

SB, Inverter board, PP490, PP492, 2022-11

SYMPTOM/DESCRIPTION

We have seen an increasing number of failures on the inverter board that are related to various error codes. Most of the issues have occurred in areas with higher ambient temperature.

The symptom of the problem is that some error codes (F10, F11) appear when starting the blade motor.

AFFECTED UNITS

Model	All units after below S/N.
PP490	From serial number 2019xxxxxxx and forward
PP492	From serial number 2019xxxxxxx and forward

CORRECTIVE ACTION

Due to the situation with the transformer on the inverter board that can cause break down of the transformer, we highly recommend:

All working Power Packs on all markets from 2019 and forward, is to be updated with FAN KIT to prevent inverter board failure.

We introduced fan kits on new power packs and spare part inverter boards in the beginning of 2023.

PROCEDURE

To assemble the fan kit, follow all steps in Appendix A.

PARTS INFORMATION

Description	Old Part No.	New Part No.
FAN SYSTEM (including installation parts)	New part	537669201
PP490/492 Inverter board	588766401	No longer Available
PP490/492 Inverter board KIT	N/A	538808901*
PP440 Inverter board KIT 200V (Japan)	523046005**	523046006*
PP480 Inverter board KIT	582904401**	582904402*

* Includes assembled FAN and power cable.

