

HOW TO BUILD A LOCKSTAR RACK



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26.11.2020 – by frank@phys.ethz.ch

Minimum Equipment List

Pos	Device	Specifications	Where to get it
1	1 x SG1-10	-	Shop, 30411.1
2	4 x Threaded insert, M2.5, St, zinc-plated	-	Shop, B10 or Distrelec via Shop
3	1 x Rearpanel	QO-WSO-21638	Impact Team or Workshop
4	1 x Power Terminal	30298.1	Shop, B10 + Screws and Bolts
5	1 x ETHernet cable	Adafruit 4215	Adafruit or Mouser 485-4215
6	1 x Ground Slug + Screw	3838 E	Shop 30115.1
7	1 x Connector	30115.1	Shop
8	9 x Blade receptacle fully insulated	30117.2	Shop
9	8 x Distance Bolts	M3 x 12	In front of Shop
10	8 x Distance Bolts	M3 x 6	In front of Shop
11	8 x Distance Bolts	M3 x 40	In front of Shop
12	8 x Screws	M3 x 16	In front of Shop
13	8 x Screws	M3 x 35	In front of Shop
14	Cable, 1.5 mm ²	various colours	various lengths
15	4 x Sews M2.5 x 8		In front of Shop

Legende:
green ... done
orange ... ordered
white ... missing
blue ... parts missing

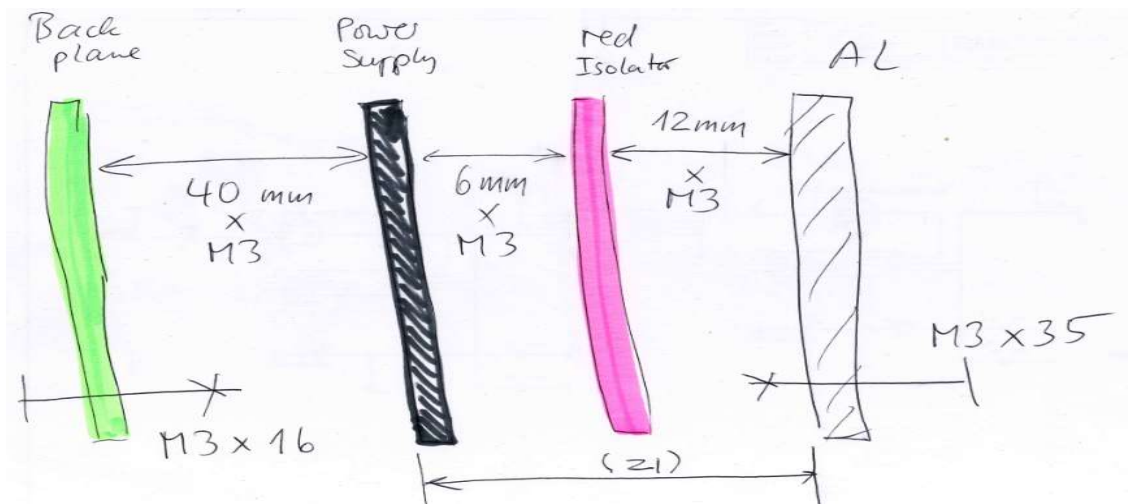
Start with the Rearpanel. Screw 8 x M3x35 and the 12 mm Distance Bolts in.

