



# North American Cab Light Kit

Groundsmaster® 4010, 4110, or 5910 Series Traction Unit

Model No. 30706

## Installation Instructions

# Introduction

If you are installing the North American Cab Light Kit on a 2017 and later Groundsmaster 4010 or 4110 Series rotary mowers with a cab, you will need to install the optional Light Adapter Kit.

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# Installation

## 1

## Preparing the Machine

No Parts Required

### Procedure

#### ⚠ CAUTION

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

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

1. Park the machine on a level surface.
2. Engage the parking brake.
3. Shut off the engine and remove the key.

## 2

## Disconnecting the Battery

No Parts Required

### Disconnecting the Battery

Groundsmaster 4010 Series or Groundsmaster 4110 Series Machines

1. Open the battery compartment door (Figure 1).



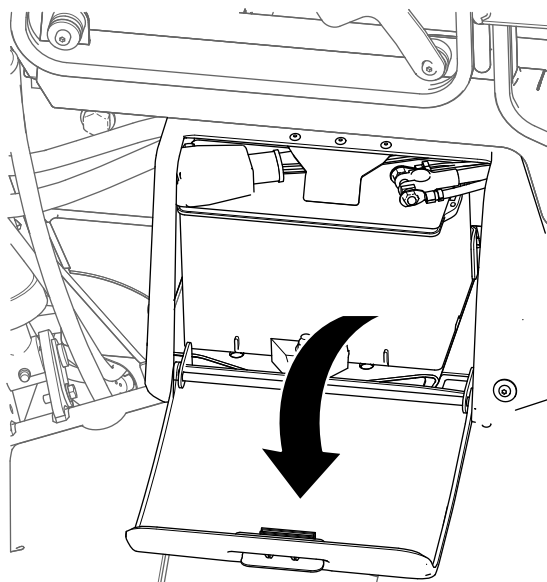


Figure 1

g205862

2. Disconnect the negative (-) battery cable from the battery (Figure 2).

### ⚠ WARNING

Electrical sparks can cause the battery gasses to explode, resulting in personal injury.

Incorrect battery cable routing could damage the machine and cables, causing sparks.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
- Always connect the positive (red) battery cable before connecting the negative (black) cable.

### ⚠ WARNING

Battery terminals or metal tools could short against metal components, causing sparks.

- When removing or installing the battery, do not allow the battery terminals to touch any metal parts of the machine.
- Do not allow metal tools to short between the battery terminals and metal parts of the machine.
- Always keep the battery strap in place to protect and secure the battery.

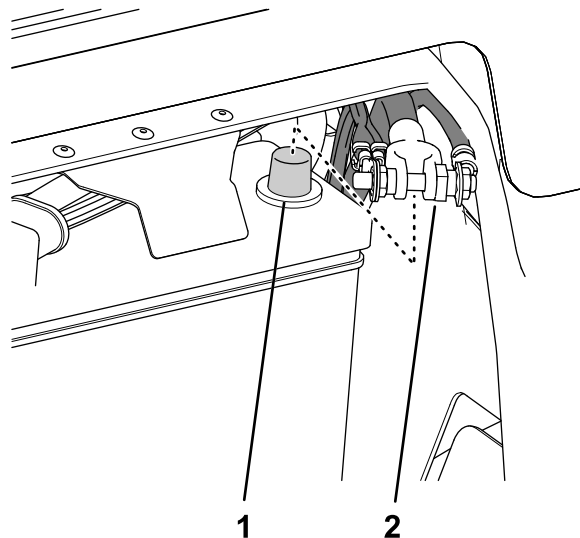


Figure 2

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1. Negative battery post
2. Terminal (negative battery cable)

## Disconnecting the Battery

### Groundsmaster 5900 Series Machines

1. Unlatch the hood latches at both sides of the hood (Figure 3).

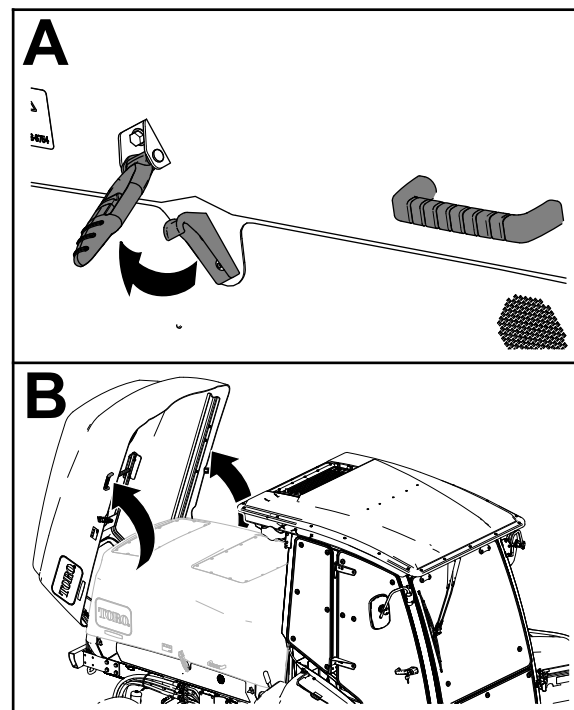
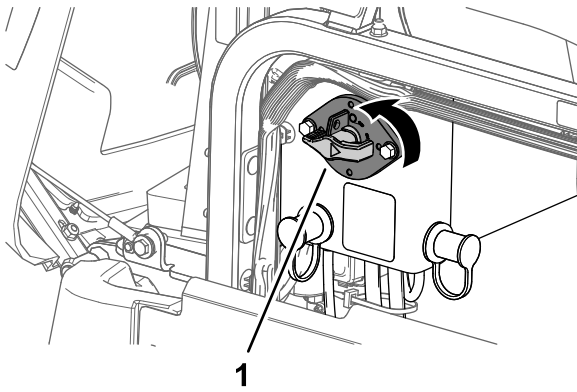


Figure 3

g210583

2. Open the hood (Figure 3).
3. Rotate the battery disconnect switch to the OFF position (Figure 4).



**Figure 4**

g210582

1. Battery disconnect switch

# 3

## Installing the Switches for the Turn Signal and Hazard

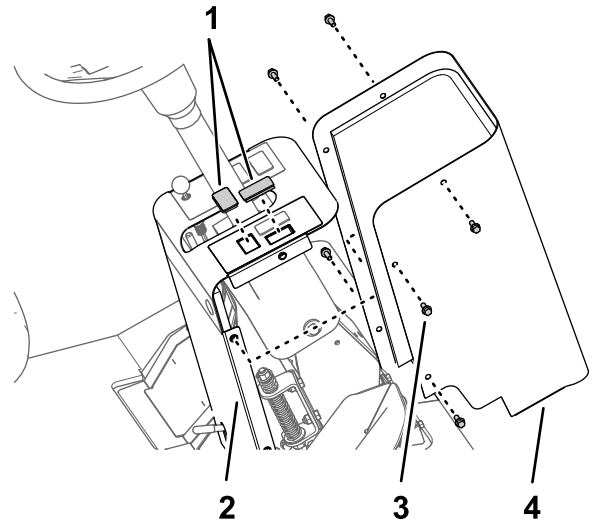
### Parts needed for this procedure:

1	Rocker switch (3-position—turn-signal switch)
1	Rocker switch (2-position—hazard switch with a hazard-warning symbol)

## Installing the Turn Signal and Hazard Switches

### Groundsmaster 4010 Series or Groundsmaster 4110 Series Machines

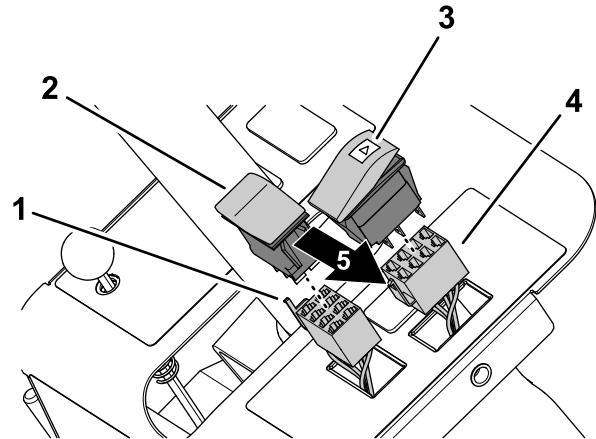
1. Remove the 6 flange-head screws (1/4 x 5/8 inch) that secure the cover to the steering tower, and remove the cover ([Figure 5](#)).



**Figure 5**

g210721

1. Dash plugs
  2. Steering tower
  3. Flange-head screw (1/4 x 5/8 inch)
  4. Cover
2. From below the panel of the steering tower, remove the 2 dash plugs from the panel of the steering tower as shown in [Figure 5](#).
  3. Plug the rocker switch (2-position—hazard switch with a hazard-warning symbol) into the 8-socket connector of the platform harness labeled HAZARD SWITCH ([Figure 6](#)).



**Figure 6**

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1. 8-socket connector (turn-signal switch)
2. Rocker switch (3 position—turn-signal switch)
3. Rocker switch (2-position—hazard switch with a hazard-warning symbol)
4. 8-socket connector (labeled HAZARD SWITCH)
5. Right side of the machine

4. Align the hazard symbol forward, and insert the switch into the opening in the panel of the

steering tower until the switch snaps securely into the panel (Figure 6).

5. Plug the rocker switch (3 position—turn-signal switch) into the other 8-socket connector of the platform harness (Figure 6).
6. Align the tail of the turn-signal switch to the right side of the machine, and insert the switch into the opening in the panel of the steering tower until the switch snaps securely into the panel (Figure 6).
7. Secure the wire harness as needed with a cable tie.

**Note:** When routing the wires, ensure that the operation of the tilt steering does not damage the harness or pull on the wires.

