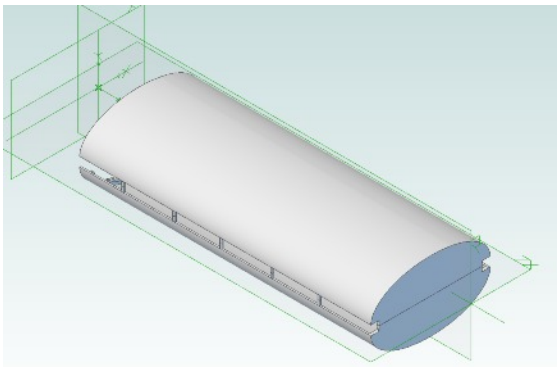
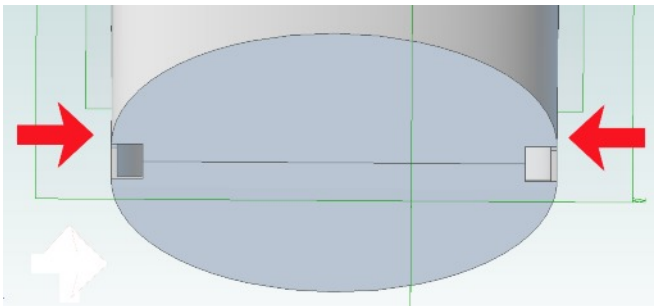
General Roof Instructions



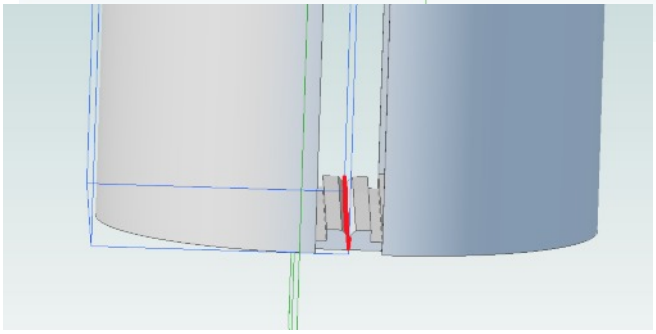
Instructions

1) Please read the general notes for hints & Tips on cleaning and preparing your 3D printed parts.

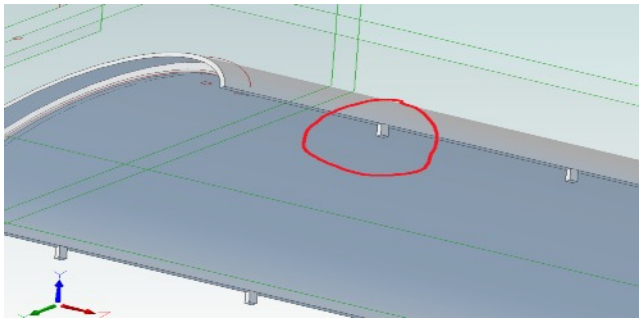
2) Avoid excess pressure across the roof, especially close to the base as this may split the part along the print lines. If this does happen, reinforce the inside if the roof with filler and leave to set before smoothing and painting.



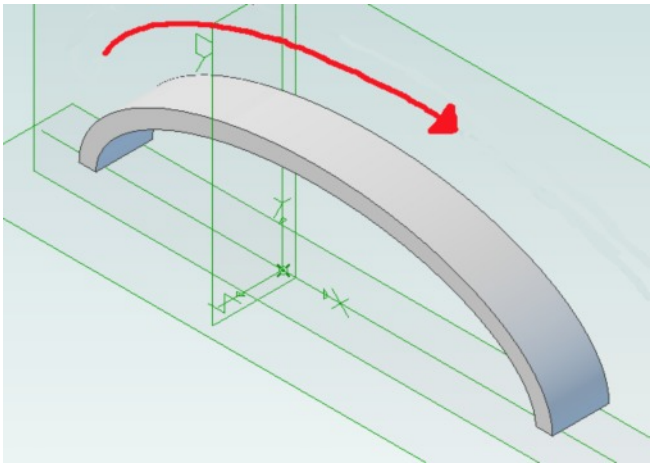
3) Separate the roof halves. Snip the tabs along the length of the roof. Don't snap the base apart as this may break across the roof instead of the join. Either saw or score the base with a sharp knife. Remove any excess material.



