



## Cab Kit

### Groundsmaster® 3280-D 4-Wheel Drive Traction Unit

Model No. 30298—Serial No. 400000000 and Up

## Operator's Manual

# Safety

### ⚠ 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.

This product complies with all relevant European directives. For details, please see the Declaration of Incorporation (DOI) at the back of this publication.

## Rollover Protection System (ROPS) for a Cab

- The cab is an integral part of the ROPS, which is an effective safety device.
- The ROPS consists of the cab, the seat, the seat belt, and the seat latch.
- Use the seat belt when operating the machine with a cab.
- Ensure that the seat belt can be released quickly in the event of an emergency.
- Drive slowly and carefully.
- Check carefully for overhead clearances (i.e., branches, doorways, electrical wires) before driving under any objects and do not contact them.
- Keep the cab in safe operating condition by periodically thoroughly inspecting for damage and keeping all mounting fasteners tight.
- Replace a damaged cab. Do not repair or revise.
- **Do not** remove the ROPS.



# Safety and Instructional Decals



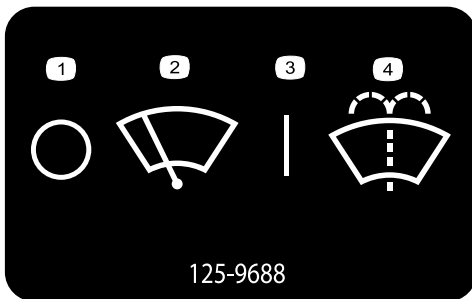
Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.



**130-5361**

decal130-5361

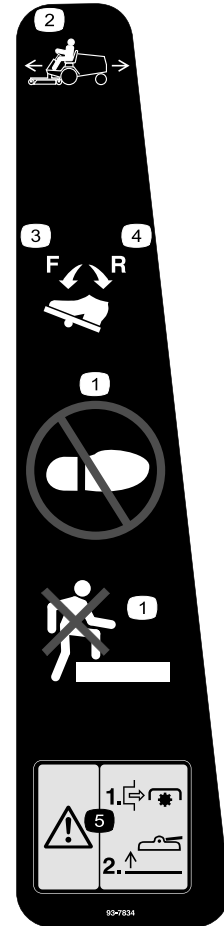
1. Warning—read the *Operator's Manual*; operate the machine only from the driver's seat; wear a seatbelt; wear hearing protection.



**125-9688**

decal125-9688

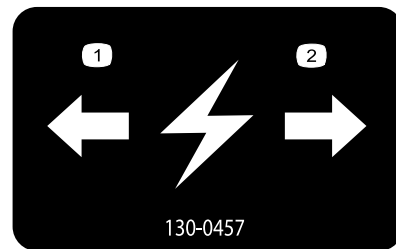
1. Windshield wipers—off
2. Windshield wipers
3. Windshield wipers—on
4. Spray windshield washer fluid



**93-7834**

decal93-7834

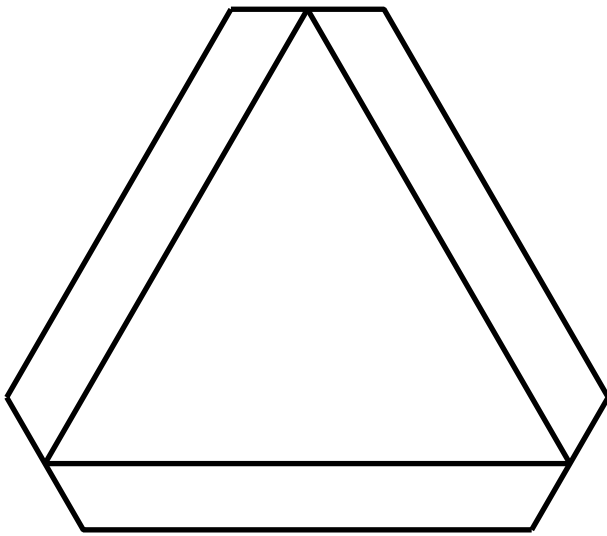
1. No step
2. Traction pedal
3. Traction-forward
4. Traction-reverse
5. Warning—shut off PTO prior to raising decks; do not operate decks when they are in raised position



**130-0457**

decal130-0457

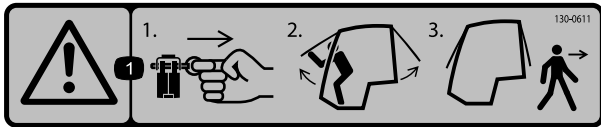
1. Left
2. Right



**120-0250**

decal120-0250

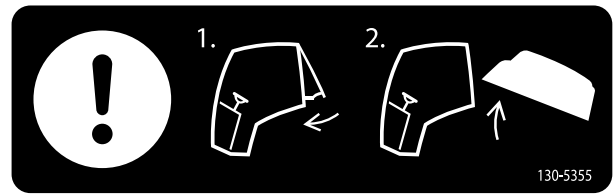
1. Slow-moving vehicle



**130-0611**

decal130-0611

1. 1) Remove the pin. 2) Raise the doors. 3) Exit the cab.

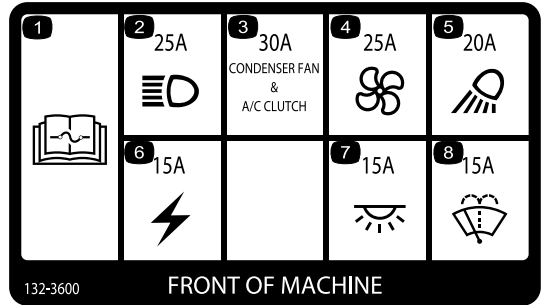


130-5355

decal130-5355

**130-5355**

1. Close the rear window.
2. Raise the hood.



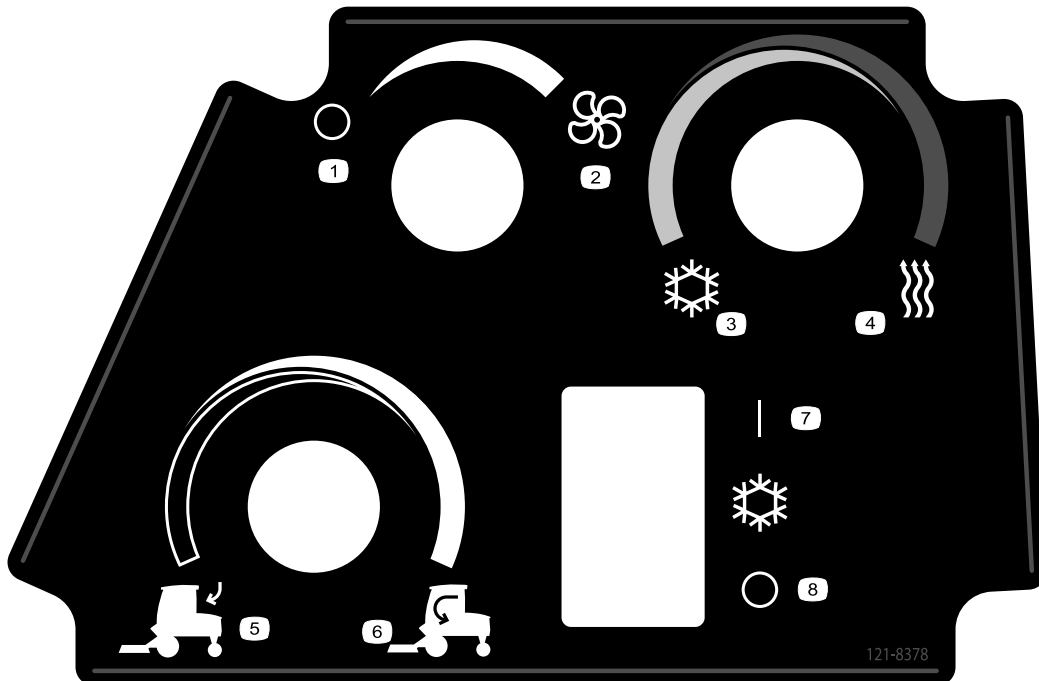
132-3600

**FRONT OF MACHINE**

decal132-3600

**132-3600**

1. Read the *Operator's Manual* for more information on fuses.
2. Headlight—25 A
3. Condenser fan and A/C clutch—30 A
4. Fan—25 A
5. Working light—20 A
6. Auxiliary power—15 A
7. Cab light—15 A
8. Windshield wipers—15 A



121-8378

decal121-8378

**121-8378**

1. Fan—off
2. Fan—on full
3. Cold air
4. Hot air
5. External air
6. Internal air
7. Air conditioner—off (If equipped)
8. Air conditioner—on (If equipped)

# Setup

## Loose Parts

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

| Procedure | Description   | Qty.   | Use  |
|-----------|---|--|--|
| <b>1</b>  | No parts required   | –  | Prepare the machine for installing the cab.  |
| <b>2</b>  | Front mount<br>Left, rear mount<br>Right, rear mount<br>Rubber Isolator   | 1<br>1<br>1<br>4   | Prepare the cab mounting hardware.           |
| <b>3</b>  | Frame<br>Front seal<br>Floor seal<br>Left seal<br>Right seal<br>Lower-back plate<br>Back seal   | 1<br>1<br>2<br>1<br>1<br>1<br>1                                      | Apply the foam seals to the mount and frame. |
| <b>4</b>  | Safety decal  | 1  | Apply the safety decal to the rear window.   |
| <b>5</b>  | Front mount assembly<br>Left, rear mount assembly<br>Right, rear mount assembly<br>Bolt (1/2 x 4-1/2 inches)<br>Bolt (1/2 x 1-1/4 inches)<br>Small washer<br>Locknut (1/2 inch)   | 1<br>1<br>1<br>4<br>8<br>4<br>8                                      | Install the mounts to the machine.           |
| <b>6</b>  | Cab<br>Bolt (1/2 x 3 inches)<br>Thrust washer<br>Large washer<br>Locknut (1/2 inch)<br>Floor tread<br>Pedal cover<br>Bolt (5/16 x 3/4 inch)<br>Nut clips<br>Back panel<br>Carriage bolt (5/16 x 3/4 inch)<br>Locknut (5/16 inch)<br>Left cover<br>Right cover | 1<br>4<br>4<br>4<br>4<br>1<br>1<br>4<br>4<br>1<br>16<br>16<br>1<br>1 | Install the cab to the machine.              |
| <b>7</b>  | Washer tank<br>Tank mount<br>Flange bolt (5/16 x 1-1/2 inches)<br>Carriage bolt (5/16 x 3/4 inches)<br>Flange-head nut  | 1<br>1<br>2<br>4<br>6  | Install the washer tank and mount.           |

| Procedure | Description   | Qty.  | Use                                      |
|-----------|---|---|--|
| <b>8</b>  | Short hose<br>Female coupler<br>Female dust plug<br>Straight fitting (3/8 NPT x 5/8 barb)<br>Small hose clamp<br>Tee fitting<br>Large hose clamp<br>Long hose<br>Male coupler<br>Male dust plug<br>R-clamp<br>Carriage bolt (1/4 x 3/4 inch)<br>Flange nut (1/4 inch)<br>Coupler bracket<br>Bolt (5/16 x 3/4 inch)<br>Flange nut (5/16 inch)<br>Washer hose<br>Hose fitting<br>Cable ties | 1<br>1<br>1<br>3<br>4<br>1<br>2<br>1<br>1<br>1<br>1<br>2<br>2<br>1<br>2<br>2<br>1<br>1<br>8 | Install the hoses.                       |
| <b>9</b>  | R-clamp<br>Bolt (5/16 x 3/4 inch)<br>Flange nut (5/16 inch)   | 2<br>2<br>2   | Install the R-clamps.                    |
| <b>10</b> | Temperature sensor<br>Wiring harness<br>Fuse (10 A)<br>Wire cover<br>Flange-head bolt (1/4 x 5/8 inch)<br>Locknut (1/4 inch)  | 1<br>1<br>1<br>1<br>2<br>2  | Connect the wire harness to the machine. |
| <b>11</b> | No parts required   | –   | Adjust the hood.                         |
| <b>12</b> | No parts required   | –   | Complete the installation.               |

# 1

## Preparing the Machine

### No Parts Required

### Procedure

1. Park the machine on a level surface, shut off the engine, engage the parking brake, and remove the key from the ignition.
2. Allow the engine coolant to cool and then drain the coolant from the machine; refer to the *Service Manual*.
3. Disconnect the negative (-) battery cable from the battery.
4. Remove the bolt securing the brake pin that holds the brake pedals (Figure 1).

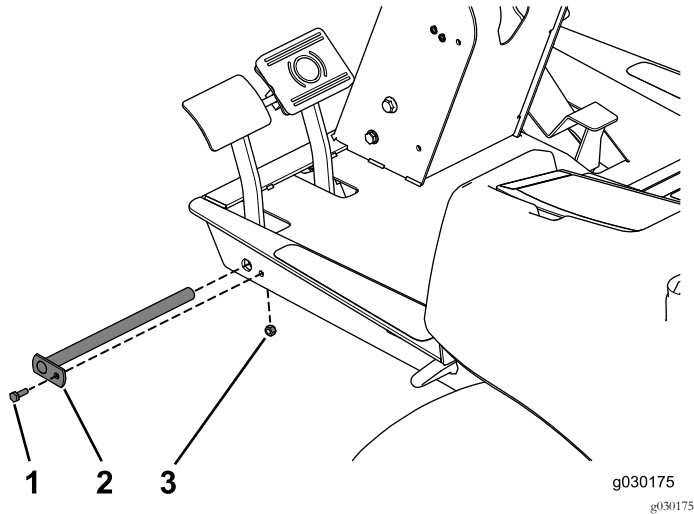


Figure 1

1. Bolt (1/4 x 3/4 inch)
2. Brake pin
3. Locknut (1/4 inch)

5. Ensure that the machine is secure from movement before you begin to work on it.
6. Remove the brake pin to allow the pedals to rest loosely on the footrest.
7. Tilt the steering column to its lowest position; refer to the *Operators Manual*.
8. Remove the roll bar from the machine (Figure 2).

