

**INSTRUCTION SHEET
FOR
MULTI-APPLICATION STROBE BEACONS****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.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- 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 re-installing 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.

The type and quantity of parts in this list represent a typical kit. Your parts list may be different.

Qty. Description

- 2 Nylon Arrow Clip
- 2 Bolt, Hook
- 4 Screw, #10, Type AB
- 2 Screw, 1/4"-20
- 4 Screw, SEMS, #10-32 x 5/8"
- 1 Screw, #8-32
- 2 Terminal, Male
- 2 Terminal, Female
- 2 Flat washer, 1/4"
- 2 Lockwasher, Int., 1/4"
- 2 Lockwasher, Split, 1/4"
- 1 Lockwasher, Ext., #8
- 2 Nut, 1/4"-20
- 1 Grommet
- 1 Extrusion, Rubber, 27.25"

III. INSTALLATION.**▲ WARNING**

When installing equipment inside airbag 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 airbag, or potentially damage or dislodge the equipment, causing serious injury or death to you or others.

NOTE

Strobe lights have multiple mounting styles and accessories. Determine the strobe light mounting style, location, and accessories used.

A. *Blackout Disk.*

See Figure 1 and proceed as follows:

1. Remove and retain the four screws which secure the lens and dust cover to the base.
2. Remove the dust cover from the lens.
3. Remove paper backing from the Blackout Disk and affix to the top of the colored dome.
4. Ensure that the Dome Gasket rests flat on the base (see Figure 2) and reassemble the light.

B. *Branch Guard.*

If branch guard is used, it must be placed over the light before it is installed on the vehicle.

C. *Hook Mount.*

See Figure 3 and proceed as follows:

1. Determine the strobe light mounting location.
2. Before proceeding, plan all wiring and cable routing.
3. Using the base of the light as a template, scribe mounting hole locations (7" centers) on the mounting surface. 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 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.
5. Install the supplied grommet in the wire routing hole.
6. Install the rubber gasket on the metal base and cut it to the proper length.
7. Some models include a low power mode which is activated by the white wire. Before proceeding determine if the low power mode is desired.

