



CONTROLLED

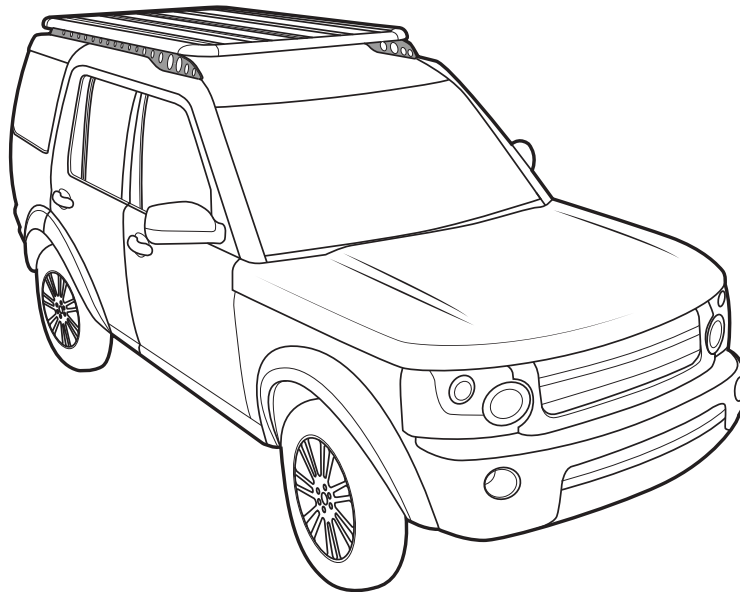
RHINO-RACK

Land Rover
Discovery RD4B1

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: 100kg / 220lbs

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: 100kg (220lbs) including the weight of the rack system 25kg (55lbs). **Static Load Rating: 360kg/ 800lbs**

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.

