Form No. 3379-751 Rev B

Fuel Tank Service Kit

MB-1600 Mud Buggy

Model No. 130-2100

Installation Instructions

⚠ WARNING

CALIFORNIA
Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Remove the engine cowl.
2	No parts required	–	Drain the fuel tank.
3	No parts required	–	Remove the fuel tank.
4	Tank Fuel hose Hose clamp Fuel cap/gauge	1 1 2 1	Prepare the fuel tank.
5	No parts required	–	Install the fuel tank.
6	No parts required	–	Install the fuel hose.
7	Vent hose Hose clamp Cable tie	1 2 1	Replace the vent hose.
8	No parts required	–	Check the fuel system.
9	No parts required	–	Install the engine cowl.

© 2013—The Toro® Company
8111 Lyndale Avenue South
Bloomington, MN 55420

Register at www.Toro.com.

Original Instructions (EN)
Printed in the USA
All Rights Reserved

3379-751 B

1

Removing the Engine Cowl

No Parts Required

Procedure

1. Move the machine to a level surface and set the parking brake; refer to the *Operator's Manual* for the machine.
2. Position the hopper in the dump position; refer to the *Operator's Manual* for the machine.
3. Shut off the engine; refer to the *Operator's Manual* for the machine.
4. Remove the 4 latches that secure the engine cowl to the machine at the 4 latch posts (Figure 1).

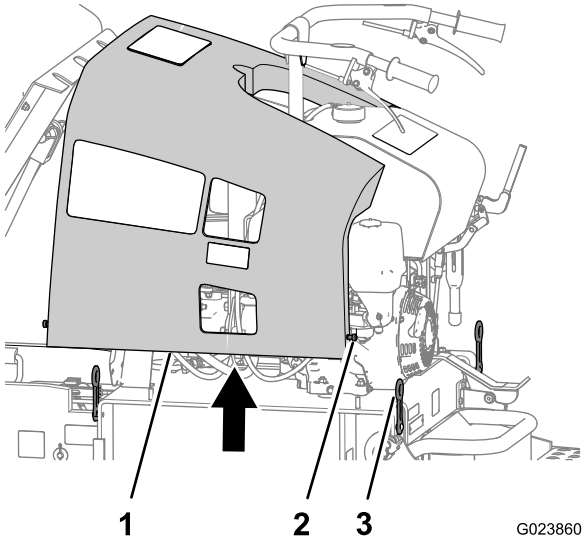


Figure 1

1. Engine cowl
2. Latch post
3. Latch

5. Lift the engine cowl up and remove it from the machine (Figure 1).

2

Draining the Fuel Tank

No Parts Required

Procedure

1. Rotate the lever for the tank-shutoff valve forward and up to the Off position (Figure 2).

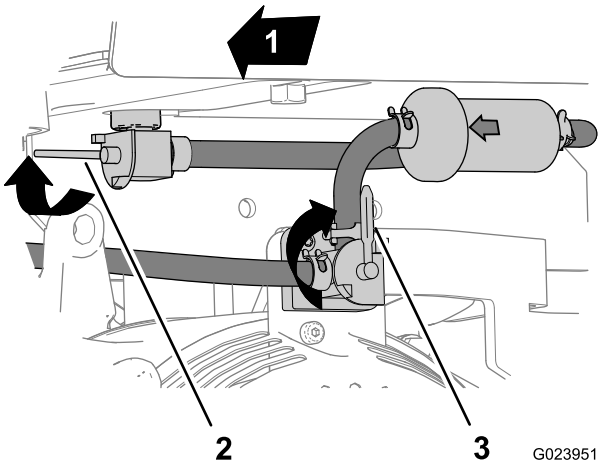


Figure 2

1. Forward
2. Shutoff-valve lever for the fuel tank (Off position)
3. Engine-switch lever (Stop position)

2. Start the engine and run the machine until the engine stops.
3. Rotate the lever for the engine switch clockwise to the Stop position, and allow the engine to cool (Figure 2).
4. Carefully remove the spark-plug wire from the terminal of the spark plug. (Figure 3).

