



RHINO-RACK

Aerodynamic & Heavy Duty Roof Rack Systems

Holden Crewman Heavy Duty Two Crossbar System

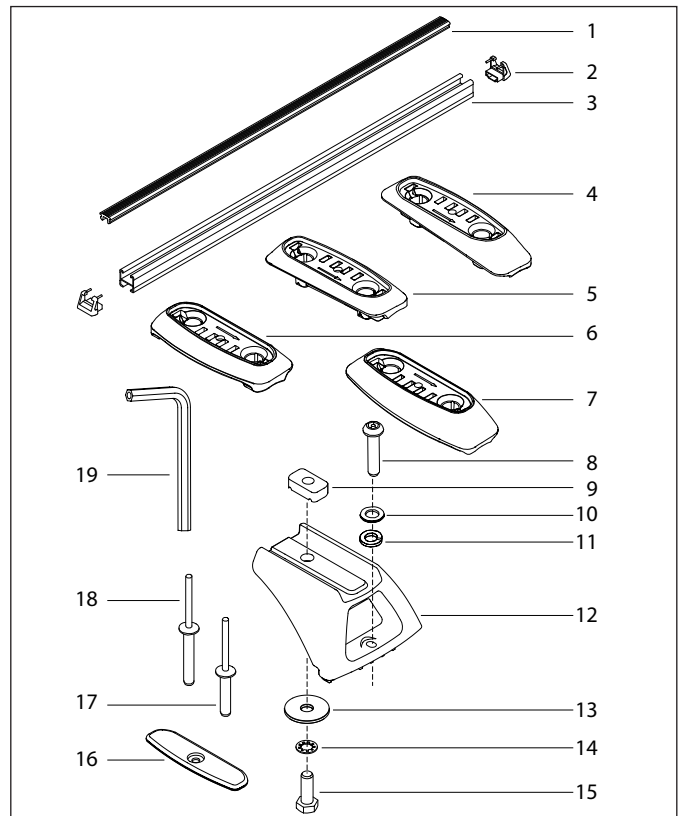
Place these instructions in the vehicle's glove box after installation is complete.

Important: Please read these instructions carefully prior to installation. Please refer to your fitting instruction to ensure that the roof racks are installed in the correct locations. Check the contents of kit before commencing fitment and report any discrepancies

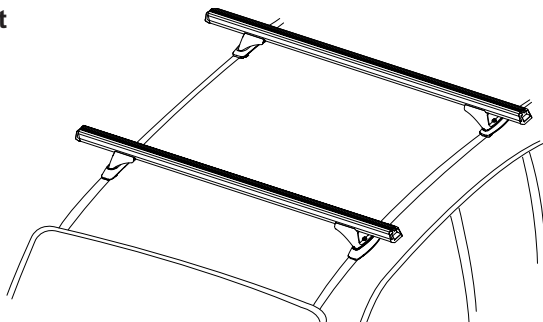
Parts List

Maximum carrying capacity: 100kg

Item	Component Name	Qty	Part No.
1	Heavy Duty Rubber Buffer 1250mm (sold separately)	2	R003
2	Heavy Duty Crossbar End Cap	4	M002
3	Heavy Duty Crossbar 1250mm (sold separately)	2	A019
4	Roof Pad Front LEFT	1	M191
5	Roof Pad Rear LEFT	1	M193
6	Roof Pad Rear RIGHT	1	M192
7	Roof Pad Front RIGHT	1	M190
8	M6 x 27mm Security Screw	4	B063
9	M10 Channel Nut	4	N024
10	M6 Spring Washer	4	W004
11	M6 x 12.5mm Flat Washer	4	W003
12	RCP Leg	4	M123
13	M10 x 38mm Flat Washer	4	W022
14	M10 Internal Shakeproof Washer	4	W021
15	M10 x 20mm Hex Bolt	4	B003
16	Mounting Pad Cover Plate	4	M126
17	5mm x 28 Rivet	7	H003
18	5mm x 33 Rivet	3	H007
19	5mm Security Allen Key	1	H021
20	Fitting Instruction	1	RR-132



Layout



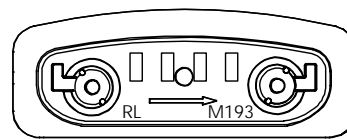
Care Instruction:

Thoroughly clean vehicle roof including roof channel prior to fitting the Rhino Heavy Duty roof racks.