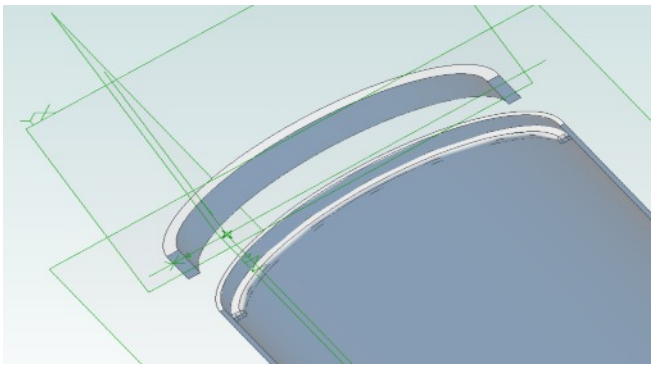
3) Clean the tabs and the lip inside the roof.

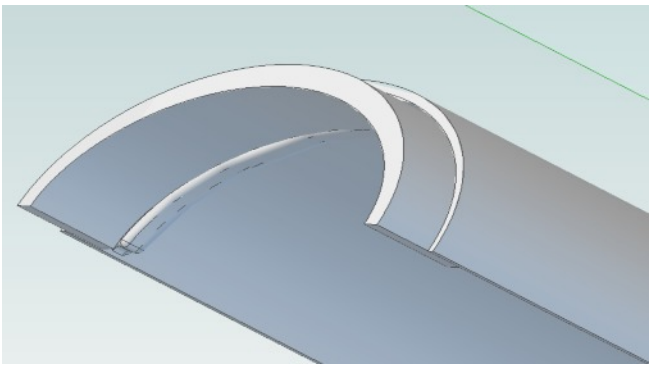


4) If your roof has domed ends, clean the outside of the roof joins by drawing a sharp knife across the surface. Any raised material will prevent a clean join

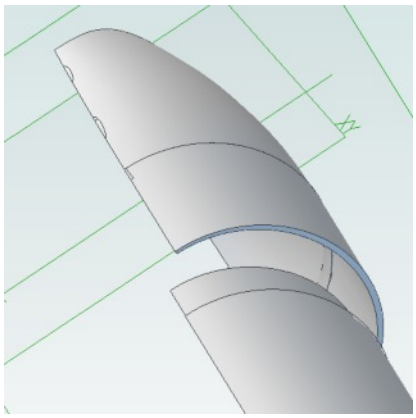


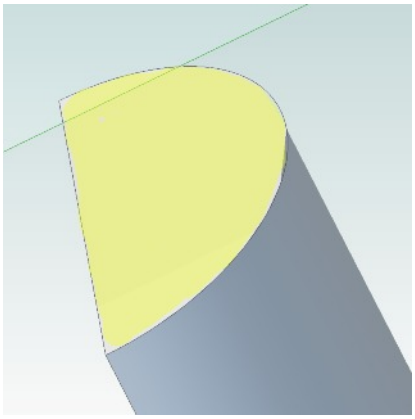
4(a) Test and fit the roof joins against the inside lip of the roof.





4(c) Check the domed end against join, clean and fix in place. Test the fit on a flat surface.



