

WHELEN[®]

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Installation Guide LFL Lightbar Kit Model LK4124G (add 4 Strobe Lightheads and 1 Strobe Power Supply)

Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- If mounting this product requires drilling holes, the installer **MUST** be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr any holes and remove any metal shards or remnants. Install grommets into all wire passage holes.
- If this manual states that this product may be mounted with suction cups, magnets, tape or Velcro[®], clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.
- Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owner's manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.
- For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the **NEGATIVE (-)** battery post.
- If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.
- Do not attempt to activate or control this device in a hazardous driving situation.
- This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.
- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

For warranty information regarding this product, visit www.whelen.com/warranty

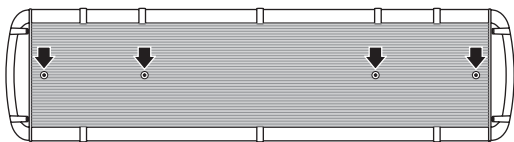
IMPORTANT! The lightbar should be located a minimum of 16" from any radio antennas!

Strobe Lighthoods: Installation

WARNING! The strobe light power supply is a high voltage device. Do not remove the strobe tubes or dismantle the strobe lights in the system while the unit is in operation. Wait 10 minutes after turning off power before starting work on the system.

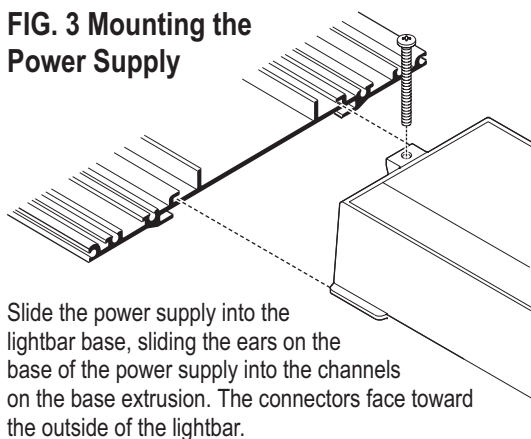
1. Disconnect the unit from power and remove the endcaps. Remove the 4 endcap screws, endcap and gasket from both sides of the lightbar base. If you have alley lights, they must be unplugged also (Fig. 1).
2. Slide the 4 corner strobes out of the lightbar (without unplugging them) and set them aside.
3. Slide the lenses and spacers out of the lightbar and place them on your workbench in the order you removed them (for easy reassembly).
4. Remove the top of the base extrusion by removing the 4 screws as shown in figure 2.

Fig. 2 Remove top extrusion of Lightbar

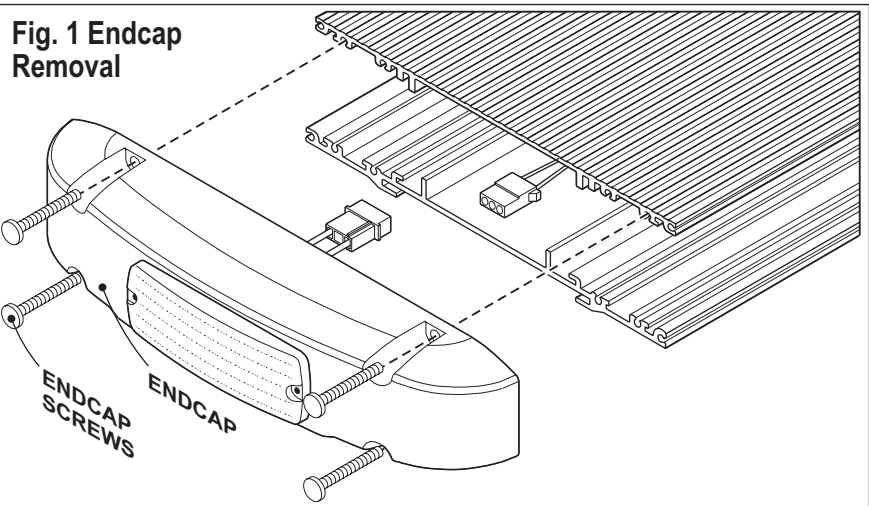


5. With the base extrusion exposed (see wiring diagram) remove the dummy power supply housing located in the power supply "B" spot. Its function is to secure the top extrusion to the base if there is no power supply present. You will replace it with the power supply.
6. Install the new power supply as shown (Fig. 3). Slide the power supply into the base of the lightbar. Two of the screws that hold the top extrusion on will secure the power supply to the base when you remount the top of the lightbar (Fig. 6). Make sure that the power supplies connectors are facing out toward the end of the lightbar.

FIG. 3 Mounting the Power Supply



Slide the power supply into the lightbar base, sliding the ears on the base of the power supply into the channels on the base extrusion. The connectors face toward the outside of the lightbar.

