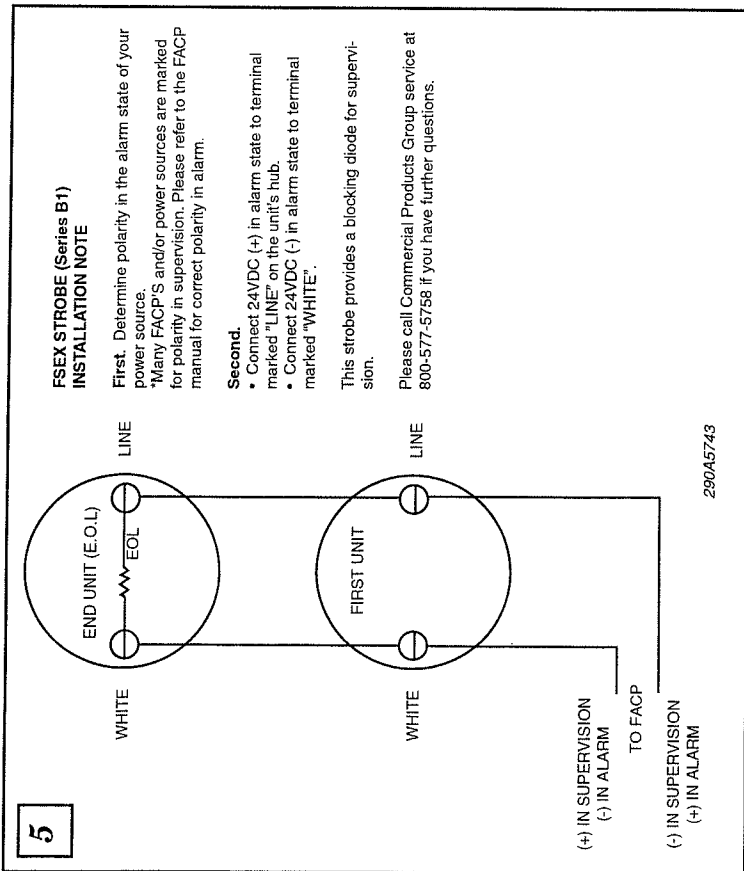
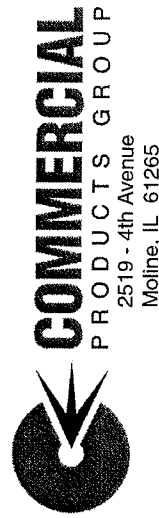


MODEL FSEX-HI

INSTALLATION AND SERVICE INSTRUCTIONS FOR MODEL FSEX-HI

VISUAL SIGNAL APPLIANCES FOR THE HEARING IMPAIRED FOR USE IN HAZARDOUS LOCATIONS

Address all communications and shipments to:



INSTALLATION AND SERVICE INSTRUCTIONS FOR MODEL FSEX-HI VISUAL SIGNAL APPLIANCES FOR THE HEARING IMPAIRED FOR USE IN HAZARDOUS LOCATIONS

A SAFETY MESSAGE TO INSTALLERS, USERS AND MAINTENANCE PERSONNEL

It is important to follow all instructions shipped with this product. This device is to be installed by a trained electrician who is thoroughly familiar with the National Electrical and Fire Codes and will follow all local codes.

This device should be considered a part of the warning system and not the entire warning system.

The selection of the mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the facilities engineer and the safety engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Never alter the unit in any manner. Safety may be compromised if additional openings or other alterations are made to the unit.
- Do not connect this light to the system when power is on.
- After installation, ensure that the setscrew and threaded joints are properly tightened.
- Keep unit tightly closed when in operation.
- After testing is complete; provide a copy of this instruction sheet to all operating personnel.
- Establish a procedure to routinely check the light installation for integrity and proper operation.

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

I. GENERAL

The Model FSEX-HI strobe light is a Visual Signaling Device for Hearing Impaired for use in Hazardous Locations and provides about 80 high intensity flashes per minute. The unit is UL Listed for indoor use on a wall or ceiling in a non-sleeping area and complies with the TYPE 4X (watertight and corrosion resistant) enclosure requirements and Marine Visual Signal Device (saltwater).

For the Electrical Ratings and Light Dispersion Pattern of the Model FSEX-HI, reference Table 1 and Figure 1.

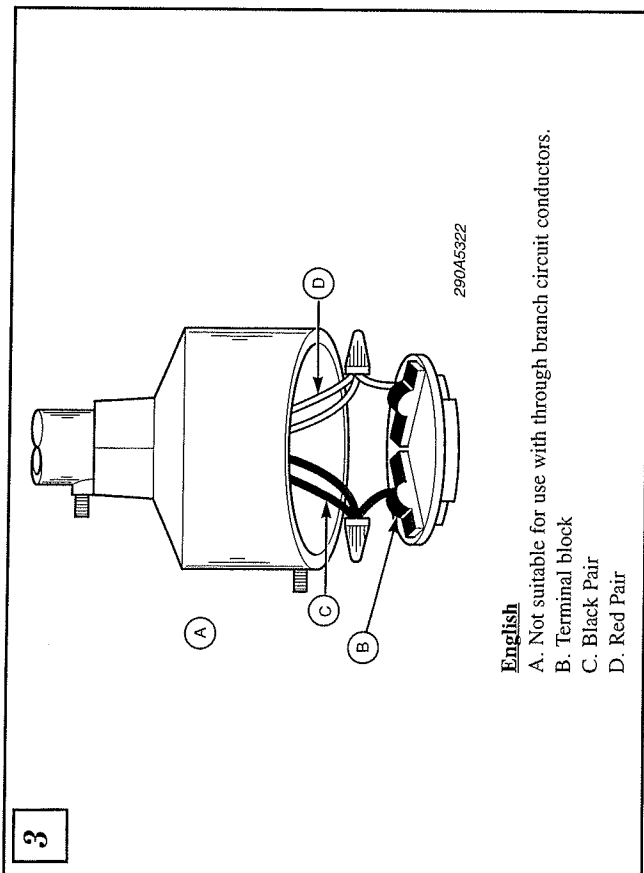
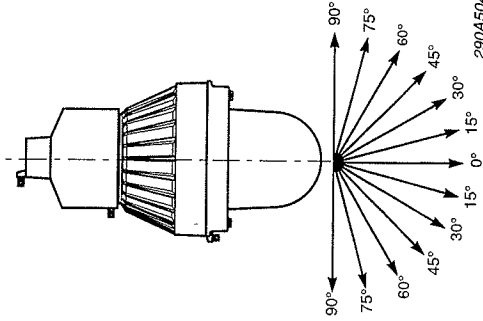


Table 1

Electrical Ratings	
Operational Voltage Range	16-33V dc
On-Axis Candelas	15
Flashes/minute	80
Frequency, Hz	DC
Inrush Current, A	3.0
Max. DC Operating Current, A	1.9

Underwriters Laboratories only evaluated this product to the stated operational voltage range. It was not evaluated to 80% to 110% of the voltage range.

I Model FSEX-HI Signaling Device for the Hearing Impaired Light Dispersion Pattern per UL1971.



Horizontal Light Dispersion Pattern		
Degrees	UL Min. cd per UL1971	Typical cd
0°	15.00	149
5-25°	13.50	215
30-45°	11.25	152
50°	8.25	114
55°	6.75	97.68
60°	6.00	112
65°	2.40	134
70°	5.25	150
75°	5.25	167
80°	4.50	272
85°	3.75	640
90°	3.75	518

III. MAINTENANCE.

⚠ WARNING

To prevent receiving an electrical shock, disconnect the fixture from the supply circuit and wait at least 5 minutes before opening.

High voltages are present inside the light assembly after disconnecting power.

⚠ SAFETY MESSAGE TO MAINTENANCE PERSONNEL

Listed below are some important safety instructions and precautions you should follow:

- Read and understand all instructions before operating this system.
- Any maintenance to the light system must be done with the power turned off.
- Any maintenance to the light system must be performed by a trained electrician in accordance with all applicable national and local codes in the country of use.
- Never alter the unit in any manner. Safety of the unit may be compromised if additional openings or other alterations are made.
- The nameplate should not be obscured, it contains cautionary and/or other information of importance to maintenance personnel. Ensure the nameplate remains readable if the housing's exterior is painted.
- If dome is damaged in any way, it **MUST** be replaced.
- After performing any maintenance, test the light system to ensure that it is operating properly.

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

A. Flash Tube Replacement.

As strobe lights are used, the flash tubes begin to darken, causing the light output to decrease. This darkening is characteristic of flash tubes. The darkening will begin near the base of the tube and progress upward. In addition, 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, glow continuously or darken to a point beyond that shown in Figure 6 — it should be replaced.

▲WARNING

High voltages are present inside the light assembly. Wait at least 5 minutes after shutting off the power before servicing this unit.

To change the flash tube, proceed as follows:

1. Disconnect power.
2. Loosen the setscrew, located on the globe-and holder assembly.
3. Remove the globe-and-holder assembly from the main casting by rotating the globe counterclockwise. If the globe assembly will not unscrew, back out the setscrew a few additional turns.

▲WARNING

Effectiveness of explosion –proof enclosure must be maintained. Do not damage globe or threads while disassembling or reassembling unit. Lubricated joints exposed for long periods of time may attract small particles of dirt or other foreign materials. Body and cover joints should be reassembled immediately.

4. Loosen the dome clip screw (1 - 3 turns) and rotate the clip 90°. Remove the dome to expose the flash tube.
5. With the dome removed, gently pull the flash tube from its socket. A rocking motion is most helpful when installing or removing the tube.

6. Replace flash tube with the appropriated replacement part listed in part listed in paragraph III. E. Replacement Parts.

7. Place dome in position under hold down tabs (2). Rotate the clip into place on lip of dome and tighten the screw.

B. Cleaning Enclosure.

NOTE

Maintenance procedures sometime require fixtures to be hosed down for good housekeeping. The circuit must be turned OFF and fixture globe MUST be allowed to cool to ambient room temperature before cleaning.

The fixture should be cleaned periodically to maintain maximum light output. Only mild, non-abrasive cleaning agents should be used. The glass globe should be regularly inspected for scratches and chips, and if damaged, must be replaced.

C. Lubrication.

Threaded joint on cover should be kept well lubricated with a corrosion-inhibiting grease such as petrolatum or soap-thickened mineral oils. If corrosive products have accumulated on explosion-proof joints and cannot readily be removed with solvents, the parts should be discarded and replaced.

▲WARNING

Never use an abrasive material or file to remove corrosive products from threaded surfaces. In extremely corrosive locations, equipment should be periodically inspected to guard against unusual deterioration and possible porosity, since this may weaken the enclosure structurally.

D. Service.

The CPG factory will service your equipment and provide technical assistance with any problems that cannot be handled locally with satisfaction or promptness.

If any unit is returned to CPG for adjustment or repair, it can be accepted only if we are notified by mail or phone in advance of its arrival. Such notice should clearly indicate the service requested and give all pertinent information regarding the nature of the malfunction and, if possible, its cause.

Address all communications and shipments to:

Service Department
Commercial Products Group
2519 - 4th Avenue
Moline, IL 61265
800-521-8219

E. Replacement Parts.

Description	Part Number
Fresnel Lens, Clear	K8550C095A
Flash Tube	K8107159A
Assembly Globe	K8444C271A-03
Pendant Fixture Mount	K8444A272-01
PCBA Low-Inrush	K2001918A-01
Mechanism, 24VDC	K8436107F-03

F. Optional Accessories.

Description	Model
Ceiling Fixture Mount	CMXC-R
Wall Fixture Mount	WMXC-R

II. INSTALLATION.

A. Unpacking.

▲WARNING

Damaged globes can lead to explosions, which could result in serious injury or death.

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 the unit. File a claim immediately with the carrier, stating the extent of damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them.

B. Mounting.

The Model FSEX-HI, strobes are designed for hearing impaired applications and should be installed per the NFPA 70 and 72, STATE and LOCAL CODES. Alternate installation locations and/or orientations should only be performed with the approval of the authority having jurisdiction. Reference Figure 1 for the light dispersion pattern of the FSEX-HI.

1. Optional Ceiling Mount.

2. Optional Wall Mount.

C. Electrical Connections.

▲WARNING

To avoid electrical shock hazards, do not connect wires when power is applied.

The DC Model's Operating Voltage Range Limits: 16 – 33Vdc.

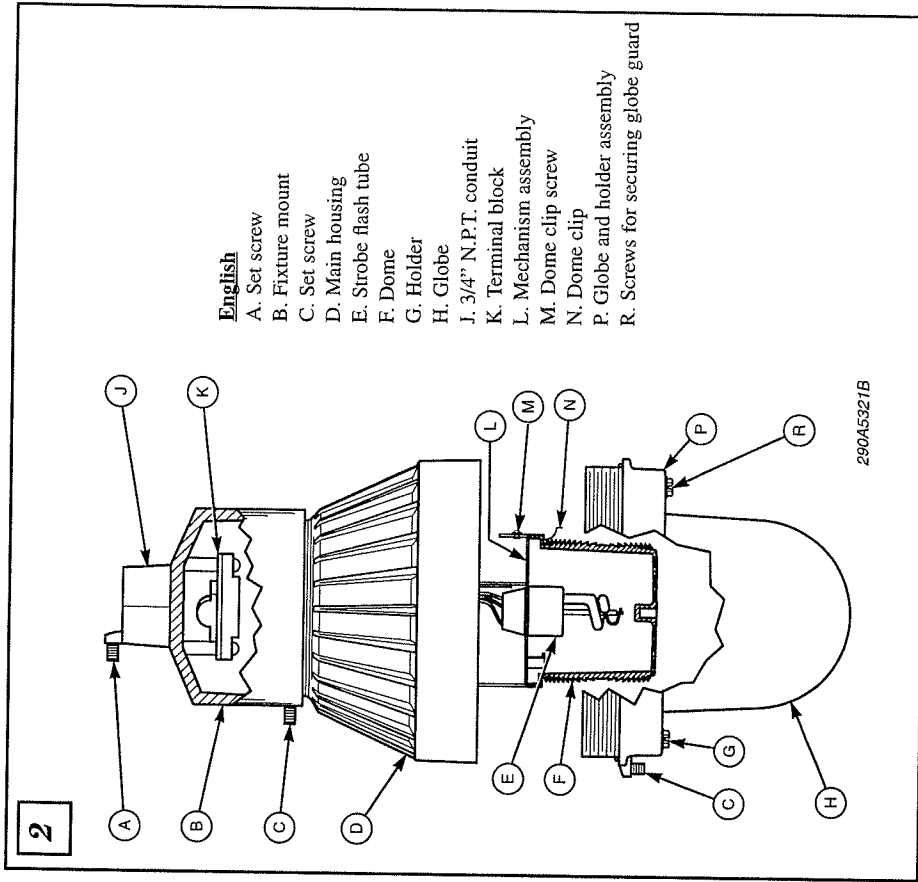
▲WARNING

This product was only tested to its rated operating voltage range. It was not tested to 80% and 110% of these limits.

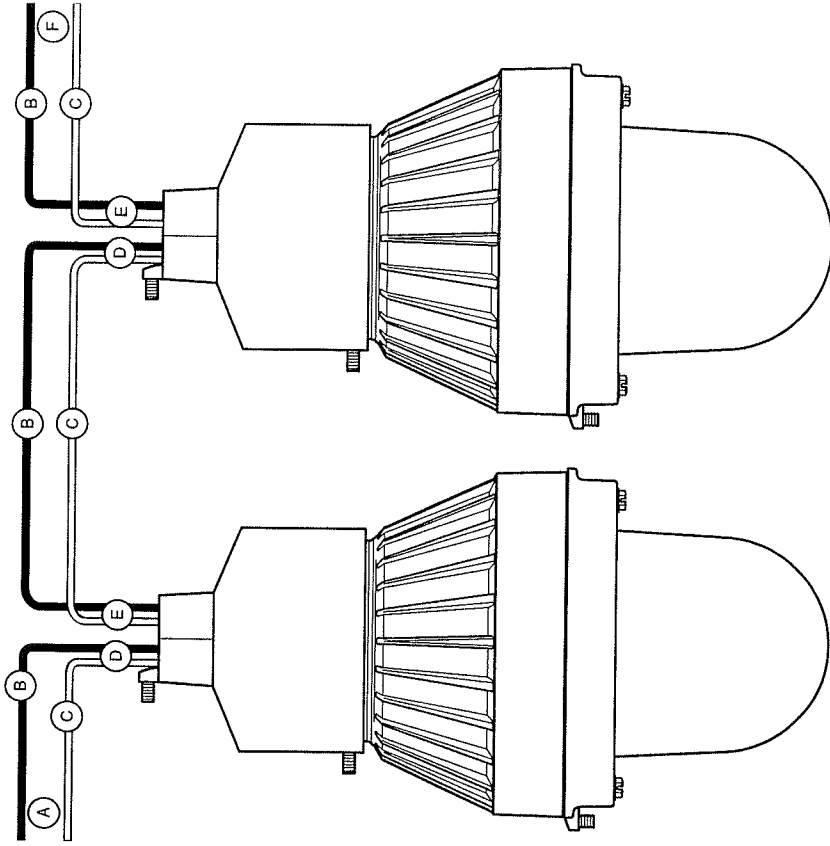
▲CAUTION

The DC units are polarity sensitive, and **MAY BE DAMAGED** by incorrect electrical hookup. When connecting the DC strobe unit to the voltage supply lines, **POLARITY MUST BE OBSERVED**. In addition, damage will result if the voltage rating of the model is exceeded.

The FSEX-HI units are provided with four leads; two red and two black. To achieve electrical supervision, connect one red (+) lead to the positive side of the incoming power source and the other red (+) lead to the outgoing power source. Then connect one black (-) lead to the negative side of the incoming power source and the other black (-) lead to the negative side of the outgoing power source. If required by local building codes, connect the earth ground to the grounding screw located in the mounting hood. See figures 2, 3, 4 and 5 for additional information.



4



290A5323

- English**
- A. 24VDC
 - B. Black
 - C. Red
 - D. In
 - E. Out
 - F. To next device