

Safety Message to Installers of Warning Light Equipment

⚠ WARNING

People's lives depend on your proper installation and servicing of Federal Signal products. It is important to read and follow all instructions shipped with this product and the original product. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install the lighting system, you must have a good understanding of automotive systems, along with proficiency in the installation and use of safety warning equipment.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- Refer to the instructions included with the light system for the proper electrical connections.
- To be an effective warning device this product produces bright light that can be hazardous to your eyesight when viewed at close range. Do not stare directly into this lighting product at close range or permanent damage to your eyesight may occur.
- You should frequently inspect the light system to ensure that it is operating properly and that it is securely attached to the vehicle.
- Refer to the instructions packed with related products for additional precautions and information.
- File these instructions in a safe place and refer to them when maintaining or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Unpacking the Kit

After unpacking the kit, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 1 are included in the package.

Table 1: Kit contents

Qty.	Description	Part No.	Qty.	Description	Part No.
2	Foot, Mounting, Perm Mount	8653183-01	8	Washer, Lock, 5/16 Split	7074A020
4	Pad, Foot, 0.29"	8653157-03	8	Nut, 5/16-18	7059125
4	Pad, Foot, 0.44"	8653157-04	4	Bolt, Toggle, 1/4-20	8422A032
4	Pad, Foot, 0.69"	8653157-07	4	Washer, Flat, 1/4"	7072A024
8	Bolt, Carriage, 5/16-18 x 1"	7004025-16	4	Nut, Jam, 1/4-20	7057A049
8	Washer, Flat, 5/16	7072A031	4	Nut, Acorn, 1/4-20	7054A010

Installing the Mounting Foot

⚠ WARNING

HEAVY OBJECT

Use lifting aids and proper lifting techniques when removing or replacing this product.

Failure to follow this warning may cause personal injury.

1. Turn the lightbar upside down on soft rags or cardboard to avoid marring the plastic domes.
2. Insert two 5/16-18 carriage bolts into each track in the aluminum extrusion through the center access holes. Position the bolts to match the holes in the mounting foot (Figure 1).

