Installation Instructions

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	Left bracket	1	
	Right bracket	1	Install the brackets.
	Bolt	4	
	Nut	4	
	Wire harness	1	
	Cable clamp	8	
	Short bolt	5	
2	Nut	5	Install the wires.
	Large grommet	2	
	Small grommet	1	
	Cable tie	4	
	Left light	1	
	Right light	1	
	Center light	1	
2	Center-light harness	1	Install the lights.
3	License-plate holder	1	
	Long bolt	2	
	Nut	6	
	Cable tie	1	
4	Reflector	2	
	Short bolt	2	Install the reflectors.
	Nut	2	
5	No parts required	-	Replace the light bulbs.



Installing the Brackets

Parts needed for this procedure:

1	Left bracket
1	Right bracket
4	Bolt
4	Nut

Procedure

1. Align the bolt holes on the end of the long side of the left bracket (L-shaped) with the bolt holes in the left side of the frame, near the handwheel (Figure 1).

Note: For older models, drill 2 holes (7.5 mm or 9/32 inch) in the frame, spaced 51 mm (2 inches) apart, to accommodate the 2 mounting bolts for the bracket.

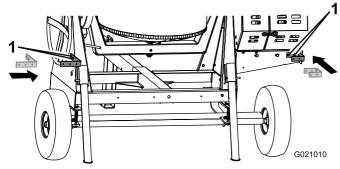


Figure 1

- 1. Bolt holes
- 2. Insert a bolt through each of the 2 holes in the bracket and the frame, and secure each bolt with a nut.
- Align the bolt holes on 1 end of the right bracket (U-shaped) with the bolt holes in the engine-deck support.

Note: For older models, drill 2 holes (7.5 mm or 9/32 inch) in the engine-deck support, spaced 51 mm (2 inches) apart, to accommodate the 2 mounting bolts for the bracket.

4. Insert a bolt through each of the 2 holes in the bracket and the engine-deck support, and secure each bolt with a nut.

2

Installing the Wires

Parts needed for this procedure:

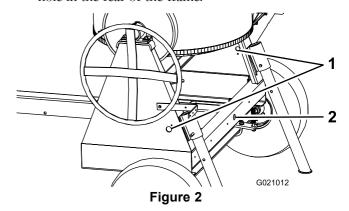
1	Wire harness
8	Cable clamp
5	Short bolt
5	Nut
2	Large grommet
1	Small grommet
4	Cable tie

Procedure

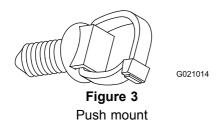
Note: Throughout the wire installation, make sure that the wires are secure but not pulled tight. Use the cable ties as needed to secure to wires, and keep 1 cable tie for Installing the Center Light (page 5).

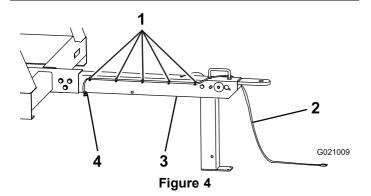
1. Install the large grommets into the holes in the sides of the frame and the small grommet into the hole in the rear of the frame, aligned with the center frame rail (Figure 2).

Note: For older models, drill a 41 mm (1-5/8 inch) hole in each side of the frame, and a 22 mm (7/8 inch) hole in the rear of the frame.



- 1. Large grommet holes
- 2. Small grommet hole
- 2. Ensure that the tongue is **attached** to the machine, and push the 5 pre-installed push mounts (Figure 3) at the front of the wire harness into the 5 holes in the right side of the tongue (Figure 4).



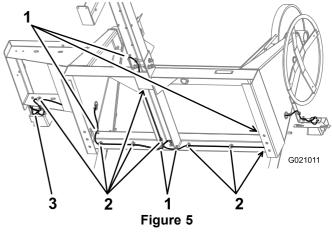


- 1. Push mounts
- 3. Tongue
- 2. Wire harness
- 4. Edge clip
- 3. Route the front of the wire harness through the tongue handle (Figure 4).

Note: For older models, drill 5 holes (6.75 mm or 17/64 inch), spaced 15.2 cm (6 inches) apart, along the right side of the tongue.

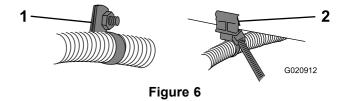
- 4. Secure the nearest edge clip to the bottom edge of the tongue, and route the wire harness up into the inside of the center of the frame, toward the back of the machine (Figure 4).
- 5. Route the wire harness as shown in Figure 5.

