

# Lightbar Installation Manual

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## CONTENTS

Pre-Installation .....	1
Vehicle Roof Installation .....	2
Standard / Aegis Feet .....	2
Adjustable Feet (Type A).....	3
Adjustable Feet (Type B) .....	3
Permanent Mount .....	4
Strap Kit Mount .....	5
Flat Surface Installation .....	6
Narrow Surface Mount .....	6
Wide Surface Mount .....	7
Optional Lighthouse Bracket for Adjustable Feet (Type B) .....	8

## PRE-INSTALLATION

To prevent damage to lightbar and vehicle, ensure that all equipment operates properly, and carefully plan where to mount and wire the lightbar and controlling equipment:

1. Verify that the lightbar and mounting hardware fit the vehicle.
2. Pre-configure desired lightbar functions.
3. Determine:
  - the location to mount the lightbar.
  - the location to route the lightbar's Power Cable.
  - the location to route the Function Cable, (eg. to siren, switch box, console).

**WARNING:** Take extreme care when routing wires around airbag areas to not interfere with it's proper operation.

4. Separate all electronic equipment wiring from two-way radio equipment wiring.
5. To avoid interference, keep two-way radio antennas a minimum of 50cm away from warning equipment.
6. After drilling holes, deburr and smooth sharp edges, and insert grommets to protect the wires from chafing.
7. When frame-ground the equipment, use the manufacturer-supplied ground locations in the vehicle.

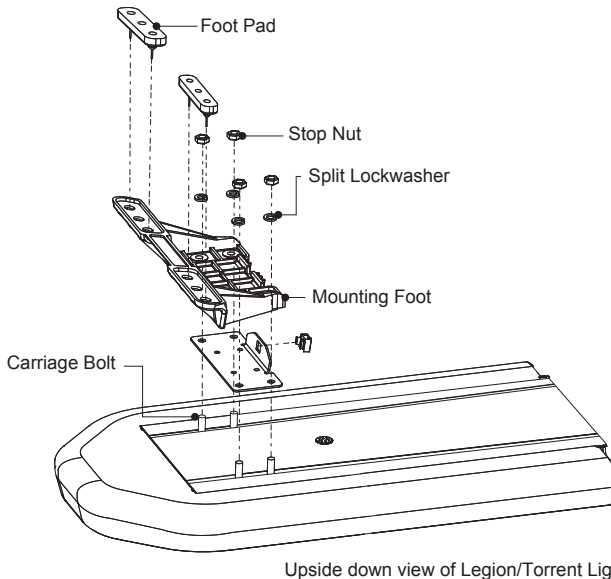
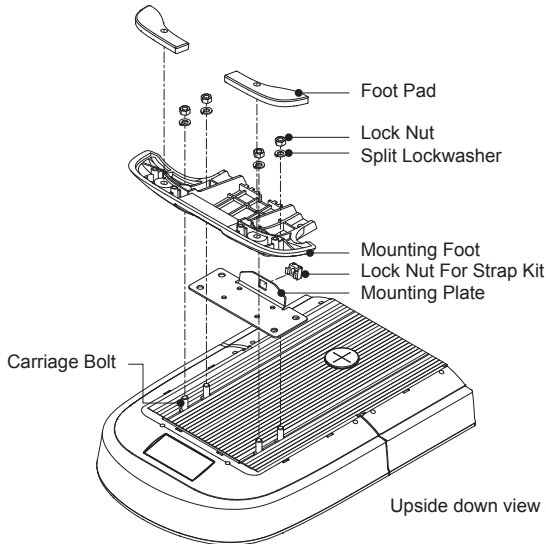
# VEHICLE ROOF INSTALLATION

## STANDARD FEET / AEGIS FEET

Install Mounting Feet on the Lightbar

1. Turn the lightbar upside down.
2. Place mounting feet over the carriage bolts.
3. Attach a lockwasher and a nut on each of the carriage bolts, but do not completely tighten the bolts. Leave them loose enough to reposition the mounting foot.

