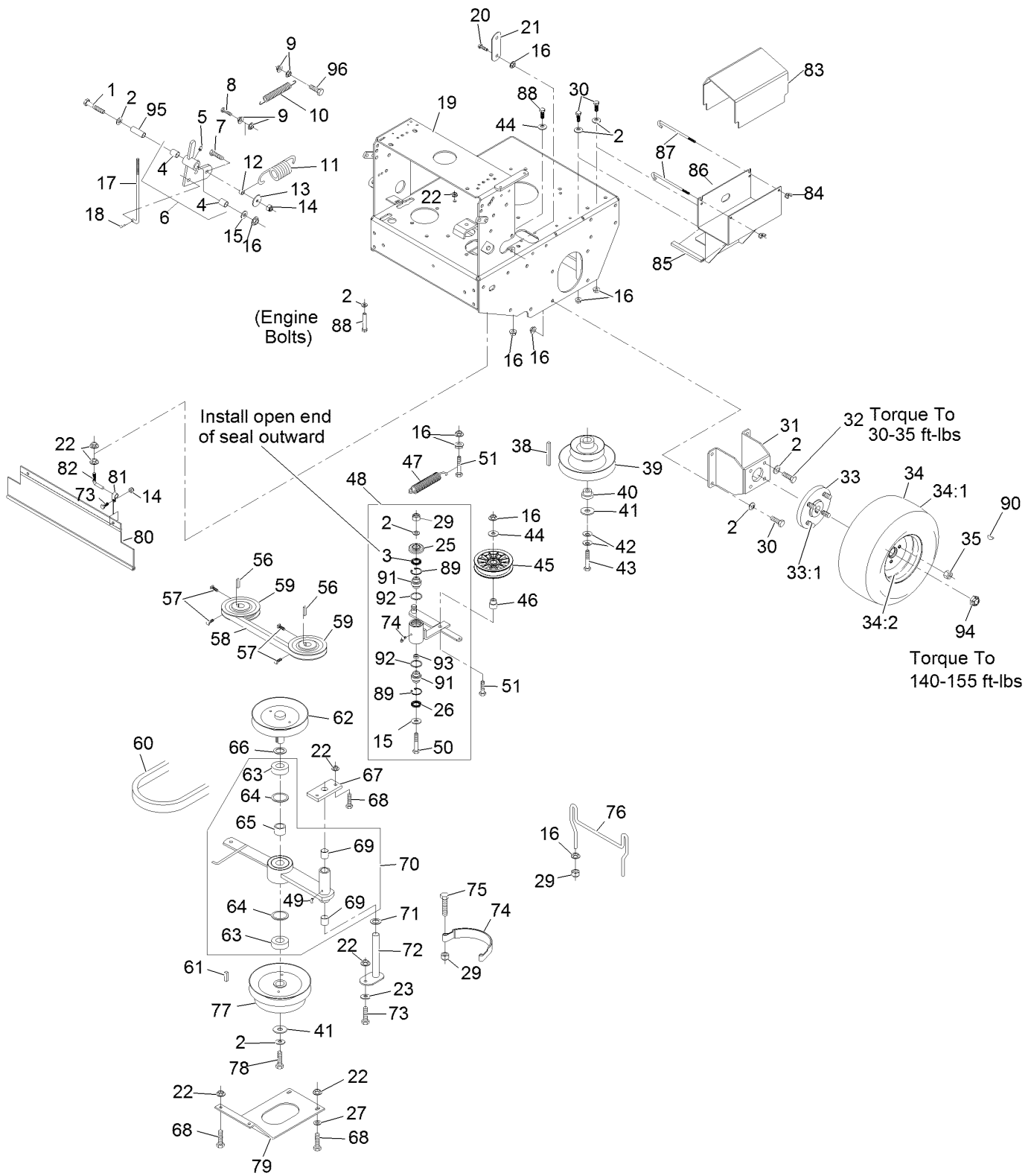
<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	116-2711	1	Shield, Belt (1-413101-01) W/Decals	47	1-414384	1	Wld, Deck (116-2457-01) W/Decals, Discharge Baffle & Support Rods
2	1-323385	4	Knob-3 Prong	48	116-2297-01	1	Baffle, Discharge
3	1-323417	4	Washer-Belt Shield	49	1-613204	2	Balljoint
4	1-414310	1	Wld, Support (1-412110-01) W/Bushings & Decals	50	323-13	2	Screw-HH 3/8-16 X 2 3/4
5	1-413425	2	Spacer	51	98-5961	1	Screw-HH 3/8-16 X 4 Gr8
6	1-513336	2	Bushing-Deck	52	1-603299	4	Roller-Scalp, Anti
7	302-61	2	Zerk-45° 1/4-28	53	99-2842	4	Spacer
8	1-323539	2	Spacer-Blade Drive	54	1-513809	2	Bearing
9	1-413525	2	Link, Rear Deck Support	55	1-603050	2	Spacer
10	323-7	26	Screw-HH 3/8-16 X 1 1/4	56	323-9	2	Screw-HH 3/8-16 X 1 3/4
11	3220-3	2	Nut-Jam 3/8-24	57	1-414521	2	Link, Assembly
12	32120-33	2	Ring-Retaining	58	103-2970-01	2	Shield, Belt
13	1-806009	4	Hairpin-Cotter #206	59	3256-3	6	Washer-5/16 Std
14	302-52	2	Zerk-1/8-27 Str	60	1-800017	2	Bolt-HH 5/16-18 X 3 1/4 Tap
15	323-6	2	Screw-HH 3/8-16 X 1	61	1-411532	2	Kit, Support Link W/Pin
16	3253-5	2	Washer-Lock 3/8 Heavy	62	103-0321	1	Asm, Deck Complete
17	109-6658	4	Nut-Nyloc 3/8-16 Flg	63	3217-46	3	Nut-Hex 3/4-16 Heavy
18	1-303514	4	Bearing-Flanged	64	103-2802	3	Washer-Spring Disc 3/4
19	3217-9	2	Nut-Hex 1/2-13	65	1-413424	3	Sheave W/ Hub ▲
20	3253-7	2	Washer-Lock 1/2	66	103-1330	3	Guard-Bearing Top ▲
21	1-522143-01	2	Wld, Caster	67	103-8280	3	Kit, Cutter Housing
22	325-20	2	Screw-HH 1/2-13 X 6	68	103-9081	3	Asm, Cutter Housing Complete
23	3290-357	13	Nut-Whizlock 3/8-16	69	103-2171	2	Kit, Tire & Wheel Asm W/ Spacer
24	98-5975	15	Washer-Spring Disc 3/8	70	103-2535	3	Spacer-Guard Bottom
25	109-9220	3	Screw-Sems 1/2-20 X 2.19	71	103-9071	3	Kit, Spindle ▲
26	103-3037	3	Bushing,Splined	72	1-807268	3	Key-Machine 1/4 X 3/16 X 1
27	109-5151	1	Deflector-Discharge	73	103-6401	3	Blade-Notched ■
28	1-413093	1	Belt - V, B	73	103-6391	3	Blade, Mulch 16.25 (.94 Hole)
29	103-3330	1	Spring-Extension	73	103-6386	3	Blade, Low Lift 16.25 (.94 Hole)
30	3296-39	19	Nut-Nyloc 3/8-16	73	103-6381	3	Blade, Solid 16.25 (.94 Hole)
31	103-3506	1	Seal-Single Lip	73	116-5177	3	Blade-Extreme 2, 16.25"
32	32120-10	2	Ring-Retaining	74	1-513547	2	Spacer
33	302-40	1	Zerk-90° 1/4-28	75	1-513810	4	Bushing-Flanged
34	3234-11	1	Screw-HH Flg 3/8-16 X 1	76	106-7159	2	O-Ring
35	3256-24	3	Washer-3/8 Sae	77	103-5677	1	Spacer
36	1-413099	1	Pulley-Idler	78	103-3505	1	Seal-Double Lip
37	103-8585	1	Kit, Idler Arm (103-7356-03) W/Brgs ●	79	103-2916	1	Guard-Top
38	103-3504	2	Bearing-Spherical	80	109-0977	1	Pulley,Idler 5"
39	1-613098	1	Pulley-Idler	81	116-0962	1	Spring, Torsion
40	1-413113	2	Bushing-Idler	82	1-373034	2	Washer
41	3296-29	6	Nut-Nyloc 5/16-18	83	103-4051	1	Kit,Anti-Scalp Roller
42	32128-20	3	Nut-Whizlock 5/16-18				
43	109-8854	1	Pin-Chute				
44	1-603001	2	Rod, Deck Support				
45	1-806332	2	Rollpin 1/4 X 1 1/2				
46	322-2	3	Screw-HH 5/16-18 X 5/8				