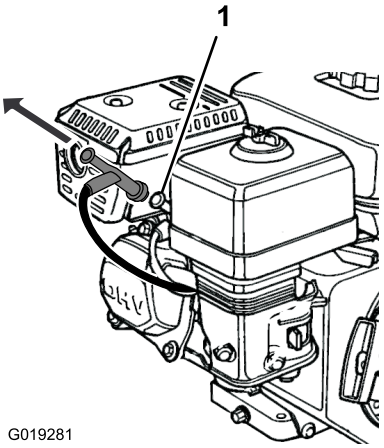


Figure 3

1. Spark-plug wire

5. Remove the hose clamp and hose from the barbed fitting at the top of the engine switch (Figure 2).

6. Align the hose into an approved fuel container with a 26.5 L (7 US gallon) capacity (Figure 4).

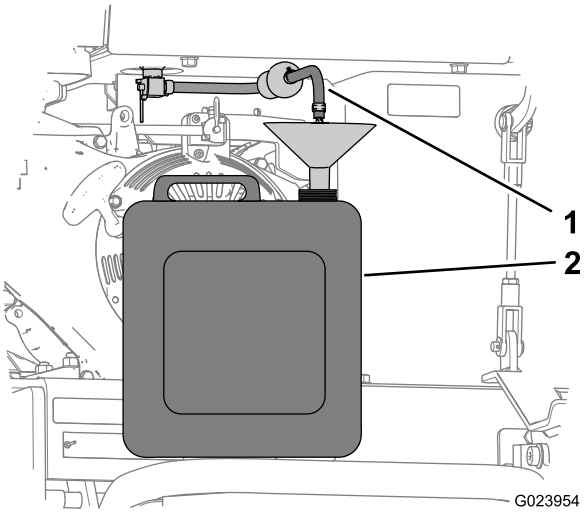


Figure 4

1. Fuel hose
2. Fuel container

7. Rotate the shutoff valve for the fuel tank back and down to the On position (Figure 2).

   Note: Allow the fuel tank to drain completely.

8. Install the hose and hose clamp onto the barbed fitting at the top of the engine switch (Figure 2).

   Note: Ensure that the barbed fitting is fully inserted into the end of the fuel hose and that the clamp is centered over the barbed area of the fitting.

3

Removing the Fuel Tank

No Parts Required

Procedure

1. Remove the hose clamp and the vent hose that are attached to the vent valve in the fuel tank (Figure 5).

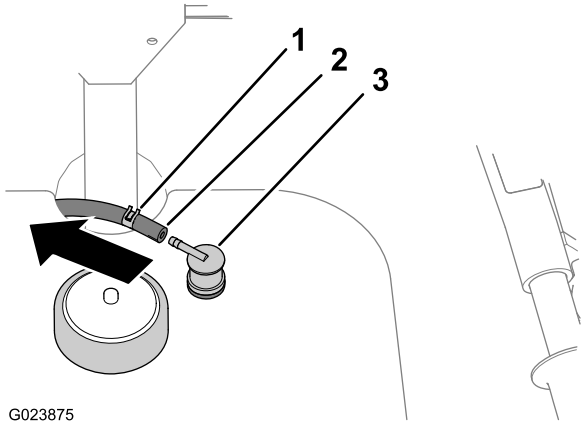


Figure 5

1. Hose clamp
2. Vent hose
3. Vent valve

2. Remove the hose clamp that secures the fuel hose to the barbed fitting in the fuel filter, and remove the hose (Figure 6).

