

25500770 Rev A0 0222

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. 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.
- Frequently inspect the light system to ensure that it is operating properly and that it 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.
- Do not stare directly into the lights at a close range, or permanent damage to your eyesight may occur.
- 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.

Product Overview

This publication has instructions for permanently mounting the Allegiant®, Integrity®, Legend®, Navigator®, and VSLR to a vehicle with adjustable mounting feet. For electrical installation instructions, refer to the installation and maintenance instructions packed with the 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 the 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. 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 Mounting kit contents

| Qty. | Description | Part Number |
|------|---|-------------|
| 4 | Screw, Hex Head,Stainless Steel, 1/4", Type AB | 7011183-12 |
| 8 | Pad, Mounting, Rubber | 8422A033 |
| 4 | Nut, Hex, 3/8-16, HCR | 7059124 |
| 4 | Washer, Flat, 3/8-inch, Stainless Steel | 7072A035 |
| 4 | Lockwasher, Split, 3/8-inch, Stainless Steel | 7074A046 |
| 2 | Upper Mounting Bracket, Adjust, ALGT/INTG/LGD, NVG/VSL | 865203978 |
| 1 | Lower Right Mounting Bracket, Adjust, ALGT/INTG/LGD, NVG/VSLR | 865203979 |
| 1 | Lower Left Mounting Bracket, Adjust, ALGT/INTG/LGD, NVG/VSLR | 865203980 |
| 4 | Bolt, CRG, 1/4-20, SQR.NK, 18-8, Stainless Steel | 7004A020-12 |
| 4 | Flat Washer, 0.266 X 11/16 X.063, Stainless Steel | 7072A024 |
| 4 | Nut, El Stop, Hex, 1/4-20, Stainless Steel | 7058A010 |