8. Assemble the cover to the steering tower with the 6 flange-head screws (1/4 x 5/8 inch) that you removed in step 1.

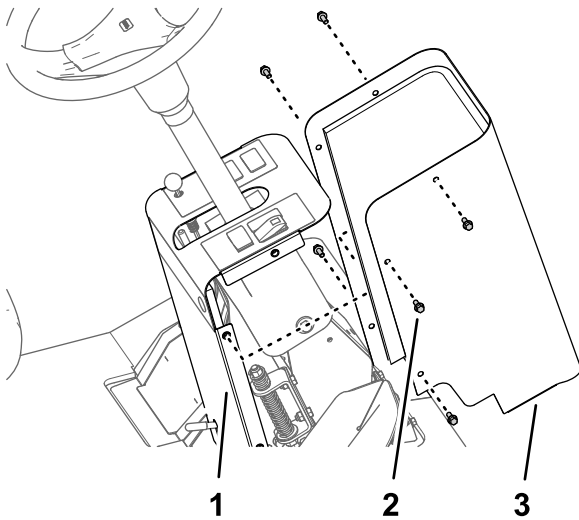


Figure 7

1. Steering tower
2. Flange-head screw (1/4 x 5/8 inch)
3. Cover

9. Torque the screws to 1017 to 1243 N·cm (90 to 110 in-lb).

## Installing the Turn Signal

### Groundsmaster 5910 Models 31599 or 31599N

**Note:** The Groundsmaster 5910 Models 31599 or 31599N do not have a hazard switch.

1. Remove the 6 flange-head screws (1/4 x 5/8 inch) that secure the cover to the steering tower, and remove the cover (Figure 8).

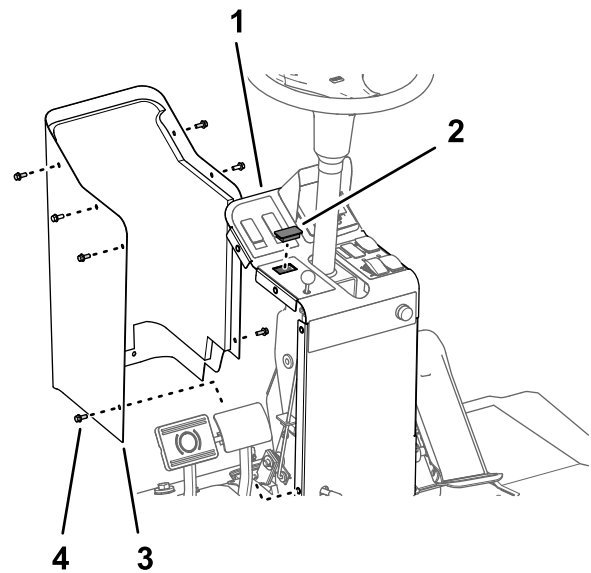


Figure 8

1. Steering tower
2. Dash plug
3. Cover
4. Flange-head screw (1/4 x 5/8 inch)

2. From below the panel of the steering tower, remove the dash plug for the steering switch from the steering tower as shown in Figure 8.
3. Plug the rocker switch (3 position—turn-signal switch) into the 8-socket connector of the platform harness (Figure 9).

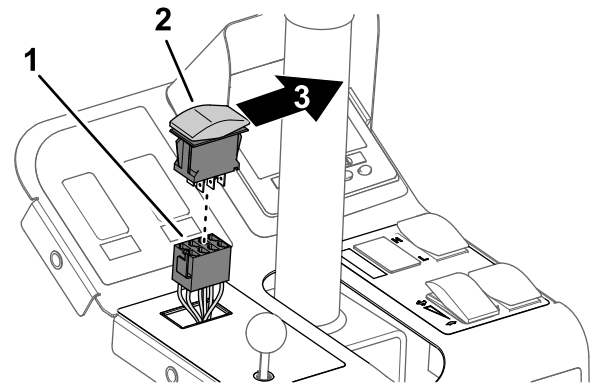


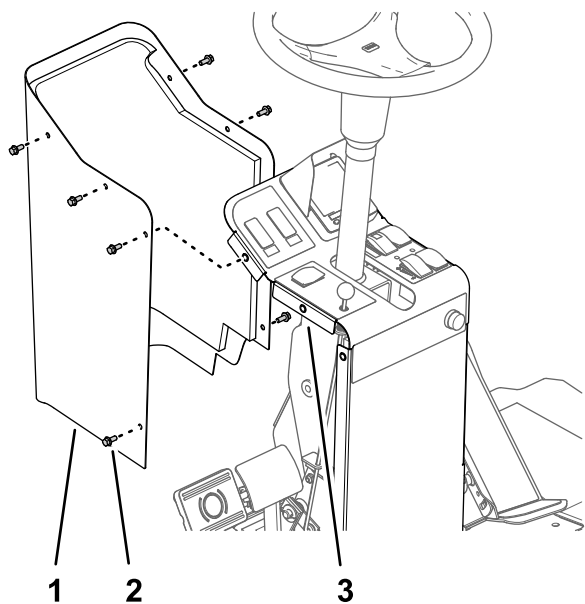
Figure 9

1. 8-socket connector (turn-signal switch)
2. Rocker switch (3 position—turn-signal switch)
3. Right side of the machine

4. Align the tail of the turn-signal switch to the right side of the machine, and insert the switch into the opening in the panel of the steering tower until the switch snaps securely into the panel (Figure 9).
5. Secure the wire harness as needed with a cable tie.

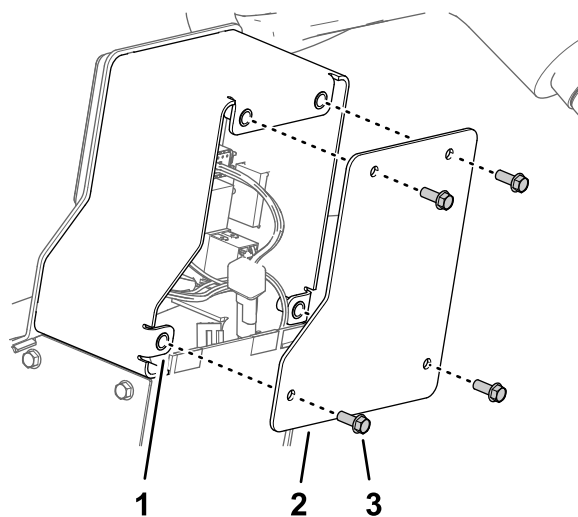
**Note:** When routing the wires, ensure that the operation of the tilt steering does not damage the harness or pull on the wires.

6. Assemble the cover to the steering tower with the 6 flange-head screws (1/4 x 5/8 inch) that you removed in step 1.



**Figure 10**

1. Cover
2. Flange-head screw (1/4 x 5/8 inch)
3. Steering tower



**Figure 11**

1. Console arm
2. Front cover
3. Washer-head screw (1/4 x 5/8 inch)

2. From inside the console arm, remove the dash plugs for the hazard switch and the turn-signal switch from the console arm as shown in [Figure 12](#).

## Installing the Turn Signal and Hazard Switches

### Groundsmaster 5910 Model 31599 or 31599N

1. Remove the 4 washer-head screws (1/4 x 5/8 inch) that secure the front cover to the console arm, and remove the cover ([Figure 11](#)).

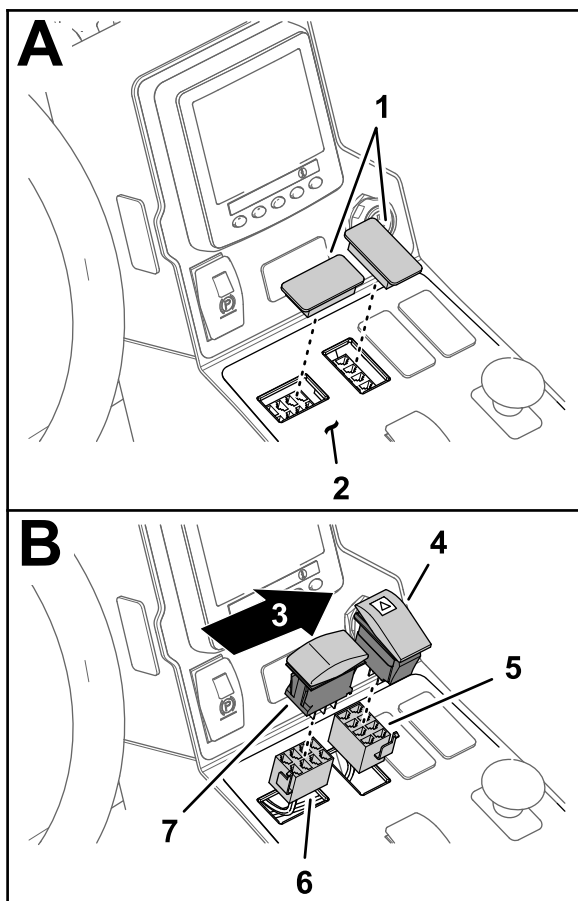


Figure 12

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1. Dash plugs
  2. Console arm
  3. Right side of the machine
  4. Rocker switch (2-position—hazard switch with a hazard-warning symbol)
  5. 8-socket connector (labeled HAZARD SWITCH)
  6. 8-socket connector (labeled TURN-SIGNAL SWITCH)
  7. Rocker switch (3 position—turn-signal switch)
- 
3. Plug the rocker switch (2-position—hazard switch with a hazard-warning symbol) into the 8-socket connector of the platform harness labeled HAZARD SWITCH (Figure 12).
  4. Align the hazard symbol forward, and insert the switch into the opening in the dash panel until the switch snaps securely into the panel (Figure 12).
  5. Plug the rocker switch (3 position—turn-signal switch) into the 8-socket connector of the platform harness labeled TURN SIGNAL SWITCH (Figure 12).
  6. Align the tail of the turn-signal switch to the right side of the machine, and insert the switch into

the opening in the dash panel until the switch snaps securely into the panel (Figure 12).

7. Secure the wire harness as needed with a cable tie.

**Note:** When routing the wires, ensure that the operation of the tilt steering does not damage the harness or pull on the wires.

**Note:** You will install the front cover of the control arm in [Installing the Light Switch \(page 7\)](#).

## 4

## Installing the Switch for the Headlight

Parts needed for this procedure:

1	Rocker switch (2 position—light switch)
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## Installing the Light Switch

**Groundmaster 4010 Series Machines, Groundmaster 4110 Series Machines, or Groundmaster 5910 Models 31599 or 31599N**

1. Remove the 2 flange-head screw (1/4 x 1-1/4 inches) and 2 spacers that secure the cover plate to the panel frame of the control arm (Figure 13).

