

INSTRUCTION SHEET  
FOR  
DUAL DECK STROBE MODEL 413245

SAFETY MESSAGE TO INSTALLERS AND USERS

 **WARNING**

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.**
- **DO NOT install equipment or route wiring or cord in the deployment path of an air bag.**
- **When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.**
- **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.

**A. GENERAL.**

The Federal Deck Strobe Model 413245 is a high intensity, directional strobe light head. It is designed to

be used exclusively with any Federal Signal strobe power supply (15W per head max.). These power supplies will provide 70 to 75 double or quadruple strobe flashes per minute with flash energy of 10 to 13 joules per double/quadruple flash.

**CAUTION**

Use of any other power supply may cause shortened service life of the strobe tube.

The units are supplied with mounting brackets, adhesive pads, and velcro strips which allow flexible mounting arrangements. Lens colors (amber, red, green, blue, or clear) are specified when ordering. The lenses are interchangeable, and can be ordered separately.

**B. UNPACKING.**

After unpacking the light, inspect it for damage that may have occurred in transit. If the unit has been damaged, do not attempt to install or operate it. 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. Ensure that the parts listed in the KIT CONTENTS LIST are included in the package.

**C. KIT CONTENTS LIST.**

Qty.	Description	Part No.
2	Connector, receptacle, red, 3-position	139299-10
6	Terminal, QD, receptacle, 18-22 AWG	224A216-01L
6	Terminal, pin, 14-20 AWG	233229
2	Screw, Pan Hd., 1/4 x 5/8	7011161-10
3	Screw, Hex Hd., 1/4 x 5/8	7011165-10
2	Lockwasher 7075078	
1	Velcro, Hook	8550A101
1	Velcro, Loop 8550A100	
1	Adhesive Pad	8550A031

 **WARNING**

**This product is intended for supplemental warning and for use in conjunction with an approved primary warning light system. This strobe head can be powered by several types of strobe power supplies. Consult local codes and regulations to determine if the power supply/strobe head combination complies.**

## D. INSTALLATION.

### **⚠ WARNING**

When installing equipment inside air bag equipped vehicles, the installer **MUST** ensure that the equipment is installed **ONLY** in areas recommended by the vehicle manufacturer.

Failure to observe this warning will reduce the effectiveness of the air bag, damage the air bag, or potentially damage or dislodge the equipment, causing serious injury or death to you or others.

### **NOTE**

For maximum coverage and effectiveness, the light assembly should be mounted in a horizontal orientation.

Installation can be accomplished using the supplied bracket(s) and screws, adhesive pads, or velcro strips. Determine the mounting position appropriate for the installation, and then select the applicable mounting method.

### **⚠ WARNING**

Do not install the light in a location which can obstruct the driver's vision. Installing the light assembly too low will obstruct the driver's vision and prevent safe vehicle operation. Ensure that the light is mounted in a position that allows maximum visibility.

### **CAUTION**

Do not install the light assembly in the windshield's tinted area. Light output will be reduced and the light's color will change, lessening the effectiveness of the light.

#### 1. *Bracket(s)/Adhesive Pads or Velcro Strips.*

### **⚠ WARNING**

The surfaces to which the adhesive pads (or velcro strips) are applied must be clean and dry for proper adhesion. If necessary, use isopropyl alcohol (rubbing alcohol) and water to clean the mounting surfaces.

a. Remove the release paper from one side of the adhesive pad and apply the pad to the bracket surface. Press the pad firmly against the bracket to make sure that the pad adheres properly.

b. Peel the release paper from the other side of the pad and attach the bracket to the mounting surface.

Ensure that the assembly adheres firmly to the mounting surface.

c. Mounting on a flat non-metallic surface can also be performed using the supplied velcro hook-and-loop strips.

d. Secure the light assembly to the mounting bracket(s) using the 1/4" x 5/8" pan head Taptite screws and lockwashers as shown in figure 1.

#### 2. *Bracket(s)/Screws.*

a. See figure 1. Use the mounting bracket(s) as a template and scribe mounting hole position marks on the mounting surface.

### **CAUTION**

Before drilling holes in ANY part of a vehicle, be sure that both sides of the mounting surface are clear of parts that could be damaged; such as brake lines, fuel lines, electrical wiring or other vital parts.

b. Drill mounting holes at the previously scribed position marks.

c. Secure the mounting bracket(s) to the mounting surface with the 1/4" x 5/8" hex head Taptite screws.

d. Secure the light assembly to the mounting bracket(s) using the 1/4" x 5/8" hex head Taptite screws and lockwashers as shown in figure 1.