● Assembly also includes Washer and Screw

■ 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



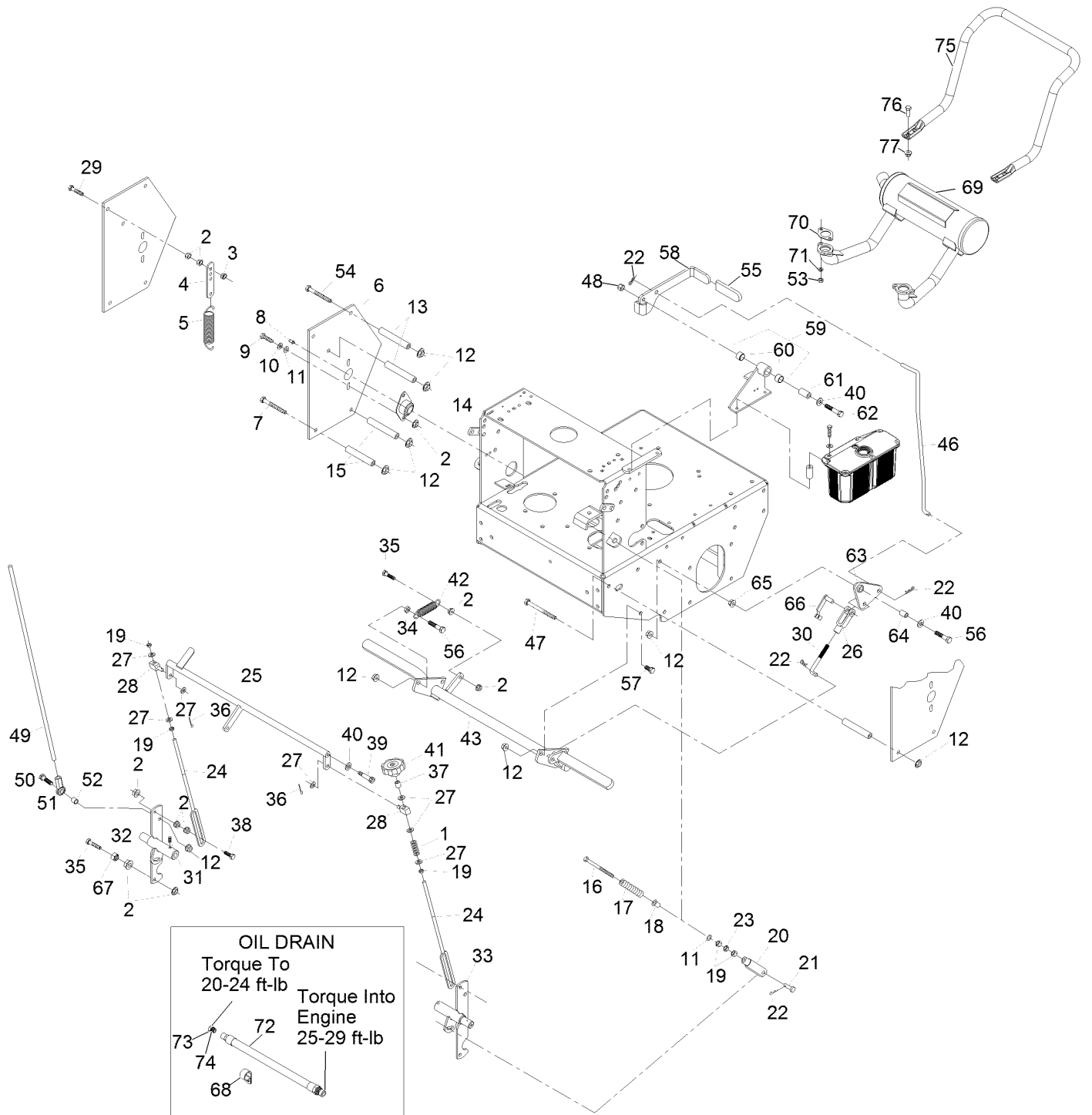
## Engine Deck Assembly (continued)

