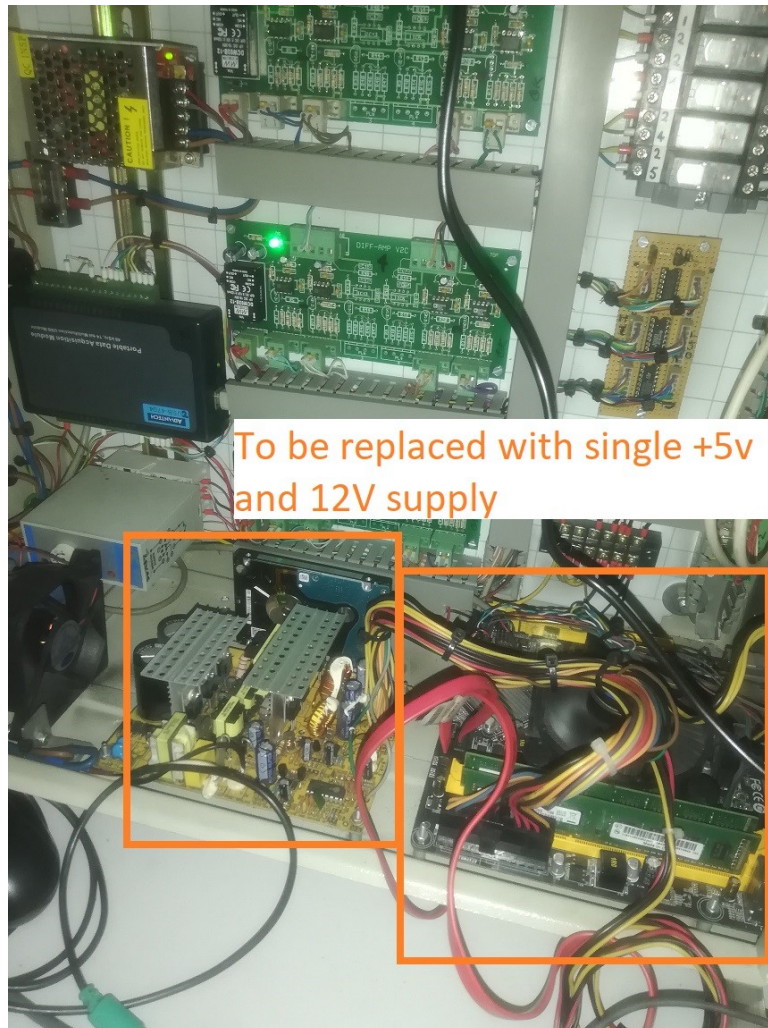
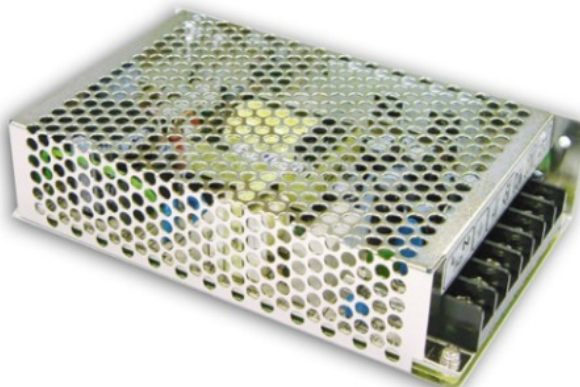