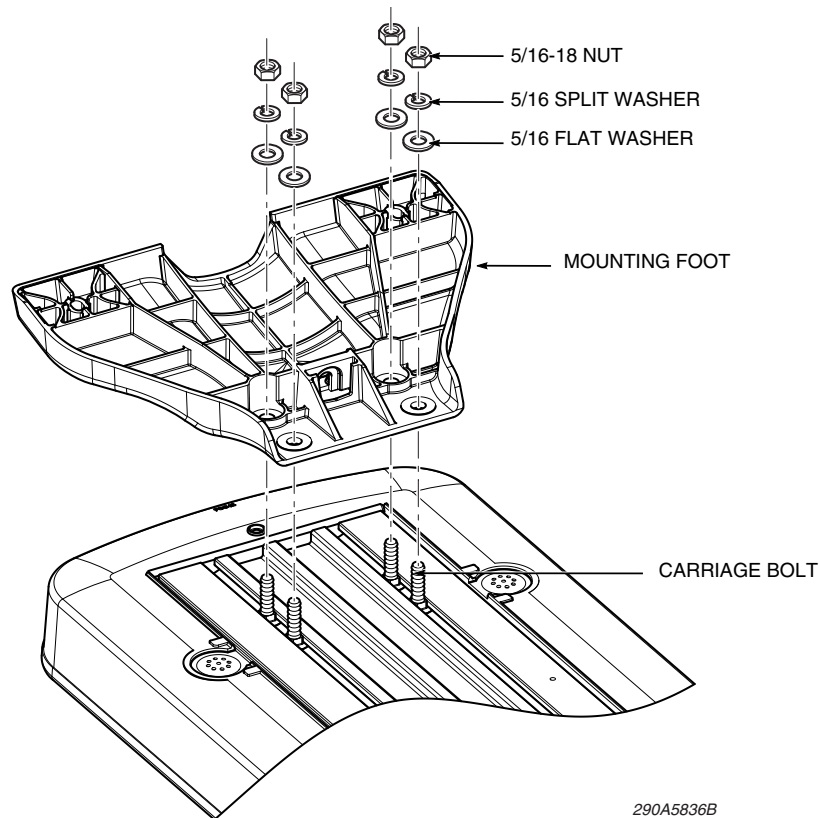


Figure 1: Hardware for installing the mounting foot

3. Place a mounting foot over the four carriage bolts. Install four 5/16" flat washers, lock washers, and nuts. Leave the nuts just loose enough to enable you to reposition the mounting foot. Do not tighten the bolts yet.
4. Temporarily attach two 0.44" thick mounting pads to the mounting foot with tape. Do not cover the hole in the pad or foot with the tape.
5. Repeat steps 1 through 4 for the other side of the lightbar.

Selecting a Mounting Location on the Vehicle Roof

Refer to the installation and maintenance instructions included with the lightbar for electrical installation instructions. Plan all cable routing before the installation.

1. Place the lightbar assembly on the vehicle roof at the selected location. Usually the lightbar assembly should be installed so that it is centered on the door center post.
2. Adjust both mounting foot assemblies in or out until the foot pads rest near the edge of the roof or gutter where the roof is the most rigid. Both the lightbar and the mounting feet should be centered left to right on the vehicle.
3. Ensure that the lightbar is level. To level the lightbar, use foot pads of different thicknesses and/or reposition the lightbar slightly forward or backward.
4. Using the mounting feet as a template, scribe two drill-position marks on each end of the lightbar for the toggle bolts.
5. Carefully remove the lightbar and turn it upside down on soft rags or cardboard.

Mounting the Lightbar Assembly

NOTICE

DO NOT OVERTIGHTEN NUTS

To avoid damage to the lightbar, do not overtighten the nuts.

1. Torque to 120 in-lb to 132 in-lb the eight 5/16" nuts that secure the mounting feet to the lightbar.

NOTICE

DRILLING PRECAUTIONS

Before drilling holes, check the area into which you plan to drill to ensure you do not damage vehicle components while drilling. All drilled holes should be deburred and all sharp edges should be smoothed. All wires going through drilled holes should be protected by a grommet or convolute/split-loom tubing.

2. Recheck the positions of the four drill-position marks for the toggle bolts. Drill a 1/2-inch diameter hole at each of the marks.
3. Insert a toggle bolt in each hole and seal the hole with RTV (Figure 2 on page 4).
4. Place a rubber mounting pad of the appropriate thickness over each bolt. Avoid dropping the bolts through the holes as you install the pads.
5. Place the mounting feet down over the ends of the toggle bolts.
6. Install a 1/4" flat washer on each toggle bolt and secure it with a jam nut. Tighten each jam nut just until the rubber pad begins to bulge. Do not exceed a torque of 60 in-lb.
7. Saw off the toggle bolts 3/16 inch above the jam nuts and screw the acorn nuts onto the bolts. The lightbar should now be securely anchored to the roof (Figure 3 on page 4).
8. Ensure that all fasteners are properly tightened.

IMPORTANT: Frequently inspect the lightbar to ensure that all fasteners are tight.

