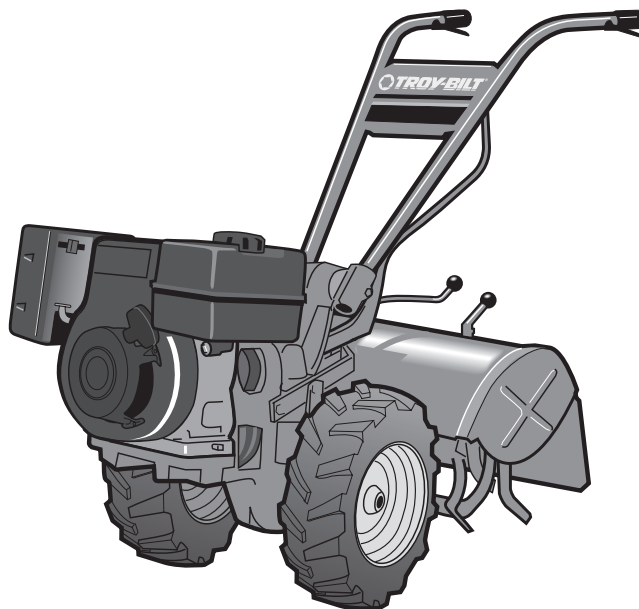




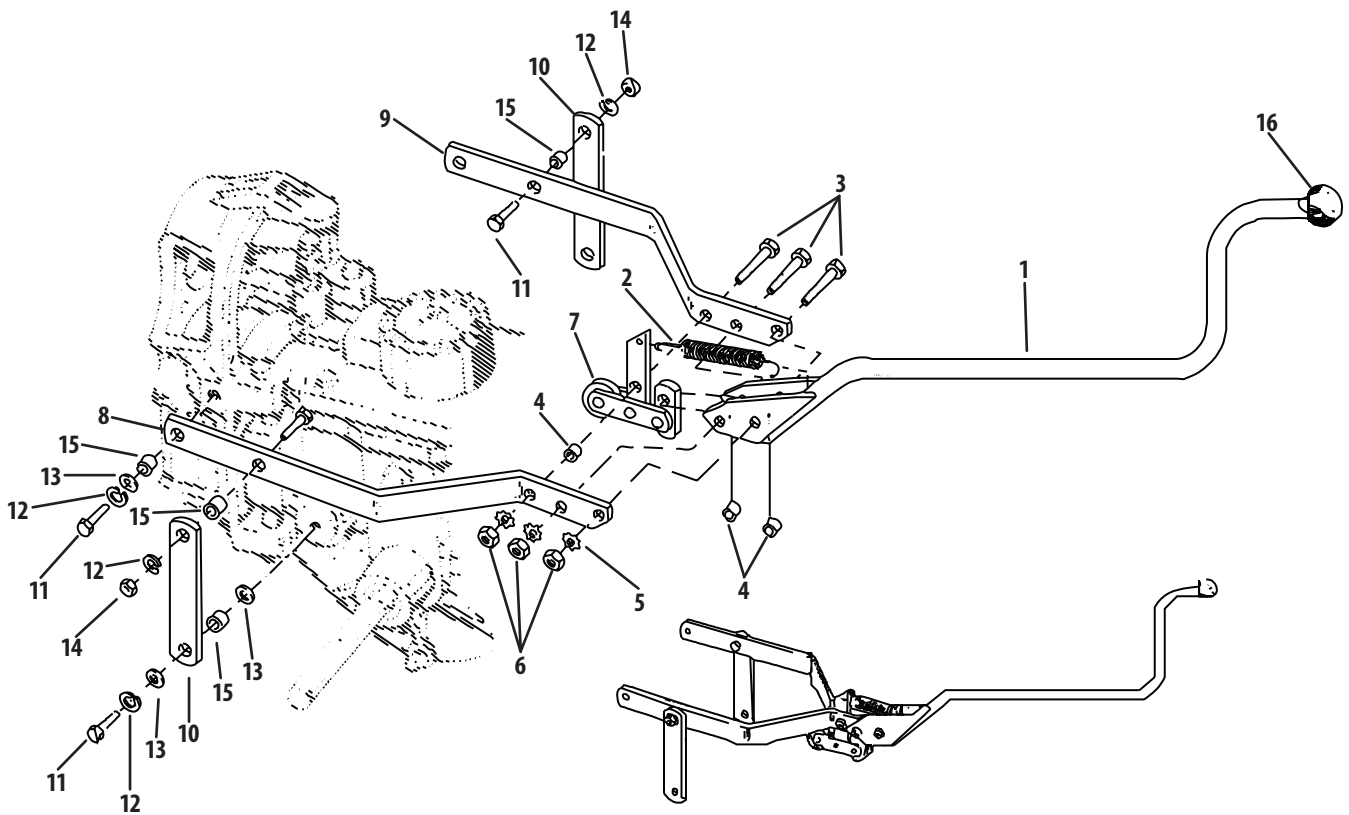
ILLUSTRATED PARTS MANUAL



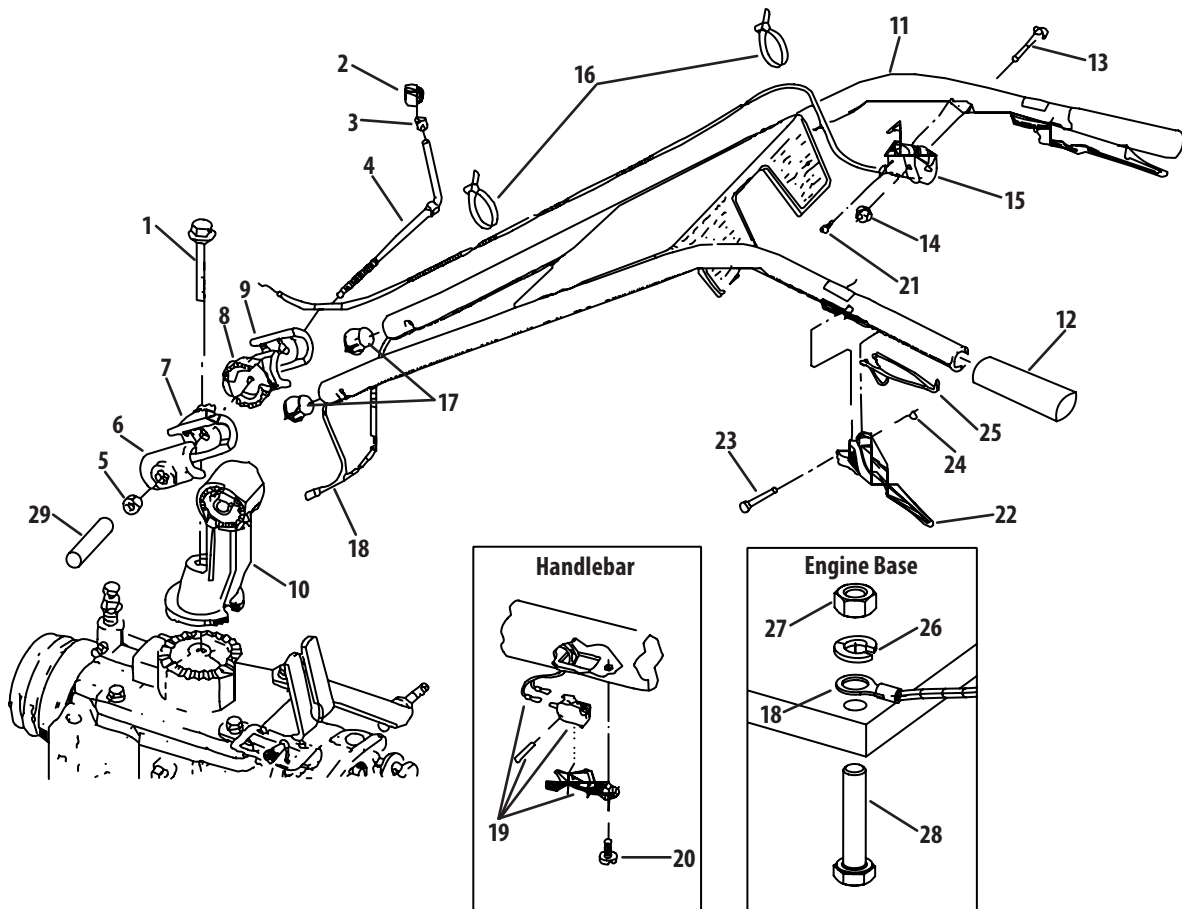
Large Frame Tiller — 680 Series

TROY-BILT LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

680 Series Drive Lever & Yoke Assembly



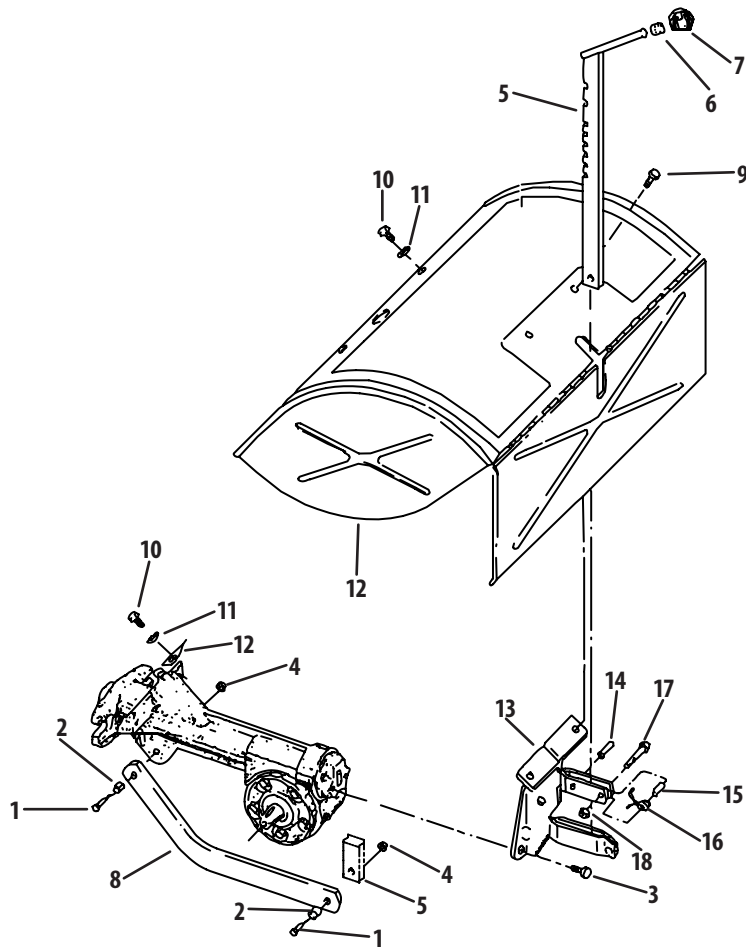
Ref.	Part Number	Description
1.	GW-2595	Forward/Reverse Lever
2.	1908156	Clutch Pawl Spring
3.	710-0805	Hex Bolt, $\frac{5}{16}$ -18 x 1- $\frac{1}{2}$ "
4.	GW-2447	Bushing, $\frac{3}{8}$ "
5.	1177548	External Tooth Lockwasher, $\frac{5}{16}$ "
6.	712-3010	Hex Nut, $\frac{5}{16}$ "-18
7.	686-04006	Roller Assembly
8.	GW-2165-1	Yoke (Left)
9.	GW-2165-2	Yoke (Right)
10.	GW-2164	Yoke Pivot Link, 6- $\frac{7}{8}$ "
11.	710-0514	Hex Bolt, $\frac{3}{8}$ -16 x 1"
12.	736-0169	Spring Lockwasher, $\frac{3}{8}$ "
13.	736-3050	Flat Washer, $\frac{3}{8}$ "
14.	712-3017	Hex Nut, $\frac{3}{8}$ "-16
15.	GW-1113-1	Bushing Spacer, $\frac{19}{64}$ "
16.	GW-2595	Knob



