



# RHINO-RACK

AERODYNAMIC & HEAVY DUTY ROOF RACK SYSTEMS

**HI-TECH GLASS REINFORCED NYLON LEGS WITH STRUCTURAL GRADE ANODIZED OR POWDER COATED ALUMINIUM H SECTION BAR THAT WILL GIVE YOU MANY YEARS OF TROUBLE FREE USAGE.**

**THANKYOU FOR PURCHASING A RHINO-RACK CANOPY FIXED MOUNT SYSTEM**

**YOUR RHINO-RACK IS DESIGNED AND MANUFACTURED IN AUSTRALIA TO MEET THE STRINGENT REQUIREMENTS OF AUSTRALIAN STANDARD AS1235-2000.**

**ONLY USE RHINO-RACK APPROVED ACCESSORIES.**

## **HOW TO FIT YOUR RHINO-RACK CANOPY FIXED MOUNT.**

1. Place swivel inserts into pads, please note that there is a left and right. Assemble leg supports to pads using M6 x 45 cap screws and finger-tighten.
2. Attach leg support assembly to crossbars. Loosen the channel nut on top of the leg support assembly to allow it to

slot into the underside of the crossbar. Rotate the bolt clockwise to allow the channel nut to lock into position. If the channel nut does not rotate into position, loosen the bolt and repeat. **It is essential that the channel nut rotates into lock position. Do not tighten.**

3. When the crossbars, pads and leg supports have been assembled, spacing must be calculated. Common sense must be used when determining the crossbar positions on the canopy. The pads must be fitted as far apart as possible on the outside edge of the canopy, where the pad base still has full contact with the canopy.

4. Ensure crossbars are parallel and all corners of pads are centrally located. When desired location is found, mark outside edge of pads with a thin tipped artline pen.

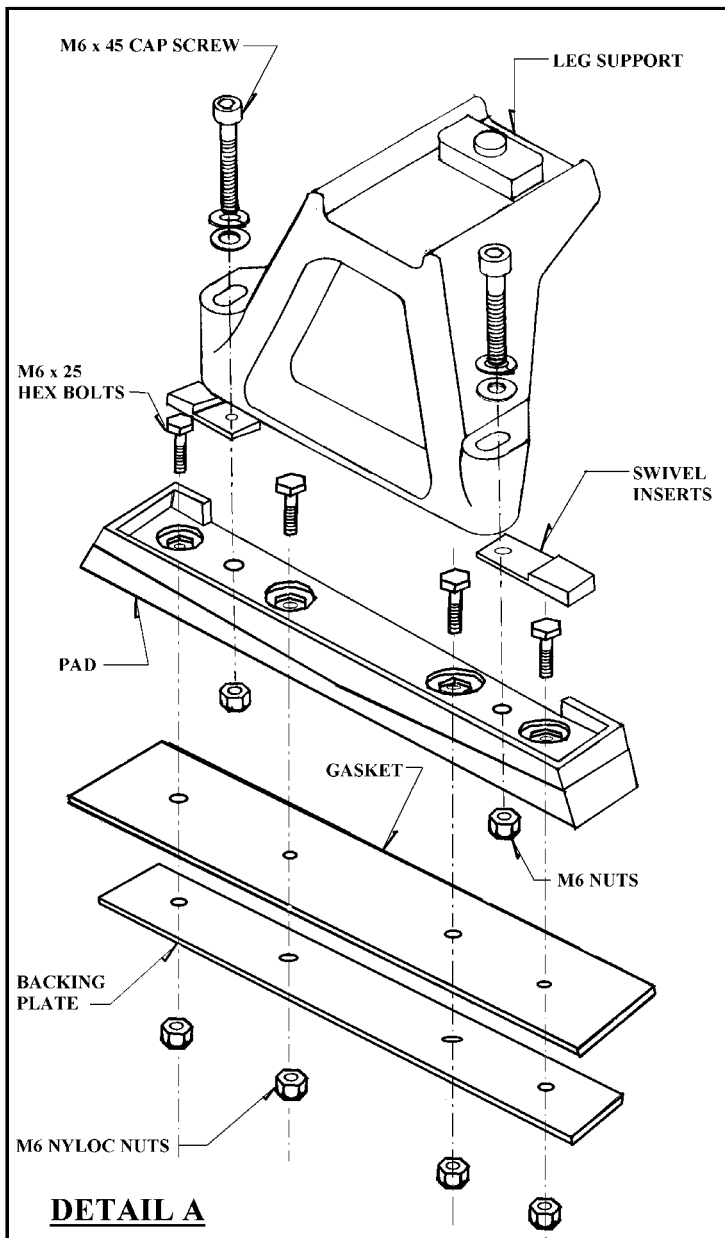
5. Remove pad from leg assembly, unclip swivel inserts and place pad over marked outline. Mark out the 4 hole positions for each pad.

6. Using a 6mm drill bit, drill the desired bolt holes. PLEASE NOTE you must also drill out holes in pads with the 6mm drill. (Existing holes are 5mm in diameter.)

7. Place M6 nuts in underside of pads. Attach gasket tape to underside of pad. Trim and cut excess tape from the edges of the pad. Cut holes in gaskets to allow M6 x 25 hex bolts to penetrate. Place bolts in pads and seat pads in canopy.

8. In the underside of the canopy attach backing plate, and tighten 4 bolt assembly with M6 nyloc nuts.

9. Attach swivel inserts to pads and leg assembly to pads. Note, that the swivel inserts have a left and right and should slope upwards to the centre of the vehicle, tighten the M10 leg bolt to the crossbar to a torque of 20Nm. Ensure crossbar overhang is equal both sides, refer Detail D. Tighten the leg support M6x45 cap screws to a torque of 6Nm.



