



Illustrated Parts Manual



STARTING SERIAL # L120-214001

Model #: Z31KT
Description: 31HP Kawasaki Tractor

20386 REV 20-214

2/23/2021

SWISHER ACQUISITION INC.
1602 Corporate Drive, Warrensburg Missouri 64093
Phone: 660-747-8183 FAX: 660-747-8650 Toll Free: 1-800-222-8183



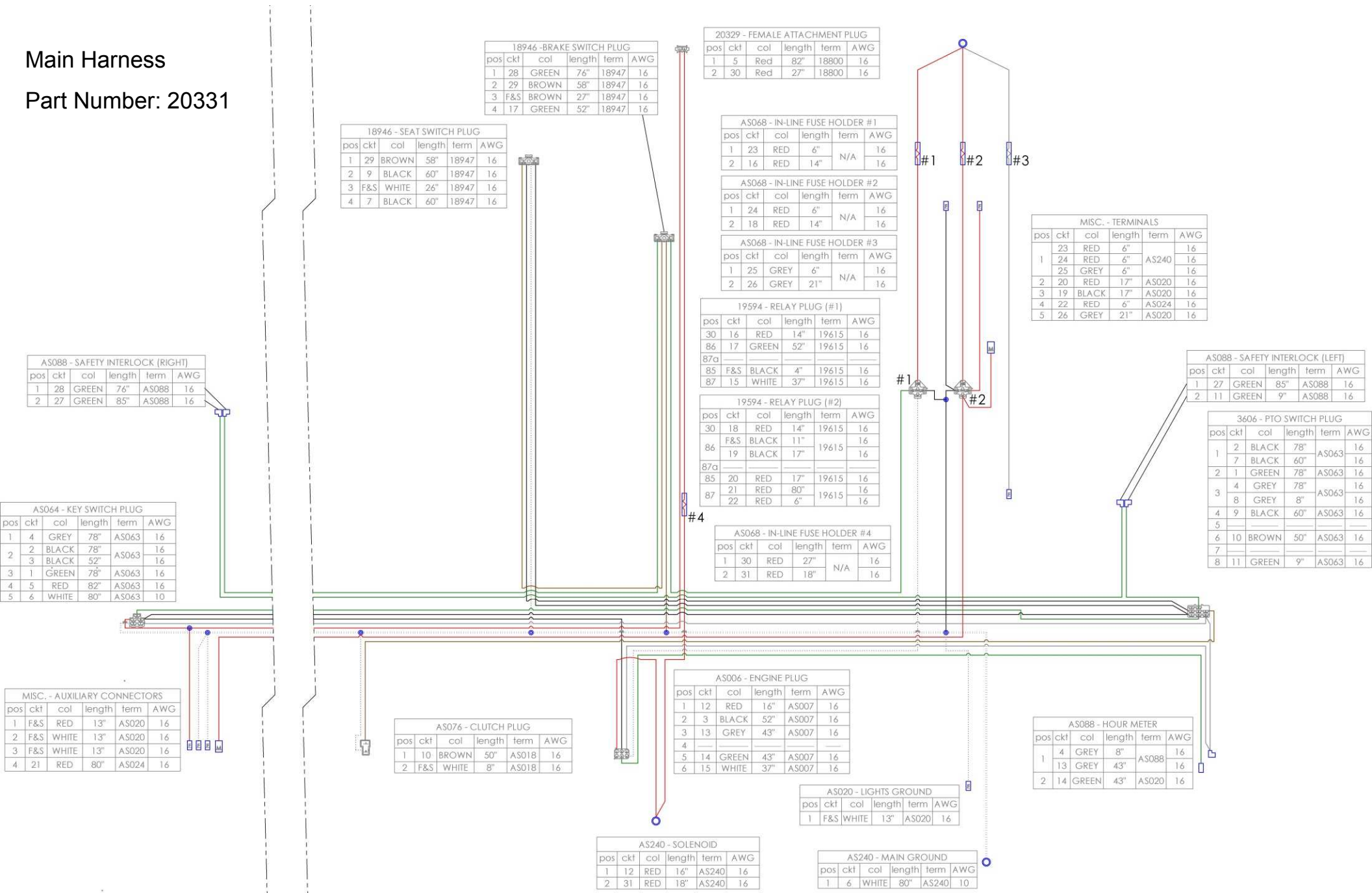
Table of Contents

Electrical Schematics	3-4
Fuel System Routing	5
Frame Components Diagram	6
Frame Components Parts List	7
Engine, Transmission & Gearbox Diagram	8
Engine, Transmission & Gearbox Parts List	9
Seat Base & Fenders Diagram	10
Seat Base & Fenders Parts List	11
Rear Axle, Wheels & Fuel Tank Diagram	12
Rear Axle, Wheels & Fuel Tank Parts List	13
Notes	14

