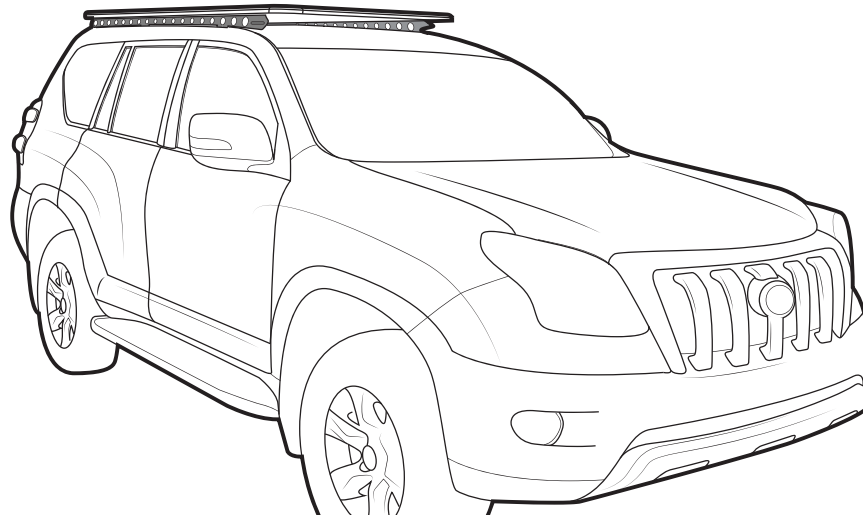


RHINO-RACK

Toyota Prado 120 Backbone - RTPB2

Fit Time: 1.5 Hours

Layout:



IMPORTANT INFORMATION

Maximum carrying capacity:

Suitable Pioneers	On Road Cargo Allowance	Off Road Cargo Allowance	Static Allowance	Roof Allowance	Rack Weight
42102B	87kg / 192lb	63kg / 139lb	327kg / 721lb	120kg / 265lb	33kg / 73lb
45102B	84.5kg / 187lb	60.5kg / 133lb	324.5kg / 715lb		35.5kg / 78lb
41102	81.5kg / 180lb	57.5kg / 127lb	321.5kg / 709lb		38.5kg / 85lb
42107B	84.5kg / 187lb	60.5kg / 133lb	324.5kg / 715lb		35.5kg / 78lb
45107B	81.5kg / 180lb	57.5kg / 127lb	321.5kg / 709lb		38.5kg / 85lb
41107	79kg / 174lb	55kg / 121lb	319kg / 703lb		41kg / 90lb

Roof Allowance: Total permissible weight attached to the roof of the car. This is inclusive of the weight of the roof rack system

Cargo Allowance: Total permissible weight allowed on top, and attached to roof racks whilst the vehicle is in motion

Static Allowance: Total permissible weight allowed on top, and attached to roof racks whilst the vehicle is stationary

Please refer to your vehicle manufacturers handbook for maximum carrying capacity. Always use the lower of the two figures. Load must be evenly distributed over the entire Pioneer. Weight of roof rack accessories is to be included in cargo allowance.

Warning:

- Check Part No. and/ or Kit is correct for use with your vehicle
- Do not attempt to fit the rack system to your vehicle unless you fully understand these fitting instructions. Please direct any questions regarding fitting to the dealer from where the roof racks were purchased.
- **Use only non-stretch fastening ropes or straps.**
- The handling characteristics of the vehicle changes when you transport a load on the roof. For safety reasons we recommend you exercise extreme care when transporting wind-resistant loads. Special consideration must be taken into account when cornering and braking.
- Although the system is tested and approved to AS1235-2000 / ISO 11154, off-road conditions can be much more rigorous. Extreme care must be taken in off road conditions

Recommendations:

It is essential that all bolt connections be checked after driving a short distance when you first install your roof racks. Bolt connections should be checked again at regular intervals (once a week is enough, depending on road conditions, usage, loads and distances travelled). You should also check the roof racks each time they are re-fitted. Always make sure to fasten your load securely. Please also ensure that all loads are evenly distributed and that the centre of gravity is kept as low as possible and must be entirely contained within the extents of the roof racks.

Note for Dealers and Fitters:

It is your responsibility to ensure these fitting instructions are given to the end user or client