10. Knock bar end caps into ends of crossbar using a rubber mallet. Insert rubber buffer strip into top of crossbar.

**Please Note: When more than two crossbars are to be fitted, Rhino-Rack leg height spacers (LHS - Refer Detail B) may be required to level crossbar height due to roof curvature**

**RECOMMENDATIONS**

Please refer to your canopy manufacturer for maximum roof load rating. **Please note that the canopy load rating may be less than the fixed mount bar load rating.**

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

Crossbars and accessories should be cleaned and all screw threads should be lubricated at regular intervals. Rhino-Rack offers a 12-month warranty to the original purchaser of the Rhino-Rack Canopy Fixed Mount Systems and Accessories. Rhino-Rack cannot be held responsible for incorrect mounting of the Canopy Fixed Mount System or for usage that exceeds vehicle and production tolerances.

Make sure to fasten the 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 and straps.**

**SENSITIVITY TO CROSSWINDS, BEHAVIOUR IN CURVES AND BRAKING**

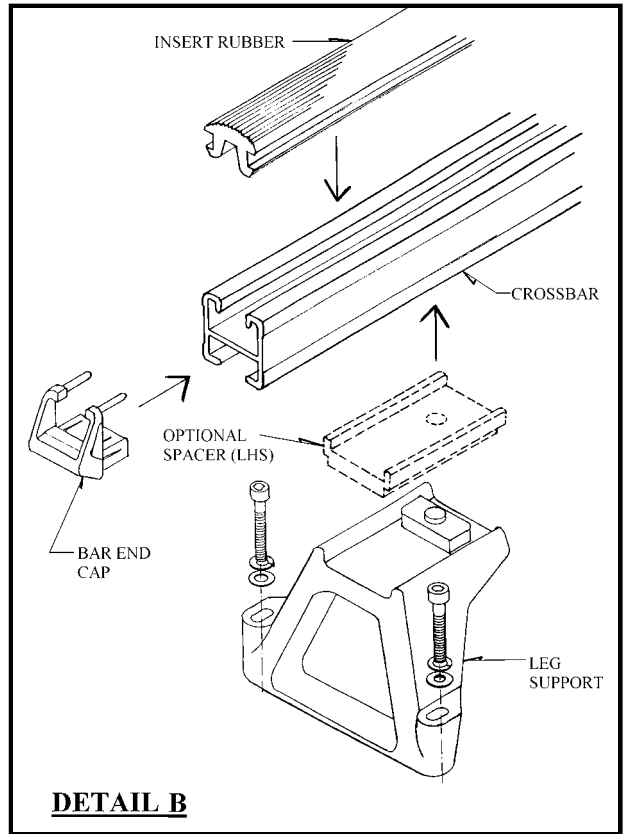
The handling of the car changes when you transport a load on the roof. For safety reasons, we recommend you exercise extreme care when transporting wind resistant loads, special consideration must be taken into account when braking

**PLEASE REMOVE CROSSBARS WHEN PUTTING VEHICLE THROUGH AN AUTOMATIC CAR WASH.**

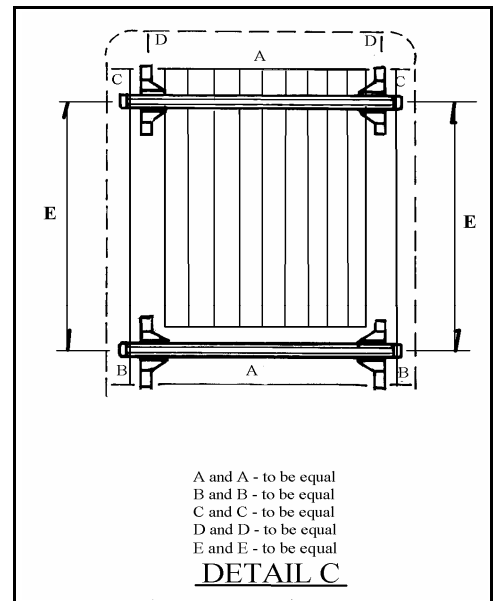
**LOAD RATINGS** Maximum permissible load is **60kg per pair** of roof bars (include the weight of the roof bars, 6kg). When roof bars are to be used in extreme off-road conditions please build a safety factor of 1.5 into this load limit (36kg per pair). Although roof bars are tested and approved to AS1235-91, Australian road conditions can be much more rigorous. Addition of extra roof bars has proven to be the most successful way to minimize vehicle roof turret deformation. However, increasing the number off crossbars does not increase the vehicles maximum permissible roof loading. **RHINO-RACK WILL NOT BE RESPONSIBLE FOR CANOPY FAILURE, REGARDLESS OF CANOPY MANUFACTURERS LOAD RATING.**

**Note for dealers and fitters.** It is your responsibility to ensure instructions are given to the end user or client

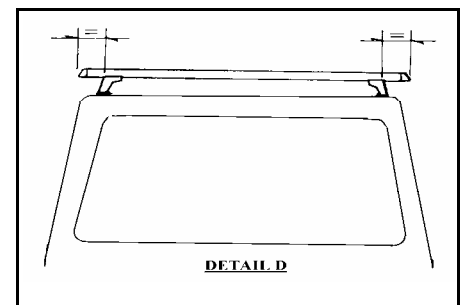
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**DETAIL B**



A and A - to be equal  
 B and B - to be equal  
 C and C - to be equal  
 D and D - to be equal  
 E and E - to be equal  
**DETAIL C**



**DETAIL D**

<b>RHINO-RACK</b>	No: RR34
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Issue Date: 08/01/99