

**CONTROLLED**

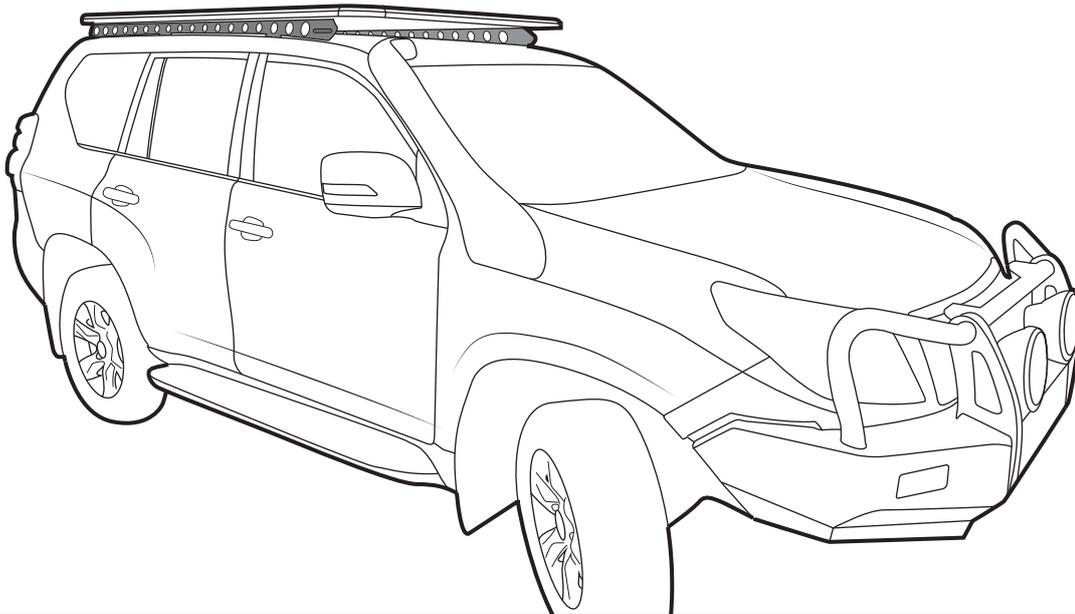
RHINO-RACK

Toyota Prado 150
Backbone RTPB1

BACKBONE

Important: Please read these instructions carefully prior to installation. Please refer to your fitting instruction to ensure that the Backbone System is installed in the correct location. Check the contents of kit before commencing fitment and report any discrepancies. Place these instructions in the vehicle's glove box after installation is complete.

Layout



Maximum load carrying capacity: 120kg / 264lbs

Important Information

1. Check Part No./Kit is correct
2. Read through instruction before installing
3. Fit roof rack accessory
4. Check and recheck all fasteners are secure

Maximum carrying capacity: 120kg (264lbs) including the weight of the rack system 9kg (20lbs) + Pioneer Platform/Tray.

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 basket. **Note: The maximum static load is 360kg (800lbs).**

Warning: 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.

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.

Rack System must be removed when putting vehicle through an automatic car wash.

Caution: 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.

Off-road use:

The Backbone Rack System may be used in off road applications, however a safety factor of 1.5 is enforced. That is, maximum permissible off road load is **80kg (176lbs)**. Although the crossbars are tested and approved to AS1235-2000/ 15011154, off-road conditions can be much more rigorous. Extreme car must be taken in off road conditions

Note for Dealers and Fitters:

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

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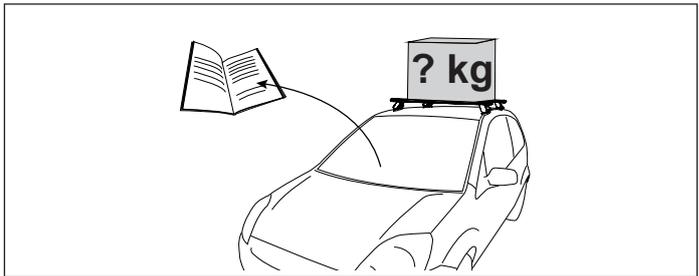
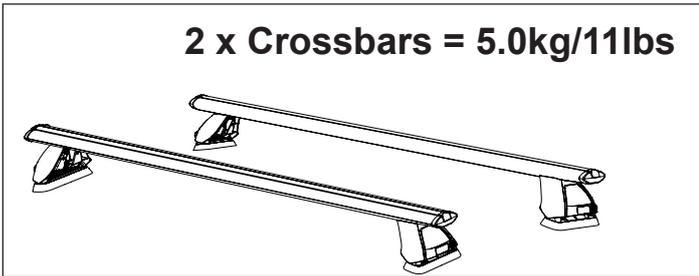
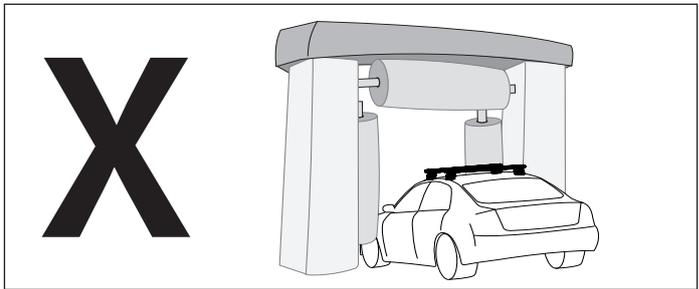
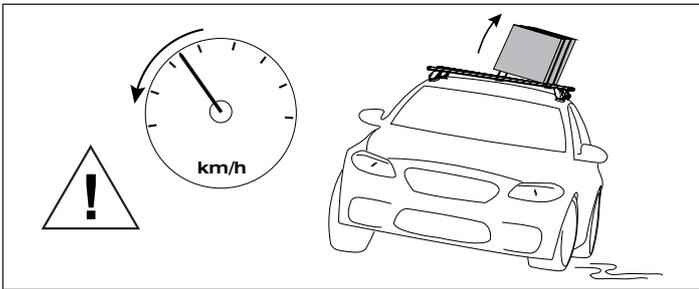
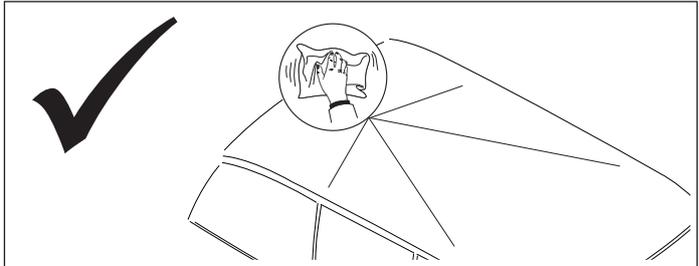
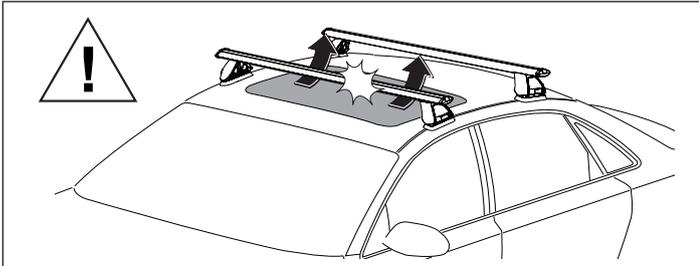
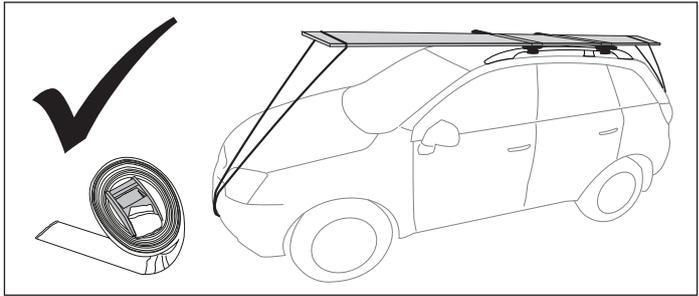
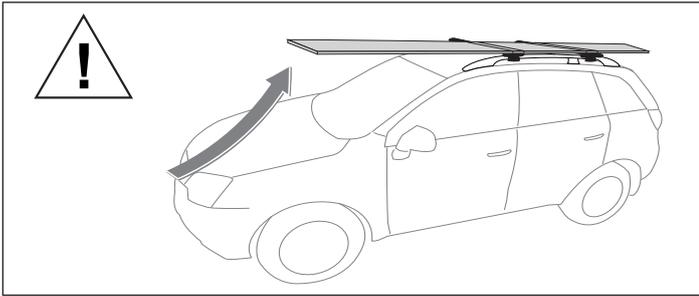
Issue No: 04
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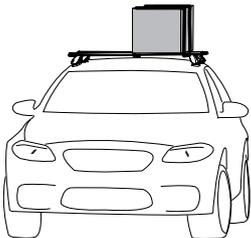
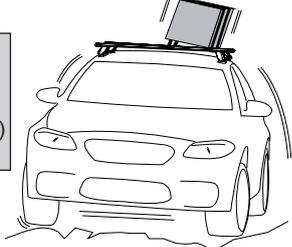
Toyota Prado 150 Backbone RTPB1

BACKBONE



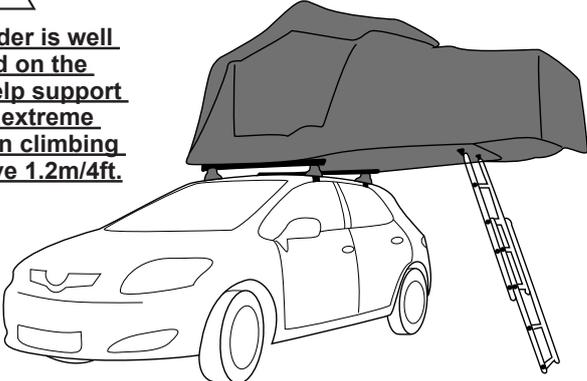
When these roof racks are to be used on a vehicle that is driven off sealed roads, the manufacturer maximum roof load rating (to be found in the vehicles User Manual) should be **divided by 1.5**. Do not forget to subtract the complete crossbar system weight from your maximum carrying capacity.

120kg/264lbs load rating (Urban road)	=	80kg/176lbs load rating (Off road - 120kg / 1.5)
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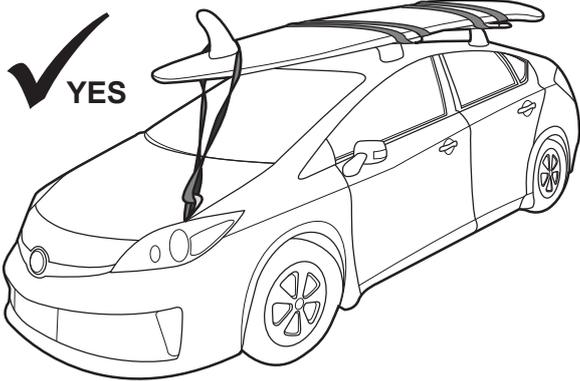
Static Load Rating: 360kg/ 800lbs

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.

