

**INSTALLATION AND OPERATING INSTRUCTIONS
FOR
MAGNETIC SUCTION CUP MOUNTING KIT
ON
MINI-LIGHTBAR LIGHT ASSEMBLIES**

SAFETY MESSAGE TO INSTALLERS AND USERS

⚠ 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 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.**
- **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, use grommets at all drilled holes through which wiring passes.**
- **You should frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.**
- **After installation and testing are complete, provide a copy of this instruction sheet to 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 to you or others.

A. GENERAL.

This instruction sheet provides directions for installation and wiring of a magnetic suction cup

mounting kit on HighLighter series light assemblies made after 5/18/2002.

NOTE

The magnetic mounting kit is intended for use with the HighLighter Light Assembly.

Magnetic mounting provides a secure, temporary mounting method for most installations. However, it is not intended for use on the exterior of a moving vehicle.

After unpacking the kit, inspect it for damage that may have occurred in transit. If the unit 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 the KIT CONTENTS LIST are contained in the packing carton.

B. KIT CONTENTS LIST.

Qty.	Description	Part Number
2	Screw, Thd. Form, 1/4" x 5/8"	7011165A-10
1	Cable Assembly with terminals	1751127A
2	Magnet Assembly	8550A012A-03
2	Suction cup	8560052A
2	Washer	7072230A
1	Plug shell	140A203A-02
2	Terminals	224A216A-04L
1	Warning Label	200389
2	Suction cup retainer	8560061A

C. WIRING.

To install the power cable assembly, proceed as follows:

⚠ WARNING

Wait 10 minutes with the power disconnected when servicing strobe versions of the Highlighter. High voltages are present inside the unit. Failure to do so may result in property damage, serious injury, or death to you or others.

1. Remove and retain the four screws (one at each corner), which secure the dome to the base and remove the dome (see figure 1).

2. Remove and discard the foam mounting pad. Peel the pad back with slow and steady tension to minimize tearing of the pad.

3. Remove the strain relief bushing from the base plate. Pull the wires out of the wire exit hole, and remove and retain the strain relief bushing from the wires. Disconnect the black and red incoming wires from the terminal block (rotator models), or remove the 2-conductor plug from the strobe power supply (strobe models).

4. Route the cable assembly through the wire routing hole in the base plate. For rotator models, replace the metal contacts with the terminals provided. Connect the ribbed wire to the positive (+) terminal and the smooth wire to the negative (-) terminal.

NOTE

For strobe models, route the cable through the base BEFORE installing the wires into the connector shell.

Press the metal contacts into the connector shell as shown in figure 2, or use the old connector as a reference. The ribbed wire will replace the original red wire. Plug the connector into the power supply.

5. Replace the previously removed strain relief bushing.

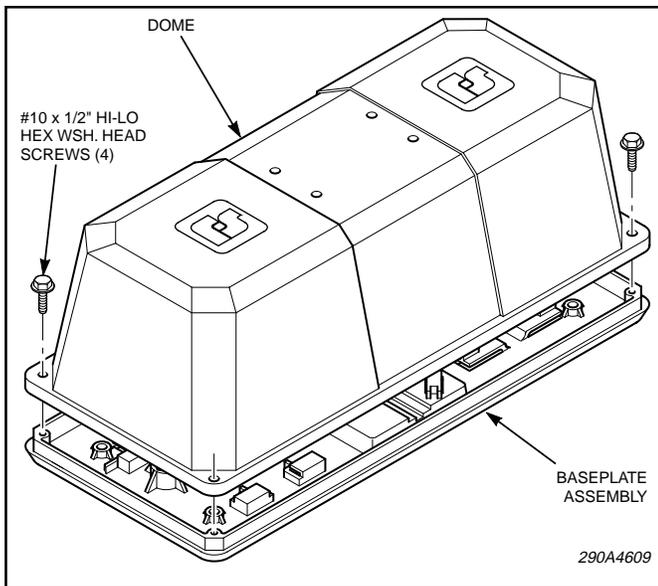


Figure 1.

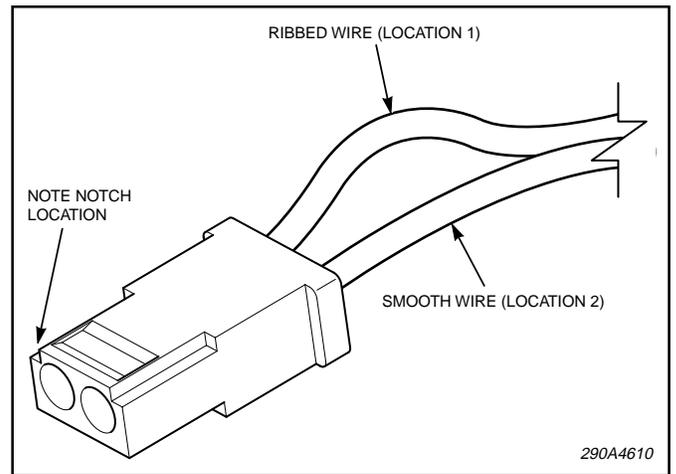


Figure 2.

CAUTION

Interference with a rotating reflector can damage the reflector or wires. Ensure that wires are dressed to prevent any interference.