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 **66kg (145lbs)**. Although the crossbars are tested and approved to AS1235-2000/ 15011154, off-road conditions can be much more rigorous. Extreme care 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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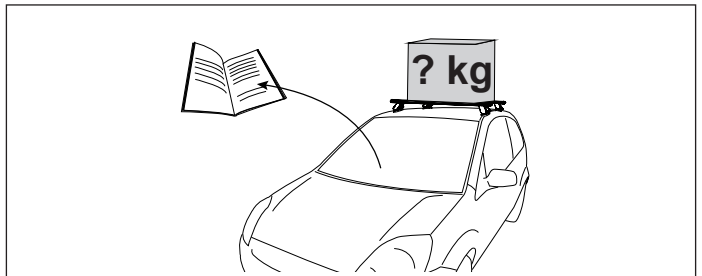
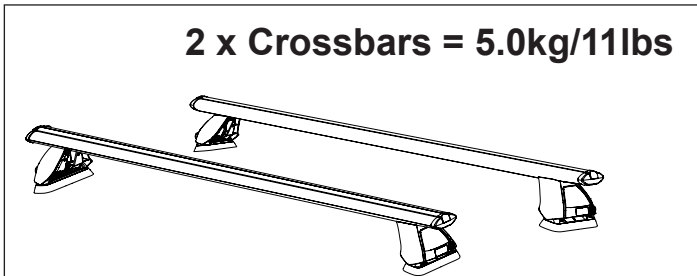
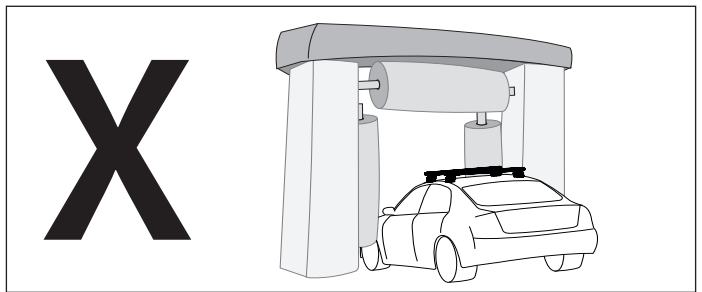
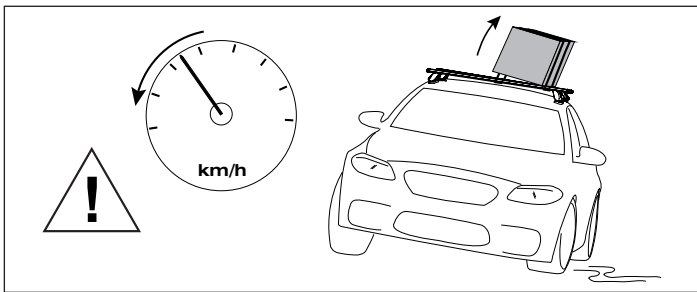
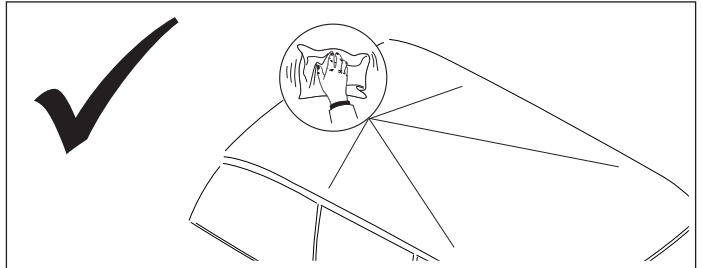
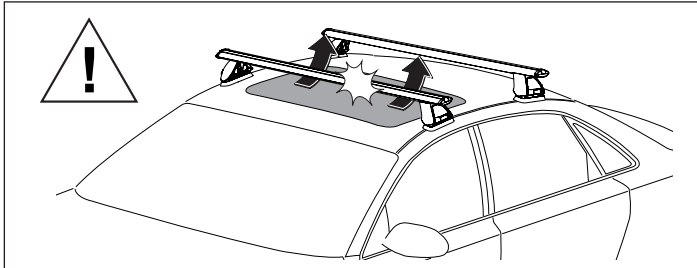
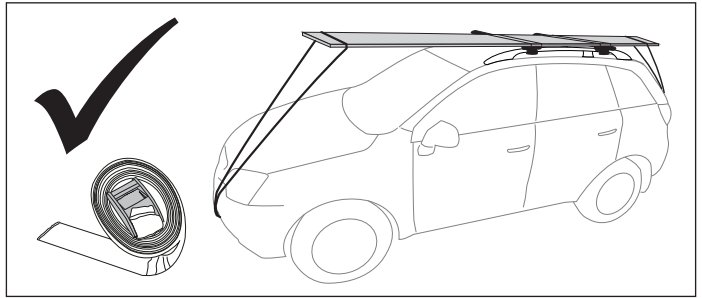
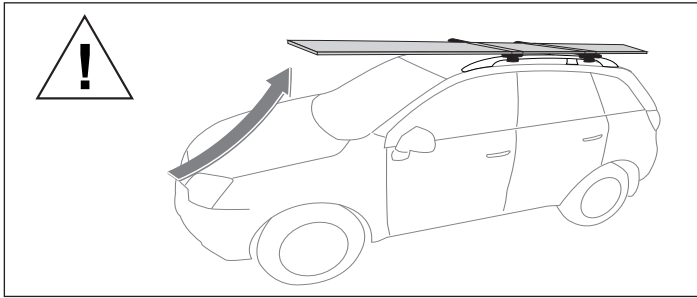
Document No: R802
Prepared By: Kayle Everett
Authorised By: Chris Murty

Fit Time: 2 hours
Issue No: 04
Issue Date: 01/03/2016

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Land Rover Discovery RD4B1 **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.

	100kg/220lbs (Urban Road)	=	66kg/145lbs (Off Road)	
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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.

