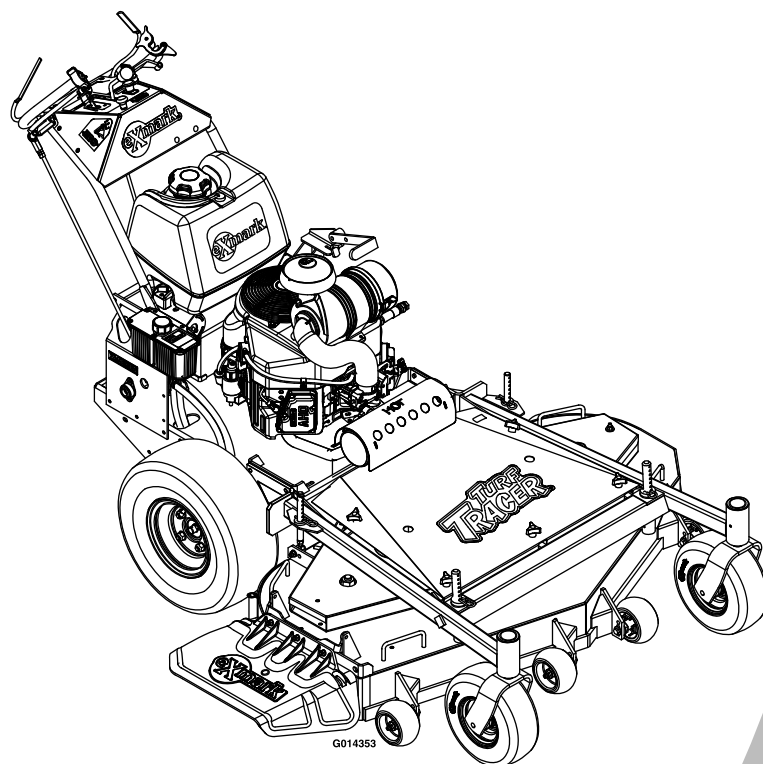




TURF TRACER® X-SERIES

Model No. TTX24KAE—Serial No. 920000 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	HOC: height-of-cut	RRB: rear roller brush
ASM: assembly	HSBH: hex socket button head	SFH: slotted fillister head
BBC: blade brake control	HSFH: hex socket flat head	SHH: slotted hex head
BHTF: button head thread forming	HSH: hex socket head	SHWH: slotted hex washer head
CARR: carriage	HWH: hex washer head	SPH: slotted pan head
CCW: counter clockwise	HWTF: hex washer head thread forming	SQH: square head
CW: clockwise	HYD: hydraulic	SRH: slotted round head
DEG: degrees	LH: left hand	STD: standard
DPA: Dual Point Adjustment	LP: Liquid Propane	TAP: self tapping
ECM: electronic control module	NI: nylon insert	TTH: torx truss head
EXT: external	NPTF: national pipe thread fine	
FH: flat head	PFH: phillips flat head	
GA: gauge	PPH: phillips pan head	
HD: heavy-duty	PPHTF: phillips pan head thread forming	
HF: hex flange	PRH: phillips round head	
HH: hex head	PTH: phillips truss head	
HHF: hex head flange	PTO: power-take-off	
HHFTF: hex head flange thread forming	RH: right hand	
HJ: hex jam	ROPS: roll-over protection system	
HLH: hex lag 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).