Electrical Schematic - Main

Main Harness

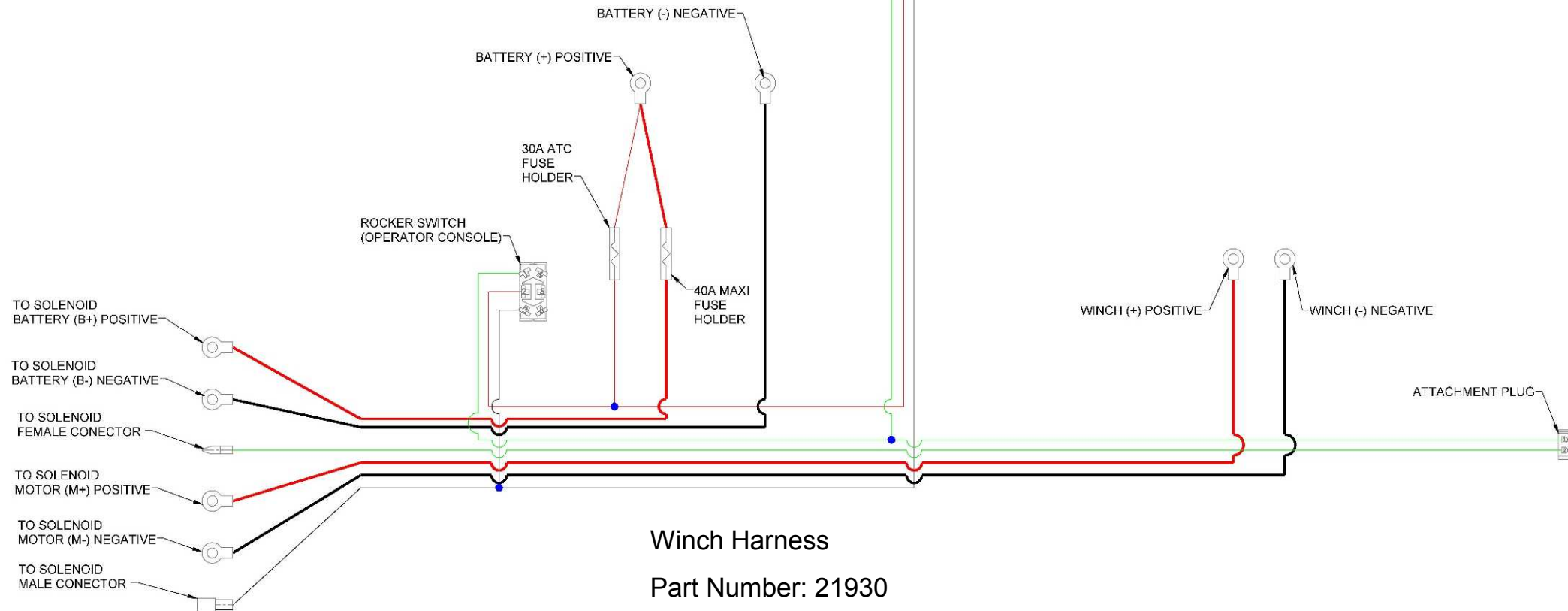
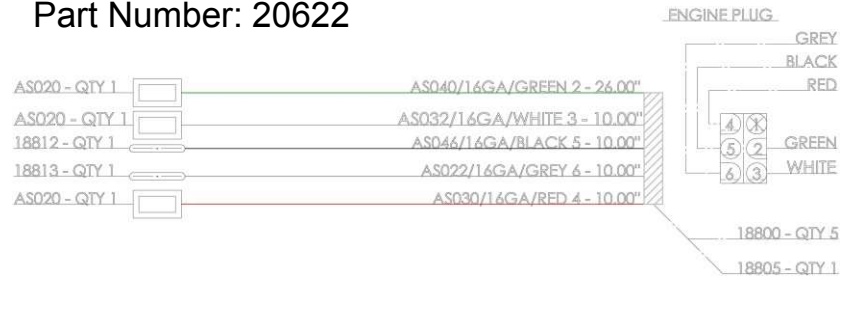
Part Number: 20331