Installing the Mounting Brackets on the Light Bar

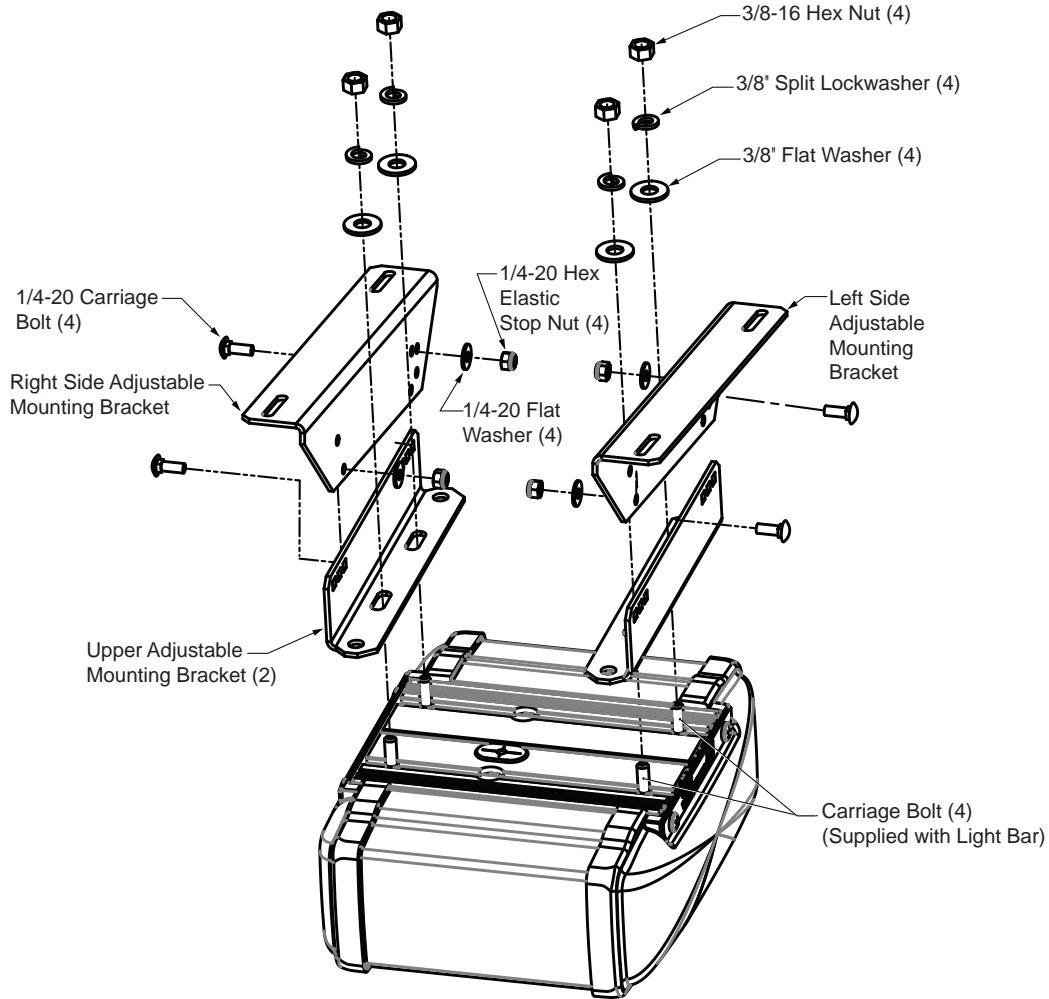
▲ WARNING

HEAVY OBJECT: Use lifting aids and proper lifting techniques when removing or replacing the light bar. Failure to follow this warning may cause personal injury.

To install the mounting brackets on the light bar:

1. Carefully turn the light assembly upside down and place it on a surface that will not scratch the domes.
2. Secure an upper mounting bracket to each of the adjustable mounting brackets using the 1/4-20 by 3/4-inch carriage bolts, 1/4-inch flat washers, and 1/4-inch elastic stop nuts. See Figure 1.
3. Assemble the LH and RH adjustable mounting bracket on the factory-installed carriage bolts using 3/8-16 hex nuts, 3/8-inch flat washers, and 3/8-inch split lockwashers as shown in Figure 1. Secure the brackets in position and torque the nuts to 20 ft-lb.

Figure 1 Exploded view of bracket assembly on light bar (10-inch Navigator light bar shown)