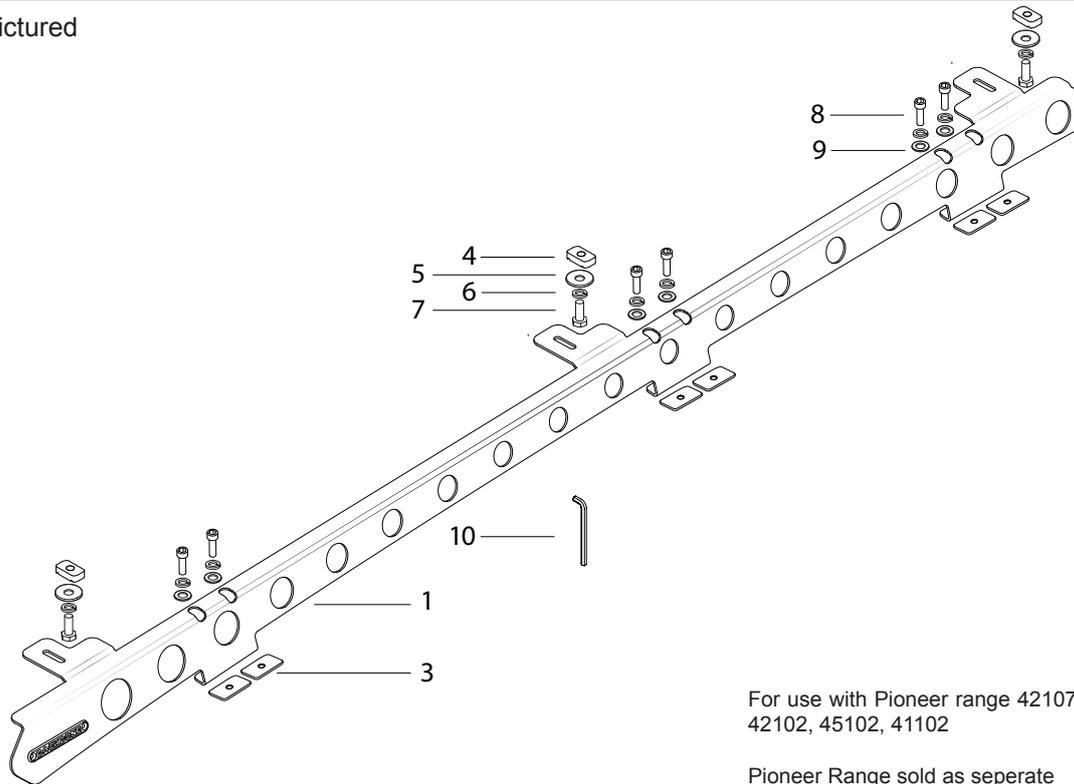
YES





Parts List

Left Side Pictured

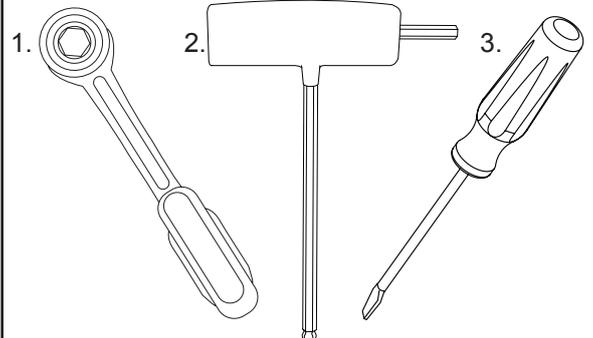


For use with Pioneer range 42107, 45107, 41107, 42102, 45102, 41102

Pioneer Range sold as separate

Item	RTPB1 Kit	Qty	Part No.
1	Prado 150 Left Hand Rail	1	CA1626
2	Prado 150 Right Hand Rail	1	CA1627
3	Butyl Patch 40x25 M8 Hole	12	CA1260
4	M8 Channel Nut	6	N003
5	M8x19x2.5mm Flat Washer	6	W043
6	M8 Spring Washer	18	W019
7	M8x25 Hex Setscrew	6	B101
8	M8x30 Socket Head Screw	12	B190
9	M8x17mm Flat Washer	12	W020
10	Short 6mm Allen Key	1	H050
11	Instructions	1	R748

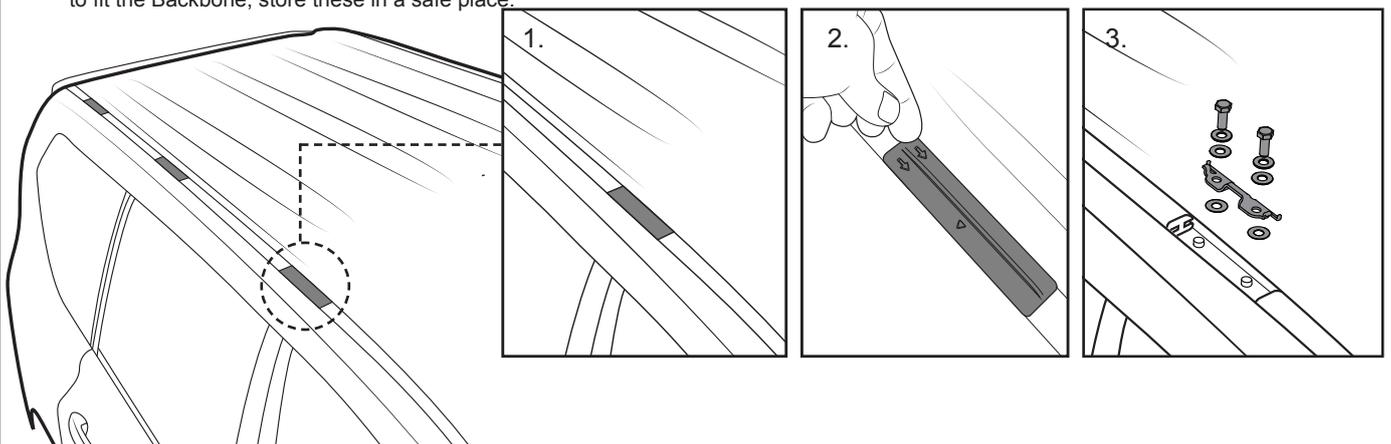
Tools Required:



1. Socket Wrench
2. 6mm Ball End Allen Key (recommended)
3. Flat blade Screw Driver

Removing Fixed point mount covers

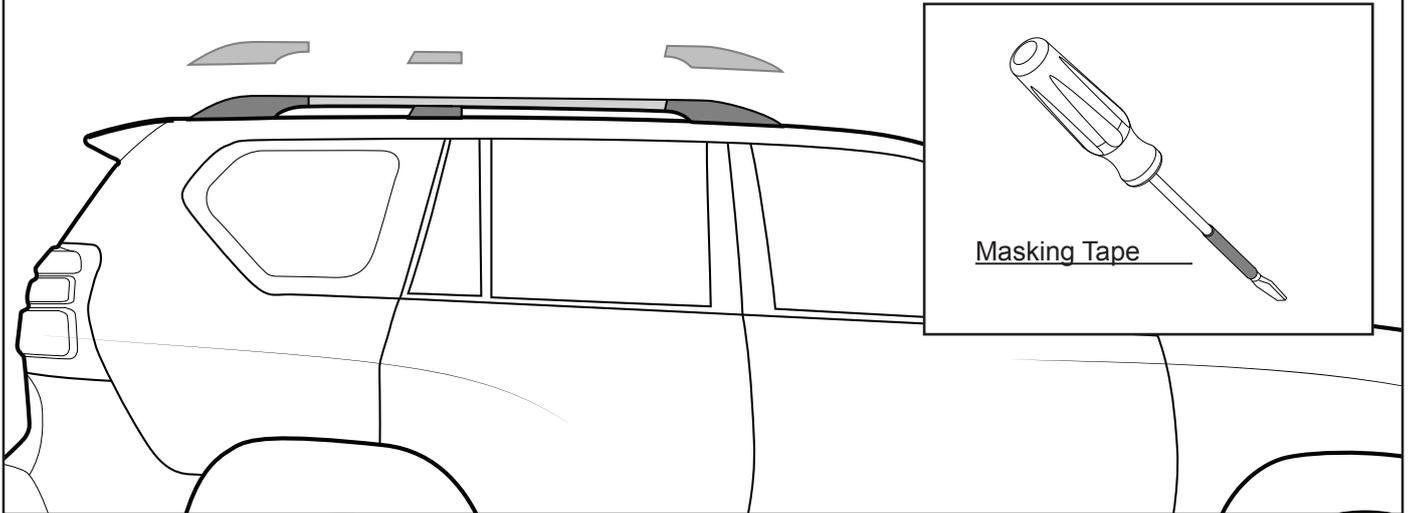
Move to the roof of the vehicle. If your car is not fitted with factory roof rails, remove the six mounting point covers (three per side). Remove Sliding the cover forward and rotating out. Remove the two M8 bolts, washers and bracket. Note that these are not required to fit the Backbone, store these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



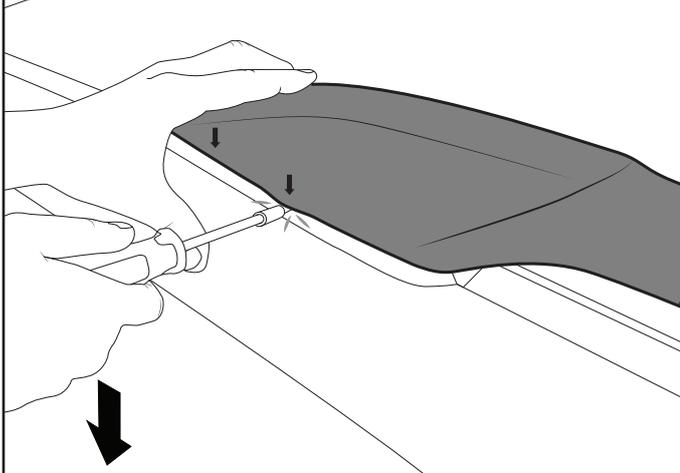


Removing Factory Elevated Roof Rails

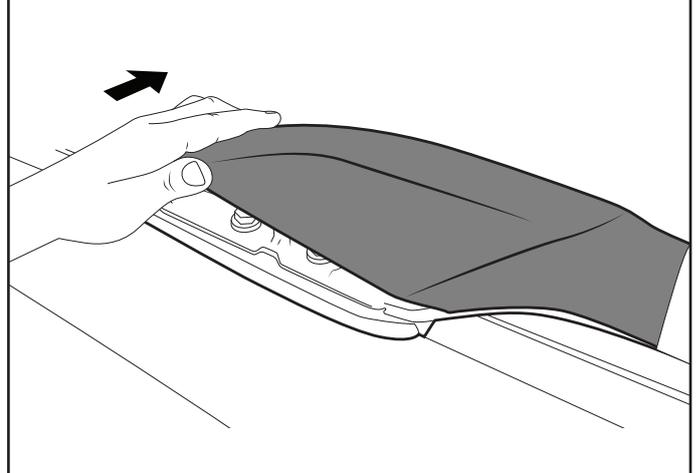
1 If the Toyota Prado 150 has factory elevated roof rails you will need to remove these before installing the backbone. To access the hardware fixing the roof rails to the roof, you must first remove the plastic covers. You will need a flat head screwdriver to pry the plastic covers off. To minimise 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.



