

# WHELEN<sup>®</sup>

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## Installation Guide Model 1002 12-48 Volt Strobe Beacon (Polycarbonate Base)

### 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 the holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**
- **If this product is mounted with 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 owners 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 (this does not include products that use cigar power cords).**
- **If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device 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!**

## Mounting the Unit:

The Whelen 1000 Series Strobe Light Beacons have a universal mounting base that may be mounted in one of three ways. An optional magnetic mount kit may be added for those requiring a temporary warning beacon (see page 2). This strobe light was designed to be mounted in a normal “dome up” position. If mounted in an inverted position, drill a 1/8 inch diameter hole in the lowest point of the dome in order to let condensation drain.

### 3/8 Inch Pipe Mount:

1. Feed the power wires through the pipe.
2. Connect the power wires to the wires from the light (see “Wiring Instructions” next page).
3. Screw the strobe beacon onto the pipe, being careful not to pinch or strain the wires. *Hand tighten* unit onto pipe.

### Permanent Surface Mount:

1. Using the base of the strobe light as a template, mark the location of the mounting holes and the wire access hole. The wire access hole may be located either beneath the center of the base, or the wire may be routed through the wire channel located underneath the strobe light base for surface wiring.
2. Drill the starter holes for the three sheet metal mounting screws with a 7/64 inch drill. Drill the wire access hole large enough for the wires to fit through. Deburr all holes and install a rubber grommet (customer supplied) to protect the wires.
3. Feed the power wires through the wire access hole in the base, and through the mounting gasket.
4. Connect the power wires to the wires from the strobe light (See “Wiring Instructions” next page).
5. Push the excess wires back through the wire access hole while aligning the mounting holes in the strobe light base, mounting gasket, and the mounting surface.
6. Secure the strobe light head assembly to the mounting surface with the three sheet metal screws provided.

### Tamper Resistant Mount:

**Note:** It will be necessary to disassemble the strobe light head assembly in order to use this mounting style.

**WARNING! The strobe light is a high voltage device. DO NOT TOUCH the strobe lamp assembly or the strobe power supply assembly while the unit is in operation! WAIT 10 MINUTES after turning power off before starting any work or troubleshooting.**

1. Using a small straight blade screwdriver, pry the dome upward at the three pockets in the base, and remove the polycarbonate optic dome taking precautions not to damage or lose the dome gasket. Remove the strobe power supply assembly from the base.

## BOTTOM VIEW OF BASE

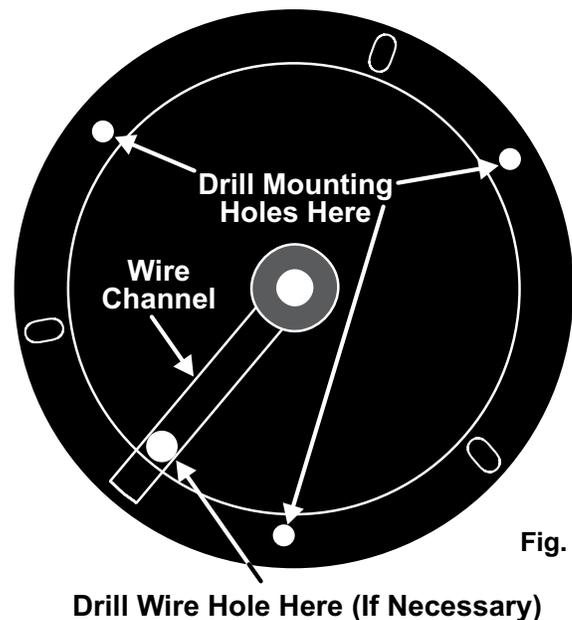
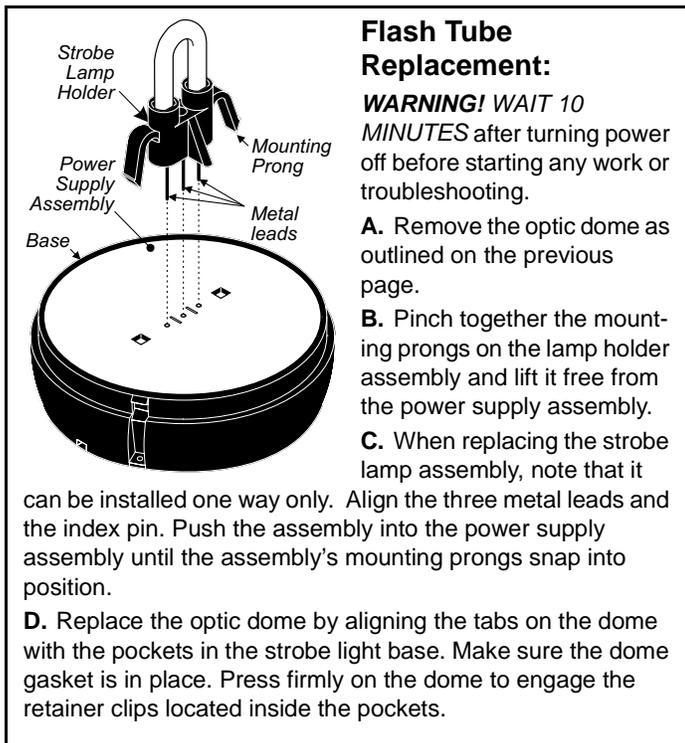


Fig. 1

**Note:** As you remove the power supply assembly, note (for reassembly) that the capacitor sits in a cradle within the base.

