

2562578A REV. A 910

## Safety Message to Installers of Federal Signal Products

### **⚠ WARNING**

People's lives depend on your proper 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 equipment, you must have a good understanding of automotive electrical procedures and 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. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury to you or others.
- 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.
- If a vehicle seat is 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. Remove all burrs from drilled holes. To prevent electrical shorts, grommet all drilled holes through which wiring is run.
- Never attempt to install aftermarket equipment that connects to the vehicle wiring without reviewing a vehicle wiring diagram available from the vehicle manufacturer. Insure that your installation will not effect vehicle operation or mandated safety functions or circuits. Always check the vehicle for proper operation after installation.
- Locate the controls so the VEHICLE and CONTROLS can be operated safely under all driving conditions.
- The flasher should be frequently inspected to ensure that it is operating properly and that it is securely attached to the vehicle.
- File these instructions in a safe place and refer to them when installing and/or reinstalling the product.

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

## Overview of the Model FHLP-IMP

The Model FHLP-IMP Headlight Flasher is a solid-state plug-in flasher designed for installation in 2006 and newer models of the Police Package Chevrolet™ Impala. The plug-in flasher operates from +9 Vdc to 16 Vdc with a 55 W load output on each of two outputs. It has built-in shutdown protection against short circuit, loss of ground, over-temperature, and reverse polarity. The built-in mounting bracket allows easier installation in tight spaces.

Along with the PowerPulse™ flash pattern, the Model FHLP-IMP features High-Beam Override. When the high-beam switch is activated, the High-Beam Override (HBOR) function of the flasher interrupts the flashing sequence to allow use of the high beams. The HBOR function is automatically disabled when the high-beam switch is de-activated, allowing the headlight flasher to resume operation.

**NOTE:** When used in dark conditions, the low-beam headlights must be ON for proper illumination, while the high-beam headlights flash to gain attention and increase the vehicle's visibility.

**Table 1** Product specifications

Operational Voltage:	9 Vdc to 16 Vdc
Standby Current:	Less than 13 mA
Flash Pattern:	PowerPulse™: Fast double flash alternating at 4.0 FPS, 180 cycles/minute
Dimensions:	4.7 in L x 2.05 in W x 0.7 in H (11.9 cm L x 5.2 cm W x 1.8 cm)
Material:	ABS plastic housing with aluminum mounting bracket
Mounting:	Mounts on 2.2 in (5.6 cm) centers
Wire Length:	14 in (45.7 cm)

## Installing the Flasher

**IMPORTANT:** Do not use the Model FHLP-IMP on 2005 and older vehicles.

The Model FHLP-IMP Headlight Flasher is designed to be water resistant. However, to ensure years of trouble-free operation, it should be mounted in a location that is protected from direct water spray and high temperatures.

These installer-supplied items are required:

- ✓ #8 nuts and bolts
- ✓ Activation switch for the 6J7 option

### NOTICE

**INSTALLATION PRECAUTION—Do not install the headlight flasher in a 1999 or newer Dodge Dakota or Dodge Durango. The installation may cause permanent damage to the electrical system of the vehicle.**

To mount and wire the flasher:

1. Position the flasher as shown in Figure 1 on page 3. DO NOT mount the flasher directly on the engine or close to the exhaust system.
2. Use the flasher as a template to mark the center of the two mounting holes.