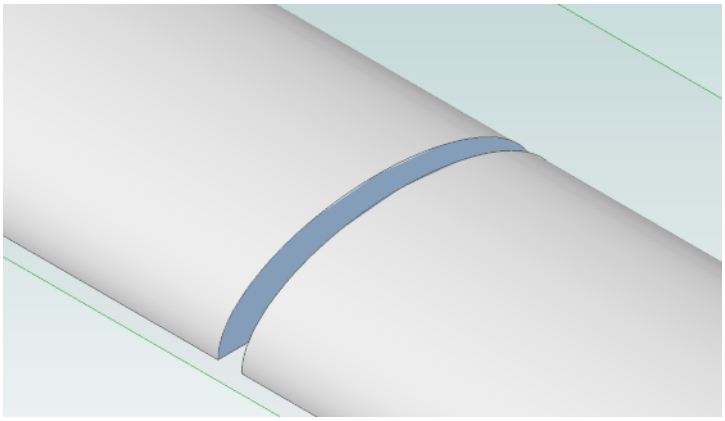


5) Clean the base. There may be up to .5mm of waste material that needs smoothing .

Alternate cleaning both ends and constantly check fit on a flat surface to ensure you haven't shaped the end at an odd angle.

6) Join the 2 halves together then smooth and fill the join. Repeat until a smooth surface is achieved.

Paint with micro filler primer.



General notes on assembly of 3d Printed parts

The 3D print process used in this kit takes 3mm filament and melts it at 210 Celcius before extruding it into a .4mm filament that can be plotted, 1 layer at a time into the required parts. As the layers cool they will form a bond but under pressure may snap along a print line so care should be taken when cleaning and assembling parts.

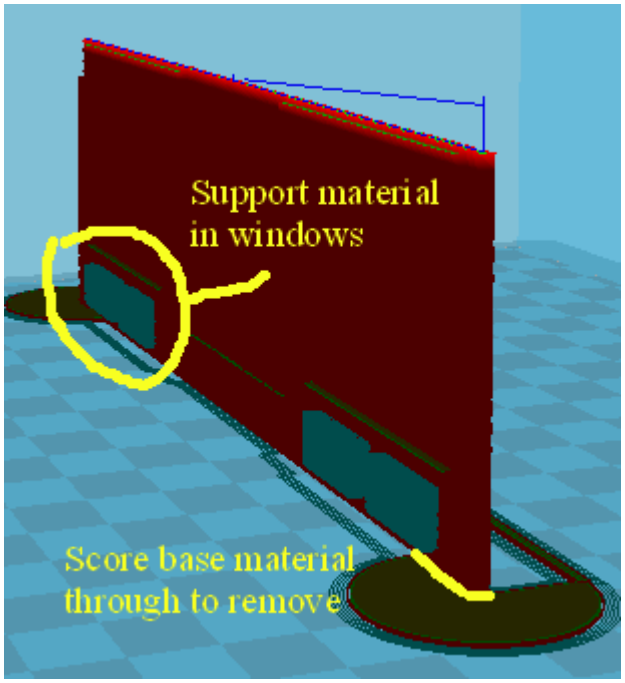
The material becomes flexible at approximately 50 Celcius, so with care repairs and alterations may be possible.

General Preparation

Clean waste material from all parts.

Where the part was attached to the printer bed there will be a thin skirt of material that can be removed, often by hand but scoring & trimming with a sharp knife will produce cleaner results and prevent damage to the part. If there is any support material inside windows or other openings, work at it gently with a sharp knife. It will probably remove in one piece.

The circular bases help the part to adhere to the print bed during production and reduce warping considerably. Before removing score heavily along the line of the wall, preferably completely through the base. If you snap the base off too soon you may remove part of the wall as well.



You will probably find some warping along the top and bottom edges of carriage and van sides. This is most noticeable on where the part was attached to the print bed and is due to the cooling that occurs between print layers so some filing in the centre needed to achieve a straight edge.

The material can also be filed or sanded clean where required. Occasionally lines of printing occur slightly out of position, particularly on the roof. These can be cleaned by drawing a sharp modelling knife along the line, shaving it to the correct level.

Parts should be glued together with strong adhesive. I recommend HAFIXS (www.hafixs.co.uk) as this does not damage the parts. Please test other adhesives on a non visible surface before use.

I recommend Alclad 2 microfiller primer when painting as this reduces the appearance of the printing layers.

If you have any suggestions, either to detail or construction technique, please let me know. Alterations to a digital master are not expensive and improved parts can be made available in reasonably short order.