

**INSTRUCTION SHEET  
FOR  
FIREBALL® COMPACT STROBE LIGHTS**

**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 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. 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.

**A. Magnetic Mount.**

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.

**WARNING**

The surfaces to which the adhesive pads are applied must be clean and dry for proper adhesion. If necessary, use isopropyl alcohol (rubbing alcohol) and water to clean the mounting surfaces.

1. Assemble the brackets using the two 8-32 screws and lockwashers (supplied) as shown in figure 1. Insure that the lockwashers are between the legs of the brackets.

2. Remove the release paper from one side of the gasket and apply the gasket to one of the bracket surfaces as shown in figure 1. Press the gasket firmly against the bracket to make sure that the gasket adheres properly.

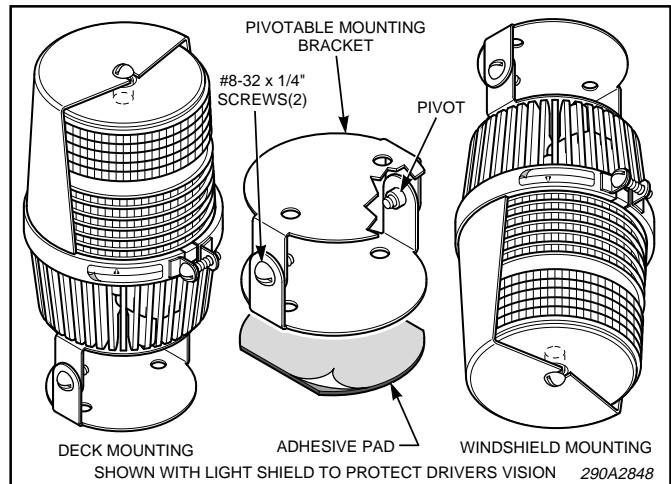


Figure 1.

3. Peel the release paper from the other side of the gasket and attach the bracket assembly to the mounting surface. Insure that the assembly adheres firmly to the mounting surface. A second gasket can be used to insure contact to curved surfaces, if required.

**CAUTION**

Operation of unit for extended periods with shield attached may result in damage to the dome.

4. Attach the shield to the light using the 8-32 x 3/8" supplied (see figure 2). The magnet assembly can be removed from the base and attached to the dome, if desired.

5. If the light is to be held directly to the roof by the magnet, insure that the power cable is not under the magnet.

6. The light is equipped with a plug that fits in standard cigar lighter sockets.

**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.

**B. Surface Mount (see figure 3).**

1. Install the mounting plate on the unit using the supplied #8 Phillips head screws. Before proceeding, plan all wiring and cable routing.
2. Determine the strobe light mounting location.
3. Place the assembled unit on the mounting surface at the mounting location. Using the unit as a template, scribe mounting hole

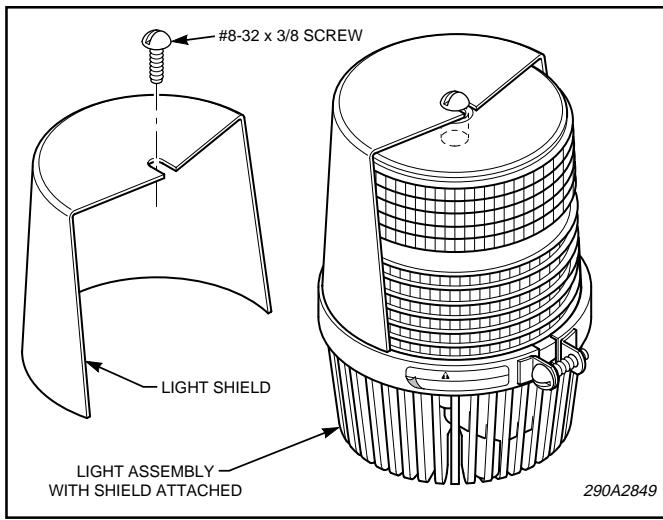


Figure 2.

locations on the mounting surface. Place the rubber gasket on the mounting surface over the mounting hole locations. 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.