**NOTE:** Set driver torque force at 115~125kgf-cm.

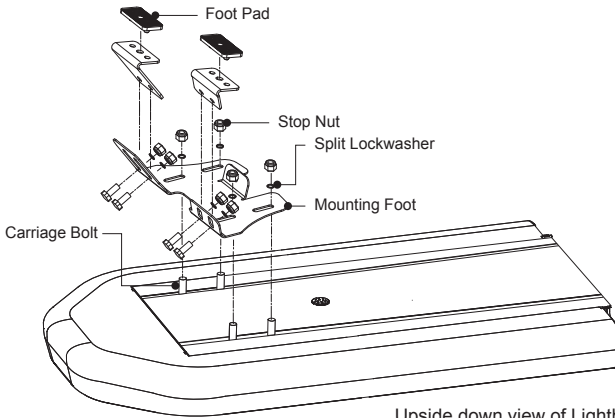


## ADJUSTABLE FEET (TYPE A)

Install Mounting Feet on the Lightbar

1. Turn the lightbar upside down.
2. Place mounting feet over the carriage bolts.
3. Attach a lockwasher and a nut on each of the carriage bolts, but do not completely tighten the bolts. Leave them loose enough to reposition the mounting foot.

**NOTE:** Set driver torque force at 115~125kgf-cm.



Upside down view of Lightbar with Mounting Foot

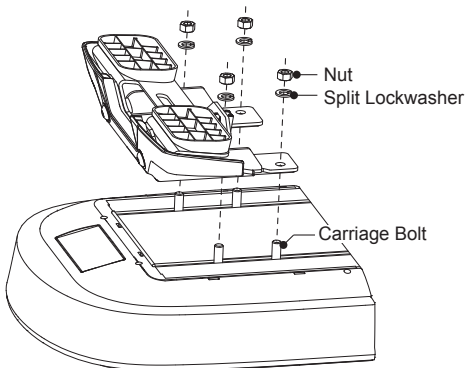
## ADJUSTABLE FEET (TYPE B)

**NOTE:** If optional lighthouse bracket(s) is purchased with this Adjustable Feet (Type B), go to Pg. 8 prior the following procedures.

Install Adjustable Feet onto the Lightbar

1. Turn the lightbar upside down.
2. Place adjustable feet over the carriage bolts.
3. Attach a split lockwasher and a nut on each of the carriage bolts, but do not completely tighten the bolts. Leave them loose enough to reposition the adjustable foot.
4. Loosen the hexagon screws and adjust the mounting feet to the desired angle. Make sure it fits the contours of the vehicle roof.

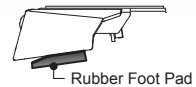
**NOTE:** Set driver torque force at 120~140kgf-cm.



Upside down view of Lightbar with Mounting Foot

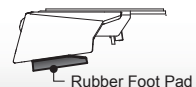
**NOTE:**

\*For vehicle roof with steep slope

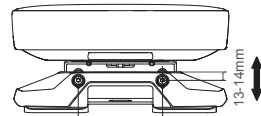


Rubber Foot Pad

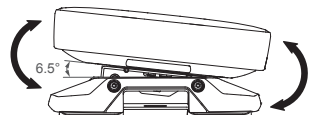
\*For vehicle roof with gentle slope



Rubber Foot Pad



Loose the Hexagon Screws before adjustment



Side view of Lightbar with Mounting Foot

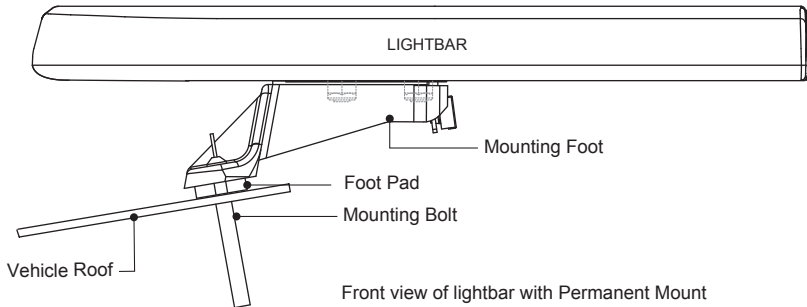
## PERMANENT MOUNT

Installation includes centering the lightbar on the vehicle's roof, leveling the lightbar, and scribing and drilling holes for mounting the lightbar permanently to the roof.

