



Safety Message to Installers

⚠ WARNING

People's lives depend on your safe installation of our products. It is important to read, understand, and follow all instructions shipped with this product and the related add-on products. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this product you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- When drilling or cutting into a vehicle structure be sure that both sides of the surface are clear of anything that could be damaged.
- Do not install equipment or route wiring in the deployment path of an airbag.
- Locate the light control so that the VEHICLE and the CONTROL 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.
- To be an effective warning device, an emergency warning system produces bright light that can be hazardous to your eyesight when viewed at close range. Do not stare directly into this light at close range or permanent damage to your eyesight may occur.
- Refer to the instructions included with related products for additional precautions and information.
- You should frequently inspect the Opticom™ to ensure that it is operating according to the original manufacturer's specifications and that it is securely attached to the vehicle.
- 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.

Installation Precautions

⚠ WARNING

READ AND UNDERSTAND INSTRUCTIONS

Included with Opticom Model 795H-INT is the Installation Instruction Manual part number 79-1000-0316 (Federal Signal part number 2562457) for the GTT Opticom Infrared System Model 795H Low Profile LED Emitter. Before installing the equipment, read, understand, and follow all directions in the manual. Failure to follow the instructions may result in property damage, serious injury, or death.

⚠ WARNING

INSTALLATION PRECAUTION

The GTT Opticom Internal Model 795H-INT must be used with the Federal Signal designated mounting brackets and hardware as provided from the factory for proper installation. Failure to follow proper installation as outlined in this manual may result in property damage, serious injury, or death and/or void any associated warranties.

Introduction

The Model 350701-02 and Model 350701-03 are kits for mounting the Viper S2 lighthead close to the headliner within the interior of vehicles. The Model 350701-02 is used for mounting the single-head Viper™ S2 while the Model 350701-03 is used for mounting the dual-head Viper S2 and the GTT Opticom Infrared System Model 795H-INT Low Profile LED Emitter.

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 Tables 1 and 2 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 Model 350701-02 contents

Qty.	Description	Part Number
2	Screw, #10 x 3/4 , Thd. Form, Hex Washer	7011A122-12
2	Bracket, Extended	7011220-05
2	Screw, #6 x 5/16, Plastite®	7075A002
1	Mounting Bracket, Single	8613133

Table 2 Model 350701-03 contents

Qty.	Description	Part Number
2	Screw, #10 x 3/4 , Thd. Form, Hex Washer	7011A122-12
2	Bracket, Extended	7011220-05
2	Screw, #6 x 5/16, Plastite	7075A002
1	Mounting Bracket, Double	8613132

Tools Required

- Phillips screwdriver for #6 screws
- Drill and 9/64" drill bit
- Level

Hardware Required

- Installer-supplied #8 hardware for mounting the brackets to a rigid surface.

Mounting the Viper S2 or Model 795H-INT Opticom

For maximum coverage and effectiveness, the light assembly should be mounted in a horizontal orientation.

⚠ WARNING

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.

⚠ WARNING

OPTICOM MOUNTING PRECAUTION

The Model 795H-INT Opticom must be mounted in a horizontal position. Failure to do so may cause it to malfunction, resulting in damage, serious injury, or death.

⚠ WARNING

SEAT REMOVAL PRECAUTION

If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.

To mount the Viper S2 or Opticom:

1. Select a mounting location along the vehicle header. To assist in determining the mounting position, the lighthead or the Opticom may be attached to the bracket with the two #6 Plastite screws supplied with the lighthead.
2. See Figure 1 on page 4. Position the mounting bracket at the selected location along the vehicle headliner.
3. Mark the locations of the two #10 x 3/4" hex washer-head mounting screws. Take great care to ensure that the screws are located so that they will be fastened into the roof brace.

NOTICE

DRILLING PRECAUTIONS

When drilling holes, check the area into which you are drilling to be sure you do not damage vehicle components. All drilled holes should be de-burred and all sharp edges should be smoothed. All wiring routings going through drilled holes should be protected with convolute/split-loom tubing. DRILL ONLY THROUGH THE ROOF BRACE—DO NOT DRILL THROUGH THE ROOF.

