Form No. 3403-614 Rev A

Cab Kit

2015 and After Groundsmaster® 3280-D 4-Wheel Drive Traction Unit

Model No. 30298—Serial No. 316000001 and Up

Operator's Manual

Safety

⚠ WARNING

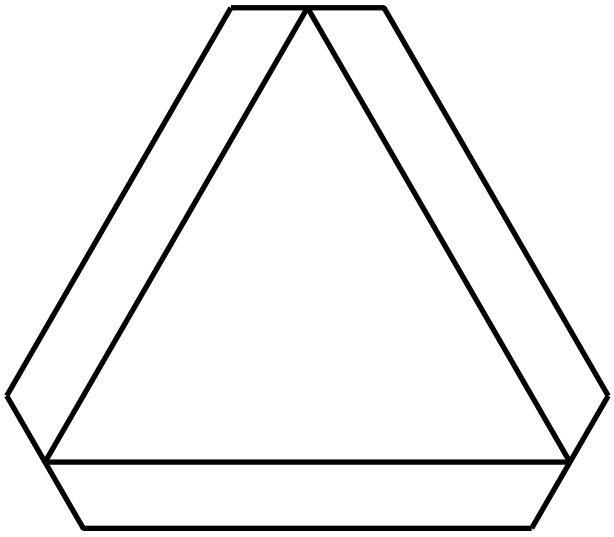
CALIFORNIA
Proposition 65 Warning

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.

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 lost.



120–0250

1. Slow moving vehicle



130-5361

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

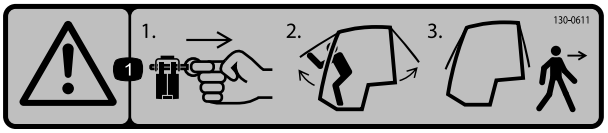
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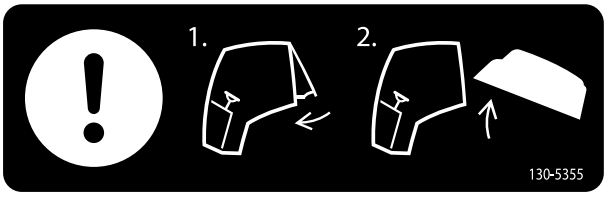
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3403-614 A



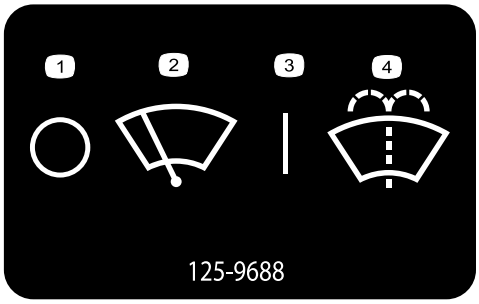
130-0611

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



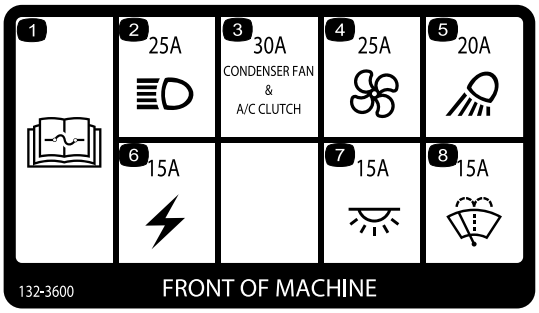
130-5355

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



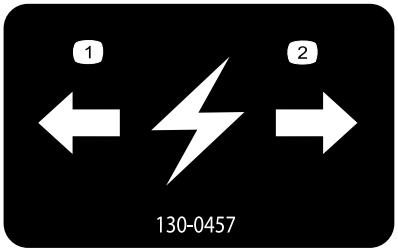
125-9688

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



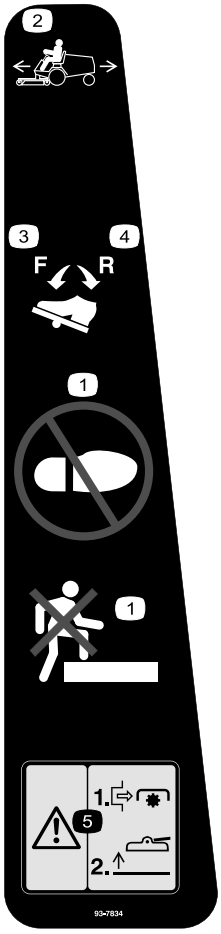
132-3600

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



130-0457

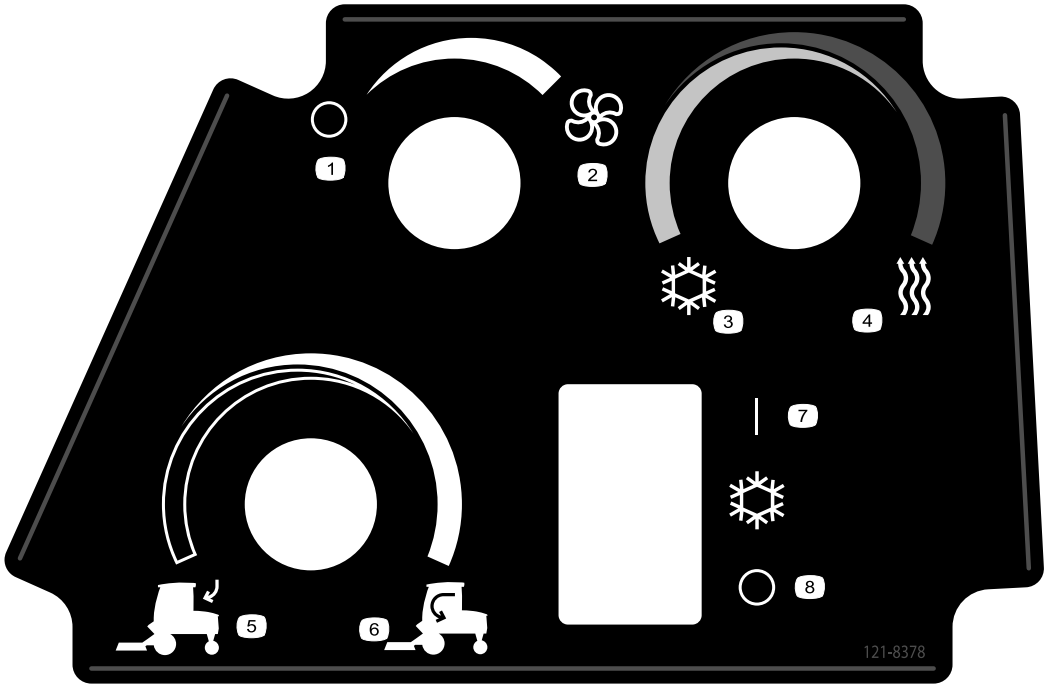
1. Left
2. Right



93-7834

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

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

Procedure	Description	Qty.	Use
9	Short hose	1	Install the hoses.
	Female coupler	1	
	Female dust plug	1	
	Straight fitting (3/8 NPT x 0.625 barb)	3	
	Small hose clamp	4	
	Tee fitting	1	
	Large hose clamp	2	
	Long hose	1	
	Male coupler	1	
	Male dust plug	1	
	R-clamp	1	
	Carriage bolt (1/4 x 3/4 inch)	2	
	Flange nut (1/4 inch)	2	
	Coupler bracket	1	
	Bolt (5/16 x 3/4 inch)	2	
	Flange nut (5/16 inch)	2	
	Washer hose	1	
	Hose fitting	1	
	Cable ties	8	
10	R-clamp	2	Install the R-clamps.
	Bolt (5/16 x 3/4 inch)	2	
	Flange nut (5/16 inch)	2	
11	Temperature sensor	1	Connect the wire harness to the machine.
	Wiring harness	1	
	Fuse (10 A)	1	
	Wire cover	1	
	Flange-head bolt (1/4 x 5/8 inch)	2	
	Locknut (1/4 inch)	2	
12	No parts required	–	Adjust the hood.
13	No parts required	–	Complete the installation.

1

Preparing the Machine

No Parts Required

Procedure

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

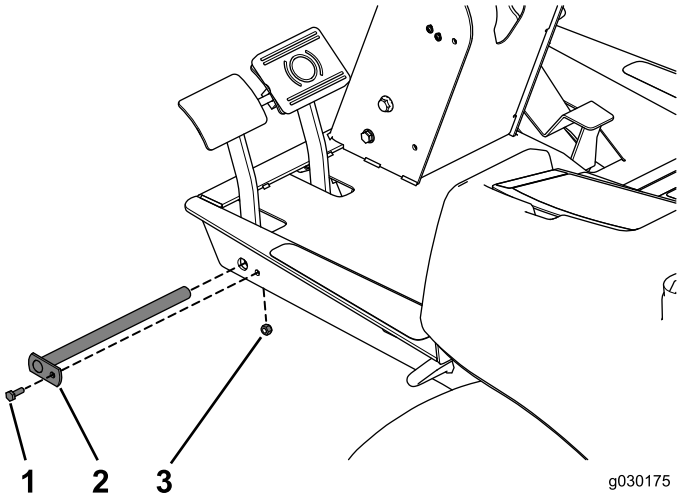


Figure 1

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

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 rollover protection system (ROPS) from the machine (Figure 2).

   Note: Use an assistant to help you remove the ROPS from the machine.

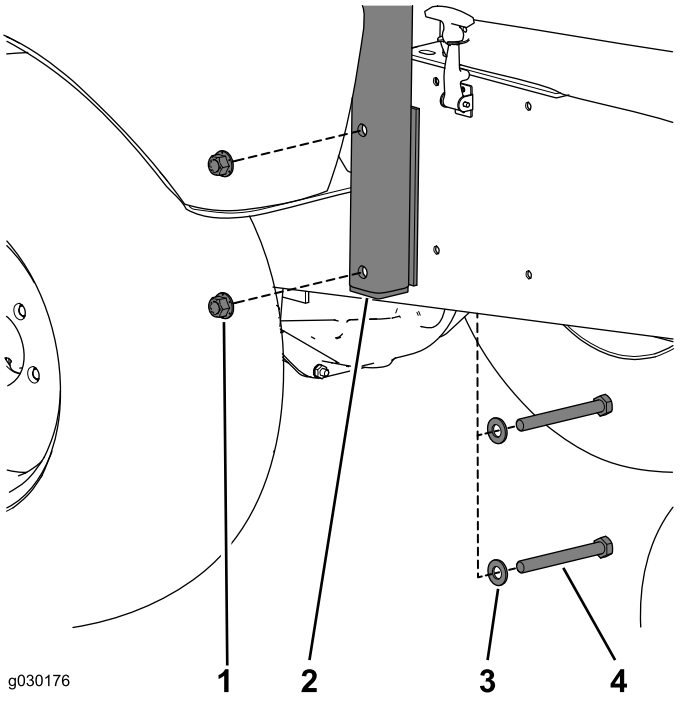


Figure 2

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

9. Carefully remove the ROPS 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.

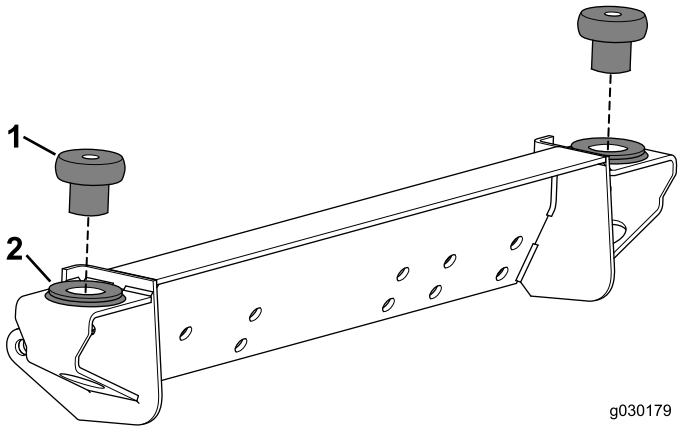


Figure 3

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.