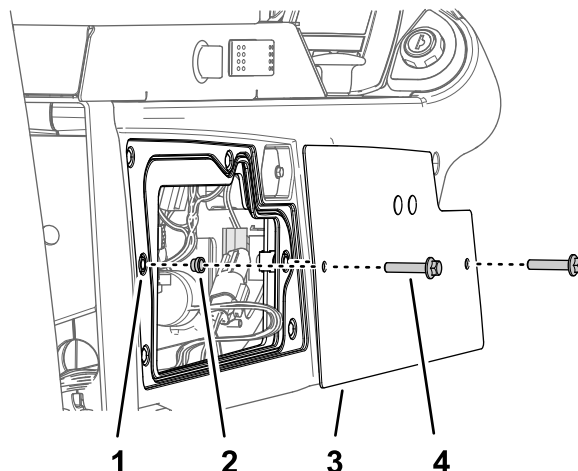


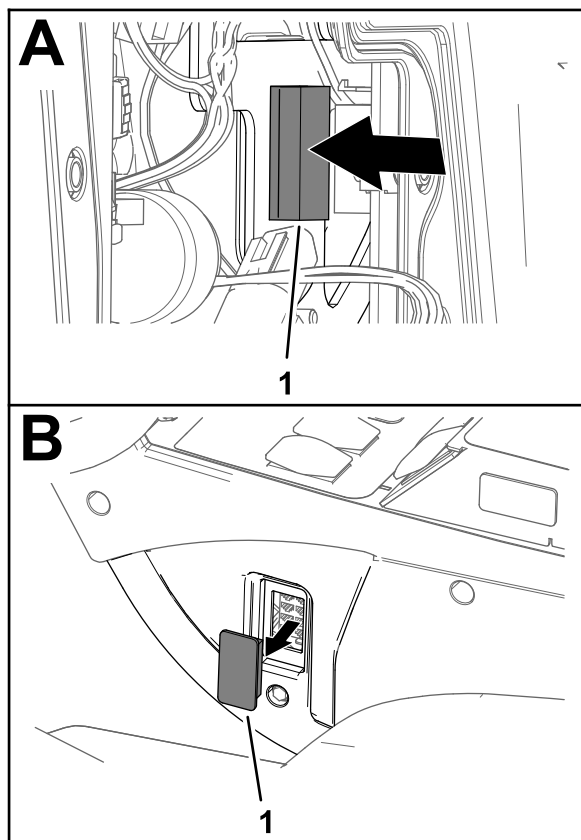
Figure 13

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1. Panel frame
2. Spacer
3. Cover plate
4. Flange-head screw (1/4 x 1-1/4 inches)



- From inside the control arm, press the dash plug out of the hole in the side of the control panel ([Figure 14](#)).

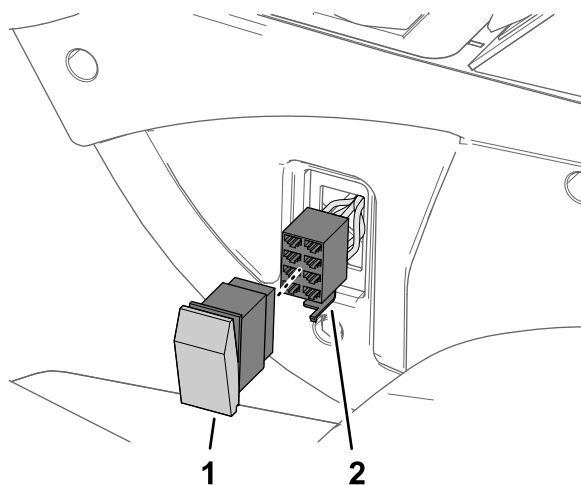


**Figure 14**

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- Dash plug

- Plug the rocker switch (2 position—light switch) into the 8-socket connector ([Figure 15](#)) of the platform harness labeled LIGHT SWITCH (OPTIONAL).



**Figure 15**

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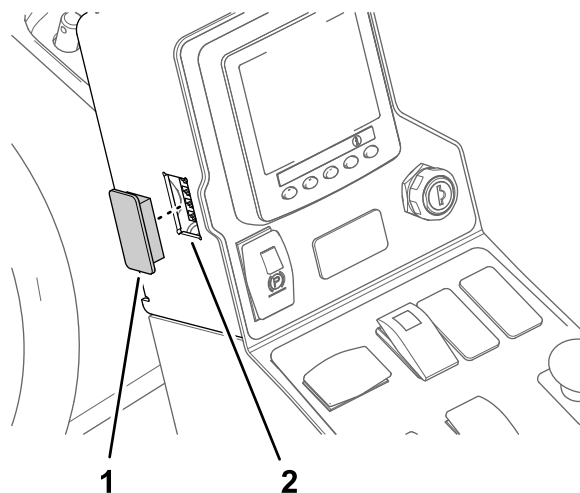
- Rocker switch (2 position—light switch)
- 8-socket connector—LIGHT SWITCH (OPTIONAL)

- Install the cover and plate to the right side of the control arm with the 2 flange-head screw (1/4 x 1-1/4 inches) and 2 spacers that you removed in [step 1](#), and tighten the screws by hand.

## Installing the Light Switch

### Groundsmaster 5910 Models 31699 or 31699N

- From inside the control arm, press the dash plug out of the hole in the side of the arm ([Figure 16](#)).

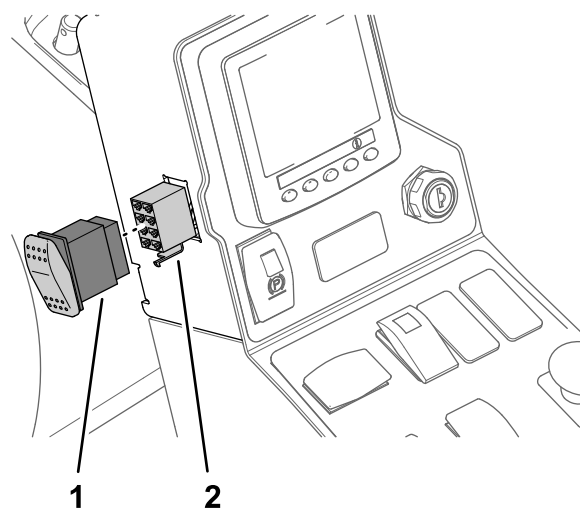


**Figure 16**

g210848

- Dash plug
- Side of the arm

- Plug the rocker switch (2 position—light switch) into the 8-socket connector ([Figure 17](#)) of the platform harness labeled LIGHT SWITCH.



**Figure 17**

g210847

- Rocker switch (2 position—light switch)
- 8-socket connector

- Assemble the front cover with the 4 washer-head screws (1/4 x 5/8 inch) that you removed in [step 1](#) of [Installing the Turn Signal and Hazard](#)

Switches (page 5) for Models 31699 and 31699N, and tighten the screws by hand (Figure 18).

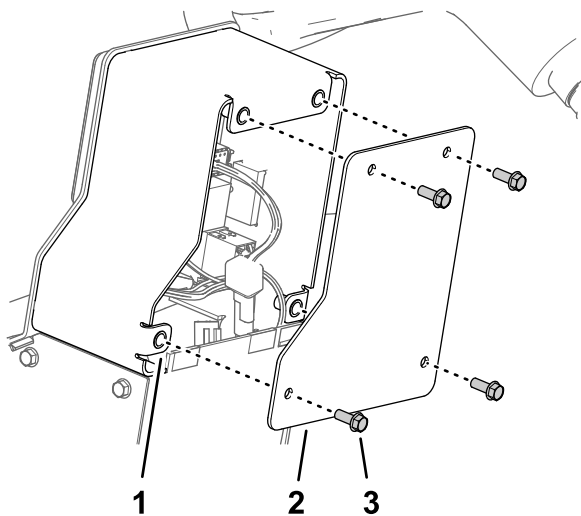


Figure 18

- 1. Console arm
- 2. Front cover
- 3. Washer-head screw (1/4 x 5/8 inch)

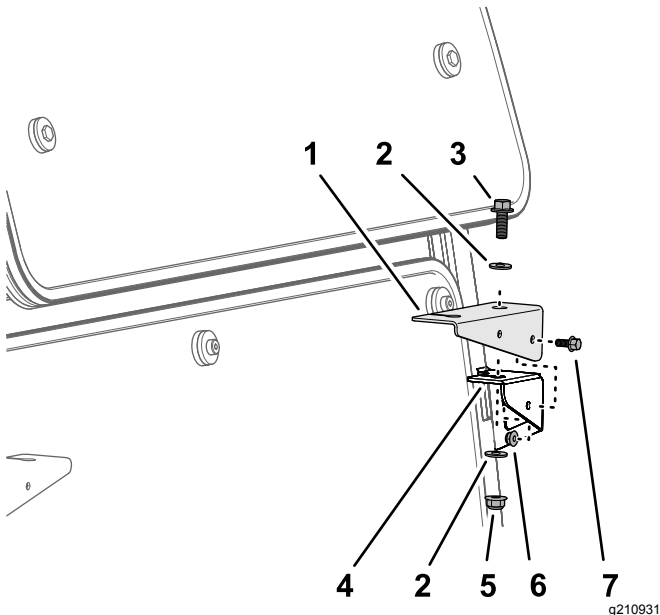


Figure 19

- 1. Light bracket (left shown)
- 2. Washer (3/8 inch)
- 3. Flange-head bolt (3/8 x 1 inch)
- 4. Headlight mount
- 5. Flange locknut (3/8 inch)
- 6. Flange locknut (1/4 inch)
- 7. Flange-head bolt (1/4 x 5/8 inch)

# 5

## Installing the Headlights

Parts needed for this procedure:

1	Light bracket (left)
4	Flange-head bolt (3/8 x 1 inch)
4	Flange locknut (3/8 inch)
6	Washer (3/8 inch)
2	Flange nut (1/4 inch)
2	Flange-head bolt (1/4 x 5/8 inch)
2	Flange locknut (1/4 inch)
1	Light bracket (right)
2	Mounting bracket
2	Headlight assembly

- 2. Assemble the light bracket to the headlight mount (Figure 19) with a flange-head bolt (3/8 x 1 inch), 2 washers (3/8 inch), a flange locknut (3/8 inch), a flange-head bolt (1/4 x 5/8 inch), and a flange locknut (1/4 inch).
- 3. Repeat steps 1 and 2 for the light bracket at the other side of the machine.
- 4. Torque the flange-head bolt (3/8 x 1 inch) and flange locknut (3/8 inch) to 37 to 45 N·m (27 to 33 ft-lb).
- 5. Torque the flange-head bolt (1/4 x 5/8 inch) and a flange locknut (1/4 inch) to 1017 to 1243 N·cm (90 to 110 in-lb).

