



NISSAN PATROL Y62 2013-on SCOUT ROOF RACK

IMPORTANT! – READ BEFORE INSTALLATION

Maximum roof loading of 100kg as specified by vehicle manufacturer

Minus 32kg roof rack weight gives Maximum Cargo Loading of 68kg

- 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.

GENERAL CARE AND MAINTENANCE

Use caution when cleaning with pressure washers, as they may compromise the product coating's integrity. Exercise care to avoid surface damage.

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

Do not use acidic or alkaline based cleaning products.

Plastic parts may be maintained with silicone spray.

It is important to perform regular checks (pre/during/post trip or on an annual basis) on the installed product. More frequent checks may be required in extreme use cases. 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.



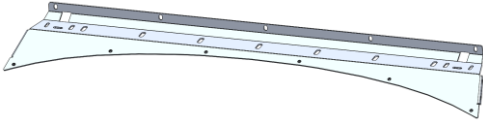
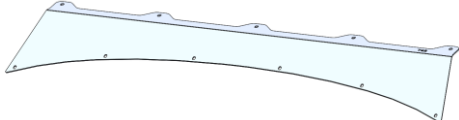
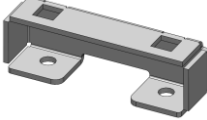

FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR	
Size	Torque Nm
M10	57 Nm
M12	100 Nm
M14	164 Nm
M16	248 Nm

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.

Parts – In the Main Box

Qty	Part Number	Description	Image
1	B-1765R	Y62 Patrol Scout Rack Side Rail RH	
1	B-1765L	Y62 Patrol Scout Rack Side Rail LH	
1	B-1766	Y62 Patrol Scout Rack Front Panel	
1	B-1767	Y62 Patrol Scout Rack Wind Deflector	
6	B-1768	Y62 Patrol Scout Rack Roof Mount	
2	OFA-LOGO	Offroad Animal Metal Logo	

Cross Bar Kit

Qty	Part Number	Description	Image
7	E-0006-1300	Scout Roof Rack – Cross Bar Extrusion 1300MM	

Fasteners – Contained in Small Parts Kit Bag

Qty	Part Number	Description
4	M6 X 16 HEX	M6X16 HEX BOLT, ZP, 8.8
6	M6x12 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M6 FLAT WASHER	M6 Flat Washer, 12x6.1x1
6	M6 FLAT WASHER BLACK ZINC	M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH
4	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
12	M8 X 20 HEX	Bolt Hex, M8X20x1.25, GR8.8 ZP
12	M8X20 CAP SCREW	CAP SCREW, M8X20X1.25 GR10.9 ZP
10	M8 X 12 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X12X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
14	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH
28	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH
24	M8 HD FLAT WASHER	M8 FLAT WASHER - High Tensile 19x8x1.9mm
42	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
19	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
12	M8 Cage nut	NUT, CAGE, M8X1.25 ZINC PLATE

TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
10/13mm Metric Socket/Spanner	N/A	Isopropyl Alcohol
Socket Extension Bar		Clean Workshop Rags
Hex (Allen) Key Set 4-5mm		Automotive Sealant (Sikaflex 227 or equivalent)
Plastic Auto Trim Tool Set		
Flat Blade Screwdriver		Thread Sealant (Loctite 577 or equivalent)
Phillips Head Screwdriver		
Torque Wrench (suitable for 22Nm)		
5mm Hex Bit		

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. Lay out main parts of roof rack on a table/open space.
 2. Bring the rack side in line with the cross bar extrusions and loosely secure each extrusion end with 2x M8x20 black button head bolts and black washers through the pre-threaded holes on the side.
- Keep these bolts loose until after the roof rack is installed onto the vehicle.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

28x M8x20 black button head
28x M8 black flat washer



3. Insert 1x M8 flange nut into the top T-slot of each extrusion end.
4. Slide the nut so that it lines up with the hole on the top of the rack side.
5. Loosely secure the top of each rack side to the nut in the extrusion T-slot with 1x M8x16 button head bolt and black washer.

Keep these bolts loose until after the roof rack is installed onto the vehicle.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

14x M8x16 black button head
14x M8 black flat washer
14x M8 flange nut



6. Insert 5x M8 hex nuts into the front T-slot of the forward-most extrusion.
7. Roughly align them with the corresponding holes in the front panel.

TOOLS REQUIRED

FASTENERS

5x M8 hex nut



8. Secure the front panel to the M8 nuts in the front T-slot with 5x M8x12 black button head bolts (no washers).
Fully tighten these bolts now.

TOOLS REQUIRED

5mm hex/Allen key

FASTENERS

5x M8x12 black button head



VIEW FROM UNDERNEATH ROOF RACK

9. On the underside, secure the front panel to each rack side with 2x M6x16 hex head bolts, plain washers and flange nuts (each).

Fully tighten these bolts now.

TOOLS REQUIRED

10mm socket/spanner

FASTENERS

4x M6x16 hex bolt
4x M6 washer
4x M6 flange nut



10. If fitting lights or a light bar to the front of the roof rack, now is the best time to do so. It is still possible to install it once on the roof, but it may be more difficult to access bolts and nuts with tools.

The front panel supports up to a 42" light bar, or 7x smaller pod lights.

A square cutout is provided on both ends for discreetly routing cables to the underside of the roof rack (see inset photo).

TOOLS REQUIRED

Supplied with accessories

FASTENERS

Supplied with accessories

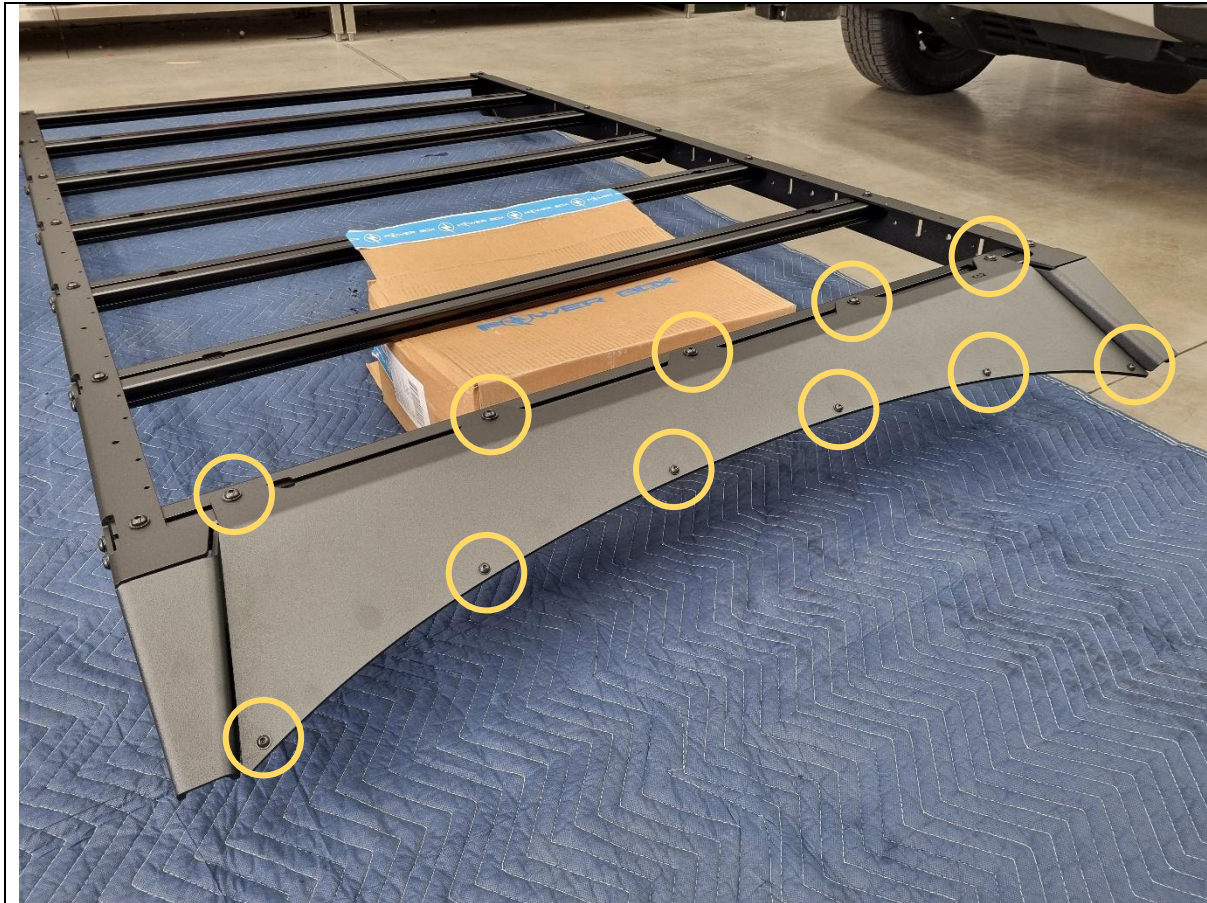


11. If not fitting a light bar, insert 5x M8 flange nuts into the top T-slot of the forward-most extrusion.
12. Roughly align them with the corresponding holes in the wind deflector.

TOOLS REQUIRED

FASTENERS

5x M8 flange nuts



13. Fit the wind deflector onto the roof rack. Secure the top to the M8 nuts in the front T-slot with 5x M8x12 black button head bolts (no washers).

14. Secure the bottom to the embedded nuts in the front panel with 6x M6x12 black button head bolts and black washers.

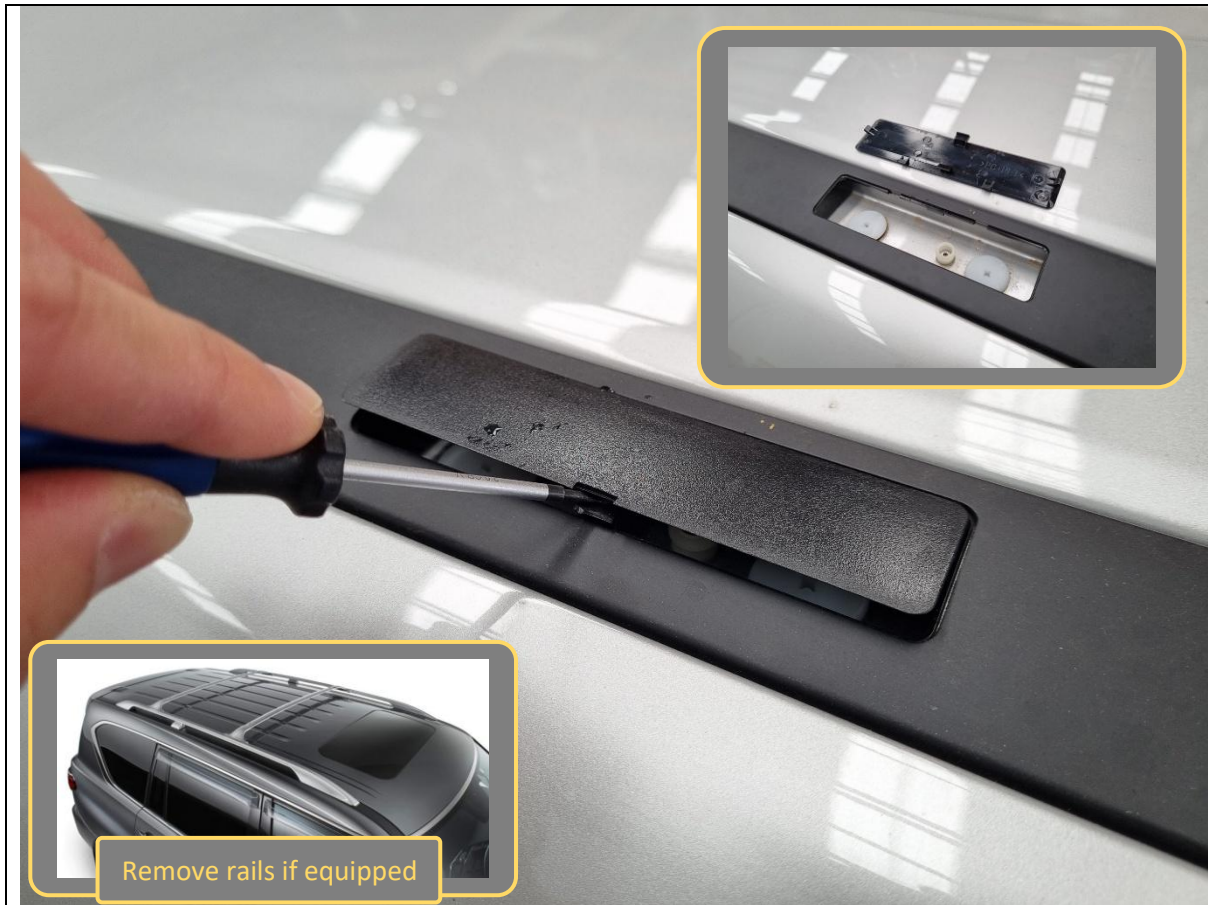
Fully tighten wind deflector bolts now.

TOOLS REQUIRED

4mm hex/Allen key
5mm hex/Allen key

FASTENERS

5x M8x12 black button head
6x M6x12 black button head
6x M6 black flat washer



15. Remove any existing roof racks/rails from the roof, if present.
16. Otherwise, use a small flat blade screwdriver or trim tool and remove the 6x plastic covers on the roof.

TOOLS REQUIRED

Flat blade screwdriver
or
Trim tool

FASTENERS

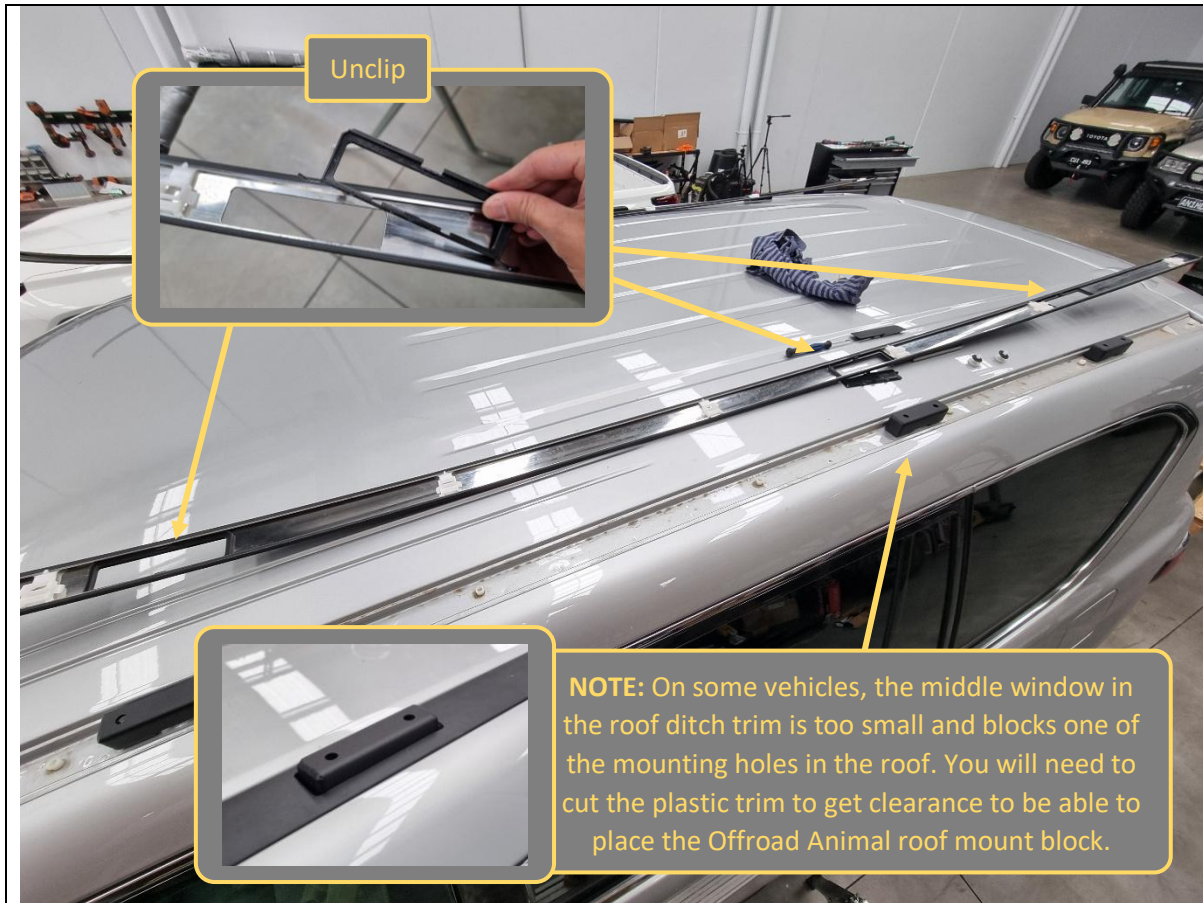


17. If present, remove and discard the plastic screw plugs in the roof using a Phillips head screwdriver.

TOOLS REQUIRED

Phillips head screwdriver

FASTENERS



<p>18. Lift up and unclip the plastic roof ditch trim.</p> <p>19. Unclip and remove the rectangular plastic surround trims from the roof ditch.</p> <p>20. On some vehicles, the middle window in the roof ditch trim is too small and blocks one of the mounting holes in the roof.</p>	<p>TOOLS REQUIRED</p> <p>(Multi tool or similar)</p>
<p>If this is the case, you will need to enlarge the middle window in the roof ditch to match the size of the other openings.</p> <p>Confirm by dry fitting the B-1768 roof mount block on the roof. Make sure you enlarge/cut the middle window in the correct direction.</p>	<p>FASTENERS</p>



- 21. Re-fit the roof ditch trims to the roof.
- 22. Use alcohol wipes or isopropyl alcohol and clean rag to wipe clean the roof gutter. Make sure there is no dirt or oil residue.

TOOLS REQUIRED

Isopropyl alcohol
Clean rag

FASTENERS



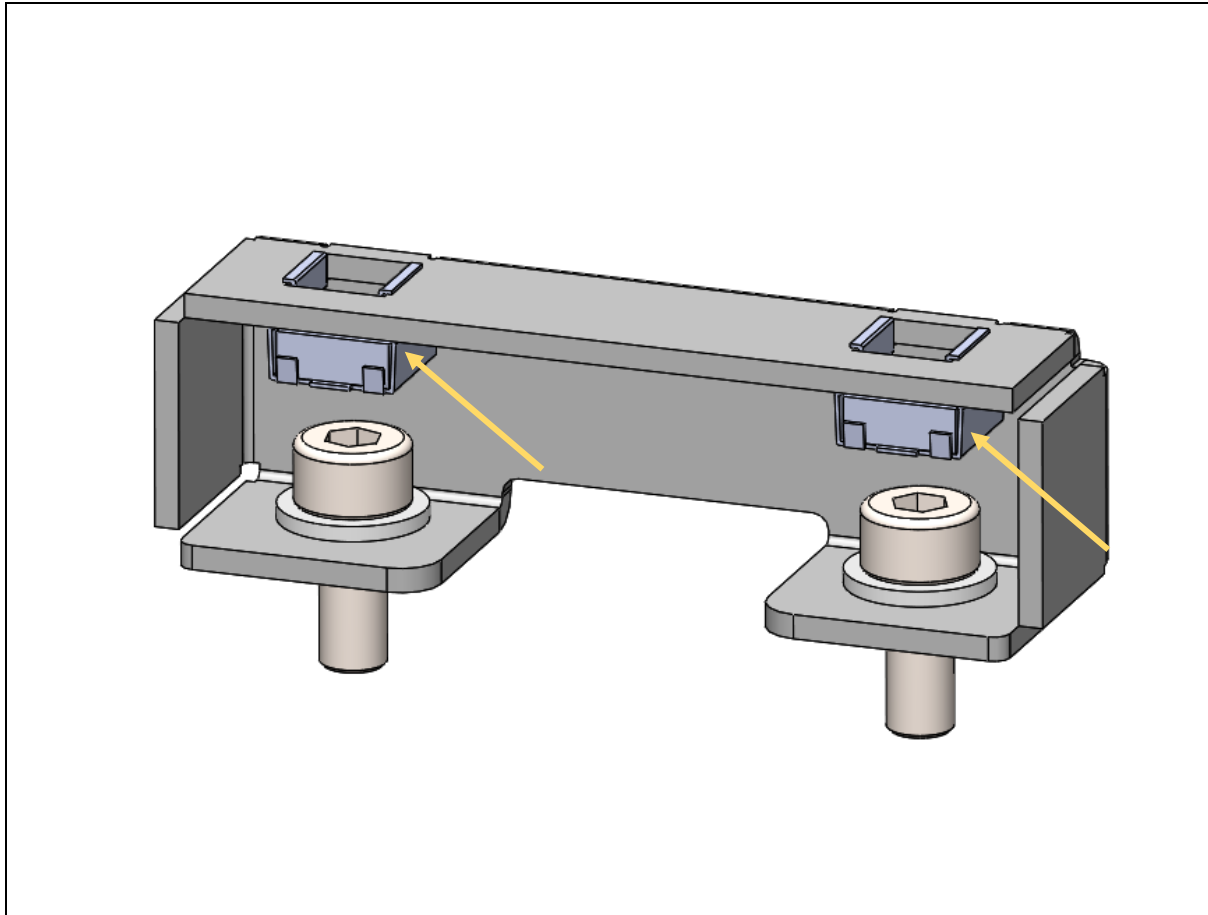
23. Prepare the B-1768 roof mounting blocks. You will require the following products:
Sealant (SikaFlex 227 recommended)
Thread Sealer (Loctite 577 recommended)
24. Pre-fit 2x M8x20 socket head cap screws and washers to each roof mounting block, as shown.
25. Apply a drop of thread sealer between the bolt head, washer and mounting block to seal any potential gap between parts.
26. Do this for all 6x mounting blocks.

TOOLS REQUIRED

Thread sealer
 or
 Low strength thread locker

FASTENERS

12x M8x20 cap screw
 12x M8 washer



27. Install 2x M8 cage nuts to each mounting block, as shown.

Use a flat blade screwdriver to assist.

TOOLS REQUIRED

Flat blade screwdriver

FASTENERS

12x M8 cage nut

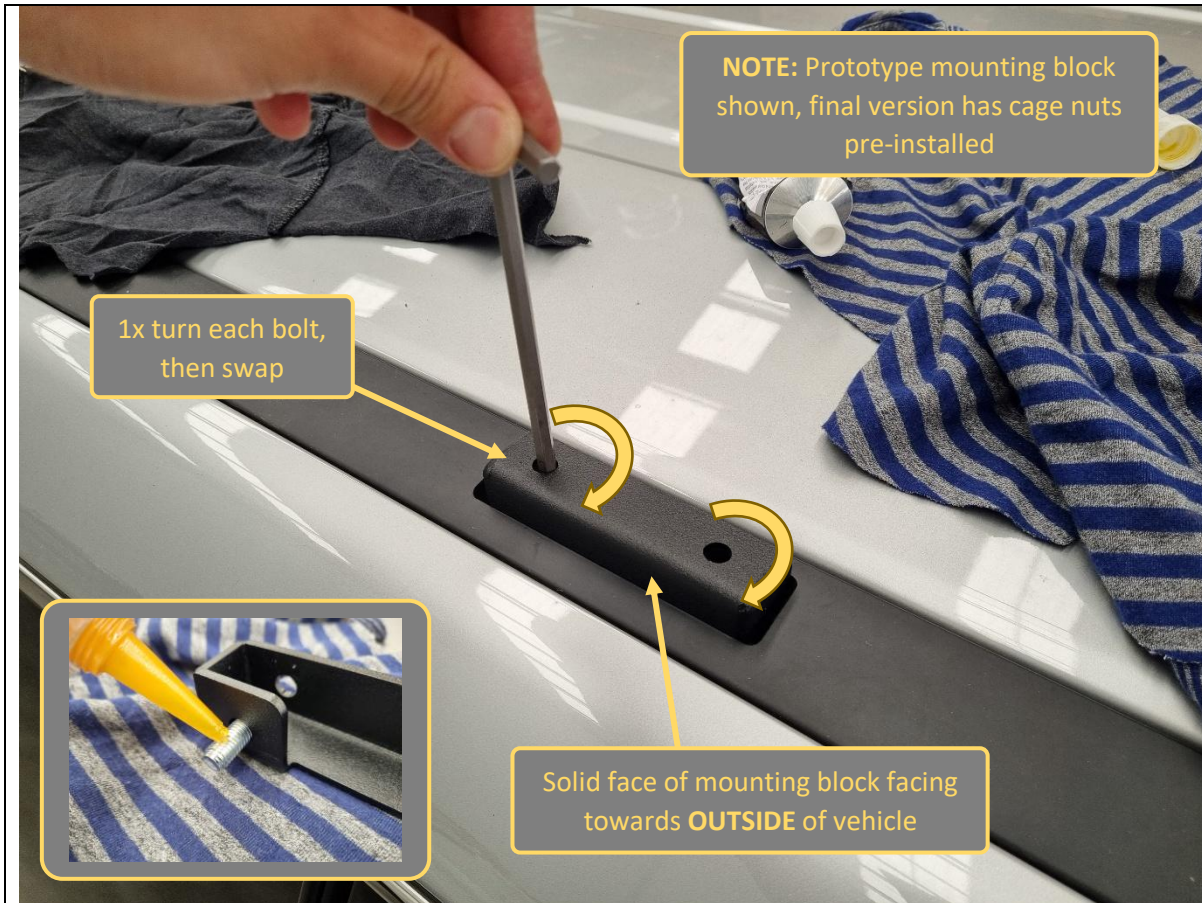


- 28. Apply a generous amount of automotive grade sealant (such as Sikaflex 227) around the 2x holes at each of the 6x mounting locations.
- 29. Also cover up the protruding white posts (see arrow) with sealant.

TOOLS REQUIRED

Automotive sealant (eg. Sikaflex 227)

FASTENERS



<p>30. Apply a drop of thread sealer over the M8x20 cap screws in the roof mounting block.</p> <p>31. Fit the roof mounting blocks to the roof, ensuring the block is orientated with the solid face facing the outside of the vehicle.</p> <p>The open section that exposes the bolts is facing towards the middle of the roof.</p>	<p>TOOLS REQUIRED</p> <p>Thread sealer or Low strength thread locker</p> <p>5mm hex/Allen key</p>
<p>32. Use a 5mm hex/Allen key through the cage nut holes on top and progressively tighten the M8 cap screws into the roof until finger tight.</p> <p>33. After tightening you should be able to observe sealant squeeze out from the edges of the mount.</p> <p>If no squeeze out is visible after tightening it is likely more sealant is needed. Remove mount and apply sealant before re-tightening using same technique.</p>	<p>FASTENERS</p>



34. Once bolts are finger tighten, use a torque wrench set to **22Nm** and tighten bolts to spec. Do this for all 6x roof mounting blocks.

TOOLS REQUIRED

Torque wrench
5mm hex bit

FASTENERS



35. Roof should now look like this with mounting blocks installed.

TOOLS REQUIRED

FASTENERS



- 36. With your mate's assistance (or other lifting device), lift and place the roof rack onto the roof.
- 37. Position roof rack so that the feet on the rack sides sits on top of the mounting blocks installed on the roof.

TOOLS REQUIRED

FASTENERS



38. Loosely fit M8x20 hex bolts and washers to hold the roof rack to the M8 cage nuts in the mounting blocks.

TOOLS REQUIRED

FASTENERS

12x M8x20 hex bolt
12x M8 flat washer



<p>39. Align roof rack so it is sitting central on the vehicle.</p> <p>40. Once happy with alignment, tighten M8 hex bolts holding roof rack to mounting blocks.</p> <p>41. For vehicles equipped with sunroof, check tilt and slide operation and ensure it does not hit the roof rack. (May need 1x person in the car and 1x outside).</p>	<p>TOOLS REQUIRED</p> <p>13mm socket/spanner</p>
<p>If it is hitting or the clearance is less than 5mm (especially in tilt mode), then you may need to insert washer shims between the roof rack and mounting block to raise the roof rack.</p>	<p>FASTENERS</p>



<p>42. Once roof rack is fully tightened onto roof, tighten all remaining black M8 button head bolts holding extrusion.</p> <p>43. Double check all other fasteners are properly tightened and secure.</p> <p>44. Be a lad and fit the Offroad Animal logo plate on both sides of the roof rack, in the location shown.</p>	<p>TOOLS REQUIRED</p> <p>5mm hex/Allen key</p>
<p>45. If you want to fit the optional Window Accessory Panel, you can do so now by referring to that specific instruction found on the website.</p>	<p>FASTENERS</p> <p>2x Logo Plate</p>



Congratulations! You're done!
Go out bush and enjoy carrying all your gear on our low profile and quiet Scout Roof Rack for your Y62 Patrol!