



# HI-FIVE® CAB ROOF LIGHTS INSTALLATION INSTRUCTIONS

20-221, 20-221C, 20-221S, 20-226, 20-231, 20-244, 20-244C, 20-244S, 20-247, 20-247C 20-247S (L.E.D Bulbs)  
20-220, 20-220C, 20-220S, 20-225, 20-230, 20-245, 20-245C, 20-245S, 20-246, 20-246C 20-246S (Incandescent Bulbs)

## PARTS LIST

5 Hi-Five® Lights	1 Length of red wire
1 Switch	10 Long sheet metal screws
2 Sheet metal screw (switch)	6 Quick Splice Connectors
1 Pig tail with fuse	

## TOOLS NEEDED

Hammer	Pliers
Center Punch	#2 Phillips Screwdriver
Drill Motor	Tape Measure
1/8" Drill Bit	Masking Tape

**CAUTION!** Before beginning installation of your Pacer Hi-Five® Lights, read instructions through carefully and completely. Before drilling, check to make sure all lights are positioned and located properly. Use a measuring tape to ensure accuracy and masking tape to mark positions.

**BULB INSTALLATION:** SECTION A - L.E.D. BULBS SECTION B - INCANDESCENT BULBS

### SECTION A - L.E.D. BULBS

- 1) Insert LED bulb into bulb socket and press firmly until secure.
- 2) Using a battery or 12V power source, test each light to ensure bulb is installed correctly.

**IMPORTANT:** LED bulbs are polarity specific and will only operate in one direction. If light does not turn on, remove bulb, rotate 180° and reinstall and Retest.

- 3) Once you determine the light is functioning correctly, Install the bulb socket into the light housing by twisting clockwise until secure.

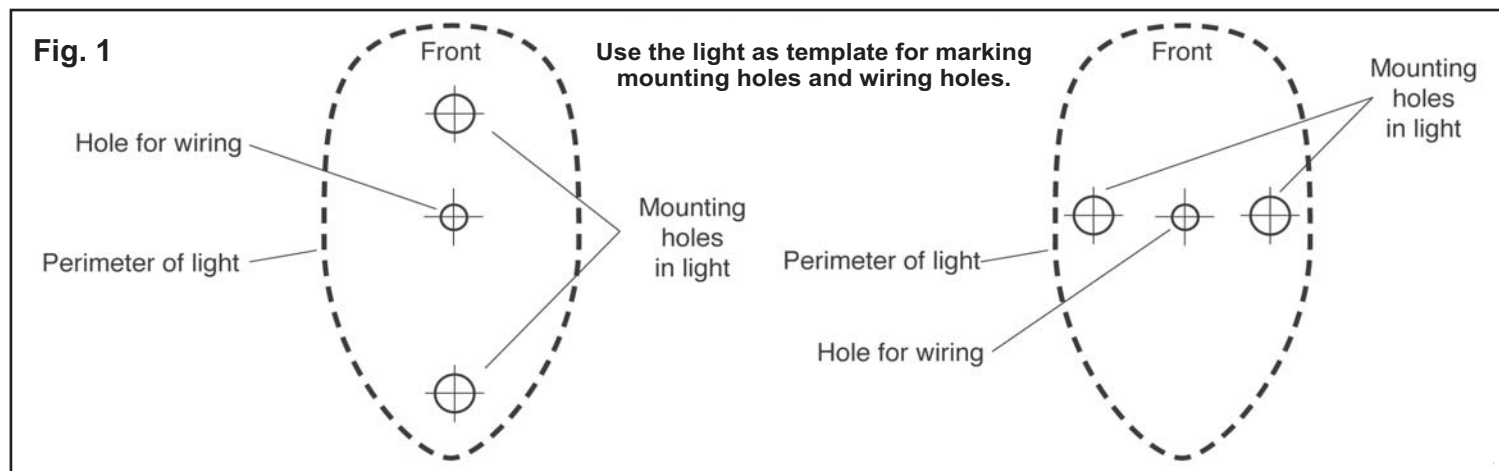
### SECTION B - INCANDESCENT BULBS

- 1) Insert each incandescent bulb into the bulb socket and press firmly until secure.
- 2) Using a battery or 12V power source, test each light to ensure bulb lights.
- 3) Once you determine the light is functioning correctly, Install the bulb socket into the light housing by twisting clockwise until secure.