## Installing the Head Light Bracket

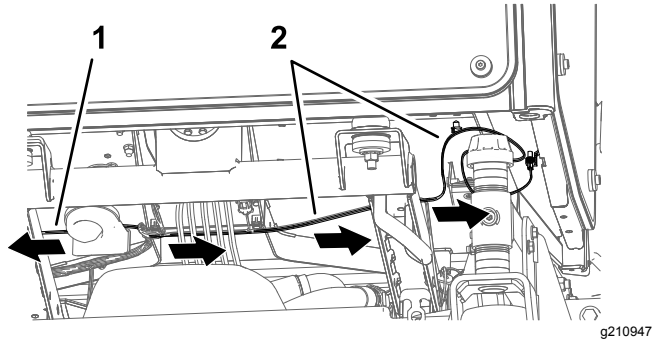
Groundsmaster 4110 Series Machines

- 1. Align the holes of the left light bracket with the holes of the left headlight mount as shown in Figure 19.



# Installing the Headlights

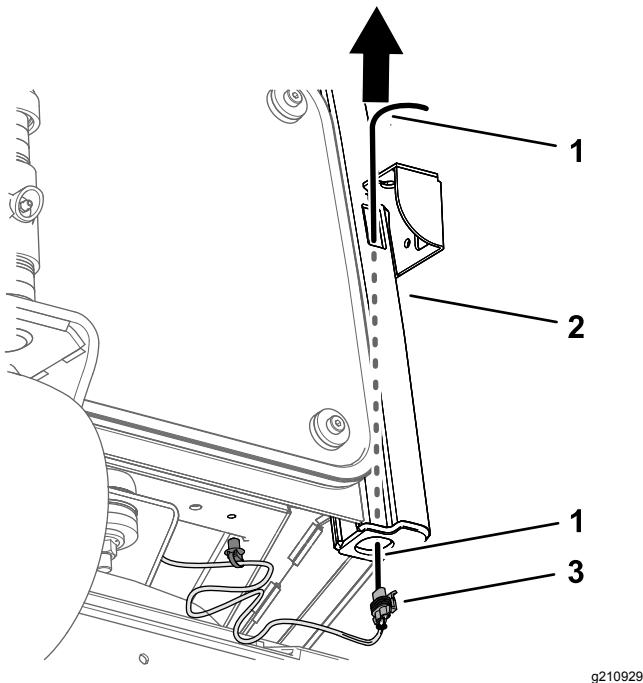
1. Route the branches of the platform harness across the front of the machine (Figure 20).



**Figure 20**

1. Wire harness branch (right headlight)
2. Wire harness branch (left headlight)

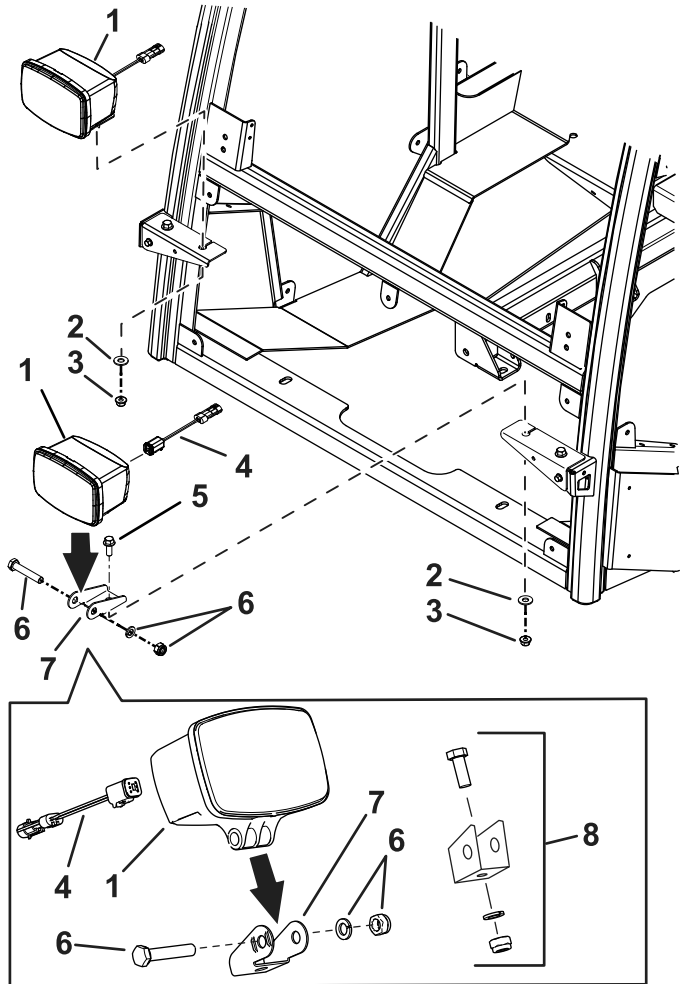
2. Align a piece of wire through the forward opening in the front pillar and out the bottom (Figure 21).



**Figure 21**

1. Wire
2. Front pillar
3. Attach the wire to the 2-socket connector for the headlight branch of the platform harness (Figure 21).
4. Pull the headlight branch of the platform harness up through the pillar (Figure 21).

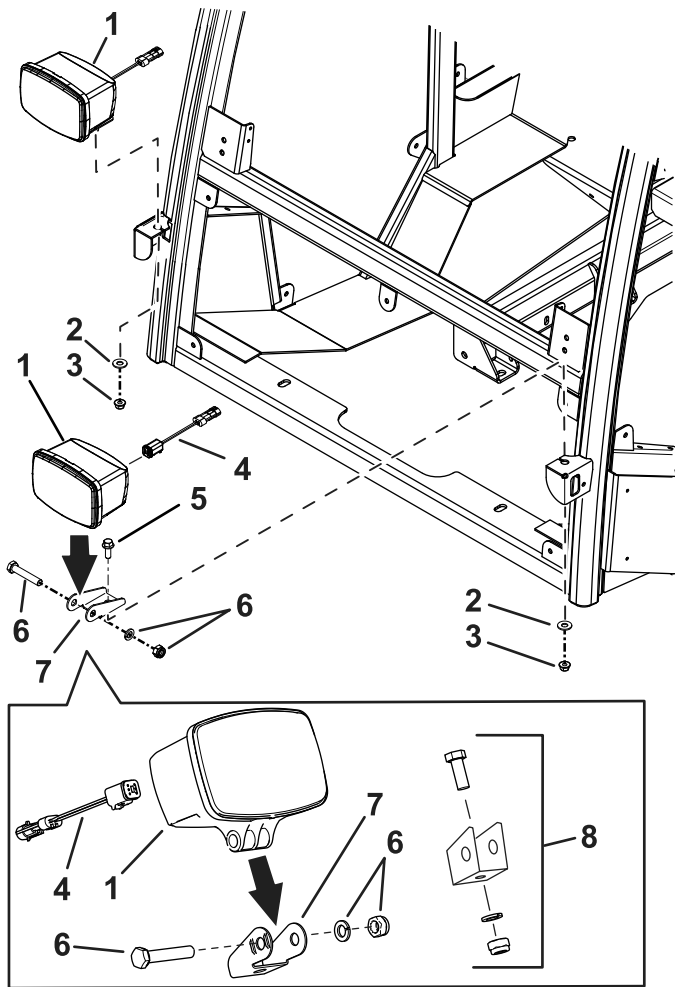
5. Connect the short harness to the 2-socket connector of the headlight connector of the platform harness.
6. Remove the hardware from the light (Figure 22 or Figure 23).
7. Discard the existing bracket and hardware shown in Figure 22 and Figure 23.
8. Install the new bracket with the hardware from the light (Figure 22 and Figure 23).
9. Install the lights to the machine as shown in Figure 22 and Figure 23.



**Figure 22**

Groundsmaster 4110 Series Machines

1. Headlight
2. Flat washer (3/8 inch)
3. Flange nut (3/8 inch)
4. Short harness
5. Bolt (3/8 x 1 inch)
6. Use this hardware with the light.
7. Mounting bracket
8. Discard this hardware

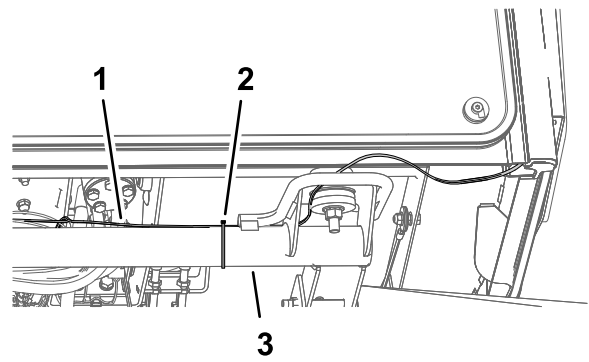


**Figure 23**

Groundsmaster 4010 Series or Groundsmaster 5910 Series Machines

- |                           |                                      |
|---------------------------|--------------------------------------|
| 1. Headlight              | 5. Bolt (3/8 x 1 inch)               |
| 2. Flat washer (3/8 inch) | 6. Use this hardware with the light. |
| 3. Flange nut (3/8 inch)  | 7. Mounting bracket                  |
| 4. Short harness          | 8. Discard this hardware             |

10. Install the short harness into the back of the light ([Figure 22](#) or [Figure 23](#)).
11. Secure the headlight branch of the platform harness as follows:
  - For Groundsmaster 4010 and 4110 Series machines, secure the headlight branch of the platform harness to the cross tube with a cable tie as shown in [Figure 24](#).

