

Light Kit

Zero-Turn-Radius Riding Mower

Model No. 117-5317

Installation Instructions

⚠ WARNING

CALIFORNIA Proposition 65 Warning

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

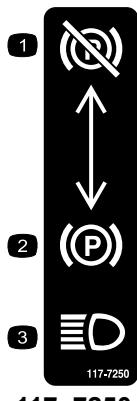


Safety

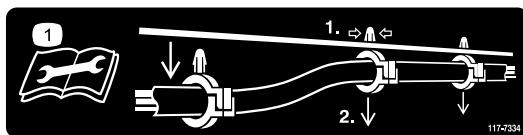
Safety and Instructional Decals



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.



- 1. Parking brake, disengage
- 2. Parking brake, engaged
- 3. Headlights



- 1. Read the *Operator's Manual* before performing maintenance; to remove the accessory harness, pinch the protruding end of the clip and push down at the same time to disengage the clip.

Installation

Loose Parts

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

| Procedure | Description | Qty. | Use |
|-----------|---|-------------|-------------------------------|
| 1 | No parts required | — | |
| 2 | Lamp assembly Self tapping screw (1/4 x 1/2 inch) | 2 4 | Mount the front headlights. |
| 3 | Accessory harness Decal Plastic tie | 1 1 2 | Modify the floor pan. |
| 4 | Lamp assembly Self tapping screw (1/4 x 1/2 inch) Plastic tie | 1 2 1 | Mounting the Side Lamp |
| 5 | Control plate | 1 | Installing the Switch Plate |
| 6 | Plastic tie Fuse 15A | 3 1 | Routing the Accessory Harness |
| 7 | No parts required | — | Testing the Lights |

Note: Determine the left and right sides of the machine from the normal operating position.

1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface, stop the engine, engage the parking brake and remove key from ignition switch.
2. Raise seat to access the battery.
3. Disconnect the negative (-) battery cable from the battery.

2

Mounting the Front Headlights

Parts needed for this procedure:

| | |
|---|-------------------------------------|
| 2 | Lamp assembly |
| 4 | Self tapping screw (1/4 x 1/2 inch) |

Procedure

Note: Model year 2014 and newer machines have existing holes. No drilling is needed for these machines.

1. Locate the flat surface on the front frame between the casters. Mark and drill four holes in the frame to accommodate the lamp assemblies.

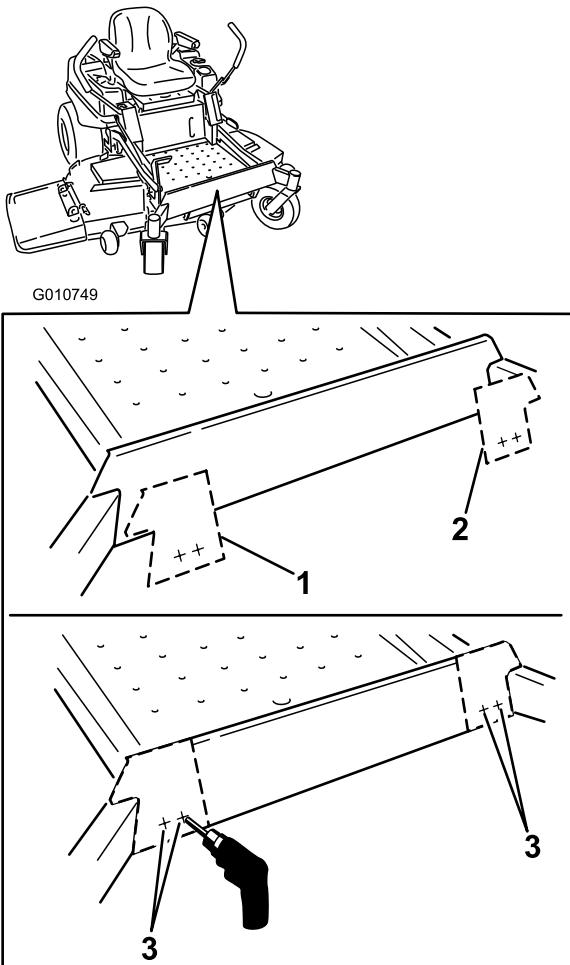


Figure 1

| | |
|--|---------------------|
| 1. Right (from operator's position) front template | 3. Drill holes here |
| 2. Left (from operator's position) front template | |

- A. Locate the templates section at the end of this publication.
- B. Cut out the templates for the front left and right head lamp assemblies.
- C. Place the templates over the foot rest as shown in Figure 1.
- D. Use a 7/32 inch drill bit to drill two holes at each marked spot on the two templates. Four holes in total should be drilled.
- E. Remove the templates and clean or deburr the holes.

