



Replacement Engine and Switch Kit

Greensmaster Flex Mower

Model No. 115-1899

Installation Instructions

Note: The replacement engine is shipped with a On/Off toggle switch which has to be installed on the mowers control panel.

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	Engine assembly	1	Replace the engine
2	Template	1	Install the on/off switch
	Switch assembly	1	
	Decal/washer assembly	1	
3	Wire harness	1	Install wire harness
	Cable tie	2	
4	No parts required	–	

1

Replace the Engine

Parts needed for this procedure:

1	Engine assembly
---	-----------------

Procedure

Refer to the Toro Service Manual for information on engine replacement.

Note: Remove the safety module w/screw and washer, ground wire w/mounting fasteners, hour meter bracket (if applicable) and the R-clamp from the old engine and retain them for reuse on the new engine (Figure 1). Note the location of all the electrical connections before disconnecting them.

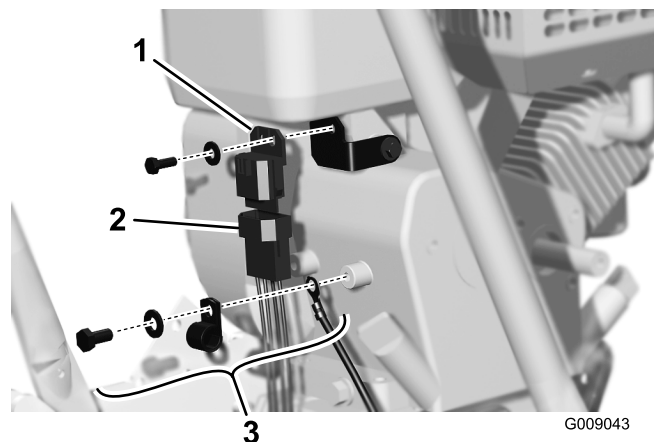


Figure 1

- 1. Safety module
- 2. Safety module harness connector
- 3. Ground wire, mounting fasteners and R-clamp



2

Install the On/Off Toggle Switch

Parts needed for this procedure:

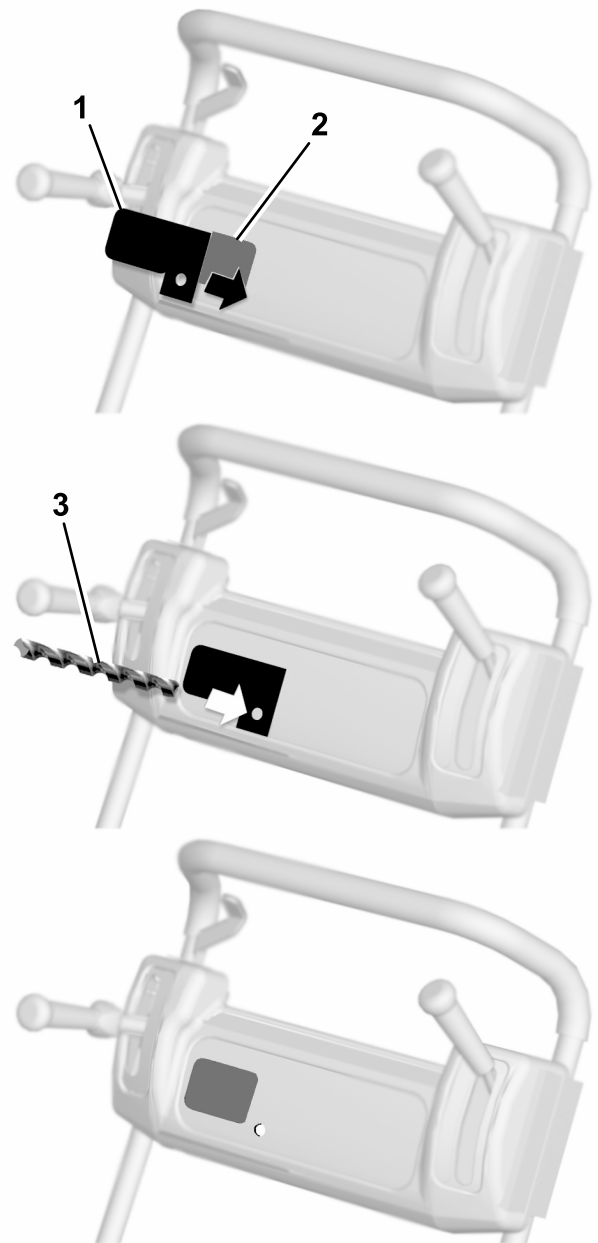
1	Template
1	Switch assembly
1	Decal/washer assembly

Procedure

1. Remove the backing from the template decal (Figure 2).
2. Affix the template decal directly over the Toro logo on the front of the console (Figure 2).
3. At the locations marked on template decal, drill (2) .125 inch diameter holes through the console.

Note: Make sure there are no wires, cables or other objects behind the area to be drilled.

4. Drill the upper hole out to .500 inch diameter. Remove any burrs from the drilled holes.
5. Remove the template decal from the console.
6. Install the ON/OFF toggle switch as follows:
 - A. Remove and discard the tabbed washer from the new switch assembly.
 - B. Thread a jam nut onto the switch threads. Also, insert a wave washer onto the switch threads (Figure 3).
 - C. From the back of the console, insert the switch into the larger drilled hole (Figure 3).
 - D. Slide the new tabbed washer w/decals onto the switch while inserting the tab into the small drilled hole (Figure 3).
 - E. Secure the switch and components to the console with the wave washer and (2) jam nuts (Figure 3).