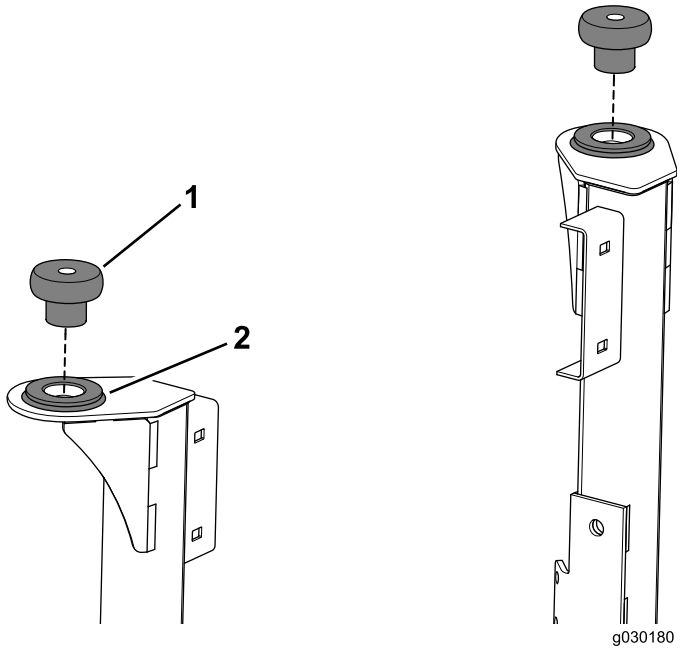


Figure 4

1. Rubber isolator
2. Hole

3

Drilling the Accessory Holes

No Parts Required

Drilling the Front Mount Hole

Follow this procedure if the mounting hole is not present.

1. Temporarily install the front mount to the machine; refer to Installing the Front Mount to the Machine (page 11).
2. Transfer the center point of the through hole on the front mount to the machine (Figure 5).

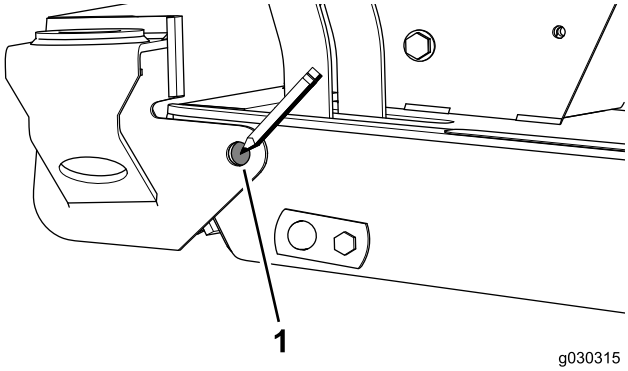


Figure 5

1. Through hole

3. Remove the front mount from the machine.
4. Drill a hole in the machine large enough for a bolt (1/2 x 1-1/4 inches) to pass through at the marked location.

Drilling the Pedal Cover Holes

1. Locate and mark the right mounting holes for the pedal cover (Figure 6).

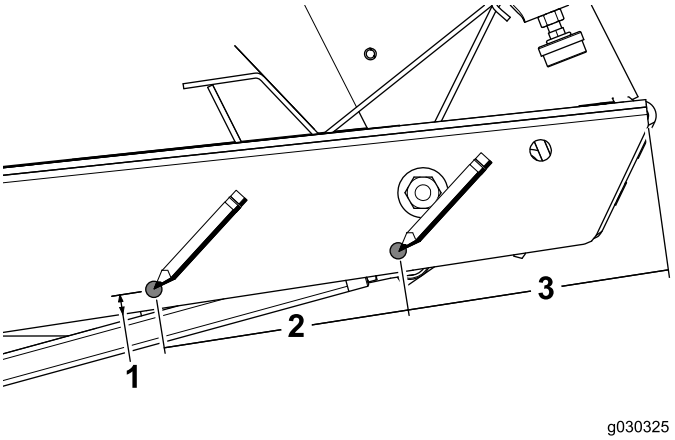


Figure 6

1. 12 mm (0.5 inch)
2. 150 mm (5.9 inches)
3. 162 mm (6.37 inches)

2. Drill a hole in the machine large enough for a bolt (5/16 x 3/4 inch) to pass through at the marked location.
3. Temporarily mount the pedal cover using the 2 holes drilled in the previous step, the 2 bolts (5/16 x 3/4 inch), and 2 clip nuts (Figure 7).

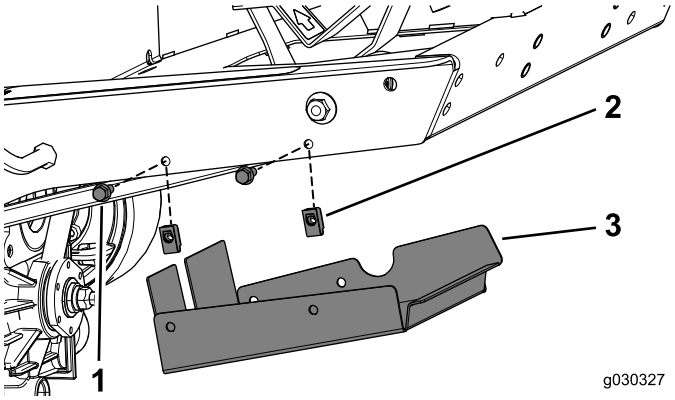


Figure 7

1. Bolt (5/16 x 3/4 inch)
2. Clip nut
3. Pedal cover

4. Support the other side of the pedal cover and transfer the center point of the 2 remaining hole locations to the machine (Figure 8).

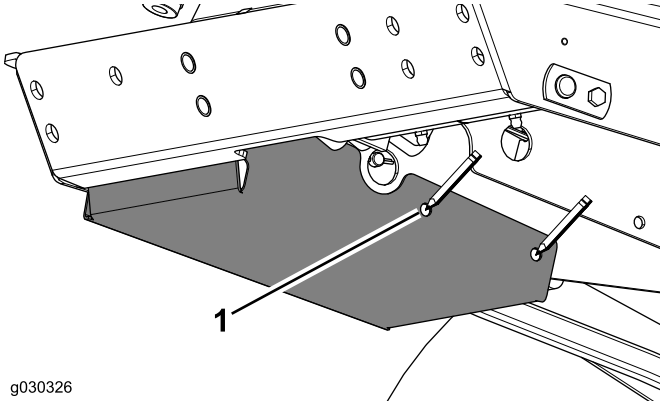


Figure 8

1. Mount hole

5. Remove the pedal cover from the machine.
6. Drill a hole in the machine large enough for a bolt (5/16 x 3/4 inch) to pass through at the marked location.

4

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 9).

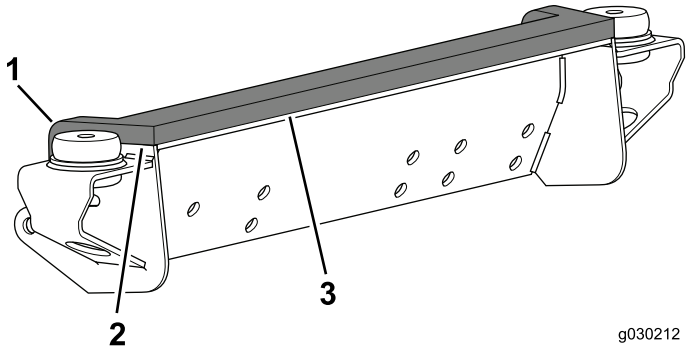


Figure 9

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

2. Fold the side tabs over the back of the mount (Figure 9).

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 10).

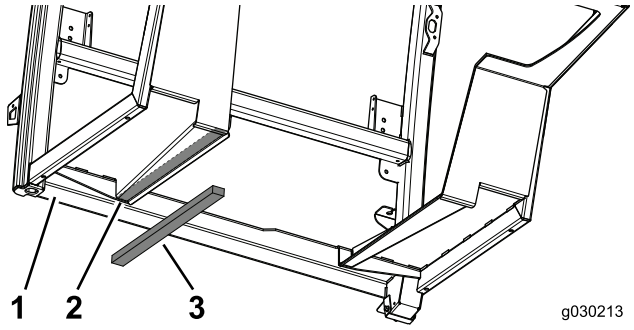


Figure 10

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

2. Apply the other floor seals to the right side of the cab (Figure 11).

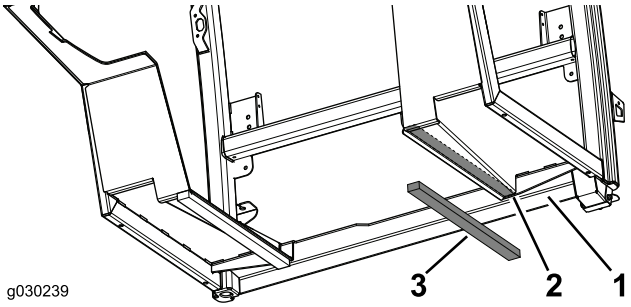


Figure 11

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

3. Apply the left seal to the left side of the cab (Figure 12).

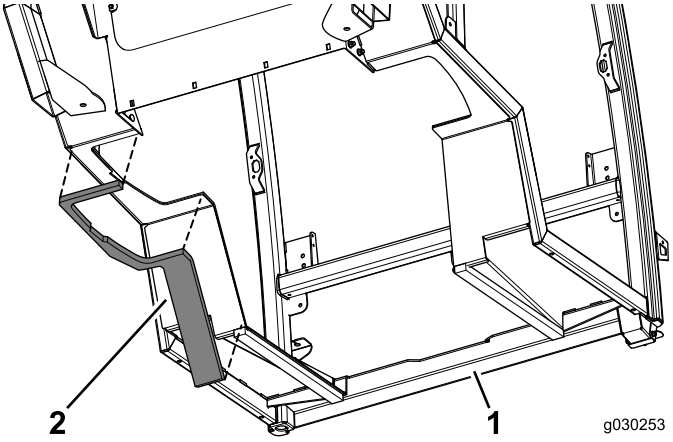


Figure 12

1. Front of cab
2. Left seal

4. Use the measurements shown in Figure 13 to place the seal.

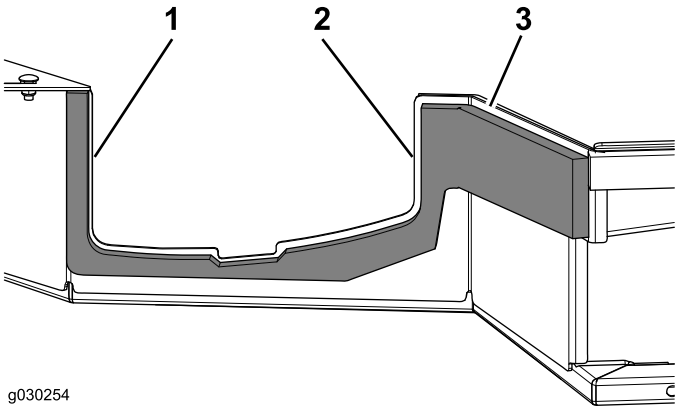


Figure 13

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 14).