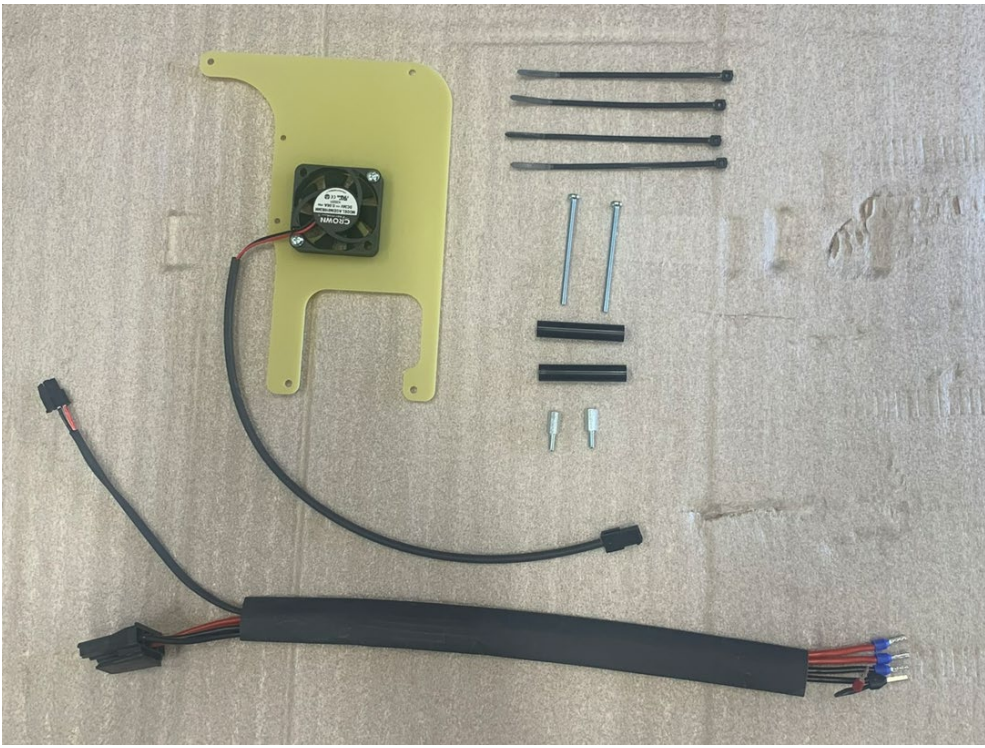

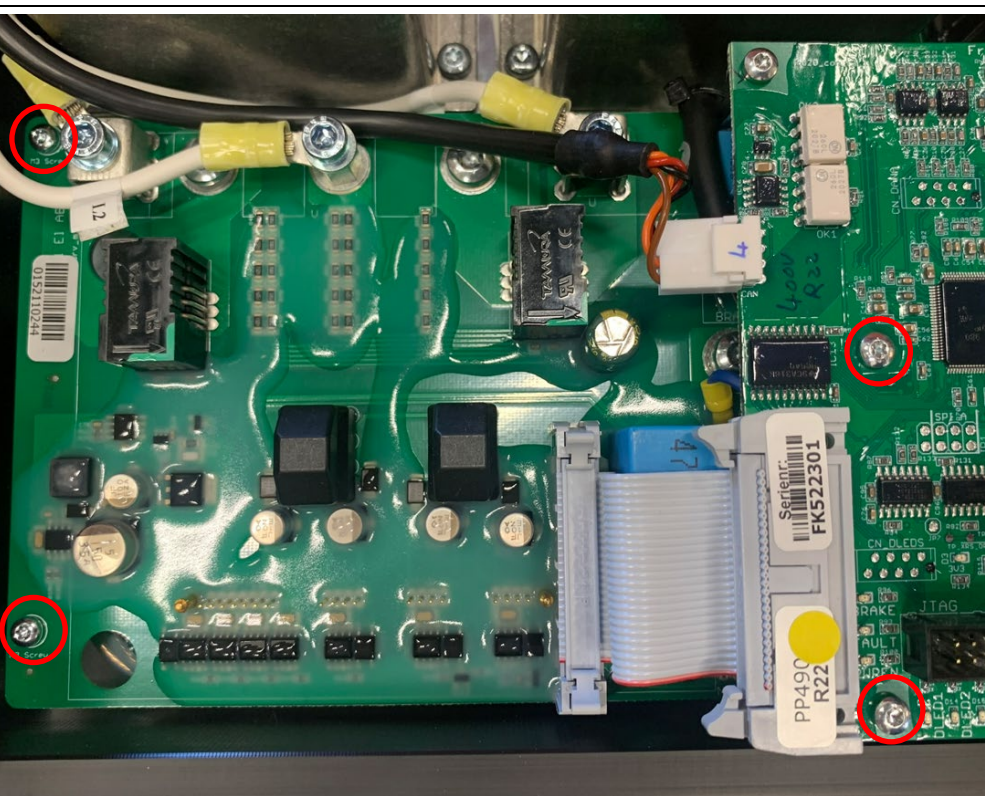
** Includes the FAN but NOT the power cable

