

BASE RACK

FITTING INSTRUCTION

Part Number:
17921080/110

Suits BASE RACK:
1770010 - ARB BASERACK 1835X1155
1770030 - ARB BASERACK 1835X1285

17921100

1770020 - ARB BASERACK 1545X1285
1770160 - ARB BASE RACK 1545 X 1155

Product Description: **BASE RACK Fitting Kit Suits Toyota Prado 250 Series**

WARNING

NOTE THE FOLLOWING:

- ◆ 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)
17921080	1770010	100 / 220	28.5 / 63	71.5 / 158
17921080	1770030	100 / 220	30.1 / 66	69.9 / 154
17921100	1770160	100 / 220	24.8 / 55	75.2 / 166
17921100	1770020	100 / 220	26.2 / 58	73.8 / 163
17921110	1770010	100 / 220	28.5 / 63	71.5 / 158
17921110	1770030	100 / 220	30.1 / 66	69.9 / 154

* 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.

All bolts should be checked prior to touring to ensure the tray is fastened correctly

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	13mm spanner
Pen/pencil	Torx key set
Tape measure	Socket set
Trim Removal Tools	

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

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

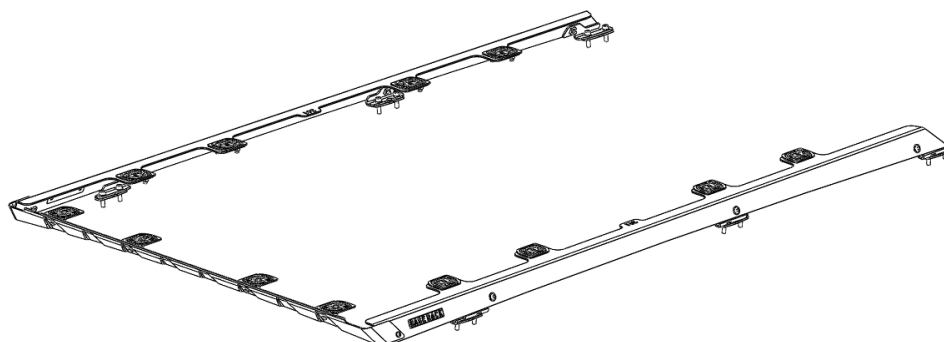
The Light Bar must be fit in front of the BASE RACK, together with the main Air Deflector.

The Light Bar cannot be fitted beneath the front edge of the BASE RACK in place of the main Air Deflector.

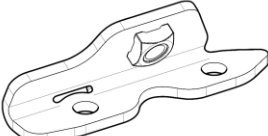
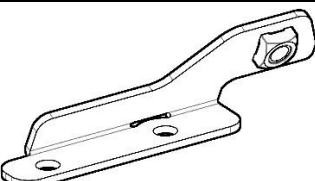
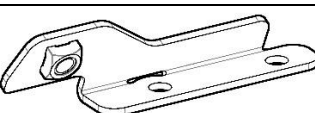
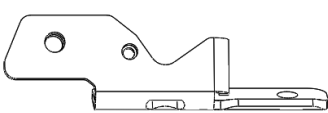
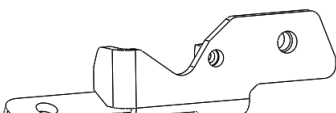
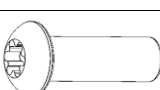
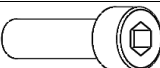
Refer to the instructions provided with this product for further details.

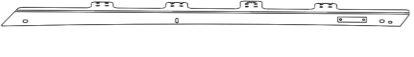
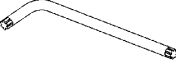
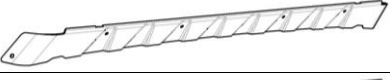
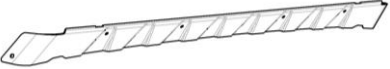
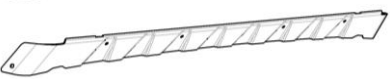
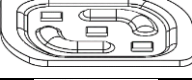
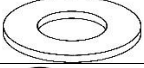
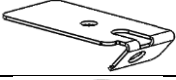
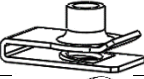
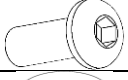
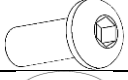
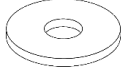
PART NUMBER		
BASE RACK LIGHT BAR		1780500