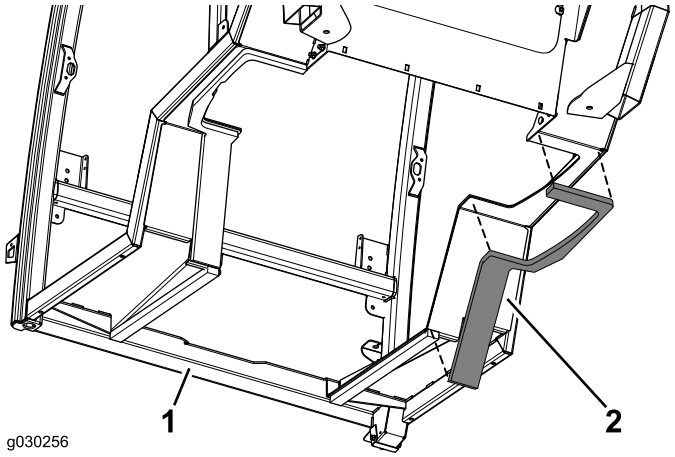


Figure 14

1. Front of cab
2. Right seal

6. Use the measurements shown in Figure 15 to place the seal.

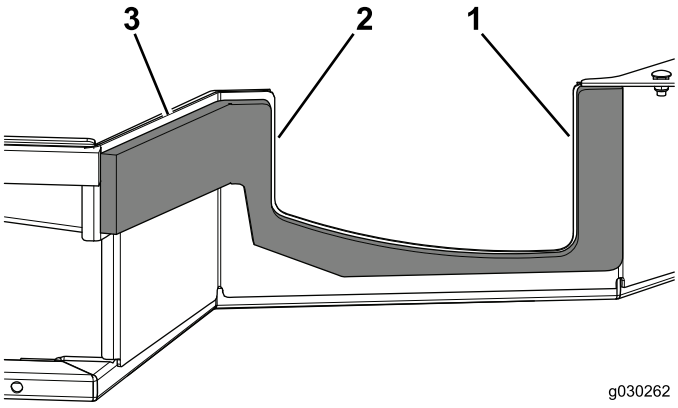


Figure 15

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 16).

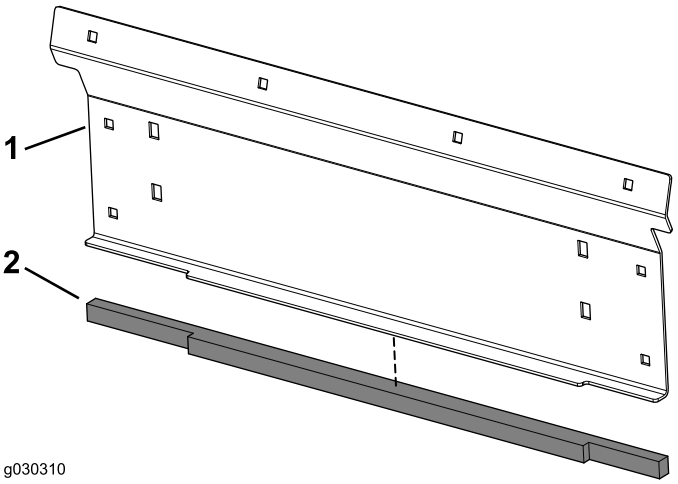


Figure 16

1. Lower-back plate
2. Back seal

5

Appling the Safety Decal

Parts needed for this procedure:

1	Safety decal

Procedure

Apply the safety decal to the rear window as shown in Figure 17.

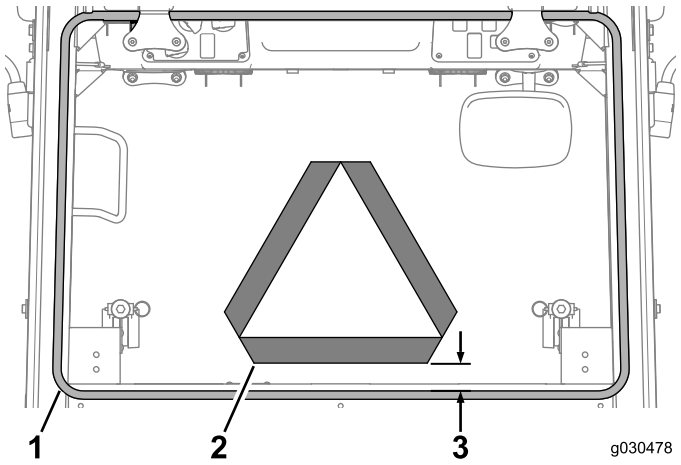


Figure 17

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

6

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 18).

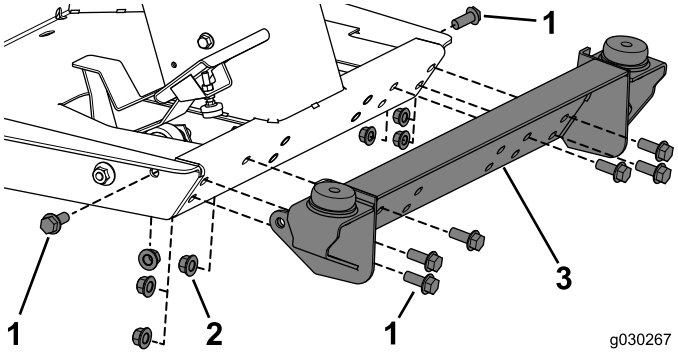


Figure 18

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 19).

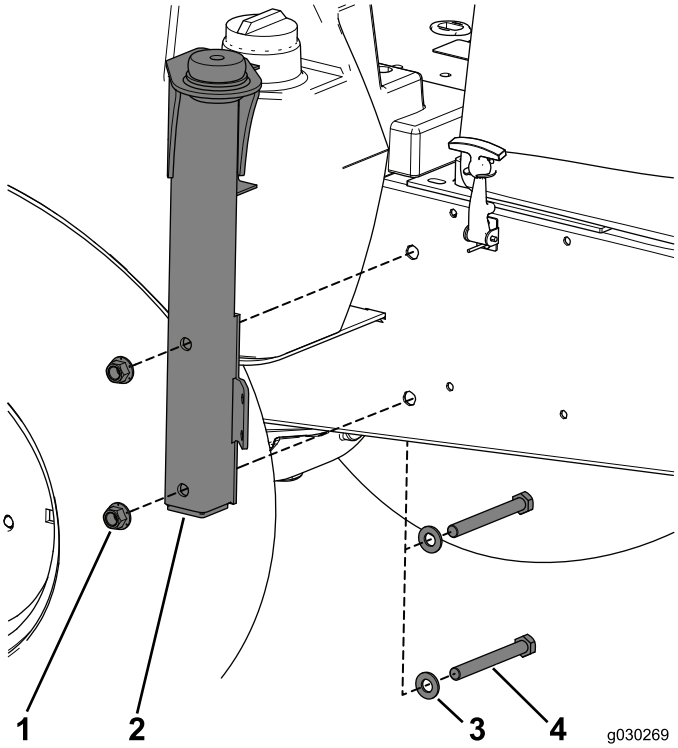


Figure 19

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.

7

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 20).

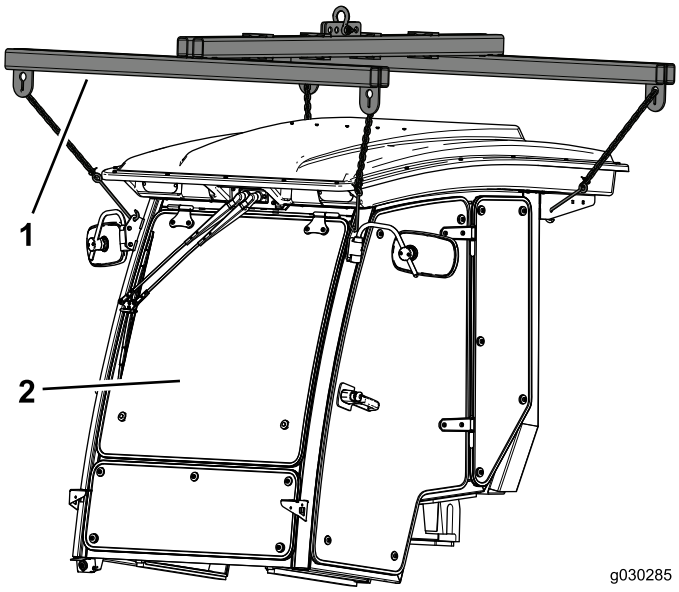


Figure 20

1. Hoist
2. Cab

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

2. Connect the cab hoist to the 4 lift points on the cab (Figure 21).

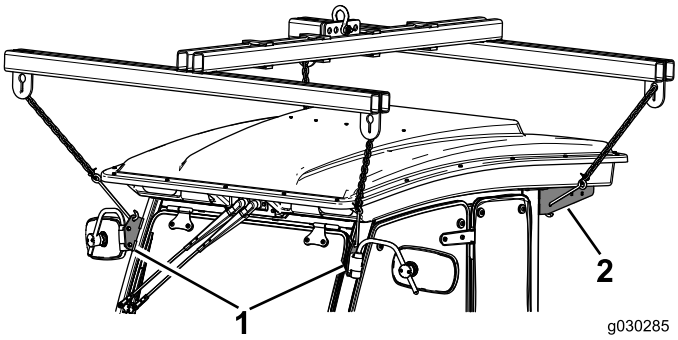


Figure 21

1. Front lift point
2. Rear lift point

Important: Ensure that the lift system does not contact the headliner (Figure 22).

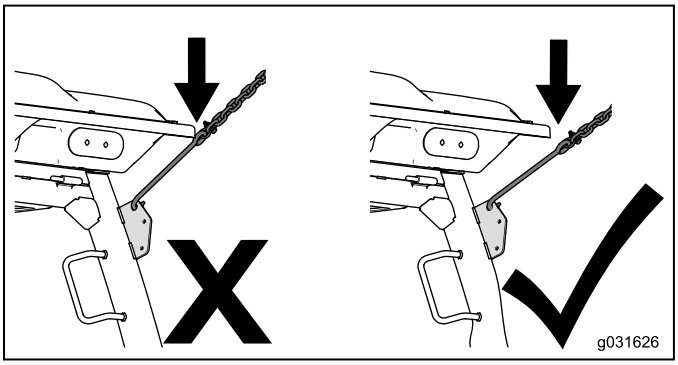


Figure 22

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 23).

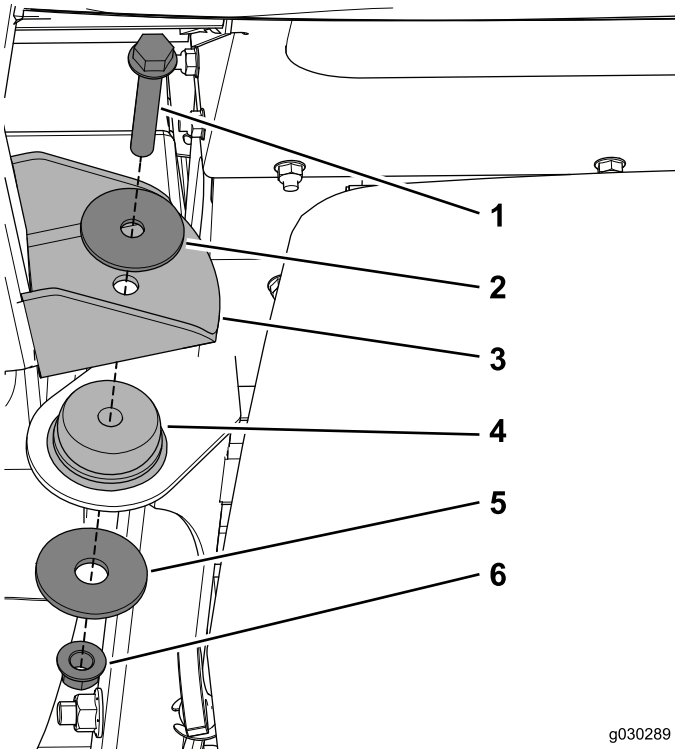


Figure 23

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

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

6. Torque the bolt and nut to 127 to 157 N•m (94 to 116 ft-lb).
7. 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 24).