2. Locate the lamp assemblies from loose parts and make note drain hole location on the lamp housings. Lamp assemblies need to be installed with the drain holes facing down.

Important: Failure to install the lamp assemblies with drain holes facing down can cause damage to the light kit.

3. Install the lamp assemblies to the frame with the drain holes facing down at the drilled holes using four self tapping screws (1/4 x 1/2 inch) Figure 2. Do not tighten at this time to allow for further adjustment.

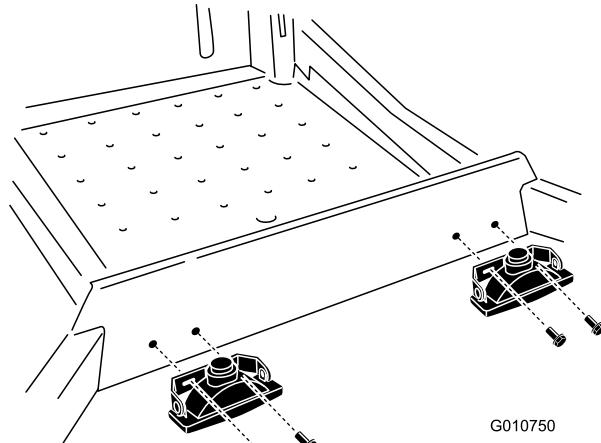


Figure 2

3

Modifying the Floor Pan

Parts needed for this procedure:

| | |
|---|-------------------|
| 1 | Accessory harness |
| 1 | Decal |
| 2 | Plastic tie |

Procedure

Note: Model year 2014 and newer machines have existing holes. No drilling is needed for these machines.

1. On the left side of the floor pan drill three holes to accommodate the routing of the accessory harness.

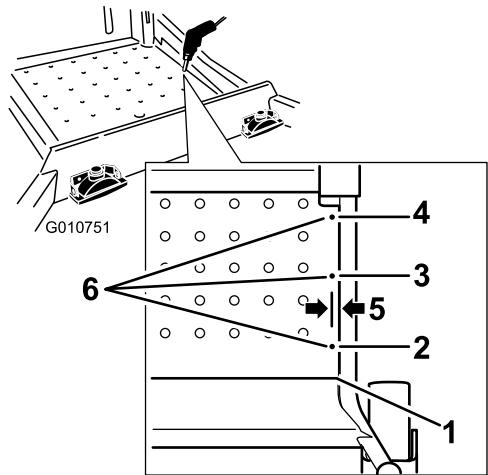


Figure 3

1. Front edge of the floor pan
2. 7.62 cm (3 inches) away from the front of the floor pan
3. 22.86 cm (9 inches) away from the front of the floor pan
4. 38.1 cm (15 inches) away from the front of the floor pan
5. 12.7 mm (1/2 inch) away from the side
6. Drill holes here