Electrical Schematic - Winch

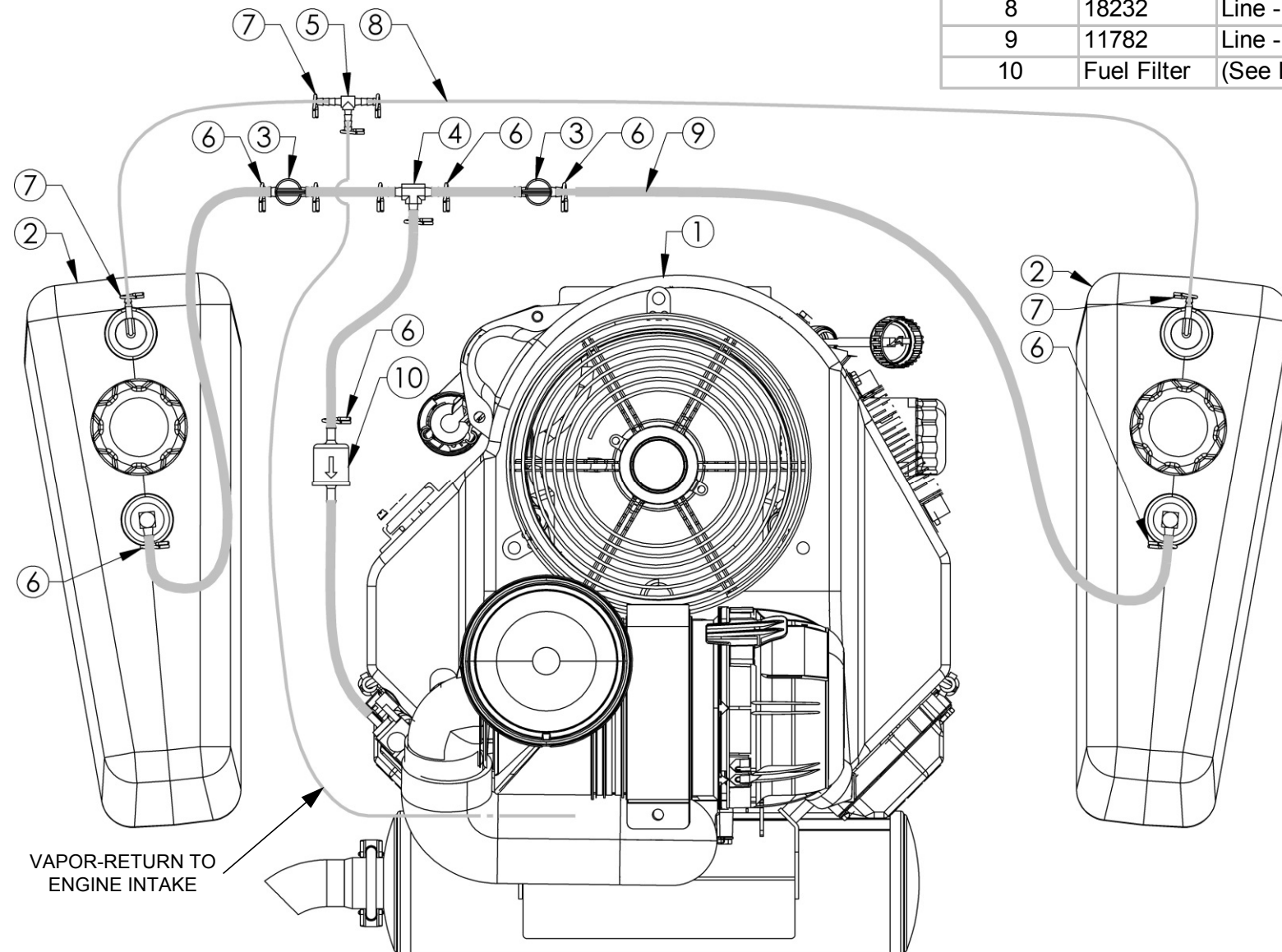
Kawasaki Adapter

Part Number: 20622

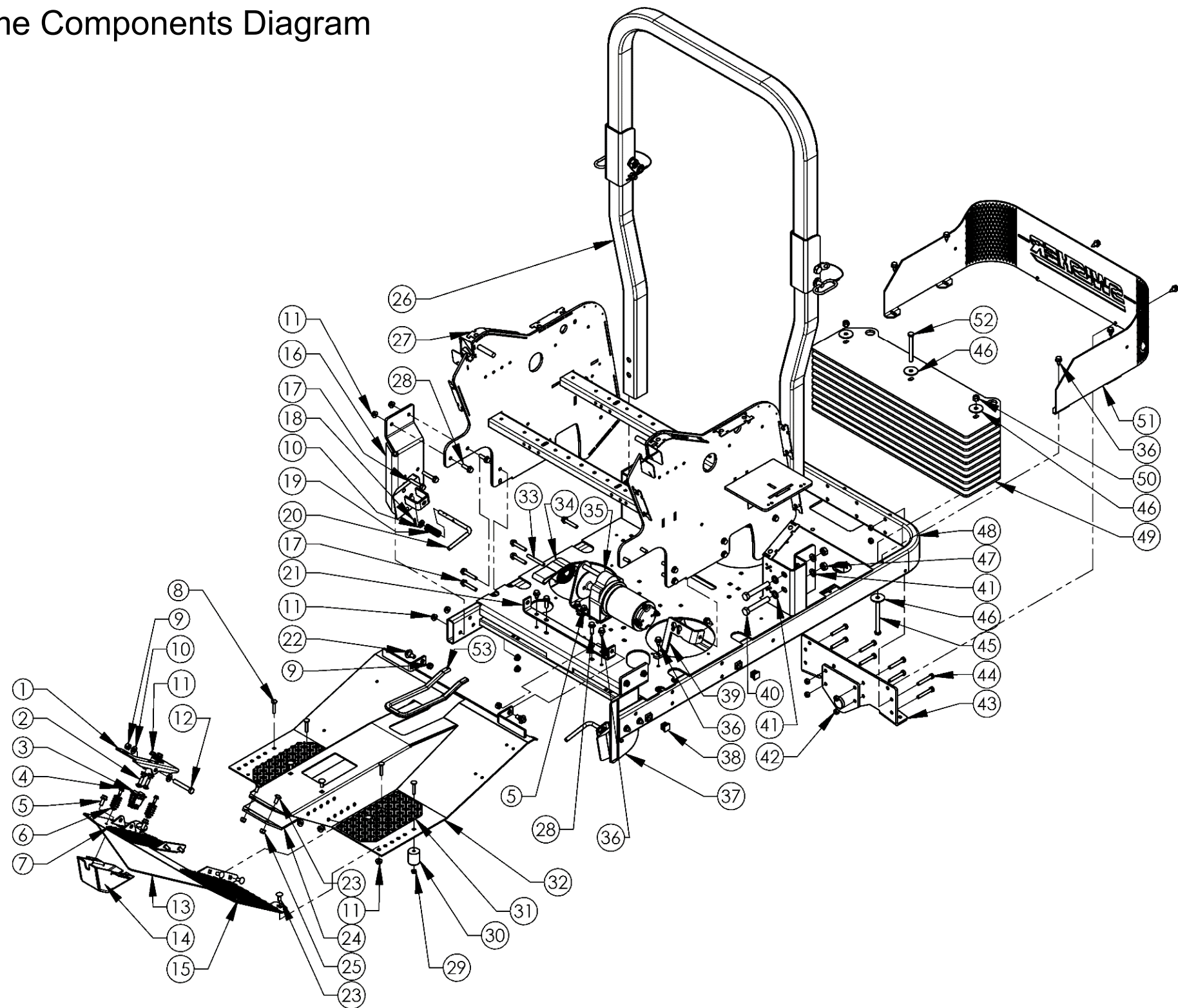


Fuel System Routing

ITEM NO.	PART NO.	DESCRIPTION
1	N/A	Engine - 31HP Kawasaki
2	19373	Tank - Fuel, 4 Gallon; Black
3	7414	Valve - Fuel Shut Off (Inline)
4	18228	Tee - Metal, Barbed, 1/4 Tube
5	18231	Tee - Metal, Barbed, 3/16 Tube
6	6FLC	Clamp - Fuel Line Hose; 1/2"OD .092 Diam
7	18223	Clamp - Fuel Line
8	18232	Line - Fuel, Bulk; 3/16" Low Perm
9	11782	Line - Fuel, Bulk; 1/4" Low Perm
10	Fuel Filter	(See Engine Owners Manual)