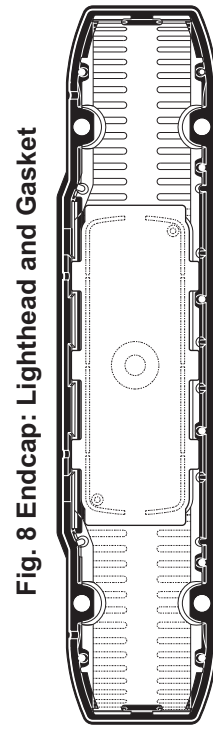
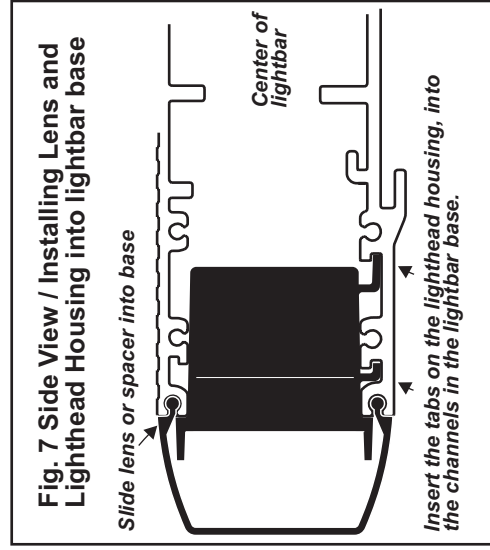
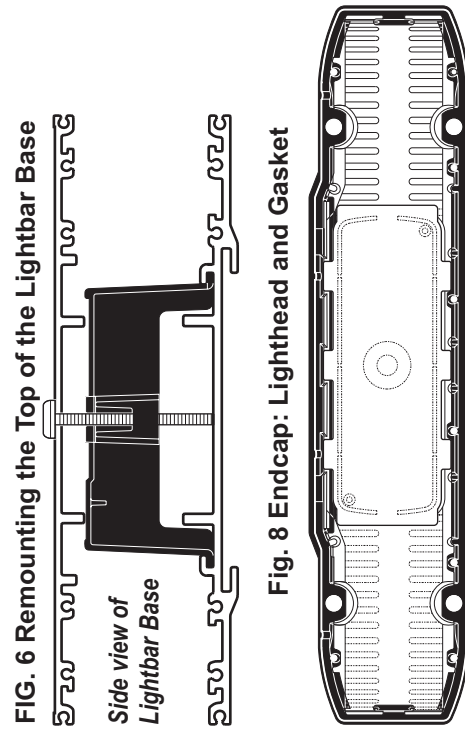
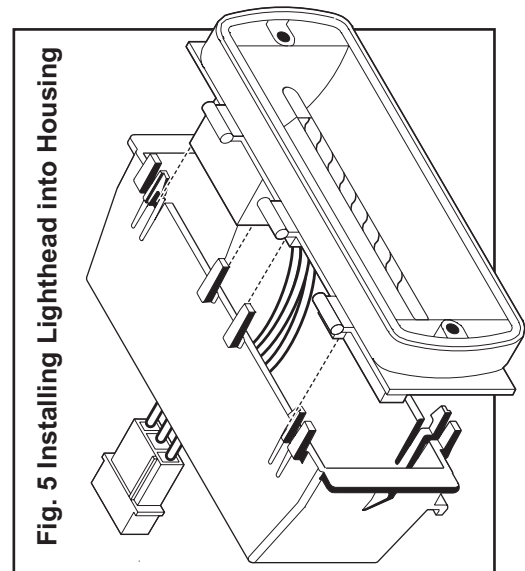
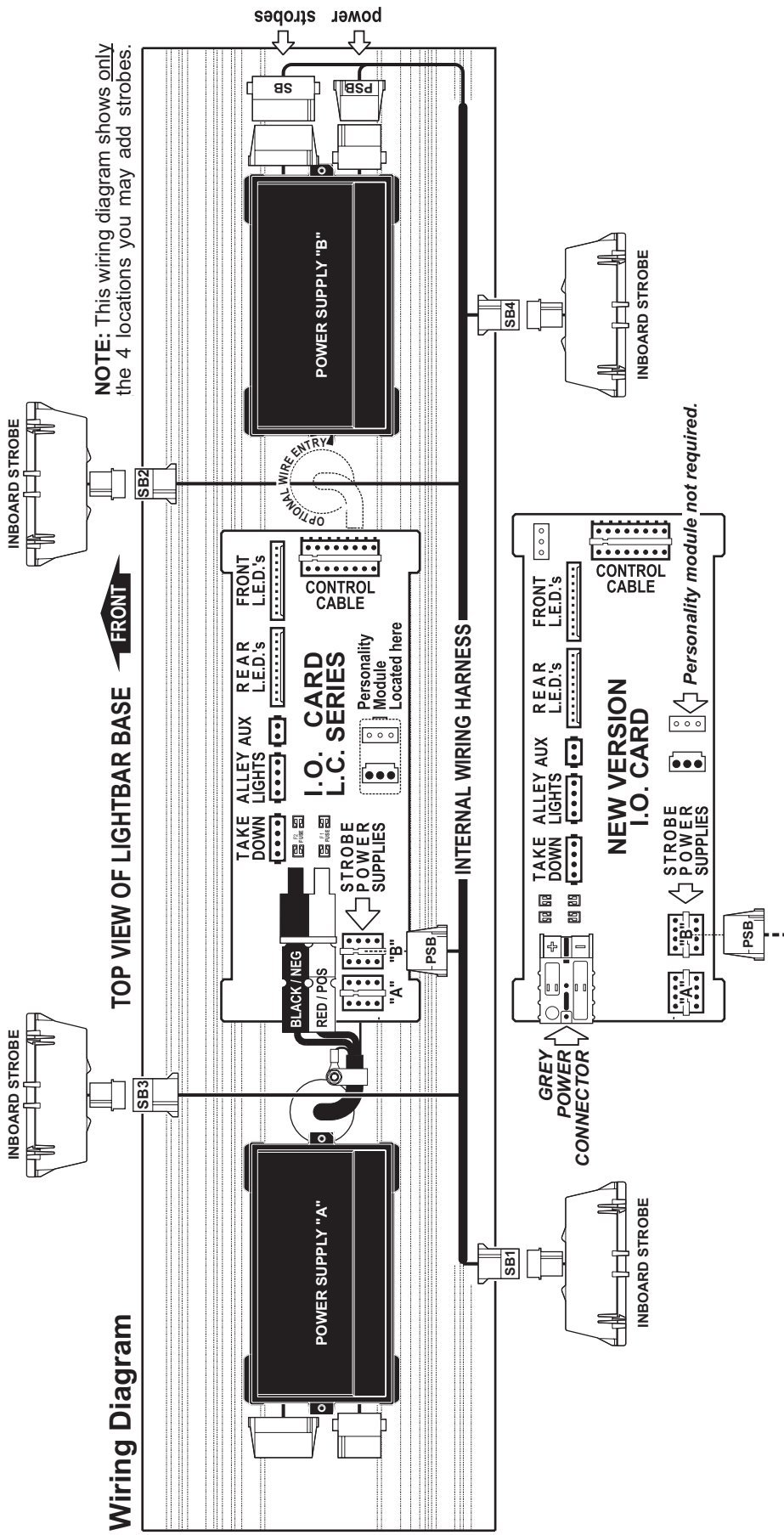


