

# Explorer Roof Rack Fitting Instructions: Roll Cage Mounted models only

These instructions cover the fitting of the following rack models:

- RRL229 0FRC/OLRC/OSRC/ONRC - Defender 90 HT/SW Roll Cage Mounted Racks**
- RRL232 0FRC/OLRC/OSRC/ONRC - Defender 110 HT/SW Roll Cage Mounted Racks**
- RRL245 0FRC/OLRC/OSRC/ONRC - Defender 110 CC Roll Cage Mounted Racks**

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 - Mounting the rack assembly onto the vehicle**
- Section 3 - Fitting of the marine plywood floor (optional extra)**
- 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.

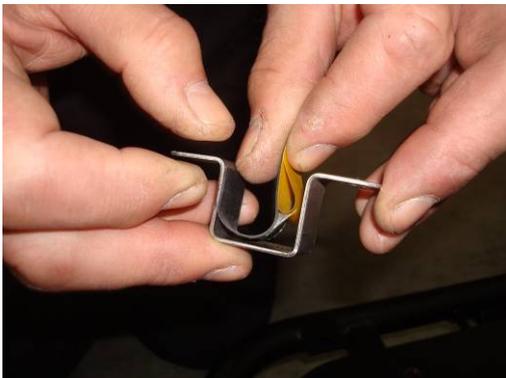
Product code/parts required	RRL229 0FRC	RRL229 0LRC	RRL229 0SRC	RRL229 0NRC	RRL232 0FRC	RRL232 0LRC	RRL232 0SRC	RRL232 0NRC	RRL245 0FRC	RRL245 0LRC	RRL245 0SRC	RRL245 0NRC
Front Cage Mount Cross Rail	1	1	1	1	1	1	1	1	1	1	1	1
Roll Cage Clamp - Double	6	6	6	6	6	6	6	6	4	4	4	4
Roll Cage Clamp - Single	0	0	0	0	2	2	2	2	0	0	0	0
Clamp to Rack Bracket	2	2	2	2	2	2	2	2	0	0	0	0
Self Adhesive Rubber	26	26	26	26	30	30	30	30	16	16	16	16
M8 x 25mm Cap Head Bolt (SS)	12	12	12	12	14	14	14	14	8	8	8	8
M8 x 20mm Cap Head Bolt (SS)	4	4	4	4	4	4	4	4	4	4	4	4
M8 x 16mm Cap Head Bolt (SS)	24	24	24	24	28	28	28	28	16	16	16	16
M8 Nyloc Nut (SS)	4	4	4	4	4	4	4	4	4	4	4	4
M8 Flat Washer (SS)	20	20	20	20	22	22	22	22	8	8	8	8
M8 Spring Washer (SS)	36	36	36	36	42	42	42	42	24	24	24	24

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 - Unwrap the roll cage cross rail, aluminium clamps and stainless steel brackets from their plastic bubble wrap and lay in the base of the cardboard box (L232 shown below).



1.4 - The aluminium clamps and stainless brackets need to have the self adhesive rubbers applied to them at this stage.



1.5 - Using M8 x 25mm cap head bolts, flat washers and spring washers provided 2 x double clamps can be attached to either end of the front cross rail. These should not be tightened fully.

1.6 - Using M8 x 25mm cap head bolts, flat washers and spring washers provided 2 x double clamps can be attached to the rearmost brackets of the rack. These should not be tightened fully. Please note that the rack fixings are the same front to rear and side to side so you can choose which way the rack is mounted depending upon your rail configuration.

## Section 2 - Mounting the rack assembly onto the vehicle

2.0 - 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.

2.1 - Lifting the rack onto the vehicle will take between 2-4 people depending on which size is being fitted. Take care to ensure the rack is high enough not to scratch the roof as it is carried into position.

2.2 - When in the desired position lower rack onto the roll cage and check for the correct alignment front to rear and left to right on the vehicle. The brackets fix to slotted holes so it may be necessary to take reference measurements and choose different slots to ensure the rack is mounted correctly.

2.3 - With the front and rear clamps in position, the upper sections of the remaining clamps (2 x single supplied with L232 only, please see images below) should now be fitted to the rack using the M8 x 25mm cap head bolts, flat washers, spring washers and stainless mounting brackets provided.



2.4 - Using the M8 x 16mm countersunk bolts and spring washers provided, attach the lower section of each clamp to the upper section. Copper grease should be applied to the threads to aid fitment. These should not be tightened fully at this stage.



2.5 - All bolts can now be gradually tightened to **25Nm** ensuring that the rack sits position does not change whilst working around the vehicle.

### Section 3 - Fitting of the marine plywood floor (optional extra)

3.0 - If fitting a floor to the rack, please carry out the steps below. If not, the rack is now fitted and ready for use so please proceed to Section 4.

3.1 - Unpack the floor and its associated fitting kit; check the contents against the table at the end of these instructions. If anything is missing please contact your stockist before you proceed with the installation.

3.2 - The bolts between the rack and the clamps and rack and cross rail should now be removed to allow the rack to be lifted from the vehicle. Remove the rack from the vehicle.

3.3 - With the rack on the floor, the floor can now be fastened to the rack in all of the positions using the stainless hardware provide.

3.4 - Lift the rack back onto the pre-positioned mountings on the vehicle and bolt back into position using the access holes in the floor.

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.

