



# Light Kit

## Groundsmaster® 3280-D Traction Unit

Model No. 30405

### Installation Instructions

The auxiliary power unit kit (model 30382) is needed install this kit.

## Installation

### Loose Parts

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

Procedure	Description	Qty.	Use
<b>1</b>	No parts required	–	Disconnect the battery.
<b>2</b>	Headlight bracket assembly, L.H. Headlight bracket assembly, R.H. Headlight bracket L.H. (for machines with less than a 72–inch deck) Bolt (1/2 inch) Bolt (3/8 inch) Nut (1/2 inch)	1 1 1 3 4 3	Install the headlights.
<b>3</b>	L.H. rear light assembly R.H. rear light assembly Short bracket (for machines with a deck smaller than 72–inches)	1 1 1	Install the rear lights.
<b>4</b>	Wire harness Cable Ties, 7 1/4 inches Cable Ties, 14 1/2 inches Fuse, 15 amp Headlight cover Headlight cover mounting screws Rear light cover (for units with a 72–inch deck) Rear light cover (for units with a deck smaller than 72–inches) Rear light cover fasteners	1 12 2 1 2 8 2 1 8	Install the wiring harness.
<b>5</b>	Column bracket assembly Horn Switch assembly Column bracket mount Carriage bolt (3/8 inch) Flange nut (3/8 inch) Column cover Screw (1/2 inch)	1 1 1 2 2 1 2	Install the switch column assembly.
<b>6</b>	Horn assembly Screw (5/16 x 3/4 inch) Flange head nut (5/16 inch) Mounting bracket	1 1 1 1	Install the horn.



## Media and Additional Parts

Description	Qty.	Use
Parts catalog	1	
Installation instructions	1	

# 1

## Disconnecting the Battery

### No Parts Required

### Procedure

1. Position the machine on a level surface, set the parking brake, lower the cutting units, turn the ignition off, and remove the key.

### ⚠ 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.

2. Unlatch and raise the hood.
3. Disconnect the negative battery cable from the battery.
4. Lower the hood.

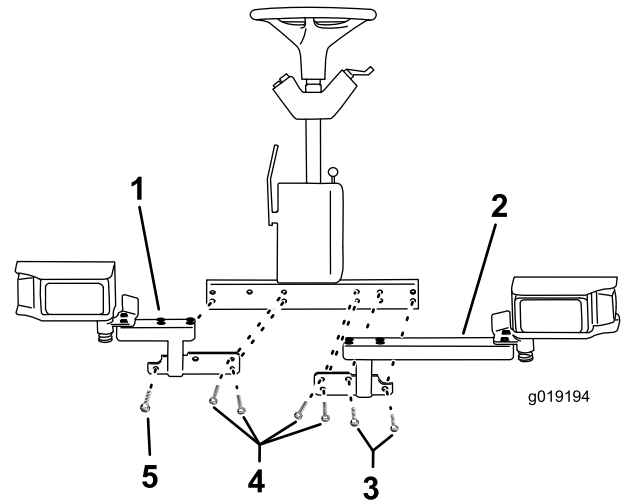


Figure 1

1. R.H. headlight bracket assembly
2. L.H. headlight bracket assembly
3. Bolt (1/2 inch)
4. Bolt (3/8 inch)
5. Bolt (1/2 inch)

2. Secure each of the bolts (1/2 inch) with a nut (1/2 inch).
3. Torque the fasteners to 129 to 156 N-m (95 to 115 ft-lbs) (Figure 1).

# 2

## Installing the Headlights

### Parts needed for this procedure:

1	Headlight bracket assembly, L.H.
1	Headlight bracket assembly, R.H.
1	Headlight bracket L.H. (for machines with less than a 72-inch deck)
3	Bolt (1/2 inch)
4	Bolt (3/8 inch)
3	Nut (1/2 inch)

### Installing the Headlights for Units with a 72-inch Deck

**Note:** Remove the headlight covers that are loosely placed on the headlight assemblies.

1. Mount the R.H and L.H headlight bracket assemblies to the existing holes in the front of the operators platform (Figure 1).

**Note:** Ensure that the turn signal lens on the headlight is positioned toward the outside of the machine.

### Installing L.H. Headlights for Units with a Deck Smaller than 72-inches

1. Remove the fasteners connecting the headlight to the long bracket. Set aside the hardware to install the smaller bracket (Figure 2).