2. Using a 3/16 inch drill, drill through the three flashed over mounting holes located around the inside of the base.
3. Using the base as a template, mark the location of the mounting holes and wire access hole onto the mounting surface.
4. Drill the starter holes for the three mounting screws with a 7/64 inch drill. Drill the wire access hole large enough for the wires to fit through. Deburr all holes and install a rubber grommet (customer supplied) to protect the wires.
5. Feed the power wires through the wire access hole in the mounting surface and through the mounting gasket and strobe light base.
6. Align the mounting holes in the strobe base, gasket, and mounting surface. Secure the base to the mounting surface with the three mounting screws provided.
7. Inside the base, tie a knot in the power wires 3 inches from the end to act as a strain relief. Connect the power wires to the strobe power supply assembly (see “Wiring Instructions” next page). Replace the strobe power supply assembly into the base being careful not to pinch any of the wires.
8. Replace the dome gasket on the power supply assembly and secure the optic dome to the base by aligning the tabs on the dome with the pockets in the strobe base. Press firmly on the top of the optic dome so the tabs snap into the pockets.



**WIRING INSTRUCTIONS:**

**NOTE:** DC voltage models are polarity sensitive. If the positive and negative wires are reversed the unit will not function. A 2 amp fuse (customer supplied) must be installed in the RED (+) wire within 2 wire feet of the power source.

1. Connect RED wire on beacon to positive (+) DC voltage .
2. A customer supplied single pole single throw (SPST) switch may be used to control the ON-OFF function of the beacon.
3. Connect BLACK wire on the beacon to negative (-) ground.

**WARNING:** All customer supplied wires, that connect to the positive terminal of the battery, must be sized to supply at least 125% of the maximum operating current, and fused at the battery to carry that load.

**Trouble Shooting:**

**WARNING! The strobe light is a high voltage device. DO NOT TOUCH** the strobe lamp assembly or the strobe power supply assembly while the unit is in operation! **WAIT 10 MINUTES** after turning power off before starting work or troubleshooting.

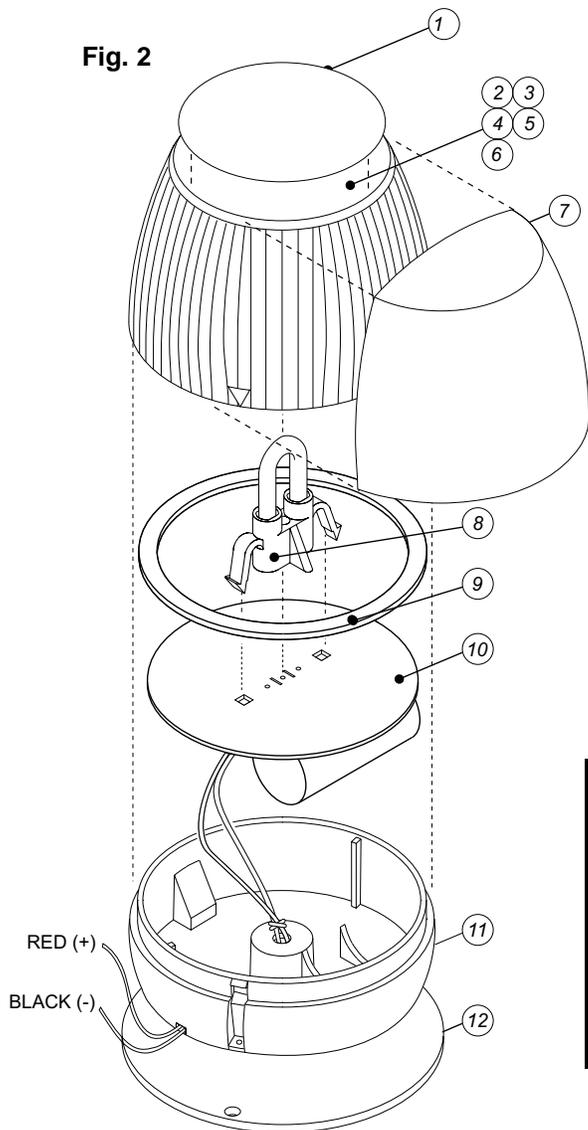
**Light does not work after initial installation:**

1. Check wires for proper hook-up.
2. Check power source.
3. Check any in-line fuses or switches.
4. Check that the strobe lamp assembly is firmly secured to the power supply assembly.

**Strobe light fails or becomes intermittent during service:**

1. Check power source.
2. Check any in-line fuses or switches.
3. Check power wires for breaks, chafing, or loose connections.
4. Check that the strobe lamp assembly is firmly secured to the strobe power supply assembly.
5. A strobe flash tube that is 50% black, is at the end of its service life and should be replaced.
6. A strobe flash tube can become hard firing with age. It will sometimes flash normally with the engine running, but will fail when operated on a low battery. If so, it should be replaced.

**Fig. 2**



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

QTY.	ITEM	PART NUMBER	DESCRIPTION
A/R	1	38-0141350-00	DECAL
A/R	2	68-2181382-10	LENS (AMBER)
A/R	3	68-2181382-20	LENS (BLUE)
A/R	4	68-2181382-30	LENS (CLEAR)
A/R	5	68-2181382-40	LENS (GREEN)
A/R	6	68-2181382-50	LENS (RED)
A/R	7	11-261332-000	LENS SHIELD COVER
1	8	02-0341319-00	LAMP HOLDER ASSY.
1	9	38-0241323-00	SEAL
1	10	02-0166873-00	P.C. BOARD ASSY.
1	11	11-362261-000	BASE, HOUSING
1	12	38-0242108-00	GASKET
-	-	01-0682581-(-)	FINAL ASSY.
Not Shown	-	01-0416225-00	KIT, SCREW MOUNT