1. Place lightbar on the vehicle roof at the desired location. The lightbar is usually centered on the door center post (B-pillar).
2. Adjust both mounting feet in or out as necessary until the foot pads rest near the edge of the roof or gutter where the roof is the most rigid. Make sure the lightbar and the mounting feet are centered left to right on the vehicle.
3. Level the lightbar by shifting the lightbar slightly forward or back.
4. Using the mounting feet as a template, mark two drilling holes on each end of the vehicle roof.
5. Carefully remove the lightbar and turn it upside down, and ensure that the mounting feet do not shift place.
6. Tighten the nuts that secure the mounting feet to the lightbar.
- NOTE:** Set driver torque force at 115~125kgf-cm.
7. Drill four holes at the previously marked drilling positions.

**WARNING:** DO NOT DRILL THROUGH the roof support structure that spans the distance between the driver's and passenger's side. Drilling through this will weaken the roof of the vehicle.

8. Place lightbar on the vehicle roof and align the mounting holes with the mounting feet. Secure mounting feet to vehicle roof with carriage bolts.



**NOTE:** After installation, frequently inspect the lightbar and mounting feet to ensure that all fasteners and brackets are tight.

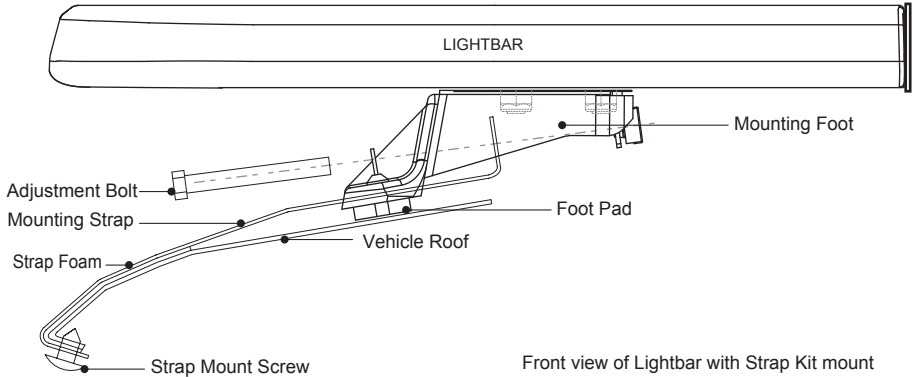
## STRAP KIT MOUNT

The Strap Kit is designed for specific make and mode of vehicle. Before installation, ensure that the correct strap kit is used.

1. Place the lightbar on the vehicle roof at the desired location. Usually, the lightbar should be centered on the center door post (B-pillar).

**NOTE:** Water may leak into the vehicle interior if the straps are improperly positioned.  
Ensure that the straps are positioned above or near the center door post (B-pillar).

2. Determine where the straps will attach to the vehicle.



Front view of Lightbar with Strap Kit mount

3. Place the straps in position on the roof sheet metal as shown in diagram.
4. Use the straps as a template and mark the drilling hole locations.
5. Drill holes according to the marked locations.
6. Apply a silicone sealant (user-supplier) around the holes before attaching the straps.
7. Secure the straps with the strap mount screws.

