

## Safety Message to Installers of Federal Signal Warning Light Systems

### **▲ 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. Listed below are some other important safety instructions and precautions you should follow:

- To properly install a light assembly, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- Frequently inspect the light system to ensure that it is operating properly and that it is securely attached to the vehicle.
- Always refer to the vehicle service manuals when performing equipment installations on a vehicle.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- Locate the light system controls so the VEHICLE and CONTROLS can be operated safely under all driving conditions.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- Do not install equipment or route wiring in the deployment path of an airbag. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury to you or others.
- To avoid damage to the light bar, do not overtighten screws and nuts.
- This product contains high intensity LED devices. To prevent permanent eye damage, DO NOT stare into the light beam at close range.
- For additional precautions and information, refer to the instructions packed with related products.
- 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.

### **Introduction**

This publication provides instructions for installing the Vision® SLR light bar to a vehicle with the Hook-On Mounting Kit. To complete the installation, it is necessary to purchase a vehicle-specific mounting hook kit.

### **Unpacking the Kit**

After unpacking the kit, inspect it for damage that may have occurred in transit. If it has been damaged, file a claim immediately with the carrier, stating the extent of the damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts shown in Table 1 are contained in the packing carton. If you are missing any parts, contact Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT). An installer-supplied control head for controlling the functions of the light bar is also required.

Table 1 Kit contents

Qty.	Description	Part No.
1	LH Mounting Assembly	8652171
1	RH Mounting Foot Assembly	8652172
2	Hook-Attach Bracket	8652125
2	Nut Retainer	8583490
2	5/16-18 Flange Nut	7065078
4	#10 Type B Black Stainless Steel Pan Head Torx® Screw	7011246-08
8	3/8-inch Stainless Steel Lockwasher	7074A046
8	3/8-16 Steel HCR Nut	7059124

The items above are installed on new light bars at the factory.

4	Adjustable Foot Bracket Assembly	8652124
4	Mounting Pad	8572029
8	5/16-inch Black Stainless Steel Washer	7072234
8	5/16-inch Black Stainless Steel Lockwasher	7074A020-01
8	5/16-18 Black Stainless Steel Pan Head Torx Screw	7000434-10
4	#10 Type B Black Stainless Steel Pan Head Torx Screw	7011246-08
2	Split Grommet	228128
2	Cable Tie	150A109

**⚠ WARNING**

**HEAVY OBJECT:** Use lifting aids and proper lifting technique when removing or replacing this product. Failure to follow this warning may cause personal injury.

**NOTE:** To aim the optional LED takedown lights to the 45 degree or 90 degree position (+/- 10 degrees), move the lights to the top of the mounting feet before the installation. See “Aiming the Optional HotFoot LED Takedown Lights” on page 6.

**Installing the Service Kit Mounting Feet**

**NOTICE**

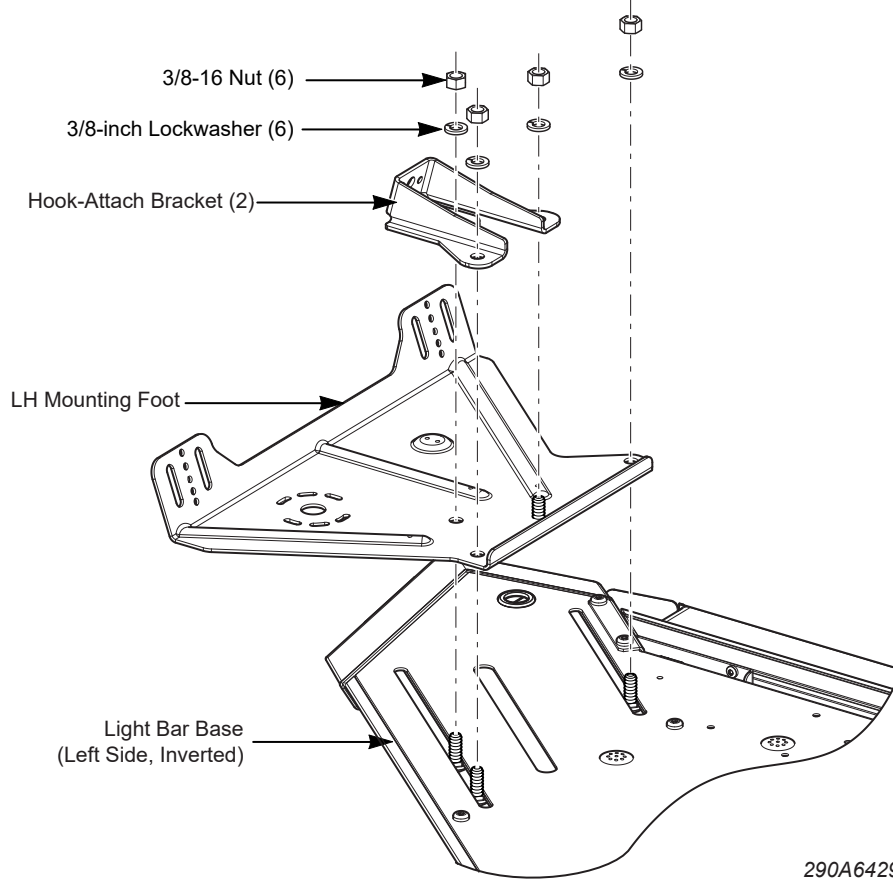
**ENSURE PROPER INSTALLATION OF THE MOUNTING FEET:** Note that the LH mounting foot is for the left side of the light bar, and RH mounting foot is for the right side. Failure to follow this precaution may damage the light bar.

