

Land Rover Discovery 1 and 2 'Highlander' Roof Rack Fitting Instructions

These instructions cover the fitting of the following rack models:

RRL103 ORRA - Discovery 1 Low Roof Rack (for vehicles without roof rails)

RRL104 ORRA - Discovery 1 High Roof Rack (for vehicles with roof rails)

RRL155 ORRA - Discovery 2 Low Roof Rack (for vehicles without roof rails)

RRL156 ORRA - Discovery 2 High Roof Rack (for vehicles with roof rails)

If your rack model is not listed above then please contact us and we can send the correct instructions via email or in a hard copy if required.

Section 1 - Rack assembly and preparation prior to fitting

Section 2 - Fitting of the marine plywood floor (optional extra)

Section 3 - Mounting the rack assembly onto the vehicle

Section 4 - Roof rack maintenance

General Fitting advice:

All washers have a smooth side and a sharp side which comes about in their manufacturing process. We recommend that washers are always installed with the smooth side against the powder coat and the sharp side against the head of the bolt. This allows for washer to slide on the powder coat without causing damage when tightened.

Section 1 - Rack assembly and preparation prior to fitting

1.1 - Open the box and unpack the roof rack and its fitting kits. At this point, it is recommended that all the main components are checked against the table provided below. Should any parts or fixings be missing at this stage, or during installation, please contact your stockist.

Product code/parts required	RRL103 ORRA	RRL104 ORRA	RRL155 ORRA	RRL156 ORRA
Roof Rack Feet Mounting Rubbers	8	8	8	8
Roof Rack Gutter Clamp	8	8	8	8
M8 x 15mm Button Head Bolt (SS)	16	16	16	16
M8 Flat Washer (SS)	16	16	16	16
M6 x 40mm Countersunk Bolt (SS)	8	8	8	8

1.2 - Remove the plastic bubble wrap from around the rack taking care not to scratch the powder coat in the process. We would recommend laying the rack the correct way up inside the lid of the box when unwrapped to prevent any scratches from occurring.

1.3 - Each of the feet should have a piece of rubber pushed on to the lower edge. This is to protect the gutter paintwork when fitted.



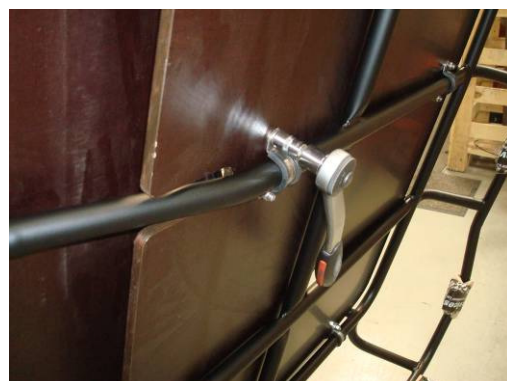
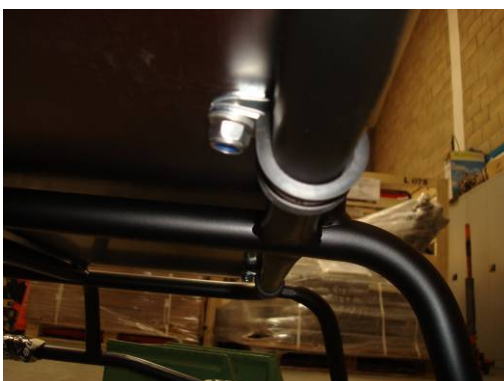
Section 2 - Fitting of the marine plywood floor (optional extra)

2.0 - If you are fitting one of our marine ply floors then the following steps are required. If not then please proceed to section 3 of the instructions.

2.1 - Unpack the floor and its associated fitting kit; check the contents against the table below. If anything is missing please contact your stockist before you proceed with the installation.

Product code/parts required	RRL103 OFL	RRL104 OFL	RRL155 OFL	RRL156 OFL
25mm Diameter P Clip (SS)	10	10	10	10
25mm Diameter U Clip (SS)	5	5	5	5
M8 x 25mm Countersunk Bolt (SS)	20	20	20	20
M8 Flat Washer (SS)	20	20	20	20
M8 Nyloc Nut (SS)	20	20	20	20

2.2 - Using the stainless hardware provided fasten the floor to the rack in all of the positions.



Section 3 - Mounting the rack assembly onto the vehicle

3.0 - The rack is now in a position to be lifted onto the vehicle. If you are mounting any accessories to the rack such as spotlights or working lights then it may be easier to do this whilst the rack is on the floor.



3.1 - Lifting the rack onto the vehicle will take 4 people, 1 on each corner. Take care to ensure the rack is high enough not to scratch the roof as it is carried into position.

3.2 - When in the desired position lower rack onto roof gutter and check for the correct alignment front to rear and left to right on the vehicle.

3.3 - Using the M6 x 40mm countersunk bolts provided, attach each of the outer clamps loosely into position through the lower mounting hole into the tab that protrudes from the cross rail foot. Copper grease should be applied to the threads to aid fitment. These should not be tightened fully at this stage.



3.4 - Using the M8 x 16mm button head bolts and flat washers provided the outer clamps can now be fixed through the two outward facing slots onto the cross rail feet. Copper grease should be applied to the threads to aid fitment. These should not be tightened fully at this stage.

3.5 - The lower bolts can now be tightened to **25Nm** ensuring that the rack sits evenly in the gutter base. The amount of sealant in the gutter does vary from vehicle to vehicle so it may be necessary to persevere until the rack is sitting level.

3.6 - The outer clamps bolts can now be tightened to **25Nm** ensuring that the clamp pulls up against the gutter outer edge.

The rack is now fitted and ready for use.

Section 4 - Roof rack maintenance

The rack should be kept clean and the fasteners greased regularly - if this is not carried out then you may find it difficult to remove the rack from the vehicle if required at some point. The rack should also be inspected for damage if in regular use.

Industrial coatings are no different to the paint on your car – they need cleaning and maintaining. Accumulated dirt may affect the design life of the system, and any mechanical damage almost certainly will. Therefore regular inspections should take place and minor damage must be touched up. The rack is powder coated with zinc primer followed by a topcoat so does provide a hardwearing surface. Should you damage the surface and expose bare metal this needs to be repaired to prevent rust spreading under the powder coat.

Damaged areas must be clean and free of grease or rust. Dry sand the area with 600-grade paper until the metal is exposed. The area must be completely free of dust and cleaned with a non-aggressive solvent before proceeding. Spray zinc based primer onto the area and allow it to dry fully. An acrylic or polyurethane topcoat of matching colour (RAL9005 Black Satin) should then be applied and allowed to dry.