<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	323-11	1	Screw-HH 3/8-16 X 2 1/4	47	103-8599	1	Spring, Extension
2	98-5975	26	Washer-Spring Disc 3/8	48	109-1296	1	Kit, Idler Arm (109-1208-03) W/Brgs
3	103-3506	1	Seal-Single Lip	49	1481	2	Zerk-45° 1/4-28
4	1-513034	2	Sleeve-Bearing	50	98-5961	1	Screw-HH 3/8-16 X 4 Gr8
5	302-19	1	Zerk-1/4-28 Str	51	323-9	2	Screw-HH 3/8-16 X 1 3/4
6	1-414143	1	Asm, Bellcrank (1-412285-03) W/Brgs	56	1-807272	2	Key-5Mm X 5Mm X 25Mm
7	322-6	1	Screw-HH 5/16-18 X 1 1/4	57	1-803050	4	Setscrew-5/16-18 X 3/4 ■
8	321-6	1	Screw-HH 1/4-20 X 1	58	109-1057	1	Belt, Pump Drive
9	32128-33	4	Nut-Whizlock 1/4-20	59	1-413010	2	Sheave ASM ●
10	1-523498	1	Spring, Motion Control	60	103-6317	1	Belt, Blade Clutch
11	103-7398	1	Spring, Belt Tension	61	1-807259	1	Key-Machine 1/4 X 1/4 X 1
12	1-543007	1	Spacer	62	103-6308	1	Sheave W/Shaft ●
13	1-213069	1	Washer	63	1-413111	2	Bearing, Clutch ●
14	3296-29	3	Nut-Nyloc 5/16-18	64	32120-8	2	Ring-Retaining
15	3256-4	2	Washer-3/8 Std	65	1-413012	1	Spacer, Bearing
16	3290-357	17	Nut-Whizlock 3/8-16	66	1-523157	1	Washer
17	1-413282	1	Linkage	67	1-413049-01	1	Plate, Clutch Pivot
18	1-806003	1	Hairpin-Cotter	68	322-5	6	Screw-HH 5/16-18 X 1
19	116-6129	1	Asm, Deck (116-6080-01) W/Decals	69	1-413207	2	Pivot, Bearing
20	323-4	2	Screw-HH 3/8-16 X 3/4	70	1-414418	1	Asm, Clutch Arm (1-412417-03) W/Bearings
21	1-633068	1	Arm-Lift, Deck	71	1-413235	1	Washer, Spacer
22	32128-20	11	Nut-Whizlock 5/16-18	72	1-412138-03	1	Wld, Pivot Pin
23	1-303334	1	Washer-Spring Disc 5/16	73	322-3	3	Screw-HH 5/16-18 X 3/4
25	103-2916	1	Guard-Top	74	1-413062	1	Band, Brake
26	103-3505	1	Seal-Double Lip	75	323-8	2	Screw-HH 3/8-16 X 1 1/2
27	3256-3	2	Washer-5/16 Std	76	103-6310	1	Wld, Belt Guide
29	3296-39	5	Nut-Nyloc 3/8-16	77	1-412028	1	Sheave W/Drum ●
30	323-6	10	Screw-HH 3/8-16 X 1	78	1-800521	1	Screw-HH 3/8-24 X 1 ■
31	1-412082-01	2	Mount, Wheel Motor (48& 52)	79	1-413009-01	1	Plate, Guard
32	323-6	8	Screw-HH 3/8-16 X 1	80	103-2056	1	Shield-Drag
33	112-9049	2	Wheel Hub ASM	81	1-413510	2	Clip-Loom
33:1	1-633926	8	Stud-Wheel	82	1-413511	2	Hanger, Drag Shield
34	1-613263	2	Wheel And Tire ASM	83	1-543891	1	Battery, Cover
34:1	1-613264	2	Tire-Turfmaster	84	1-543792	2	Wingnut-Nyloc 1/4-20
34:2	1-603715	2	Wheel-Rim	85	1-413541	1	Trim-Lok, 1/8 X 5
35	242-50	8	Nut-Lug 1/2-20	86	103-1098	1	Stand W/ Trim-Lok
38	1-807264	1	Key-Machine 1/4 X 1/4 X 2 5/8	87	1-543882	2	Bolt, Hold Down
39	103-6309	1	Asm, Drive Sheave ●	88	323-7	5	Screw-HH 3/8-16 X 1 1/4
40	1-603609	1	Bushing	89	32120-10	2	Ring-Retaining
41	1-373034	2	Washer	90	1-807019	2	Key-Woodruff 1 X 1/4
42	1-603610	2	Washer-Spring Disc 7/16	91	103-3504	2	Bearing-Spherical
43	3212-10	1	Screw-HH 7/16-20 X 2 1/2 ■	92	106-7159	2	O-Ring
44	3256-24	2	Washer-3/8 Sae	93	103-5677	1	Spacer
45	109-4077	1	Pulley-Idler, Flat	94	116-2839	2	Nut-Lock
46	1-603496	1	Bushing-Idler	95	1-603044	1	Bushing
				96	321-8	1	Screw-HH 1/4-20 X 1 1/4

● Apply anti-seize compound in bore.

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

# Engine Deck Assembly (cont.)





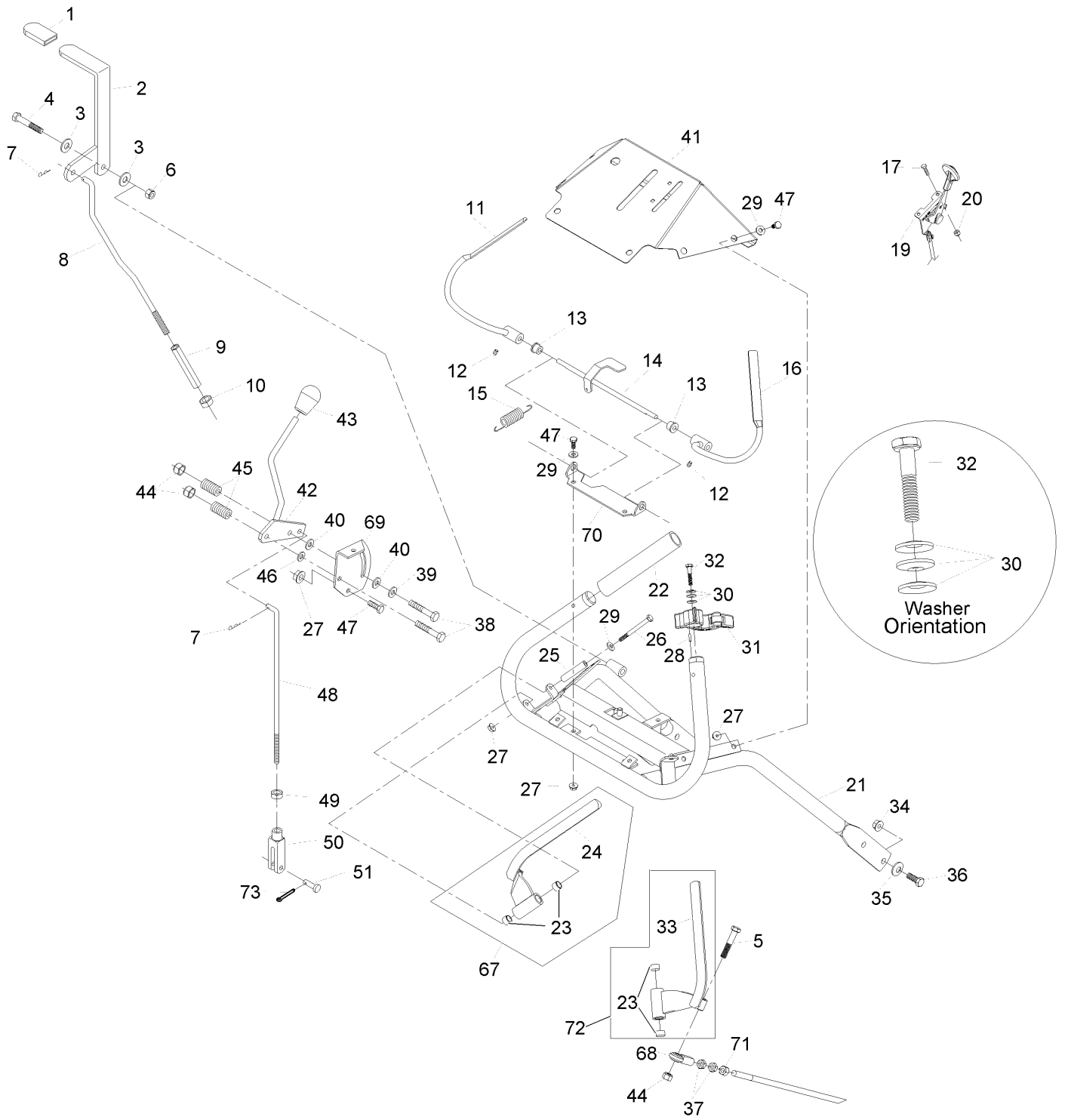
## Engine Deck Assembly (cont.) (continued)