The Service Kit requires that you assemble the mounting feet on the light bar. If you are installing a new light bar that is shipped with the mounting feet already attached, see “Installing the Adjustable Foot Brackets” on page 4. New light bars may require that you loosen the 3/8-16 nuts to adjust the positions of the mounting feet on the vehicle roof.

To install the Service Kit mounting feet:

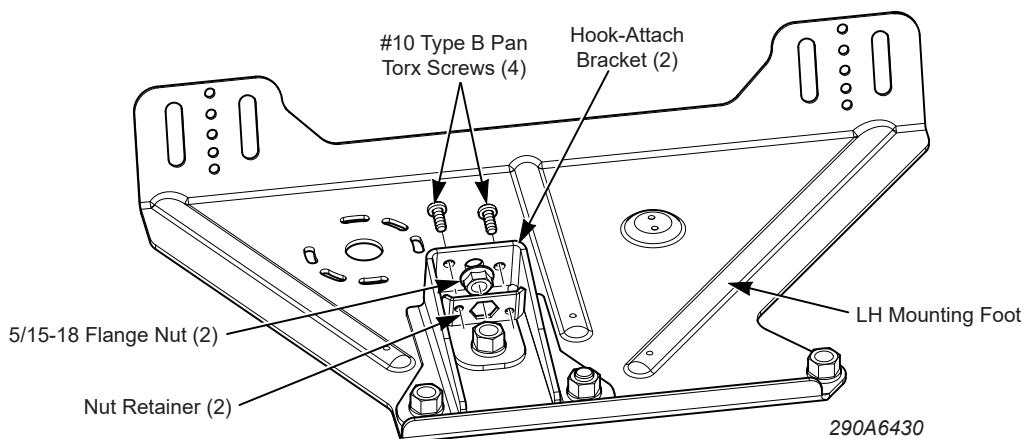
1. To avoid marring the plastic domes, invert the light bar on soft rags or cardboard.
2. Use the four 3/8-16 nuts and lockwashers to install a mounting foot assembly and a hook-attach bracket on the light bar. See Figure 1. Tighten the nuts only enough to hold the mounting foot assembly in place.

Figure 1 Mounting foot installation



3. Use a nut retainer and two #10 Type B pan Torx screws to trap the 5/16-18 flange nut on the backside of the hook-attach bracket. See Figure 2.

Figure 2 Hook-attach bracket installation



4. Repeat steps 2 and 3 with the other mounting foot assembly.
5. To continue with the installation, see "Installing the Adjustable Foot Brackets" on page 4.