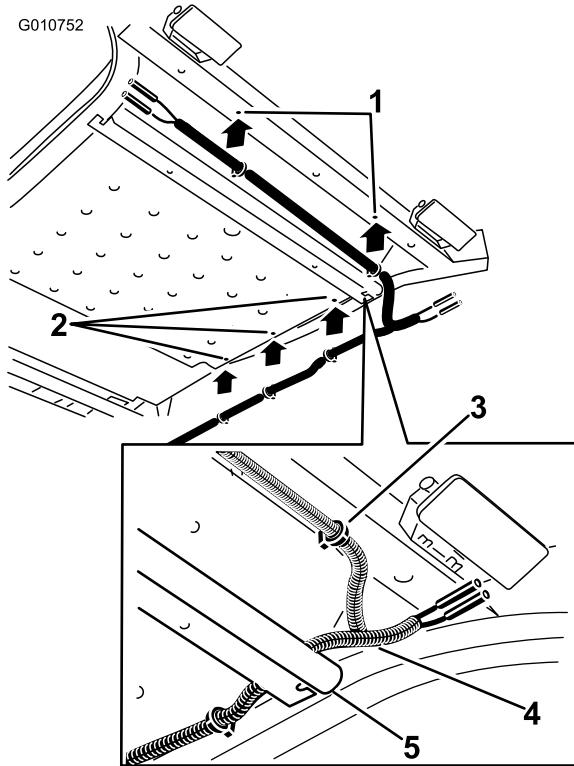


Figure 4

- A. Measure from the front edge of the pan rearward to mark locations at 7.62, 22.86, and 38.1 cm (3, 9, and 15 inches) (Figure 3).
- B. Mark spots that are 12.7 mm (1/2 inch) away from the wall at those spots.
- C. Use a 7/32 drill bit to drill holes at the marked spots.
- D. Clean and deburr the holes.

Note: Model year 2014 and newer machines, move the retaining clips to align with the holes in the floor pan (Figure 4).

2. Locate the accessory harness in loose parts. Locate the end of the harness with two retaining clips between two sets of bullet connectors. Route this end of the harness forward over the front support bar of the lift assembly to the front head lamps (Figure 4).

1. Holes in the front frame, existing
2. Holes in the floor plan, drilled
3. Retaining clip
4. Front harness routed over the front support of the lift rod
5. Front support bar of the lift rod assembly

3. Secure the harness to the under side of the floor pan as you route the harness by inserting the retaining clips into the holes drilled previously.
4. Secure the harness to the under side of the front frame as you route the harness across by inserting the retaining clips into the existing holes.
5. Connect the lamps to the accessory harness (Figure 5).

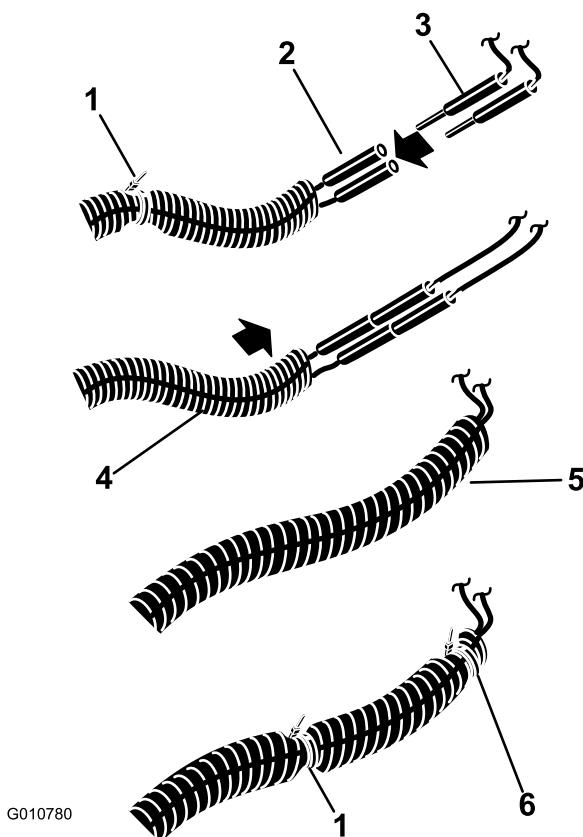


Figure 5

| | |
|---|--|
| 1. Plastic tie, existing | 4. Accessory harness sleeve pulled back |
| 2. Accessory harness connectors | 5. Accessory harness sleeve pulled over the connectors |
| 3. Bullet connectors from the lamp assembly | 6. Plastic tie, new |

A. Connect the black wire on the harness to the black wire coming from the lamp assembly. Connect the white wire on the harness to the white wire coming from the lamp assembly. Make sure terminals are fully seated.

Important: The connection is polarity sensitive. The wire colors must be matched to ensure the proper function of the light kit.

B. Slide accessory harness sleeve over the mated connectors to protect them from the elements.

C. Use a plastic tie to secure the harness sleeve over the mated connectors.

D. Repeat for this procedure for the other lamp assembly connection.

Note: Model year 2014 and newer machines, install the decal onto the frame.

