

**INSTRUCTION SHEET
FOR
MODELS TCL5 AND TCLF5
TRAFFIC CLEARING LIGHT KITS**

**SAFETY MESSAGE TO INSTALLERS
OF
FEDERAL SIGNAL LIGHT 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 assembly, 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.
- 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.

Models TCL5 and TCLF5 are traffic clearing lights which should be installed only on Federal JET,

JSTRM, and JM Series Light Assemblies. If installation of the Model TCL5 or TCLF5 in another mounting location or in any other product is chosen, the safety and effectiveness of the final design must be carefully evaluated.

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

KIT CONTENTS LIST

Qty.	Description	Part Number
1AR	Mechanism Assy., TCL	8431C001-01
	Mechanism Assy., TCLF	8431059
3	Nut, #10-32 Hex	7059A014
3	Washer, #10 Flat	7072A020
1	Adaptor Plate	8552A264
2	Wire Tie	150A109
1	Lamp, 50W	8107A119
2	Screw, #10 Hex Hd. Thd. Frm.	7011A122-06
1	Wire, Term. Violet	T300A218-07-0006

II. INSTALLATION.

WARNING

To avoid electrical shock or damage from electrical shorts, disconnect power to the Light Assembly before performing the installation procedure.

A. To install the traffic clearing light on a Model JET or JSTRM, proceed as follows:

1. Remove the two screws located at the identification plate of the applicable dome. Slide dome out of the extrusion. If center mounting location (JSTRM only) is desired, proceed to step 4.

2. Locate and remove the two installation screws (#8 hex hd. thd. frm.) provided on the light bar option mounting plate (see figure 1). Place the adaptor plate (with PEM studs) in position and secure with two #8 hex hd. thd. frm. screws previously removed.

3. Locate the white with red stripe wire (male terminal) in the light bar wiring harness and

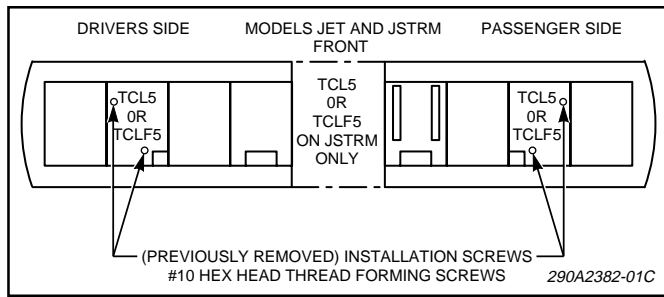


Figure 1.

connect it to the red wires (female terminal) on the traffic clearing light mechanism. Proceed to step 6.

4. If center mounting location (JSTRM only) is desired, place the adaptor plate (with PEM studs) in position and secure with two #10 hex head thd. frm. screws (supplied) as shown in figure 2.

5. Connect male terminal of the violet wire (supplied) to female terminal on the traffic clearing light mechanism. Connect female terminal of the violet wire to position 11 of terminal block adjacent to the red wire (see figure 3).

6. Place the traffic clearing light assembly on the adaptor plate and secure with three #10-32 hex nuts and #10 flat washers (all supplied) as shown in figure 2.

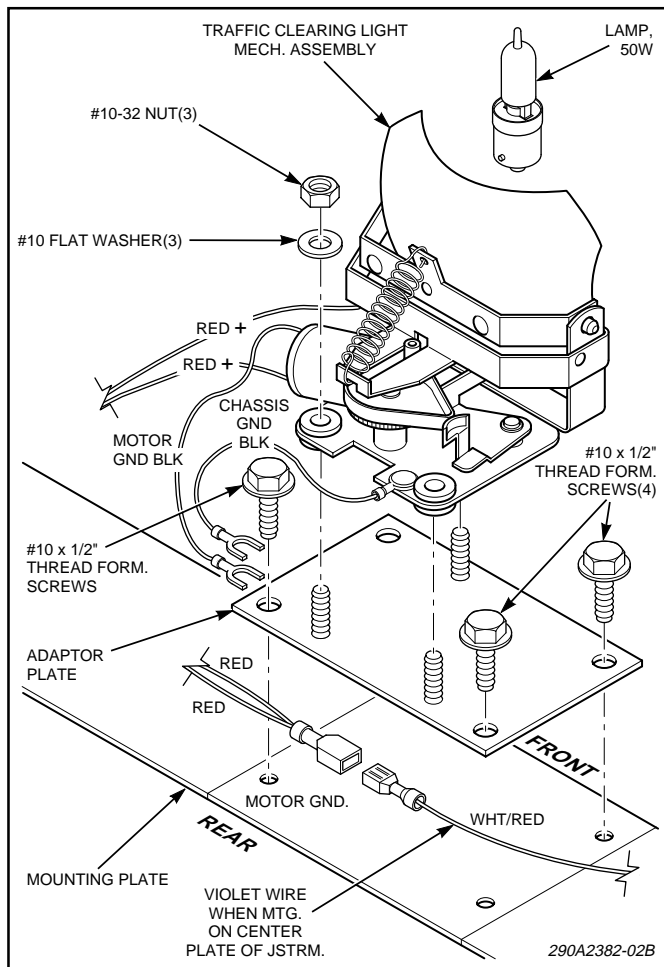


Figure 2.

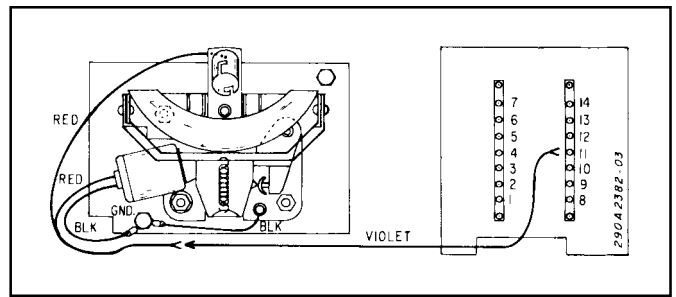


Figure 3.

7. Properly ground both black wires from the traffic clearing light mechanism as shown in figure 2.

CAUTION

Service life of lamp will be shortened if glass portion is touched. If glass has been handled, clean carefully with a grease solvent.

8. Install the supplied lamp in the lamp socket.

CAUTION

Interference with moving parts can damage the moving parts or wires. Ensure that wires are dressed to prevent any interference.

9. Dress wires with supplied wire ties.

10. Reinstall the dome assembly and secure with previously removed screws.

11. If another Model TCL5 or TCLF5 is to be installed, repeat steps B.1. through B.10.

12. Reconnect power to the Light Assembly and test for proper operation.

B. To install the traffic clearing light on a JM Series Light Assembly, proceed as follows:

1. Loosen the screws on both retaining bands. Remove both retaining bands from the Light Assembly. Remove the two screws located at the identification plate, opposite the end where the cable exits the Light Assembly. Slide the dome assembly out of the extrusion. Retain the screws, retaining bands, and the dome assembly.

2. If applicable, remove any existing components from positions two and three (see figure 4).

3. See figure 5. Locate the two installation holes in the baseplate. Place the adaptor plate (with PEM studs) in position and secure with the two #10 thread-forming screws.

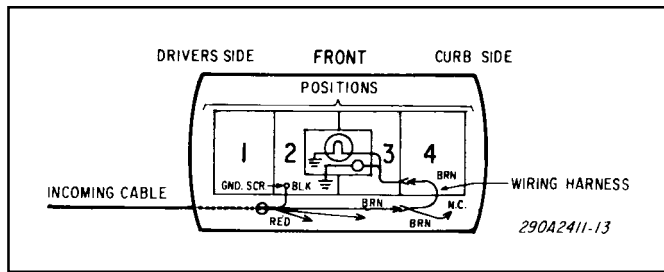


Figure 4.

NOTE

Model JM-FAST is not equipped with a base-plate. Center the adaptor plate on the extrusion and secure with the two #10 thread-forming screws (see figure 5).

4. Place the traffic clearing light assembly on the adaptor plate and secure with the three #10-32 hex nuts and #10 flat washers as shown in figure 5.

NOTE

If you removed the cable clamp and ground wire to facilitate kit installation, ensure that both of these components are properly reinstalled in an appropriate location (see figure 5).

5. Ground both black wires from the traffic clearing light mechanism as shown in figure 5. Complete the wiring as follows:

- a. See figure 5. Connect the male terminal of the Light Assembly cable's brown wire to the female terminal of the Light Assembly wiring harness' double brown wire.
- b. See figure 5. Connect a male terminal from the double brown wire to the female terminal on the traffic clearing light mechanism's double red wire.

CAUTION

Interference with moving parts can damage the moving parts or wires. Ensure that wires are dressed to prevent any interference.

6. Dress wires with supplied tie-wrap.

CAUTION

Service life of lamp will be shortened if glass portion is touched. If glass has been handled, clean carefully with a grease solvent.

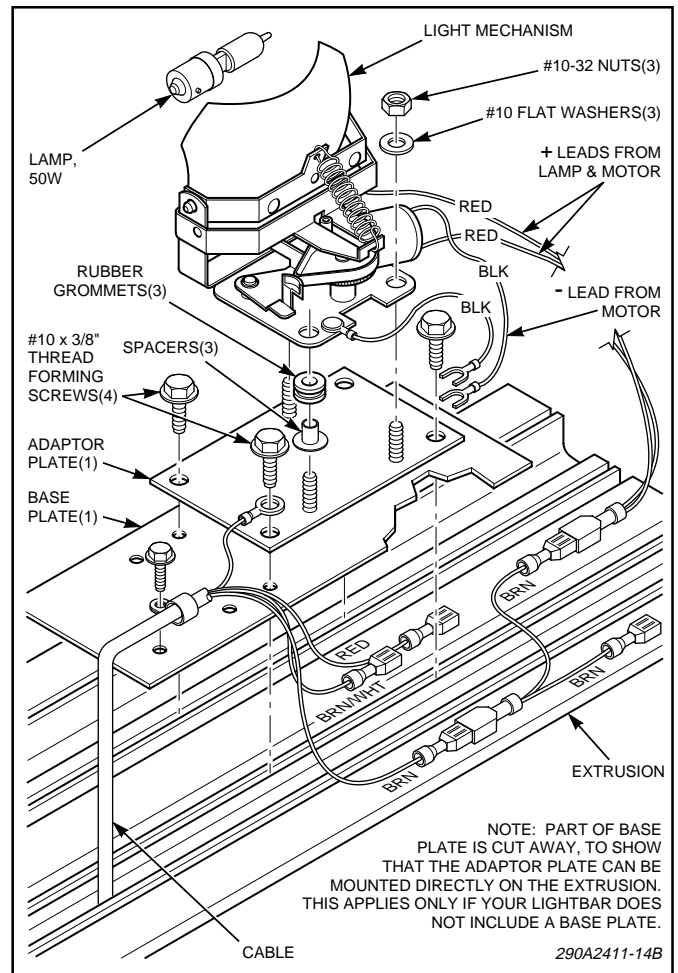


Figure 5.

7. Install the lamp in the reflector socket.

8. Replace the dome assembly. Secure with the previously removed screws. Replace retaining bands and tighten retaining band screws.

9. Reconnect power to the Light Assembly and test for proper operation.

III. MAINTENANCE.

- A. Lubricate all pivot and contact points of the mechanism assembly with a silicone based grease every six (6) months.

CAUTION

Service life of lamp will be shortened if glass portion is touched. If glass has been handled, clean carefully with a grease solvent.

- B. To replace the halogen lamp, twist to unlock and then pull the defective lamp out of the socket. Install a new Sylvania #795 or equivalent in the socket.