## Installing the Adjustable Foot Brackets

### **⚠ WARNING**

**ROOF SUPPORT STRUCTURE:** *There is a roof support member that spans the distance between the driver and passenger side. DO NOT DRILL THROUGH THIS MEMBER! Adjust any hole locations until the holes can be drilled without going through this member. Failure to follow this warning will weaken the roof of the vehicle and may lead to an increased chance of bodily injury or death in a rollover accident.*

### **NOTICE**

**ENSURE PROPER INSTALLATION OF MOUNTING FEET:** *Note that the LH Mounting Foot is for the left side of the light bar, and the RH Mounting Foot is for the right side. Failure to follow this precaution may damage the light bar.*

### **NOTICE**

**DRILLING PRECAUTIONS:** *Before drilling holes, check the area into which you plan to drill to ensure that you do not damage vehicle components. 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.*

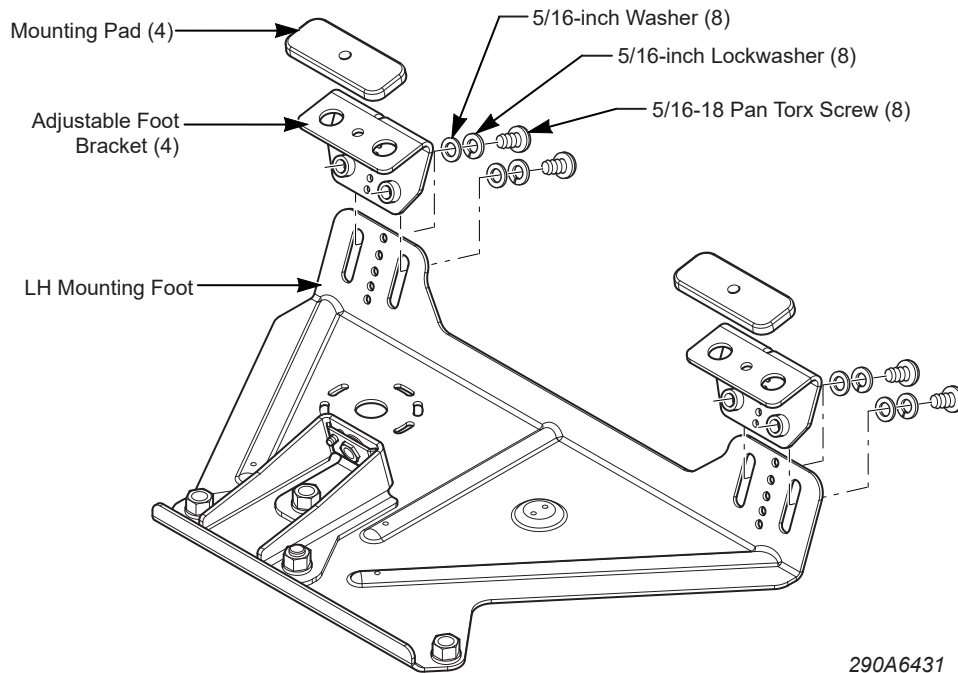
**IMPORTANT:** Plan all cable routing before completing the installation. Plan the location of the wire routing hole in the vehicle roof so that the power and communication cables do not have tight bends and have some slack to allow disconnection on removal.

The adjustable foot brackets enable you mount the Vision SLR at the maximum height and to level the light bar.

To install the brackets:

1. To avoid marring the plastic domes, invert the light bar on soft rags or cardboard.
2. Use the 5/16-18 pan Torx screws, 5/16-inch flat washers, and 5/16-inch lockwashers to install the adjustable foot brackets on the mounting feet. See Figure 3.

Figure 3 Adjustable foot bracket installation



3. To achieve the maximum mounting height of the light bar, position the screws in the adjustable foot brackets at the bottom of the slots. Tighten the screws only enough to hold the adjustable foot brackets in place.
4. Install the rubber mounting pads to the adjustable feet as shown in Figure 3.
5. To continue with the installation, see “Preparing the Vision SLR for Hook-Mounting.”