6. Install the decal as shown in Figure 6. Align the middle arrow on the decal with the middle clip.

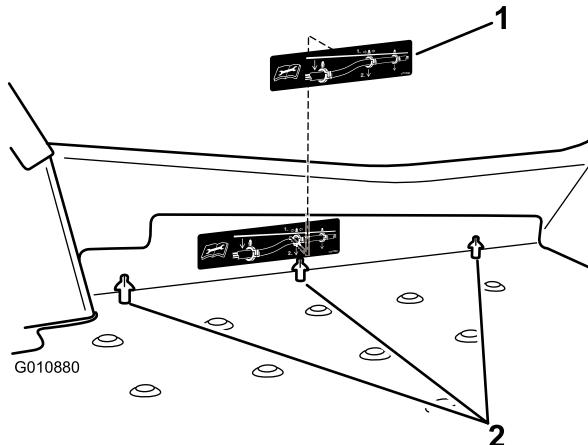


Figure 6

1. Decal
2. Accessory clip

Important: When removing the floor pan to perform maintenance on a machine with a light kit installed, you must disconnect the accessory harness from the floor pan before removal to avoid damaging the harness.

To remove the harness from the floor pan pinch the protruding end of the clips and push down at the same time to disengage the clip.

4

Mounting the Side Lamp

Parts needed for this procedure:

| | |
|---|-------------------------------------|
| 1 | Lamp assembly |
| 2 | Self tapping screw (1/4 x 1/2 inch) |
| 1 | Plastic tie |

Procedure

1. Locate the existing control plate on the left hand side of the machine. Remove the screw retaining the plate and remove the plate.

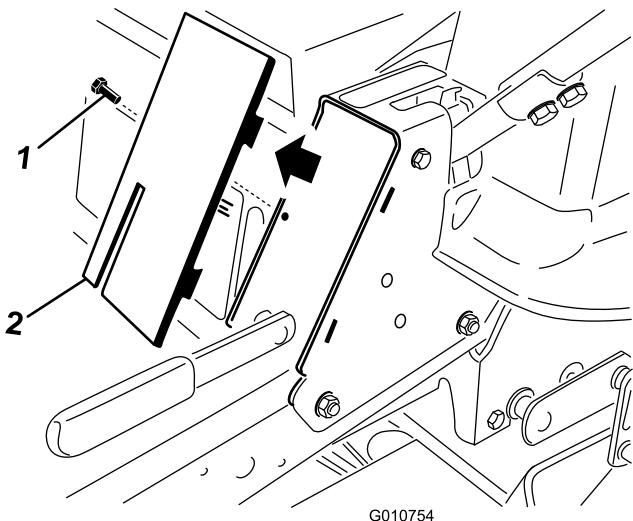


Figure 7

1. Screw
2. Control plate, existing

2. Mark and drill two holes in the frame to accommodate the side lamp assembly.

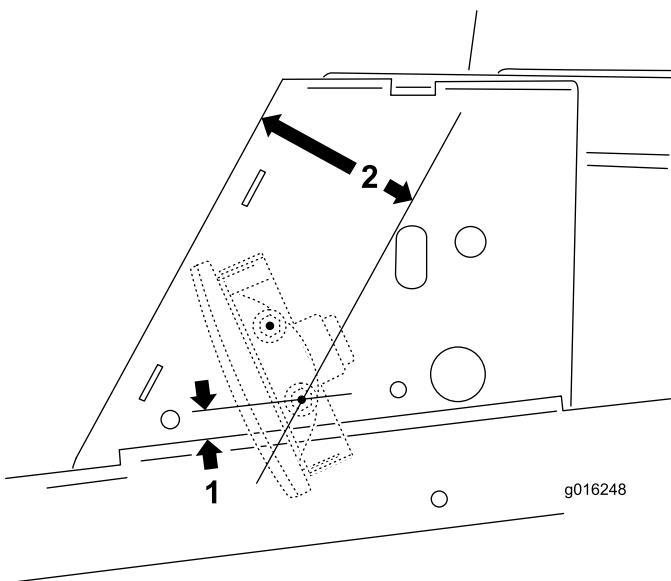


Figure 8

1. 1/2 inch
2. 3 inches

- Measure a 1/2 inch from the bottom edge of the control arm housing and score a line (Figure 8).
- Measure 3 inches from the forward edge of the control arm housing and score a line (Figure 8).
- Place the lamp assembly over the intersection of the 2 lines, aligning the lower hole in the bracket with the intersection point.
- Pivot the lamp assembly on that point until the desired angle is achieved. Mark the point on the housing for the upper hole in the lamp assembly bracket.

