

## INSTRUCTION SHEET FOR ARCTIC STROBE LIGHTS

### 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 the 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.
- 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, examine it for damage that may have occurred in transit. If the equipment has been damaged, do not attempt to install or operate it, file a claim immediately with the carrier stating the extent of the damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them.

#### II. KIT CONTENTS LIST.

Qty.	Description
1	Grommet
2	Nut, 1/4-20, Hex
2	Screw, 1/4-20
2	Washer, Flat, 1/4"
2	Lockwasher, 1/4"
2	Connector

#### III. INSTALLATION.

#### **⚠ WARNING**

When installing equipment inside air bag equipped vehicles, the installer **MUST** ensure that the equipment is installed **ONLY** in areas recommended by the vehicle manufacturer.

Failure to observe this warning will reduce the effectiveness of the air bag, damage the air bag, or potentially damage or dislodge the equipment, causing serious injury or death to you or others.

See figure 1 and proceed as follows:

- A. Determine the strobe light mounting location.
- B. Before proceeding, plan all wiring and cable routing.
- C. Scribe 2 mounting hole locations 6-7/8" apart. Scribe a wire routing hole location 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.

- D. Drill two 0.281" holes at the scribed mounting hole locations. Drill a 0.31" hole at the scribed wire routing hole location. Remove all burrs and sharp edges.

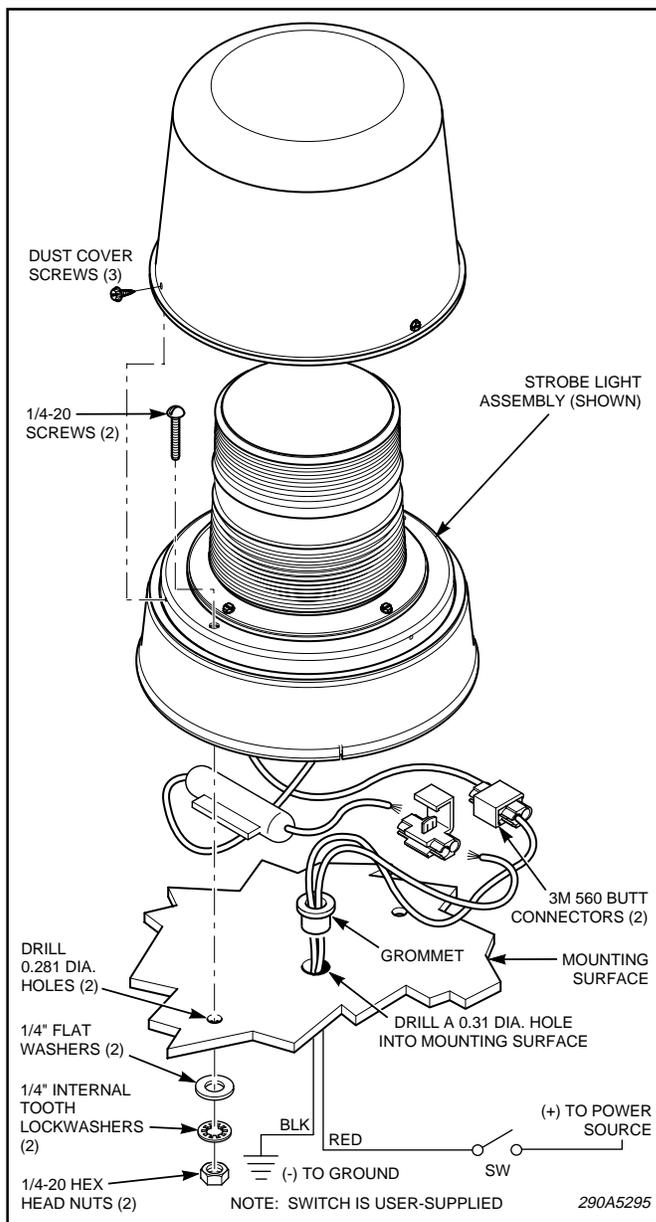


Figure 1.

E. Install the supplied grommet in the wire routing hole.

F. Install the rubber gasket on the metal base and cut it to the proper length.

G. Route user-supplied red and black wires through the grommet and mounting surface. Use the supplied connectors to splice the light's wires to the user-supplied red and black wires.

