

# WHELEN<sup>®</sup>

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## Installation Guide: Centurion™ Lightbar Option Kit Model KROTA2 (Inboard Rotators)

### 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](http://www.whelen.com/warranty)**

## Installation:

1. Remove the two Torx head screws that secure the end cap to the base (Fig. 1).
2. Slide the lens sections off the end of the base and remove the dividers to gain access to the lightbar base (Fig. 2). Be sure to note the order in which the lenses were installed on the lightbar.

**IMPORTANT:** The lenses are seated very tightly into the lens divider gaskets to prevent leaks. You will need to insert a screwdriver at each corner (between the black endcap and aluminum base) and gently pry the lens out to break it free from the dividers. Pry each side out a little at a time, alternating from one side to the other until the lens slides out easily. Before reassembling, apply a small amount of liquid dish detergent to the sides of the rubber gaskets to help them slide in easier and obtain a better seal.

**NOTE:** If this is a replacement for an existing rotator, remove any remaining VHB adhesive tape (if present) from the base of the lightbar before proceeding. This surface must be clean. (See "Switching from the Old Style Rotator" on page 3.)

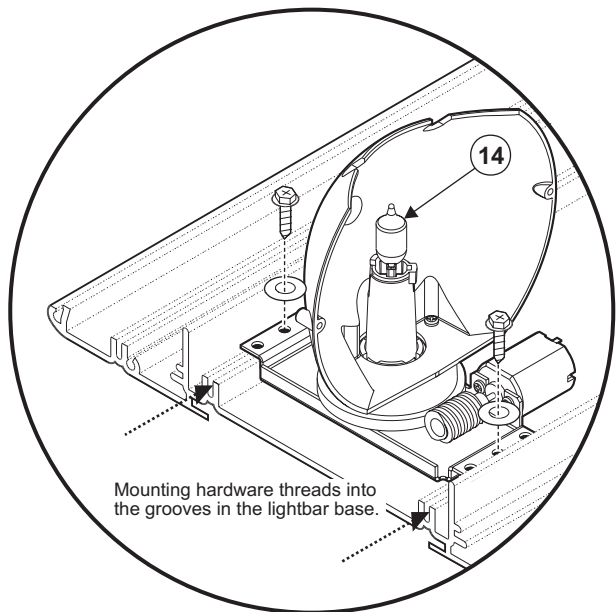
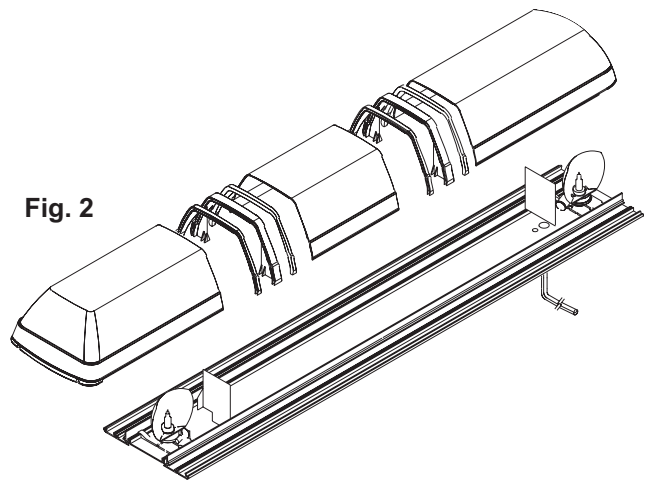
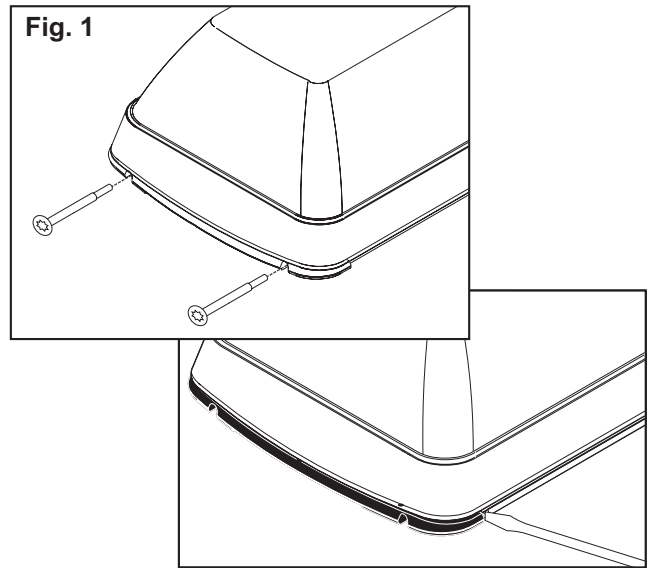
1. Measure the length and width of the base of the bar to find the center. Mark the center point with a pencil or marker.