Ref.	Part Number	Description
1.	GW-9548	Hex Bolt, 1/2-13 x 3-1/2"
2.	GW-9119	Handlebar Height Adjustment Knob
3.	GW-9120	Retaining Ring
4.	GW-2657	Handlebar Height Adjustment Stud
5.	1186233	Hex Nut, 1/2"-13
6.	GW-1021-1	Handlebar Hgt. Adj. Clamp (LT)
7.	GW-2542-1	Handlebar Hgt. Adj. Ratchet (LT)
8.	GW-2542-2	Handlebar Hgt. Adj. Ratchet (RT)
9.	1901784	Handlebar Hgt. Adj. Clamp (RT)
10.	GW-2534A	Handlebar Mounting Base
11.	649-04020	Handlebars
12.	720-04083	Handlebars Grip
13.	1918111	Curved Head Bolt, 1/4-20 x 2"
14.	1186389	Hex Nut, 1/4"-20
15.	1909286	Throttle Control & Cable, 66"

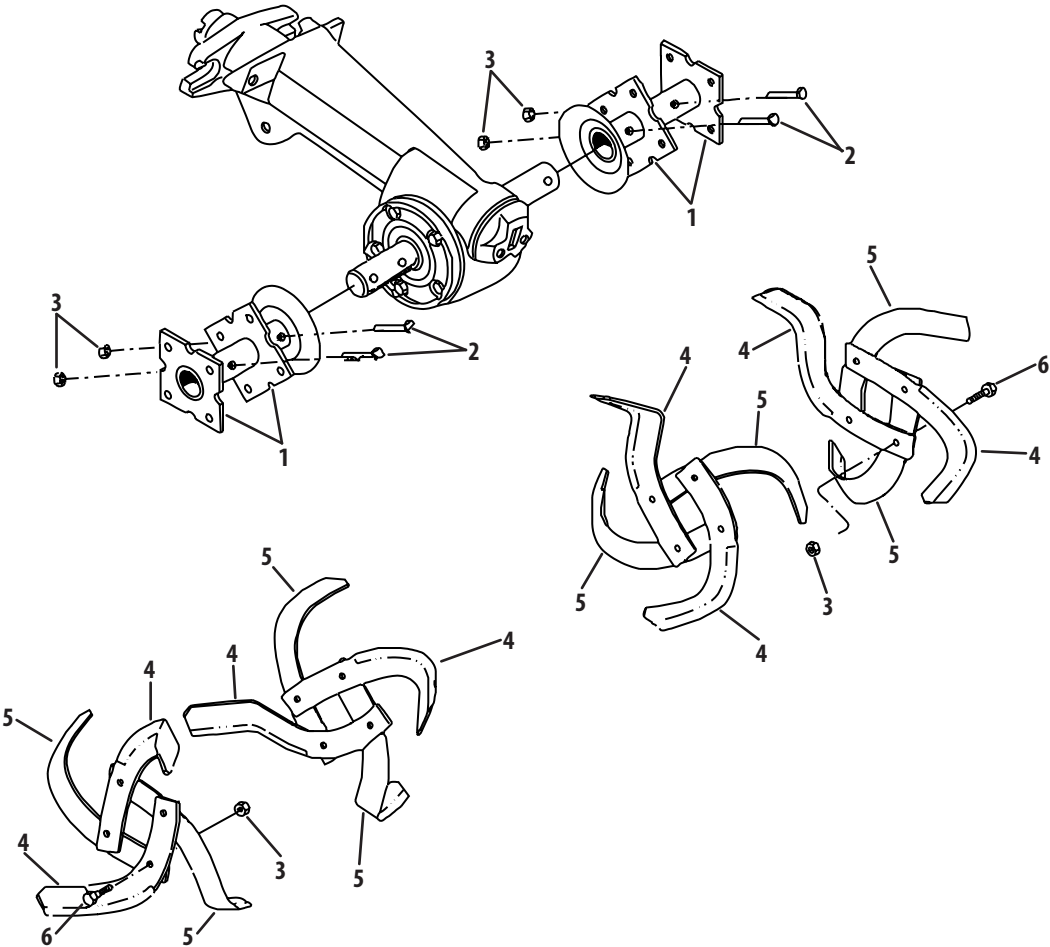
Ref.	Part Number	Description
16.	725-0157	Plastic Tie
17.	GW-9219	Wire Harness Retainer Plug
18.	725-04367	Handlebar Wire Harness Assembly
19.	GW-2563	Switch Assembly
20.	710-0779A	Pan Head Screw, #10-16 x 1/2"
21.	GW-9733	Phillips Head Screw, 10-32 x 1/2"
22.	786-04003	Operator Presence Control Lever
23.	GW-9199	Pivot Pin
24.	GW-9514	Retaining Ring
25.	GW-9387	Return Spring
26.	712-3010	Hex Nut, 5/16-18
27.	736-0119	Washer, 5/16
28.	710-0805	Cap Screw, 5/16-18 x 1.5
29.	1901835	Plug Cap

