



Road Light Kit

Groundsmaster® 580-D

Model No. 30613

Form No. 3355-252 Rev. A

Installation Instructions

Initial Preparation

1. Unlatch, raise and secure the hood with the prop rod. Unlatch and remove the left side panel.
2. Remove the capscrews securing the battery tray and slide the tray out.
3. Remove the negative (-) battery cable connections from both batteries.



Warning



Wear safety goggles and rubber gloves when working with batteries. Since the gases are explosive, keep open flames and electrical spark away from batteries. Do not smoke.

Remove the Plug from the Control Housing

1. Remove the plug from the hole in the front of the control housing (Fig. 1).

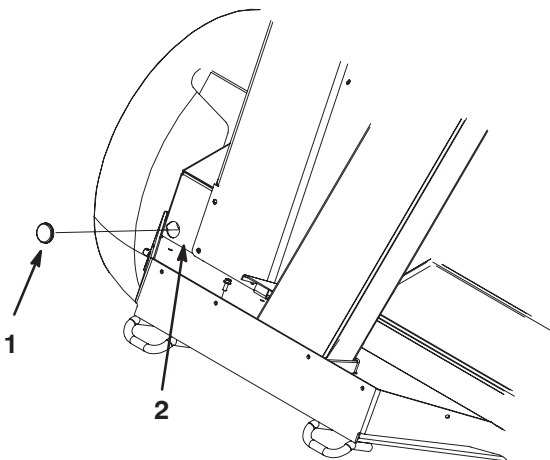


Figure 1

1. Plug 2. Control housing

2. Install the rubber grommet into the hole in the panel (Fig. 2).

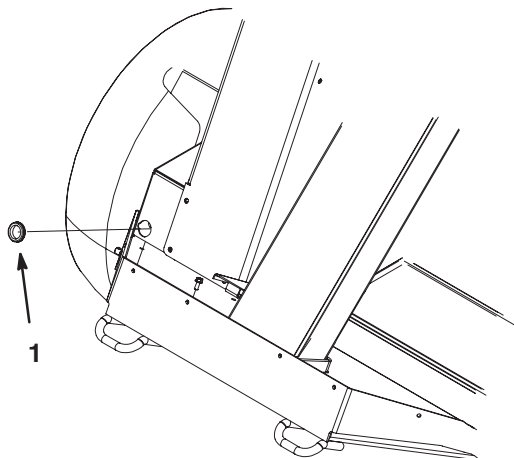


Figure 2

1. Rubber grommet

Install the Light Switch

1. Locate the light switch mounting location on the control panel (Fig. 3).
2. Open the control panel cover. Using a punch and hammer, knock out the plug at mounting hole location. Discard the plug.



Figure 3

1. Light switch mount hole 2. Control panel lift knob

3. Install the toggle switch into the control panel so the terminals are positioning to the front (Fig. 4).

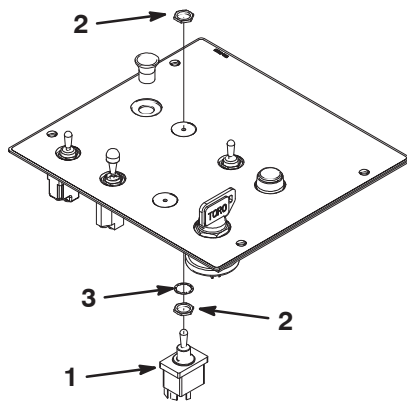


Figure 4

1. Toggle switch
2. Lock nut
3. Lock washer

4. Locate the switch wire harness under the control panel.
5. Route the harness to the switch and plug the connector into the switch terminals.