## E. ELECTRICAL.

### **CAUTION**

The strobe tube assembly is designed to be used exclusively with Federal Signal's strobe power supplies and cable kits. Use of any other power supply may cause shortened service life of the strobe tube.

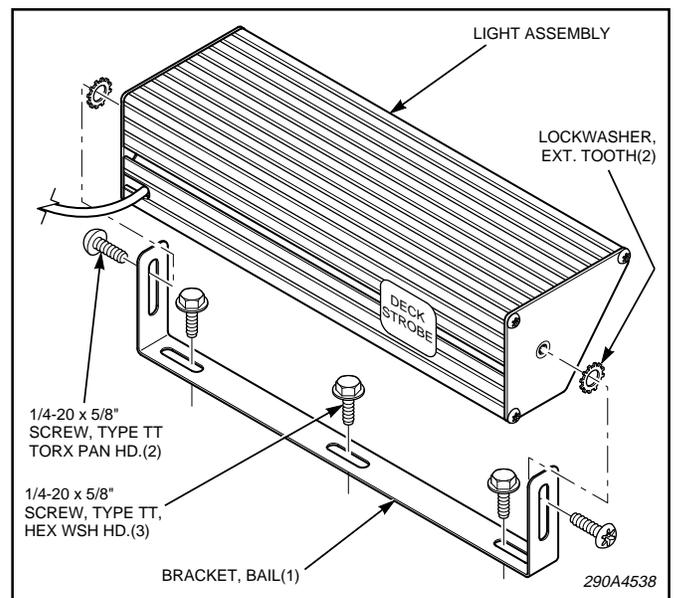


Figure 1.

The light assemblies are supplied with a 6-foot cable with pin terminals. Extra pin terminals are included in the kit to allow replacement when shortening the cable. Perform the electrical connections as described in the instructions packed with the power supply and the cable kit(s). Test the unit(s) for proper operation.

**NOTE**

Two cable kits are required for installation of two head units.

**CAUTION**

Ensure that the correct wire color sequence is maintained at all connections from the strobe tube to the power supply. Table 1 shows the wire color sequence.

**F. MAINTENANCE.**

1. *General.*

**⚠ WARNING**

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

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 a soft cloth.

2. *Strobe Tube Replacement.*

**⚠ WARNING**

**High voltages are present in a strobe light system. Wait at least five (5) minutes, after shutting off power, before servicing the unit. Failure to do so may result in property damage, serious injury, or death to you and others.**

a. Disconnect all power to the strobe system power supply before performing any maintenance.

Wire Color		Function
Tube 1	Tube 2	
Red	Wht/Red	Anode
White	Wht/Green	Trigger
Black	Wht/Black	Ground

Table 1.

b. Remove and retain the two screws and lockwashers which secure the light assembly to the mounting bracket (see figure 1). Remove and retain the two screws which secure the lens (see figure 2), and carefully pull the lens straight away from the light assembly.

c. See figure 3. Remove and retain the screws which secure the end plate to the extrusion.

d. Unplug the defective strobe tube at the 1/4" quick disconnects.

e. Remove the strobe tube assembly by pulling the wires at the base of the strobe tube assembly. Pull the strobe tube straight away from the mounting bar.

**CAUTION**

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

f. See figure 4. SLOWLY insert the new strobe tube in the mounting bar until it is properly seated in the top slot of the strobe tube. If the strobe tube is difficult to insert, remove it and apply a high temperature grease, or Vaseline, to the rubber edge of the strobe tube and try again.

**CAUTION**

The tube may be damaged or the life reduced if wired improperly.

g. See figure 5. Plug in the replacement strobe tube. Reassemble the unit.

h. Reconnect all power connections to the power supply and test for proper operation.

**NOTE**

Figure 5 shows the 413245's internal wiring.

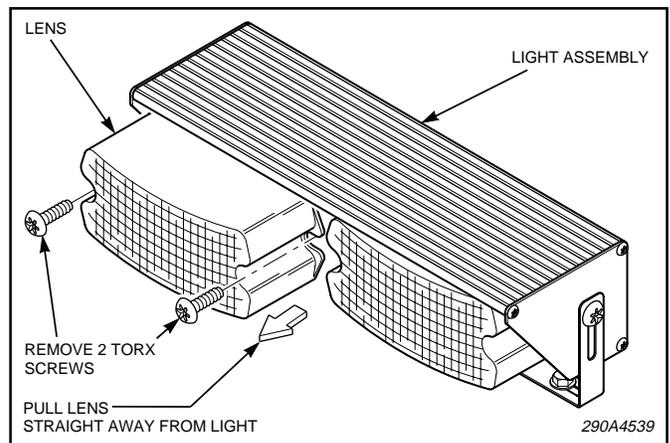


Figure 2.