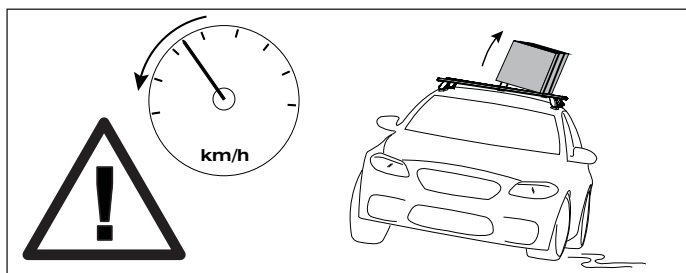
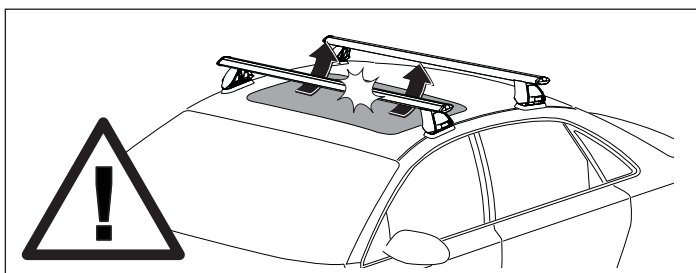
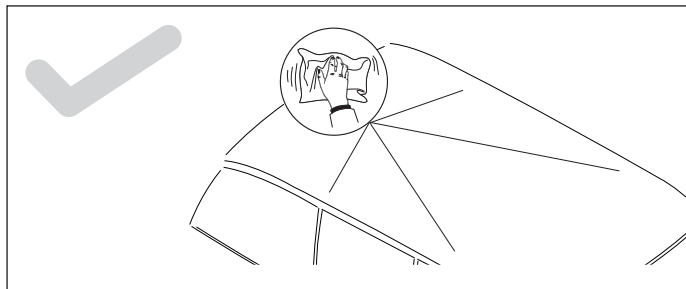
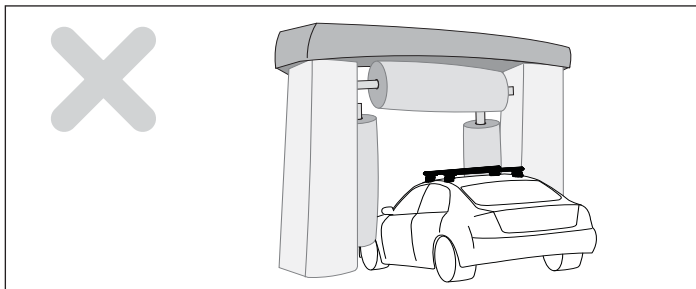
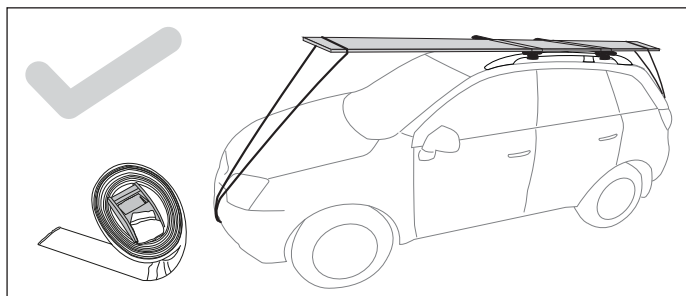
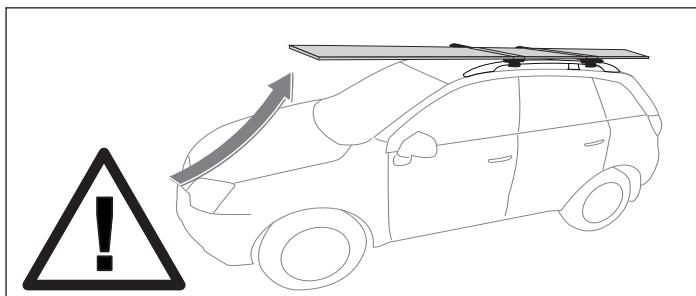
Rhino-Rack, 3 Pike St, Rydalmere
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Document No: R1451
Prepared By: Will Davis
Authorised By: Chris Murty

Issue No: 04
Issue Date: 12/07/2018

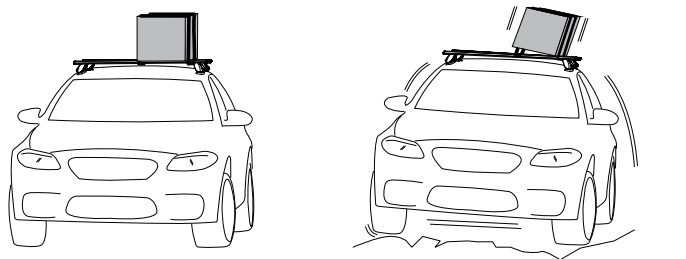
These instructions remain the property of Rhino-Rack Australia Pty. Ltd. and may not be used or changed for any other purpose than intended.

Toyota Prado 120 Backbone RTPB2

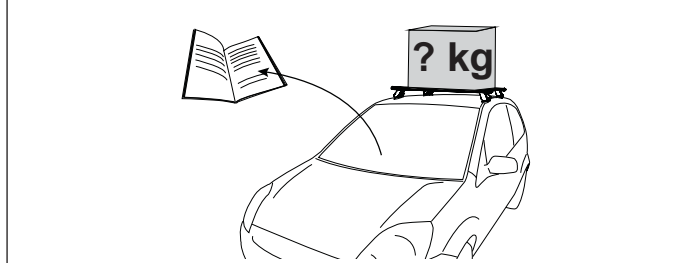
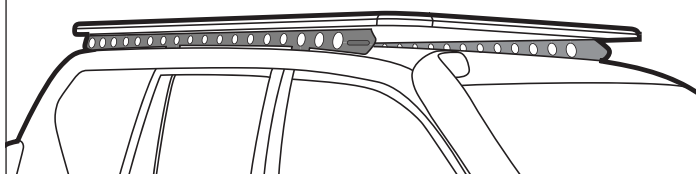


The handling characteristics of the vehicle changes when you transport a load on the roof. For safety reasons we recommend you exercise extreme care when transporting wind-resistant loads. Special consideration must be taken into account when cornering and braking.

Although the system is tested and approved to AS1235-2000 / ISO 11154, off-road conditions can be much more rigorous. Extreme care must be taken in off road conditions



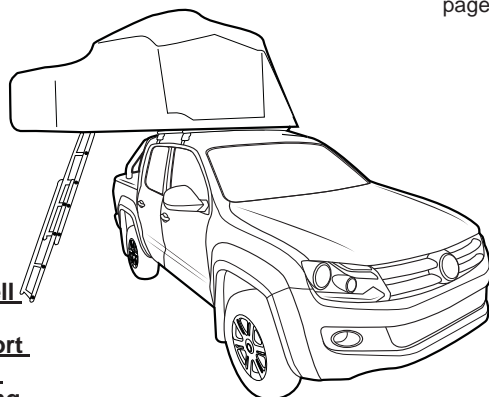
System Weight: 33kg - 41kg



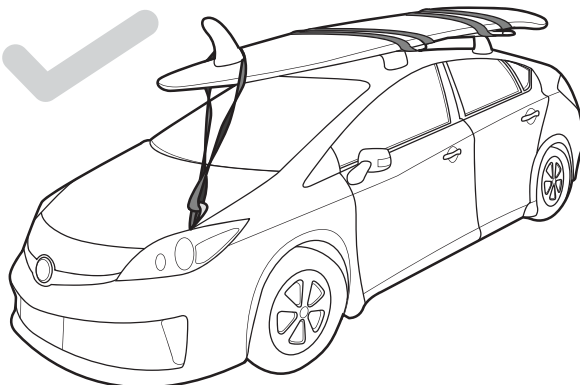
Static Load Rating: refer to front page



Ensure Ladder is well supported on the ground to help support tent. Take extreme caution when climbing heights above 1.2m/4ft.