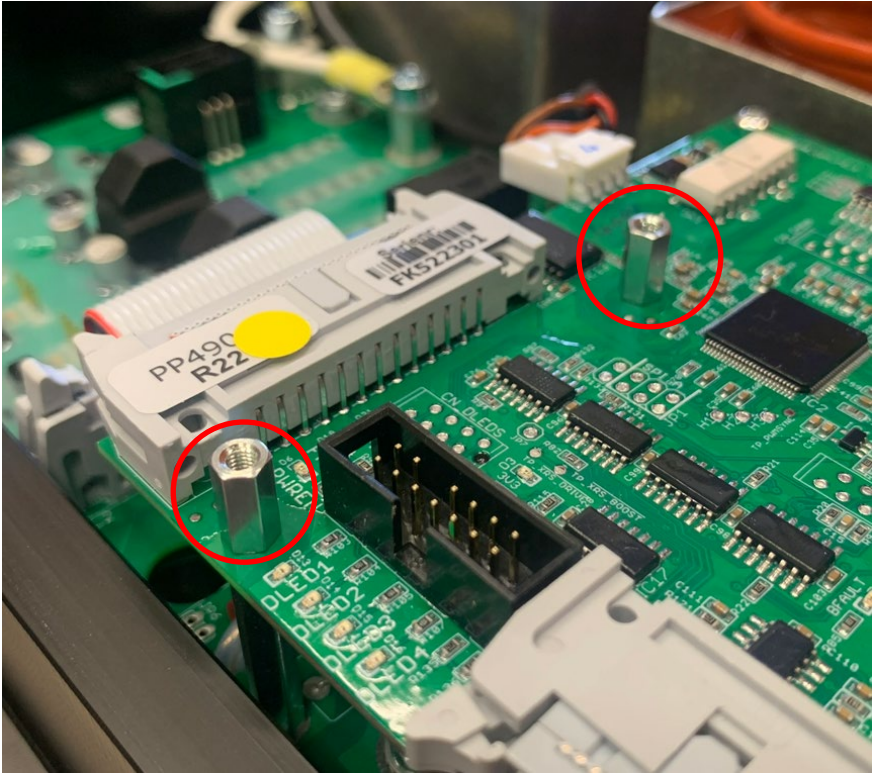
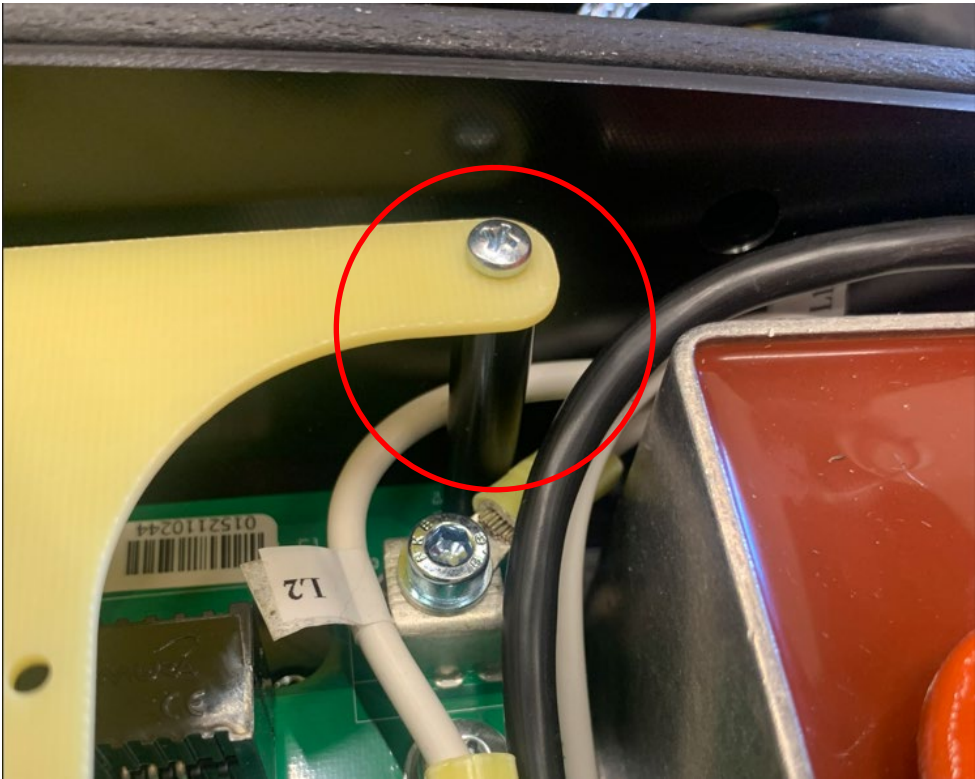
Revision History