**IMPORTANT NOTE:** Be sure to leave the proper distance between all mirrors and rotators. Check all measurements with the illustration on the next page.

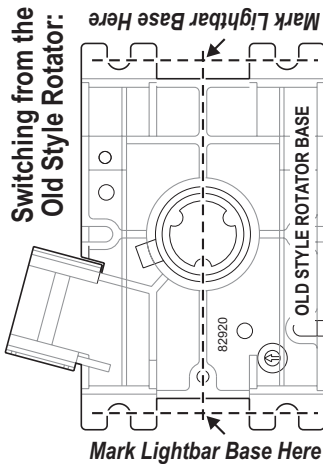
2. First install the 2 mirrors at the center of the bar. Using your center lines, mount the mirrors as shown in the illustration. Secure them with the hex head screws supplied, then mount the 2 other mirrors toward the inside of the existing outer mirrors.
3. Measuring from the outside of the base, mount the 2 rotator assemblies (with the motor toward the front) and secure them by threading the 2 screws into the channel that runs the length of the lightbar base.

## Wiring:

1. Find the ground lugs coming from the rotator assemblies (attached to 2 black wires). Using a hex head screw, attach it to the lightbar base and tighten it firmly. It will screw into the same channel the rotator screws into.
2. Next find the wire extension and plug it into the faston connector coming from the rotator assembly (Red & Black wires).
3. Run the extension wire along the base of the lightbar and attach it to any open wire in the lightbar wire harness.
4. Neatly dress and place any loose wires under the cable clamps to avoid interference with any moving parts.
5. Replace and secure all domes.



### Switching from the Old Style Rotator:



Before removing the old rotator, scribe a mark onto the base of the lightbar, centered exactly between the mounting screws of the old rotator as shown. This is where the mounting screws of the new rotator will go. As you see from the illustration, there are markings on the old rotator that you can use to find the center.