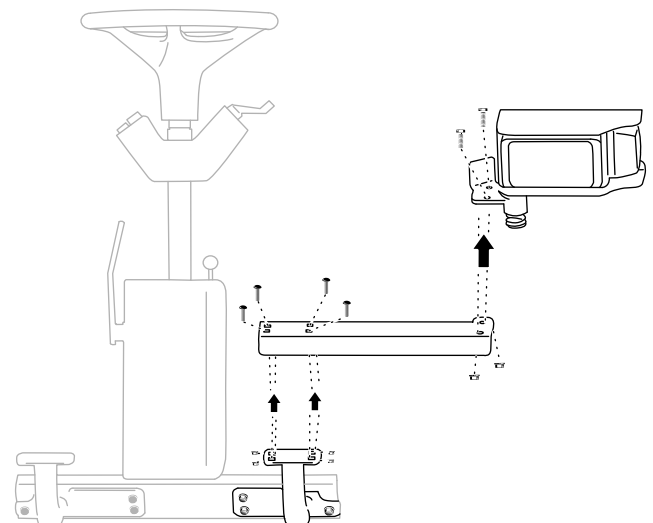


Figure 2

2. Remove the fasteners connecting the long bracket to the curved bracket that is attached to the machine. Set

aside the hardware to install the smaller bracket (Figure 2).

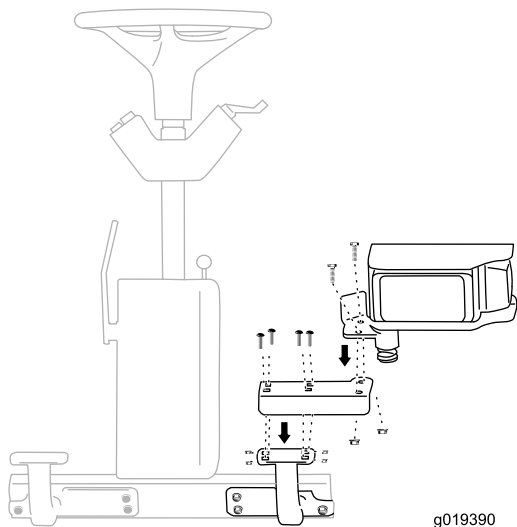


Figure 3

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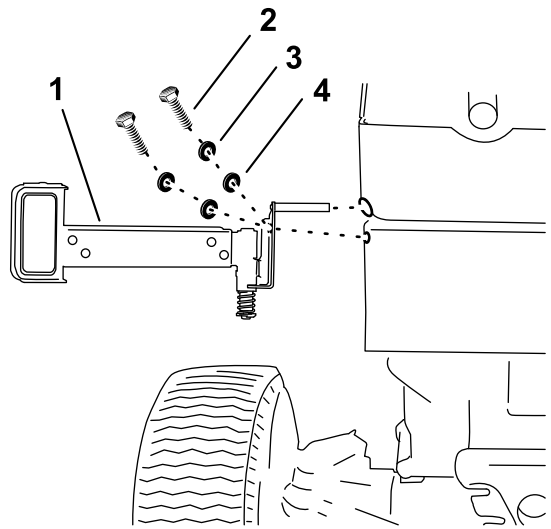


Figure 4

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1. L.H. rear light assembly
2. Bolt
3. Lock washer
4. Flat washer

3. Install the smaller bracket included in the kit to the curved bracket that is currently attached to the machine using the fasteners from Step 2 (Figure 3).

Install the headlight to the bracket using the fasteners from Step 1 (Figure 3).

3. Remove the existing R.H. bracket on the rear of the machine.
4. Mount the R.H. rear light bracket assembly to the existing holes in the rear of the machine using the hardware from the brackets previously removed (Figure 5).

# 3

## Installing the Rear Lights

### Parts needed for this procedure:

1	L.H. rear light assembly
1	R.H. rear light assembly
1	Short bracket (for machines with a deck smaller than 72-inches)

### Installing the Rear Lights for Units with a 72-Inch Deck

**Note:** Remove the rear light covers that are loosely placed on the headlight assemblies.

1. Remove the existing L.H. bracket on the rear of the machine.
 

**Note:** Remove one bracket at a time to ensure the hood will remain stable.
2. Mount the L.H. rear light bracket assembly to the existing holes in the rear of the machine using the hardware from the brackets previously removed (Figure 4).

