

# **21 & 27 SERIES** LIGHTBAR MOUNTING



## **WARNING!**

Failure to install or use this product according to manufacturer's 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.
- 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.

  The use of this or any other warning device does not ensure all drivers can or will observe or react to an emergency 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.

  This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding emergency warning 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.
- This product may contain high intensity LEDs staring directly into these lights could result in temporary and/or permanent vision impairment.

# Installation & Mounting:

Prior to installation, examine the mounting kit for transit damage and locate all parts. If damage is found or parts are missing, contact your disitributor or ECCO directly. Do not use damaged or broken parts. Select the mounting location for the lightbar on a flat, smooth surface and center the unit across the width of the vehicle. The mounting location for the lightbar should be chosen such that the lightbar is level and visibility to approaching traffic is optimized.



### 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.

# **Permanent Mounting with Adjustable Mounting Feet**

- 1. Loosen the 5/16" nuts to allow the mounting feet to slide along the base. Place the lightbar on the vehicle in the determined location and slide the mounting feet into position. It is suggested that positioning of the feet be symmetrical and positioned near the curved edges of the roof where the roof is strongest. See FIGURE 2.
- 2. Secure the feet in location on the lightbar by tightening the four nuts on each foot.
- 3. With the feet positioned, remove the adjustable foot cover and mark the location of the mounting hole centers on the roof of the vehicle. Remove the bar and drill the mounting holes as marked. Note: The center distance between the mounting holes in an adjustable mounting foot is 11.1" or 281.94 mm.
- 4. Select and attach the appropriate foot pad for the curvature of the roof surface. Secure the lightbar feet to the vehicle using the supplied 1/4"-20 hardware and reattach the adjustable foot cover as shown in FIGURE 1.

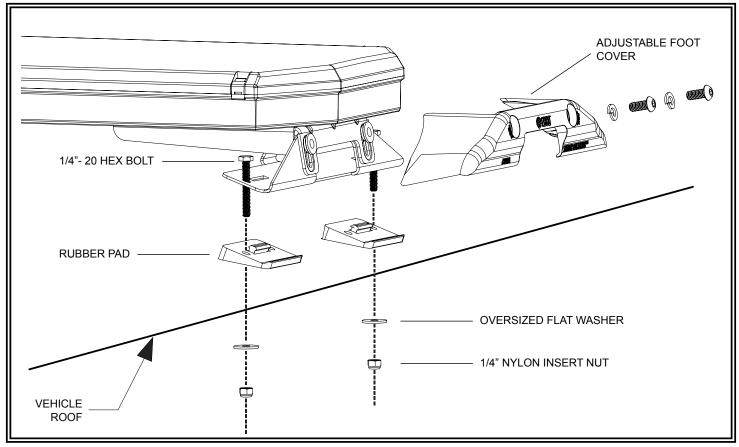


FIGURE 1

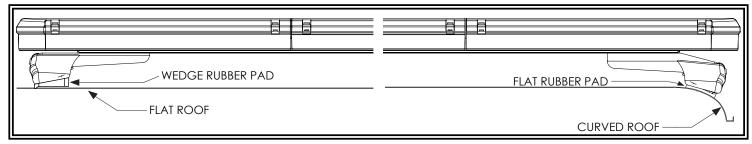


FIGURE 2

# **Permanent Mounting without Adjustable Mounting Feet**

- 1. Insert the four 5/16"-18 carriage bolts in the channels on the under side of the lightbar.
- 2. Place the lightbar on the vehicle in the determined location and slide the mounting hardware into position. It is suggested that positioning of the attachment locations should be symmetrical and positioned where the roof is strongest. See FIGURE 4.
- 3. With the mounting hardware positioned, mark the location of the mounting hole centers on the roof of the vehicle. Remove the bar and drill the mounting holes as marked.
- 4. Mount the lightbar with the rubber standoffs and the carriage bolts going through the holes drilled in the prior step. See FIGURE 3. Install washers and 5/16" nylon insert nuts, and secure the unit.

