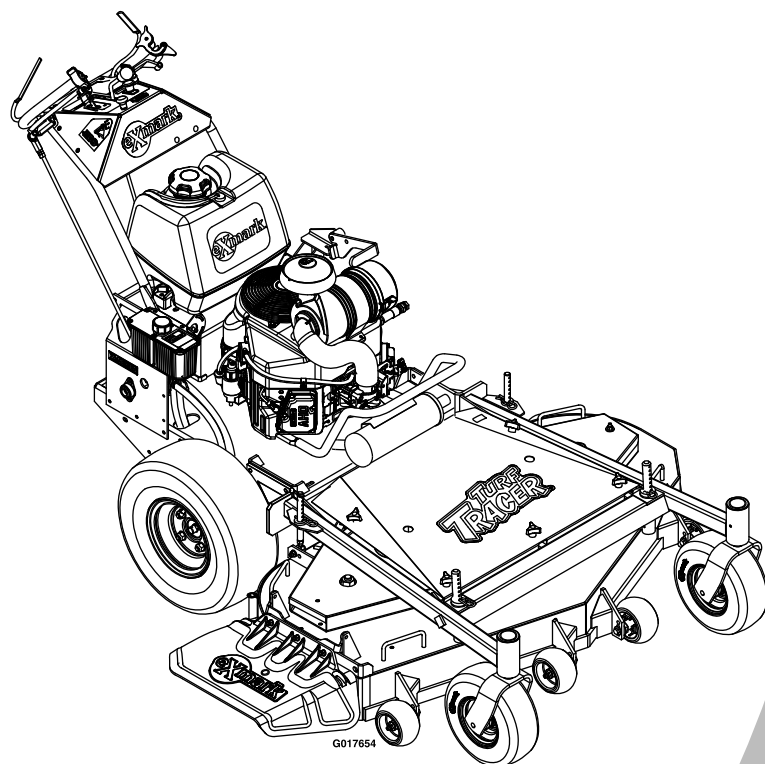




TURF TRACER® X-SERIES

Model No. TTX691KAE—Serial No. 312000000 and Up

Picture below may not reflect actual product.



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

AR: as required

ASM: assembly

BBC: blade brake control

BHTF: button head thread forming

CARR: carriage

CCW: counter clockwise

CW: clockwise

DEG: degrees

DPA: Dual Point Adjustment

ECM: electronic control module

EXT: external

FH: flat head

GA: gauge

HD: heavy-duty

HF: hex flange

HH: hex head

HHF: hex head flange

HHFTF: hex head flange thread forming

HJ: hex jam

HLH: hex lag head

HOC: height-of-cut

HSBH: hex socket button head

HSFH: hex socket flat head

HSH: hex socket head

HWH: hex washer head

HWHTF: hex washer head thread forming

HYD: hydraulic

LH: left hand

LP: Liquid Propane

NI: nylon insert

NPTF: national pipe thread fine

PFH: phillips flat head

PPH: phillips pan head

PPHTF: phillips pan head thread forming

PRH: phillips round head

PTH: phillips truss head

PTO: power-take-off

RH: right hand

ROPS: roll-over protection system

RRB: rear roller brush

SFH: slotted fillister head

SHH: slotted hex head

SHWH: slotted hex washer head

SPH: slotted pan head

SQH: square head

SRH: slotted round head

STD: standard

TAP: self tapping

TTH: torx truss head

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).

