

## INSTRUCTION SHEET FOR MODEL 601131, 601141, AND 601151 STROBE HEADS

### 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. GENERAL.

The Federal Signal/Target Tech Strobe Head Model 601131 is a high intensity, 360° strobe light head. It is designed for use exclusively with Federal

Signal/Target Tech two head, four head, six head, and eight head power supplies. This unit is supplied with a jumper cable which allows the user to double the strobe head Flash energy.

### NOTE

Do not use the jumper cable with Model 601111, 601141, 600151, or any other head that is supplied without a jumper cable.

### II. 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.

### III. KIT CONTENTS LIST.

#### MODELS 601141/601151

Qty.	Description	Part No.
1	Grommet	200012
3	Lockwasher, #10 Int. tooth	200308
3	Screw, #6-32 x 1/4", Pan Hd.	200316
3	Nut, #10-32, Hex	200330
3	Terminal, Ring, #6	200594
3	Lockwasher, #6 Int. tooth	208006
3	Screw, #10-32 x 1-3/4"	208000
3	Screw, #10-32 x 3/4"	208002

#### MODEL 601131

Qty.	Description	Part No.
1	Grommet, Large	200013
4	Nut, 1/4-20, Hex	200289
3	Screw, #6-32 x 1/4", Pan Hd.	200316
4	Bolt, 1/4-20 x 3/4", Hex	200333
4	Lockwasher, 1/4"	200490
4	Bolt, 1/4-20 x 1-1/4", Hex	200493
3	Terminal, Ring, #6	200594
3	Lockwasher, #6 Int. tooth	208006
1	Jumper Cable, Strobe	438575

### IV. INSTALLATION.

A. Determine the strobe light mounting location.

B. Before proceeding, plan all wiring and cable routing.

C. Using the bottom plate as a template, scribe mounting hole locations on the mounting surface. Scribe a wire routing hole location on the mounting surface through the gasket.

**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.

D. Drill three 0.203" 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.

E. Install the supplied grommet in the wire routing hole.

F. Route the 3-conductor cable (supplied in the cable extension kit) through the grommet. Allow approximately 10-inches of exposed cable to perform the electrical connections. See figure 1.

G. See figure 2. Using care to avoid damaging insulation on the cable's conductors, remove approximately 6-inches of the cable's outer insulation.

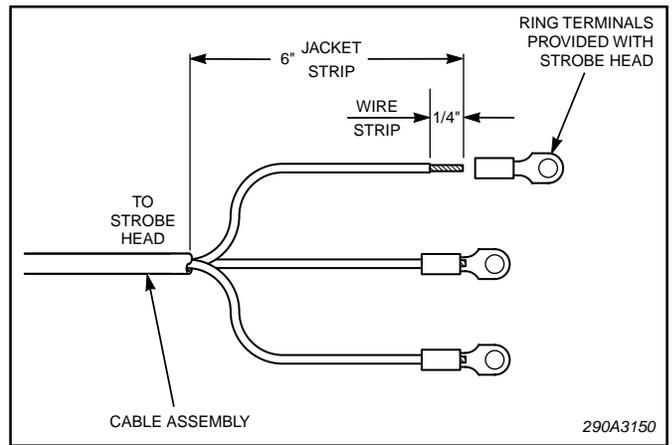


Figure 2.

Remove approximately 1/4-inch of insulation from each conductor.

H. Crimp a ring terminal on the end of each conductor as shown in figure 2.

I. Attach the conductors to the base of the light using the 6-32 x 1/4" screws and #6 lockwashers as shown in figure 3. Ensure that the screws are tightened securely before mounting the light.

J. Secure the bottom plate and the light to the mounting surface using the #10 screws, lockwashers, and nuts. Ensure that excess cable is trapped between the bottom plate and the light. See figure 1.

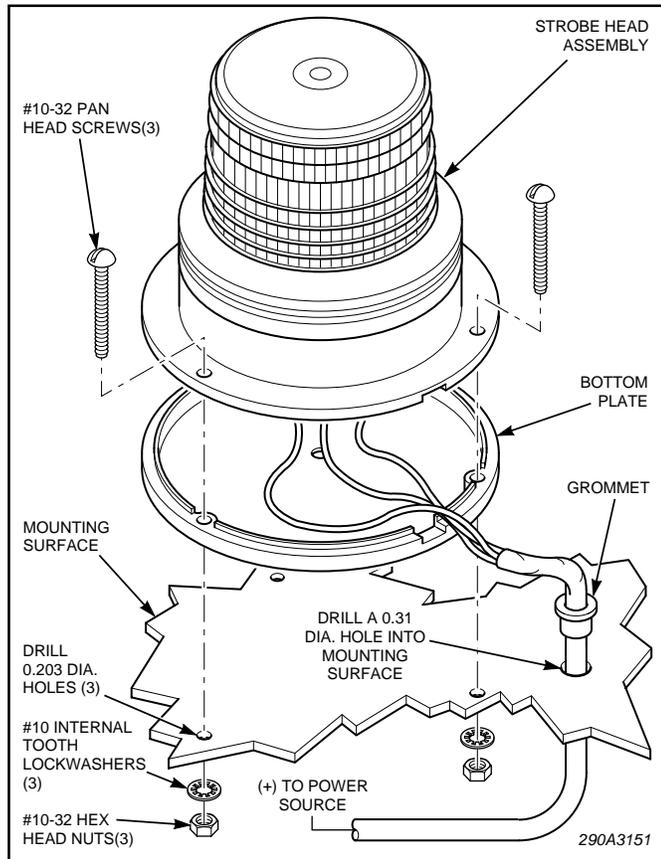


Figure 1.

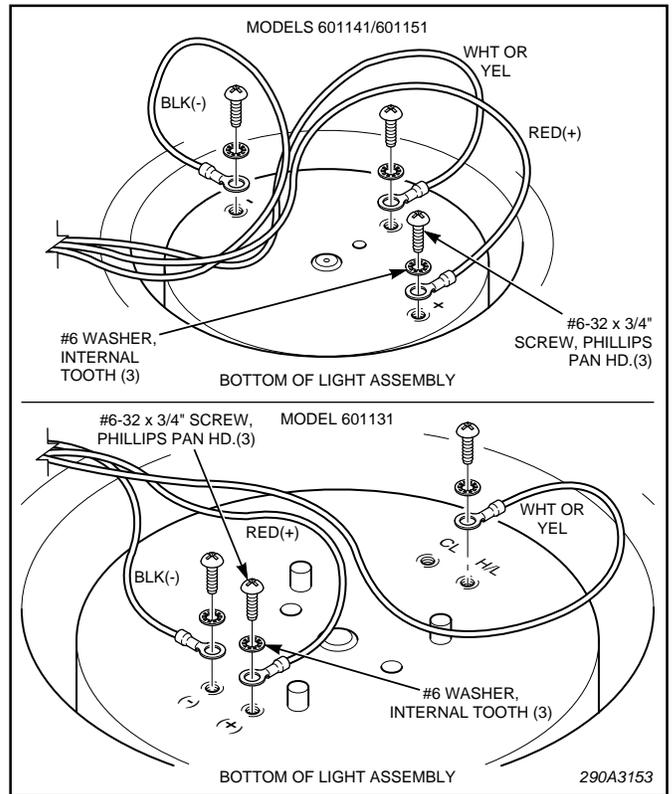


Figure 3.

#### IV. JUMPER CABLE INSTALLATION (Model 601131 only).

##### A. Option 1.

To use the Model 600131 four head power supply with two Model 601131 heads providing 75 flashes (22 joule) per minute (each head), proceed as follows:

#### CAUTION

Some strobe heads may not survive the additional heat resulting from doubling the flash energy. Model 601131 is designed to withstand the additional heat. DO NOT use the jumper cable with any other strobe head.

1. Plug the jumper cable's two male connectors into outlets 1 and 2 of the power supply.
2. Connect the strobe head cable to the jumper cable's female connector.
3. Plug the second jumper cable's two male connectors into outlets 3 and 4 of the power supply.
4. Connect the other strobe head cable to the second jumper cable's female connector.

#### CAUTION

Installation of a single jumper cable also doubles the flash energy to the other pair of power supply outlets. If a second jumper cable is not used, ensure that a second connected strobe head is capable of withstanding 22 joules of flash energy.

##### B. Option 2.

To use the Model 600131 four head power supply with one Model 601131 head providing 75 flashes (22 joule) per minute, and two strobe heads providing 75 flashes (11 joule) per minute (each head), proceed as follows:

#### CAUTION

Some strobe heads may not survive the additional heat resulting from doubling the flash energy. Model 601131 is designed to withstand the additional heat. DO NOT use the jumper cable with any other strobe head.

1. Plug the jumper cable's two male connectors into outlets 1 and 2 of the power supply.
2. Connect the strobe head cable to the jumper cable's female connector. This strobe head will operate at 22 joules of flash energy.

3. Connect the other two strobe heads to outlets 3 and 4 of the power supply. These strobe heads will operate at 11 joules of flash energy.

#### CAUTION

If one of the strobe heads operating at 11 joules (outlets 3 and 4) fails, the other will operate at double the flash energy (22 joules). If the remaining strobe head cannot withstand the doubled flash energy, IMMEDIATELY replace the failed strobe head.

##### C. Option 3.

To use the Model 600141 four head power supply with two Model 601131 heads providing approximately 75 quadruple flashes (22 joule) per minute (each head), proceed as follows:

#### CAUTION

Some strobe heads may not survive the additional heat resulting from doubling the flash energy. Model 601131 is designed to withstand the additional heat. DO NOT use the jumper cable with any other strobe head.

1. Plug the jumper cable's two male connectors into outlets 2 and 3 of the power supply.
2. Connect the strobe head cable to the jumper cable's female connector.
3. Connect the second strobe head cable into either outlet 1 or 4 of the power supply. Do not use a second jumper cable.

#### CAUTION

Installation of a single jumper cable also doubles the flash energy to the other pair of power supply outlets. Ensure that a second connected strobe head is capable of withstanding 22 joules of flash energy.

##### D. Option 4.

To use the Model 600141 four head power supply with one Model 601131 head providing approximately 75 quadruple flashes (22 joule) per minute, and two strobe heads providing 75 flashes (11 joule) per minute (each head), proceed as follows:

#### CAUTION

Some strobe heads may not survive the additional heat resulting from doubling the flash energy. Model 601131 is designed to withstand the additional heat. DO NOT use the jumper cable with any other strobe head.

1. Plug the jumper cable's two male connectors into outlets 2 and 3 of the power supply.

2. Connect the strobe head cable to the jumper cable's female connector. This strobe head will operate at 22 joules of flash energy.

3. Connect the other two strobe heads to outlets 1 and 4 of the power supply. These strobe heads will operate at 11 joules of flash energy.

### CAUTION

If one of the strobe heads operating at 11 joules (outlets 3 and 4) fails, the other will operate at double the flash energy (22 joules). If the remaining strobe head cannot withstand the doubled flash energy, IMMEDIATELY replace the failed strobe head.

## VI. 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. Unscrew the lens and remove from the base.
- C. Remove and retain the screw which secures 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 4. Install a new flash tube. Secure the flash tube assembly to the base using the previously removed screw. Ensure that the O-ring seal rests flat on the base (see figure 4) and reassemble the light.

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

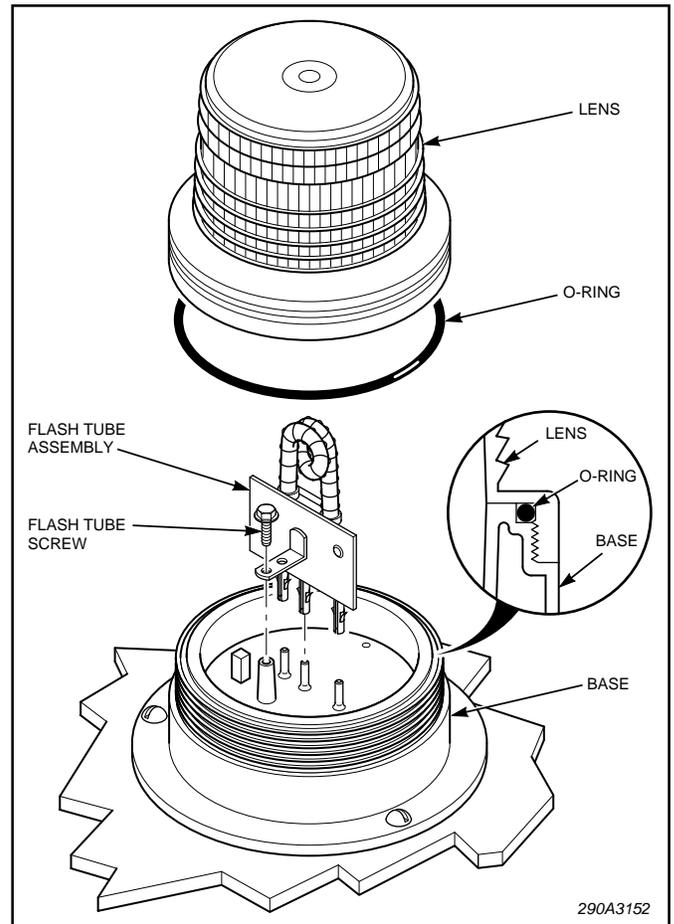


Figure 4.