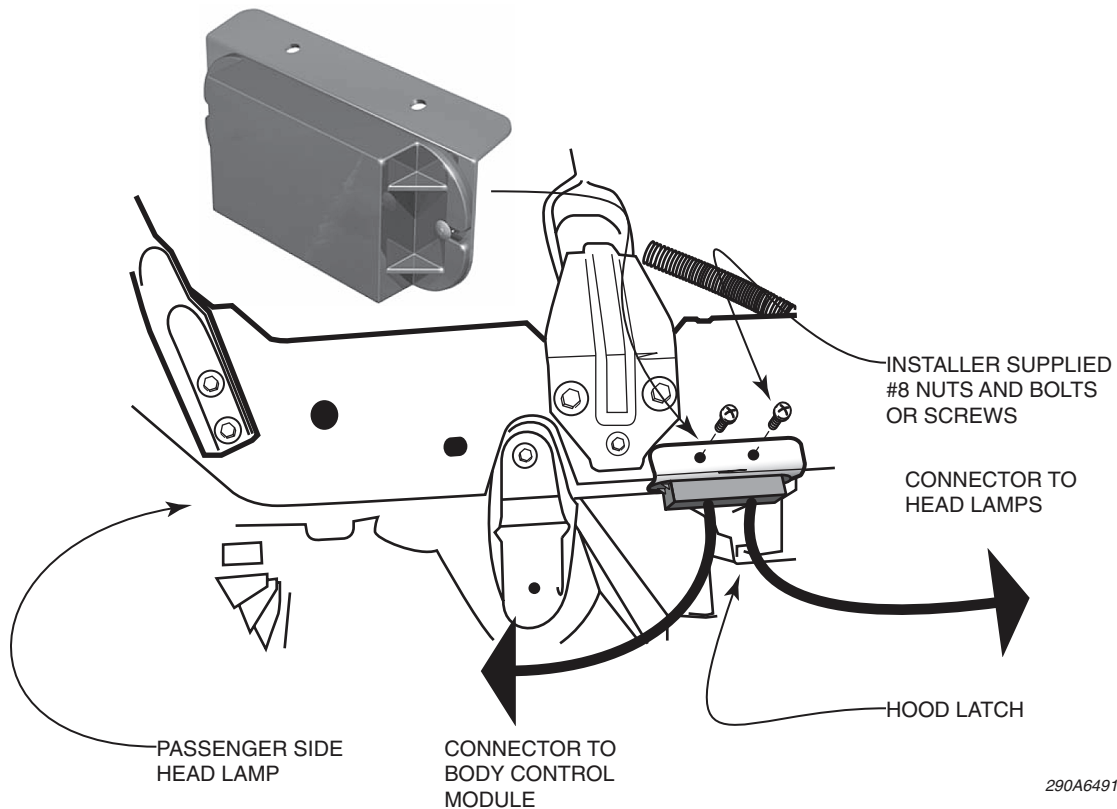
### NOTICE

**DRILLING PRECAUTION—When drilling holes, check the area into which you are drilling to be sure you do not damage vehicle components while drilling. All drilled holes should be de-burred and all holes should be smooth. All wire routing going through drilled holes should be protected by a grommet or convolute/split loom tubing.**

3. Drill the two holes and use the installer-supplied #8 mounting hardware to mount the flasher.
4. Disconnect the wire harness between the head lamps and connect it to the matching flasher plugs.

5. For the 6J7 option, connect the GREEN/RED activation wire, which is coiled in the passenger-side footwell, to one terminal of the installer-supplied activation switch.
6. Connect the other terminal of the activation switch to a source of 10 Vdc to 16 Vdc power.

Figure 1 Wiring Diagram



## Testing the Flasher

### **⚠ 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.

To test the operation of the flasher:

1. Verify that the flasher properly flashes the headlights when the control switch is turned ON.
2. With flasher control switch ON, turn ON the high-beam switch and verify that both high-beam lights turn on steady.

Table 3 Troubleshooting guide

Problem	Corrective Action
No operation	Verify that the flasher plugs are properly connected to the head lamps.
Headlights turn ON for a short time then OFF for a couple of seconds and repeats	The over-current shutdown of the flasher has detected too much load on the flasher. Verify that a maximum of two 55 watt lamps are connected to each output.

## Testing the Installation

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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 indoors or in enclosed areas where you and others will be exposed to the sound.***

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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 the lights at a close range or permanent damage to your eyesight may occur.***

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After testing the flasher, 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.

## Limited Warranty

Federal Signal warrants the Model FHLP-IMP Headlight Flasher for five years from the date of purchase to the original purchaser against any manufacturer defects or workmanship. This warranty applies only to the units installed according to the manufacturer's installation instructions and operated within the specifications of the unit. Federal Signal's obligation under this warranty is limited to repairing or exchanging the unit. Exchanging units under this warranty is as follows: 100 percent of purchase price for the first two years, 75 percent of the purchase price for the third year, 50 percent of the purchase price for the fourth year, and 25 percent of the purchase price for the fifth year. Warranty is void if the unit was installed incorrectly or maliciously damaged. All warranty claims must be accompanied by dated proof of purchase. Federal Signal retains the right to be the sole mediator of what constitutes defects in performance or manufacturing.

## Obtaining Technical Support and Service

For technical support and service, please contact:

Federal Signal Corporation  
Public Safety Systems  
Service Department  
Phone: 1-800-433-9132  
Fax: 1-800-343-9706  
Email: [empserviceinfo@fedsig.com](mailto:empserviceinfo@fedsig.com)

## Returning a Product to Federal Signal

Before returning a product to Federal Signal, call 800-264-3578, 800-433-9132, or 800-824-0254 to obtain a Returned Merchandise Authorization number (RMA number). To expedite the process please be prepared with the following information:

- Your Federal Signal customer or account number.
- The purchase order number under which the items were purchased.
- The shipping method.
- The model or part number of the product being returned.
- The quantity of products being returned.
- Drop ship information as needed.
- Any estimate required.

When you receive your RMA Number:

- Write the RMA number on the outside of the box of returned items.
- Reference the RMA number on your paperwork inside of the box.
- Write the RMA number down, so that you can easily check the status of the returned equipment.

Send all material with the issued RMA Number to:

Federal Signal Corporation  
Public Safety Systems  
2645 Federal Signal Drive  
University Park, IL 60484-3167  
Attn: Service Department  
RMA: # \_\_\_\_\_

800-433-9132  
800-343-9706 (fax)  
[www.fedsig.com](http://www.fedsig.com)

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Chevrolet is a trademark of General Motors





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