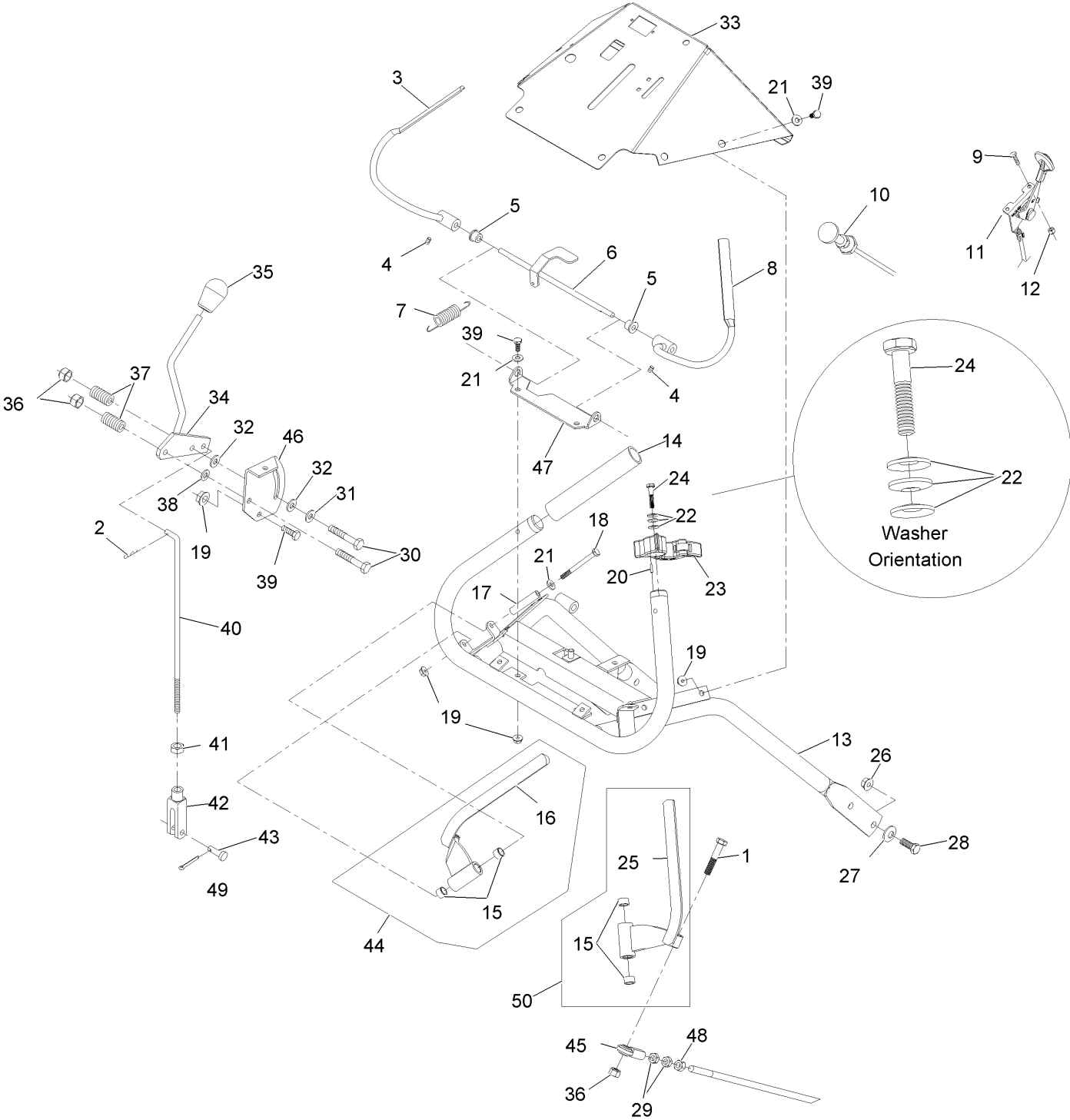


If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

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ECS Upper Handles and Controls Assembly



ECS Upper Handles and Controls Assembly (continued)

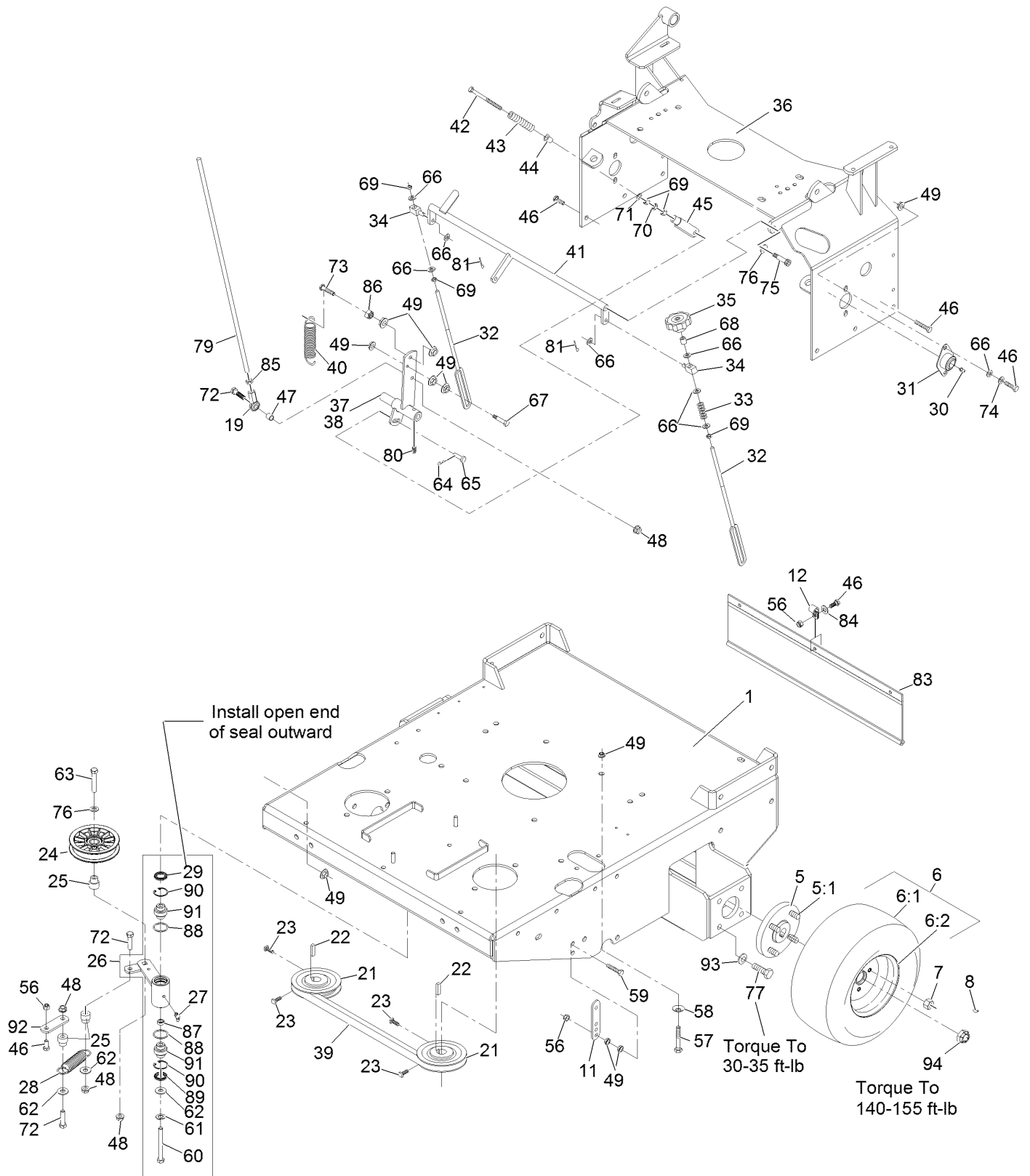
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	322-9	2	Screw-HH 5/16-18 X 1 3/4	25	116-4082	1	Lever, Drive RH
2	1-806003	1	Hairpin-Cotter	26	3290-357	4	Nut-Whizlock 3/8-16
3	116-4079	1	Wld, Lever, Opc (LH) ▲	27	98-5975	4	Washer-Spring Disc 3/8
4	1-803322	2	Setscrew-5/16-24 X 5/16 ■	28	323-6	4	Screw-HH 3/8-16 X 1
5	1-303365	2	Bushing-Nylon	29	3220-3	4	Nut-Jam 3/8-24
6	103-0769-03	1	Wld, Opc Axle Lever	30	322-10	2	Screw-HH 5/16-18 X 2
7	1-303363	1	Spring-Extension	31	1-603716	1	Washer-Friction Disc
8	116-4080	1	Wld, Opc Lever (RH) ▲	32	1-323244	2	Washer-Friction
9	1-807513	2	Bolt-Carriage #10-24 X 1/2	33	109-4508	1	Console 109-4506-03 W/ Decals
10	110-5720	1	Control-Choke, Push / Pull	34	116-4083	1	Wld, Speed Shift
11	116-2426	1	Cable, Throttle	35	103-0423	1	Knob-Nyloc 3/8-16
12	3296-2	2	Nut-Nyloc #10-24	36	3296-29	4	Nut-Nyloc 5/16-18
13	103-1537-03	1	Handle Weldmt, Upper Ecs	37	1-323245	2	Spring-Compression
14	103-0815	2	Grip-Bar, Handle	38	3256-23	1	Washer-5/16 Sae
15	1-413152	4	Bushing-Sleeve	39	321-3	10	Screw-HH 1/4-20 X 5/8
16	116-4081	1	Lever, Drive LH	40	1-413225	1	Rod, Speed Control
17	103-0027	2	Bushing-Lever, Drive	41	3220-2	1	Nut-Jam 5/16-24
18	321-14	2	Screw-HH 1/4-20 X 2 3/4	42	1-303105	1	Yoke-Adjustable
19	32128-33	12	Nut-Whizlock 1/4-20	43	1-808280	1	Pin-Clevis 5/16 X 1 49/64
20	103-0464	2	Pin-Spring 1/8 X 1/2	44	103-2514	1	Asm, Drive Lever LH
21	3256-22	10	Washer-1/4 Sae	45	103-2463	2	Balljoint
22	1-303435	6	Washer-Spring Disc 1/4	46	103-0503	1	Bracket, Shifter Slide
23	103-1371	1	Thumb Latch Asm RH(Shown)	47	103-0489-03	1	Bracket, Opc Axle
23	103-1372	1	Thumb Latch Asm LH(Not Shown) ●	48	3219-3	2	Nut-Hex 3/8-24
24	103-0235	2	Screw-HH 1/4-20 X 1 1/8 W/Nylon ■	49	3272-5	1	Pin-Cotter 3/32 X 1/2
				50	103-2513	1	Asm, Drive Lever RH