**Note:** Use an assistant to help you remove the roll bar from the machine.

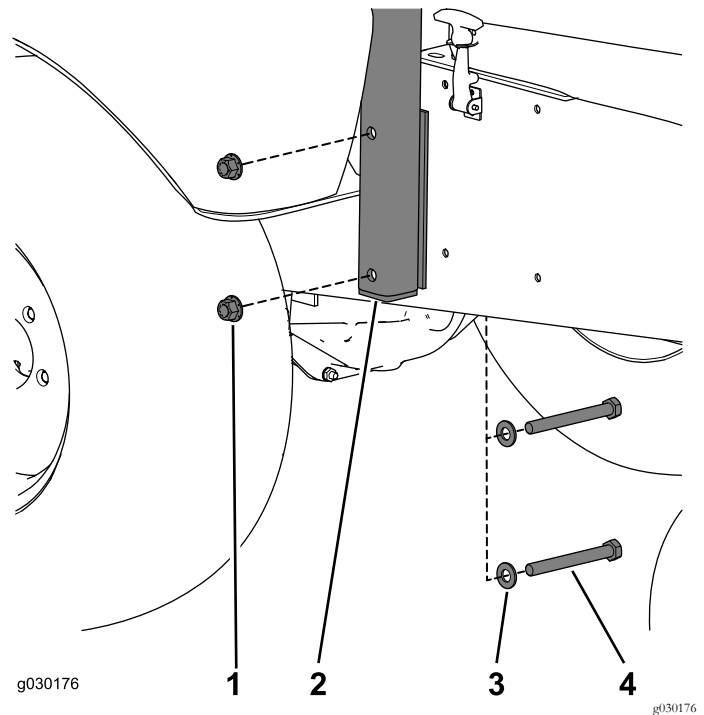


Figure 2

1. Locknut (1/2 inch)
2. Roll bar
3. Washer (1/2 inch)
4. Bolt (1/2 x 4-1/2 inches)

9. Carefully remove the roll bar from the machine.

# 2

## Preparing the Cab Mounts

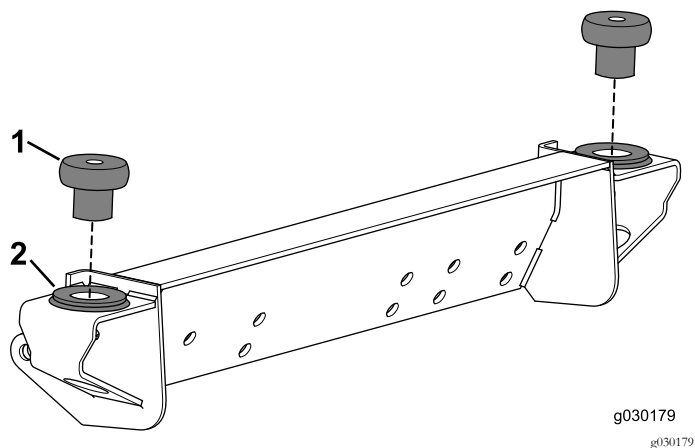
### Parts needed for this procedure:

|   |                   |
|---|-------------------|
| 1 | Front mount       |
| 1 | Left, rear mount  |
| 1 | Right, rear mount |
| 4 | Rubber Isolator   |

### Assembling the Front Mount

Press a rubber isolator into each hole in the front mount (Figure 3).

**Note:** Use soapy water and a mallet to insert the rubber isolator into the hole.



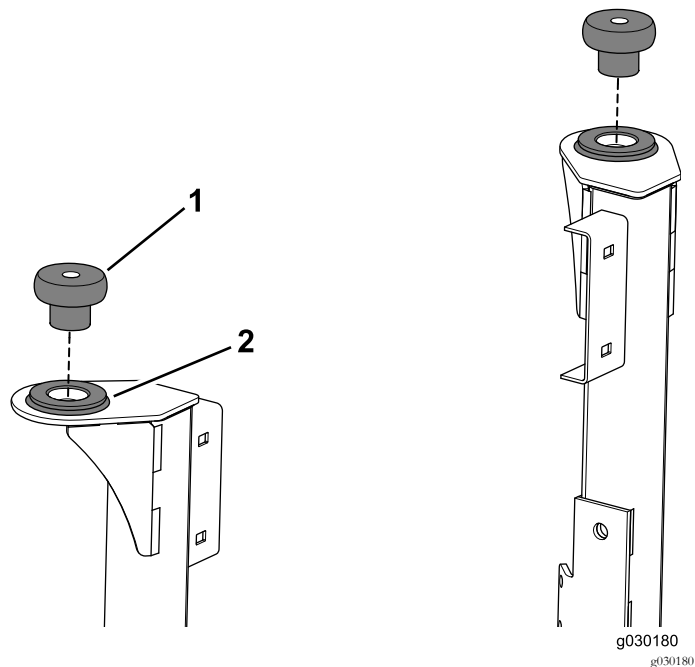
**Figure 3**

1. Rubber isolator      2. Hole

## Assembling the Rear Mounts

Press a rubber isolator into the hole in each of the rear mounts ([Figure 4](#)).

**Note:** Use soapy water and a mallet to insert the rubber isolator into the hole.



**Figure 4**

1. Rubber isolator      2. Hole

# 3

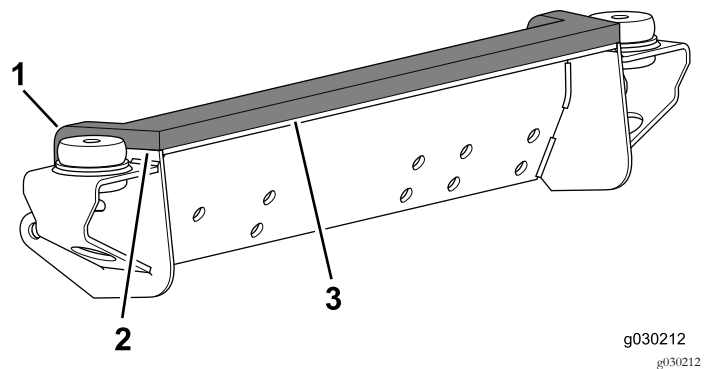
## Applying the Foam Seals

Parts needed for this procedure:

|   |                  |
|---|------------------|
| 1 | Frame            |
| 1 | Front seal       |
| 2 | Floor seal       |
| 1 | Left seal        |
| 1 | Right seal       |
| 1 | Lower-back plate |
| 1 | Back seal        |

## Applying the Seal to the Front Mount

1. Apply the seal to the mount flush with the front and side edges of the front mount ([Figure 5](#)).



**Figure 5**

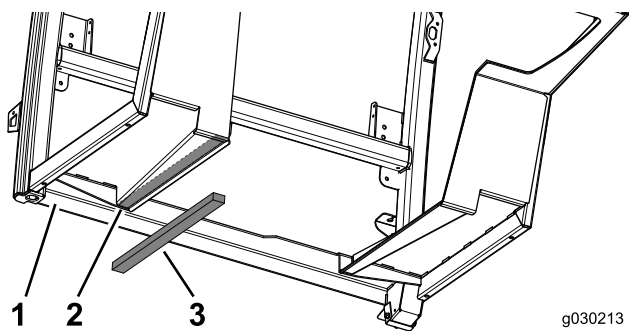
1. Tab folded over      3. Flush with front edge  
2. Flush with side edge

2. Fold the side tabs over the back of the mount ([Figure 5](#)).

## Applying the Foam Seals to the Cab

Apply the seals to the cab while it is on the shipping pallet.

1. Apply 1 of the floor seals to the left side of the cab ([Figure 6](#)).

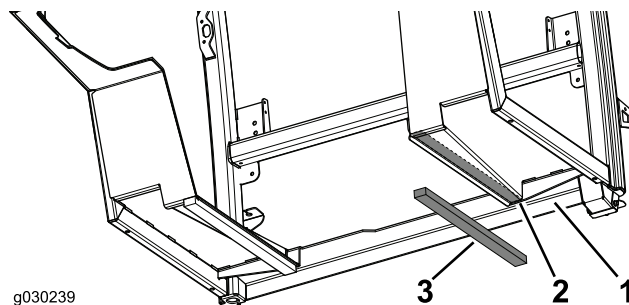


g030213

**Figure 6**

1. Front of cab
2. Application area
3. Floor seal

2. Apply the other floor seals to the right side of the cab ([Figure 7](#)).

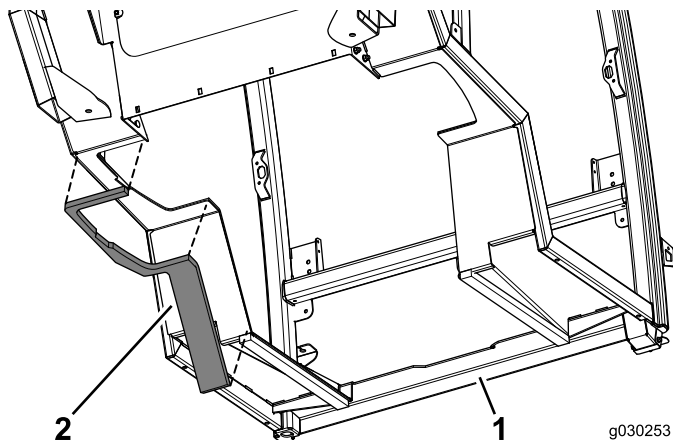


g030239

**Figure 7**

1. Front of cab
2. Application area
3. Floor seal

3. Apply the left seal to the left side of the cab ([Figure 8](#)).

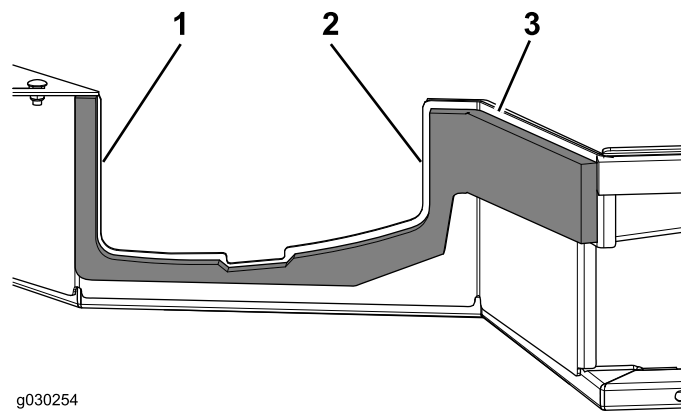


g030253

**Figure 8**

1. Front of cab
2. Left seal

4. Use the measurements shown in [Figure 9](#) to place the seal.

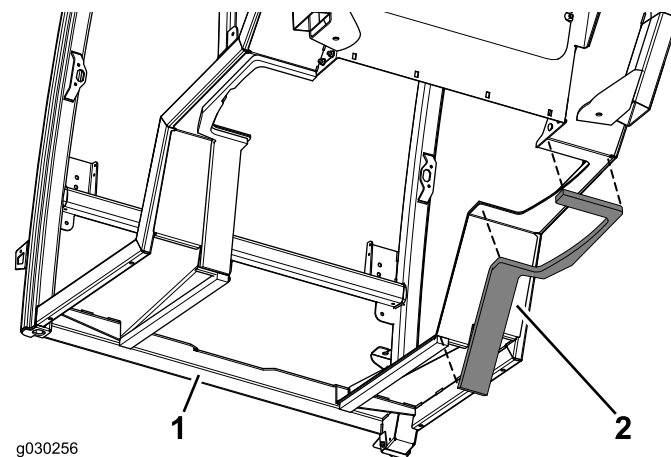


g030254

**Figure 9**

1. 0 to 6 mm (1/4 inch) from edge
2. 0 to 6 mm (1/4 inch) from edge
3. 0 to 6 mm (1/4 inch) from edge

5. Apply the right seal to the right side of the cab ([Figure 10](#)).



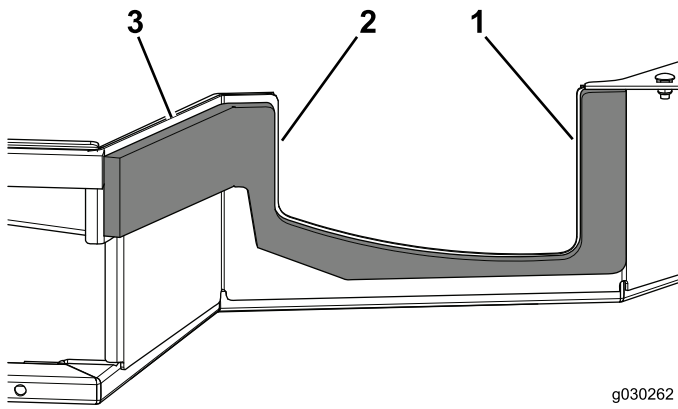
g030256

**Figure 10**

1. Front of cab
2. Right seal

6. Use the measurements shown in [Figure 11](#) to place the seal.



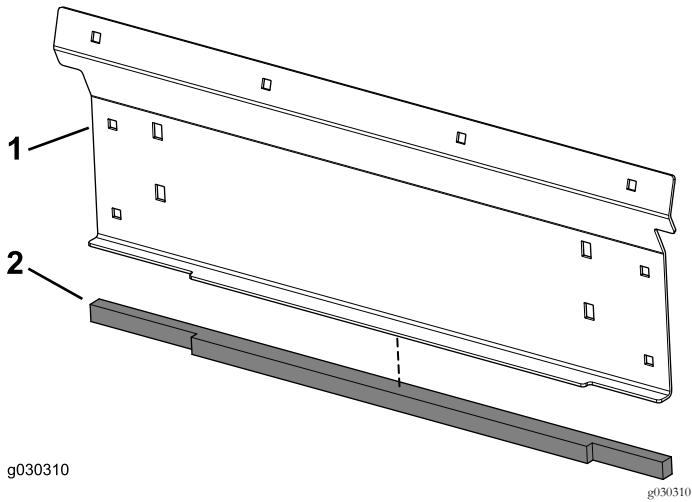


g030262  
g030262

**Figure 11**

1. 0 to 6 mm (1/4 inch) from edge
2. 0 to 6 mm (1/4 inch) from edge
3. 0 to 6 mm (1/4 inch) from edge

7. Apply the back seal to the lower-back plate ([Figure 12](#)).



g030310

g030310

**Figure 12**

1. Lower-back plate
2. Back seal

# 4

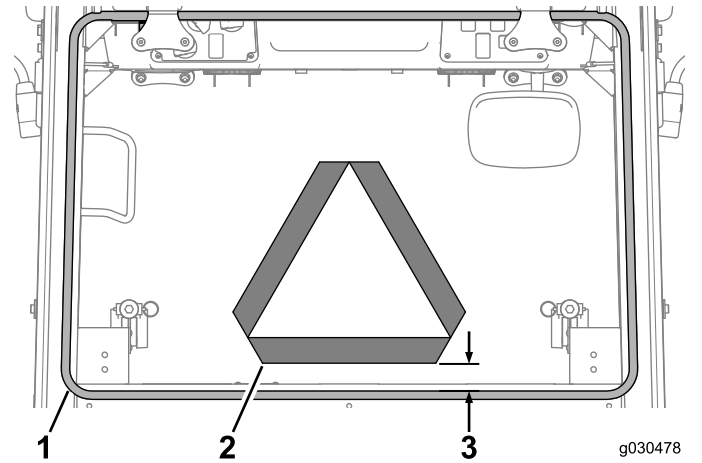
## Applying the Safety Decal

**Parts needed for this procedure:**

|   |              |
|---|--------------|
| 1 | Safety decal |
|---|--------------|

## Procedure

Apply the safety decal to the rear window as shown in [Figure 13](#).



