

TOMAR ELECTRONICS, INC.
970L Scorpion™ Series LED Lightbar

INSTALLATION AND MAINTENANCE INSTRUCTIONS



REFERENCE DRAWINGS

IS0488 - Permanent Mount 960-UNPK
IS0537 – Programming Instructions

PRODUCT DESCRIPTION

The Tomar Electronics Inc. 970L Scorpion® series lightbar is a state-of-the-art programmable LED lightbar designed to provide complete emergency warning, preemption, and traffic control lighting for police, fire and other emergency response vehicles.

INSTALLER SAFETY MESSAGE

The safe installation of the Tomar 970 Series Scorpion Light Bar is the first priority. All instructions listed here should be followed and common sense applied to each Light Bar installation to insure safety. Tomar field service should be called if you have any question.

Some important precautions and instructions:

- Installers should have a good understanding of automotive electrical and mechanical systems. The quality of the installation work should equal or surpass OEM standards.
- Protect the vehicle components when drilling into the sheet metal. Metal chips and sharp edges must not be left on the vehicle. Check to see that the drill bit will not damage surrounding components when it penetrates the sheet metal.
- Review all instruction sheets packed with other components of the 970L Light Bar and make sure you thoroughly understand each step of the installation before you start.
- Roof damage can occur if hook adjustment bolts are over-tightened.
- File these instructions in a safe place for future reference.

Perform a final inspection of the installation to insure that the 970L Scorpion® Light Bar is operating properly. It should be securely fastened to the vehicle when pulling on the Light Bar mounting bracket. Failure to follow all safety procedures and instructions may result in serious injury, property damage or death to you or others.

I. GENERAL INFORMATION

This instruction sheet provides procedures to install the 970- UNHK Hook Mounting System to the Tomar 970L LED Light Bar and mount the assembly to the vehicle. In order to complete the installation, you must have the 970L LED Light Bar with a 970-UNHK Hook Mounting Kit, and the correct Hook Bracket pair for your vehicle. Consult Tomar Sales for the correct part no. for your vehicle.

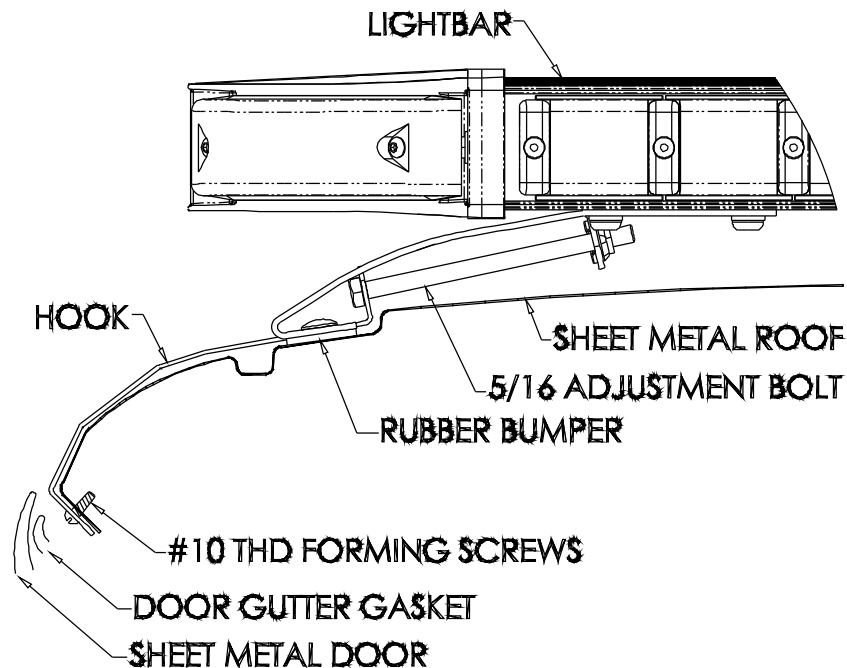
II. UNPACKING

Check to see that all components shown in Figures 1 and 2 are included. You should also have one pair of the hook brackets to fit your vehicle. Check your packing lists carefully.