● 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.

Engine Deck Assembly



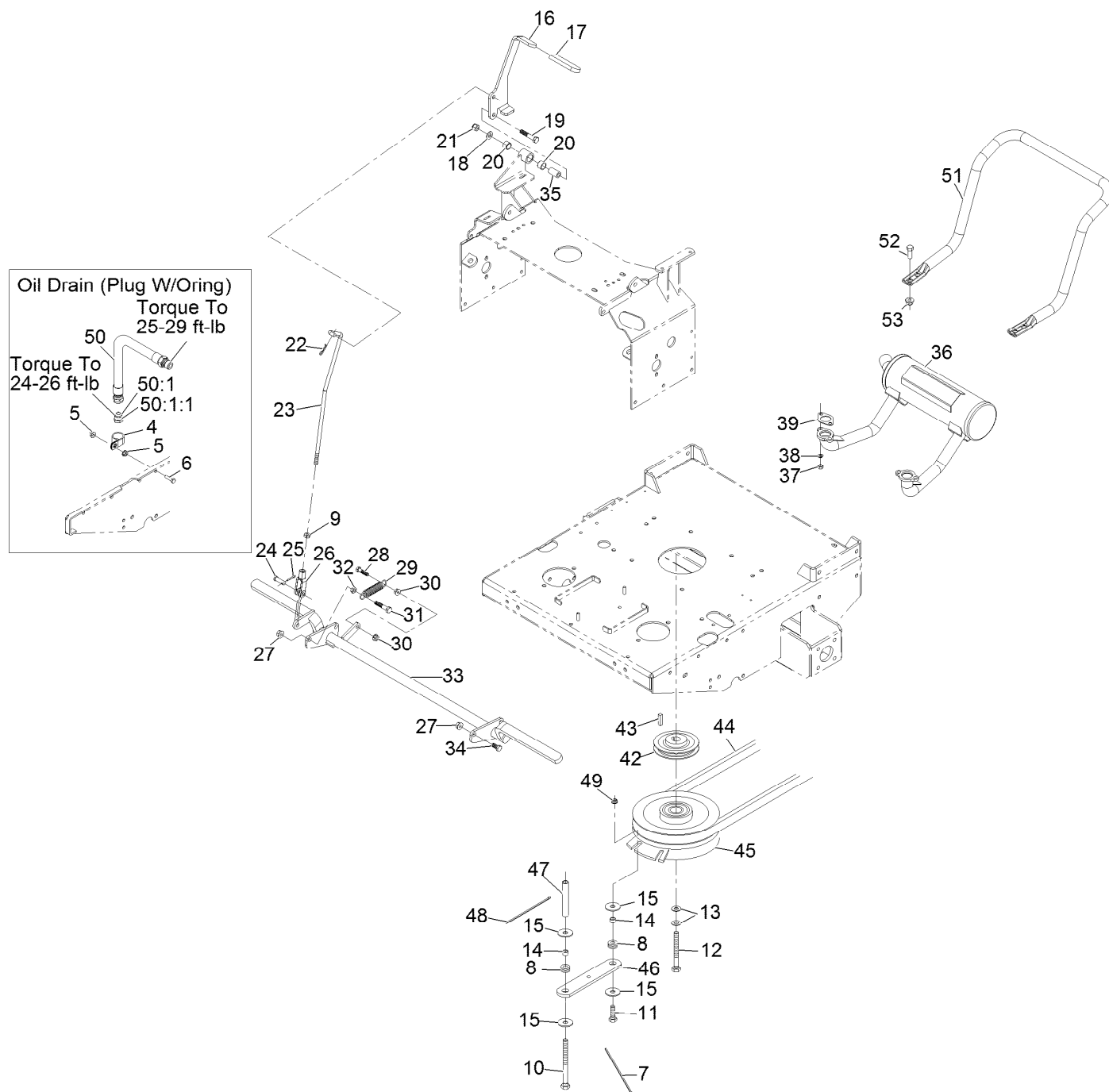
Engine Deck Assembly (continued)