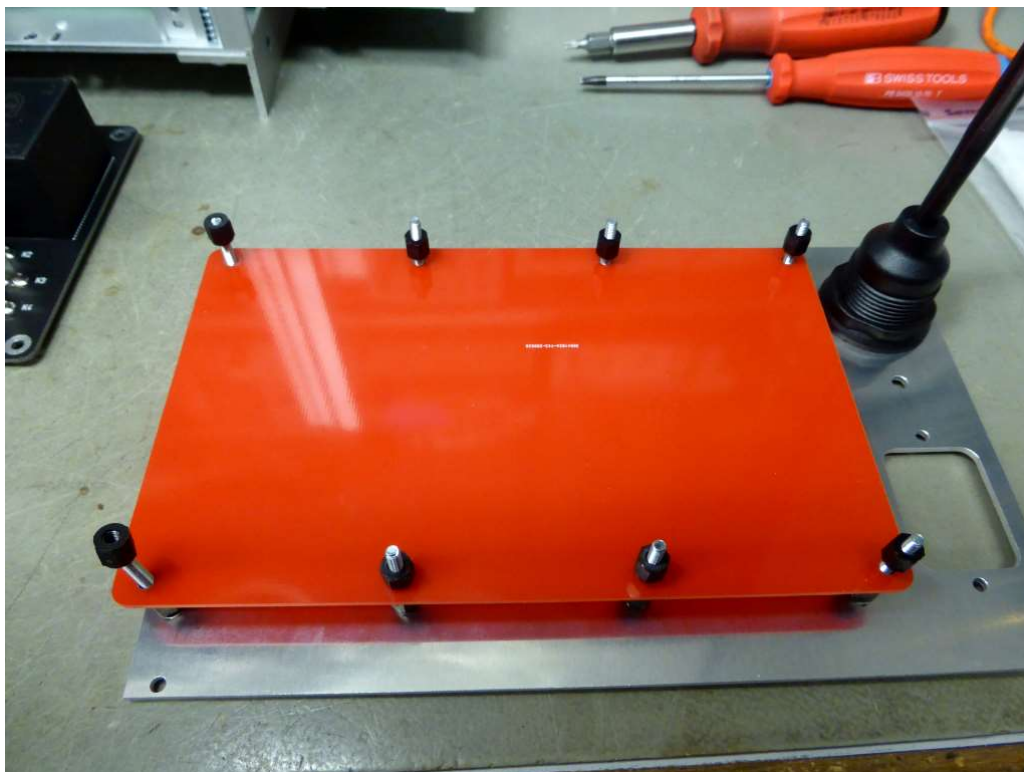
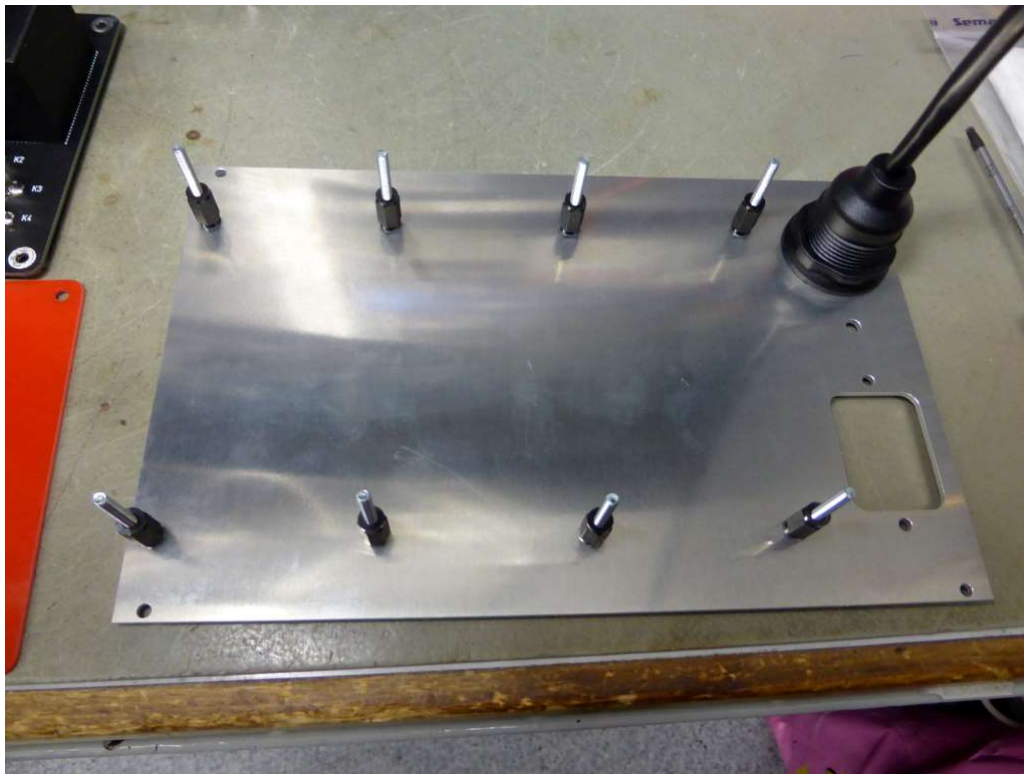
Add red isolation. Note the orientation. Serialnumber is upside down.