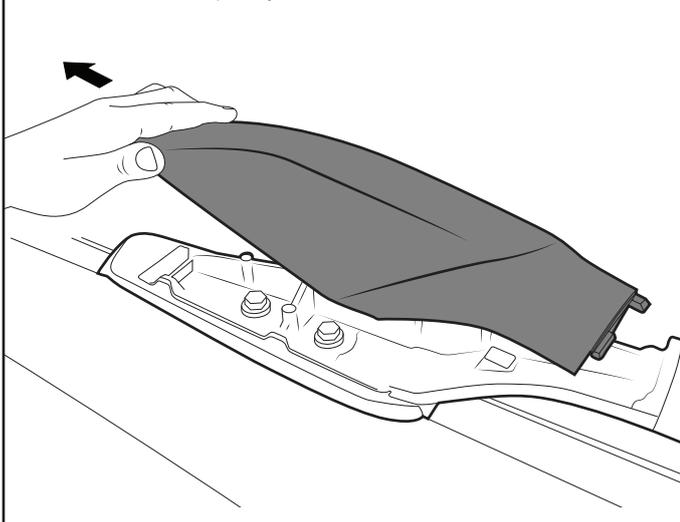
2 Using the tape covered screwdriver, unclip the two outside clips holding the covers onto the roof rails. You will need to flex the outside of the covers and find where the clips are resisting. Lever downwards until the clips pop out.



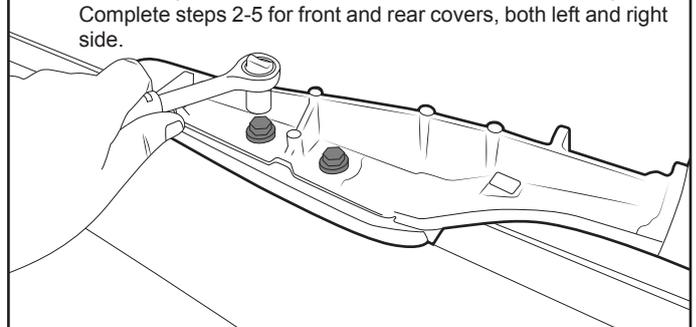
3 After the outside clips have popped out, push the front of the cover in towards the car. This will release the inside clips of the cover.



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



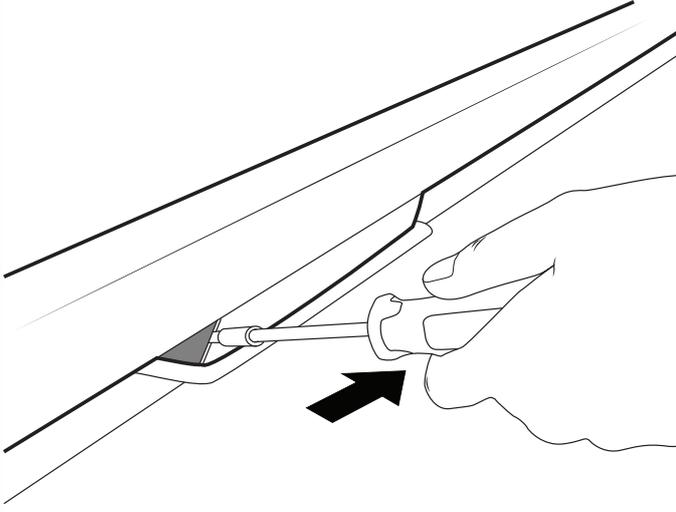
5 Remove all hardware holding down roof rails. Note that these are not required to fit the Backbone, store these in a safe place. Complete steps 2-5 for front and rear covers, both left and right side.



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

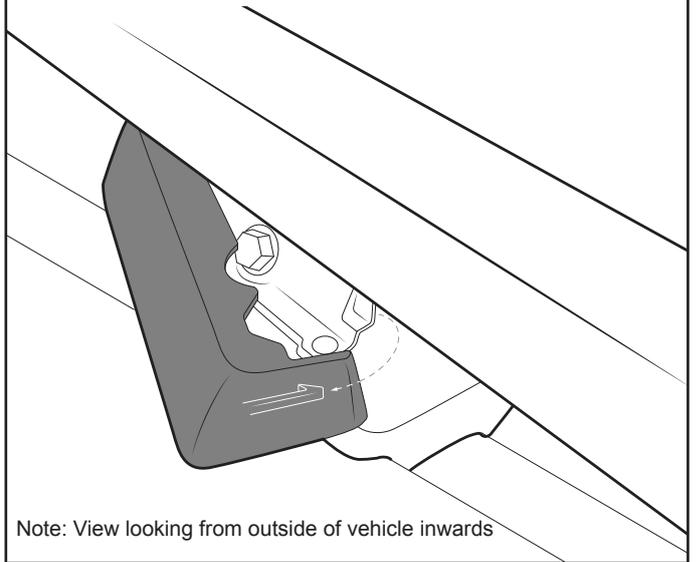


6 Move to the centre fixture of the roof rail, lean over the rail and position the flat head screwdriver as indicated in image below. Lever the case so the inside clip releases (see Step 8)



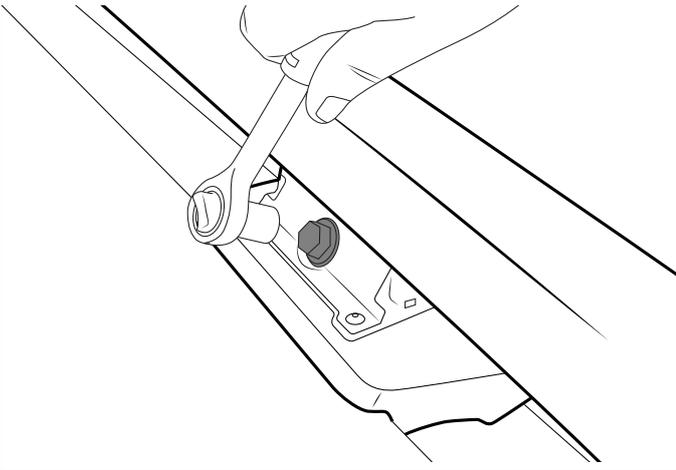
Note: View looking from centre of vehicle outwards