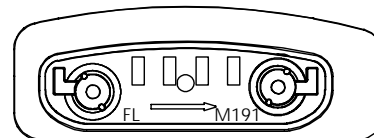
Tools Required

- Allen key, provided in kit
- Flat Head screwdriver
- Measuring Tape
- Pneumatic or Concertina type Rivet Gun
- Marking Pen
- 5mm drill bit with depth stop
- Vacuum Cleaner
- Cold Galvanising Solution & Brush
- Selleys Butyl Mastic
- Caulking Gun
- Power or Battery Drill
- Hacksaw

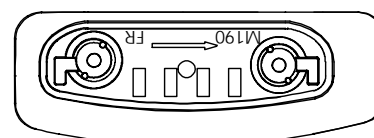
Figure 1. Roof Pads denoting their position.



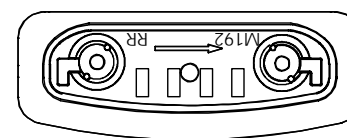
'RL'
Rear Left
(Passenger side)



'FL'
Front Left
(Passenger side)



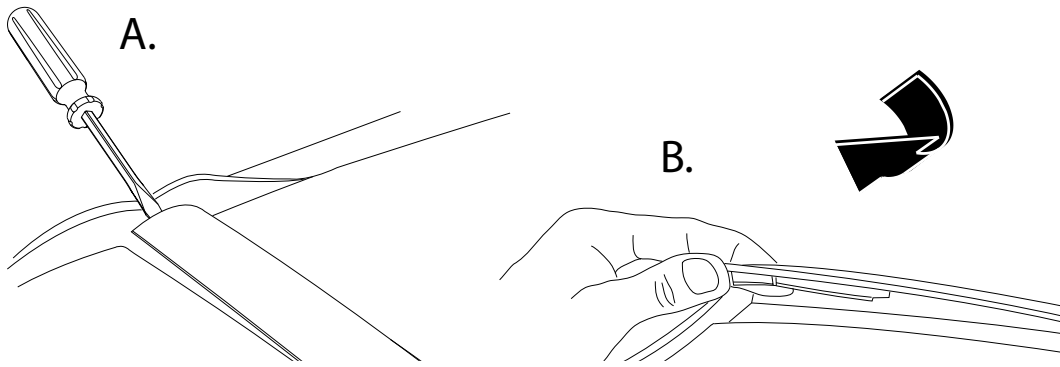
'FR'
Front Right
(Driver side)



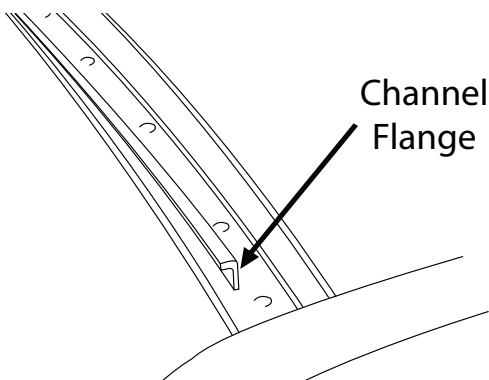
'RR'
Rear Right
(Driver side)

Lift the windscreen rubber and gently lever under the roof strip so you can grab it with your fingers (A.). The roof strip will need to be rotated/twisted (B.) in the direction shown to unclip it from the channel flange. Once the roof strip is out thoroughly clean the channel before starting any installation. (Left Front of vehicle shown).

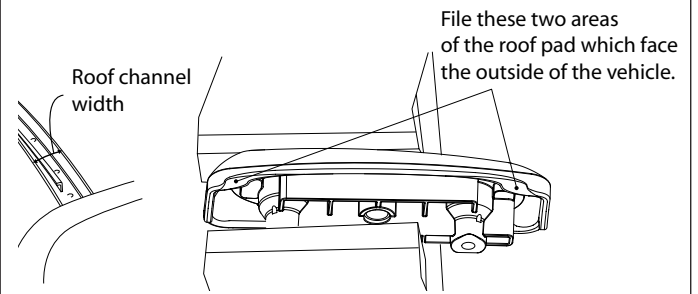
1



NOTE a: Detail view of channel flange where measurements are taken from for roof pad placement. (Front right shown).