Mount the Reflective Tape

1. Affix a reflective tape strip onto the center of each fender lip, positioning as shown in figure 5.

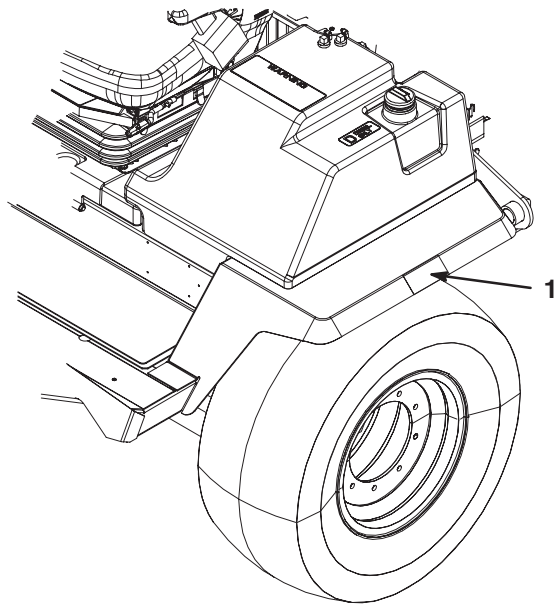


Figure 5

1. Reflective tape

2. Affix a reflective tape strip onto each wing deck skid, positioning as shown in figure 6. The tape strip must be in clear view from the back of the machine.

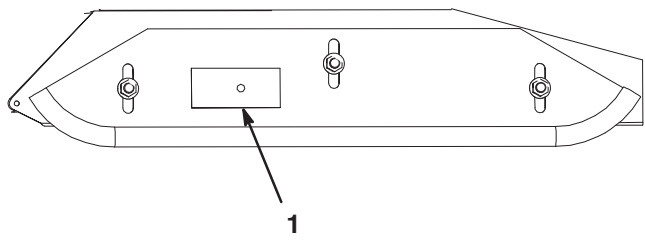


Figure 6

1. Reflective tape

Mount the Horn

1. Secure the horn mounting bracket to the floor plate brace with (2) 5/16 x 3/4" screws and nuts (Fig. 7).

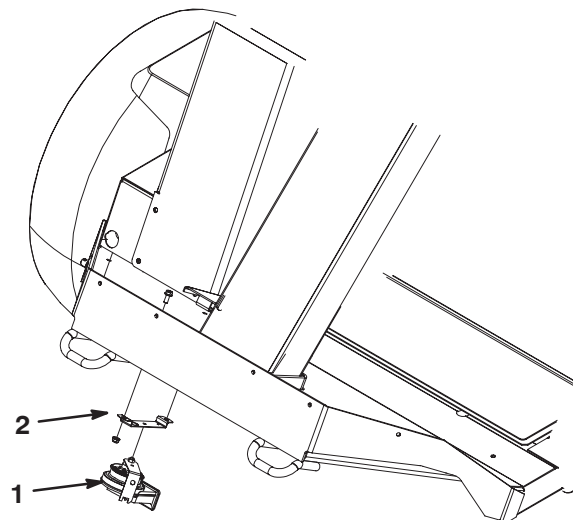


Figure 7

1. Horn
2. Mounting bracket

2. Locate the wire harness under the machine.
3. Route the harness to the horn and plug the connector into the horn terminals.

