

**INSTRUCTION SHEET
FOR
STREETHAWK® LED LOWER LEVEL RETROFIT KIT**

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 systems, along with proficiency in the installation and use of safety warning equipment.
- You should frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.
- The light should be frequently inspected 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.

A. GENERAL.

⚠ WARNING

This unit is designed for use in the lower level of the Streethawk lightbar only. Do not install in any other lightbar.

This device is a retrofit LED light head for use in the Federal Signal Streethawk lightbar. It is designed to operate on a 12.8 VDC, negative ground system. It is to be used with flashers designed for use with LED lights, such as the Federal Signal Intelli-Flash™ Model 650200 Flasher or the Federal Signal FA3C Flasher. The unit is comprised of an aluminum mounting bracket with three LED modules installed, a PCB board with heat sink attached, and a wire harness.

B. KIT CONTENTS LIST .

Qty.	Description	Part No.
6	Cable Tie	150A109
2	Screw, Hex Hd., Type B	7011A122-08
1	Red female 1/4" tab connector	224A216-01
1	Red male 1/4" tab connector	224A217-01
1	Red #10 ring lug	224A200-05

C. INSTALLATION.

1. To install lower level LED modules when using the Intelli-Flash Model 650200 flasher, proceed as follows:

- Remove the domes.
- Move or remove any upper level lamp assemblies that interfere with lower level lamp or harness access. Rotate rotator worm gears by hand if mechanism blocks screw access.
- Service one lamp at a time to avoid wiring mix-ups. Cut wire ties as needed for connector access. Remove screws securing lamp to be replaced. Trace leads back to harness connector and ground screw and remove. Retain brass spacers and/or washers for ground screw. Retighten the ground screw after the old lamp ground connections to the screw are removed.
- Place the LED module into position (electrical connector is at the top) and install the screws. Take care not to strip the threads in the light bar base.
- Route leads to avoid interference, especially with hot or rotating parts. Plug the LED module's red power lead into the existing harness connector. Make a note of the wire color. Route the ground wire through the bar to the end where the main cable enters the bar. Do not terminate at this time.
- Repeat for other lamp(s), and then remove existing flashers and flasher harnesses.
- Locate the Intelli-Flash flasher near the terminal strip and secure.

h. To complete the wiring, follow the instructions supplied with the flasher.

i. After the flasher is installed and wired, dress and tie leads.

j. Reinstall any previously removed hardware, and then reinstall the domes.

2. To install lower level LED modules when using the FA3C flasher, proceed as follows:

a. Remove the domes.

b. Move or remove any upper level lamp assemblies that interfere with lower level lamp or harness access. Rotate rotator worm gears by hand if mechanism blocks screw access.

c. Service one lamp at a time to avoid wiring mix-ups. Cut wire ties as needed for connector access. Remove screws securing lamp to be replaced. Trace leads back to harness connector and ground screw and remove. Retain brass spacers and/or washers for ground screw. Retighten the ground screw after the old lamp ground connections to the screw are removed.

d. Place the LED module into position (electrical connector is at the top) and install the screws. Take care not to strip the threads in the light bar base.

e. Route leads to avoid interference, especially with hot or rotating parts. Plug the LED module's red power lead into the existing harness connector. Cut and strip the ground lead to the necessary length, crimp ring lug and slip over ground screw. Tighten screw after all grounds to the screw are in place.

f. Repeat for other lamps, then dress and tie leads.

g. Replace existing flasher with FA3C flasher and connect ground wire to chassis ground screw. Secure flasher.

h. After the flasher is installed and wired, dress and tie leads.

i. Reinstall any previously removed hardware, and then reinstall domes.

D. TESTING.

WARNING

This product contains high output LED devices. To prevent eye damage, do not stare into the light beam at close range

After installation, check the entire system to be sure the lights are flashing properly and all siren/light system functions are operating properly.

SAFETY MESSAGE TO OPERATORS

People's lives depend on your safe use of our products. Listed below are some important safety instructions and precautions you should follow:

- Although your warning system is operating properly, it may not be completely effective. People may not see or heed your warning signal. You must recognize this fact and continue driving cautiously.
- Also, situations may occur which obstruct your warning signal when natural or man-made objects are between your vehicle and others, such as: raising your hood or trunk lid. If these situations occur, be especially careful.
- This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.
- At the start of your shift, you should ensure that the light is securely attached and operating properly.

Failure to follow these safety precautions may result in property damage, serious injury, or death to you, to passengers, or to others.

RETAIN AND REFER TO THIS MESSAGE

E. MAINTENANCE.

WARNING

Crazing (cracking) of lenses will cause reduced effectiveness of the light. Do not use cleaning agent (which will cause crazing) such as strong detergents, solvents, or petroleum products. If crazing of lenses does occur, reliability of light for emergency signaling purposes may be reduced until lenses are replaced.

1. General.

Ordinary cleaning of the plastic lenses can be accomplished by using mild soap and a soft rag. Should fine scratches or a haze appear on a lens, they can ordinarily be removed with a non-abrasive, high quality, one-step, automotive paste cleaner/wax and soft cloth.

2. PCB Assembly Replacement.

- a. Remove the domes.
- b. See figure 1. Disconnect the electrical connector from the PCB assembly.
- c. Gently pry the PCB assembly from the snap-top standoffs on the backplane.
- d. Remove the two heat sink retaining screws and the heat sink.
- e. Assembly is the reverse of disassembly. Prior to installation of the PCB assembly, ensure that the LED connector pins on the PCB are not bent or damaged.

3. LED Module Replacement.

- a. Remove the domes.
- b. See figure 1. Disconnect the electrical connector from the PCB assembly.
- c. Gently pry the PCB assembly from the snap-top standoffs on the backplane.
- d. Remove the device from the light bar.

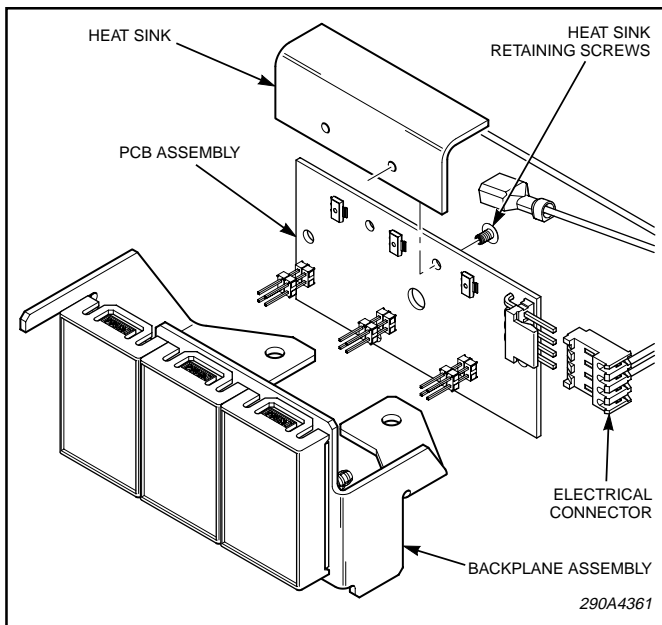


Figure 1.

- e. See figure 2. Remove and discard the Rivscrews retaining the LED module to the backplane. Remove the LED module.
- f. Unlatch the Fresnel lens from the LED module.
- g. Snap the Fresnel lens onto the new module. Make sure the rectangular recess in the lens aligns with the black connector on the new LED module.
- h. Position the LED module on the backplane, aligning the black connector on the LED with the large clearance hole in the backplane. Secure the module with the 2 6-32 screws provided.
- i. Remainder is the reverse of disassembly.

4. Fresnel Lens Replacement.

Same as LED Module Replacement above, except that the Rivscrews must be retained for reuse if a new LED module is not being installed.

E. REPLACEMENT PARTS.

Description	Part #
PCB Assembly Red/Amber	Z2005175-N
PCB Assembly Blue	Z2005175-02N
LED Module Assembly, Amber	Z8625106-AS
LED Module Assembly, Blue	Z8625106-BS
LED Module Assembly, Red	Z8625106-RS
Lens, Fresnel	8625101

Manufactured by:
Federal Signal Corporation
Emergency Products Group
2645 Federal Signal Drive
University Park, Illinois 60466

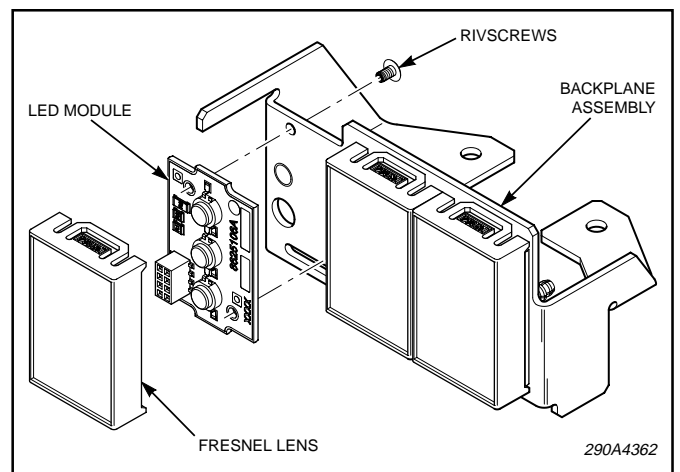


Figure 2.