



FEDERAL SIGNAL
Safety and Security Systems

Model SIFMHVHL-EX18 Mounting Kit

***Installation, Operation, and
Maintenance Instructions***

25500717

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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.



FEDERAL SIGNAL Safety and Security Systems

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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 this light, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment. Always refer to the vehicle's service manuals when installing equipment on a vehicle.
- DO NOT install equipment or route wiring in the deployment path of an airbag.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that could be damaged.
- For the light to function properly, a separate ground connection must be made. If practical, it should be connected to the negative battery terminal. At minimum, it may be attached to a solid metal body or chassis part that provides an effective ground path.
- Locate the light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- The effectiveness of an interior mounted warning light depends on the clarity, the tinting, and the angle of the glass it is being placed behind. Tinting, dirt defects, and steeply angled glass reduce the light output of the warning light. This may reduce the effectiveness of the light as a warning signal. If your vehicle has dirty, tinted, or steeply angled glass, use extra caution when driving your vehicle or blocking the right of way with your vehicle.
- Do not attempt to activate or deactivate the light control while driving in a hazardous situation.
- Frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.

Safety Message to Installers of Warning Light Equipment

- After installation, test the light to ensure that it is operating properly.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- After testing is complete, provide a copy of these instructions to the instructional staff and all operating personnel.
- 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 contains instructions for installing a SpectraLux® ILS (SIFM) system into the rear hatch of a 2018 Ford® Expedition®.

NOTE: For electrical installation instructions, refer to the Installation and Maintenance Instructions packed with the lights.

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
1	SIFMH 18EXPD Shroud Assembly	862403714
1	SIFMH 18EXPD Cover Assembly	862403716
2	#10 Type B Torx Head Steel Screw	7011246-06
1	8-32 Pan Head Phillips Machine Screw	7000A408-10

Installing the Warning Lights

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.*

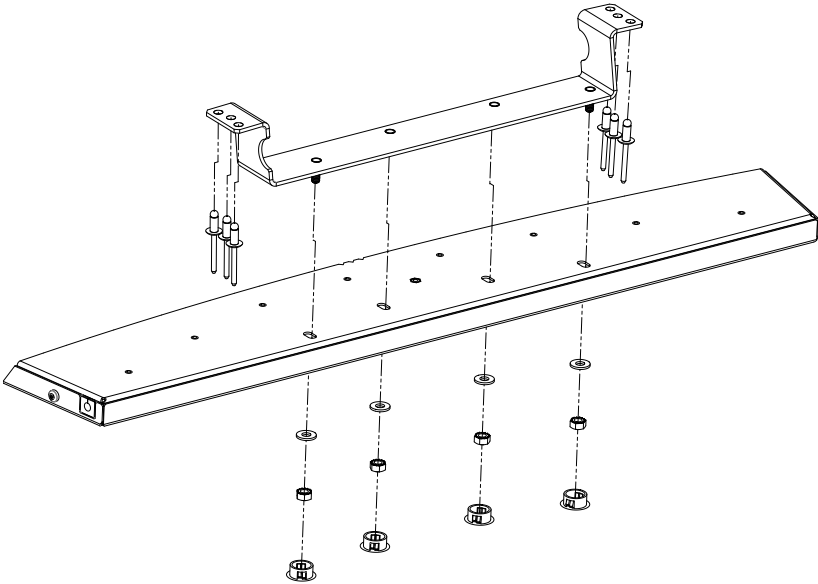
IMPORTANT: Plan all cable routing before the installation.

To install the warning lights:

1. Install the extruded rubber sealing strip on the edges of the shroud and cover that contact the rear window.
2. Remove the trim panel from the vehicle according to the manufacturer's instructions.

3. Loosely install the bracket assembly to the shroud assembly as shown in Figure 1. Have the bracket adjust all the way toward the opening in the shroud. Use the supplied 1/4-inch flat washers and Keps® nuts.

Figure 1 Exploded View



4. Hold the light bar assembly to the vehicle in the location shown in Figure 3. Relocate the factory wiring and washer hose as needed. Mark the six mounting holes.

NOTICE

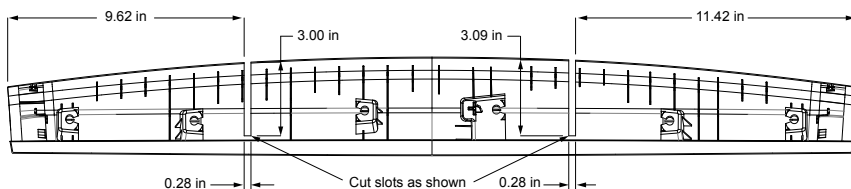
DRILLING PRECAUTIONS: Before drilling holes, check the area you are drilling into to be sure you do not damage vehicle components while drilling. All drilled holes should be deburred, and all sharp edges should be smoothed. All wire routings going through drilled holes should be protected by a grommet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

5. Drill holes appropriately sized for a 1/4-inch rivet at the six previously marked locations.
6. Remove the bracket assembly from the shroud assembly and install it to the vehicle using the included pop rivets and a rivet installation tool.

Unpacking the Kit

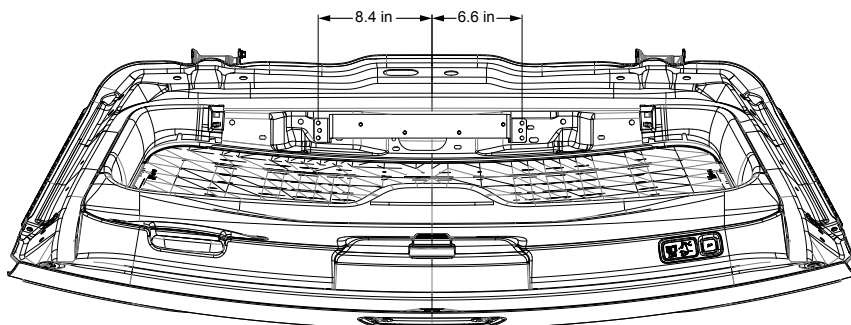
7. Modify the trim panel as shown in Figure 2. Reinstall the trim panel to the vehicle.

Figure 2 Trim Panel (Measurements in inches)



8. Install the ILS assembly to the bracket assembly using the 1/4-inch flat washers and Keps® nuts. Ensure that the ILS assembly is pushed rearward and tight to the glass.

Figure 3 Assembly (Measurements in inches)



9. Install the four included dome plugs to the four holes in the ILS.
10. Complete the wiring according to the electrical instruction sheet.

Wiring the Installation

Refer to the Installation and Maintenance Instructions packed with the speaker and lights.

Testing the Warning System

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

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.

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.

Getting Technical Support

Getting Technical Support

For technical support, please contact:

Service Department
Federal Signal Corporation
Phone: 1-800-443-9132
Email: empserviceinfo@fedsig.com

Ordering Replacement Parts

To order replacement parts, call Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT) or contact your nearest distributor.

Table 2 Replacement Parts - Permanent Mount

Qty	Description	Part No
1	6 mm Bulb 1/16-inch Edge Trim Seal	77700500-56
1	Fuse Kit	8620006-01
6	1/4-inch Diameter Zinc Steel Blind Rivet	70901172
1	SIFMH 18 EXPD Bracket Assembly	862403718
4	1/4-20 Steel External Keps® Hex Nuts	7058A005
4	0.266 x 0.625 x 0.063-inch Flat Steel Washer	7072A028
4	3/4-inch Nylon Dome Plug	231224

Getting Repair Service

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally.

Any units 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 to the following address.

Service Department
Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484-3167



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