g030478  
g030478

**Figure 13**

1. Window seal
2. Safety decal
3. 50 mm (2 inches)

# 5

## Installing the Cab Mounts

Parts needed for this procedure:

|   |                            |
|---|----------------------------|
| 1 | Front mount assembly       |
| 1 | Left, rear mount assembly  |
| 1 | Right, rear mount assembly |
| 4 | Bolt (1/2 x 4-1/2 inches)  |
| 8 | Bolt (1/2 x 1-1/4 inches)  |
| 4 | Small washer               |
| 8 | Locknut (1/2 inch)         |

### Installing the Front Mount to the Machine

1. Secure the front mount to the machine 8 bolts (1/2 x 1-1/4 inches) and 8 locknuts (Figure 14).

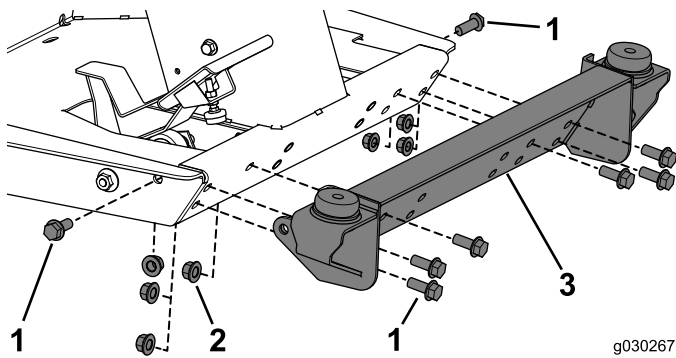


Figure 14

1. Bolt (1/2 x 1-1/4 inches)
2. Locknut (1/2 inch)
3. Front mount

2. Torque the bolt and nut to 91 to 113 N·m (67 to 83 ft-lb).

### Installing the Rear Mounts to the Machine

1. Secure the left mount to the machine using 2 bolts (1/2 x 4-1/2 inches), 2 small washers, and 2 locknuts (Figure 15).

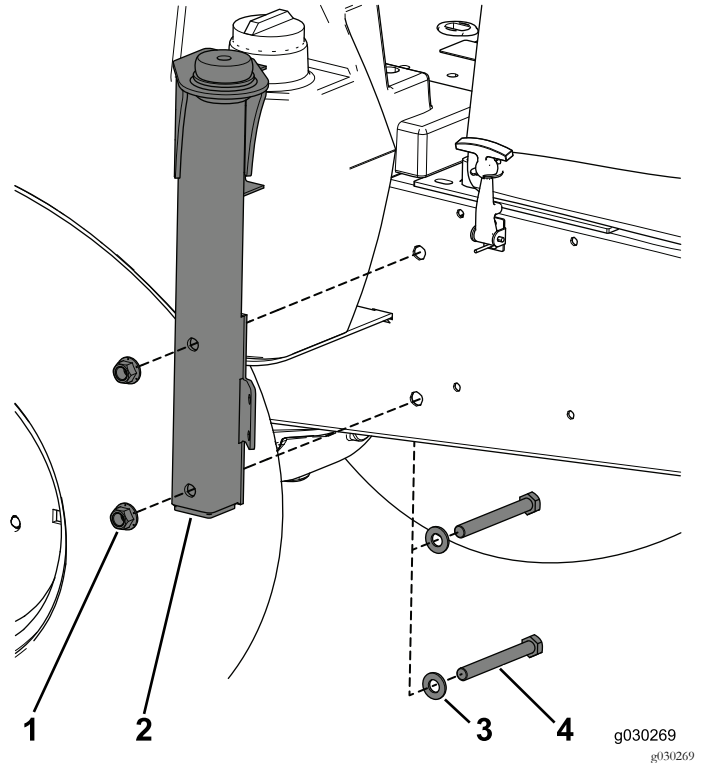


Figure 15

1. Locknut (1/2 inch)
2. Left mount
3. Small washer
4. Bolt (1/2 x 4-1/2 inches)

2. Torque the bolt and nut to 127 to 157 N·m (94 to 116 ft-lb).
3. Repeat the previous steps to the mount on the other side of the machine.

# 6

## Installing the Cab

### Parts needed for this procedure:

|    |                                 |
|----|---------------------------------|
| 1  | Cab                             |
| 4  | Bolt (1/2 x 3 inches)           |
| 4  | Thrust washer                   |
| 4  | Large washer                    |
| 4  | Locknut (1/2 inch)              |
| 1  | Floor tread                     |
| 1  | Pedal cover                     |
| 4  | Bolt (5/16 x 3/4 inch)          |
| 4  | Nut clips                       |
| 1  | Back panel                      |
| 16 | Carriage bolt (5/16 x 3/4 inch) |
| 16 | Locknut (5/16 inch)             |
| 1  | Left cover                      |
| 1  | Right cover                     |

### Installing the Cab to the Machine

1. Use the Toro cab hoist, or similar, to support the cab (Figure 16).

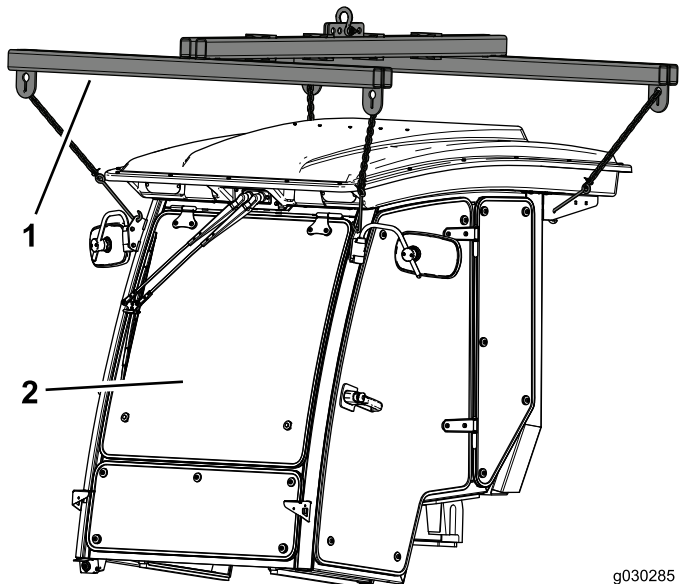


Figure 16

1. Hoist
2. Cab

2. Connect the cab hoist to the 4 lift points on the cab (Figure 17).

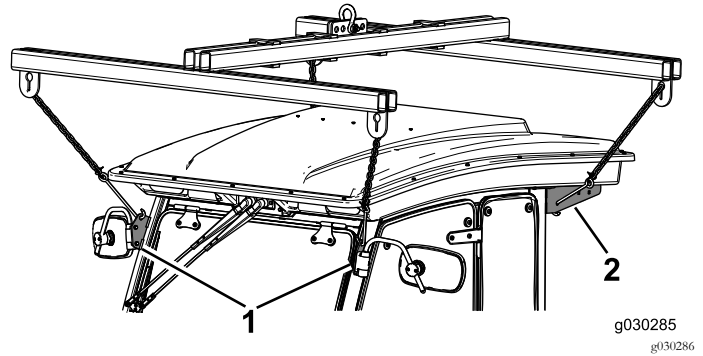


Figure 17

1. Front lift point
2. Rear lift point

**Important:** Ensure that the lift system does not contact the headliner (Figure 18).

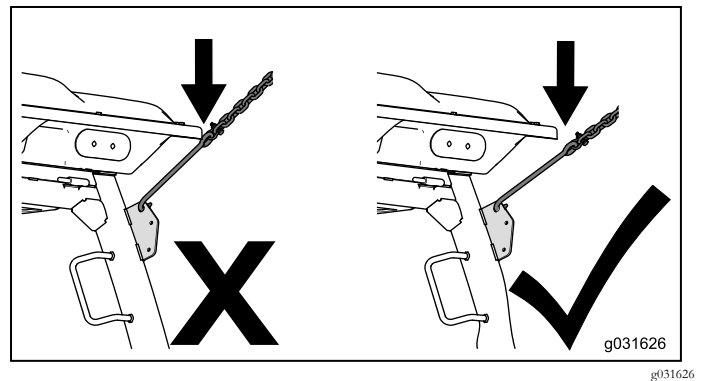


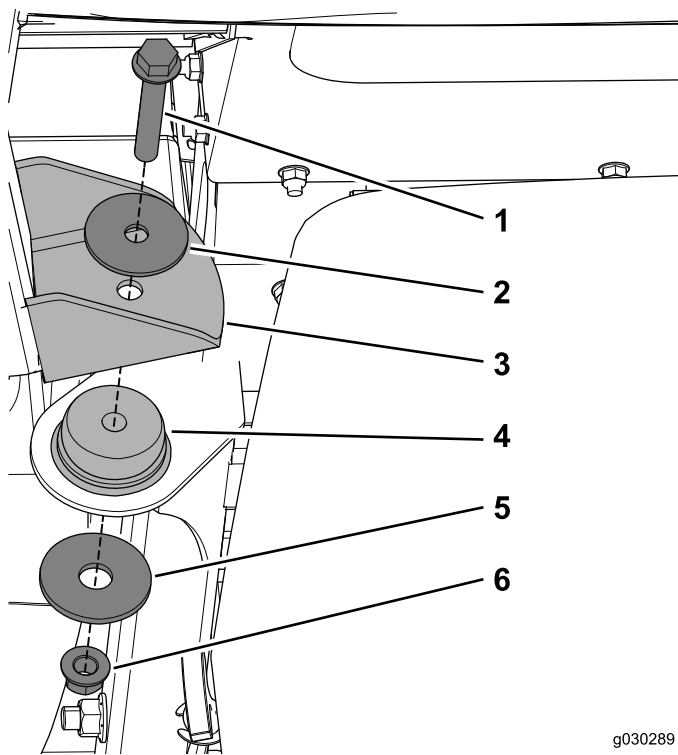
Figure 18

3. Align the cab over the machine.
4. Lower the cab to the machine aligning the 2 bolt holes on the rear mounts.

**Note:** You can move the brake pedals aside and tilt the steering column down to allow the alignment of the cab to the mounts.

5. Use a bolt (1/2 x 3 inches), a thrust washer, a large washer, and locknut to secure the cab to the rear mounts on the machine (Figure 19).

**Note:** A Toro cab hoist is available through your Toro distributor.

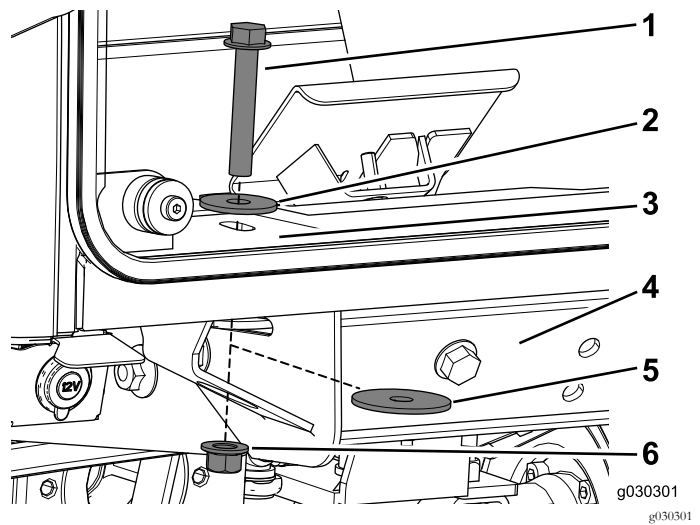


**Figure 19**

- |                          |                       |
|--------------------------|-----------------------|
| 1. Bolt (1/2 x 3 inches) | 4. Rubber isolator    |
| 2. Thrust washer         | 5. Large washer       |
| 3. Cab mount             | 6. Locknut (1/2 inch) |

**Note:** Repeat the previous step for the mount on the other side of the machine.

- Torque the bolt and nut to 127 to 157 N·m (94 to 116 ft-lb).
- Use a bolt (1/2 x 3 inches), a thrust washer, a large washer, and locknut to secure the cab to the front mounts on the machine (Figure 20).



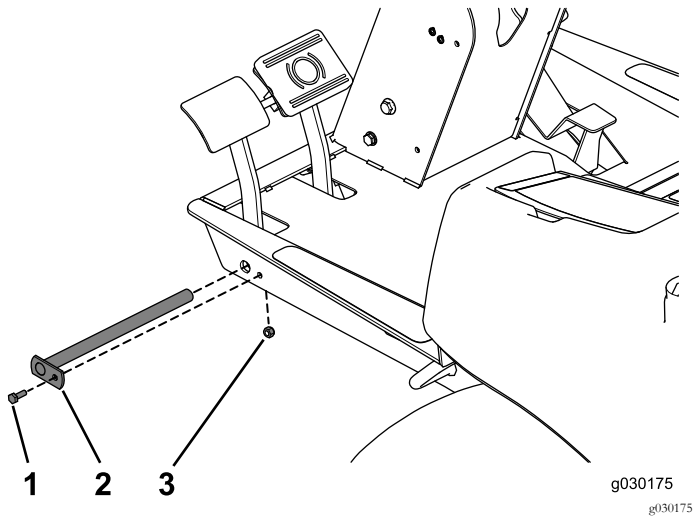
**Figure 20**

- |                          |                       |
|--------------------------|-----------------------|
| 1. Bolt (1/2 x 3 inches) | 4. Front mount        |
| 2. Thrust washer         | 5. Large washer       |
| 3. Cab mount             | 6. Locknut (1/2 inch) |

- Torque the bolt and nut to 127 to 157 N·m (94 to 116 ft-lb).

## Installing the Floor Tread

- Install the brake pin through the brake pedals.

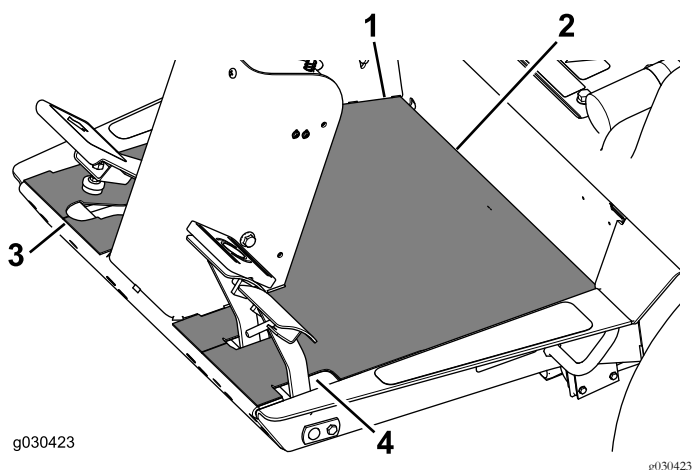


**Figure 21**

- |                          |                       |
|--------------------------|-----------------------|
| 1. Bolt (1/4 x 3/4 inch) | 3. Locknut (1/4 inch) |
| 2. Brake pin             |                       |

- Secure the pin using the bolt (1/4 x 3/4 inch) and locknut (Figure 21).
- Torque the bolt and nut to 10 to 12 N·m (7 to 9 ft-lb).

- Align the back edge of the floor tread at the edge where the operator deck meets the kick plate (Figure 22).