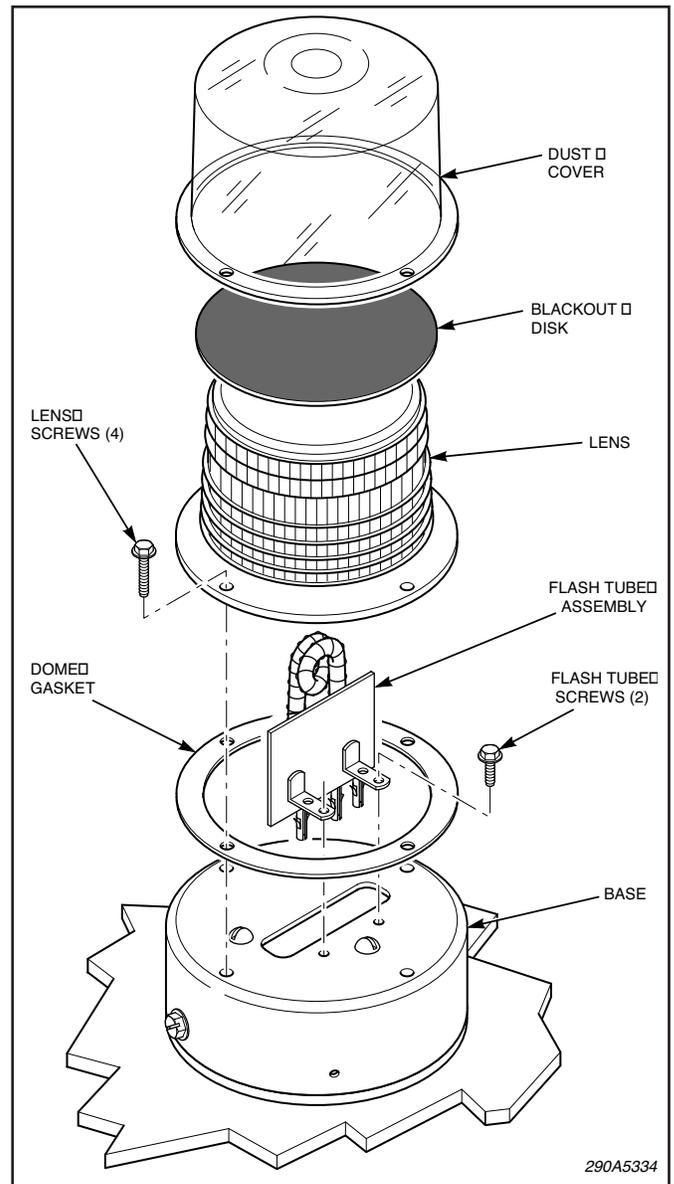


Figure 1.

NOTE

Polarity **MUST** be observed for proper operation. The red wire connects to positive and the black wire connects to negative. If the connections are reversed, the in-line 10-ampere fuse will blow and the light will not function.

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.

If the white wire will not be used, dress the wire so that it can not be pinched when installed

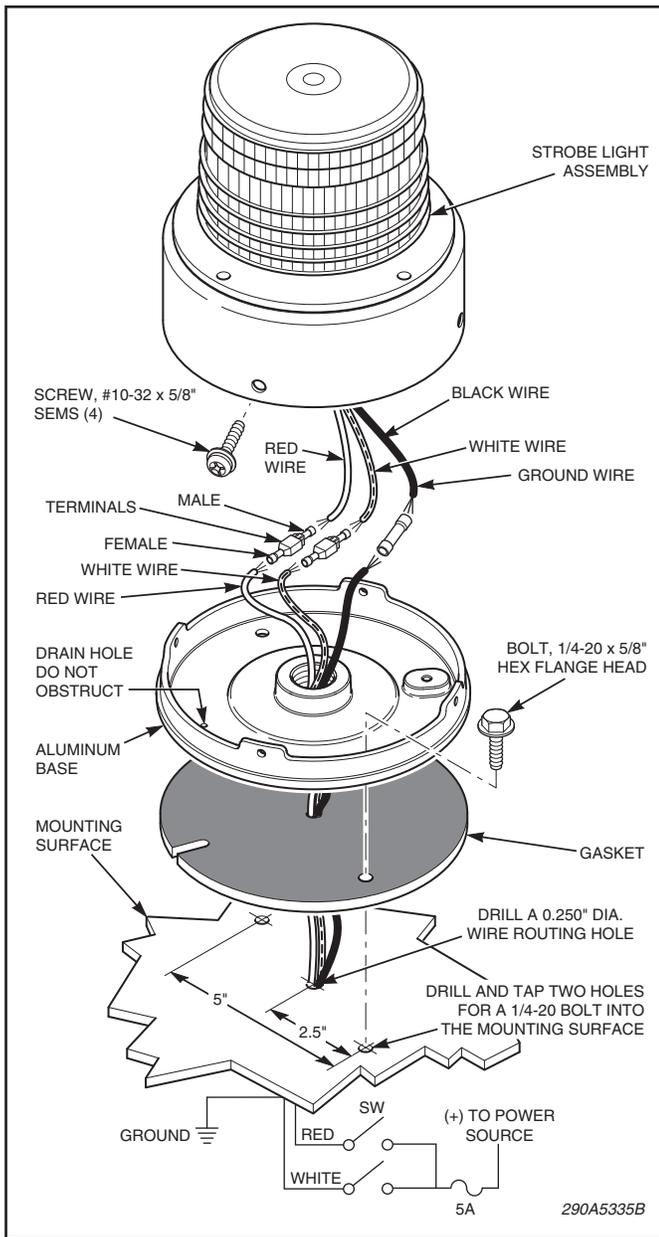


Figure 2.

on the mounting surface. It is necessary to insulate the end of the wire to prevent shorting to anything in the light's base.

8. Route user-supplied red, black, and white (where applicable) wires through the grommet and mounting surface. Use the supplied terminals to slice the light's wires to the user-supplied red, black, and white wires.