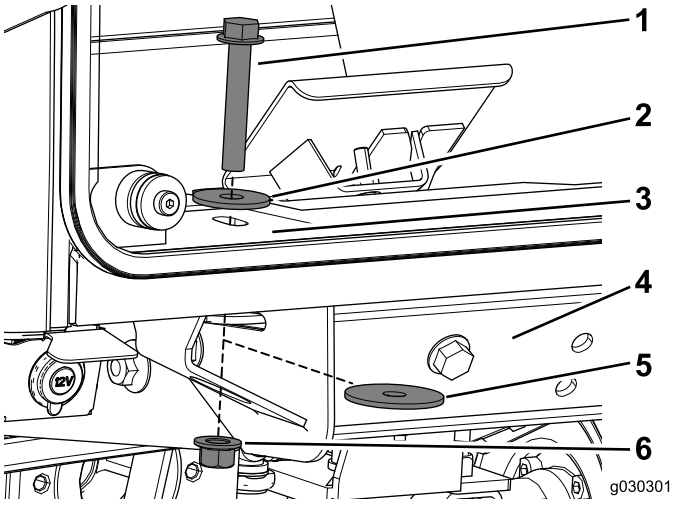


Figure 24

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

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

Installing the Floor Tread

1. Install the brake pin through the brake pedals.

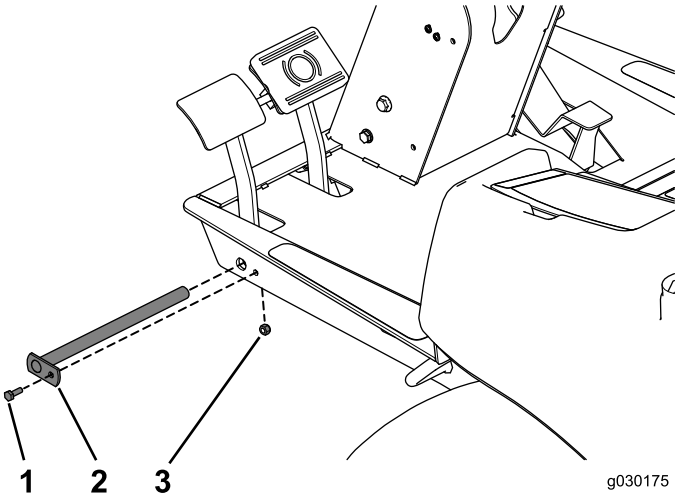


Figure 25

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

2. Secure the pin using the bolt (1/4 x 3/4 inch) and locknut (Figure 25).
3. Torque the bolt and nut to 1017 to 1243 N•cm (90 to 110 in-lb).
4. Align the back edge of the floor tread at the edge where the operator deck meets the kick plate (Figure 26).

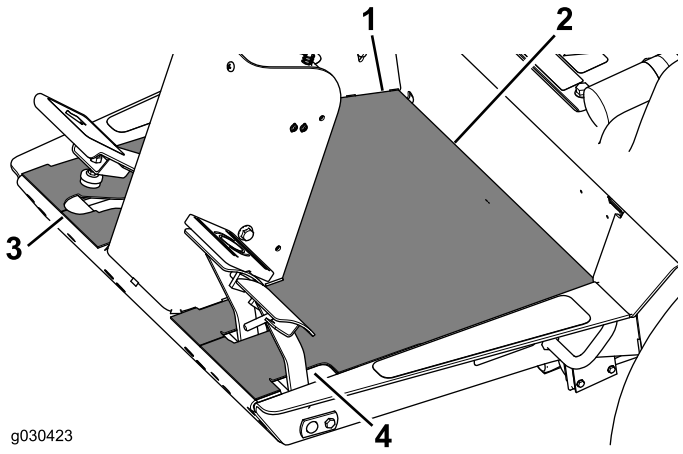


Figure 26

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

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

Installing the Pedal Cover

Secure the pedal cover to the machine using the 4 bolts (5/16 x 3/4 inch) and 4 nut clips.

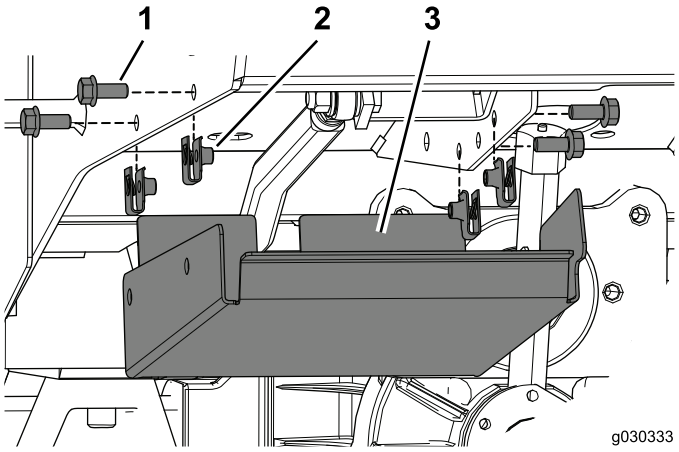


Figure 27

1. Bolt (5/16 x 3/4 inch)
2. Nut clips
3. Pedal cover

Installing the Back Panel Components

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

1. Loosely install the back panel to the cab using 8 carriage bolts (5/16 x 3/4 inch) and 8 locknuts (Figure 28).

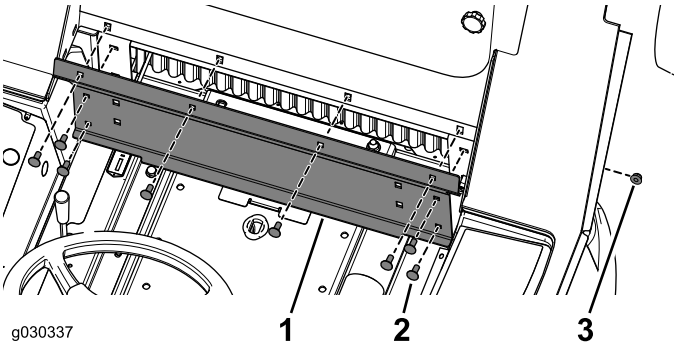


Figure 28

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

2. Loosely install the right cover bracket to the cab with the 4 carriage bolts (5/16 x 3/4 inch) and 4 locknuts (Figure 29).

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

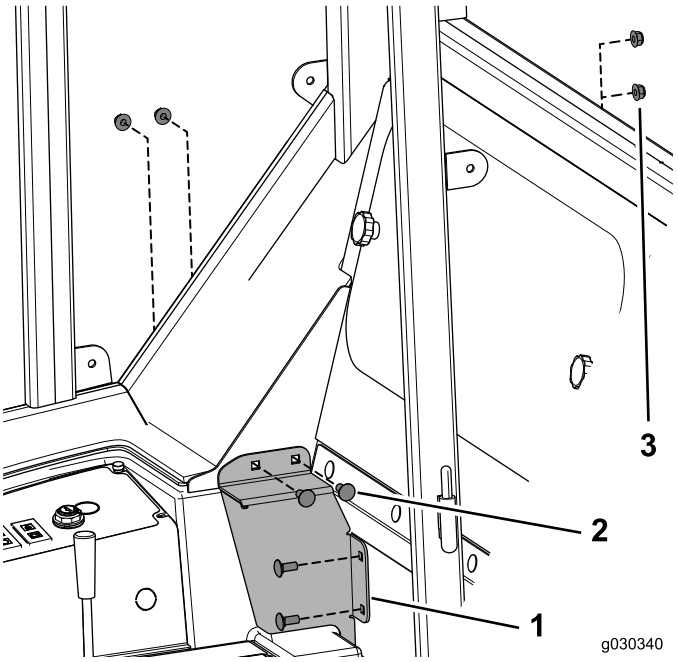


Figure 29

1. Cover panel
2. Carriage bolt (5/16 x 3/4 inch)
3. Locknut (5/16 inch)

3. Loosely install the left cover bracket to the cab with the 4 carriage bolts (5/16 x 3/4 inch) and 4 locknuts.
4. Torque the bolts and nuts to secure the back cover, left and right cover bracket to 1978 to 2542 N•cm (175 to 225 in-lb).

8

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 30).

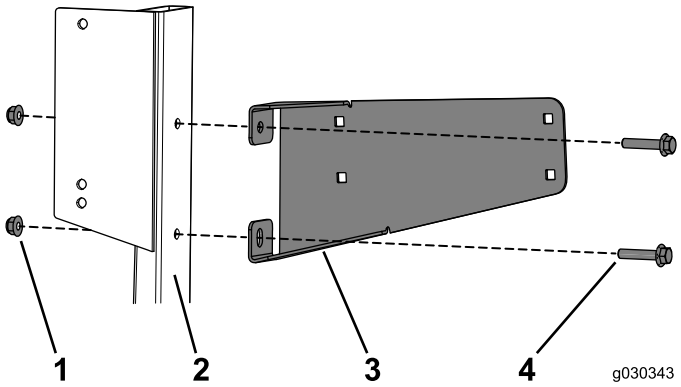


Figure 30

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 1978 to 2542 N•cm (175 to 225 in-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 31).

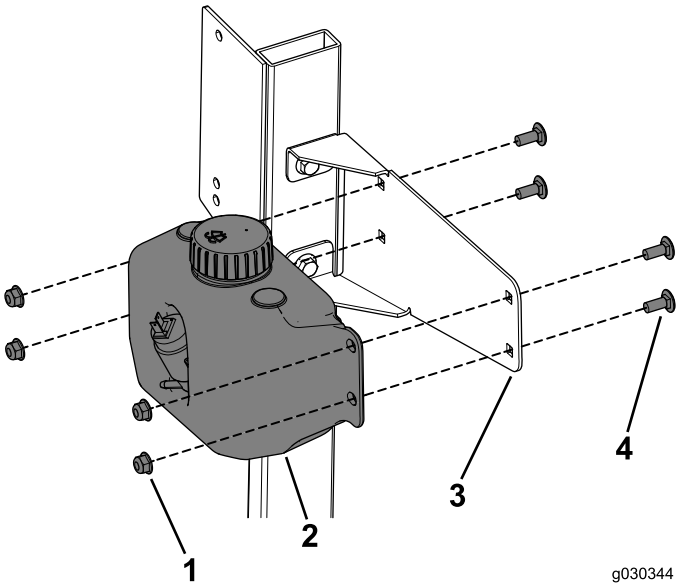


Figure 31

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 1978 to 2542 N•cm (175 to 225 in-lb).

9

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 0.625 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 0.625 barb); skipping the first thread.

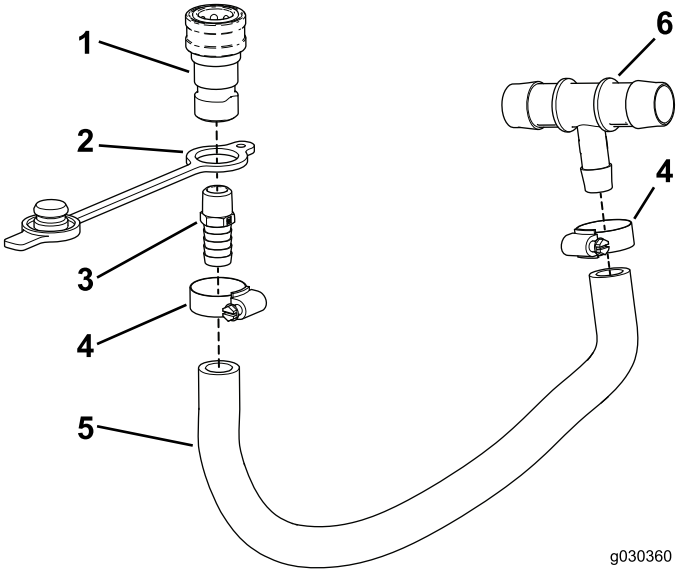


Figure 32

1. Female coupler
2. Female dust plug
3. Straight fitting (3/8 npt x 0.625 barb)
4. Small hose clamp
5. Small hose
6. Tee fitting

2. Thread the straight fitting (3/8 npt x 0.625 barb) to the female coupler (Figure 32).
3. Tighten the straight fitting (3/8 npt x 0.625 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 32).
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 32).
7. Insert the barbed end of the tee fitting into the hose and secure it with the hose clamp(Figure 32).

