



# 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.
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 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.
7. 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.
8. 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 distributor 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.

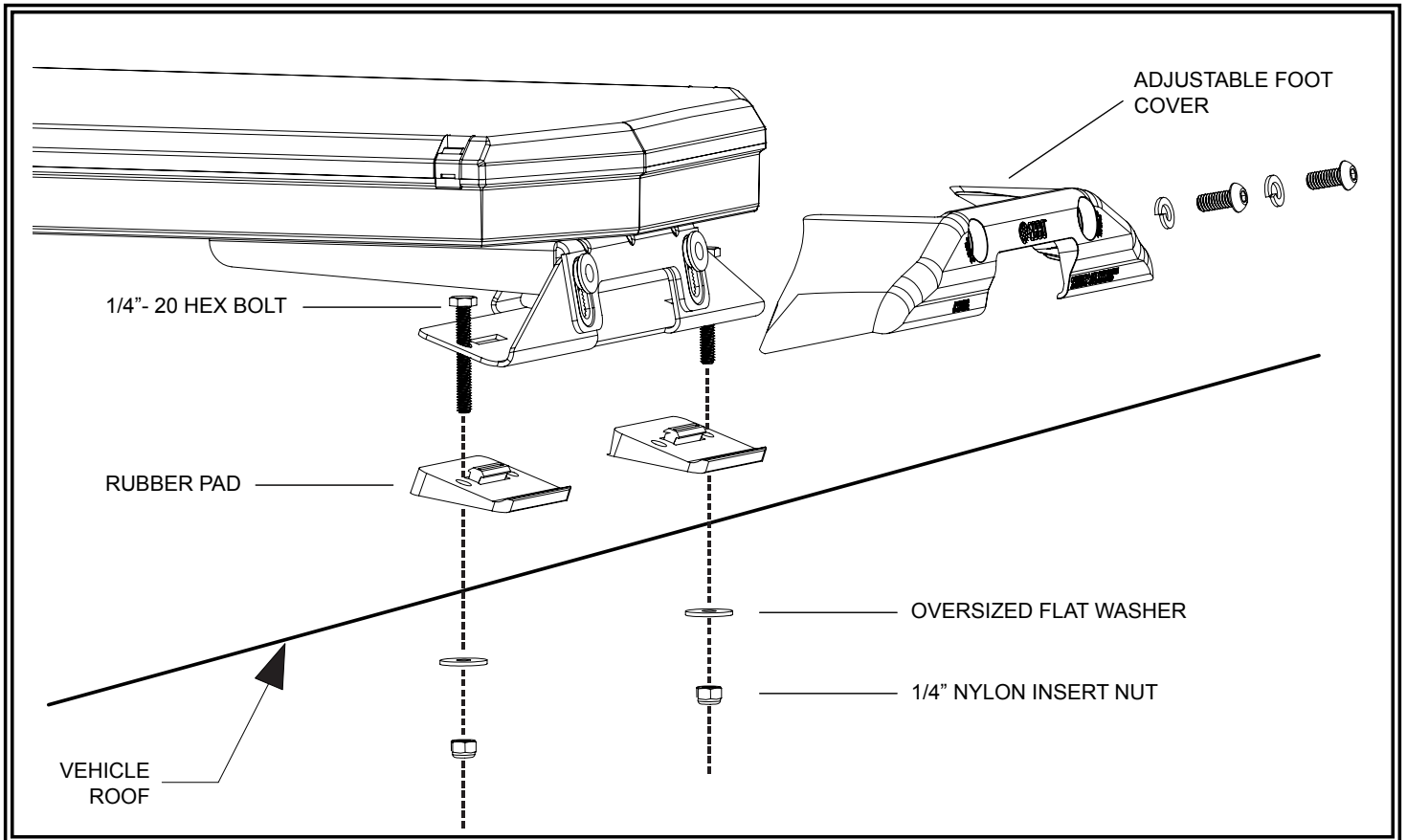


FIGURE 1