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

10. On 901/951 models connect the remaining switch terminal to one end of the supplied in-line fuseholder as close as practical to the battery.

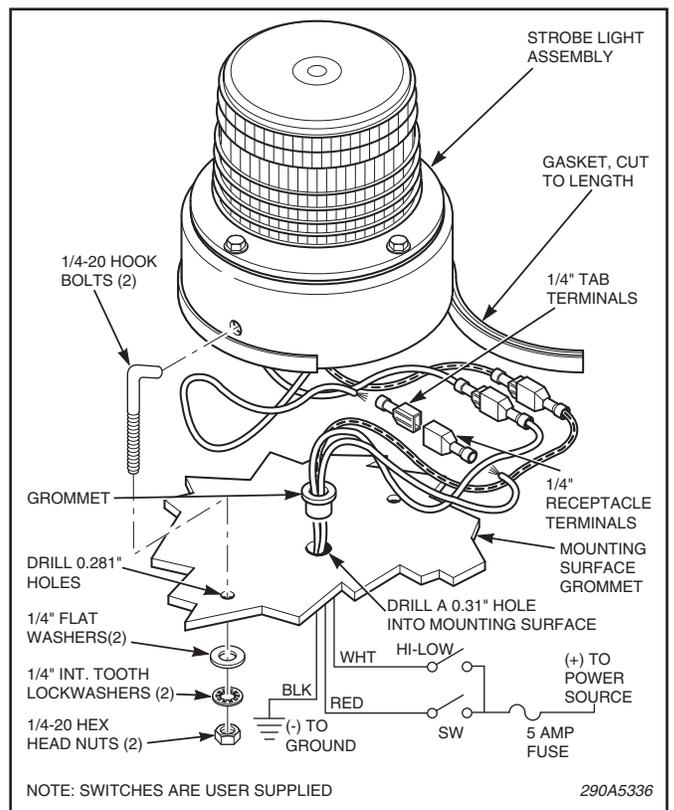


Figure 3.

Connect the other end of the fuseholder to the vehicle battery with user-supplied wire. Install the supplied 5-ampere fuse in the fuseholder. No fuse is required for 651/851 models.

The strobe operates in the high power mode if the white wire is left unconnected, and it operates in the low power mode when the white wire is connected to the power supply's positive terminal. If desired, connect the white wire to one side of a user-supplied switch with a current handling capacity of at least one ampere. Connect the remaining switch terminal to the in-line fuseholder with user supplied wire as shown in Figure 3.

11. Install the unit on the mounting surface using the 1/4"-20 hook bolts, 1/4" lockwashers, flat washers, and hex nuts. Test the light for proper operation.

D. Permanent Mount.

See Figures 2 and 4 and proceed as follows:

1. Determine the strobe light mounting location.
2. Before proceeding, plan all wire routing.
3. Using the supplied aluminum mounting base as a template, scribe two mounting hole locations on the mounting surface. Using the hole in the center of the base scribe a wire clearance hole on the mounting surface.

