

ARB **BASE RACK** FITTING INSTRUCTION

Part Number(s):
17940070

Suits BASE RACK:
1770060/70

Product Description: **BASE RACK fitting kit suits:**

- **Ford Ranger Wildtrak 2011 On models PX, PXII & PXIII**

WARNING

REGARDING VEHICLES EQUIPPED WITH SRS AIRBAG;

When installed in accordance with these instructions, the cab rack does not affect operation of the SRS curtain airbags.

ALSO, NOTE THE FOLLOWING:

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any cab rack component, contact your nearest authorised ARB stockist. Repairs or modifications must not be attempted.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ Do not remove labels.
- ◆ 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

ARB 4x4 ACCESSORIES

Corporate Head Office

42-44 Garden St
Kilsyth, Victoria
AUSTRALIA 3137

Tel: +61 (3) 9761 6622
Fax: +61 (3) 9761 6807

Australian enquiries
North & South American enquiries
Other international enquiries

sales@arb.com.au
sales@arbusa.com
exports@arb.com.au

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 table below gives the BASE RACK net payload for fitting kit 17940020, using the vehicles maximum vehicle 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) |
|----------|-----------|--------------------------------|-------------------------------|-------------------------------|
| 17940070 | 1770060 | 80 / 176 | 20 / 44 | 60 / 132 |

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

It is important to follow these safety 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:

| | |
|----------------------------------|-----------------------------|
| Basic tool kit | Centre punch & small hammer |
| Torque wrench | Metric Torx key set |
| 9.0mm drill bit & cordless drill | Metric Allen key set |

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

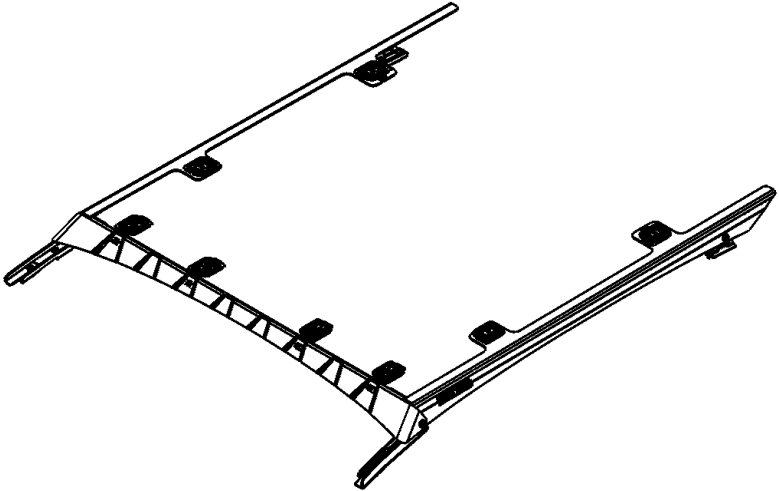
| | |
|--------------------|--|
| Protective eyewear |  |
| | Hearing protection  |

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.



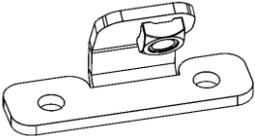
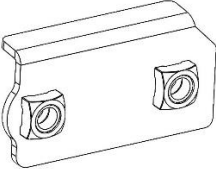
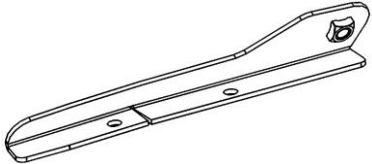
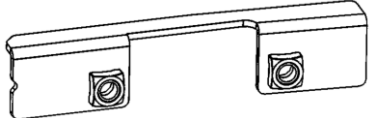
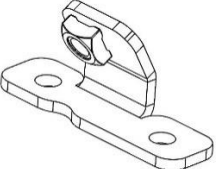
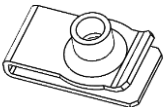
FASTENER TORQUE SETTINGS:

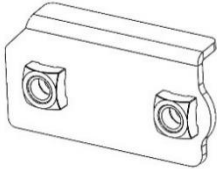
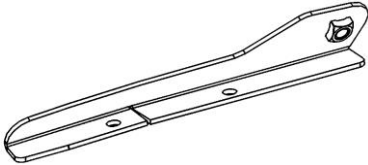
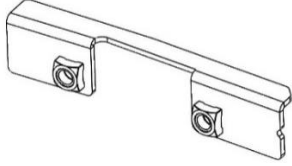
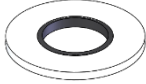
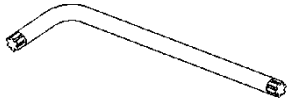
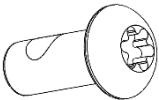
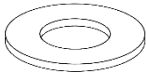

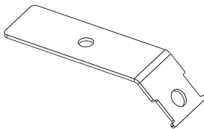
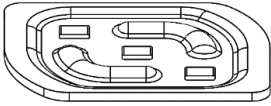
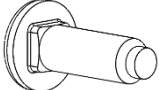
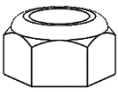

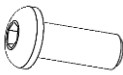

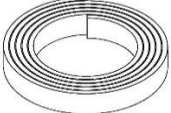
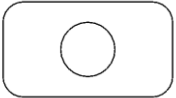
| SIZE | Torque Nm | Torque lbft |
|-----------------|-----------|-------------|
| M6 | 9Nm | 7lbft |
| M8 | 22Nm | 16lbft |
| M10 | 44Nm | 32lbft |
| Seat Belt Bolts | 50Nm | 36lbft |
| M12 | 77Nm | 57lbft |

