

## INSTALLATION INSTRUCTIONS FOR MODEL UNPK UNIVERSAL PERMANENT MOUNTING KIT

### SAFETY MESSAGE TO INSTALLERS AND USERS OF FEDERAL SIGNAL LIGHT/SOUND SYSTEMS

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/sound system, you must have a good understanding of automotive electrical procedures and systems.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- Refer to instruction sheet packed with light system for proper electrical connections.
- Avoid dimpling (denting) of roof. Place light bar mounting feet as close to gutter as possible.
- You should frequently inspect the light system to ensure 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. GENERAL.

If your Light Assembly was ordered with a loudspeaker, it has been installed at the factory. Federal also has speaker kits available to allow you to add a speaker at a later date.

This instruction sheet provides instructions for installing the universal permanent mounting kit on Federal AeroDync® Series, JetSonic® Series, JetStream™ Series, JetStrobe™ Series, or StreetHawk® Series lightbars.

### II. UNPACKING.

After unpacking the kit, carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts shown in the KIT CONTENTS LIST are contained in the packing carton.

### III. KIT CONTENTS LIST.

Qty.	Description	Part No.
8	Screw, Thd. Frm., #10	7011A146-08
4	Nut, Acorn, 1/4-20	7054A010
4	Nut, Jam, 1/4-20	7057A049
2	Bracket, Adapter	8559206
2	Bolt, Retainer	8559248
4	Nut, Hex, 3/8-16	7059A063
4	Washer, Flat, 3/8	7072A035
4	Washer, Flat, 1/4	7072A024
4	Lockwasher, Split, 3/8	7074A046
2	Mounting Foot	8559202
4	Pad, Mounting	8559203
2	Bracket, Hook Mounting	8559207
4	Bolt, Carriage, 3/8-16 x 1	8572050
4	Bolt, Toggle, 1/4-20	8422A032

### IV. PERMANENT MOUNT KIT INSTALLATION.

A. *JetSonic, JetStream, JetStrobe, and AeroDync Series Lightbars.*

1. Remove the two screws, located at the identification plate, at each end of a dome assembly. Slide both dome assemblies out about 4 or 5 inches, along the slots in the extrusion, and remove the plastic filler from the bottom of the extrusion. See figure 1.

#### NOTE

When installing on a JetSonic, JetStream or JetStrobe lightbar, remove and retain the plastic filler (see figure 1).

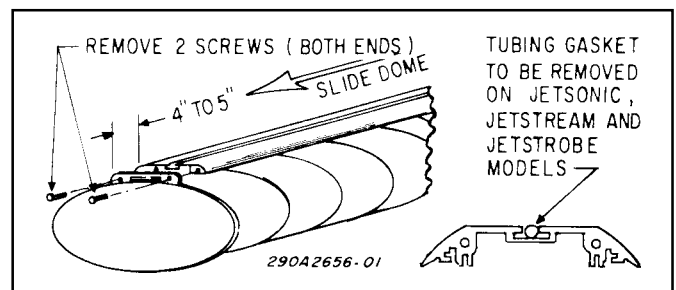


Figure 1.

2. Carefully turn the light assembly upside down.

3. Assemble a hook bracket to each mounting foot using the 3/8-16 carriage bolts, 3/8 flat washers, 3/8 lockwashers, and 3/8-16 hex nuts as shown in figure 2.

**NOTE**

Do not tighten the nuts at this time.

4. Slide the two carriage bolts of a mounting foot assembly into the slot in the extrusion as shown in figure 2. Repeat on the other side of the light assembly.

5. Reinstall the domes.

**B. StreetHawk Lightbars.**

1. Turn the light assembly over so that the bottom of the bar faces up. The unit should be placed on some soft rags or cardboard to avoid marring the plastic domes.