- Remove the lamp assembly and using a 7/32 drill bit, drill two holes at the marked points on the housing. Clean or deburr the holes when finished.
- Locate the lamp assembly from loose parts and make note drain hole location on the lamp housing. The lamp assembly needs to be installed with the drain hole facing down.

Important: Failure to install the lamp assembly with the drain hole facing down can cause damage to the light kit.

- Install the lamp assembly to the frame with the drain hole facing down at the drilled holes using two self tapping screws (1/4 x 1/2 inch) as shown in Figure 9. Do not tighten at this time.

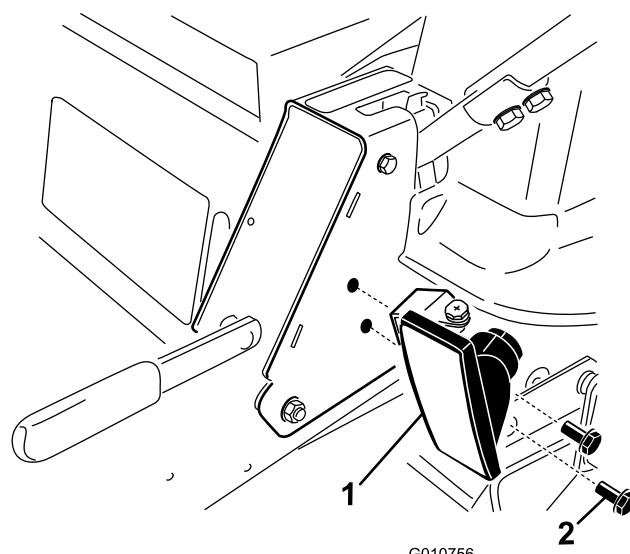


Figure 9

5. Connect the lamp to the accessory harness (Figure 10).

5

Installing the Control Plate

Parts needed for this procedure:

| | |
|---|---------------|
| 1 | Control plate |
|---|---------------|

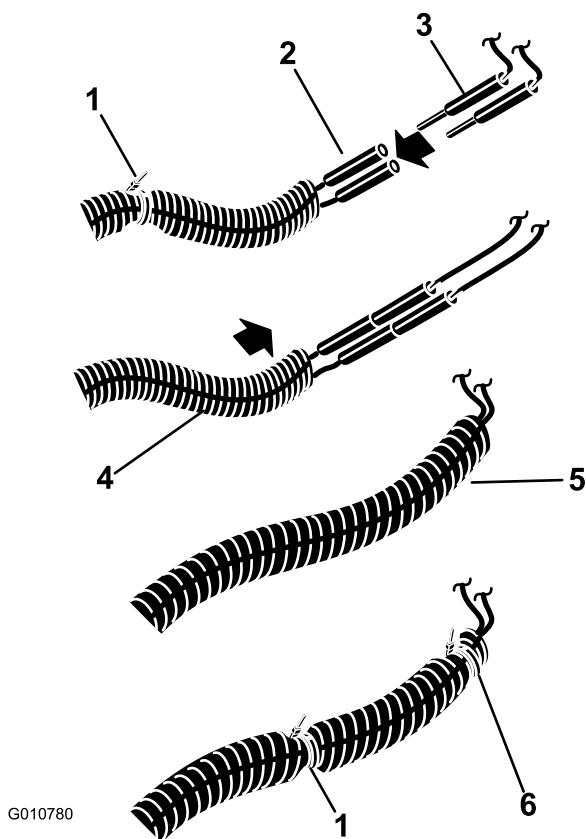


Figure 10

| | |
|---|--|
| 1. Plastic tie, existing | 4. Accessory harness sleeve pulled back |
| 2. Accessory harness connectors | 5. Accessory harness sleeve pulled over the connectors |
| 3. Bullet connectors from the lamp assembly | 6. Plastic tie, new |

A. Connect the black wire on the harness to the black wire coming from the lamp assembly. Connect the white wire on the harness to the white wire coming from the lamp assembly. Make sure terminals are fully seated.

