

## Land Rover Defender 90/110 Pick Up/Soft Top (L122) Fitting Instructions

Unwrap the roll cage and unpack the individual fitting kits. At this point it is recommended that all the main components are checked against the assembly drawing provided on page 6 of these instructions. Should any parts or fixings be missing at this stage, or during installation, please contact your stockist.

Throughout the assembly we shall use a variety of different fasteners; the torque setting for each different size is listed below:

M8 - 25Nm    M10 - 45Nm    M12 - 70Nm    M14 - 95Nm    7/16<sup>th</sup> - 55Nm

When removal and refitting of an original bolt on the vehicle is require, please refer to the manufacturers original torque specification for that particular fastener.

The assembly process of this roll cage is separated into several different sections, each section having its own fitting kit containing all nuts, bolts, washers and fitting plates required:

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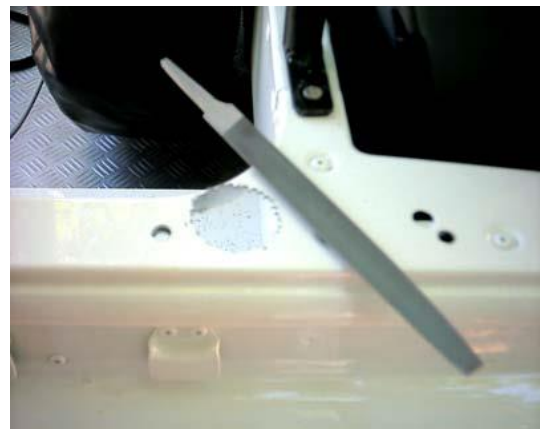
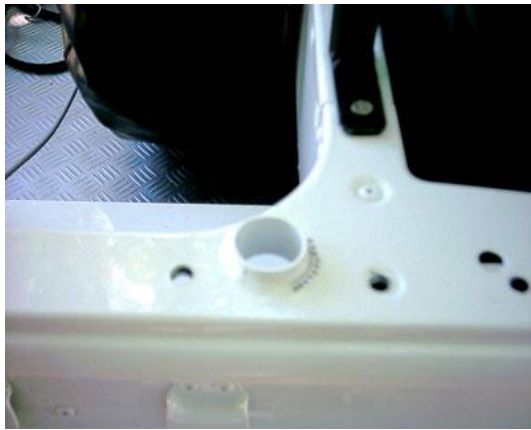
### Section 1 - Preparation of vehicle for roll cage

Unbolt front seat belt upper mountings.

Remove existing soft top, rear hood stick support and connecting rails. The front hoop should remain in place. *If converting a Pick Up then remove headlining, roof section and rear window from vehicle at this point.*

### Section 2 - Installation of main hoop

Level with the bulkhead is a hood stick mounting tube of 25mm diameter which will provide the mounting point for the front hoop. Mark around the existing tube a circle of 45mm diameter and cut/drill out.



There are 2 brackets that sit inside the rear tub and should be dropped into position at this point - see assembly drawing and photo above for correct orientation of brackets. *If fitting to a non bulkhead vehicle then these brackets may not be compatible with the bulkhead replacement bar.*

The hoop can then be inserted into position through the capping and into the brackets below.

Mark through the holes in the foot plate onto the capping and after removing the hoop, drill the two holes on each side to 11mm.

The B hoop can now be repositioned onto the holes drilled. The hoop can be bolted into position using the 4 x M10 x 30mm bolts provided.

The mounts in the rear tub can be secured into place with rivets through the outer skin and bolted through the bulkhead.

The upper seat belt mounting can now be attached to the location on the roll cage. Ensure that the bushes and washers are refitted in the correct order.

### Section 3 - Installation of backstays

The backstays can be joined to the B hoop and onto the capping bracket. Allow the bracket to meet the capping and measure distance to the bulkhead.

The other backstay can be installed in the same way; check the measurements to ensure the backstays are a level distance from the bulkhead.

The capping bracket holes can be marked on each side and the backstays temporarily removed. These holes should then be drilled out to 11mm only through the inside skin of this panel.

The backstays can be repositioned and bolted into place using M10 x 25mm bolts and nut plates supplied. The nut plates can be inserted into one of the larger holes in the channel and pushed along to where the capping bracket is located.

The bolts can all be tightened gradually ensuring that the cage remains square on the vehicle.

The door frames can be mounted back on the vehicle and attached to the B hoop.

The canopy can now be refitted over the roll cage. The installation of your Safety Devices roll cage is now complete.

### Section 4 – Roll Cage maintenance

The roll cage should be kept clean and the fasteners checked regularly - if this is not carried out then you may find it difficult to remove the roll cage from the vehicle if required at some point. The roll cage 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 roll cage 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.