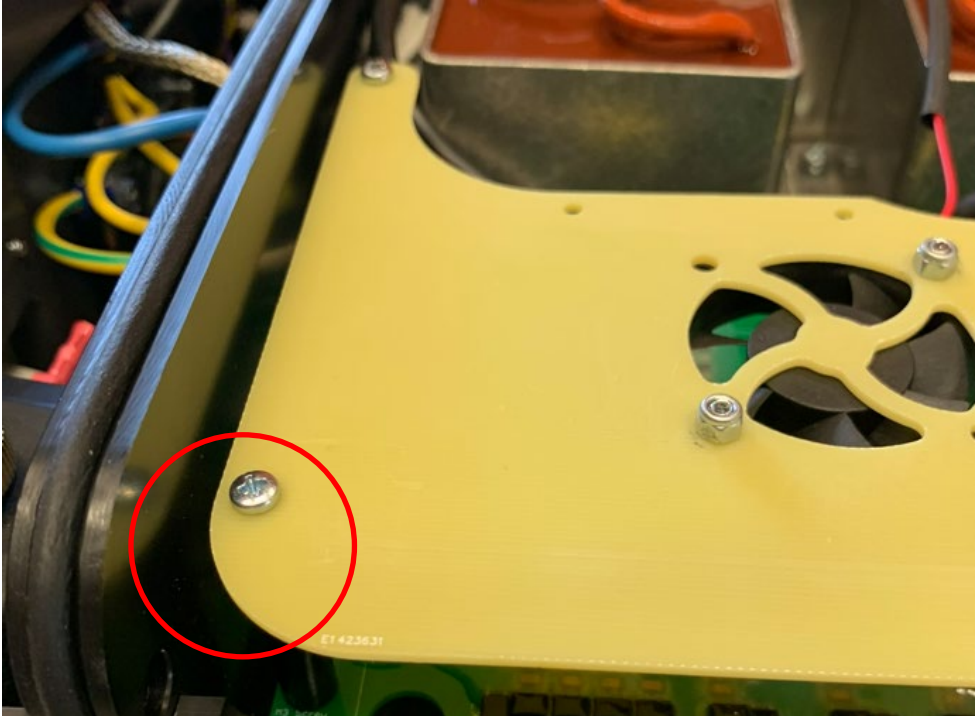

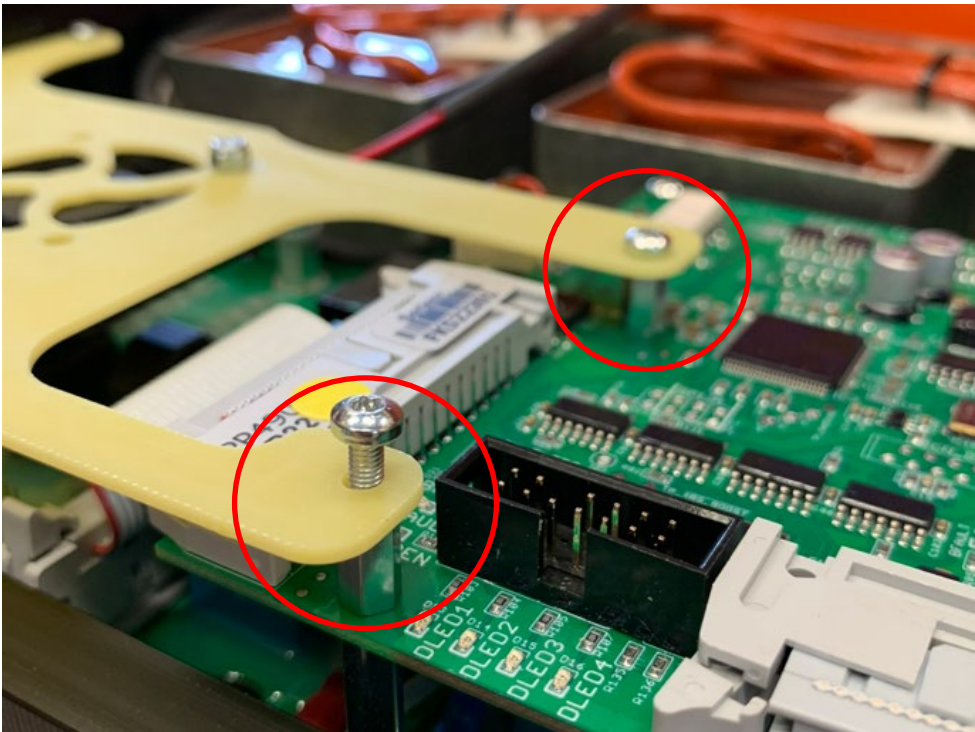
Rev.	Date	Order id.	Description
A	2022-11	00025318	Created
B	2023-03	00028131	Implementation serial number for PP492 updated
C	2024-09	00086711	Update in red text. Parts added in Parts information.