4. For the Model VSLR6 and VSLR8, repeat steps 1 through 3 on the other split half of the light bar.

Installing the Light Bar on the Vehicle

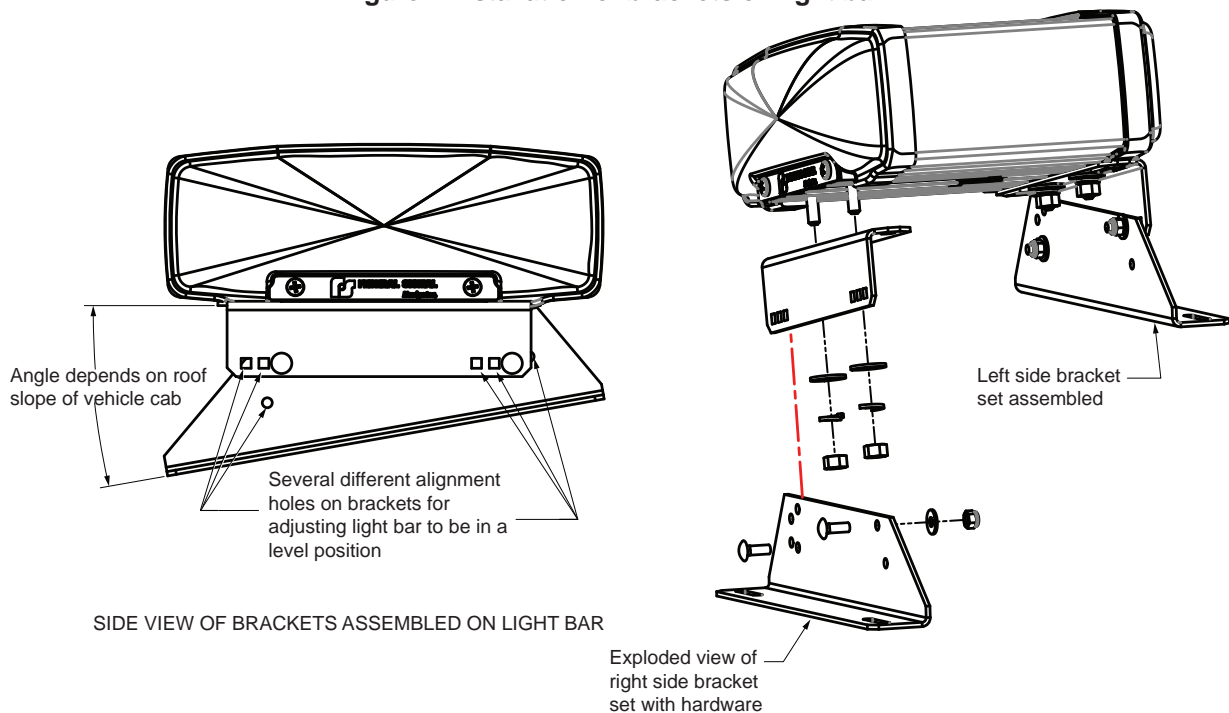
⚠ WARNING

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.

To install the light bar on the vehicle.

1. Position the light bar on the vehicle roof at the desired location. If mounting a VSLR light bar, the light bar should be positioned with the pods aligned facing forward. In addition, ensure that the light bar does not interfere with the operation of other apparatus. See Figure 2.

Figure 2 Installation of brackets on light bar



2. Using the mounting brackets as templates, scribe four drill position marks on the mounting surface.

NOTICE

DRILLING PRECAUTIONS: When drilling holes, check the area you are drilling into to ensure that you do not damage vehicle components while drilling. All drilled holes should be deburred, and all sharp edges should be smoothed. All wire routings going through drilled holes should be protected by a grommet or convolute/split loom tubing.

3. Before drilling, move the light bar(s) out of the way. Drill 0.199-inch (#8 drill) diameter holes at the scribed drill-position marks.
4. Place the light bar in position on the roof. Insert two mounting pads between the roof and the mounting bracket at each hole.

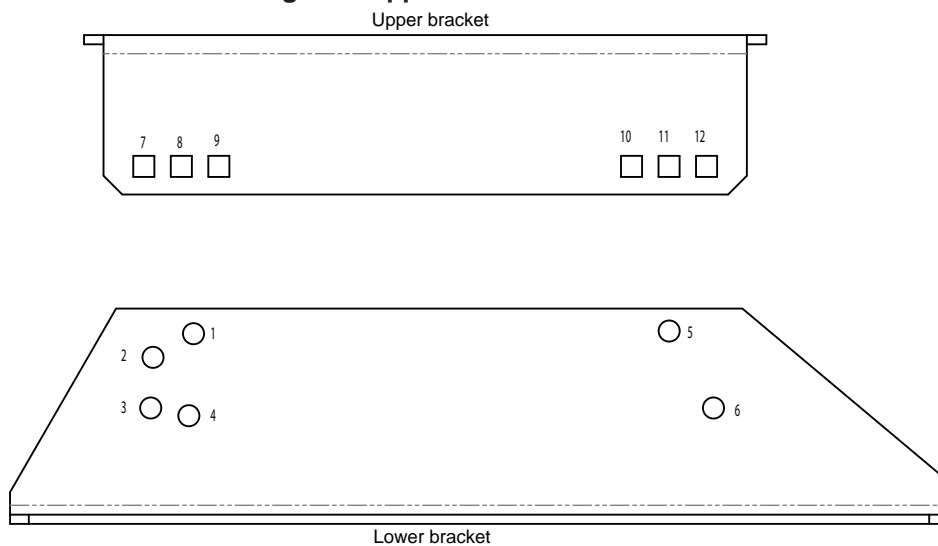
- Refer to Table 2 Adjustable Bracket Angle Chart for several bracket angle variations that can be assembled using the different combinations of holes in the brackets. The proper hole positioning of hardware on the brackets should be done by two people.