**NOTE A:** Set driver torque force at 95~105kgf-cm.

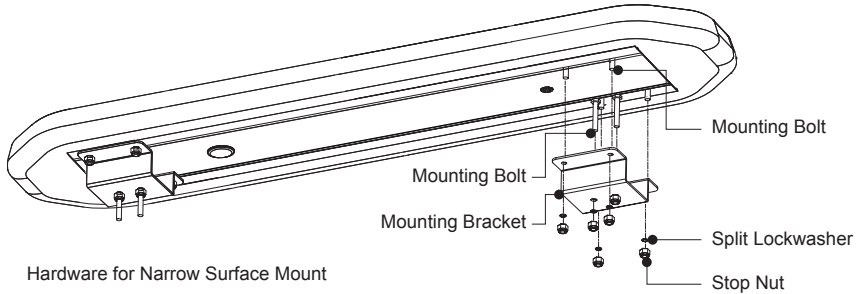
**B:** After installation, frequently inspect the lightbar and mounting feet to ensure that all fasteners and brackets are tight.

8. Place the lightbar on the vehicle roof, and align strap bolt holes with lightbar mounting feet bolt holes.
9. Insert adjustment bolt through strap bolt hole all the way to mounting feet bolt hole.
10. Tighten bolts.

# FLAT SURFACE INSTALLATION

## NARROW SURFACE MOUNT

1. Turn the lightbar upside down.
2. Place mounting feet over the carriage bolts.
3. Attach a lockwasher and a nut on each of the carriage bolts, but do not completely tighten the bolts. Leave them loose enough to reposition the mounting foot.

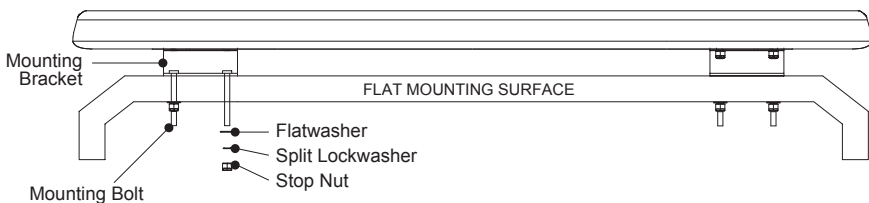


4. Place lightbar on the mounting surface at the desired location.
5. Adjust both mounting foot assemblies in or out as necessary. If possible, try to keep mounting feet near the ends of the lightbar.
6. Using the mounting feet as a template, mark two drilling holes on each end of the mounting surface.
7. Carefully remove the lightbar and turn it upside down, and ensure that the mounting feet do not shift place.
8. Tighten the nuts that secure the mounting feet to the lightbar.

**NOTE A:** Set driver torque force at 115~125kgf-cm.

**B:** Before drilling holes in ANY part of the vehicle, ensure that both sides of the mounting surface are clear of parts that could be damaged, such as brake lines, fuel lines, electrical wiring, or other vital parts.

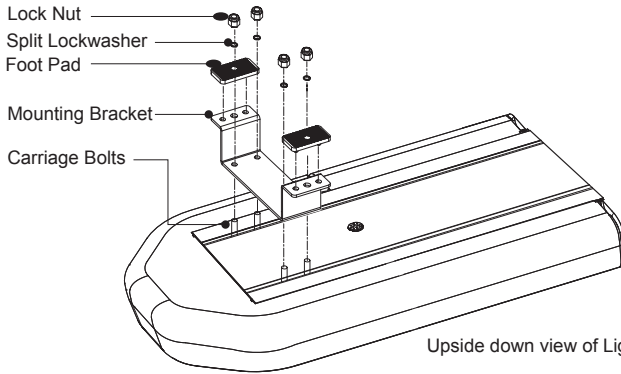
9. Drill four holes at the previously marked drilling positions.
10. Place lightbar on the mounting surface and align mounting holes with the mounting feet.
11. Secure mounting feet to mounting surface with carriage bolts.



12. Lightbar lengths from 66" and/or above, please refer to the specification sheet for the exact mounting bracket quantity. When installing with more than 2 brackets, place the extra bracket(s) evenly between the two side brackets.