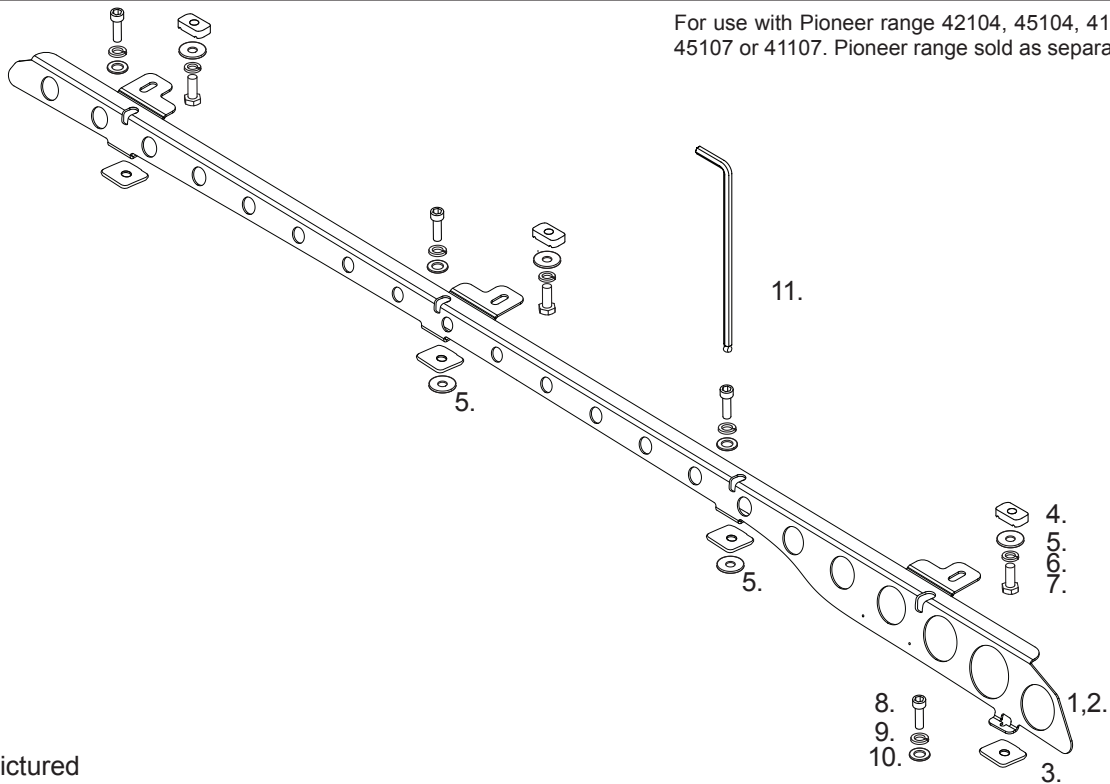
Paddle/ Surfboards should be fixed to the front of the vehicle.

✓ YES



Parts List

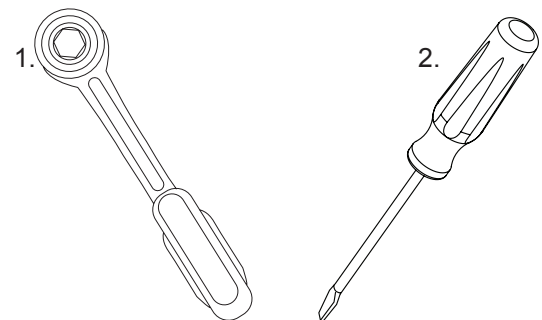
For use with Pioneer range 42104, 45104, 41104, 42107, 45107 or 41107. Pioneer range sold as separate.



Right Side Pictured

Item	RD4B1 Kit	Qty	Part No.
1	Land Rover Discovery Left Rail	1	CA1437
2	Land Rover Discovery Right Rail	1	CA1438
3	Butyl Patch 20x20 M5 Hole	8	CA1266
4	M8 Channel Nut	6	N003
5	M8x19x2.5 Flat Washer	10	W043
6	M8 Spring Washer	6	W019
7	M8x25 Hex Setscrew	6	B101
8	M6x16 Socket Head Screw	8	B031
9	M6x12.5mm Flat Washer	8	W003
10	M6 Spring Washer	8	W004
11	5mm Ball Allen Key	1	-
12	Instructions	1	R802

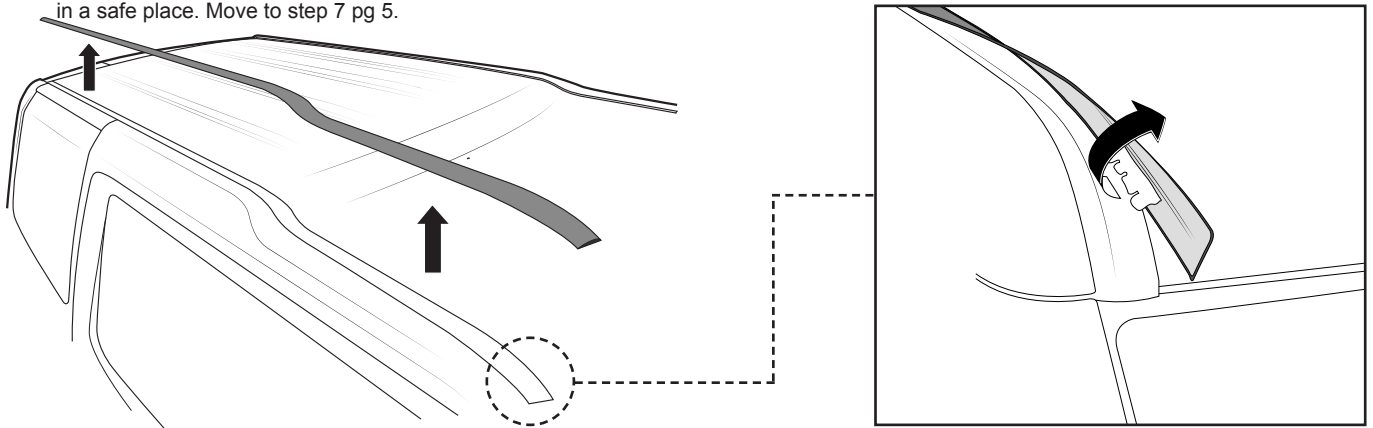
Tools Required:



1. Socket Wrench
2. Flat blade Screw Driver

TDV6 Ditch Rubber Mold Removal

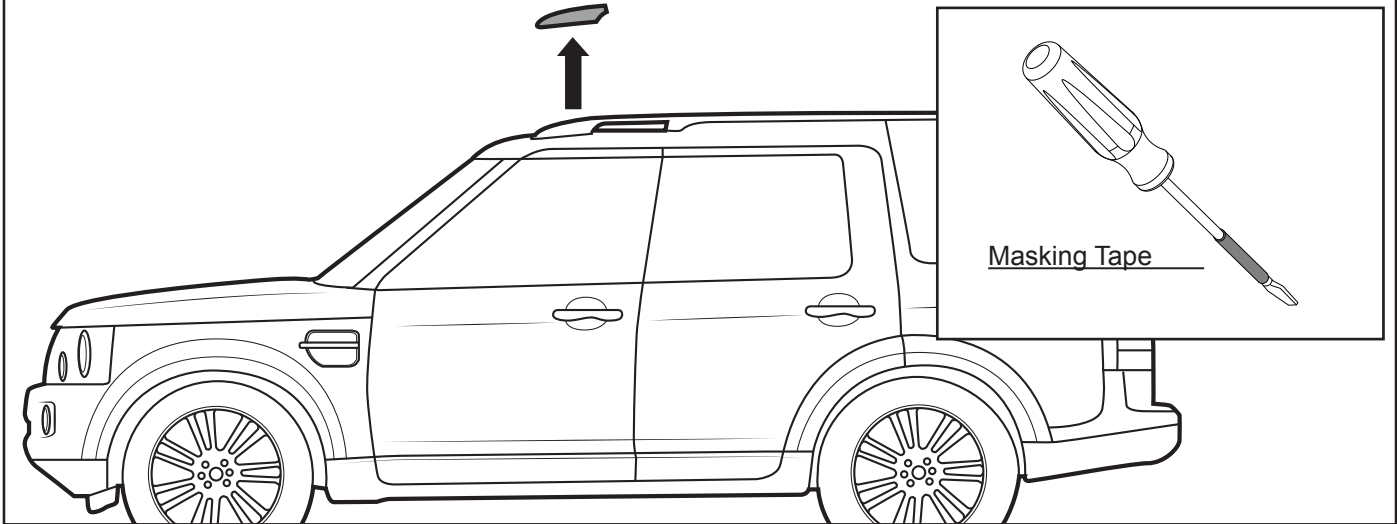
Move to the roof of the vehicle. If your car is not fitted with factory roof rails, remove the Ditch Molding by lifting at the front and twisting in an outward direction to unhook plastic clips. Do not use excessive force otherwise clips may break. Store the Ditch Mold in a safe place. Move to step 7 pg 5.



