

# **ARB** **BASE RACK**

## **FITTING INSTRUCTION**

Part Number:  
**17970070** (2 boxes)  
**17970090** (2 boxes)

Suits BASE RACK:  
**1770130**  
**1770140**

Suits Vehicle:  
**SWB Normal Roof**  
**LWB Normal Roof**

Product Description: **BASE RACK FITTING KIT for VW T5 / T6 / T6.1  
TRANSPORTER / MULTIVAN / CARAVELLE**

### **WARNING**

- ◆ Vehicle accessories which are not properly fitted can be dangerous.
- ◆ Please read these instructions carefully prior to fitting, and comply with the instructions at all times
- ◆ If in any doubt please contact your nearest ARB state office or the stockist from whom it was purchased.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ◆ Work safely at all times
- ◆ Unless otherwise instructed, tighten fasteners to specified torque
- ◆ Check bolt torque after 500km & at regular service intervals

## **ARB 4x4 ACCESSORIES**

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# SAFETY

## NET PAYLOAD FOR YOUR BASE RACK

The net payload for your BASE RACK is calculated by subtracting the weight of the BASE RACK and the vehicle mounting kit from the vehicle's roof capacity.

The vehicle's roof load capacity may vary between models and driving conditions. Refer to vehicle owner's manual for model and condition specific roof load capacities.

| Kit      | BASE RACK | Vehicle roof capacity* (kg/lb) | BASE RACK + mount kit (kg/lb) | BASE RACK net payload (kg/lb) |
|----------|-----------|--------------------------------|-------------------------------|-------------------------------|
| 17970070 | 1770130   | 150 / 330                      | 51 / 120                      | <b>99 / 210</b>               |
| 17970090 | 1770140   | 150 / 330                      | 55 / 120                      | <b>95 / 210</b>               |

\* Maximum roof load capacity. Refer to vehicle owner's manual for model and condition specific roof load capacities.

It is important to follow the listed usage instructions;

- ◆ Maximum load per BASE RACK beam is 25kg.
- ◆ Load must be evenly distributed and adequately secured.
- ◆ Any weight carried on the roof of the vehicle will adversely affect its handling, particularly in cornering or in a cross-wind, the vehicle should therefore be driven with increased discretion.
- ◆ Regularly check the tightness of the securing clamps and the security of the load.
- ◆ Attention is directed to statutory requirements regarding maximum permissible projections from vehicles.

# GENERAL CARE AND MAINTENANCE

By choosing an ARB BASE RACK, you have bought a product that is one of the most sought after 4WD products in the world. Your BASE RACK is a properly engineered, reliable, quality accessory that represents excellent value. To keep your BASE RACK in original condition it is important to care and maintain it following these recommendations:

As part of any pre-trip preparation, or on an annual basis, it is recommended that a thorough visual inspection of the BASE RACK is carried out, making sure that all bolts and other components are torqued to the correct specification. Replace any components as necessary.

Please contact local Authorised ARB Stockist if you would like to have this service carried out on your behalf.

## FITTING REQUIREMENTS

### REQUIRED TOOLS FOR FITMENT OF PRODUCT:

|               |                      |
|---------------|----------------------|
| Allen key set | 10mm & 13mm spanners |
| Torx key set  | Socket set           |
| Tape measure  | Pen/pencil           |

**NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.**

### FASTENER TORQUE SETTINGS:

| SIZE | Torque Nm | Torque lbft |
|------|-----------|-------------|
| M6   | 9Nm       | 7lbft       |
| M8   | 22Nm      | 16lbft      |

## Air Deflectors and Base Rack Light Bar

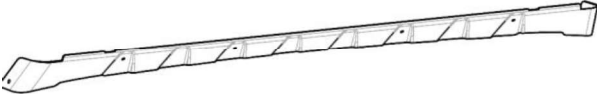
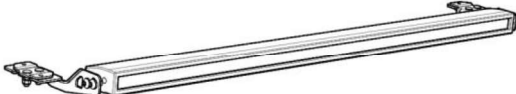
**By default** (Without Light Bar):

Air Deflector should be fitted to the BASE RACK. Instructions are in the following pages.

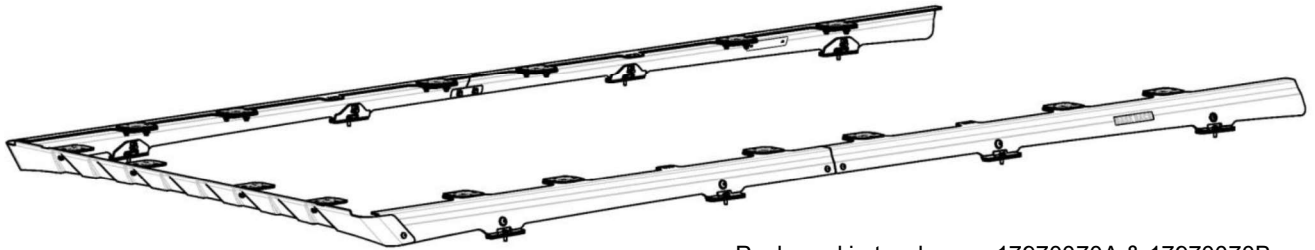
**When using a BASE RACK Light Bar** (part number **1780500**):

It is recommended to fit the Light Bar in front of the BASE RACK, together with the Air Deflector, which will need to be trimmed.