DIAGRAM



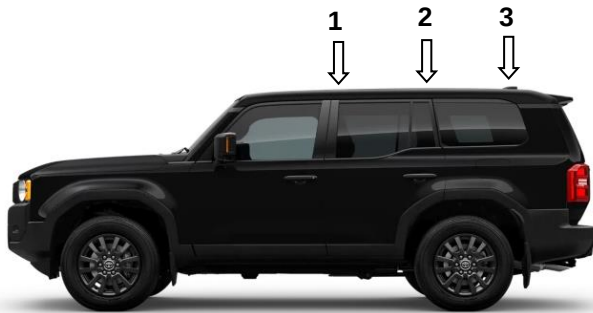
PARTS LISTING

PART NO.	PICTURE	17920080	17921100	17921110	DESCRIPTION
APPLICATION – MOUNTING BRACKETS TO ROOF					
3753261R		1	1	1	MOUNTING BRACKET W/ WELD NUT – MID LEFT & FRONT RIGHT
3753261L		1	1	1	MOUNTING BRACKET W/ WELD NUT – MID RIGHT & FRONT LEFT
3753265R		2	1	2	MOUNTING BRACKET W/ WELD NUT –FRONT RIGHT
3753265L		2	1	2	MOUNTING BRACKET W/ WELD NUT –FRONT LEFT
37500574R		0	1	0	BRKT MOUNT FRONT RHS
37500574L		0	1	0	BRKT MOUNT FRONT LHS
6151625		0	2	0	SCREW BHD M8x25
6151184		12	10	12	M8 X 1.25 X 30MM SOCKET HEAD CAP
4584415		12	12	12	WASHER FLAT M8X16X1.2-BONDED
5848516		6	6	6	RUBBER PACKER
APPLICATION – BLADE BRACKETS TO MOUNTING BRACKETS					
37500361L		1	0	1	BLADE BASERACK RHS SUIT PRADO 250
37500361R		1	0	1	BLADE BASERACK LHS SUIT PRADO 250
37500573R		0	1	0	BLADE BASERACK RHS SHORT PRADO

37500573L		0	1	0	BLADE BASERACK LHS SHORT PRADO
6151924		6	6	6	M8 X 1.25 X 20 BUTTON HEAD TORX – BLK
4581085		6	6	6	WASHER FLAT M8X19X1.2
6151934		1	1	1	TORX ALLEN KEY
APPLICATION – BASE RACK TO AIR DEFLECTOR					
37500362		1	0	0	DEFLECTOR SUIT PRADO 250
37500575		0	1	0	DEFLECTOR SHORT SUIT PRADO 250
37500747		0	0	1	DEFLECTOR PRADO 250 SUNROOF
3195184		4	4	4	M8 STUD PLATE
6151921		4	4	4	M8 X 20 STUD - BLACK
6151212		4	4	4	M8 X 1.25 NYLOC NUT - BLACK
4581085		4	4	4	WASHER FLAT M8X19X1.2
3752747		4	4	4	AIR DEFLECTOR MOUNT BRACKET
6151475		4	4	4	M6 U-NUT
6151459		4	4	4	M6 x 16 BUTTON HEAD HEX - BLACK
4584329		4	4	4	WASHER FLAT M6X12.2X1.2
APPLICATION – BASE RACK TO BLADE BRACKETS					
3195184		8	8	8	M8 STUD PLATE
6151921		16	16	16	M8 X 20 STUD - BLACK
6151212		16	16	16	M8 X 1.25 NYLOC NUT - BLACK
4581085		16	16	16	WASHER FLAT M8X19X1.2
APPLICATION – AIR DEFLECTOR TO BLADE BRACKETS					
6151300		2	2	2	M6 CAGE NUT
6151459		2	2	2	M6 x 16 BUTTON HEAD HEX - BLACK
4584329		2	2	2	WASHER FLAT M6X12.2X1.2
4581082		2	2	2	WASHER FLAT M6X20

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

STEP 1: REMOVAL OF CHANNEL COVERS OR ROOF BARS



If fitted, remove factory roof rails (see below).

If not, remove all three flat plastic covers from the vehicle's roof channels (see below).