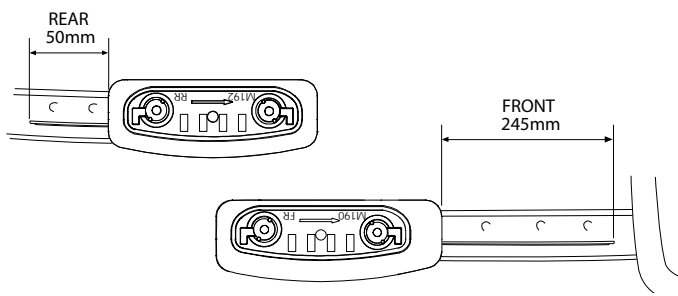


NOTE b: Due to the variance in roof channel width between vehicles, roof pads may need to be filed to fit. Hold roof pad in a bench vice and file. Place a rag between the jaws to prevent marking the roof pad. **Do not overtighten the vice.**



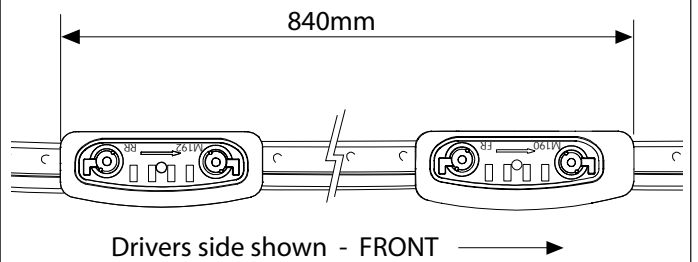
Mark a line 245mm from Front of channel flange and position Front Roof Pad as shown. Mark a line 50mm from Rear of channel flange and position Rear Roof Pad as shown. Same measurement for both sides.

2



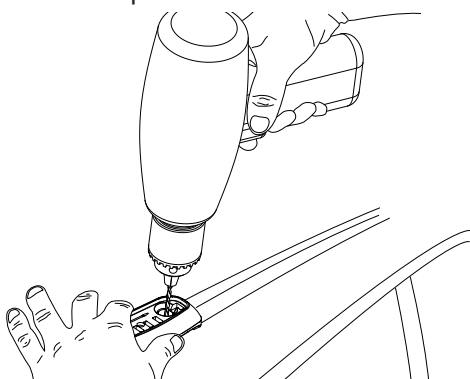
With the roof pads in position, double check that the overall measurement is 840mm as shown.

3



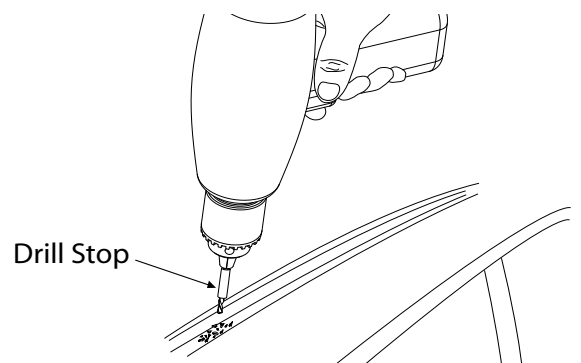
Hold the roof pad in position and using a 5mm drill bit spot drill only at this stage the two hole positions in each roof pad. Remove the roof pad.

4



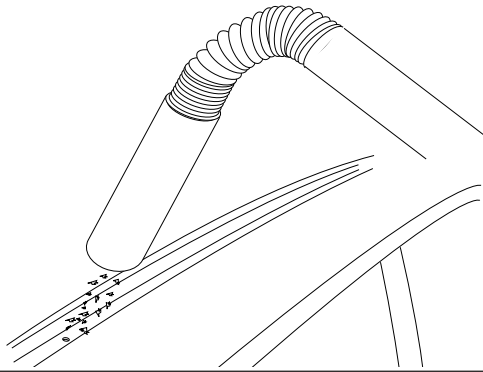
Position a drill stop 5-8mm from the drill tip. Drill through the spot holes in the roof channel using a 5mm drill bit.