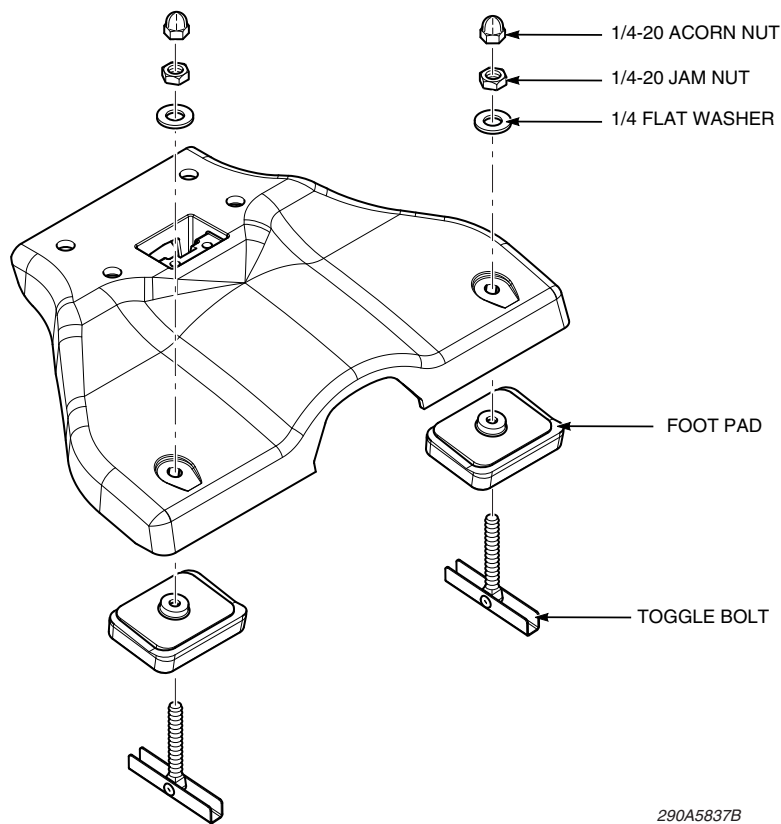


Figure 2: Hardware for mounting the lightbar to the vehicle

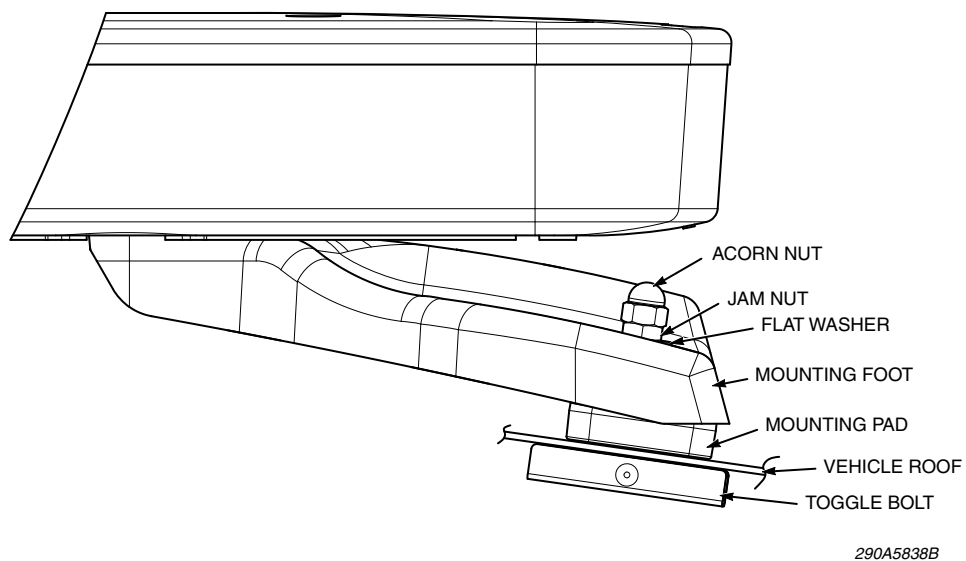


Figure 3: Lightbar attached to vehicle roof

Ordering Replacement Parts

To order replacement parts, please contact your distributor or:

Customer Support
Federal Signal Corporation
Phone: 1-800-264-3578

Returning a Product to Federal Signal

Before returning a product to Federal Signal, call 800-264-3578, 800-433-9132, or 800-824-0254 to obtain a Returned Merchandise Authorization number (RMA number). To expedite the process please be prepared with the following information:

- Your Federal Signal customer or account number.
- The purchase order number under which the items were purchased.
- The shipping method.
- The model or part number of the product being returned.
- The quantity of products being returned.
- Drop ship information as needed.
- Any estimate required.

When you receive your RMA Number:

- Write the RMA number on the outside of the box of returned items.
- Reference the RMA number on your paperwork inside of the box.
- Write the RMA number down, so that you can easily check on status of the returned equipment.

Send all material with the issued RMA Number to:

Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484-3167
Attn: Service Department
RMA: # _____



2645 Federal Signal Drive, University Park, IL 60484-3176
Tel.: (800) 264-3578 • Fax: (800) 682-8022
www.fedsig.com

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