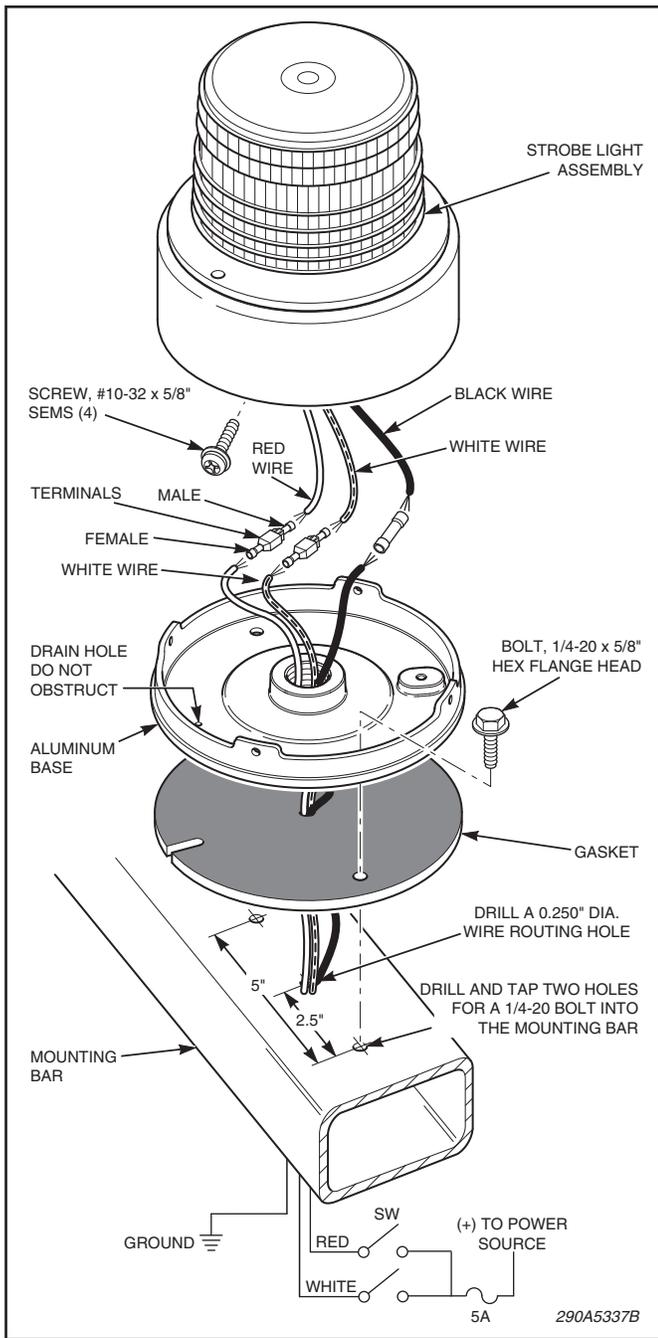


Figure 4.

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. Tap two holes for 1/4"-20 bolts at the scribed mounting hole locations. Drill a 0.25" hole at the scribed wire clearance hole (center) location. Remove all burrs and sharp edges.

5. Place supplied gasket between aluminum mounting base and mounting surface. Align the cut out for the drain hole with the drain hole.

6. Secure the aluminum mounting base on the mounting surface using the 1/4"-20 bolts.

NOTE

Polarity **MUST** be observed for proper operation. The red wire connects to positive and the black wire connects to negative. If the connections are reversed, the in-line 10-ampere fuse will blow and the light will not function.

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.

7. Some models include a low power mode which is activated by the white wire. Before proceeding determine if the low power mode is desired.

If the white wire will not be used, dress the wire so that it can not be pinched when installed on the mounting surface. It is necessary to insulate the end of the wire to prevent shorting to anything in the light's base.

8. Route user-supplied red and white (where applicable) wires through the mounting surface and aluminum base. Use the supplied terminals to splice the light's wires to the user supplied red and white wires.

9. Connect the light's red wire to the cable's red wire using a user supplied terminal connectors.

10. Cut the ring terminal from the black ground wire and strip 3/8" of insulation from the wire. Use the user-supplied butt connector and 18 AWG or thicker wire to connect the black ground wire to a suitable ground on the vehicle.

11. On 901/951 models connect the remaining switch terminal to one end of the supplied in-line fuseholder as close as practical to the battery. Connect the other end of the fuseholder to the vehicle battery with user-supplied wire. Install the supplied 5-ampere fuse in the fuseholder. No fuse is required for 651/851 models.

The strobe operates in the high power mode if the white wire is left unconnected, and it operates in the low power mode when the white wire is connected to the power supply's positive terminal. If desired, connect the white wire to one side of a user-supplied switch with a current handling capacity of at least one ampere. Connect the remaining switch terminal to the in-line fuseholder with user supplied wire as shown in Figures 2 and 4.

12. Secure the strobe light to the aluminum base using the supplied #10-32 SEMS screws. Test the light for proper operation.