Note: Ensure that each side of the wire harness goes to the correct side of the machine. If you switch the wiring of the lights, each turn signal will flash on the wrong side. The side with the **green** wire is for the **right** side, and the side with the **yellow** wire is for the **left** side.



Frame underside shown for clarity

- 1. Edge clips
- 3. Wire harness
- 2. Cable clamps
- 6. Use cable clamps and the pre-installed edge clips to secure the wire harness along the inside of the frame (Figure 6).



Cable clamp

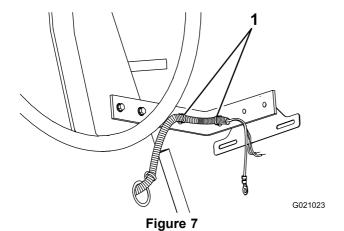
2. Edge clip

Note: Install 2 of the cable clamps later, when you install the **center** light.

To use a cable clamp, spread it apart and fit the wire harness into it. Then squeeze the clamp back together. Fasten the clamp to the frame of the machine with a nut and a bolt, using the pre-drilled holes along the frame. Tighten the nuts and bolts until they are secure. For older models, drill a 7.5 mm (9/32 inch) hole for each bolt.

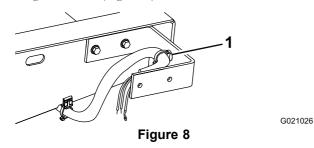
To use a pre-installed edge clip, push it into position along the edge of the frame (Figure 6).

7. Push the 2 pre-installed push mounts near the **yellow** wire into the 2 corner holes in the **left** light bracket, so that the wires are pointing away from the machine (Figure 7).



1. Push mounts

8. Push the pre-installed push mount near the **green** wire into the open hole closest to the bolts, in the **right** light bracket (Figure 8).



1. Push mount

9. To secure the cable clamp near the **right** light bracket, use a bolt that secures the bracket (Figure 9).

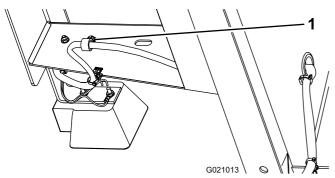


Figure 9

1. Nut and bolt

3

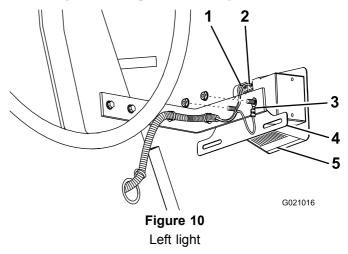
Installing the Lights

Parts needed for this procedure:

1	Left light
1	Right light
1	Center light
1	Center-light harness
1	License-plate holder
2	Long bolt
6	Nut
1	Cable tie

Installing the Side Lights

1. Position the license-plate holder onto the posts of the light with the clear bottom lens so that the clear lens is facing the license-plate holder (Figure 10).



- Yellow wire—stop and turn 4.
- 4. License-plate holder
- 2. Brown wire—tail light
- Clear lens
- White wire—ground

Note: This is the left light, which illuminates the license plate through the clear lens.

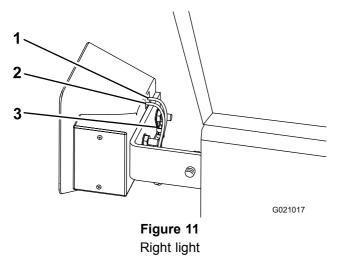
- 2. Install the light so that the posts go into the holes in the bracket on the left side of the machine (Figure 10).
- 3. Install the round terminal of the ground wire (white) onto the outside threaded post (Figure 10).
- Install the nuts onto the threaded posts; tighten them
 by hand to prevent cross-threading, then use a wrench
 to secure them until they are snug.

Important: Do not overtighten the nuts, or the plastic housing will break.

5. Push the wires into the appropriate holes in the light (Figure 10).

Note: If you need to remove a wire from the light, insert the end of a paper clip into the small hole under the wire, then pull the wire out.

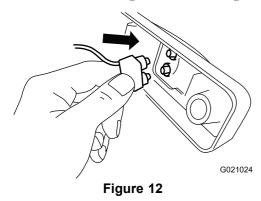
Repeat steps 3 through 6 for the light on the right side of the machine.



- Brown wire—tail light
- 3. White wire-ground
- 2. Green wire—stop and turn

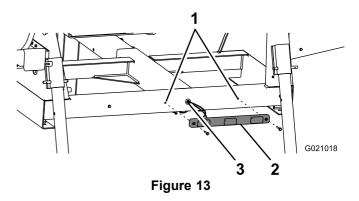
Installing the Center Light

1. Install the connectors of the center-light harness onto the back of the center light as shown in Figure 12.



2. Route the ends of the wires of the center light through the hole in the rear of the frame, and secure the center light with a nut and a **long** bolt on each side of the light (Figure 13).

