



Parts List

Frame	Foam Seal, Gas Strut Mounts and Striker Plates attached
Door Panel	Handles attached
Hinges	Assembled With face plates and strut mounts
Support Brackets	
Weather Strip	
Glue	310ml Sikaflex 291
Gas Struts	
Bag of bolts	4mm steel bolts, washers and Nylocs. 6mm nuts and washers Pan Head bolts
Instructions	

Tools Required

*Optional

Allen Keys	4mm and 2.5mm
Small Flat Bladed Screwdriver	
Philips screwdriver	
Clamps	
Spanners	7mm, 10mm and 27mm
Caulking/Glue Gun	
Rags	
*Chalk Pen	
Cleaning Fluid	To remove wax and grease from surfaces

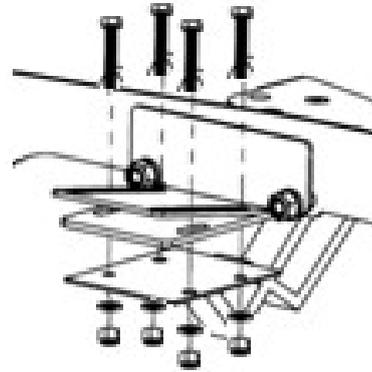
The following instructions detail the installation of your new EmuWing kit; allow a total of one to two hours fitting time for each panel excluding curing time. Read the instructions thoroughly before starting.



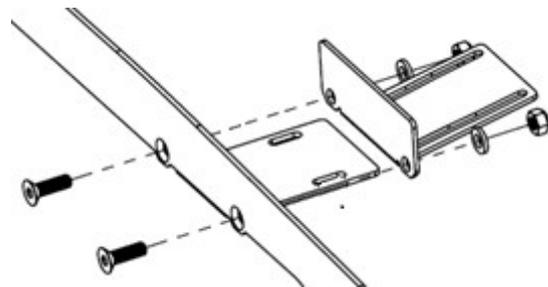
1: Removing the existing window

We recommend contacting a glazier to have the window removed as the panel is firmly glued in place.

2: Fixing the frame. The frame is supplied assembled and should be fitted to the car as supplied, but firstly the top interior panel must be marked and trimmed as this panel needs to be refitted prior to installation of the frame. The side and bottom trims around the window must also be removed or pulled back out of the way prior to installation.



Before removing the upper interior panel directly above the window put the frame in place and mark the panel for trimming around the support brackets. Once the panel has been marked it can then be removed and trimmed down – once this is done refit this top panel only and retest to ensure the frame can sit flush against the body of the vehicle before applying any glue, if further trimming is required ensure this is done before opening the supplied glue. The top panel cannot be re-fitted once the frame is glued in place.

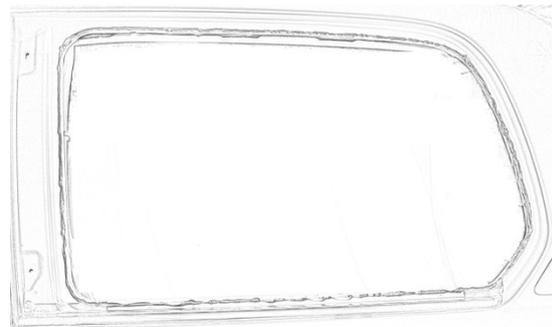


Fix the frame in place using clamps to assess where you will need to thicken the bead of Sikaflex to ensure no gaps between the body of the car and the frame. The frame should be aligned centrally in the space left by the window, we suggest testing and getting a feel for the position before applying any glue..

Apply a bead of Sikaflex around the inside edge of the window seam – approximately 5mm wide, (*paying particular attention*) to the corners increasing the bead enough to fill any higher spots between the body and the frame.

Make sure there are no gaps in the bead.

The support brackets can now be tightened just enough to put pressure on the glue and help to support the frame in position





Once the glue is applied and the frame is in place, apply clamps paying particular attention to the corners and leave to dry for at least 24 hours. Use a torch check no light can be seen between the frame and the car body.

Whilst the glue is wet and the frame is clamped, carefully clean up any excess glue from around the frame. This can also be done when the Glue has set, with the careful use of a sharp knife.

Do Not proceed with fitting any hardware to the frame until the glue has set and the frame is securely in place (24 hours).

3: Attaching the door panel.

Tighten the support brackets firmly but be careful not to overtighten these as they can pull through the frame if care is not taken.

If you purchased panels already powder coated the handles have been assembled and locktight has been applied otherwise: remove the door handles from the door panel, when reassembling use some locktite on the threads to prevent them loosening over time.