H. Connect the red wire to one terminal of a user-supplied switch with a current handling capacity of at least eight amperes. Connect the black wire to the vehicle chassis as close as practical to the light. Connect the remaining switch terminal to the vehicle battery with user-supplied wire.

#### NOTE

Polarity **MUST** be observed for proper operation. The red wire connects to positive and the black wire connects to negative.

Use 18-gauge wire for runs under 20-feet. For wire runs over 20-feet, consult local electrical codes.

Ensure that the vehicle's supply voltage is within the voltage rating specified on the strobe light.

I. Remove and retain the 3 screws which secure the dust cover to the base. Remove the dust cover from the base and insert the 1/4-20 screws through the base.

J. Install the unit on the mounting surface using the 1/4-20 screws, 1/4"lockwashers, flat washers, and hex nuts. Replace the dust cover and secure with the 3 previously removed screws. Test the light for proper operation.

#### ⚠ 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.

#### ⚠ WARNING

**High voltage generated by the light's power supply may cause property damage, serious injury or death to you or others. Ensure that power to light is disconnected and wait at least 5 minutes before working on the light.**

As strobe lights are used, the flash tubes begin to darken, causing the light output to decrease. This darkening is characteristic of flash

tubes. Also, as flash tubes age, they may have a tendency to misfire (not fire periodically).

After extended operation, occasionally check for flash tube degradation. Should the flash tube misfire, have a noticeable decrease in light output or glow continuously—it should be replaced.

To replace the flash tube, proceed as follows:

A. Disconnect power.

B. Remove and retain the 3 screws which secure the dust cover to the base. Remove the dust cover from the base.

C. Remove and retain the four screws which secure the lens to the base. Remove the lens from the base.

D. Remove and retain the screws which secure the flash tube assembly to the base.

#### CAUTION

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

E. Grasp the flash tube by its printed circuit board and pull it off of the pins, using a gentle "rocking" motion. See figure 2. Install a new flash tube. Secure the flash tube assembly to the base using the previously removed screw. Ensure that the O-ring seal rests flat on the base (see figure 2) and reassemble the light.

F. Reconnect power and test the light for proper operation.

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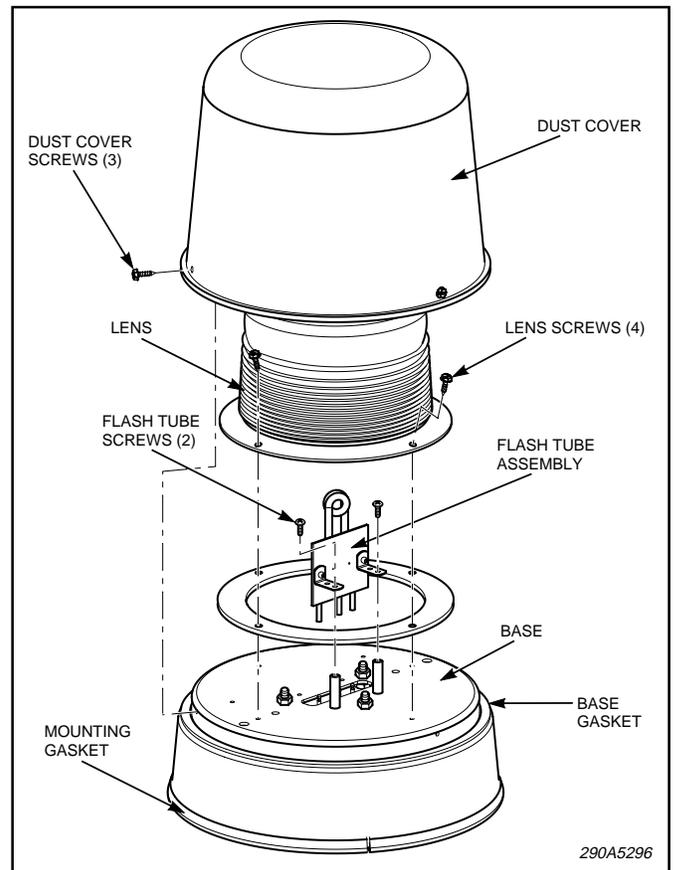


Figure 2.