# Crabtree Lab Panel Mechanical Work

## 1) Replace PC power supply



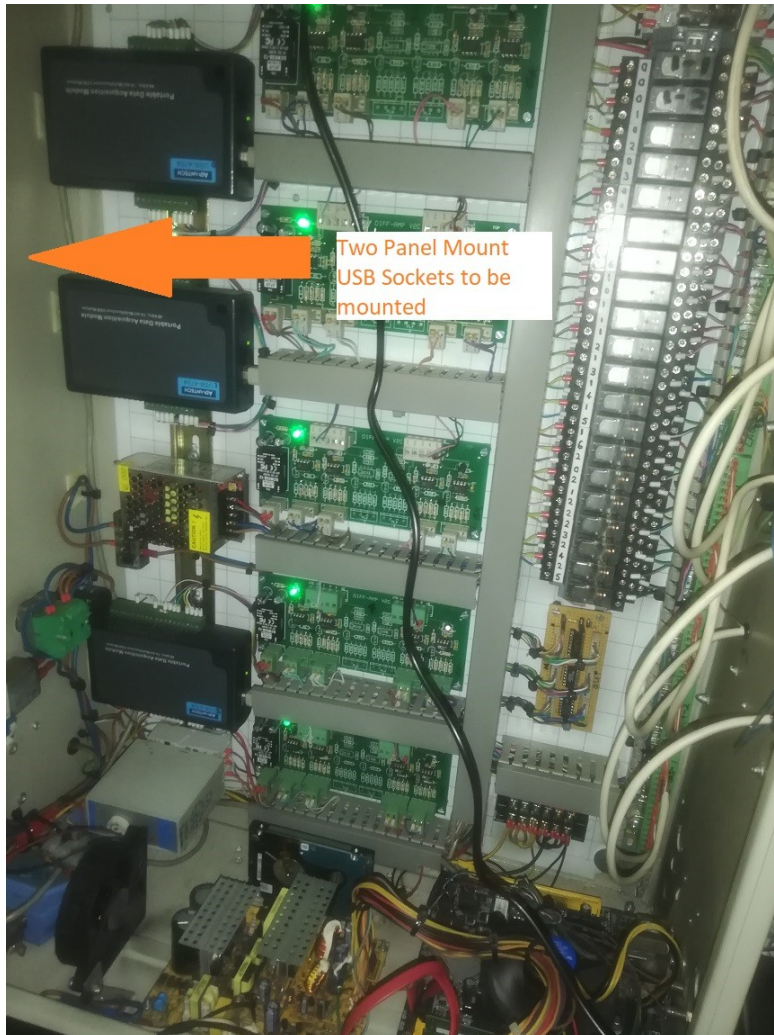
A motherboard and PSU were built into the panel, but the motherboard is faulty and redundant. The PSU is used to provide +5v and +12v to the system. They are now using an external PC, so they need to replace the PSU with this :



It ,might be necessary to make a mounting plate which can be riveted to the floor to avoid having to turn the panel upside.

## 2) Install panel mount USB sockets

Two USB connections are required to the electronics in the panel and because the PC is now outside the panel, panel mount USB sockets are required



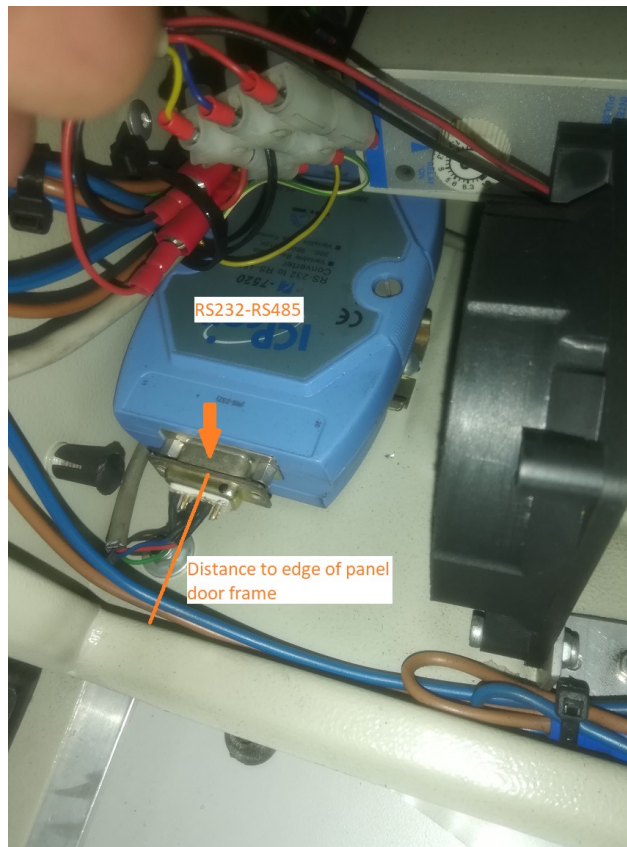
## 3) Replace Power Switch

The rotary power switch is broken and needs to be replaced with something like this:



4) Make and install 9w COM port extension

One of the USB ports connects to an RS232 to RS485 converter via a USB to RS232 converter. This is too big and the door wont close. We need to make an RS232 extension for this reason. The RS232 converter will need to be fatened down to the side of the panel.



5) All wires must be terminated with crimp lugs where appropriate and fatened down where necessary



*More pictures of the panel for clarity*