PARTS LISTING - BASE RACK fitting kit

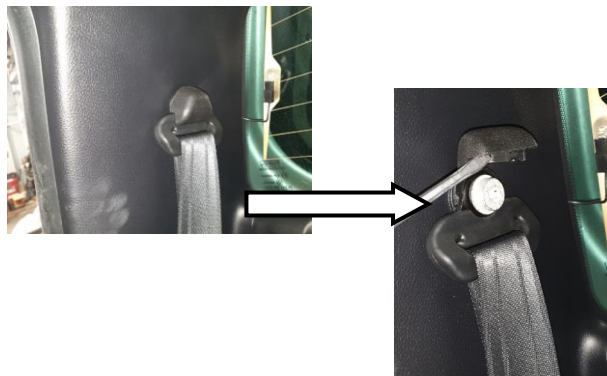
| PART NUMBER | SUITS BASE RACK | QTY | DIAGRAM |
|-------------|-----------------|-----|--|
| 17940070 | 1770060 | 1 |  |

PARTS LISTING 17940020

| PART NO. | PICTURE | QTY | DESCRIPTION |
|----------|---|-----|------------------------------|
| 3750573L |  | 1 | BLADE BRACKET RANGER LH |
| 3750573R |  | 1 | BLADE BRACKET RANGER RH |
| 4655137R |  | 1 | WELD ASSY REAR BLADE FOOT R |
| 4655138R |  | 1 | WELD ASSY REAR BLADE NUT R |
| 4655139R |  | 1 | WELD ASSY FRONT BLADE FOOT R |
| 4655140R |  | 1 | WELD ASSY FRONT BLADE NUT R |
| 4655137L |  | 1 | WELD ASSY REAR BLADE FOOT L |
| 6151475 |  | 4 | M6 U-NUT |

| | | | |
|----------|---|----|--|
| 4655138L |  | 1 | WELD ASSY REAR BLADE NUT L |
| 4655139L |  | 1 | WELD ASSY FRONT BLADE FOOT L |
| 4655140L |  | 1 | WELD ASSY FRONT BLADE NUT L |
| 4584415 |  | 8 | M8 WASHER FLAT - BONDED |
| 6151934 |  | 1 | TORX ALLEN KEY |
| 6151625 |  | 12 | M8 X 1.25 X 25 BUTTON HEAD TORX - BLK |
| 4581085 |  | 16 | M8 WASHER FLAT - BLACK |
| 3750574 |  | 1 | FRONT DIFFUSER |
| 3750575 |  | 4 | DIFFUSER MOUNT BRACKET |
| 3195184 |  | 8 | M8 STUD PLATE |
| 6151921 |  | 12 | M8 X 20 STUD - BLACK |
| 6151212 |  | 12 | M8 X 1.25 NYLOC NUT - BLACK |
| 4584329 |  | 4 | M6 WASHER FLAT - BLACK |
| 6151459 |  | 4 | SCREW BHD M6x16 BTZP480 |
| 6781408 |  | 3 | TAPE DOUBLE SIDED 0.8 X 15 X 300 |
| 668PB028 |  | 1 | TAPE-RL-24x6.4x1600mm SBR7010 |
| 6253417 |  | 8 | SPACER BUMPER SUPPORT SUIT NP300 21 ON |

FITTING PROCEDURE



The interior roof lining needs to be released along all edges to install the cab rack kit.

Note: Ensure you retain all fasteners and clips to use when reinstalling the roof lining.

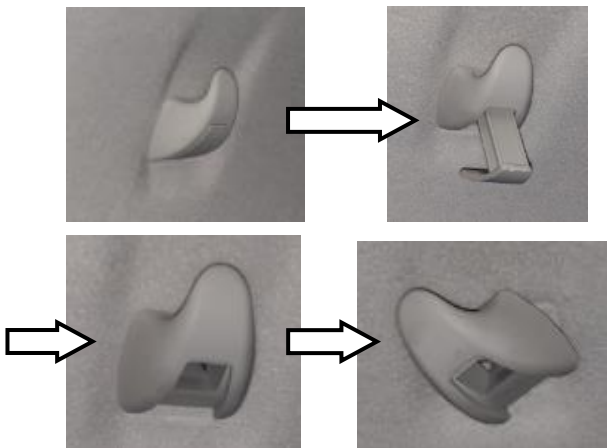
1. Remove the plastic cap to expose the retaining bolt on both rear side seat belts as shown



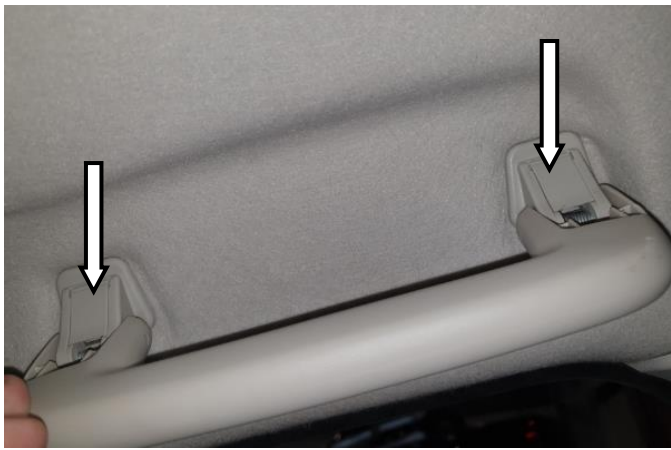
2. Undo the M10 torx head bolt on each side rear seat belt and remove. Allow the seatbelt to hang down as shown.



