Avolites LTD Engineering Change Notice

ECN title	TNP Touch sensor pcb replacement	
ECN Number	ECN-0223	
Related Products	TNP	
Date / Author	31/10/2025	Grzegorz Ksiazka
Reasons for ECN	Rusty 6way SM connector on TNP 1201-7330-3 board	
Parts required	1x PCB TNP 7330DA-3 (1201-7330DAS-3) 2x Sems SCREW M3 X 8 PAN SUPA ZN/CLR (0210-2082-SM) 1x TNP LVDS loom 3D printed holder (1394-0021) 8x CABLE TIE 98x 2.5 Black (04-03-0043) – spares included 3x NUT M3 NYLOC Z/CLR (0213-1240)	
Tools required	Flexible or short PZ1 screwdriver PZ2 screwdriver 5.5 mm nutrunner Side cutters Insulation tape Methylated spirit	
Estimated time	30 minutes	

1. Reason for change

Front panel touch issues like touch sensor doesn’t work or license not found. Caused by rusty 6way SM connector on Touch board - TNP 1201-7330-3 board

2. Lid opening

Power down the console then disconnect the power cord before start opening the console

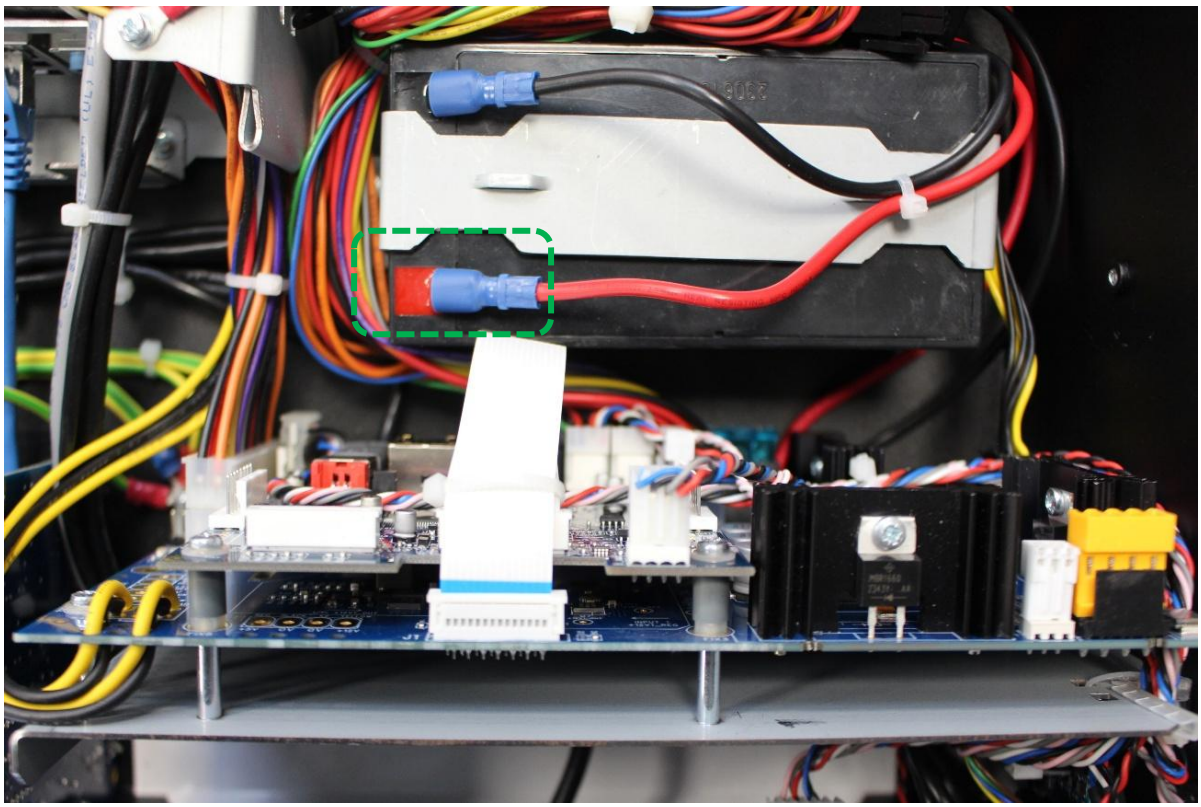
a. Unscrew the 3x M4 screws on each side of the TNP lid

b. Unscrew the 2x M3 CSK screw on the top of the TNP lid

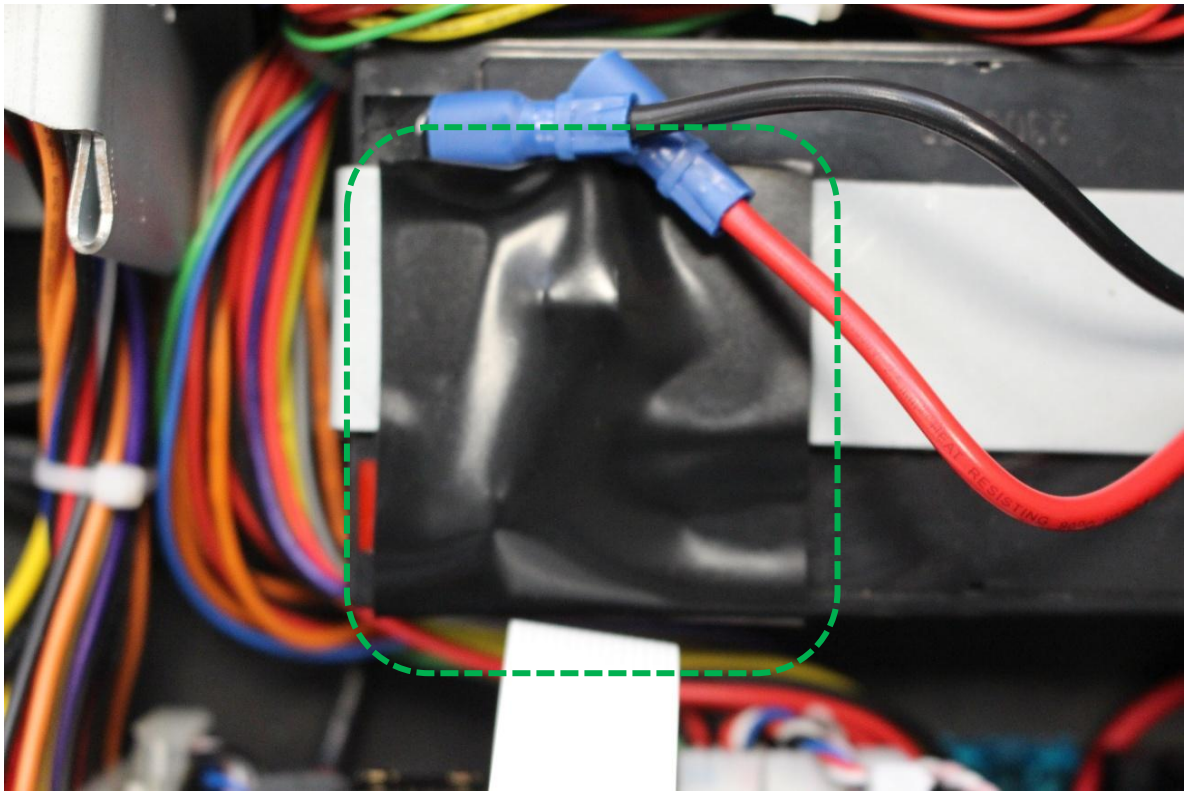
c. Disconnect the Earth loom then remove the lid

3. Touch pcb replacement

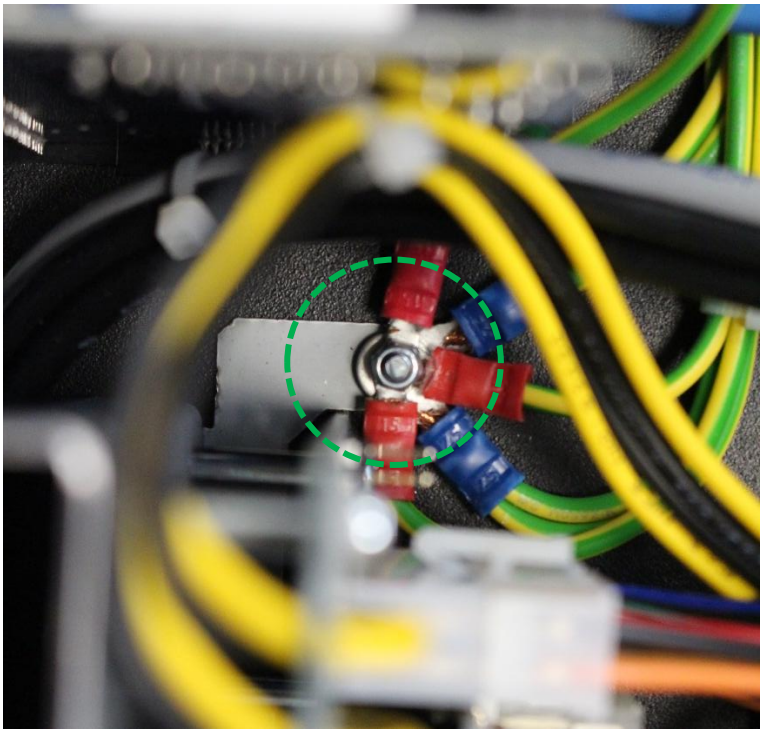
Disconnect the red loom from battery terminal