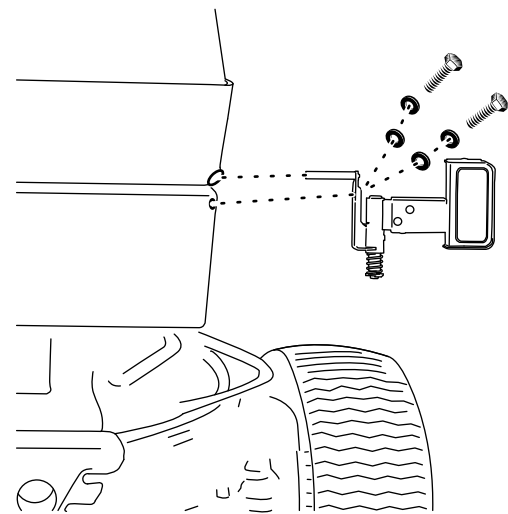


Figure 5

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### Installing the Left Hand Rear Lights for Units with a Deck smaller than 72-inches

1. Remove the fasteners connecting the L.H. rear light to the long bracket. Set aside the hardware to install the smaller bracket (Figure 6).

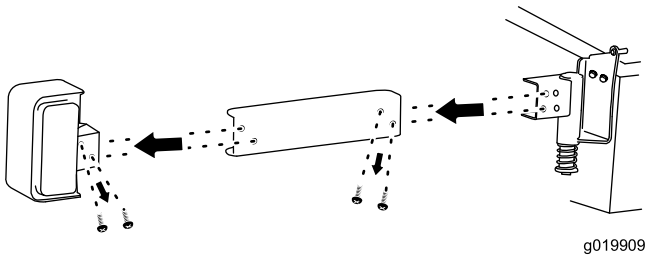


Figure 6

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2. Remove the fasteners connecting the L.H. rear light bracket to the L.H. pivot assembly. Set aside the hardware to install the smaller bracket (Figure 6).
3. Install the smaller bracket included in the kit to the L.H. pivot assembly using the fasteners from Step 2 (Figure 7).

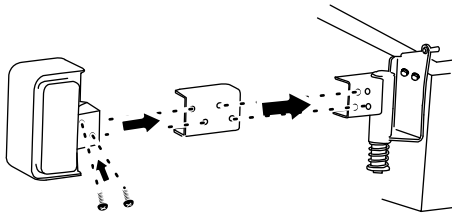


Figure 7

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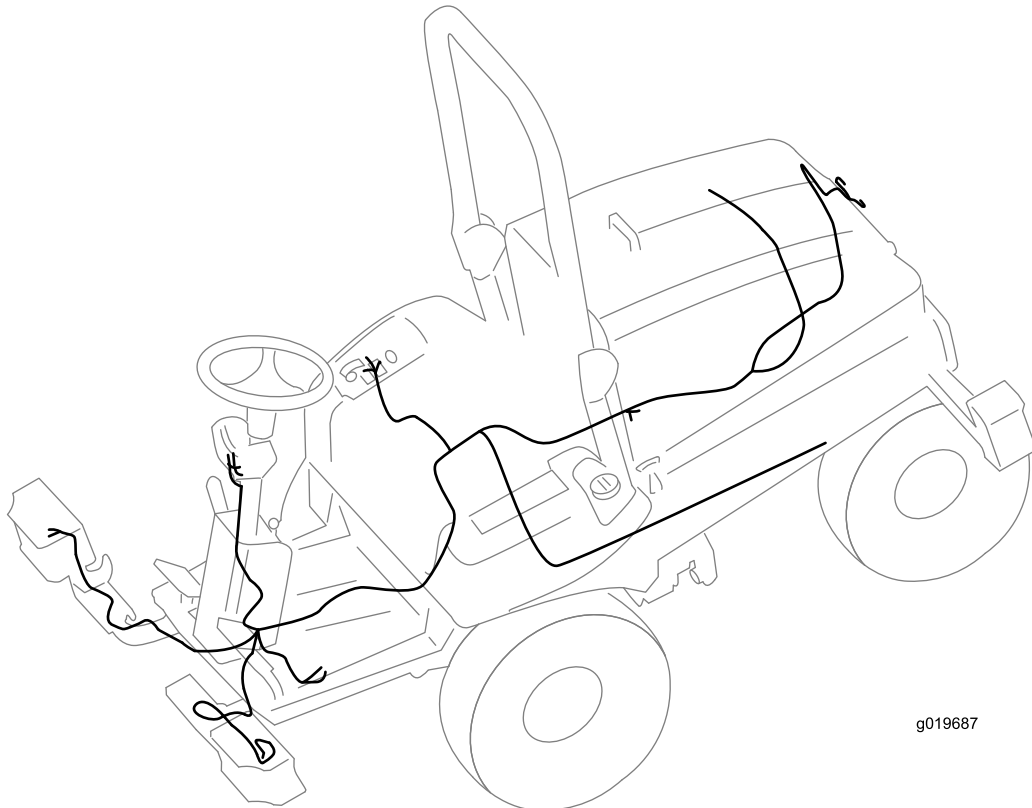
4. Install the L.H. headlight to the bracket using the fasteners from Step 1 (Figure 7).