680 Series Depth Regulator & Tine Shield



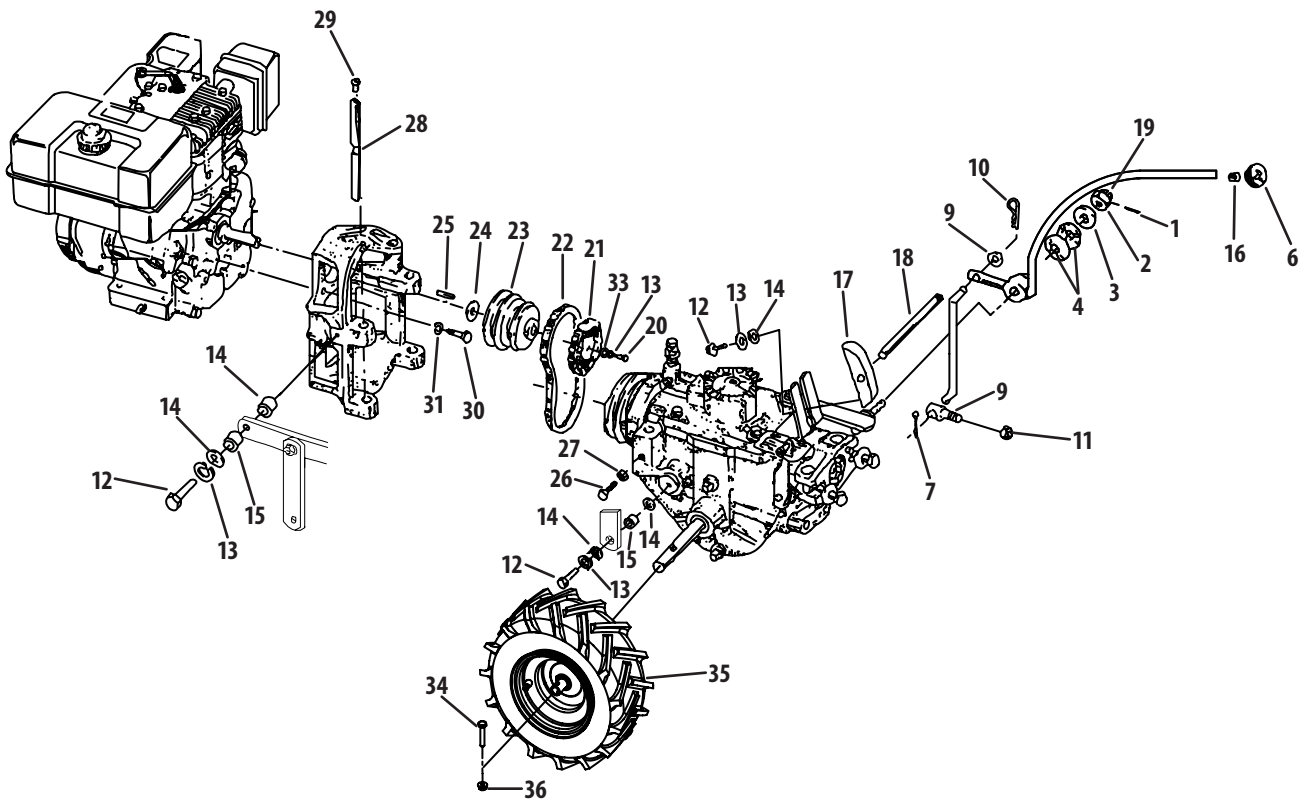
Ref.	Part Number	Description
1.	710-3005	Hex Bolt, $\frac{3}{8}$ -16 x 1- $\frac{1}{4}$ "
2.	GW-1113-1	Bushing, $\frac{1}{64}$ "
3.	710-04049	Hex Flange Bolt, $\frac{5}{16}$ -18 x $\frac{5}{8}$ "
4.	712-04065	Hex Nut, $\frac{3}{8}$ "-16
5.	GW-20795	Depth Regulator
6.	GW-9120	Retaining Ring
7.	GW-9119	Depth Regulator Knob
8.	GW-2121	Depth Regulator Bar Drag
9.	710-0599	Thread-forming Screw, $\frac{1}{4}$ -20 x $\frac{1}{2}$ "

Ref.	Part Number	Description
10.	710-04043	Hex Flange Bolt, $\frac{5}{16}$ -18 x $\frac{3}{4}$ "
11.	GW-9929	Flat Washer, $\frac{5}{16}$ "
12.	1904563	Hood
13.	GW-2525	Bracket
14.	715-04034	Roll Pin (Spirol), $\frac{1}{4}$ " x 1"
15.	750-04556	Split Spacer
16.	732-04320	Spring
17.	710-0597	Hex Bolt, $\frac{1}{4}$ -20 x 1"
18.	712-04064	Locknut, $\frac{1}{4}$ "-20



Ref.	Part Number	Description
1.	686-04068	Tine Holder
2.	710-3096	Hex Bolt, 3/8"-16 x 2"
3.	712-3000	Hex Locknut, 3/8"-16
4.	742-04118	Bolo Tine Left
5.	742-04119	Bolo Tine Right
6.	710-3005	Hex Bolt, 3/8"-16 x 1"