EXMARK PARTS PLUS

PARTS
OVERNIGHT
OR *FREE**

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

ECS Upper Handles and Controls Assembly 6

Engine Deck Assembly 8

Park Brake and Engine Assembly 10

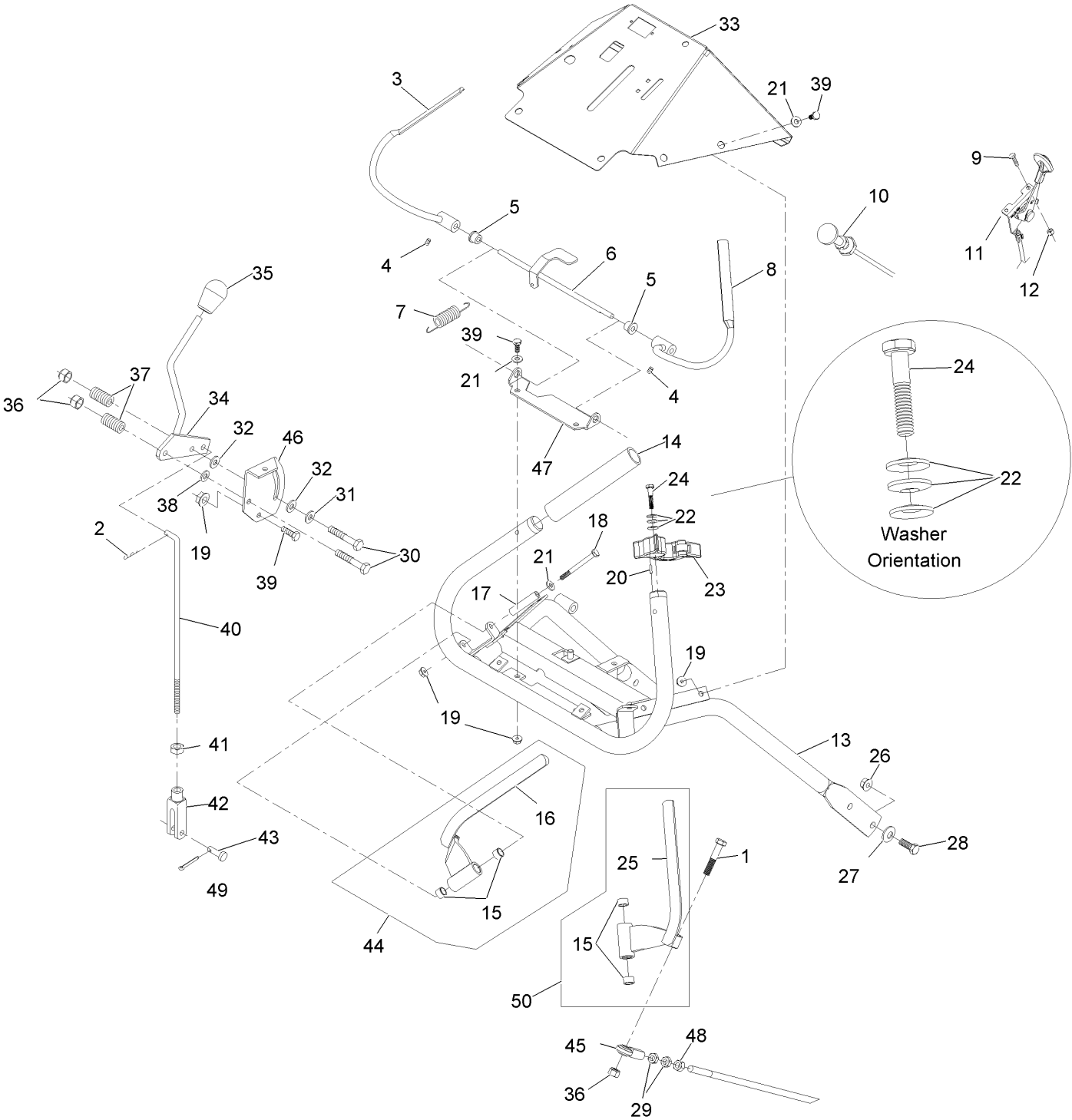
Fuel Tank Assembly 12

Hydraulics Assembly 13

Electrical Assembly 14

Decals 15

ECS Upper Handles and Controls Assembly



ECS Upper Handles and Controls Assembly (continued)