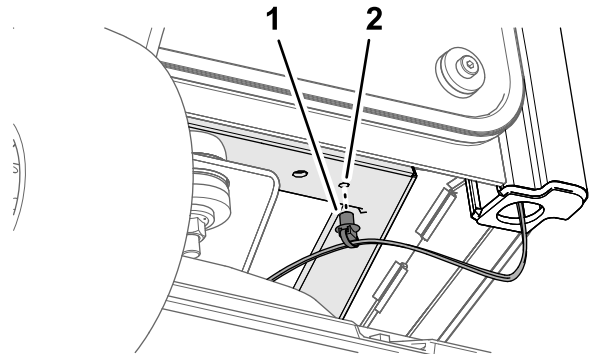


**Figure 24**

Groundsmaster 4010 and 4110 Series Machines

- |   |               |
|---|---------------|
| 1. Wire harness branch (left headlight) | 3. Cross tube |
| 2. Cable tie                            |               |

- For Groundsmaster 5910 Series machines, insert the push-in connector for the headlight branch of the platform harness into the hole in the front support ([Figure 25](#)).



**Figure 25**

Groundsmaster 5910 Series Machines

- |                     |                         |
|---------------------|-------------------------|
| 1. Push-in fastener | 2. Hole (front support) |
|---------------------|-------------------------|

# 6

## Installing the Turn Signal and Warning Lights

Parts needed for this procedure:

2	Gasket (front light—oval)
2	Front turn-signal and warning light
4	Hex-head screw (#10 x 1-3/8 inches)
4	Washer (#10)
2	Gasket (rear light—rectangular)
2	Taillight
4	Nut (5 mm)
4	Washer (5 mm)

## Removing the Cab Roof

1. Open the 4 latches that secure the screen to the roof of the cab, and remove the screen ([Figure 26](#)).

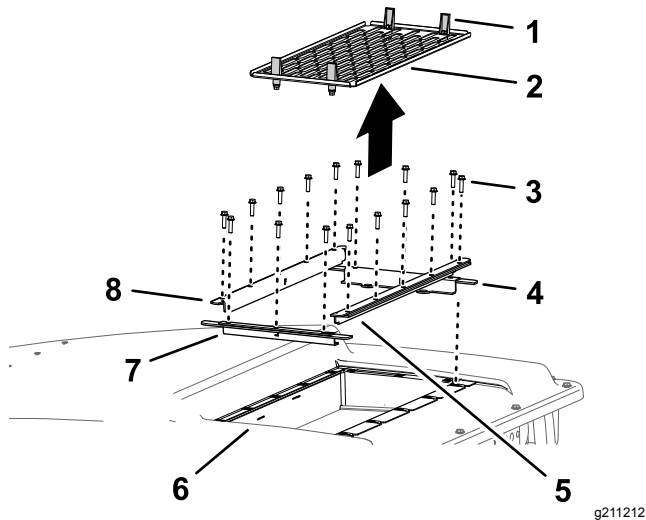


Figure 26

1. Latch
2. Screen
3. Flange-head screw (1/4 x 1 inch)
4. Seal (right)
5. Seal (back)
6. Cab roof
7. Seal (left)
8. Seal (front)

2. Remove the 16 flange-head screws (1/4 x 1 inch) that secure the front, left, right, and back seals to the roof and liner of the cab ([Figure 26](#)).
3. Remove the 22 shoulder bolts, 22 washers (5/16 x 5/8 inch), 22 flange locknut (1/4 inch)

that secure the flange of the roof, flange of the headliner, side cab straps, and end cab straps ([Figure 27](#)).

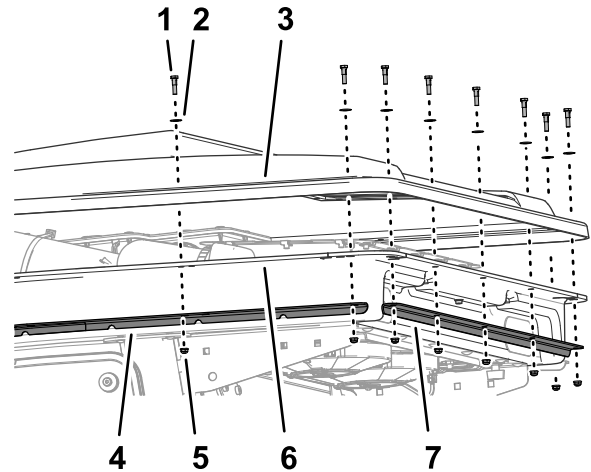


Figure 27

1. Shoulder bolt
2. Washer (5/16 x 5/8 inch)
3. Flange (cab roof)
4. Side cab strap
5. Flange locknut (1/4 inch)
6. Flange (headliner)
7. End cab strap

## Installing the Front Turn Signal and Warning Lights

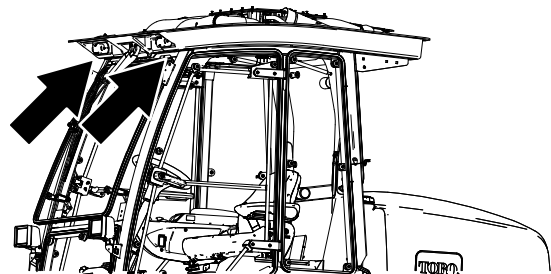
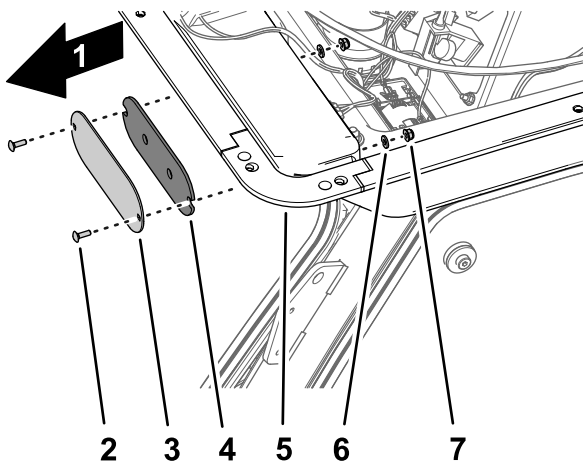


Figure 28

1. At the front of the headliner, remove the 2 carriage bolts (#10 x 5/8 inch), 2 washers (#10), and 2 flange locknuts (#10) that secure the front light cover and seal to the headliner, and remove the cover and seal ([Figure 33](#)).

**Note:** Ensure that the surface of the headliner under the seal is clean.

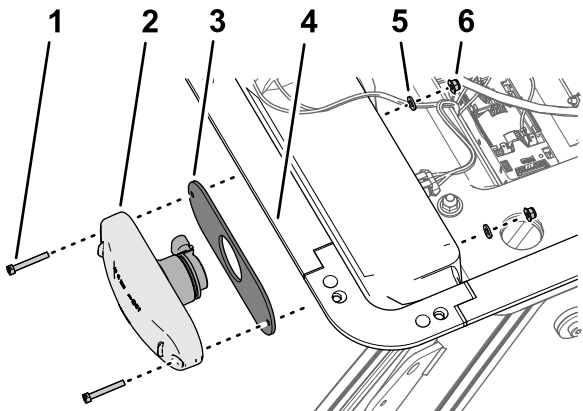


**Figure 29**

g211210

1. Front of the machine
2. Carriage bolt (#10 x 5/8 inch)
3. Front light cover
4. Seal (light)
5. Headliner
6. Washer (#10)
7. Flange locknut (#10)

2. Align the oval gasket over the connector for the front turn-signal and warning light with the backing of the adhesive side of the oval gasket away from the body of the light (Figure 34).



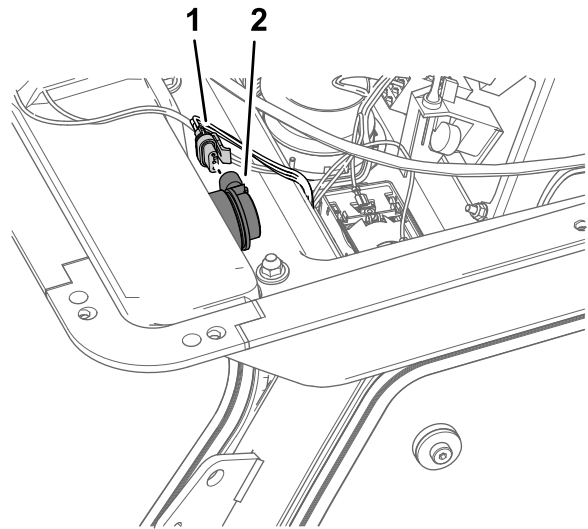
**Figure 30**

g211204

1. Hex-head screw (#10 x 1-3/8 inches)
2. Front turn-signal and warning light
3. Gasket (front light—oval)
4. Headliner
5. Washer (#10)
6. Flange locknut (#10)

3. Remove the backing gasket.
4. Align the holes in the front turn-signal and warning light and gasket with the holes in the headliner (Figure 35).
5. Secure the front turn-signal and warning light to the headliner with 2 hex-head screws (#10 x 1-3/8 inches), 2 washers (#10), and 2 flange locknuts (#10), and tighten the screws and nuts by hand (Figure 35).

6. Plug the 3-socket connector of the cab wire harness labeled LH FRONT TURN SIGNAL (if you are installing the left turn-signal and warning light) or RH FRONT TURN SIGNAL (if you are installing the right turn-signal and warning light) into the 3-pin connector of the turn-signal and warning light (Figure 31).



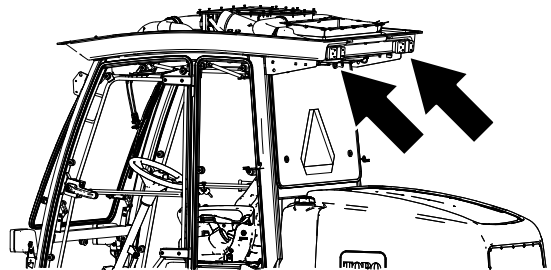
**Figure 31**

g211206

1. 3-socket connector (cab wire harness—LH FRONT TURN SIGNAL)
2. 3-pin connector (front turn-signal and warning light)

7. Repeat steps 1 through 6 for the front turn-signal and warning light at the other side of the machine.

## Installing the Taillights

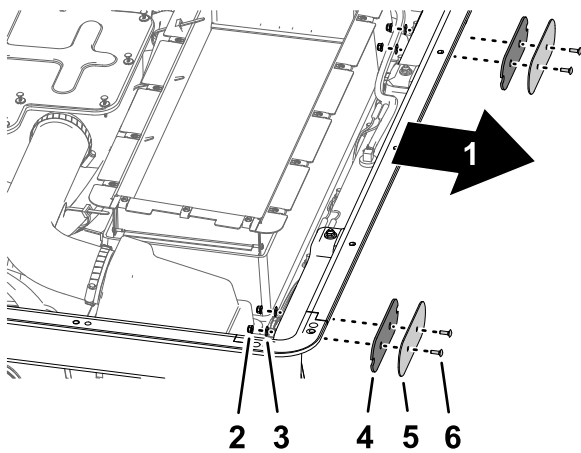


**Figure 32**

g211208

1. At the back of the headliner, remove the 2 carriage bolts (#10 x 5/8 inch), 2 washers (#10), and 2 flange locknut (#10) that secure the rear light cover and seal to the headliner, and remove the cover and seal (Figure 33).