3. Pull back the door seal on the top half of the door jamb. Unclip and pull back the side rear pillar trims on both sides as shown.



4. The hooks above the rear windscreen need to be removed. Remove the centre section, rotate 45° and carefully remove the hook from the roof lining.



5. Remove the 4x grab handles. This is done by lifting the plastic covers to expose the torx head screws.



6. Remove the plastic cover to expose the retaining bolt on both front seat belts as shown.
Undo the Torx head bolt on each front seat belt and remove. Allow the seatbelt to hang down.



7. Pull off the door seal along the tops of front door jambs. Unclip B-pillar plastic trim on both sides.



8. Remove the grab handle on both A-pillar trims. There are two small hex bolts behind the plastic caps.



9. Both sun visors need to be removed. Remove plastic covers exposing the small torx screws.
10. Let the visors carefully hang by the wiring loom as shown.



11. Unclip the A-pillar trims.
12. The roof lining should now be free along all edges.



13. Drop the roof lining, locate the nuts located up in the roof cavity, and use a ratchet to remove. There are 4 nuts per rail (2 at the front and back).



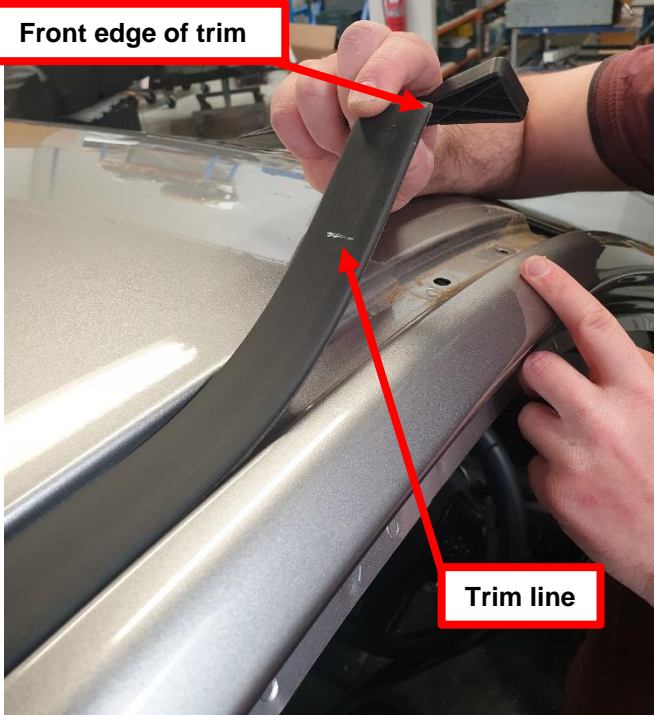
Note: Ensure not to damage the roof lining, when reaching up into the roof cavity



14. Once the nuts are removed, reach up and gently remove the brackets (2 per side).



15. Once all the brackets are removed, remove the OE rails.



16. Measure approximately 65mm back from the front edge of the trim, and mark a line.
17. Pry the exterior roof trim from the roof until there is sufficient access to the trim line. Take care not to bend the remaining trim.



18. Remove excess trim using some pliers or an equivalent cutting apparatus.



Note: Ensure to line the roof with some protective fabric whilst cutting.

19. Apply a section of new double sided tape to the exposed underside of the trim (tape supplied in kit), and reattach to roof channel.

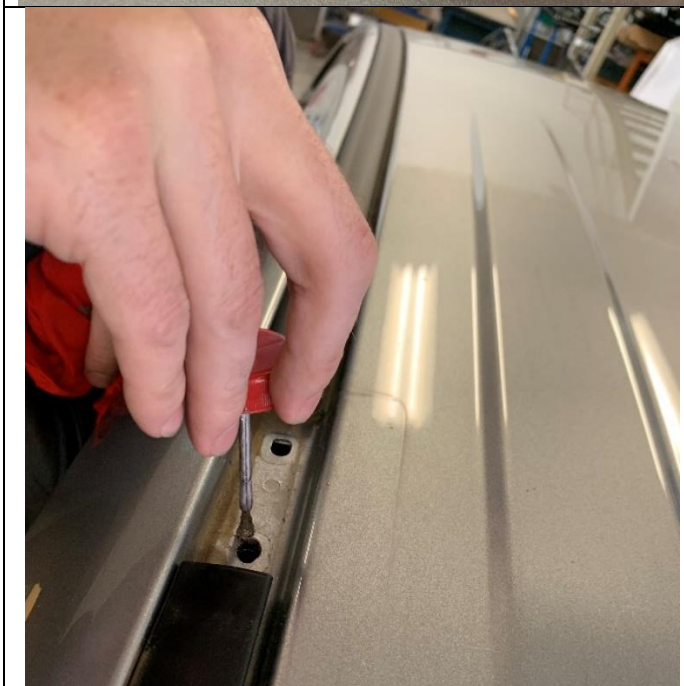


20. Using a step drill, drill out the front hole at the front of the vehicle to $\Phi 8\text{mm}$.

Note: Ensure to use a vacuum on the inside cavity of the roof whilst drilling.



