

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

51 Winthrop Road  
Chester, Connecticut 06412-0684  
Phone: (860) 526-9504  
Fax: (860) 526-4078  
Internet: [www.whelen.com](http://www.whelen.com)  
Sales e-mail: [autosale@whelen.com](mailto:autosale@whelen.com)  
Canadian Sales e-mail: [autocan@whelen.com](mailto:autocan@whelen.com)  
Customer Service e-mail: [custserv@whelen.com](mailto:custserv@whelen.com)

## Installation Guide: Edge<sup>®</sup> 9M Scan-Lock<sup>™</sup> Kit

### 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<sup>®</sup>, 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!**

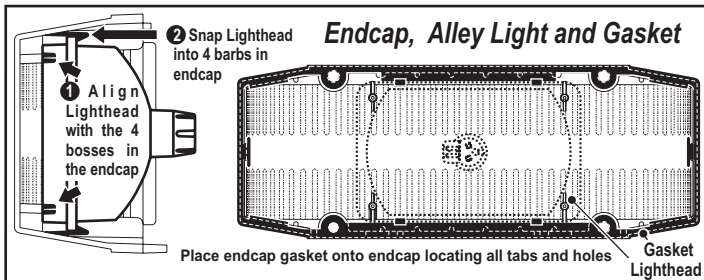
**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

## Scan-Lock™: Installation

The Scan-Lock™ harness will plug into the power distribution board located on the center inner wall of the lightbar base. The cable will exit the lightbar along with the main cable. Always cut power before starting installation.

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

1. Remove the endcaps. If your lightbar is equipped with alley lights you must unplug them before fully removing the endcap.

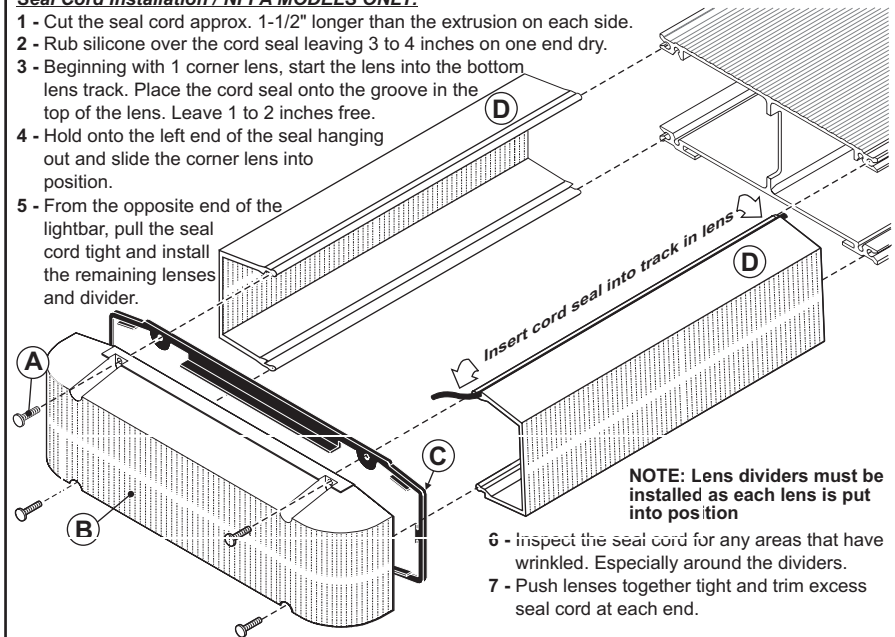


### Removing the Endcap and Lenses

Remove the 4 screws (A) that hold the endcap (B) on and pull the endcap and gasket (C) off. Slide lenses (D) out of the lightbar, to gain access to the extrusion. When reinstalling the lenses and spacers, install the cord seal (NFPA / See below). When reinstalling the endcap, place the endcap gasket into its position on the endcap and line up all the tabs and holes. Spacers (not shown) mount the same as lenses.

