

**INSTALLATION INSTRUCTIONS  
FOR  
STROBE POWER SUPPLY EXTENSION CABLE KITS  
MODELS SPC16 AND SPC30**

**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 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 re-installing 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.**

Models SPC16 and SPC30 are strobe power supply cable extension kits. They are designed to connect Federal's strobe power supplies (Model SPS2, SPS2P, SPS4, SPS4P, SPS4J, or SPS6J) to Federal Models CS1, DS1, TMS1, TMS2, GS1, GS2, 141SH, 131SH, and DS2 strobe-head units. One end of the cables is terminated with a connector that plugs directly into the power supplies. Connectors are also provided for terminating the cable at the strobe head end.

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.
3	Terminal, Female, Red	224A216-01L
2	Terminal, Female, Blue	224A216-04L
1AR	Cable Assy., 16 ft. (SPC16)	175761
1AR	Cable Assy., 30 ft. (SPC30)	175761-01

**C. INSTALLATION.**

When selecting a mounting location for the power supply unit and strobe heads, it is necessary to keep in mind that some strobe heads are supplied with 4-foot of cable exiting the unit and others are supplied with a 6-inch wire pigtail. 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. Connect the strobe tube cables to the power supply. Route the cables to the strobe tube unit(s). Allow for a drain loop for maintenance, and cut the cable to the proper length.

## IMPORTANT

Refer to figures 1 and 2 while completing the electrical connections.

4. Using care to avoid damaging insulation on the cables' conductors, remove approximately 2-inches of each cables' outer insulation. Remove approximately 1/4-inch of insulation from each conductor.

If connecting to a Model DS2: crimp a red female terminal on the end of each white conductor; terminate both black wires in a single blue female terminal; terminate both red wires in a single blue female terminal.

When connecting to other models, crimp the six red female connectors on the ends of each cables' conductors.

5. If the cables or wires exiting the strobe-head unit(s) are not terminated, prepare the cables or wires as described in step 4 above. Crimp the red male connectors, supplied with the strobe-head unit(s), on the conductors.

6. When connecting to Models CS1, TMS1, DS1, 141SH, 131SH, and GS1, connect the cables' conductors to the strobe-head units' conductors by matching the wire colors as shown in figure 1.

7. When connecting to the Model DS2, connect the cables' conductors as shown in figure 2.

8. 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.

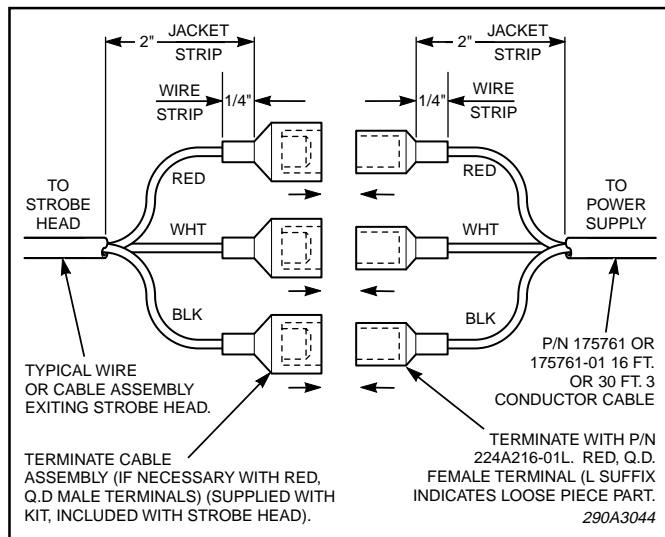


Figure 1.

## SAFETY MESSAGE TO OPERATORS

Peoples' lives depend on your safe use of our products. Listed below are some 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

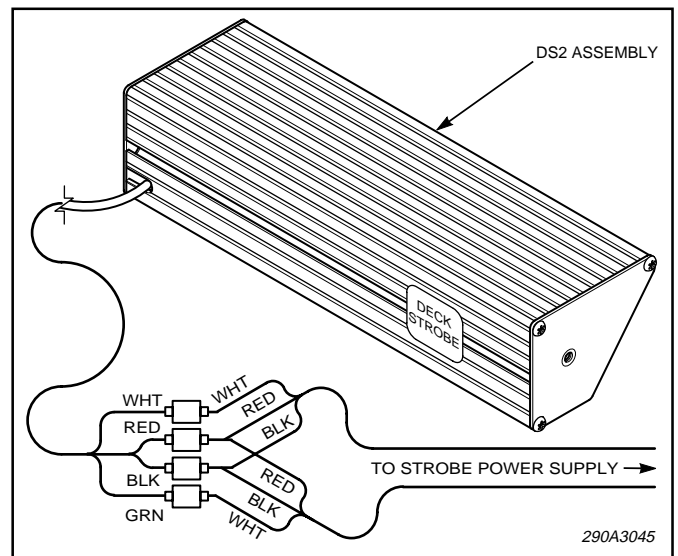


Figure 2.