<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	116-6130	1	Eng Deck (116-6082-01) W/ Decals	49	32128-20	23	Nut-Whizlock 5/16-18
5	1-602997	2	Hub ASM W/Studs	56	3296-29	6	Nut-Nyloc 5/16-18
5:1	1-633926	8	Stud-Wheel	57	323-7	4	Screw-HH 3/8-16 X 1 1/4
6	103-1715	2	Tire And Wheel Assy	58	98-5975	4	Washer-Spring Disc 3/8
6:1	103-2237	2	Tire	59	1-800016	2	Bolt-HH 5/16-18 X 1 1/4 Tap
6:2	103-2238	2	Wheel Only	60	1-800805	1	Screw-HH 3/8-16 X 3-1/2 Gr8 ■
7	242-50	8	Nut-Lug 1/2-20	61	3253-5	1	Washer-Lock 3/8 Heavy
8	1-807019	2	Key-Woodruff 1 X 1/4	62	3256-4	3	Washer-3/8 Std
11	1-613089	2	Tab-Spring, Extension	63	323-9	1	Screw-HH 3/8-16 X 1 3/4
12	1-413510	3	Clip-Loom	64	1-806003	2	Hairpin-Cotter
19	103-1167	2	Joint-Ball End, .38X.38Fe LH	65	1-808280	2	Pin-Clevis 5/16 X 1 49/64
21	1-413010	2	Sheave ASM	66	3256-23	11	Washer-5/16 Sae
22	1-807272	2	Key-5Mm X 5Mm X 25Mm	67	1-403180	2	Screw-HH 5/16-18 X 1 1/4 Sp
23	1-803050	4	Setscrew-5/16-18 X 3/4 ■	68	1-603903	1	Spacer
24	109-4077	1	Pulley-Idler, Flat	69	3219-2	7	Nut-Hex 5/16-24
25	1-603496	3	Bushing-Idler	70	3220-2	2	Nut-Jam 5/16-24
26	109-2578	1	Kit, Idler Arm W/Bearings	71	3256-2	2	Washer-1/4 Std
27	302-40	1	Zerk-90° 1/4-28	72	323-8	4	Screw-HH 3/8-16 X 1 1/2
28	1-603414	1	Spring-Extension	73	116-3515	2	Screw,HH Special 5/16-18 X 1.25
29	103-3506	1	Seal-Single Lip	74	1-805005	4	Washer-Lock 5/16 Heavy
30	302-19	2	Zerk-1/4-28 Str	75	1-809056	2	Screw-Sh 5/16-18 X 1 3/8 ■
31	1-633102	2	Bearing-Flanged	76	3256-24	3	Washer-3/8 Sae
32	1-613206	2	Rod, Control Arm	77	323-6	8	Screw-HH 3/8-16 X 1
33	1-323245	1	Spring-Compression	79	103-1576	2	Rod, Drive Lever
34	1-603676	2	Swivel-Adjustable, Short	80	1-803022	2	Setscrew-5/16-18 X 5/8 ■
35	103-3060	1	Knob-Tracking	81	3272-5	2	Pin-Cotter 3/32 X 1/2
36	116-1792-01	1	Support, Tank/Handle	83	103-2224	1	Shield, Drag
37	103-1561-01	1	Arm, Control LH	84	3256-3	3	Washer-5/16 Std
38	103-1562-01	1	Arm, Control RH ●	85	3220-16	2	Nut-Jam 3/8-24 LH
39	109-2584	1	Belt, Hyd Trans Drive (a Belt)	86	3218-2	2	Nut-Jam 5/16-18
40	1-603693	2	Spring	87	103-5677	1	Spacer
41	103-2234-01	1	Crank Weldment	88	106-7159	2	O-Ring
42	1-603737	2	Bolt-Neutral Return	89	103-3505	1	Seal-Double Lip
43	103-0265	2	Spring, Neutral Return	90	32120-10	2	Ring-Retaining
44	1-603735	2	Bushing-Flanged	91	103-3504	2	Bearing-Spherical
45	1-303105	2	Yoke-Adjustable	92	1-633068	1	Arm-Lift, Deck
46	322-3	14	Screw-HH 5/16-18 X 3/4	93	98-5975	8	Washer-Spring Disc 3/8
47	103-2421	2	Tube, Pump Link Spacer	94	116-2839	2	Nut-Lock
48	3290-357	6	Nut-Whizlock 3/8-16				