Install the Signal Controller and the Dual Rate Flasher

1. Remove the front cover of the steering tower (Fig. 8).

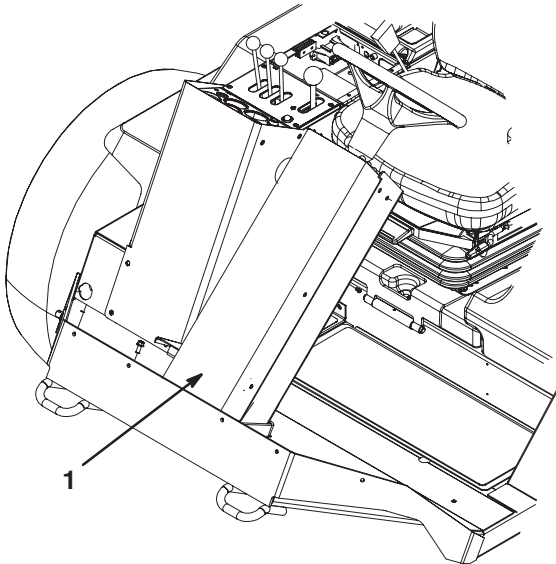


Figure 8

1. Front cover of steering tower

2. Secure the signal controller mounting bracket to the steering tower with (2) screws and nuts (Fig. 9).

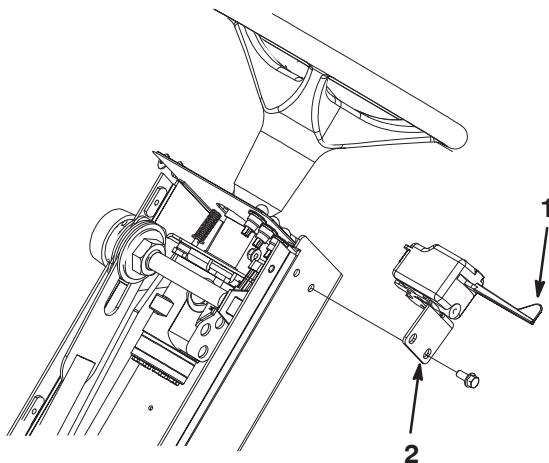


Figure 9

1. Signal controller
2. Mounting bracket

3. Insert the signal controller cables through the opening in the steering tower panel.
4. Locate the wire harness for signal controller in the steering tower. Route the harness to the signal controller wire harness.
5. Connect the signal controller wire harness to the machine harness.
6. Mount the dual rate flasher to the steering tower with (4) #10 screws and nuts, positioning as shown in figure 10.

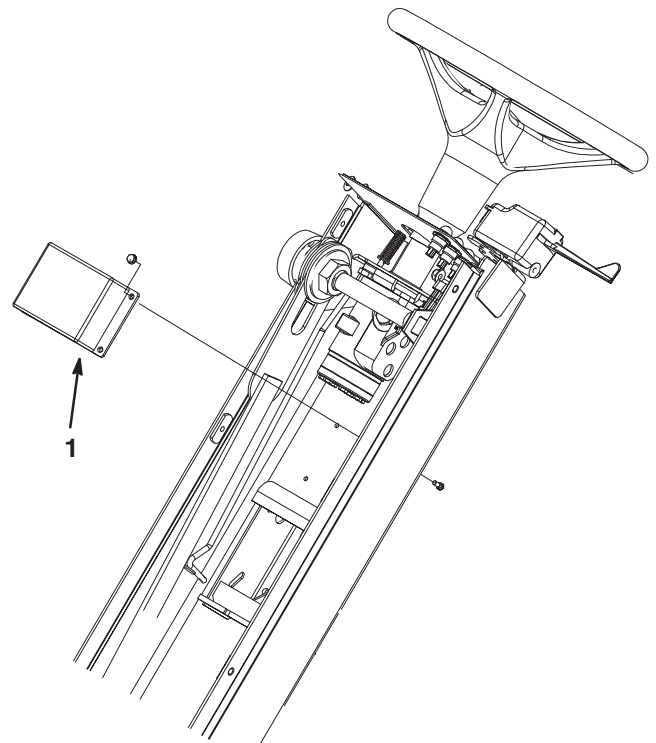


Figure 10

1. Dual rate flasher

Note: If the mounting holes for the dual rate flasher are not in the steering tower, use the dimensions shown in figure 11 to locate, mark and drill (4) .203" dia. mounting holes.

