

## How to make a fuelcell that fits your model

On a couple of models I have built I have run into the same problem. The space available for the fuelcell is not big enough and I wished I had something that could fit into it.

So I decided to make the fuelcell myself and make it so it would fit the space available.

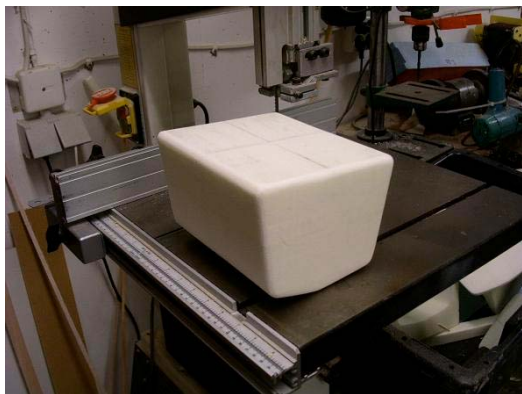


The first thing I did was measure how large the space is and out of this I made a simple sketch. Now I knew the dimension I could use so I made two templates out of plywood. These templates were used to get the right shape on the plug.

I drew a line on each of them representing the center line.

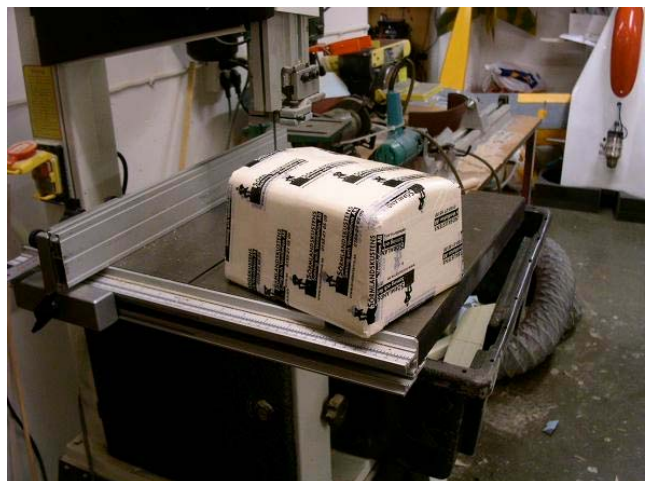


Then I cut enough foam to make a block slightly bigger than the dimension I have available. I glued these blocks together with some waterbased contact cement. When it had cured, I drew a centerline around the whole block and nailed the templates to the shortends of the foam block. When this was done, it was time to remove all the excess foam with the help of a hot wire. This could also be done by sanding. It will just take a little longer



When the cutting was done, I sanded the entire plug. To get smooth curved edges.

Next step was to cover the entire plug with package tape and cover it with wax and mould release.

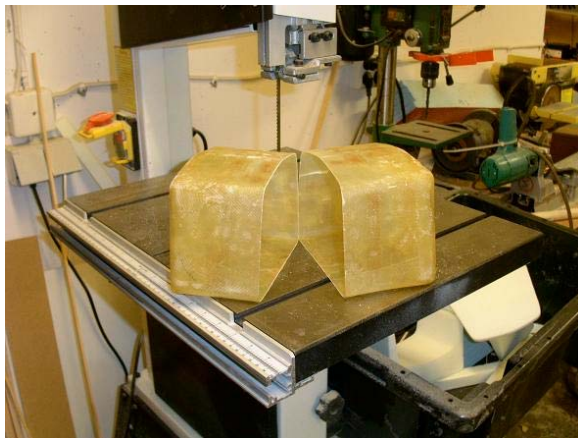




6 layers of 163 gr/sq meter glass cloth and Pacer Finishing resin later....



When the epoxy was cured, I cut the plug into two pieces.



After I had removed the foam, it looked like this.



I used the top of a 1.5 liters Soda bottle so I can attach the tube from the engine, the filler tube and the breathing tube. It was glued into place with the help of Hysol, 5 minutes.



The inside of the bottle top was sealed with some more Hysol to make sure there would be no leaks.



When the Hysol was cured, I glued the two halves together with some more Hysol. Then I wrapped the seam with a couple of layers with 163 gr/sq meter glasscloth and some more Finishing Resin.



Another quick test to see if it still fits...which it did.



All that had to be added now was the cap from the soda bottle. The fittings so you can attach the tubes to the tank was made out of a small kit from the local hobby shop. It contained all the things I needed to make the attachments.

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