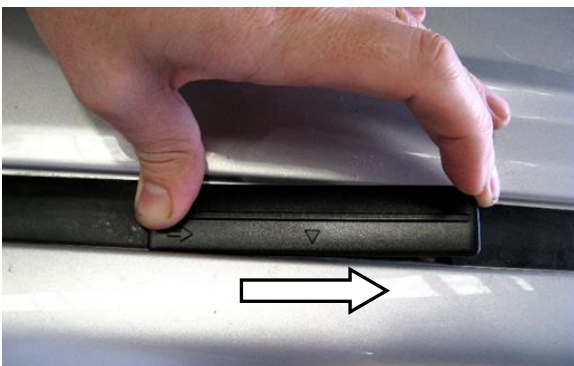


1. To remove factory roof rail end caps, unclip base from the bottom up by pulling outward with a panel remover, then slide out horizontally.

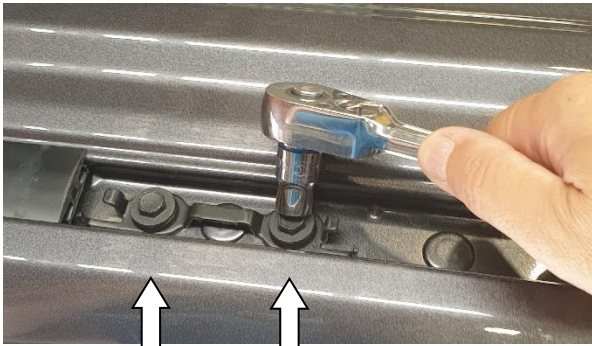


To remove factory roof rail middle caps, unclip by pulling from the back of the rail.

You can then unscrew the central bolt (12mm socket).



To remove flat plastic covers, push in the direction of the arrows and then lift the opposite end up.



2. Remove all the brackets from the roof.
Discard plastic covers, rails, brackets & fasteners.

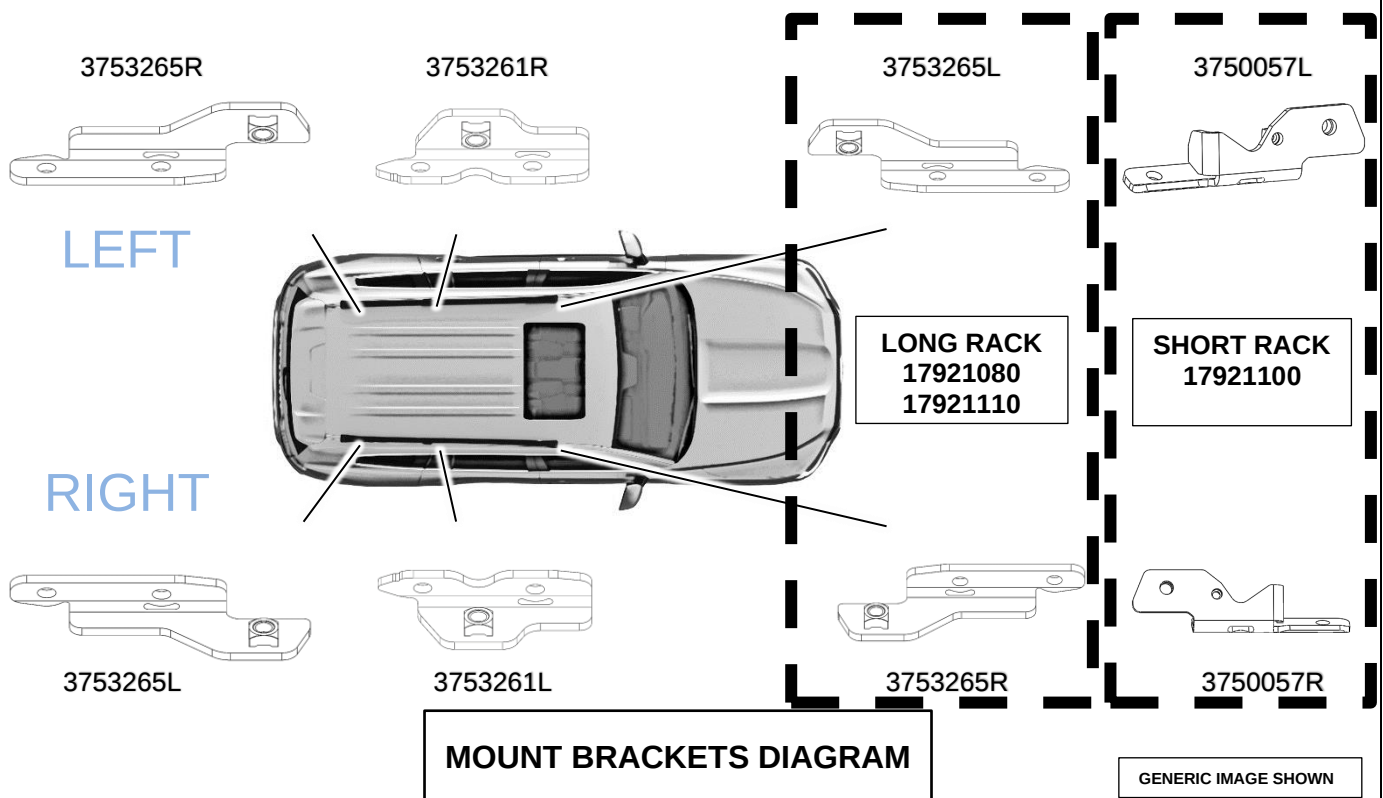
IMPORTANT NOTE:

Anchors are sleeved with a thin plastic tube.

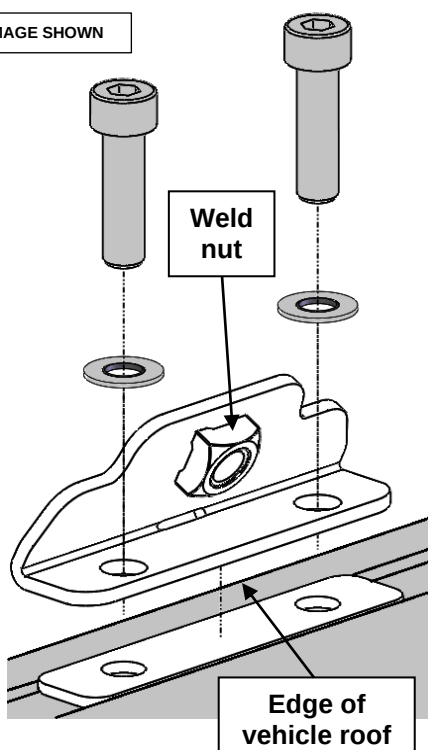
When removing or installing brackets, be careful **NOT TO PUSH THE TUBES DOWN**.

The anchors are connected to these tubes and will easily come loose with them.

STEP 2 – ATTACH MOUNTING BRACKETS TO ROOF



GENERIC IMAGE SHOWN



3. Place a rubber packer carefully over each of the sets of holes in the roof channels.
4. Position the mounting brackets following the mount brackets diagram, so that the weld nuts are facing towards the centre of the vehicle.

Attach each bracket to the roof mounting points using M8 x 30 Socket head screws and M8 Bonded washers as shown.

IMPORTANT NOTE:

Install both screws as anchors in roof can come loose and twist unless both screws are installed before tightening.

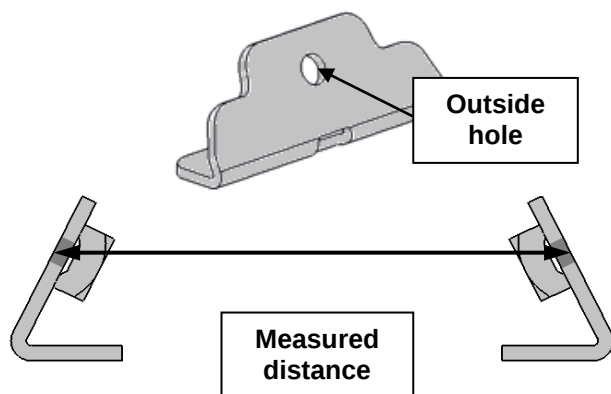
Note: Mount Brackets are not meant to sit parallel to the car's roof channels. Align holes, not sides of brackets.

5. Once both screws have been inserted, tighten to specified torque



Torque M8 to 22Nm

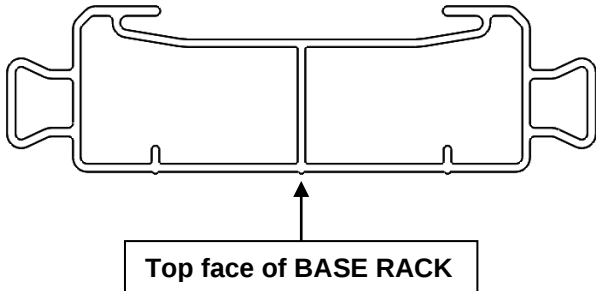
GENERIC IMAGE SHOWN



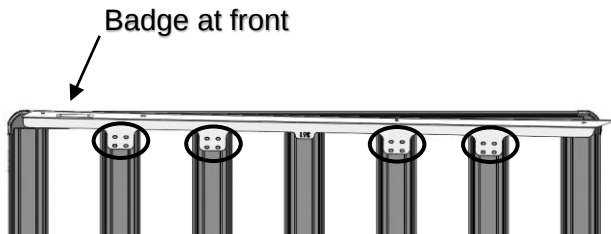
6. Using a tape measure, measure across the vehicle between the middle of the hole on the outside face of the front and rear set of mounting brackets. Make a note of each measurement.