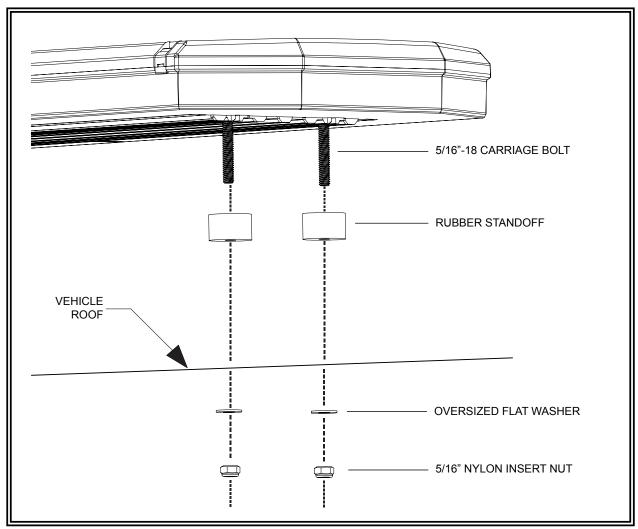


FIGURE 3

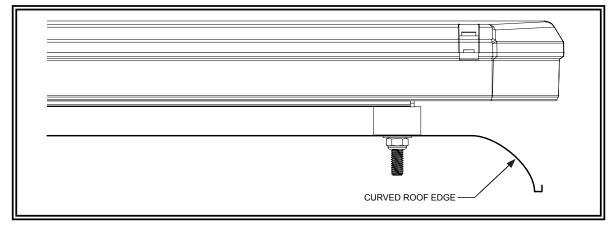


FIGURE 4

# Pylon/Headache Rack Mounting

- 1. Insert the four (4) 5/16"-18 carriage bolts in the channels on the under side of the lightbar and loosely attach the mounting brackets.
- 2. Place the lightbar on the vehicle in the determined location and slide the mounting brackets into position. Positioning the attachment locations symmetrically about the lightbar is strongly suggested.
- 3. Secure the feet in location by tightening the four nuts through each foot.
- 4. With the mounting brackets positioned, mark the locations of the mounting hole centers on the roof of the vehicle. Remove the bar and drill the mounting holes as marked.
- 5. Mount the lightbar with the customer supplied bolts going through the brackets and holes drilled in the prior step. See FIGURE 5. Install customer supplied washers and nuts, and secure the unit.

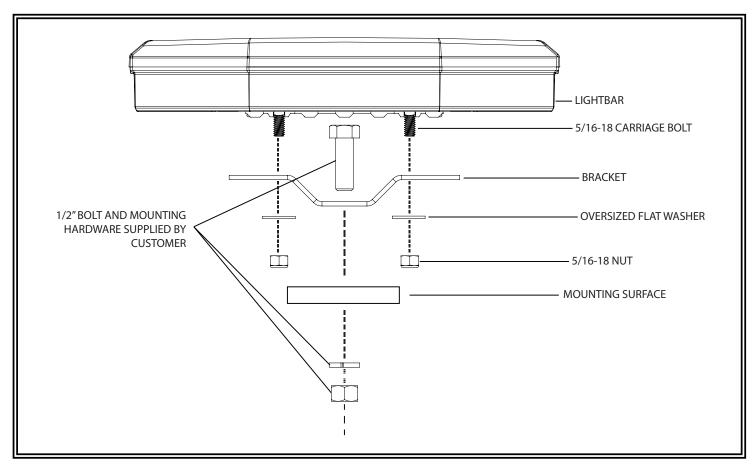


FIGURE 5

# **Strap Kit Mounting**

## Important!

Mounting brackets are specific to the vehicle model. Please make sure the brackets are suitable for the vehicle before installation.

- 1. Loosen the 5/16" nuts to allow the mounting feet to slide along the base of the lightbar. Loosely attach the mounting strap to each foot using the supplied 3" hex head bolts and lock washers.
- 2. Center the lightbar across the vehicle and align the strap mount brackets to hook into the gutter of the vehicles door frame as shown in FIGURE 6.
- 3. Secure the feet to the lightbar in location by tightening the four nuts on each foot.
- 4. Slowly tighten the 3" bolts to secure the strap mount brackets to the lightbar feet and around the door gutters, keeping the lightbar centered and level. Ensure the doors close completely and secure each strap mount bracket to the door frame with supplied No. 8 sheet metal screws.

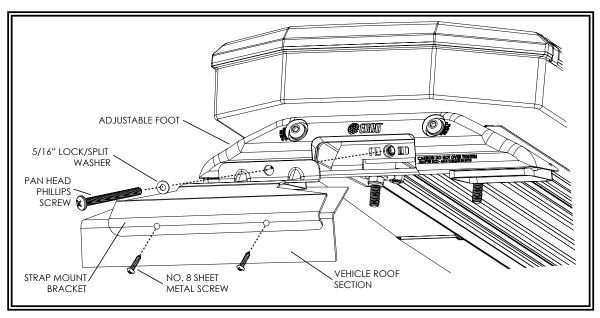


FIGURE 6

#### Electronics Controls Company "ECCO" (Manufacturer)

ECCO warrants that on the date of purchase, this product will conform to ECCO's specifications for this product (which are available from ECCO upon request). This Limited Warranty extends for sixty (60) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICA-TIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAIN-TENANCE PROCEDURES SET FORTH IN ECCO'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

#### Exclusion of Other Warranties:

ECCO MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FIT-NESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

#### Remedies and Limitation of Liability:

ECCO'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST ECCO REGARDING THE PRODUCT AND ITS USE SHALL BE, AT ECCO'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL ECCO'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE ECCO'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL ECCO BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF ECCO OR A REPRESENTATIVE OF ECCO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. ECCO SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND ECCO NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.

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



833 West Diamond St Boise, Idaho 83705 **Customer Service** USA 800-635-5900 UK +44 (0)113 237 5340 AUS +61 (0)3 63322444 www.eccosafetygroup.com

920-2127-00 Rev. A Page 6 of 6