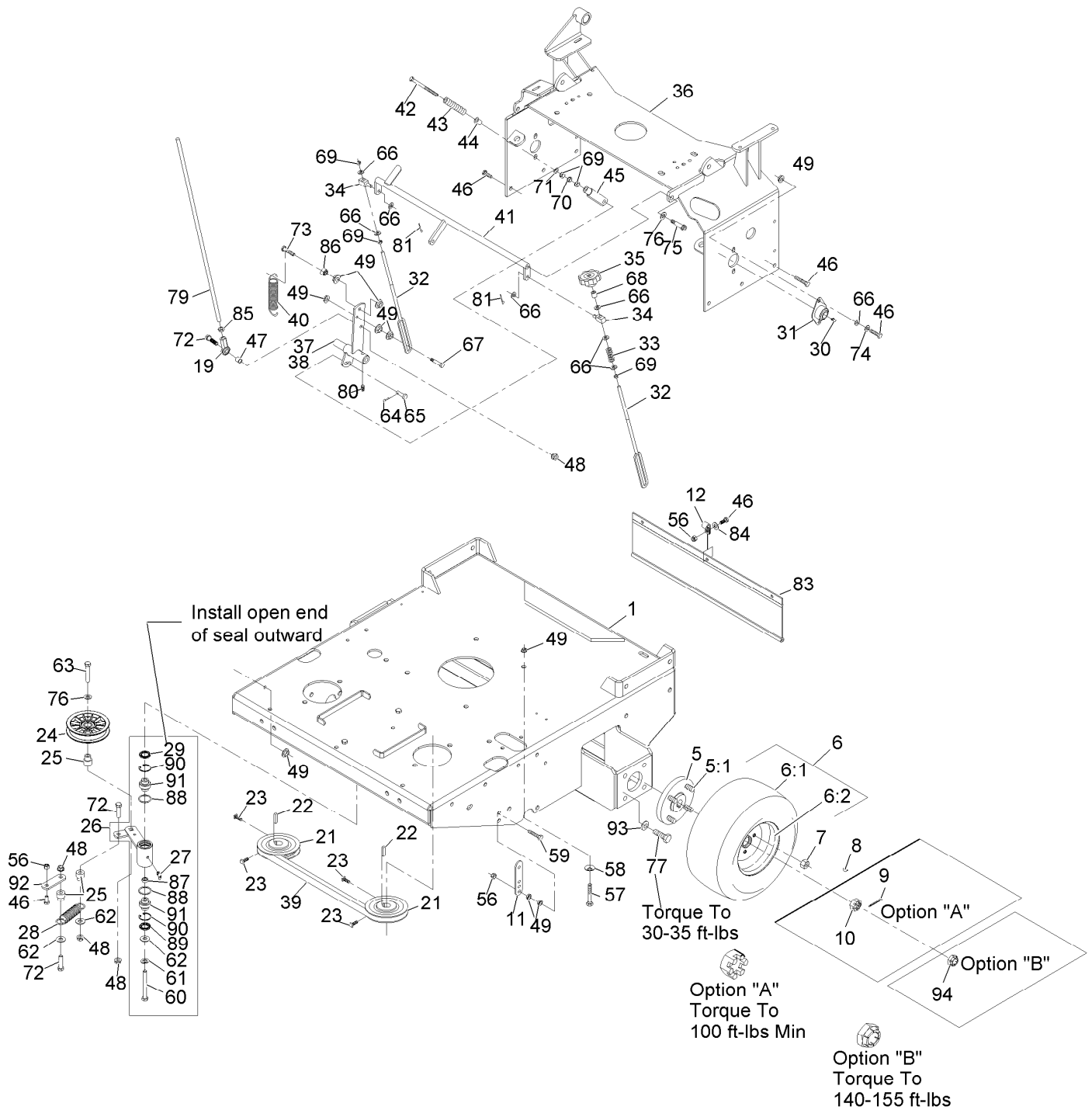
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	322-9	2	Screw-HH 5/16-18 X 1 3/4	25	116-4082	1	Lever, Drive RH
2	1-806003	1	Hairpin-Cotter	26	3290-357	4	Nut-Whizlock 3/8-16
3	116-4079	1	Wld, Lever, Opc (LH) ▲	27	98-5975	4	Washer-Spring Disc 3/8
4	1-803322	2	Setscrew-5/16-24 X 5/16 ■	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	103-2513	1	Asm, Drive Lever RH
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	103-2514	1	Asm, Drive Lever LH

● 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



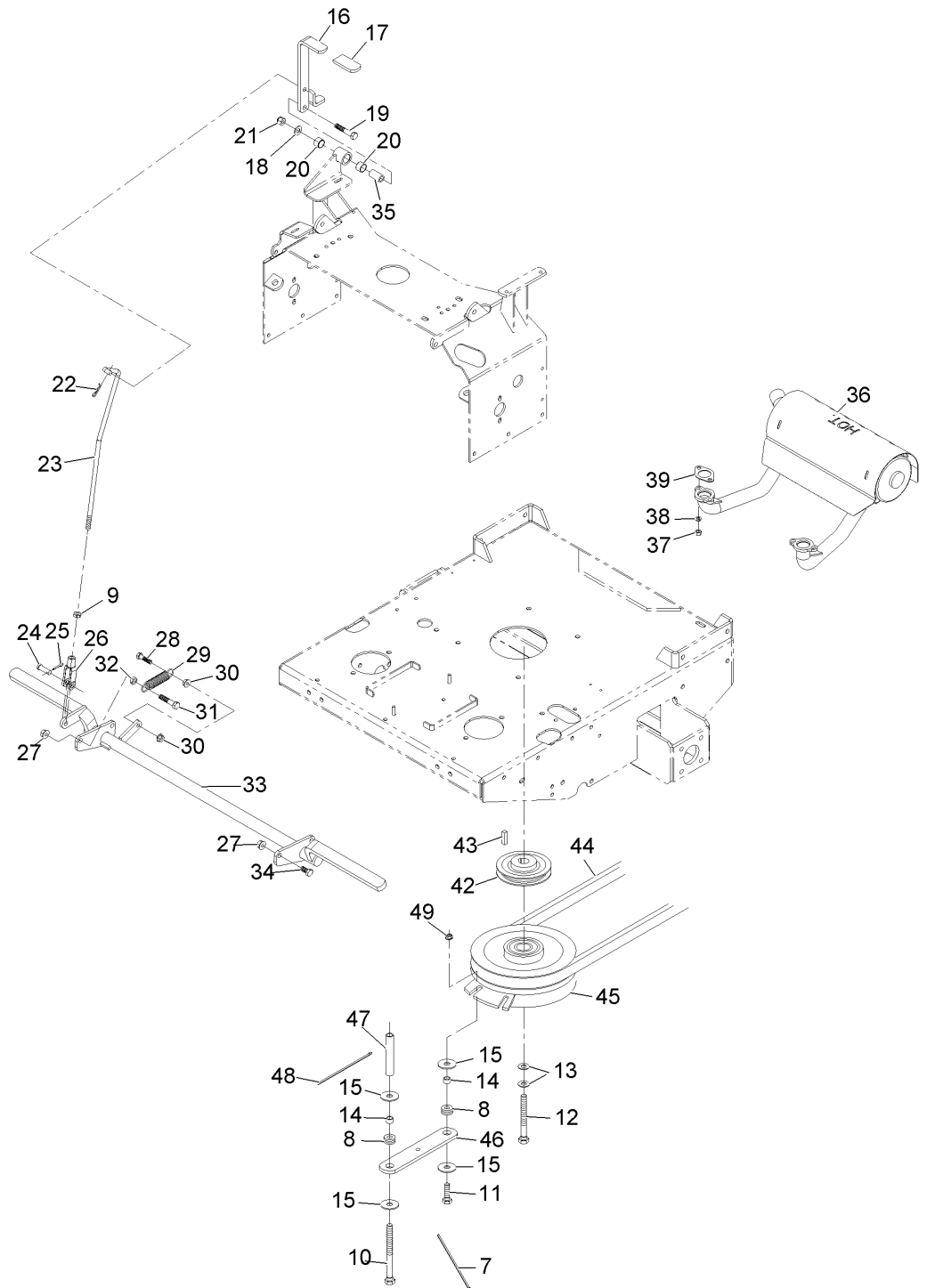
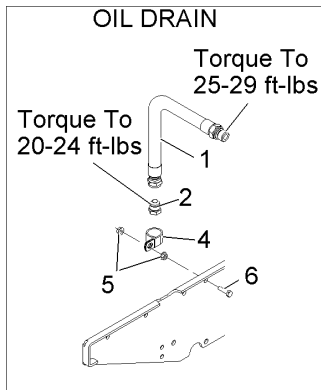
Engine Deck Assembly (continued)