5



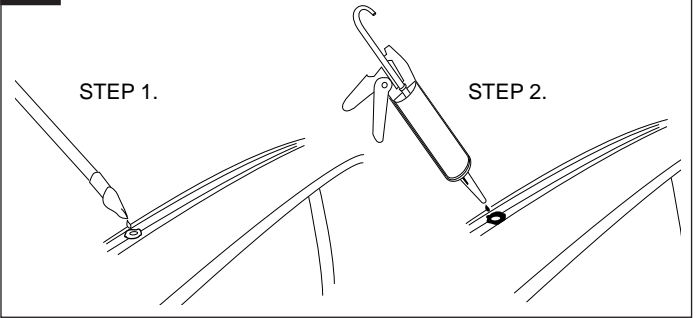
Vacuum the swarf from the roof channel then wipe clean with a rag.

6



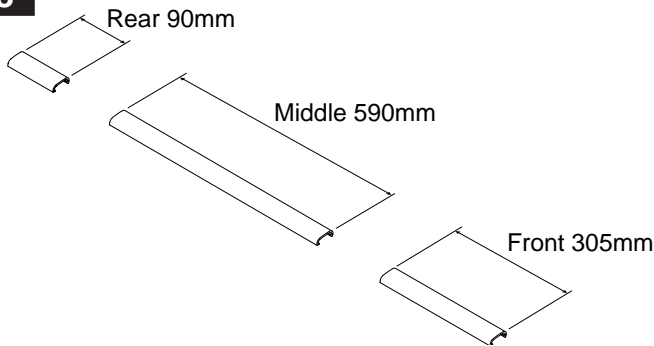
Apply a liberal amount of cold galvanizing solution to the inside and surrounds of all holes. Allow cold galvanizing solution to dry, approx 10 minutes, then apply a liberal amount of Selleys Butyl Mastic in and around each hole.

7



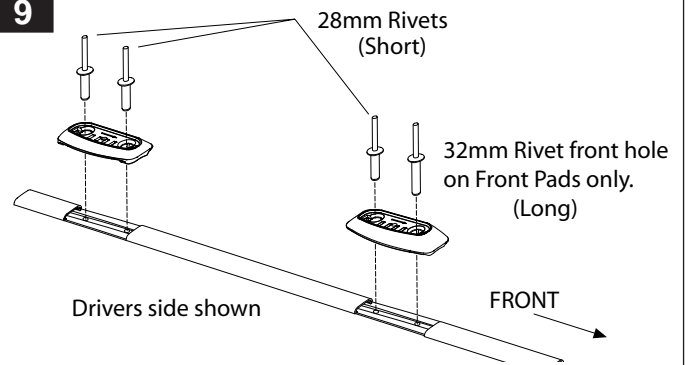
Make two cuts through the roof channel trim so you end up with three pieces at the sizes illustrated. Use of a hacksaw or tin snips is recommended.

8



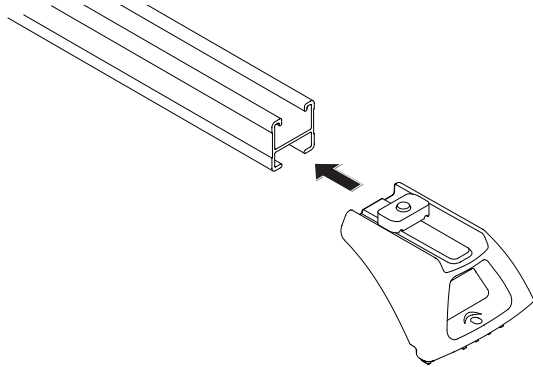
The roof pads are designed to cover the the trim when in position. Clip the trim in place and then sit the roof pads over the drilled holes and rivet in place.

9



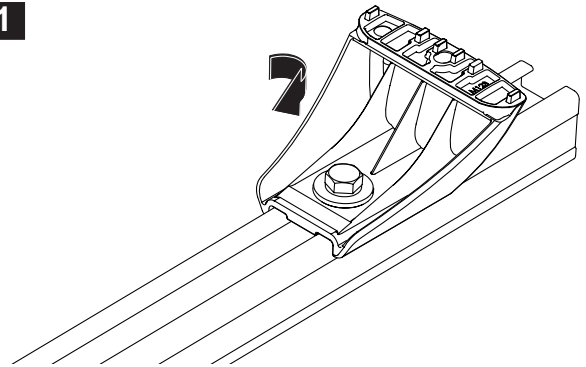
Slide the Legs into each end of the Cross Bar. Make sure the Channel Nut locates across the bar as shown. Only finger tighten the M10 Channel Nut bolt at this stage.