7. Plug the power (PSB) and strobe (SB) connectors of the internal harness into the power supply as shown in the wiring diagram.
8. Install the lighthoods into the lighthood housings (Fig. 5). Make sure that the lighthoods connectors are routed through the wire exit holes located in the housing. Plug these connectors into the internal harness. Installation is complete and you may reassemble the lightbar.
9. First identify which I.O. card your lightbar has. If the power connector plug is red and black, use the new personality module included with the kit. Follow the instructions included with the module. If the power connector is grey, you do not need to install a personality module for this installation.
10. Remount the top extrusion. Line screws up with power supply (Fig. 6)
11. Next replace the lenses and spacers you removed (Fig. 7).
12. Now make sure the endcap gasket is in place (Fig. 8) on the endcap, plug in the alley lights and remount the endcap. Repeat for other side.
13. Reassembly is now complete. Reconnect to power and test the lightbar.

Control Wire Functions:

Control cables were changed in the new LFL lightbars. Be sure of which cable you have. The old cable will have a GREY wire present.

<u>OLD CONTROL CABLE</u>	<u>FUNCTION</u>	<u>NEW CONTROL CABLE</u>
GRAY	Front Inboard Strobes	GREEN-WHITE
GREEN	Front Corner Strobes	GREEN
BLUE	Rear Corner Strobes	BLUE
YELLOW	Passenger Alley	YELLOW
WHITE	Driver Alley	WHITE
WHITE-BLACK	Takedowns	WHITE-BLACK
WHITE-BROWN	Rear L.E.D.	WHITE-BROWN
WHITE-RED	Front L.E.D.	WHITE-RED
WHITE-ORANGE	Rear Inboard Strobes	BLUE-WHITE
WHITE-YELLOW	Alley / Flashing	WHITE-YELLOW
WHITE-GREEN	Takedown / Flashing	WHITE-GREEN
WHITE-BLUE	Strobe Scan-Lock	WHITE-BLUE
WHITE-VIOLET	L.E.D. Scan-Lock	WHITE-VIOLET
VIOLET	Low Power	VIOLET
	Right Traffic Advisor	GREEN-BLACK
	Left Traffic Advisor	BLUE-BLACK
	Auxiliary	WHITE-ORANGE



Place the endcap gasket onto the endcap matching up all the tabs and holes.