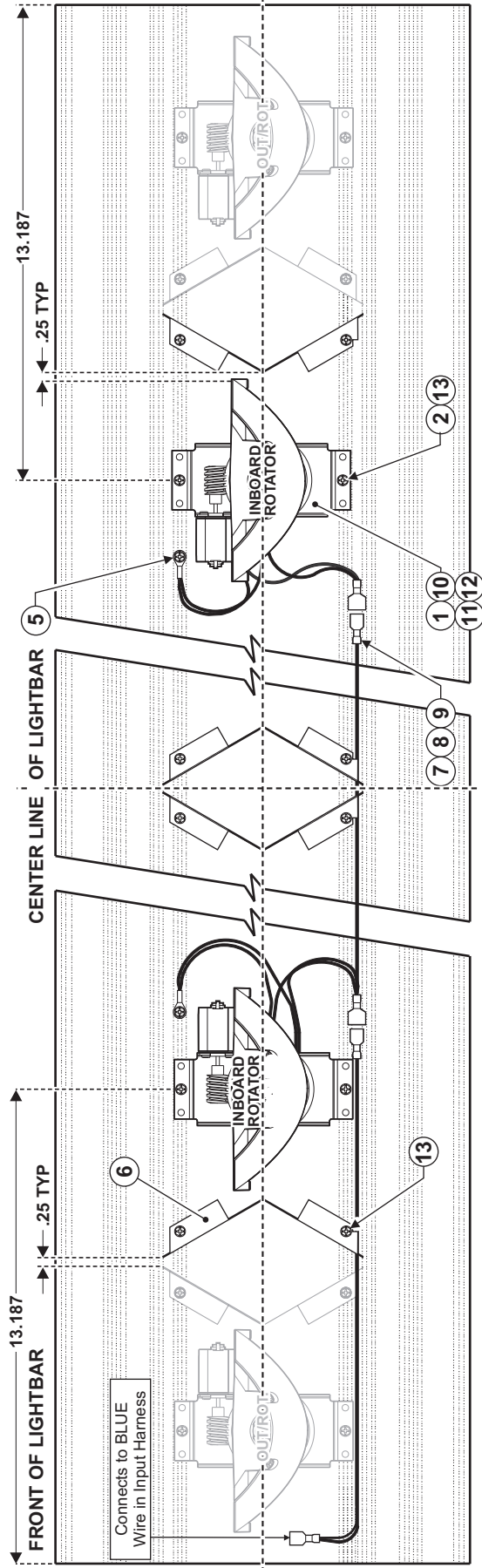
**WARNING:** Do not install Halogen Bulbs exceeding the maximum watt rating for your rotator. This will be either 35 or 50 watts depending on which rotator you have. (See Parts List)

**CAUTION:** The outer surfaces of this product may be cleaned with mild soap & water. Use of any other chemicals may void the product warranty. Do not use a pressure washer.

**1** PART NUMBER: 02-0362991-

ROTATOR RPM & VOLTAGE	BAR LENGTH	LIGHTBAR LENGTH ROTATOR RPM & VOLTAGE
0 = 150RPM-12VDC 50WATT	0 = 48" OR 52"	
1 = 150RPM-24VDC 35WATT	1 = 60"	
2 = 175RPM-12VDC 50WATT	2 = 72"	
3 = 175RPM-24VDC 35WATT		

QTY.	QTY.	QTY.	ITEM	PART NUMBER	DESCRIPTION
*	*			02-0362991-0	KIT / INBOARD ROTATOR CENTURION™ / 48" & 52"
	*			02-0362991-1	KIT / INBOARD ROTATOR CENTURION™ / 60"
*				02-0362991-2	KIT / INBOARD ROTATOR CENTURION™ / 72"
A/R	A/R	1		02-0363225-00	ASSEMBLY / ROTATING REFLECTOR / 150 / 24 / 35
4	4	4	2	16-1001220-06	WASHER / #10 FLAT
2	2	2	5		SCREW / #8 X 1/4" PHEXWASHHD SS TYPE B
4	4	4	6	68-5962964-01	MIRROR / "V" STYLE / PLASTIC
-	-	1	7	46-0762977-00	HARNES / INBOARD ROTATOR / 48" & 52"
-	-	8	8	46-0762977-01	HARNES / INBOARD ROTATOR / 60"
1	-	-	9	46-0762977-02	HARNES / INBOARD ROTATOR / 72"
A/R	A/R	10		02-0363225-01	ASSEMBLY / ROTATING REFLECTOR / 150 / 24 / 35
A/R	A/R	11		02-0363225-02	ASSEMBLY / ROTATING REFLECTOR / 175 / 12 / 50
A/R	A/R	12		02-0363225-03	ASSEMBLY / ROTATING REFLECTOR / 175 / 24 / 35
12	12	13			SCREW / #8 X 3/8" PHEXWASHHD SS TYPE B
-	-	-	14	34-0041987-02	ASSEMBLY / LAMP / 28V - 35W (Page 1)
-	-	-	14	34-0041987-06	ASSEMBLY / LAMP / 12V - 50W (Page 1)



**IMPORTANT:** The cable coming from the lightbar must be fused. Follow the diagram below. Fusing will vary depending on whether you have a 12 or 24 Volt Rotator.

