SK40 Control Box - Part 1

The SK40 is the Swinks Upgraded Version of a K40.

Since I am taking the current machine and upgrading it to a much larger process area the stock K40 Cabinet needs to be modified in a number of areas.
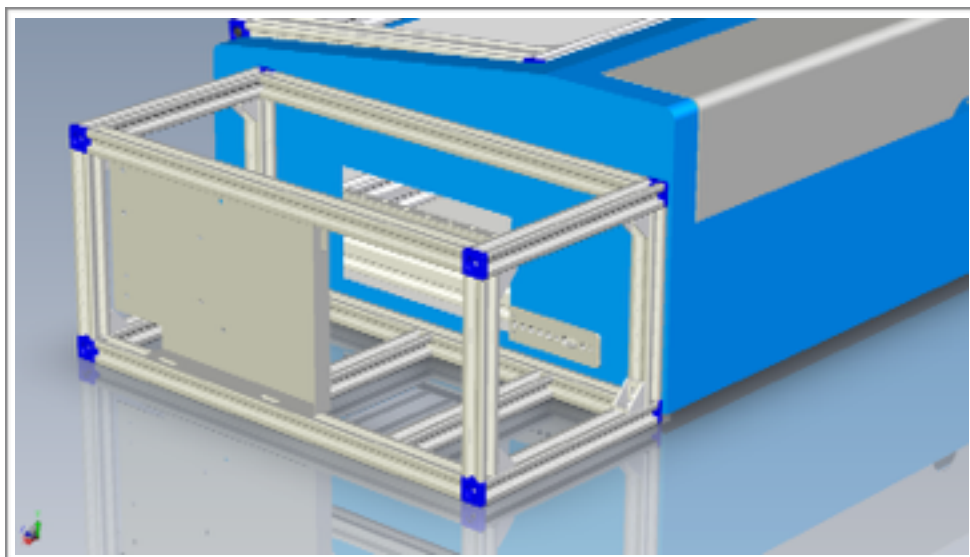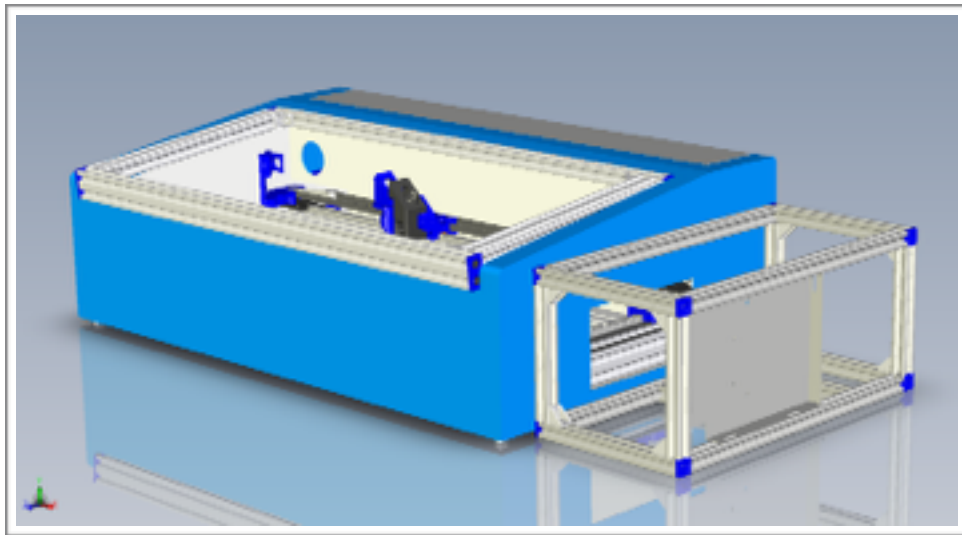
In this guide I'm focusing on the external control box and this is is optional for my build or people can use this for other builds.

Part 1 - details more of a photo visual look
Part 2 - is a CAD to show parts and profile lengths
Part 3 - will show outer panel designs etc - still yet to be done.

Below is a graphical view of the control box placement.

Use Part 2 to collect the required parts and assembly as described. I did not draw in the lucking nuts or screws (time and I was a bit lazy but you get the idea).

Photo 1 - here is the cable guide in place directing cables safely between the cabinet and control box.
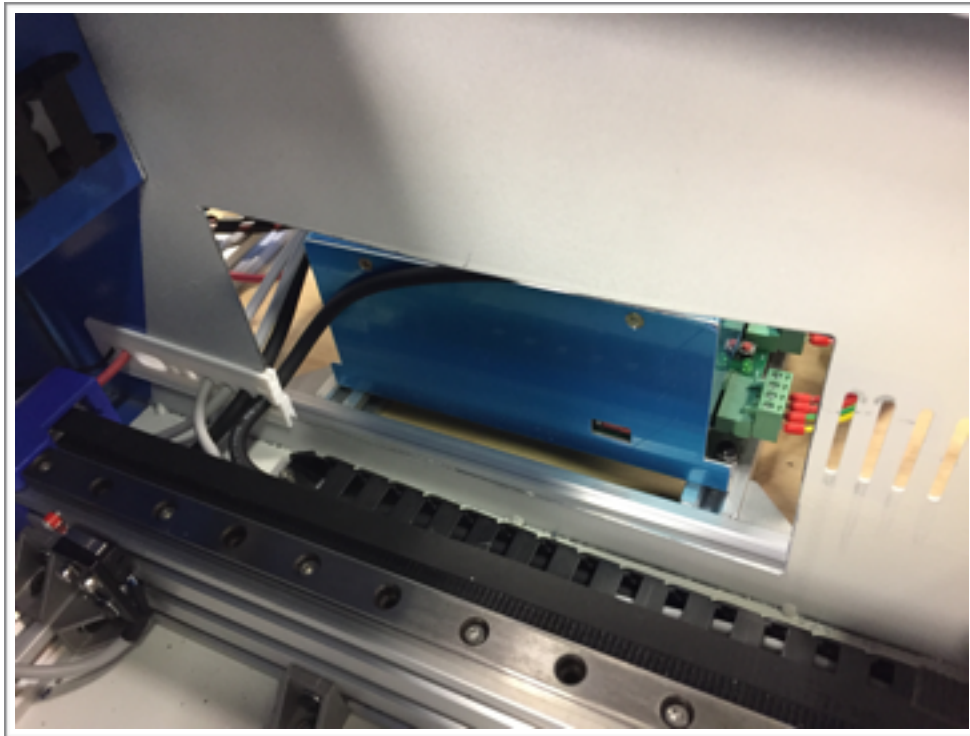

Photo 2 - Here is the side view of the control box and with the temporary mounted original control panel. Note 2 brackets to anchor the control box to the table top.
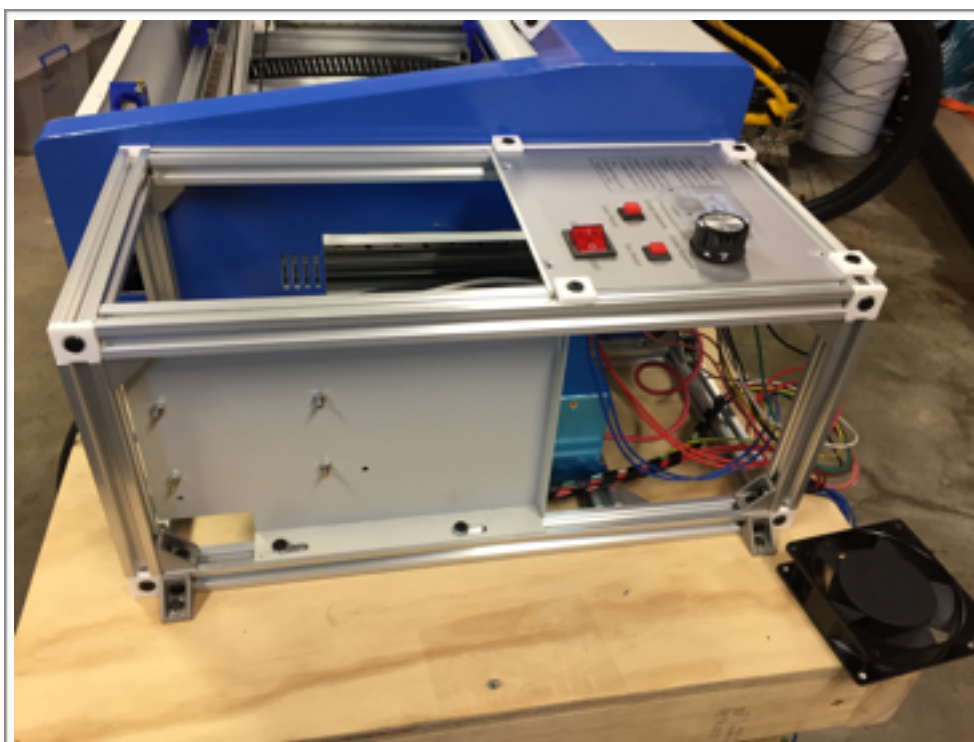
Photo 3 - Here is a better view of the control panel temporary mounted - eventually a full plate will be made which will host an emergency stop, water temp gauges and better switches in a in order of activation alignment.
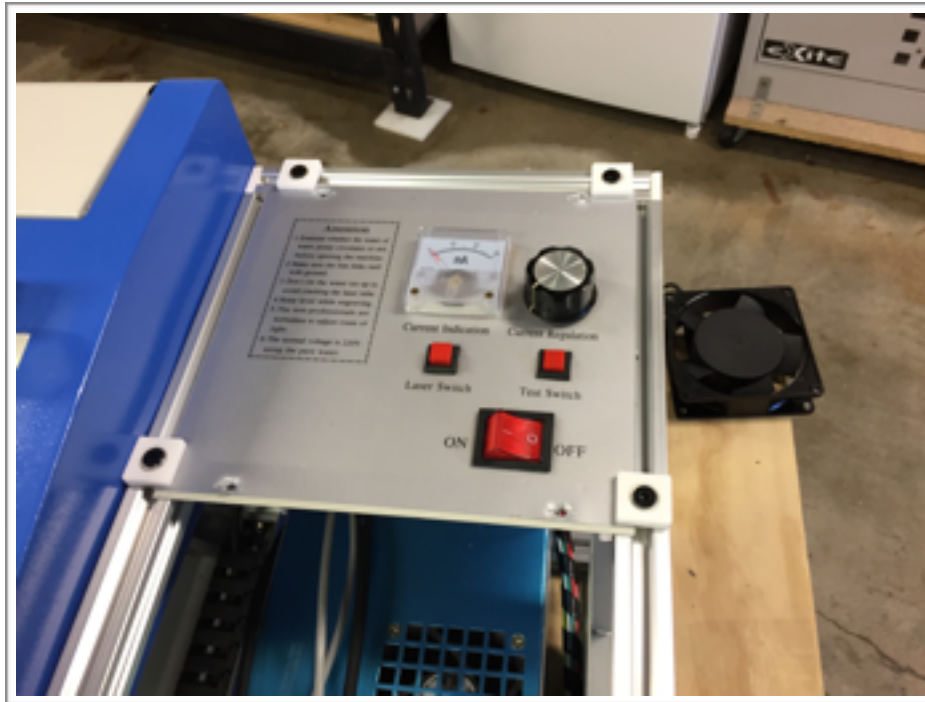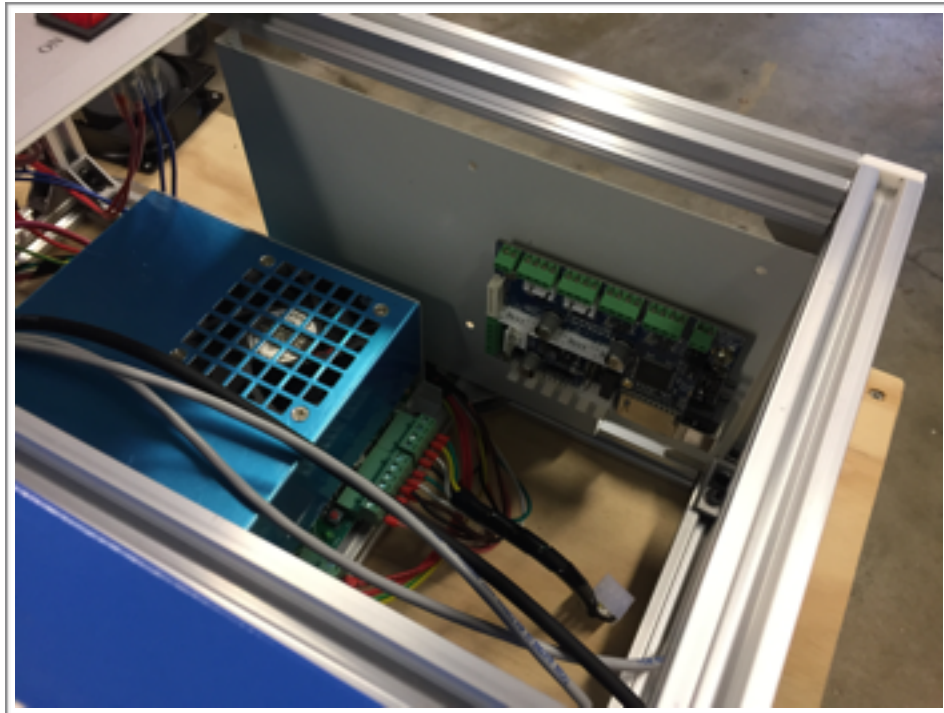