6. Dress the wires inside the Light Assembly with user-supplied tie-wrap(s).

7. Test for proper operation.

8. Replace the dome using the previously removed screws.

D. INSTALLATION OF MAGNETS, AND SUCTION CUPS.

CAUTION

Use caution, the magnets provided are strong, and will be attracted to any nearby steel or other magnetic items.

1. Place a magnet into each suction cup as shown in figure 3. All five flaps should cover the magnet. Place a suction cup retainer onto the suction cup; align the posts with the suction cup as shown in figure 3. The release tab should be centered between the two posts on the top of the suction cup retainer.

2. Place the suction cup assemblies onto the base as shown in figure 4. Be sure to align the pins with the mounting holes. Fasten to the base with a screw and washer. Tighten to 24 lb-in.

E. INSTALLATION ON VEHICLE ROOF.

Select a location for the light assembly on the vehicle roof which provides maximum signaling effectiveness for your application.

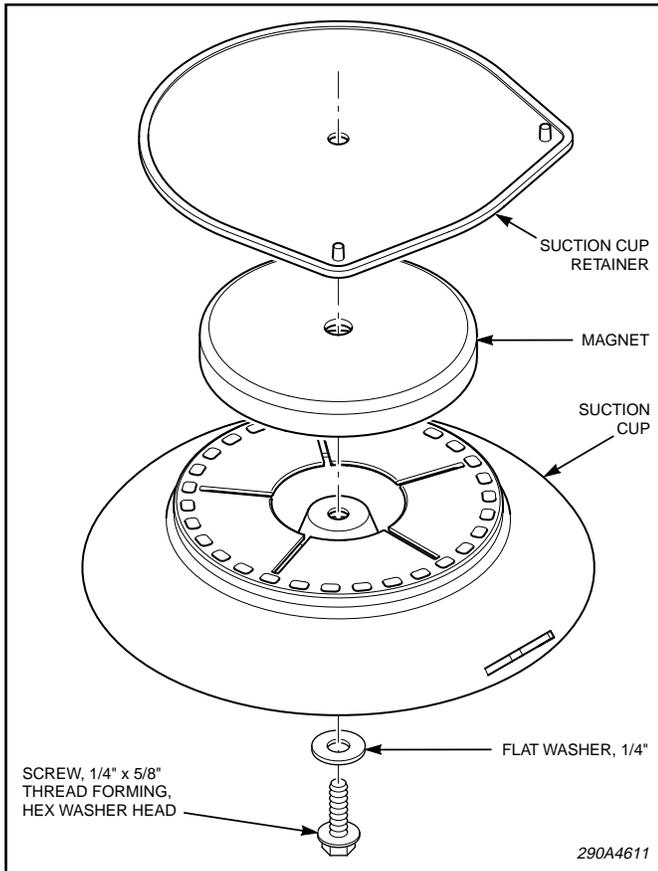


Figure 3.

⚠ WARNING

Because vehicle roof construction and driving conditions vary, Federal Signal does not recommend driving a vehicle with a magnetically mounted warning light installed. The light could fly off the vehicle causing injury or damage. Repair of damage incurred because of ignoring this warning shall be the sole responsibility of the user.

Holding power of magnetic mounting systems is dependent upon surface finish, surface flatness, and thickness of the steel mounting surface. Therefore, to promote proper magnetic mounting:

- Magnetic mounting system should not be used on vehicles with vinyl tops.
- Mounting surface magnets and suction cups must be kept clean, dry, and free of foreign particles that prevent good surface contact.

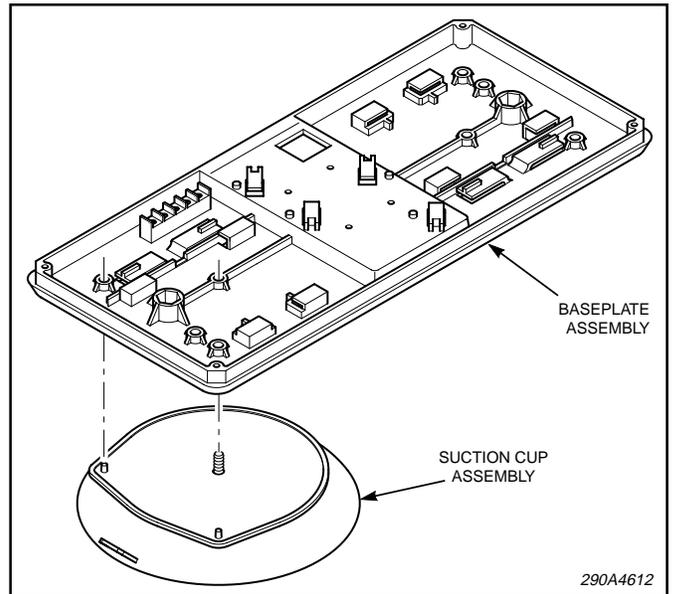


Figure 4.

1. Ensure that mounting surface is flat. Place the light at the desired location
2. Pull up on the release tab while pushing down on the top of the bar to release trapped air. Repeat for the other suction cup.
3. To remove the light bar, pull up on the release tabs while picking up the light.

F. OPERATION.

⚠ WARNING

If conditions require your full attention, you should avoid inserting the plug in the cigarette lighter socket.

Insert the plug on the end of the cable assembly in the cigarette lighter socket.