**NOTE:** This kit uses a T10 #194 Wedge Base Bulb.

LED replacements bulbs are available from Pacer:

Part number 20-100 – 5 Bulb Amber L.E.D. Kit



### POSITIONING LIGHTS & TOGGLE SWITCH

- 1) Determine best location for light placement, using a tape measure to make sure lights are positioned and spaced evenly. Use masking tape to mark the position of the lights. Always find absolute center first, attaching and securing that light first. Measure outward from there.

**NOTE:** On all roof mount installations, use of amber lights must be forward-facing.

- 2) Working inside vehicle, determine best placement for the toggle switch. Keep in mind your natural seating position as well as placing switch within easy reaching distance.

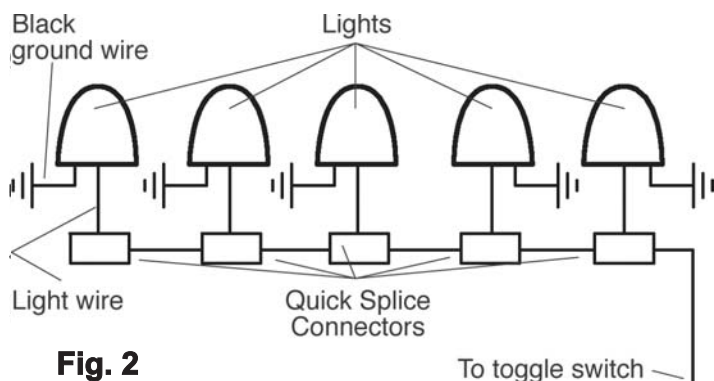
### MOUNTING LIGHTS AND TOGGLE SWITCH

- 1) On roof mount installations, working inside vehicle, lower headliner directly below desired mounting area to access inside where mounting screws and light wiring will pass through and into cab.

**Warning:** Installation of accessories should only be undertaken by those with mechanical and electrical knowledge and are familiar with working on vehicles. Park the vehicle in a well lit area, on level ground and apply the parking brake. After installation, check all lights and electronic functions thoroughly. Failure to follow instructions can lead to severe damage and personal injury.

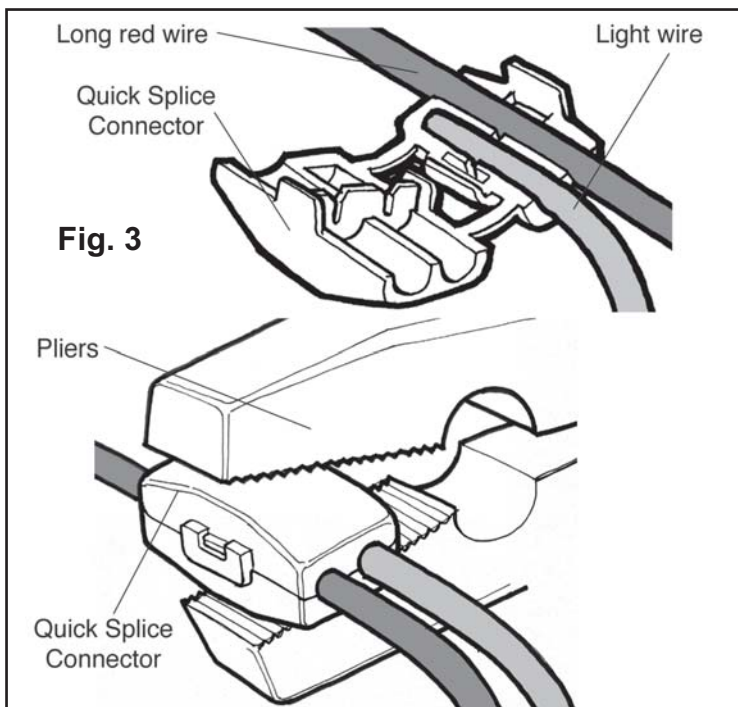
- 2) Install masking tape to the top of the roof in all mounting areas.
- 3) Using light as a template, mark location of both mounting holes onto roof. Move light, then mark location of hole needed for wiring to pass through roof. Make sure hole is inside the perimeter of the light (see Fig.1) and allows for easy routing of the wires.
- 4) CAREFULLY center punch marked hole locations. Only a light tap of the hammer is necessary to dimple sheet metal.
- 5) Before drilling, make sure headliner is clear and will not be pierced by drill bit. Now drill holes marked using 1/8" bit.
- 6) Attach and secure light assembly to roof using long sheet metal screws provided in hardware bag. Repeat procedure for all lights.
- 7) Position toggle switch in area clear of obstructions that will not interfere with leg or arm/hand motions, but is within easy reaching distance of driver's seat. Using slots at top of plastic switch housing as a template, mark location to be drilled for mounting. Carefully drill where marked using 1/8" drill bit. Attach and secure switch using sheet metal screws provided.