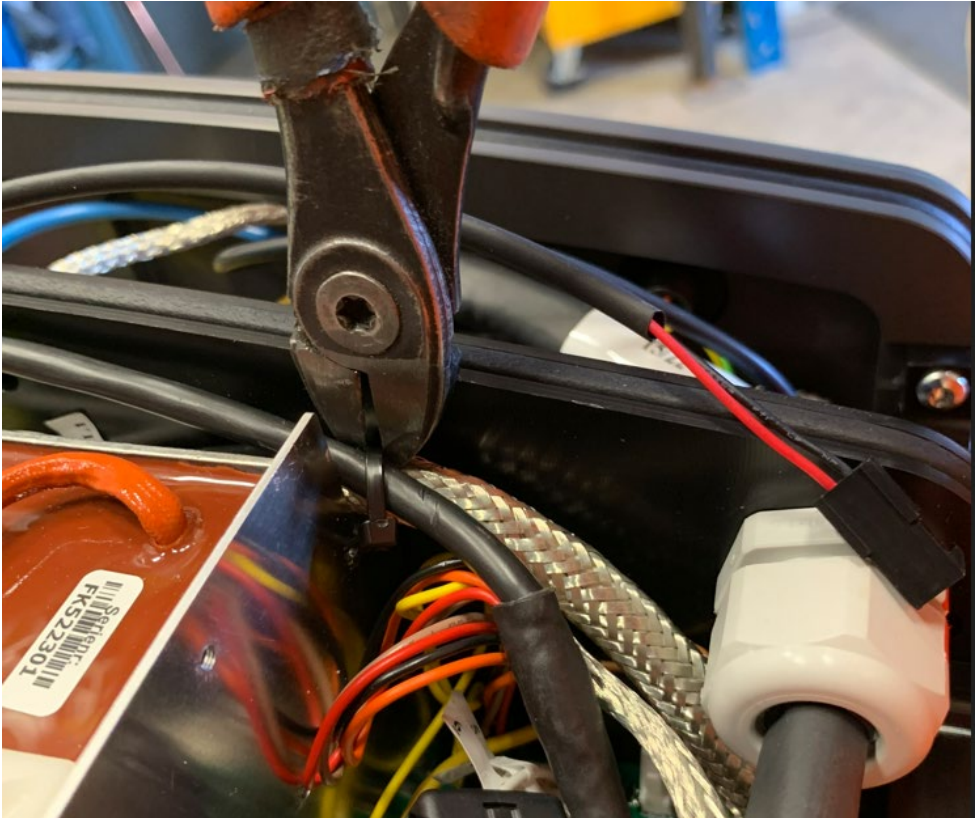
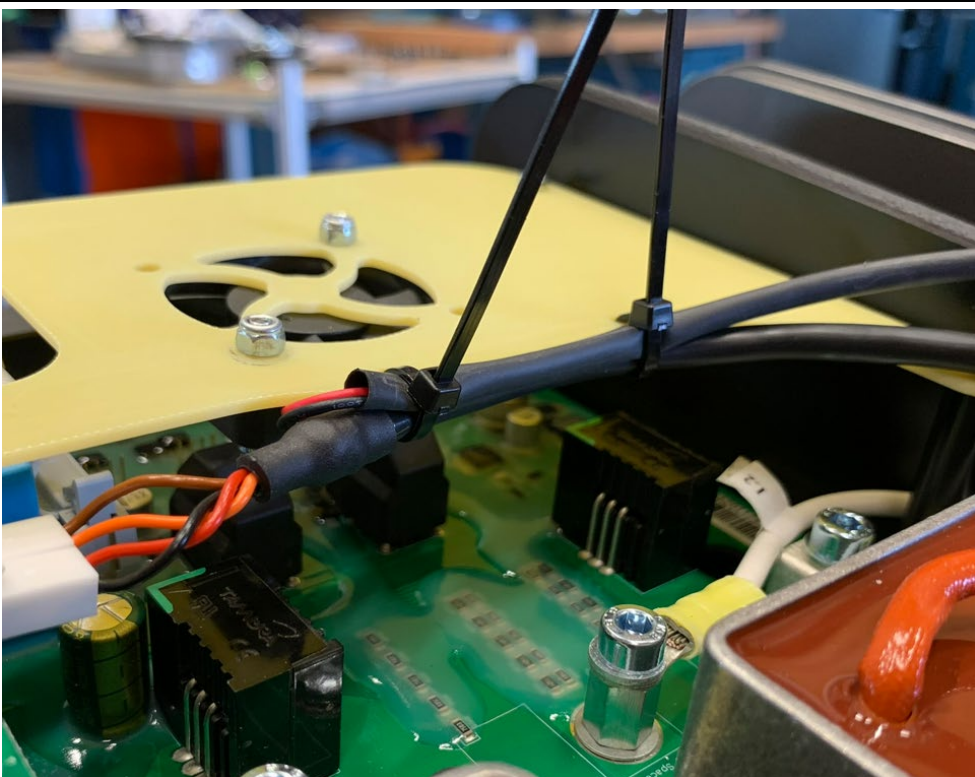
APPENDIX A