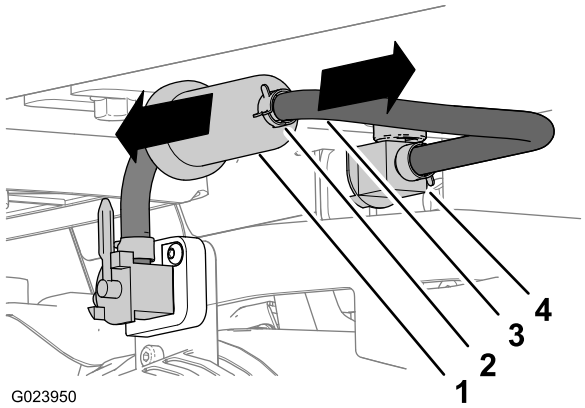


Figure 6

1. Fuel filter
2. Hose clamp
3. Fuel hose
4. Tank-shutoff valve

3. Remove the 4 flange-head bolts that secure the fuel tank to the machine, and remove the tank from the machine (Figure 7).

   Note: Be careful when lifting the tank up to ensure that the shutoff valve for the fuel tank and the fuel hose are centered while passing through the hole in the tank-support plate for the shutoff valve.

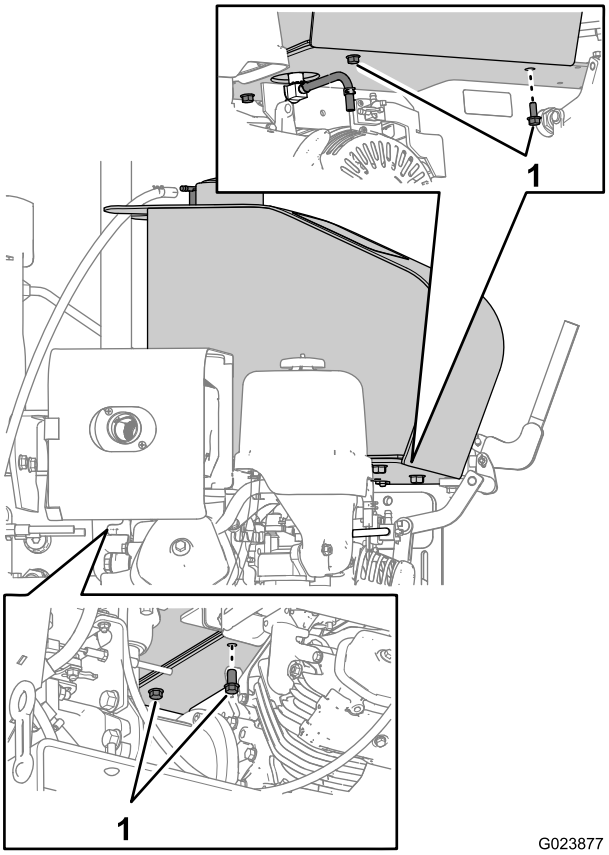


Figure 7

1. Flange bolts

Note: Retain the flange bolts for the installation of the fuel tank from the fuel-tank service kit.

Note: For **Toro** Model No. 68038—Serial No. 313000101–313000240 and Model No. 68038G—Serial No. 313000101–313000200, retain the spacers for installing of the new fuel tank from the fuel-tank service kit (Figure 8).

Important: For Stone Construction Equipment Model No. FB1000, SB1000, and SB2100, refer to the Toro *SWS Service Bulletin No. 73* for information about ordering the 4 bolts, 4 washers, and 2 fuel tank spacers necessary to install the new fuel tank from the fuel-tank service kit.

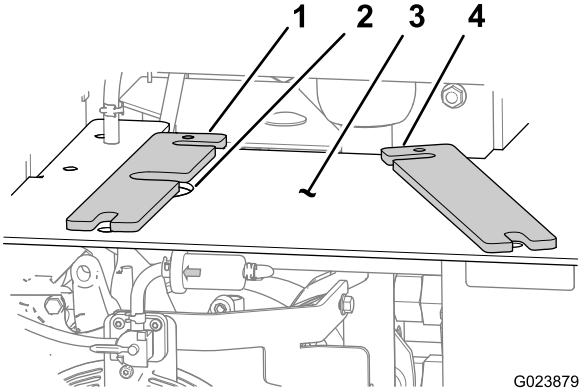


Figure 8

1. Left spacer
2. Fuel-valve hole
3. Tank plate
4. Right spacer

4

Preparing the Fuel Tank

Parts needed for this procedure:

1	Tank
1	Fuel hose
2	Hose clamp
1	Fuel cap/gauge

Installing the Shutoff Valve

1. At the bottom of the original fuel tank, remove the fuel hose from the fitting of the shutoff valve (Figure 9).

   Note: Discard the original fuel hose and the original hose clamps.

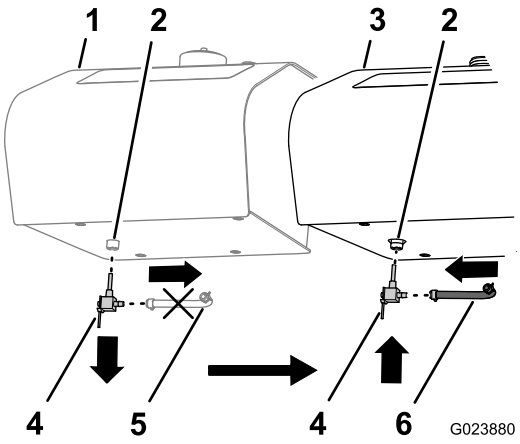


Figure 9

1. Fuel tank (original)
2. Coupler
3. Fuel tank (fuel-tank service kit)
4. Fuel shutoff valve
5. Fuel hose (original)
6. Fuel hose (fuel-tank service kit)

2. Remove the shutoff valve from the coupler in the bottom of the original tank (Figure 9).

   Note: Discard the original fuel tank.

3. Clean off the threads of the shutoff valve.
4. Apply PTFE thread-sealing tape to the threads of the shutoff valve.
5. Insert the shutoff valve into the coupler of the fuel tank from the fuel-tank service kit, and thread the valve into the coupler (Figure 9).
6. Tighten the shutoff valve and position the barbed fitting to point to the left as viewed from the bottom of the tank (Figure 10).

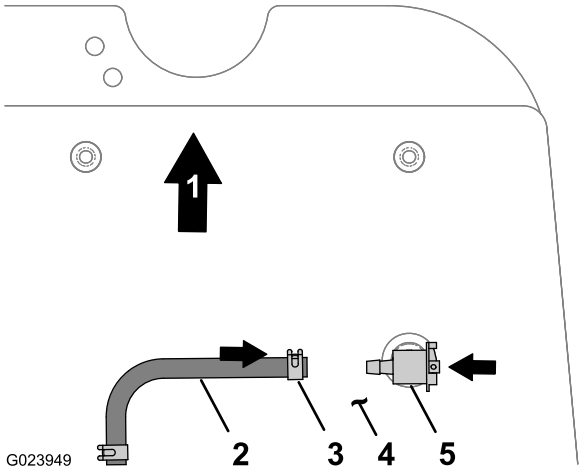


Figure 10

1. Forward
2. Fuel hose (fuel-tank service kit)
3. Hose clamp (fuel-tank service kit)
4. Fuel tank bottom (fuel-tank service kit)
5. Fuel-shutoff valve

7. Position a clamp from the fuel-tank service kit over each end of the fuel hose from the kit (Figure 9 and Figure 10).
8. Install one end of the fuel hose over the barbed fitting of the shutoff valve in the tank (Figure 10).

   Note: Ensure that the barbed fitting is fully inserted into the end of the fuel hose and that the clamp is centered over the barbed area of the fitting.

Installing the Fuel Cap

1. Insert the retainer that is at the end of the chain for the fuel cap/gauge into the filler neck of the fuel tank (Figure 11).

   Note: Use a screw driver to push the retainer into the cavity of the fuel tank.

