

# GU PATROL

#### Nissan



## Installation Instructions





Due to the intrusion of the hinge this product is not suitable for vehicles with passengers in the seats adjacent to the Emuwing. The Emuwing is designed as an addition to a storage system and should be removed if the seats adjacent to the Emuwing are ever reinstated.

## Parts List

Frame 1 per side	Wing Panel x 1 per side	Glue and Nozzle x 1 per kit	
Support Brackets x 2 per side	Hinge & Faceplate – One front & One rear per side (Pre-Assembled)	Weather Seal, 1 per side cut to length	
Gas Struts – two per side	Panhead bolts x 4 per side	Pinch Weld, 1 per side cut to length	
M4 Nyloc Nut x 8 per side	M4 Nyloc Washer x 8 per side	M4 Hex Bolts x 8 per side	
Keyring x 1 per kit Keys x 2 per side	Installation Instructions Installation Instructions Model specific installation instructions x 1 per kit	11	
		Emuwing Flyer x 1 per kit	
Other items and Tools Required: <ul> <li>Allen Key 3mm</li> <li>Medium size Phillips's head screwdriver</li> <li>Eight to Twelve Clamps per side</li> <li>Spanners and or sockets (7mm, 8mm, 10mm, *27mm)</li> <li>Caulking/Glue gun</li> <li>Wax and Grease remover or other solvent that leaves no residue</li> <li>Clean rags or kitchen paper</li> <li>Masking tape</li> <li>Heat Gun</li> </ul> *Glass models only			



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

We have installations on our YouTube channel which may be worth looking at before beginning.

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#### As this is a DIY kit. Please ensure you read the instructions carefully before beginning installation as once installed, no claims can be made due to incorrect installation.

#### 1: Remove the existing rear window and mark the interior trim for cutting.

- Remove interior trim, glass and rubber.

Remove the existing rear window rubber and the interior trim.

The interior trim requires the removal of both second-row top seat belt mounts, the rear most grab handles and the third-row seat belt top seat belt mounts. There are also two plastic clip retainers that need to be removed on each side – one is simply levered up and the other is screwed into place.

Cargo barriers may make removal of the trim difficult and may need to be moved or removed completely.

Completely remove the interior trim surrounding the window, this is held in place by plastic clips that may have become brittle over time, carefully pull it back at the bottom. Once the bottom of the trim is clear and the clips up each side are free – pull down being careful of the roof lining.

On the outside of the car at the rear of the window is a plastic vent. This is removed by pulling the top out and pushing the trim upwards – three plastic clips hold it in place so be careful as these may also have become brittle.

The window can now be removed. We recommend contacting a glazier to have the window removed as the panel is glued firmly in place. If you do decide to remove the windows yourself – purchasing a windscreen removal tool will help. Beware as there are plastic clips within the existing glue that are difficult to cut through.

After removing the rear window, wash off any dirt and carefully remove as much residual glue from around the seam as you can. The previous glue does not have to be completely removed but you should ensure the Emuwing frame can be mounted as close to the car body as possible by removing any excess glue.

#### - Marking interior trim for cutting.

Reinstall the interior trim temporarily. Once it is in its original position, it will overhang the outside of the car. The frame of the Emuwing will sit flush against the body so any excess material needs to be marked and removed.

Before removing the interior trim, you can also mark the top support bracket (Figure 1) as this requires an additional 5mm of material to be removed. Place the frame against the car and mark the position of the top supports of the frame onto the plastic interior trim. Once the trim has been marked up it can be

marked up it can be removed allowing you to

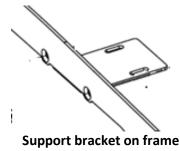


Figure 1.



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frame.

#### 2: Installing the frame.

#### - Positioning the frame.

Make sure you understand the positioning of the frame before attempting to glue it into position. Although there is some adjustment in the panel later during installation – correct positioning of the frame will ensure a smooth installation and a great finish.

Without applying glue, position the frame.

Use the hole at the bottom rear corner of the frame and align it with the window placement clip left after removal of the original window. (Figure 2).



Figure 2.

At this point place a clamp on each corner of the frame. The frame will easily mould to the car. It is a good idea to apply some masking tape around the frame, this will help with glue clean up later in the process.



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#### - Gluing the frame into place.

Remove the frame and clean the back, and around the window seam ensuring no residual glue is left on either surface. Wearing gloves will ensure no grease or oils from your hands contaminate the surfaces.

Remove the nuts and washers from the top of the frame and put aside.

Apply an even consistent bead of Sikaflex around the inside edge of the window seam on the car – approximately 6/7mm wide, increasing the bead slightly to 8/9mm around the corners.

There is plenty of glue in your kit for a practice before putting glue on the window seam.

Make sure there are no gaps in the bead, and it is consistent around the window.

Make sure your clamps are close to hand before placing the frame.

Place the frame into position and place clamps firstly, onto each corner, then along the top and bottom edges. (Figure 3).

We recommend looking closely to ensure no light can be seen between the frame and car. Use more clamps if required, a torch may help.



Figure 3.

Once the glue is applied and the frame is in place, leave to dry for at <u>least 24 hours</u>. Whilst the glue is wet and the frame is clamped, carefully clean up any excess glue from around the frame.

Use an old rag to push the excess glue onto the masking tape, once all the glue has been pushed back – remove the masking tape carefully ensuring the glue remains on the tape and not all over you and the car.

The glue can be cleaned up using wax and grease remover whilst wet, do not leave it to dry or it will be difficult to remove without damage to the paintwork.

#### - Reinstall the exterior vent

In your kit you will find a 10mm neoprene rubber, this is placed inside the vent following the channel at the front – this fills the void between the vent and the frame. (Figure 4).