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 0.625 barb); skipping the first thread.

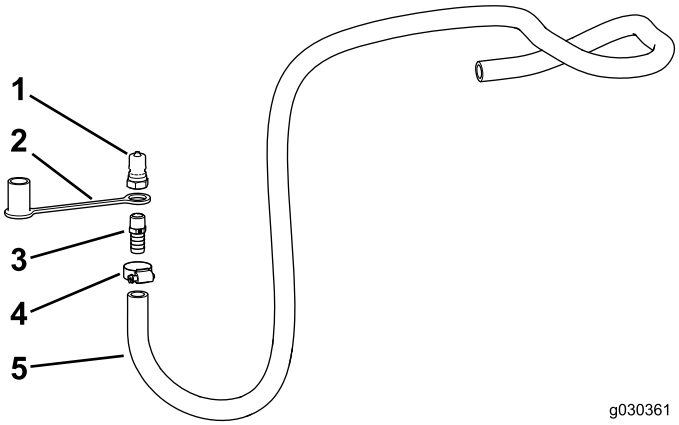


Figure 33

1. Male coupler
2. Male dust plug
3. Straight fitting (3/8 npt x 0.625 barb)
4. Small hose clamp
5. Long hose

2. Thread the straight fitting (3/8 npt x 0.625 barb) to the male coupler (Figure 33).
3. Tighten the straight fitting (3/8 npt x 0.625 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 33).
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 34).

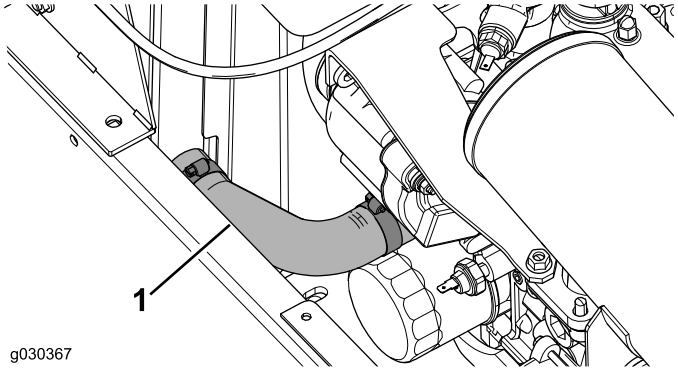


Figure 34

1. Lower hose of the radiator

3. Remove a 13 mm (1/2 inch) section of the hose as shown in Figure 35.

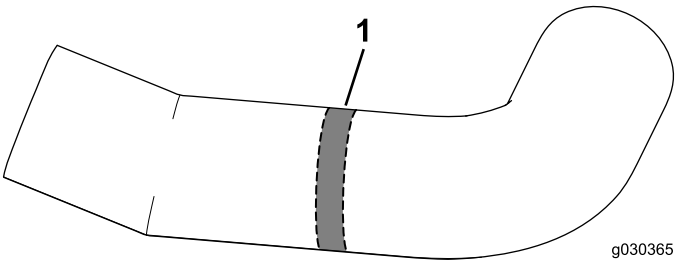


Figure 35

1. Cut location

4. Arrange the left and right halves of the hose over the tee fitting (Figure 36).

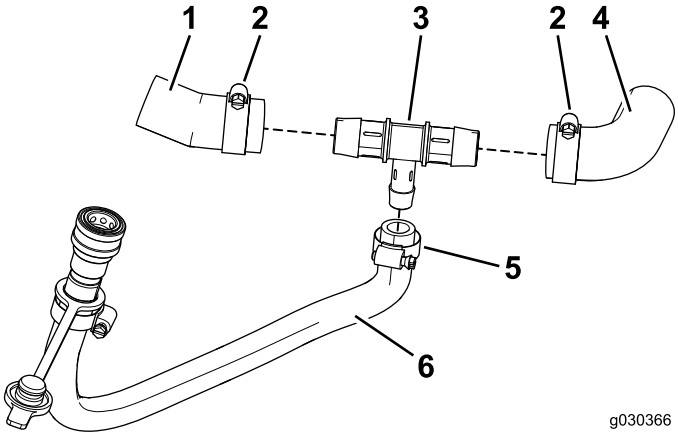


Figure 36

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

5. Use the large hose clamps to secure the hose to tee fitting (Figure 36).

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

6. Route the short hose as shown in Figure 37.

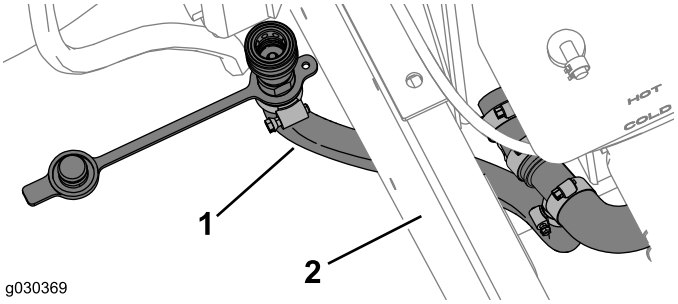


Figure 37

1. Short hose
2. Machine frame

Installing the Long Hose

1. Locate, disconnect, and remove the temperature sensor shown in Figure 38.

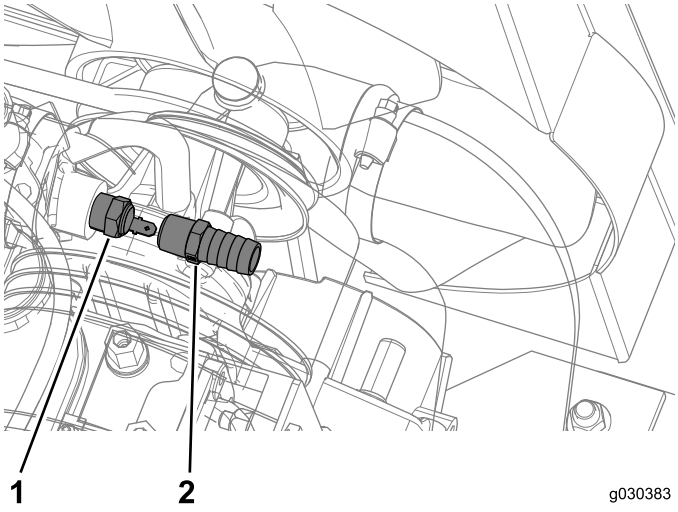


Figure 38

1. Temperature sensor
2. Straight fitting (3/8 npt x 0.625 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.

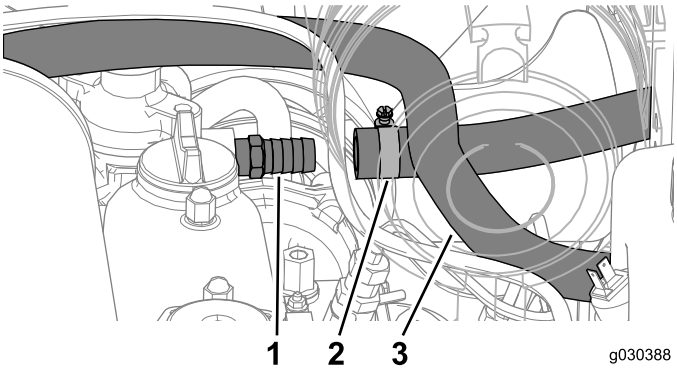


Figure 39

1. Straight fitting (3/8 npt x 0.625 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 40).

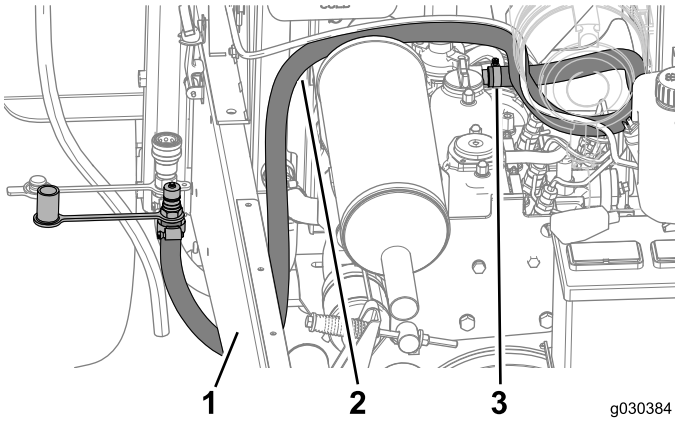


Figure 40

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

7. Route the long hose as shown in Figure 40.

Installing the Washer Hose

1. Connect 1 end of the washer hose to the washer tank (Figure 41).

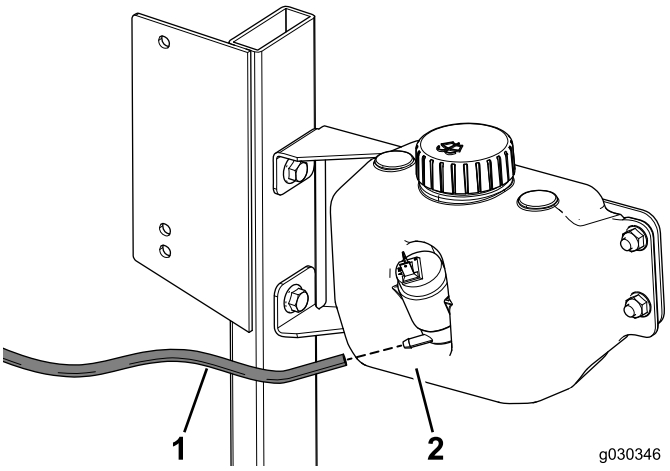


Figure 41

1. Washer hose
2. Washer tank

2. Connect the hose fitting to the other end of the washer hose (Figure 42).

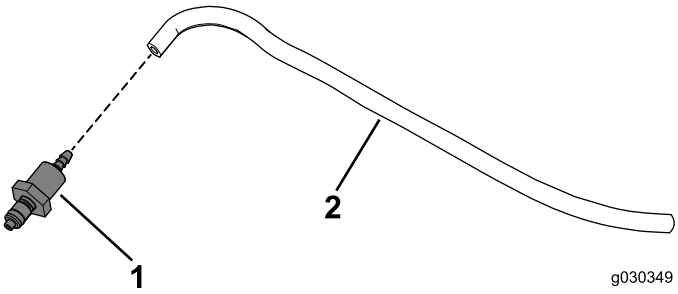


Figure 42

1. Hose fitting
2. Washer hose

3. Route the washer hose and connect it to the washer hose from the cab (Figure 43).

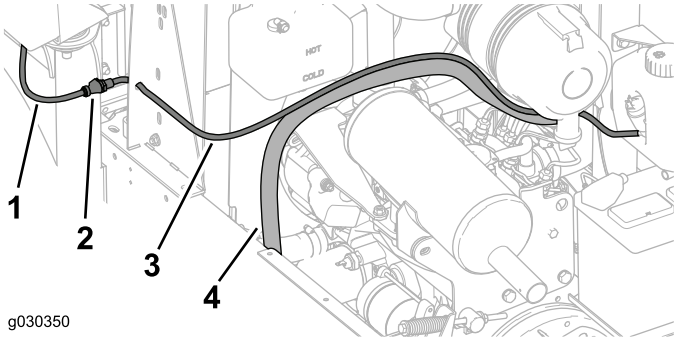


Figure 43

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 44).