<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	109-6408	1	Eng Deck (116-1794-01) W/ Decals	48	3290-357	6	Nut-Whizlock 3/8-16
5	1-602997	2	Hub ASM W/Studs	49	32128-20	23	Nut-Whizlock 5/16-18
5:1	1-633926	8	Stud-Wheel	56	3296-29	6	Nut-Nyloc 5/16-18
6	103-1715	2	Tire And Wheel Assy	57	323-7	4	Screw-HH 3/8-16 X 1 1/4
6:1	103-2237	2	Tire	58	98-5975	4	Washer-Spring Disc 3/8
6:2	103-2238	2	Wheel Only	59	1-800016	2	Bolt-HH 5/16-18 X 1 1/4 Tap
7	242-50	8	Nut-Lug 1/2-20	60	1-800805	1	Screw-HH 3/8-16 X 3-1/2 Gr8 ■
8	1-807019	2	Key-Woodruff 1 X 1/4	61	3253-5	1	Washer-Lock 3/8 Heavy
9	1-806800	2	Pin-Cotter 9/64 X 1 1/2	62	3256-4	3	Washer-3/8 Std
10	32136-5	2	Nut-Slotted 3/4-16	63	323-9	1	Screw-HH 3/8-16 X 1 3/4
11	1-613089	2	Tab-Spring, Extension	64	1-806003	2	Hairpin-Cotter
12	1-413510	3	Clip-Loom	65	1-808280	2	Pin-Clevis 5/16 X 1 49/64
19	103-1167	2	Joint-Ball End, .38X.38Fe LH	66	3256-23	11	Washer-5/16 Sae
21	1-413010	2	Sheave ASM	67	1-403180	2	Screw-HH 5/16-18 X 1 1/4 Sp
22	1-807272	2	Key-5Mm X 5Mm X 25Mm	68	1-603903	1	Spacer
23	1-803050	4	Setscrew-5/16-18 X 3/4 ■	69	3219-2	7	Nut-Hex 5/16-24
24	109-4077	1	Pulley, Idler	70	3220-2	2	Nut-Jam 5/16-24
25	1-603496	3	Bushing-Idler	71	3256-2	2	Washer-1/4 Std
26	109-2578	1	Kit, Idler Arm W/Bearings	72	323-8	4	Screw-HH 3/8-16 X 1 1/2
27	302-40	1	Zerk-90° 1/4-28	73	116-3515	2	Screw,HH Special 5/16-18 X 1.25
28	1-603414	1	Spring-Extension	74	1-805005	4	Washer-Lock 5/16 Heavy
29	103-3506	1	Seal-Single Lip	75	1-809056	2	Screw-Sh 5/16-18 X 1 3/8 ■
30	302-19	2	Zerk-1/4-28 Str	76	3256-24	3	Washer-3/8 Sae
31	1-633102	2	Bearing-Flanged	77	323-6	8	Screw-HH 3/8-16 X 1
32	1-613206	2	Rod, Control Arm	79	103-1576	2	Rod, Drive Lever
33	1-323245	1	Spring-Compression	80	1-803022	2	Setscrew-5/16-18 X 5/8 ■
34	1-603676	2	Swivel-Adjustable, Short	81	3272-5	2	Pin-Cotter 3/32 X 1/2
35	103-3060	1	Knob-Tracking	83	103-2224	1	Shield, Drag
36	116-1792-01	1	Support, Tank/Handle	84	3256-3	3	Washer-5/16 Std
37	103-1561-01	1	Arm, Control LH	85	3220-16	2	Nut-Jam 3/8-24 LH
38	103-1562-01	1	Arm, Control RH ●	86	3218-2	2	Nut-Jam 5/16-18
39	109-2584	1	Belt, Hyd Trans Drive (a Belt)	87	103-5677	1	Spacer
40	1-603693	2	Spring	88	106-7159	2	O-Ring
41	103-2234-01	1	Crank Weldment	89	103-3505	1	Seal-Double Lip
42	1-603737	2	Bolt-Neutral Return	90	32120-10	2	Ring-Retaining
43	103-0265	2	Spring, Neutral Return	91	103-3504	2	Bearing-Spherical
44	1-603735	2	Bushing-Flanged	92	1-633068	1	Arm-Lift, Deck
45	1-303105	2	Yoke-Adjustable	93	98-5975	8	Washer-Spring Disc 3/8
46	322-3	14	Screw-HH 5/16-18 X 3/4	94	116-2839	2	Nut-Lock 3/4-16
47	103-2421	2	Tube, Pump Link Spacer				