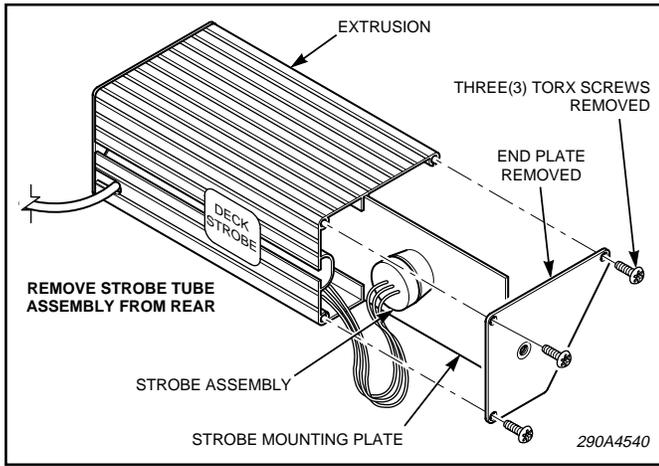


Figure 3.

**SAFETY MESSAGE TO OPERATORS**

**⚠ WARNING**

Peoples' 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.
- 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**

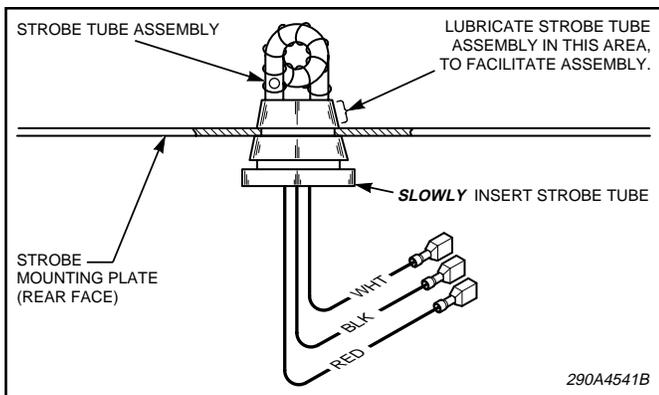


Figure 4.

**F. REPLACEMENT PARTS LIST.**

Description	Part No.
Strobe Tube Assembly	8575013
Reflector, Strobe	8573187
Cable Assy., 6-cond., 413245	1751133
Bracket, Bail, 413245	8673118
Lens, Red	8573001-01
Lens, Blue	8573001-03
Lens, Amber	8573001-02
Lens, Green	8573001-04
Lens, Clear	8573001
Lens, Red W/Clear Insert	8573207
Screw, Pan Hd., Torx, #8	7011163-04
Grommet, Split	228126

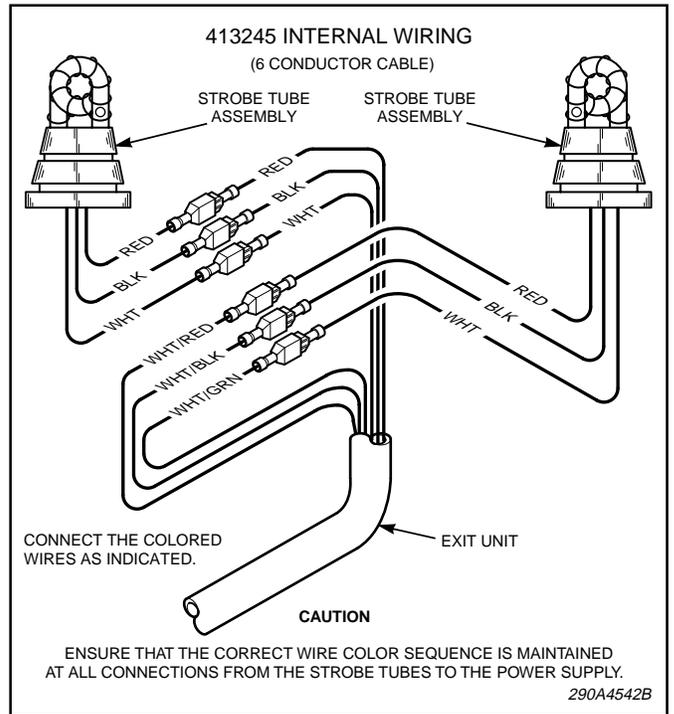


Figure 5.