## WIDE SURFACE MOUNT

1. Turn the lightbar upside down.
2. Place mounting feet over the carriage bolts.
3. Attach a lockwasher and a nut on each of the carriage bolts, but do not completely tighten the bolts. Leave them loose enough to reposition the mounting foot.

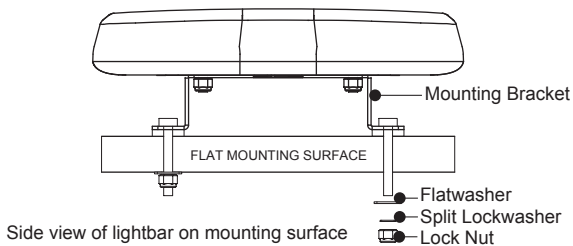


4. Place lightbar on the mounting surface at the desired location.
5. Adjust both mounting foot assemblies in or out as necessary. If possible, try to keep mounting feet near the ends of the lightbar.
6. Using the mounting feet as a template, mark two drilling holes on each end of the mounting surface.
7. Carefully remove the lightbar and turn it upside down, and ensure that the mounting feet do not shift place.
8. Tighten the nuts that secure the mounting feet to the lightbar.

**NOTE A:** Set driver torque force at 115~125kgf-cm.

**B:** Before drilling holes in ANY part of the vehicle, ensure that both sides of the mounting surface are clear of parts that could be damaged, such as brake lines, fuel lines, electrical wiring, or other vital parts.

9. Drill four holes at the previously marked drilling positions.
10. Place lightbar on the mounting surface and align the mounting holes with the mounting feet.
11. Secure mounting feet to mounting surface with carriage bolts.



12. Lightbar lengths from 66" and/or above, please refer to the specification sheet for the exact mounting bracket quantity. When installing with more than 2 brackets, place the extra bracket(s) evenly between the two side brackets.

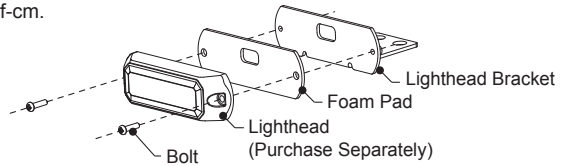
# OPTIONAL LIGHTHEAD BRACKETS FOR ADJUSTABLE FEET (TYPE B)

\*(Lighthouse and Lighthouse Brackets are purchased separately)

## Assemble the lighthouse onto the lighthouse bracket:

1. Place the foam pad between the lighthouse and the bracket, and then secure the lighthouse onto the lighthouse bracket.

**NOTE:** Set driver torque force at 4.5~5.5kgf-cm.



## Assemble the lighthouse w/bracket onto the adjustable feet (on either ends of lightbar):

1. Loosen the hexagon screws and adjust the height for the lighthouse bracket to be inserted into the bracket body.

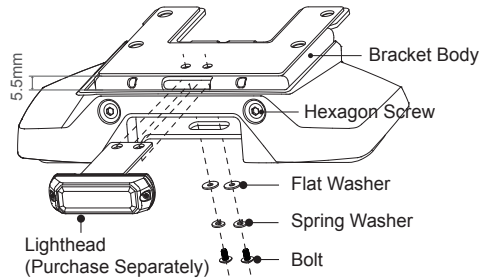
2. Using two supplied screws and secure the bracket from below.

**NOTE:** Set driver torque force at 7.5~8.5kgf-cm.

3. Tighten the hexagon screws.

**NOTE:** Set driver torque force at 120~140kgf-cm.

4. Repeat above steps for the other foot.



## Assemble the lighthouse w/bracket onto the lightbar (on front/rear sides of lightbar):

1. Choose your desired front/rear lighthouse location/s.
2. Slide 2 carriage bolts into each base groove for later foot installation.
3. Slide 2 more carriage bolts into the base groove.
4. Place lighthouse w/bracket over the carriage bolt.
5. Attach a split lockwasher and a nut on each of the carriage bolts and secure it.

**NOTE:** Set driver torque force at 120~140kgf-cm.