Important: The connection is polarity sensitive. The wire colors must be matched to ensure the proper function of the light kit.

B. Slide accessory harness sleeve over the mated connectors to protect them from the elements.

C. Use a plastic tie to secure the harness sleeve over the mated connectors.

Procedure

1. Locate the switch connector lead on the accessory harness. Route the switch connector up from underneath the frame.

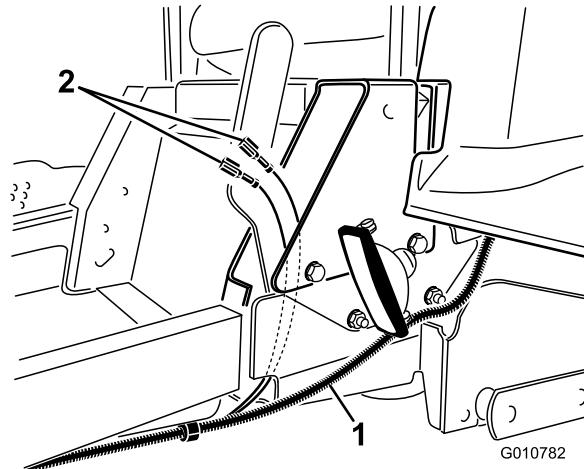


Figure 11

| | |
|--|--|
| 1. Accessory harness, routed rearward. | 2. Light switch connector lead, routed under and inside the frame. |
|--|--|

2. Locate the new control plate with the light switch in loose parts.
3. Connect the light switch lead to the switch on the back side of the plate.

Note: The wires connecting the harness to the switch are non specific and do not need to be matched.

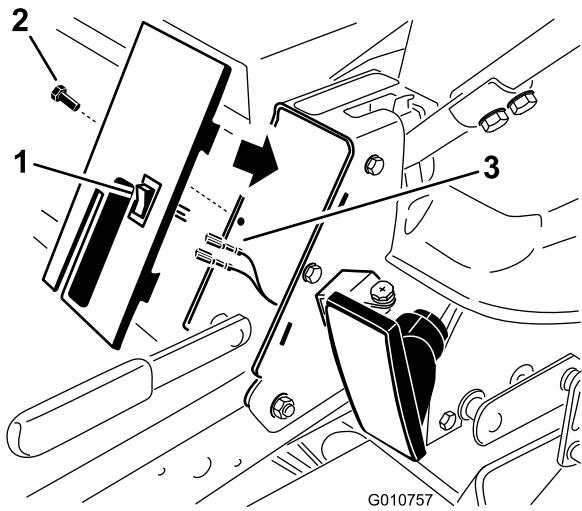


Figure 12

- 1. New control plate with light switch
- 2. Screw, removed previously
- 3. Light switch leads, accessory harness

- 4. Install the control plate to the machine frame. Align the tabs in the plates with slots in the frame. Make sure the slot in the plate accommodates the parking brake lever.
- 5. Secure the plate to the machine frame using the screw removed previously.

6

Routing the Accessory Harness

Parts needed for this procedure:

| | |
|---|-------------|
| 3 | Plastic tie |
| 1 | Fuse 15A |

Procedure

1. Route the remaining accessory harness up under the left pod and along the existing wire harness as it routes behind the operator's seat and up to the underside of the control panel.