4. Drill through the headliner and into the roof brace using a 9/64" drill.
5. Secure the bracket to the ceiling by securing it with the #10 x 3/4" hex washer-head mounting screws.
6. If you have not done so already, attach the Viper S2 lighthead or Opticom to the bracket with the two #6 Plastite screws.

Completing the Viper S2 Installation

To wire the lighthead and adjust the aim:

1. Wire the lighthead as described in the instructions included with the light assembly.
2. To adjust the aim of the lighthead, loosen the #6 screws and tilt the lighthead to the selected position. Make sure to re-tighten the screws after you are done. DO NOT overtighten the screws.

Completing the Opticom Installation

To connect the Opticom to the control box and level the aim:

1. Re-position the front visor on the Opticom so that the visor follows the slope of the windshield See Figure 1.
2. Connect the Opticom as described in the instructions included with the product.

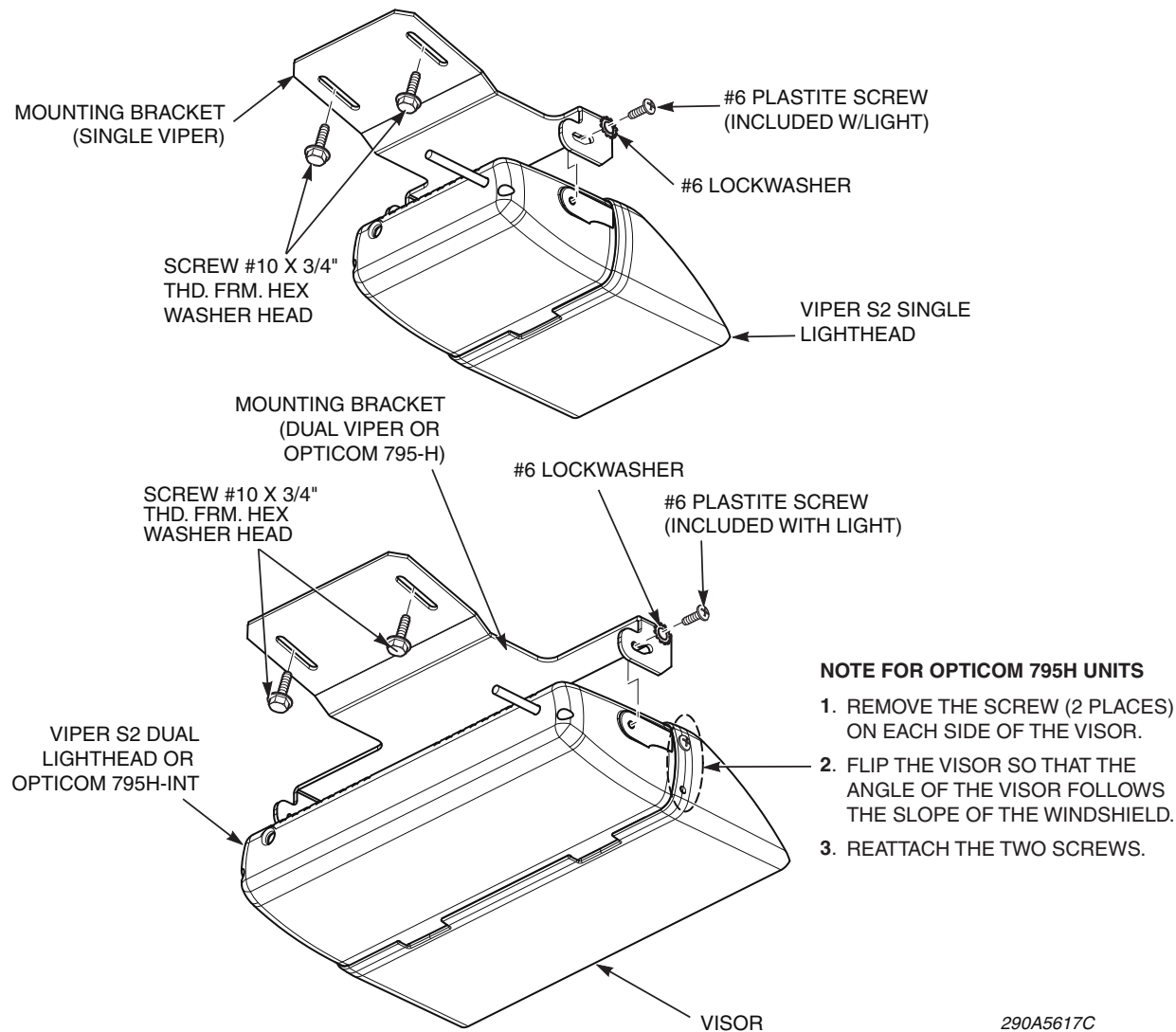
⚠ WARNING

MAINTAIN PROPER OPTICOM ALIGNMENT

Failure to maintain the proper alignment of the Opticom may cause it to malfunction, resulting in property damage, serious injury, or death.

3. Use a level to ensure that the Opticom does not tilt up or down and is parallel to the road surface. To adjust the aim, loosen the #6 screws and level the Opticom, then tighten the screws. Be sure to check regularly that the Opticom is properly aligned.

Figure 1 Viper S2 lightheads and Opticom 795H-INT attached to brackets



Testing the Opticom Installation

Following the directions provided with the installation instructions for the GTT Model 795H (part number 2562457), test the Opticom while driving to insure the emitter works with the detectors in your municipality per the standards of GTT and the municipality..

WARNING

VEHICLE FACTORS MAY AFFECT PRODUCT PERFORMANCE

Communication between the internally-mounted Federal Signal Opticom Model 795H-INT and an intersection signaling detector may be adversely affected by factors that vary by vehicle, resulting in a communication range that may be below the municipal requirement. These factors include the downward slope and overall curvature of the windshield, applied window tint or polarized films, the cleanliness of the windshield, sunlight reflected off the front hood, and other factors unique to the vehicle. The performance of the Opticom Model 795H-INT MUST first be validated by the municipality/installer with an actual trial in all varying types of first-responder vehicles within the municipality before it is deployed for general use. Failure to validate this product within the internal environment in which it is to be used may result in serious injury or death.

Safety Message to Operators