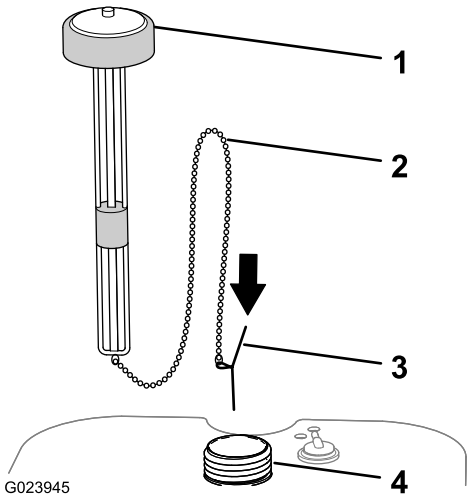


Figure 11

1. Fuel cap/gauge
2. Chain
3. Retainer
4. Filler neck

2. Align the fuel cap/gauge over the filler neck, and feed the chain at the end of the gauge into the filler neck (Figure 11).
3. Thread the cap onto the filler neck of the fuel tank until it is hand tight (Figure 11).

5

Installing the Fuel Tank

No Parts Required

Procedure

1. Wipe the surface of the spacers clean (Figure 8).
2. Align the slots in the spacers to the mounting holes for the fuel tank that are in the tank–support plate (Figure 8).

Note: Ensure that the cutout in the left spacers for the fuel-shutoff valve is aligned with the hole in the tank-support plate for the shutoff valve.

3. Align the fuel tank (from the fuel-tank service kit) to the machine, and insert the fuel hose and shutoff valve through the tank-support plate (Figure 12).

   Note: Avoid damaging the fuel hose and fuel-shutoff valve when lowering the tank. Ensure that the fuel hose and fuel-shutoff valve are centered while passing through the hole in the tank-support plate for the shutoff valve.

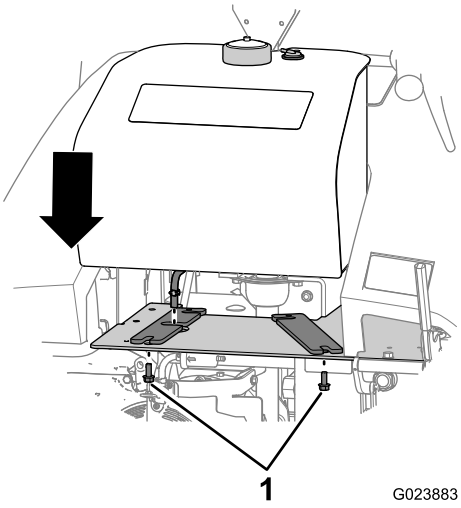


Figure 12

1. Flange bolts

4. Lower the tank and align the mounting holes in the tank with the mounting holes in the tank-support plate.
5. Apply medium-grade (service removable) thread-locking compound to the 4 flange bolts that you removed in step 3 of 3 Removing the Fuel Tank (page 3).
6. Secure the tank to the machine with the 4 flange bolts (Figure 12), and torque the bolts to 23 to 28 N-m (17 to 21 ft-lb).

6

Installing the Fuel Hose

No Parts Required

Procedure

1. Install the fuel hose from the shutoff valve to the barbed fitting of the fuel filter (Figure 13).

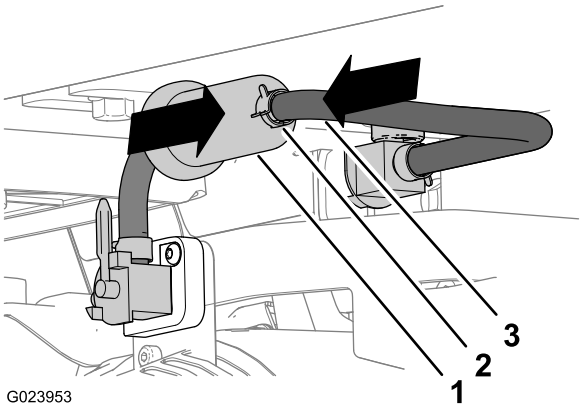


Figure 13

1. Fuel filter
2. Hose clamp
3. Fuel hose

2. Secure the fuel hose to filter the with a hose clamp from the fuel-tank service kit (Figure 13).

   Note: Ensure that the barbed fitting of the fuel filter is fully inserted into the end of the fuel hose and that the clamp is centered over the barbed area of the fitting.