21. Repeat the same process as step 20, and drill out the rear slot at the rear of the vehicle to $\Phi 8\text{mm}$.



22. Clean openings of channels to remove any debris and or dirt.

23. Apply cold galvanising solution or rust preventative paint to cut edges of drilled holes.

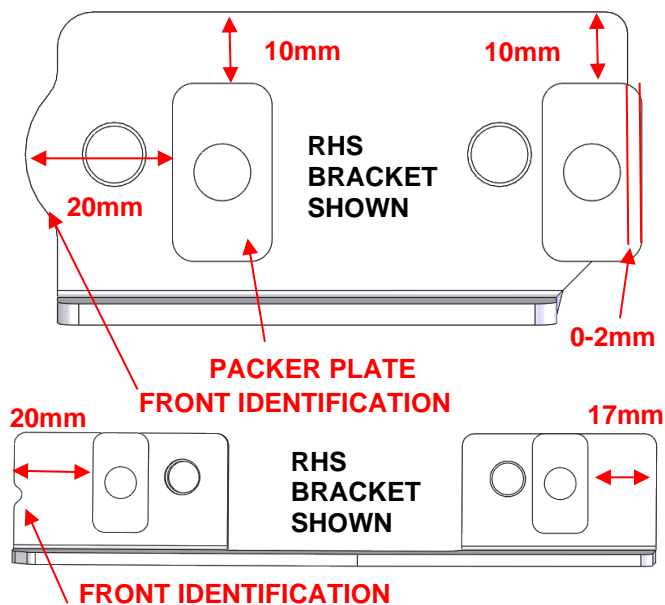
24. Repeat steps 16 to 23 on the opposite side of the vehicle.



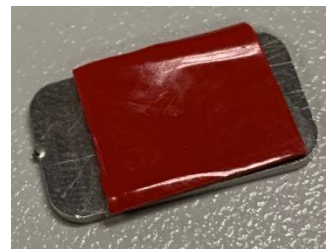
25. Fit the foam tape to the underside face of the front mounting feet (as seen in the image to the left). Ensure the tape covers the surface.
26. Using the bracket holes as a guide, drill 2x $\Phi 6\text{mm}$ holes (2 per bracket) through the tape. Ensure not to tear the tape.



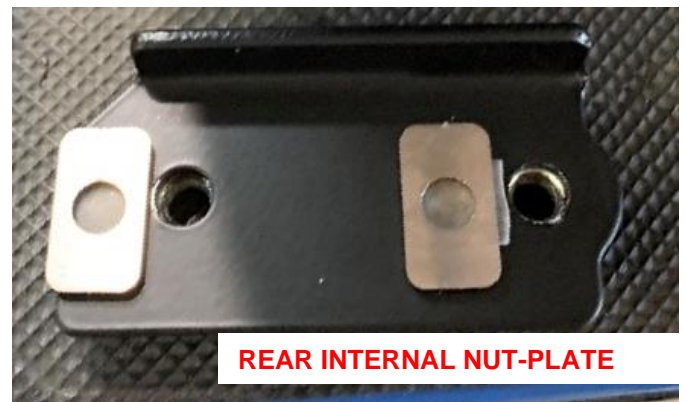
27. Repeat steps 25 & 26 for the rear feet.

