



Mitsubishi Triton MV Series MY2024 on Scout Roof Rack FITTING INSTRUCTION

IMPORTANT! – READ BEFORE INSTALLATION

- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed, please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.
- This Rack Suits GSR / GSR Special Edition vehicles fitted with factory roof rails. Fitment for non roof rail equipped vehicles coming soon

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS	
Size	Torque Nm
M5	5 Nm
M6	9 Nm
M8	22 Nm
M10	44 Nm
M12	77 Nm

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

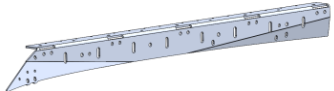
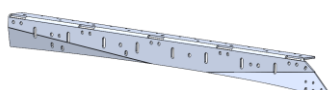
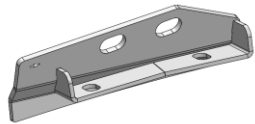
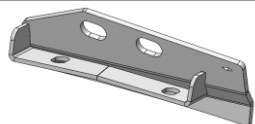
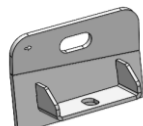
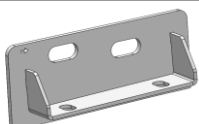
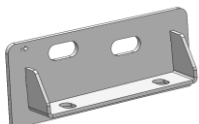
FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING


IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts – Main Fitting Kit

Qty	Part Number	Description	Image
1	B-1386L	MV Triton Scout Rack Side Rail	
1	B-1386R	MV Triton Scout Rack Side Rail	
1	B-1387	MV Triton Scout Rack Front Panel	
1	B-1388	MV Triton Scout Rack Wind Deflector	
1	RR-MTR-MV-24-SCT-ASM2L	MV Triton Scout Rack Front Mount	
1	RR-MTR-MV-24-SCT-ASM2R	MV Triton Scout Rack Front Mount	
1	RR-MTR-MV-24-SCT-ASM3L	MV Triton Scout Rack Mid Mount	
1	RR-MTR-MV-24-SCT-ASM3R	MV Triton Scout Rack Mid Mount	
1	RR-MTR-MV-24-SCT-ASM4L	MV Triton Scout Rack Rear Mount	
1	RR-MTR-MV-24-SCT-ASM4R	MV Triton Scout Rack Rear Mount	
1	B-1429L	MV Triton Scout Rack Ditch Finisher Panel	

1	B-1429R	MV Triton Scout Rack Ditch Finisher Panel	
1	UC-14-3-600MM	U CHANNEL RUBBER 600MM LONG, AMBASSADOR PART NUMBER 7 R32-50/U277	No Image

Main Parts – Cross Rail Kit

Qty	Part Number	Description	Image
5	E-0006 - 1150	Scout Roof Rack – Cross Bar Extrusion 1150MM	

Small Parts– Contained in Small Parts Kit Bag

QTY.	PART NO.	DESCRIPTION
16	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
8	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
8	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
6	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
30	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
30	M8 HD FLAT WASHER - BZP	M8 FLAT WASHER - High Tensile 19x8x2mm, ISO4042 ZnNi BLACK PASSIVATED FINISH
5	M8 NUT	Hex Nut, M8x1.25 G8.8 ZP
20	M8 FLAT WASHER- BLACK ZINC	M8 FLAT WASHER, 16.5x8.4x1.2, ISO4042 ZnNi BLACK PASSIVATED FINISH
25	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
10	M8 X 12 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X12X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
10	M6 FLAT WASHER	M6 FW
10	M6 X 12 HEX	M6X12 HEX BOLT, ZP, 8.8



TOOLS REQUIRED

The following tools and supplies will be required to install the product.

Hand Tools	Power Tools	Workshop Supplies
Metric Socket Set 8-19mm Socket Extension Bar Metric Spanner Set 10-19mm Hex (Allen) Key Set 4-6mm Trim removal tool set		Soft Blanket Isopropyl Alcohol Clean Shop Rags Double Sided Tape

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.</p>



1. IMPORTANT ASSEMBLY NOTE: For **ALL FASTENERS** during the assembly process leave finger tight until tightening step.
2. Assemble the roof rack. Start by setting out the 5 extrusions on a table or panel stand. Position them so they sit approximately 300mm (center to center) apart.

TOOLS REQUIRED

FASTENERS



3. Fit the side rail to the extrusion,

This is easiest to do when the ends of the extrusions are hanging over the edge of a table / workbench.

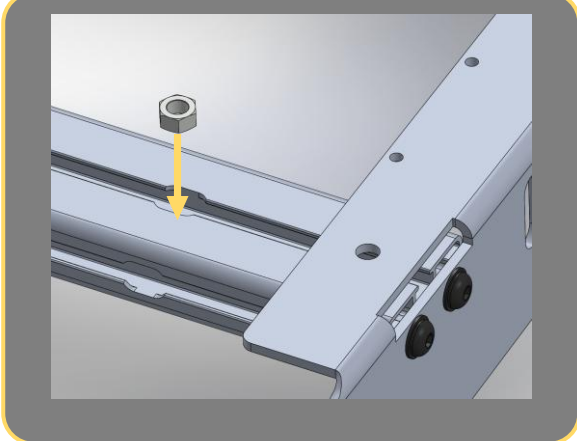
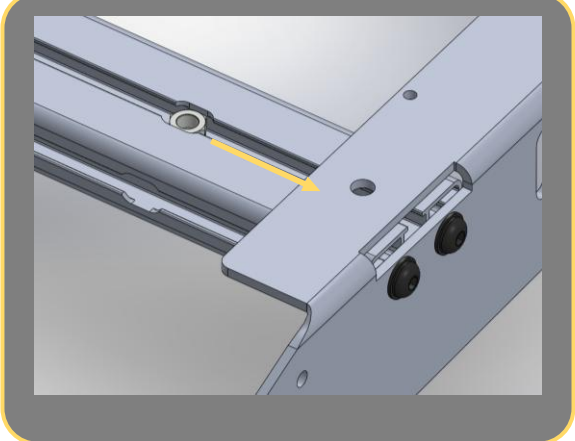
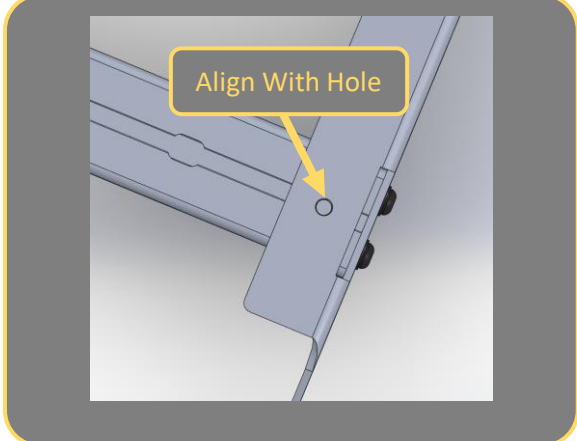
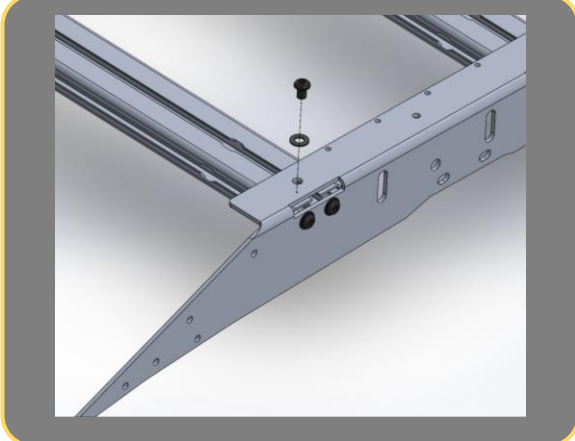
4. Secure using M8x20 Button Head bolts through the side face into the Tapped holes on the end face of the extrusion.
5. Complete steps for both side rails.

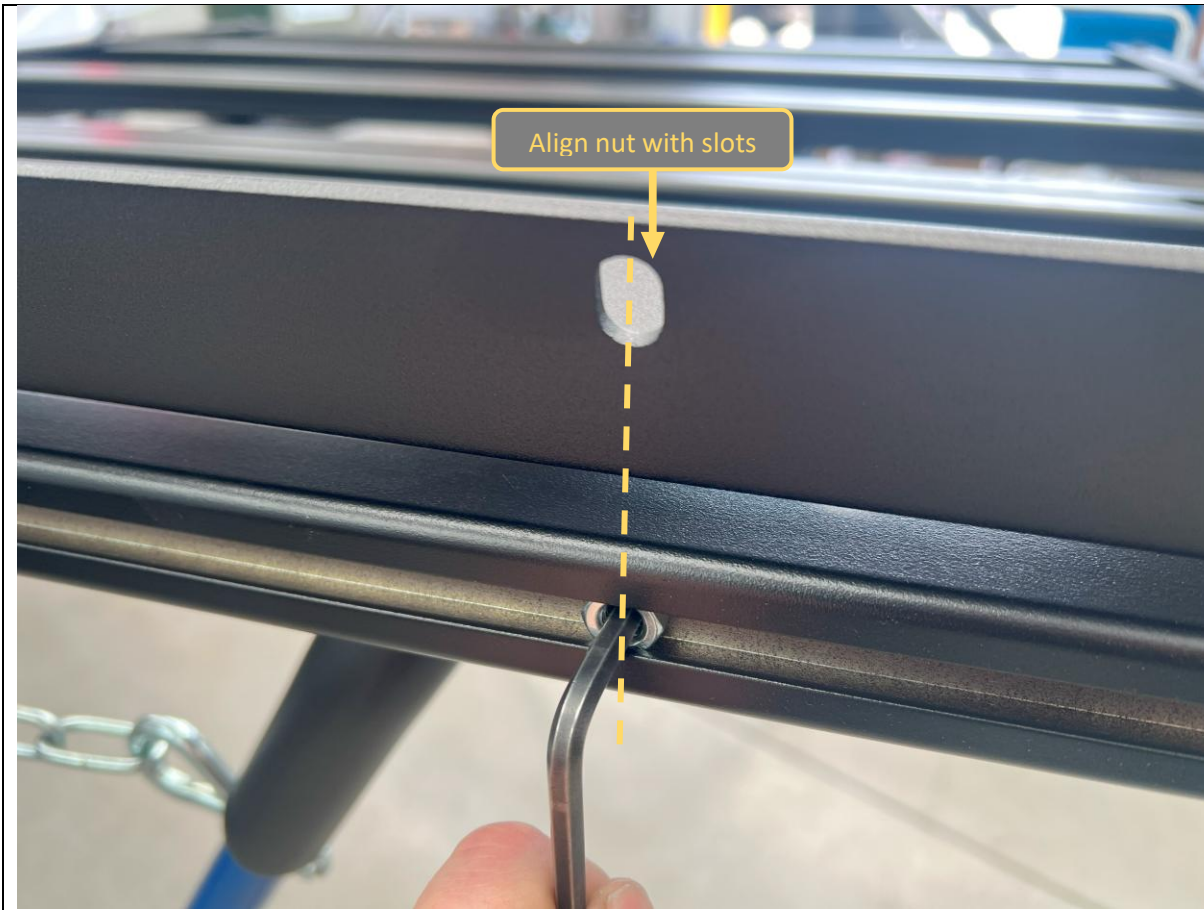
TOOLS REQUIRED

5mm Hex Key

FASTENERS

10x M8x20 Button head bolt.
10x M8 Flat Washer

   	<div data-bbox="256 1120 920 1444"> <ol style="list-style-type: none"> 6. Insert M8 Flange Nut into each track for securing top face of side rail. 7. Drop nut into slot in extrusion, then slide nut sideways in slot and align with hole in the side rail. 8. Secure with M8x16 Bolt + Flat Washer. 9. Complete top bolt fitment for other side of rail. </div> <div data-bbox="1048 1120 1281 1158"> <p>TOOLS REQUIRED</p> </div> <div data-bbox="1066 1191 1265 1232"> <p>5mm Allen Key</p> </div> <div data-bbox="1086 1422 1244 1456"> <p>FASTENERS</p> </div> <div data-bbox="992 1491 1342 1599"> <p>5x M8 Flange Nuts 5x M8x16 Button head bolt 5x M8 Black Washer</p> </div> <div data-bbox="1106 1635 1224 1671"> <p>Per Side</p> </div>	
---	---	--



10. Insert 5x M8 nuts into the front slot of the front extrusion.
11. Using the hole positions in the vertical face of the front panel as a guide, use a screwdriver to move nuts into correct positions. Gravity should hold the nut in position.
12. Position 5x M8x12 Button head and M8 Flat washers on the rack within easy reach for the next step.

TOOLS REQUIRED

Screwdriver / Allen key

FASTENERS

5x M8 Nuts
5x M8x12 Button Head
5x M8 Black Washer



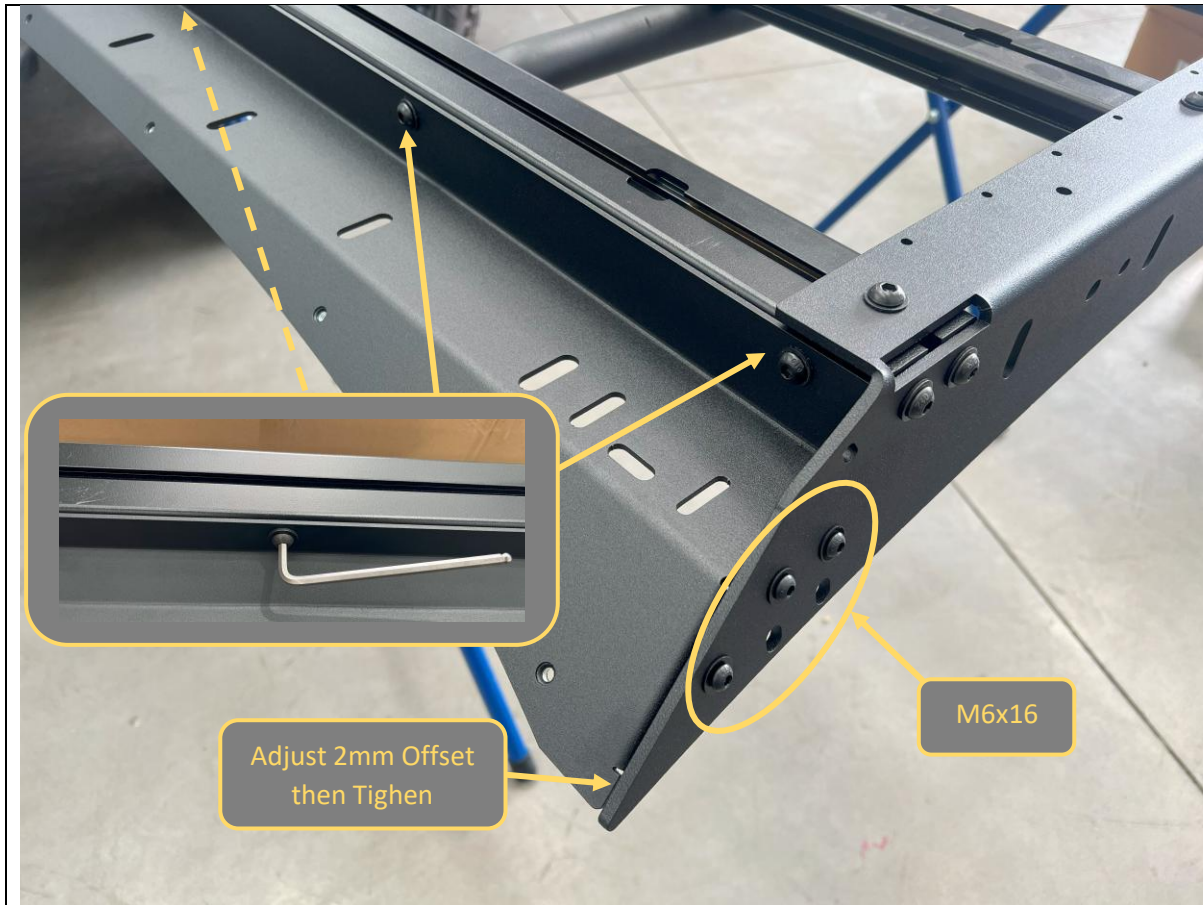
13. Fit the Front panel to the rack assembly. Secure to the pre-placed nuts in the front extrusion using the M8x12 Button head bolts and flat washers.

TOOLS REQUIRED

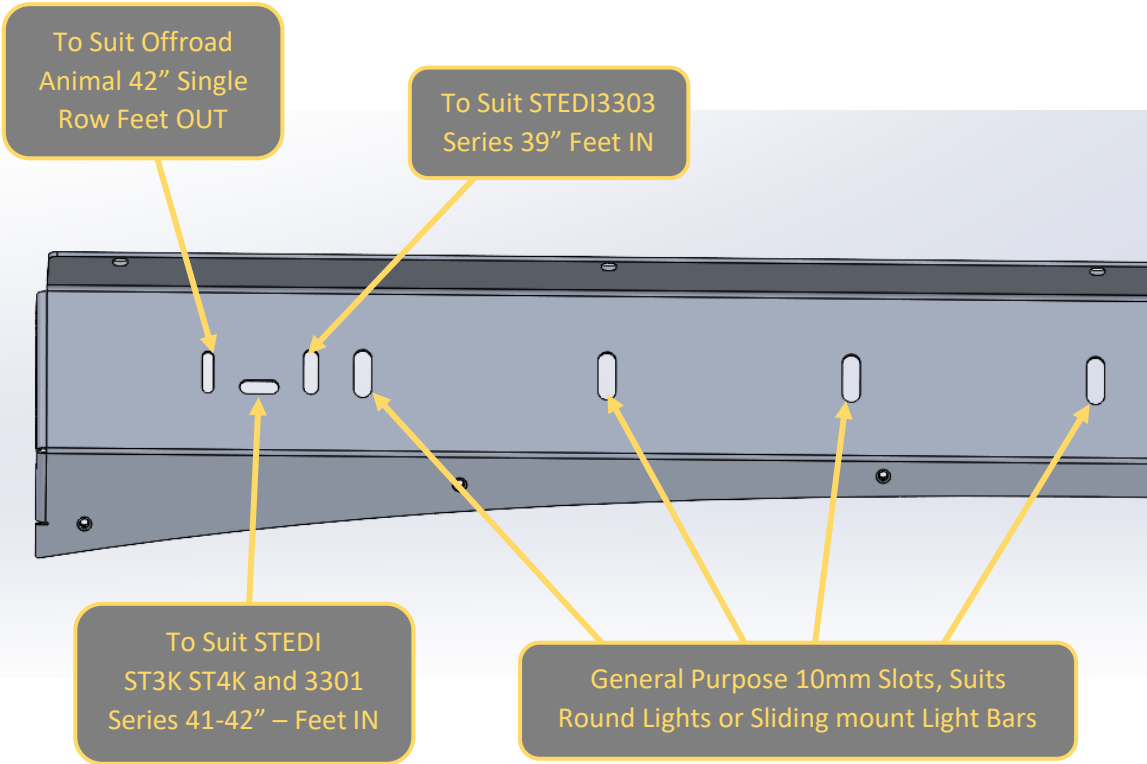
5mm Hex Key

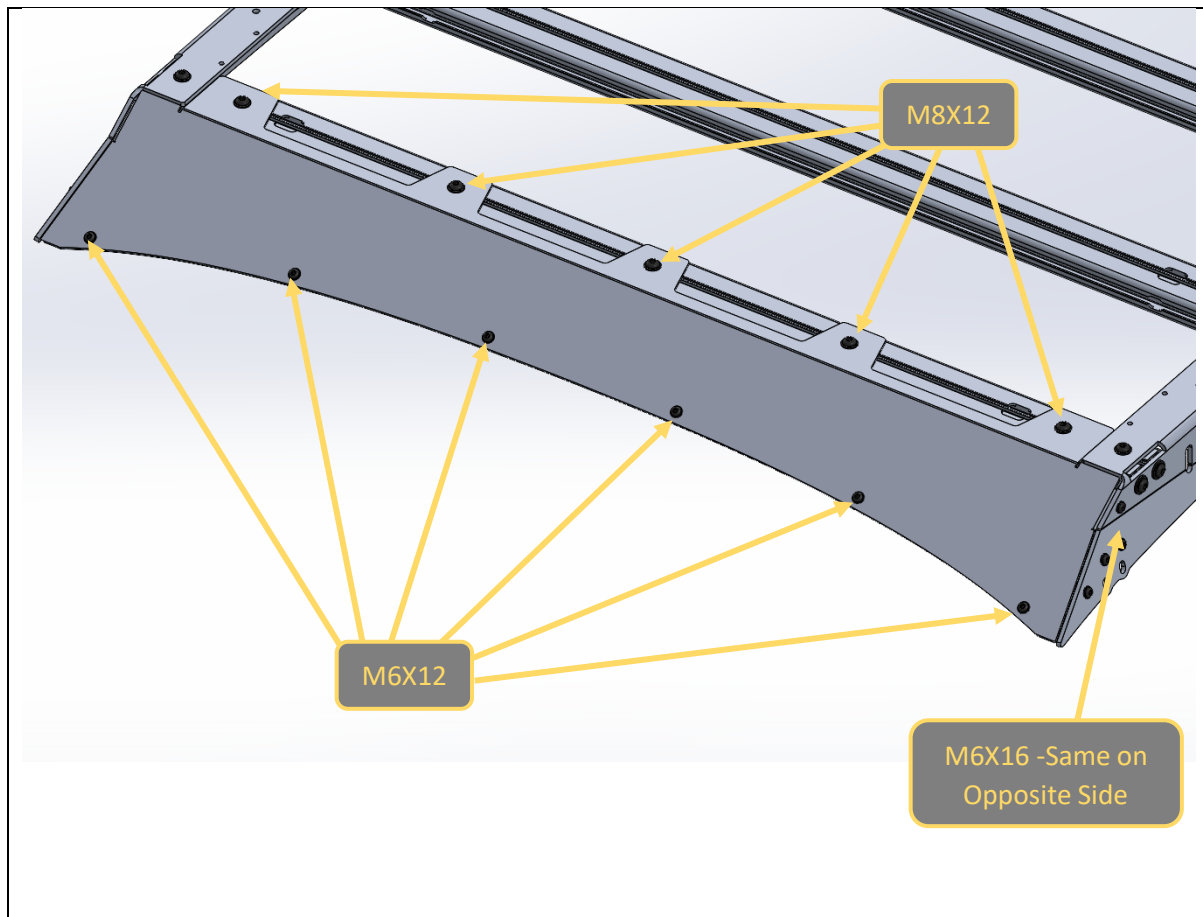
FASTENERS

5x M8X12 Button Head Bolt
5x M8 Flat Washer



<p>14. Fit M6x16 Button head, M6 Black Flat Washer and M6 Flange Nut to secure the tabs of the front panel to the side arm.</p> <p>15. Complete for both sides.</p>	<p>TOOLS REQUIRED</p> <p>5mm Hex Key 4mm Hex Key</p>
<p>16. Once all bolts are fitted adjust such that the lower face of the front panel sits 2mm below the top edge of the side arm. Tighten all M6 bolts fitted in previous steps.</p> <p>17. Once Adjusted tighten the Horizontal M8x12 bolts securing the Front panel to the cross bar, starting in the center, and working progressively out.</p>	<p>FASTENERS</p> <p>3x M6X16 Button Head Bolt 3x M6 Flat Washer 3x M6 Flange Nut</p> <p>Per Side</p>

	
<p>18. If fitting a light bar or other lights to the front of rack – do so now. Refer to the above image to identify appropriate slots to use.</p> <p>19. If lights are not fitted skip to step 26.</p>	<p>TOOLS REQUIRED</p>
	<p>FASTENERS</p> <p>Fasteners Supplied with Lights</p>



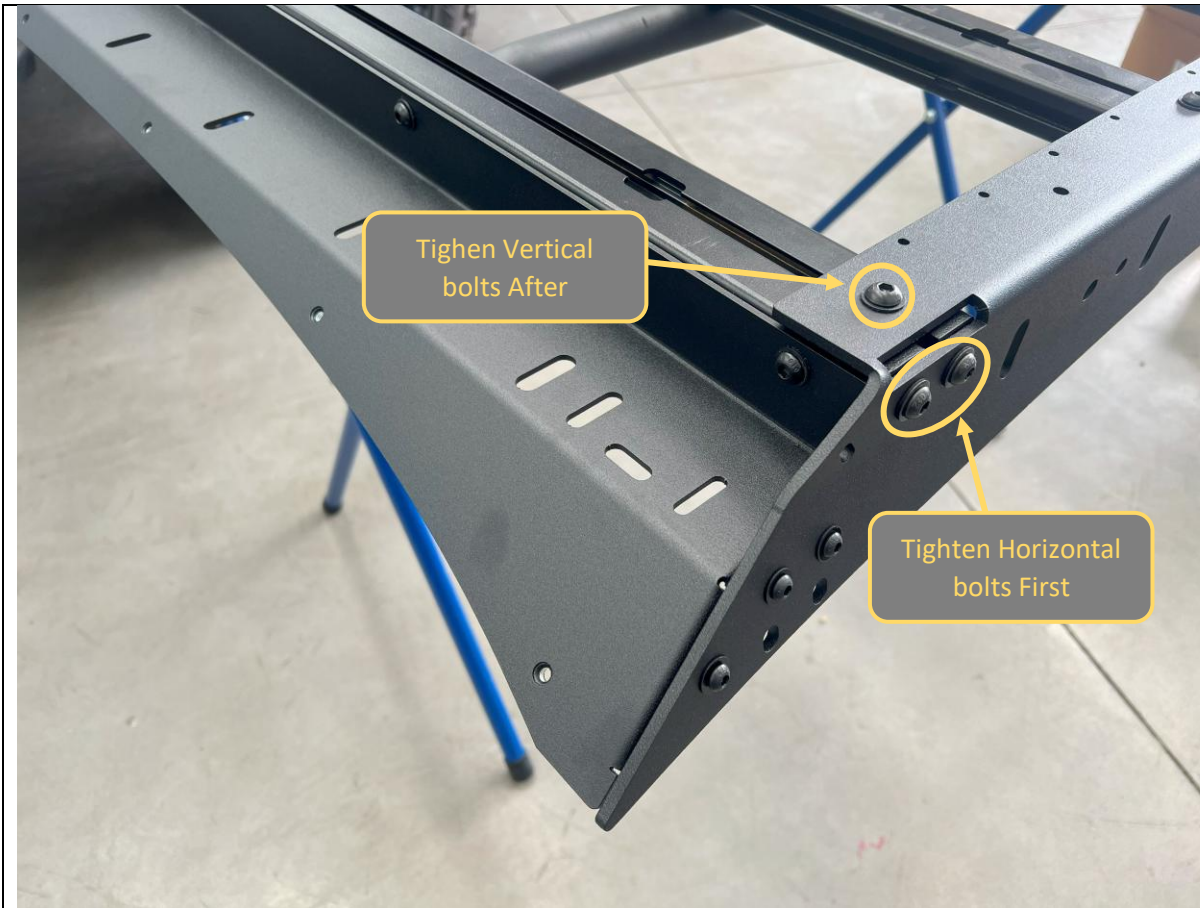
20. If not fitting lights, fit the wind deflector by first positioning 5x M8 Flange nuts into the top slot of the front extrusion.
21. Using the hole positions in the top face of the wind deflector as a guide, use a finger or screwdriver to move nuts into correct positions. Gravity should hold the nut in position.
22. Fit the wind deflector and secure top edge with M8x12 Bolts into the nuts placed earlier.
23. Secure sides with M6x16 Button Head bolt and Flat washer into captive nut in wind deflector
24. Secure bottom edge with M6x12 Button head + flat washer into captive nuts in Front Panel
25. Tighten all wind deflector bolts, starting in the center and working towards the outer edges.

TOOLS REQUIRED

4mm Hex Key
5mm Hex Key

FASTENERS

5x M8 Flange Nuts
5x M8x12 Black BHCS
2x M6x16 Black BHCS
6x M6x12 Black BHCS
10x M6 Black Washer
2x M6 Flange Nuts



26. Now is time to **TIGHTEN ALL** bolts securing the components of the rack assembly together.
27. First **Tighten** all horizontal bolts securing the side arms to the Extrusions and front panel / wind deflectors. Complete on both sides
28. Next **Tighten** all vertical bolts.
29. Work methodically from front to back to ensure no bolts are missed.
30. If fitted, tighten the wind deflector bolts from center progressively out to the sides.
31. It is recommended **NOT** to use power tools for this step to prevent cross threading or stripping bolt heads

TOOLS REQUIRED

4mm Hex Key
5mm Hex Key

FASTENERS

GSR & GSR SPECIAL EDITION



32. Using a trim tool, carefully pry up the front roof rail cover. There are molded clips in the cover securing it to the roof rail.

We found it most effective to start from the rear near the rail seam. **DO NOT** lever the trim tool against the roof, as this could damage or dent the roof surface.

TOOLS REQUIRED

Trim Tool
Rag

FASTENERS

GSR & GSR SPECIAL EDITION



33. Using a trim tool, carefully pry up the rear roof rail cover, using similar technique to the front cover.

We found it most effective to start from the front near the rail seam. **DO NOT** lever the trim tool against the roof, as this could damage or dent the roof surface.

TOOLS REQUIRED

Trim Tool
Rag

FASTENERS

GSR & GSR SPECIAL EDITION



34. Using a trim tool, carefully pry outwards out the plug covering the center rail bolt.
35. Remove the bolt using 10mm socket and Extension Bar

TOOLS REQUIRED

Plastic Trim Tool
10mm socket
Socket extension bar

FASTENERS

GSR & GSR SPECIAL EDITION



36. Using a 10mm Socket, remove the 3x bolts securing the front mount of the roof rail to the captive nuts in the roof.

TOOLS REQUIRED

10mm Socket

FASTENERS

Factory Bolt - Discard

GSR & GSR SPECIAL EDITION



37. Using a 10mm Socket, remove the 3x bolts securing the rear mount of the roof rail to the captive nuts in the roof.

TOOLS REQUIRED

10mm Socket

FASTENERS

Factory Bolts - Discard

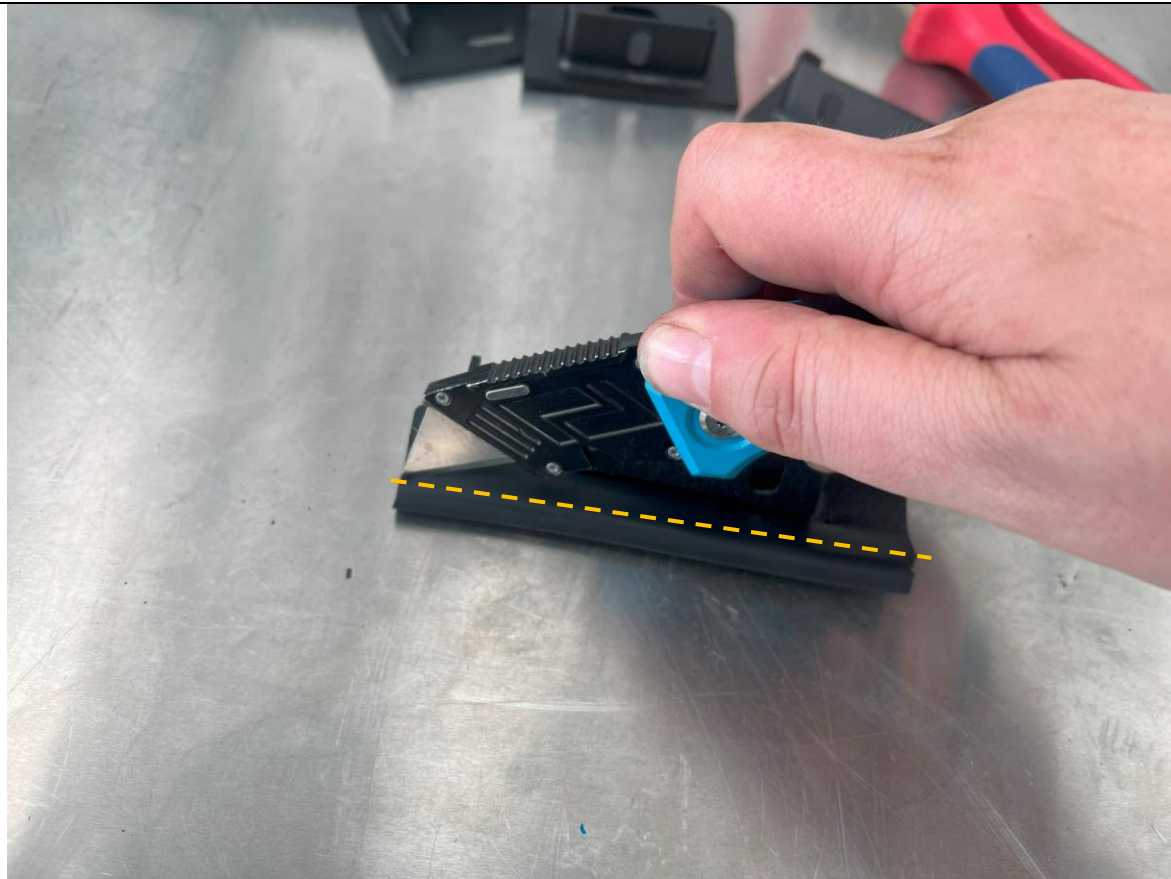
GSR & GSR SPECIAL EDITION



38. The roof rail should now be loose. Carefully lift the roof rail away from the car and set aside.

TOOLS REQUIRED

FASTENERS

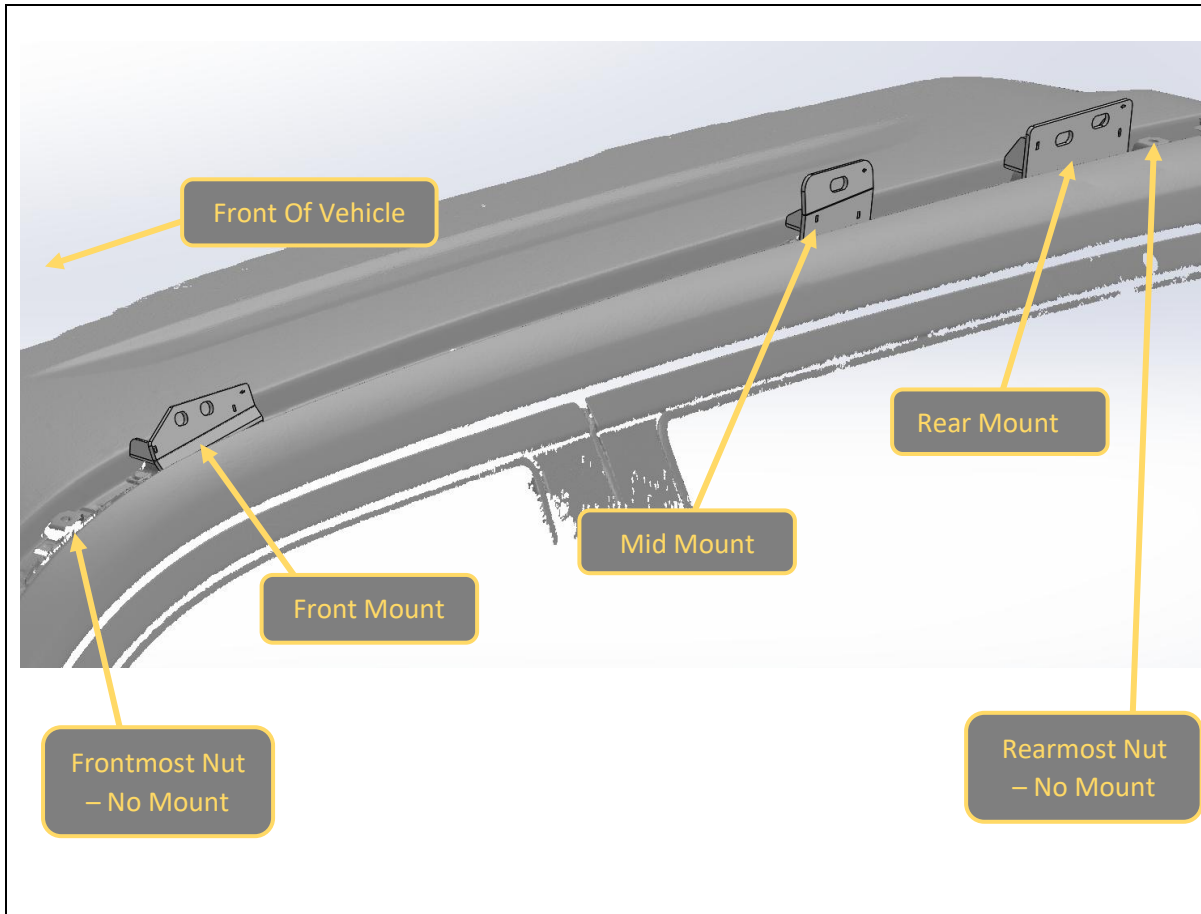


39. Prepare the mounting brackets for fitment to the roof.
40. Fit the U Channel Rubber to the bottom edge of the mounting brackets and trim to length.
41. Trim the U Channel Rubber on the inside as shown in the image above, such that it does not interfere with the horizontal face of the mounting brackets.

TOOLS REQUIRED

Utility Knife

FASTENERS



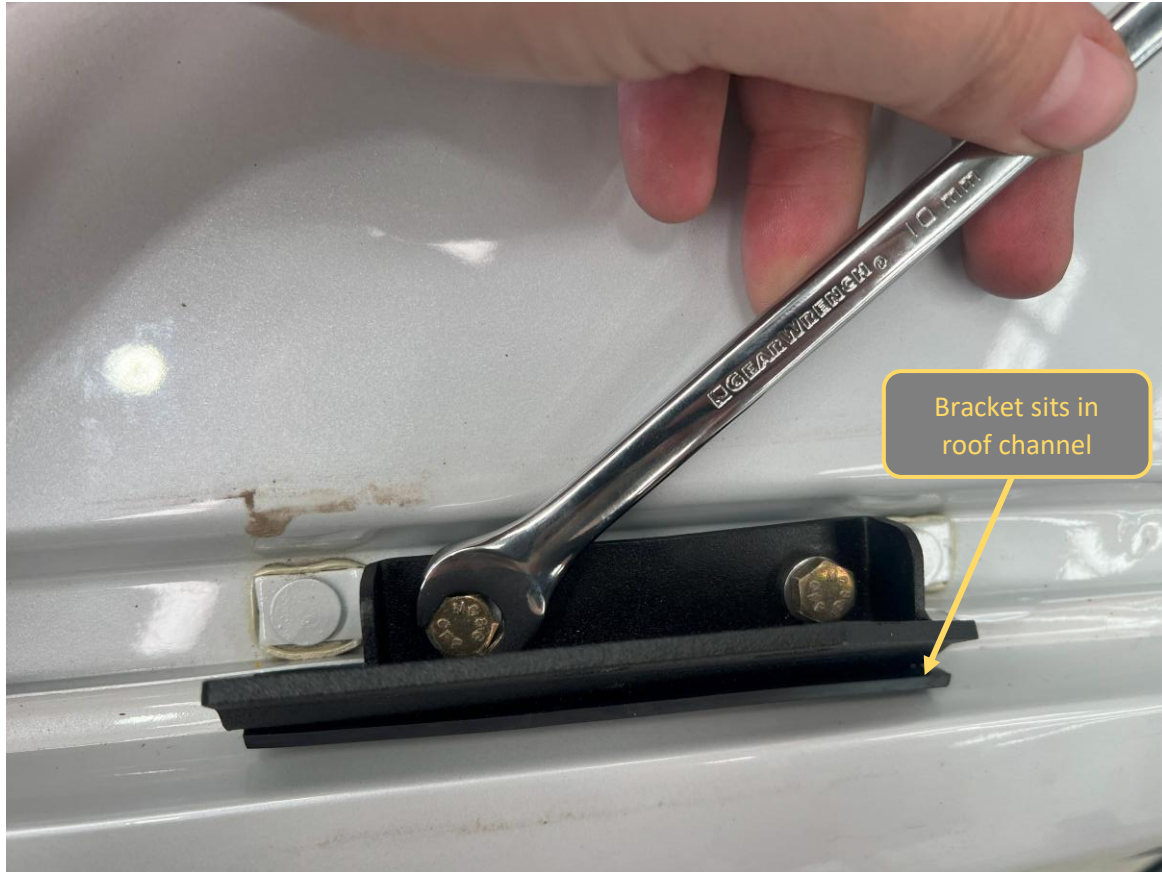
42. Position the mounting brackets on the roof in the correct locations, as shown in the diagram above.
43. All mounts should sit in the roof channel on the U Channel rubber trim, with the horizontal portions of the brackets aligned with the corresponding nuts in the
44. Secure all mounts using M6x12 Hex Bolts and Flat washers into the captive nuts in the roof. Leave all bolts finger tight at this stage.

TOOLS REQUIRED

FASTENERS

5x M6x12 hex bolt
5x M6 flat washer

Per side



45. Ensuring the brackets are sitting correctly in the roof channel, tighten the M6 Bolts securing the FRONT mounting brackets to the roof, using a 10mm Spanner.

TOOLS REQUIRED

10mm Spanner

FASTENERS



46. Place a blanket or similar soft material on the roof of the vehicle.
47. With assistance lift the rack onto the vehicle and place down over the mounts. All mounting brackets should sit to the inside of the side rails.

TOOLS REQUIRED

Blanket

FASTENERS

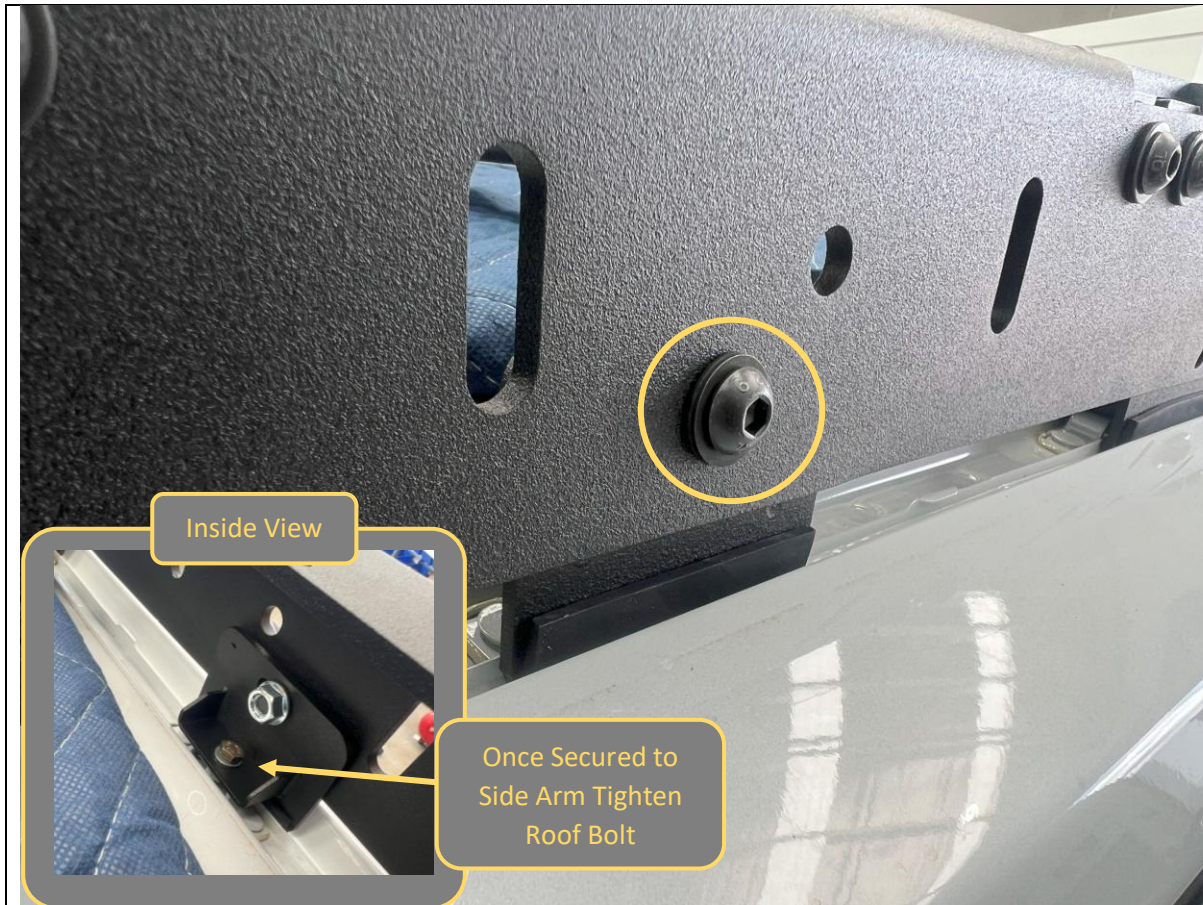


48. Secure rack to front mount using 2x M8x20 Button Head Bolts, 2x M8 Flat Washers and M8 Flange nuts per side.
49. Reach in from behind rack to position M8 Flange nuts, as shown in image above.
50. Leave bolts finger tight at this stage. Repeat for other side of vehicle.

TOOLS REQUIRED

FASTENERS

2x M8x20 Button Head
2x M8 HD Washer
2x M8 Flange Nuts
Per Side



51. Secure the center mount to the side arm using 1x M8x20 Button Head Bolts, 2x M8 Flat Washers and M8 Flange nuts per side. Leave finger tight at this stage

52. Complete for both sides.

53. Once brackets are secured to the side arms, tighten the M6x12mm bolts securing the mounting bracket to the roof.

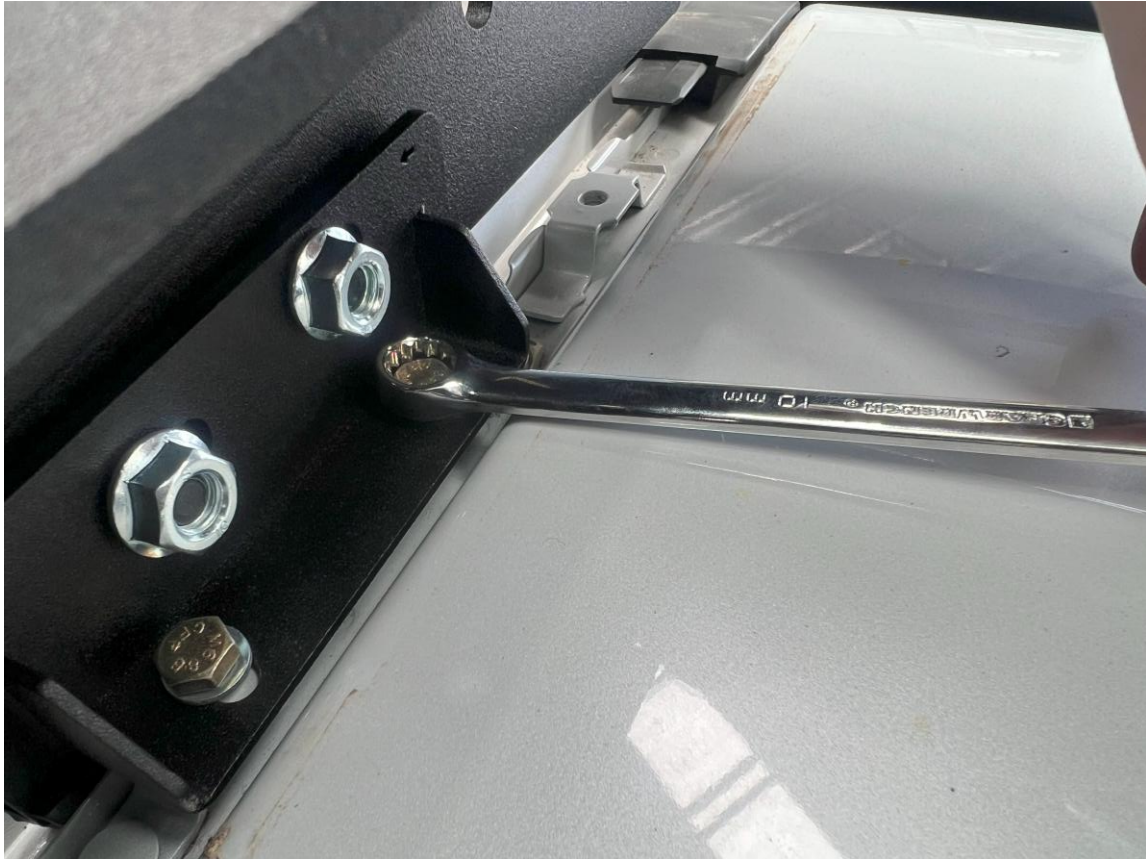
TOOLS REQUIRED

10mm Spanner

FASTENERS

1x M8x20 Button Head
1x M8 HD Washer
1x M8 Flange Nuts

Per Side



54. Secure the rear mount to the side arm using 2x M8x20 Button Head Bolts, 4x M8 Flat Washers and 2x M8 Flange nuts per side. Leave finger tight at this stage
55. Complete for both sides.
56. Once brackets are secured to the side arms, tighten the 2x M6x12mm bolts securing the mounting bracket to the roof.

TOOLS REQUIRED

10mm Spanner

FASTENERS

2x M8x20 Button Head
2x M8 HD Washer
2x M8 Flange Nuts

Per Side



57. Adjust the position of the rack upon the mounting bracket slots to achieve the clearances shown in the image above.
58. Tighten M8x20mm Button head bolts securing mounting brackets to the side rail to lock rack in position

TOOLS REQUIRED

5mm Hex Key

FASTENERS

2x M8x16 Black Button Head bolt
2x M8 Black Flat Washer

Per Side



59. Clean the roof gutter area between the between windscreen and front of the roof rack, where the ditch finisher is to be fitted.

60. Apply pads of double-sided tape to the tabs on either end of the ditch finisher brackets. Determine handedness of brackets by checking brackets in location of fit.

Alternatively small dabs of Automotive sealant such as Sikaflex can also be used.

61. Remove backing to tape and fit the ditch finisher to the roof, securing with supplied M6x12 Black Button head bolt and M6 Black Washer

62. Apply pressure at each end to ensure tape bonds well to the roof surface.

63. Complete fitment of ditch finisher on other side of vehicle.

TOOLS REQUIRED

4mm Hex Key

FASTENERS

1x M6x12 Black Button Head bolt
1x M6 Black Flat Washer

Per Side



64. Double Check all Fasteners are tight.

65. With That you are done! Head Bush and Enjoy your new rack!

For contact details see www.offroadanimal.com