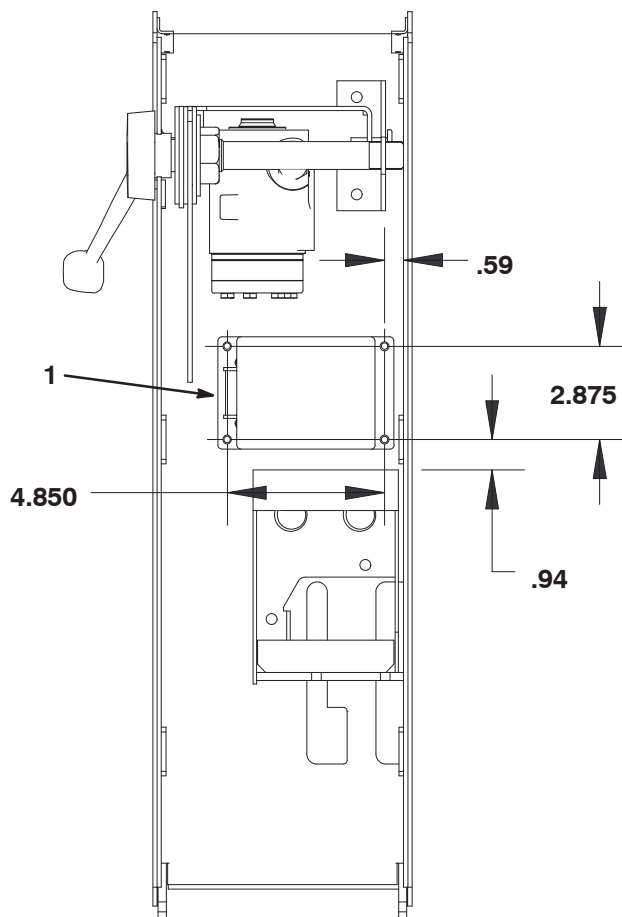


Figure 11

1. Dual rate flasher

7. Connect the machines wire harness to the dual rate flasher.
8. Bundle the excess cables together and secure it to a power steering hose with cable ties.

Note: Use cable ties where necessary to prevent the harness from possible damage.

9. Install the front cover to the steering tower.

Install the Front Shroud Assembly

1. Secure the headlight assemblies to the top of the front shroud with carriage bolts, lock washers and nuts (Fig. 12).

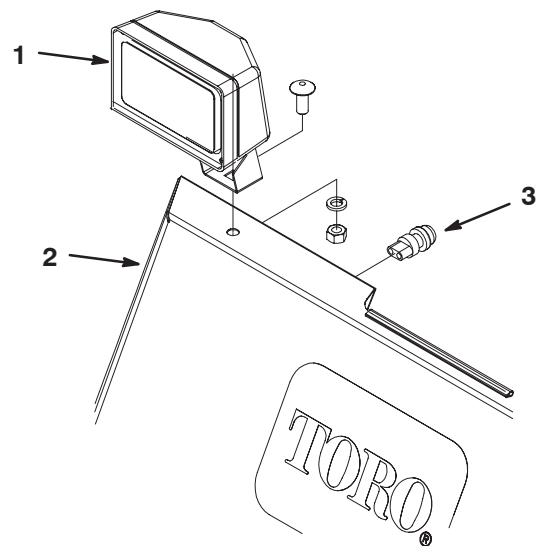


Figure 12

1. Headlight assembly
2. Front shroud
3. Horn button

2. Remove the cover from the control housing (Fig. 13).

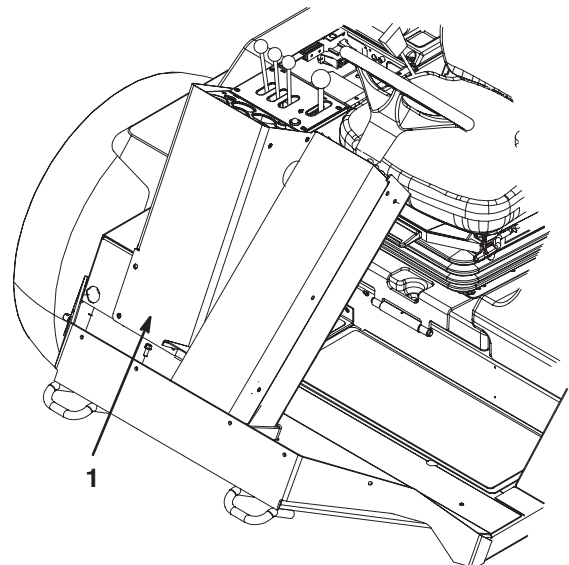


Figure 13

1. Control housing cover
3. In the control housing, locate the headlight wire harness connected to the main wire harness. Disconnect and remove the headlight wire harness from the main harness.
4. Route the headlight harness wires inside of the brackets and crimp a 1/4 in. male spade terminal to each wire.
5. Connect the spade terminals to the headlight wire terminals.
6. Unscrew the push button from the horn body.