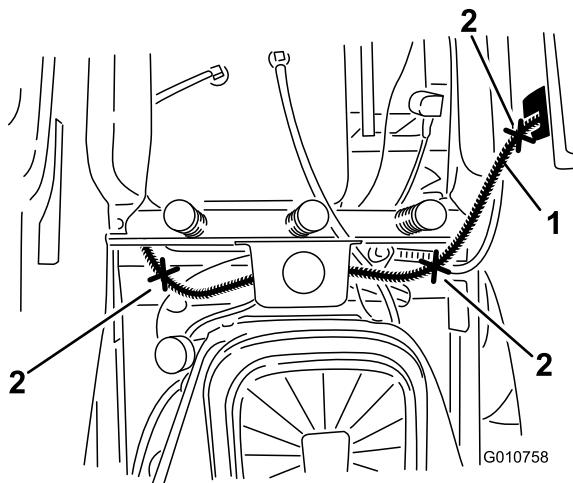


Figure 13

- 1. Accessory harness
- 2. Plastic ties

2. Locate the open connector on the main wire harness underneath the control panel.
3. Connect the accessory harness to the wiring harness on the main connector.
4. Use plastic ties to secure the accessory harness to the main wiring harness. Ensure the harness is not loose, in contact with hot engine components or pinched during the normal operation of the machine.
5. For 2013 and older models, install the 15A fuse into the open accessory circuit in fuse block (Figure 14).

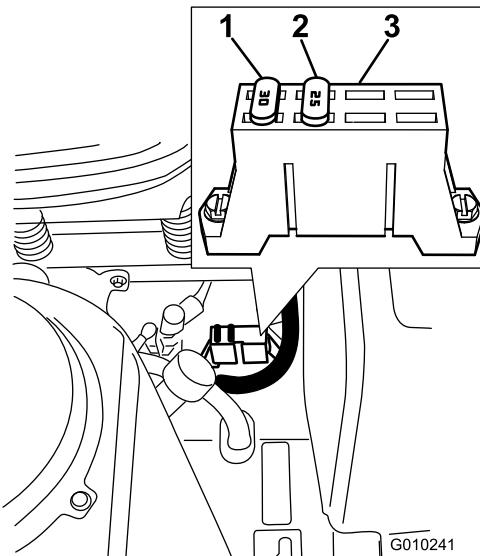


Figure 14

Fuse block for 2013 and older models shown

- 1. Existing fuse
- 2. Existing fuse
- 3. Open accessory slot

6. For 2014 and newer models, install the 15A fuse into the open accessory slot (Figure 15).

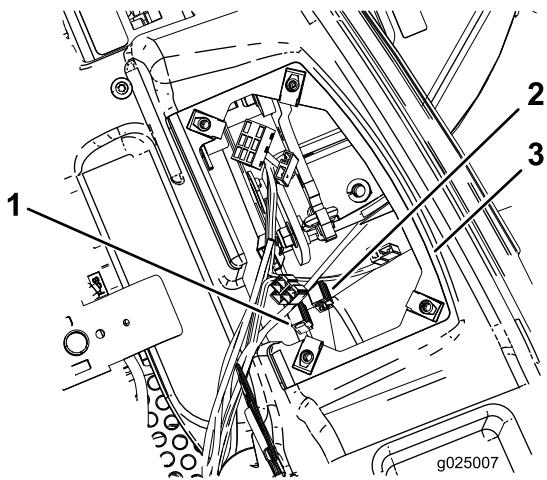


Figure 15

Fuse block for 2014 and newer models shown

- 1. Engine fuse
- 2. Open accessory slot
- 3. Side console

7

Testing the Lights

No Parts Required

Procedure

Turn the key switch to run but do not attempt to start the engine.

Now use the switch on the control plate to turn on the lights and verify operation.