**Figure 22**

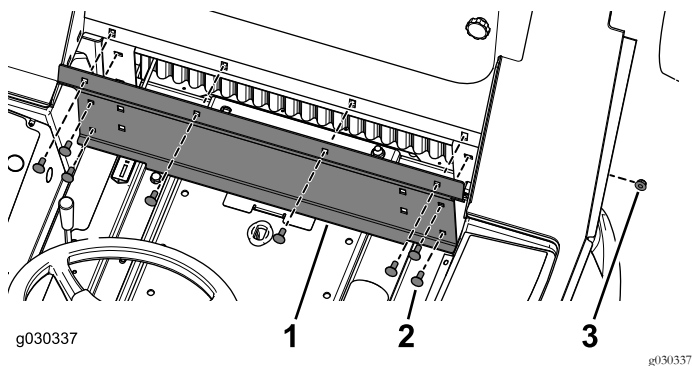
- |                |           |
|----------------|-----------|
| 1. Floor tread | 3. Cutout |
| 2. Back edge   | 4. Cutout |

- Arrange the cutouts in the floor tread to match the cutouts in the operator deck.

## Installing the Back Panel Components

**Note:** Have an assistant help you with the following procedure.

- Loosely install the back panel to the cab using 8 carriage bolts (5/16 x 3/4 inch) and 8 locknuts (Figure 23).

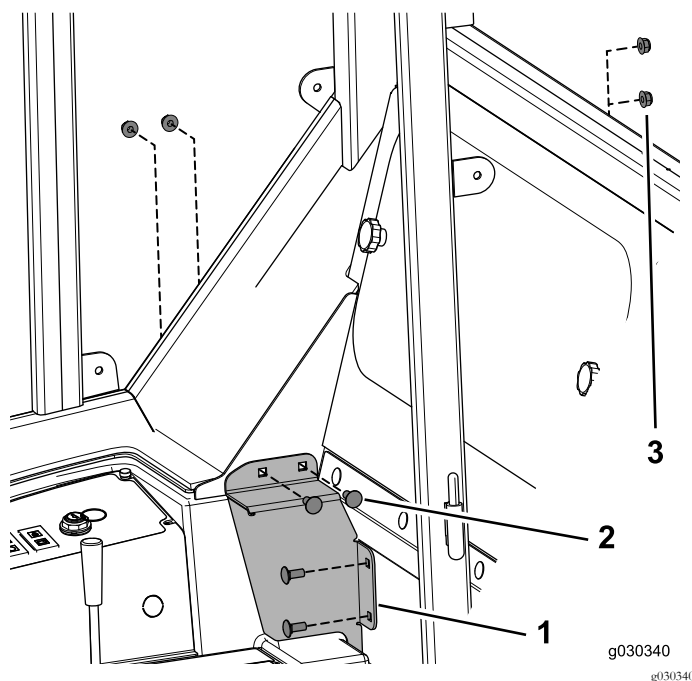


**Figure 23**

- |                                     |                        |
|-------------------------------------|------------------------|
| 1. Back plate                       | 3. Locknut (5/16 inch) |
| 2. Carriage bolts (5/16 x 3/4 inch) |                        |

- Loosely install the right cover bracket to the cab with the 4 carriage bolts (5/16 x 3/4 inch) and 4 locknuts (Figure 24).

**Note:** Ensure that there is a foam seal inserted inside the cover bracket before installing it to the machine.



**Figure 24**

- |                                    |                        |
|------------------------------------|------------------------|
| 1. Cover panel                     | 3. Locknut (5/16 inch) |
| 2. Carriage bolt (5/16 x 3/4 inch) |                        |
- Loosely install the left cover bracket to the cab with the 4 carriage bolts (5/16 x 3/4 inch) and 4 locknuts.
  - Torque the bolts and nuts to secure the back cover, left and right cover bracket to 20 to 25 N·m (14 to 19 ft-lb).

# 7

## Installing the Washer Tank

Parts needed for this procedure:

|   |                                   |
|---|-----------------------------------|
| 1 | Washer tank                       |
| 1 | Tank mount                        |
| 2 | Flange bolt (5/16 x 1-1/2 inches) |
| 4 | Carriage bolt (5/16 x 3/4 inches) |
| 6 | Flange-head nut                   |

### Installing the Washer Tank and Mount

1. Secure the tank mount to the tube mount in the engine compartment using the 2 flange-head bolts (5/16 x 1-1/2 inches) and 2 flange nuts (Figure 25).

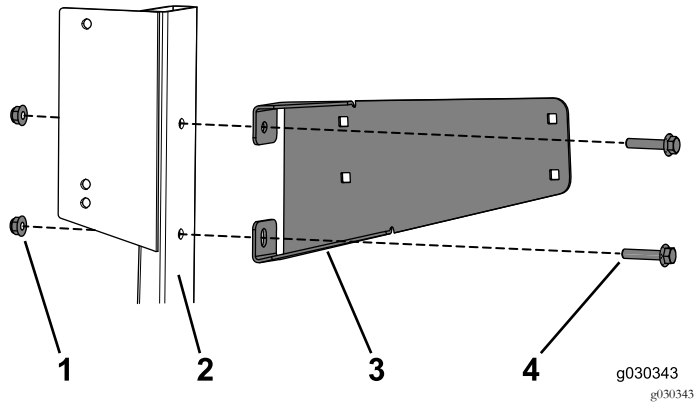


Figure 25

1. Flange nut
2. Tube mount
3. Tank mount
4. Flange-head bolt (5/16 x 1-1/2 inches)

2. Torque the bolt and nut to 20 to 25 N·m (14 to 19 ft-lb).

3. Secure the washer tank to the tank mount using the 4 carriage bolts (5/16 x 3/4 inch) and 4 flange nuts (Figure 26).

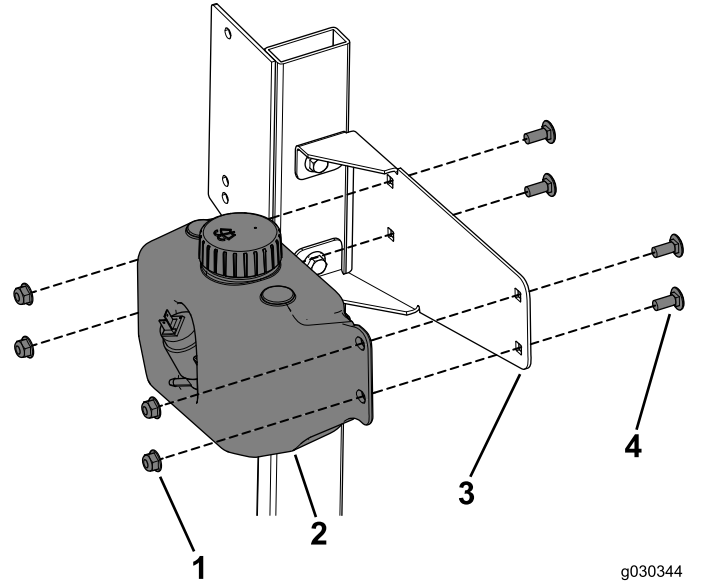


Figure 26

1. Flange nut
2. Washer tank
3. Tank mount
4. Carriage bolt (5/16 x 3/4 inch)

4. Torque the bolt and nut to 20 to 25 N·m (14 to 19 ft-lb).

# 8

## Installing the Hoses

### Parts needed for this procedure:

|   |                                       |
|---|---------------------------------------|
| 1 | Short hose                            |
| 1 | Female coupler                        |
| 1 | Female dust plug                      |
| 3 | Straight fitting (3/8 NPT x 5/8 barb) |
| 4 | Small hose clamp                      |
| 1 | Tee fitting                           |
| 2 | Large hose clamp                      |
| 1 | Long hose                             |
| 1 | Male coupler                          |
| 1 | Male dust plug                        |
| 1 | R-clamp                               |
| 2 | Carriage bolt (1/4 x 3/4 inch)        |
| 2 | Flange nut (1/4 inch)                 |
| 1 | Coupler bracket                       |
| 2 | Bolt (5/16 x 3/4 inch)                |
| 2 | Flange nut (5/16 inch)                |
| 1 | Washer hose                           |
| 1 | Hose fitting                          |
| 8 | Cable ties                            |

## Preparing the Short Hose Assembly

1. Apply sealant to the straight fitting (3/8 NPT x 5/8 barb), skipping the first thread.

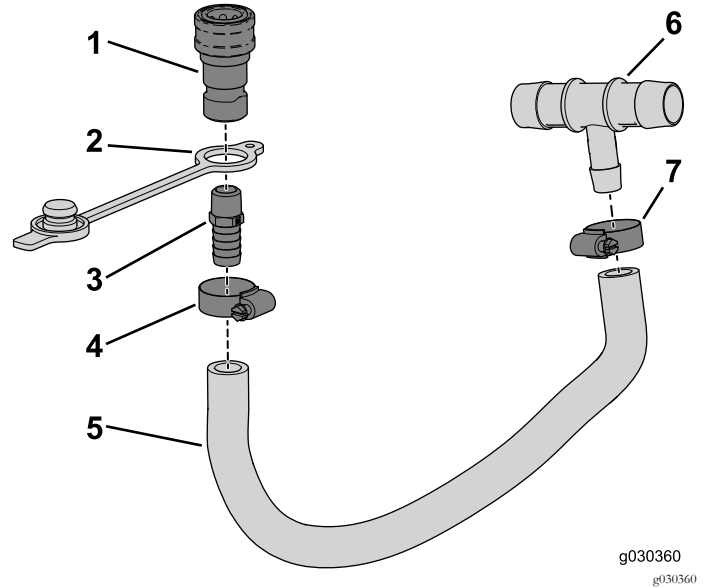


Figure 27

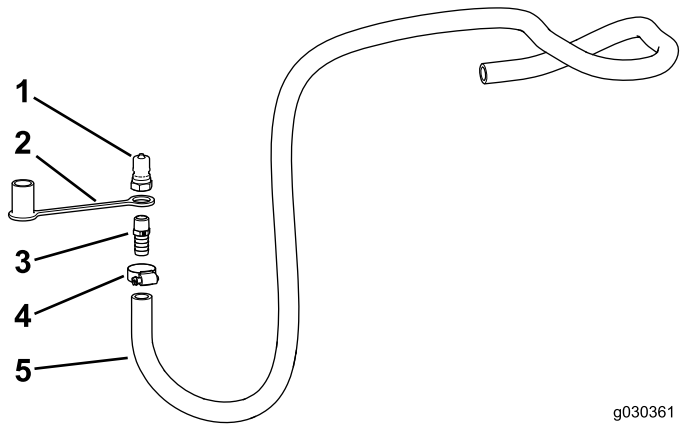
- |  |                     |
|--|---------------------|
| 1. Female coupler                        | 5. Small hose       |
| 2. Female dust plug                      | 6. Tee fitting      |
| 3. Straight fitting (3/8 NPT x 5/8 barb) | 7. Small hose clamp |
| 4. Small hose clamp                      |                     |

2. Thread the straight fitting (3/8 NPT x 5/8 barb) to the female coupler (Figure 27).
3. Tighten the straight fitting (3/8 NPT x 5/8 barb) into the female coupler 2 to 3 turns from finger-tight.
4. Slip the dust plug over the barbed end of the assembly (Figure 27).
5. Slip both hose clamps over the hose.
6. Insert the barbed end of the assembly into the hose and secure it with the hose clamp (Figure 27).
7. Insert the barbed end of the tee fitting into the hose and secure it with the hose clamp (Figure 27).

**Note:** Remove any tag that may be present on the tee fitting.

## Preparing the Long Hose Assembly

1. Apply sealant to the straight fitting (3/8 NPT x 5/8 barb), skipping the first thread.



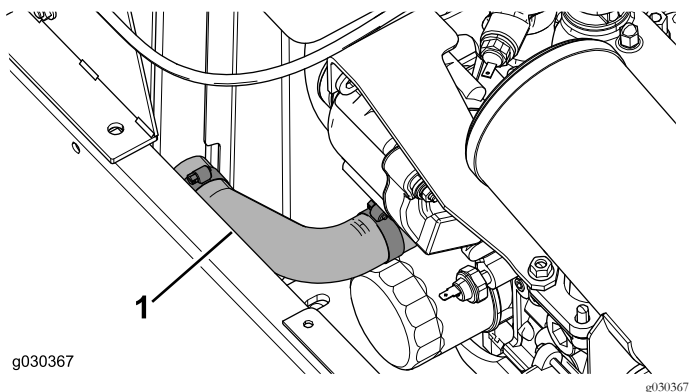
**Figure 28**

- |  |                     |
|--|---------------------|
| 1. Male coupler                          | 4. Small hose clamp |
| 2. Male dust plug                        | 5. Long hose        |
| 3. Straight fitting (3/8 NPT x 5/8 barb) |                     |

2. Thread the straight fitting (3/8 NPTx 5/8 barb) to the male coupler (Figure 28).
3. Tighten the straight fitting (3/8 NPT x 5/8 barb) into the male couple 2 to 3 turns from finger-tight.
4. Slip the dust plug over the barbed end of the assembly (Figure 28).
5. Slip the hose clamp over the hose.
6. Insert the barbed end of the assembly into the hose and secure it with the hose clamp.

## Installing the Short Hose

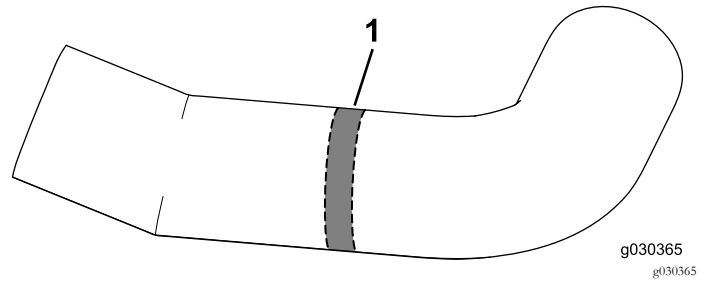
1. Allow the engine coolant to cool and then drain the coolant from the machine; refer to the *Service Manual*—if you have not done so already.
2. Locate and remove the lower hose of the radiator from the machine (Figure 29).



**Figure 29**

1. Lower hose of the radiator

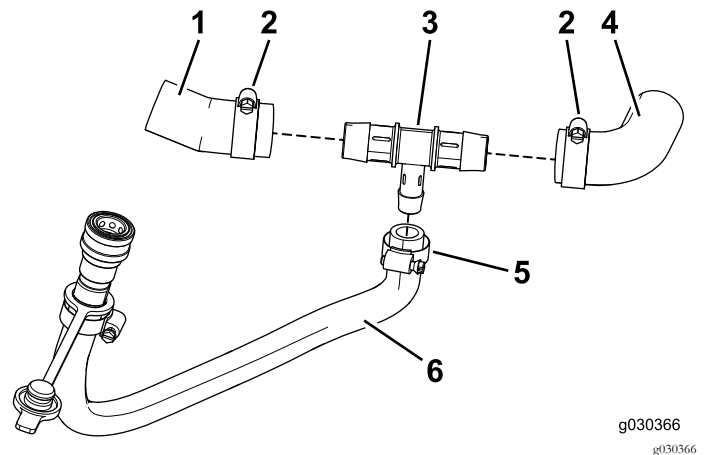
3. Remove a 13 mm (1/2 inch) section of the hose as shown in Figure 30.



