#### 25500322 Rev. A0 0616

### 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. 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.
- 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.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- Do not stare directly into the lights at a 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 and/or reinstalling the product.

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

### Introduction

This publication describes how to mount Legend, Integrity, Valor, and HighLighter lightbars to the top of the HRX Headache Rack. Each lightbar includes mounting brackets and hardware. Refer to the section in this document that pertains to the model of your lightbar. To complete the installation, refer to the wiring instructions included with the lightbar.

### **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 in the Kit Contents List are included in the package. Disposal of all shipping materials must be carried out in accordance with national and local codes and standards. 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).

Qty.	Description
8	Bolt, Carriage, 5/16 in-18 x 1 in
4	Bolt, Carriage, 3/8 in-16 x 1 in
8	Washer, Flat, 5/16 in
4	Washer, Lock, 3/8 in Split,
4	Nut, Hex, 3/8 in-16
8	Nut, Stop, Elastic, 5/16 in-18
2	Bracket, Mounting

 Table 1
 Kit contents

# Mounting the Legend, Integrity or Valor to the Headache Rack

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 or death.

### **A**WARNING

## HEAVY OBJECT: Use lifting aids and proper lifting techniques when removing or replacing this product. Failure to heed this warning may cause personal injury,

For instructions on mounting the HighLighter lightbar, see page 4.

To mount the lightbar atop the headache rack:

- 1. Carefully turn the lightbar upside down on soft rags or cardboard to prevent scratching the domes.
- 2. IMPORTANT: Clean and lightly oil the mounting bolts.

**NOTE:** Step 3 is not required for the Valor lightbar. The eight mounting bolts are pre-installed.

- 3. Insert the eight 5/16 in-18 x 1 in mounting bolts into the bottom of the aluminum extrusion using the keyhole at the center of each channel. Four bolts go in each channel (Figure 1).
- 4. Insert the two 3/8 in x 16 x 1 in mounting bolts into the mounting brackets and place the brackets on the bottom of the lightbar.
- 5. Secure the mounting brackets to the lightbar using the 5/16 in x 18 stop nuts and the 5/16 in flat washers, ensuring the 3/8 in mounting bolts line up with their mounting tabs.
- 6. Turn the lightbar back to the upright position, and insert the 4-inch mounting bolts into the tabs on the headache rack.
- 7. Secure the lightbar assembly to the headache rack using the 3/8 in split lock washers and the 3/8 in-16 hex nuts.

**IMPORTANT:** Torque the 3/8 in mounting bolts 150 in-lb to 175 in-lb. Torque the 5/16 in mounting bolts 120 in-lb to 132 in-lb.

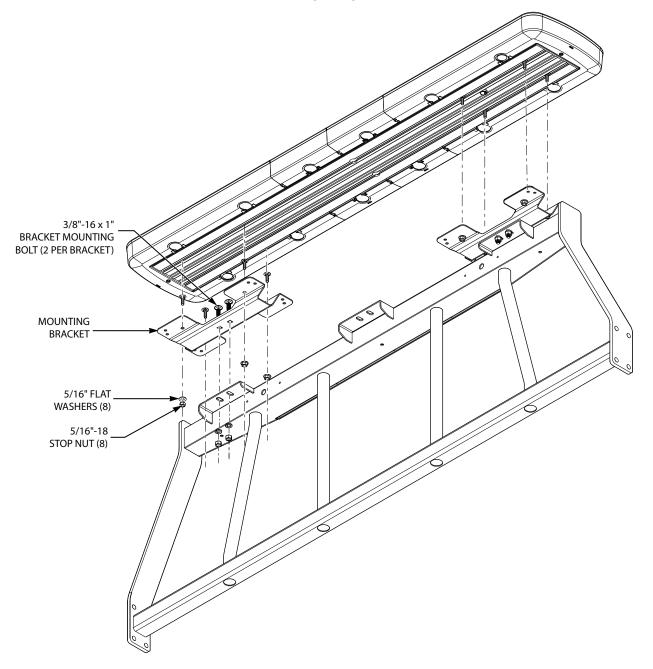


Figure 1 Exploded view of Integrity lightbar mounted to headache rack

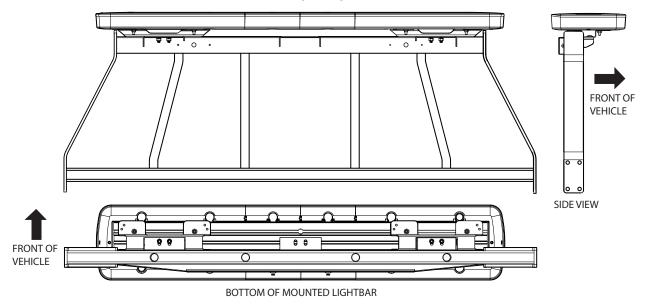


Figure 2 Exploded view of Integrity lightbar mounted to headache rack

### Mounting the HighLighter to the Headache Rack

The Model HRX-HL lift mounting bracket enables you to mount up to three HighLighter lightbars to the Model HRX headache rack. The kit can also be used to mount MicroPulse lights to the HRX.

To mount the HighLighter:

- 1. Determine the mounting location for the HighLighter.
- 2. Secure the lift bracket to the headache rack with the 3/8 in x 1 in carriage bolts.
- **3.** Using the mounting hardware provided with the HighLighter, secure the lightbar to the bracket. There are two sets of holes, one for the halogen and strobe versions of the Highlighter and another for the Highlighter Solaris LED.

### **Getting Technical Support and Service**

Federal Signal Corporation will service your equipment or provide 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 number. The RMA number can be obtained from your local distributor or Federal Signal. Please provide a brief explanation of the service requested or the nature of the malfunction. Contact your local dealer/ distributor for replacement parts availability or contact the Federal Signal Service Department (7 a.m. to 5 p.m., Monday through Friday, Central Time) at:

Service Department Federal Signal Corporation 2645 Federal Signal Drive University Park, IL 60484-3167 800-433-9132, 800-343-9706 (fax) http://www.fedsig.com/support/service