### Seal Cord Installation / NFPA MODELS ONLY:

- 1 - Cut the seal cord approx. 1-1/2" longer than the extrusion on each side.
- 2 - Rub silicone over the cord seal leaving 3 to 4 inches on one end dry.
- 3 - Beginning with 1 corner lens, start the lens into the bottom lens track. Place the cord seal onto the groove in the top of the lens. Leave 1 to 2 inches free.
- 4 - Hold onto the left end of the seal hanging out and slide the corner lens into position.
- 5 - From the opposite end of the lightbar, pull the seal cord tight and install the remaining lenses and divider.



2. Remove any lenses, lighthoods or filler panels necessary (Figs. 1 & 2) to reach the power distribution board.
3. Wire the Scan-Lock™ cable in as shown in the wiring diagram then tie-wrap the Scan-Lock cable to the main cable following the main cable out of the lightbar.
4. Reinstall any lighthoods into the lightbar base along with any existing options you removed. To reinstall the lighthoods and lenses in proper order, you may refer to the switch operations sheet that comes with the lightbar.
5. Plug in the alley lights (if present) and replace the endcaps. Installation is now complete and you may test the Scan-Lock option by following the instructions on the wiring diagram.

**IMPORTANT: It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment.**

**IMPORTANT! Before returning this vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment!**

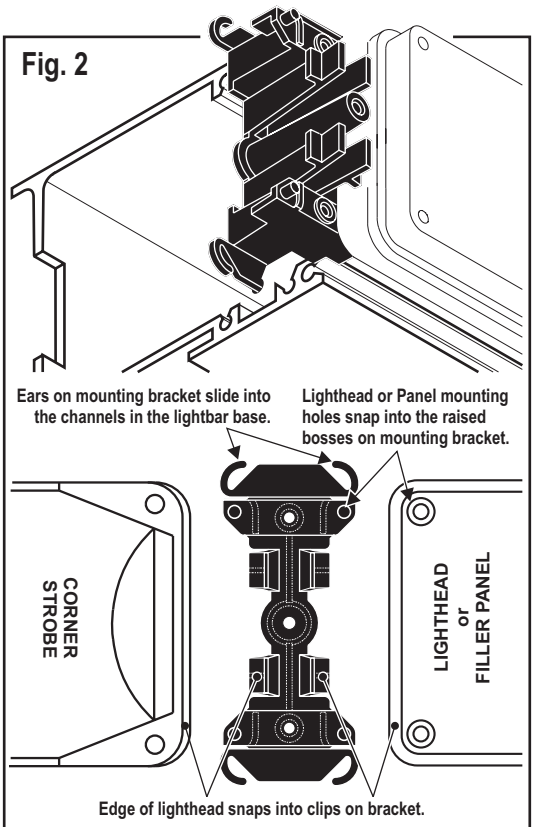
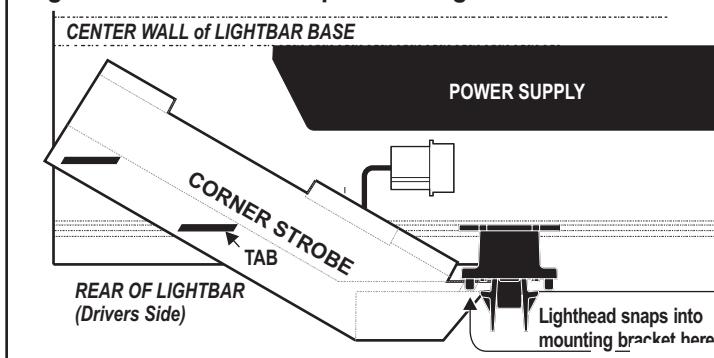
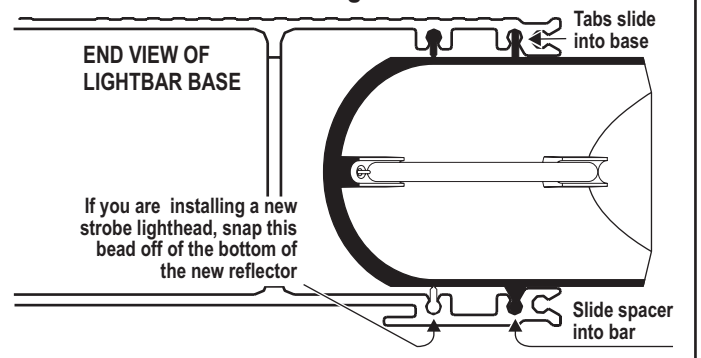