<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	1-323245	1	Spring-Compression	40	3256-24	4	Washer-3/8 Sae
2	32128-20	20	Nut-Whizlock 5/16-18	41	103-3060	1	Knob-Tracking
3	3296-29	2	Nut-Nyloc 5/16-18	42	1-323161	1	Spring
4	1-613089	2	Tab-Spring, Extension	43	103-2004-03	1	Brake
5	1-603693	2	Spring	46	1-413492	1	Linkage, Upper Brake
6	110-4897-01	2	Shield-Control	47	323-16	1	Screw-HH 3/8-16 X 4
7	323-16	6	Screw-HH 3/8-16 X 4	48	3296-39	1	Nut-Nyloc 3/8-16
8	302-19	2	Zerk-1/4-28 Str	49	103-1148	2	Rod, Drive Lever
9	322-3	4	Screw-HH 5/16-18 X 3/4	50	323-8	2	Screw-HH 3/8-16 X 1 1/2
10	1-805005	4	Washer-Lock 5/16 Heavy	51	103-1167	2	Joint-Ball End, .38X.38Fe LH
11	3256-2	6	Washer-1/4 Std	52	103-1166	2	Spacer-Tube, Pump Link
12	3290-357	15	Nut-Whizlock 3/8-16	53	114-3549	4	Nut-M8
13	1-323195-01	4	Spacer-Shield	54	323-23	1	Screw-HH 3/8-16 X 4-1/2
14	1-633102	2	Bearing-Flanged	55	1-303020	1	Grip-Lever
15	1-323197-01	4	Spacer-Shield	56	323-9	2	Screw-HH 3/8-16 X 1 3/4
16	1-603737	2	Bolt-Neutral Return	57	323-4	3	Screw-HH 3/8-16 X 3/4
17	103-0265	2	Spring, Neutral Return	58	103-3495	1	Lever, Brake W/Decal & Grip
18	1-603735	2	Bushing-Flanged	59	1-414504	1	Bracket ASM
19	3219-2	7	Nut-Hex 5/16-24	60	1-413347	2	Sleeve-Bushing
20	1-303105	2	Yoke-Adjustable	61	1-413344	1	Bushing-Pivot
21	1-808280	2	Pin-Clevis 5/16 X 1 49/64	62	323-10	1	Screw-HH 3/8-16 X 2
22	1-806003	5	Hairpin-Cotter	63	1-414508	1	Bellcrank ASM
23	3220-2	2	Nut-Jam 5/16-24	64	1-303548	1	Bushing-Plastic
24	1-413350	2	Link-Control, Speed	65	32128-21	1	Nut-3/8-16 Flanged Side Lock
25	1-412203-01	1	Crank-Control, Speed	66	103-2399	1	Pin-Clevis Spring 3/8
26	1-633131	1	Yoke-Linkage, Brake	67	3218-2	2	Nut-Jam 5/16-18
27	3256-23	7	Washer-5/16 Sae	68	1-643312	1	Clip-Loom
28	1-603676	2	Swivel-Adjustable, Short	69	116-3735	1	Muffler
29	1-800016	2	Bolt-HH 5/16-18 X 1 1/4 Tap	70	1-653313	2	Gasket-Exhaust
30	1-413489	1	Linkage-Lower	71	114-3550	4	Washer-Lock, Spring
31	1-803022	2	Setscrew-5/16-18 X 5/8 ■	72	116-5052	1	Asm-Oil Drain Hose W/Plug ●
32	103-1190-01	1	Shaft-Control, LH	73	353-508	1	Plug-W/O-Ring
33	103-4796-01	1	Shaft-Control, RH	74	237-42	1	O-Ring
34	3218-3	1	Nut-Jam 3/8-16	75	116-6278-03	1	Guard-Muffler
35	116-3515	3	Screw,HH Special 5/16-18 X 1.25	76	323-6	4	Screw-HH 3/8-16 X 1
36	3272-5	2	Pin-Cotter 3/32 X 1/2	77	104-8301	4	Nut-Nyloc 3/8-16 Flg
37	1-603903	1	Spacer				
38	1-403180	2	Screw-HH 5/16-18 X 1 1/4 Sp				
39	1-809056	2	Screw-Sh 5/16-18 X 1 3/8 ■				

● Use a Teflon Pipe Sealant or equivalent on threads.