Frame Components Diagram



Frame Components Parts List

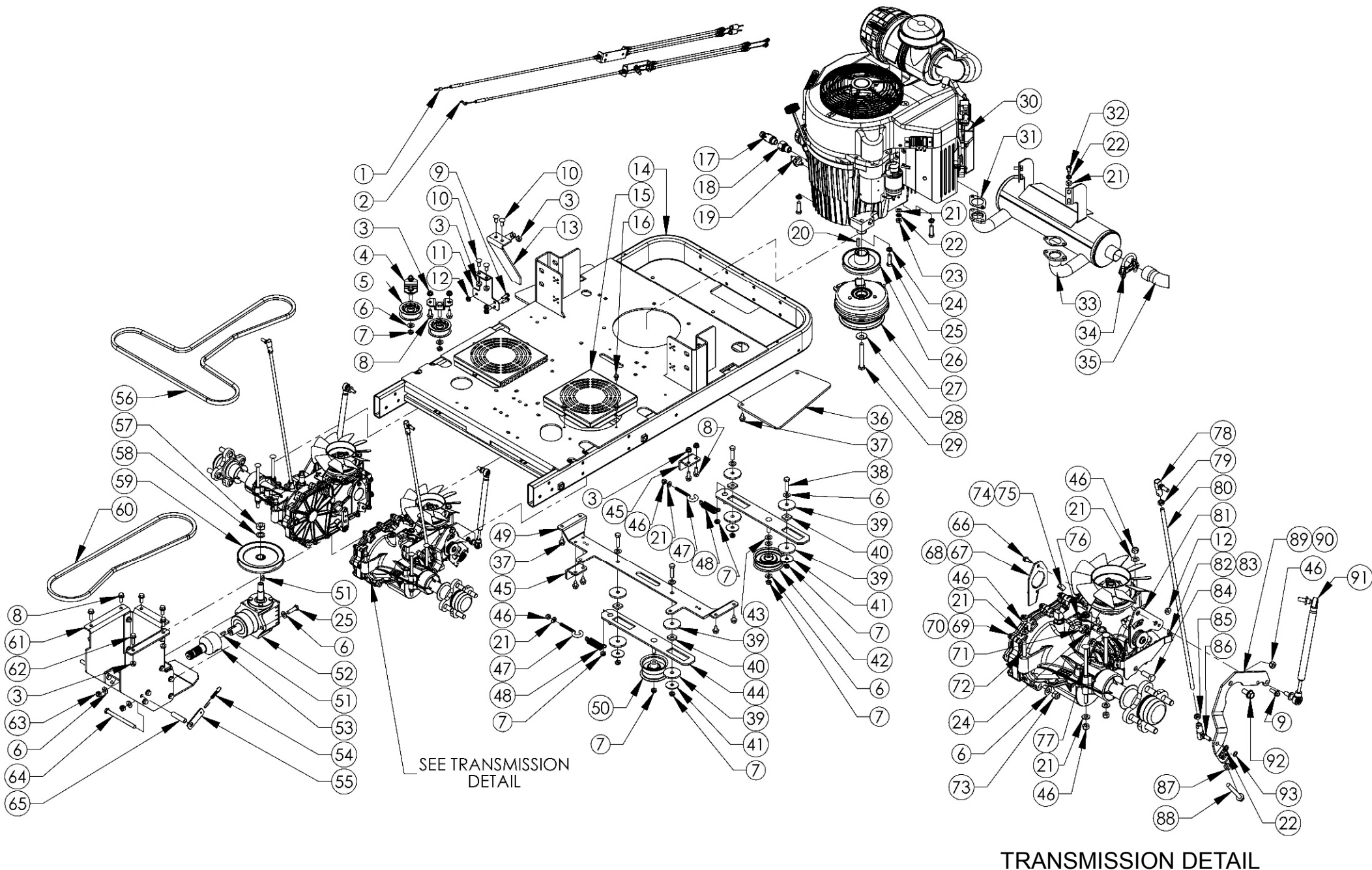
ITEM NO.	PART NUMBER	DESCRIPTION
1	20368*	Pedal - Attachment Lift, In/Out
2	10197	Bolt - Carriage 5/16-18 X 1 GR5
3	19978	Switch - DPDT, 30A, On-Off-On MOM
4	26X263	Screw - TCS Type F, 1/4-20 X 5/8
5	NB596	Bolt - Serr Flange, 5/16-18 X 3/4 Gr 5
6	19618	Spring - Compression, Ø.875 X 1.5 X .085
7	19684	Mat - Foot, Right; Diamond Pattern
8	NB583	Bolt - Carriage 1/4-20 X 1 1/2 GR2 ZY
9	NB280	Nut - 2 Way Lock 3/8-16 ZY Gr A
10	NB272	Washer - SAE Flat 3/8 ZY
11	NB170	Nut - Serr Flange 5/16-18 ZY
12	NB221	Bolt - 3/8-16 X 2 1/2 HCC GR5 ZY
13	19809*	Weldment - Adjustable Foot Switch Plate
14	20369*	Bracket - Switch Cover
15	19683	Mat - Foot, Left; Diamond Pattern
16	19326*	Weldment - Deck Mount, Right
17	NB515	Bolt - Serr Flange, 5/16-18 X 1 3/4 ZY Gr5
18	19816	Pin - Hair, Ø.054 X 7/8; ZP
19	12364	Spring - Compression .620ID X 2" ZP
20	19292	Pin - Deck Release
21	19648*	Bracket - Foot Pan Mount
22	009X58	Bolt - Shoulder, 3/8-16 X 1/2
23	10216	Bolt - Carriage 5/16-18X3/4 GR5 ZY
24	20328	Glide - Plastic, Foot Pan; Short
25	NB181	Nut - Nyloc 5/16-18 ZY
26	18860	Kit - ROPS, Fully Assembled
27	19288*	Weldment - Battery & Seat Mount