7

Replacing the Vent Hose for the Fuel Tank

Parts needed for this procedure:

1	Vent hose
2	Hose clamp
1	Cable tie

Removing the Vent Hose

1. Remove the cable tie that secures the vent hose for the fuel tank to the handlebar column (Figure 14).

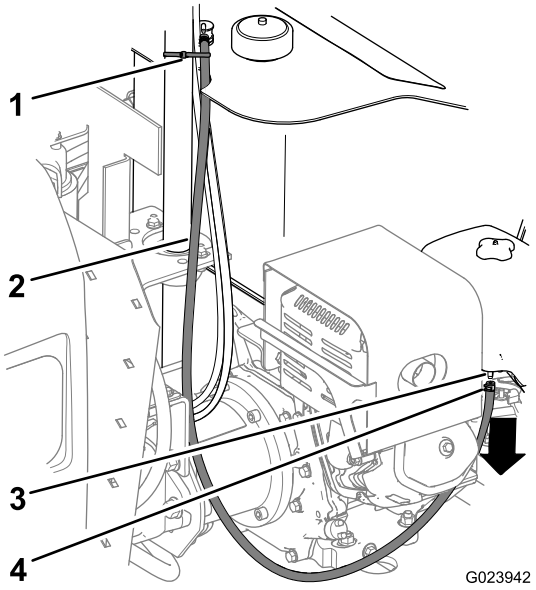


Figure 14

1. Cable tie
2. Vent hose
3. Hose Fitting
4. Hose clamp

2. Remove the clamp that secures the vent hose to the hose fitting at the bottom forward corner of the air-filter case (Figure 14).
3. Remove the hose from the fitting and remove the hose from the machine (Figure 14).

   Note: Discard the vent hose and clamps.

Installing the Vent Hose

1. Align the vent hose from the from the fuel-tank service kit with the hose fitting at the bottom forward corner of the air-filter case (Figure 15).

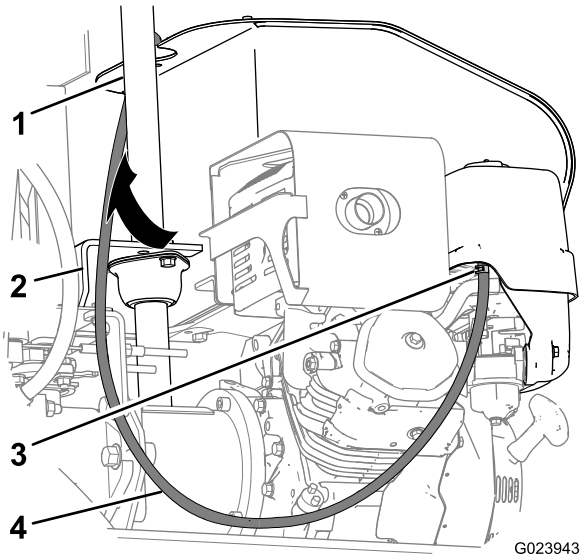


Figure 15

1. Handlebar column
2. Bearing-support bracket
3. Hose clamp
4. Vent hose (fuel-tank service kit)

2. Secure the hose with a clamp from the kit (Figure 15).

   Note: Ensure that the fitting of the air-filter case is fully inserted into the end of the vent hose and that the clamp is centered over the fitting.
3. Route the vent hose forward of the handlebar column above the bearing-support bracket and up along the right side of the column as shown in Figure 15.
4. Install the vent hose and hose clamp onto the hose fitting of the vent valve for the fuel tank (Figure 16).

