

INSTALLATION INSTRUCTIONS FOR ROTATING LIGHT

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 the products. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this kit: 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.
- In order 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 a minimum, it may be attached to a solid metal body or chassis part that will provide an effective ground path as long as the light system is to be used.
- Locate light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- Do not attempt to activate or deactivate light control while driving in a hazardous situation.
- You should frequently inspect the light 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 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.

I. UNPACKING.

After unpacking the unit, inspect it for damage that may have occurred in transit. If the unit has been damaged, 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 package.

II. KIT CONTENTS LIST.

Qty.	Description	Part Number
3	Washer, Flat	7072A025
1	Grommet	8108A005
6	Pad, Mounting	8422A033
3	Screw, Thd. Form	7011A084-16
1	Terminal, Male	224A217-02
1	Terminal, Ring #10	224A201-04
1	Wire Tie	150A109

III. INSTALLATION.

A. Mounting.

To mount the light, proceed as follows:

1. Remove the retaining band from the light assembly. Lift off the dome.
2. Position the vehicle on a level surface. Select a relatively flat position on the centerline of the roof which provides sufficient rigidity to support the light and prevent vibrations caused by the light when the vehicle is in motion.

CAUTION

Turning reflector by hand may damage motor or worm gear. To rotate the or reflector, connect to an appropriate power source.

3. Use the base of the light as a template and scribe four drill position marks on the mounting surface.

CAUTION

To avoid damage when drilling, ensure that both sides of mounting surface are clear of any parts or wires.

Also, when drilling any holes, ensure that holes are drilled only through sheet metal and not through upholstery.

4. Drill one 1/2" hole (wire routing hole) at the previously scribed inner drill position mark. Drill three 3/16" holes (mounting holes) at the previously scribed outer drill position marks.

5. Install the grommet in the 1/2" hole (wire routing hole).

6. Carefully position the light over the mounting holes and wire routing hole. Inspect the installation to determine if the base of the light is level. If necessary, place one or more mounting pads between the base and the mounting surface at the mounting hole locations (see figure 1). Temporarily place the light aside.

7. Install a user-supplied switch (current capacity of at least 6 amps) at a location which allows the vehicle and all controls to be operated safely under all driving conditions.

8. Route a user-supplied 16AWG red wire from one side of the switch through the grommet in the mounting surface and leave about 6" of excess wire above the mounting surface. Also, route a user-supplied 16AWG black wire from a known good vehicle ground through the grommet in the mounting surface and leave about 6" of excess wire above the mounting surface.

9. Apply a silicone sealing compound around the wires and grommet where they pass through the mounting surface to prevent leakage.

10. Route the wires through the wire routing hole in the base of the light.

NOTE

Ensure that wire routing hole in the base of the light is directly over the grommet that was installed in step 5.

11. See figure 1. Secure the base to the mounting surface with three thread-forming screws, flat washers, and mounting pads as determined in step 6 above.

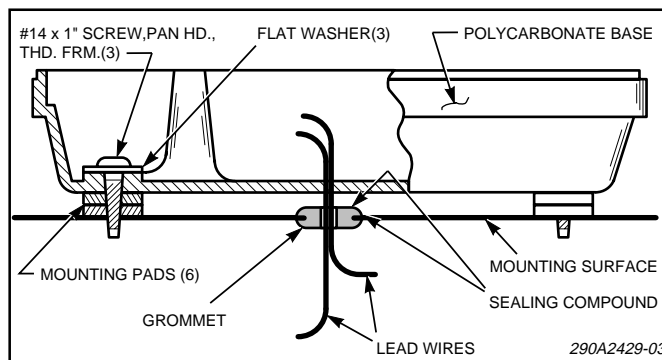


Figure 1.