ITEM NO.	PART NUMBER	DESCRIPTION
28	10548	Bolt - Serr Flange, 5/16-18 X 1 GR5 ZY
29	024907	Nut - 1/4-20 2-Way Lock ZY
30	9931	Bushing - Seat
31	19682	Mat - Floor, Diamond Pattern
32	20307*	Weldment - Foot Pan
33	20325	Pin - Ø5/16 x 2.5, HD Dowel; ZP
34	20327	Strap - Winch, 50" X 2"
35	20326	Winch - Strap Drum, 12V
36	26X249	Screw - .312-18 X .75 Black Zinc
37	19327*	Weldment - Deck Mount, Left
38	18629	Plug, Finishing - 3/4 X 3/4 X .120 Tube
39	19321*	Mount - Cable; Bypass/Brake Mount
40	12669	Bolt - 1/2-13 X 3 1/4 GR8 Alloy ZY
41	NB177	Washer - Mach 1/2 NR 14 GA
42	NB558	Nut - Lock, 5/16-18 ZY 2 Way Grade A
43	19351*	Weldment - Rear Axle Mount
44	NB507	Bolt - 5/16-18 X 2 HCC GR5 ZY
45	NB645	Bolt - 3/8-16 X 4 HCC GR5 ZY
46	10177	Washer - Fender 3/8 X 1.5, Crbn Stl GR 2
47	NB121	Nut - Jam Lock, 1/2-13 2-Way Gr A
48	19234*	Weldment - Front Mount ZT Frame
49	19376*	Plate - 1/4" Ballast, 11 Lbs
50	NB182	Nut - Nyloc 3/8-16 ZY
51	19401*	Wrap - Engine, Swisher; HD
52	NB649	Bolt - 3/8-16 X 3 1/2 GR5 ZY
53	AS116	Edge Trim, TrimLok, Black (22")

When Ordering Replacement Parts:

* = USE PAINT CODE: TK=BLACK

Engine, Transmission & Gearbox Diagram



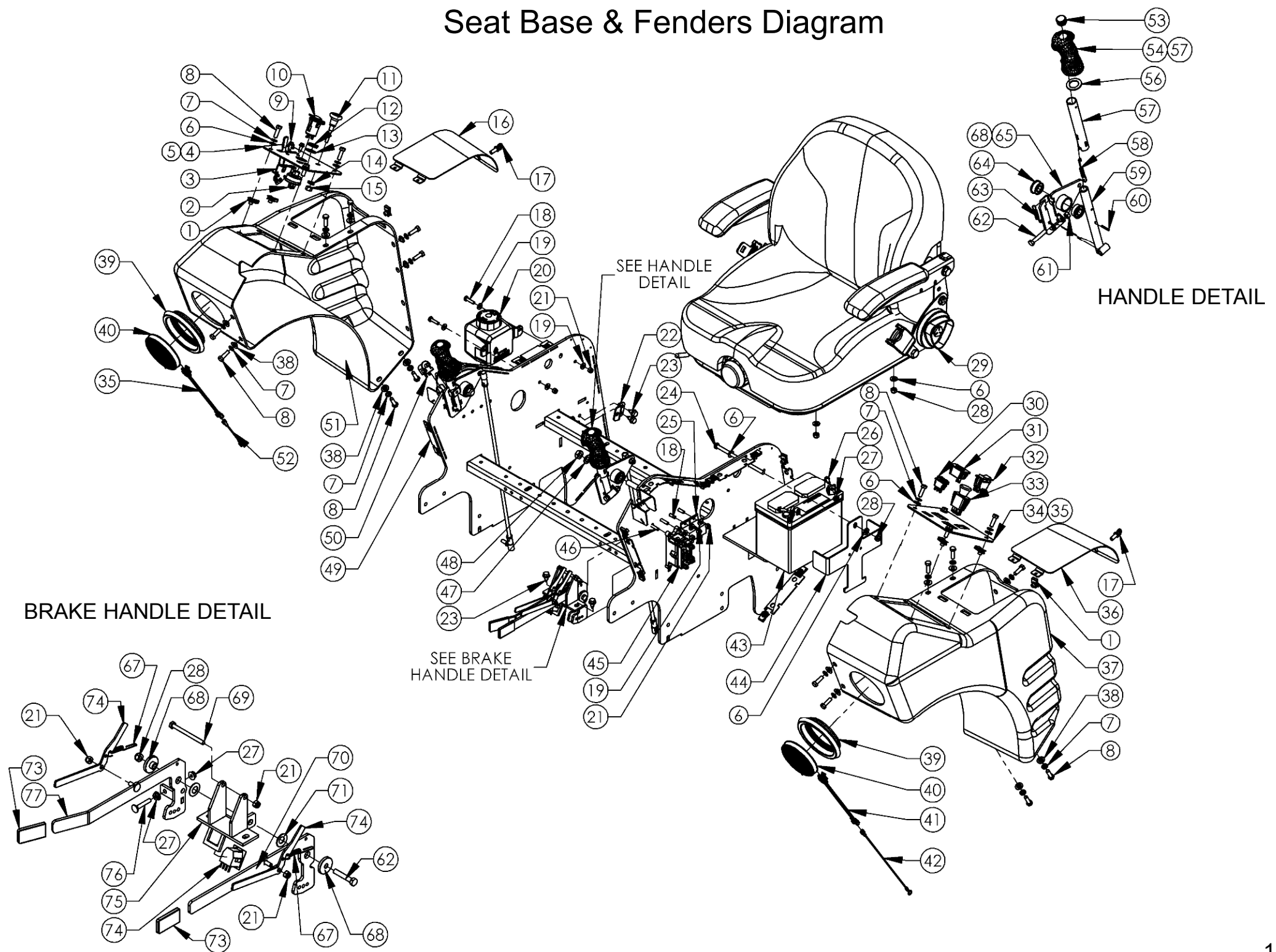
Engine, Transmission & Gearbox Parts List