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

# ECS Upper Handles and Controls Assembly

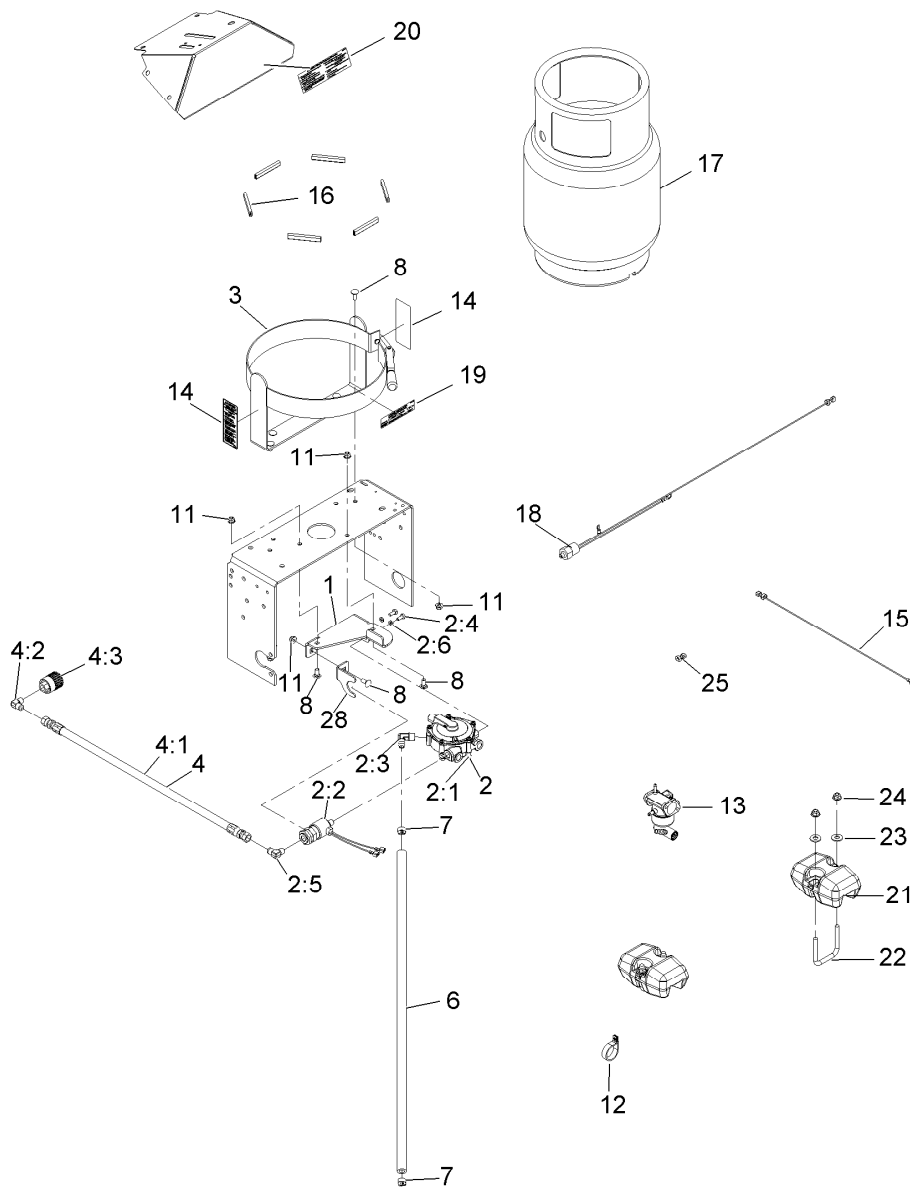


## ECS Upper Handles and Controls Assembly (continued)

<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	1-303020	1	Grip-Lever	31	103-1372	1	Thumb Latch Asm LH(Not Shown)
2	116-6334	1	Asm, Lever (116-1736-03) W/Grip	32	103-0235	2	Screw-HH 1/4-20 X 1 1/8 W/Nylon ●
3	3256-4	2	Washer-3/8 Std	33	116-4082-03	1	Lever, Drive (RH)
4	323-11	1	Screw-HH 3/8-16 X 2 1/4	34	3290-357	4	Nut-Whizlock 3/8-16
5	322-9	2	Screw-HH 5/16-18 X 1 3/4	35	98-5975	4	Washer-Spring Disc 3/8
6	3296-39	1	Nut-Nyloc 3/8-16	36	323-6	4	Screw-HH 3/8-16 X 1
7	1-806003	2	Hairpin-Cotter	37	3220-3	4	Nut-Jam 3/8-24
8	103-1149	1	Link, Blade Engagement	38	322-10	2	Screw-HH 5/16-18 X 2
9	1-413279	1	Turnbuckle	39	1-603716	1	Washer-Friction Disc
10	3217-7	1	Nut-Hex 3/8-16	40	1-323244	2	Washer-Friction
11	116-4079	1	Wld, Lever, Opc (LH) ■	41	109-4650	1	Asm, Console (109-4649-03)W/ Decals
12	1-803322	2	Setscrew-5/16-24 X 5/16 ●	42	116-4083	1	Wld, Speed Shift
13	1-303365	2	Bushing-Nylon	43	103-0423	1	Knob-Nyloc 3/8-16
14	103-0769-03	1	Wld, Opc Axle Lever	44	3296-29	4	Nut-Nyloc 5/16-18
15	1-303363	1	Spring-Extension	45	1-323245	2	Spring-Compression
16	116-4080	1	Wld, Opc Lever (RH) ■	46	3256-23	1	Washer-5/16 Sae
17	1-807513	2	Bolt-Carriage #10-24 X 1/2	47	321-3	8	Screw-HH 1/4-20 X 5/8
19	116-2426	1	Cable, Throttle	48	1-413225	1	Rod, Speed Control
20	3296-2	3	Nut-Nyloc #10-24	49	3220-2	1	Nut-Jam 5/16-24
21	103-0770-03	1	Wld, Handle	50	1-303105	1	Yoke-Adjustable
22	103-0815	2	Grip-Bar, Handle	51	1-808280	1	Pin-Clevis 5/16 X 1 49/64
23	1-413152	4	Bushing-Sleeve	67	103-2513	1	Asm, Drive Lever RH
24	116-4081-03	1	Lever, Drive (LH)	68	103-2463	2	Balljoint
25	103-0027	2	Bushing-Lever, Drive	69	103-0503	1	Bracket, Shifter Slide
26	321-14	2	Screw-HH 1/4-20 X 2 3/4	70	103-0489-03	1	Bracket, Opc Axle
27	32128-33	10	Nut-Whizlock 1/4-20	71	3219-3	2	Nut-Hex 3/8-24
28	103-0464	2	Pin-Spring 1/8 X 1/2	72	103-2514	1	Asm, Drive Lever LH
29	3256-22	10	Washer-1/4 Sae	73	3272-5	1	Pin-Cotter 3/32 X 1/2
30	1-303435	6	Washer-Spring Disc 1/4				
31	103-1371	1	Thumb Latch Asm RH(Shown)				

● 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.