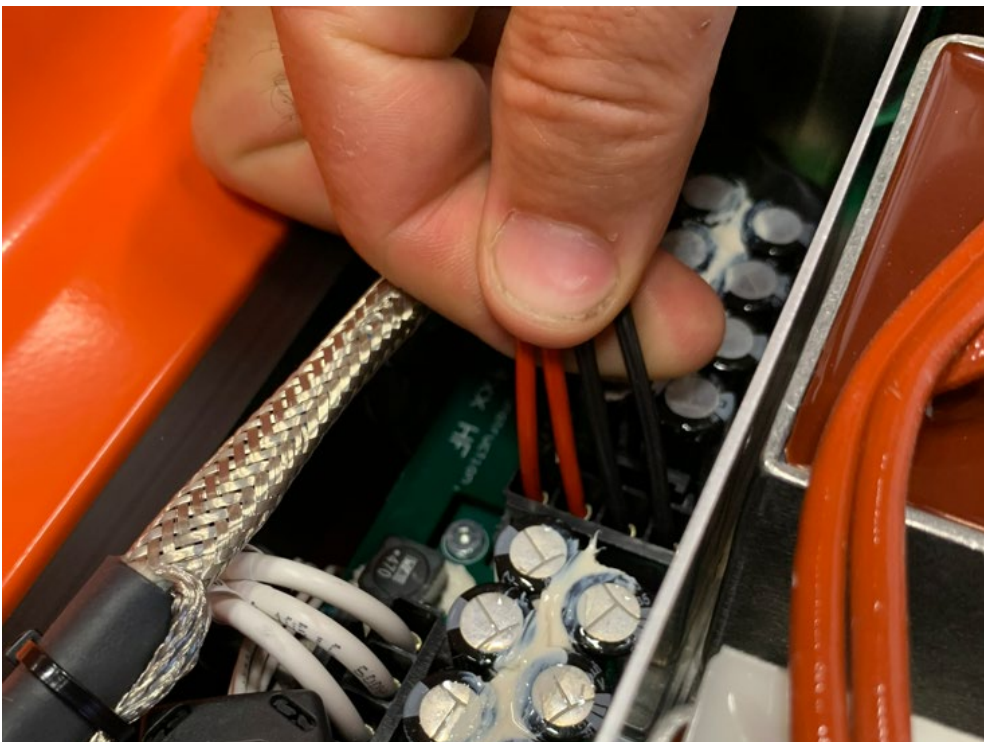
Before working with the Power Pack, make sure that the power cable is DISCONNECTED!!!


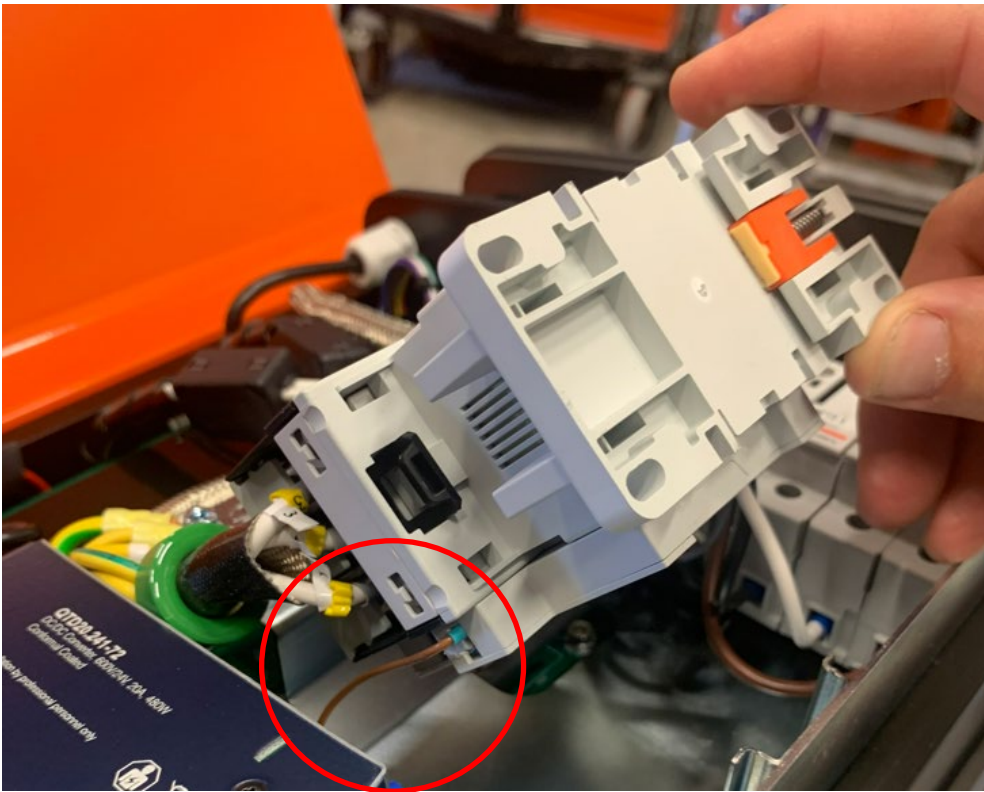
1	Complete kit (537669201)	
2	<p>Start with unscrewing the 4 screws, marked with red circles. Save the 2 long screws to be used in step 6.</p> 	