# 4

## Installing the Wiring Harness

### Parts needed for this procedure:

1	Wire harness
12	Cable Ties, 7 1/4 inches
2	Cable Ties, 14 1/2 inches
1	Fuse, 15 amp
2	Headlight cover
8	Headlight cover mounting screws
2	Rear light cover (for units with a 72-inch deck)
1	Rear light cover (for units with a deck smaller than 72-inches)
8	Rear light cover fasteners



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Figure 8

Machine Overview of Wiring Harness

# Installing the Wiring Harness for the Head and Rear Lights

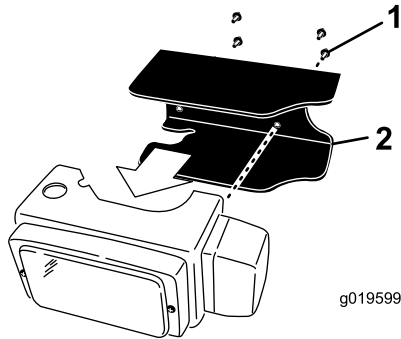
**Note:** Installing the wiring headlight harness can be done by 1 person but 2 people are recommended.

**Note:** Use zip ties to secure wires to the machine to ensure that the wires do not touch hot or moving parts.

1. Plug one of the harness connectors into the harness connector and one into the headlight (Figure 11).

**Note:** The headlight connection should be made inside the headlight bracket.

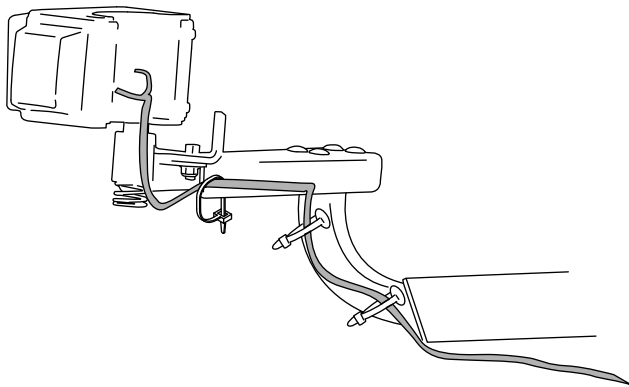
2. Repeat this procedure on the other headlight.
3. Attach the headlight covers onto the head and rear light assemblies (Figure 9).