10



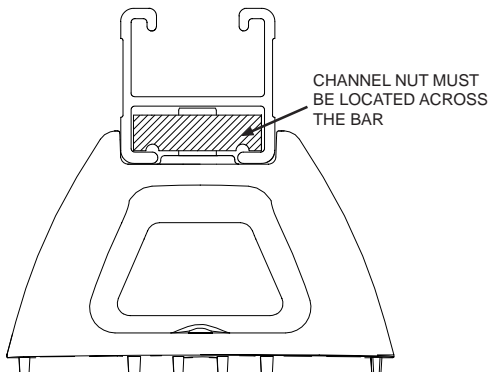
Finger tighten the Leg attachment bolt so that the Channel Nut turns to locate across the Bar. The legs will require adjustment later.

11



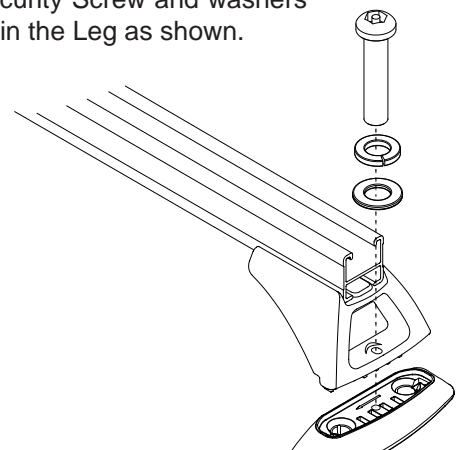
It is very important that the Channel Nut is fully located across the Bar as shown.

12



Place the M6 Security Screw and washers through the hole in the Leg as shown.

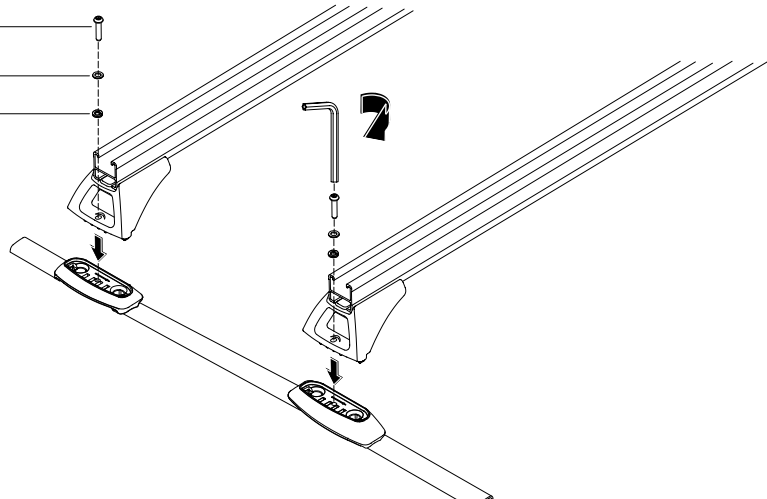
13



Place the Crossbar/Leg assemblies onto the pads. Insert the screw/washer assembly through the Leg mounting hole. Using the allen key provided. Tighten the Security screws. Recommended tightening torque 3-4N/m. **DO NOT OVERTIGHTEN.**