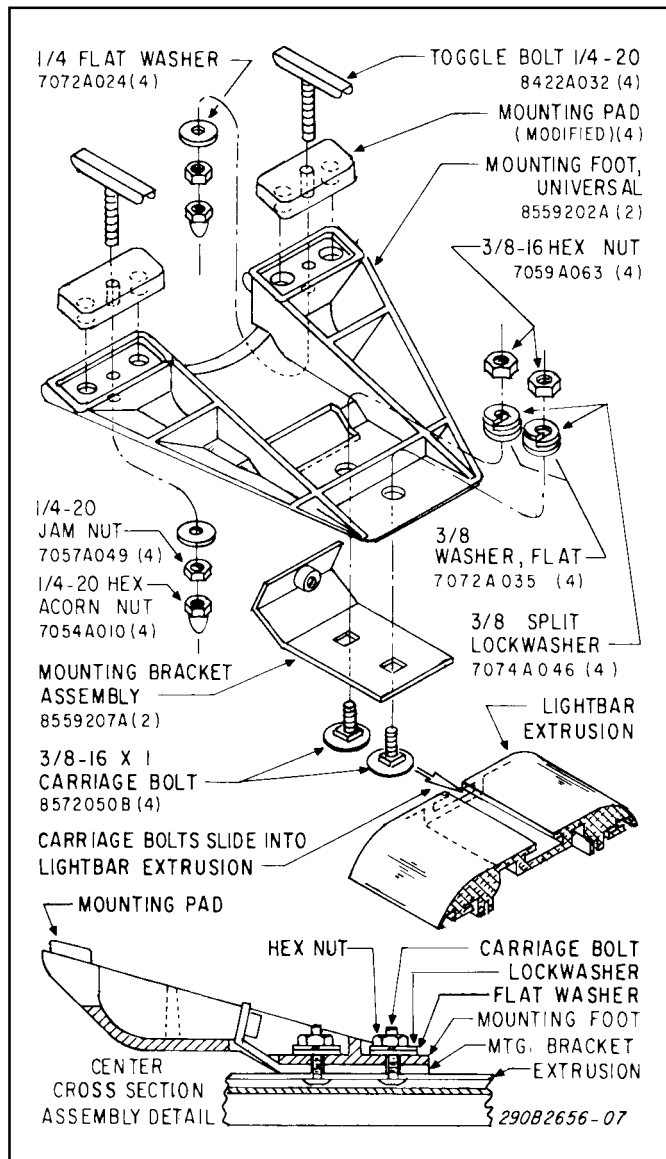


Figure 2.

2. Assemble two 3/8-16 carriage bolts to each adapter bracket with a bolt retainer as shown in figure 3.

3. See figure 3. Assemble an adapter bracket assembly to the extension mounting bracket on each end of the light bar using eight #10 hex head screws (four for each bracket). We recommend that the adapter bracket assemblies be fastened to the appropriate holes, provided in the extension mounting brackets, that best suits your installation. Tighten securely.