Fig. 1 Corner Strobe / Top view of lightbar base



Corner Strobe / End view of lightbar base



## Installing Scan-Lock™:

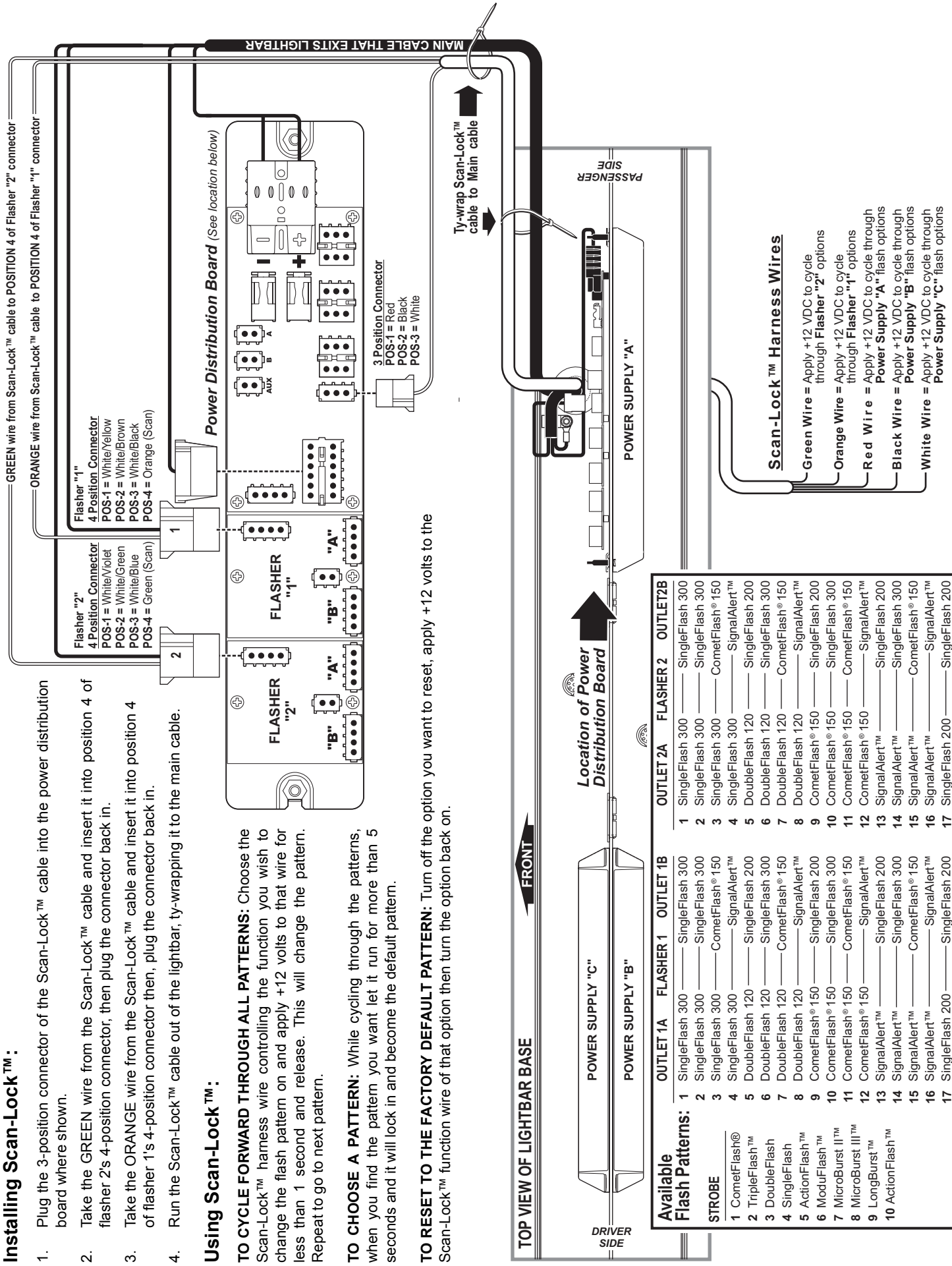
1. Plug the 3-position connector of the Scan-Lock™ cable into the power distribution board where shown.
2. Take the GREEN wire from the Scan-Lock™ cable and insert it into position 4 of flasher 2's 4-position connector, then plug the connector back in.
3. Take the ORANGE wire from the Scan-Lock™ cable and insert it into position 4 of flasher 1's 4-position connector then, plug the connector back in.
4. Run the Scan-Lock™ cable out of the lightbar, ty-wrapping it to the main cable.

## Using Scan-Lock™:

**TO CYCLE FORWARD THROUGH ALL PATTERNS:** Choose the Scan-Lock™ harness wire controlling the function you wish to change the flash pattern on and apply +12 volts to that wire for less than 1 second and release. This will change the pattern. Repeat to go to next pattern.

**TO CHOOSE A PATTERN:** While cycling through the patterns, when you find the pattern you want let it run for more than 5 seconds and it will lock in and become the default pattern.

**TO RESET TO THE FACTORY DEFAULT PATTERN:** Turn off the option you want to reset, apply +12 volts to the Scan-Lock™ function wire of that option then turn the option back on.



Available Flash Patterns:	OUTLET 1A	FLASHER 1	OUTLET 1B	OUTLET 2A	FLASHER 2	OUTLET 2B
1 CometFlash®	1 SingleFlash 300	SingleFlash 300	1 SingleFlash 300	1 SingleFlash 300	SingleFlash 300	1 SingleFlash 300
2 TripleFlash™	2 SingleFlash 300	SingleFlash 300	2 SingleFlash 300	2 SingleFlash 300	SingleFlash 300	2 SingleFlash 300
3 DoubleFlash	3 SingleFlash 300	CometFlash® 150	3 SingleFlash 300	3 SingleFlash 300	CometFlash® 150	3 SingleFlash 300
4 SingleFlash	4 SingleFlash 300	SignalAlert™	4 SingleFlash 300	4 SingleFlash 300	SignalAlert™	4 SingleFlash 300
5 ActionFlash™	5 DoubleFlash 120	SingleFlash 200	5 DoubleFlash 120	5 DoubleFlash 120	SingleFlash 200	5 DoubleFlash 120
6 ModuFlash™	6 DoubleFlash 120	SingleFlash 300	6 DoubleFlash 120	6 DoubleFlash 120	SingleFlash 300	6 DoubleFlash 120
7 MicroBurst II™	7 DoubleFlash 120	CometFlash® 150	7 DoubleFlash 120	7 DoubleFlash 120	CometFlash® 150	7 DoubleFlash 120
8 MicroBurst III™	8 DoubleFlash 120	SignalAlert™	8 DoubleFlash 120	8 DoubleFlash 120	SignalAlert™	8 DoubleFlash 120
9 LongBurst™	9 CometFlash® 150	SingleFlash 200	9 CometFlash® 150	9 CometFlash® 150	SingleFlash 200	9 CometFlash® 150
10 ActionFlash™	10 CometFlash® 150	SingleFlash 300	10 CometFlash® 150	10 CometFlash® 150	SingleFlash 300	10 CometFlash® 150
	11 CometFlash® 150	CometFlash® 150	11 CometFlash® 150	11 CometFlash® 150	CometFlash® 150	11 CometFlash® 150
	12 CometFlash® 150	SignalAlert™	12 CometFlash® 150	12 CometFlash® 150	SignalAlert™	12 CometFlash® 150
	13 SignalAlert™	SingleFlash 200	13 SignalAlert™	13 SignalAlert™	SingleFlash 200	13 SignalAlert™
	14 SignalAlert™	SingleFlash 300	14 SignalAlert™	14 SignalAlert™	SingleFlash 300	14 SignalAlert™
	15 SignalAlert™	CometFlash® 150	15 SignalAlert™	15 SignalAlert™	CometFlash® 150	15 SignalAlert™
	16 SignalAlert™	SignalAlert™	16 SignalAlert™	16 SignalAlert™	SignalAlert™	16 SignalAlert™
	17 SingleFlash 200	SingleFlash 200	17 SingleFlash 200	17 SingleFlash 200	SingleFlash 200	17 SingleFlash 200