Continue by adding 8 x 6 mm Distance Bolts on top.

Add the (assembled) Power Supply.

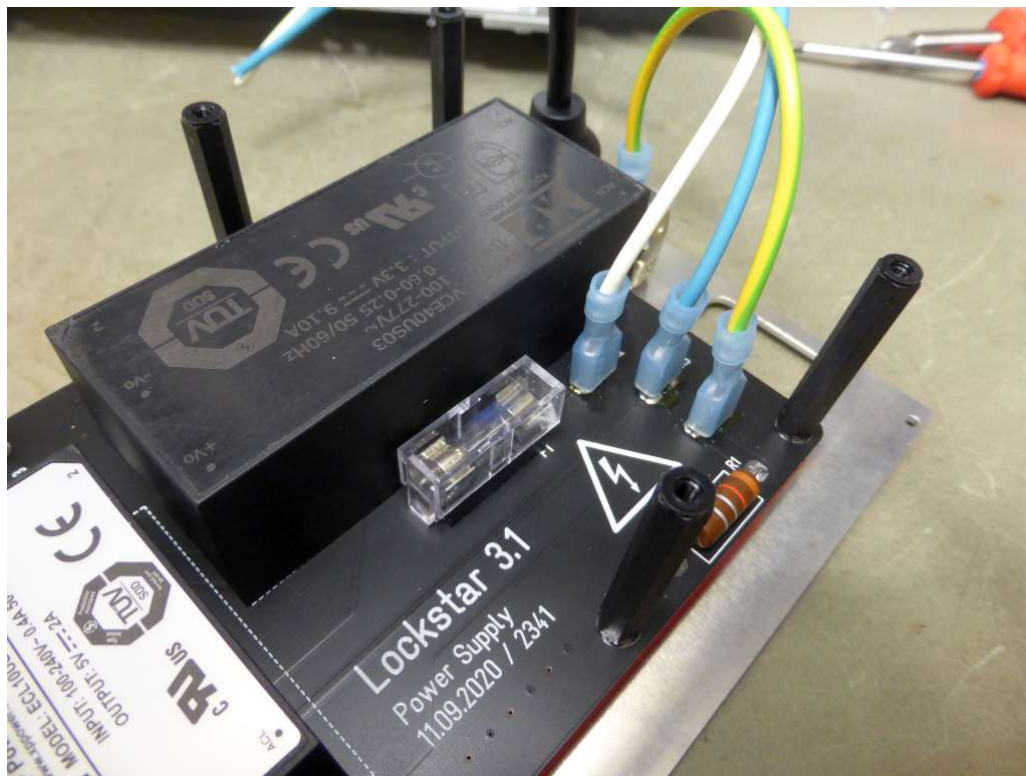
Continue by adding 8 x 40 mm Distance Bolts.