● Not illustrated

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

Park Brake and Engine Assembly

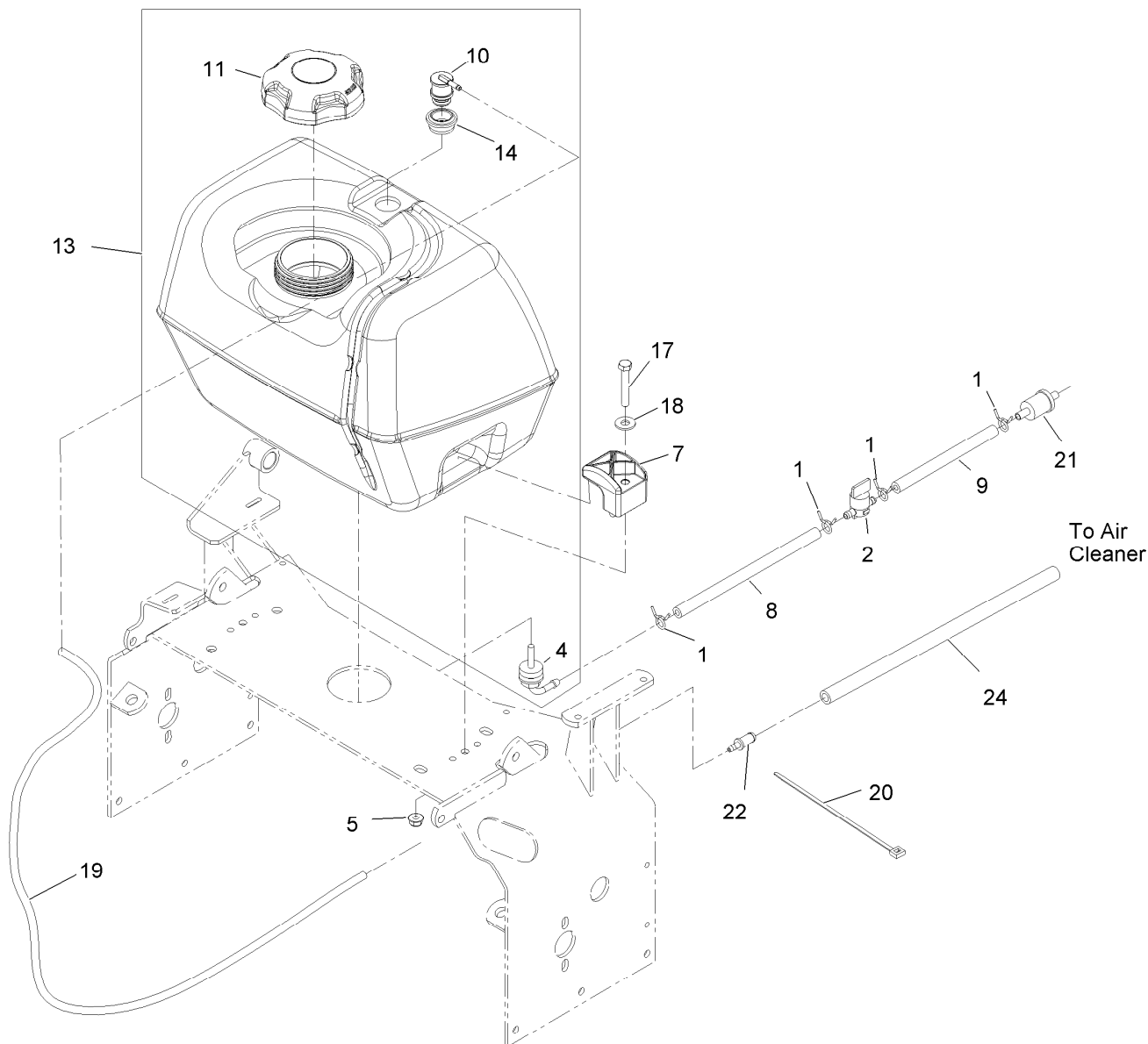


Park Brake and Engine Assembly (continued)