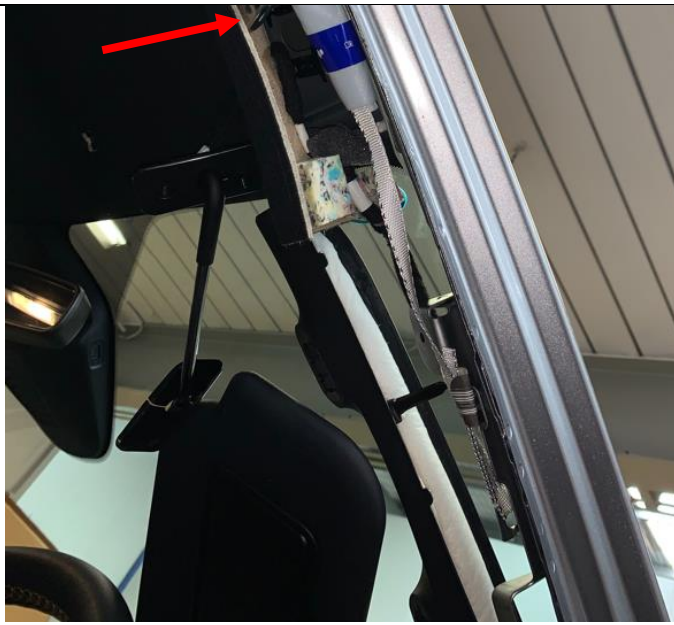


28. Cut the double sided tape into 20mm strips, and apply them to the 8x 1mm packing plates.

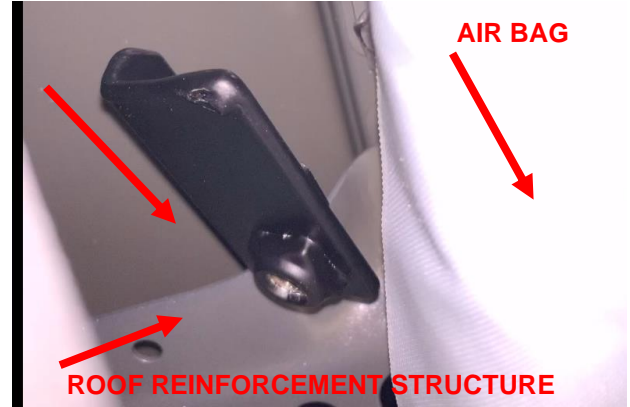


29. Apply the packing plates to the internal nut plates (as shown below).





30. At the front of the vehicle, carefully pry open the interior trim (minimise the amount of pressure placed on the trim), and slide the front internal nut plate above the air bag and on to the inner roof skin. Ensure that the nut plate is inserted from the rear of the reinforcement structure, and through the opening between the roof. Once through, align the holes of the nut-plate with their respective roof holes.

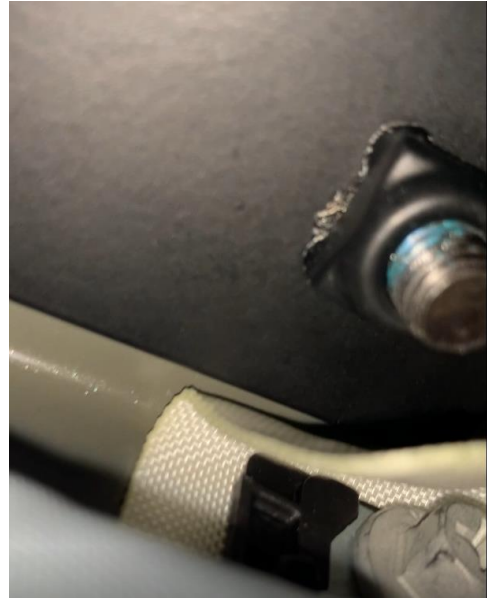


31. Once the holes are aligned, secure the front foot to the front internal nut-plate using M8x25mm TORX Button Head Screw (2) and M8x16 Bonded Washer (2).

Note: TORX Allen key provided.




32. At the rear of the vehicle, carefully pry open the interior trim (minimise the amount of pressure placed on the trim), and slide the rear internal nut plate above the air bag and on to the inner roof skin. Ensure that the holes of the nut-plate align with their respective roof holes.

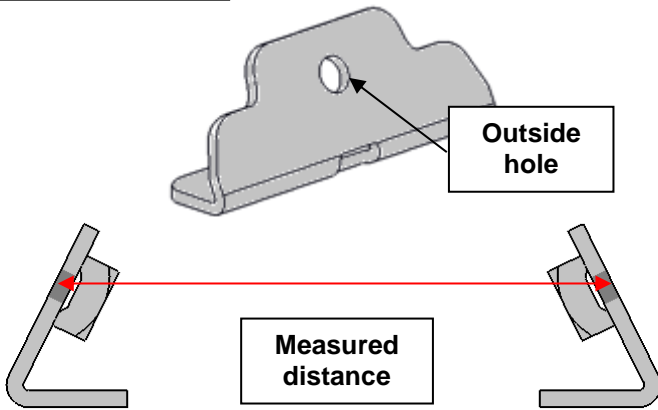


33. Once the holes are aligned, secure the rear foot to the rear internal nut-plate using M8x25mm TORX Button Head Screw (2) and M8x16 Bonded Washer (2).

34. Repeat steps 30 – 33 on the other side of the vehicle.
35. Tighten all 4 feet to the correct torque settings

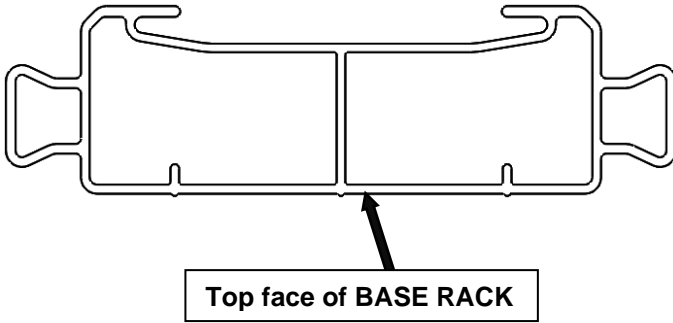
 M8 - 22 Nm.

Generic Image

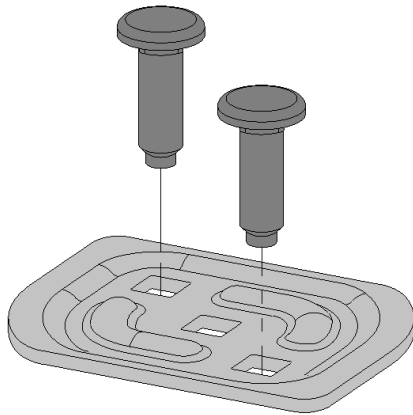


36. Using a tape measure, measure across the vehicle between the middle of the hole on the outside face of the front and rear set of mounting brackets. Make a note of each measurement.

