



# Fitment Of Motorcraft Windows

MC-TI-A4-00701

## Technical Instruction

Revision 1.0

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## 1. Revision History

This document will be updated, when necessary, by issue of the complete document. The amendments or additional parts will be marked by red text until the document is revised again.

Issue	Description	Prepared By	Approved By	Date
A	First Issue	T. Parkin-Coates	G. Shears	06/09/23

*Table 1*

## 2. Inventory

References.

Item	Document No. / URL	Title
1.	<a href="https://www.motorcraftoa.com/overland-vehicle-windows">https://www.motorcraftoa.com/overland-vehicle-windows</a>	Motorcraft OA Windows Webpage

*Table 2*

Ensure all parts and fixings listed in this document are obtained before starting the assembly. If anything is missing from the product, please contact Motorcraft Overland Accessories Ltd.

## 3. Introduction

This instruction defines the method to be followed in fitting Motorcraft Overland Accessories Ltd Expedition Windows, both Premium and Monsoon, and Van Windows. All types of windows fit the same way.

## 4. Responsibility

It is the responsibility of the Fitter that all documentation is followed. It is their responsibility that all steps throughout this instruction are followed correctly. It is their responsibility to ensure the correct tooling is used as well as PPE.

## 5. Items Required

Tool Description	Tool Size
Allen Key	4mm
Wood Router Min. 40mm Depth	12.7mm ADVISED
Sandpaper	Fine Grit such as 400
Sealant Gun	
Jigsaw	Blade 100mm
Panel Cleaner / Wipes	
Metal File	Bastard File
Bowl of Warm Soapy Water	
Telescopic Prop	x4

*Table 3*

## 6. Fixings Required

Fastener Description	Quantity	Recommended Tightening Torque
Solvent Free Polyurethane Adhesive such as Bostik Simson ISR 70-08 AP	2 x 290ml Tubes	N/A

*Table 4*

## 7. **Advised Personal Protection Equipment**

- Protective Work Glasses
- Rubberised Work Gloves
- Steel Toe Cap Boots
- Ear Defenders
- Respiratory Dust Mask

### HAVING A WORK PARTNER IS ADVISED WHEN CONDUCTING THIS ASSEMBLY

For any questions regarding the assembly of this product, please contact Motorcraft Overland Accessories Ltd.

## 8. **Measuring Up**

- 8.1. Obtain your Motorcraft window and place it glass side down on your work surface. Ensure a clean cloth is placed first to reduce the chance of scratching the glass and GRP frame.
- 8.2. Using a tape measure, measure the GRP frame to determine the size of the biggest cut you will need to make from the outside of your panel. The measurements required is shown in Figure 1.

*Note: Although this information might be available on the website, it is essential to check the physical product sizes due to Fibreglass thickness discrepancies.*

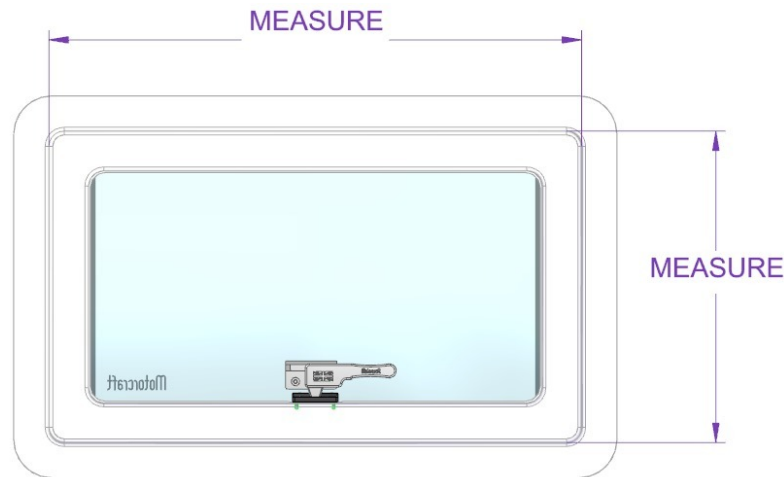


Figure 1: Inside Window Measurement

**IF YOUR PANEL IS LESS THAN 50MM THICK CONTINUE FROM POINT 11.**

*Note: As Motorcraft windows are a stepped Glass Unit design, there must be a big, routed cut-out with a smaller cut-out through the panel. This is assuming the panel is more than 50mm thick. If not, only the big cut-out needs to be made all the way through.*

8.3. Using a tape measure, measure the GRP frame to determine the size of the smallest cut you will need to make from the outside of your panel. The measurements required is shown in Figure 2.