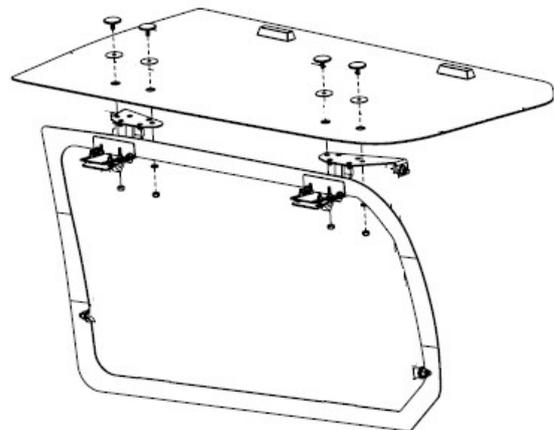
Remove the nuts from the 4mm bolts and attach the hinges so the face plate protrudes around 8mm from the frame. The exact depth will be adjusted later. Just tighten the two diagonally opposed bolts to one another for now.

The hinges are marked for correct placement:
PS – (Left) and DS – (Right).

When the hinges are in the closed position, place the door panel centrally; we suggest using a spacer at the bottom of the door panel to lift it up slightly so that the panel is aligned correctly.

Note: when the gas struts are attached the door panel will be pushed up around 2mm as the hinges compress – try to allow for this when placing the door.

Close the handles a little so the cam latches over the frame to secure the panel in place while fixing into position. Placing the Pan Head bolts from the outside; fit a washer and nut on the inside (you may need some pressure on the outside of the panel to allow the nuts to catch onto the thread of the pan head) – If the threads still seem short, loosen the hinges and move them out.



Once all four pan heads are in place and secure, check that the door doesn't touch the car when opening and closing. If there is any touching, adjust the door accordingly before attaching the gas struts.



Once the Door panel is adjusted as much as possible screw in the rest of the bolts through the hinge into the support bracket – make sure everything is tight, open the door and attach the struts (wider end to the top). Close the panel carefully, again watching if it touches the car as it closes. Once closed note any required adjustments to the door panel to align it with the car. The depth of the door can be adjusted later, once the seal has been attached.

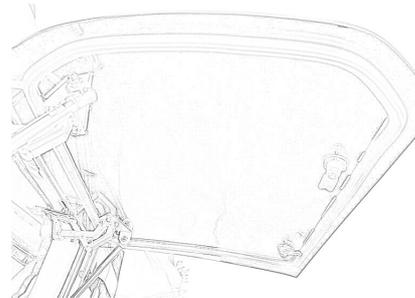
4: Adjusting the door panel and fitting the seal

Before loosening any nuts detach the gas struts.

The door panel can be adjusted up/down and left/right by releasing the pan heads that attach the door to the hinge. Make note of the required adjustments and mark the current position of the hinge plate on the inside of the door before removing the struts and loosening the pan heads.

Once you are happy the door panel is adjusted into position and the gas struts are reinstalled, the weather seal can be attached to the inside. Close the door panel and carefully mark inside the door panel around the inside edge of the frame noting the distance between the line and the edge of your frame - chalk pens are great for this.

Once the door has been marked, the weather seal can be attached to the door following outside of the marked lines so the seal will line up centrally with the foam rubber on the frame (if the seal does not align correctly moisture and dust will find its way into the back of the vehicle).



If you are unsure of how to place the weather strip in relation to your line, cut a small (10mm) section off the supplied rubber and test by attaching it to the door. Once the rubber is in place close the door for a few minutes, after this time when opening the door an indentation should be left on the foam rubber attached to the frame showing you how they are meeting when closed – if done correctly you will see a clear line in the foam rubber on the frame left by the ridge on the weather strip.

Once the weather seal has been set in place, close the door panel and check the depth to ensure it aligns with the car and compresses the rubber seal. If adjustment is required loosen the hinges from the top supports (the gas struts do not need to be removed), apply pressure evenly to the outside of the door where the hinge meets the door until you see the rubber compress, and then re-tighten the bolts.

You may also need to bend the cams on the door locks to compress the bottom part of the rubber seal, to do this remove the cam by taking the screw out from the back of the door handle. Put the cam into a vice so that any bend is applied away from the square hole – do not distort or bend this part of the cam. Bend slightly and then retest until the correct rubber compression is achieved – you should see a clear line where the ridge on the weather seal pushes into the foam rubber on the frame.

Close the EmuWing and leave the car in the sun for a few hours to activate the glue on the back of the weather seal – leave the wing closed for around 24 hours while the glue on the weather seal sets.



Once everything is dry the interior panels can be re-fitted – the edge that meets the frame may require a little filing so it will sit in the correct position without causing the plastic clips to release.

If additional help is required, please feel free to give us a call on +613 90171614 between the hours of 9am and 4pm AEST – Monday to Friday.