

INSTRUCTION SHEET
FOR
STROBE BULK CABLE KIT
MODEL 413123

⚠ WARNING

The lives of people depend on your proper installation and servicing of Federal products. It is important to read 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 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.**
- **When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged. Remove all burrs from drilled holes. To prevent electrical shorts, grommet all drilled holes through which wiring passes.**
- **Locate light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.**
- **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.

Model 413123 is a bulk cable kit. The kit allows the installer to custom fit the cable to their specific installation. Pin and socket terminals must be crimped with the proper tool to ensure a solid crimp. Application of AMP plugs and receptacles complete the cable assembly.

Before proceeding with the installation, ensure that all parts in the KIT CONTENTS LIST are included in the packing carton.

B. KIT CONTENTS LIST.

Qty.	Description	Part No.
120	Terminal, socket	233A160
120	Terminal, pin	233229
36	AMP receptacle	139299-10
36	AMP plug	140A203-10
500 ft.	Wire, 3cond., 600V, shielded	R306040-01
36	Heatshrink tubing, 1/8" x 1-1/4"	C92-09-02-001

C. INSTALLATION.

Select a mounting location for the power supply unit and strobe heads. Plan all wiring and cable routing before performing any installation.

⚠ WARNING

Failure to observe this WARNING may result in fire, burns or blindness.

If shorted to vehicle frame, high current conductors can cause hazardous sparks resulting in electrical fires or molten metal.

DO NOT connect this system to vehicle battery until ALL other electrical connections are made and mounting of all components is complete.

Verify that no short circuits exist, before making connection to the vehicle battery.

1. Disconnect vehicle battery. Ensure that power is disconnected from all vehicle lighting control systems.

2. Ensure that the power supply chassis is grounded to the vehicle chassis. If necessary, connect a wire from the power supply chassis (mounting screw) to a known good vehicle chassis ground.

3. From the cable routing plan, cut the cable to the appropriate length.

4. *Power Supply Cable End. (See figure 1.)*

- a. Strip cable jacket approximately 1-1/2".
- b. DO NOT cut uninsulated shield/drain wire. Trim foil to jacket.
- c. Strip 3/16" of insulation off the red, black and white wire.
- d. Slip supplied 1-1/4" heatshrink tubing over black wire and shield drain wire.
- e. Using the AMP hand tool, AMP part number 90124-2 (not available through Federal Signal), crimp pin terminals on the RED, BLACK and WHITE wires. Do NOT leave any loose strands of wire.
- f. With a heat gun, secure the heat shrink tubing to the wire.

CAUTION

Ensure that the correct wire color sequence is maintained at all connections from the strobe tubes to the power supply.

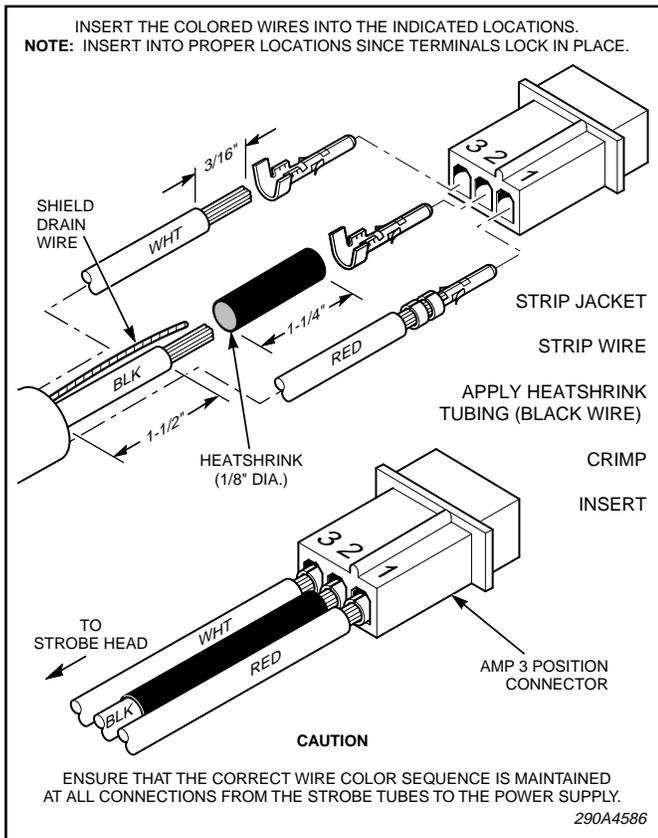


Figure 1.