680 Series Drive System

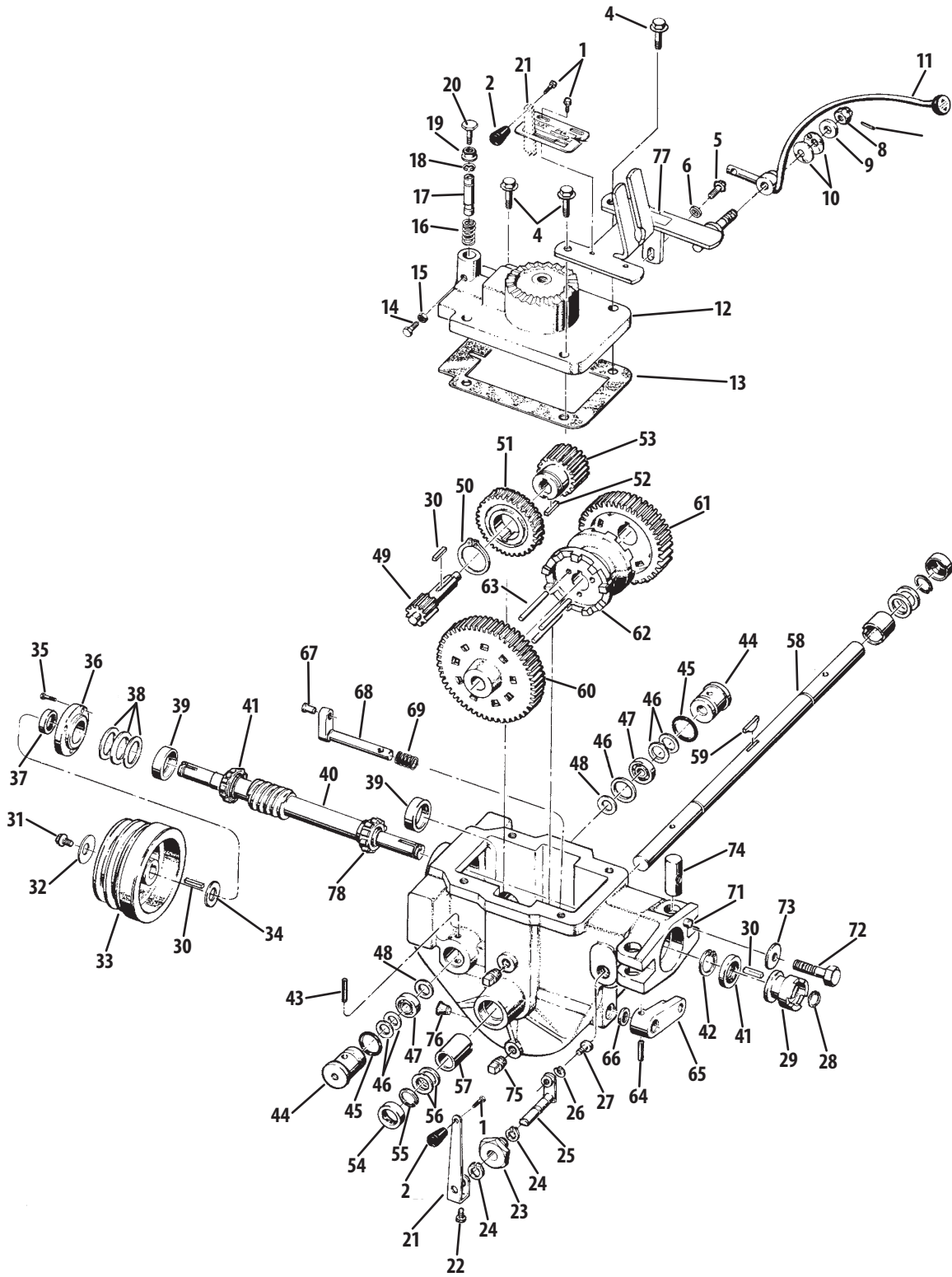


680 Series Drive System

Ref.	Part Number	Description
1.	GW-9362	Spring Pin, 1/8"
2.	736-0326	Flat Washer, .510 x 1.0 x .125
3.	GW-9934	Shoulder Washer, 1/2"
4.	GW-9932	Disc Spring Washer
5.	GW-2178	Wheel Speed Shift Lever
6.	1902240	Knob
7.	GW-9317	Cotter Pin, 3/32" x 1"
8.	GW-1033	Swivel
9.	736-0275	Flat Washer, 5/16"
10.	714-04048	Hair Pin Cotter
11.	712-0158	Hex Locknut, 5/16"-18
12.	710-0514	Hex Bolt, 3/8-16 x 1"
13.	736-0169	Spring Lockwasher, 3/8"
14.	736-3050	Flat Washer, 3/8"
15.	GW-1113-1	Spacer Bushing, 19/64"
16.	GW-9120	Retaining Ring
17.	GW-2102	Belt Adjustment, 3-7/8"
18.	GW-2100	Belt Adjustment Rod
19.	712-3012	Hex Nut, 1/2-20
20.	710-0539	Hex Bolt, 3/8-24 x 1.75

Ref.	Part Number	Description
21.	756-04171	Reverse Disc
22.	GW-9245	Forward Drive Belt
23.	619-04124	Engine Power Take-off Pulley
24.	736-04192	Flat Washer, .766 x 1.0 x .031*
—	736-04187	Flat Washer, .766 x 1.0 x .062*
25.	GW-9303	Engine Pulley Key, 3/16"x 2-1/2"
26.	710-0376	Hex Bolt, 5/16-18 x 1"
27.	712-3010	Hex Nut, 5/16-18
28.	GW-1034	Engine Mounting Bar
29.	GW-9147	Thread Protector Plug
30.	710-04458	Hex Bolt, 5/16-24 x 1-1/8"
31.	736-0119	Spring Lockwasher, 5/16"
32.	719-04222	Motor Mount
33.	736-3052	Flat Washer, .406 x 1.0 x .105
34.	710-0606	Hex Screw, 1/4-20 x 1-1/2"
35.	634-04231	Wheel Assembly, 16 x 4.6 x 8"
—	634-04230	Rim Assembly
—	734-0808	Tire, 16.2 x 4.6
36.	712-04064	Hex Flange Nut, 1/4-20

