

**INSTALLATION AND OPERATING INSTRUCTIONS  
FOR  
MAGNETIC MOUNTING KIT  
ON  
HIGHLIGHTER™ SERIES LIGHT ASSEMBLIES**

**SAFETY MESSAGE TO INSTALLERS AND USERS**

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, grommet 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 mounting kit on Highlighter™ Series Light Assemblies.

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
4	Screw, 1/4-20 Hex Head	7000A311-08
4	Nut, 1/4-20 Hex	7059A018
8	Washer, Flat, 1/4"	7072A025
4	Lockwasher, Split, 1/4"	7074A015
1	Cable Assembly with Plug	175757B
4	Magnet Assembly	8550A012A
1	Terminal, QD, Yellow	224A253

**C. INSTALLATION OF MAGNETS.**

**NOTE**

The magnetic mounting kit is intended for use with the Model HL 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.

To install the magnets on the base plate, proceed as follows:

1. Remove the four screws (one at each corner) which secure the dome to the base plate and remove the dome (see figure 1). Retain the screws.
2. Locate the four mounting holes in the base plate as shown in figure 2.
3. See figure 3. From the underside of the magnet, insert a 1/4-20 hex head screw through the magnet. Place two 1/4" flat washers over the exposed threads.

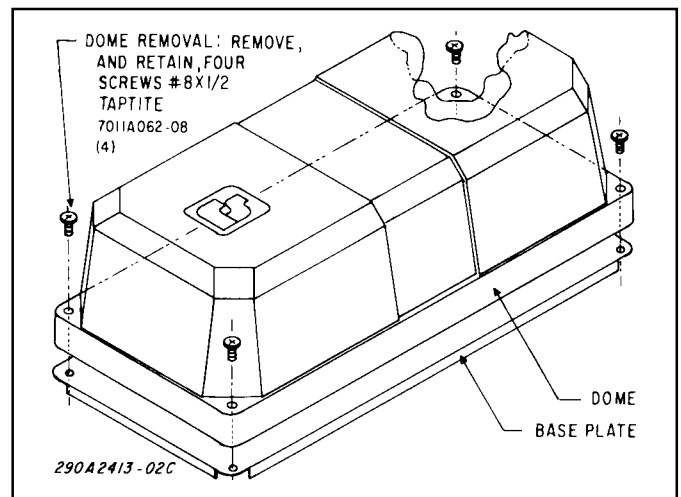


Figure 1.

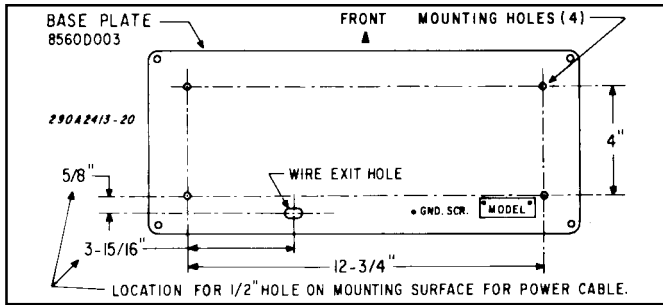


Figure 2.

4. Insert the remaining exposed threads of the assembly through a mounting hole (figure 2) in the base plate and secure with a 1/4" lockwasher and hex nut (see figure 3).

5. Perform steps III.C. and III.D. until all four magnets are installed on the base plate.

#### D. WIRING.

#### CAUTION

Cable assembly damage will result if two rotating lights and a traffic clearing light are connected together. Do not use the supplied cable assembly if connecting two rotating lights and a traffic clearing light.

To install the cable assembly, proceed as follows:

1. 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.

2. Route the cable assembly through the wire routing hole in the base plate. Disconnect the incoming red wire at the quick connect terminal. Remove and retain the screw and lockwasher which secures the incoming black ground wire to the light assembly's base.

#### NOTE

Ensure that the lockwasher is placed between the light assembly's base and the cable assembly's ring terminal.

3. Connect the quick connect terminal on the supplied cable assembly to the mating connector in the light assembly. Secure the supplied cable assembly's ring terminal to the light assembly's base using the previously removed screw and lockwasher.

#### NOTE

If the light assembly is equipped with flashing lights (Model HLF), splice the blue power lead to the cable assembly's ribbed lead. Remove the blue quick connect terminal from cable assembly and replace with the supplied yellow quick connect terminal. Also, ensure that the cigarette lighter fuse is a 15-ampere fuse (Model HLF only).

4. Replace the previously removed strain relief bushing.

#### CAUTION

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

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

6. Test for proper operation.

7. Replace the dome using the previously removed screws.

#### E. INSTALLATION ON VEHICLE ROOF.

Place the light assembly on the vehicle roof at a location which provides maximum signalling effectiveness for your application.

#### WARNING

Because vehicle roof construction and driving conditions vary, Federal 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:

- Mounting surface and magnets must be kept clean, dry, and free of foreign particles that prevent good surface contact.
- Ensure that mounting surface is flat.
- Magnetic mounting system should not be used on vehicles with vinyl tops.
- To prevent sliding of light assembly on mounting surface, quick acceleration and hard stops should be avoided.

#### F. OPERATION.

#### WARNING

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

#### WARNING

To avoid overheating of plug assembly during operation, ensure that the cigarette lighter socket is free of dirt and ashes.

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

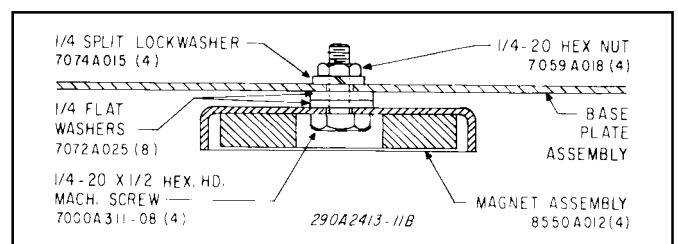


Figure 3.