### Preparing the Vision SLR for Hook-Mounting

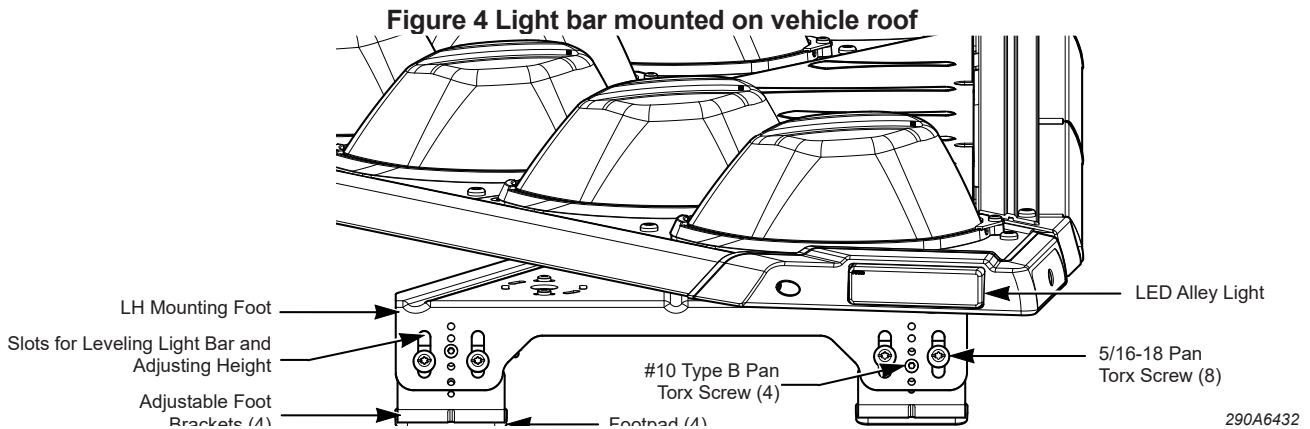
To prepare the light bar for hook-mounting:

1. Place the light bar assembly on the vehicle roof at the selected location. The assembly is usually installed so that the mounting hooks attach at, or immediately behind, the door center post. Before proceeding, refer to the instructions provided with the separately purchased mounting hook kit.
2. Adjust both mounting foot assemblies in or out until the mounting pads rest near the edge of the roof or gutter where the roof is the most rigid.
3. Center the light bar assembly so that the end of the assembly and edge of the roof are equidistant on each side of the vehicle. Ensure that the gutter hooks, when installed, do not interfere with the door or door glass. Improper clamping on the vehicle roof may result if the gutter hooks contact the mounting feet. Adjust the mounting feet, if required, before tightening the 3/8-16 hex nuts.
4. Remove the light bar assembly from the vehicle roof and place it on soft rags or cardboard to avoid marring the plastic domes.
5. Turn the light bar assembly over so that the bottom faces up. Tighten the eight 3/8-16 nuts (four on each mounting foot) installed in “Installing the Service Kit Mounting Feet” on page 2

## Hook-Mounting the Vision SLR on the Vehicle

To mount the light bar on the vehicle:

1. Place the light bar assembly back into its original position on the vehicle roof.
2. To maximize aerodynamic efficiency, it is recommended that the lighting system be mounted as high as possible. Adjust the adjustable foot brackets on the mounting feet as required. See Figure 4.



3. For proper drainage, tilt the nose of the light bar downward approximately 1/8 inch to 1/4 inch while ensuring the light bar is level from side to side.
4. Using the holes that are most closely aligned between the 5/16-inch pan head Torx® screws, install a #10 Type B Torx pan head screw to lock in the adjustment. See Figure 4. Minor adjustment may be necessary. Repeat this step for all four adjustable foot brackets.
5. Tighten all eight 5/16-inch Torx pan head screws that fasten the adjustable foot brackets to the mounting feet.
6. To fasten the mounting hook, refer to the keeper plate instructions (Federal Signal Part No. 2561635) included in the supplied Keeper Plate Kit.

**IMPORTANT:** Frequently inspect the light bar assembly to ensure that all fasteners and brackets are tight.

### Aiming the Optional HotFoot LED Takedown Lights

The optional HotFoot LED takedown lights are factory-wired and installed on the bottom of the mounting foot. Beneath the mounting foot the aim of the lights is horizontally adjustable  $\pm 10$  degrees.