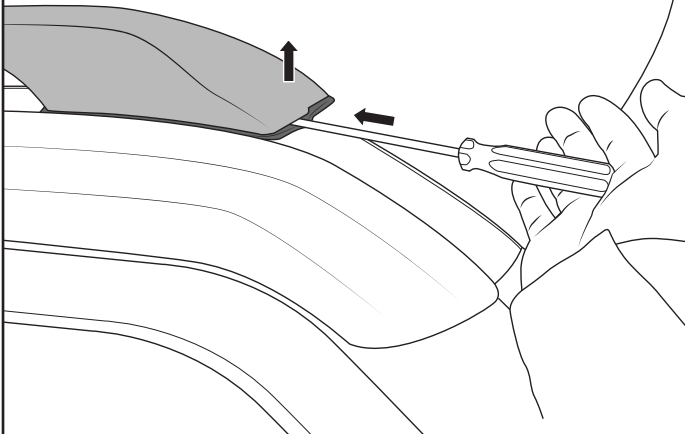


Removing Factory Elevated Roof Rails

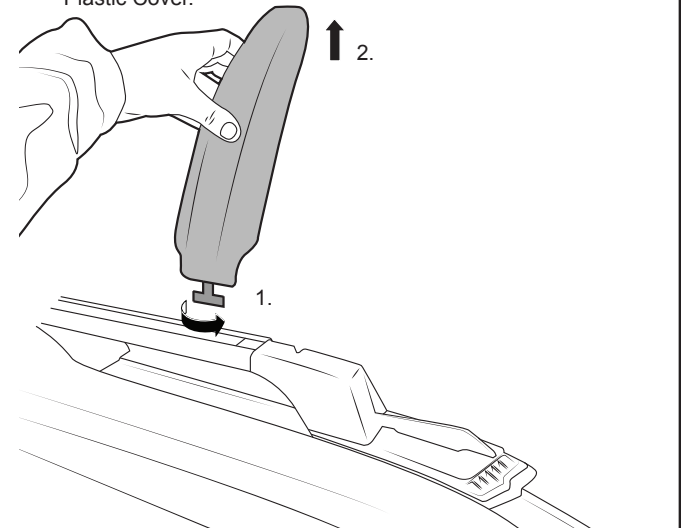
- 1** If the Land Rover Discovery has factory elevated roof rails you will need to remove these before installing the Backbone. To access the hardware fixing the roof rails to the roof, you must first remove the Plastic Covers. You will need a flat head screwdriver to pry the Plastic Covers off. To minimise potential damage to the vehicle, it's recommended to pad the metal shaft of the screwdriver with multiple layers of masking tape. This will protect the bodywork of the vehicle.



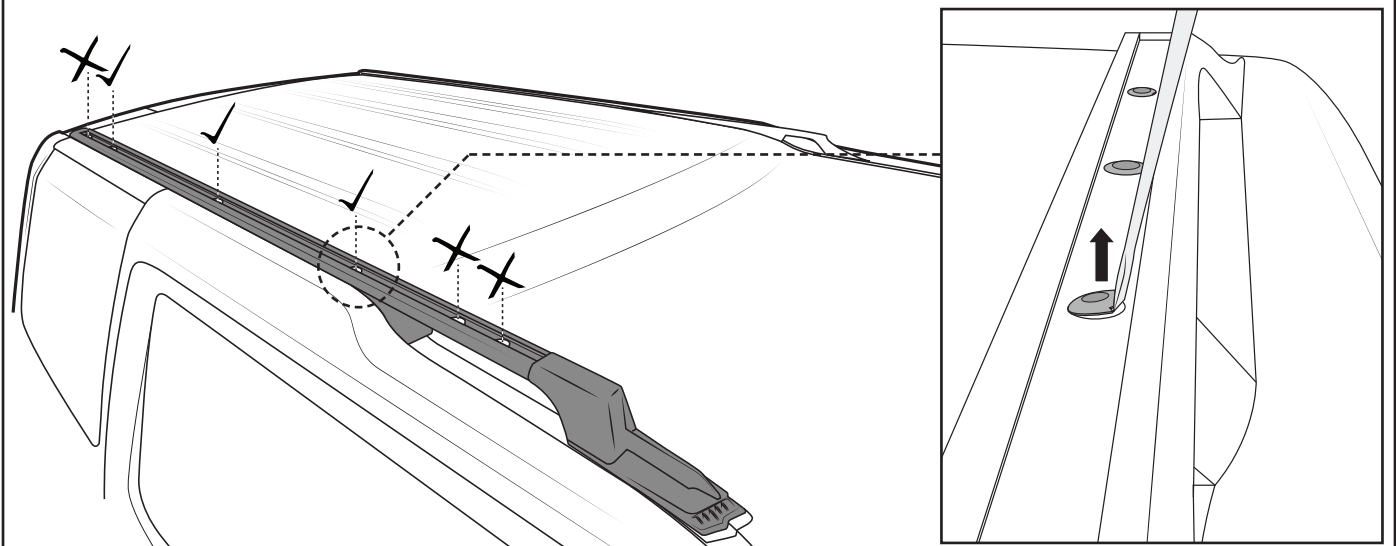
- 2** Using the tape covered screwdriver, slide into the very front of the Factory Rail. The screwdriver should fit in between the Plastic Cover and the Rubber Base of the unit. Carefully pry the Plastic Cover upward. Do not use excessive force.