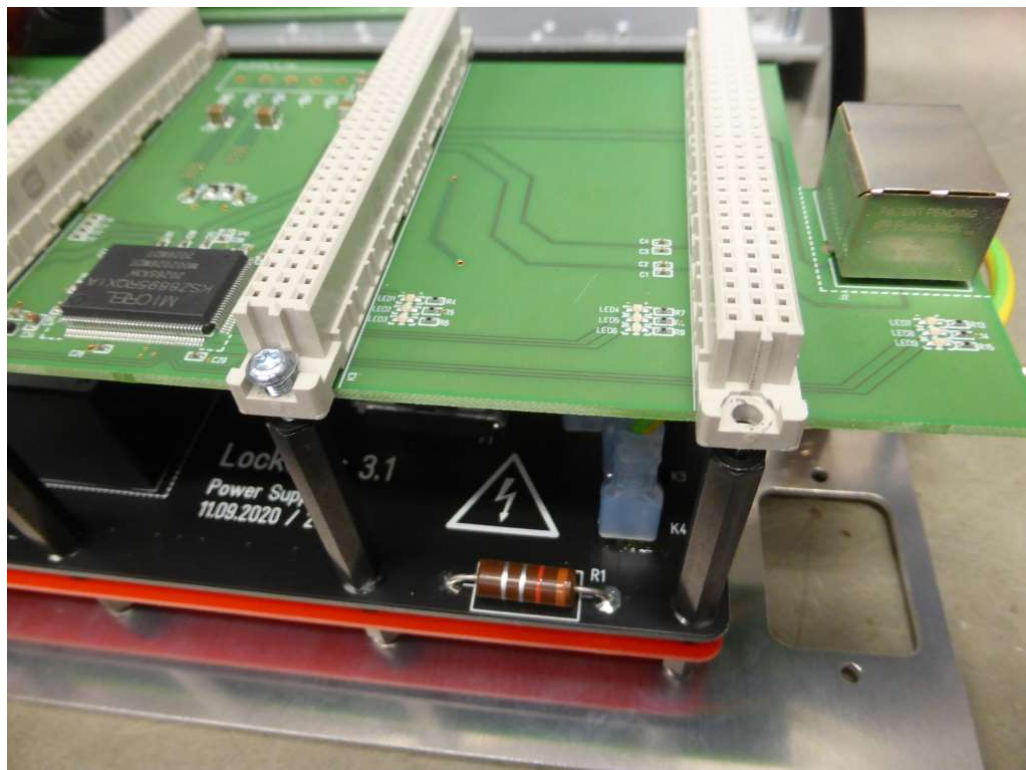




USE M4 with LOCKER AND SECURITY BOLT.



NO CREATIVITY WHEN IT COMES TO COLOURS !



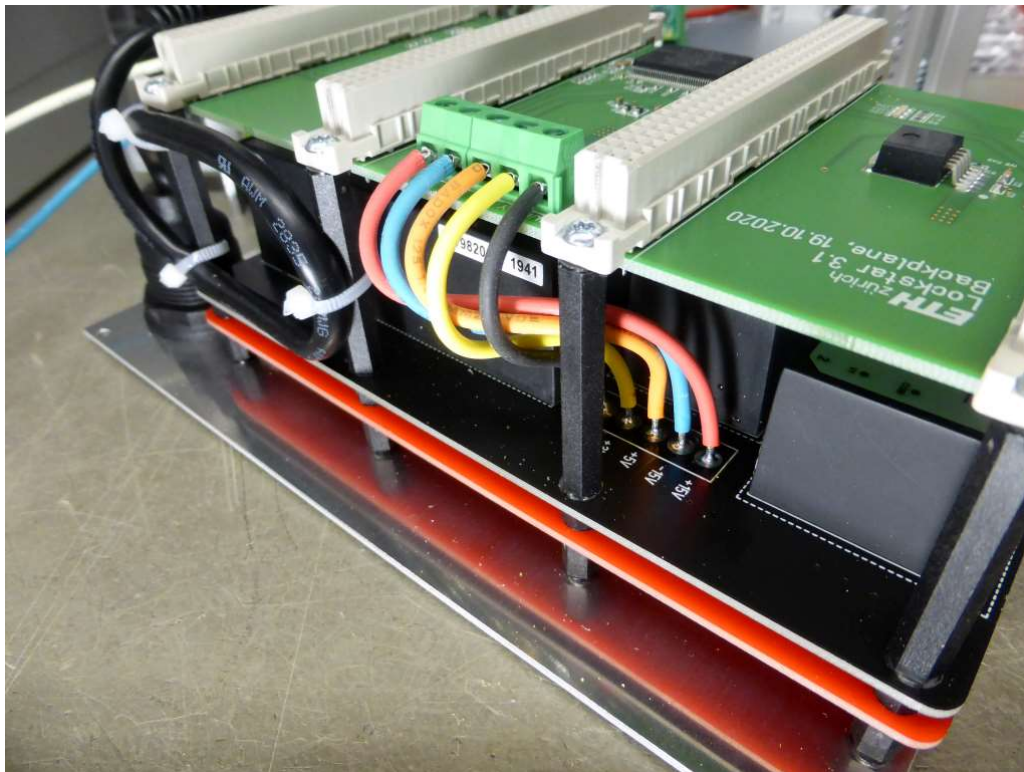
HOLE DIAMETER MAYST BE INCREASED TO 3.1 mm



FIX THE ETHERNET CABLE.