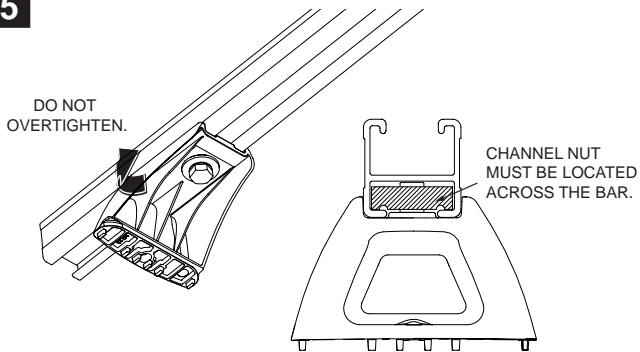
14

- M6 Security Screw
- M6 Spring Washer
- M6 Flat Washer



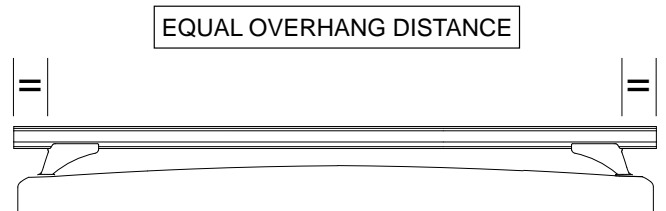
Recommended tightening torque for the crossbar attachment bolts is 5Nm. Ensure that the channel nut is fully located across the crossbar.

15



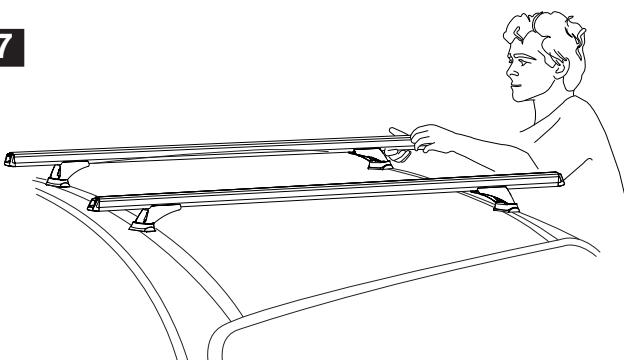
Check the Crossbar over hang is equal on both sides, re-adjust if required.

16



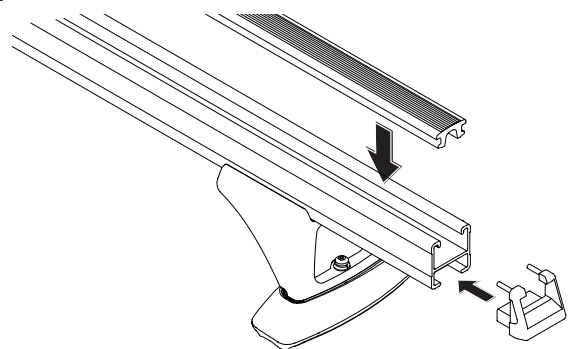
When front and rear Crossbars are in required position, tension Legs and Crossbars.

17



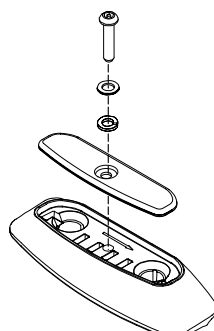
Insert the crossbar rubber buffer strip into the top of the Crossbar. Insert the end caps into the ends of the crossbar, a rubber mallet may be required to fit the end caps.

18



When the roof crossbars and legs are removed the roof pads can be covered for protection with the Mounting Pad Cover Plates.

19



Important Information

Maximum carrying capacity: 100kg

Recommendations

It is essential that all bolt connections be checked after driving a short distance when you first install your crossbars. Bolt connections should be checked again at regular intervals (probably once a week is enough, depending on road conditions, usage, loads and distances travelled). You should also check the roof bars each time they are refitted.

Make sure to fasten your load securely. Please ensure that all loads are evenly distributed and that the centre of gravity is kept as low as possible.

Use only non-stretch fastening ropes or straps.

Sensitivity to Crosswinds, Behaviour in Curves and Braking

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-resisting loads; special consideration must be taken into account when braking.

Please remove crossbars when putting vehicle through an automatic car wash.

Load Ratings

Maximum permissible load is 100kg per pair of roof racks (include the weight of the roof bars, 5kg). When roof racks are to be used in off-road conditions, please build a safety factor of 1.5 into this load limit. Although the roof racks are tested and approved to AS1235-2000, Australian road conditions can be much more rigorous. However, increasing the number of crossbars does not increase the vehicles maximum permissible roof loading.

Note for Dealers and Fitters

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

Rhino-Rack
3 Pike Street, Rydalmere,
NSW 2116, Australia.
(Ph) (02) 9638 4744
(Fax) (02) 9638 4822

Document No: RR-132
Prepared By: Craig Jones
Authorised By: Gary England

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