For further details, refer to the instructions in the following pages, and to those provided with the Light Bar.

|                        |  | PART NUMBER                                    |
|------------------------|--|--|
| AIR DEFLECTOR          |  | <b>3755020<br/>OR<br/>3755022<br/>Included</b> |
| BASE RACK<br>LIGHT BAR |  | <b>1780500</b>                                 |

## DIAGRAM 17970090



Packaged in two boxes: 17970070A & 17970070B

Includes: FASTENERS KIT **6177903**

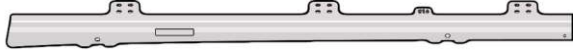







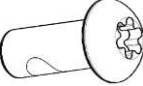

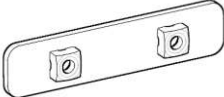
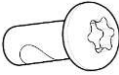
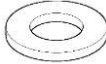
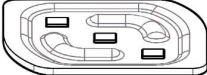
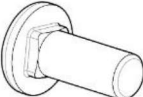

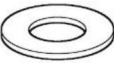



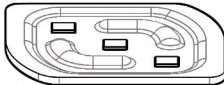
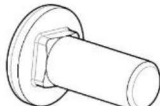

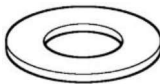

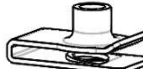
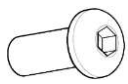

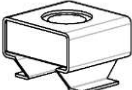
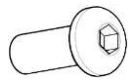


Packaged in two boxes: 17970090A & 17970090B

Includes: FASTENERS KIT **6177903**

## PARTS LISTING 17970070 & 17970090

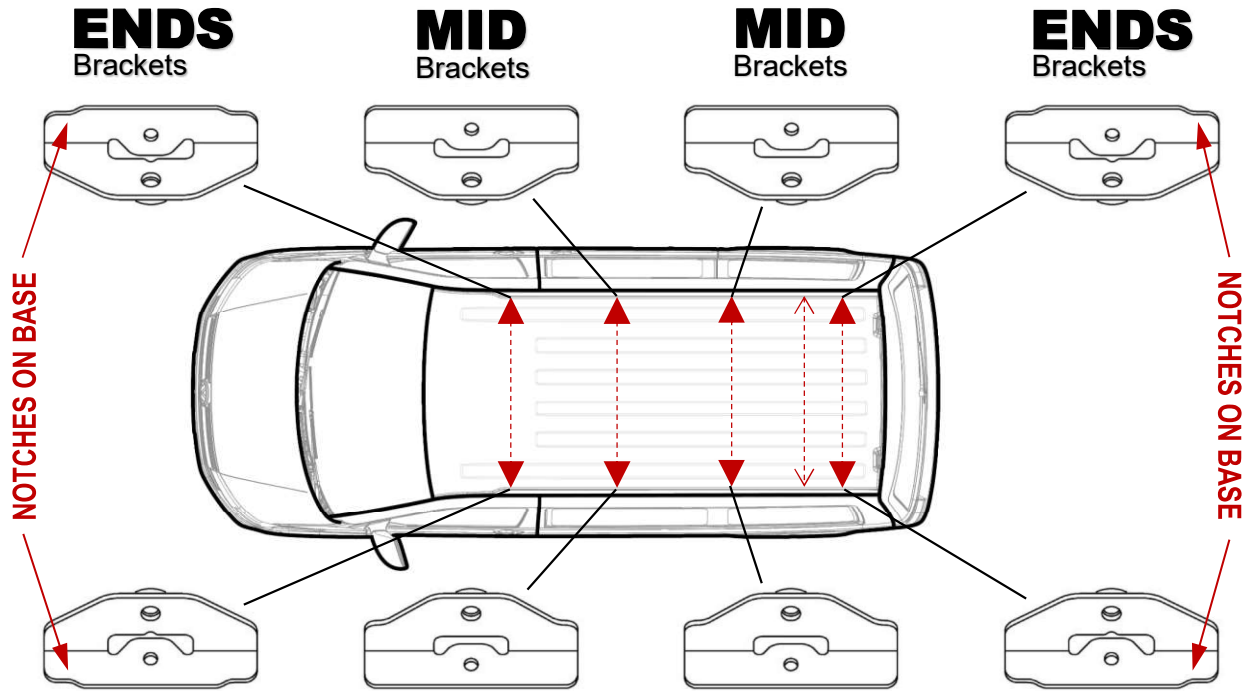
| PART NO.                                       | PICTURE | QTY | DESCRIPTION                                |
|--|---------|-----|--|
| <b>APPLICATION – MOUNTING BRACKETS TO ROOF</b> |         |     |  |
| 3755010  |         | 4   | <b>MOUNTING BRACKET W/ WELD NUT - ENDS</b> |
| 3755011  |         | 4   | <b>MOUNTING BRACKET W/ WELD NUT - MID</b>  |
| 6151180  |         | 8   | <b>M6x20 HEXAGONAL HEAD</b>                |
| 4584425  |         | 8   | <b>M6 WASHER FLAT - BONDED</b>             |
| 5848524  |         | 8   | <b>RUBBER PACKER</b>                       |
| 6151934  |         | 1   | <b>TORX ALLEN KEY</b>                      |

| PART NO.   | PICTURE   | QTY     |         | DESCRIPTION                                 |
|--|---|---------|---------|---|
|  |   | 1790070 | 1790090 |   |
| 3755014R   |    | 1       |         | BLADE BRACKET LWB 2995 BACK RIGHT           |
| 3755014L   |    | 1       |         | BLADE BRACKET LWB 2995 BACK LEFT            |
| 3755015R   |    | 1       |         | BLADE BRACKET LWB 2995 FRONT RIGHT          |
| 3755015L   |    | 1       |         | BLADE BRACKET LWB 2995 FRONT LEFT           |
| 3755016R   |    | 1       |         | BLADE BRACKET SWB 2705 BACK RIGHT           |
| 3755016L   |    | 1       |         | BLADE BRACKET SWB 2705 BACK LEFT            |
| 3755017R   |    | 1       |         | BLADE BRACKET SWB 2705 FRONT RIGHT          |
| 3755017L   |   | 1       |         | BLADE BRACKET SWB 2705 FRONT LEFT           |
| 6151924  |  | 8       |         | M8x20 BUTTON HEAD TORX - BLACK              |
| 4581085  |  | 8       |         | M8 WASHER FLAT - BLACK                      |
| <b>APPLICATION – SPLIT BLADES JOINT</b>          |   |         |         |   |
| 3195588  |  | 2       |         | JOINER BLADE FLAT - BLACK ZINC              |
| 6151859  |  | 4       |         | M6x16 BUTTON HEAD TORX - BLACK - WITH PATCH |
| 4584329  |  | 4       |         | M6 FLAT WASHER - BLACK                      |
| <b>APPLICATION – BASE RACK TO BLADE BRACKETS</b> |   |         |         |   |
| 3195184  |  | 12      |         | M8 STUD PLATE                               |
| 6151921  |  | 24      |         | M8x20 STUD - BLACK                          |
| 6151212  |  | 24      |         | M8 NYLOC NUT - BLACK                        |
| 4581085  |  | 24      |         | M8 WASHER FLAT - BLACK                      |

| PART NO.   | PICTURE   | QTY | DESCRIPTION                   |
|--|---|-----|-------------------------------|
| <b>APPLICATION – BASE RACK TO AIR DEFLECTOR</b>      |   |     |                               |
| 3755020  |    | 1   | AIR DEFLECTOR LWB 2995        |
| 3195184  |    | 4   | M8 STUD PLATE                 |
| 6151921  |    | 4   | M8x20 STUD - BLACK            |
| 6151212  |    | 4   | M8 NYLOC NUT - BLACK          |
| 4581085  |    | 4   | M8 WASHER FLAT - BLACK        |
| 3752747  |    | 4   | AIR DEFLECTOP MOUNT BRACKET   |
| 6151475  |   | 4   | M6 U-NUT                      |
| 6151459  |  | 4   | M6x16 BUTTON HEAD HEX - BLACK |
| 4584329  |  | 4   | M6 FLAT WASHER - BLACK        |
| <b>APPLICATION – AIR DEFLECTOR TO BLADE BRACKETS</b> |   |     |                               |
| 6151300  |  | 2   | M6 CAGE NUT                   |
| 6151459  |  | 2   | M6x16 BUTTON HEAD HEX - BLACK |
| 4584329  |  | 2   | M6 FLAT WASHER - BLACK        |
| 4581082  |  | 2   | M6 FLAT WASHER LARGE - BLACK  |

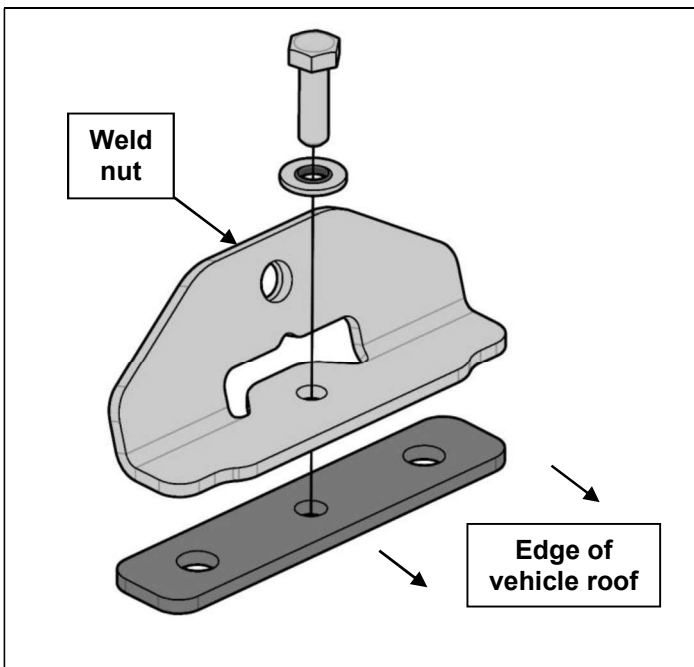
**BEFORE STARTING, READ ALL STEPS OF THE INSTRUCTIONS CAREFULLY AND CHECK ALL PARTS**

**STEP 1 – ATTACH MOUNTING BRACKETS TO ROOF**



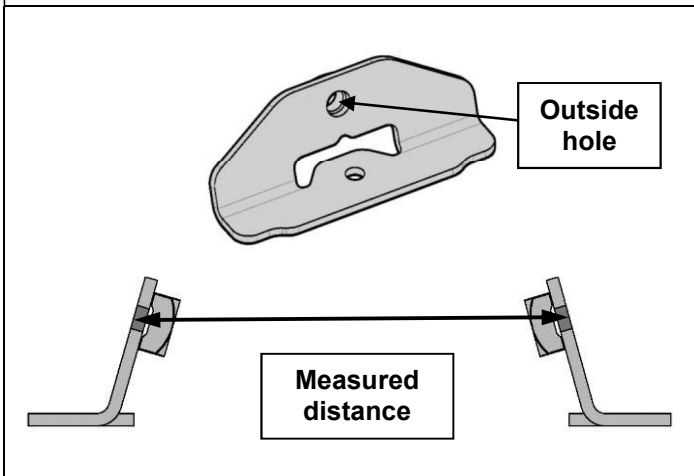
1. Remove covers from anchor points to be used.

Leave covers on all other anchor points.



2. Assemble mount brackets:
  - Place rubber packers over each anchor point.
  - Position mounting brackets following the mount brackets diagram, so that weld nuts are facing towards the centre of the vehicle.
  - Attach brackets to roof mounting points using an M6 x 20mm hex head screw and M6 Bonded washer (See image).
  - Tighten all M6 Hexagonal screws to the specified torque.

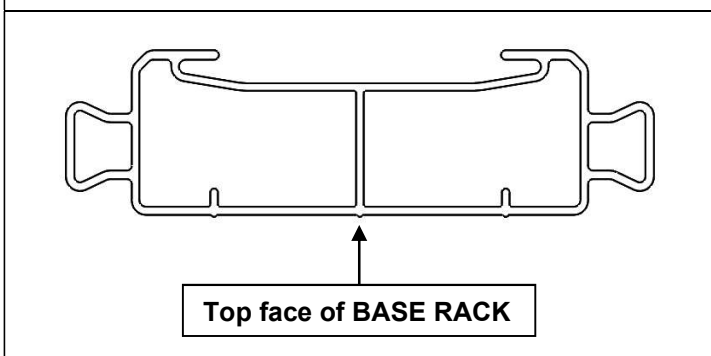
 **Torque M6 to 9Nm (7lbf)**



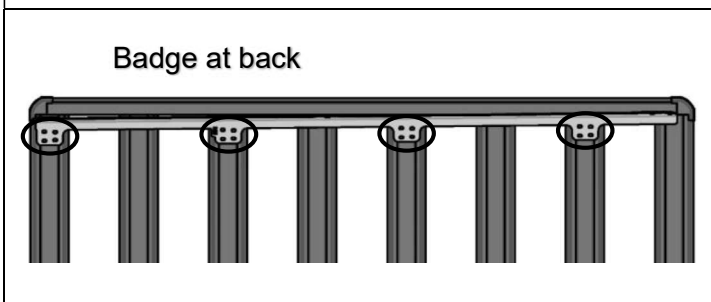
3. Using a tape measure, measure across the vehicle between the middle of the hole on the outside face of the front and rear set of mounting brackets. Make a note of each measurement.

| Position | Distance |
|----------|----------|
| Front    |          |
| Rear     |          |

## STEP 2 – ASSEMBLE BASE RACK WITH BLADE BRACKETS

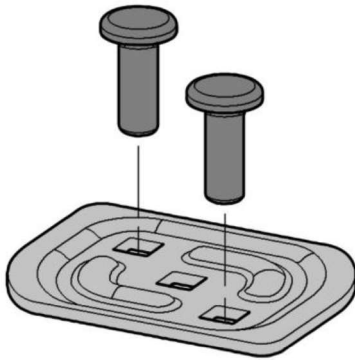


4. Place the BASE RACK face down on a clean flat surface. Provide protection to the top face of BASE RACK to avoid marking of surfaces

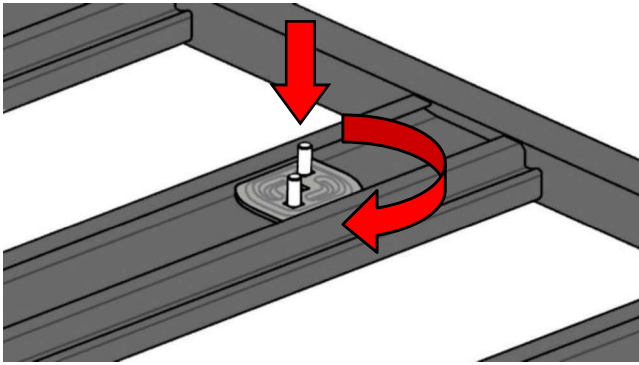


5. Check the position of the mounting plates (circled in image) on the blade brackets in relation to the channels on the BASE RACK.

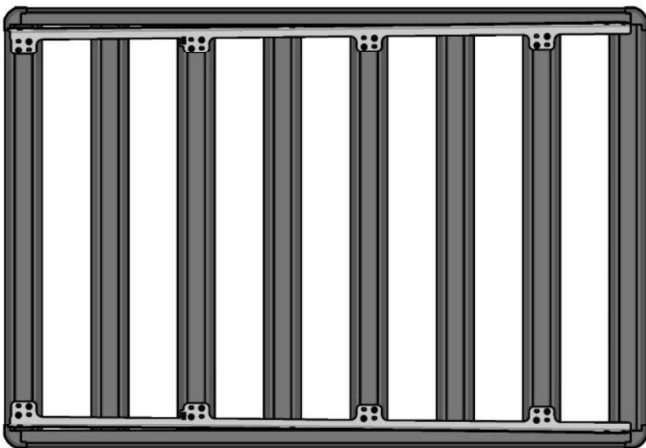
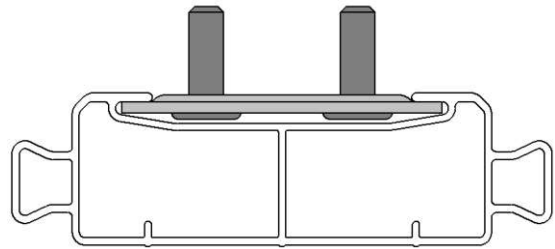




6. Insert 2, M8 x 20 Studs into each of the Stud Plates as shown.



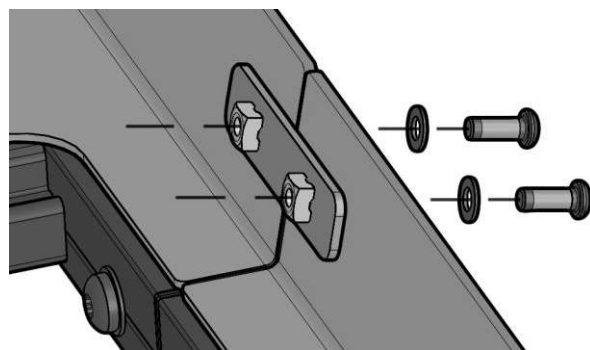
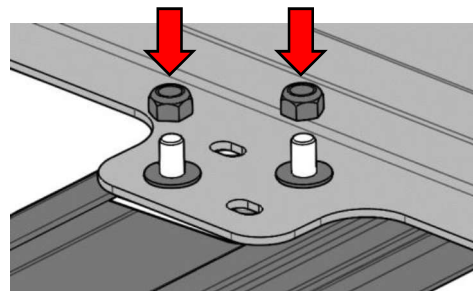
7. Insert the assembled stud plates into the correct BASE RACK channels. Rotate the plates 90 degrees.



8. Flip the blade brackets over so they are upside down and carefully place on top of the BASE RACK. Ensure the M8 studs go through the slots.

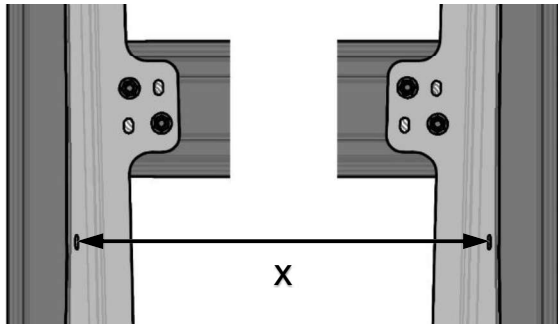
Secure the blade brackets to the BASE RACK using M8 flat washers and nyloc nuts.

Do not fully tighten, allowing each blade to move.



9. Install blade joiners, using M6x16 **torx** bolts (**with patch**) and M6 washers.

 **Torque M6 to 9Nm (7lbft)**

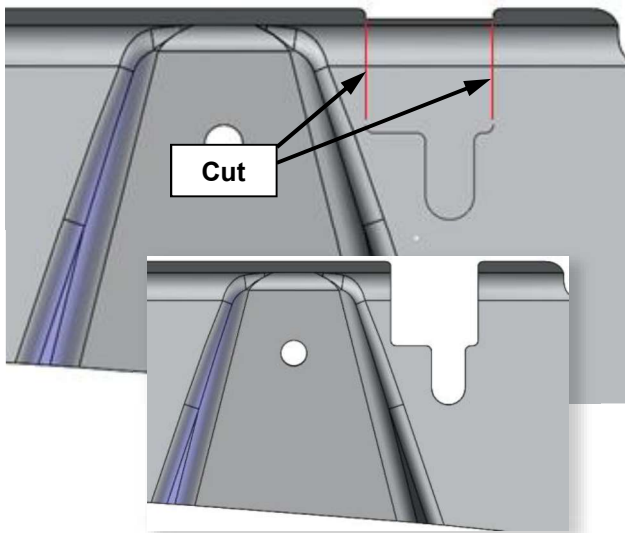


10. Using the previously recorded measurements, adjust the location of the blade bracket on the BASE RACK.
- Ensure the distance between the blade bracket and the edge of the tray is the same on both sides. Fully tighten all M8 Nyloc nuts



**Torque M8 to 22Nm (16lbf)**

### STEP 3 – ASSEMBLE AIR DEFLECTOR

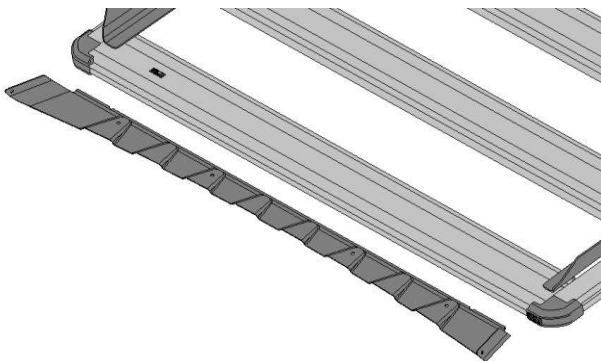
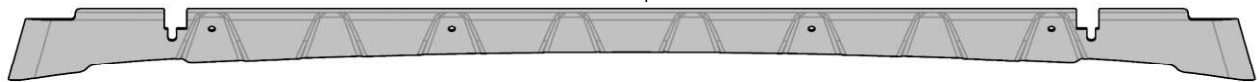


#### OPTIONAL: LIGHTBAR FITMENT

If fitting the Air Deflector together with a front mounted BASE RACK Light Bar, the Air Deflector needs to be modified as described.

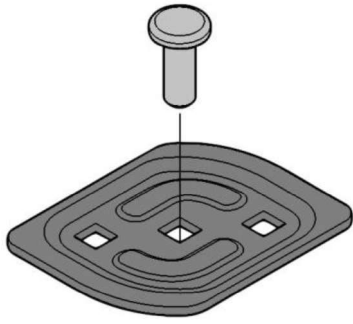
Refer to the instructions provided with the BASE RACK light bar for details on installing the light bar.

11. -Make 4 cuts in the air deflector between the notches in the top edge and the laser cut shape as shown.
- Discard the material removed.
  - Remove any sharp edges and paint raw edges with black touch-up paint.

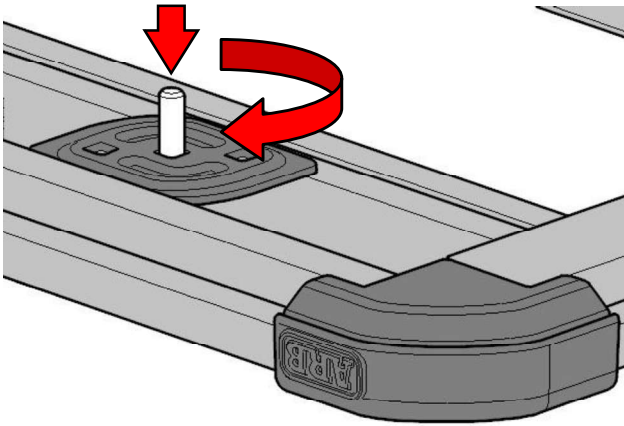


Note: BASE RACK should be upside down with the vehicle mount brackets fitted.

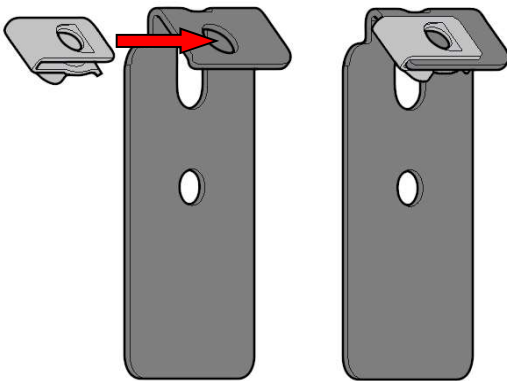
12. Lay the air deflector face down, parallel with the front of the BASE RACK. This will help determine the general position for the stud plates. Ensure the distance between the end of the deflector and outside of the tray is the same on both sides.