Position	Distance
Front	
Rear	

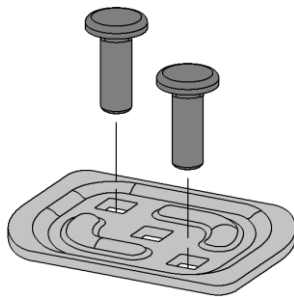
STEP 3 – ASSEMBLE BASE RACK WITH BLADE BRACKETS



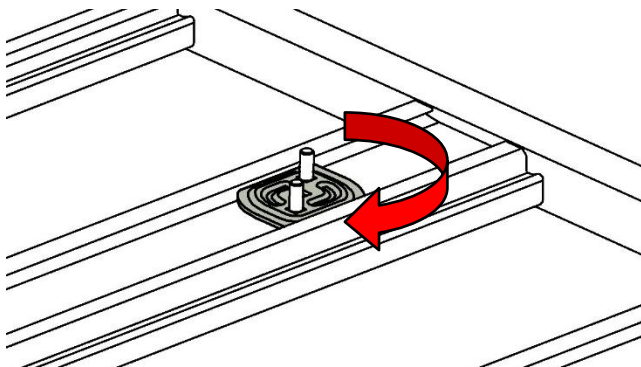
7. Place the BASE RACK face down on a clean flat surface. Provide protection to the top face of BASE RACK to avoid marking of surfaces



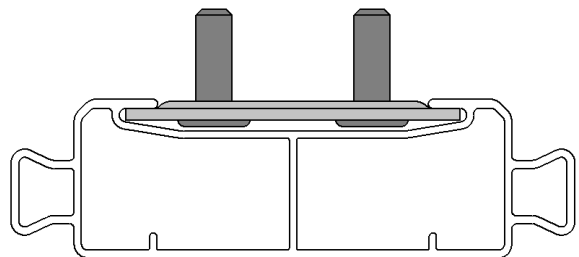
8. Check the position of the mounting plates (circled in image) on the blade brackets in relation to the channels on the BASE RACK.

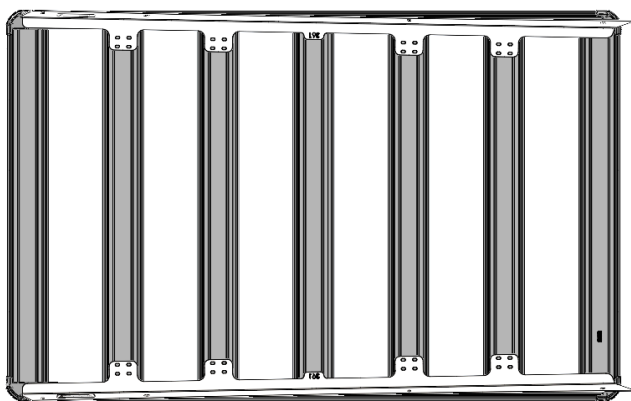


9. Insert two, M8 x 20 Studs into each of the stud plates as shown.



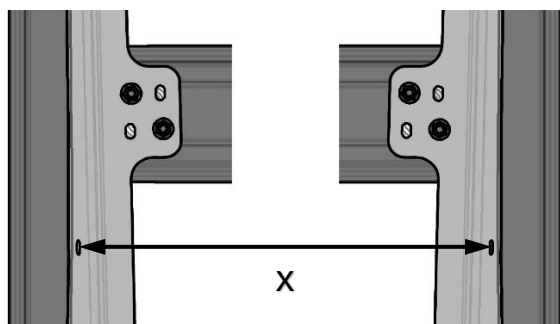
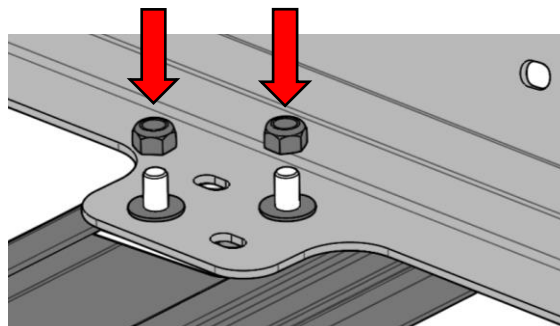
10. Insert the assembled stud plates into the correct BASE RACK channels. Rotate the plates 90 degrees.