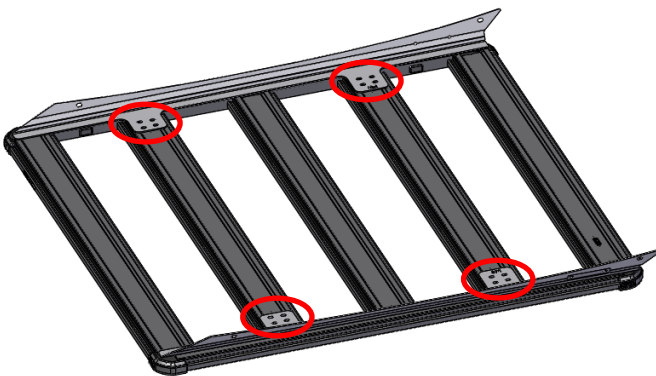
| Position | Distance |
|----------|----------|
| Front | |
| Rear | |



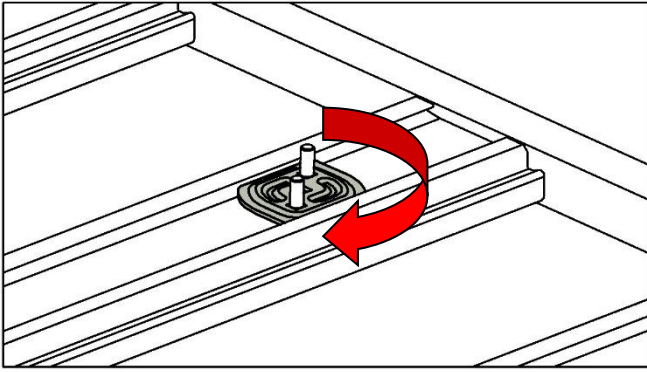
37. Place the BASE RACK face down on a clean flat surface. Provide protection to the top face of BASE RACK to avoid marking of surfaces.



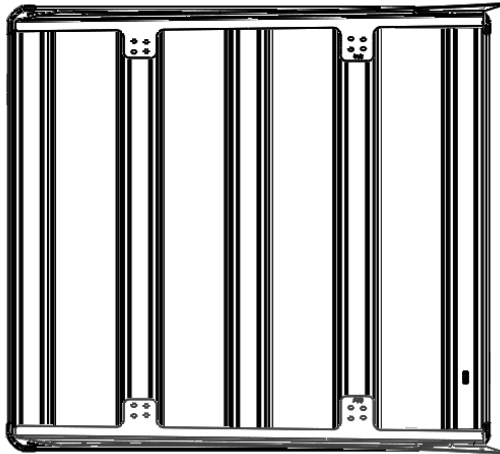
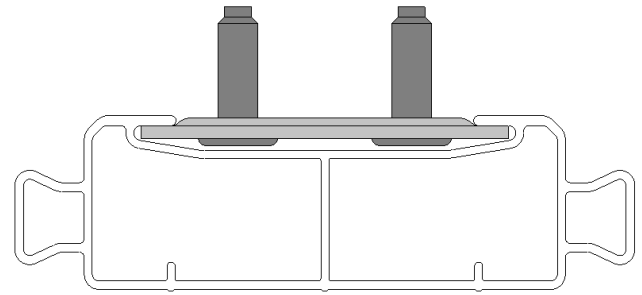
38. Insert 2, M8 x 20 Studs into 4 of the Stud Plates as shown.



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

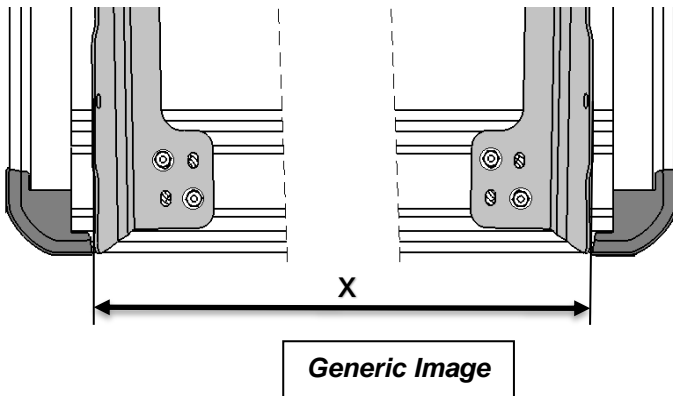
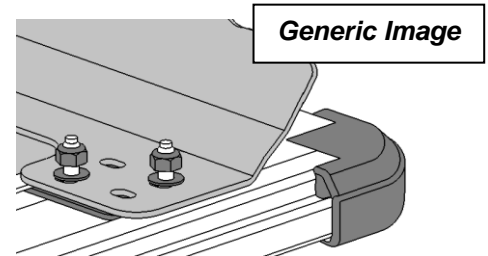


40. Insert the previously assembled stud plates into the correct BASE RACK channels. Rotate the plates 90 degrees.



41. 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.

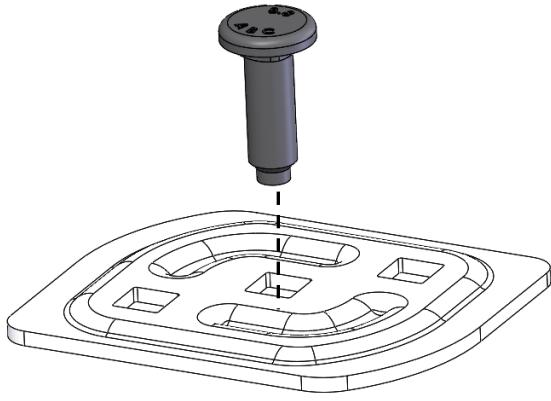
Do not fully tighten, allowing each blade to move.