III. ASSEMBLY

Turn the light bar assembly upside down while protecting the top surface from scratches

- A. Loosen eight 5/16" hex head bolts holding the mounting feet to the lightbar.
- B. Adjust the feet so they are positioned to fit as wide as possible on the roof of the vehicle. Re-tighten the eight 5/16" hex head bolts to 40 in/lbs.
- C. Cut the two plastic filler extrusion pieces to fit, and install between the two mounting feet in the bolt mounting slot on the bottom of the main aluminum extrusion. This is very important in order to reduce the wind noise at high speeds.
- D. Center the light bar on the vehicle roof, approximately over the B pillar. For the best visibility it is important to mount the lightbar as close to level as possible. Ensure the rubber bumper pads on the mounting feet rest near the edge of the roof or gutter where the roof is most rigid.
- E. Using the appropriate length 5/16-18" bolt from hardware packet labeled LB0155-UNHK. Attach the hook kit to the j-nut located on the underside of the lightbar mounting foot. If your mounting hooks are supplied with sheet metal screws, see instructions packaged with the hooks for correct procedures. Insure that the hooks do not interfere with the operation of the door or window glass. Also insure that the water tightness of any sealing rubber is maintained. Tighten each hook adjustment bolt to a maximum torque of 72 in/lbs. (6 ft/lb). Check to insure that the light bar does not slide front-to-back when pulling on the mounting brackets. CAUTION: Excessive tightening of the hook adjustment bolts can cause damage to the light bar mounting system, or vehicle roof.



MAINTENANCE INSTRUCTIONS

1. Periodically clean the lamps by hand or with pressure washer, using mild soap if needed. As with any plastic surface, you should protect against chemical attacks and abrasive materials. **DO NOT** use solvents such as Methylene chloride or MEK. **DO NOT** use ammonia-based liquids such as Windex™ or aromatic or halogenated hydrocarbons like wax, gasoline, acetone, or isopropyl alcohol. Use of such materials may damage the plastics and can damage the watertight integrity of the lamp.

REPLACING A 970L LAMP MODULE

Tools needed: 1/8" Allen wrench

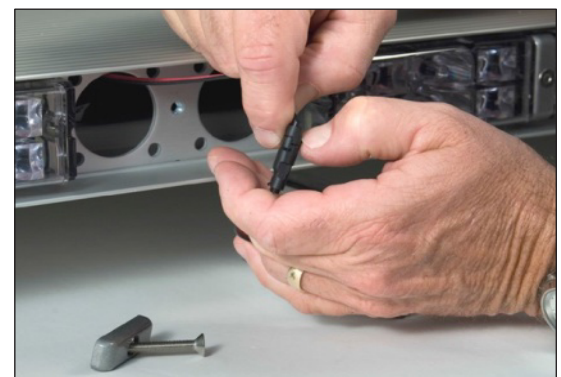
1. Using a 1/8" Allen wrench, remove the screws on either side of the lamp module to be replaced. Set aside the screws and lamp fasteners.



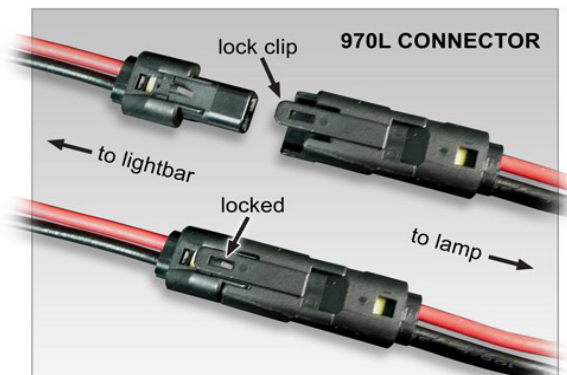
2. Pull lamp out till the connector is out far enough to disconnect it.



3. Using a fingernail pull up on the connector lock clip and disconnect the lamp.



4. Connect the new lamp making sure the connectors “click” together.



5. Put the lamp into position making sure the wires go inside the lightbar through the hole.



6. Reverse Step 1 above to reinstall lamp.
Torque to 14 inch-lb.