680 Series Power Transmission Assembly

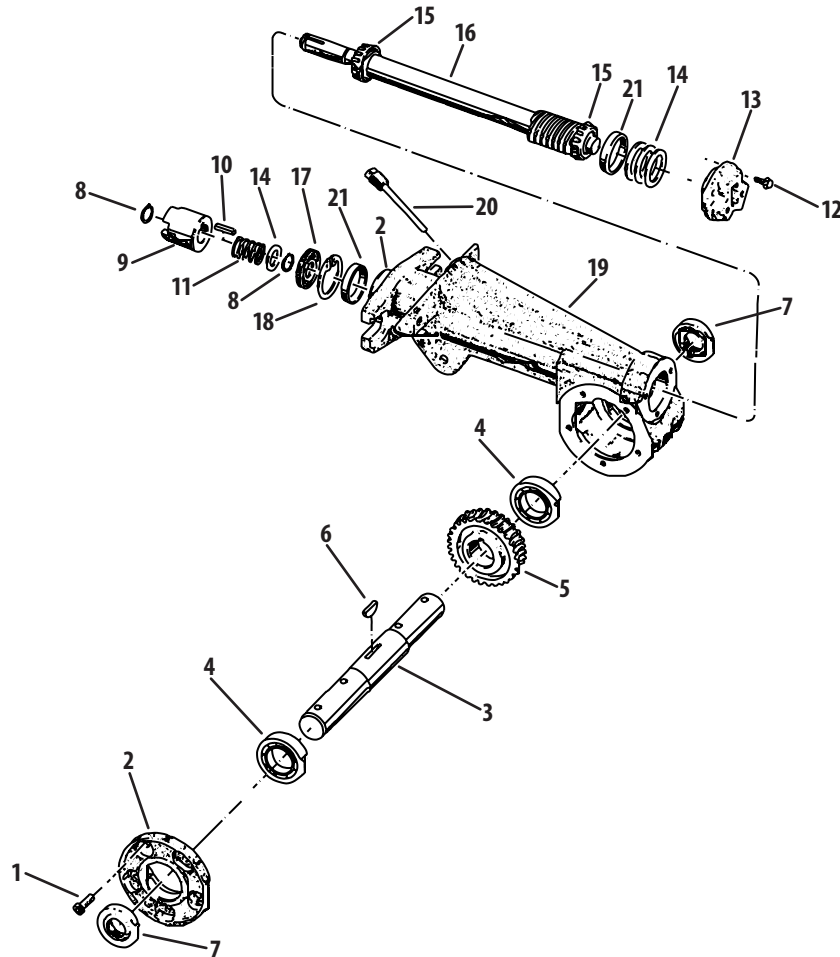


680 Series Power Transmission Assembly

Ref.	Part Number	Description
1.	.1186299	Hex Bolt, #10-32 x 3/8"
2.	GW-9463	Knob
3.	GW-2124	Plate
4.	1186349	Hex Flange Bolt, 3/8-16 x 1-1/2"
5.	1186329	Hex Flange Bolt, 5/16-18 x 3/4"
6.	736-0275	Flat Washer, 5/16"
7.	GW-9362	Spring Pin, 1/8"
8.	712-3012	Hex Nut, 1/2-20
—	736-0326	Flat Washer, .510 x 1.0 x .125
9.	GW-9934	Shoulder Washer, 1/2"
10.	GW-9932	Disc Spring Washer
11.	GW-2178	Wheel Speed Shift Lever
12.	GW-2523	Power Unit Transmission Cover
13.	GW-1123	Transmission Cover Gasket
14.	710-0376	Hex Bolt, 5/16-18 x 1"
15.	712-3010	Hex Nut, 5/16"-18
16.	1901439	Plunger Spring
17.	GW-1035-1	Plunger
18.	1901440	Clip Ring
19.	712-04065	Flange Lock Nut
20.	1902004	Hex Bolt, 3/8-16x1-1/2"
21.	786-04002	Tines/PTO Clutch Lever
22.	710-3013	Hex Bolt, 1/4-20 x 1/2"
23.	741-04008	Tines/PTO Clutch Bushing
24.	GW-9516	External Retaining Ring
25.	GW-2461	Tines/PTO Clutch Shaft
26.	GW-9911	Hi-Collar Lockwasher, 1/4"
27.	GW-9672	Socket Head Screw, 1/4-20 x 3/8"
28.	716-0101	External Retaining Ring
29.	1909139	Dog Clutch
30.	GW-9301	Key, 3/16 x 1"
31.	1100004	Hex Bolt, 5/16-24 x 3/4"
32.	GW-9944	Spring Washer, .827 x .331 x .098
33.	GW-2107	Transmission Drive Pulley
34.	GW-50027	Flat Washer, 1-1/4"
35.	710-04466	Flange Nut, 1/4-20 x .75
36.	718-04007	Front Bearing Cap
37.	721-04044	Oil Seal
38.	736-04305	Flat Washer, 1.175 x 1.5 x .062
—	736-04306	Flat Washer, 1.175 x 1.5 x .005
—	736-04307	Flat Washer, 1.175 x 1.5 x .03
—	736-04308	Flat Washer, 1.175 x 1.5 x .01
39.	741-04299	Cup Bearing
40.	GW-2655	Main Drive Shaft

Ref.	Part Number	Description
41.	721-04030	Oil Seal
42.	716-04102	Retaining Ring
43.	715-0121	Roll Pin (Spirol), 1/4 x 2
44.	718-04006	Pinion Bearing
45.	GW-9604	O-Ring
46.	736-04310	Flat Washer, 1.234 x 1.015 x .062
—	GW-1132-1	Flat Washer, 1.234 x 1.015 x .033
—	GW-1132-3	Flat Washer, 1.234 x 1.015 x .01
47.	GW-9404	Pinion Shaft
48.	GW-1126	Washer
49.	GW-1222	Pinion Stem
50.	GW-9502	External Retaining Ring
51.	GW-2656	Worm Gear
52.	GW-9300	Key, 3/16" x 5/8"
53.	GW-1233	Fast Speed Pinion Gear
54.	721-04031	Oil Seal
55.	716-04104	External Retaining Ring
56.	736-04257	Flat Washer, 1.375 x 1.015 x .005
—	736-04258	Flat Washer, 1.375 x 1.015 x .01
—	736-04259	Flat Washer, 1.375 x 1.015 x .015
—	736-04260	Flat Washer, 1.375 x 1.015 x .03
—	736-04309	Flat Washer, 1.375 x 1.015 x .062
57.	741-04300	Bushing, 1.25 x 1.005 x 1.5
58.	711-04258	Wheel Shaft
59.	714-04014	Hi-Pro Key, .250 x 1.8125
60.	GW-1223	Slow Speed Gear
61.	GW-1232	Fast Gear Speed
62.	GW-1237	Dog Clutch
63.	GW-1112	Clutch Guide Pin, 1/4"
64.	1911372	Roll Pin, 3/16" x 1-1/4"
65.	619-04000	Wheel Speed Shifting Lever
66.	721-04034	Oil Seal
67.	GW-1442	Wheel Speed Shifting Pin
68.	611-04003	Wheel Speed Shifting Shaft
69.	GW-1441	Spring
70.	GW-2109	Transmission Housing
71.	GW-9359	Alignment Pin
72.	1100067	Hex Bolt, 1/2-13 x 2"
73.	GW-9928	Disc Spring Washer
74.	GW-2126	Post
75.	1105620	Pipe Plug, 1/4"
76.	GW-9122	Plug-Red Plastic
77.	GW-2149	Clutch Bracket
78.	741-04298	Cone Bearing