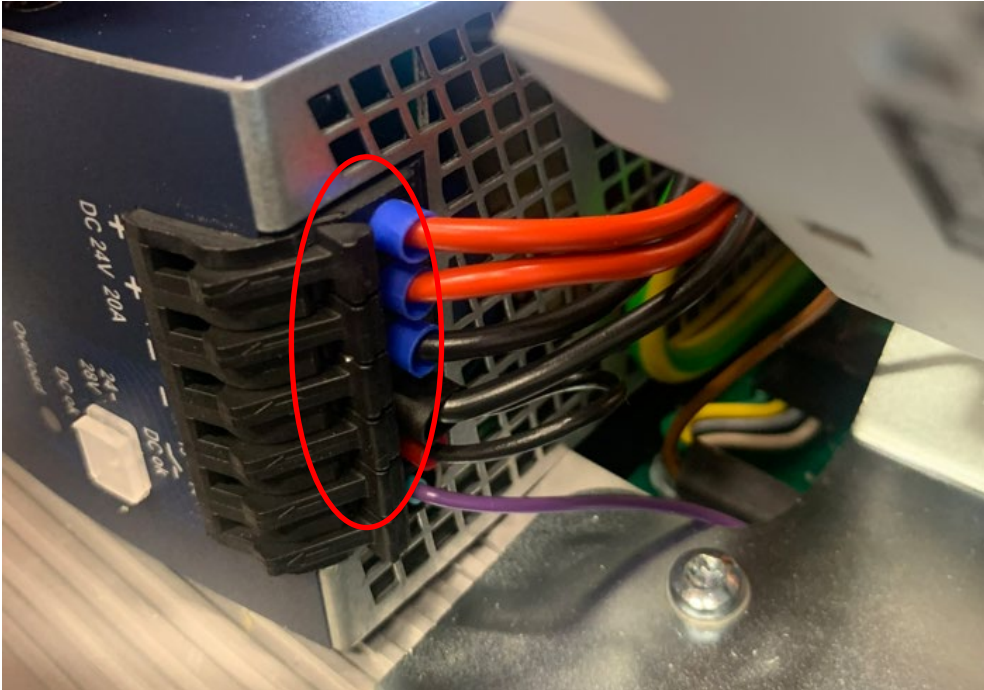

3	<p>Add the distances from the kit on the FKD/control board.</p>	
4	<p>Assemble first screw with plastic distance.</p>	

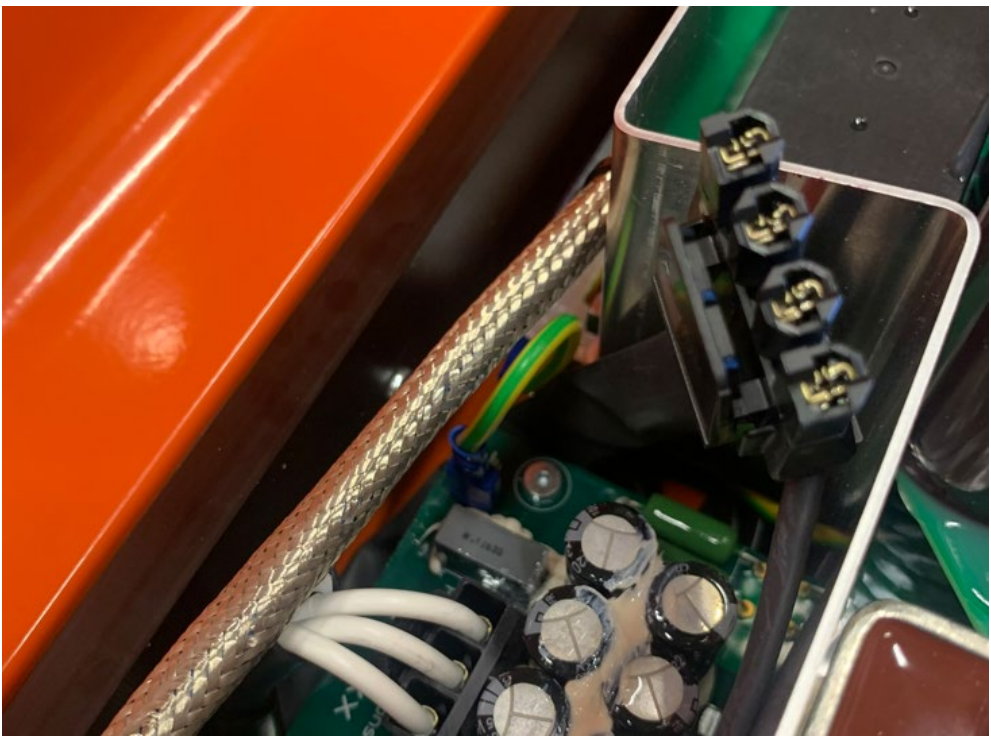
5	<p>Add second screw with plastic distance.</p>	
6	<p>Reuse the long screws that was diasssembled in step 2 to assemble the fan on the FKD board.</p> 	