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	19713	Cable Assembly - Dual, Hydro Brake	32	NB719	Bolt - M8-1.25 X 20, HCC, CL8, ZY	63	NB280	Nut - 2 Way Lock 3/8-16 ZY
2	19714	Cable Assembly - Dual, Hydro Bypass	33	19426	Muffler - Kawasaki, Big Block	64	NB674	Bolt - 3/8-16 X 4 1/2 HCS GR5 ZY
3	NB170	Nut - Serr Flange 5/16-18 ZY	34	18876	Clamp - Muffler	65	19404*	Spacer - Hydro Support Tube
4	18714*	Weldment - Idler Pulley Offset	35	19427	Elbow - Muffler Turn Down, 45°	66	0025X3	Screw - 1/4-20 X 1/2, Thread Form Hex
5	19108	Pulley - Backside Idler, 2.25" OD, 3/8" ID	36	19408*	Plate - Gas Tank Mount	67	18949*	Mount - Brake Cable, Right
6	NB272	Washer - SAE Flat 3/8 ZY	37	26X249	Screw - 5/16-18 X .75 Black Zinc	68	18950*	Mount - Brake Cable, Left
7	NB207	Nut - Jam, Nyloc 3/8-16 ZY	38	NB107	Bolt - 3/8-16 X 1 1/2 HCC GR5 ZY	69	19366	Transmission - Hydrostatic, Left
8	NB596	Bolt - Serr Flange, 5/16-18 X 3/4 Gr 5	39	18874	Washer - Plastic 2" OD X 3/8" ID X .188"	70	19365	Transmission - Hydrostatic, Right
9	NB690	Bolt - Serr Flange, 1/4-20 X 3/4 GR5 ZY	40	18875	Spacer - UHMW, 7/8" Sq. X 3/8" ID X .200"	71	NB212	Nut - HNC, 3/8-16 GR2 ZY
10	10216	Bolt - Carriage 5/16-18X3/4 GR5 ZY	41	10177	Washer - Fender 3/8 X 1.5, Crbn Stl GR 2	72	18580	Bolt - Serr Flange, 5/16-18 x 3; GR5 ZP
11	19690*	Bracket - Brake Bypass Cable Mount	42	B527	Pulley - Idler, OD3.25" ID3/8"	73	NB182	Nut - Nyloc 3/8-16 ZY
12	NB524	Nut - Serr Flange, 1/4-20 GR 5 ZY	43	NB196	Washer - 3/8 ZY	74	20336	Fitting - 60° Hose Barb, SAE 9/16-18
13	19449*	Bracket - Clutch Stop	44	19303*	Weldment - Hydro/Gearbox Idler	75	19665	Clamp - Ø5/8 Hose
14	19234*	Weldment - Front Mount ZT Frame	45	19309*	Bracket - Idler Tensioner	76	19816	Pin - Hair, Ø.054 X 7/8; ZP
15	18691*	Cover - Hydro Fan	46	NB181	Nut - Nyloc 5/16-18 ZY	77	18635	Bolt - Carriage 5/16-18x6 GR5
16	NB114	Bolt - TCS 1/4-20 X 1/2 Unslot ZY Gr2	47	10198	Eyebolt - 5/16-18 X 2 1/4 ZY	78	NB263	Linkage - Ball, Right
17	16000	Valve - Oil Drain	48	7821	Latch Spring	79	NB190	Nut - Jam 5/16-24 ZY
18	18810	Adapter - Oil Drain, Kawasaki	49	19301*	Bracket - Rear Frame Brace	80	19320	Linkage - 5/16-18 x 1 RHT & LHT, ZY
19	18809	Oil Sensor	50	7509	Pulley - Idler OD-2.75", ID-3/8"	81	NB779	Nut - Serr Flange, Hex ZY 3/8-16
20	9031	Key Stock - 1/4 X 1	51	NB638	Key - Woodruff, 3/16 X 3/4 #9	82	18940*	Mount - Bypass Cable, Right
21	NB275	Washer - SAE Flat 5/16 ZY	52	19330	Gearbox - 90°-1:1, CW Input/CCW Output	83	18941*	Mount - Bypass Cable, Left
22	NB159	Washer - Split Lock 5/16 ZY	53	19337	Adapter - Ø7/8 To Ø1-15 Spline	84	NB604	Bolt - 3/8-16 X 1 GR5 ZY
23	NB718	Nut - Hex, M8-1.25, ZY	54	17465	Spring - Extension, Hydro Release	85	NB265	Nut - Jam 5/16-24 Lft-Hand Thrd ZY Gr2
24	NB711	Washer - Split Lock, 3/8 ZY	55	18952*	Plate - Brake Return Spring	86	NB264	Linkage - Ball, Left; (LH Thread)
25	NB618	Bolt - 3/8-16 X 1 1/4 GR5 ZY	56	19423	Belt - 76", A Section; Hydro	87	NB210Z	Nut - 5/16-18 HNC GR2 ZY
26	19285	Pulley - Engine, Ø1 1/8" Bore	57	19370	Nut - Hex Jam, 5/8-18 ZY	88	16836	Bolt - Serr Flng5/16-18 X 2 3/4 GR5, ZP
27	19433	Clutch - Ø1 1/8", 125 Ft/Lbs	58	NB149	Washer - 5/8 ID X 1 OD 14 GA ZY	89	19719	Weldment - Hydro Control, Left
28	10291	Washer - Belleville, .512X1.26X138 Gr2	59	19283	Pulley - Deck Drive, 5.5"	90	19718	Weldment - Hydro Control, Right
29	NB705	Bolt - HCF, 7/16-20 X 3.25 GR5 ZY	60	19424	Belt - 50", A-Section; PTO	91	18723	Damper - Control
30	N/A	Engine - 31 HP Kawasaki	61	19308	Subassembly - Gearbox Mount, Input	92	NB780	Bolt - Serr Flange, ZY 3/8-16X3/4 Gr5
31	N/A	Exhaust Gasket, Kawasaki	62	10548	Bolt - Serr Flange, 5/16-18 X 1 GR5 ZY	93	NB215	Nut - Hex 5/16-24 ZY