People's lives depend on your safe use of our products. Listed below are some important safety instructions and precautions you should follow:

- Because vehicle driving conditions vary and the possibility of emergency vehicle accidents always exists, Federal Signal does not recommend driving a vehicle with a suction cup mounted light installed. Under certain violent circumstances, the light could detach from the glass mounting surface causing injury or damage.
- Although your warning system is operating properly, it may not be completely effective. People may not see or heed your warning signal. You must recognize this fact and continue driving cautiously.
- Also, situations may occur which obstruct your warning signal when natural or man-made objects are between your vehicle and others, such as a raised hood or trunk lid. If these situations occur, be especially careful.
- This product contains high intensity LED devices. To prevent permanent eye damage, DO NOT stare into the light beam at close range.
- At the start of your shift, you should ensure that the light is securely attached and operating properly.

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

Testing the Warning System

⚠ 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 this lighting product at a close range or permanent damage to your eyesight may occur.

⚠ WARNING

SOUND HAZARD

All effective sirens and horns produce loud sounds (120 dB) that may cause permanent hearing loss. Always minimize your exposure to siren sound and wear hearing protection. Do not sound the siren or horn indoors or in enclosed areas where you and others will be exposed to the sound.

After the installation, test the emergency warning system to ensure that it is operating properly. Also test all vehicle functions, including horn operation, vehicle safety functions, and vehicle lighting systems to ensure proper operation. Ensure that the installation has not affected the vehicle operation or changed any vehicle safety functions or circuits. After testing is complete, provide a copy of these instructions to the instructional staff and all operating personnel.

Do not test the sound and light system of the vehicle while driving. Operating the vehicle warning systems may pose a hazard to the operator and other drivers if the systems do not function as expected. Test the vehicle only in a controlled environment.

Getting Assistance with the Installation

If you need further assistance with installing the GTT Opticom 795H-INT or the Viper S2 with the Model 250701-02 or 250701-03 Mounting Kit, contact the Federal Signal service department at:

Federal Signal Corporation
Public Safety Systems
2645 Federal Signal Drive
University Park, Illinois 60484-3167
1-800-433-9132
<http://www.fedsig.com>

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