<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	109-4490	1	Oil Drain Hose ASM	25	3272-10	1	Pin-Cotter 1/8 X 3/4
2	109-1012	1	Plug	26	1-633131	1	Yoke-Linkage, Brake
4	1-643312	1	Clip-Loom	27	3290-357	4	Nut-Whizlock 3/8-16
5	32128-33	2	Nut-Whizlock 1/4-20	28	116-3515	1	Screw,HH Special 5/16-18 X 1.25
6	321-6	1	Screw-HH 1/4-20 X 1	29	1-323161	1	Spring
7	1-303335	1	Tie-Cable 7 15/16 (Large)	30	32128-20	6	Nut-Whizlock 5/16-18
8	1-633630	2	Grommet	31	323-9	1	Screw-HH 3/8-16 X 1 3/4
9	3220-3	1	Nut-Jam 3/8-24	32	3218-3	1	Nut-Jam 3/8-16
10	322-38	1	Screw-HH	33	103-2205-03	1	Brake Weldmt
11	322-6	1	Screw-HH 5/16-18 X 1 1/4	34	323-4	3	Screw-HH 3/8-16 X 3/4
12	3212-12	1	Screw-HH 7/16-20 X 3 ■	35	1-413344	1	Bushing-Pivot
13	1-603610	2	Washer-Spring Disc 7/16	36	116-4398	1	Muffler
14	1-633545	2	Spacer	37	114-3549	2	Nut-M8
15	1-613235	4	Washer	38	114-3550	2	Washer-Lock, Spring
16	109-4544	1	Lever, Park Brake (109-4543-03) W/Decal & Grip	39	1-653313	2	Gasket-Exhaust
17	1-303020	1	Grip-Lever	42	1-653035	1	Pulley ●
18	3256-24	1	Washer-3/8 Sae	43	1-807259	1	Key-Machine 1/4 X 1/4 X 1
19	322-10	1	Screw-HH 5/16-18 X 2	44	103-2240	1	Belt, Deck Drive(52)
20	1-413347	2	Sleeve-Bushing	44	1-603306	1	Belt, Deck Drive(60)
21	3296-39	1	Nut-Nyloc 3/8-16	45	103-0662	1	Clutch ASM
22	1-806003	1	Hairpin-Cotter	46	1-633543-03	1	Strap-Clutch, Brake
23	109-4078	1	Linkage, Park Brake	47	1-323195-03	1	Standoff, Clutch
24	1-808285	1	Pin-Clevis 3/8 X 1 1/8	48	1-303287	1	Tie-Cable 5 1/2 (Small)
				49	32128-20	1	Nut-Whizlock 5/16-18

● Install sheave with long end of hub up.