**Figure 9**

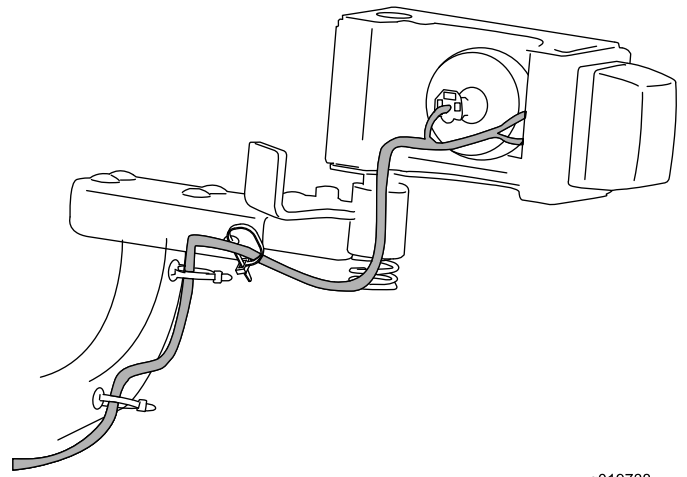
1. Mounting screw
2. Headlight shield

4. Attach the cable tie clips to the holes in the existing bracket (Figure 10 and Figure 11).



**Figure 10**

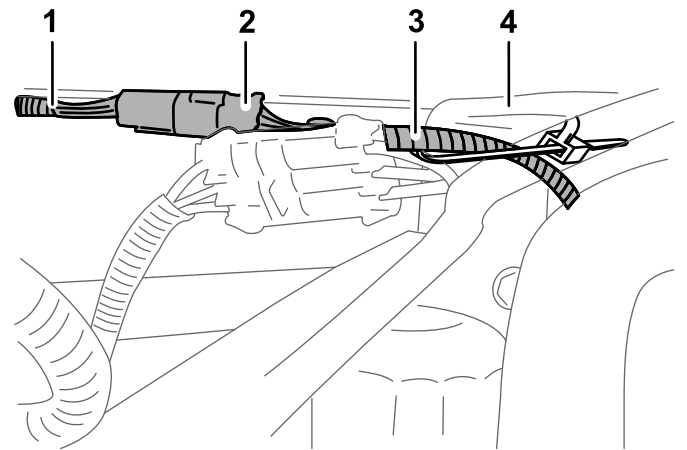
L.H. Front Headlamp Wiring



**Figure 11**

R.H. Front Headlamp Wiring

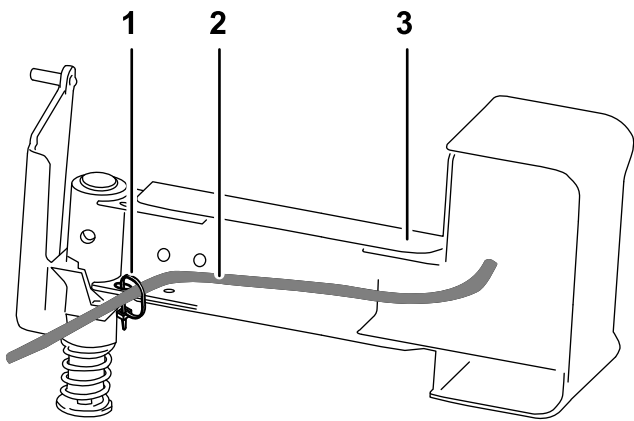
5. Route the enclosed wire harness under the front of the machine.
6. Remove the hydraulic R clamp and route the cables for the horn and rear lights through the clamp.
7. Install the hydraulic R clamp.
8. Route the front end of the enclosed wire harness over the front wheel axle.
9. Connect the R.H. tail lights by plugging in the lead connector of the light assembly to the right hand tail light connector.
10. Connect the LH tail lights (Figure 12). See Figure 8 for routing.



**Figure 12**

1. Wiring from L.H. rear lamp
2. Connectors
3. Wire harness
4. Chassis

11. Using the hole in the L.H. rear light bracket, secure the harness to the bracket with a cable tie (Figure 13).



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**Figure 13**

- 1. Cable tie
- 2. Cord from L.H. rear lamp
- 3. L.H. rear lamp

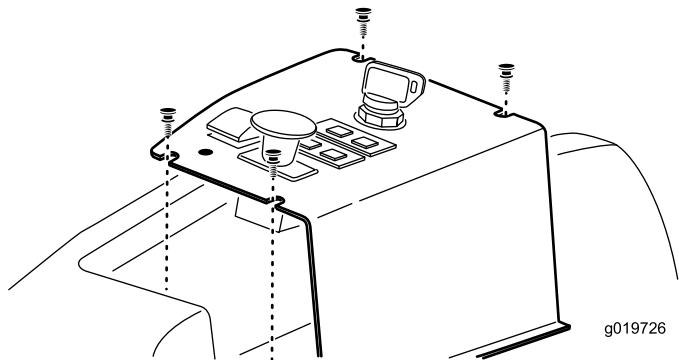
## Installing the Wiring Harness to the Control Panel

**Note:** The auxiliary power unit kit (model 30382) is needed to install this kit.

**Note:** Use zip ties to secure wires to the machine.

1. Remove the screws securing the control panel. Remove the control panel cover (Figure 14).

**Note:** The throttle panel and fuse block mount may need to be removed to gain access to the wire harness.



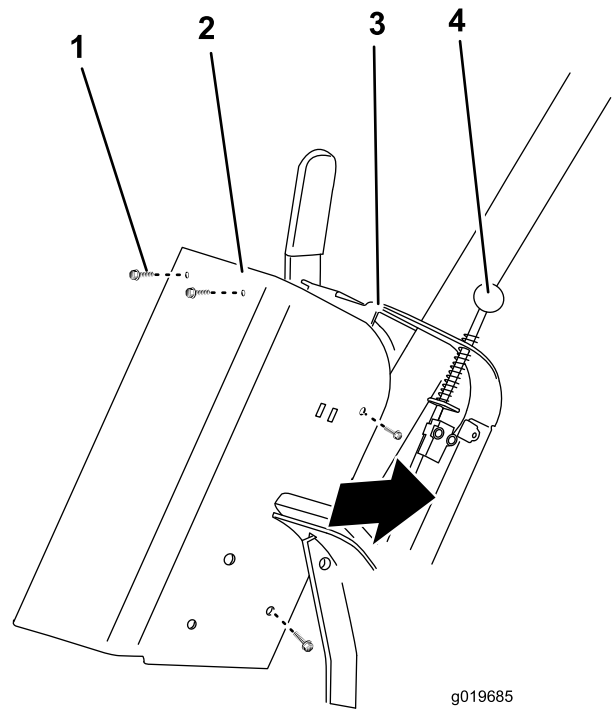
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**Figure 14**