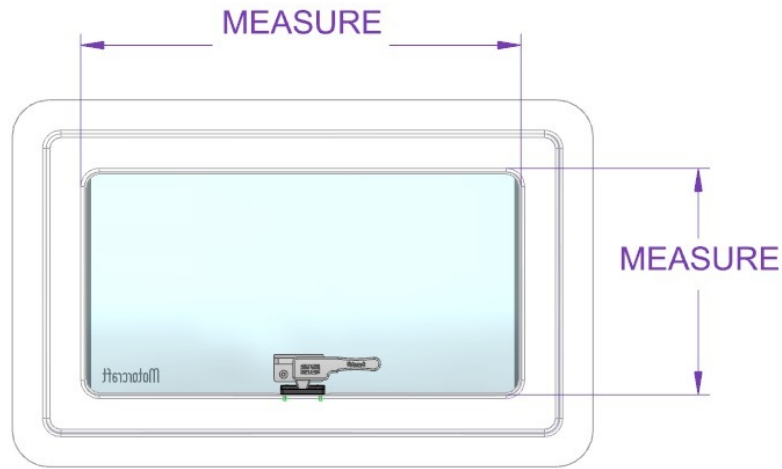


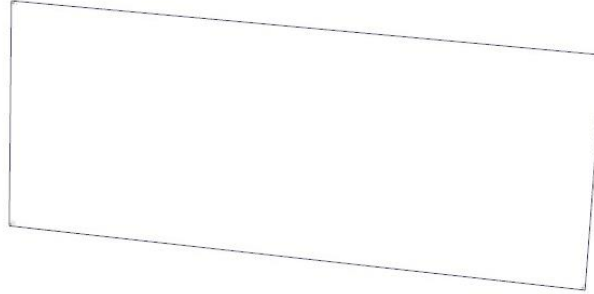
Figure 2: Inside Window Measurements

## 9. Panel Prep for Cutting

- 9.1. Wash the Panel thoroughly with soapy warm water and a sponge and then dry with a clean cloth.
- 9.2. Using a vibrant Marker Pen and a straight edge, mark on the panel the measurements taken from point 8.3. (Figure 2) in the desired location on the panel.

*Note: The Window must be fitted to a flat surface unless a Van window is being installed. Van windows are designed to accommodate a gentle curve within the Van Panel.*

- 9.3. Ensure the window location is correct on the inside and the outside before cutting the panel. This can be checked by drilling a small pilot hole in the corner of the proposed cut-out. Then go around to the other side of the panel and see where the pilot hole is located. See Figure 3.



*Figure 3: Pilot Holes in Each Corner*

9.4. Ensure you are happy with the window location BEFORE continuing.

## **10. Making The Small Cut-out**

10.1. Using a Drill create a hole, all the way through, inside the drawn cut-out area. Ensure the drill bit is big enough to allow a jigsaw blade to get through the hole.

10.2. Using a Jigsaw, with a 100mm Blade (either wood or metal blade based on your panel spec), cut out the centre of the window hole following the drawn lines made in point 9.2. Now, your panel should look like Figure 4.

*Note: Ensure suitable PPE is worn whilst making the cuts through the panel and handling the cut piece.*



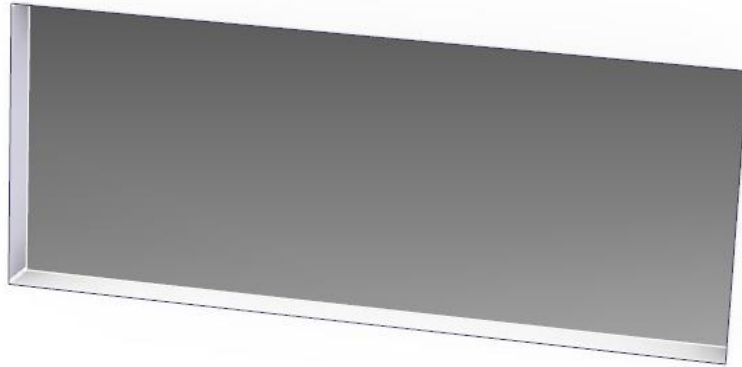


Figure 4: Cut Window Hole

## 11. Making The Big Cut-out

*Note: If your Panel is less than 50mm thick, follow point 11 instructions but cut all the way through the panel using a Jigsaw. If in doubt, contact Motorcraft overland Accessories Ltd.*

11.1. Using a vibrant Marker Pen and a straight edge, mark on the panel the measurements taken from point 8.2. (Figure 1) positioned central vertically and horizontally with the first cut-out. As shown in Figure 5.

