



# Masai Land Rover Defender Blind Spot Window Fitting Instructions



Thank you for purchasing our Masai Blind Spot Windows for the Land Rover Defender. Please read these instructions carefully. If you do not feel confident to fit these windows yourself, we also provide a fitting service - just call for a quote.

To help cut out the apertures we recommend that you watch our online video, where you will also find more detailed instructions about cutting out apertures.

<http://www.landrover-panoramic.com/defender-90-110-fitting-masai-panoramic-tinted-windows>

You can fit Masai Panoramic Windows to your Land Rover Defender in just a few hours – back on the road the same day, as the special silicone adhesive sticks permanently quite quickly. We do not recommend that you wash your vehicle or leave out in the rain for 24 hours. Do not fit windows in very cold weather.

## **1. Safety Precautions**

As the fitting of these windows require the use of potentially hazardous materials, chemicals and equipment - such as high speed cutting jigsaw, electric drill, adhesive and glass - we therefore recommend that you use protective clothing including safety goggles, ear and clothing protection.

## **2. The Tools and Equipment Required**

You will need to have ready in advance:

- A table or a bench min 4 foot long to put the windows on whilst applying the silicone sealant. You should always protect the glass against the rough surfaces to avoid unnecessary scratching. (Masai packaging is ideal for this.)
- A jig saw with suitable blade for cutting aluminium.
- Blu-Tack or masking tape to hold our template against your vehicle.
- A fine permanent marker pen to mark the cut-out area on the vehicle.
- Cloths and mild cleaning agent to make sure all surfaces are clean and dry.
- Latex gloves – to use whilst applying silicone sealant
- An electric drill and an electric extension cable.
- An applicator gun for use with standard sealant tubes
- A metal file or abrasive paper to remove rough edges from aluminium after cutting.
- Stanley knife and a pair of Scissors

Ensure you have all the tools and equipment setup before you start.

**Put the tubes of silicone adhesive in a bucket of hot water (not boiling – ideal is 30 degrees C, 86 F) and get the adhesive applicator gun ready.**

### **3. Cutting out the Aperture**

Using scissors or a Stanley knife neatly cut along the line on the template and remove the rectangular inner section.

Stick the template to the side of your vehicle using Blu-Tack or masking tape - making sure when doing the driver's side that the template says *Right Hand Side* at the top; when doing the passenger side it must say *Left Hand Side* at the top.



Parallel align the top of the template so that it just touches the rim of the roof and aligned with the vertical edge next to the door.

Using a fine permanent marker pen accurately draw the section to be cut out on the side of your vehicle following the inside edge of the template. You can then remove the template and attach it to the other side of your vehicle.

Get a drill and make a pilot hole within the middle of the marked section. Draw a line and a couple of curves to practice cutting aluminium sheet with a jigsaw along a predefined line - before you start cutting the actual rectangular aperture.

Once you are confident you can cut out the aperture accurately, drill a hole for the blade near the aperture's marked line, within the marked area in the chosen place you want to start cutting.

Make sure you are tall enough to reach the top part for cutting – if not get a sturdy box or chair to stand on.

When you start cutting, it is important to follow the line as best you can within 1 mm tolerance. Lightly file the edges to remove burrs.

Fit the edging strip around the aperture sides, tap home with a hammer and cut to size – try not to have a gap between the ends of the edging strip.



Offer up the glass to the aperture and align as straight, as central and neatly as you can.

Mark the outline of the glass using a marker pen, using the glass like a template. This area will form the maximum boundary for the primer.

Repeat this process on the other side of your vehicle.



#### **4. Preparing the Surfaces with the Primer and Applying the Silicone Sealant**

Clean the outside surfaces of the side of your vehicle surrounding the aperture and also clean the glass. Clean surfaces are important to ensure the primer bonds properly.

Complete one window at a time and decide which side you are doing first.

Lay the first window on a table, with cardboard or newspaper protection – so that the stencilled side is facing up (see photo).

Put on some latex gloves – as the primer and adhesive is very sticky and hard to remove.

**TAKE NOTE** – You are going to be applying the special primer in a continuous line **WITHOUT** over-painting what you have done – one stroke only – as it dries very quickly and you may deactivate it if you over-paint.

Shake the preparation primer and **CAREFULLY** remove the lid.

**Don't use too much or too little primer** – use an even amount so there are no really wet parts nor patchy parts (not enough primer on the applicator swab).

Wipe the applicator against the inside edge of the primer bottle when withdrawing to ensure there is not too much primer on the applicator that it drips – it sticks very well to all surfaces – so be very careful indeed.

Practice painting a few lines on the aluminium section you have cut out, or on another non-important clean, smooth, non-absorbent surface.