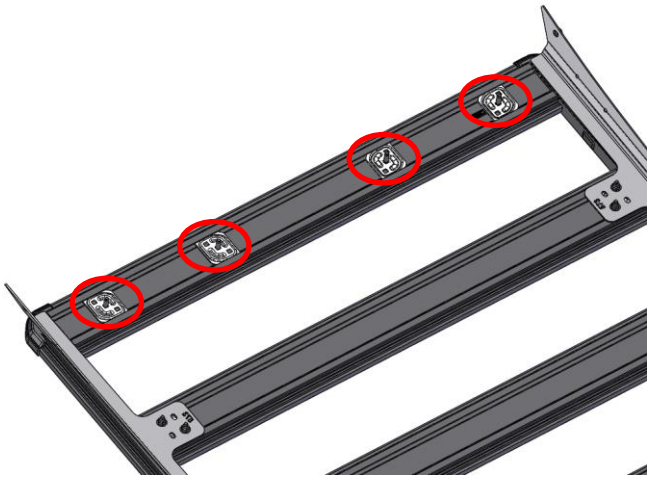
42. Using the previously recorded measurements, adjust the location of the blade bracket on the BASE RACK.

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 to specified torque.

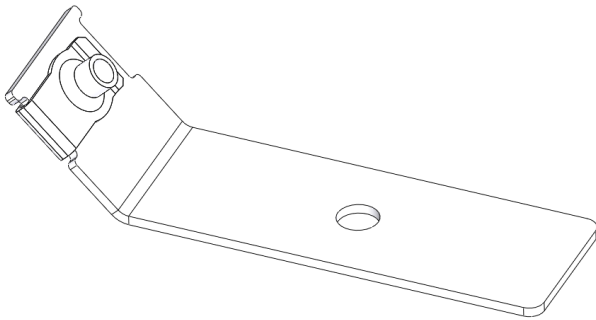
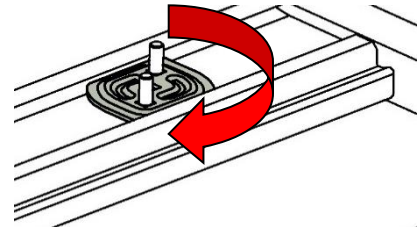




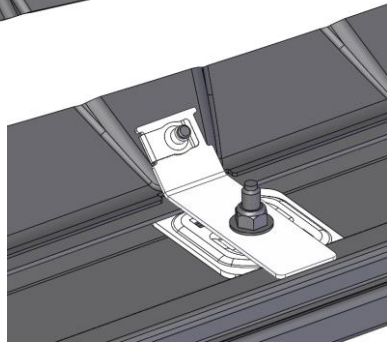
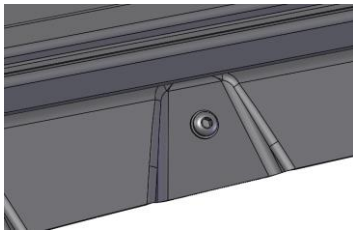
43. Insert an M8 x 20 Stud into 4 of the Stud Plates as shown.



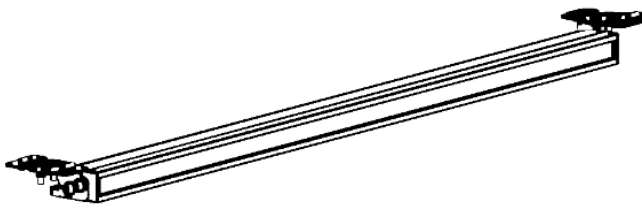
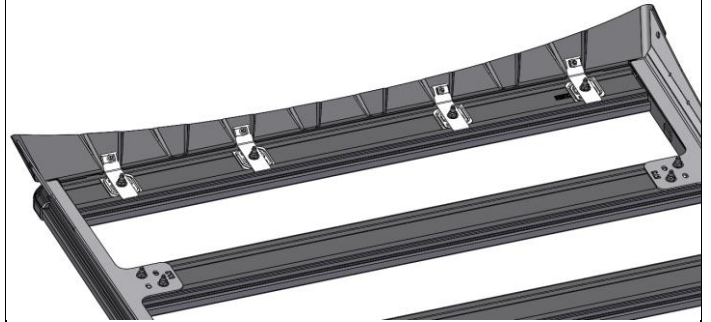
44. Insert the previously assembled stud plates into the correct BASE RACK channels. Rotate the plates 90 degrees.



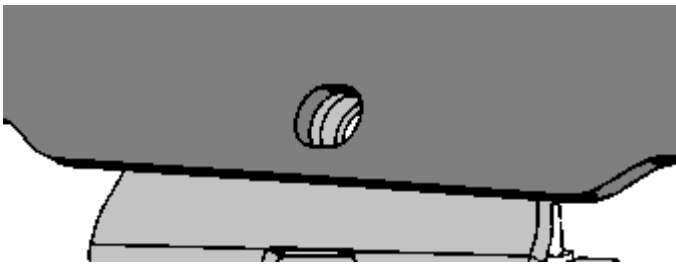
45. Fit M6 U-nuts to the 4x diffuser brackets as shown. The thread needs to be on the inside.