- 3** With the Plastic Cover lifted into an upright position, rotate the unit 90 degrees, freeing it from the Factory Rail. Remove the Plastic Cover.

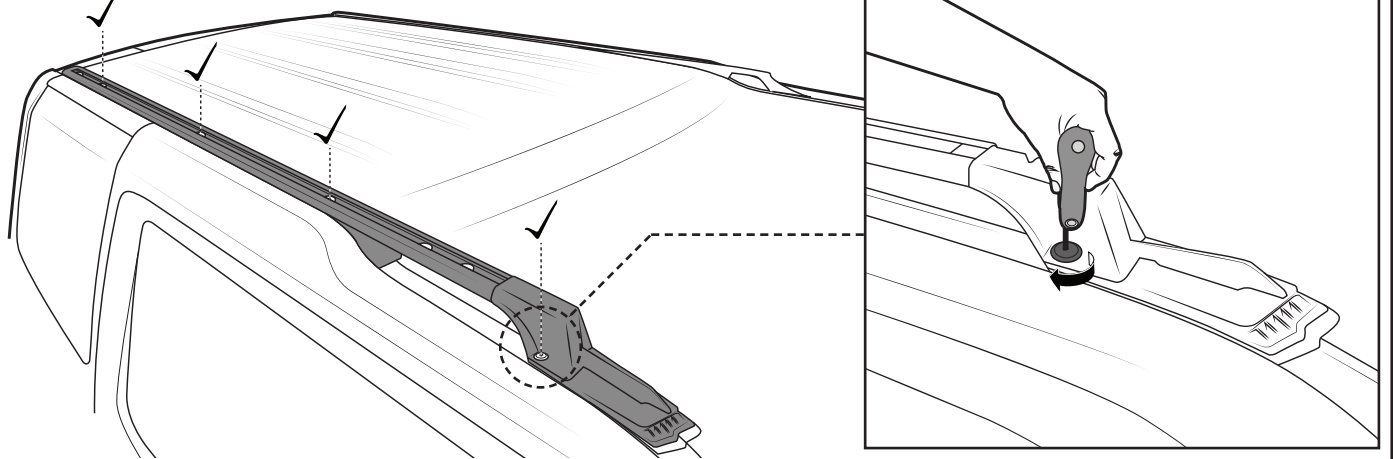


- 4** Locate the fixture points along the Factory Rail. Remove the covers from 3rd, 4th and 5th fixture point from the **front** of the vehicle. Using a screwdriver, carefully remove the covers as shown.

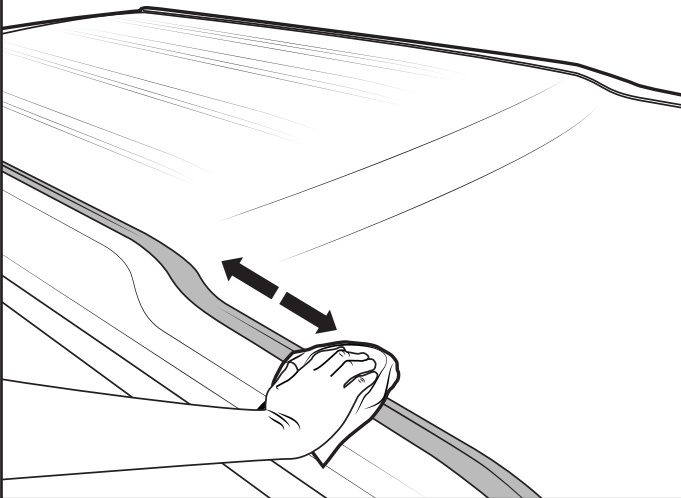




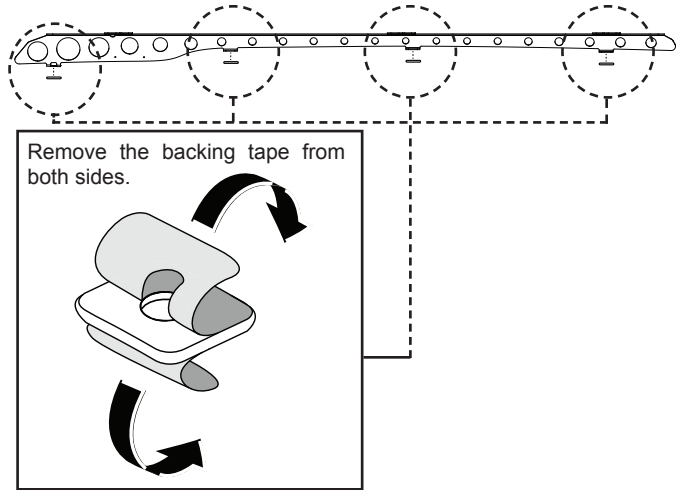
6 Using a T30 Torx Key, remove the hardware holding the Factory Rail in place. Store in a safe place.