11. Flip the blade brackets over so they are upside down and carefully place on top of the BASE RACK. When doing so ensure the M8 studs in the stud plates go through the slots. Then secure the blade brackets to the BASE RACK using M8 flat washers and nyloc nuts.

Do not fully tighten, allowing each blade to move.



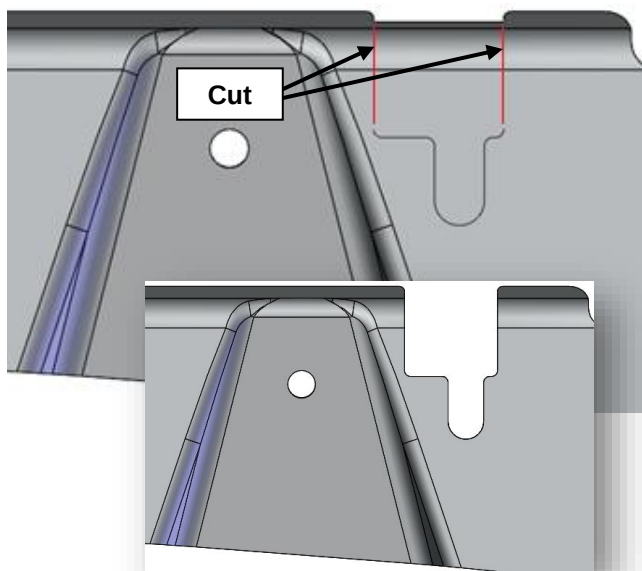
12. Using measurements recorded in Step 6, adjust the location of the blade bracket on the BASE RACK.

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

STEP 4 – ASSEMBLE AIR DEFLECTOR

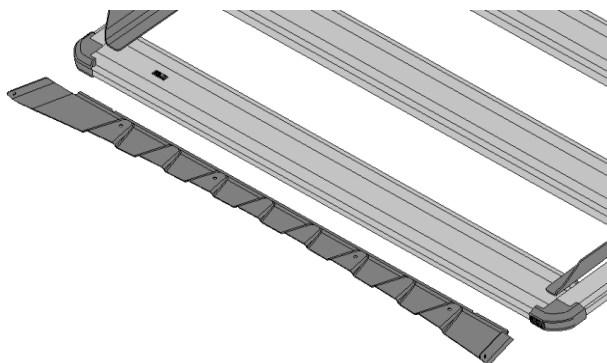
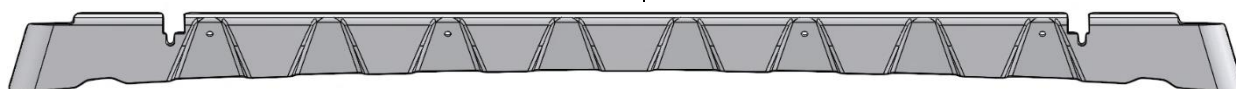


OPTIONAL: LIGHTBAR FITMENT

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

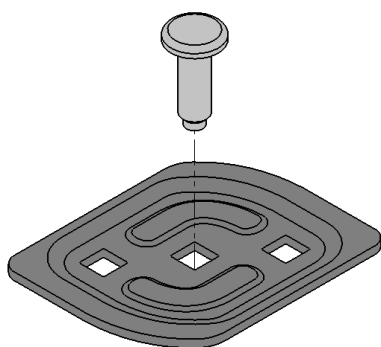
Refer to the instructions provided with the BASE RACK light bar for details on installing the light bar.

13. -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.