Table 2 Adjustable Bracket Angle Chart

| Angle from Horizontal | Lower Brackets Hole Number Location | Upper Brackets Hole Number Location |
|-----------------------|-------------------------------------|-------------------------------------|
| 0.85° | 4 & 6 | 8 & 12 |
| 0.85° | 4 & 6 | 7 & 11 |
| 8.1° | 1 & 6 | 8 & 12 |
| 8.1° | 1 & 6 | 7 & 11 |
| 8.5° | 3 & 5 | 7 & 11 |
| 8.5° | 3 & 5 | 8 & 12 |
| 10° | 4 & 5 | 7 & 10 |
| 10° | 4 & 5 | 8 & 11 |
| 10° | 4 & 5 | 9 & 12 |

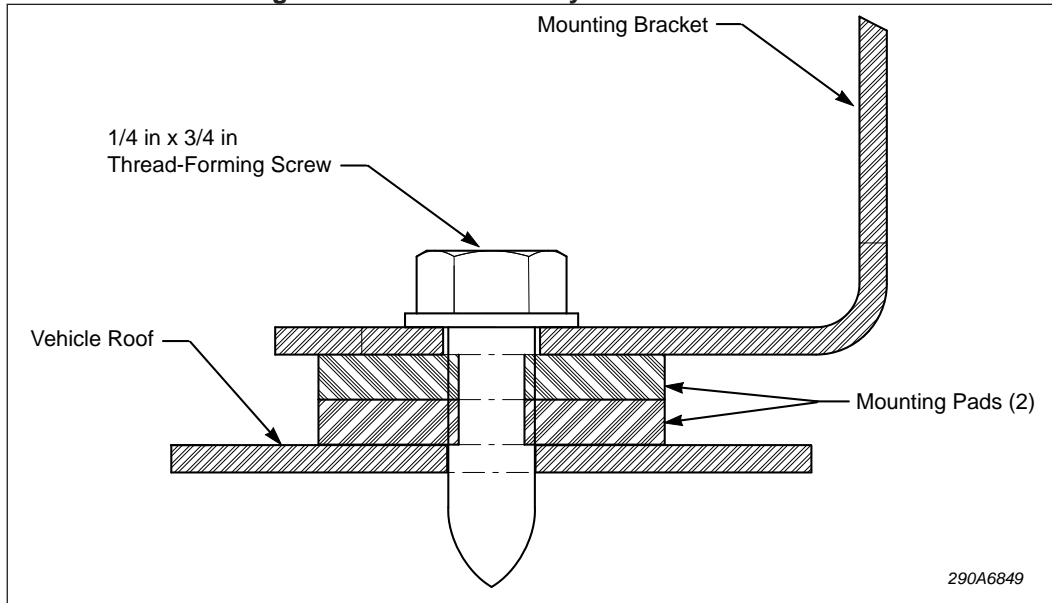
- The rear of the light bar can be aligned by using one of the upper bracket holes (1 through 4) with one of the lower bracket holes (7 thru 9) as shown in Figure 3. This should be done on both the driver side and passenger side of the light bar.

Figure 3 Upper and Lower Brackets



- The front of the light bar can be aligned by one of upper bracket holes (10 through 12) with one of the lower bracket holes (5 and 6) as also shown Figure 3. This should also be done on both the driver side and passenger side of the light bar.
- Secure the light bar to the roof using the 1/4-inch by 3/4-inch black stainless-steel thread-forming screws and tighten them securely. The light should now be solidly anchored to the roof. See Figure 4.

Figure 4 Bracket Assembly Secured to Vehicle



9. Make any necessary horizontal angle adjustments to the bracketry and ensure that all fasteners are tightened properly.
10. After any adjustments to the brackets have been made, secure all four 1/4-20 carriage bolts on the bracket assemblies in position and torque the nuts to 20 ft-lb.

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

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 an 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

Limited Warranty

This product is subject to and covered by a limited warranty, a copy of which can be found at www.fedsig.com/SSG-Warranty. A copy of this limited warranty can also be obtained by written request to Federal Signal Corporation, 2645 Federal Signal Drive, University Park, IL 60484, email to info@fedsig.com or call +1 708-534-3400.

This limited warranty is in lieu of all other warranties, express or implied, contractual or statutory, including, but not limited to the warranty of merchantability, warranty of fitness for a particular purpose and any warranty against failure of its essential purpose.



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