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



Fuel Tank Assembly

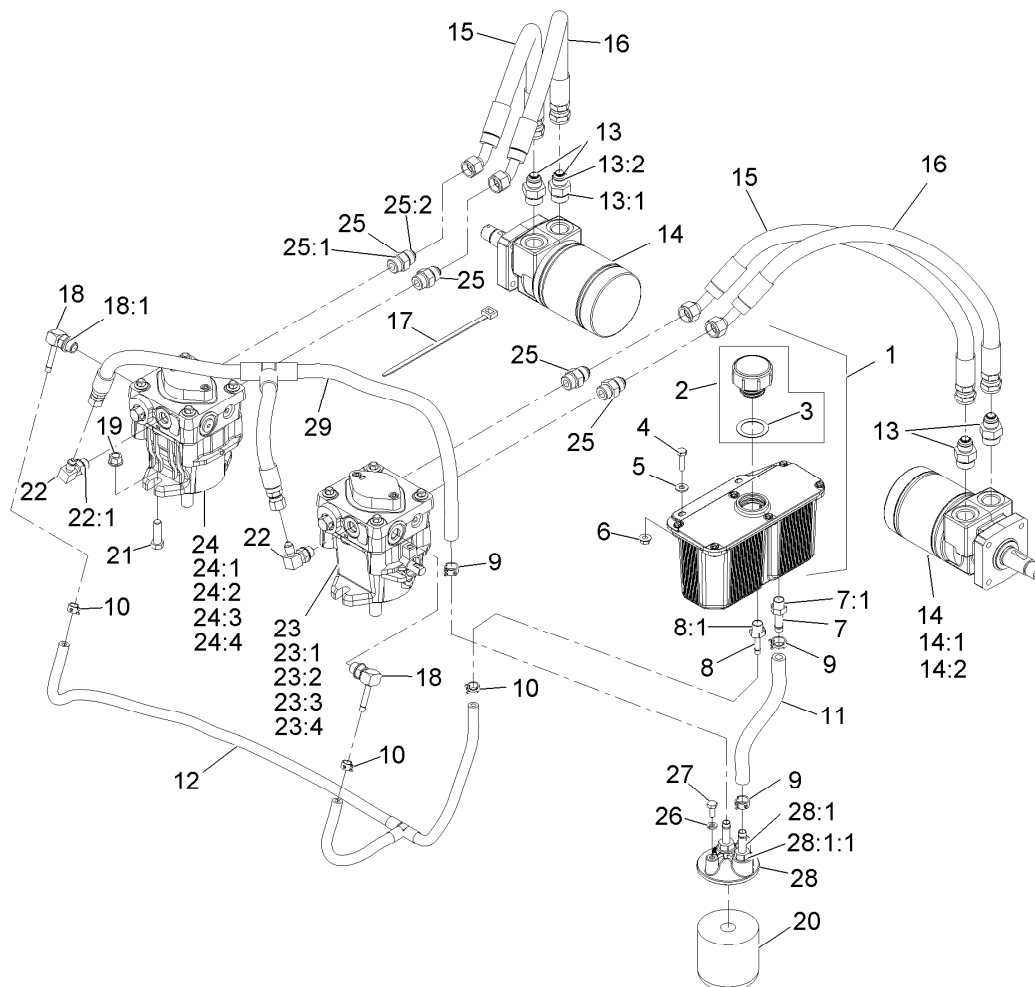
Ref.	Part Number	Qty.	Description
1	1-303077	4	Clamp-Fuel Line
2	1-603770	1	Valve-Fuel
4	103-2605	1	Fitting-Fuel Bulkhead W/Strainer ▲
5	104-8300	2	Nut-Nyloc 5/16-18 Flg
7	107-4543	2	Clamp
8	109-0304	1	Hose-Fuel Line 2 1/2"
9	109-0304	1	Hose-Fuel Line 2 1/2"
10	114-0285	1	Valve-Rollover
11	115-4465	1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