● Not illustrated

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

Park Brake and Engine



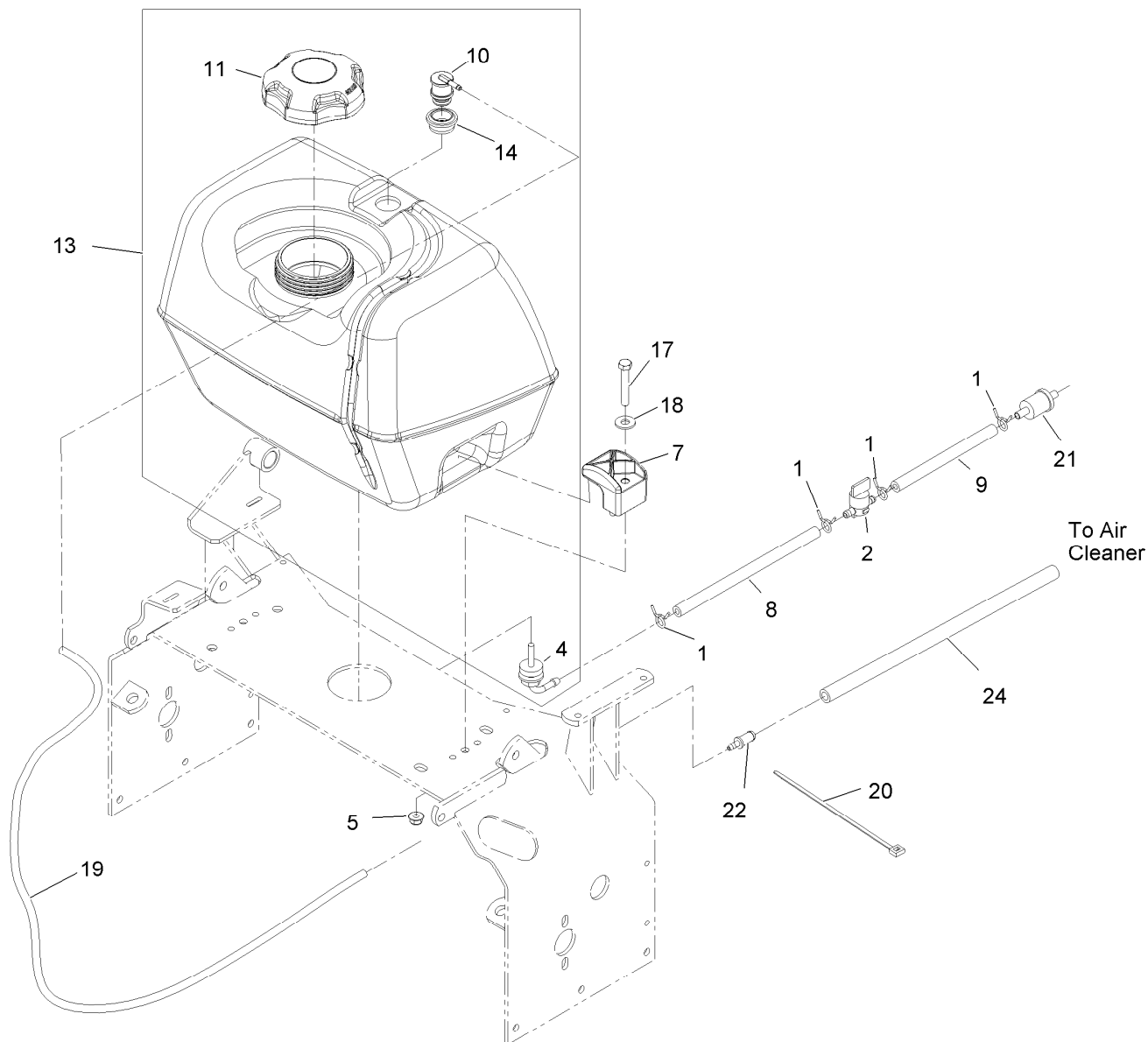
Park Brake and Engine (continued)

<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>
4	1-643312	1	Clip-Loom	29	1-323161	1	Spring
5	32128-33	2	Nut-Whizlock 1/4-20	30	32128-20	6	Nut-Whizlock 5/16-18
6	321-6	1	Screw-HH 1/4-20 X 1	31	323-9	1	Screw-HH 3/8-16 X 1 3/4
7	1-303335	1	Tie-Cable 7 15/16 (Large)	32	3218-3	1	Nut-Jam 3/8-16
8	1-633630	2	Grommet	33	103-2205-03	1	Brake Weldmt
9	3220-3	1	Nut-Jam 3/8-24	34	323-4	3	Screw-HH 3/8-16 X 3/4
10	322-38	1	Screw-HH	35	1-413344	1	Bushing-Pivot
11	322-6	1	Screw-HH 5/16-18 X 1 1/4	36	116-3736	1	Muffler
12	3212-12	1	Screw-HH 7/16-20 X 3 ▲	37	114-3549	2	Nut-M8
13	1-603610	2	Washer-Spring Disc 7/16	38	114-3550	2	Washer-Lock, Spring
14	1-633545	2	Spacer	39	1-653313	2	Gasket-Exhaust
15	1-613235	4	Washer	42	1-653035	1	Pulley ●
16	109-4544	1	Lever, Park Brake W/Decal & Grip	43	1-807259	1	Key-Machine 1/4 X 1/4 X 1
17	1-303020	1	Grip-Lever	44	103-2240	1	Belt, Deck Drive(52)
18	3256-24	1	Washer-3/8 Sae	44	1-603306	1	Belt, Deck Drive(60)
19	322-10	1	Screw-HH 5/16-18 X 2	45	103-0662	1	Clutch ASM
20	1-413347	2	Sleeve-Bushing	46	1-633543-03	1	Strap-Clutch, Brake
21	3296-39	1	Nut-Nyloc 3/8-16	47	1-323195-03	1	Standoff, Clutch
22	1-806003	1	Hairpin-Cotter	48	1-303287	1	Tie-Cable 5 1/2 (Small)
23	109-4078	1	Linkage, Park Brake	49	32128-20	1	Nut-Whizlock 5/16-18
24	1-808285	1	Pin-Clevis 3/8 X 1 1/8	50	116-4924	1	Asm-Hose Oil Drain W/Plug ■
25	3272-10	1	Pin-Cotter 1/8 X 3/4	50:1	353-508	1	Plug-W/O-Ring
26	1-633131	1	Yoke-Linkage, Brake	50:1:1	237-42	1	O-Ring
27	3290-357	4	Nut-Whizlock 3/8-16	51	116-6278-03	1	Guard-Muffler
28	116-3515	1	Screw,HH Special 5/16-18 X 1.25	52	323-6	4	Screw-HH 3/8-16 X 1
				53	104-8301	4	Nut-Nyloc 3/8-16 Flg

● Install sheave with long end of hub up.

■ Use a Teflon Pipe Sealant or equivalent on threads.