7 Clean the exposed ditch with a clean cloth.

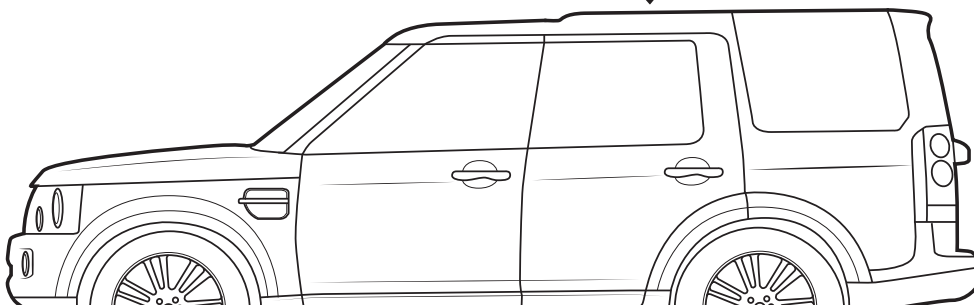
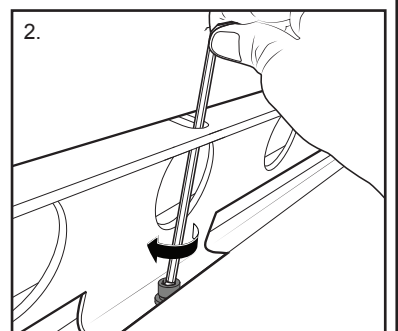
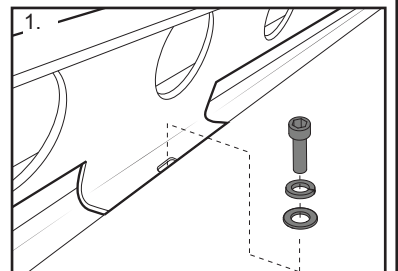
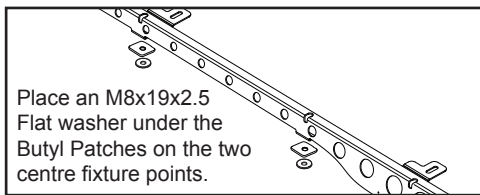
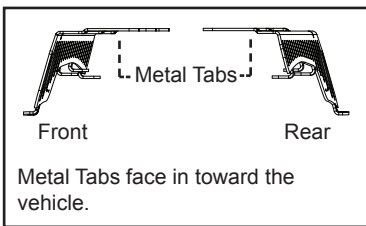


8 Remove the backing tape from both sides of the Butyl Patches and place onto the underside of the Backbone. Be sure to line up with the Backbone's bolt holes.



Fitment Instructions

1 Place the Backbone onto the vehicle. Be sure to use correct orientation. 1: Finger tighten in place with M6 Socket head Screws, M6 Spring and Flat Washers. 2: Tighten with an M5 Ball Head Allen Key. Be sure all fixtures are secure.



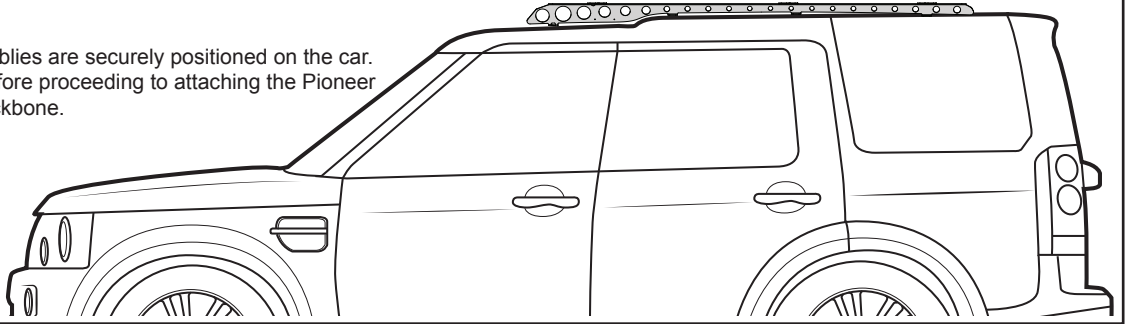


Land Rover Discovery RD4B1 **BACKBONE**

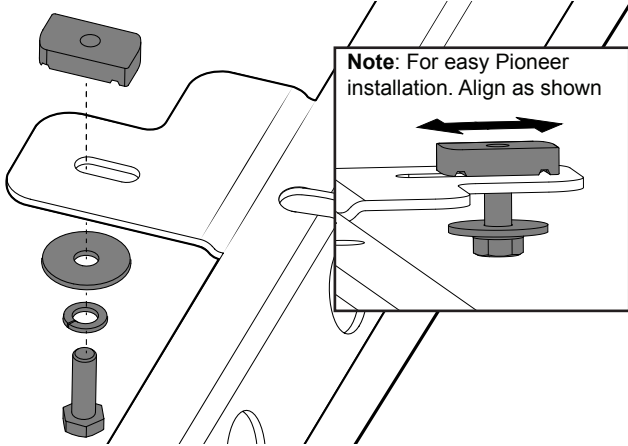
Mounting Pioneer Platform

10 Repeat previous steps for securing opposite side Backbone rail.

Ensure both Assemblies are securely positioned on the car. Check each bolt before proceeding to attaching the Pioneer Platform to the Backbone.



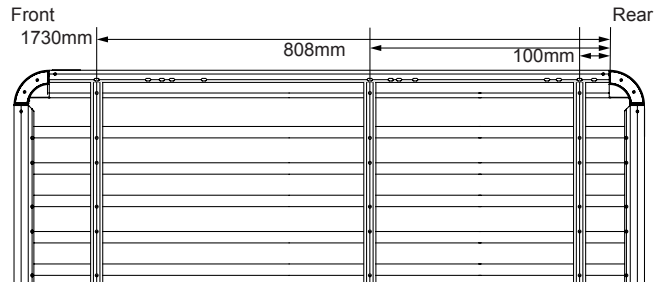
11 Assemble M8 hardware as pictured below. Complete this for the six tabs on top of the backbone rails (3 each rail).



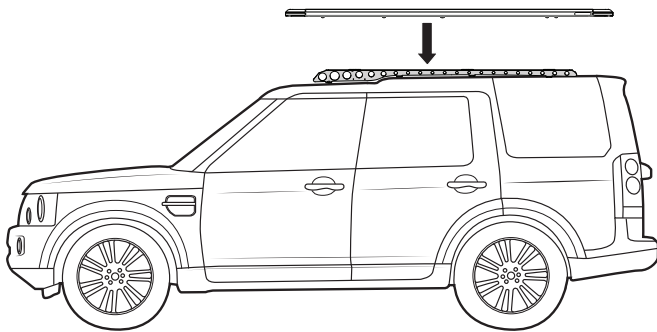
12 Install Pioneer Underbars with slots indicated

- Front:** 100mm from Rear
- Middle:** 808mm from Rear
- Rear:** 1730mm from Rear

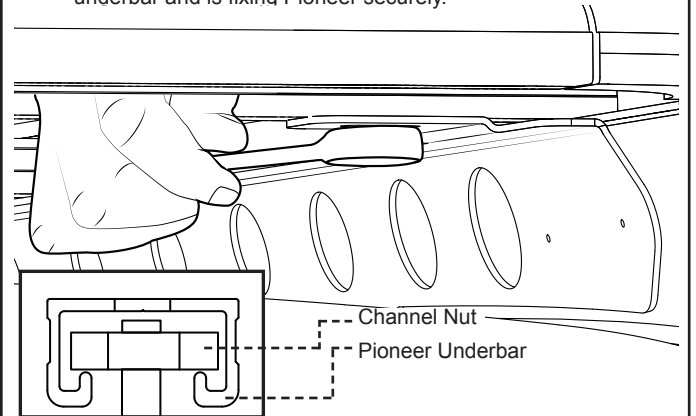
For detailed underbar installation instructions, refer to Pioneer fitting instructions.



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



14 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.



Note The Ditch Moulding can be cut to length and fit around the Backbone Brackets. Measure the distance of the gaps on either side of the Bracket. Translate this measurement to the previously removed Ditch Fill and cut (be sure to use sharp cutters). Replace the newly cut Fill.