7. Attach the wire harness connectors to the horn terminals.
8. Insert the horn body through the hole in the shroud and install the push button.
9. Secure the horn button to the front shroud with a jam nut (Fig. 12).
10. Secure the headlight wiring harness to the inside of the front shroud with (5) mounting pads and cable ties at the locations shown in figure 14. Make sure the surface is clean before affixing the mounting pads.
11. Mount the front shroud assembly to the front frame with (6) 5/16 x 3/4" lg. flange head screws and locknuts (Fig. 15). Position the front shroud behind the raised lip on the front frame.
12. Insert the headlight wire harness through the grommet (hole) in the control housing and plug it into the main harness.
13. Secure the wiring harness to the operator's platform with the wire cover and (3) flange head capscrews and nuts (Fig. 15).
14. Install the control housing cover.

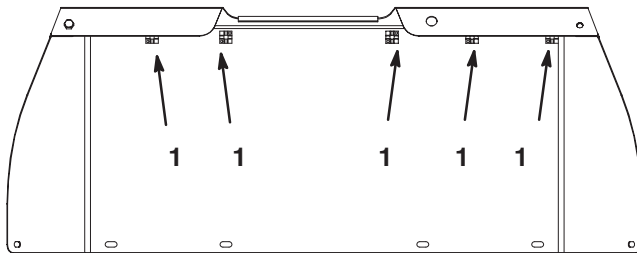


Figure 14

1. Mounting pad & cable ties

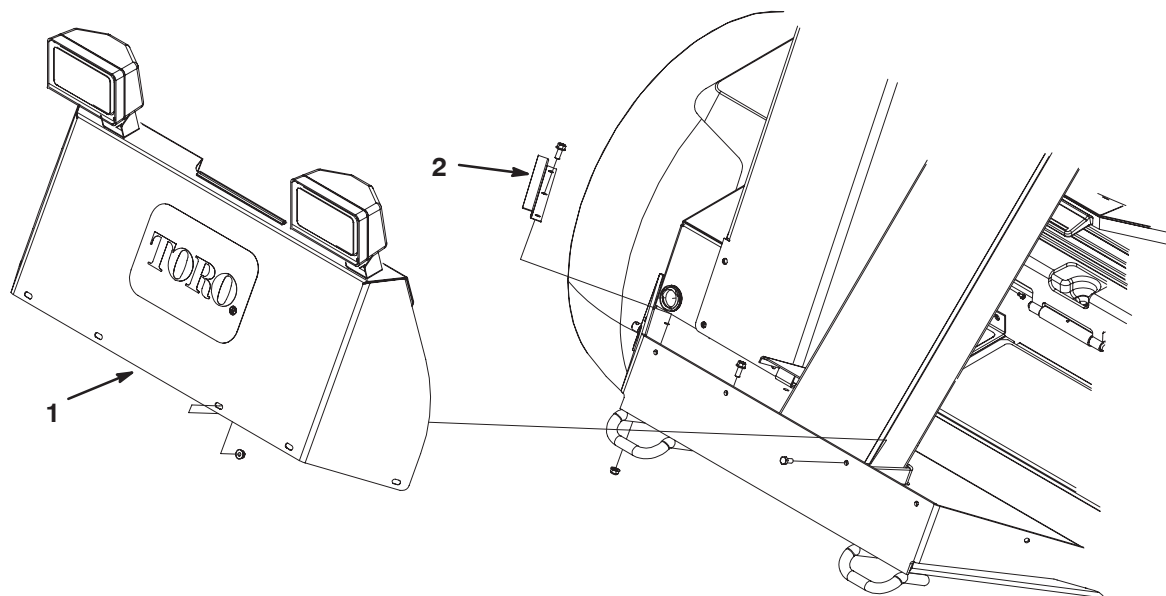


Figure 15

1. Front shroud assembly
2. Wire cover

Install the Tail Light Assemblies (When not equipped with a canopy)