680 Series Power Transmission Assembly



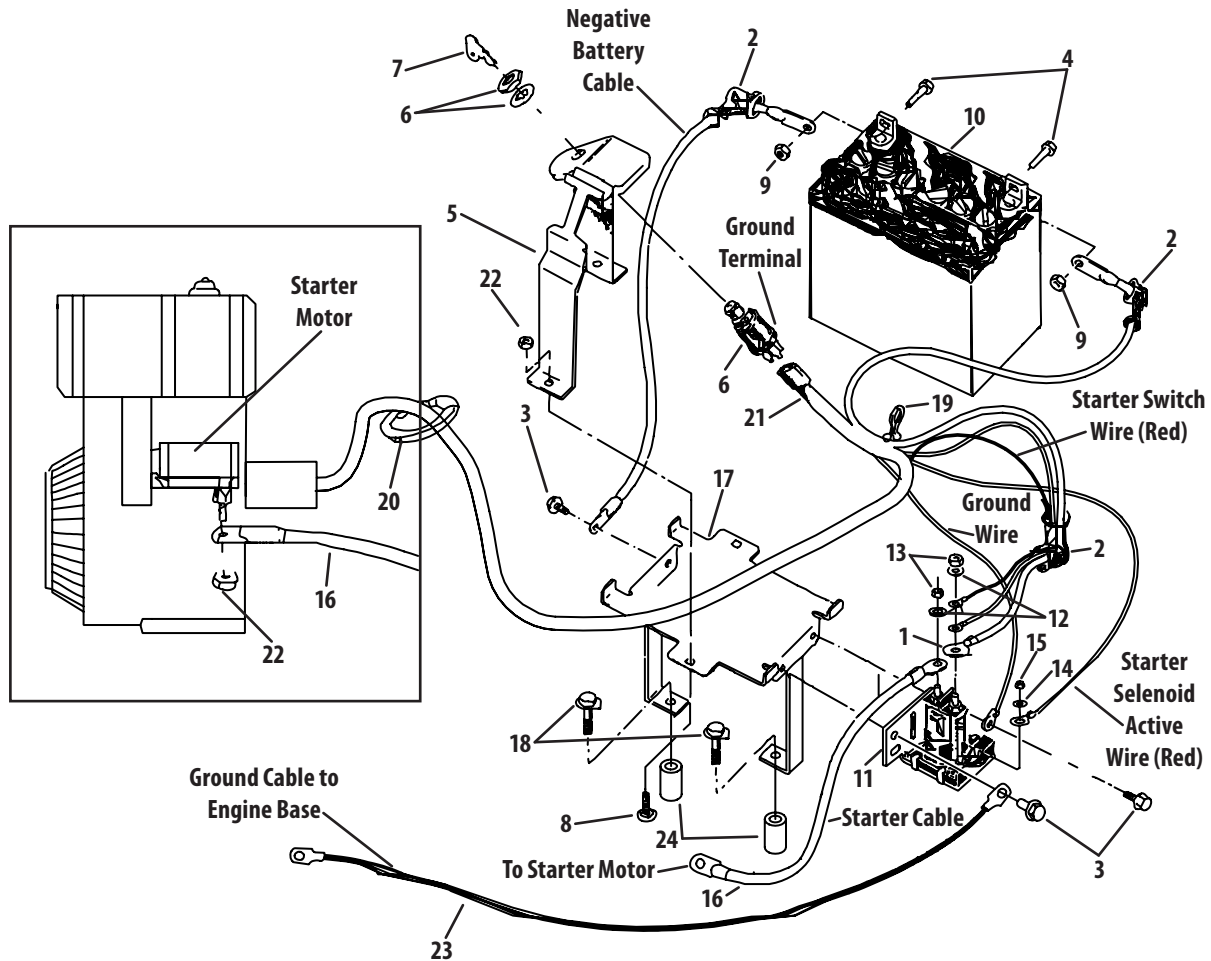
Ref.	Part Number	Description
1.	1915068	Self-Sealing Screw, 1/4"-20 x 5/8"
2.	GW-20873	Tiller Housing Cover
3.	711-04082	Tine Shaft
4.	741-3037	Ball Bearing
5.	1901976	Worm Gear
6.	GW-1104	Woodruff Key
7.	721-04035	Oil Seal
8.	716-0101	External Retaining Ring
9.	1909138	Dog Clutch
10.	GW-9301	Key, 3/16" x 1"
11.	GW-2127	Spring
12.	1915069	Self-Sealing Screw, 1/4"-20 x 7/8"

Ref.	Part Number	Description
13.	GW-1115	Cap
14.	736-04305	Flat Washer, 1.75 x 1.5 x .062**
—	736-04306	Flat Washer, 1.75 x 1.5 x .005**
—	736-04307	Flat Washer, 1.75 x 1.5 x .03**
—	736-04308	Flat Washer, 1.75 x 1.5 x .01**
15.	741-04299	Cup Bearing
16.	GW-2653	Shaft
17.	721-04030	Oil Seal
18.	716-04102	Retaining Ring
19.	1901971	Attachment Housing
20.	1909157	Oil Dipstick
21.	741-04298	Cone Bearing

* — These screws have a special sealing design and cannot be re-used. If removed, replace with new hardware.

** — Washers of multiple thickness are used as required to obtain a thickness of .005" to .015" of allowable end-play in the drive shaft.