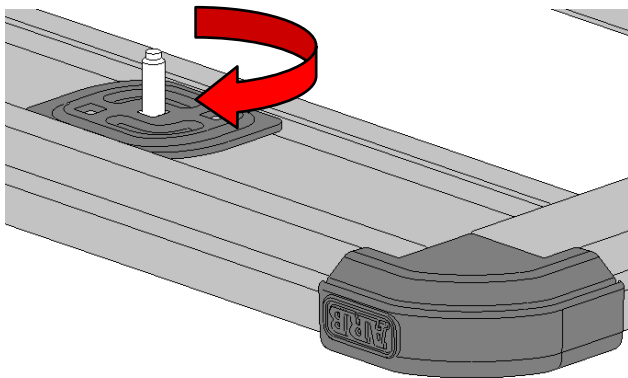


Note: BASE RACK should be upside down with the vehicle mount brackets fitted.

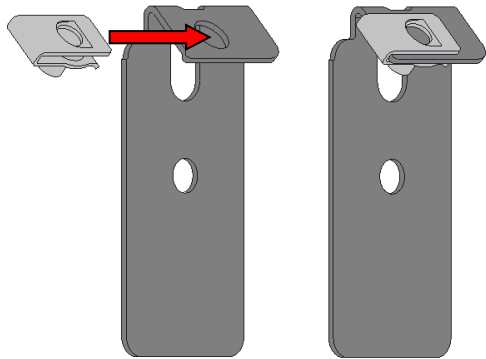
14. Lay the air deflector face down, parallel with the front of the BASE RACK. This will help determine the general position for the stud plates. Ensure the distance between the end of the deflector and outside of the tray is the same on both sides.



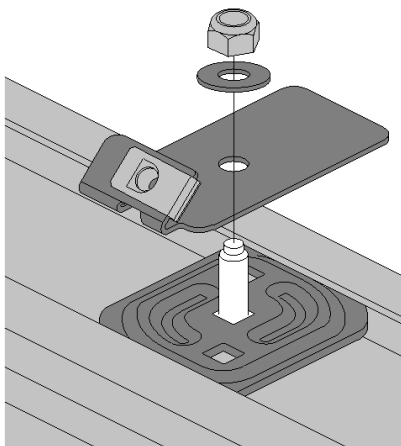
15. Insert one M8 x 20 Stud into each of the Stud Plates as shown.



16. 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.

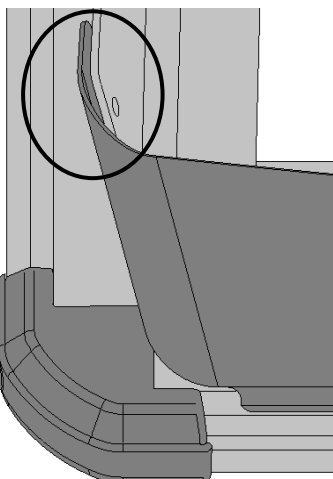


17. Snap one u-nut onto each of the four air deflector mounting plates. Take care to ensure the u-nut is oriented correctly. See image.



18. Attach the air deflector mounting plates to the stud plates with an M8 flat washer & nyloc nut.

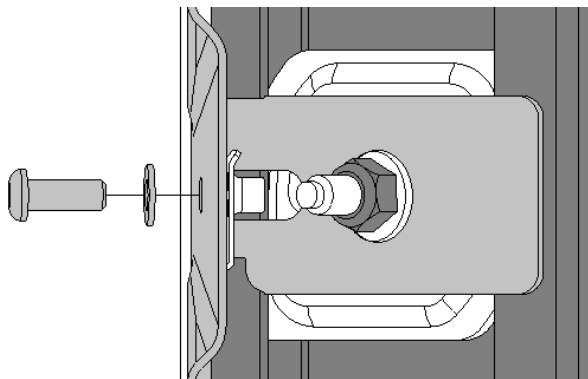
Leave nut loose enough to allow assembly to slide along channel.



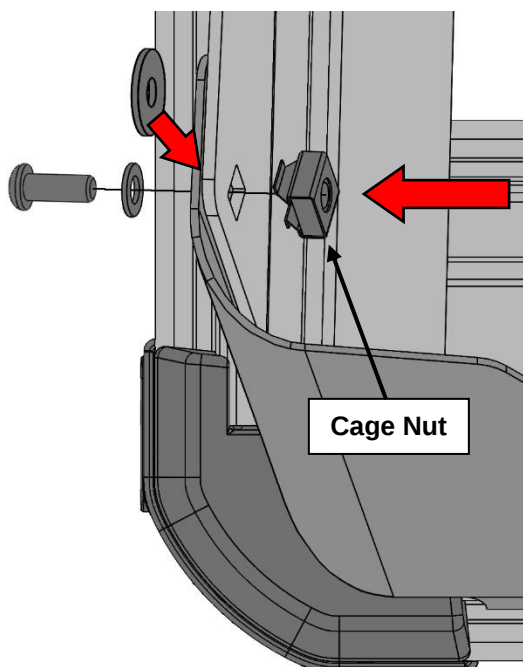
19. Flip the air deflector over and offer it up to the assembled BASE RACK and blade brackets.