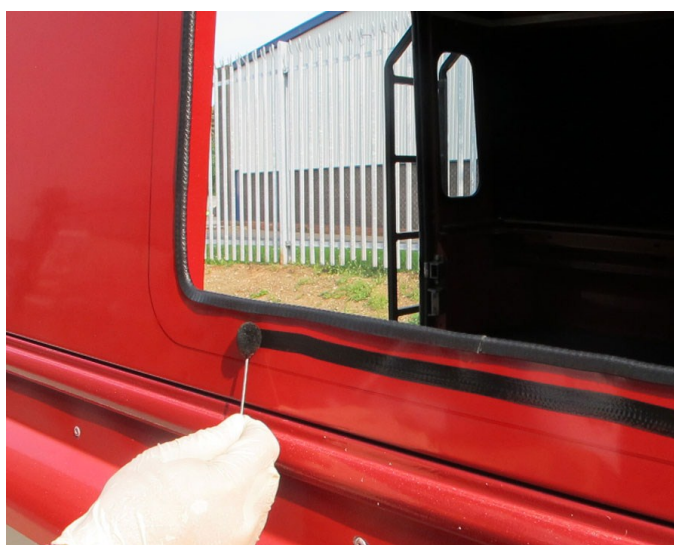
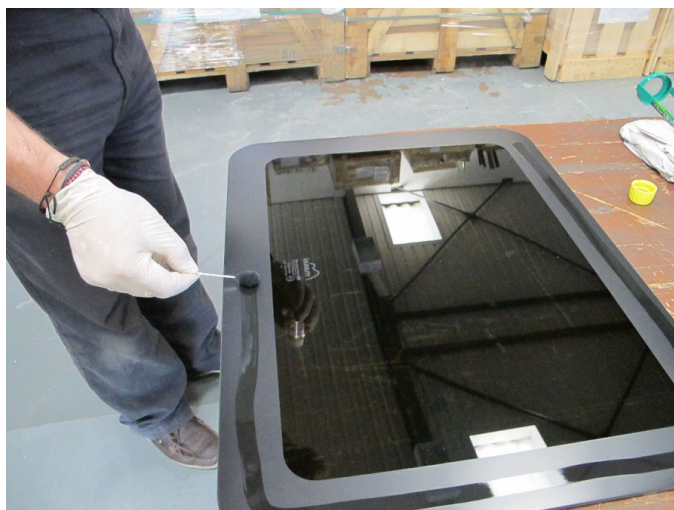
Using the applicator apply the primer in a neat straight line all around the perimeter of the glass – about 5mm to 10mm from the edge.

Join up line without a gap. See photo.

**Immediately** go to the vehicle and apply the primer in the same way – paint the **same rectangular shape** that you made on the glass around the aperture you are doing first between 5mm and 10mm within the marked out area.

You should complete one window at a time.

Again – join up the line – no gaps. Screw the lid back on the primer bottle as soon as you are finished.



Get one of the silicone adhesive tubes from the bucket, dry it and insert it into the applicator gun. Remove the nozzle and break the metal seal, screw the nozzle back on.

You will be extruding the silicone in a triangular shape like a mountain range (see photo).

Test on a piece of newspaper to see that the gun is prepared and the silicone adhesive extrudes from the nozzle correctly.

The primer is dry within 5mins; do not leave it too long after that before applying the silicone on top of the primer and fixing the glass to your vehicle.



Without delay start to apply the adhesive (see photo) **on top of all the lines you have made with the primer on the glass (not the vehicle).**

**The triangular cut-out in the nozzle needs to face upwards.** Make a continuous pyramid shape line along and on top of all of the primer lines (see photo, and video on website).

Make sure there are no gaps – particularly the top edge – to ensure rain cannot leak in.

## 5. Fitting the Windows

The primer and adhesive application process should be completed within 10 - 15 minutes and immediately after carefully carry the window to the vehicle and press it firmly into position ensuring that the Masai logo is be the right way up.

**First priority** is to make sure the top edge is parallel to the rim of the roof and the rear side is parallel to the vertical side of the vehicle.

The silicone adhesive bonds straight away to the primer on the vehicle but will take 24 hours to really cure.

Keep continuous pressure on all parts of the glass for at least 10 minutes to ensure it is properly stuck evenly all around.

You can use clamps and some wood to hold the glass evenly pressed hard against your vehicle for 30mins or so to make extra sure that the glass is firmly held in place tight against the vehicle whilst the adhesive starts to cure.

**Repeat the whole process on the other side of the vehicle.**

You may need to adjust some of the internal trim if necessary to fit around the new window.



## 6. Sealing the Edge of the Glass

To ensure an aesthetically pleasing finish, apply a neat continuous line of black polymer window sealant around the glass edge – between the glass and the vehicle – to fill the gap.

You can buy black polymer window sealant as an optional extra from our eStore. Do NOT use the Silicone Adhesive we provide for this – it is an adhesive.

To assist you could use masking tape to protect your paintwork and the edge of the glass from any excess sealant. Neaten up before the sealant cures too much.



We do not recommend that you wash your vehicle or leave out in the rain for the first 24 hours after fitting the windows.

That's it, all complete.