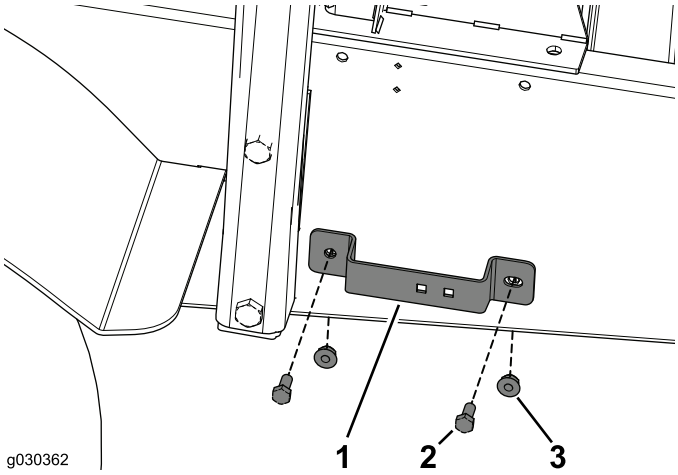


Figure 44

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

2. Torque the bolt and nut to 1978 to 2542 N•cm (175 to 225 in-lb).
3. Arrange 1 R-clamp around each of the hoses (Figure 45).

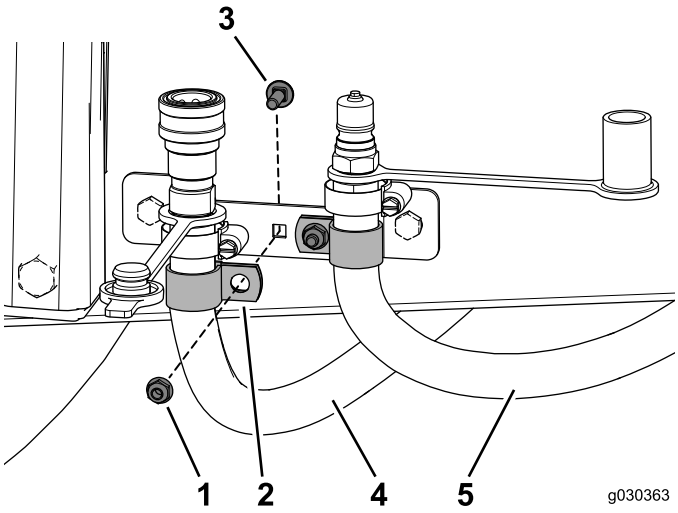


Figure 45

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 45).
5. Torque the bolt and nut to 1017 to 1243 N•cm (90 to 110 in-lb).
6. Connect the hoses from the cab to the hoses mounted to the machine (Figure 46).

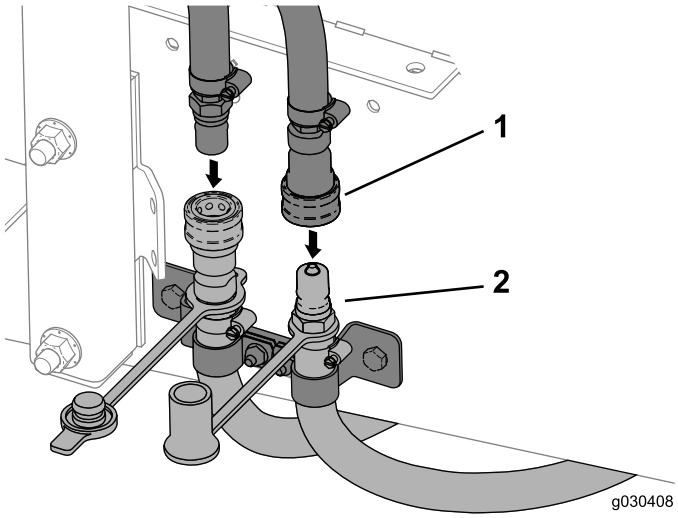


Figure 46

1. From the cab
2. From the machine

7. Secure the hoses into position with the cable ties (Figure 47) and (Figure 48).

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

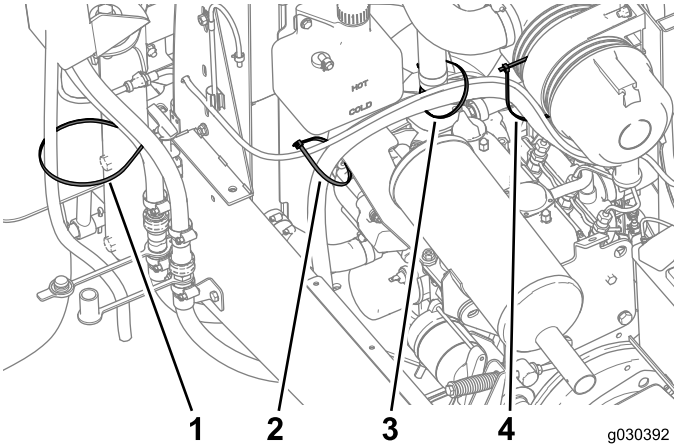


Figure 47

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.

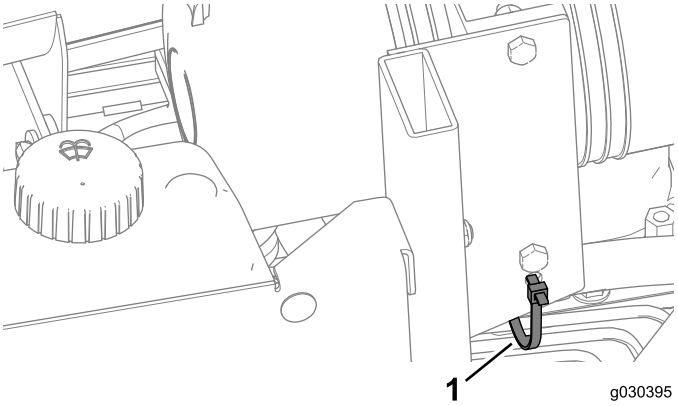


Figure 48

1. Cable tie

10

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 49).

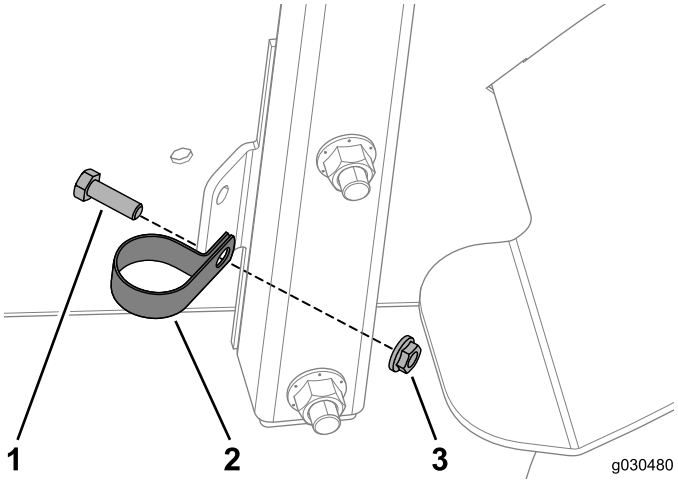


Figure 49

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

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

11

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.

1. Locate and remove the engine plug shown in Figure 50.

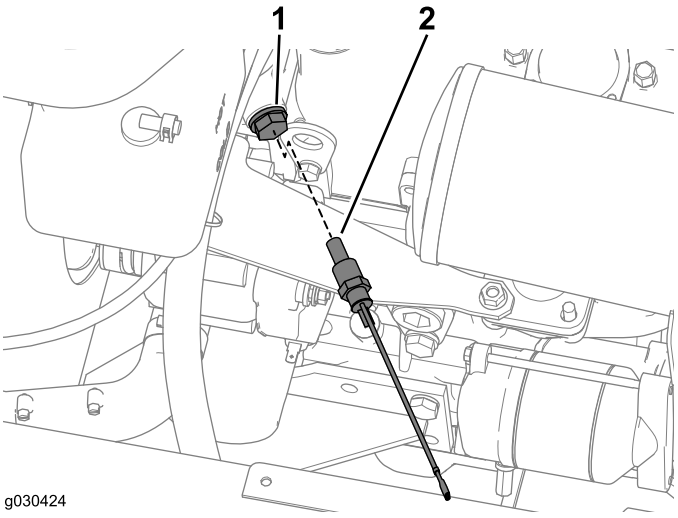


Figure 50

1. Engine plug
2. Temperature sensor

2. Apply pipe sealant to the threads on the temperature sensor.
3. Install the temperature sensor into the port until it is finger-tight.
4. Use a tool to secure temperature sensor 2 to 3 additional turns from finger-tight.
5. Connect the temperature-sensor to the wire that you disconnected in Installing the Long Hose (page 18).

Connecting the Power Wire

1. Locate and access the fuse block on the right side of the operator's seat.
2. Connect the wire for the cab power to an empty space in the fuse block (Figure 51)

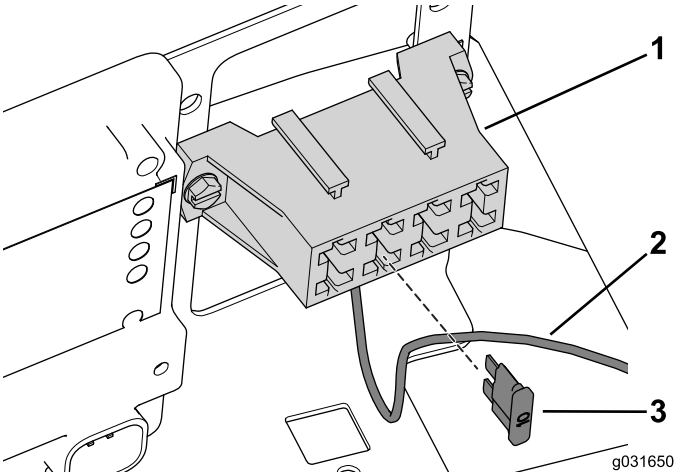


Figure 51

1. Fuse block
2. Wire for cab power
3. Fuse (10 A)

3. Install a 10 A fuse into the slot associated with the wire (Figure 51).

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 52).

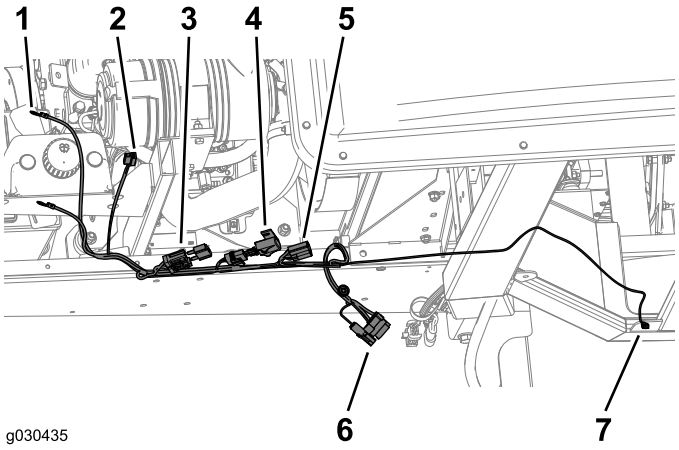


Figure 52

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

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 53).

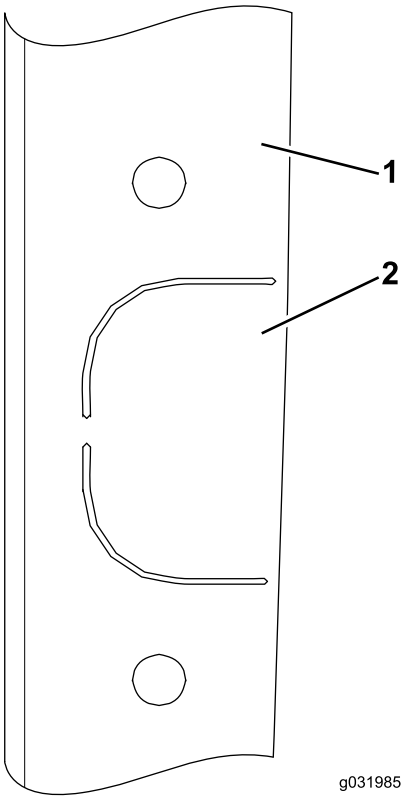


Figure 53

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 54) and (Figure 55).