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

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 the M6 Button head screws and black M6 washer shown.



SKIP STEP IF FITTING SHORT RACK 17921100.

21. Install cage nut in location shown.

Place the M6x20 washer between the blade and the air deflector and secure using the remaining M6x16 Button head screws, M6x12 washers, as shown.

22. Tighten all screws to specified torque.

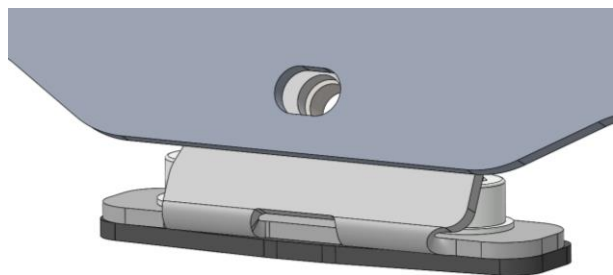


Torque M8 to 22Nm



Torque M6 to 9Nm

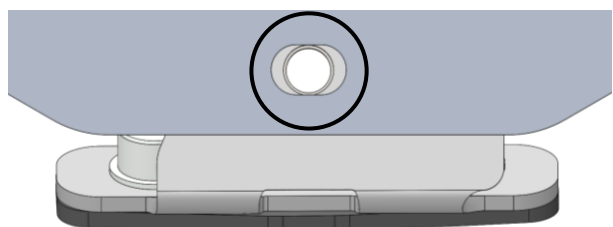
STEP 5 – ASSEMBLE BASE RACK TO ROOF



GENERIC IMAGE SHOWN

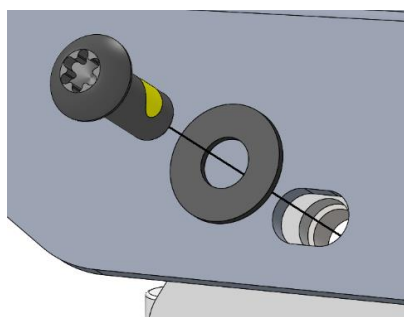
1. With assistance, carefully place the BASERACK on the vehicle so the inside of the blade brackets rests on the outside of the mounting brackets. The entire BASERACK assembly should be clear of the vehicle roof. All mounting holes/slots should align closely.

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



GENERIC IMAGE SHOWN

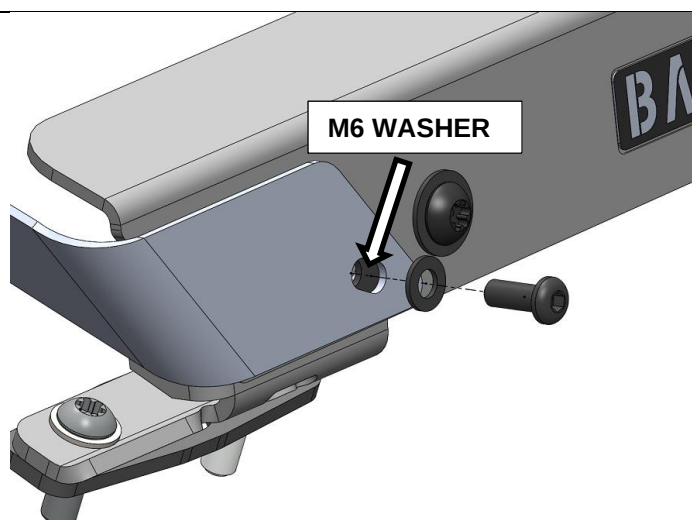
2. Confirm BASE RACK is correctly aligned to vehicle. If it is not, it is recommended to remove the BASE RACK from the vehicle roof and repeat the mounting process from the measurement step.



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



Torque M8 to 22Nm



M6 WASHER

SKIP STEP IF FITTING LONG RACK 17921080/1110.

4. Fasten deflector to blade using one M6 Button head screw and washer each side into the front mounting foot. Place a 20mm M6 washer between deflector and blade as shown. Tighten all screw to the specified torque.



Torque M6 to 9Nm

FITTED PRODUCT