   Note: Ensure that the fitting of the vent valve is fully inserted into the end of the vent hose and that the clamp is centered over the fitting.

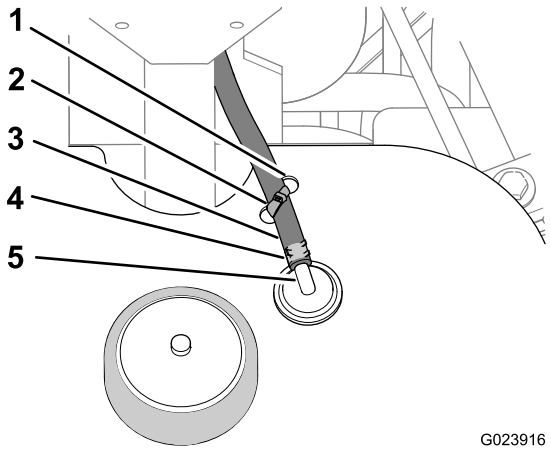


Figure 16

1. Holes 9.5 mm (3/8 inch)
2. Cable tie
3. Vent hose
4. Hose clamp
5. Barbed fitting (vent valve)

5. Using the 2 holes 9.5 mm (3/8 inch) in the top of the fuel tank, secure the hose to the tank with the cable tie as shown in Figure 16.

8

Checking the Fuel System

No Parts Required

Procedure

1. Add 2 L (0.5 US gallon) of fuel to the fuel tank; refer to the *Operator's Manual* for the machine.
2. Rotate the tank-shutoff valve clockwise to the On position (Figure 2).
3. Check the bottom of the tank, fuel shutoff valve, and fuel hose for leaks.

   Note: If there is a fuel leak, rotate the fuel shutoff valve to the Off position, and repair the leaks before proceeding to the next step.
4. Rotate engine switch counterclockwise to the On position (Figure 2).
5. Check the engine switch and the fuel hose for fuel leaks.

   Note: If there is a fuel leak, rotate the fuel shutoff valve to the Off position, and repair the leaks before proceeding to the next step.
6. Connect the spark-plug wire to the terminal of the spark plug (Figure 3).
7. Start the machine; refer to the *Operator's Manual* for the machine.
8. Check the fuel system and engine for fuel leaks.

   Note: If there is a fuel leak, immediately shut off the machine, rotate the fuel shutoff valve to the Off position, and repair the leaks.
9. Shut off the machine.

9

Installing the Engine Cowl

No Parts Required

Procedure

1. Align the engine cowl over the machine (Figure 17).

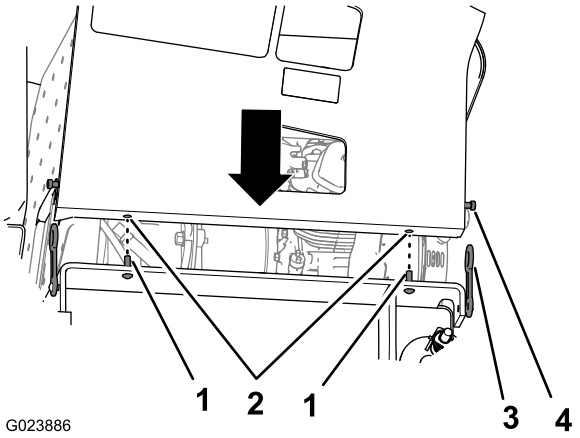


Figure 17

1. Hole
2. Guide pin
3. Latch
4. Latch post

2. Carefully lower the cowl while aligning the guide pins in the chassis with the holes in the cowl (Figure 17).
3. Secure the engine cowl to the chassis with the 4 latches on the chassis to the 4 latch posts on the cowl (Figure 17).
4. Start the machine, move the hopper to the upright position, and shut off the machine; refer to the *Operator's Manual* for the machine.