



WARNING!

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 emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency 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 are 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 during use 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, driving against traffic, responding at a high rate of speed, walking 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:

Voltage: Models 5810-5816: 12 VDC

Model Number	Size	Weight
5810	6.0" dia. x 8.0" height	2.15
5813	6.0" dia. x 6.0" height	1.65
5813-MG	6.5" dia. x 6.0" height	2.50
5813-VM	7.8" dia. x 6.5" height	2.80
5816	6.0" dia. x 6.5" height	2.00

Current Draw: 5.2 Amps @ 12 VDC

Flashes: 160 flashes/minute nominal

Installation & Mounting:

Carefully remove the rotating beacon and examine the unit for transit damage, broken lamps, etc. If damage is found, contact the transit company or ECCO. Do not use broken or damaged parts.

Three Bolt Mount Rotating Beacon: 5813 (Refer to Figure 1)

1. Select the mounting location for the beacon on a flat, smooth surface. If the beacon is to be mounted on a curved surface, such as on the roof of the vehicle, choose a placement with the least amount of curvature. The mounting location for the beacon should be chosen such that there is maximum visibility to the oncoming traffic.
2. Remove the three (3) mounting bolts from the base.
3. Place the unit in the desired mounting position, and mark the position of the mounting holes.
4. Drill the three mounting holes using a 5/16" (8mm) drill size.
5. Drill a 3/8" hole for the beacon's power supply wires, and deburr. The hole should be underneath where the beacon will be mounted. Note: the use of a grommet is recommended, to protect the wires from the sharp edges of the hole.
6. Wire the beacon as shown in Figure 2. Apply sealant around the wires where they pass through the mounting surface to prevent leakage.
7. Mount the beacon, using the holes drilled in step 3. Install nuts & washers, and secure the unit.

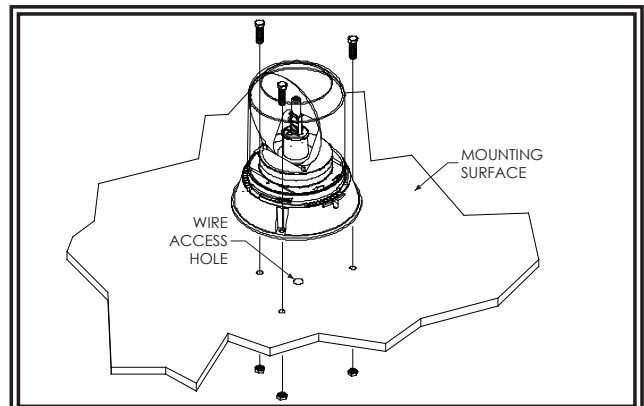


Figure 1



CAUTION:

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



CAUTION:

Disable power before wiring up the beacon, to prevent accidental shorting, arcing, and electrical shock.

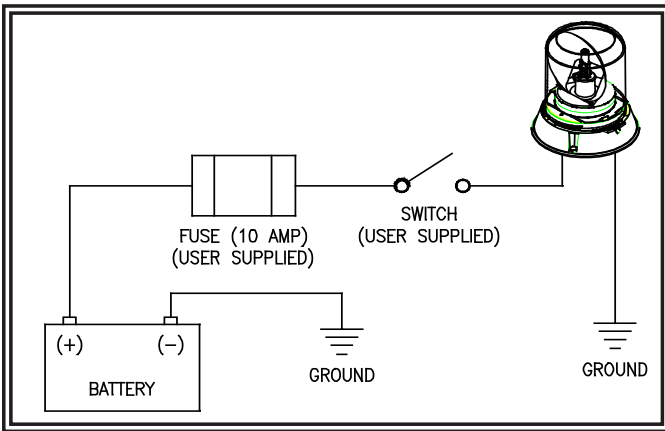


Figure 2

Quick Connect(DIN/Pole Mount) Rotating Beacon: 5810

These beacons are designed for pipe mounting on a 3/4" pipe, and connected to power via a standard DIN connector (See Figure 3). To mount, simply plug in the DIN connector, place on the pipe, and tighten the wing nut. The unit can be easily removed for storage and security.

Magnet Mount Rotating Beacon: 5813-MG

The Magnet Mount features a magnet for temporary mounting. The beacon should be placed in the center of the roof where the least amount of curvature occurs. Before installing, make sure there is no debris on the bottom of the beacon or on the roof of the vehicle, which could reduce the holding power of the magnet. Place and remove the beacon without sliding to avoid scratching the paint on the vehicle. After placement, the beacon should adhere firmly to the surface. If the unit slides or moves easily, a proper installation has not been obtained. **Do not attempt to attach the beacon to an ice covered surface.**

One Bolt Mounting Rotating Beacon: 5816

1. Select the mounting location for the beacon on a flat, smooth surface. If the beacon is to be mounted on a curved surface, such as on the roof of the vehicle, choose a placement with the least amount of curvature. The mounting location for the beacon should be chosen such that there is maximum visibility to the oncoming traffic.
2. Remove the mounting from the base.
3. Place the unit in the desired mounting position, and mark the mounting hole.
4. Drill and deburr 9/16" (14mm) hole for mounting the beacon/ routing the power wire. Note: The use of a grommet is recommended, to protect the wires from the sharp edges of the hole.
5. Wire the beacon as shown in Figure 2. Apply sealant around the wires where they pass through the mounting surface to prevent leakage.
6. Mount the beacon, using the hole drilled in step 4. Install nut washer and secure the unit.

