Retrofit Rooftop-Mount Quick Disconnect Manual

25500192 Rev. A1 0820

Safety Message to Installers of Warning Light Equipment

A 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 the lighting system, you must have a good understanding of automotive systems, along with proficiency in the installation and use of safety warning equipment.
- Do not install equipment or route wiring in the deployment path of an airbag.
- 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 stare directly into the lights at a close range, or permanent damage to your eyesight may occur.
- Frequently inspect the light system to ensure that it is operating properly and is securely attached to the vehicle.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that could be damaged.
- 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 and/or reinstalling the product.

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

Introduction

This publication has instructions for installing the Rooftop-Mount Quick Disconnect harness to the $Vision_{\odot}$ SLR. To complete the installation, refer to doc. no. 25500173, "Installation Instructions for the Rooftop-Mount Quick Disconnect for the Vision SLR Light Bar."

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 the Kit Contents table are included in the package. 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).

Table 1 Kit contents

Qty.	Description	Part Number
1	Wire Assembly, Bar Pigtail, NVO-RFQD	17500724-18
1	Wire Assembly, PWR-GND, Ext. NVO-RFQD	17500725-252
1	Wire Assembly, Comm, Ext., NVO-RFQD	17500726-300
2	Screw, #8, Type B, Torx-Head	7011200-06
1	Locknut, NY, Heyco 8463	7065065
1	O-Ring, M2 x 20, Nitrile	7067022
1	Kit, Accessory, NVO-RFQD	865201088
1	Retainer, Connector	8652127
1	Housing, Connector	8652149
1	Receptacle, 0.393 Pitch, Mini-Fit	139532-02

Installing the Quick Disconnect

A WARNING

AIRBAG DEPLOYMENT: Do not install equipment or route wiring in the deployment of an airbag. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury or death.

NOTICE

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

To install the Quick Disconnect:

- 1. Remove the V-cover from the light bar
- 2. To ensure that the new harness duplicates the existing routing, diagram the cable routings. Models with Message Boards differ from non-Message Board models. Note the number of turns around the ferrite for Message Board models.
- **3.** Disconnect the light bar power, ground, and communication cables.
- 4. Remove the TPA lock from the power/ground connector, then remove the wires from the connector.
- **5.** Remove the power, ground, and CAT5 communication cables from the light bar.
- **6.** Install the O-ring onto the threaded end of the elbow, and then slide the wires and the threaded joint into the light bar.
- 7. Pass the locknut over the wires and tighten it onto the elbow. **Do not overtighten.**
- 8. Seal the wires to the elbow with RTV.
- **9.** Route the wires according to your diagram.

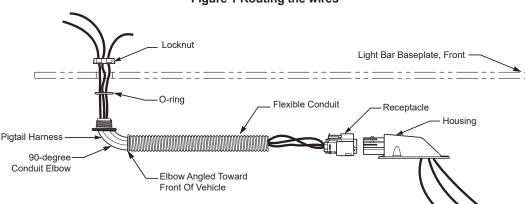
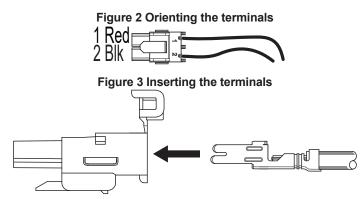


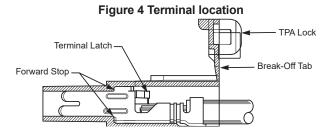
Figure 1 Routing the wires

10. Route the power and ground wires through the base of the receptacle.

11. Orient and insert the terminals into the housing as shown in Figures 2 and 3.



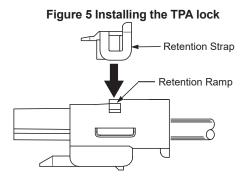
12. Ensure that the terminals are fully seated against the forward stop and the latches are snapped behind the terminal walls.



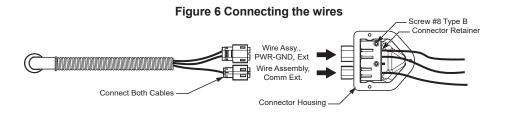
A WARNING

LIGHT BAR POWER FAILURE: To the secure the power and ground connections to the light bar, ensure that the TPA lock is properly installed on the receptacle. Failure to properly install the TPA lock may cause the light bar to malfunction, causing serious injury or death.

13. Break off the TPA lock and install it over the receptacle as shown until the retention straps snap over the retention ramps.



14. Slide the external wire assemblies onto the connector retainer as shown, and then slip this assembly into the connector housing. Secure it with #8 Torx_® screws. Do not overtighten the screws.



- **15.** Connect the light bar power, ground, and communication cables between the light bar and the Quick Disconnect.
- 16. Reinstall the V-cover.
- **17.** Complete the installation according to the instructions in doc. no. 25500173, which is included in the 865201088 Accessory Kit.

A WARNING

LIGHT HAZARD: To be an effective warning device, an emergency warning system produces bright light that can be hazardous to your eyesight when viewed at a close range. Do not stare directly into the lights at a close range or permanent damage to your eyesight may occur.

18. Test the light bar for proper operation.

Getting Technical Support

For technical support, please contact:

Federal Signal Corporation Service Department Phone: 1-800-433-9132

Email: 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



2645 Federal Signal Drive University Park, Illinois 60484-3167

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

© Copyright 2012-2020 Federal Signal Corporation