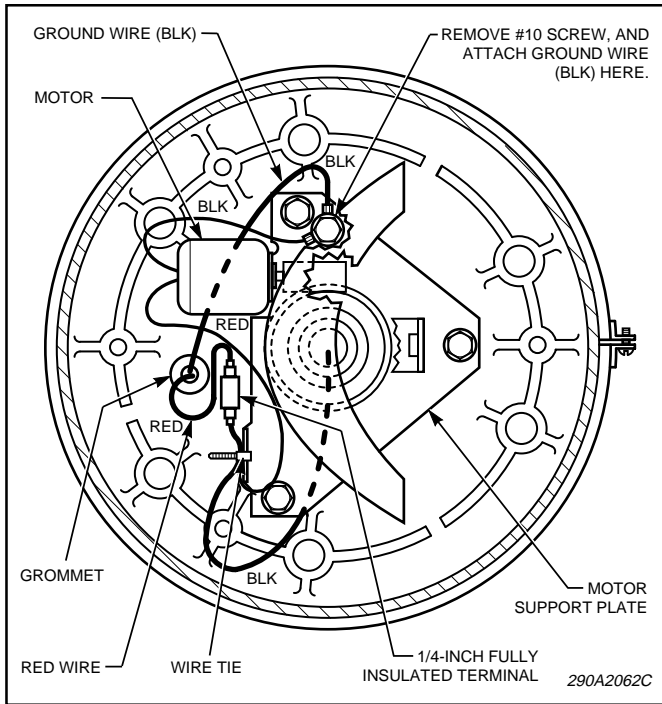


Figure 2.

B. Wiring.

To complete the wiring, proceed as follows:

1. Strip approximately 1/4" of insulation from the end of the red wire in the base of the light and crimp the male terminal on the end.
2. Connect the red and black wires to the light as shown in figure 2.
3. Wire tie the red wire to the motor support plate as shown in figure 2.
4. Connect the unused terminal of the previously installed switch to one side of a user-supplied fuseholder. Connect the other side of the fuseholder to the positive (+) terminal of the vehicle's battery. Install a six (6) amp fuse in the fuseholder.
5. Replace the dome and retaining band.

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.
- Magnet 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.
- If the light is to be held directly to the roof by the magnet, ensure that the power cable is not under the magnet.

IV. MAINTENANCE.

A. Lamp Replacement.

WARNING

A serious injury may result if lamp is touched when hot. Always allow lamp to cool before removing. Halogen lamps are pressurized and if broken can result in flying glass. Always wear gloves and eye protection when handling the lamps.

CAUTION

Service life of lamp will be shortened if glass portion is touched. If glass has been handled, clean carefully with a grease solvent.

1. Rotate the reflector until the C-clip (located at the base of the lamp) can be removed, and remove the C-clip by sliding it away from the reflector.
2. See figure 3. Note the lamp's orientation and replace the lamp (H-1 halogen, Part No. 8440A265A) with the straight edge of the lamp's base toward the reflector.

B. Dome Cleaning.

WARNING

Crazing (cracking) of domes will cause reduced effectiveness of the light. Do not use cleaning agents (which will cause crazing) such as strong detergents, solvents, or petroleum products. If crazing of dome does occur, reliability of light for emergency signalling purposes may be reduced until dome is replaced.

The dome can be cleaned using a non-abrasive, high quality, automotive paste wax and a soft cloth.

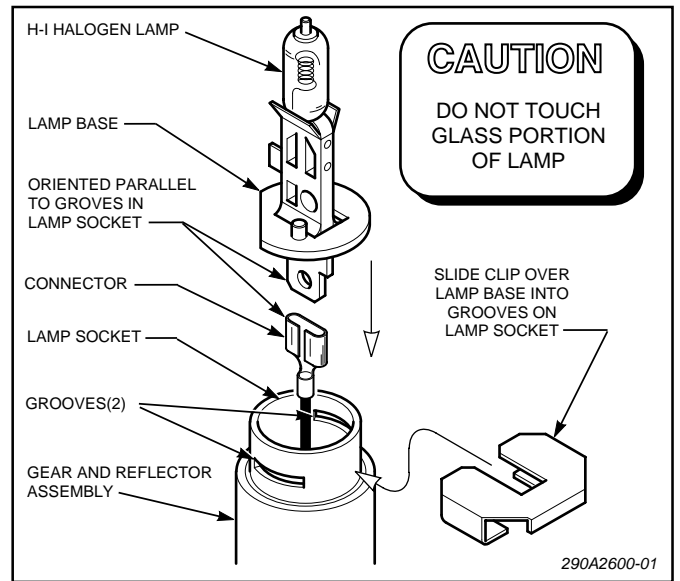


Figure 3.