4. Drill three 0.173" 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.

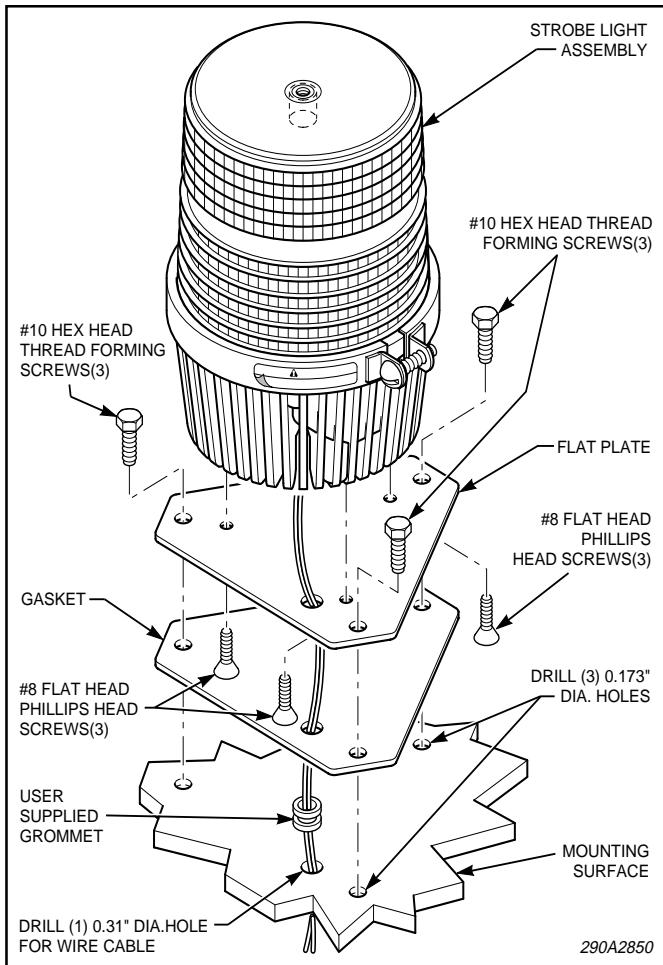


Figure 3.

5. Install a user-supplied grommet in the wire routing hole.

6. Route the red and black wires through the rubber gasket and through the user-supplied grommet in the mounting surface. Apply a sealing compound around the wires and grommet.

7. Connect the red wire to one terminal of a user-supplied switch with a current handling capacity of at least four 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. Install a user-supplied in-line fuseholder as close as practical to the battery. Install a four-ampere fast-blow, or a 2.5 ampere slow-blow, fuse in the fuseholder.

#### CAUTION

Reverse polarity will blow the fuse. Proper polarity MUST be observed.

#### WARNING

An unfused installation may cause damage to equipment, fire, or injury to you or others. Ensure that a fuse is installed.

8. Install the unit on the mounting surface using the supplied #10 hex head thread-forming screws. Test the light for proper operation.

## II. 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.

#### A. Flash Tube Replacement.

As strobe lights are used, the flash tubes begin to darken, causing the light output to decrease. This darkening is characteristic of flash tubes. Darkening will begin near the base of the tube and progress upward. 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, glow continuously or darken to a point beyond that shown in figure 4—it should be replaced.

To replace the flash tube, proceed as follows:

1. Disconnect power.
2. Remove the #4 screw that secures the retaining band and remove the retaining band. Carefully lift the lens away from the housing.

#### 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.

3. Grasp the flash tube by its base and pull it out of the socket, using a gentle "rocking" motion. Install a new flash tube (Federal Part No. 8107146) and reassemble the light.

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

#### B. Replacement Parts.

Description	Part No.
Dome, Clear	8550C095
Dome, Red	8550C095-03
Dome, Blue	8550C095-01
Dome, Amber	8550C095-02
Dome, Green	8550C095-04
Flash Tube	8107146

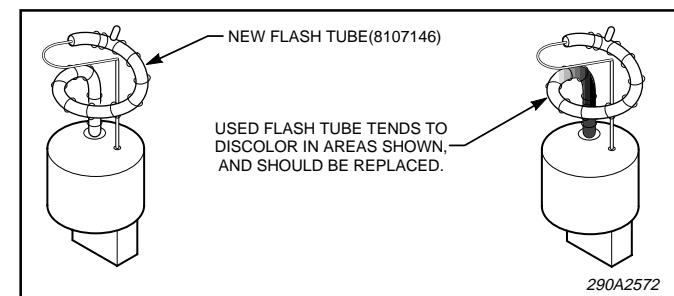


Figure 4.