- g. On the AMP plug, insert the RED wire into position 1, BLACK into position 2 and WHITE into position 3.

- h. Plug into the desired strobe connector on the Ricochet™ power supply.

5. *Strobe Head Cable End. (See figure 2.)*

- a. Route the cable to the strobe head.
- b. Strip cable jacket approximately 1-1/2".
- c. Trim foil and shield drain wire to jacket.
- d. Strip 3/16" of insulation off the red, black and white wire.
- e. Using the AMP hand tool, AMP part number 90124-2 (not available through Federal Signal), crimp pin terminals on the RED, BLACK and WHITE wires. Do NOT leave any loose strands of wire.

CAUTION

Ensure that the correct wire color sequence is maintained at all connections from the strobe tubes to the power supply.

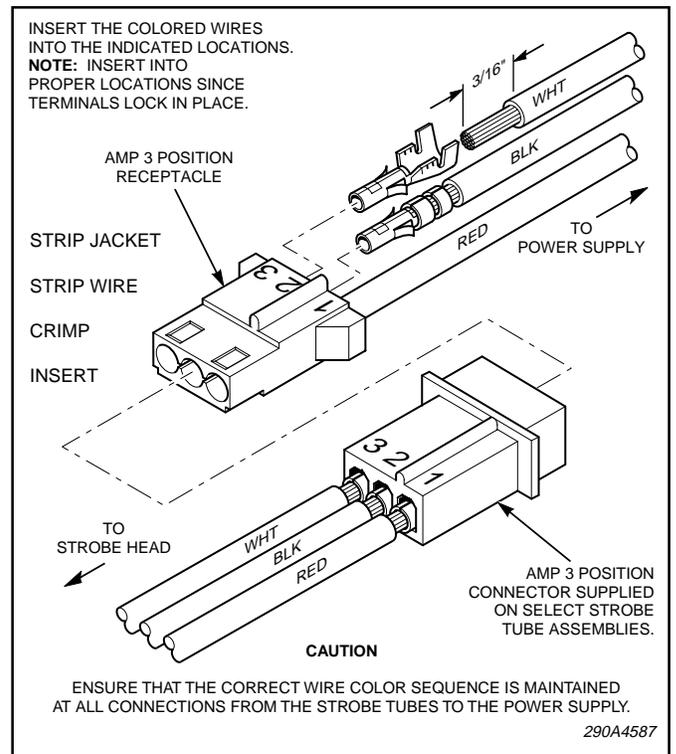


Figure 2.

f. On the AMP receptacle, insert the RED wire into position 1, BLACK into position 2 and WHITE into position 3.

g. Plug the fabricated cable end into the strobe head connector as shown in figure 2.

6. Repeat from step 3 for any additional cables.

7. Check all connections and wiring. Ensure that there are no short circuits and that all wires are protected from any sharp edges. Reconnect the vehicle battery. Test for proper operation of the strobe system.

SAFETY MESSAGE TO OPERATORS

WARNING

The lives of people depend on your safe operation of Federal products. It is important to read and follow all instructions shipped with the products. In addition, listed below are some other important safety instructions and precautions you should follow:

- **Do not attempt to activate or deactivate light control while driving in a hazardous situation.**
- **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 all lamps are operating properly.**
- **If a selected function does not perform properly or if any of the lamps remain illuminated when the control is off, disconnect the power connector from the control unit and contact the nearest service center.**

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