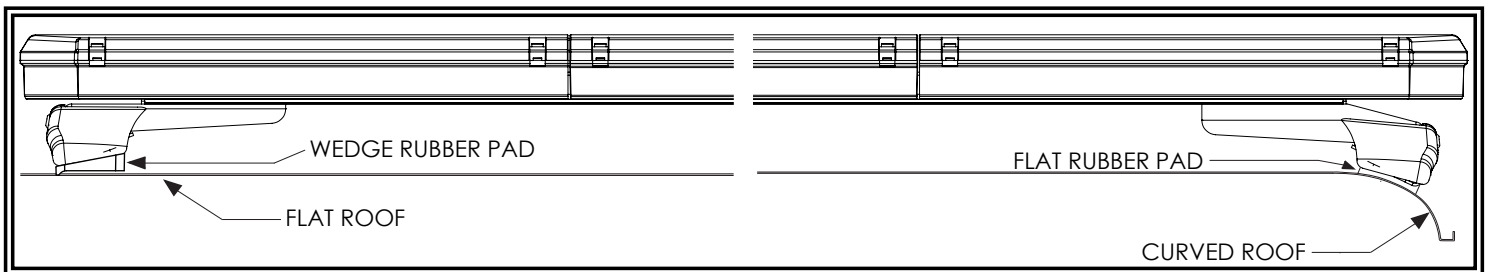


FIGURE 2

## 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.

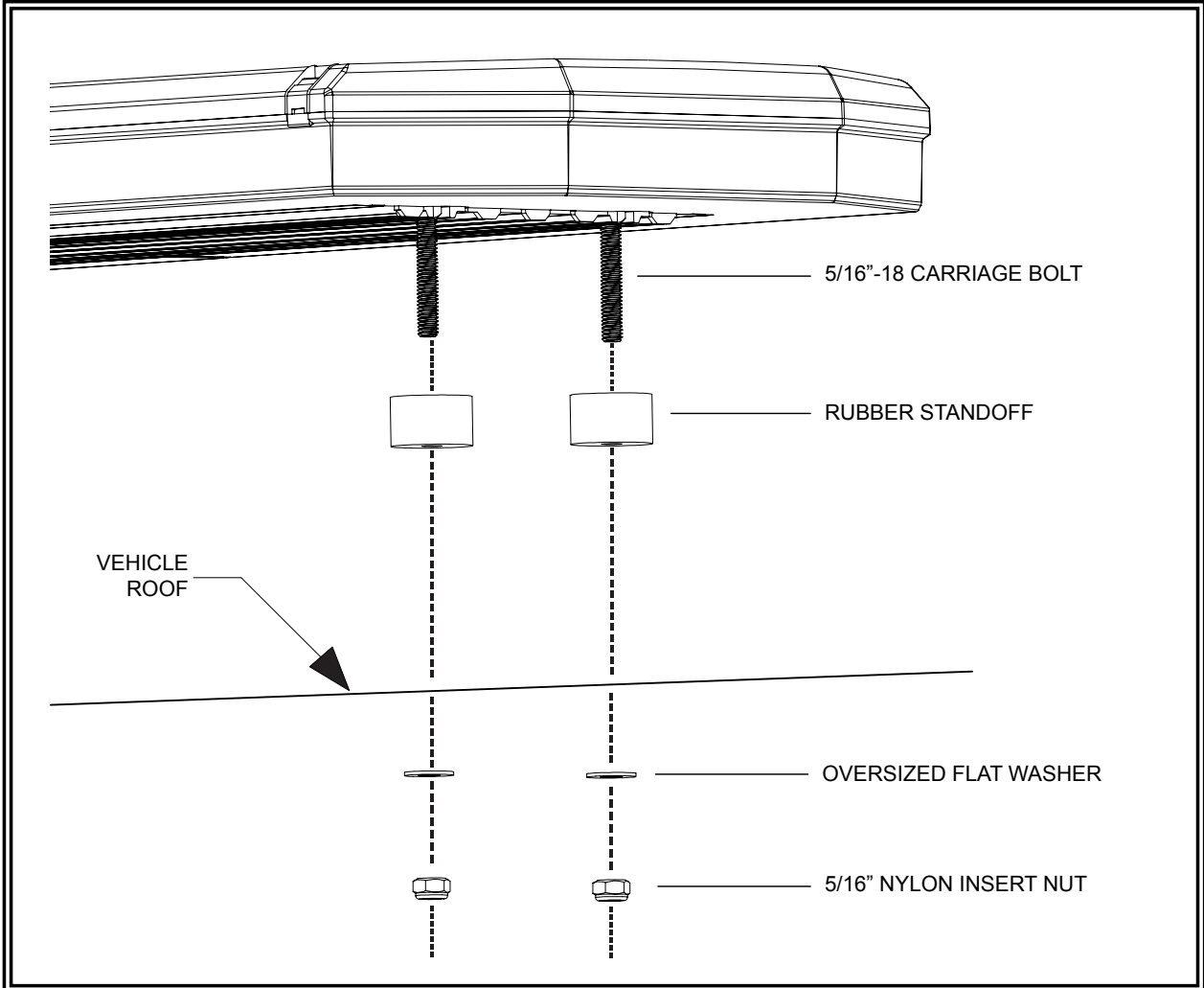


FIGURE 3

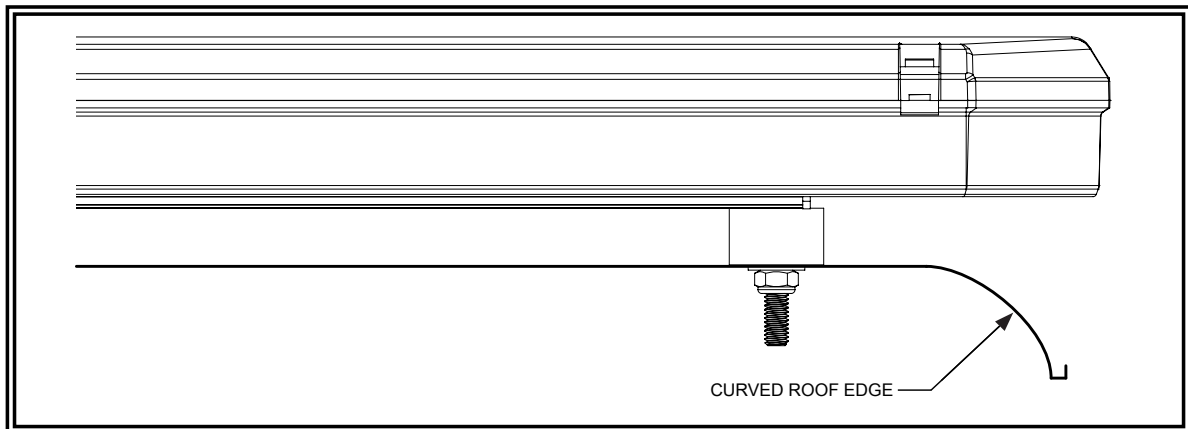


FIGURE 4