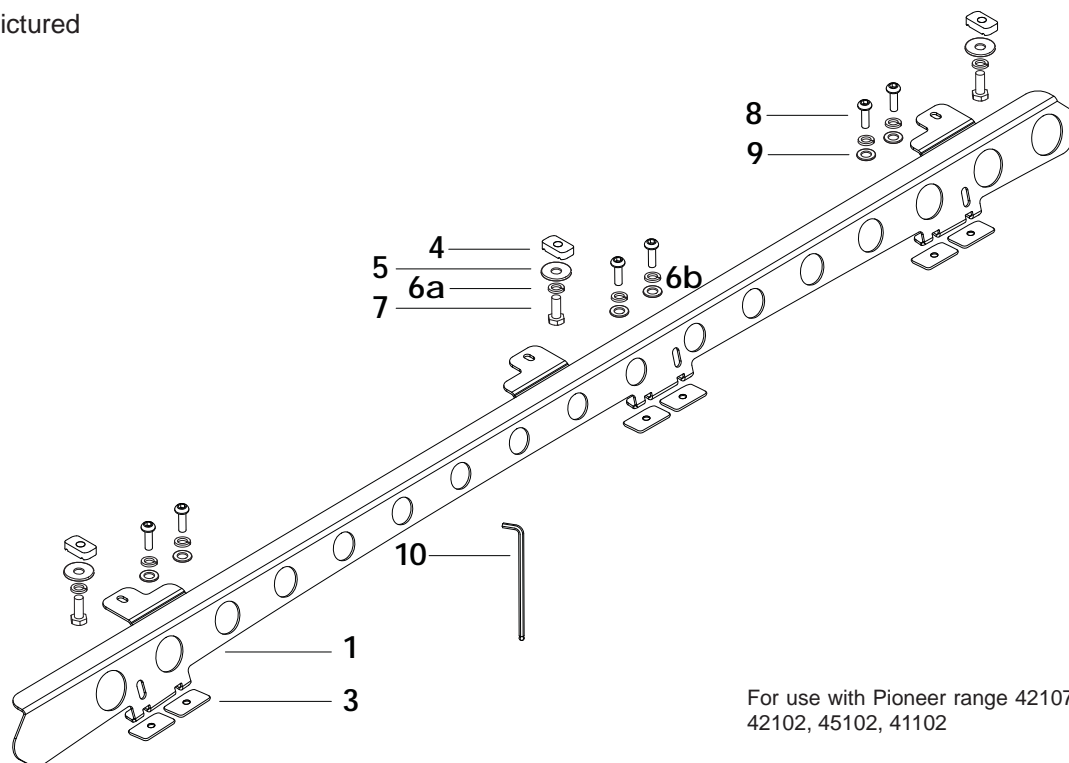
Paddle/ Surfboards should be fixed to the front of the vehicle.



Toyota Prado 120 Backbone RTPB2

Parts List

Left Side Pictured

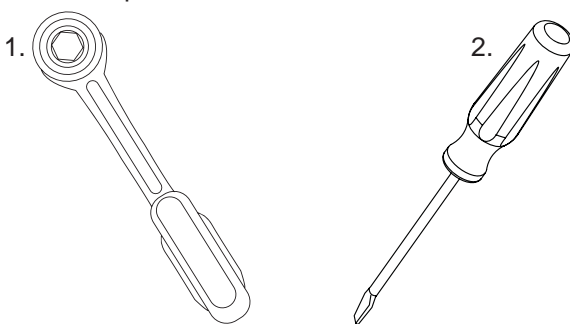


For use with Pioneer range 42107, 45107, 41107, 42102, 45102, 41102

Pioneer Range sold as separate

Item	RTPB1 Kit	Qty	Part No.
1	Prado 150 Left Hand Rail	1	CA1661
2	Prado 150 Right Hand Rail	1	CA1662
3	Butyl Patch 40x25 M8 Hole	12	CA1260
4	M8 Channel Nut	6	N003
5	M8x24x2mm Flat Washer	6	W064-BLK
6a	M8 Spring Washer black	6	W019
6b	M8 Spring Washer	12	W031
7	M8x20 Hex Setscrew	6	B020-BLK
8	M8x25 Button Head Screw	12	B140
9	M8x16mm Flat Washer	12	W020
10	Short 5mm Ball End Key	1	-
11	Instructions	1	R1451

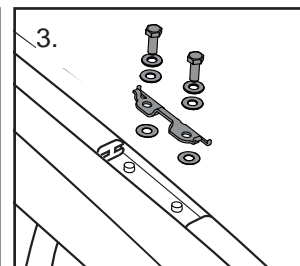
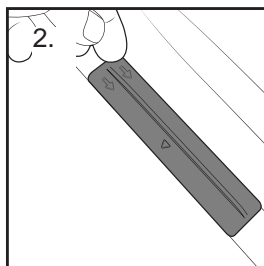
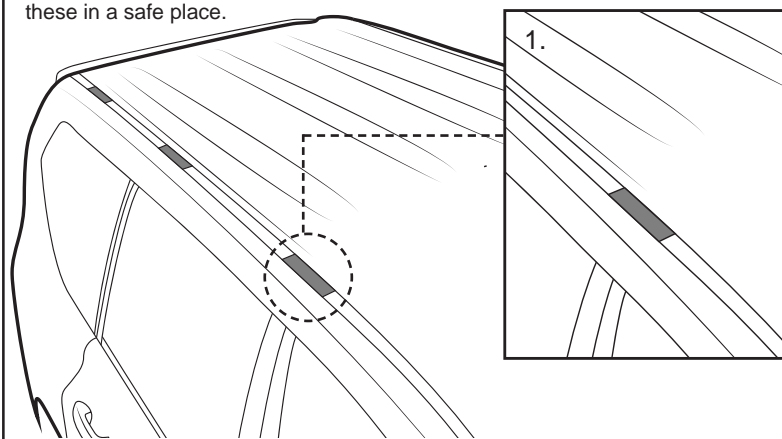
Tools Required:



1. Socket Wrench
2. Flat blade Screw Driver

Removing Fixed point mount covers

Move to the roof of the vehicle. If your car is not fitted with factory roof rails, remove the six mounting point covers (three per side). Remove Sliding the cover forward and rotating out. Remove the two M8 bolts, washers and bracket. Note that these are not required to fit the Backbone, store these in a safe place.

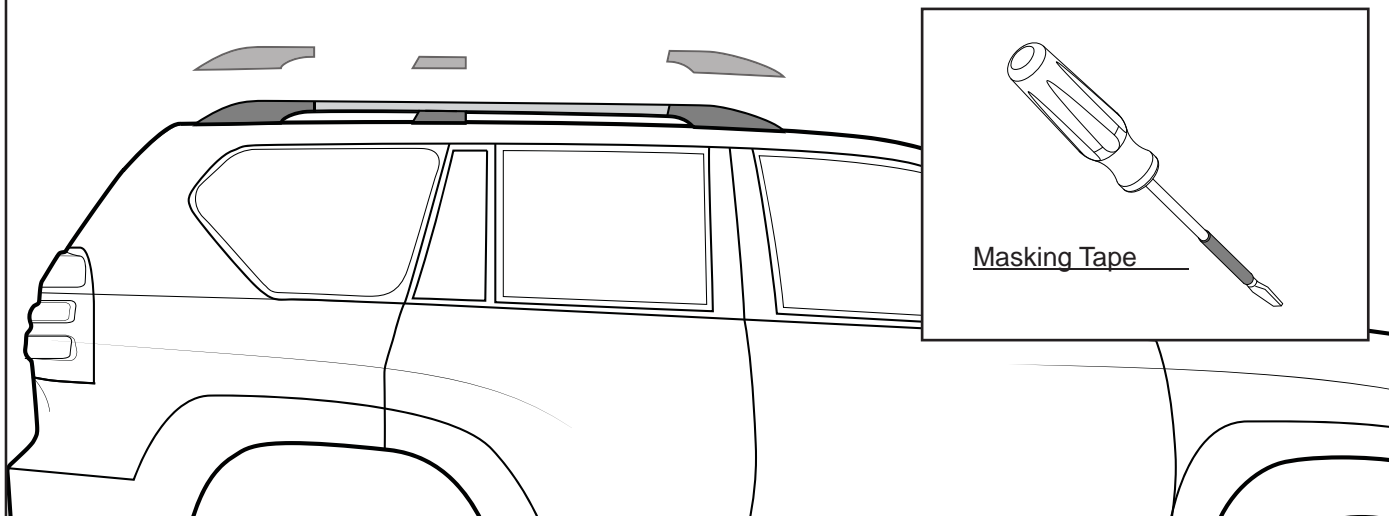


When loosening bolts, loosen bolts progressively together. Failure to do so can dislodge nutplate within roof cavity

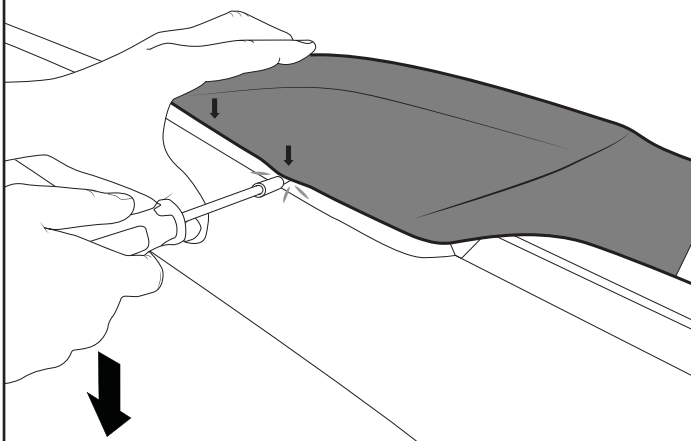
Toyota Prado 120 Backbone RTPB2

Removing Factory Elevated Roof Rails

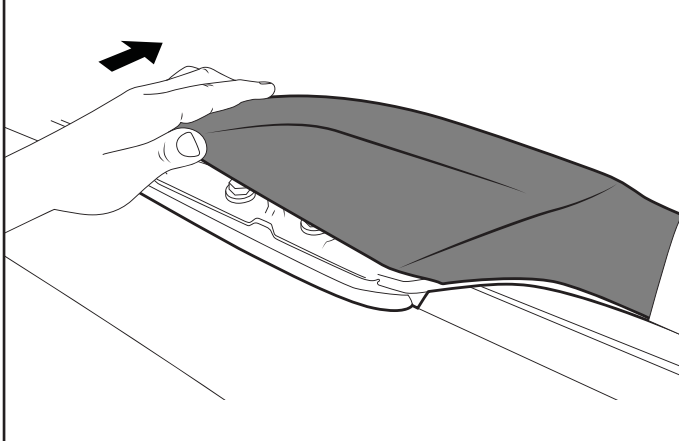
- 1** If the Toyota Prado 120 has factory elevated roof rails you will need to remove these before installing the backbone. To access the hardware fixing the roof rails to the roof, you must first remove the plastic covers. You will need a flat head screwdriver to pry the plastic covers off. To minimise potential damage to the vehicle, it's recommended to pad the metal shaft of the screwdriver with multiple layers of masking tape. This will pad the screwdriver if it hits the bodywork of the vehicle.



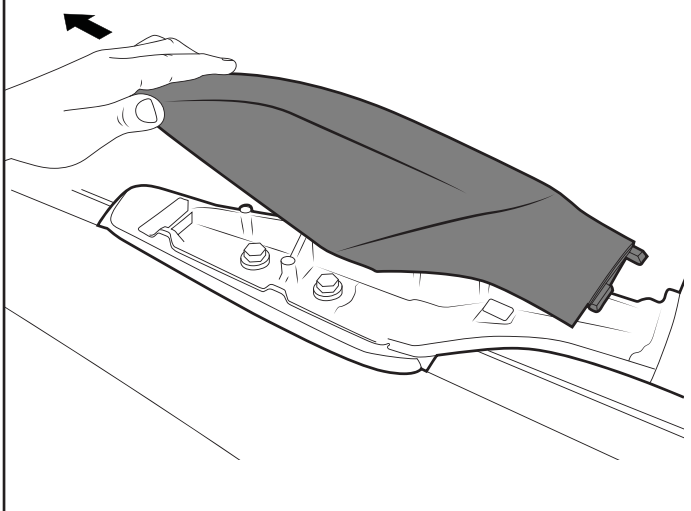
- 2** Using the tape covered screwdriver, unclip the two outside clips holding the covers onto the roof rails. You will need to flex the outside of the covers and find where the clips are resisting. Lever downwards until the clips pop out.



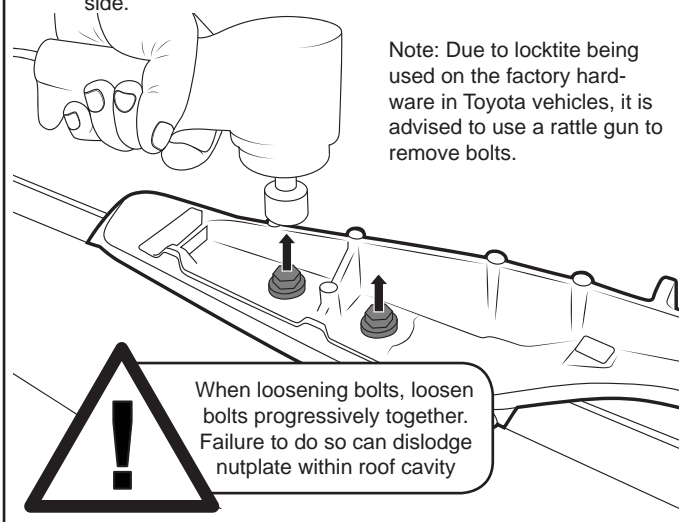
- 3** After the outside clips have popped out, push the front of the cover in towards the car. This will release the inside clips of the cover.



- 4** Once all clips have been released, pull cover forwards and up to remove completely.

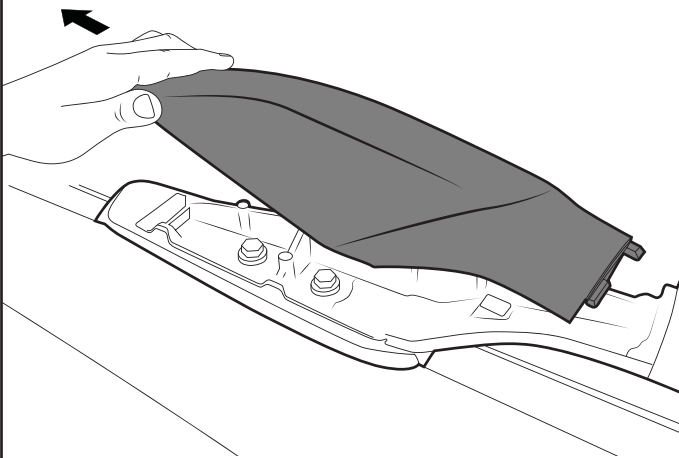


- 5** Remove all hardware holding down roof rails. Note that these are not required to fit the Backbone, store these in a safe place. Complete steps 2-5 for front and rear covers, both left and right side.



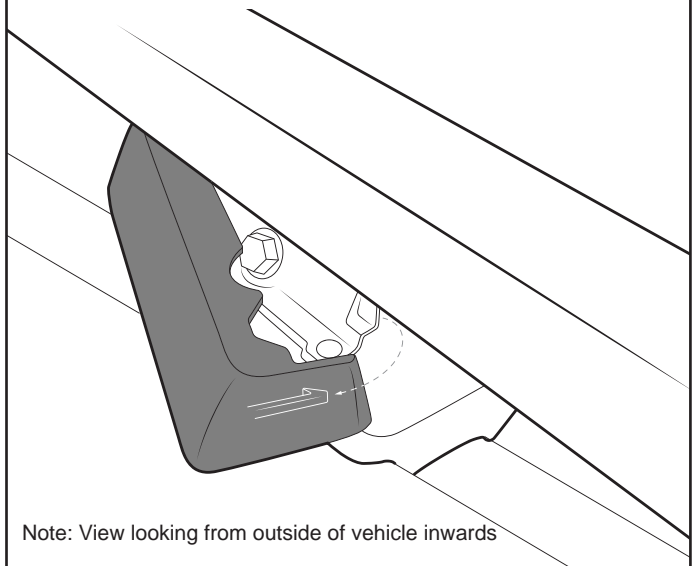
Toyota Prado 120 Backbone RTPB2

- 6** Move to the centre fixture of the roof rail, lean over the rail and position the flat head screwdriver as indicated in image below. Lever the case so the inside clip releases (see Step 8)



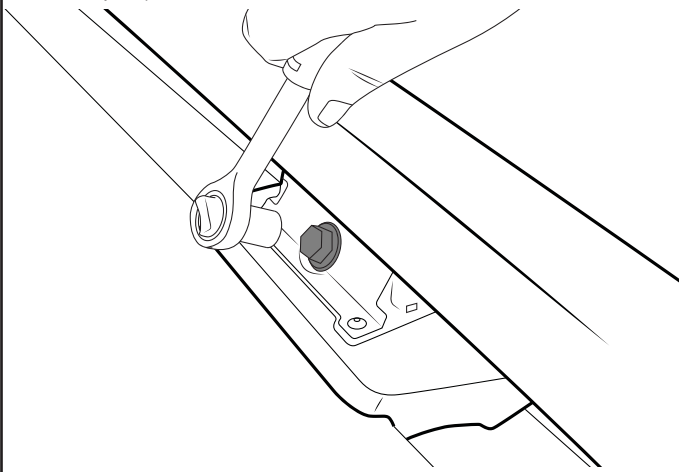
Note: View looking from centre of vehicle outwards

- 7** After one clip has released, pull outwards and remove entire car, revealing hardware fixing centre of elevated roof bars.

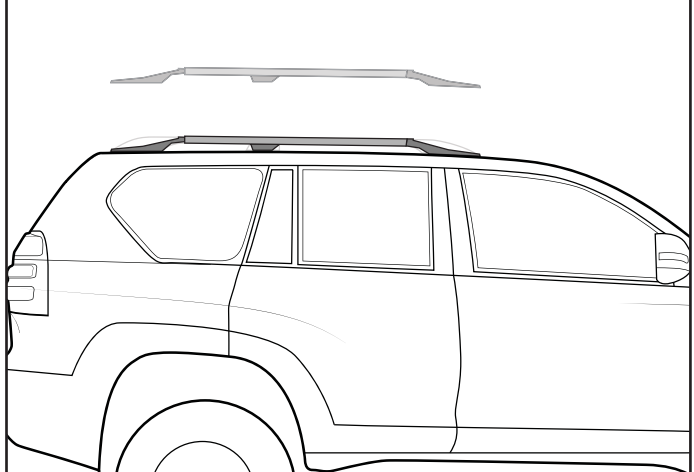


Note: View looking from outside of vehicle inwards

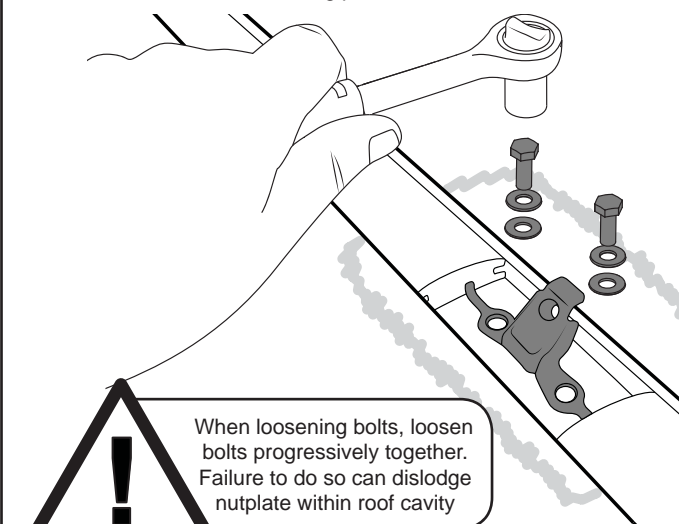
- 8** Remove exposed bolt completely. After removing the bolt, the roof rail is ready to be lifted carefully off of the roof. There will still be hardware to remove from the centre fixing point (see Step 10)



- 9** Carefully lift directly upwards and remove the elevated roof rail from the roof.

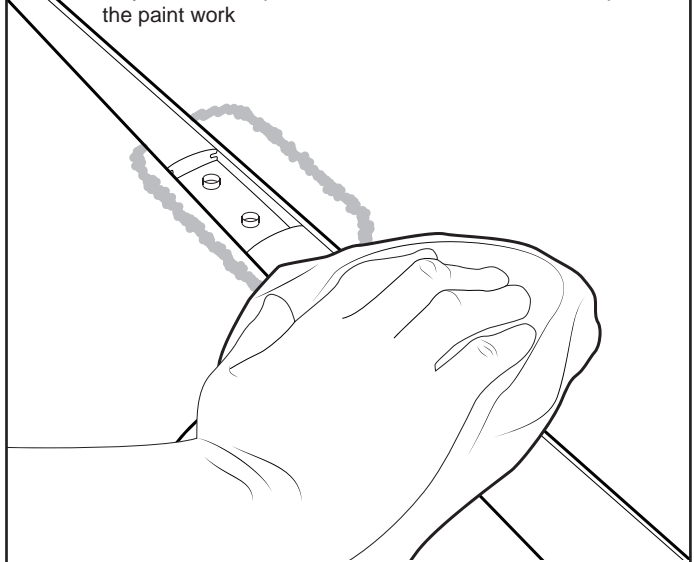


- 10** Once the rail has been removed, loosen and remove remaining hardware from middle fixing points.



When loosening bolts, loosen bolts progressively together. Failure to do so can dislodge nutplate within roof cavity

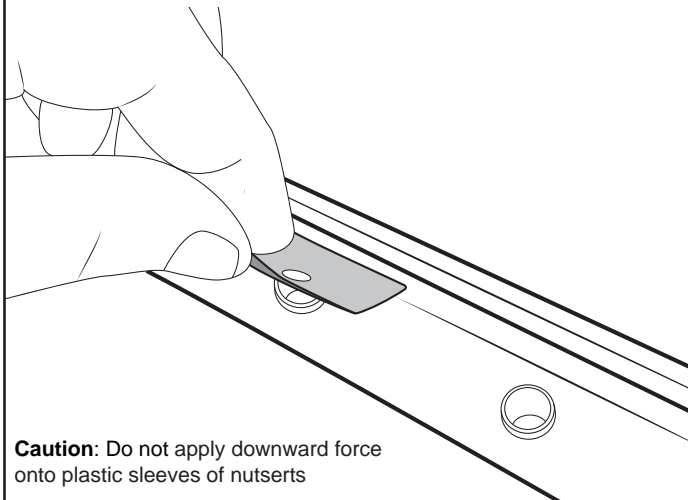
- 11** Whilst the roof is bare, take the time to remove any dirt that may have built up underneath the rubber seals and polish the paint work



Toyota Prado 120 Backbone RTPB2

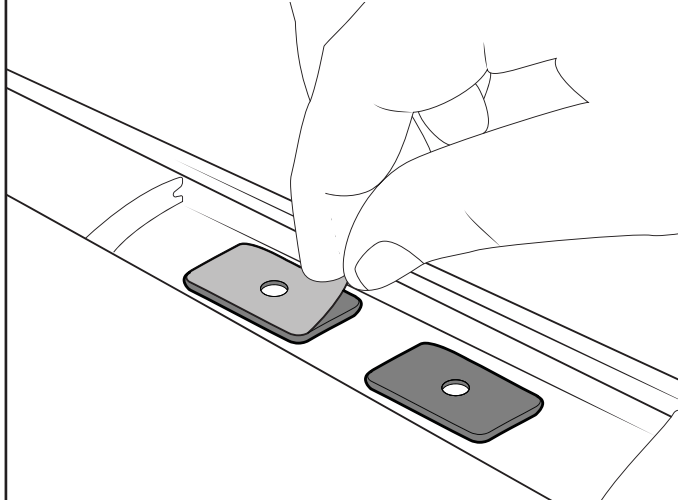
Mounting Backbone Rails and Pioneer Platform

- 1** Remove backing tape of the butyl patch and position over the top of mounting holes. Ensure patch has adhered to channel surface securely. Repeat this step for all 12 holes.