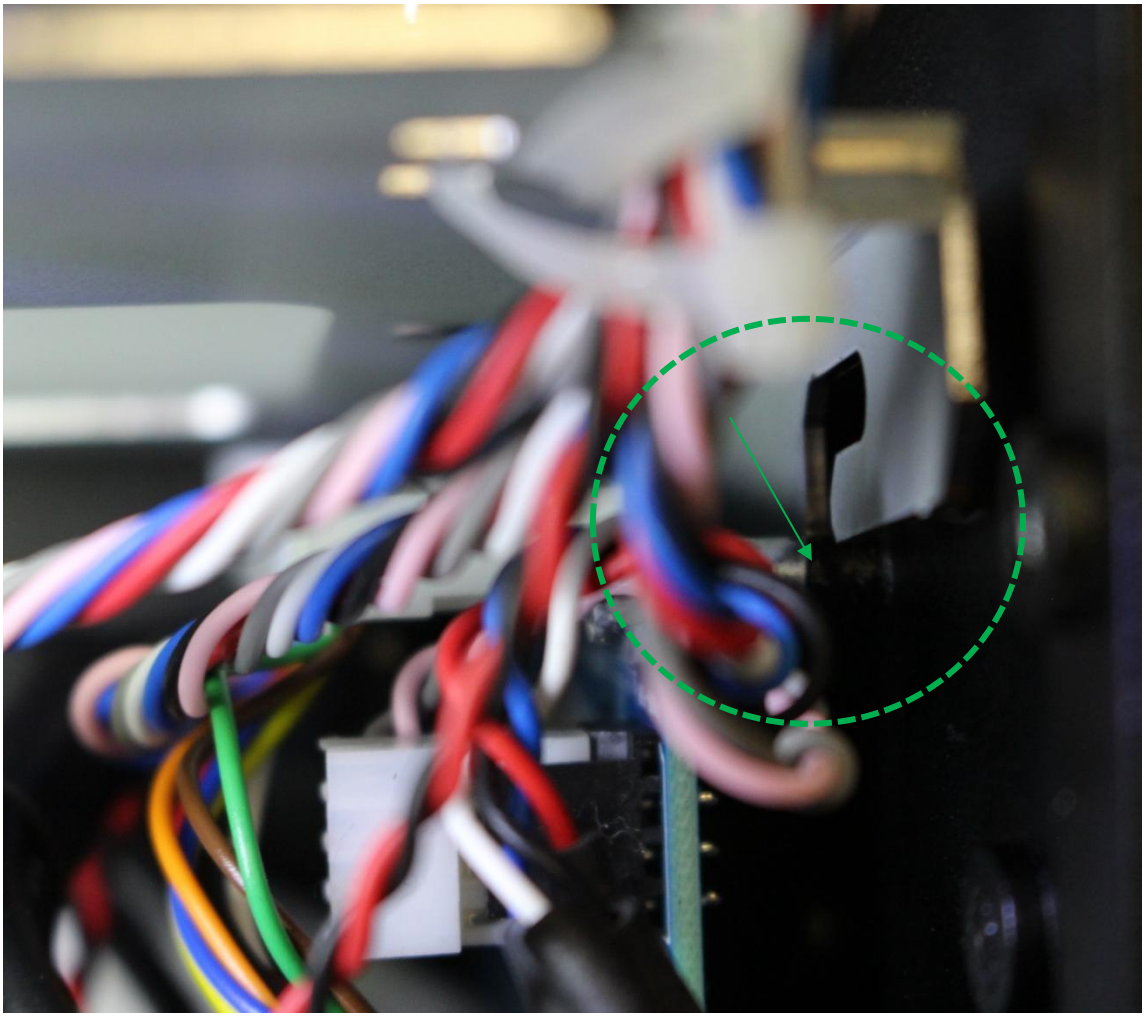
Cover the red/12V battery terminal with insolation tape



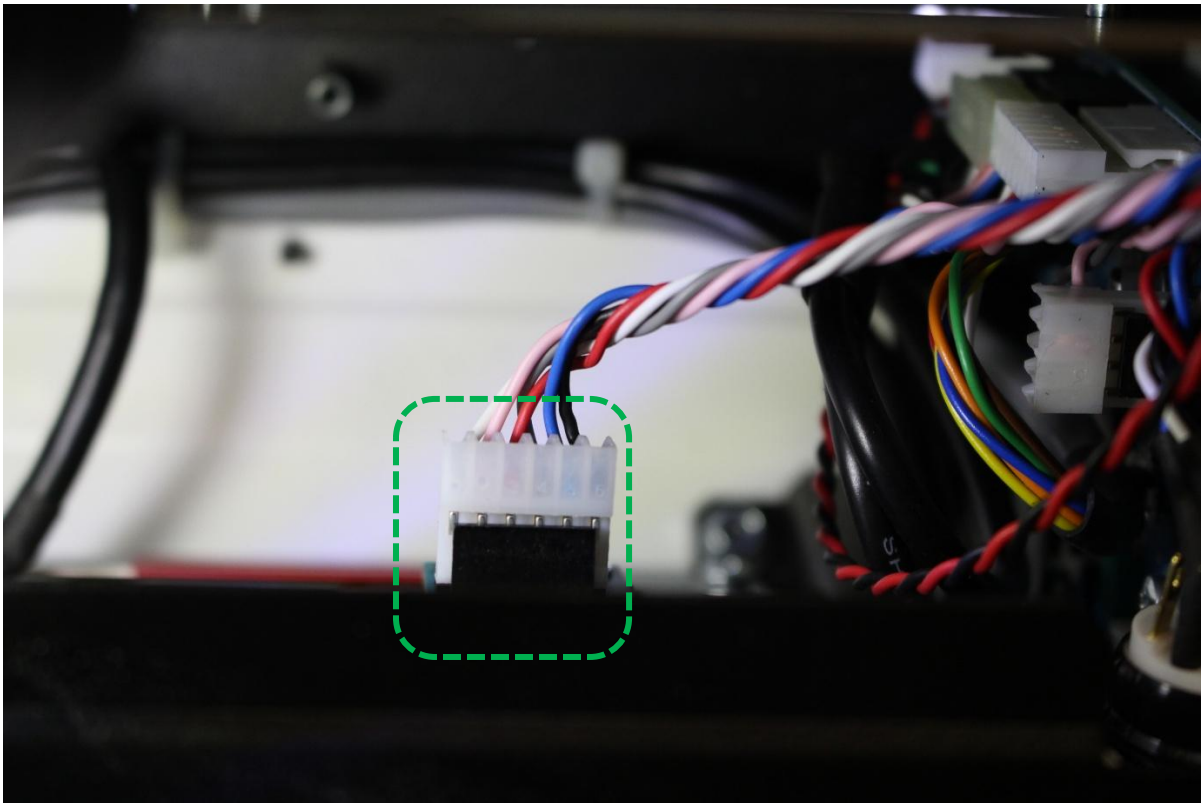
Unscrew the M3 nut holding earth looms and securing DC-UPS frame



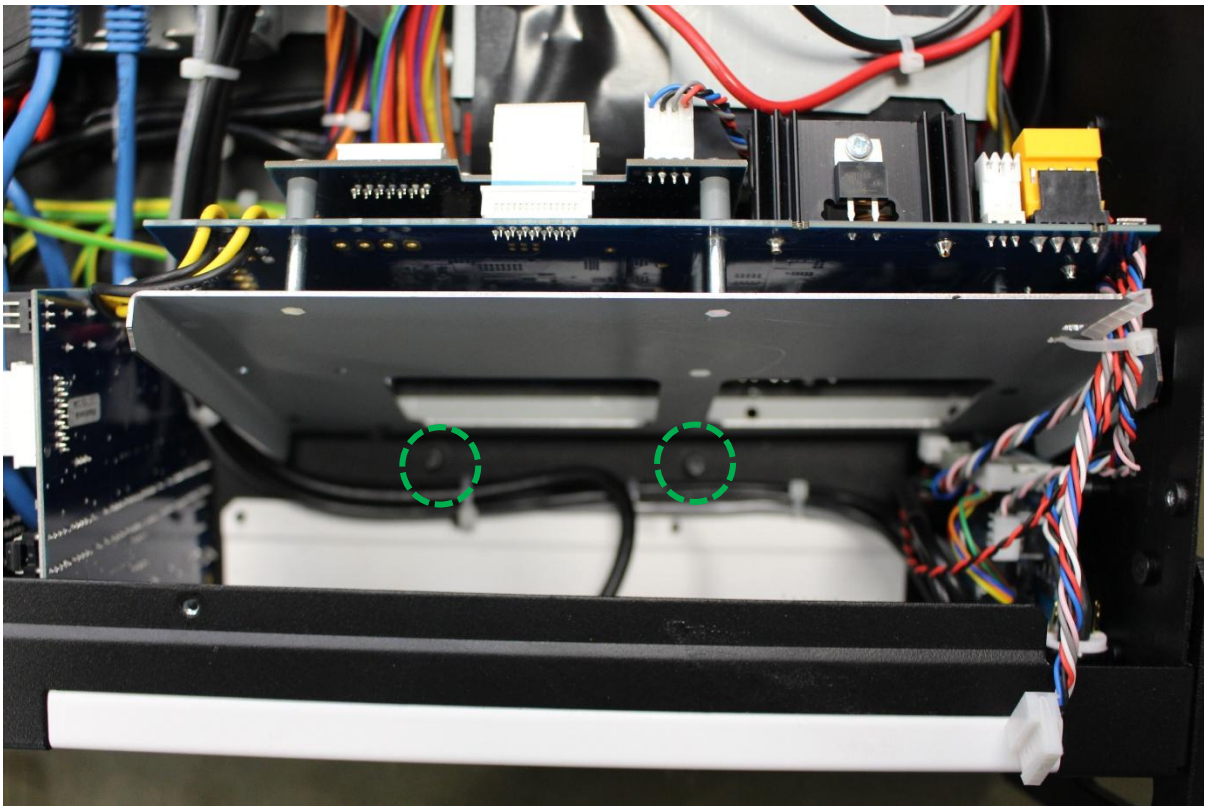
Pull the DC-UPS Frame up and release the frame from the latch



Disconnect the 6way mascon connector from Touch pcb

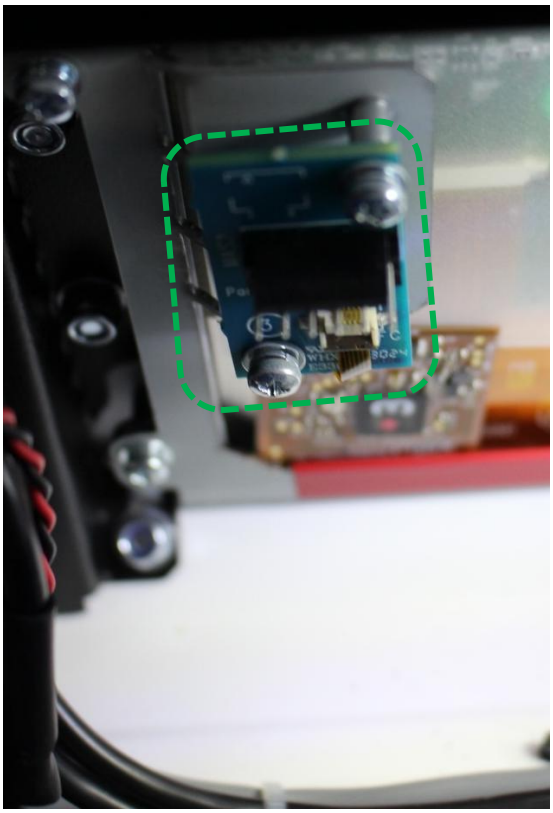


Remove the DC-UPS frame from the 2x studs (circle) the lay it on the battery giving as much access to the Touch pcb as possible

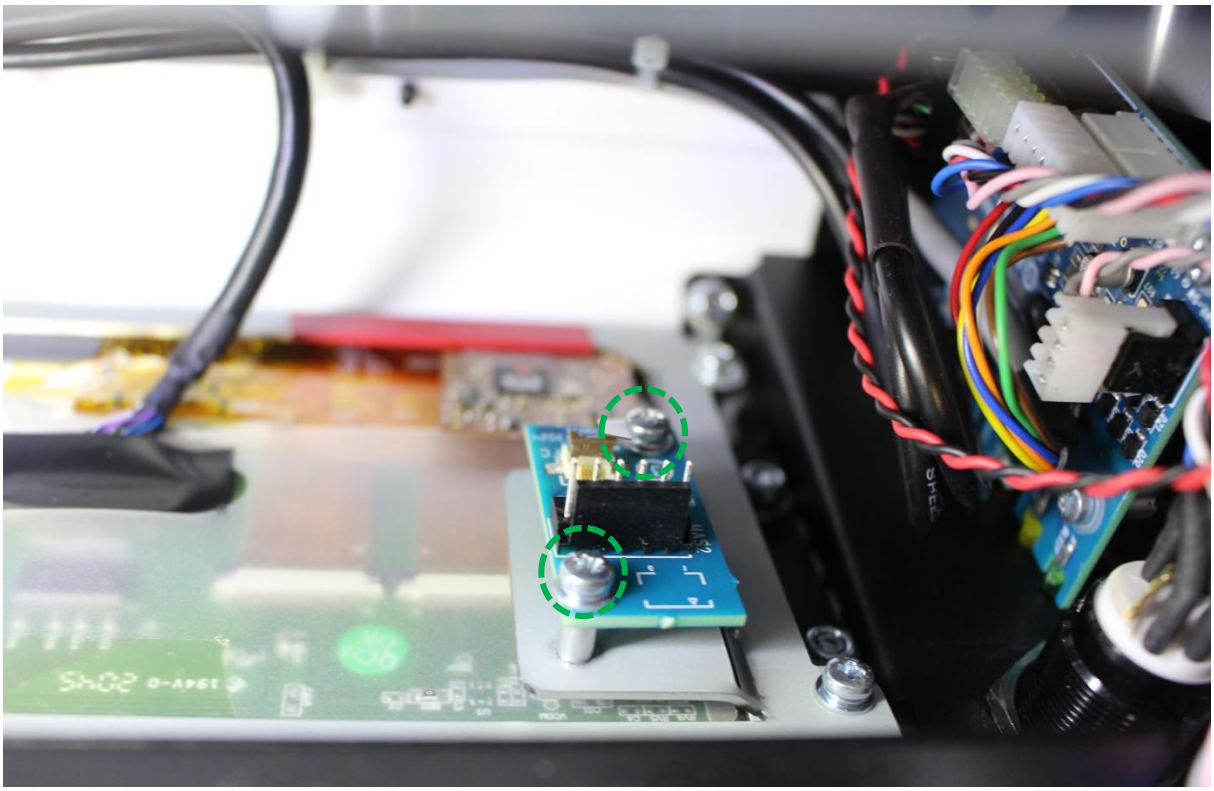


Disconnect the FFC Touch loom from Touch pcb

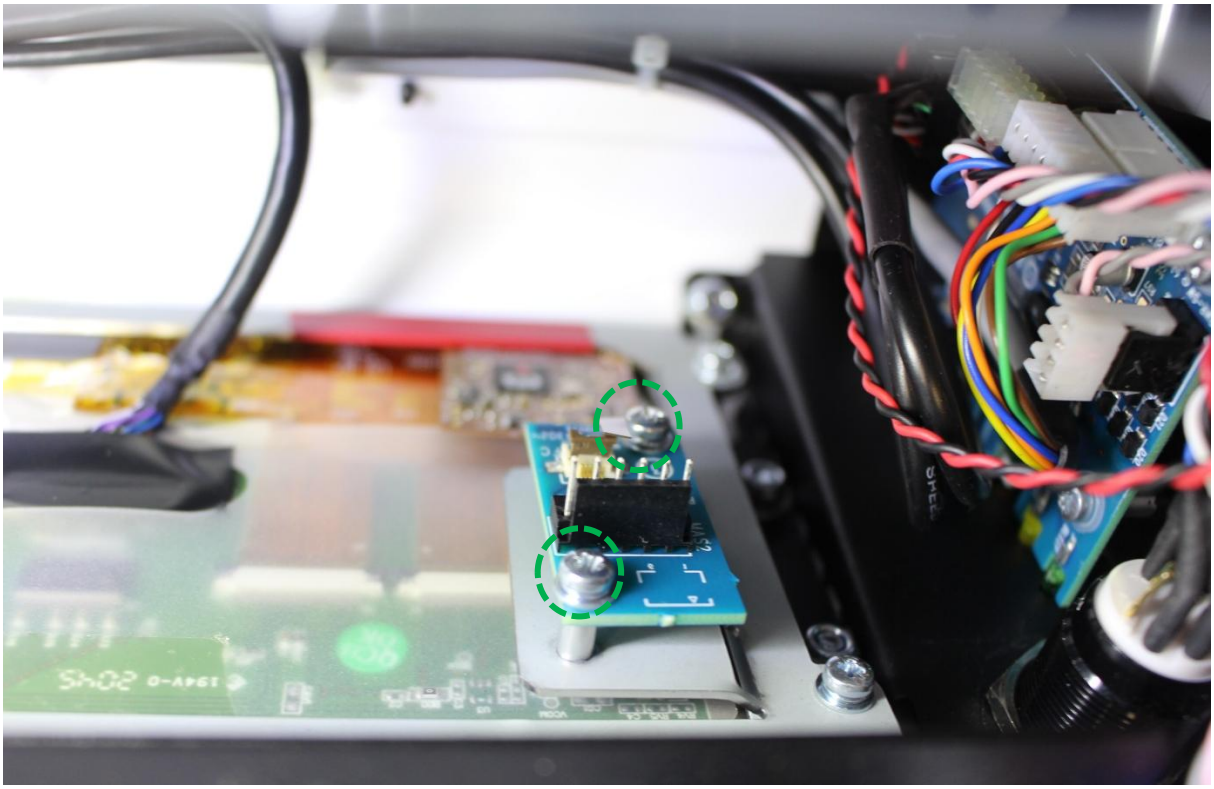
(Gently pull the brown latch up (arrow) then remove the loom; second picture)



Unscrew the 2x M3 screws then remove the Touch pcb

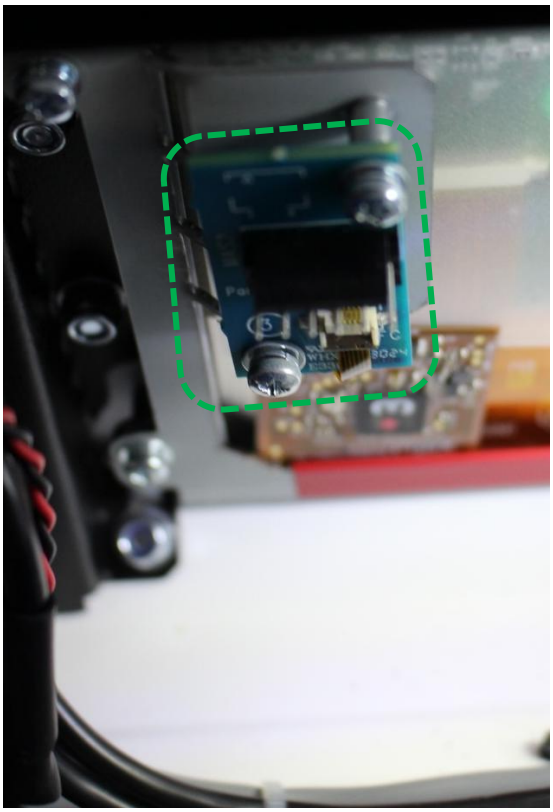


Fix the supplied Touch pcb with the supplied 2x M3 SEMS screws

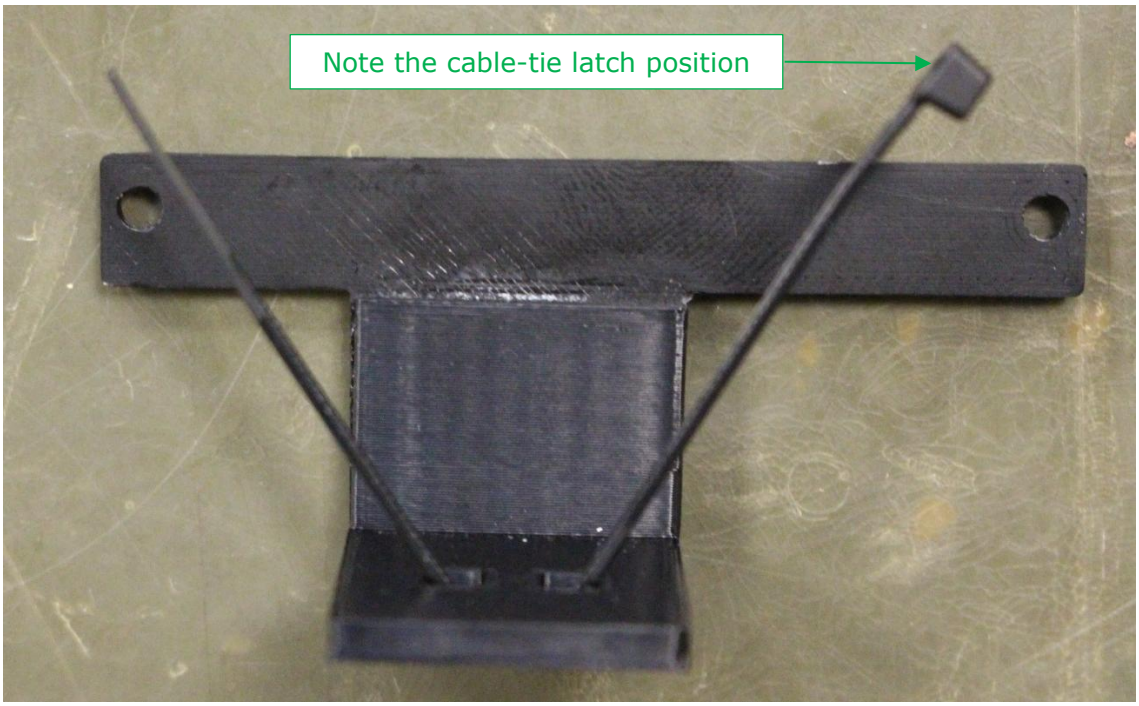


Connect the FFC Touch loom to the Touch pcb

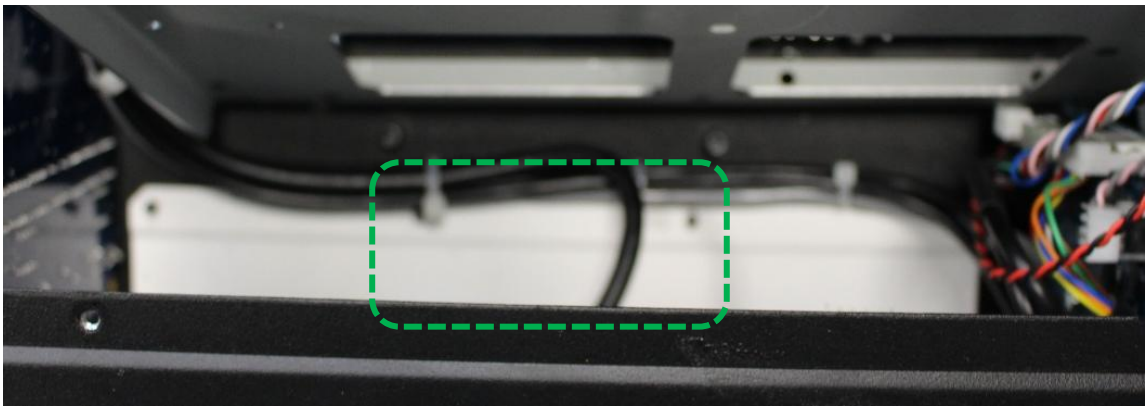
(Gently pull the brown latch up (arrow) slide in the loom then secure the loom with the latch; second picture)



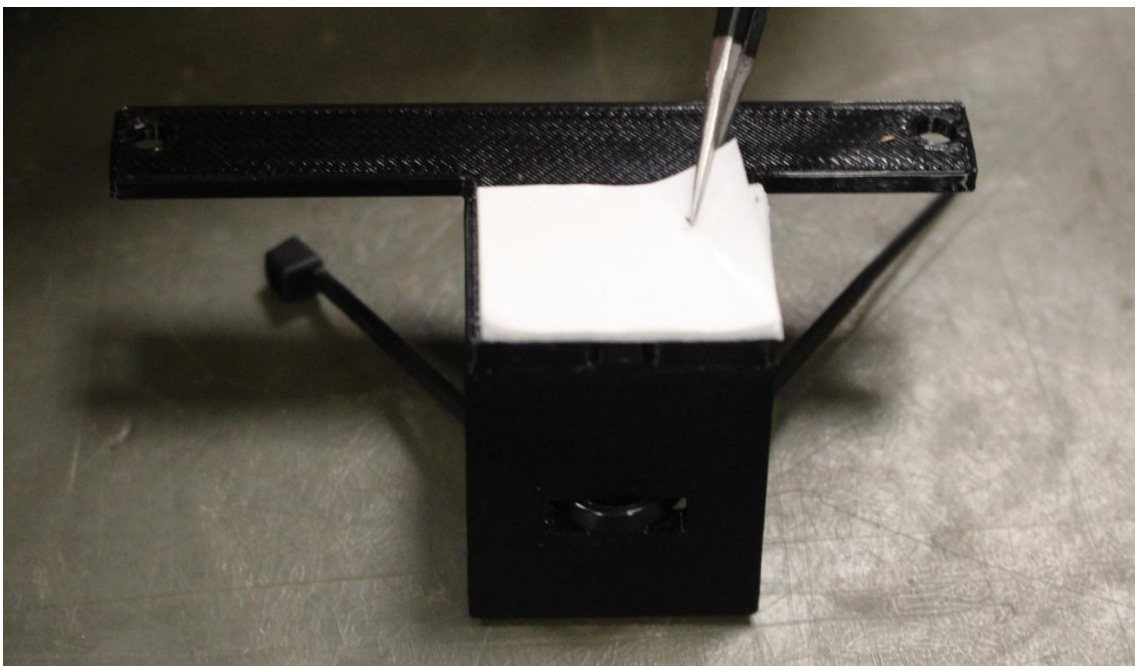
Insert a cable-tie in the LVDS loom holder as shown below



Clean the selected area on the bottom of the shell with methylated spirit



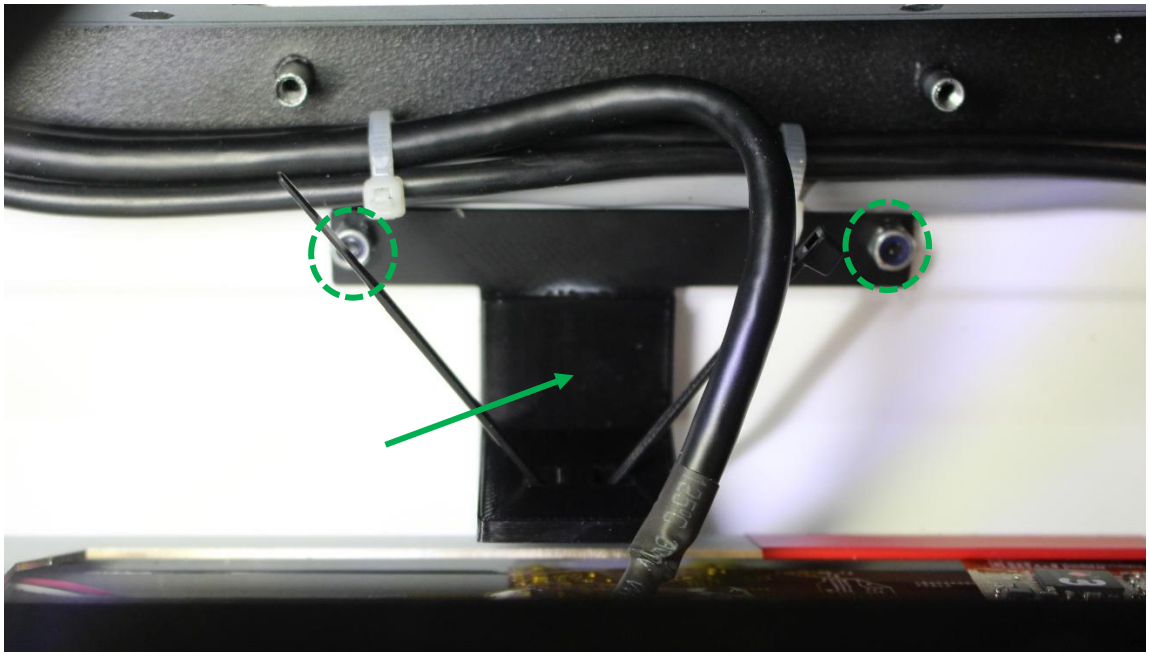
Peel off the securing paper from the tape on LVDS loom holder



Place the LVDS loom holder onto the 2x screws

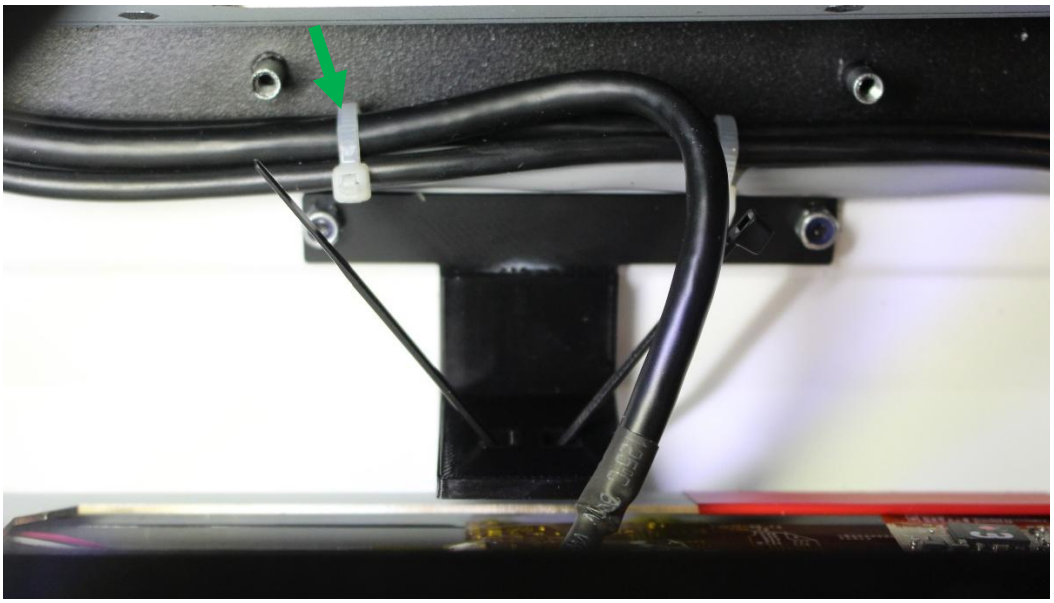
Stick the LVDS loom holder (press hard with the thumb); arrow

Secure the LVDS loom holder with 2x NUT M3 NYLOC Z/CLR (0213-1240)

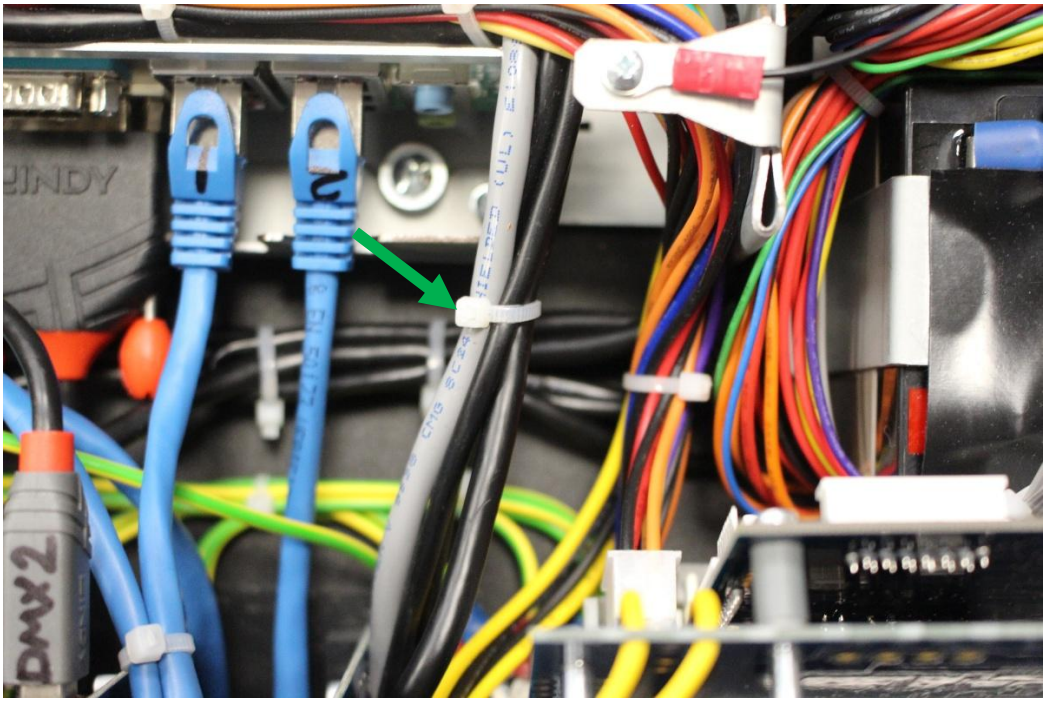


NOTE: There's a low possibly that the screw is turning. In this case hold the screw from the bottom of the unit during tightening the 2x nuts.

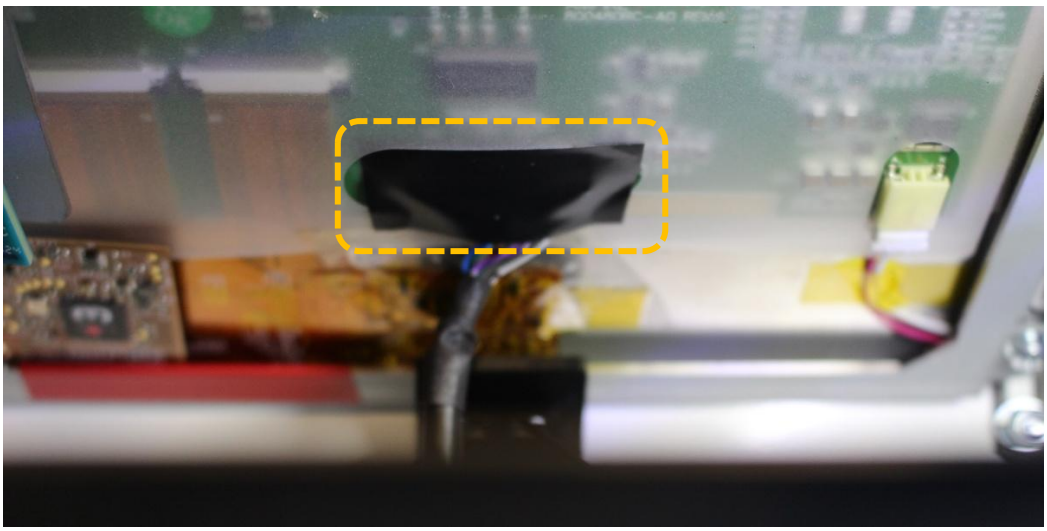
Cut the cable-tie



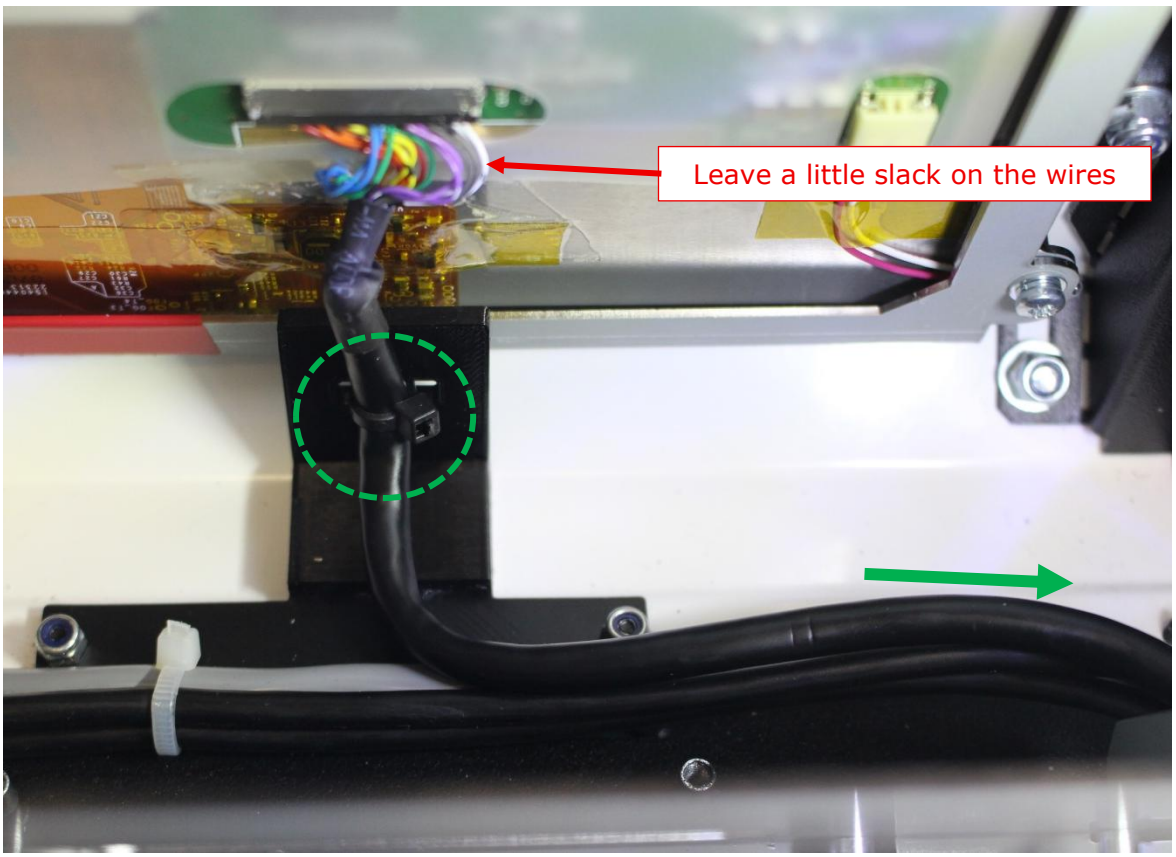
Cut the cable-tie



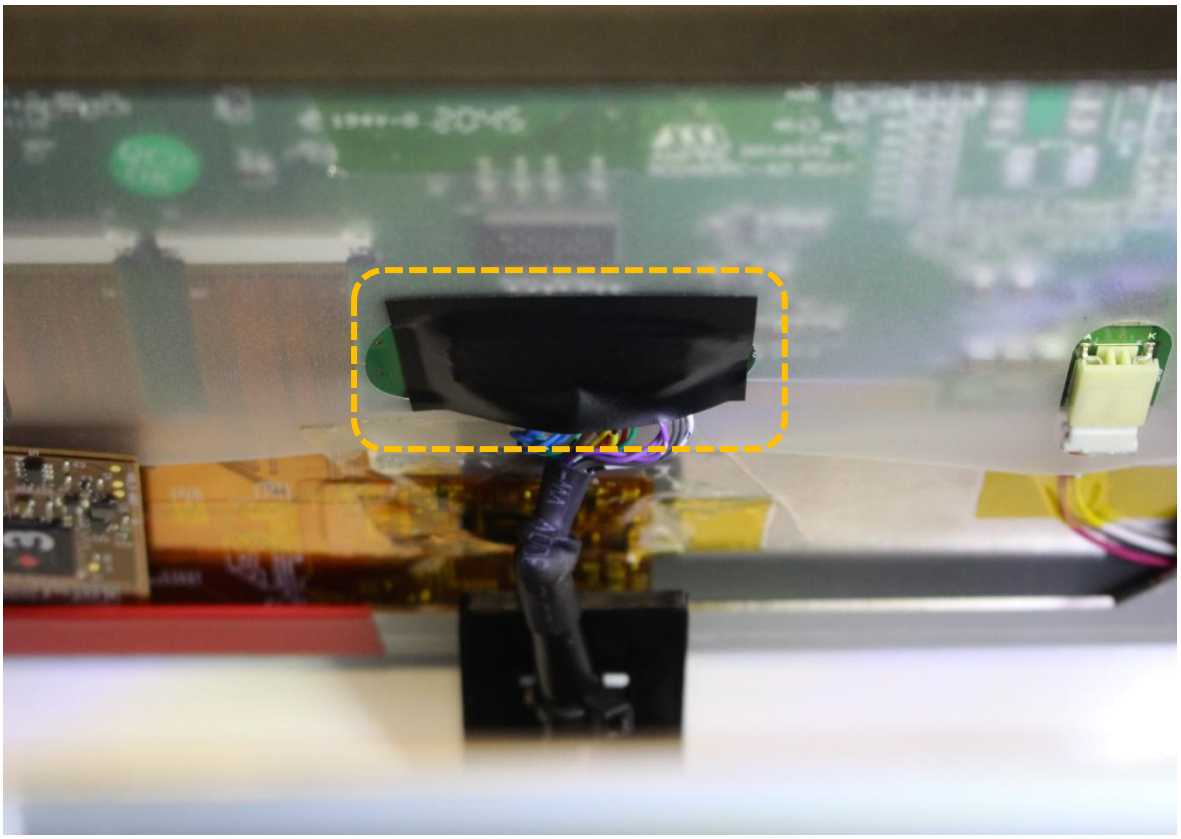
Unpeel the tape from the LVDS connector



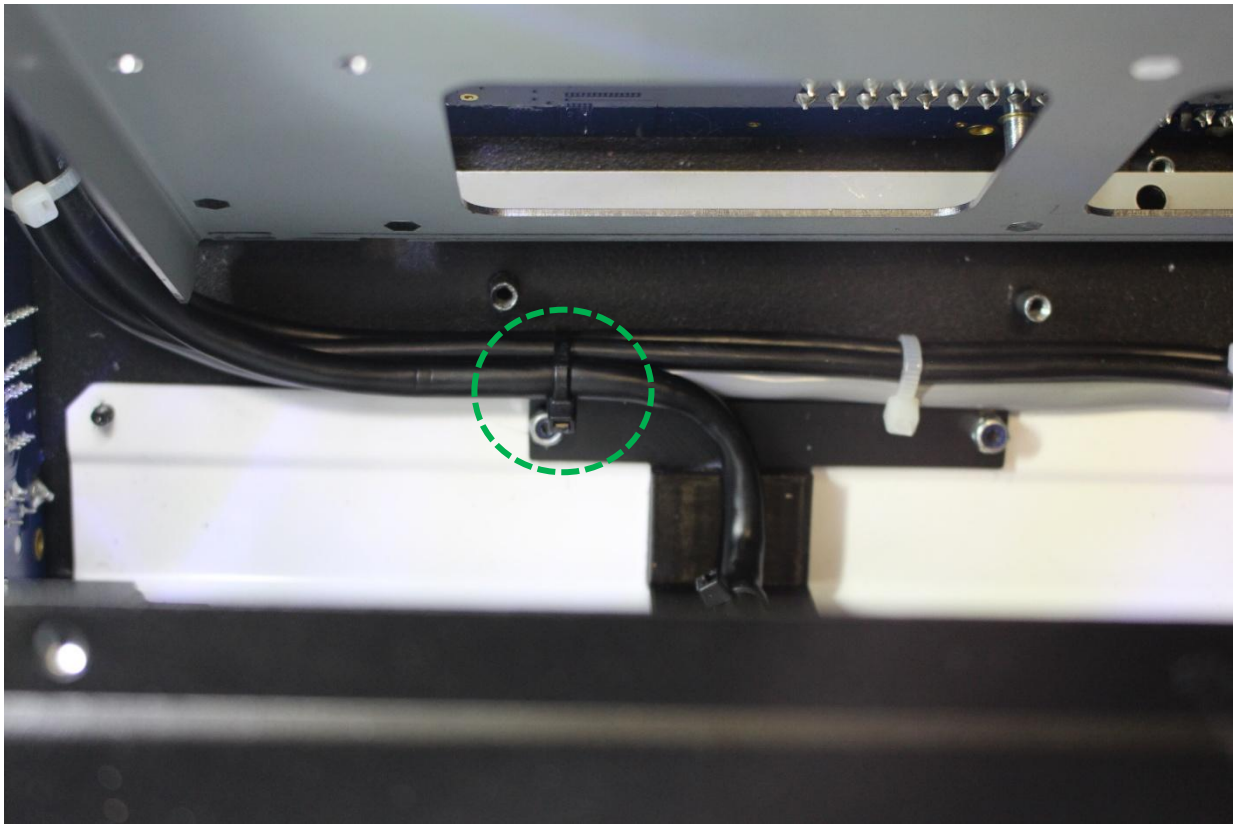
Pull back the LVDS loom (arrow) until the loom is routed as shown below then cable-tie the loom to the holder (circle)



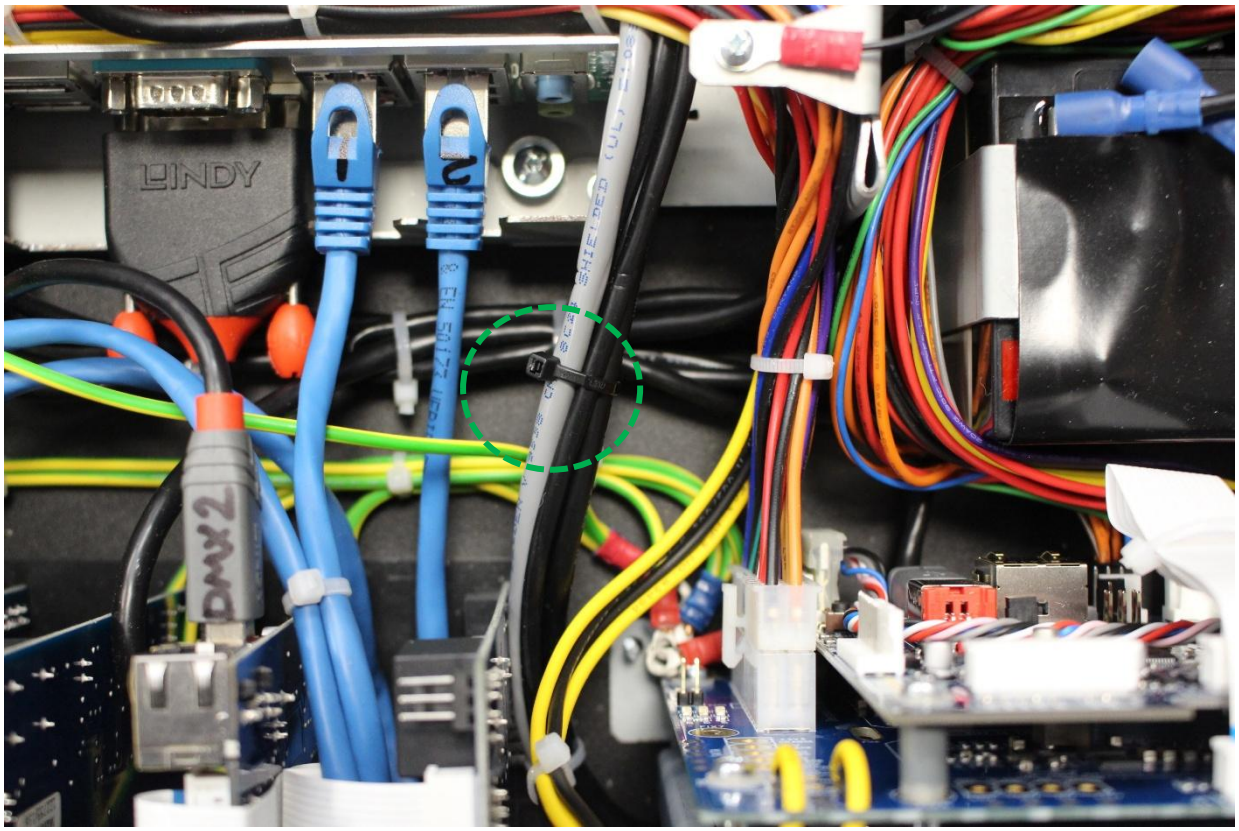
Ensure the connector is fully engaged then secure it with 35mm piece of insulation tape