G009413

Figure 2

1. Template decal
2. Toro logo on the front of the console
3. Drill

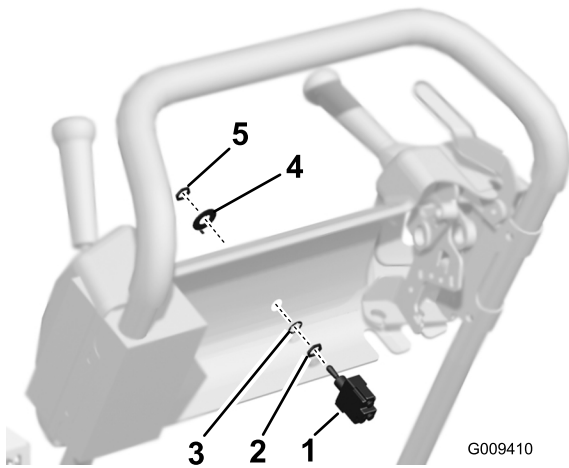


Figure 3

- 1. On/off switch
- 2. Jam nuts (2)
- 3. Wave washer
- 4. Tabbed washer w/decals

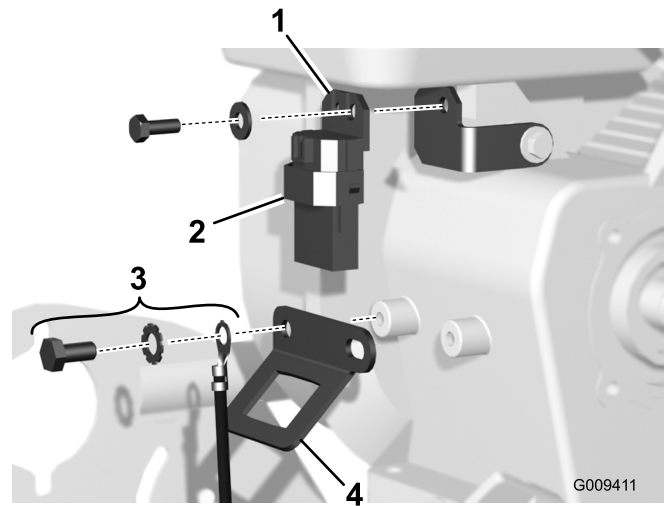


Figure 4

- 1. Safety module
- 2. Safety module wire harness connector
- 3. Ground wire, mounting fasteners and R-clamp
- 4. Hour meter bracket, if applicable

3

Install Wire Harness

Parts needed for this procedure:

1	Wire harness
2	Cable tie

Procedure

1. Mount the safety module, removed from old engine, to the back of the new engine with the screw and washer previously removed (Figure 4).

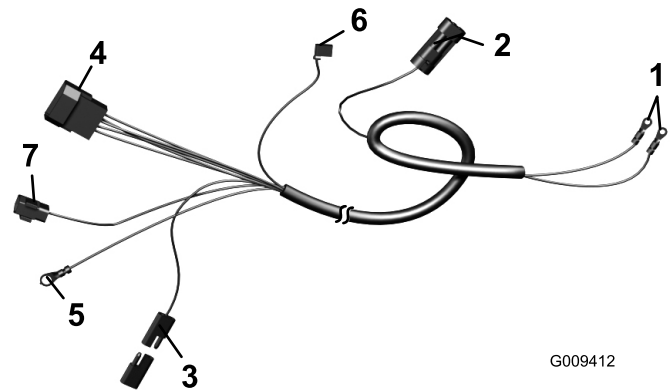


Figure 5

- 1. Engine on/off
- 2. Interlock switch
- 3. Operator presence w/ loopback connector
- 4. Safety module connector
- 5. Engine ground ring terminal
- 6. Hour meter (if applicable)
- 7. Engine magneto

2. Connect the wire harness as follows:
 - A. Plug the wire harness connector into the safety module (Figure 4).
 - B. If the mower is equipped with the optional operator presence control, remove the loop back connector from the harness connector and plug the connector into the operator presence connector (Figure 5).
 - C. Plug the wire harness connector into the engine magneto.
 - D. If the mower is equipped with an optional hour meter, plug the connector into the hour meter (Figure 5).

E. Mount the harness ground wire ring terminal to the engine boss with a external tooth lock washer and cap screw (Figure 4). Use the right hand boss on the rear of the engine.

Note: Feed the engine wires through the R-clamp.

F. Unplug the harness connector from the interlock switch in the control panel and discard the old harness.

G. Route the wire harness up the right side of the handle to the on/off switch (Figure 5). Connect the white lead terminal to the bottom terminal (#3) on the toggle switch. Connect the black lead terminal to the common terminal (#2) on the toggle switch. Apply skin over grease or equivalent to the exposed switch terminals.

H. Plug the wire harness connector into the interlock switch (Figure 5).

I. Secure the wire harness to the handle tube using the (2) cable ties. Check all the wires for excess bending, chaffing or interference with mounting parts.

4

Test the System Operation

No Parts Required

Procedure

- Make sure the machine is in neutral and up on the kickstand.
- Check the operation of the On/Off switch.
- Verify that the interlock switch is operating properly, refer to Checking the Interlock Switch Operation in the Operators Manual.
- Check the operation of the lights, if applicable.