When Ordering Replacement Parts:

* = USE PAINT CODE: TK=BLACK

Seat Base & Fenders Diagram



Seat Base & Fenders Parts List

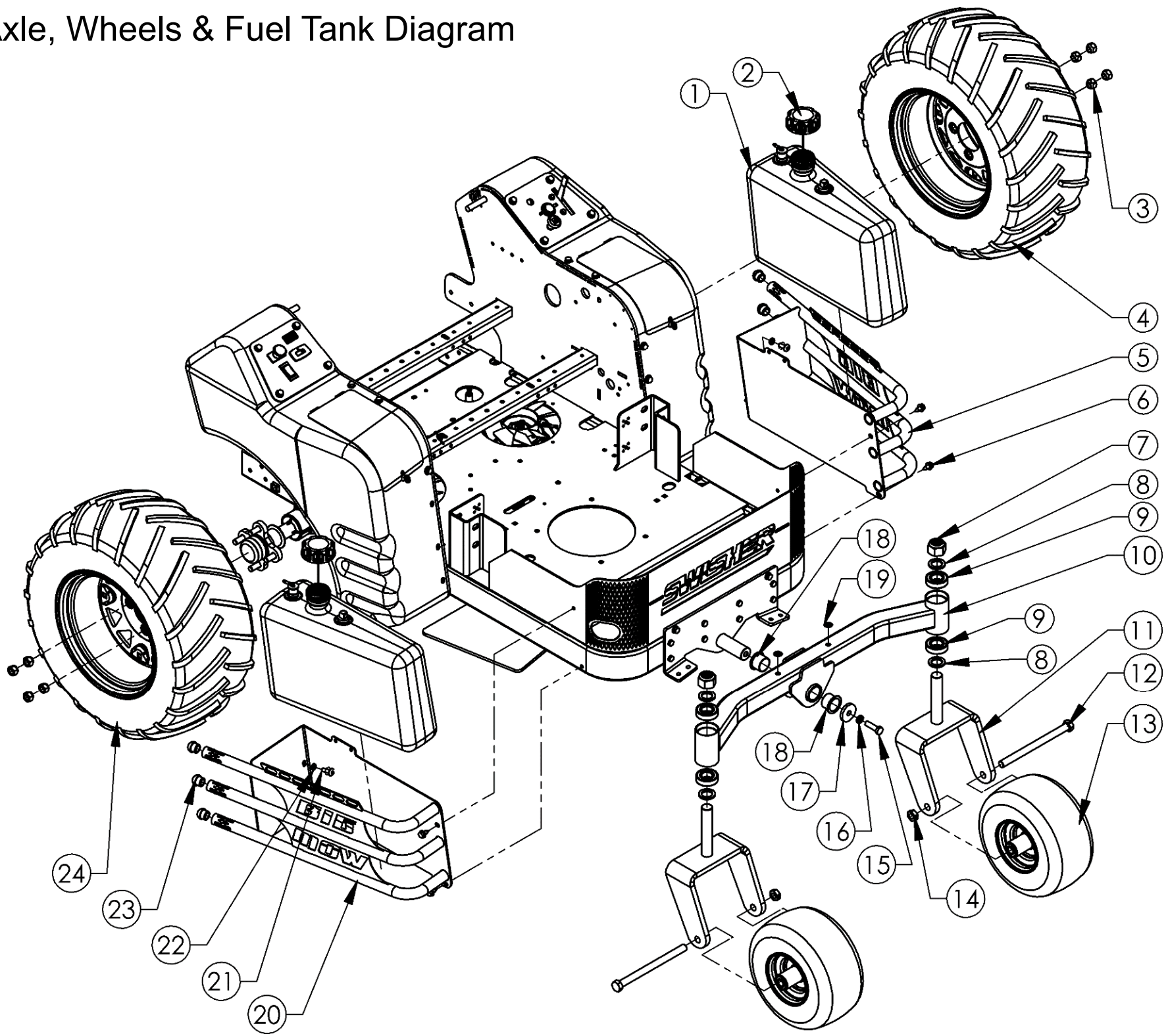
ITEM NO.	PART NUMBER	DESCRIPTION
1	3706	Clip - Tinnerman 5/16-18
2	3623	Key Switch
3	19402	Cable - Throttle, 55"
4	19352*	Panel - Control, Right
5	20365	Decal - Right Control Panel
6	NB275	Washer - SAE Flat 5/16 ZY
7	NB159	Washer - Split Lock 5/16 ZY
8	NB501	Bolt - 5/16-18 X 1 HCC GR5 ZY
9	26X263	Screw - TCS Type F, 1/4-20 X 5/8
10	18745	Adapter - 12V Power Plug
11	18606	Cable - Control, Engine Choke 66"
12	9087	Nut - Key Switch
13	9088	Washer - Lock Key Switch
14	NB711	Washer - Split Lock, 3/8" Zy, Medium
15	NB456	Nut - 3/8-24 HNF ZY Gr 2
16	19392*	Cover - Battery, Right
17	18802	Screw - Thumb, Shoulder; 5/16-18 X 3/4
18	NB102	Bolt - 1/4-20 X 1 HCC GR5 ZY
19	NB274	Washer - SAE Flat 1/4 ZY
20	19430	Reservoir - Hydros
21	NB180	Nut - Nyloc 1/4-20
22	19345*	Bracket - Damper Mount
23	26X249	Screw - .312-18 X .75 Black Zinc
24	NB680	Bolt - 5/16-18 X 6 1/2 HCC GR5 ZY
25	15749	Relay - 12 Volt
26	NB690	Bolt - Serr Flange, 1/4-20 X 3/4 GR5 ZY
27	NB524	Nut - Serr Flange, 1/4-20 Grade 5 ZY
28	NB181	Nut - Nyloc 5/16-18 ZY
29	19367	Seat - Suspension, Armrest; Seatbelts
30	19680	Switch - Rocker, Illuminated; Red
31	17635	Hour Meter - 12 Volt, Digital
32	19978	Switch - DPDT, 30A, On-Off-On MOM
33	3605	Switch - PTO
34	19405*	Panel - Control, Left
35	20364	Decal - Left Control Panel
36	19409*	Cover - Battery
37	19375	Fender - Left
38	18717	Spacer - Fender
39	19666G	Grommet - Ø5 1/4, Light Kit