2. Pull the connectors into the control panel.
3. Install the fuse block from the auxiliary power unit kit (model 30382).
4. Install the 15 amp fuse.
5. Connect the two ground wires to the ground terminal block.
6. Connect the positive wire to the 10 amp fuse block wire.
7. Attach the control panel cover.

## Installing the Wiring Harness to the Steering Column

1. Unscrew the parking brake knob.
2. Remove the screws securing the steering tower cover to the steering tower (Figure 15). Remove the steering tower cover.



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**Figure 15**

- 1. Screw
- 2. Steering column tower
- 3. Steering column cover
- 4. Parking brake knob

3. Pull the wire harness through the tower and secure it with a zip tie.
4. Attach the steering tower cover to the steering tower.
5. Install the parking break knob.

# 5

## Installing the Switch Column Assembly

### Parts needed for this procedure:

1	Column bracket assembly
1	Horn Switch assembly
1	Column bracket mount
2	Carriage bolt (3/8 inch)
2	Flange nut (3/8 inch)
1	Column cover
2	Screw (1/2 inch)

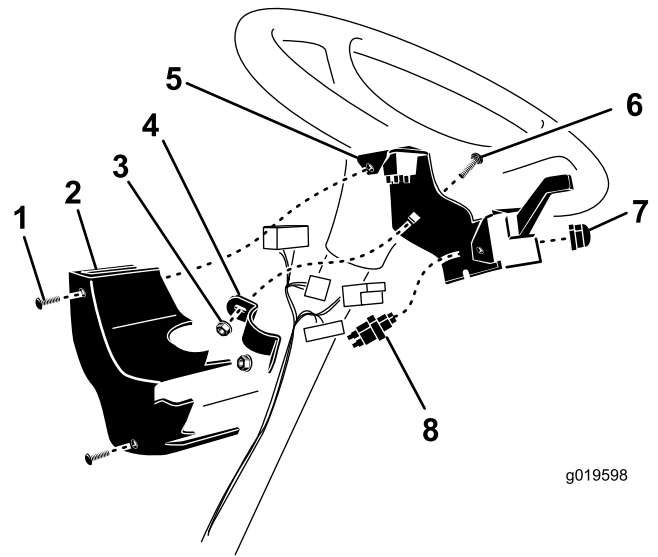
1. Mount the column bracket assembly to the rear of steering column with the column bracket mount, 2 carriage bolts (3/8 inch) and the 2 flange nuts (3/8 inch) (Figure 16).

**Note:** Position the column bracket as high as possible on the steering column as shown in Figure 16. Ensure that the column bracket does not interfere with the steering wheel.

**Note:** Over tightening the carriage screws/flange nuts may distort the column bracket prohibiting the cover from being installed.

2. Mount the horn switch to the column bracket with the rubber horn button (Figure 16).

**Note:** Do not use the silver fastener button included with the horn.



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Figure 16

- |                         |                            |
|-------------------------|----------------------------|
| 1. Screw (2)            | 5. Column bracket assembly |
| 2. Column Cover         | 6. Carriage screw          |
| 3. Flange nut           | 7. Horn button             |
| 4. Column bracket mount | 8. Horn switch             |

3. After the wire harness is connected to the switches, mount the column cover to the column bracket with the 2 screws (1/2 inch) (Figure 16).