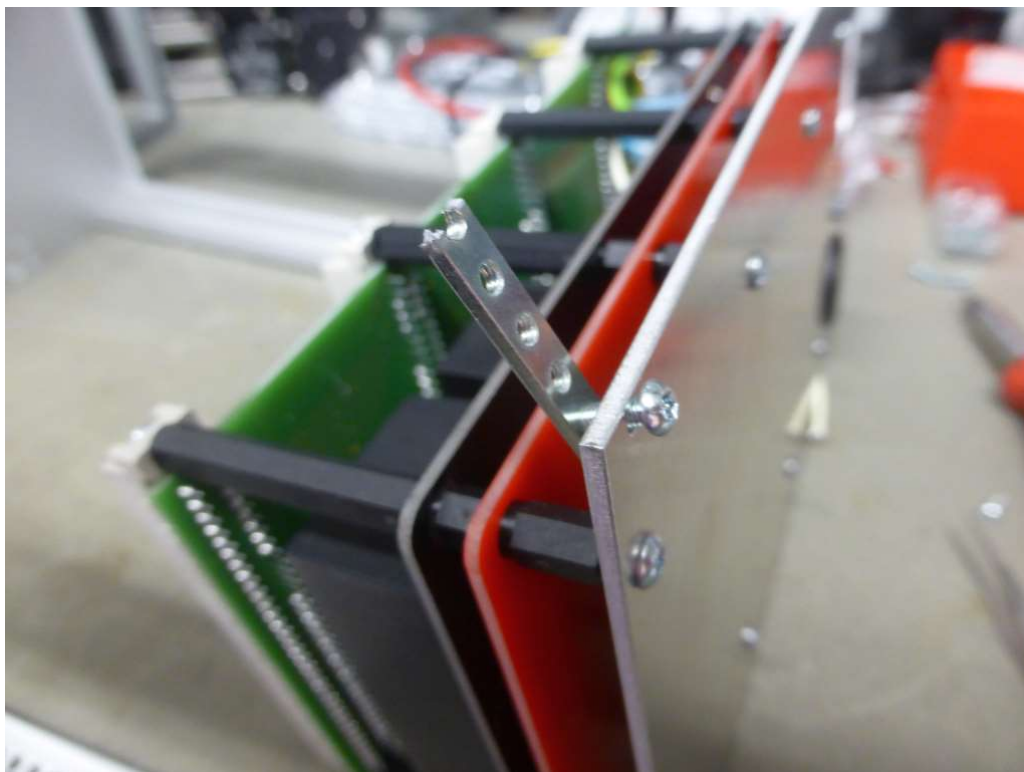


SOLDER CABLES TO THE POWER SUPPLY BOARD



ADD SCREW TERMINAL TO BACKPLANE AND CONNECT THE WIRES.