**Figure 30**

1. Cut location

4. Arrange the left and right halves of the hose over the tee fitting (Figure 31).



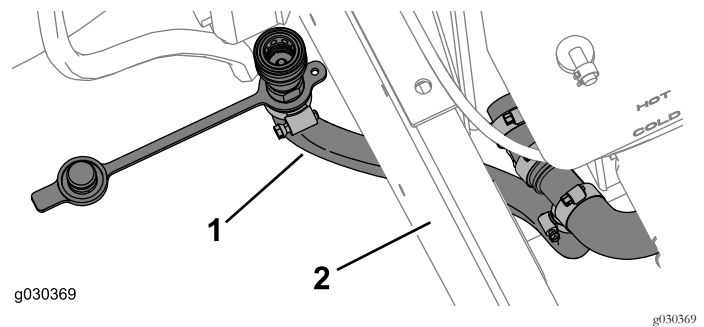
**Figure 31**

- |                      |                       |
|----------------------|-----------------------|
| 1. Left hose section | 4. Right hose fitting |
| 2. Large hose clamp  | 5. Small hose clamp   |
| 3. Tee fitting       | 6. Short hose         |

5. Use the large hose clamps to secure the hose to tee fitting (Figure 31).

**Note:** Remove any tag that may be present on the tee fitting.

6. Route the short hose as shown in Figure 32.



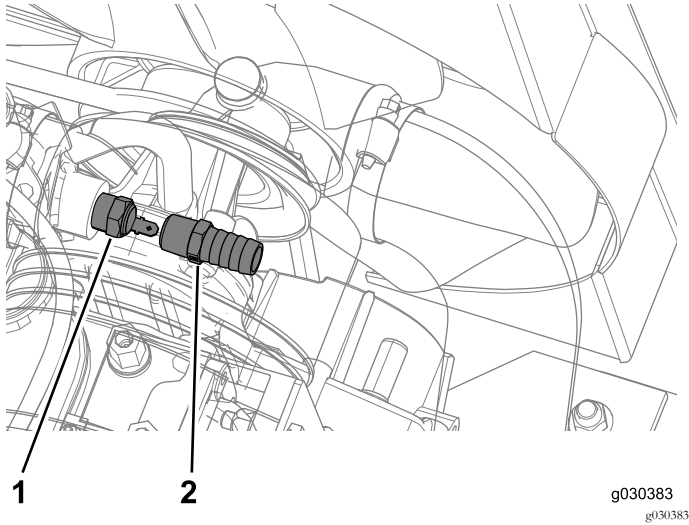
**Figure 32**

- |               |                  |
|---------------|------------------|
| 1. Short hose | 2. Machine frame |
|---------------|------------------|



## Installing the Long Hose

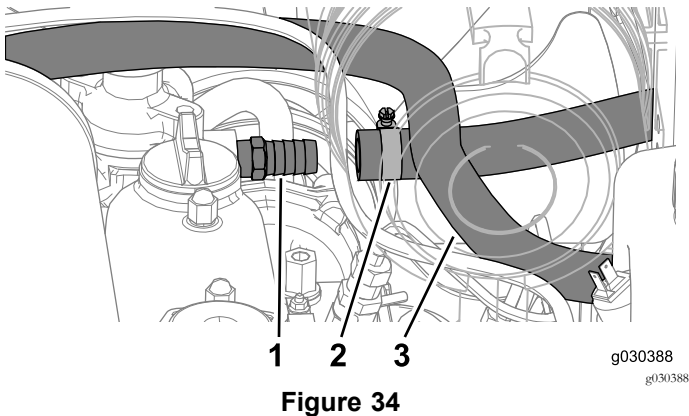
1. Locate, disconnect, and remove the temperature sensor shown in [Figure 33](#).



**Figure 33**

1. Temperature sensor
2. Straight fitting (3/8 NPT x 5/8 barb)

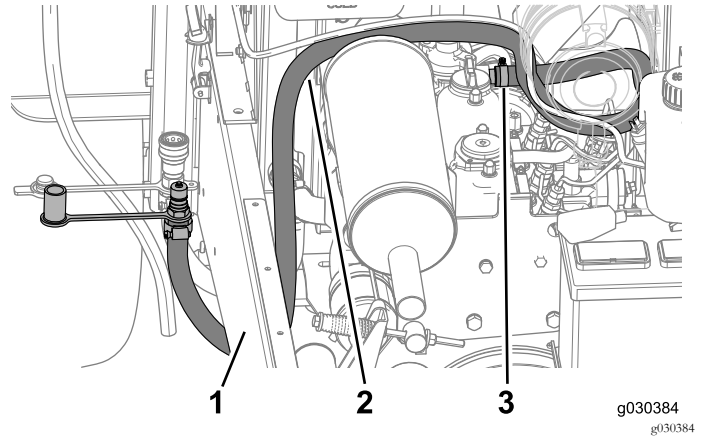
2. Apply pipe sealant to the threads on the straight fitting.
3. Manually secure the straight fitting into the port until it is finger-tight.
4. Use a tool to secure the straight fitting 2 to 3 additional turns from finger-tight.
5. Slip the hose clamps over the hose.



**Figure 34**

1. Straight fitting (3/8 NPT x 5/8 barb)
2. Small hose clamp
3. Long hose

6. Insert the hose over the barb end of the straight fitting and secure it with the hose clamp ([Figure 35](#)).



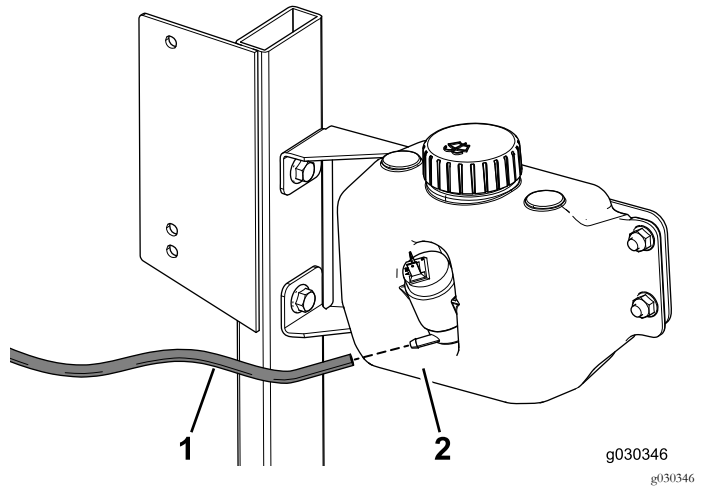
**Figure 35**

1. Machine frame
2. Long hose
3. Large hose clamp

7. Route the long hose as shown in [Figure 35](#).

## Installing the Washer Hose

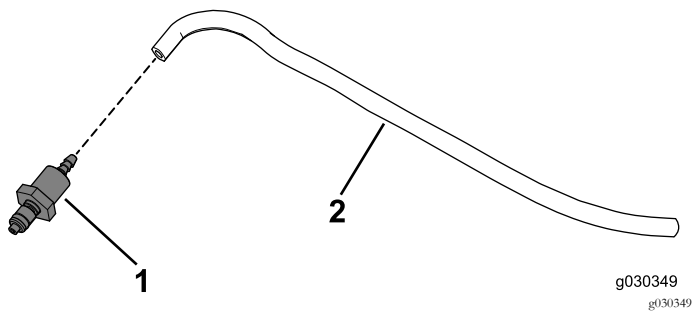
1. Connect one end of the washer hose to the washer tank ([Figure 36](#)).



**Figure 36**

1. Washer hose
2. Washer tank

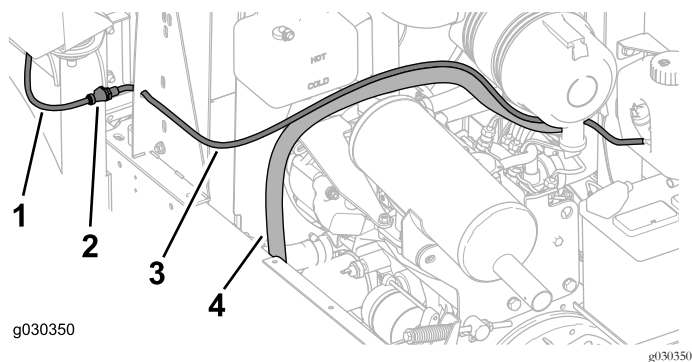
2. Connect the hose fitting to the other end of the washer hose (Figure 37).



**Figure 37**

1. Hose fitting
2. Washer hose

3. Route the washer hose and connect it to the washer hose from the cab (Figure 38).

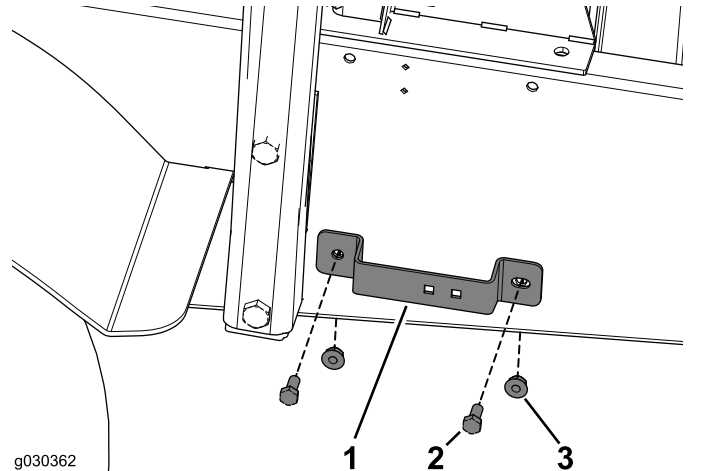


**Figure 38**

1. Hose from cab
2. Hose fittings
3. Hose routing
4. Long hose

## Installing the Hose Bracket

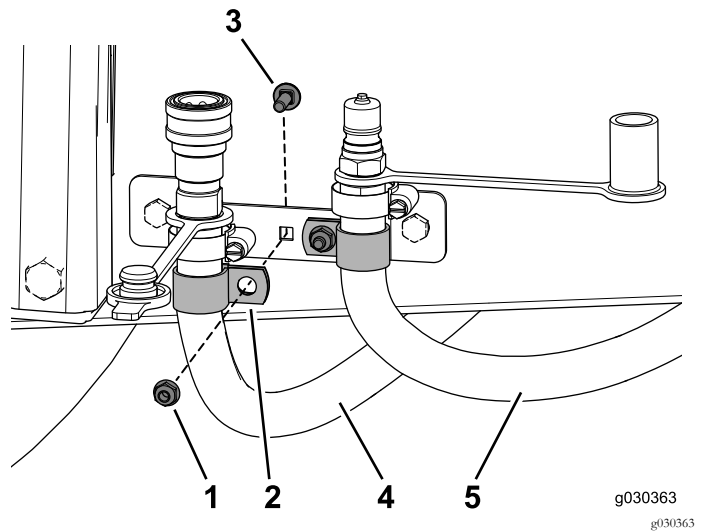
1. Secure the hose bracket to the machine frame using the 2 bolts (5/16 x 3/4 inch) and 2 flange nuts (Figure 39).



**Figure 39**

1. Hose bracket
2. Bolt (5/16 x 3/4 inch)
3. Flange nut

2. Torque the bolt and nut to 20 to 25 N·m (14 to 19 ft-lb).
3. Arrange 1 R-clamp around each of the hoses (Figure 40).

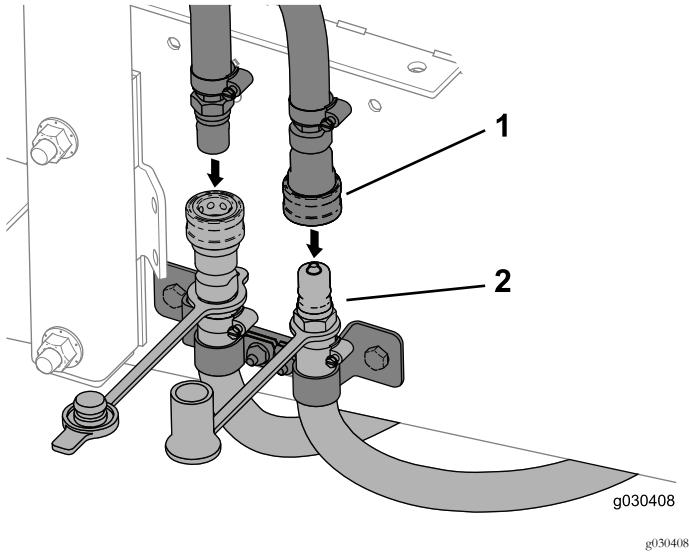


**Figure 40**

1. Flange nut
2. R-clamp
3. Carriage bolt (1/4 x 3/4 inch)
4. Short hose
5. Long hose

4. Secure the R-clamp using the carriage bolt (1/4 x 3/4 inch) and flange nut (Figure 40).

5. Torque the bolt and nut to 10 to 12 N·m (7 to 9 ft-lb).
6. Connect the hoses from the cab to the hoses mounted to the machine (Figure 41).

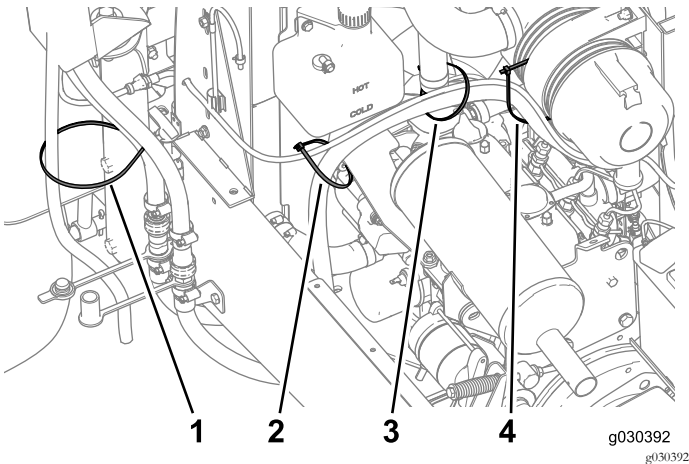


**Figure 41**

1. From the cab
2. From the machine

7. Secure the hoses into position with the cable ties (Figure 42) and (Figure 43).

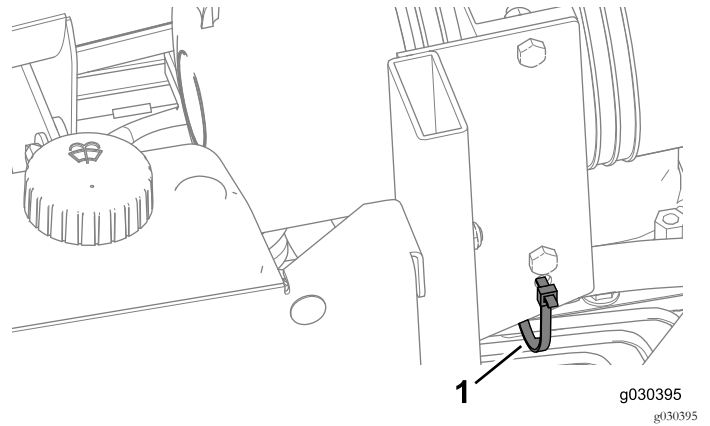
**Important:** Do not secure the hoses to hot or moving parts.



**Figure 42**

1. Cable tie
2. Cable tie
3. Cable tie
4. 2 Cable ties

**Note:** Use 2 cable ties connected together to secure the long hose to the air-filter box.



**Figure 43**

1. Cable tie

## 9

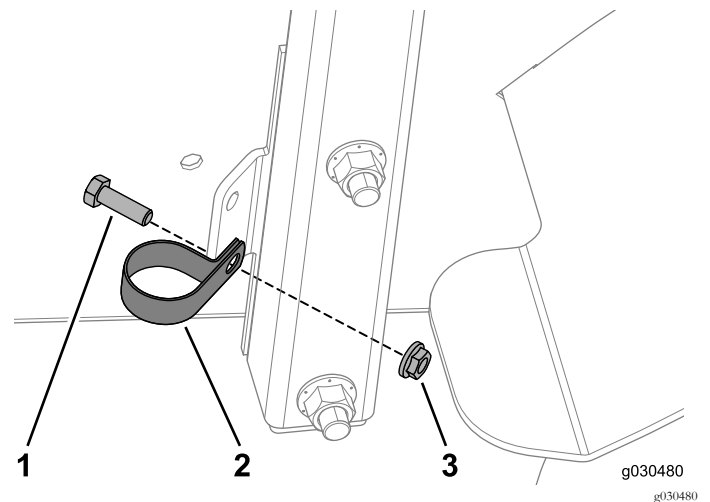
### Installing the R-clamps

**Parts needed for this procedure:**

|   |                        |
|---|------------------------|
| 2 | R-clamp                |
| 2 | Bolt (5/16 x 3/4 inch) |
| 2 | Flange nut (5/16 inch) |

#### Procedure

1. Secure 1 R-clamp to the accessory bracket using the Bolt (5/16 x 3/4 inch) and flange nut on the right side of the machine (Figure 44).



**Figure 44**

1. Bolt (5/16 x 3/4 inch)
2. R-clamp
3. Flange nut (5/16 inch)

- Follow the previous step to secure 1 R-clamp to the left side of the machine.

# 10

## Connecting the Wire Harness

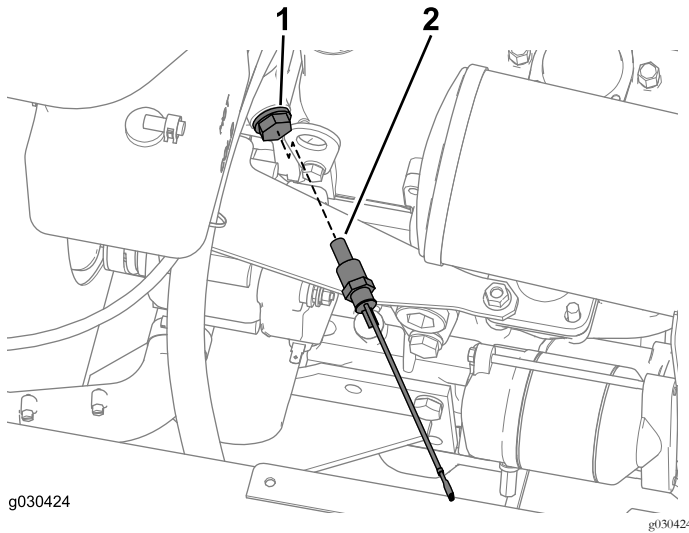
Parts needed for this procedure:

|   |                                   |
|---|-----------------------------------|
| 1 | Temperature sensor                |
| 1 | Wiring harness                    |
| 1 | Fuse (10 A)                       |
| 1 | Wire cover                        |
| 2 | Flange-head bolt (1/4 x 5/8 inch) |
| 2 | Locknut (1/4 inch)                |

### Installing the Temperature Sensor

**Important:** Whenever working with the electrical system, always disconnect the battery cables, black (-) cable first, to prevent possible wiring damage from short-outs.

- Locate and remove the engine plug shown in [Figure 45](#).



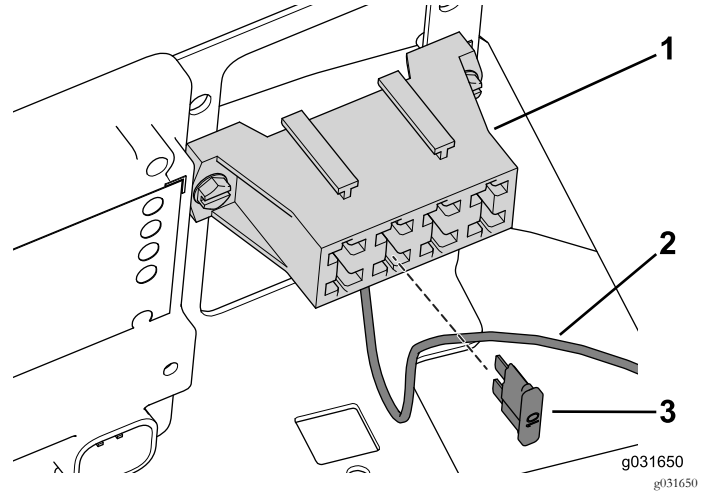
**Figure 45**

- Engine plug
- Temperature sensor

- Apply pipe sealant to the threads on the temperature sensor.
- Install the temperature sensor into the port until it is finger-tight.
- Use a tool to secure temperature sensor 2 to 3 additional turns from finger-tight.
- Connect the temperature-sensor to the wire that you disconnected in [Installing the Long Hose \(page 17\)](#).

## Connecting the Power Wire

- Locate and access the fuse block on the right side of the operator's seat.
- Connect the wire for the cab power to an empty space in the fuse block ([Figure 46](#))



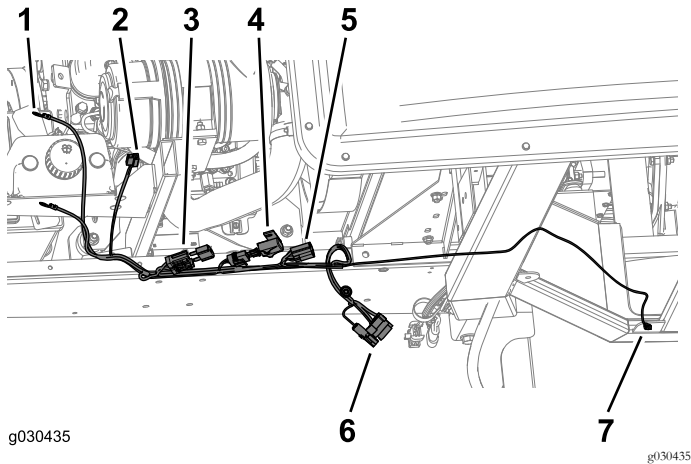
**Figure 46**

- Fuse block
- Wire for cab power
- Fuse (10 A)
- Install a 10 A fuse into the slot associated with the wire ([Figure 46](#)).

## Installing the Wire Harness

**Important:** Whenever working with the electrical system, always disconnect the battery cables, black (-) cable first, to prevent possible wiring damage from short-outs.

1. Route the wire harness on the right side of the machine frame (Figure 47).



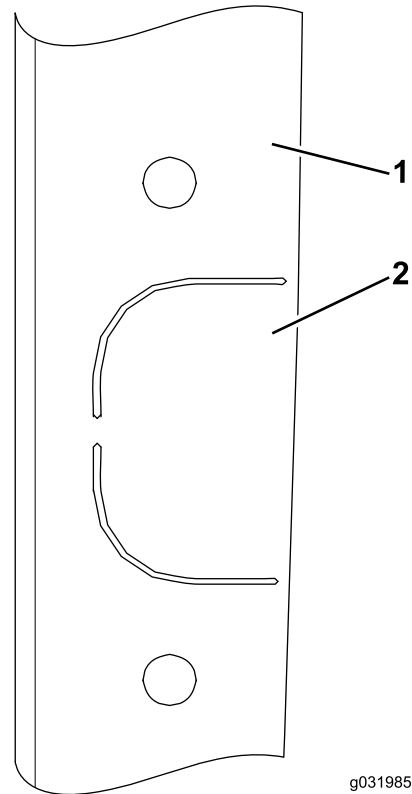
**Figure 47**

- |                      |                        |
|----------------------|------------------------|
| 1. Battery terminals | 5. Relay connector     |
| 2. Washer connector  | 6. Cab connectors      |
| 3. Fuse (60 A)       | 7. Cab power connector |
| 4. Fuse (10 A)       |                        |

2. Remove the nut that secures the positive-battery clamp to the positive-battery terminal.
3. Attach the positive battery terminal from the wire harness to the bolt used to secure the battery clamp.
4. Secure the clamp with the nut you removed previously.
5. Repeat the previous steps for the negative battery terminal on the wire harness.

## Removing the Cutout

1. Use a cutting tool to remove the cutout from the side plate (Figure 48).



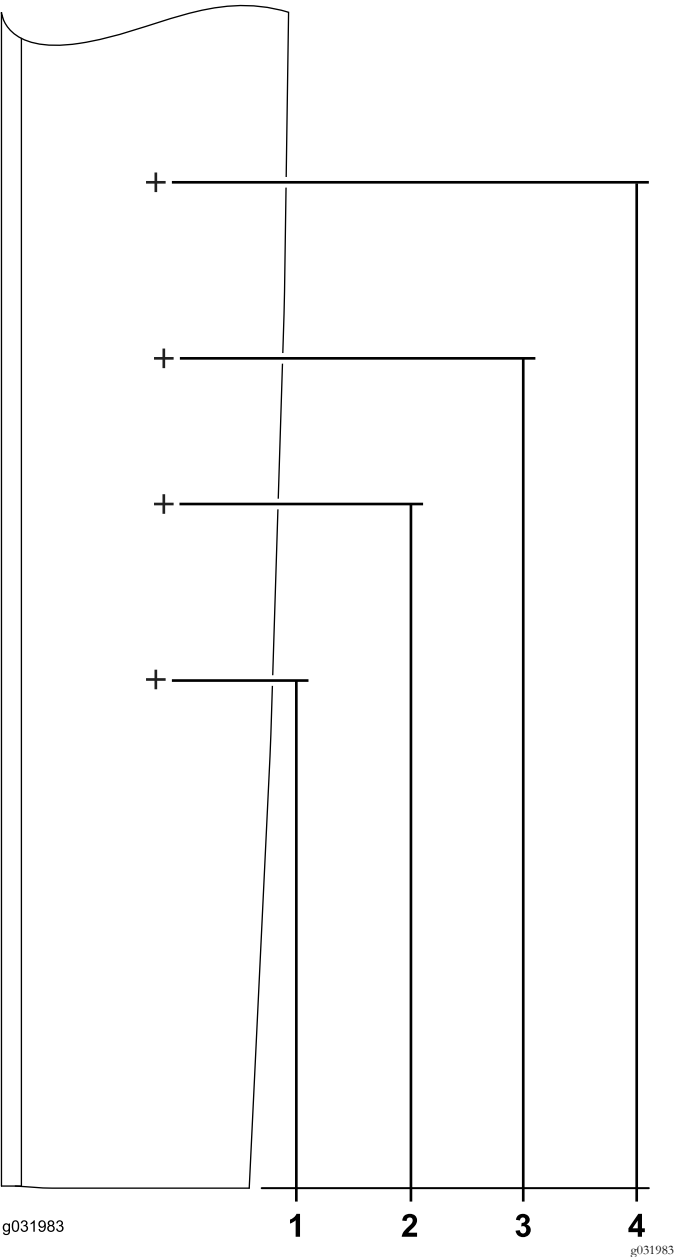
**Figure 48**

- |               |           |
|---------------|-----------|
| 1. Side plate | 2. Cutout |
|---------------|-----------|
2. Use a file to remove any sharp edges from the cutout.
  3. Apply a rust inhibitor to the bare metal surfaces.

# Making the Cutout

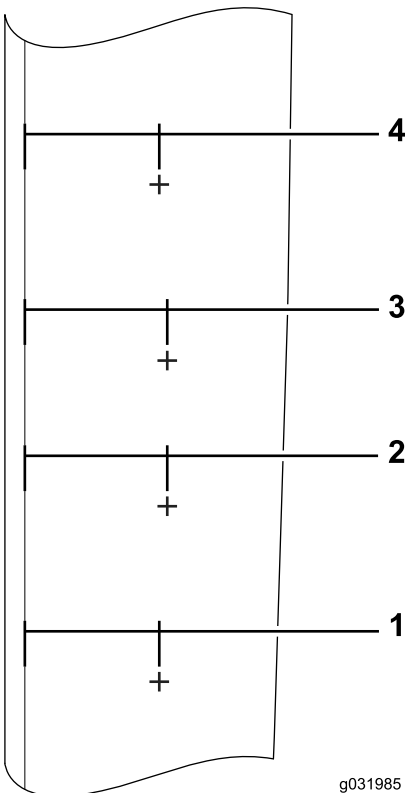
**Note:** Follow this procedure if the cutout is not in the side plate.

- 1. Locate and mark the following locations onto the side plate (Figure 49) and (Figure 50).



**Figure 49**

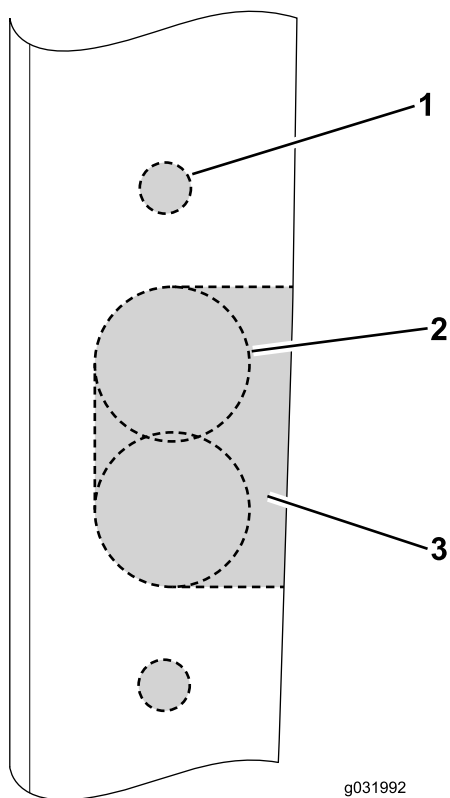
- |                           |                           |
|---------------------------|---------------------------|
| 1. 68 mm (2-11/16 inches) | 3. 109 mm (4-5/16 inches) |
| 2. 93 mm (3-11/16 inches) | 4. 134 mm (5-1/4 inches)  |



**Figure 50**

- |                         |                         |
|-------------------------|-------------------------|
| 1. 18 mm (11/16 inches) | 3. 20 mm (13/16 inches) |
| 2. 20 mm (13/16 inches) | 4. 18 mm (11/16 inches) |

2. Drill the 9/32 inch holes for the flange-head bolts  
Figure 51.



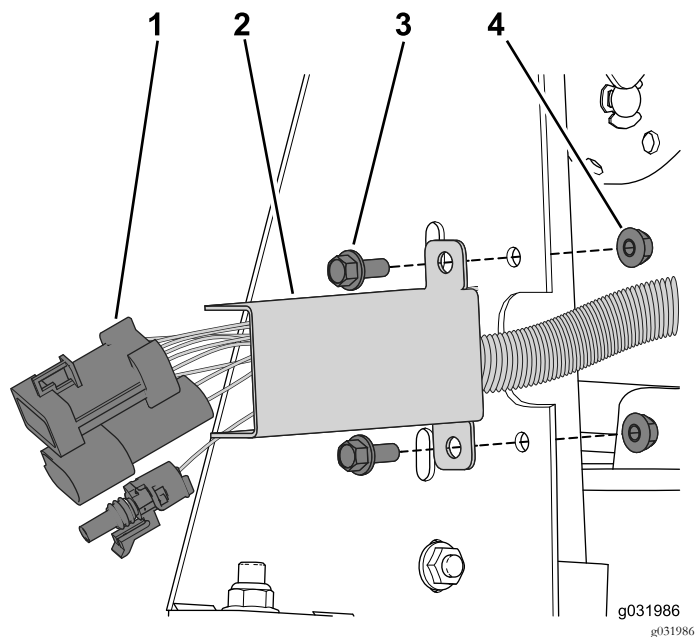
**Figure 51**

1. Bolt hole (9/32 inch)
2. Hole saw (1 inch)
3. Cutout area

3. Use a 1-inch hole saw to make the radius feature in the cutout (Figure 51).
4. Use a cutting tool to remove the remaining material.
5. Use a file to remove any sharp edges from the cutout.
6. Apply a rust inhibitor to the bare metal surfaces.

## Securing the Wiring Harness

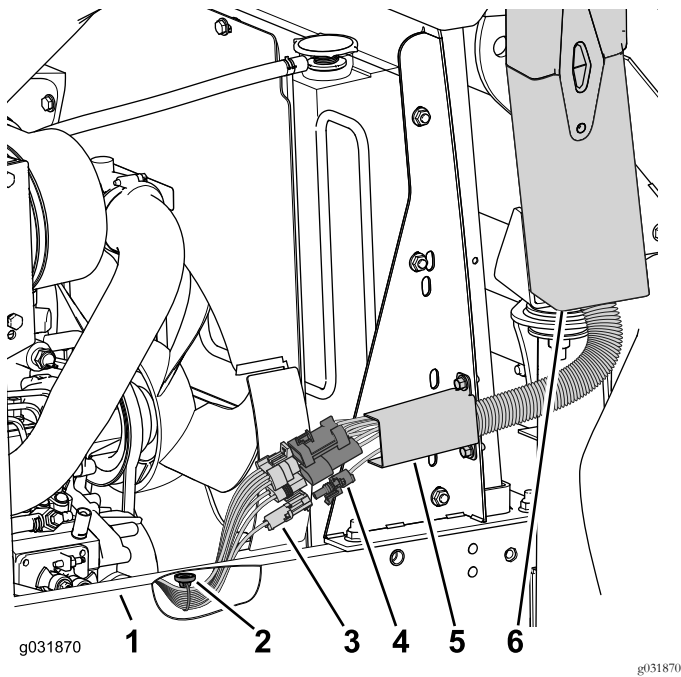
1. Arrange the wire harness from the cab into the cutout.
2. Capture the harness in the cutout by securing the wire cover to the side frame with the 2 flange-head bolt and the locknuts (Figure 52).



**Figure 52**

1. Wire harness
2. Wire cover
3. Flange-head bolt (1/4 x 5/8 inch)
4. Locknut (1/4 inch)

3. Route the wire harness from the machine toward the cab.



**Figure 53**

- |                              |                                  |
|------------------------------|----------------------------------|
| 1. Frame                     | 4. Connectors harness (from cab) |
| 2. Magnetic mount            | 5. Wire cover                    |
| 3. Connectors (from machine) | 6. Right tube                    |
- 
4. Position the magnetic mount onto the underside of the frame (Figure 53).
  5. Connect the wire harness from the machine to the wire harness from the cab (Figure 53).
  6. Ensure that the hood closes without interfering with the wire harness and correct if necessary.

# 11

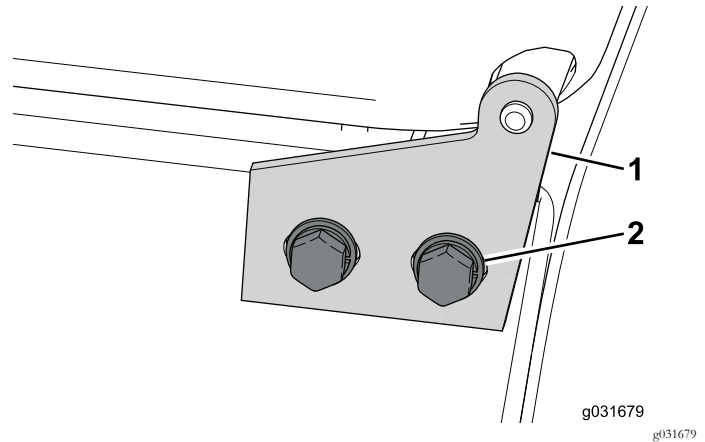
## Adjusting the Engine Hood

### No Parts Required

### Procedure

Adjust the hood if the cab interferes when it is opened.

1. Loosen the 4 bolts securing the hood to the hood hinge (Figure 54).



**Figure 54**

- |               |          |
|---------------|----------|
| 1. Hood hinge | 2. Bolts |
|---------------|----------|
- 
2. Slide the hood toward the rear of the machine.
  3. Tighten the bolts to secure the hood.
  4. Verify the operation of the hood and repeat the previous steps if necessary.



# 12

## Completing the Installation

### No Parts Required

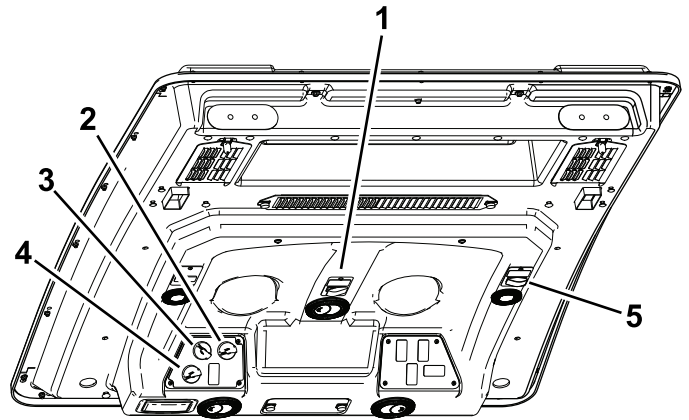
### Procedure

1. Add coolant to the machine; refer to the *Service Manual*
2. Check for leaks.
3. Route the drain hoses through the R-clamps on each side of the machine.
4. Check for parts that interfere with moving parts and make corrections before operating the machine.
5. Connect the negative (-) battery cable to the battery.
6. Check the operation of all controls before operating the machine.
7. Have an assistant to adjust the rearview and side mirrors before operating the machine.

## Product Overview

### Controls

#### Cab Controls



g030398  
g030398

**Figure 55**

- |                            |                              |
|----------------------------|------------------------------|
| 1. Windshield-wiper switch | 4. Air-recirculation control |
| 2. Temperature control     | 5. Power outlet              |
| 3. Fan control             |                              |

### Windshield-Wiper Switch

Use this switch to turn the windshield wipers on or off ([Figure 55](#)).

### Temperature Control

Rotate the temperature control knob to regulate the air temperature in the cab ([Figure 55](#)).

### Fan Control

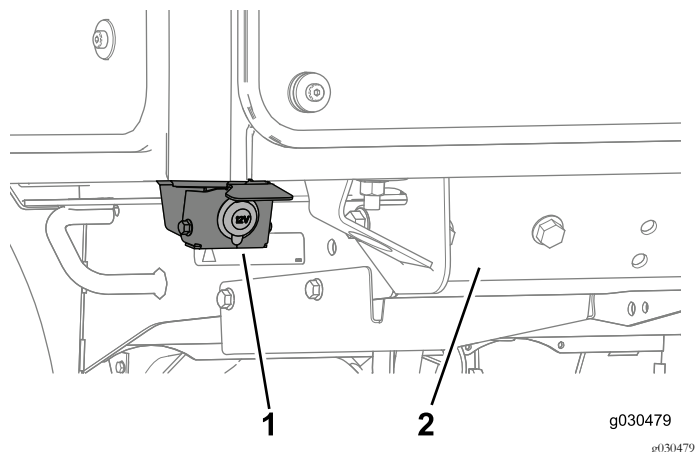
Rotate the fan control knob to regulate the speed of the fan ([Figure 55](#)).

### Air-Recirculation Control

Sets the cab to either recirculate the air in the cabin or to draw air into the cabin from outside ([Figure 55](#)). Set the control to draw air in when using the fan or heater.

## Power Outlet

Use this 12 V DC, 15 A power outlet to power compatible devices ([Figure 56](#)).

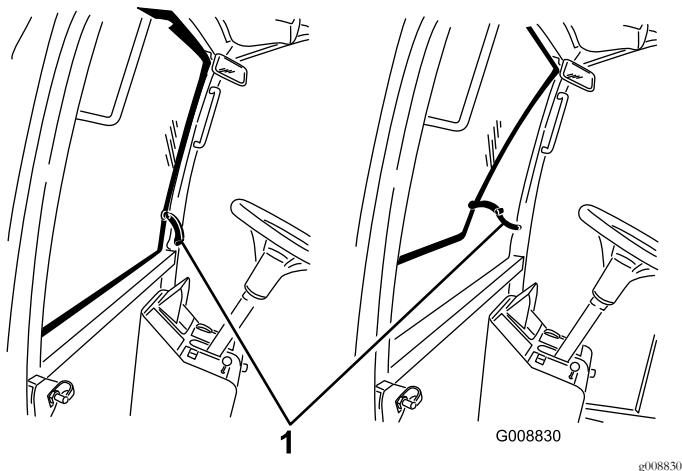


**Figure 56**

1. Power outlet (12 V DC, 15 A)
2. Front mount

## Windshield Latch

Lift the latches to open the windshield ([Figure 57](#)). Press in the latch to lock the windshield open. Pull out and down on the latch to close and secure the windshield.



**Figure 57**

1. Windshield latch

## Rear Window Latch

Lift the latches to open the rear window. Press in the latch to lock the windshield open. Pull out and down on the latch to close and secure the windshield. ([Figure 57](#)).

**Important:** You must close the rear window before you open the hood.

# Maintenance

## Recommended Maintenance Schedule(s)

| Maintenance Service Interval | Maintenance Procedure   |
|------------------------------|---|
| After the first 250 hours    | <ul style="list-style-type: none"><li>Clean the cab air filters (replace them if they are torn or excessively dirty).</li></ul> |

## Cleaning

⚠ CAUTION

If you leave the key in the switch, someone could accidently start the engine and seriously injure you or other bystanders.

Remove the key from the switch before you do any maintenance.

### Cleaning the Cab

**Important:** Use care around the cab seals and lights (Figure 58). If you are using a pressure washer, keep the washer wand at least 0.6 m (2 ft) away from the machine. Do not use the pressure washer directly on the cab seals and lights or under the rear overhang.

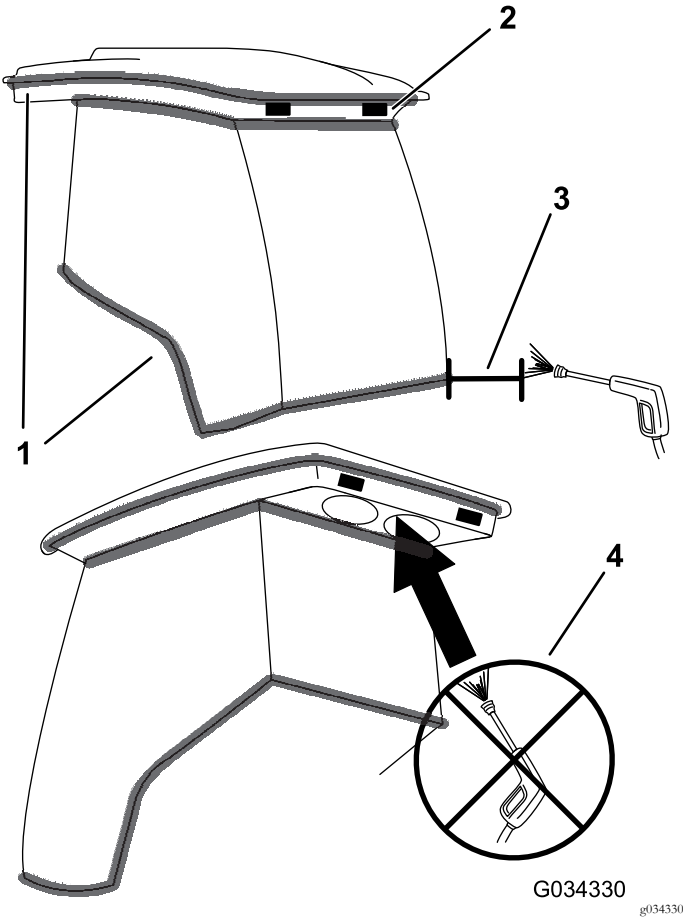


Figure 58

1. Seal
2. Light
3. Keep wand 0.6 m (2 ft) away.
4. Do not pressure-wash under the rear overhang.

# Cleaning the Air Filters

**Service Interval:** After the first 250 hours (replace them if they are torn or excessively dirty).

1. Remove the thumb screws and the grates from both the in-cab and rear cab air filters (Figure 59).

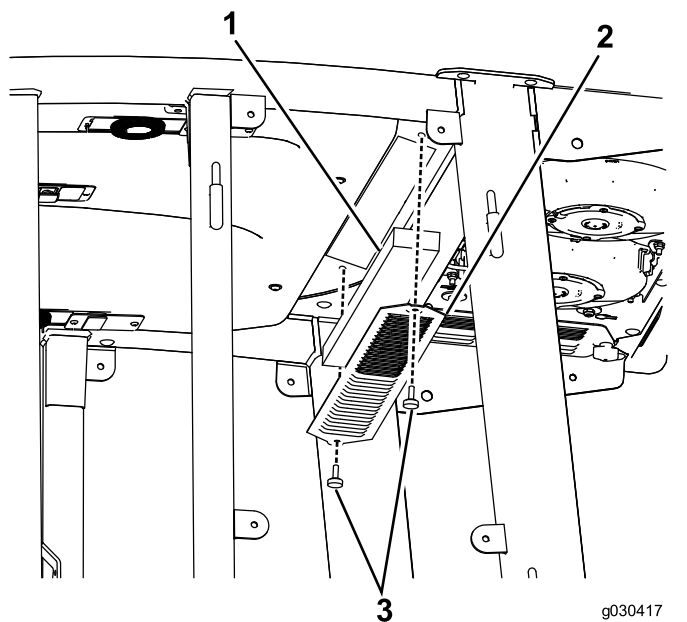


Figure 59

1. Filter
2. Grate
3. Thumb screw

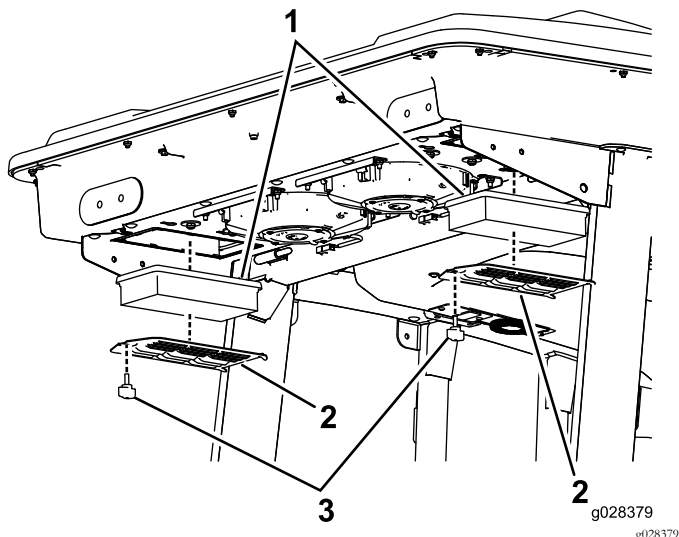


Figure 60

1. Filter
2. Grate
3. Thumb screw

2. Clean the filters by blowing clean, oil free, compressed air through them.

**Important:** Replace any damaged filters.

3. Install the filters and grate, securing them with the thumb screws.

# Storage

Remove the cab from the machine for storage.

## Preparing to Remove the Cab from the Machine

1. Move the machine underneath the cab hoist, shut off the engine, and remove the key from the ignition.
2. Ensure that the machine is secure from movement before you begin to work on it.
3. Allow the engine to cool.
4. Remove the bolt and nut securing the brake pin that holds the brake pedals (Figure 1).
5. Tilt the steering column to its lowest position; refer to the machine *Operators' Manual*.
6. Disconnect the black (-) cable from the battery.

## Disconnecting the Wire Harness

1. Disconnect the wire harness secured to the machine from the wire harness secured to the cab (Figure 61).

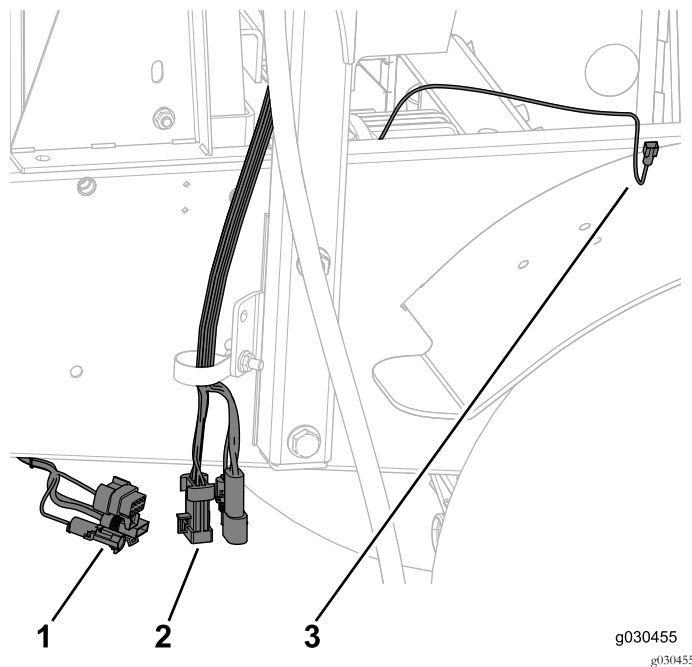


Figure 61

1. Wire harness from the machine
2. Wire harness from the cab
3. Cab power connector

2. Disconnect the cab power connector.
3. Cover the attached to the machine with tape to keep them clean.

# Disconnecting the Hoses

1. Disconnect the washer hose (Figure 62).

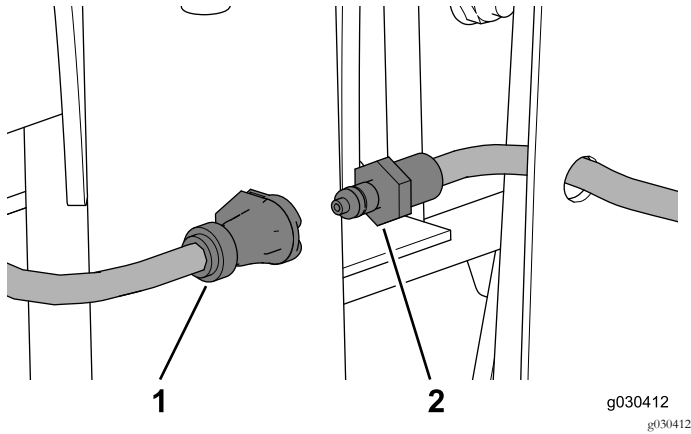


Figure 62

1. Hose from the cab
2. Hose from the machine

2. Disconnect the heater hoses (Figure 63).

**Note:** Be prepared to collect or wipe the fluid that can drain from the hoses when you disconnect them.

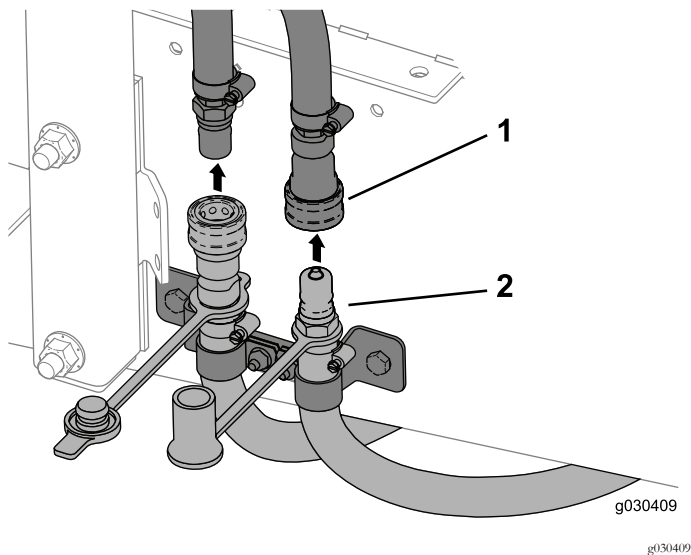


Figure 63

1. Hoses from the cab
2. Hoses from the machine

3. Seal the heater hoses using the dust caps (Figure 64).

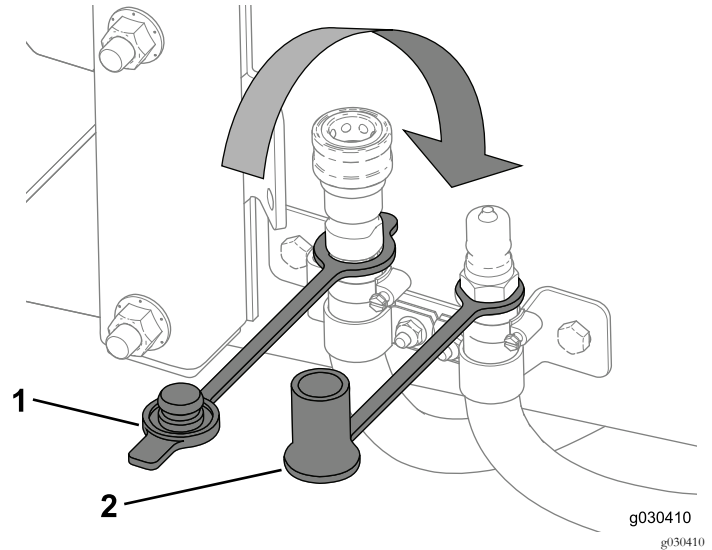


Figure 64

1. Male-dust cap
2. Female dust cap

## Removing the Cab

1. Connect the cab hoist to the 4 lift points on the cab (Figure 17).
2. Remove the bolts, the washers, and the locknuts securing the cab to the machine; refer to step 5 and step 7 in [Installing the Cab to the Machine](#) (page 11).

**Note:** Return all the hardware that you removed to the original mounting location in the order it is used to secure the cab to the machine. This can prevent losing the mounting hardware and simplify installation.

3. Raise the cab to a height that will allow you to safely move the machine away from the cab.
4. Move the machine away from the cab.
5. Lower the cab onto a carrier to allow you to move it to a storage location.

**Note:** Secure the wire harness and hoses to prevent damaging them when you lower or store the cab. Cover the cab to prevent dust and debris from accumulating on it while it is in storage.

6. Install the brake pin through the brake pedals (Figure 21).
7. Secure the pin using the bolt (1/4 x 3/4 inch) and locknut (Figure 21).
8. Use an assistant to help you align the roll bar to the machine (Figure 2).
9. Use the 4 bolts (1/2 x 4-1/2 inches), washers, and locknuts to secure the roll bar to the machine (Figure 4).
10. Torque each bolt to 91 to 113 N·m (67 to 83 ft-lb).

# Declaration of Incorporation

| Model No. | Serial No.        | Product Description  | Invoice Description   | General Description | Directive  |
|-----------|-------------------|--|-----------------------|---------------------|------------|
| 30298     | 4000000000 and Up | Cab Kit, Groundsmaster 3280-D 4-Wheel Drive Traction Unit And All 200 Series Groundsmaster | CAB-GM3280, HEAT ONLY | Utility Vehicle     | 2006/42/EC |

Relevant technical documentation has been compiled as required per Part B of Annex VII of 2006/42/EC.

We will undertake to transmit, in response to requests by national authorities, relevant information on this partly completed machinery. The method of transmission shall be electronic transmittal.

This machinery shall not be put into service until incorporated into approved Toro models as indicated on the associated Declaration of Conformity and in accordance with all instructions, whereby it can be declared in conformity with all relevant Directives.

Certified:



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September 26, 2016

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## **European Privacy Notice**

### **The Information Toro Collects**

Toro Warranty Company (Toro) respects your privacy. In order to process your warranty claim and contact you in the event of a product recall, we ask you to share certain personal information with us, either directly or through your local Toro company or dealer.

The Toro warranty system is hosted on servers located within the United States where privacy law may not provide the same protection as applies in your country.

**BY SHARING YOUR PERSONAL INFORMATION WITH US, YOU ARE CONSENTING TO THE PROCESSING OF YOUR PERSONAL INFORMATION AS DESCRIBED IN THIS PRIVACY NOTICE.**

### **The Way Toro Uses Information**

Toro may use your personal information to process warranty claims, to contact you in the event of a product recall and for any other purpose which we tell you about. Toro may share your information with Toro's affiliates, dealers or other business partners in connection with any of these activities. We will not sell your personal information to any other company. We reserve the right to disclose personal information in order to comply with applicable laws and with requests by the appropriate authorities, to operate our systems properly or for our own protection or that of other users.

### **Retention of your Personal Information**

We will keep your personal information as long as we need it for the purposes for which it was originally collected or for other legitimate purposes (such as regulatory compliance), or as required by applicable law.

### **Toro's Commitment to Security of Your Personal Information**

We take reasonable precautions in order to protect the security of your personal information. We also take steps to maintain the accuracy and current status of personal information.

### **Access and Correction of your Personal Information**

If you would like to review or correct your personal information, please contact us by email at [legal@toro.com](mailto:legal@toro.com).

## **Australian Consumer Law**

Australian customers will find details relating to the Australian Consumer Law either inside the box or at your local Toro Dealer.



## The Toro Warranty

### A Two-Year Limited Warranty

#### Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours\*, whichever occurs first. This warranty is applicable to all products with the exception of Aerators (refer to separate warranty statements for these products). Where a warrantable condition exists, we will repair the Product at no cost to you including diagnostics, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

\* Product equipped with an hour meter.

#### Instructions for Obtaining Warranty Service

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists. If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department  
Toro Warranty Company  
8111 Lyndale Avenue South  
Bloomington, MN 55420-1196  
  
952-888-8801 or 800-952-2740  
E-mail: commercial.warranty@toro.com

#### Owner Responsibilities

As the Product owner, you are responsible for required maintenance and adjustments stated in your *Operator's Manual*. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

#### Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This warranty does not cover the following:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, or modified non-Toro branded accessories and products. A separate warranty may be provided by the manufacturer of these items.
- Product failures which result from failure to perform recommended maintenance and/or adjustments. Failure to properly maintain your Toro product per the Recommended Maintenance listed in the *Operator's Manual* can result in claims for warranty being denied.
- Product failures which result from operating the Product in an abusive, negligent, or reckless manner.
- Parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, brake pads and linings, clutch linings, blades, reels, rollers and bearings (sealed or greasable), bed knives, spark plugs, castor wheels and bearings, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Conditions considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved fuels, coolants, lubricants, additives, fertilizers, water, or chemicals, etc.
- Failure or performance issues due to the use of fuels (e.g. gasoline, diesel, or biodiesel) that do not conform to their respective industry standards.

- Normal noise, vibration, wear and tear, and deterioration.
- Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

#### Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part. Parts replaced under this warranty are covered for the duration of the original product warranty and become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use remanufactured parts for warranty repairs.

#### Deep Cycle and Lithium-Ion Battery Warranty:

Deep cycle and Lithium-Ion batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and maintenance techniques can extend or reduce total battery life. As the batteries in this product are consumed, the amount of useful work between charging intervals will slowly decrease until the battery is completely worn out. Replacement of worn out batteries, due to normal consumption, is the responsibility of the product owner. Battery replacement may be required during the normal product warranty period at owner's expense. Note: (Lithium-Ion battery only): A Lithium-Ion battery has a part only prorated warranty beginning year 3 through year 5 based on the time in service and kilowatt hours used. Refer to the *Operator's Manual* for additional information.

#### Maintenance is at Owner's Expense

Engine tune-up, lubrication, cleaning and polishing, replacement of filters, coolant, and completing recommended maintenance are some of the normal services Toro products require that are at the owner's expense.

#### General Conditions

Repair by an Authorized Toro Distributor or Dealer is your sole remedy under this warranty.

**Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Except for the Emissions warranty referenced below, if applicable, there is no other express warranty. All implied warranties of merchantability and fitness for use are limited to the duration of this express warranty.**

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### Note regarding engine warranty:

The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the Engine Emission Control Warranty Statement supplied with your product or contained in the engine manufacturer's documentation for details.

#### Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer.