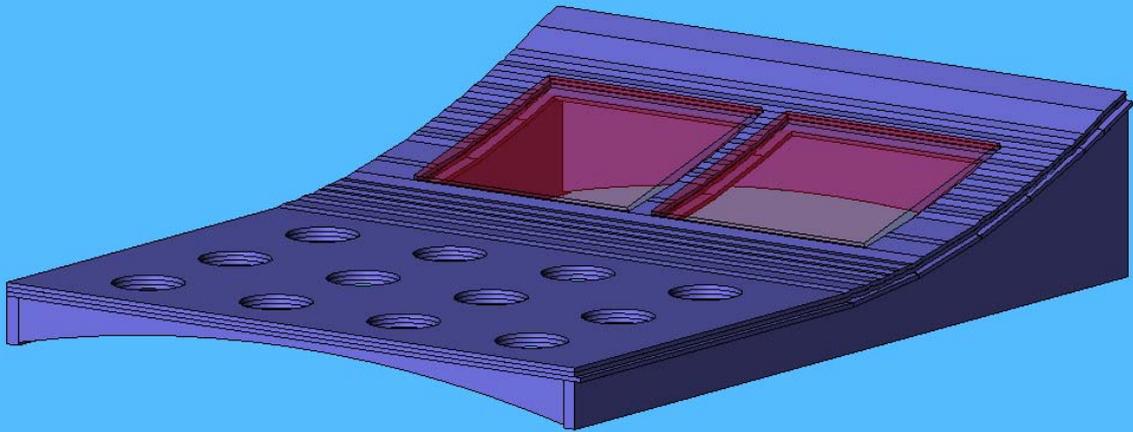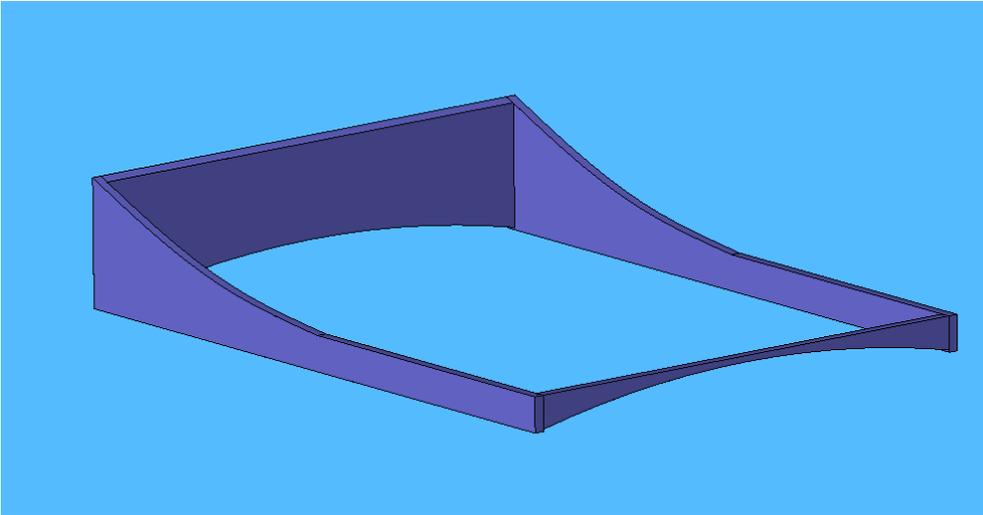# K9 Control Panel Construction

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Not for Commercial Use
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Constructing the control panel is one of the harder tasks in this build. There are some fiddly pieces to make, nothing as annoying as R2 feet, but still tricky.
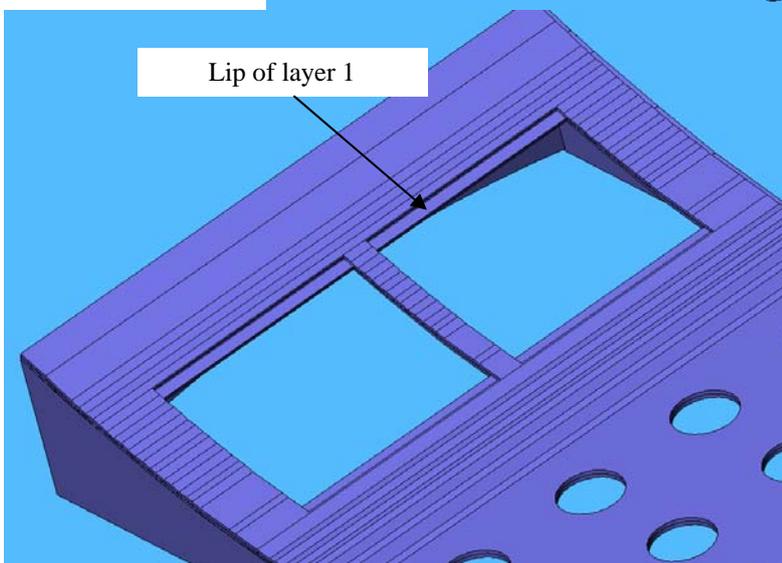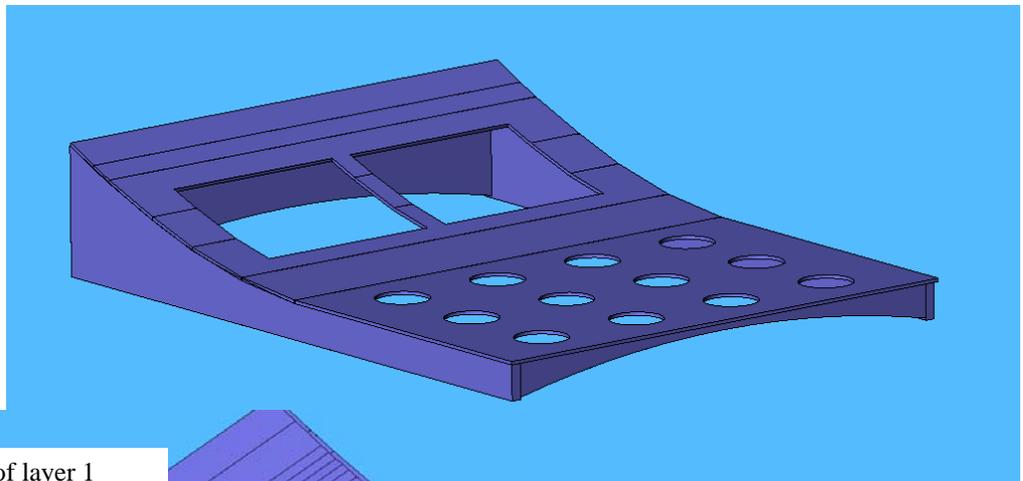
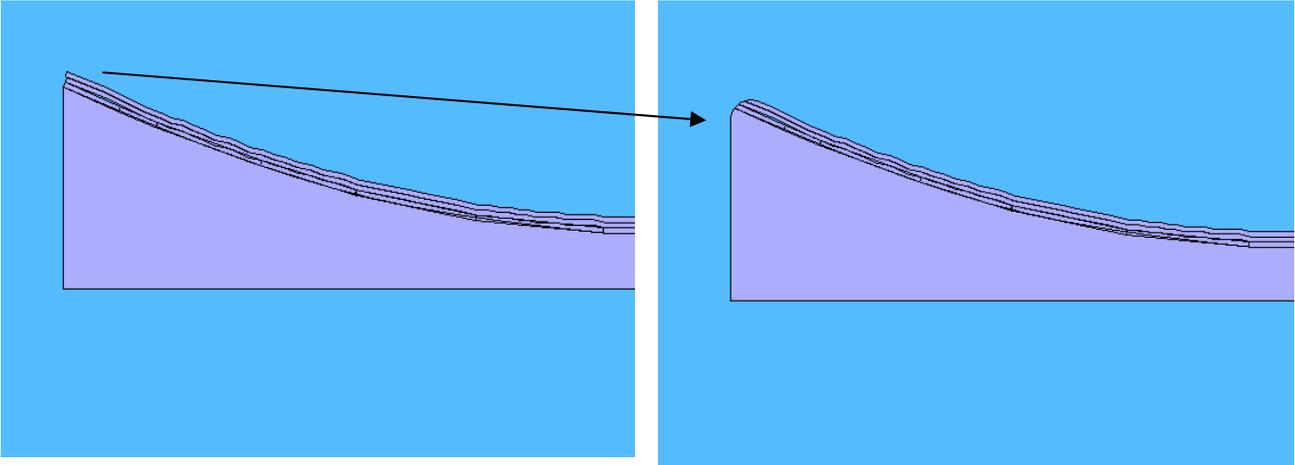We start with the frame. Glue the pieces together to form the basic shape.

Take care with the first 1mm layer. Get it aligned on the frame squarely otherwise everything will look crooked.

For now, just drill the switch holes to 3mm, we will open them up to the correct size later on.