E. *Pipe Mount.*

See Figure 5 and proceed as follows:

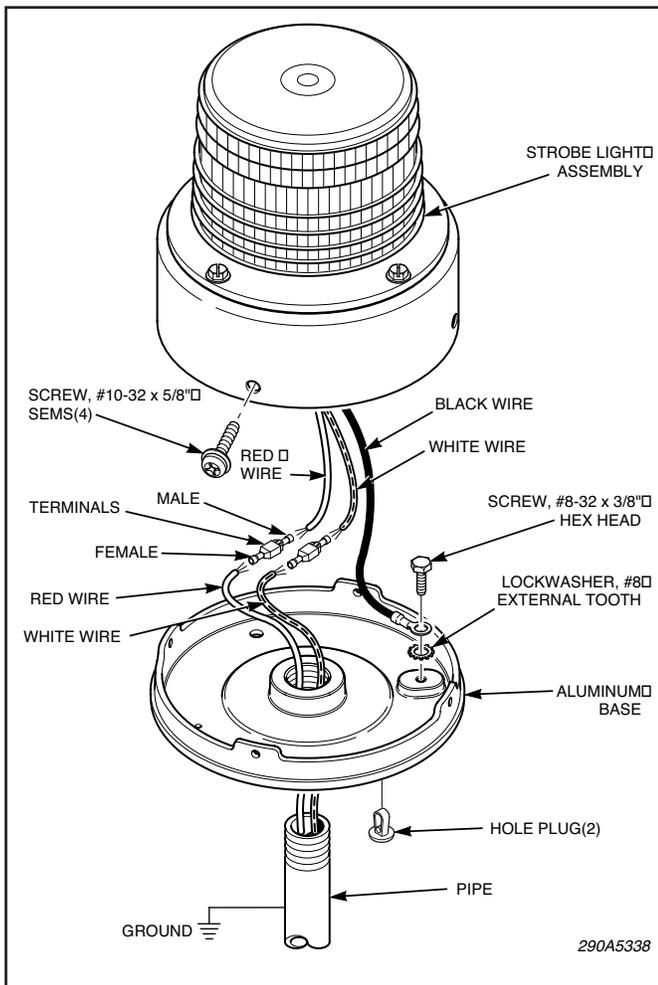


Figure 5.

1. Before proceeding, plan all wire routing.
2. Insert supplied arrow clips (hole plugs) into mounting holes on bottom side of base.

NOTE

Polarity **MUST** be observed for proper operation. The red wire connects to positive and the black wire connects to negative. If the connections are reversed, the in-line 10-ampere fuse will blow and the light will not function.

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.

3. Some models include a low power mode which is activated by the white wire. Before proceeding determine if the low power mode is desired.

If the white wire will not be used, dress the wire so that it can not be pinched when installed on the mounting surface. It is necessary to insulate the end of the wire to prevent shorting to anything in the light's base.

4. Connect the light's red wire to the cable's red wire using a user supplied terminal connectors.
5. Connect the light's black wire to the aluminum base using the supplied lockwasher and #8 screw.
6. On 901/951 models connect the remaining switch terminal to one end of the supplied in-line fuseholder as close as practical to the battery. Connect the other end of the fuseholder to the vehicle battery with user-supplied wire. Install the supplied 5-ampere fuse in the fuseholder. No fuse is required for 651/851 models.

Some strobes operate in the high power mode if the white wire is left unconnected, and operate in the low power mode when the white wire is connected to the power supply's positive terminal. If desired, connect the white wire to

one side of a user-supplied switch with a current handling capacity of at least one ampere. Connect the remaining switch terminal to the in-line fuseholder with user supplied wire as shown in Figure 5.

7. Secure the strobe light to the aluminum base using the supplied #10-32 SEMS screws.

8. Place unit on pipe. Make sure not to obstruct the drain hole. Test for proper operation.

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 four screws which secure the lens to the base. Remove the lens from the base.

C. 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.

D. Grasp the flash tube by its printed circuit board and pull it off of the pins, using a gentle rocking motion. See Figure 1. Install a new flash tube. Secure the flash tube assembly to the base using the previously removed screw. Ensure that the Dome Gasket rests flat on the base (see Figure 1) and reassemble the light.

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