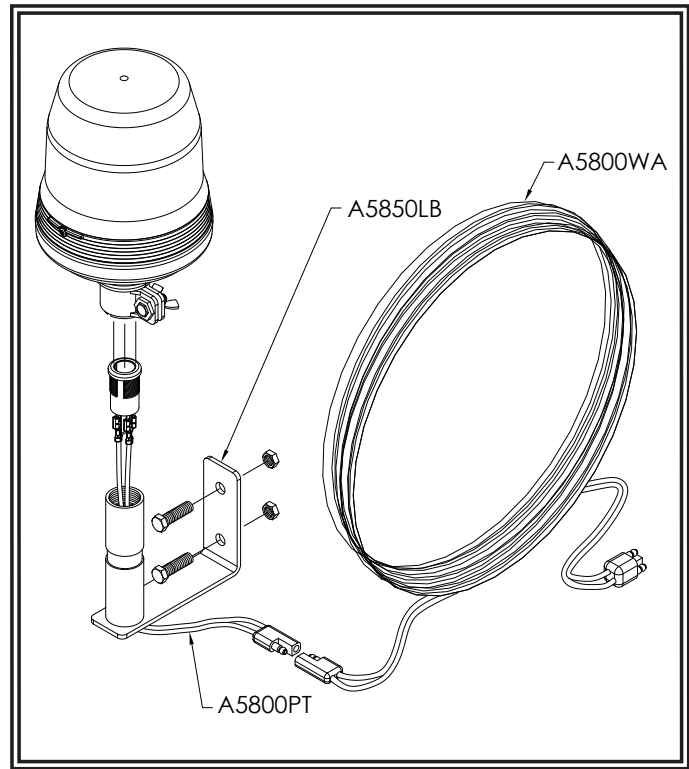


Figure 3

WARNING:
 The Magnet Mount is Not intended as a permanent mount for the beacon. The magnet mount is Not for use on a moving vehicle. The magnet mount unit must be mounted on a magnetic surface(i.e. no fiberglass, etc.). Ensure that the magnets are kept clean.

Vacuum-Magnet Mount Rotating Beacon:

The Vacuum-Magnet Mount feature includes a suction cup on the bottom of the beacon, with a magnet inside of the suction cup, for a secure, temporary mount. The beacon should be placed in the center of the roof where the least amount of curvature occurs. Before installing, make sure there is no debris on the bottom of the beacon or on the roof of the vehicle, which could reduce the holding power of the suction cup and magnet. After placement, the beacon should adhere firmly to the surface. If the unit slides or moves easily, a proper installation has not been obtained. To release the vacuum, lift the tab to release the airlock. Place and remove the beacon without sliding to avoid scratching the paint on the vehicle. To protect the Vacuum-Magnet Mount assembly, return beacon to the box when not in use. **Do not attempt to attach the beacon to an ice-covered surface.**

WARNING:
 Maximum recommended vehicle speed for safe operation using the Vacuum Mount model is 65 mph (104 km/h), when fitted to the center of a vehicle roof of steel construction. Higher speeds could cause the mount to fail, resulting in the beacon flying off of the vehicle, which could cause damage to other vehicles, and injury or death to the passengers. The vacuum-magnet mount is not intended as a permanent mounting for the beacon. The vacuum-magnet mount unit must be mounted on a flat smooth magnetic surface (i.e. no fiberglass, ribbed style roofs, etc.). Ensure that the magnet is kept clean.

WARNING:
 Lamps are extremely hot! Allow to cool completely before attempting to remove. Gloves and eye protection should be worn when handling halogen lamps as they are pressurized and accidental breakage can result in flying glass.

Note: Operating the vehicle without the lens installed on this product will result in damage that will not be covered under warranty.

Replacement Parts and Accessories:

Description	Part Number
Replacement Lens, Amber	R5810LA
Replacement Halogen Bulb, 12 VDC	R5812BH
Replacement Belt	R5801B
"L" Bracket (for Quick Connect mounting)	A5850LB
"T" Bracket (for Quick Connect mounting)	A5850TB

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 twelve (12) months from the date of purchase. Other warranties may apply, call Manufacturer for details. Manufacturer will, at its discretion, repair or replace any product found by the Manufacturer to be defective and subject to this Limited Warranty.

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This Limited Warranty defines specific legal rights. You may have other legal rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages.



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