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



Fuel Tank Assembly

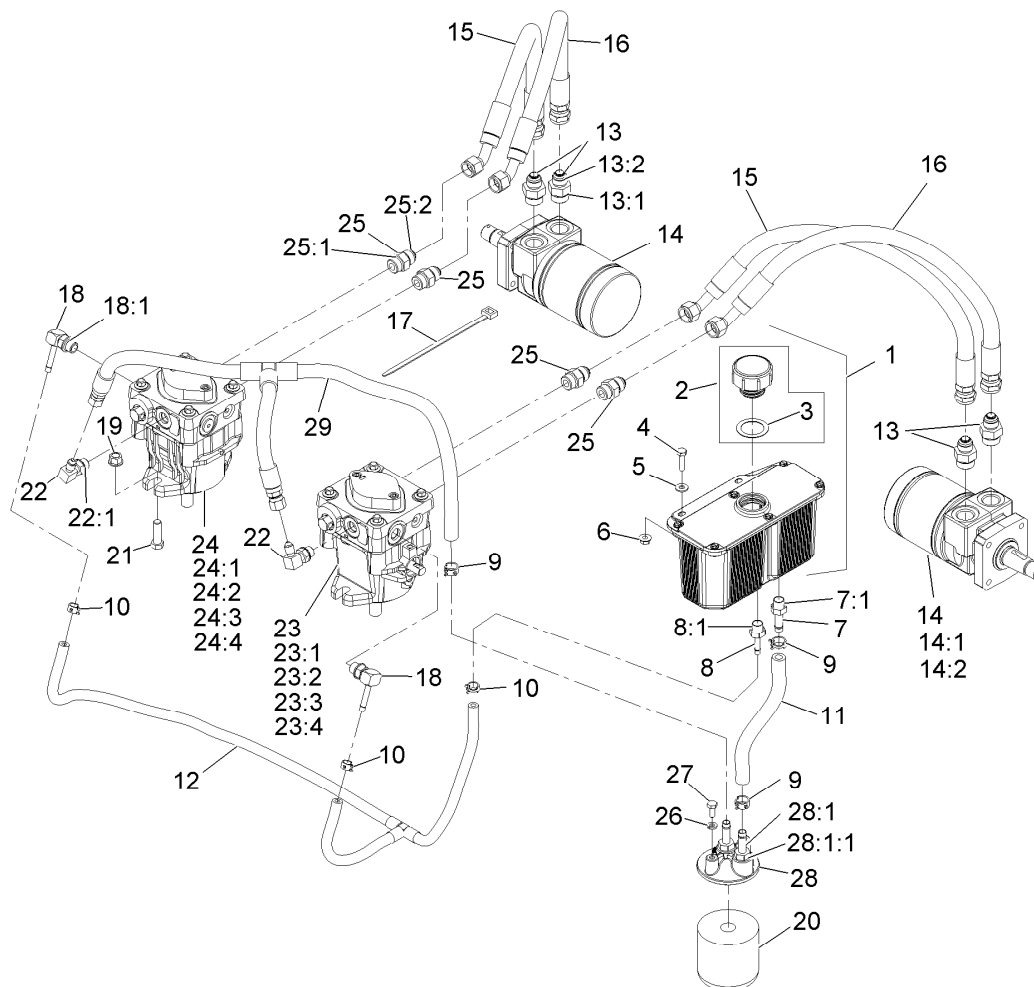
Ref.	Part Number	Qty.	Description
1	1-303077	4	Clamp-Fuel Line
2	1-603770	1	Valve-Fuel
4	103-2605	1	Fitting-Fuel Bulkhead W/Strainer ▲
5	104-8300	2	Nut-Nyloc 5/16-18 Flg
7	107-4543	2	Clamp
8	109-0304	1	Hose-Fuel Line 2 1/2"
9	109-0304	1	Hose-Fuel Line 2 1/2"
10	114-0285	1	Valve-Rollover
11	115-4465	1	Cap-Fuel, Ratcheting

Ref.	Part Number	Qty.	Description
13	116-3656	1	Asm-Fuel Tank
14	119-6549	1	Grommet-Valve, Roll-Over
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	1	Tie-Plastic
21		1	Pn 41019-1055 Filter W/6In Fuel Line ■●
22	98-2952	1	Fitting-Straight
24	116-4344	1	Hose-Fuel