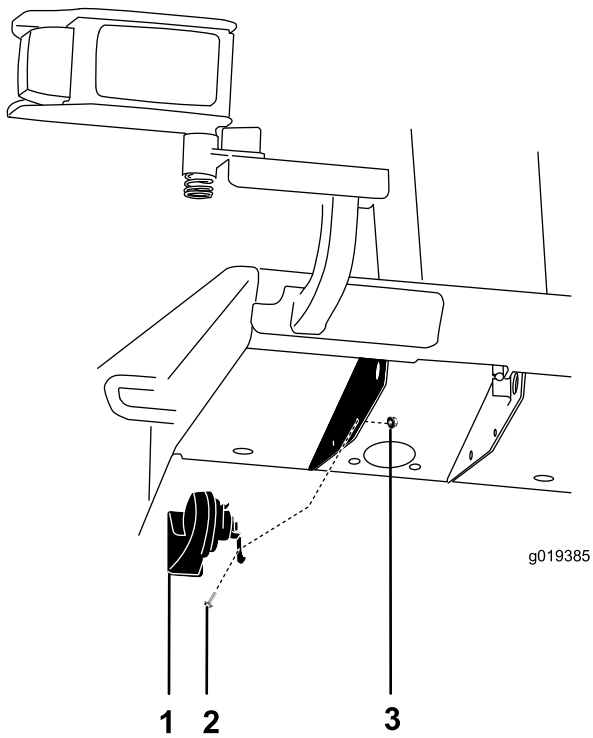
# 6

## Installing the Horn

### Parts needed for this procedure:

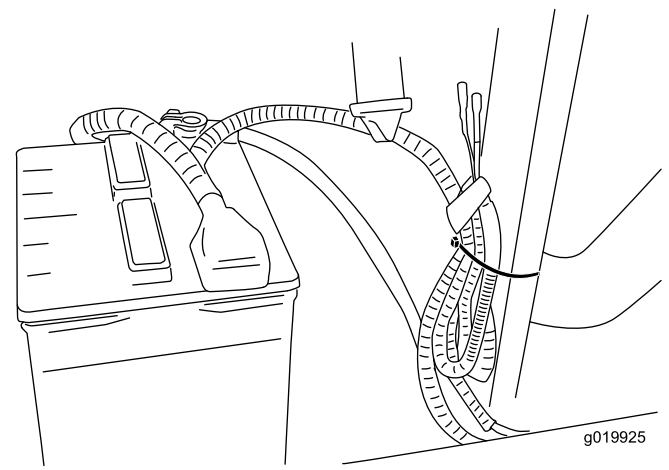
1	Horn assembly
1	Screw (5/16 x 3/4 inch)
1	Flange head nut (5/16 inch)
1	Mounting bracket

1. Remove the existing bracket and set aside the fasteners.
2. Mount the horn bracket included in this kit using the fasteners from the bracket that was removed in the previous step (Figure 17).



**Figure 17**

- 1. Horn
- 2. Screw
- 3. Nut



**Figure 18**

- 3. Connect the negative battery cable to the battery.
- 4. Lower and latch the hood.

- 3. Connect the horn to the wire harness.
- 4. Adjust the horn so that the opening points toward the back of the machine.

# 7

## Connecting the Battery

### No Parts Required

### Procedure

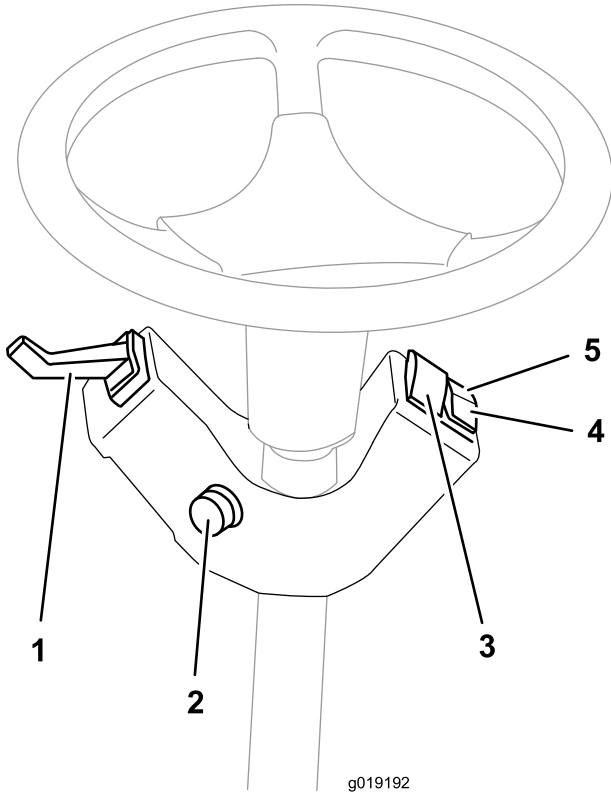
- 1. Raise the hood.
- 2. Connect the wire harness to the positive battery terminal and secure it to the machine with a zip tie (Figure 18).

# Operation

## Using the Light and Hazard Switches

Press the front of the light switch (Figure 19) to activate the front dipped beam head lights and the rear position lights.

**Note:** The rear of the switch (Figure 19) activates the optional work light.



**Figure 19**

- |                    |                     |
|--------------------|---------------------|
| 1. Turn signal arm | 4. Worklight switch |
| 2. Horn button     | 5. Headlamp switch  |
| 3. Hazard switch   |                     |

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Press the hazard light switch (Figure 19) to activate the front and rear flashing hazard lights.