Cable-tie the cables to the lance bridge

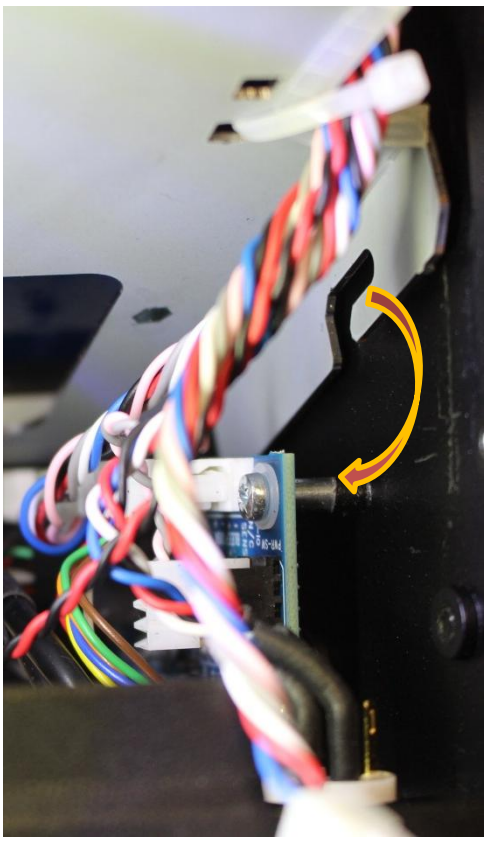


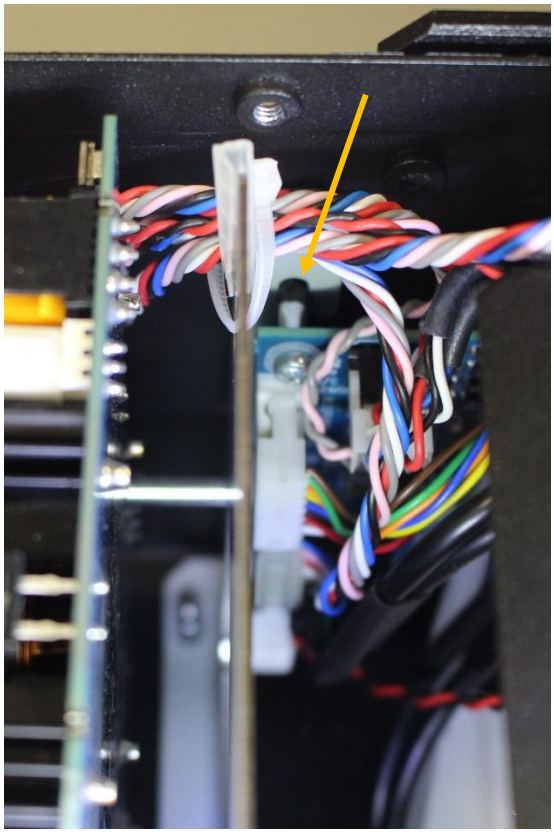
Cable-tie back, previously cut, cables

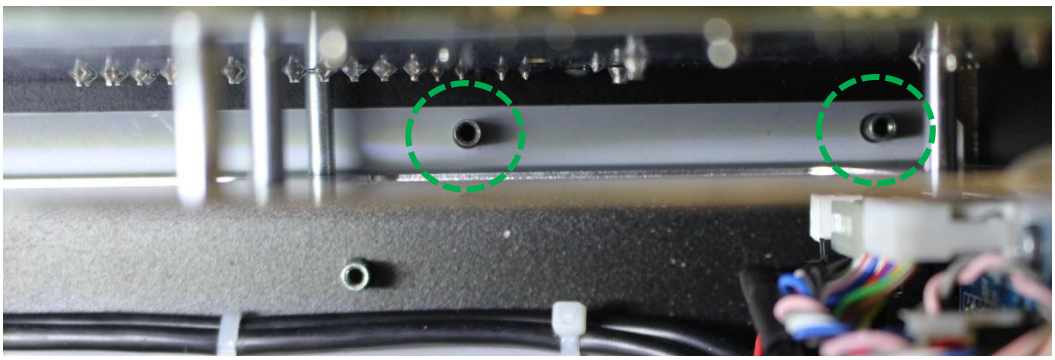


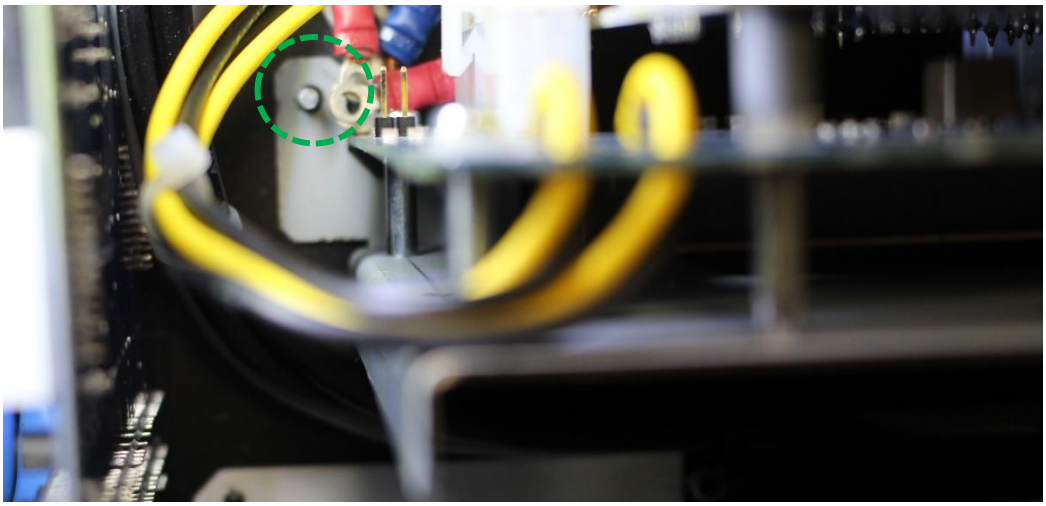
Fix back the DC-UPS Frame onto the 3x studs

NOTE that at the side of the DC-UPS Frame there's a latch

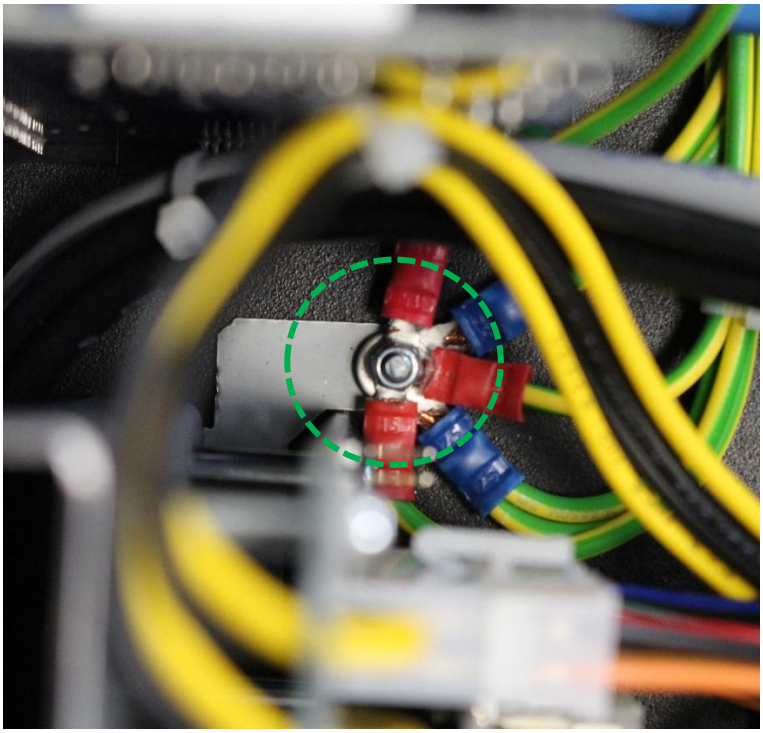




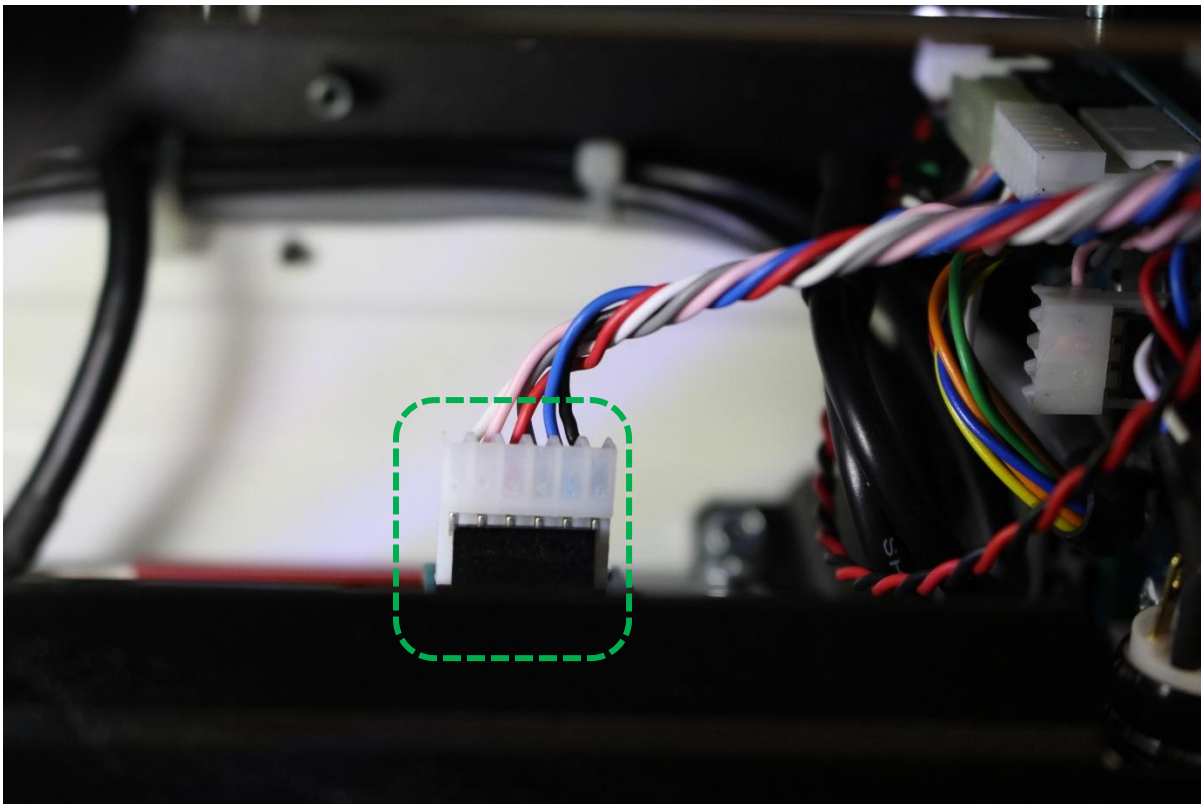




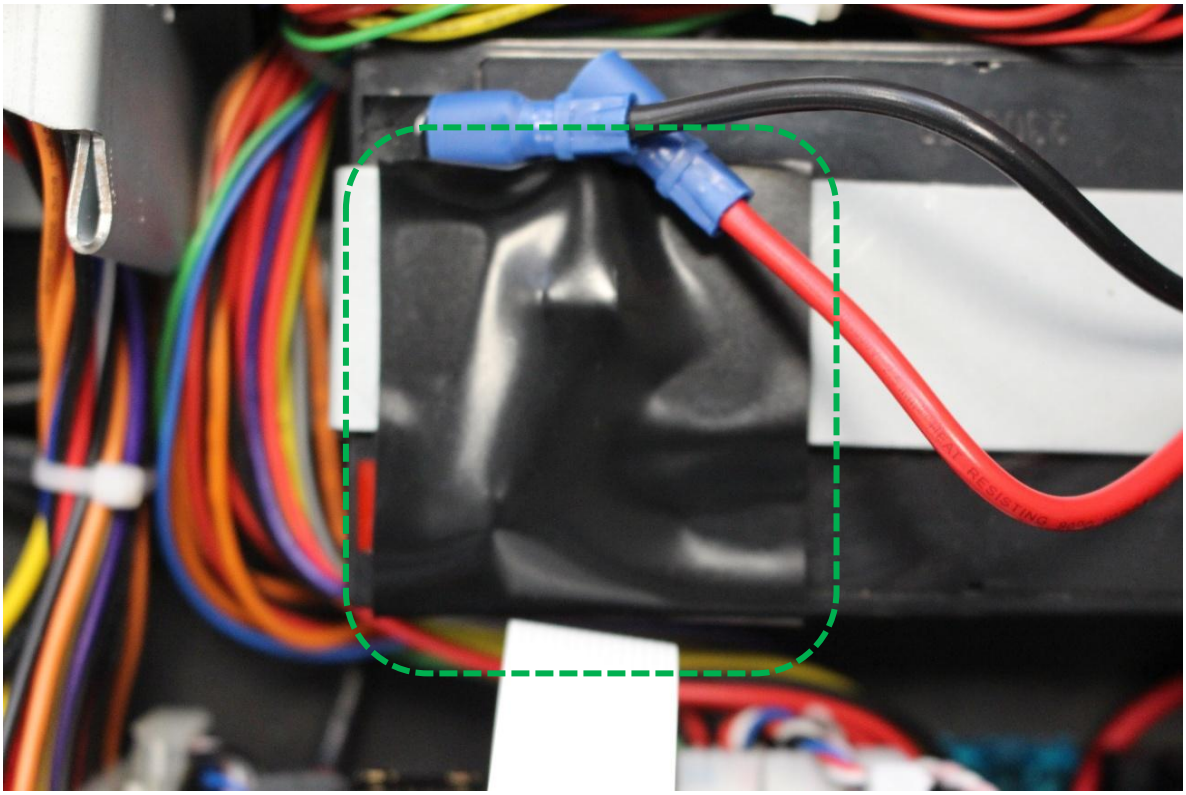
Secure back all earth looms on the stud with the M3 nut