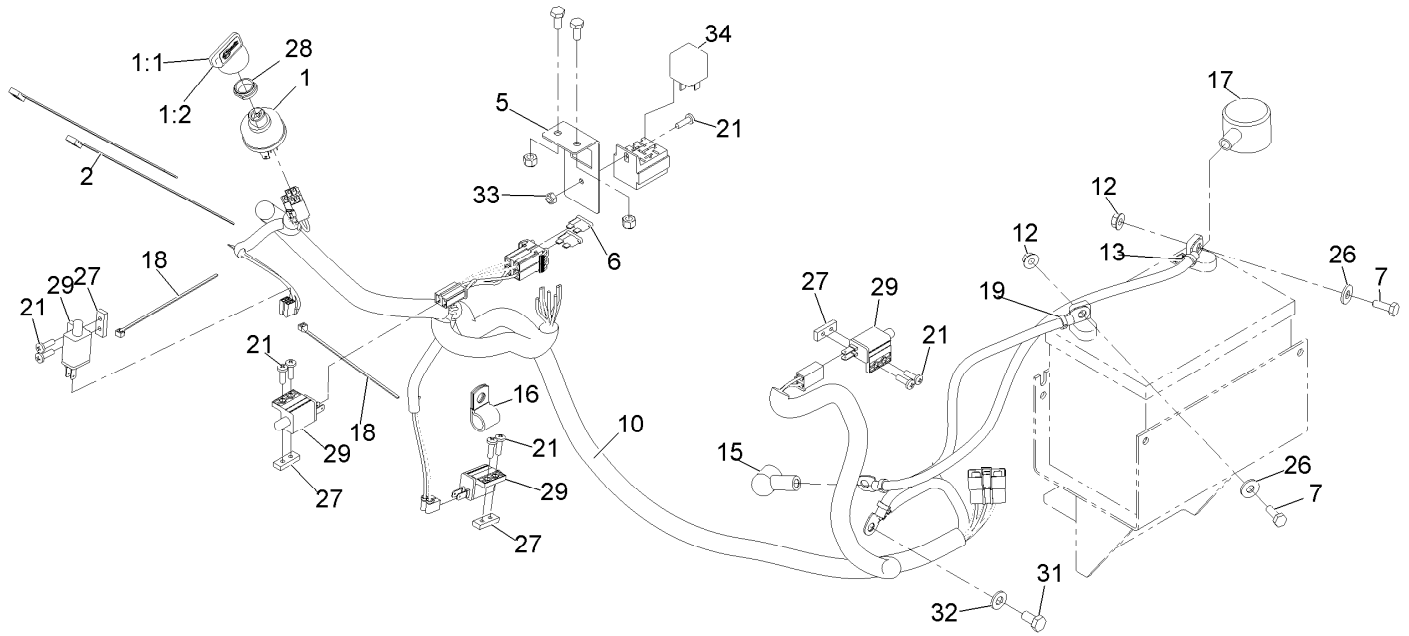


## Fuel Assembly

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	116-3749-03	1	Bracket, Tank Locator	12	103-0113	1	Clip-Loom
2		1	Asm, Reg And Shutoff ■	13	116-3540	1	Carburetor, Lpg
2:1	116-2567	1	Regulator-LP, T60	14	109-9875	2	Decal,Lpg Warning
2:2	116-1288	1	Asm, Lpg Fuel Shutoff W/ Terminals	15	116-1291	1	Asm, Wire 20
2:3	116-1127	1	Elbow-90°	16	105-7699	6	Strip-Seal
2:4	321-3	2	Screw-HH 1/4-20 X 5/8	17	109-9675	1	Tank, Lpg 20 Lb Vertical
2:5	116-1116	1	Elbow-90°	18	116-2842	1	Oil Pressure Switch ASM
2:6	1-805004	2	Washer-Lock 1/4 Heavy	19	109-9870	1	Decal-Lpg Tank Spec
3	116-1099	1	Bracket, Lpg Tank Vertical	20	109-9906	1	Decal-Tank Replacement
4		1	Asm, Lpg Fuel Hose ■	21	103-2455-01	2	Weight, Caster Support
4:1	116-1087	1	Hose, Lpg	22	103-2469	2	U-Bolt
4:2	116-1116	1	Elbow-90°	23	3256-4	4	Washer-3/8 Std
4:3	116-1073	1	Connector, Lpg Tank	24	104-8301	4	Nut-Nyloc 3/8-16 Flg
6	116-4115	1	Hose, Lpg 3/8 X 33In	25	32170-061	1	Recept, Fem, .250, Insul.
7	97-1271	2	Clamp-Hose	26	116-1457	1	Washer, Rubber Lpg Connector ●
8	3230-1	7	Bolt-Carriage 5/16-18 X 3/4	27	116-1456	1	O-Ring, Lpg Connector ●
11	104-8300	7	Nut-Nyloc 5/16-18 Flg	28	116-3750-03	1	Solenoid-Support