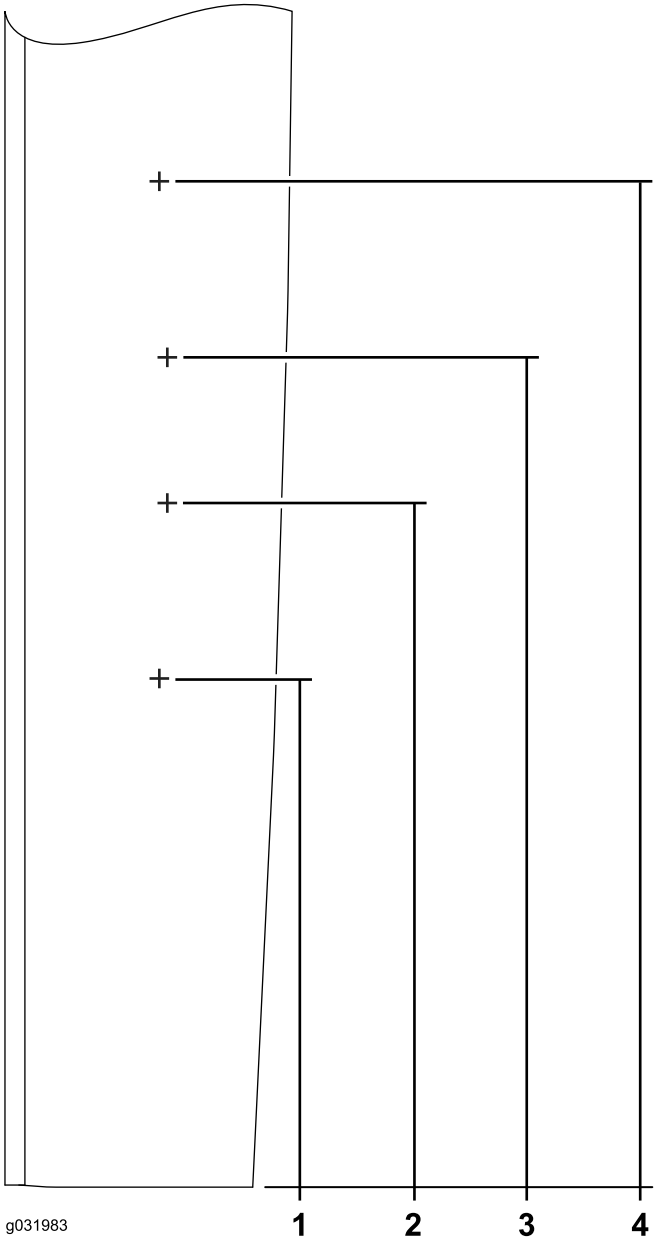


Figure 54

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

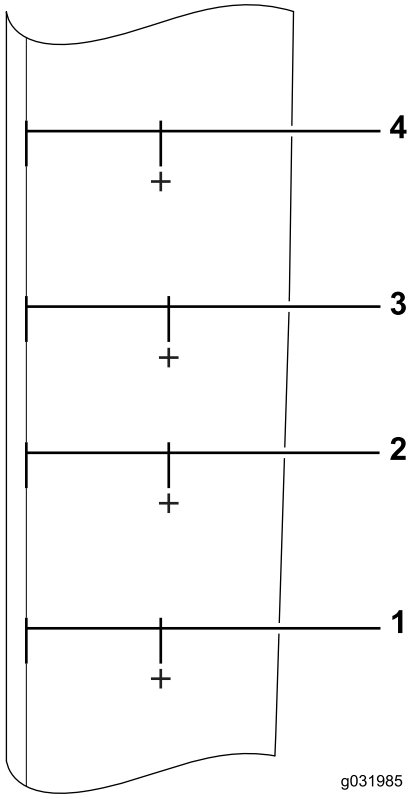


Figure 55

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

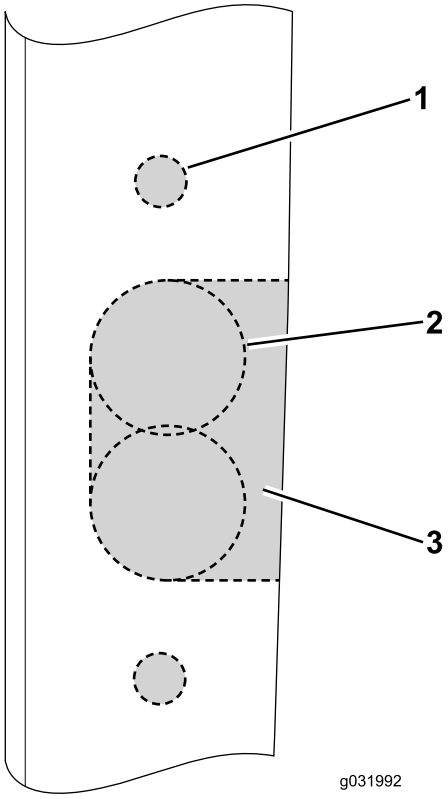


Figure 56

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

2. Drill the 9/32 inch holes for the flange-head bolts Figure 56.

3. Use a 1-inch hole saw to make the radius feature in the cutout (Figure 56).
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 57).

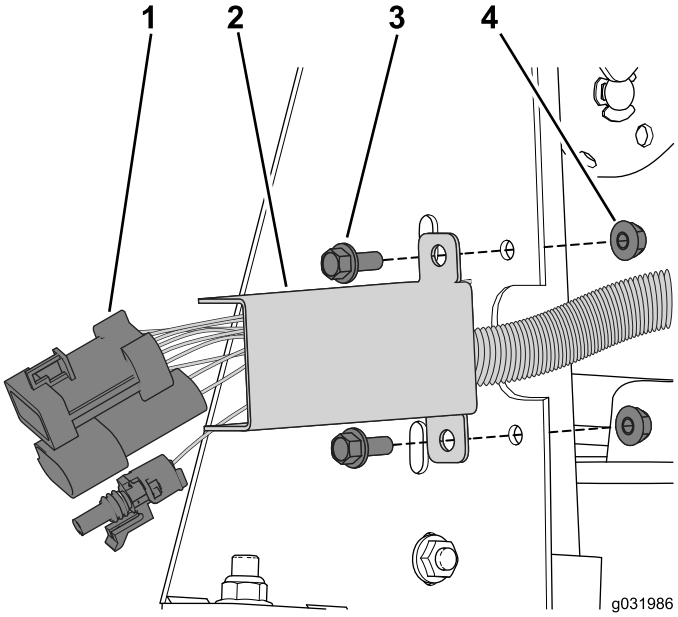


Figure 57

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.

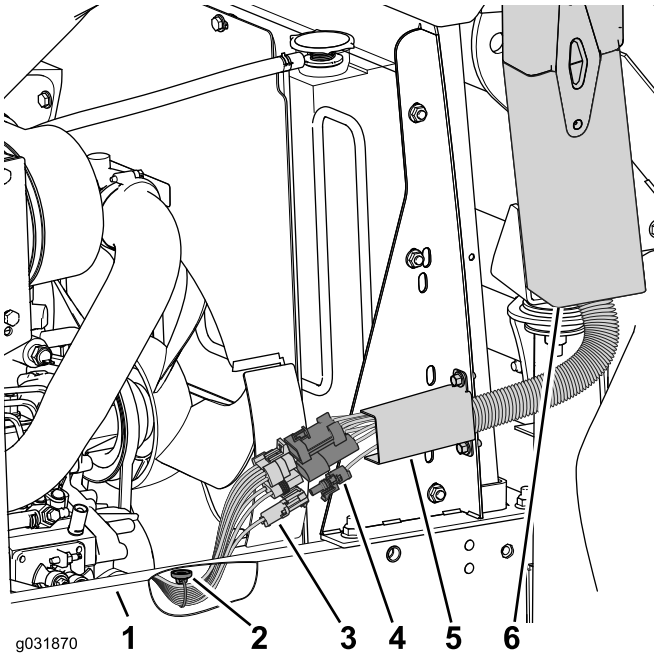


Figure 58

1. Frame
2. Magnetic mount
3. Connectors (from machine)
4. Connectors harness (from cab)
5. Wire cover
6. Right tube

4. Position the magnetic mount onto the underside of the frame (Figure 58).
5. Connect the wire harness from the machine to the wire harness from the cab (Figure 58).
6. Ensure that the hood closes without interfering with the wire harness and correct if necessary.

12

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 59).

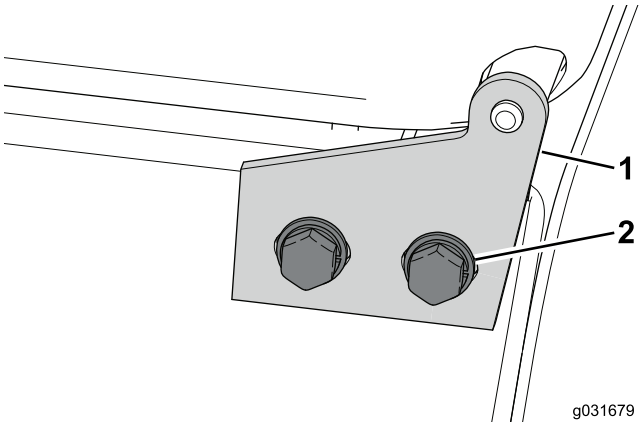


Figure 59

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.

13

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

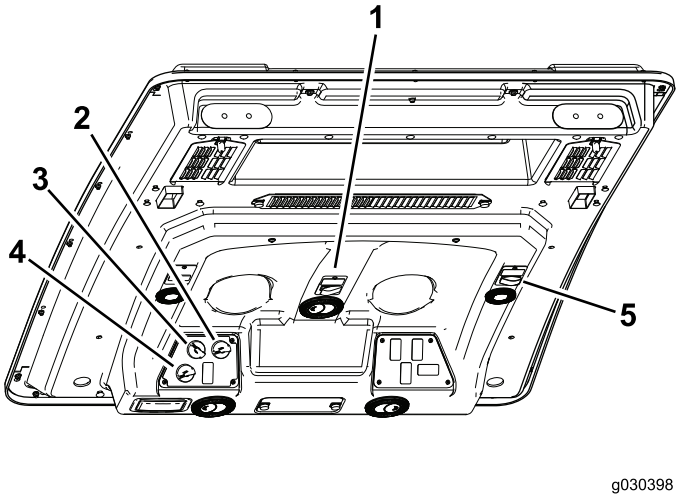


Figure 60

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

Windshield-Wiper Switch

Use this switch to turn the windshield wipers on or off (Figure 60).

Temperature Control

Rotate the temperature control knob to regulate the air temperature in the cab (Figure 60).

Fan Control

Rotate the fan control knob to regulate the speed of the fan (Figure 60).

Air-Recirculation Control

Sets the cab to either recirculate the air in the cabin or to draw air into the cabin from outside (Figure 60). 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 61).

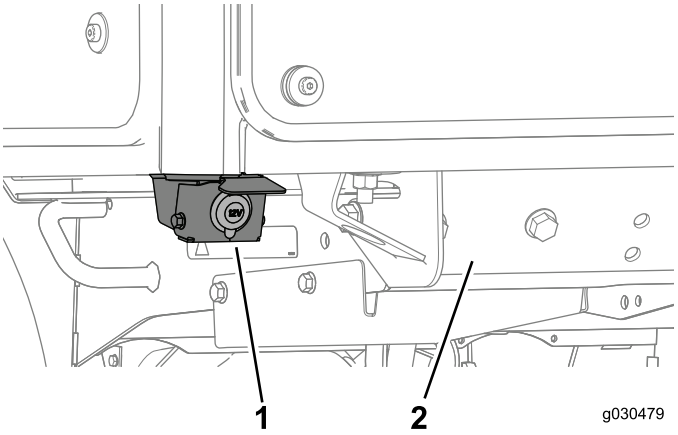


Figure 61

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

Windshield Latch

Lift the latches to open the windshield (Figure 62). Press in the latch to lock the windshield open. Pull out and down on the latch to close and secure the windshield.