**Note:** Ensure that the surface of the headliner under the seal is clean.

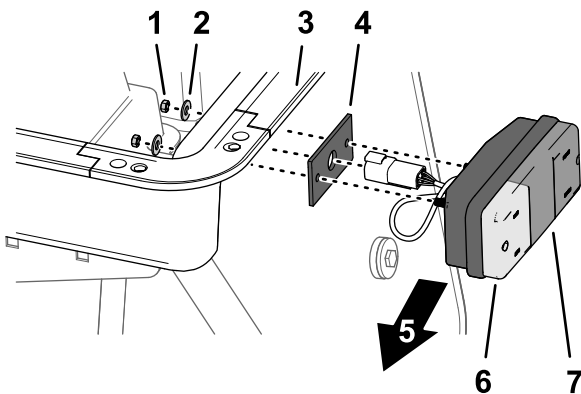


**Figure 33**

1. Back of the machine
2. Flange locknut (#10)
3. Washer (#10)
4. Seal (light)
5. Rear light cover
6. Carriage bolt (#10 x 5/8 inch)

g211211

2. Remove the backing from the adhesive side of the rectangular gasket for the rear taillight.
3. Align the adhesive side of the gasket to the headliner, align the holes of the gasket to the holes in the headliner, and apply the gasket to the headliner. (Figure 34).



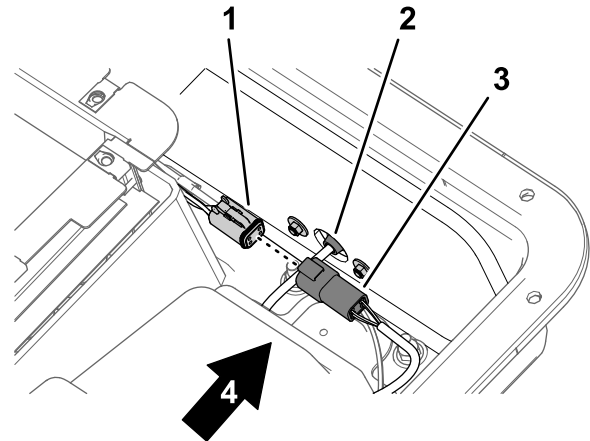
**Figure 34**

1. Nut (5 mm)
2. Washer (5 mm)
3. Headliner
4. Gasket (rear light—rectangular)
5. Outboard
6. Amber lens (taillight)
7. Red lens (taillight)

g211205

4. Align the taillight to the headliner with the amber lens of the light outward (Figure 47).
5. Route the harness connector of the taillight harness through the large hole in the gasket and the studs of the taillight through the small holes (Figure 34).
6. Secure the taillight to the headliner with 2 nuts (5 mm) and 2 washers (5 mm), and tighten the nuts by hand (Figure 34).

7. Plug the 4-pin connector of the taillight harness into the 4-socket connector of the cab wire harness (Figure 35) labeled LH REAR TURN SIGNAL (if you are installing the left taillight) or RH REAR TURN SIGNAL (if you are installing the right taillight) .
8. Repeat steps 1 through 7 for the taillight at the other side of the machine.



**Figure 35**

g211207

1. 4-socket connector (cab wire harness—LH REAR TURN SIGNAL)
2. Grommet (taillight)
3. 4-pin connector (taillight harness)
4. Back of the machine

# 7

## Mounting the Reflective Tape

### Parts needed for this procedure:

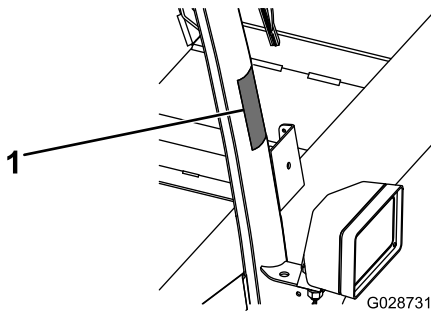
4	Red reflective tape
2	Yellow reflective tape

## Procedure

1. Apply the yellow reflective tape as shown in Figure 36.

**Note:** Apply the yellow reflective tape on the corner of the frame so that it wraps from the front to the side.



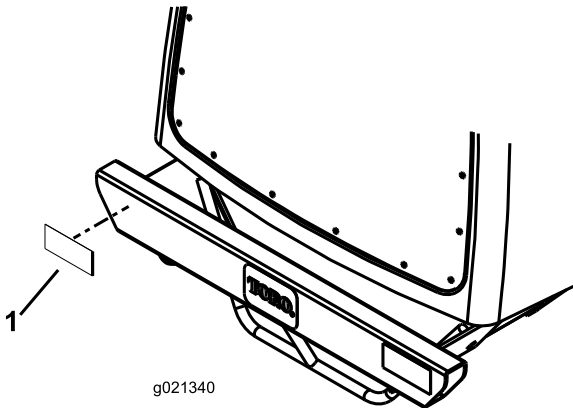


**Figure 36**

g028731

1. Yellow reflective tape

2. Apply 2 strips of red reflective tape to each end of the bumper as shown in [Figure 37](#).

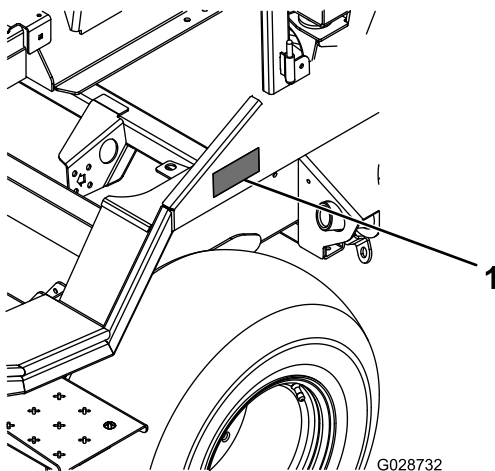


**Figure 37**

g022340

1. Reflective tape

3. Apply the remaining 2 strips of red reflective tape according to your model, as shown in [Figure 38](#), [Figure 39](#), or [Figure 40](#).

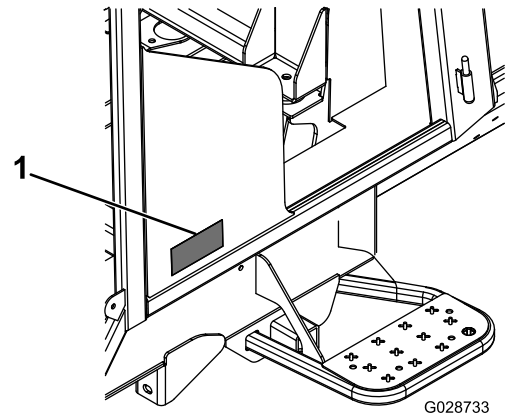


**Figure 38**

Groundsmaster 4010

g028732

1. Red reflective tape



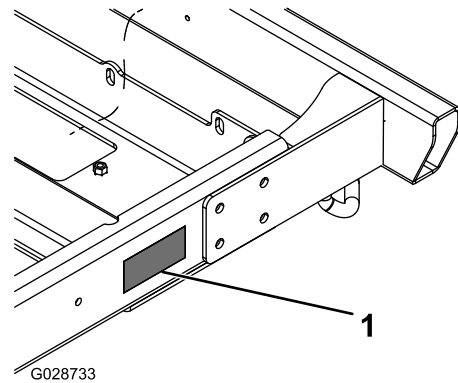
**Figure 39**

Groundsmaster 4110

G028733

g028733

1. Red reflective tape



**Figure 40**

Groundsmaster 5910

g028734

1. Red reflective tape

## 8

### Installing the Fuse

#### Groundsmaster 4010 and 4110 Series Machines

No Parts Required

#### Procedure

1. Remove the 2 socket-head bolts (1/4 x 3/4 inch) and 2 washers (1/4 inch) that secure the controller cover for the power center to the relay mount, and remove the cover ([Figure 41](#)).



# 9

## Connecting the Battery

No Parts Required

### Connecting the Battery

#### Groundsmaster 4100 Series Machines

1. Assemble the terminal of the negative battery cable to the negative post of the battery, and tighten the nut of the terminal by hand (Figure 43).

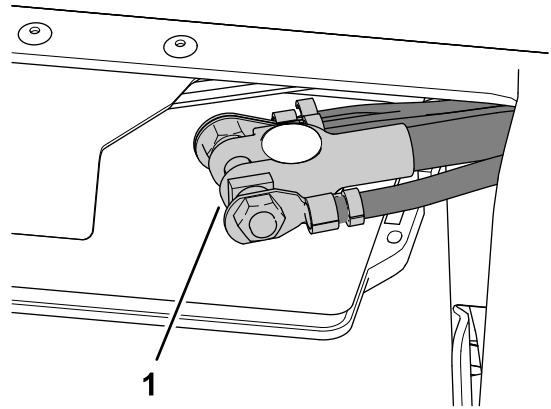


Figure 43

1. Terminal (negative battery cable)

2. Test the lights of the kit.
3. Close the battery compartment door securely.

### Connecting the Battery

#### Groundsmaster 5900 Series Machines

1. Rotate the battery disconnect switch to the ON position (Figure 44).

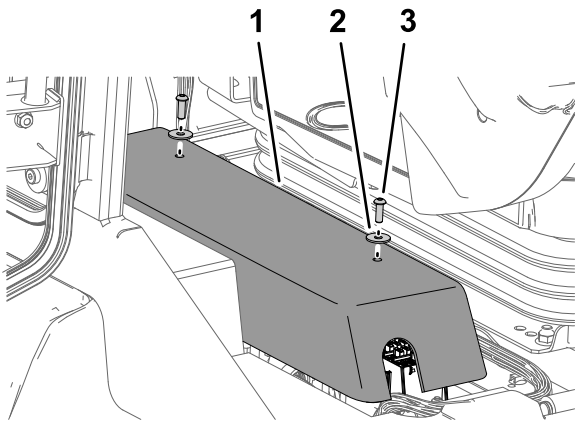


Figure 41

1. Controller cover
2. Washer (1/4 inch)
3. Socket-head bolt (1/4 x 3/4 inch)

2. Insert the fuse (15 A) into the slot at column A in row 4 of the fuse block as shown in Figure 42.
3. Remove the 7.5 A fuse from the slot at column c in row 1 and install the fuse (10 A) in that slot as shown in Figure 42.