● Not illustrated

■ Not serviced separately



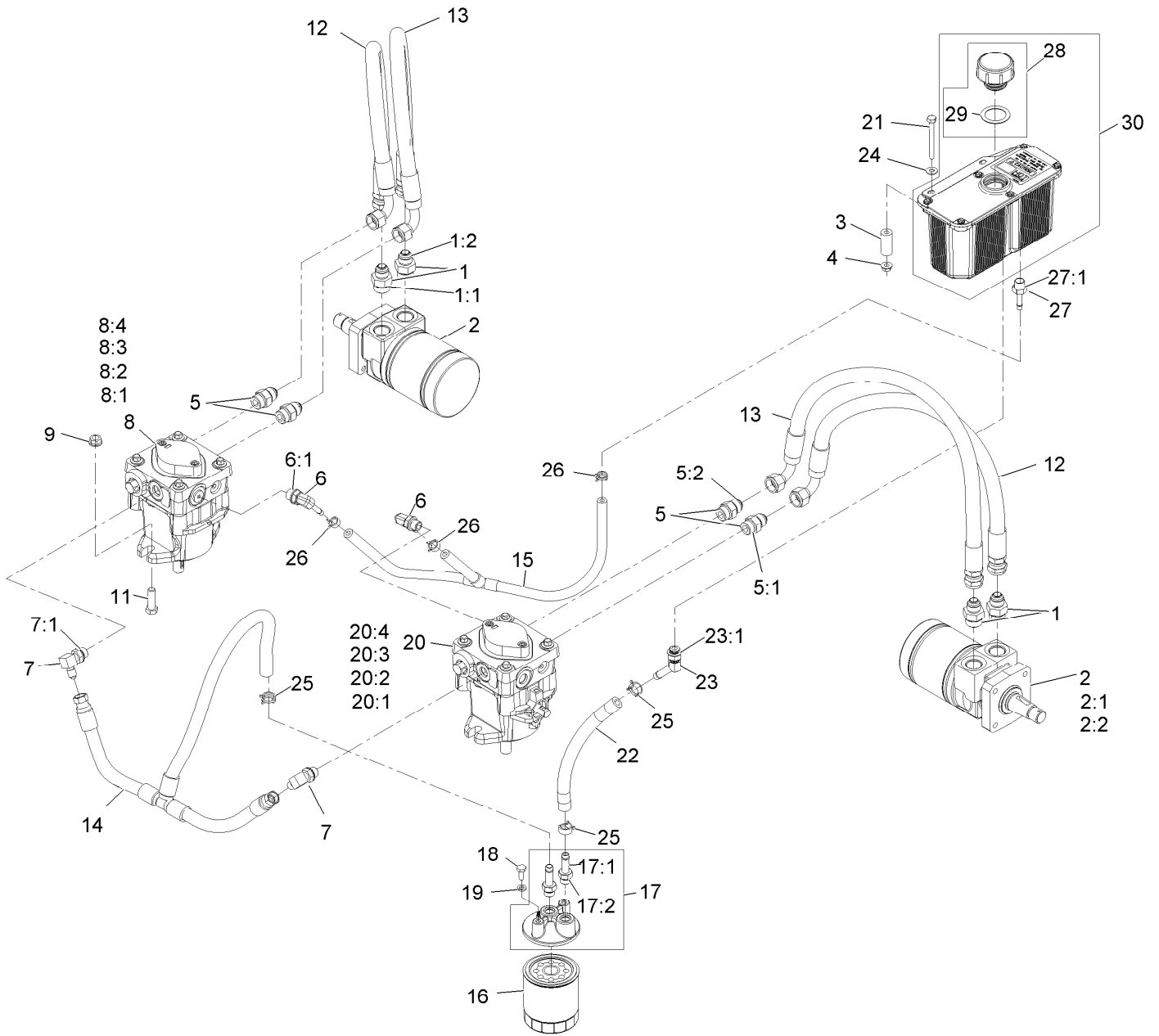
## Electrical Assembly

Ref.	Part Number	Qty.	Description
1	103-0206	1	Switch-Ignition W/Keys
1:1	1-603511	1	Key-Ignition
1:2	103-2106	1	Key-Exmark Logo
2	1-303335	2	Tie-Cable 7 15/16 (Large)
5	116-2738-01	1	Bracket, Fuse
6	1-816001	2	Fuse-Blade Type, 20 Amp
7	321-4	5	Screw-HH 1/4-20 X 3/4
10	116-2560	1	Harness, Wiring ●
12	32128-33	2	Nut-Whizlock 1/4-20
13	109-7628	1	Cable, Battery +
15	1-543393	1	Insulator-Solenoid
16	1-603727	1	Clip-Loom

Ref.	Part Number	Qty.	Description
17	109-2407	1	Insulator-Battery
18	1-303287	2	Tie-Cable 5 1/2 (Small)
19	1-413540	1	Cable-Battery, Negative
21	3290-500	9	Screw-PPH #10-24 X 5/8
26	3256-2	2	Washer-1/4 Std
27	1-633181	4	Plate-Tapped
28	103-0498	1	Nut-Ignition
29	1-513051	4	Switch-N.O.
31	33114-016	1	Screw-HH M8-1.25 X 16Mm
32	33094-00	1	Washer
33	3296-2	1	Nut-Nyloc #10-24
34	1-643275	1	Relay-12Vdc 40 Amp

● Use dielectric grease on all unsealed connectors and terminals only. Do not apply in sealed connectors.

# Hydraulic Assembly



## Hydraulic 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	1-603991	4	Adapter-Straight	16	109-4180	1	Filter,25 Micron
1:1	1-603919	1	O-Ring-Sae #10				Bi-Directional
1:2	1-603992	1	O-Ring-37 Flare #8	16	1-523541	1	Element, Oil Filter(Winter)●
2	1-603718	2	HYD Motor ASM	17	103-2889	1	Filter Head ASM
2:1	1-000138	1	Bearing And Seal Kit	17:1	103-1912	2	Adapter-Straight
2:2	1-000119	1	Seal Kit	17:2	1-603921	1	O-Ring-Sae #6
3	103-2191	2	Spacer	18	321-3	2	Screw-HH 1/4-20 X 5/8
4	32128-33	2	Nut-Whizlock 1/4-20	19	1-805004	2	Washer-Lock 1/4 Heavy
5	1-603990	4	Adapter-Straight	20	116-0943	1	RH HYD Pump ASM
5:1	1-603920	1	O-Ring-Sae #8	20:1	103-2664	1	Input Shaft Kit
5:2	1-603992	1	O-Ring-37 Flare #8	20:2	94-6922	1	Bearing-Thrust
6	103-1799	2	Elbow-90 DEG	20:3	103-2666	1	Cylinder Block Kit
6:1	1-603921	1	O-Ring-Sae #6	20:4	105-6184	1	Seal Overhaul Kit
7	103-1802	2	Fitting-HYD, 90 DEG	21	321-15	2	Screw-HH
7:1	1-603921	1	O-Ring-Sae #6	22	103-2959	1	Hose-Charge
8	116-0942	1	LH HYD Pump ASM	23	103-1807	1	Fitting-Barbed, 45 DEG
8:1	103-2664	1	Input Shaft Kit	23:1	1-603921	1	O-Ring-Sae #6
8:2	94-6922	1	Bearing-Thrust	24	3256-22	2	Washer-1/4 Sae
8:3	103-2666	1	Cylinder Block Kit	25	103-1988	3	Clamp-Hose 11/16
8:4	105-6184	1	Seal Overhaul Kit	26	103-1716	3	Clamp-Hose 17/32
9	32128-43	4	Nut-Whizlock 3/8-16	27	103-1801	1	Adapter-Straight
11	323-7	4	Screw-HH 3/8-16 X 1 1/4	27:1	1-603921	1	O-Ring-Sae #6
12	1-613034	2	Hose-Pressure, High	28	103-7615	1	Asm, Cap W/Gasket
13	1-323241	2	Hose-Pressure, High	29	103-1949	1	Gasket-Cap
14	116-2123	1	Charge Hose ASM	30	103-1947	1	HYD Reservoir ASM
15	116-0918	1	Case Drain Hose ASM				

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

# Decals

**1** ECS ENHANCED CONTROL SYSTEM logo (left)

**2** ECS ENHANCED CONTROL SYSTEM logo (right)

**4** Lubricate Blade Bolt threads with copper based anti-seize or grease and torque to 55-90 Ft-lbs (75-81 N-m) 1001141

**5** **WARNING**  
DO NOT OPERATE WITHOUT DISCHARGE DEFLECTOR, ENTIRE GRASS COLLECTION SYSTEM, OR MULCH KIT IN PLACE. DO NOT REMOVE GRASS CATCHER UNTIL BLADES HAVE STOPPED. 1003105

**6** TENSION INDICATOR  
CHECK HOURLY FOR THE FIRST 4 HRS. CHECK DAILY THEREAFTER. ALIGN BOLT WITH TENSION INDICATOR 1/16". 1-41901

**7** ENDGATE PARK BRAKE RELEASE 1001170

**9** ONLY USE EXMARK HYDRO OIL. FILL TO TOP OF BAFFLE. **CAUTION** HOT SURFACE 1001170

**10** TURF TRACER logo

**11** ENDGATE PARK BRAKE RELEASE 1001170

**12** exmark logo

**13** **WARNING**  
OPEN BELT DRIVE! STOP ENGINE BEFORE REACHING UNDERNEATH. 1-383317

**14** Control panel decal with **WARNING** text: Read operator's manual before operating. Do NOT operate unless trained to safely operate this machine. Do NOT operate without shields, guards, and safety devices in place and working. Do NOT carry passengers. Clear area of debris before running. Before leaving operator's position - Lock drive levers in end lock position. - Disengage PTO. - Shift speed control lever to neutral. - Engage park brake. Shut off engine and remove key before refueling, servicing, or cleaning. Use extreme caution when operating on slopes. Do NOT operate on a slope greater than 25°. Never mow slopes. NOT up and down. Do NOT mow wet slopes. 1001170

**15** **CAUTION** HOT SURFACE 1001170

**16** TRACKING LEVER 1001170

**17** **WARNING**  
DISengage BLADE CLUTCH, SHUT OFF ENGINE AND REMOVE KEY BEFORE MAKING ADJUSTMENTS, SERVICING OR CLEANING DECK. CUTTING HEIGHT ADJUSTMENT. DECK SUPPORT PIN. 1-32249