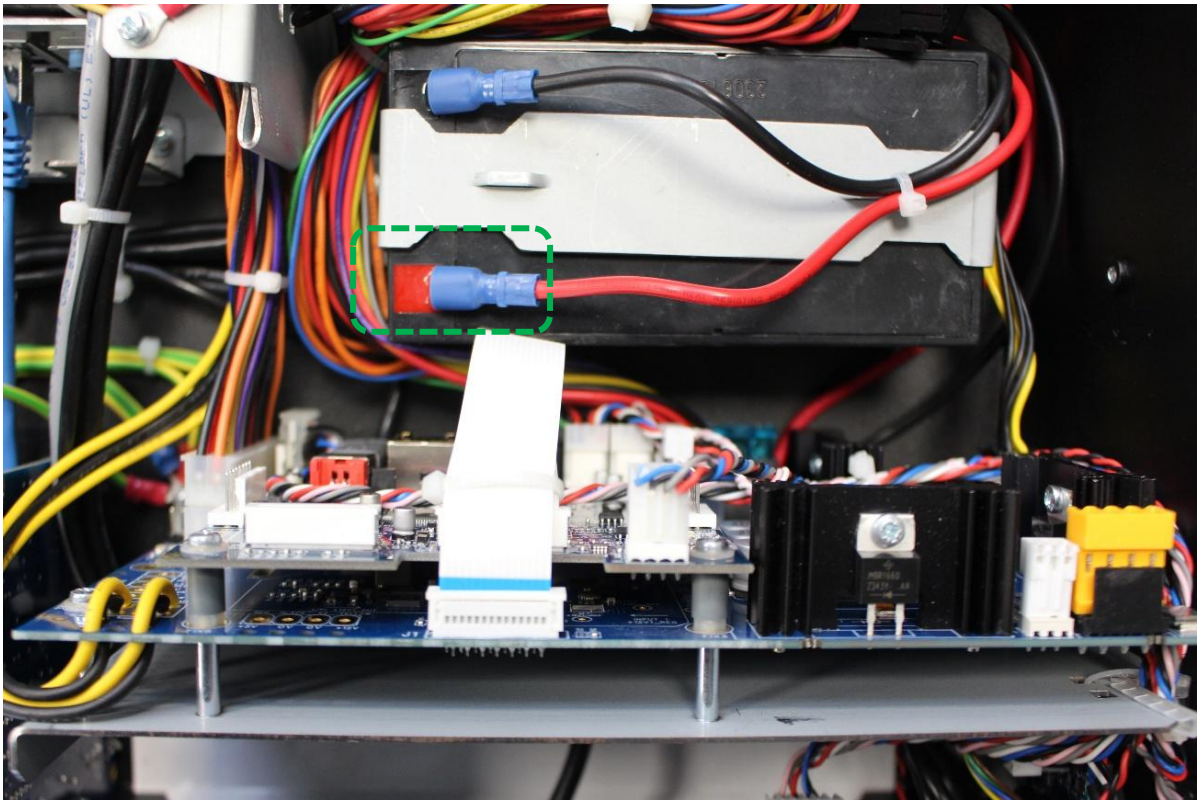
Connect the 6way mascon connector to the header on Touch pcb



Remove the insulation tape from battery terminal

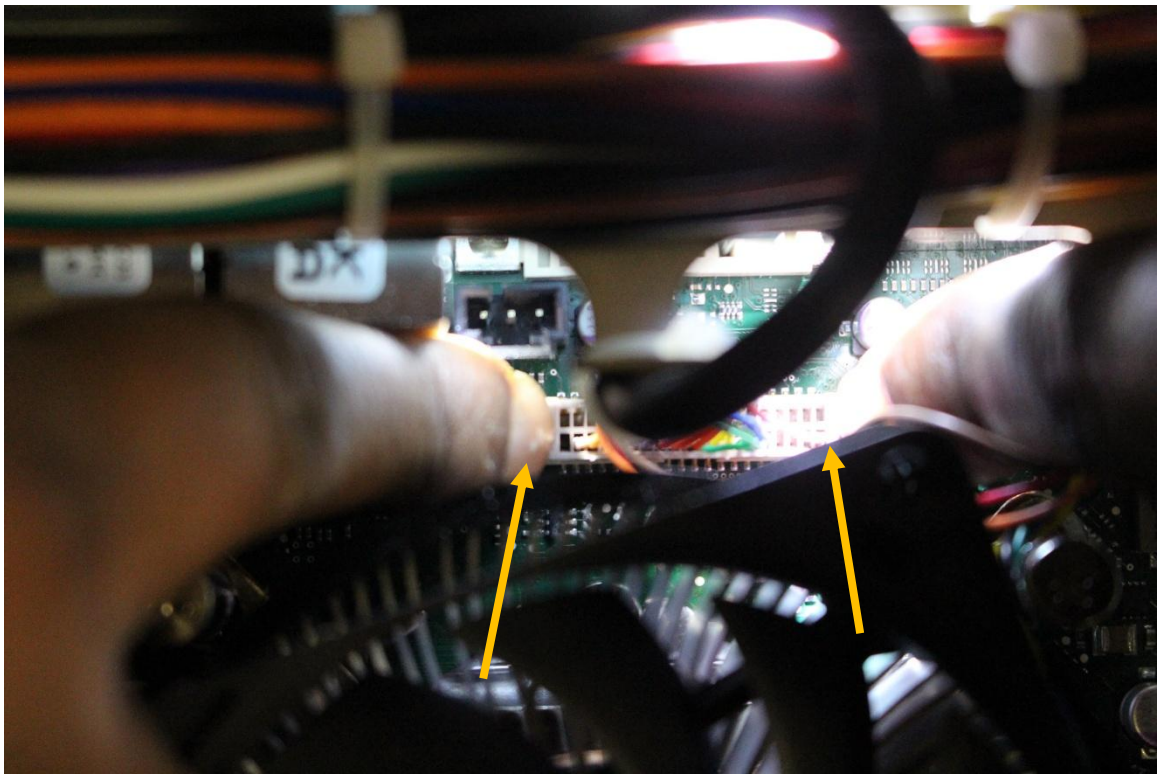


Connect back the red loom to the battery terminal

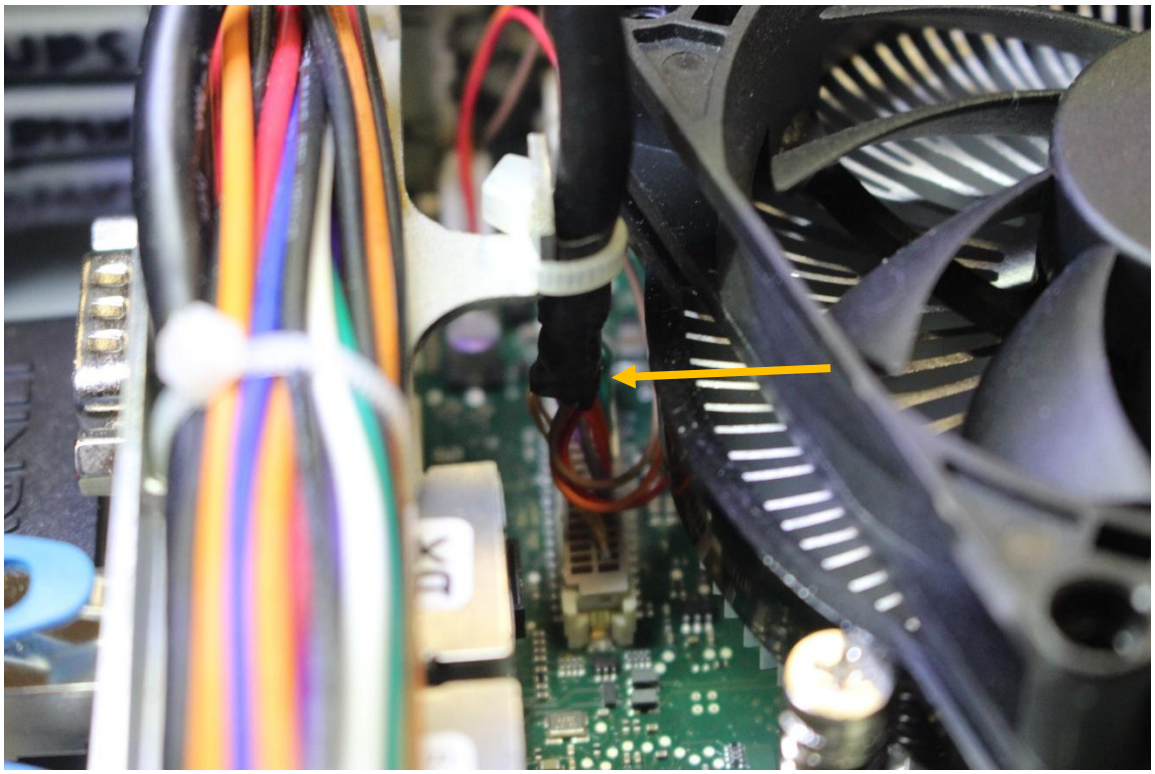


4. LVDS cable

Evenly press the LVDS loom on the motherboard port on both sides of the connector at the same time



Check that there's a little slack on the loom between the connector and cable-tie (re-cable-tie it if needed)



5. Closing the TNP

a. Connect the Earth loom then place the lid onto the TNP
b. Secure the lid with 2x M3 CSK screw on the top of the TNP lid
c. Secure the lid with 3x M4 screws on each side of the TNP lid