## 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.

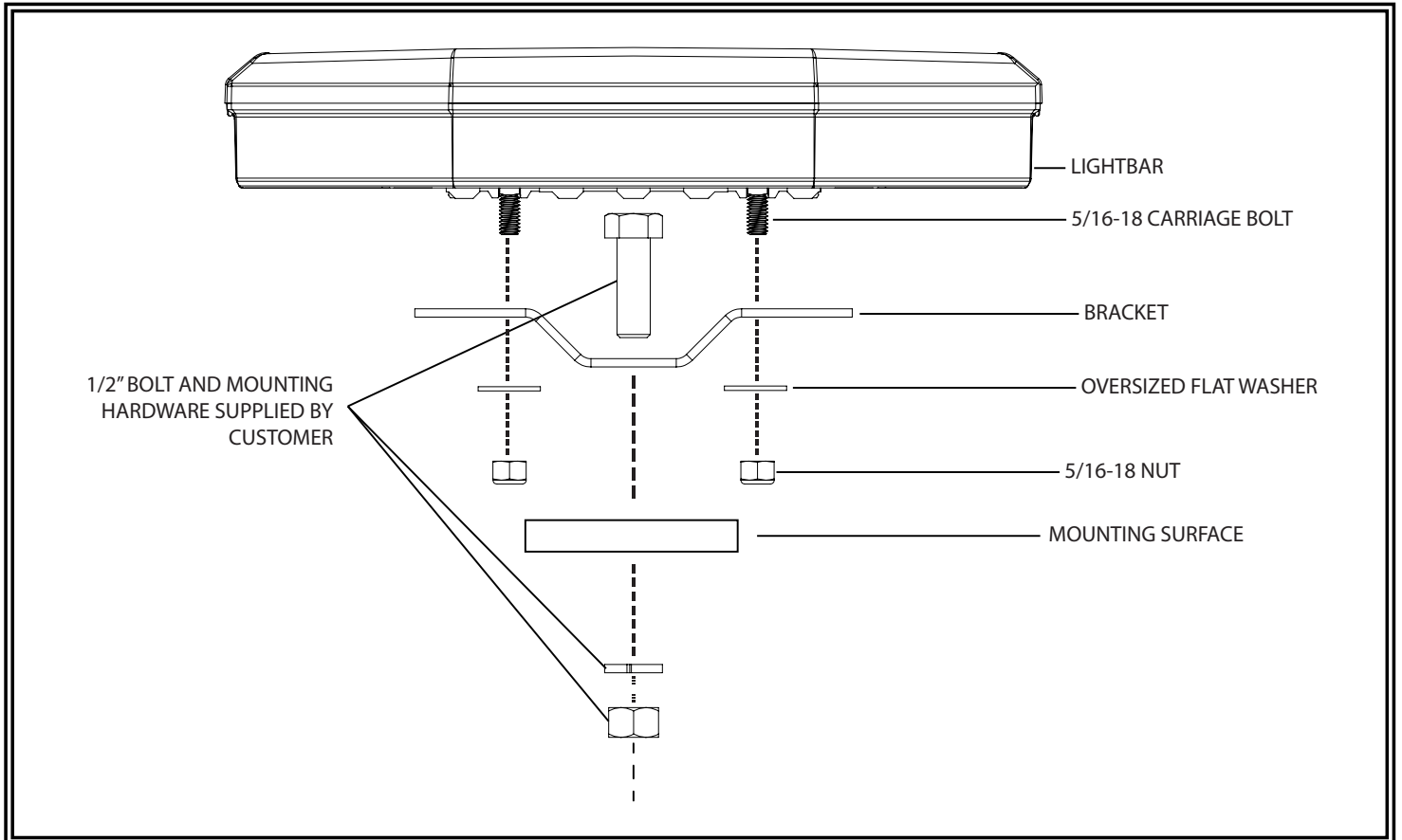


FIGURE 5

## 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.

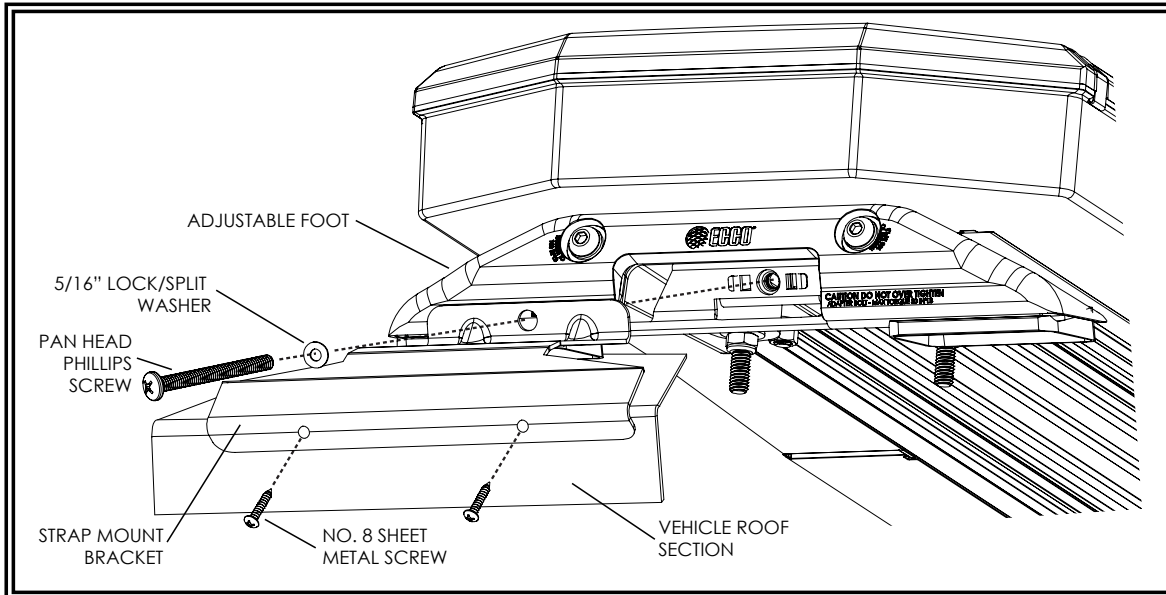


FIGURE 6