Photo 4 - This shows the Power Supply mounted as well as the controller panel. Note the location of power wires reach to the 3DCohesion board.
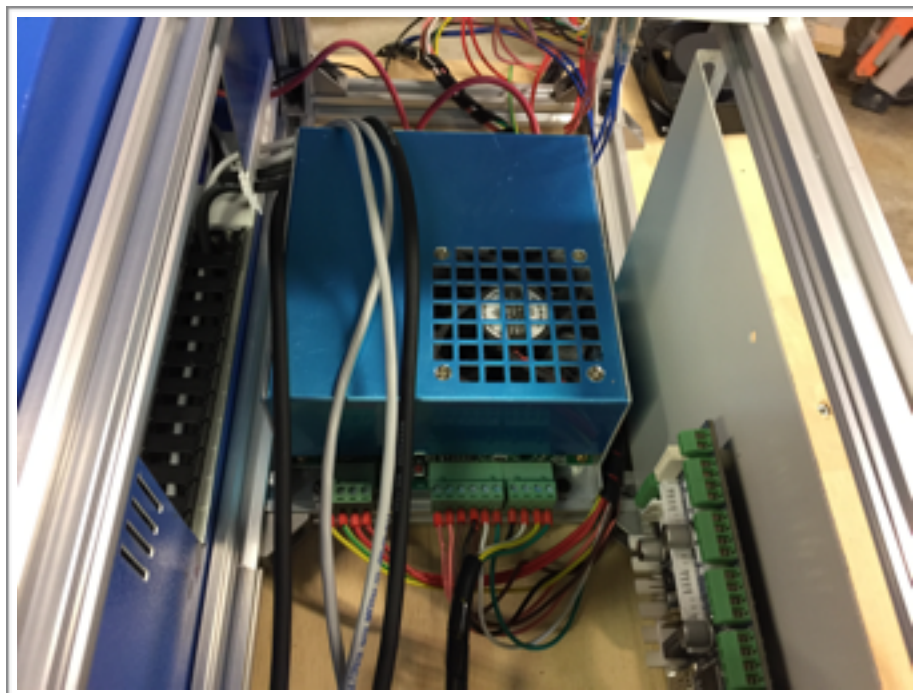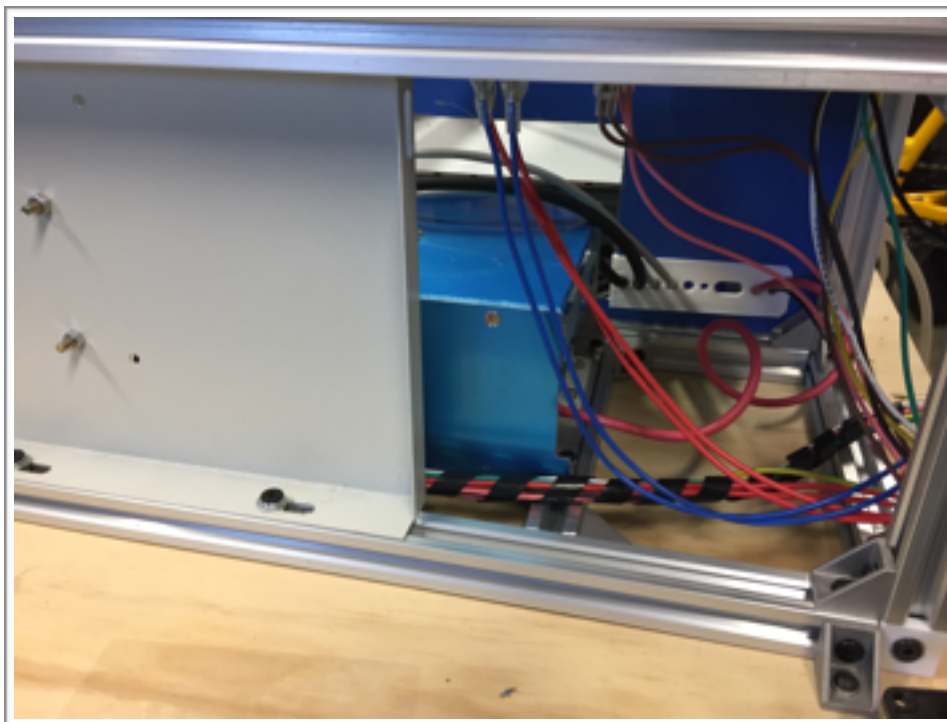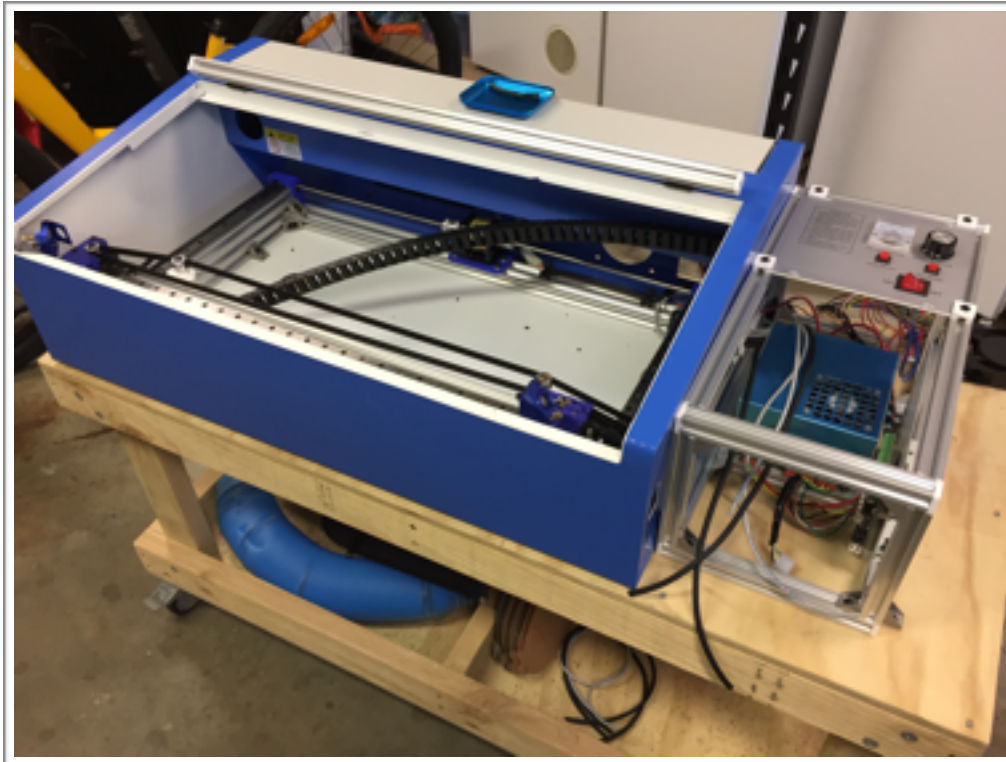
Photo 5 - Better view of control board placement.

Photo 6 - Showing the back of the Laser Power Supply and cable guide on the cabinet.

Photo 7 - Control Box in relation to the Cabinet. Admittedly I did make an error with the long sections of the 2020 profile and could of cut them at 440mm so extend more to the front of the cabinet.

For Guides go to my website:

https://swinks.com.au/k40-upgrades