

**INSTRUCTION SHEET
 FOR
 MODELS SCROT2K, SCMED2K, AND SCFAST2K
 ROTATING LIGHT KITS**

SAFETY MESSAGE TO INSTALLERS

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with this product. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this kit: you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precaution and instructions may result in property damage, serious injury, or death to you or others.

A. GENERAL.

These rotating light kits are designed for installation in a Federal All Light StreetHawk® lightbar. Model SCROT2K provides 95 FPM, Model SCMED2K provides 120 FPM, and Model SCFAST2K provides 175 FPM.

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

B. KIT CONTENTS LIST.

MODEL SCROT2K

Qty	Description	Part No.
1	Rotating Light Assy.	8559B060-01
2	V-Mirror	8559198
4	Scr. #10 Hex. Hd. Thd. Frm.	7011A146-06
4	Scr. #10 Hex. Hd. Thd. Frm.	7011A122-08
1	Lockwasher, Ext. Tth. #10	7075A026
1	Ground Spacer	8559A000
1	Wire Tie	150A109

MODEL SCMED2K

Qty	Description	Part No.
1	Rotating Light Assy.	8559B060-04
2	V-Mirror	8559198
4	Scr. #10 Hex. Hd. Thd. Frm.	7011A146-06
4	Scr. #10 Hex. Hd. Thd. Frm.	7011A122-08
1	Lockwasher, Ext. Tth. #10	7075A026
1	Ground Spacer	8559A000
1	Wire Tie	150A109

MODEL SCFAST2K

Qty	Description	Part No.
1	Rotating Light Assy.	8559B060-02
2	V-Mirror	8559198
4	Scr. #10 Hex. Hd. Thd. Frm.	7011A146-06
3	Scr. #10 Hex. Hd. Thd. Frm.	7011A122-12
1	Scr. #10 Hex. Hd. Thd. Frm.	7011A122-08
1	Lockwasher, Ext. Tth. #10	7075A026
1	Ground Spacer	8559A000
3	Flat Washer	7072A020
1	Wire Tie	150A109

C. DOME REMOVAL (see figure 1).

1. Turn off power to the Light Assembly.
2. Remove the #8-32 x 7/8 hex head screws from the front and rear edges of the dome.
3. Carefully remove the domes. Ensure that the bulkhead gasket remains tucked in its groove.

WARNING

Added lighting options may cause excessive current draw. Before proceeding with installation, ensure that conductors are not overloaded. Using the current requirements shown in table 1, calculate the total current requirement with the currently installed options. The total current requirement must not exceed 50-amperes.

D. INSTALLATION.

WARNING

To avoid electrical shock and/or wiring damage, ensure that ALL power to the lightbar is disconnected BEFORE proceeding with installation.

1. *SCROT2K/SCMED2K Installation.*
 - a. See figure 2. Place the rotating light assembly in position over screw hole locations "A", "B", and "C" in the center section of the lightbar.
 - b. See figure 3. Secure the assembly in position using three #10 x 1/2" hex head thread-forming screws. Torque the screws to 30 - 55 in-lbs.
 - c. See figure 2. Place the two V-mirrors in position over hole locations "D" and "E" on both sides of the rotating light assembly in the center section of the lightbar.
 - d. Secure the mirrors in position using the four #10 x 3/8" hex head thread-forming screws.

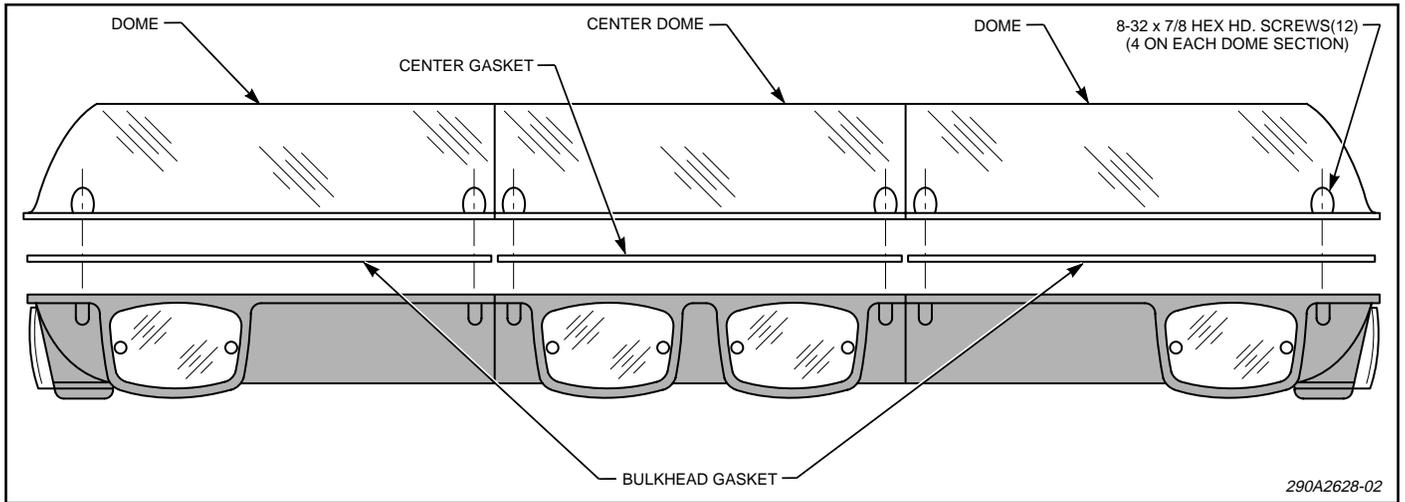


Figure 1.

2. SCFAST2K Installation.

- a. See figure 2. Place the rotating light assembly in position over screw hole locations “A”, “B”, and “C” in the center section of the lightbar.
- b. See figure 4. Secure the assembly in position using three #10 x 3/4" hex head thread-forming screws and three flat washers. Torque the screws to 30 - 55 in-lbs.
- c. See figure 2. Place the two V-mirrors in position over hole locations “D” and “E” on both sides of the rotating light assembly in the center section of the lightbar.

- d. Secure the mirrors in position using the four #10 x 3/8" hex head thread-forming screws.

E. WIRING.

WARNING

Added lighting options may cause excessive current draw. Ensure that conductors are not overloaded. Using the current requirements shown in table 1, calculate the total current requirement with the currently installed options. The total current requirement must not exceed 50-amperes.

- 1. See figures 2 and 5. Attach the black motor wire’s ring terminal to the lightbar’s metal channel/extrusion using a #10 x 3/4" hex head thread-forming screw, lockwasher, ground spacer, and two flat washers.
- 2. See the applicable wiring diagram in figure 6. Attach the female terminal on the rotating light assembly’s red and black wires to the male terminal on the appropriate wire in the lightbar’s wiring harness as shown in figure 6. Attach the other end of the wire to the appropriate terminal of the molded-in terminal strip.

WARNING

To prevent personal injury and/or damage to vehicle components, in the event of a short-circuit in the power cable, install a fuse in each incoming cable conductor.

CAUTION

Interference with a rotating reflector can damage the reflector or wires. Ensure that wires are dressed to prevent any interference.

- 3. Dress the wires with wire ties.

NOTE

Any of the lightbar 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.

- 4. Before replacing the domes, test each function by applying 12VDC to the appropriate control line.

Option	Current Requirement	See Note
Right Alley	4.0 amperes	
Left Alley	4.0 amperes	
Flashing(2)	2.74 amperes	
Take Down	4.0 amperes	
Work Light	4.0 amperes	
Dir. Strobe	10.0 amperes	A
Rotator	4.3 amperes	B
TCL	4.0 amperes	
DynaRay	4.3 amperes	
Tail Light	0.59 amperes	
Left Turn	2.10 amperes	
Right Turn	2.10 amperes	
Cal	4.3 amperes	
Ground	—	C

Notes:

- A. One J-30 power supply with two directional strobes requires 5.0 amperes. Two J-30 power supply with two directional strobes requires 10.0 amperes.
- B. The incoming cable's red 12AWG conductor is rated at 35 amperes. The internal wiring harness uses 18 AWG conductors rated at 13 amperes each. DO NOT overload the conductors.
- C. The sum of all option's current requirements shall not exceed 50 amperes.

Table 1. Option Current Requirements.

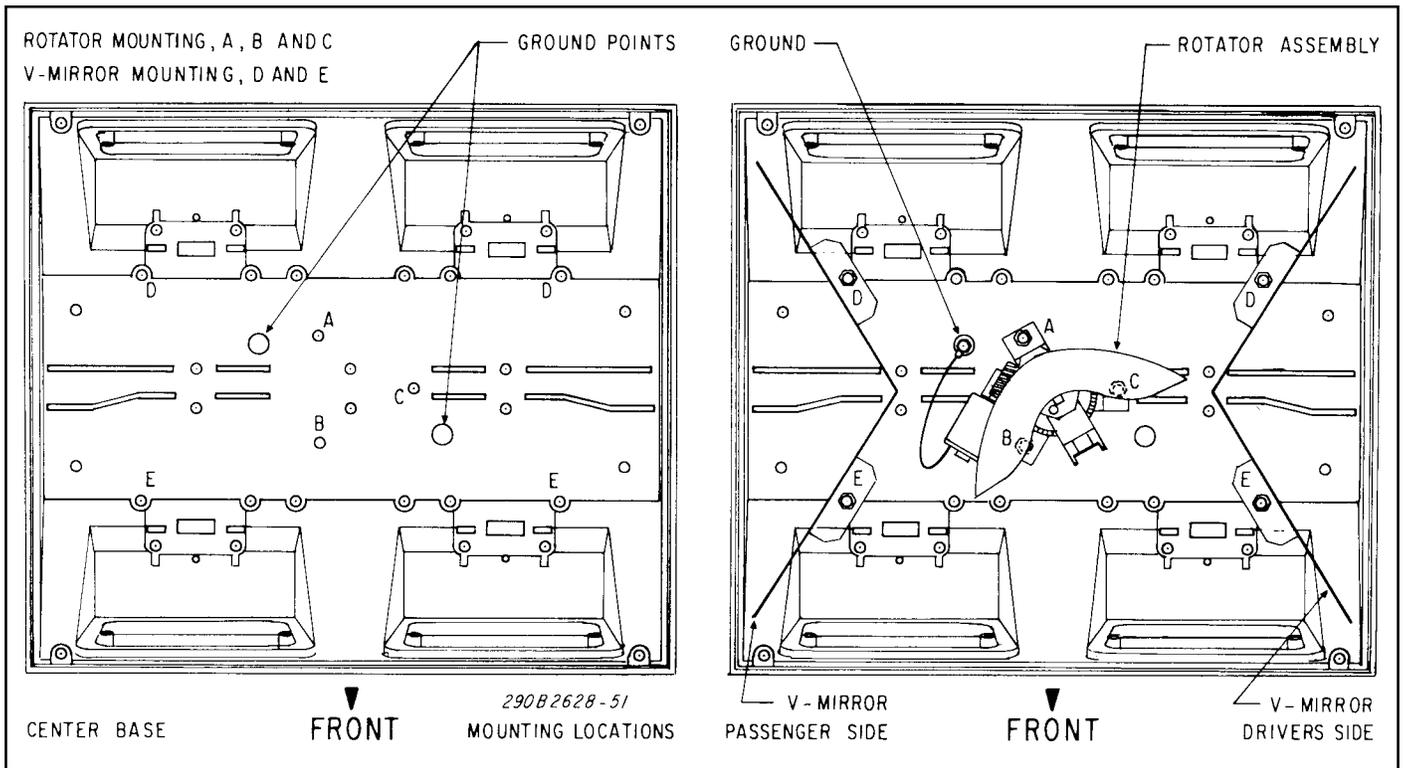


Figure 2.

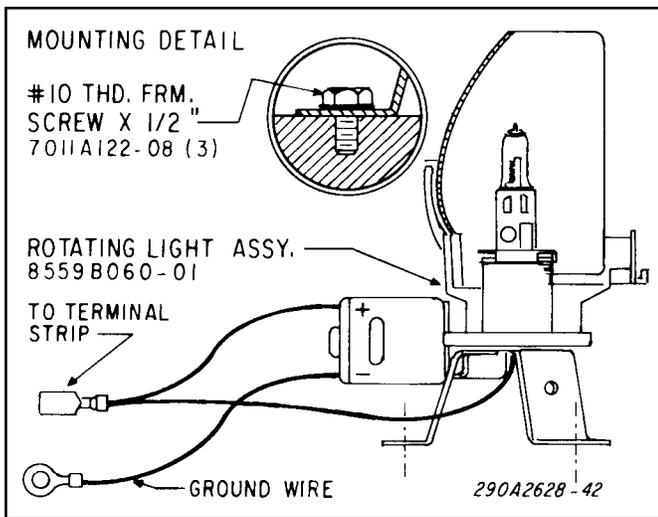


Figure 3.

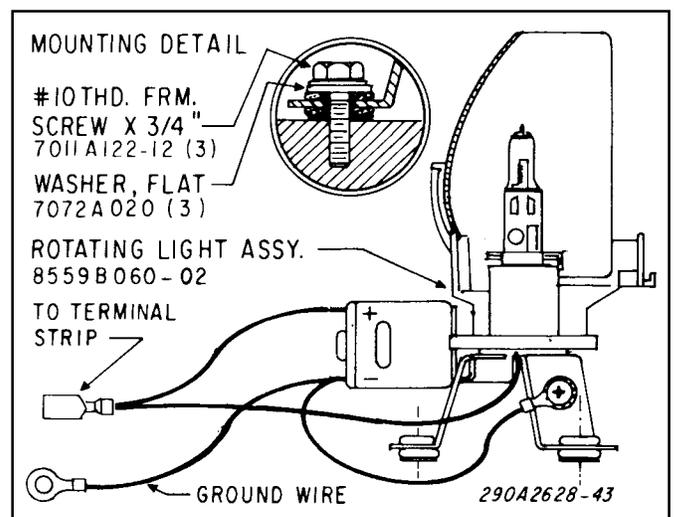


Figure 4.

5. Replace the dome assemblies and secure with the previously removed screws. Torque dome screws to 14 - 18 in-lbs.

F. MAINTENANCE.

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.

CAUTION

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

The rotating light should be lubricated at least twice a year. Use medium consistency Dow Corning DC33 or equivalent type grease. Proceed as follows (see figure 7):

1. Remove lamp and clip from rotating light.
2. Lift-off reflector and worm gear. Lubricate with grease as shown in figure 7.
3. Replace parts by performing the above procedure in reverse order.

NOTE

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.

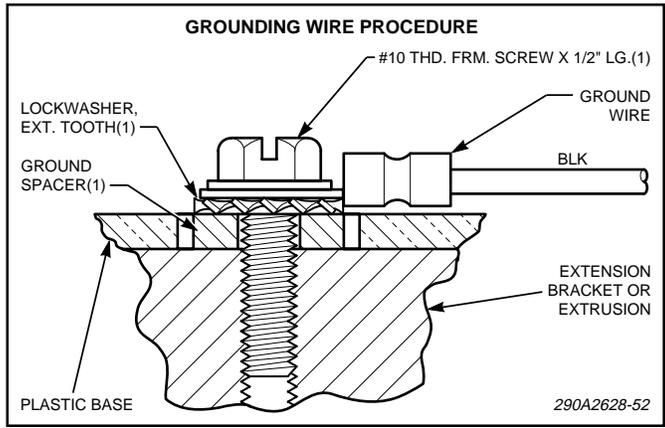


Figure 5.

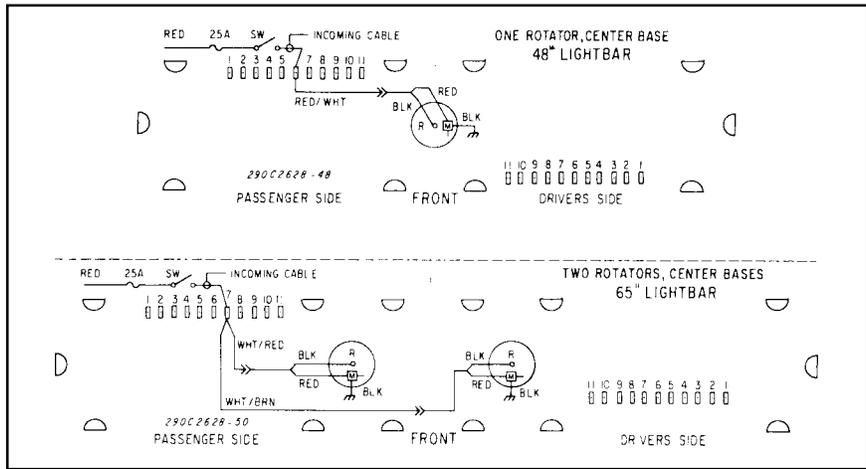


Figure 6.

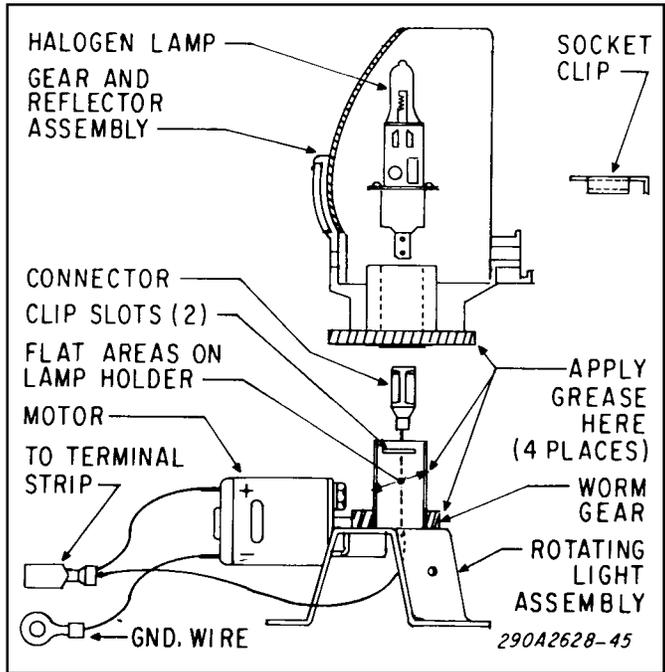


Figure 7.