### 5 LIGHT HI-FIVE® WIRING DIAGRAM

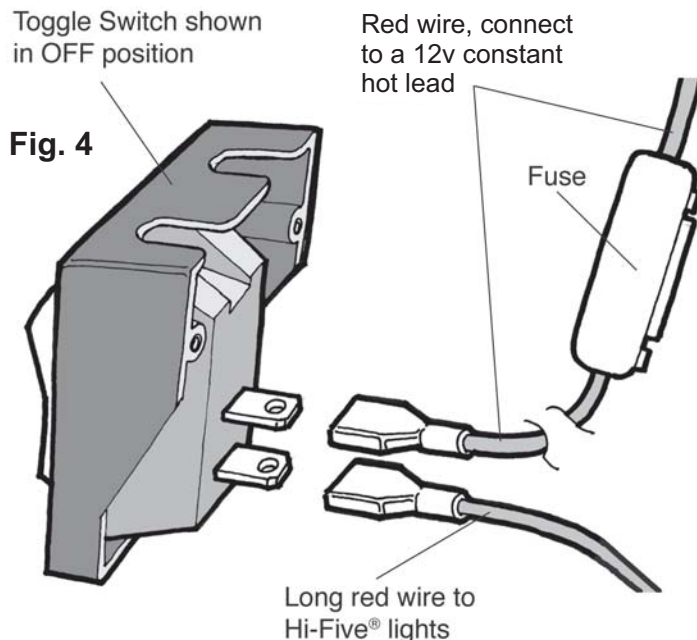


### WIRING LIGHTS TOGETHER

Beginning with lights located farthest from switch, splice light wire to end of red wire (end without connector) using quick splice connectors provided. After inserting both wires, fold over connector and press tightly using hand pliers. Continue with each light in sequence. Tape all wires securely to roof when finished. (Fig. 2 - 3)



### WIRING OF TOGGLE SWITCH:



### WIRING LIGHTS TOGETHER

- 1) Route connector end of red wire to switch, running wiring either inside or alongside windshield pillar.
- 2) Connect red wire to bottom plug on backside of switch. (Fig. 4)
- 3) Attach red hot wire with fuse to top plug on backside of switch. (Fig. 4). The stripped end of red wire can now be spliced into a constant hot lead. This will allow lights to operate directly with switch, independent of the vehicle's lights.
- 4) Attach each individual negative wire to one of the mounting screws, assuring that it is making proper contact. Ground wires may also be spliced together and connected to a good chassis ground.

### NOTE: If lights do not work after mounting

- 1) Remove plastic lens and check to make sure bulb is correctly installed and the filament is intact.
- 2) Check the ground wire for each light has a clean connection.
- 3) Check in-line fuse to make sure it is secure and in working order.
- 4) Recheck all connections to make sure they are secure.
- 5) Check hot lead at fuse box to make sure power source is constant.