# ECCO

# Installation and Operation Instructions 6700 Series Strobe Beacon

# Introduction:

The **6710** and **6720** Strobe Models are designed to meet SAE J1318 Class 2 specifications, and reflect the latest advances in 360° strobe warning technology. The super duty models are epoxy filled to provide maximum protection against moisture, vibration, and shock. The strobes will operate on vehicles with 12 to 48 VDC electrical systems. The strobes have many features, including the following:

- Field replaceable flash tube
- Selectable for dual or quad flash during installation
- Voltage spike and surge protected



IMPORTANT! Read all instructions before installing and using. Installer: This manual must be delivered to the end user.

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Failure to install or use this product according to manufacturers recommendations may result in property damage, serious bodily/personal injury, and/or death to you and those you are seeking to protect!

	Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.
1.	Proper installation combined with operator training in the use, care, and maintenance of warning signal devices are essential to ensure the safety of personnel and the public.
2.	Strobe warning devices often require high electrical voltages and/or currents. Exercise caution when working with live electrical connections.
3.	This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4.	Proper placement and installation is vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that s/he can operate the system without losing eye contact with the roadway.
5.	It is the responsibility of the vehicle operator to ensure daily that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
6.	The use of this or any other warning device does not ensure all drivers can or will observe or react to a warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk on or around traffic lanes.
7.	This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding warning signal devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

#### **Specifications:**

Size:		6.0" dia. x 4.8" high 6.0" dia. x 6.7" high	Flash Rate:	Double flash mode: 80 cycles/minute Quad flash mode: 65 cycles/minute
Weight:		approx. 2.0 lbs. approx. 2.2 lbs	Output Power (total):	Double flash mode: 7 joules Quad flash mode: 10 joules
Input Cu	urrent:	1.4 amps @ 12.8 VDC 0.7 amps @ 25.6 VDC 0.4 amps @ 36.0 VDC 0.3 amps @ 48.0 VDC Maximum power consumption: 18 Watts	Temp. Range:	-30°C to +50°C

#### Installation & Mounting:

Remove the strobe from the packaging and place it on a flat surface. Examine the unit for transit damage, and locate all parts. If damage is found, or parts are missing, contact the transit company or ECCO. Do not use damaged or broken parts.

**Caution:** When drilling into any vehicle surface, make sure that the area is free from any electrical wires, fuel lines, vehicle upholstery, vehicle support members, etc. that could be damaged.

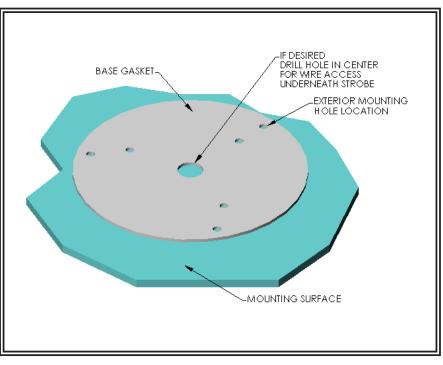
#### Important!

This unit is a safety device, and it must be connected to its own separate, fused power point to assure its continued operation should any other electrical accessory fail.

#### **Permanent Mounting:**

Select the desired location on a flat surface for the strobe beacon to be mounted. The visibility of the strobe flash and ease of wiring access should be taken into consideration in the selection of the mounting location. Using the base gasket as a template, mark the three mounting hole locations (see Figure 1). Drill the holes using the correct drill size to match the selected hardware. A fourth hole may be drilled for wire access as shown in Figure 1, or the wires may be routed through the slot in the base for external access. Connect the power wires as shown in the wiring section (see Figure 2).

Pipe Mounting: The 6700 series base comes with 1" NPT threads for pipe mounting.

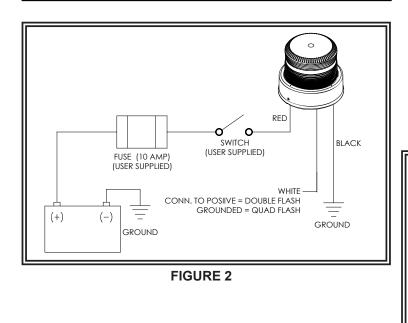


#### Wiring Instructions:

The wiring for the strobe is as shown in Figure 2 below. All wiring should be a minimum of 18AWG. The red, positive line must have a 10amp fuse. A switch may be used to control the on/off function. The black (negative) wire is connected to ground.

For Double Flash operation, the white wire is connected to positive. Quad Flash operation, the white wire is connected to ground.

**Note:** Power must be shut off when changing flash modes.



NOTE: Operating the vehicle without the outer lens installed on the product may result in damage that will NOT be covered under the warranty.

## Maintenance & Troubleshooting:

**WARNING:** The strobe power supply is a high voltage device. To avoid the risk of electrical shock, wait 5 minutes after turning off power before removing lens for access to internal parts of the strobe head.

Most strobe failures can be traced to wiring or battery problems. Check all wiring and connections to insure the correct voltage is reaching the strobe light. If the strobe operates erratically or stops completely, and the wiring is not at fault, the flashtube is probably worn. To replace it, remove the lens, and remove the flashtube by squeezing on the tabs on the side of the tube holder and lifting the flashtube up. Plug in the new tube assembly. See Figure 3. **Note:** The connector is keyed to ensure proper orientation. Do not force. If trouble continues, return product to your local dealer for warranty replacement, or call ECCO Customer Service for assistance (800) 635-5900.

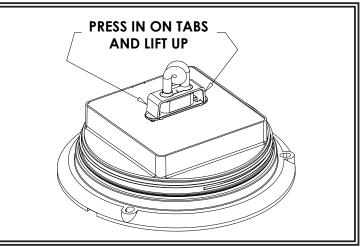


FIGURE 3

#### **Replacement Parts/Accessories:**

Description	Part No.
Flash Tube	R6501FT
Lens, 4" (replacement for 6710)	R6050LX*
Lens, 6" (replacement for 6720)	R6070LX*
Self Leveling Bracket	A6600SLB
Branch Guard (for use with 6710)	A6050BG
Branch Guard (for use with 6720)	A6070BG
Dust Cover (for use with 6710)	A6050DC
Dust Cover (for use with 6720)	A6070DC
Vibration Dampening Kit	A6600VDK
Black Top	A6501BT

\*where (X) indicates color:

A = Amber

B = Blue C = Clear

- G = Green
- R = Red

### Manufacturer Limited Warranty and Limitation of Liability:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request), and Manufacturer further warrants that this product is free from defects in materials and workmanship. This Limited Warranty extends for twenty-four (24) months (6 months for the flash tube) from the date of purchase. Other warranties may apply, call Manufacturer for details. Manufacturer will, at its discretion, repair or replace any product (other than the bulb) found by the Manufacturer to be defective and subject to this Limited Warranty.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UN-APPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTAL-LATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

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