

2562273A REV. A 311

## 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 GTT 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 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 350701-01 is a kit for mounting the Viper™ S2 Internal LED Light or the GTT Opticom Infrared System Model 795H-INT Low-Profile LED Emitter. The kit allows the light head or the Opticom to be mounted in a position that is extended up to 2.8 inches above or below the mounting surface. The kit is especially useful for mounting lights so they can be seen above the center high-mounted stop light (CHMSL) in certain vehicles.

## 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 Table 1 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
2	Screw, #6 Plastite®	7011220-05
2	Bracket, Extended	8613131
2	Lockwasher, #6	7075A002

## Tools Required

- Phillips screwdriver for #6 screws
- Drill and drill bit for #8 hardware
- 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. Install the lighthouse in an adequately ventilated area. Never install it near heater ducts.

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### **⚠ 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.*

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### **⚠ 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.*

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**⚠ 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 for the device.
2. See Figure 1. Attach the extended mounting brackets to the lighthead or Opticom with the supplied #6 Plastite screws and lockwashers. DO NOT overtighten the screws.
3. Use the mounting brackets as templates to mark the locations of the four mounting holes.

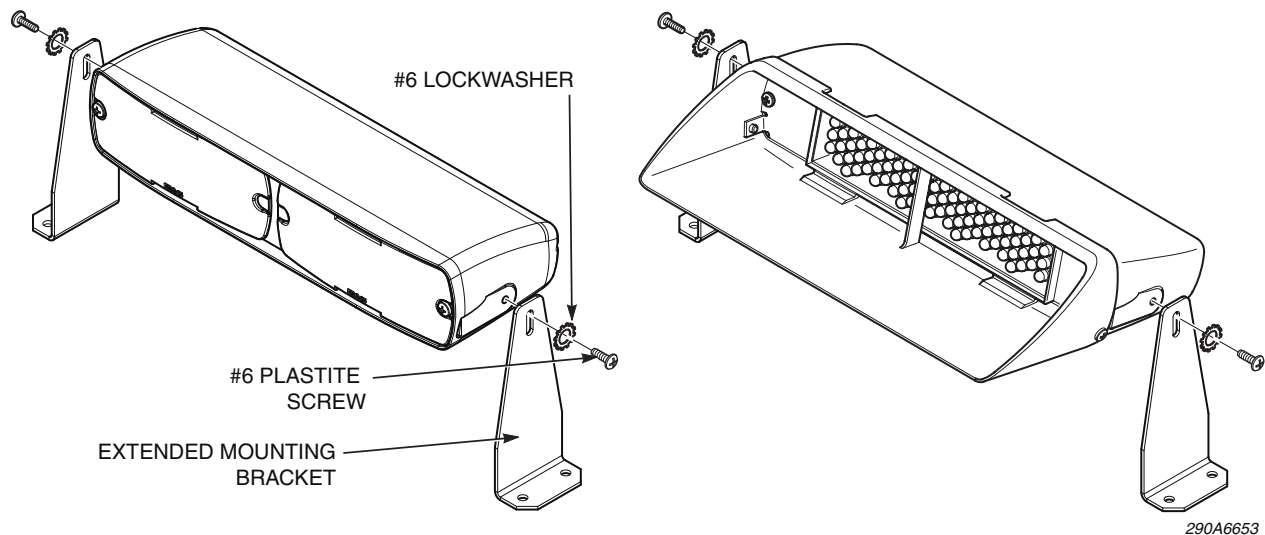
**NOTICE**

**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.*

4. Drill a hole at each of the marks.
5. Attach the lighthead or Opticom/bracket assembly to the vehicle using the appropriate #8 mounting hardware.

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



## Completing the Viper S2 Installation

To wire the Viper S2 and adjust the aim:

1. Connect 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. Connect the Opticom as described in the instructions included with the product.

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### **⚠ 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.***

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2. 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.

## **Testing the Opticom Installation**

Following the directions provided with the installation and wiring instructions for the GTT 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.

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### **⚠ 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.***

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## **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 to you, to passengers, or to others.

## **Testing the Warning System**

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### **⚠ 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.*

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### **⚠ 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.*

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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 250701-01 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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