4. Assemble a hook bracket and mounting foot to each adapter bracket assembly using the 3/8

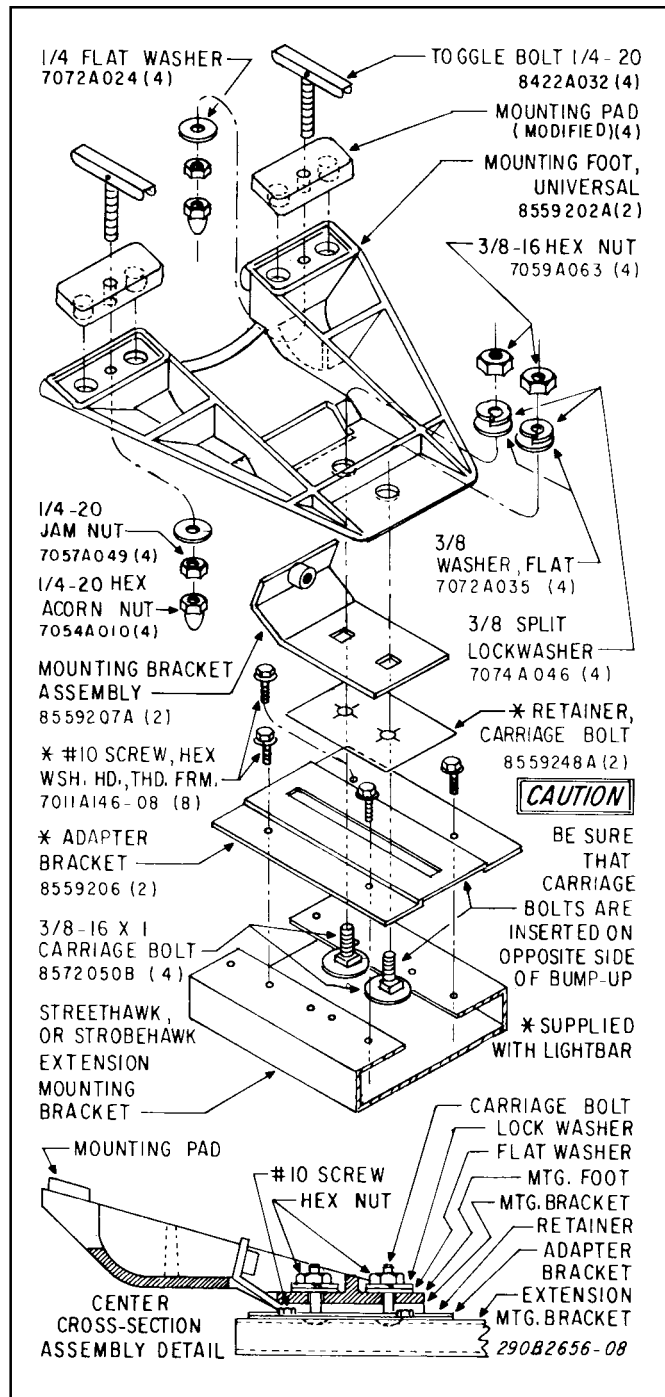


Figure 3.

flat washers, 3/8 lockwashers and 3/8-16 hex nuts as shown in figure 3.

### NOTE

Do not tighten the nuts at this time.

## V. INSTALLATION ON VEHICLE ROOF.

A. Cut-off the center nipple on all four mounting pads (see figure 4).

B. Drill a 7/32" (0.22") hole in all four pads where the nipple was removed (see figure 4).

C. Place the mounting pad into the mounting feet as shown in figure 2 or 3 as applicable.

D. Place the light assembly on the vehicle roof at the desired location. Usually the unit should be installed approximately over the driver's head. Before proceeding, refer to the instructions provided with the separately purchased mounting hook kit.

E. Adjust both mounting foot assemblies in or out until the rubber mounting pads rest near the edge of the roof or gutter where the roof is the most rigid. See figure 4.

F. See figure 4. Center the unit so that the end of the Light Assembly and edge of the roof are equally spaced on each side of the vehicle. Tighten the previously installed 3/8-16 hex nuts (two on each mounting foot).

G. If the light assembly being installed is a JetSonic Series unit, cut the previously removed

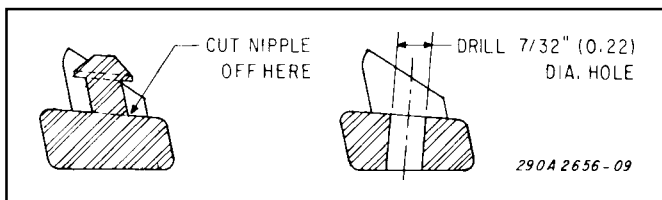


Figure 4.

plastic filler so that it will fit between the mounting feet in the extrusion slot. Insert the plastic filler into the slot.

H. Using the mounting brackets as a template, scribe two drill position marks on each side of the light.

### CAUTION

To avoid damage when drilling, ensure that both sides of mounting surface are clear of any parts or wires.

Also, when drilling holes, ensure that holes are drilled only through sheet metal and NOT through upholstery.

I. Prior to drilling, move the unit out of the way. Drill four 1/2-inch diameter holes at the previously scribed drill position marks.

J. Insert a toggle bolt in each of the four holes drilled in step G. Slide a rubber mounting pad over each bolt as it is installed (see figure 2 or 3). Use caution to avoid dropping the bolts through the holes before the rubber mounting pads are installed.

K. See figure 5. Place the mounting brackets down over the ends of the toggle bolts and secure with the jam nuts. Saw-off the toggle bolts 3/16-inch above the jam nuts and screw-on the cap nuts. The unit should now be solidly anchored to the roof.

L. Frequently inspect the light assembly to ensure that all fasteners and brackets are tight.

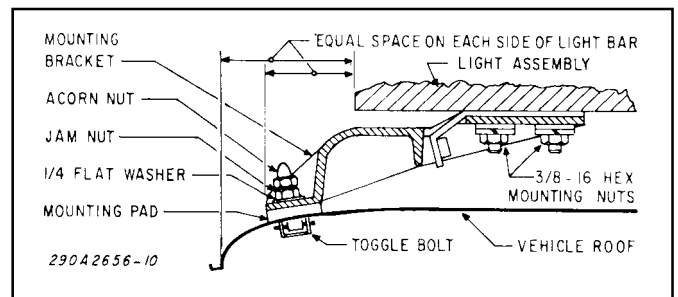


Figure 5.