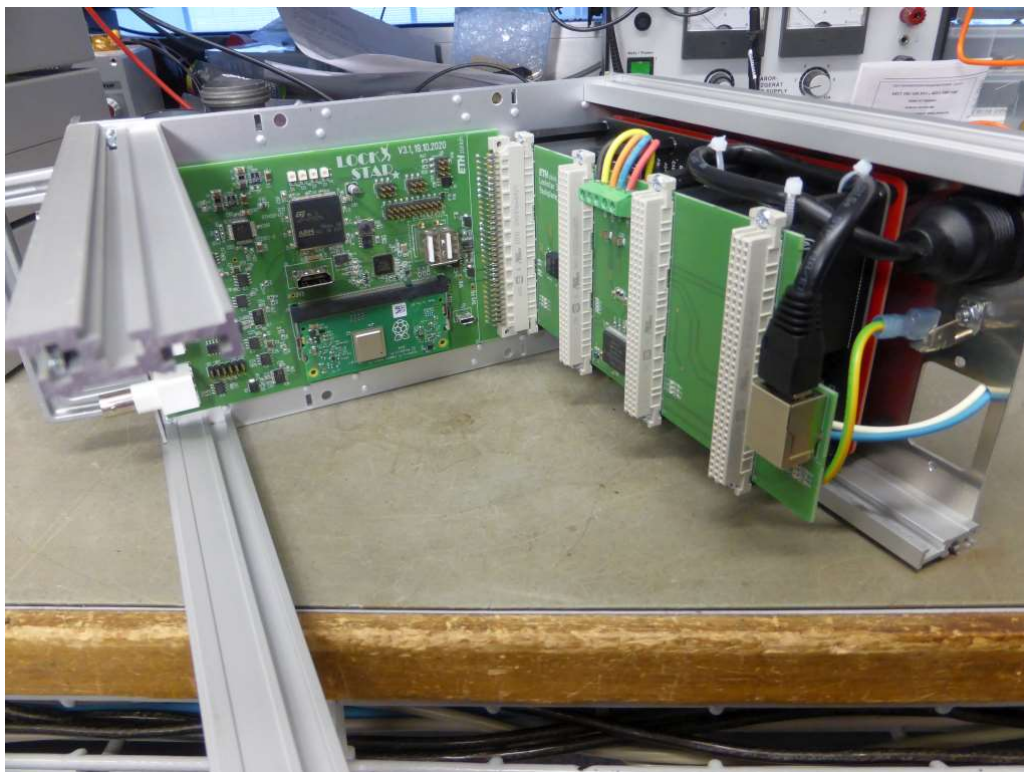
TRIPLE CHECK THE CORRESPONDING VOLTAGES. (BEFORE SWITCHING ON :-)



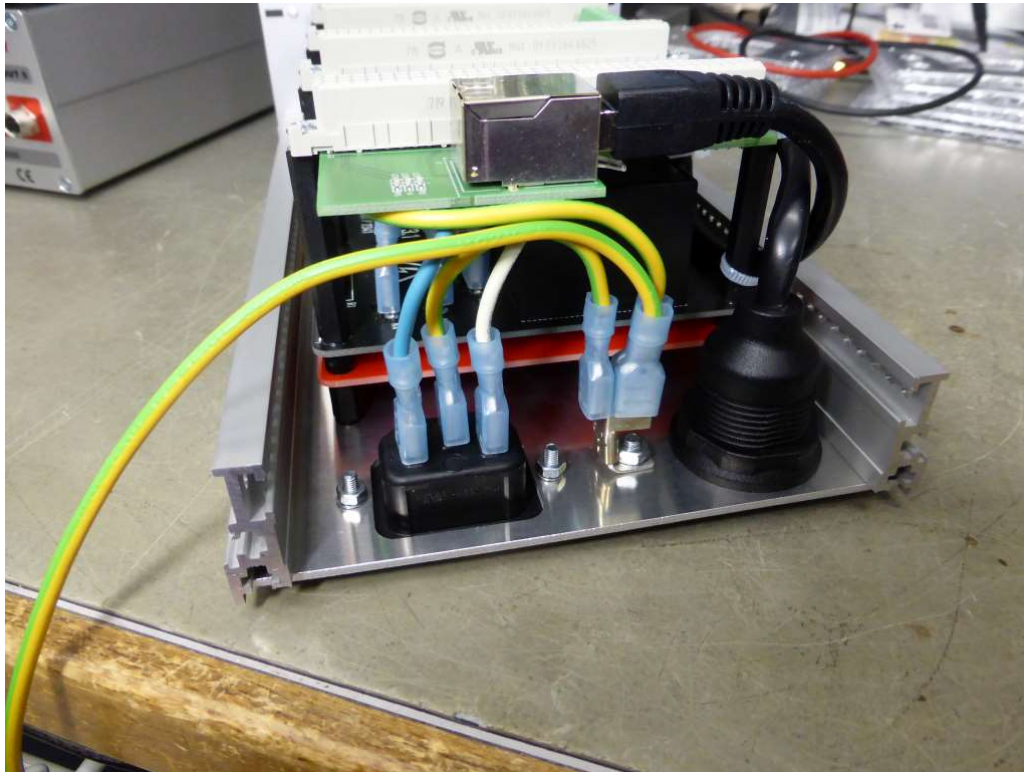
FROM POS. 2 CUT OFF 4 SMALLER PIECES FOR REAR PANEL MOUNTING. USE M2.5 x 8 SCREWS