ITEM NO.	PART NUMBER	DESCRIPTION
40	19666	Light - Ø4" LED, White
41	19667	Wire Lead - W/ Quickslides
42	19694	Wire Lead - Ground, 12"
43	EBAT340	Battery - 12V
44	19390*	Bracket - Battery Hold Down
45	21932	Solenoid, Winch 12V
46	NB103	Bolt - HTC 1/4-20 X 1 1/4 GR5 ZY
47	NB177	Washer - Mach 1/2 NR 14 GA
48	NB121	Nut - Jam Lock, 1/2-13 2-Way
49	19335*	Plate - Cup Holder
50	18636	Switch - Starter (Normally Open)
51	19374	Fender - Right, Front Mount
52	19695	Wire Lead - Ground, 4"
53	19669	Plug - Ø7/8 x 14-20 GA; Black Plastic
54	18808	Grip - Hand Conforming, Left
55	18807	Grip - Hand Conforming, Right
56	10161	Washer - 7/8 IDX1 3/8OD 14 GA ZY
57	19431	Sub-Assembly - Tube Slide, Top
58	19437	Spring - Inner Handle Tension
59	19362	Weldment - Handle Tube, Bottom
60	19436	Pin - Roll, Ø1/8" X 7/8"
61	NB558	Nut - Locking, 2 Way 5/16-18 Zp
62	NB503	Bolt - 5/16-18 X 1.75
63	19438	Spring - Outer Handle Tension
64	MWB	Bearing - Flange, 1 1/8"OD X 1/2"ID
65	19359*	Weldment - Handle Pivot, Left
66	19360*	Weldment - Handle Pivot, Right
67	17465	Spring - Extension, Hydro Release
68	14029	Bushing
69	NB574	Bolt - 1/4-20 X 3 GR2 ZP
70	18951*	Weldment - Bypass Arm
71	18937	Washer - Belleville 1/2 ID X 1 OD X .087
72	18933*	Plate - Swivel Lock
73	2077	Pivot - Handle Grip, Yellow
74	18945	Switch - 2 Pole, NC/NO
75	18936*	Weldment - Brake Mount Bracket
76	NB583	Bolt - Carriage 1/4 - 20 X 3/4 Gr5 Zy
77	18931*	Weldment - Brake Arm

When Ordering Replacement Parts:

* = USE PAINT
CODE: TK=BLACK

Rear Axle, Wheels & Fuel Tank Diagram



Rear Axle, Wheels & Fuel Tank Parts List

ITEM NO.	PART NUMBER	DESCRIPTION
1	19373	Tank - Fuel, 4 Gallon; Black
2	18221	Cap, Fuel - 2.50 Gallon, Carb Sealed
3	2203LN	Nut - Lug, Wheel Hub, 1/2-20 ZY GR5
4	19429R	Tire/Wheel - 23 X 10.5-12 Chevron; Right
5	19378*	Weldment - Tank Surround, Right
6	26X249	Screw - .312-18 X .75 Black Zinc
7	NB612	Nut - Nyloc 1"-8 ZY
8	NB614HT	Washer - 1 X 1 1/2 10GA
9	4845	Bearing - 1"ID X 2"OD
10	19341*	Weldment - Rear Pivot Axle
11	19332*	Weldment- Short Caster
12	18953	Bolt - 5/8-11 X 8 1/2, GR8; ZY
13	19290	Tire/Wheel - 11 X 6.00-5 Smooth, 5/8; Blk
14	NB595	Nut - Lock Jam, 5/8-11 2 Way
15	NB637	Bolt-HCF, 7/16-20 X 1 1/2 GR5 ZY
16	10146	Washer - Split Lock, 7/16 ZY
17	19804	Washer - Ø7/16 x Ø1 3/4 x 1/4"
18	A124B	Bushing - Flanged
19	18868	Plug - Plastic, Ø3/8
20	19398*	Weldment - Tank Surround, Left
21	19815	Bolt - BHCS, 5/16-18 X 1; ZP
22	NB159	Washer - Split Lock 5/16 ZY
23	19384	Plug - Ø1" X 14 Ga. Tubing, Dome; Black
24	19429L	Tire/Wheel - 23 X 10.5-12 Chevron; Left

When Ordering Replacement Parts:

* = USE PAINT CODE: TK=BLACK

Notes