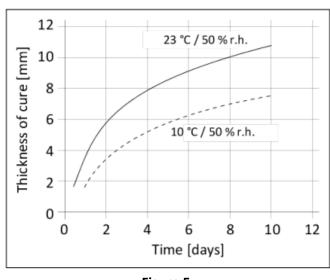


Figure 4.

The thickness of this rubber will need to be trimmed to ensure the vent sits correctly against the car. Sit the vent in place without the clips so you can see how much needs to be removed and trim excess.



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## Do Not proceed with fitting any hardware to the frame until the glue has set and the frame is securely in place (at least 24 hours). (Figure 5).



#### - Cutting interior trims.

The interior trim can be cut in preparation for reinstallation. There is a guide on our YouTube channel worth watching if you are not sure about these cuts. Carefully cut along the marks you made on the interior trim, removing between 2mm to 5mm of material. An additional 5mm will need to be removed at the two sections at the top of the panel, where the Support brackets attach to the frame.



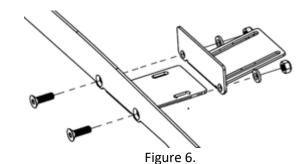
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#### **3: Attaching the door panel.**

#### - Place and tighten the support brackets.

Assemble the support brackets on top of the frame; using the previously removed nuts and bolts to clamp the frame to the body. <u>Do not over tighten these</u> <u>bolts, just tighten them firmly.</u> (Figure 6.)

Ensure the two bolts are evenly tightened so the slots in the two brackets align and the bracket is firmly against the body.



#### - Attach the hinges.

Attach the Hinges to the frame using the supplied 4mm nuts, bolts and washers so the face plate protrudes around 10mm from the frame. The exact depth will be adjusted later. (Figure 7).

Figure 7.

#### - Applying the weather-strip.

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.

#### <u>- Primer</u>

Before attaching the weather strip use the 3M primer where you will be applying the weather strip. Apply using long strokes exactly where the weather strip will be placed

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







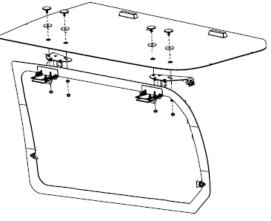
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#### - Placing the door panel.

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. Close the rear passenger doors to help with alignment. (Figure 10).

Note: when the gas struts are attached the door panel will be pushed up as the hinges compress – try to allow for this when placing the door by positioning the panel 1 or 2 mm lower than it needs to be.

Close the handles a little so the cam latches over the frame to secure the panel in place while fixing into position.





#### - Securing the door panel.

Placing the Pan Head bolts from the outside; fit a washer and nut on the inside. Once all four pan heads are in place and secure, check that the door does not foul the car when opening and closing. If there is any fouling, adjust the door accordingly before attaching the gas struts.

## <u>Before loosening any nuts for any further adjustments</u>, **detach the gas struts first** to prevent the <u>hinges from twisting</u>.

#### Attach the gas struts.

Once the Door panel is adjusted as much as possible 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, at this stage we are only concerned with the position of the panel in relation to the car however if your panel sits out from the frame more than 10mm it may be worth adjusting this in to at least 10mm.

#### 4: Adjusting the door panel depth.

#### - Adjustments – left/right and up and down.

The door panel can be adjusted up/down and left/right by loosening 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.



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#### - Adjustments - Depth.

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 but beware they may try to push the door outwards), apply pressure evenly to the outside of the door where the hinge meets the door until you see the rubber compress onto the frame, 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 rubber on the panel compresses equally top and bottom.

#### Thread locking compound – handle/cam screws.

The small screw holding the handle and cam in place has not had thread locking compound applied to facilitate any bending required. *It is essential this is applied onto these screws to ensure you retain your handles.* 

Close the Emuwing ensuring the seal has not rolled and remains attached squarely to the frame, ensure the handles are closed and there is even pressure on the seal all the way around. Now use a heat gun to heat the frame from the back (inside the car) – this will activate the glue on the weather strip and affix it in place permanently. Use a piece of cardboard to protect any trims/roof lining from the heat of the gun as you work your way around and be careful not to burn the seal directly. The frame should be heated to the point that it is very hot to the touch – above 50 degrees Celsius.

Leave the panel closed for an hour or two whilst the glue cools.

#### - Plastic grommets.

You will find some black plastic grommets in the kit. These are used to fill the holes left by the clips that held the original window in place. They will ensure the vehicle stays dry and dust free.

The interior panel may require some additional trimming around the support brackets at the top of the frame, as well as at the bottom to allow the door handle cams to close. (Figure 11). Place the interior panel into position and mark where it will need to be cut and check clearances before putting everything back together.



If additional help is required, please feel free to give us a call on +613 8592 1926 between the hours of 10am and 4pm AEST – Monday to Friday.



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#### 5: Glass supplement.



We recommend tinting the glass prior to installation, this ensures the weather strip will not deteriorate faster than usual due to UV exposure.

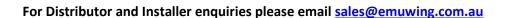
#### Instructions:

- 1. Ensure glass is tinted and dry before attempting assembly.
- 2. Disassemble handles noting the order of reassembly, the panel is located between the two rubbers when reassembling.
- 3. Tighten the barrel nut until the rubbers are compressed ensuring a good seal.
- 4. Assemble and insert handles.
- 5. Ensure thread locking compound is used on the 10mm bolt securing the cam latch.

Prior to installation of the Emuwing kit the handles should be reassembled into the glass panel.

Ensure thread locking compound is used on the threads of the 10mm bolt securing the Cam.

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