Note: For older models, drill 2 holes (7.5 mm or 9/32 inch) in the frame, spaced 40.8 cm (16-1/16 inches) apart, to accommodate the 2 mounting bolts for the center light.



- 1. Bolt holes
- 2. Center light
- 3. Grommet hole

Note: Use the nuts and long bolts that secure the center light to also secure 2 cable clamps (Figure 14); use these to help secure the main wire harness. You installed these cable clamps in step 6 of procedure 2 Installing the Wires (page 2).

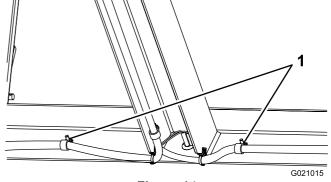
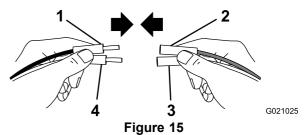


Figure 14

- 1. Nuts and bolts
- 3. Connect the wires of the center light with the main wire harness as shown in Figure 15.



- 1. Black wire—tail light
- 3. White wire—ground
- 2. Brown wire—tail light
- 4. White wire-ground

Note: Use the cable tie to secure any excess wire near the center light.



Installing the Reflectors

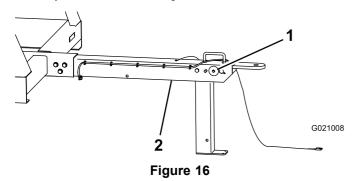
Parts needed for this procedure:

2	Reflector
2	Short bolt
2	Nut

Procedure

1. Align the hole in a reflector to the hole in 1 side of the tongue of the machine (Figure 16).

Note: For older models, drill a 7.5 mm (9/32 inch) hole for each bolt, centered between the safety-chain keyhole and the clevis-pin hole.



- 1. Reflector
- 2. Tongue
- 2. Insert a bolt through the hole in the reflector and the tongue, and install a nut on the other side.
- 3. Use a wrench on the bolt and another wrench on the nut to tighten them until they are snug.

Important: Do not overtighten the nuts and bolts, or the plastic reflectors will break.

4. Repeat steps 1 through 3 for the other side of the tongue.

5

Replacing the Light Bulbs

No Parts Required

Replacing the Rear-facing Side Bulbs

Note: The left rear-facing bulb also illuminates license plate.

1. Use a screwdriver to remove the 4 screws from the large square lens on the light (Figure 17).

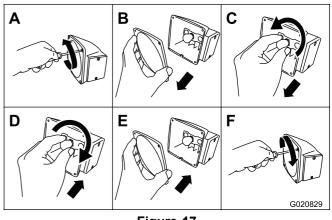


Figure 17

- 2. Remove the lens (Figure 17).
- 3. Push and twist the bulb counterclockwise to remove it from the socket (Figure 17).
- 4. Push a new 1157 bulb into the socket and then twist it clockwise (Figure 17).
- 5. Install the lens and the 4 screws (Figure 17).

Replacing the Side-facing Bulbs

1. Use a screwdriver to remove the 2 screws from the small rectangular lens on the side of the light (Figure 18).

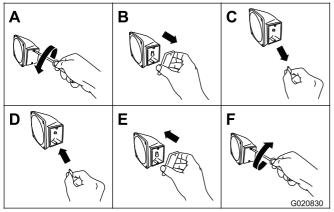


Figure 18

- 2. Remove the lens (Figure 18).
- 3. Pull the bulb out of the socket (Figure 18).
- 4. Push a new 168 bulb into the socket (Figure 18).
- 5. Install the lens and the 2 screws (Figure 18).

Replacing the Center Bulbs

Note: Each center bulb is integrated into the lens.

1. Push 1 of the tabs over that holds the lens assembly in place, and pull the lens away from the rest of the center-light assembly (Figure 19).

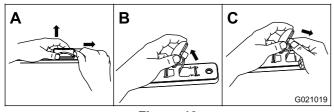


Figure 19

- 2. Disconnect the wire connector from the lens assembly.
- 3. Connect the wire connector to a new lens assembly, and install the lens assembly onto the rest of the center-light assembly (Figure 20).

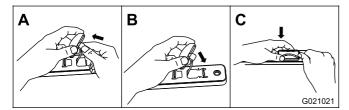


Figure 20