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

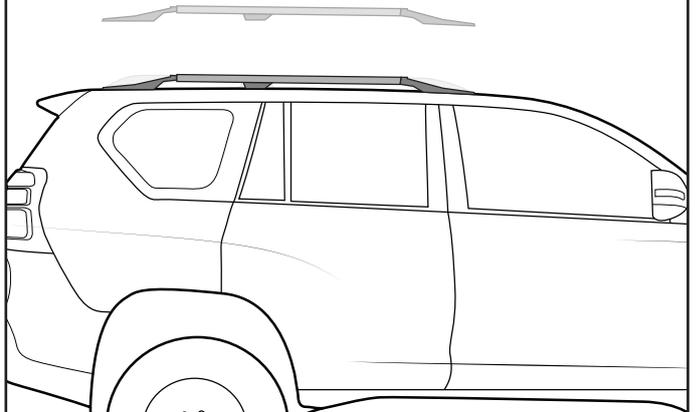


Note: View looking from outside of vehicle inwards

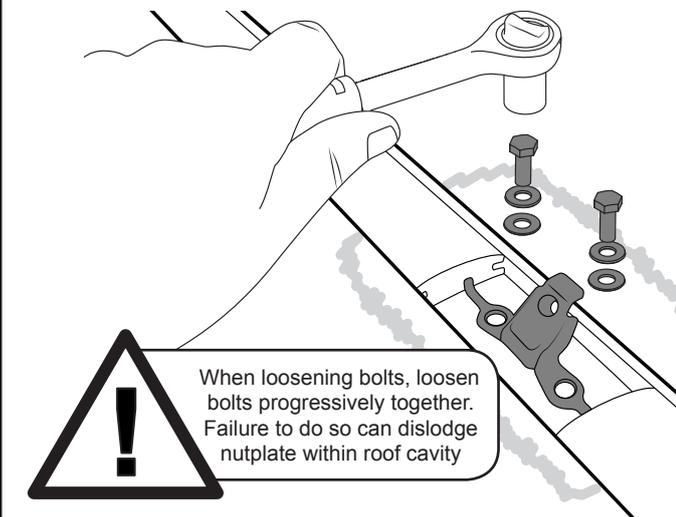
8 Remove exposed bolt completely. After removing the bolt, the roof rail is ready to be lifted carefully off of the roof. There will still be hardware to remove from the centre fixing point (see Step 10)



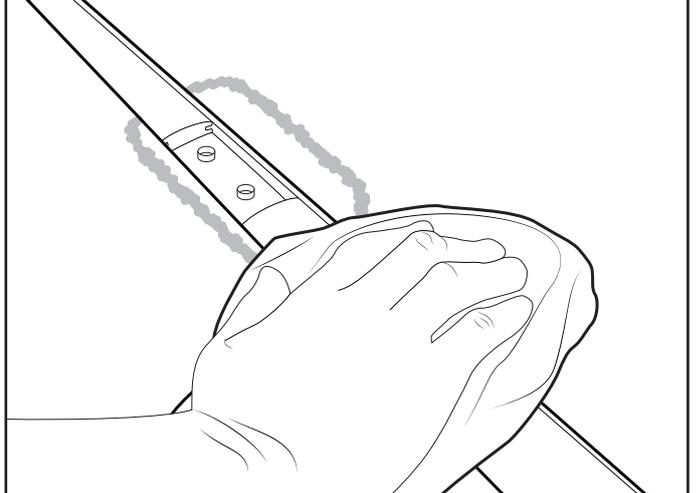
9 Carefully lift directly upwards and remove the elevated roof rail from the roof.



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



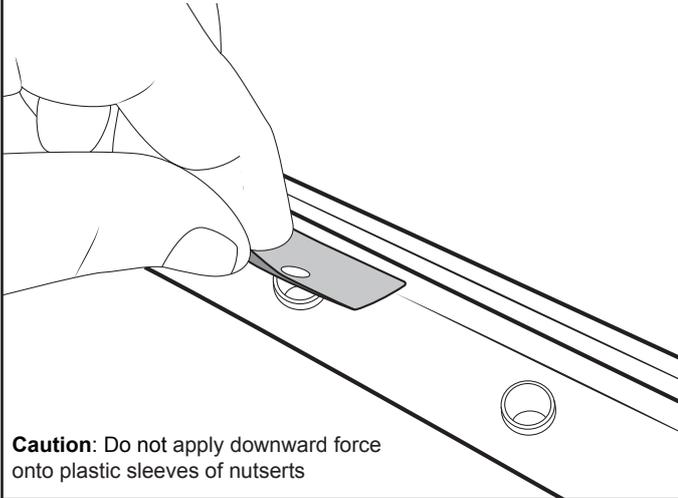
11 Whilst the roof is bare, take the time to remove any dirt that may have built up underneath the rubber seals and polish the paint work





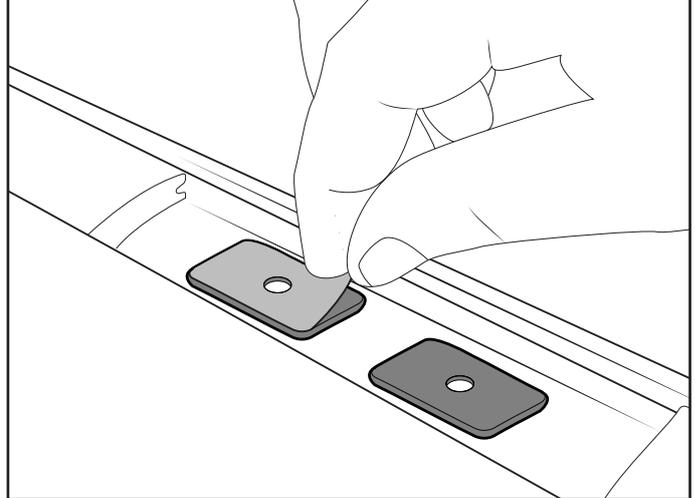
Mounting Backbone Rails and Pioneer Platform

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.