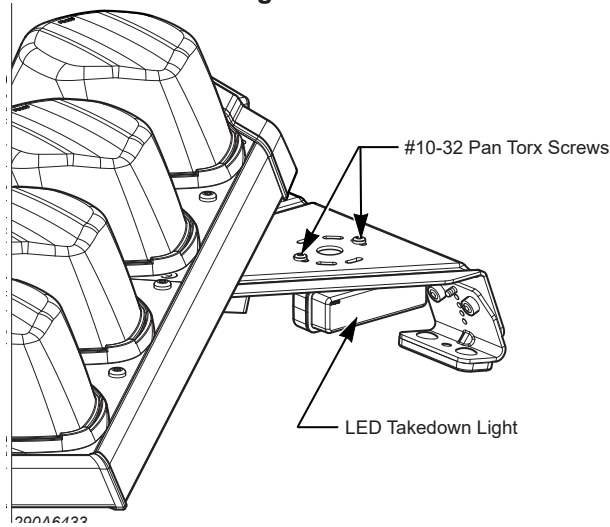
To aim the takedown lights to the 45 degree or 90 degree position ( $\pm 10$  degrees), move the lights to the top of the mounting feet before the installation. See "Inverting and Aiming a Takedown Light Above the Mounting Foot."

### Aiming a Takedown Light Beneath the Mounting Foot

To adjust the horizontal aim ( $\pm 10$  degrees) of the takedown light:

1. Loosen the 10-32 pan Torx screws as shown in Figure 5.
2. Reposition the light and tighten the screws.

Figure 5 LED takedown light mounted beneath mounting foot

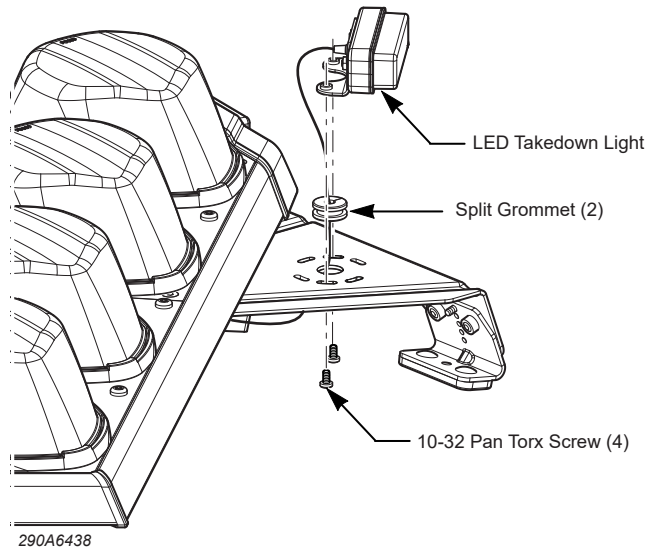


### Inverting and Aiming a Takedown Light Above the Mounting Foot

To aim the LED takedown lights to the 45 degree or 90 degree position:

1. Cut the cable tie securing the connector to the underside of the foot and unplug the connector.
2. Remove the two 10-32 pan head Torx® screws and the takedown light.
3. Install the split grommet over the cable, and feed the cable through the foot from the top. Install the grommet securely in the hole. See Figure 6.

Figure 6 LED takedown light mounted above mounting foot



4. Aim the LED takedown and install the 10-32 pan Torx screws from the bottom of the foot.
5. Reconnect the connector and secure it to the foot with the cable tie.
6. Test the light to verify that it operates properly.

## **Ordering Replacement Parts**

To order replacement parts, please contact your local dealer/distributor or:

Customer Support  
Federal Signal Corporation  
Phone: 1-800-264-3578  
7 a.m. to 5 p.m., Monday through Friday (CT)

## **Getting Technical Support**

For technical support, please contact:

Federal Signal Corporation  
Service Department  
Phone: 1-800-433-9132  
Fax: 1-800-343-9706  
Email: [empserviceinfo@fedsig.com](mailto:empserviceinfo@fedsig.com)

## **Getting Repair Service**

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain a RMA from a local Distributor or Manufacturer's Representative. Provide a brief explanation of the service requested, or the nature of the malfunction.

Address all communications and shipments to the following:

Federal Signal Corporation  
Service Department  
2645 Federal Signal Dr.  
University Park, IL 60484-3167



**FEDERAL SIGNAL**  
Safety and Security Systems

2645 Federal Signal Drive  
University Park, Illinois 60484-3167

[www.fedsig.com](http://www.fedsig.com)

Customer Support

Police/Fire-EMS: 800-264-3578 • +1 708 534-3400

Work Truck: 800-824-0254 • +1 708 534-3400

Technical Support: 800-433-9132 • +1 708 534-3400

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