1. Mount the appropriate (R.H. or L.H.) tail light assembly to each end of the light bracket with (2) (M8–1.25) screws as shown in Figure 16. The black lens should be toward the front of the machine. Torque the screws to 72 in–lbs. **Do Not Over Tighten The Screws.**
2. Loosely mount each end of the light bracket to the ROPS with a U-bolt and (2) (3/8–16) locknuts as shown in Figure 16.
3. Tighten the locknuts evenly to avoid distorting the light bracket.
4. Locate the tail light wire harness in the control panel console.
5. Route the tail light wire harness up the ROPS to the tail lights.
6. Secure the harness to the ROPS with (3) mounting pads and cable ties (Fig. 16). Evenly space the mounting pads and cable ties on the ROPS tube. Make sure the surface is clean before affixing the mounting pads.
7. Connect the wire harness to the tail lights.
8. Secure the harness to the (4) holes in the light bracket with cable ties.

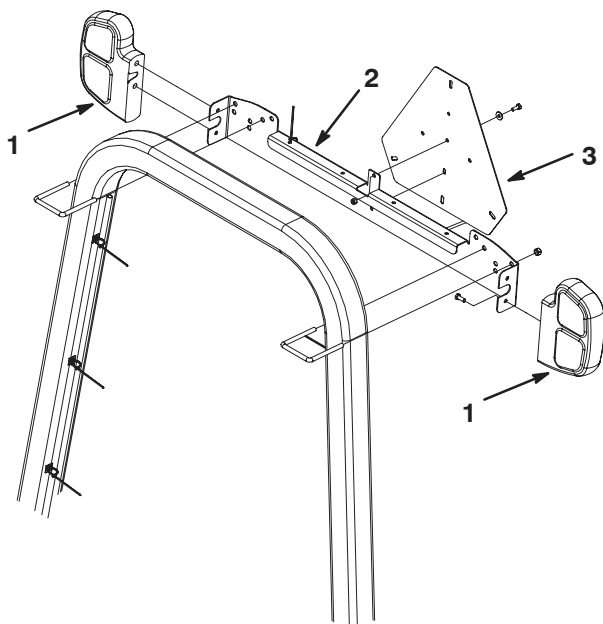


Figure 16

1. Light
2. Light bracket
3. SMV Emblem

Install the Tail Lights Assemblies (When equipped with a canopy)

1. Remove the bolts, nuts and rear mounting brackets securing the canopy to the ROPS (Fig. 17). Discard mounting brackets but retain bolts and nuts.
2. Mount the appropriate (R.H. or L.H.) tail light assembly to each end of the light bracket with (2) (M8–1.25) screws as shown in Figure 18. The black lens should be toward the front of the machine. Torque screws to 72 in–lbs. **Do Not Over Tighten The Screws.**
3. Mount the canopy, light bracket and new back up plates to the ROPS with the bolts and nuts previously removed. Use the mounting hole locations shown in figure 18. Position the light bracket between the ROPS and the lower back up plates.