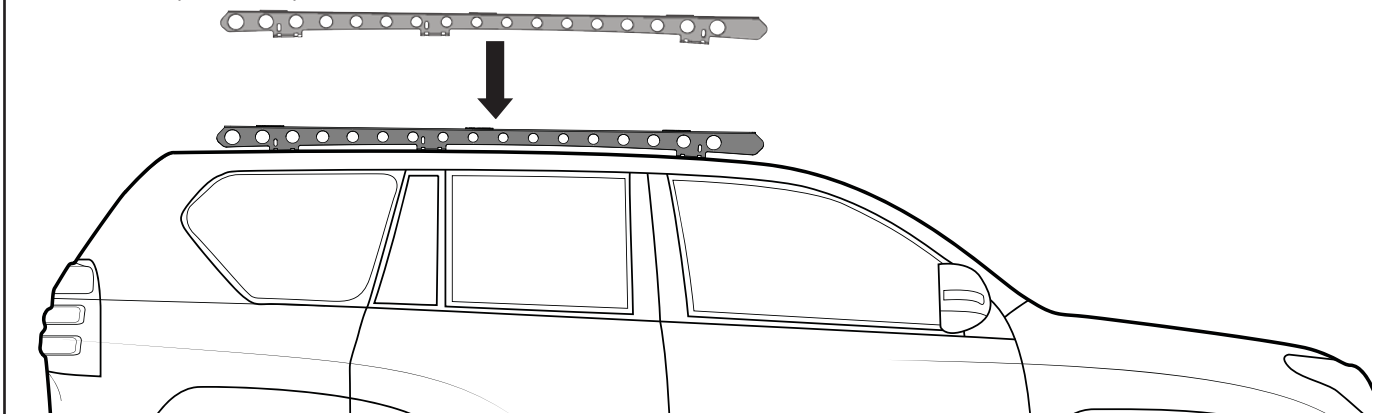


Caution: Do not apply downward force onto plastic sleeves of nutserts

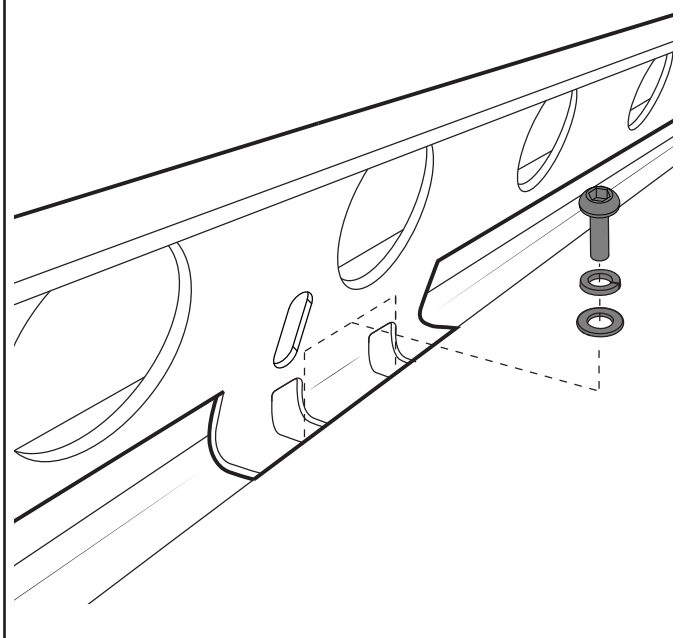
- 2** Once all butyl patches are placed, remove top cover tape, revealing just the Butyl. This will create a watertight seal and protect the paint from metal contact.



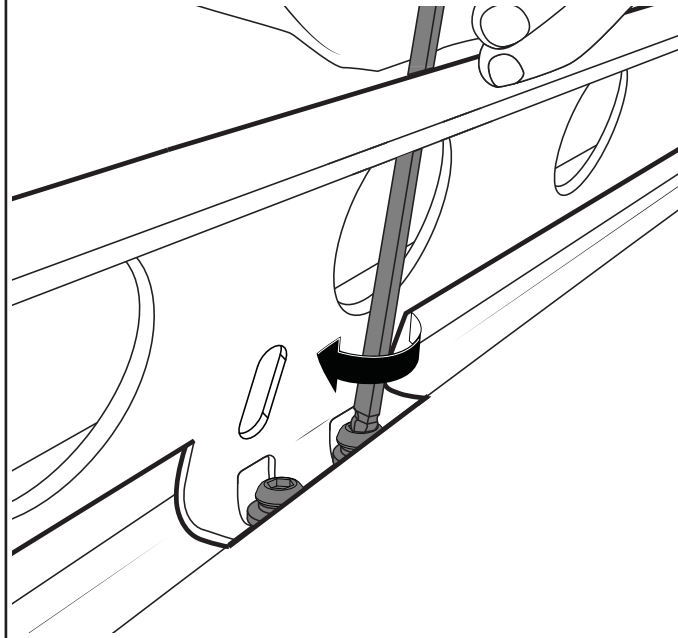
- 3** Place one side of the Backbone onto the roof of the vehicle. Line up the mounting points of the bracket to the those exposed on the roof in the previous steps.



- 4** Using the M8 button screw, M8 spring and flat washer, place hardware into mounting holes of rails. Make sure hardware and holes align with fixed roof mounts before proceeding to Step 5.

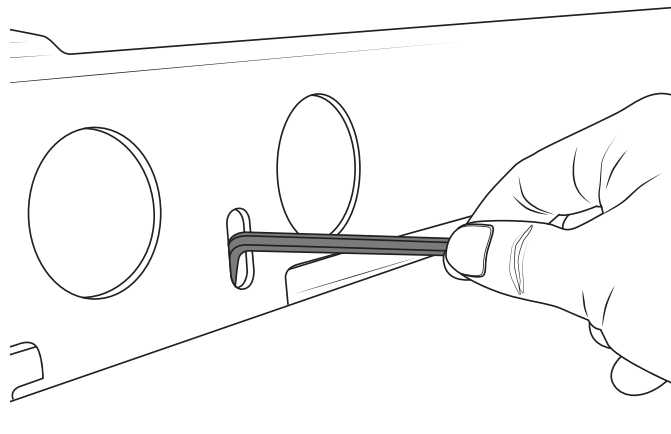


- 5** Start securing backbone by tightening M8 socket hardware into the roof fixed mount points. Improve speed of installation by tightening as much as possible using 6mm ball end allen key.