**19** ULTRACUT 48 SERIES 3 logo

**17** ANTI-SCALP ROLLER ADJUSTMENT. FOR NORMAL OPERATING CONDITIONS, PLACE ROLLERS IN POSITIONS SHOWN FOR 3 1/2" (91 mm) GROUND CLEARANCE. CUTTING HEIGHT (INCHES/CM). FOR MAXIMUM FLOTATION, ROLLERS MAY BE POSITIONED LOWER, BUT MUST MAINTAIN A MINIMUM OF 1" (2.5 cm) GROUND CLEARANCE. NEVER POSITION THE ROLLERS TO SUPPORT TOWARD DECK. 1-32249

**21** **WARNING**  
Use Only Exmark Hiding Attachments. Use of Other Hiding Attachments May Create a Hazardous Condition Resulting in Injury. 1-32249

**22** CALIFORNIA SPARK ARRESTER WARNING. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for rules or regulations relating to fire prevention requirements. 117121

**23** DRIVE WHEEL RELEASE. Use 3/8 wrench. One turn counter-clockwise to release. Do not over tighten. 1004015

**24** **DANGER**  
COVER IS MISSING, DO NOT OPERATE WITH THIS UNIT. WHEEL COVER IS NOT IN PLACE.

**26** STATIONARY IDLERS. FRONT OF MOWER. 4133083 48" 4133083 52". 1-413207

**27** **DANGER**  
KEEP HANDS AND FEET AWAY

**28** S-SERIES logo

**29** IMPORTANT: LPG Fuel Tank Replacement Procedure 100-9870. 1. Stop the engine on a level surface. 2. Close the fuel solenoid on ALL tanks. 3. Shut the engine and battery system off. 4. Disconnect ALL LPG fuel hoses, which include regulator, and remove tanks. 5. Check valve and fittings for leaks or damaged parts. 6. Only use valves and fittings that are rated for propane gas. 7. Install the tank(s) per mounting instructions. 8. Tighten all fittings and connections. 9. Check for leaks. 10. Reconnect fuel hoses. 11. Check for leaks. 12. Only use tanks that are rated for propane gas. 13. Check for leaks.

**30** **DANGER**  
LPG FUEL IS EXTREMELY FLAMMABLE AND WOUNDS ARE POSSIBLE. Do NOT attempt to use this tank unless you are trained and qualified personnel. ONLY use LPG tanks that are marked with the word "PROPANE" and are certified for use in the United States. ONLY use a tank that is ready for use on a propane system. ONLY use a tank that is marked with the word "PROPANE" and is certified for use in the United States. ONLY use a tank that is marked with the word "PROPANE" and is certified for use in the United States. 100-9870

**31** LPG TANK SPECIFICATION. USE EXMARK APPROVED TANK ONLY. MOUNTING: VERTICAL. CAPACITY: 20 LBS. DISCONNECT COUPLING: STAGHNE ENHANCED. WITHDRAWAL: VAPOR. 100-9870



## Decals (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	103-2242	1	Decal, LH Ecs Instruction	17	1-553049	1	Decal-Anti Scalp
2	103-2243	1	Decal, RH Ecs Instruction	19	116-4697	1	Decal-Ultracut 48 Series 3
4	109-3148	1	Decal,Bolt Torque	21	1-403143	1	Decal,Sulky Warning
5	1-303508	1	Decal-Warning, Discharge	22	117-2718	1	Decal-Arrester, Spark
6	1-413421	1	Decal, Indicator	23	103-4935	1	Decal, Drive Wheel Release
7	103-2103	1	Decal-Brake, Park	24	98-5954	3	Decal-Cover, Missing
9	116-0404	1	Decal-Hydraulic Tank	26	1-413327	1	Decal, Belt Routing
10	103-3013	1	Decal-Turf Tracer	27	1-403005	2	Decal-Danger
11	103-1798	1	Decal, Throttle	28	116-3884	2	Decal-S-Series
12	103-2882	1	Decal,Exmark Logo	29	109-9906	1	Decal-Tank Replacement
13	1-303517	1	Decal,Belt Drive	30	109-9875	1	Decal,Lpg Warning
14	103-1976	1	Decal, Ecs Console	31	109-9870	1	Decal-Lpg Tank Spec
15	103-2076	2	Decal-Caution	99	103-2461	1	Decal Kit ●
16	1-413214	1	Decal, Tracking				

● 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.

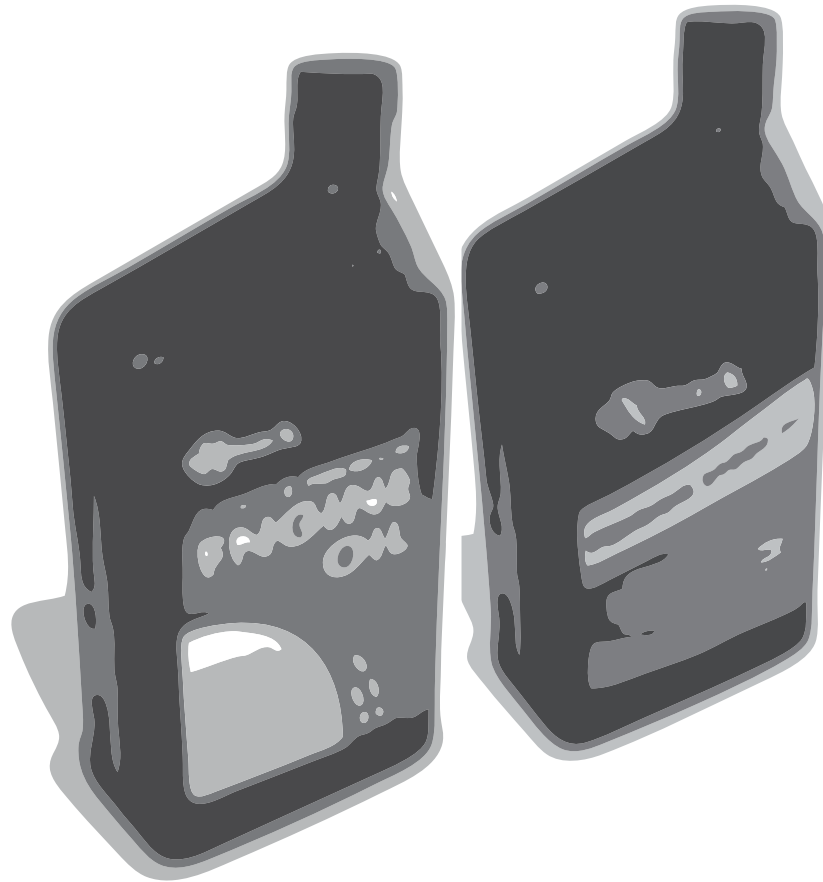
### **PREMIUM HYDRO OIL**

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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Beatrice, NE 68310  
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Part No. 4501-051 Rev. A  
(402) 223-6300  
Fax (402) 223-5489  
Printed in the USA.