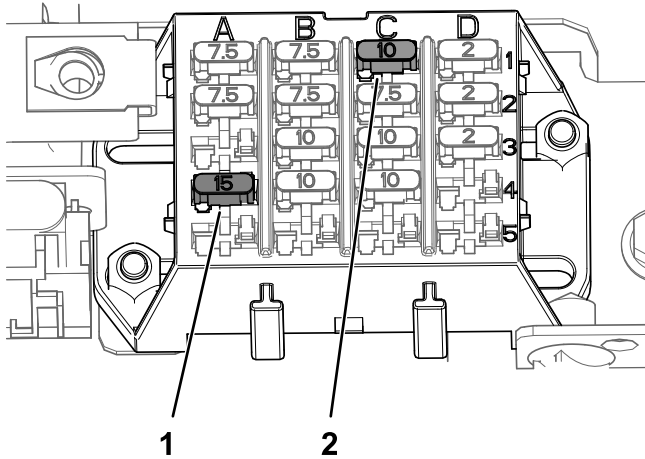
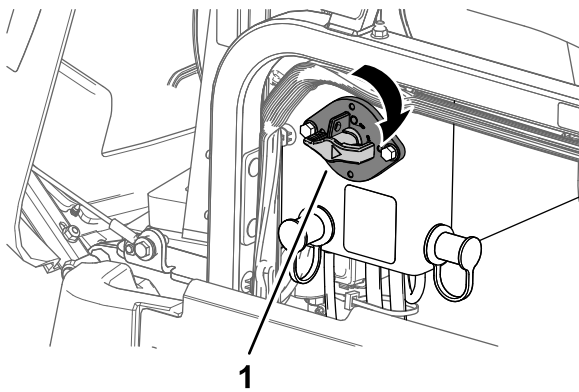


Figure 42

1. Fuse (15 A)—fuse-block slot at column A in row 4
2. Fuse (10 A)—fuse-block slot at column C in row 1

4. Align the holes in the controller cover with the holes in the relay mount (Figure 41).
5. Assemble the controller cover to the relay mount with the 2 socket-head bolts (1/4 x 3/4 inch) and 2 washers (1/4 inch) that you removed in step 1 (Figure 41).



**Figure 44**

g210584

1. Battery disconnect switch

2. Test the lights of the kit.

3. Close the hood and latch it.

**10**

## Finishing Installing the Kit

### No Parts Required

### Checking the Lights

1. Insert the key into the ignition switch and rotate it to the RUN position.
2. Perform the following operational checks of the installed lights:

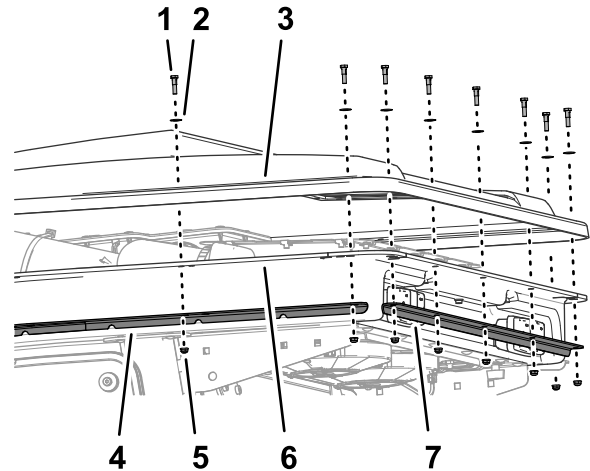
Models	Headlights	Hazard Signal	Left-Turn Signal	Right-Turn Signal
*GM 4010 and 4110 Series	X	X	X (with hazard switch ON)	X (with hazard switch ON)
GM 5910 Models 31599 or 31599N	X	X	X (with hazard switch ON)	X (with hazard switch ON)
GM 5910 Models 31699 or 31699N	X	Operates with the headlights	(with headlight switch ON)	(with headlight switch ON)

\*GM = Groundsmaster

3. Set the headlight switch to the ON position.

## Installing the Cab Roof

1. Align the holes in the flange of the roof with the holes in the flange of the headliner ([Figure 45](#)).

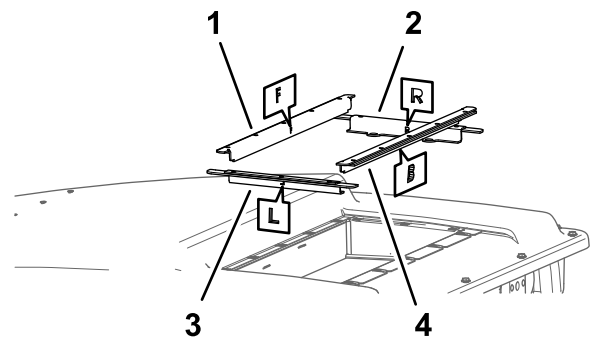


**Figure 45**

g211203

1. Shoulder bolt
2. Washer (5/16 x 5/8 inch)
3. Flange (cab roof)
4. Side cab strap
5. Flange locknut (1/4 inch)
6. Flange (headliner)
7. End cab strap

2. Assemble the flange of the roof to the flange of the headliner ([Figure 45](#)) with the 22 shoulder bolts, 22 washers (5/16 x 5/8 inch), 22 flange locknut (1/4 inch) that you removed in step 3 of [Removing the Cab Roof](#) (page 11).
3. Torque the shoulder bolts and nuts to 1017 to 1243 N·cm (90 to 110 in-lb).
4. Align the front seal, right seal, left seal, and back seal to the roof and head liner as shown in [Figure 36](#).



**Figure 46**

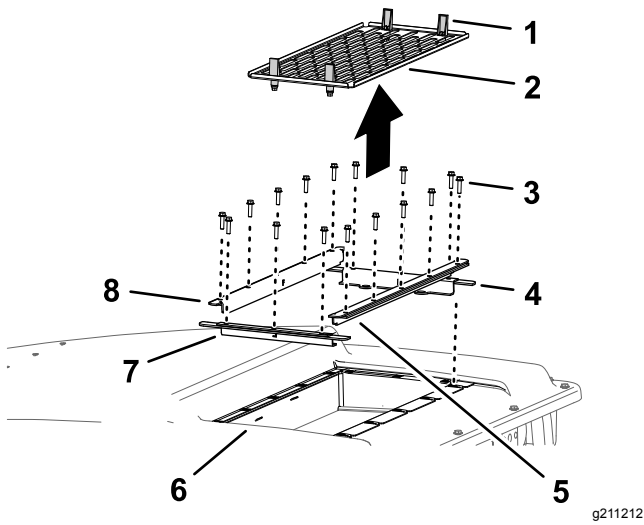
g211201

1. Seal (front)
2. Seal (right)
3. Seal (left)
4. Seal (back)

5. Assemble the seals to the roof and head liner with the 16 flange-head screws (1/4 x 1 inch) that you removed in step 2 of [Removing the Cab Roof](#) (page 11).

# Operation

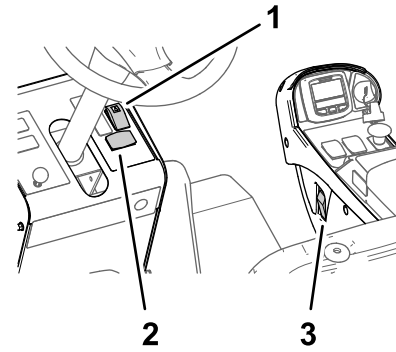
## Controls



**Figure 47**

- |                                     |                 |
|-------------------------------------|-----------------|
| 1. Latch                            | 5. Seal (back)  |
| 2. Screen                           | 6. Cab roof     |
| 3. Flange-head screw (1/4 x 1 inch) | 7. Seal (left)  |
| 4. Seal (right)                     | 8. Seal (front) |

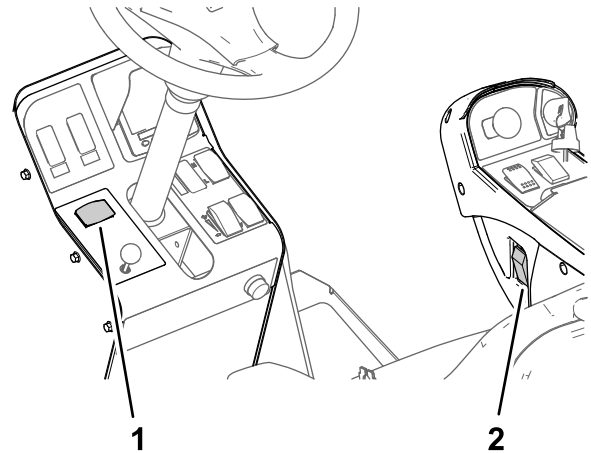
6. Torque the flange-head screws to 1017 to 1243 N·cm (90 to 110 in-lb).
7. Assemble the screen to the roof and head liner and secure the latches of the screen to the flanges of the right and left seals ([Figure 36](#)).