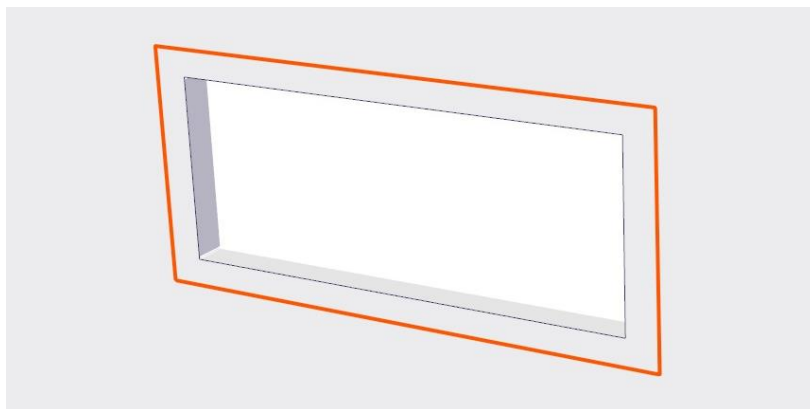


Figure 5: Marked Up Window

11.2. Obtain a Router with a ½” cutting bit equipped.

11.3. Ensure the depth gauge is set to 40mm on the Router to ensure you don't cut too deep.

11.4. Starting from the inside edge of the existing cut-out, begin to Router up to and around the inside of the drawn lines made in point 11.1. Router all the material out from the centre ensuring the depth is fixed at 40mm. The panel should then look like Figure 6.

*Tip: If the panel surface you are cutting is tough such as Aluminium, set the depth guide to a smaller depth such as 5mm until you reach the insulation on the inside of the panel. Then increase the depth in increments of 5mm until you reach 40mm. This will reduce the stress on the Router.*

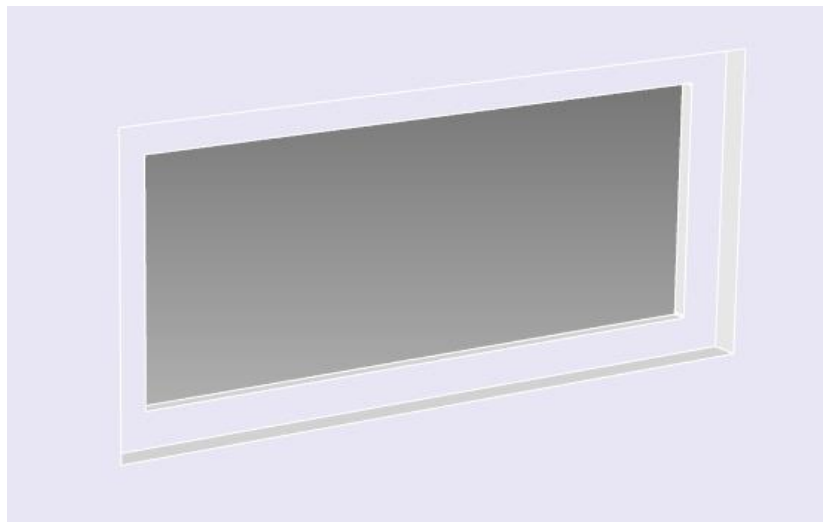
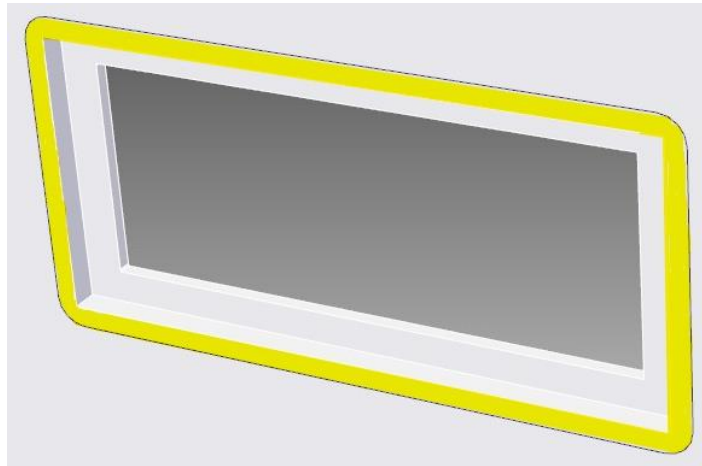