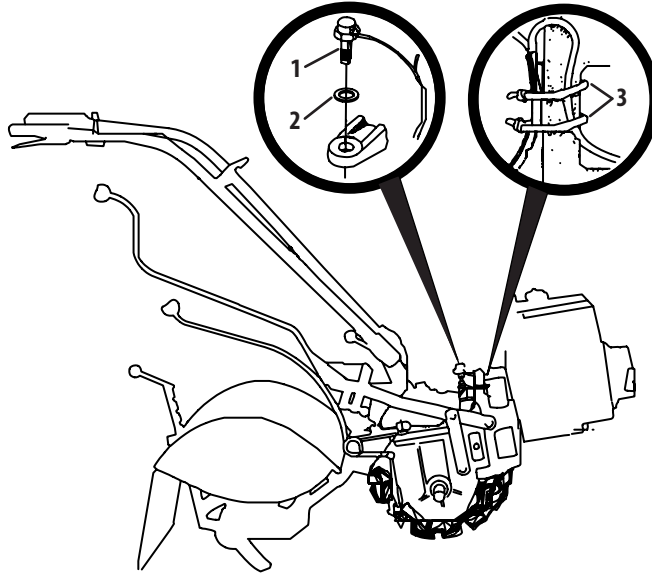
680 Series Electric Start System



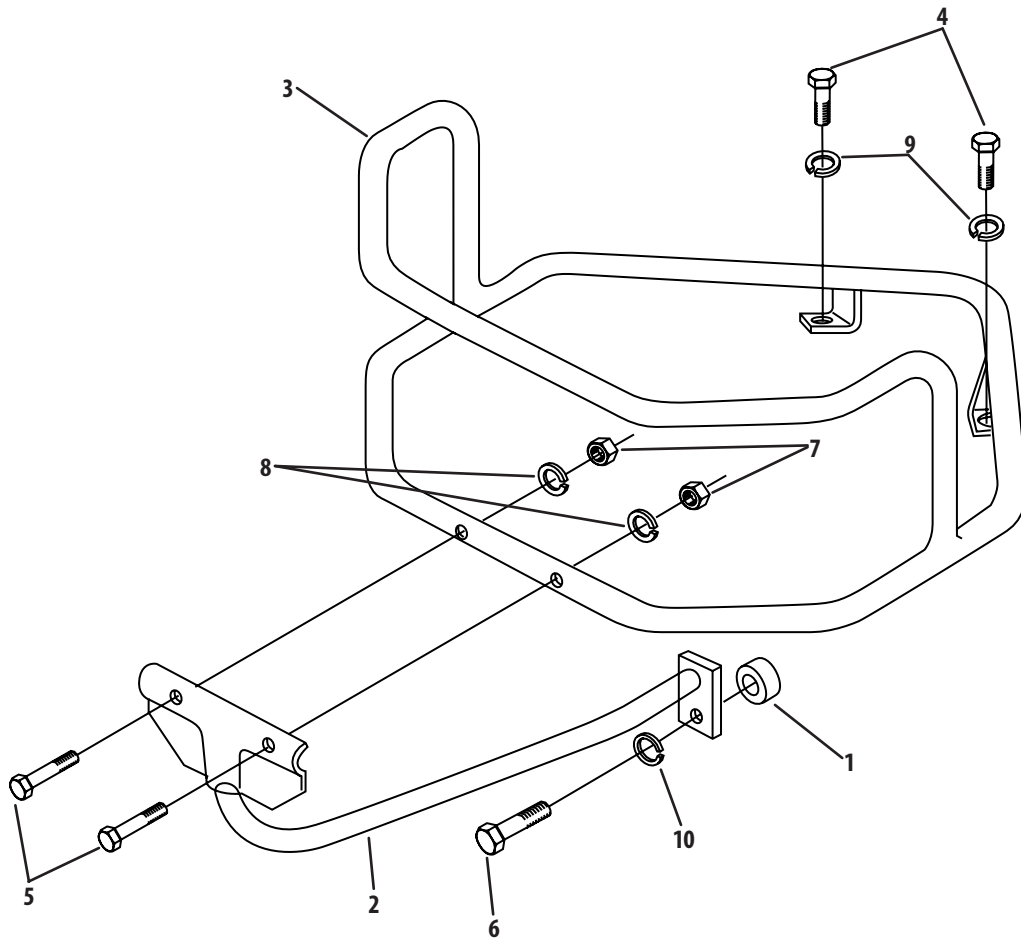
Ref.	Part Number	Description
1.	GW-96515	Battery Cable
2.	GW-97020	Terminal Insulating Boot
3.	710-0599	TT-Screw, ¼-2 x ½"
4.	1186309	Hex Bolt, ¼-20 x ⅝"
5.	GW-2614	Battery Hold-down Clamp w/ Att. Key Switch Plate
6.	725-0267B	Key Switch (Incl. 2 Keys, Ref. 7)
7.	725-0201	Ignition Key
8.	1186073	Carriage Bolt, ¼-20 x 1-¼"
9.	712-3006	Hex Nut, ¼"-20
10.	725-1706A	12-Volt Battery
11.	GW-96514	Starter Solenoid
12.	736-0119	Lockwasher, ⅝"

Ref.	Part Number	Description
13.	1186211	Hex Nut, ⅝"-24
14.	736-0147	External Tooth Lockwasher
15.	GW-9853	Hex Nut, #10-32
16.	GW-96510	Solenoid Cable
17.	GW-2557	Battery Bracket
18.	710-3022	HH Cap Screw, ⅜-16 x 2.75"
19.	GW-9265	Plastic Tie
20.	725-0157	Plastic Tie
21.	725-04346	Wire Harness & Connecting Terminal Assembly
22.	1186389	Hex Locknut, ¼"-20
23.	1901202	Ground Cable
24.	750-0748	Spacer

680 Series Forward Interlock System



Ref.	Part Number	Description
1.	725-04368	Forward Engine Wire Harness Ass.
2.	736-0508	Internal L-Washer, 1/16"
3.	725-0157	Plastic Tie



Ref.	Part Number	Description
1.	1909748	Spacer, 1.0 x .546 x .5
2.	1910730	Bottom Bumper Brace
3.	1910731	Bumper Guard
4.	710-0514	Hex Screw, 3/8-16 x 1.00
5.	710-0805	Hex Screw, 5/16-18 x 1.50
6.	710-3181	Hex Screw, 1/2-13 x 1.50
7.	712-3010	Hex Nut, 5/16-18
8.	736-0119	Lock Washer, 5/16
9.	736-0169	Lock Washer, 3/8
10.	736-0921	Lock Washer, 1/2

Notes

To order replacement parts or locate your nearest service dealer call Customer Support at (800) 828-5500.
or visit www.troybilt.com to find the nearest authorized dealer in your area.

TROY-BILT LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019