Prepare the next layer of 1mm. Note that the red bezel openings are larger on layers 2 and 3, this makes layer 1 into a lip that the red bezels can sit on and be glued to.
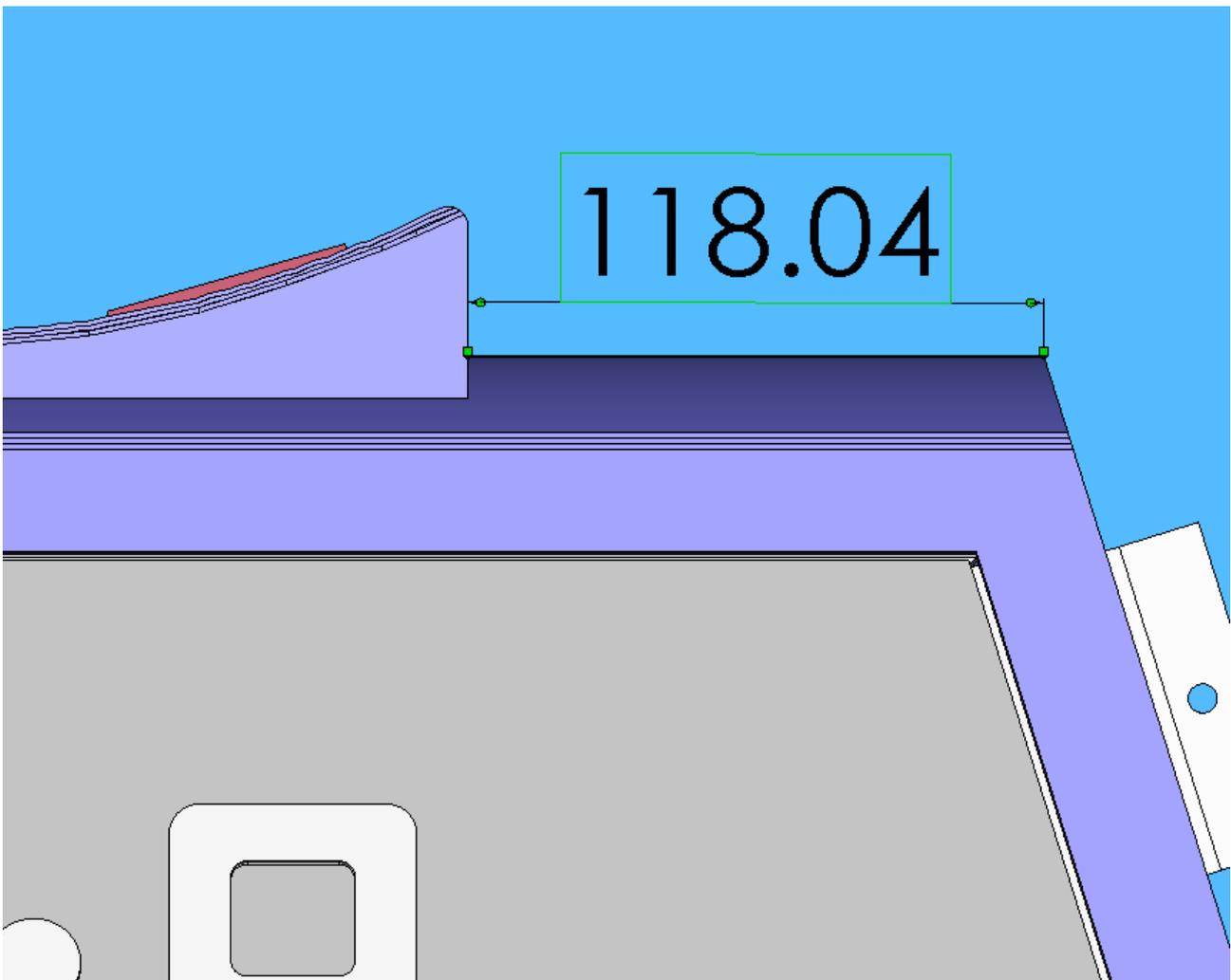

Lip of layer 1

Add the 3rd layer making sure it aligns with layer 2. You now need to round off the upper edge.

To get a good fit to the body, I taped some sandpaper to the top curve section and slid the control panel back and forth until it blended in to the body properly. Once you have the position set, cutout a rectangle in the top so the switches and lights can stick through into the body.

The panel should be set back about 120mm from the front of the dog

The switches I used are made by SunMulon of Japan. The MH range are the correct ones. Although most electronics suppliers will do a similar switch, the SunMulon ones are most accurate. The edges of the switch body are chamfered and do not have a barrier on the sides. In the USA they can be obtained from http://www.devicetec.net.

The colours vary depending on the mark of dog. I've included the data sheet in this zip of the switches.

I cut and filed the red Perspex pieces until they fitted into the spaces correctly. A piece of 0.5mm styrene is glued onto the back of the control panel to diffuse the red LEDs I used to light the panels. The LEDs were 1watt red leds available from most electronic component retailers. The button lights are controlled by a custom board I made to flash the lights in 4 different patterns