Figure 6: Window Cut-out

## 12. Panel Prep for Bonding

12.1. For installations on Aluminium Panels such as Vans, obtain a Bastard File and file the edges around the cuts to remove sharp burrs. Ensure suitable PPE is worn.

12.2. Obtain fine Sandpaper, such as 400 Grit, and begin to sand around the window cut-out where the Motorcraft window flange we meet the panel surface, such as Figure 7. This creates a coarse bonding surface for the adhesive.



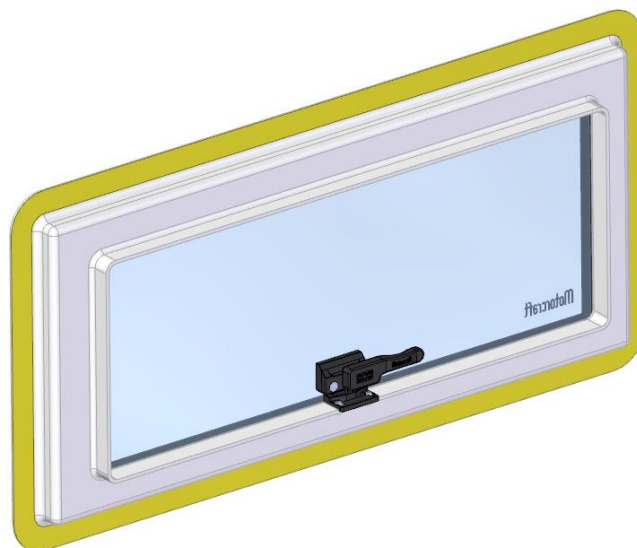
*Figure 7: Bonding Surface Area*

12.3. Using a Panel Cleaner / Wipe, clean the area which has just been sanded in order to clean the bonding surface and remove dust and remaining deposits.

## 13. Bonding in the Motorcraft Window

**MOTORCRAFT OVERLAND ACCESSORIES LTD  
RECOMMEND YOU GET A SECOND PERSON TO HELP  
YOU FIT OUR PRODUCTS**

- 13.1. Prior to bonding the window in place, dry fit the window and check the fitment and that it is correct.
- 13.2. Using a Solvent Free Polyurethane Adhesive, such as Bostik Simson ISR 70-08 AP, apply adhesive around the GRP frame, around the back side of the flange where the Window contacts the panel. See figure 8.



*Figure 8: Bonding Surface Area*

- 13.3. Instantly press the Window into the panel and align.

- 13.4. If possible, obtain props and apply force onto the window until it sets. Motorcraft recommends leaving the window in doors and dry for 24 hours.
- 13.5. Obtain 2-inch Masking tape.
- 13.6. With the Window open, masking tape from the outside of the window frame to the inside of the Panel. Ensure tension is added to pull the window frame into the panel. This, done in multiple places, will ensure the window frame is held to the panel whilst the adhesive goes off.

*Tip: It is much easier to clean excess adhesive from around the window frame when the adhesive is still wet. Get a damp cloth or a scraping tool to clean off the excess glue.*

## **14. Fine Adjustment**

- 14.1. Once 24 hours has passed, it is safe to remove all props and tape from the window. The adhesive should be set, and the window fixed into the panel.
- 14.2. Ensure to clean the window inside and out to remove any dust or debris from the window and also the window seal.
- 14.3. Operate the window. Ensure the window opens correctly and stays where you open it to.
- 14.4. To tension the hinges, obtain a flat blade screwdriver and begin to turn the golden screw on the hinges both sides with the window open, shown in figure 9. This will allow the window to stay open at the desired angle.



*Figure 9: Window Adjustment*