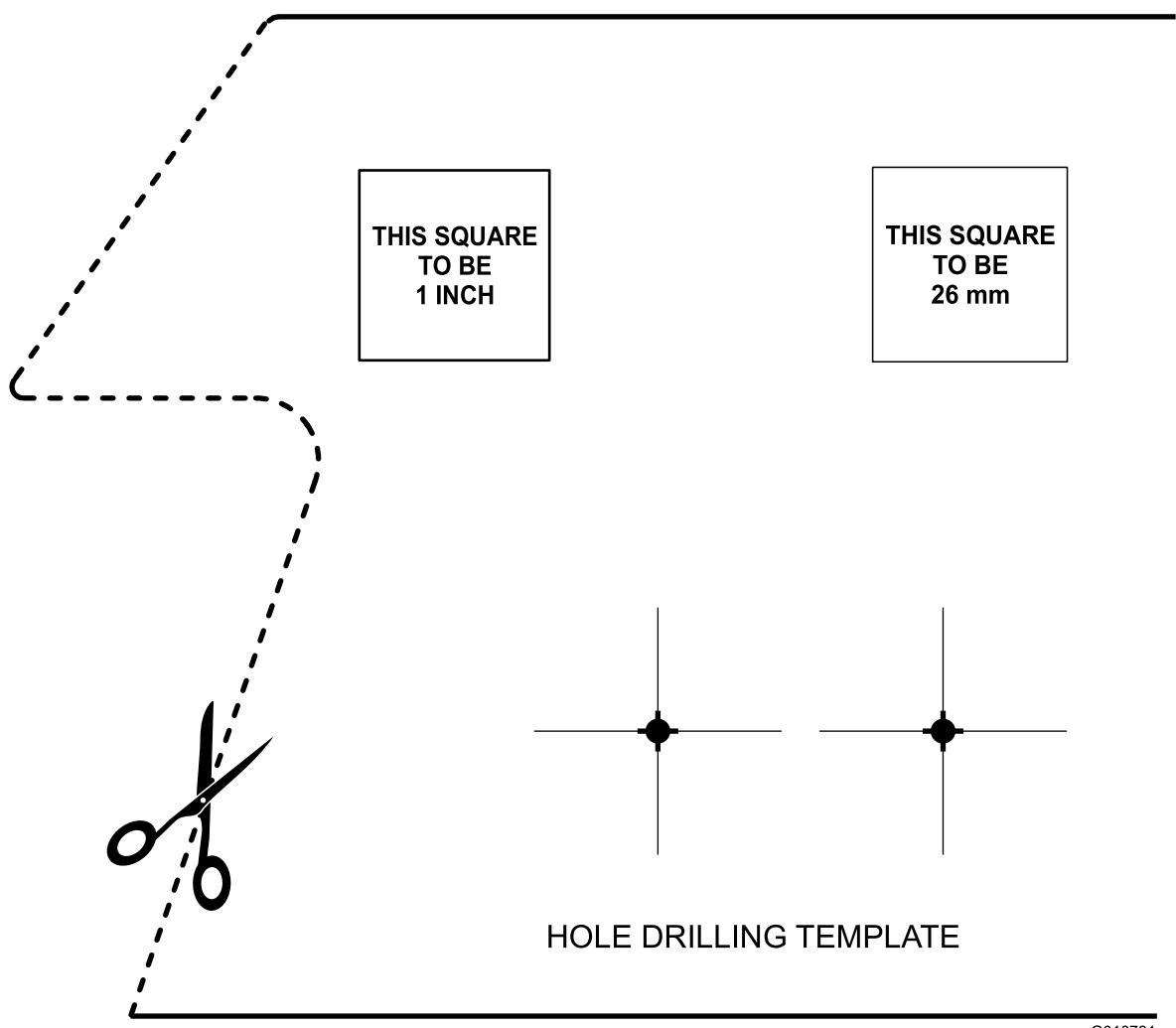
CAUTION

Halogen lamps can become extremely hot while operating and may cause burns.

Allow the lamps to cool before adjusting if necessary.

If necessary, adjust the lamps so that the light is cast as desired. Tighten all loose fasteners to complete the installation.

If the lights do not illuminate, check the 15 amp fuse to see if it has been damaged. Then confirm all wires correspond with their matching colors for each lamp assembly. Correct any mismatched pairs and replace the 15 amp fuse. **Do Not** substitute a different amperage fuse.

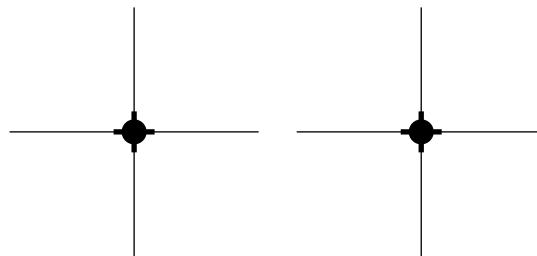


G010781

Notes:

THIS SQUARE
TO BE
1 INCH

THIS SQUARE
TO BE
26 mm



HOLE DRILLING TEMPLATE

G010811

Notes:

Notes:

