



ECCO®

Installation and Operation Instructions Minibar

5135 Series

Permanent and Vacuum-Magnet Mount 15" Rotating Minibar



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 you and those you are seeking to protect.
2. 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.

Introduction:

The ECCO 5135 series is a powerful, mid-sized, permanent or vacuum-magnet mount rotating minibar. The low profile and ease of installation make it one of the most versatile warning products on the market today.

Specifications:

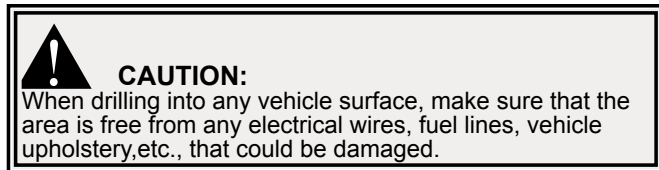
Size:	15.5" x 8.2" x 5.7"	
Weight:	Permanent Mount:	3.7 lb.
	Vacuum-Magnet Mount:	5.9 lb.
Voltage:	Model 5135: 12 VDC systems	
Current draw:	8.5A @ 12 VDC	
Flashes:	480 flashes/min. nominal	
Bulb:	55 Watt, 12 VDC, H1, halogen	

Installation & Mounting:

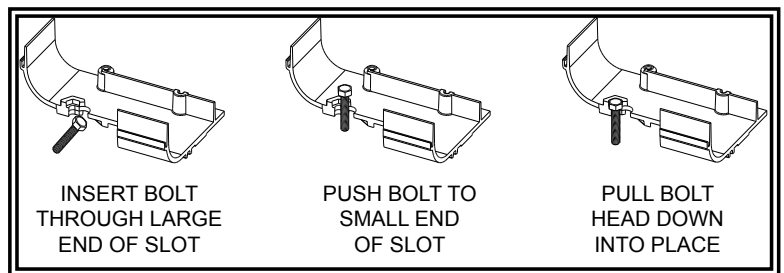
Carefully remove the minibar and place it on a flat surface. Examine the unit for transit damage, broken lamps, etc. If damage is found, contact the transit company or ECCO. Do not use damaged or broken parts.

Permanent Mounting:

Select the mounting location for the minibar on a flat, smooth surface. If the minibar 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 minibar should be chosen such that there is maximum visibility to the oncoming traffic.



1. Using the mounting holes of the minibar, mark the locations for the mounting holes. Drill the mounting holes using a 7/32" drill.
2. Drill a 3/8" hole for the minibar's power supply wire. The hole should be underneath where the minibar will be mounted. Place the supplied grommet in the hole, to protect the wires from the sharp edges of the hole.
3. Place the four (4) mounting bolts in the bottom of the base as shown in Figure 1. The base has a mechanism to hold the bolts in place for installation.
4. Mount the minibar, with the bolts going through the holes drilled in step 1, routing the wire through the grommet installed in step 2. See the Wiring section of this manual for further wiring instructions. Install washers and nuts, and secure the unit.



Vacuum-Magnet Mounting:

The vacuum-magnet mount feature includes two (2) suction cups on the bottom of the minibar, with a magnet inside each of the suction cups, for a secure, temporary mount. The minibar should be placed in the center or the roof where the least amount of curvature occurs. Before installing, make sure there is no debris on the bottom of the minibar or on the roof of the vehicle, which could reduce the holding power of the suction cups and magnets. Place and remove the minibar without sliding to avoid scratching the paint on the vehicle. After placement, the minibar 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 each tab to release the airlock (see Figure 2). To protect the rubber cushion/magnet assembly, return minibar to the box when not in use. **Do not attempt to attach to ice-covered surface.**

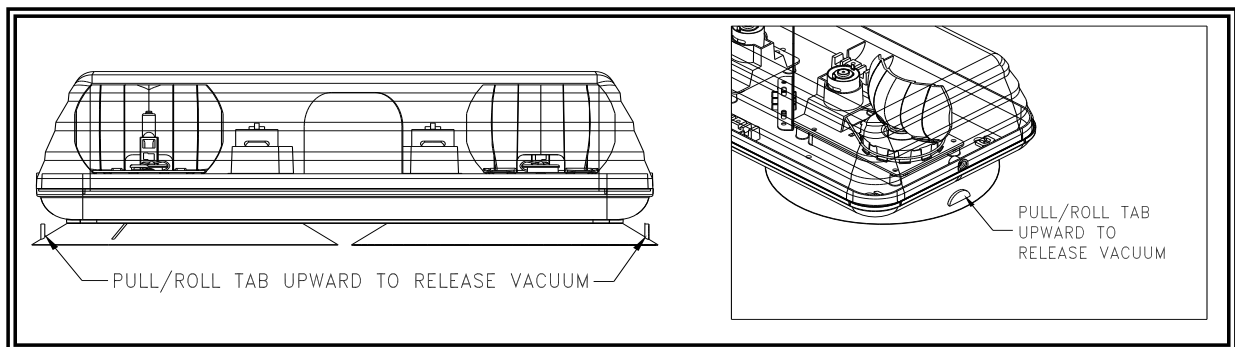
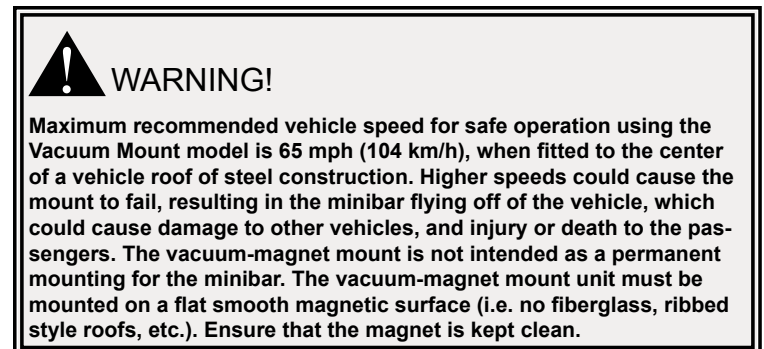
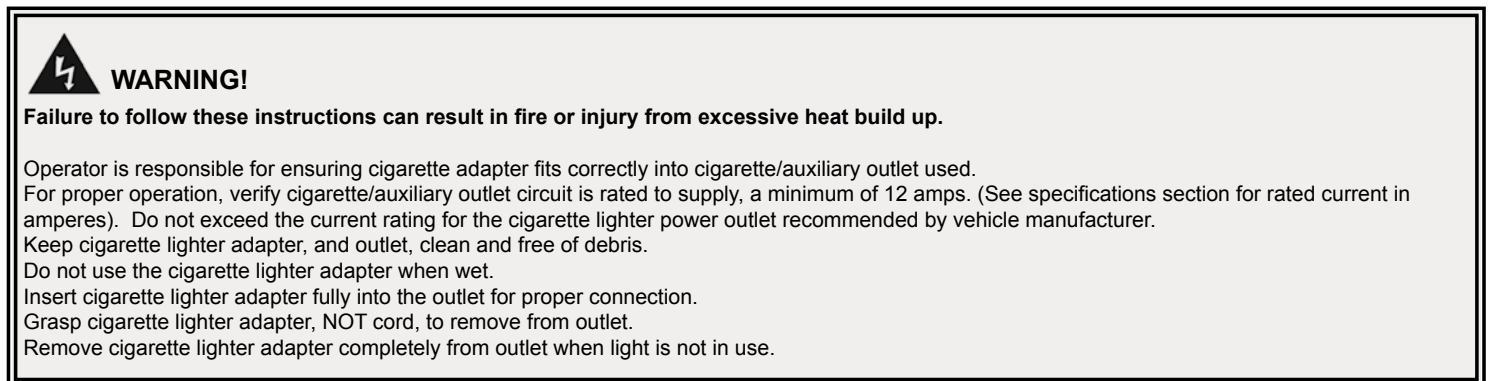


Figure 2



Wiring Instructions:

Notes:

1. Larger wires and tight connections will provide longer service life for components. For high current wires it is highly recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g., 3M Scotchlock type connectors).
2. Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. High ambient temperatures (e.g., under-hood) will significantly reduce the current carrying capacity of wires, fuses, and circuit breakers. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to anchor and protect all wiring.
3. Fuses or circuit breakers should be located as close to the power takeoff points as possible and properly sized to protect the wiring and devices.
4. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity.
5. Ground termination should only be made to substantial chassis components, preferably directly to the vehicle battery.
6. Circuit breakers are very sensitive to high temperatures and will "false trip" when mounted in hot environments or operated close to their capacity.