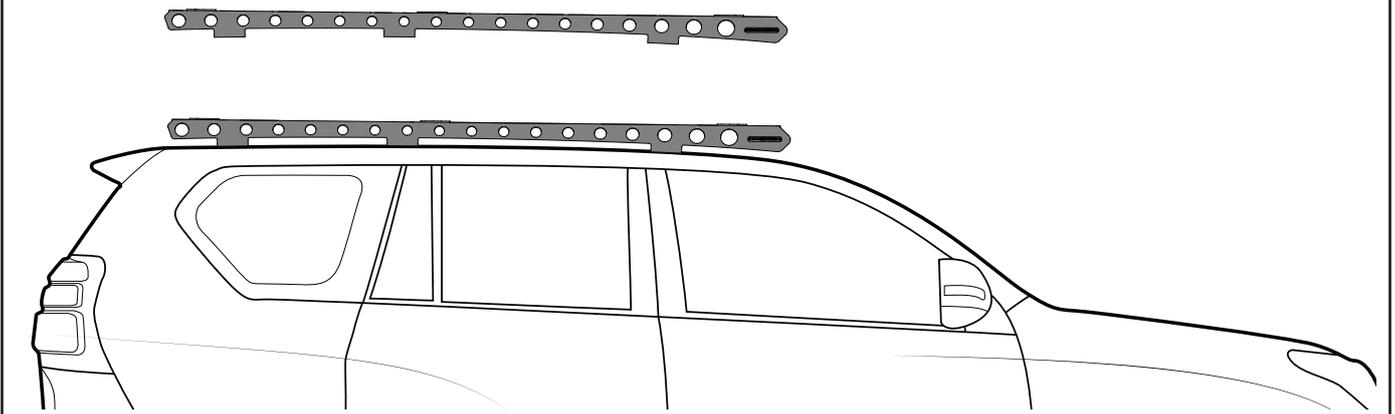


Caution: Do not apply downward force onto plastic sleeves of nutserts

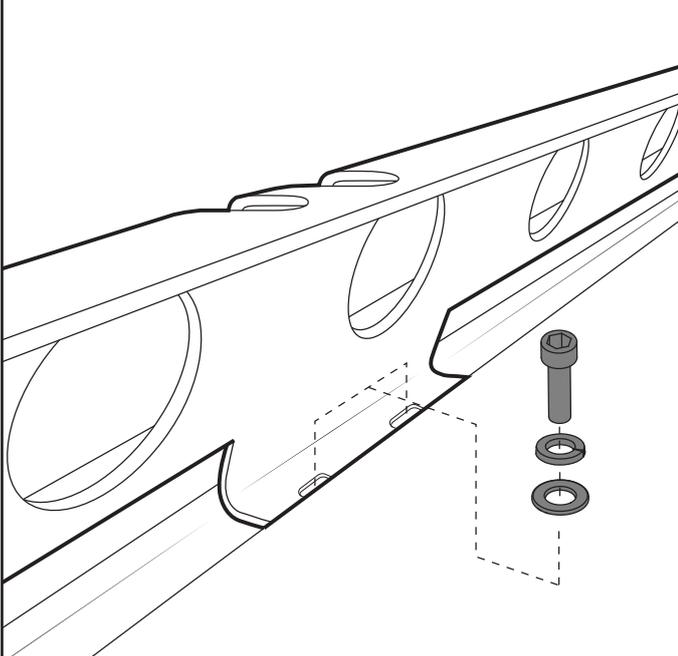
2 Once all butyl patches are placed, remove top cover tape, revealing just the Butyl. This will create a watertight seal and protect the paint from metal contact.



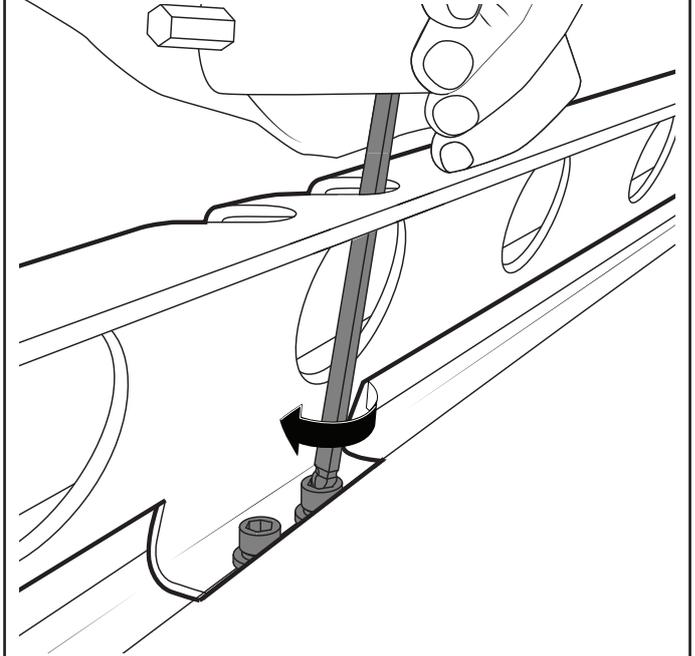
3 Place one side of the Backbone onto the roof of the vehicle. Line up the mounting points of the bracket to the those exposed on the roof in the previous steps.



4 Using the M8 socket 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.

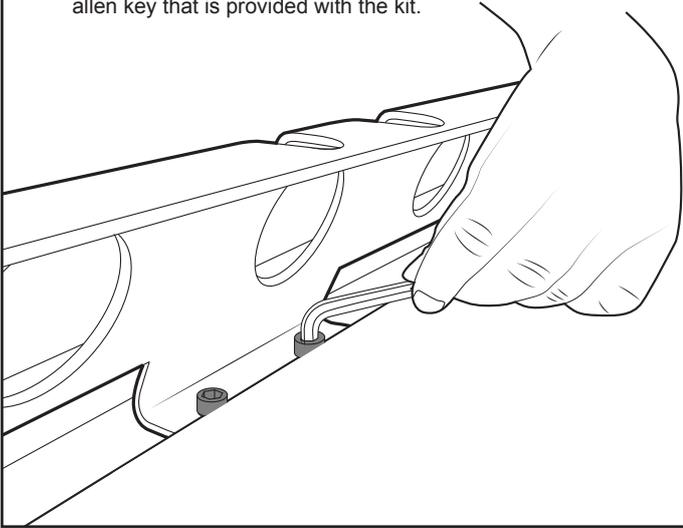


5 Start securing backbone by tightening M8 socket hardware into the roof fixed mount points. Improve speed of installation by tightening as much as possible using 6mm ball end allen key.



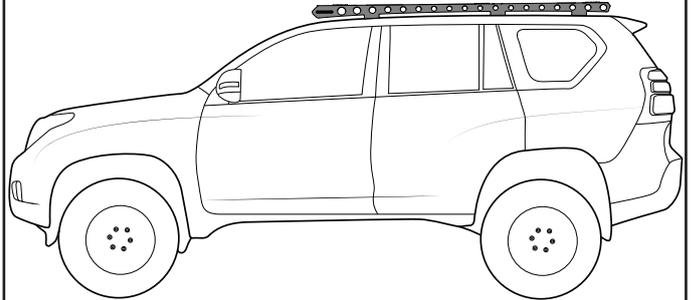


6 After all bolts have been tightened as much as possible with the ball end allen key - tighten completely using the small 6mm allen key that is provided with the kit.

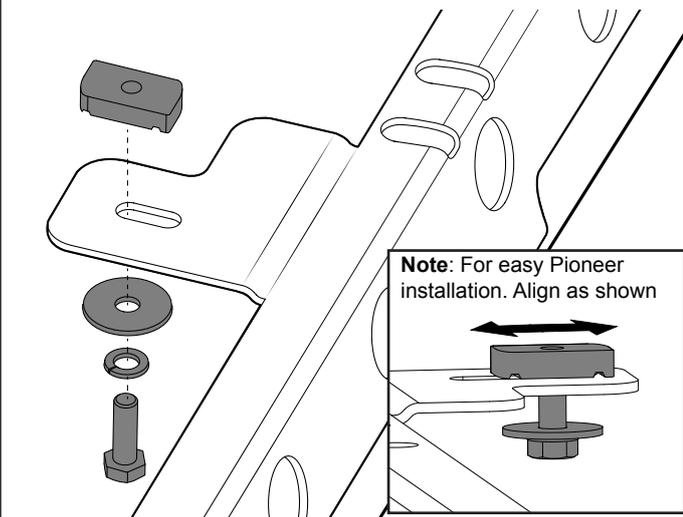


7 Repeat steps 3-6 for securing opposite side Backbone rail.

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

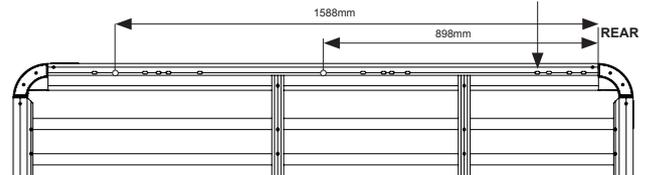


8 Assemble M8 hardware as pictured below. Complete this for the six tabs on top of the backbone rails (3 each rail).

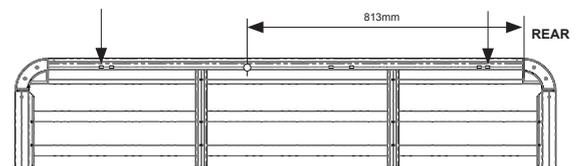


9 Install Pioneer underbars into positions indicated. For detailed instruction - refer to pioneer fitting sheets R1082 and R1088

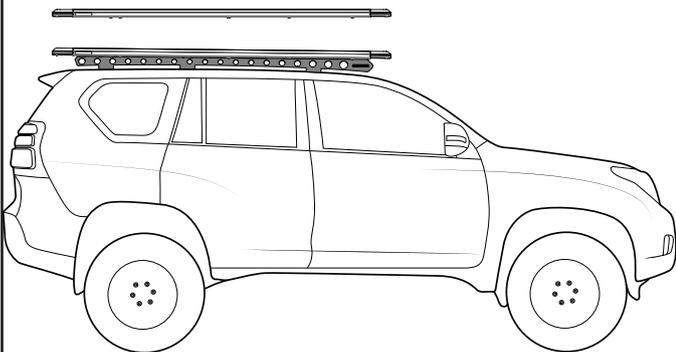
2128mm long trays (42107, 45107, 41107)



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.