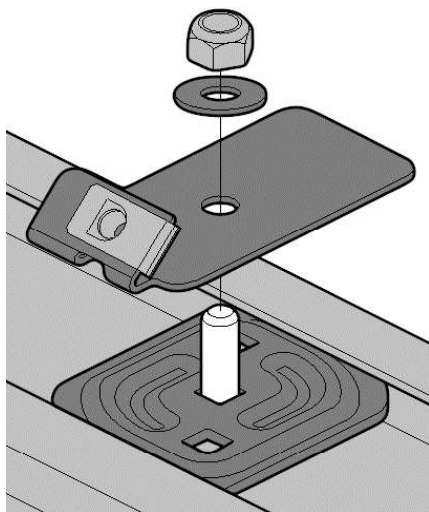
13. Insert one M8 x 20 Stud into each of the Stud Plates as shown.



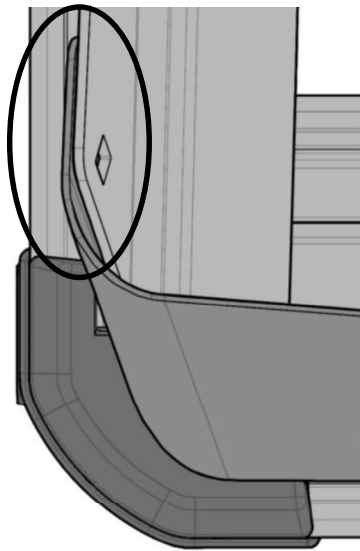
14. Flip the plate over and insert each of the 4 assembled stud plates into the front channel of the BASE RACK. Rotate 90 degrees and ensure the axis of the bolt lines up with the holes in the air deflector.



15. Snap one u-nut onto each of the 4 air deflector mounting plates. Take care to ensure the u-nut is oriented correctly. See image.



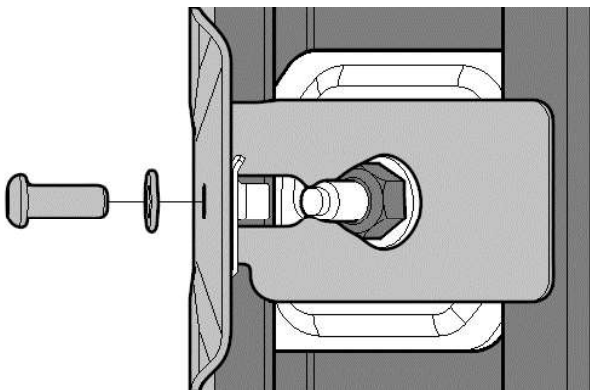
16. Attach the air deflector mounting plates to the stud plates with an M8 flat washer & nyloc nut.  
17. Leave nut loose enough to allow assembly to slide along channel.



18. Flip the air deflector over and offer it up to the assembled BASE RACK and blade brackets.

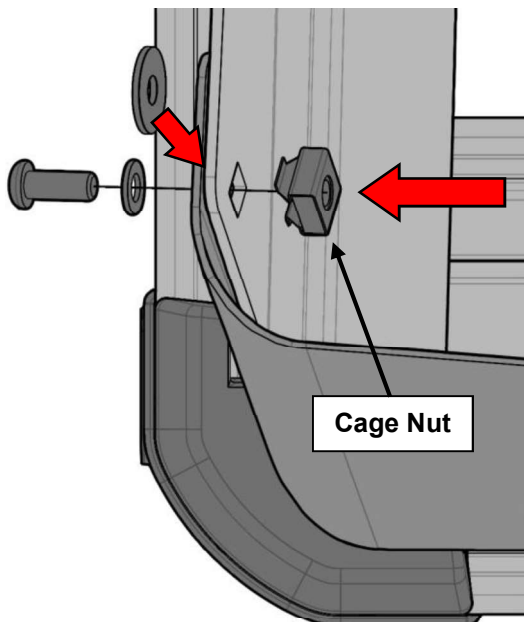
Ensure the folded ends of the deflector are outside the ends of the blade brackets.

19. The holes in the front of the air deflector should line up closely with the u-nuts of the previous step.



20. Secure each of the 4 mounting plates to the air deflector.

Use M6 Button head screws and M6 washers, as shown.



21. Install cage nut in location shown.

Place the large M6 washer between the blade and the air deflector (You can use tape to hold the washer in place).

Secure using the remaining M6 Button head screws and small M6 washers, as shown.

