

**INSTRUCTION SHEET  
FOR  
MODEL 7590000257  
(JERR-DAN AERODYNIC® LIGHTBAR)**

**SAFETY MESSAGE TO INSTALLERS OF  
FEDERAL SIGNAL LIGHT SYSTEMS**

**⚠ 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 a light assembly: 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 the vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.**
- **A light system is a high current device. In order for it 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 system controls so the VEHICLE and CONTROLS can be operated safely under all driving conditions.**
- **You should frequently inspect the light system 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. GENERAL.**

The Model 7590000257 is designed to give a tow truck operator a higher warning visibility on the road. Two independent halogen rotating assemblies each provide 90 flashes per minute. A total of 540 flashes per minute gives a highly effective pattern of light to the rear. Alternate-flashing lamps also face the front and rear of the lightbar for an extra margin of safety. Rearward facing red stop-turn signals also add higher visibility.

**II. UNPACKING.**

After unpacking the lightbar, 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 the damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them.

**III. INSTALLATION.**

The lightbar is completely wired at the factory and does not require any additional internal wiring. All the conductors necessary for control of any and all basic and optional functions are contained in the cable.

The basic light functions of the unit must be controlled by a user-supplied control head.

Before proceeding, ensure that the lightbar has been installed on the vehicle roof in accordance with the instructions packed with the mounting kit. Route the lightbar cable as described below.

**⚠ WARNING**

**Light system control must be located so that the VEHICLE and CONTROLS can be operated safely under all driving conditions.**

1. Route the control cable into the vehicle and under the dash, near the eventual location of the user-supplied control head.

2. For proper light operation, the control cable must be properly terminated inside the used-supplied control head using the electrical connections shown in Table 1.

Table 1. Electrical Connections.

Wire Color	Functions
Black	Common Ground
Red	Rotators
Red/Black	Not Used
Yellow	Tail Lights
Yellow/Black	Not Used
Blue	Front Flashers
Blue/Black	Rear Flashers
White	Passenger Brake/Tail (Right-hand)
Orange	Driver Brake/Turn (Left-hand)

3. Connect the black lead to chassis ground.

**NOTE**

The lightbars functions can be activated by applying 12vdc to the appropriate control line. The heavy black lead (-) must be connected to vehicle ground, to perform a function check.

**IV. MAINTENANCE.**

1. *Cleaning the Plastic Domes.*

**⚠ WARNING**

**Crazing (cracking) of domes will cause reduced effectiveness of the light system. Do not use cleaning agents (with will cause crazing) such as strong detergents, solvents, or petroleum products.**

Ordinary cleaning of the plastic domes can be accomplished by using mild soap and a soft rag. Should fine scratches or a haze appear on the domes, they can ordinarily be removed with a high quality automotive paste cleaner and wax.

2. *Halogen Lamp Replacement (see figure 1).*

**⚠ 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.**

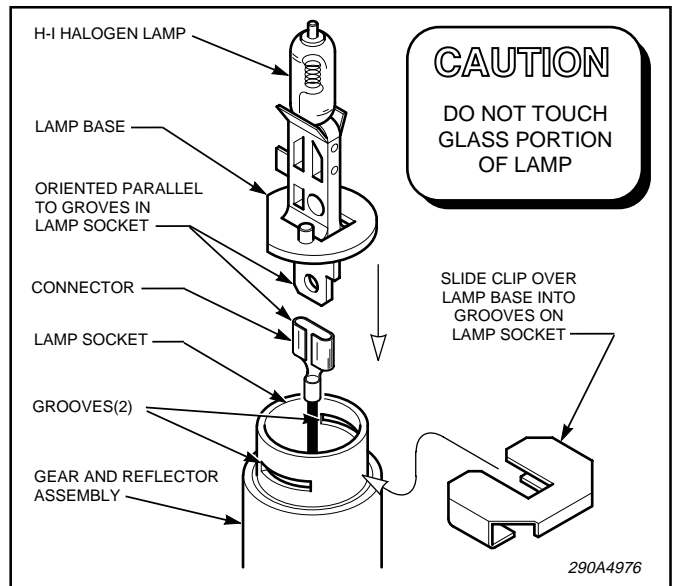


Figure 1.

**CAUTION**

Forced rotation of the light mechanism will cause damage to the worm gear. Always rotate the light mechanism by rotating the motor shaft.

- a. Rotate the reflector until the lamp clip (located at the base of the lamp) can be removed, and remove the clip by sliding it away from the reflector.
- b. Note the lamp's orientation and pull the defective lamp and connector out of the socket.

**CAUTION**

When installing a new lamp, do not touch the glass portion. If the glass has been touched, shortened lamp life will result. If the glass end has been handled, it should be carefully cleaned with a grease solvent.

- c. Replace the defective lamp with a new H-1 halogen lamp. When reassembling, ensure that the lamp is secured to the connector and that the clip is properly seated in the grooves on the lamp socket.