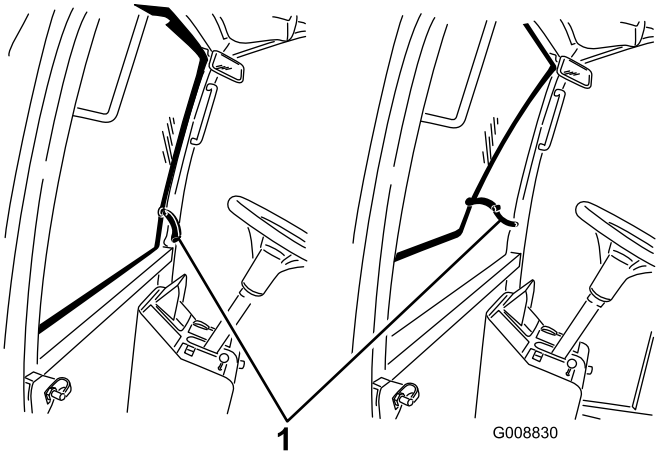


Figure 62

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 62).

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	• Clean the cab air filters (replace them if they are torn or excessively dirty).

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 63). 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.**

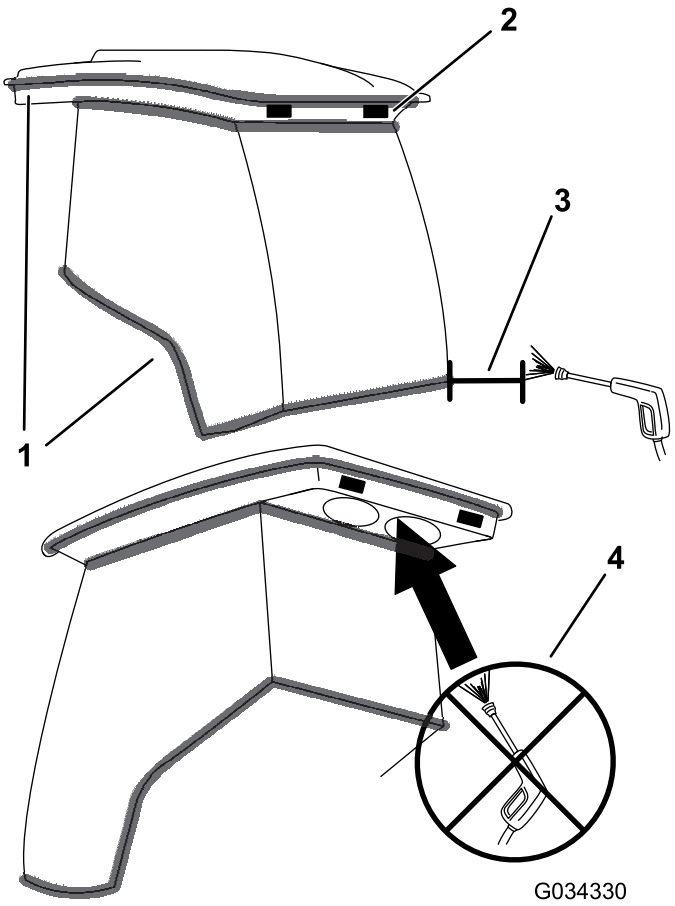


Figure 63

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 64).

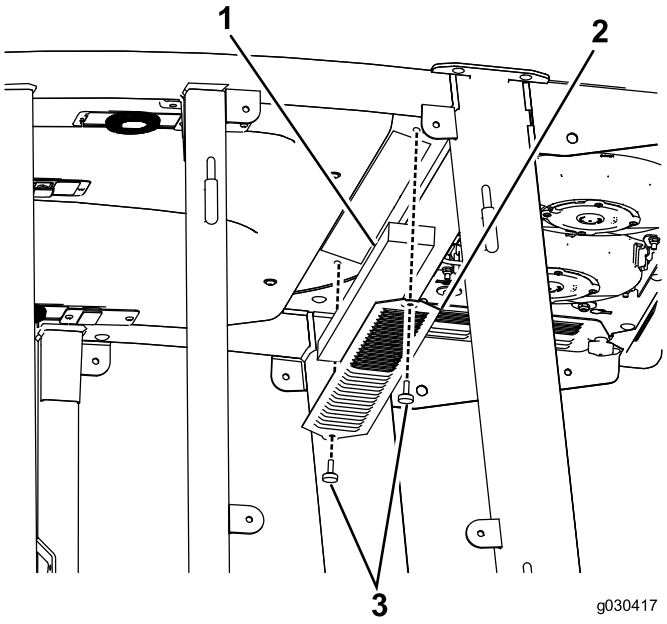


Figure 64

1. Filter
2. Grate
3. Thumb screw

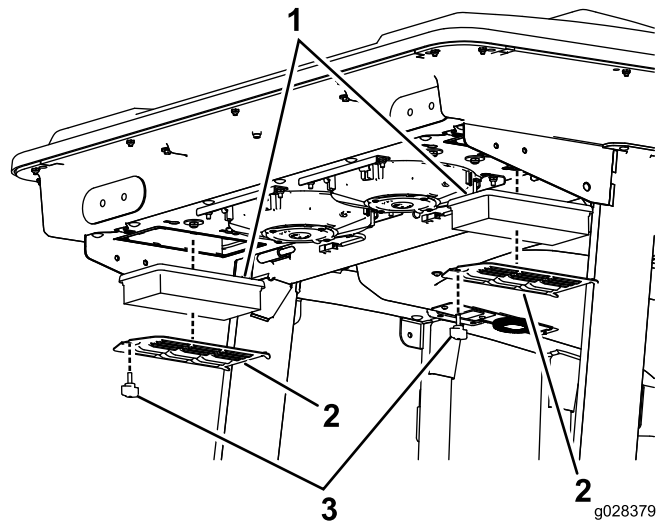


Figure 65

1. Filter
2. Grate
3. Thumb screw

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

   Important: If either filter has a hole, tear, or other damage, replace it.

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 the engine off, and remove the key from the ignition.
2. Chock the wheels to prevent the machine from moving during the installation.
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 *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 66).

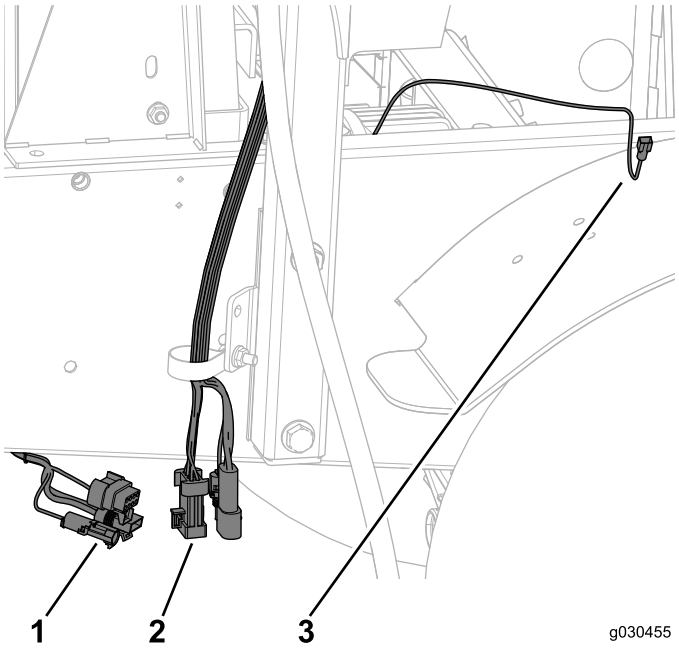


Figure 66

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 67).

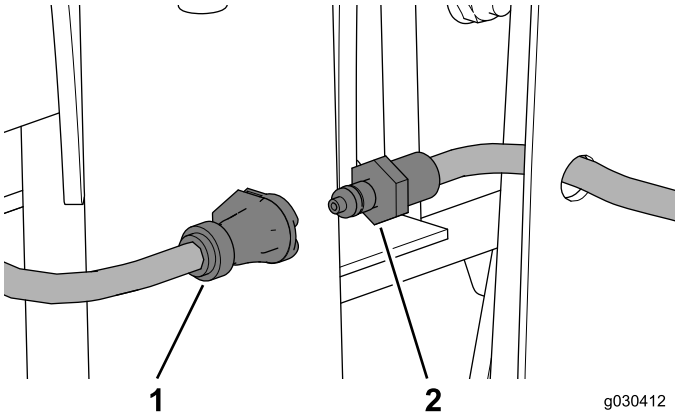


Figure 67

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

2. Disconnect the heater hoses (Figure 68).

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

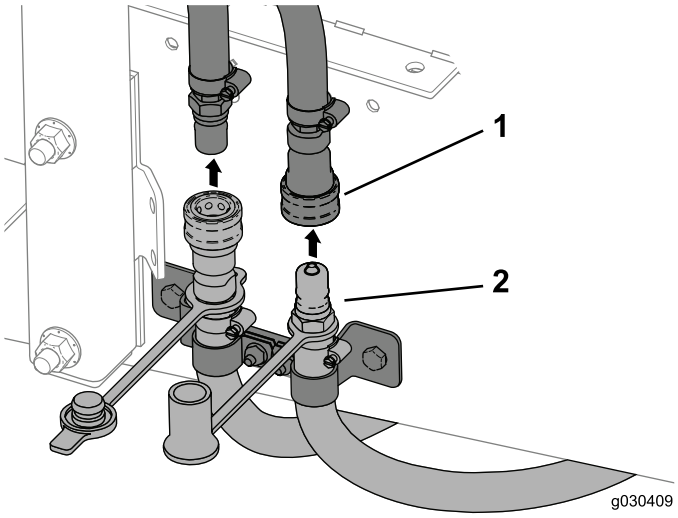


Figure 68

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

3. Seal the heater hoses using the dust caps (Figure 69).

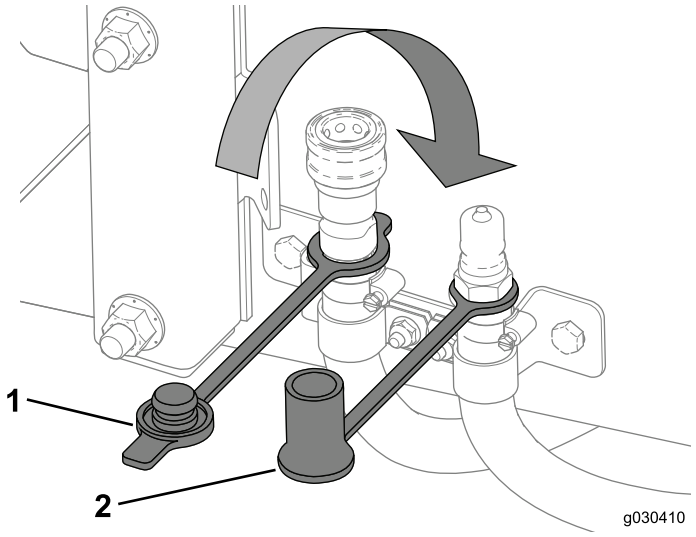


Figure 69

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 21).
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 12).

   Note: Return the 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 25).
7. Secure the pin using the bolt (1/4 x 3/4 inch) and locknut (Figure 25).

Notes:

Declaration of Incorporation

Model No.	Serial No.	Product Description	Invoice Description	General Description	Directive
30298	316000001 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:



David Klis
Sr. Engineering Manager
8111 Lyndale Ave. South
Bloomington, MN 55420, USA
February 8, 2016

EU Technical Contact:

Marcel Dutrieux
Manager European Product Integrity
Toro Europe NV
Nijverheidsstraat 5
2260 Oevel
Belgium

Tel. +32 16 386 659

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.

374-0253 Rev D