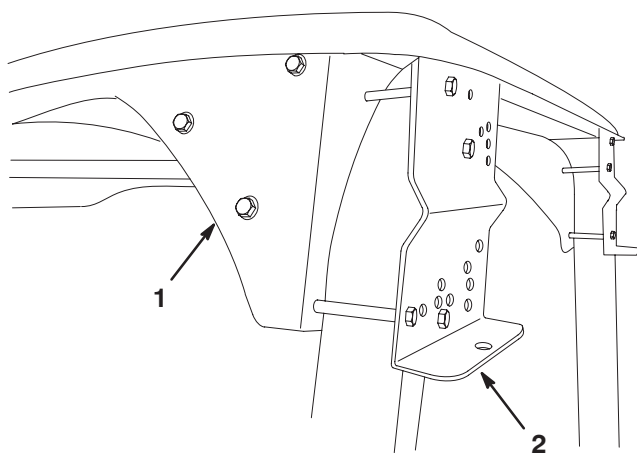


Figure 17

1. Canopy
2. Rear mounting bracket

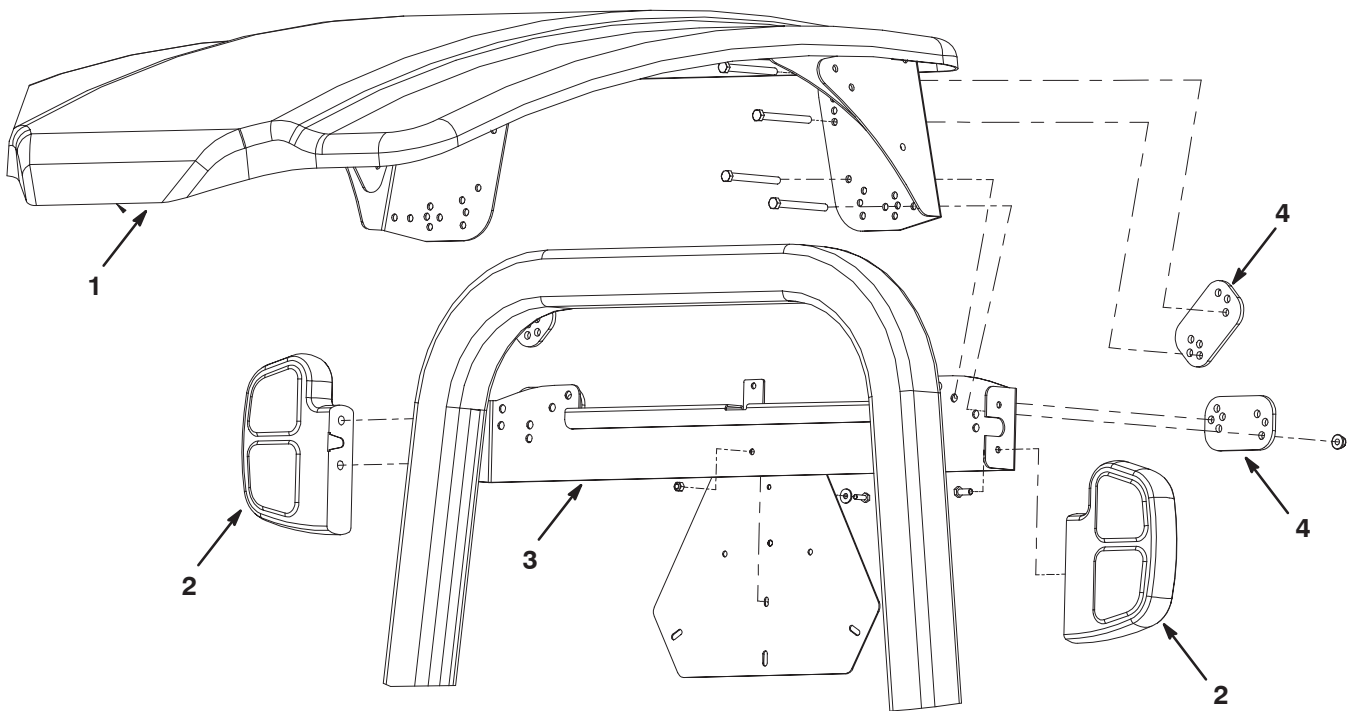


Figure 18

1. Canopy 2. Light 3. Light bracket 4. Back up plate

Install the SMV Emblem

1. Mount the slow moving vehicle (SMV) emblem to the light bracket with (2) (1/4 x 3/4 in.) screws, flat washers, and locknuts (Fig. 16 & 18).

Note: Install the SMV emblem using a hole configuration that prohibits it from extending above the ROPS.

Alternate method

1. Position the SMV socket in the center of the rear bumper as shown in figure 19.

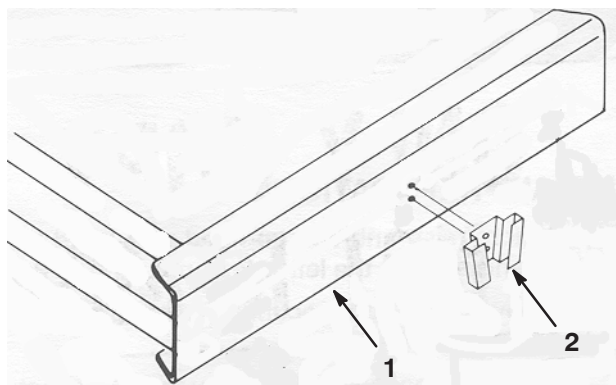


Figure 19

1. Rear bumper 2. SMV emblem

2. Using the socket as a template, locate, mark and drill (2) 5/16" dia. holes in center of rear bumper.

3. Mount SMV socket to bumper with (2) 5/16 x 1-1/4" lg. carriage bolts and 5/16 nylon lock nuts.

Install the Fuse

Insert the 15 amp fuse into the fuse block at the location shown in figure 20.