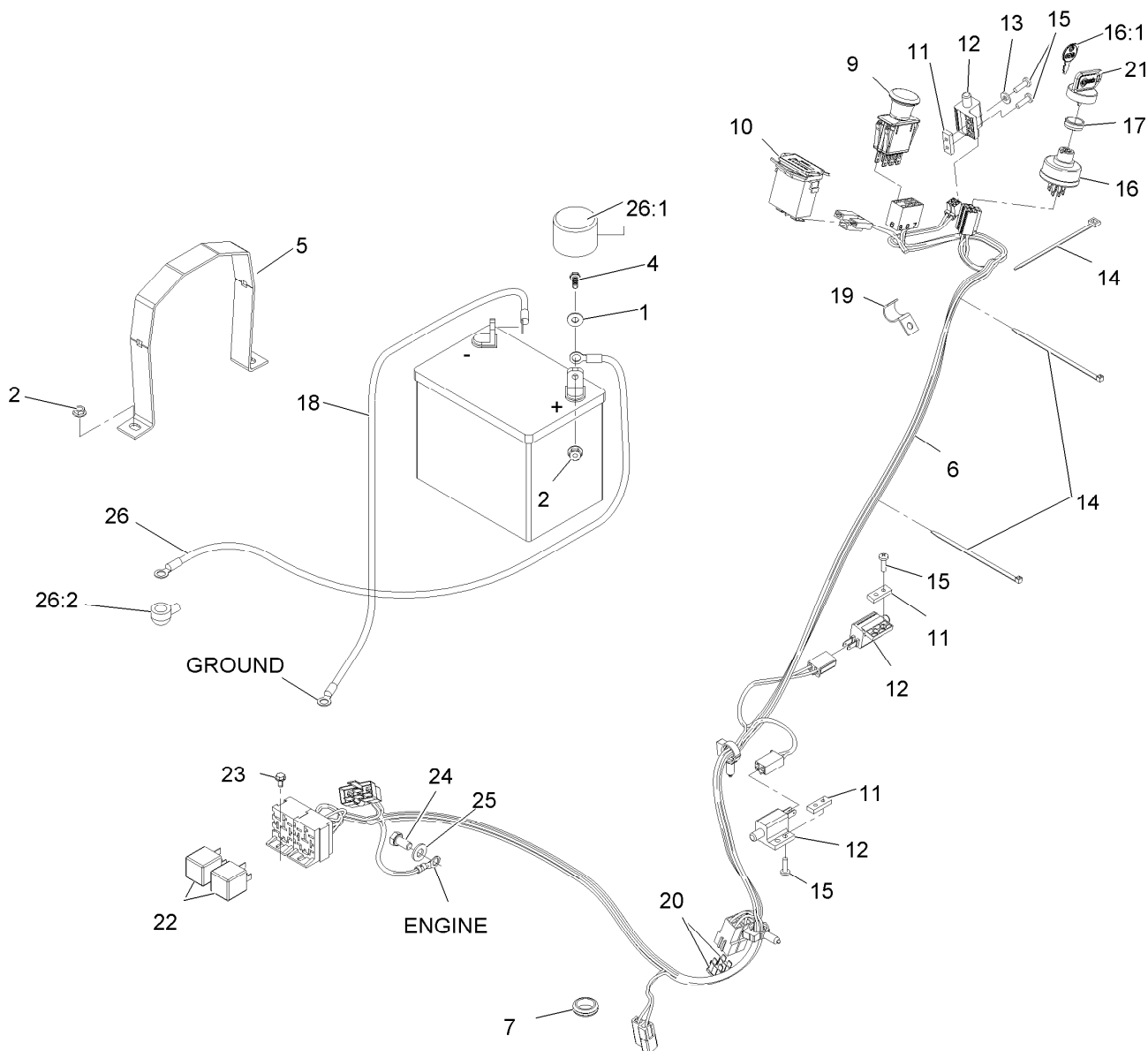


Hydraulics Assembly

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

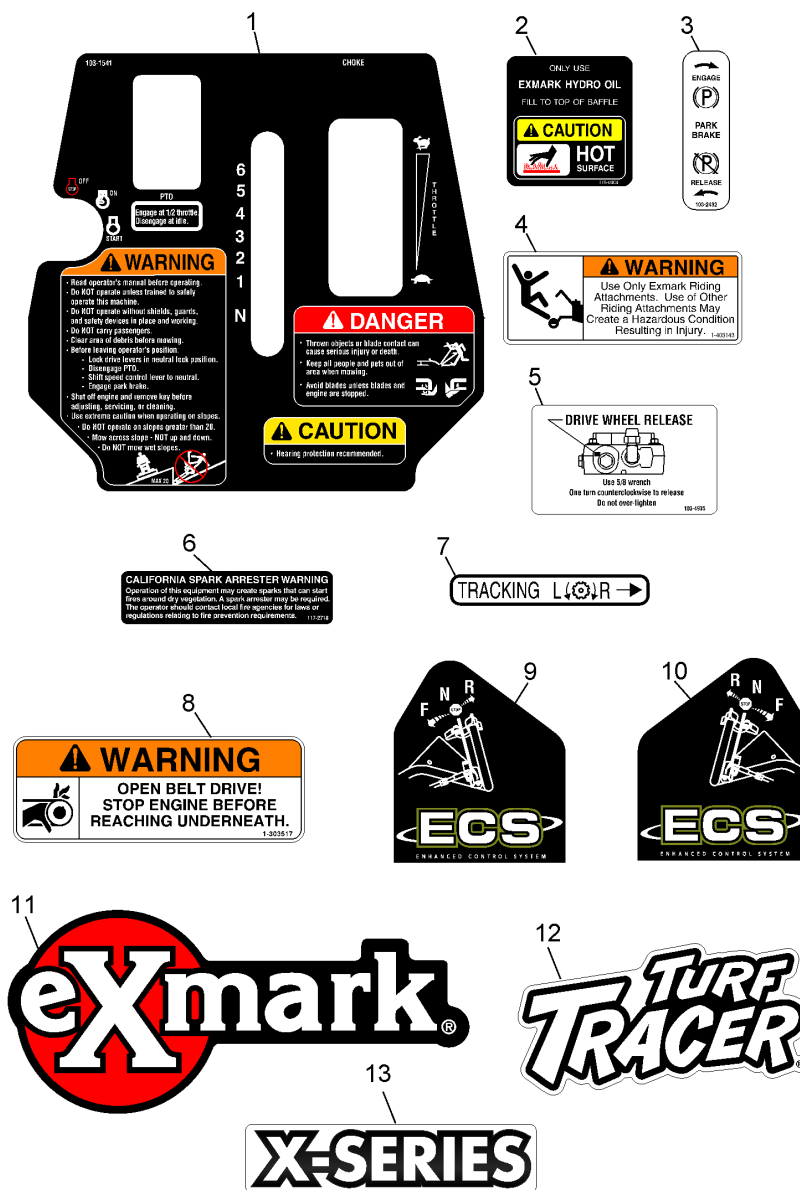
● Use only for operation below 32°F (0°C).



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	1-403143	1	Decal, Sulky Warning
4	103-2432	1	Decal, Park Brake
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:

Notes:

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

SEE EXMARK'S COMPLETE LINE OF ACCESSORIES AND OPTIONS

MID-MOUNT RIDING ACCESSORIES AND OPTIONS

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

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) _____

© 2011 Exmark Mfg. Co., Inc.
Industrial Park Box 808
Beatrice, NE 68310
All Rights Reserved

Part No. 4500-780 Rev. A
(402) 223-6300
Fax (402) 223-5489
Printed in the USA.