● Not serviced separately

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

■ Obtain parts from www.kawpowerepc.com

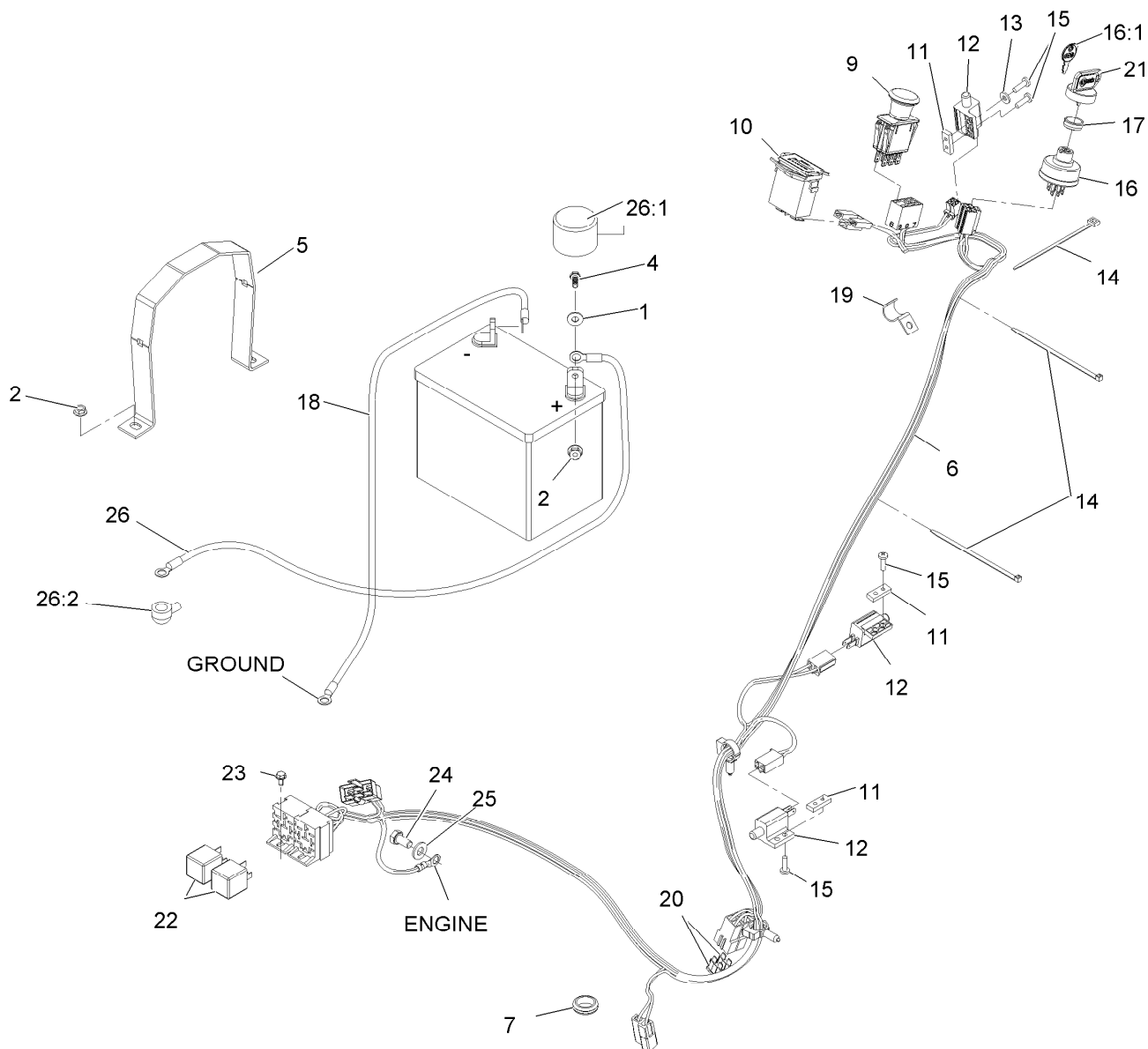


Hydraulics Assembly

Ref.	Part Number	Qty.	Description
1	103-1947	1	HYD Reservoir ASM
2	103-7615	1	Asm, Cap W/Gasket
3	103-1949	1	Gasket-Cap
4	321-6	2	Screw-HH 1/4-20 X 1
5	3256-22	2	Washer-1/4 Sae
6	32128-33	2	Nut-Whizlock 1/4-20
7	103-1912	1	Adapter-Straight
7:1	1-603921	1	O-Ring-Sae #6
8	103-1801	1	Adapter-Straight
8:1	1-603921	1	O-Ring-Sae #6
9	103-1988	3	Clamp-Hose 11/16
10	103-1716	3	Clamp-Hose 17/32
11	109-1010	1	Hose, Charge
12	103-4607	1	Asm, Case Drain Hose
13	1-603991	4	Adapter-Straight
13:1	1-603919	1	O-Ring-Sae #10
13:2	1-603992	1	O-Ring-37 Flare #8
14	1-603718	2	HYD Motor ASM
14:1	1-000119	1	Seal Kit
14:2	1-000138	1	Bearing And Seal Kit
15	103-4609	2	Hose, Hydro
16	103-4610	2	Hose, Hydro
17	1-303335	1	Tie-Cable 7 15/16 (Large)
18	103-1799	2	Elbow-90 DEG
18:1	1-603921	1	O-Ring-Sae #6
19	32128-43	4	Nut-Whizlock 3/8-16

Ref.	Part Number	Qty.	Description
20	109-4180	1	Filter,25 Micron Bi-Directional
20	1-523541	1	Element, Oil Filter(Winter)●
21	323-7	4	Screw-HH 3/8-16 X 1 1/4
22	103-1802	2	Fitting-HYD, 90 DEG
22:1	1-603921	1	O-Ring-Sae #6
23	116-2495	1	Pump, Hydro RH
23:1	103-2664	1	Input Shaft Kit
23:2	94-6922	1	Bearing-Thrust
23:3	103-2666	1	Cylinder Block Kit
23:4	105-6184	1	Seal Overhaul Kit
24	116-2494	1	Pump, Hydro LH
24:1	103-2664	1	Input Shaft Kit
24:2	94-6922	1	Bearing-Thrust
24:3	103-2666	1	Cylinder Block Kit
24:4	105-6184	1	Seal Overhaul Kit
25	1-603990	4	Adapter-Straight
25:1	1-603920	1	O-Ring-Sae #8
25:2	1-603992	1	O-Ring-37 Flare #8
26	1-805004	2	Washer-Lock 1/4 Heavy
27	321-3	2	Screw-HH 1/4-20 X 5/8
28	103-2889	1	Filter Head ASM
28:1	103-1912	2	Adapter-Straight
28:1:1	1-603921	1	O-Ring-Sae #6
29	103-4608	1	Asm, Charge Hose

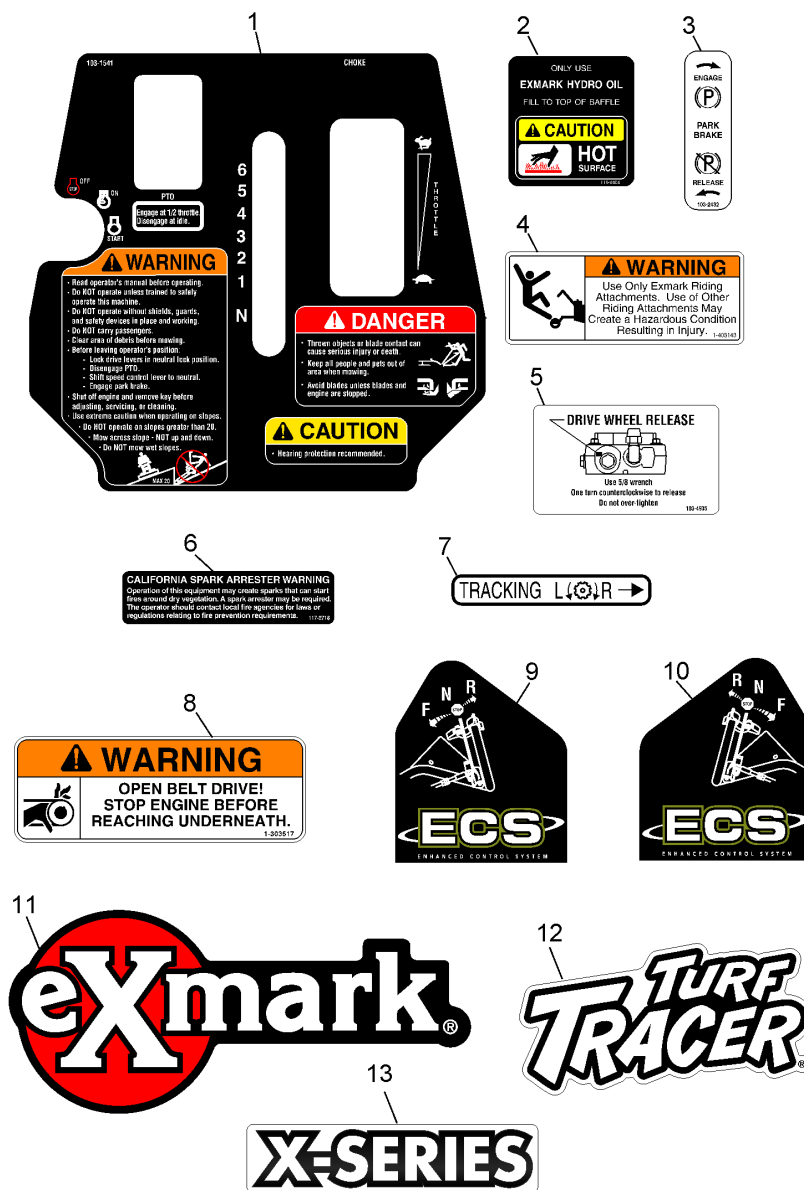
● Use only for operation below 32°F (0°C).