46. Loosely fit the diffuser to the mounts and brackets as shown. Use an M8 nyloc nut and washer to hold the diffuser brackets to the stud plates. Use M6 screws and washers to hold the diffuser to the brackets.
47. Tighten to specified torque.

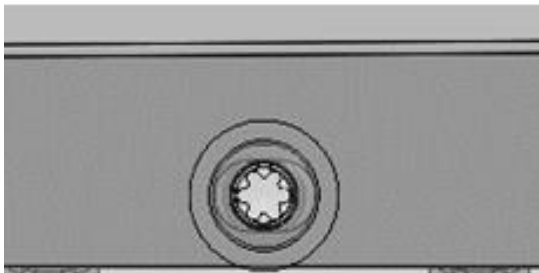


48. If fitting a BASE RACK lightbar it should be fitted to the BASE RACK at this point. Refer to instructions provided with the BASE RACK light bar for fitting details.

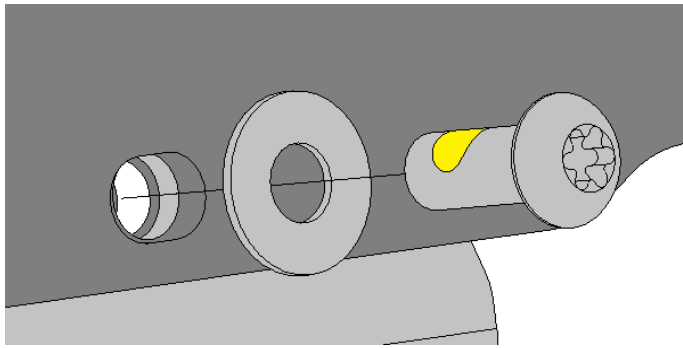


49. With assistance, carefully place the BASERACK on the vehicle so the inside of the blade brackets rests on the outside of the mounting brackets. The entire BASERACK assembly should be clear of the vehicle roof. All mounting holes/slots should align closely.

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



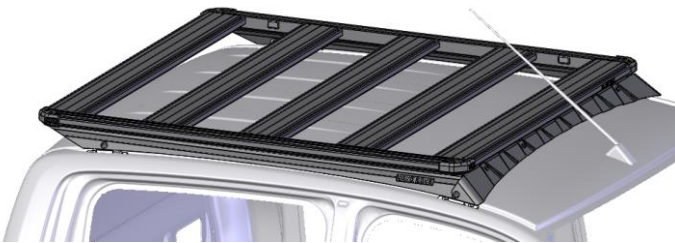
50. Confirm BASE RACK is correctly aligned to vehicle. If it is not it is recommended to remove the BASE RACK from the vehicle roof and repeat the mounting process from the measurement step 36.



51. 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.



PX & PXII aerial position shown



PXIII aerial position shown



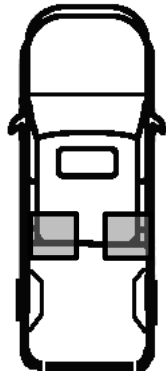
FITTED PRODUCT – 2020 PXIII Wildtrak Ford Ranger with 1770060 Base Rack



OPTIONAL STEP FOR BASE RACK WIRING KIT

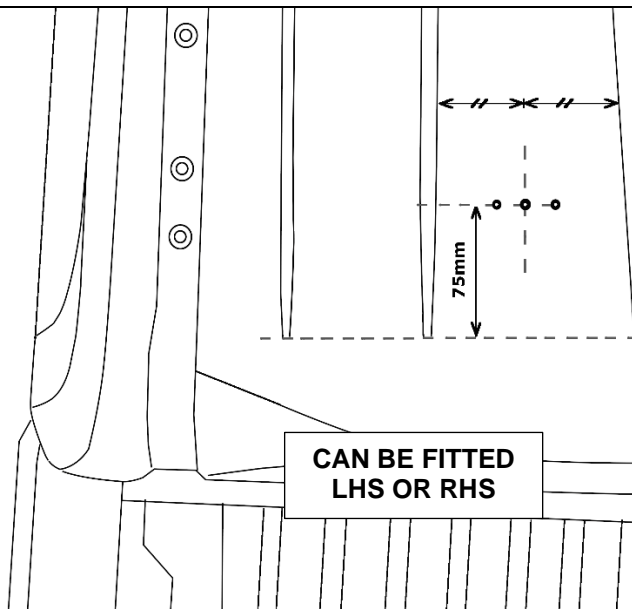
(1780400 & 1780410 SOLD SEPARATELY)

These steps are a vehicle specific supplement to the main instruction



52. The recommended location for the wiring kit for this vehicle is the rear, left or right hand side

! CAUTION – THIS STEP MAY REQUIRE DISASSEMBLY OF SEAT BELT MOUNTS AND WORK IN THE PROXIMITY OF CURTAIN AIR BAGS !



53. Mark out the hole location between the outer roof ribs as shown. Always verify they are clear inside the cabin before drilling

! CAUTION – TAKE CAUTION NOT TO DAMAGE CABLES ATTACHED TO THE INNER ROOF SKIN & ROOF LINING!



54. Run the wiring backward then follow the existing wiring loom down the rear pillar

ENSURE THE WIRING IS BEHIND THE AIRBAG

Obstruction of the airbag will prevent proper inflation and effectiveness