22. Tighten all screws to specified torque.

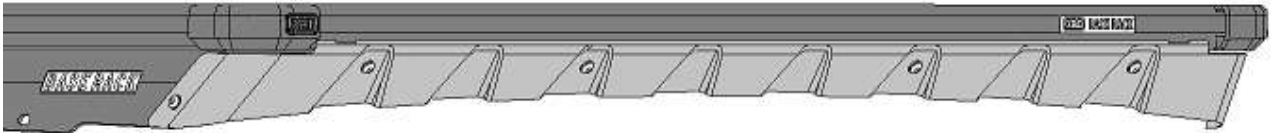


**Torque M8 to 22Nm (16lbft)**

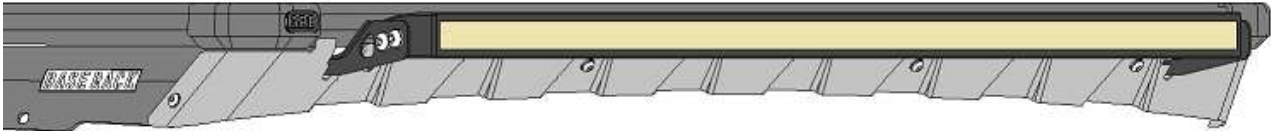


**Torque M6 to 9Nm (7lbft)**

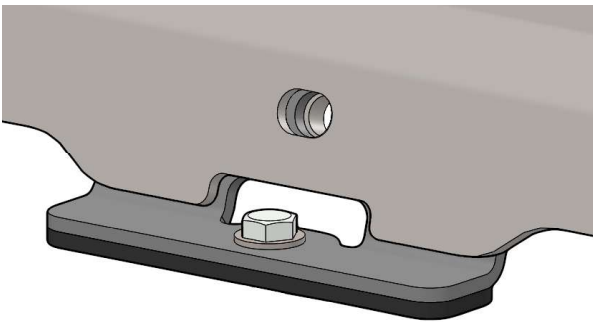
Fitted



Fitted with the optional Light Bar (in front of deflector)

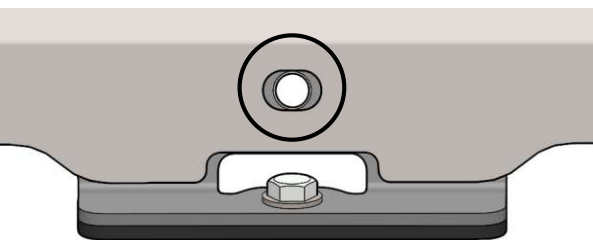


#### STEP 4 – ASSEMBLE BASE RACK TO ROOF



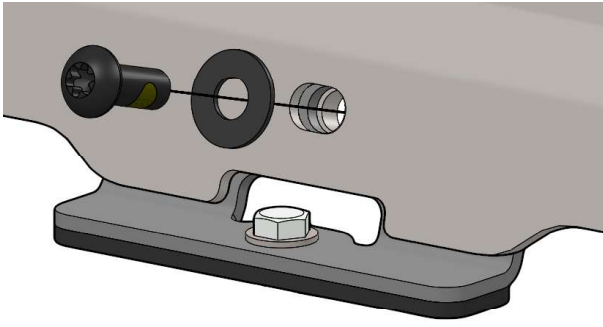
23. With assistance, carefully place the BASERACK on the vehicle so the inside of the blade brackets rests on the outside of the mounting brackets. The entire BASERACK assembly should be clear of the vehicle roof. All mounting holes/slots should align closely.

Note: Place protective material on roof to reduce the risk of accidental damage to vehicle when mounting the BASERACK to the vehicle.



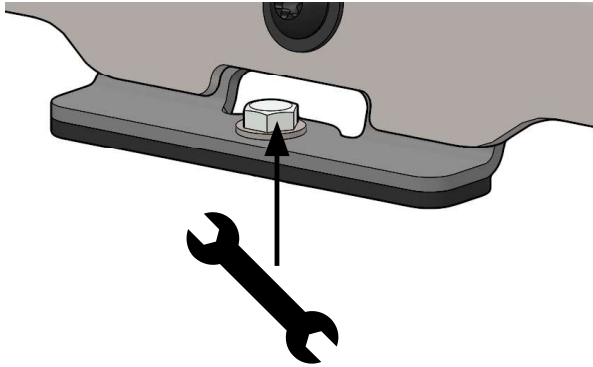
24. Confirm BASE RACK is correctly aligned to vehicle. If it is not, it is recommended to remove the BASE RACK from the vehicle roof and repeat the mounting process from the measurement step.





25. Use the M8 Button head Torx screws and M8 Black washers to secure the roof tray to the roof mounting brackets. Tighten all screws to the specified torque.

 Torque M8 to 22Nm (16lbft)



26. **If needed**, loosen M6 Hexagonal screws of misaligned mount brackets. Then retighten to the specified torque.

 Torque M6 to 9Nm (7lbft)