Important: Disconnect the battery before wiring up the bar.

The 5135 series Blaze2 minibar is designed to operate on a 12 or 24 VDC negative ground system. Use 18 AWG (UL 1015) or larger wires. If the wire is to be exposed to a high temperature environment, use 18 AWG (UL 3265 grade min.) type wire. Connect the black lead to the vehicle chassis, or preferably the

negative terminal of the battery. Bring the red lead to the user supplied control switch, and then to the battery or to the battery side of the starter solenoid or alternator. Install a 12 Amp 3AG SLO-BLO fuse to protect the vehicle's wiring system against shorts. **Note: This safety device must be connected to a separate, fused power point. Do not wire in parallel with any other accessory.** See Figure 3. The belt drive will rotate in a clockwise direction (when looking down on the unit from above).

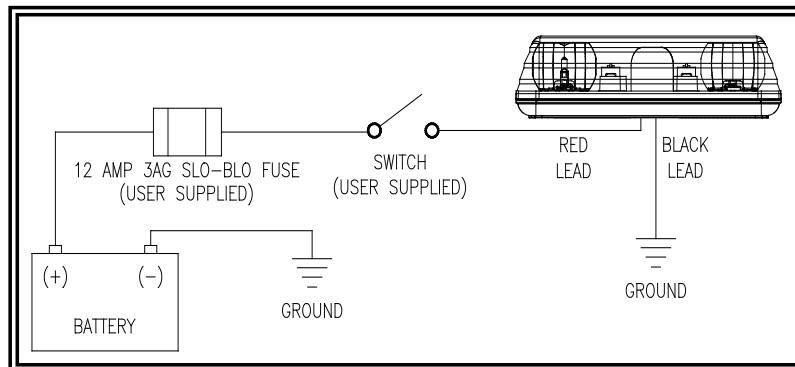


Figure 3

Maintenance:

Clean the lens and base with soap and water, or a lens polish using a soft cloth.



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.

Bulb Replacement:

1. Remove the two (2) lens screws at either end of the base, and remove the lens.
2. Remove and replace the bulb, ECCO P/N R5812BH for 12 volt units, and R5824BH for 24 volt units. **Do Not touch the glass portion of the bulb.** Use clean gloves, replacement bulb bag, finger cots, etc., to prevent hand oil from contaminating the bulb, causing failure.
3. Replace the lens.

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

Trouble Shooting:

Problem	Probable Cause	Suggested Remedy
Unit does not function when turned on	Poor ground or power connection Fuse Blown No power / improper power Unit has been damaged	Check connections at the battery and the unit and repair Check fuse, replace if necessary Verify that 12 VDC is reaching unit Return to ECCO
Rotator does not turn but lamp functions	Open circuit in wiring of rotator Unit has been damaged	Repair wiring Return to ECCO
Rotator turns but lamp does not function	Lamp has burned out Open circuit in lamp wiring of rotator Unit has been damaged	Replace lamp Check for loose connection or damaged wires between motor and lamp assembly (2 wires) Return to ECCO

Replacement Parts/Accessories:

Description	Part No.
Replacement Lens, Amber	R5100LA
Replacement Belt	R5100B
55 Watt Halogen Bulb, 12 VDC (2 bulbs per minibar)	R5812BH
Vacuum-Magnet Mount Kit (includes hardware & coil cord)	A5300VMK
Magnetic Mount Kit (includes hardware & coil cord)	A5300MK
Vibration Dampening Kit	A6600VDK