**Figure 48**

Groundsmaster 4010 Series or Groundsmaster 4110 Series Machines

- |                       |                 |
|-----------------------|-----------------|
| 1. Hazard switch      | 3. Light switch |
| 2. Turn-signal switch |                 |



**Figure 49**

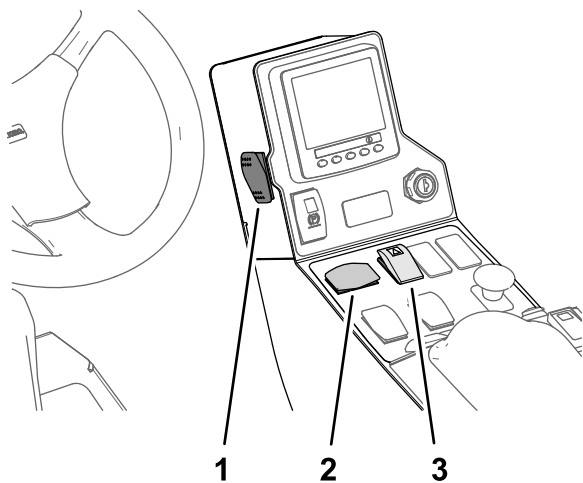
Groundsmaster 5910 Models 31599 or 31599N

- |                       |                 |
|-----------------------|-----------------|
| 1. Turn-signal switch | 2. Light switch |
|-----------------------|-----------------|

## Light Switch

Press the light switch ([Figure 48](#) or [Figure 49](#) or [Figure 50](#)) to the ON position to illuminate the headlights.

**Note:** The headlights illuminates only if the ignition switch is in the RUN position.



**Figure 50**

Groundsmaster 5910 Models 31699 or 31699N

1. Light switch
2. Turn-signal switch
3. Hazard switch

## Hazard Lights

**Note:** The hazard lights for Groundsmaster 5910 Models 31599 or 31599N operate when set the headlight switch to the ON position.

## Operating the Hazard Switch

**Groundsmaster 4010 Series Machines, Groundsmaster 4110 Series Machines, or Groundsmaster 5910 Model 31699 or 31699N**

Press the hazard switch (Figure 48 or Figure 50) to the ON position to activate the flashing hazard lights.

## Turn-Signal Switch

**Note:** For Groundsmaster 4010 Series machines, 30636; Groundsmaster 4110 Series machines, or Groundsmaster 5910 Model 31699 or 31699N, you must set the hazard switch to the ON position to use the turn signals.

Use the turn-signal switch (Figure 48, Figure 49, or Figure 50) to indicate your turn as follows:

- Press down on the left side of the turn-signal switch to indicate a left turn.
- Center the turn-signal switch position to shutoff the turn signal.
- Press down on the right side of the turn-signal switch to indicate a right turn.

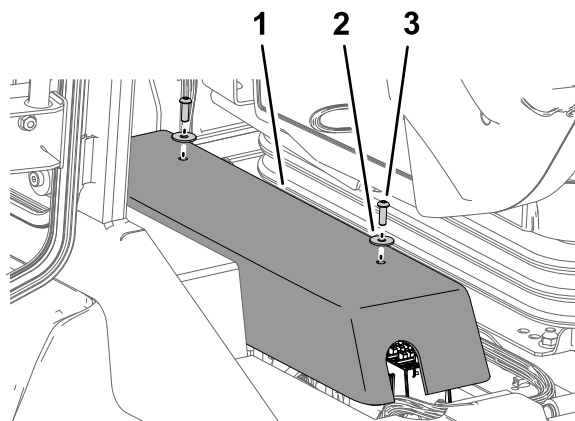
# Maintenance

## Replacing Fuses

### Replacing the Fuse

**Groundsmaster 4010 Series or Groundsmaster 4110 Series Machines**

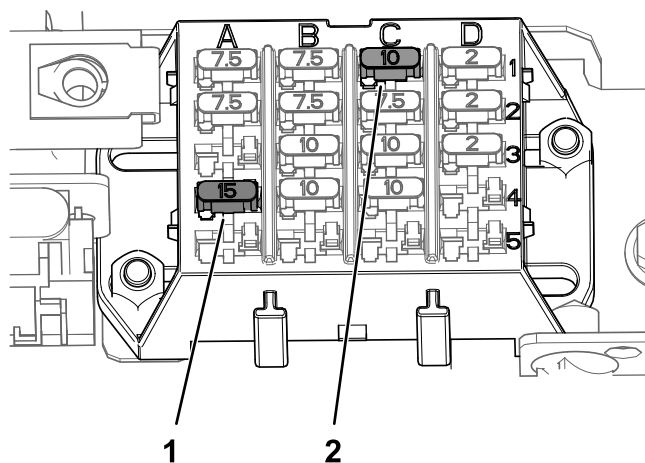
1. Remove the 2 socket-head bolts (1/4 x 3/4 inch) and 2 washers (1/4 inch) that secure the controller cover for the power center to the relay mount, and remove the cover (Figure 51).



**Figure 51**

1. Controller cover
2. Washer (1/4 inch)
3. Socket-head bolt (1/4 x 3/4 inch)

2. Replace the open (blown) fuse for the road light circuit, at the fuse-block slot at column A in row 4 or column C in row 1 (Figure 52).



**Figure 52**

1. Road lights fuse (15 A)—fuse-block slot at column A in row 4
2. Road lights fuse (10 A)—fuse-block slot at column C in row 1

3. Assemble the controller cover to the relay mount with the 2 socket-head bolts (1/4 x 3/4 inch) and 2 washers (1/4 inch) that you removed in step 1 (Figure 51).

## Replacing the Fuse

### Groundmaster 5910 Models 31599 or 31599N

1. Remove the knob that secures the cover for the power center to the stud on the power-center bracket, and remove the cover (Figure 53).

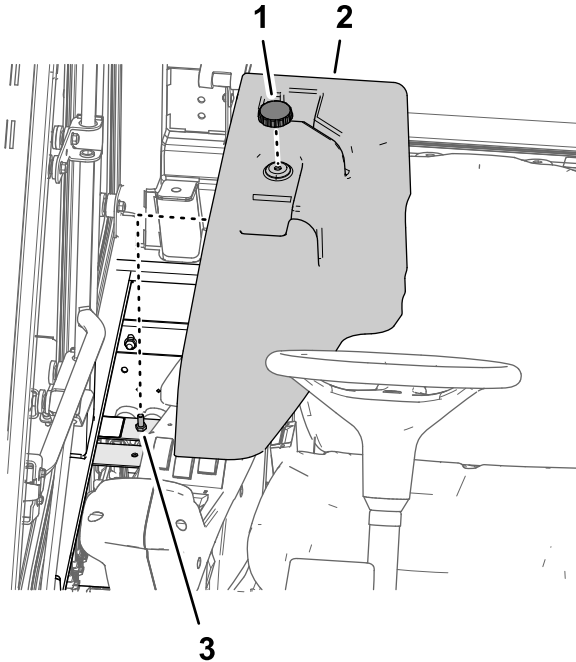


Figure 53

1. Knob
2. Cover (power center)
3. Stud

2. Replace the open (blown) fuse for the road light circuit at fuse-block slot at column B in row 1 (Figure 54).

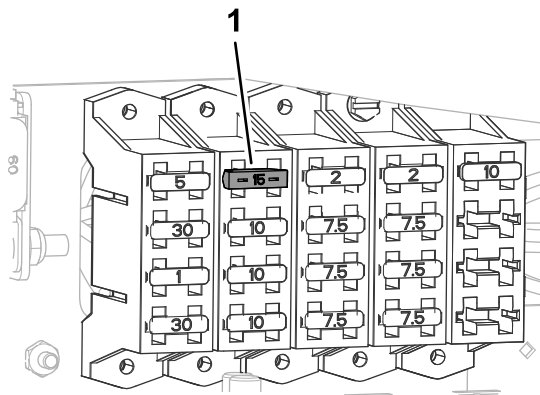


Figure 54

1. Road lights fuse (15 A)—fuse-block slot at column B in row 1

3. Align the hole in the cover for the power center with the stud on the power-center bracket (Figure 53).
4. Secure the cover to the stud with the knob that you removed in step 1 (Figure 53).

## Replacing the Fuses

### Groundmaster 5910 Models 31699 or 31699N

1. Remove the 2 knobs and 2 washers that secure the cover to the flange of the electrical plate for the power center, and remove the cover (Figure 55).

**Note:** Retain the 2 star washers for installation of the cover.

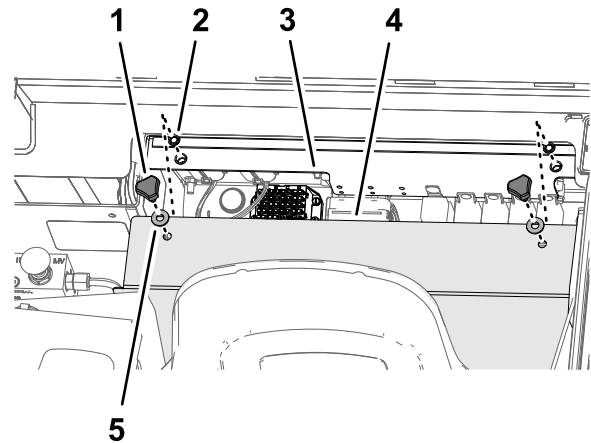
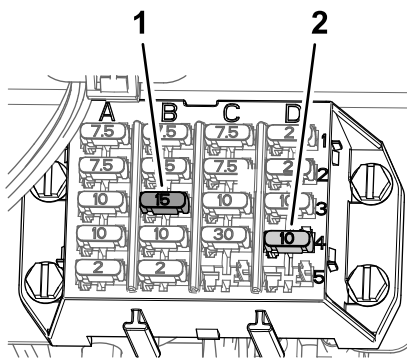


Figure 55

1. Knob
2. Star washer
3. Flange (power-center mount)
4. Cover
5. Washer

2. Replace the open (blown) fuse for the following circuits:

- Road lights fuse (15 A)—fuse-block slot at column B in row 3
- Hazard flasher fuse (10 A)—fuse-block slot at column D in row 4



g211647

**Figure 56**

1. Road lights fuse (15 A)—fuse-block slot at column B in row 3
  2. Hazard flasher fuse (10 A)—fuse-block slot at column D in row 4
- 
3. Align the holes in the cover to the holes in the flange of the electrical plate ([Figure 55](#)).
  4. Secure the cover to the power center with the 2 knobs, 2 washers, and 2 star washers that you removed in step 1 ([Figure 55](#)).