Electrical Assembly

Ref.	Part Number	Qty.	Description
1	3256-2	2	Washer-1/4 Std
2	32128-33	4	Nut-Whizlock 1/4-20
4	321-4	2	Screw-HH 1/4-20 X 3/4
5	1-603814-03	1	Strap, Battery Holddown
6	116-2561	1	Harness, Wiring
7	1-543286	1	Grommet
9	103-5221	1	Switch-PTO
10	1-513374	1	Meter-Engine Hours
11	1-633181	3	Plate-Tapped
12	1-513051	3	Switch-N.O.
13	3256-14	1	Washer-#10 Std
14	1-303335	3	Tie-Cable 7 15/16 (Large)
15	3290-500	6	Screw-PPH #10-24 X 5/8
16	103-0206	1	Switch-Ignition W/Keys

Ref.	Part Number	Qty.	Description
16:1	1-603511	1	Key-Ignition
17	103-0498	1	Nut-Ignition
18	1-543767	1	Wire-Ground
19	103-1193	2	Clip-Loom Half
20	1-816001	2	Fuse-Blade Type, 20 Amp
21	103-2106	1	Key-Exmark Logo
22	1-643275	2	Relay-12Vdc 40 Amp
23	104-2065	2	Screw-HWH #10-24 X 3/8
24	33114-016	1	Screw-HH M8-1.25 X 16Mm
25	33094-00	1	Washer
26	109-7630	1	Positive Battery Cable ASM
26:1	109-2407	1	Insulator-Battery
26:2	1-543393	1	Insulator-Solenoid



Decals

Ref.	Part Number	Qty.	Description
1	103-1541	1	Decal, Console Ecs
2	116-0404	1	Decal-Hydraulic Tank
3	103-2432	1	Decal, Park Brake
4	1-403143	1	Decal, Sulky Warning
5	103-4935	1	Decal, Drive Wheel Release
6	117-2718	1	Decal-Arrester, Spark
7	1-413214	1	Decal, Tracking
8	1-303517	1	Decal,Belt Drive
9	103-2242	1	Decal, LH Ecs Instruction
10	103-2243	1	Decal, RH Ecs Instruction
11	103-2882	1	Decal,Exmark Logo
12	103-3013	1	Decal-Turf Tracer
13	116-3883	2	Decal-X-Series
99	103-5828	1	Kit-Decal ●

● Not illustrated

Notes:

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.

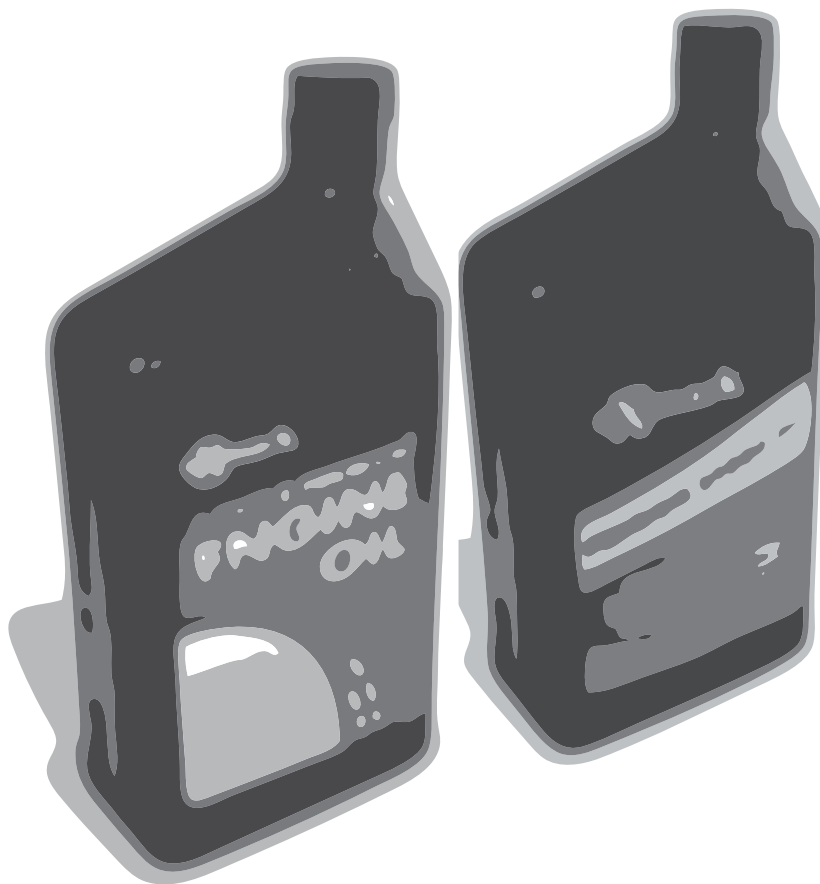
PREMIUM HYDRO OIL

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

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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Part No. 4500-969 Rev. A
(402) 223-6300
Fax (402) 223-5489
Printed in the USA.



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