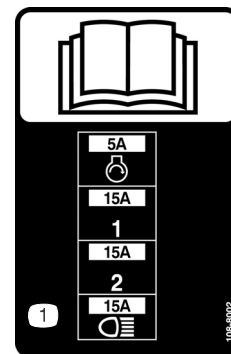


Figure 20

1. 15 amp fuse here

Connect the Battery

1. Attach the negative battery cable to the battery post.
2. Slide the battery tray in and secure with capscrews previously removed.
3. Replace the left side panel and close the hood. Latch the hood.

Operation

The Road Light Kit consists of 2 front mounted head lamps and 2 combination warning/turn/tail lamps mounted to the ROPS structure (roll bar).

Toggle Switch

Move the toggle switch on the control panel (Fig. 21) to the ON position. The head lamps, tail lamps and warning flashers will be activated:

- 2 head lamps will be on.
- The amber warning lamps will slow rate flash.
- The red tail lamps will be on steady (low intensity).

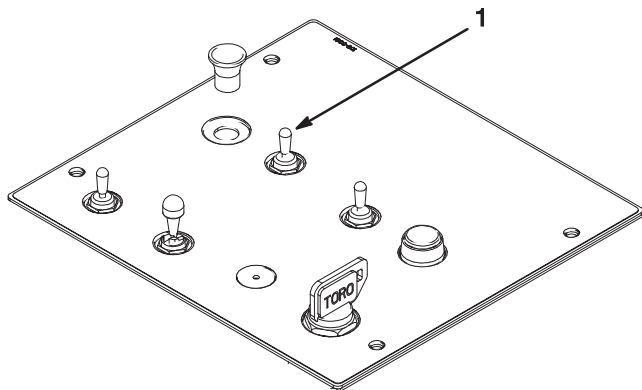


Figure 21

1. Toggle switch (Control panel)

Turn Signal Controller

Move the turn signal controller handle (Fig. 22) in either direction of a turn. The corresponding combination lamp assembly will now flash at a faster rate, and the opposite side assembly will now remain illuminated (not flashing).

If turning LEFT:

The left combination warning/turn/tail lamp will:

- Amber lamp will flash.
- The low intensity red tail lamp will be on steady.
- The high intensity red tail lamp will be high rate flash.

The right combination warning/turn/tail lamp will:

- Amber lamp will be on steady.
- The red tail lamp will be on steady (both high and low intensity).

If turning RIGHT:

The right combination warning/turn/tail lamp will:

- Amber lamp will flash.
- The low intensity red tail lamp will be on steady.
- The high intensity red tail lamp will be high rate flash.

The left combination warning/turn/tail lamp will:

- Amber Lamp will be on steady.
- The red tail lamp will be on steady (both high and low intensity).

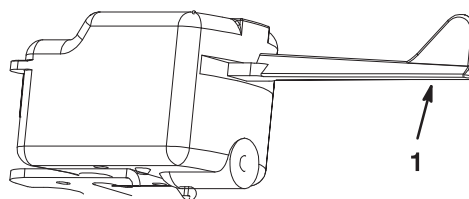


Figure 22

1. Turn signal controller handle

Aiming the Headlights

1. Loosen the mounting nuts and position each headlight so that it points straight ahead. Tighten the mounting nut just enough to hold the headlight in position.
2. Place a flat piece of sheet metal over the face of the headlight.
3. Mount a magnetic protractor onto the plate. While holding the assembly in place, carefully tilt the headlight downward 3°, then tighten the nut.
4. Repeat the procedure on the other headlight.