SLIDE IN THE POS2 PIECES INTO RAIL OF CASE.



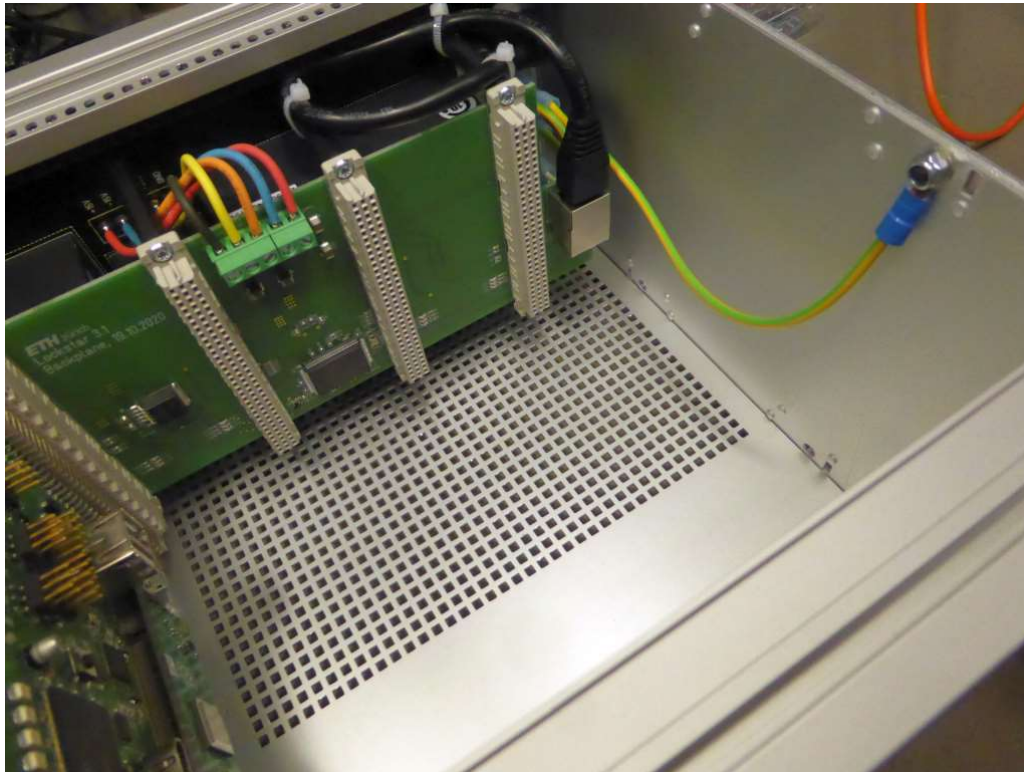
STILL NOT HURT YOURSELF ? BE PROUD AND TAKE A BREAK ...



MOUNT POWER CONNECTOR. CONNECT POWER WIRES. DOUBLE CHECK, THAT CRIMPING WAS SUCCESSFUL BY PULLING HARD AT THE ENDS.



SAME SAME - BUT DIFFERENT VIEWING ANGLE :-)



CONNECT AN EARTH WIRE TO THE SIDEWALLS.



DOUBLE CHECK THE ORIENTATION OF THE POWER CONNECTOR.

**BY COMMAND OF THE
BOARD, THE DEVICE
MUST BE TESTED
ACCORDING TO DIN /
VDE 0701 AFTER
ASSEMBLY IS COMPLETE.**

**YOU MANUFACTURER
ARE RESPONSIBLE FOR
THE SECURITY OF THAT
THING.**