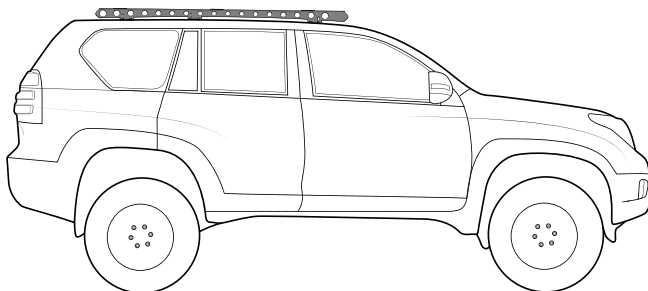
Toyota Prado 120 Backbone RTPB2

6 After all bolts have been tightened as much as possible with the ball end allen key - tighten completely using the small 6mm allen key that is provided with the kit.

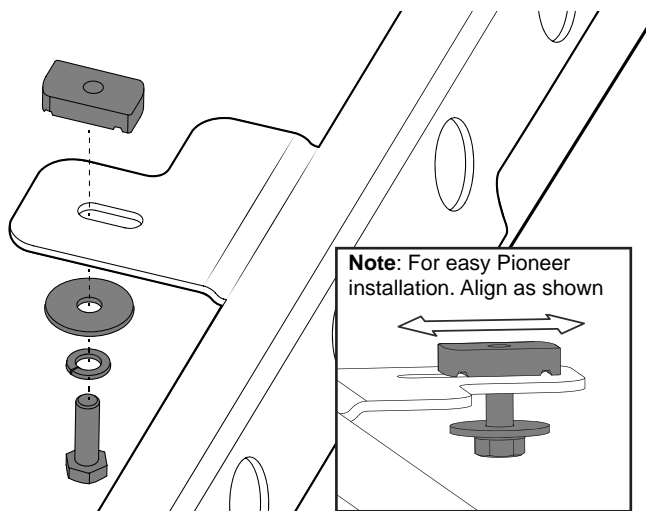


7 Repeat steps 3-6 for securing opposite side Backbone rail.

Ensure both plates are securely positioned on the car. Check each bolt before proceeding to attaching the Pioneer tray to the backbone rails.

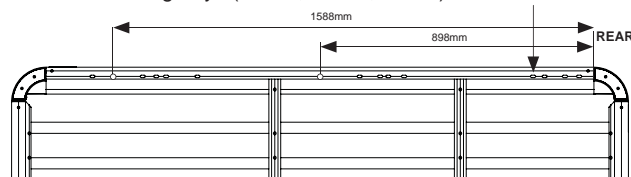


8 Assemble M8 hardware as pictured below. Complete this for the six tabs on top of the backbone rails (3 each rail).

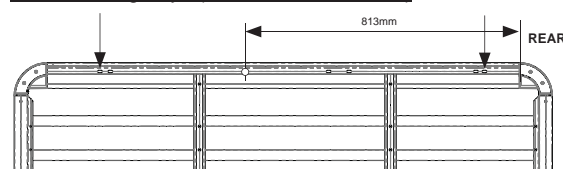


9 Install Pioneer underbars into positions indicated. For detailed instruction - refer to pioneer fitting sheets R1082 and R1467

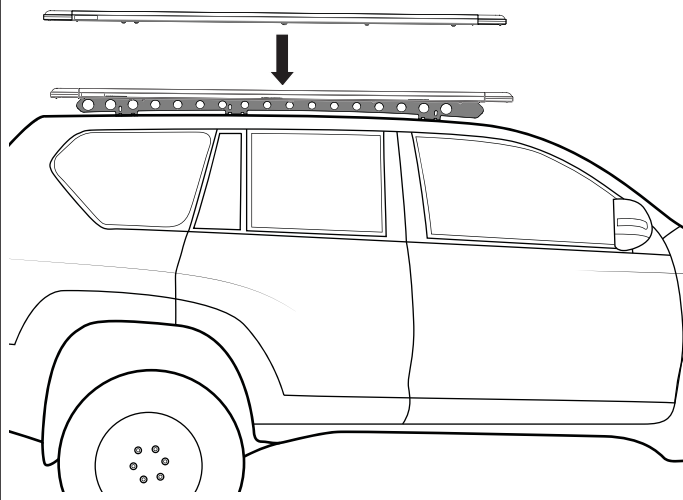
2128mm long trays (42107, 45107, 41107)



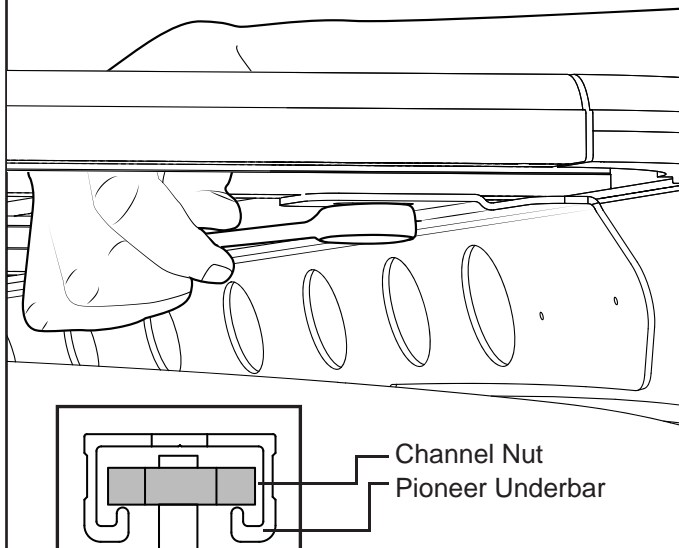
1928mm long trays (42102, 45102, 41102)



10 After underbars have been correctly fitted, place the Pioneer tray on top of the Backbone rails. Align the underbars with the top tabs and ensure the M8 hardware fits into underbar channel.



11 Once Pioneer underbars have been aligned properly, tighten all M8 hardware using 13mm socket wrench or 13mm spanner. Ensure channel nut has rotated within Pioneer underbar and is fixing Pioneer securely.



Channel Nut
Pioneer Underbar