## Horn Button

Press the horn button to activate the horn (Figure 19) .

## Turn Signal

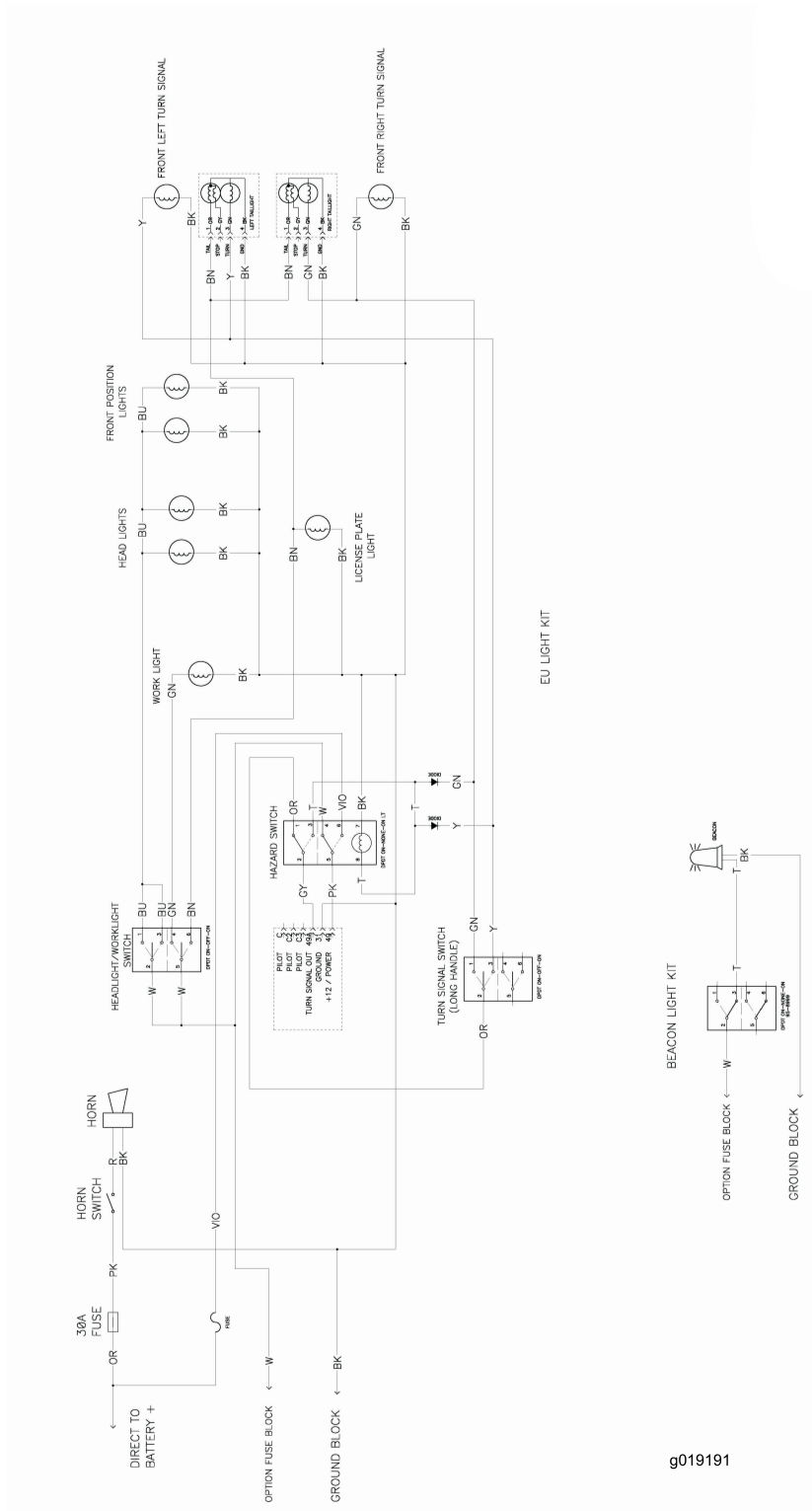
Press down on the turn signal arm (Figure 19) to activate the left turn signal.

Press up on the turn signal arm (Figure 19) to activate the right turn signal.

## Aiming the Headlights

1. Loosen the mounting nuts to adjust the lights.
2. Adjust the lights per local standards.

# Schematics



Electrical Schematic (Rev. A)



**Count on it.**