7	Cut the cable tie.	
8	Use 2 cable ties to clamp fan cable and FKD cable to the fan bracket.	

9	Tighten cables with cable tie.	
10	Disconnect the contact from the main board.	

11	<p>Disconnect earth cable.</p> <p>This is to make it easier to remove the 24VDC cable.</p>	
12	<p>Flip the Power Pack to get access to the other side.</p>	
13	<p>Pull out the contactor.</p> <p>NOTE Be careful to not damage or disconnect the brown cable, marked with red circle, by mistake.</p>	

<p>14</p>	<p>Release the 5 cables, marked with red circle, by pulling the holder out.</p> <p>NOTE Purple cable is not to be disconnected.</p>	
<p>15</p>	<p>Make sure that the cable is free and don't stuck or hooked up to anything, before moving to next step.</p>	
<p>16</p>	<p>Flip the PP around and pull out the cable.</p>	

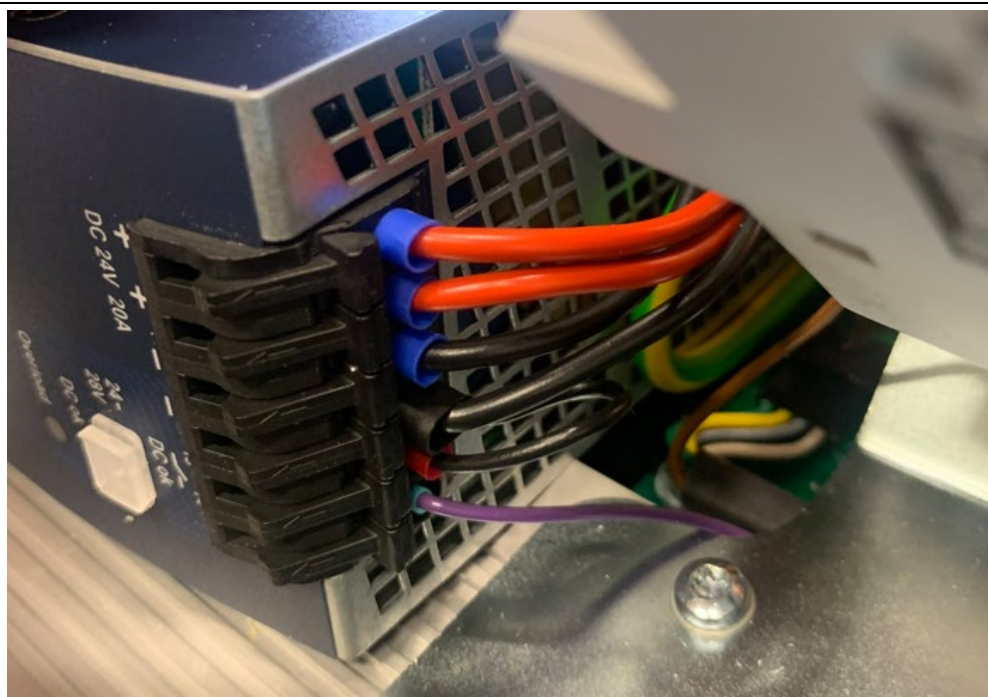
17	Put in the new cable.	
	Flip the PP around.	

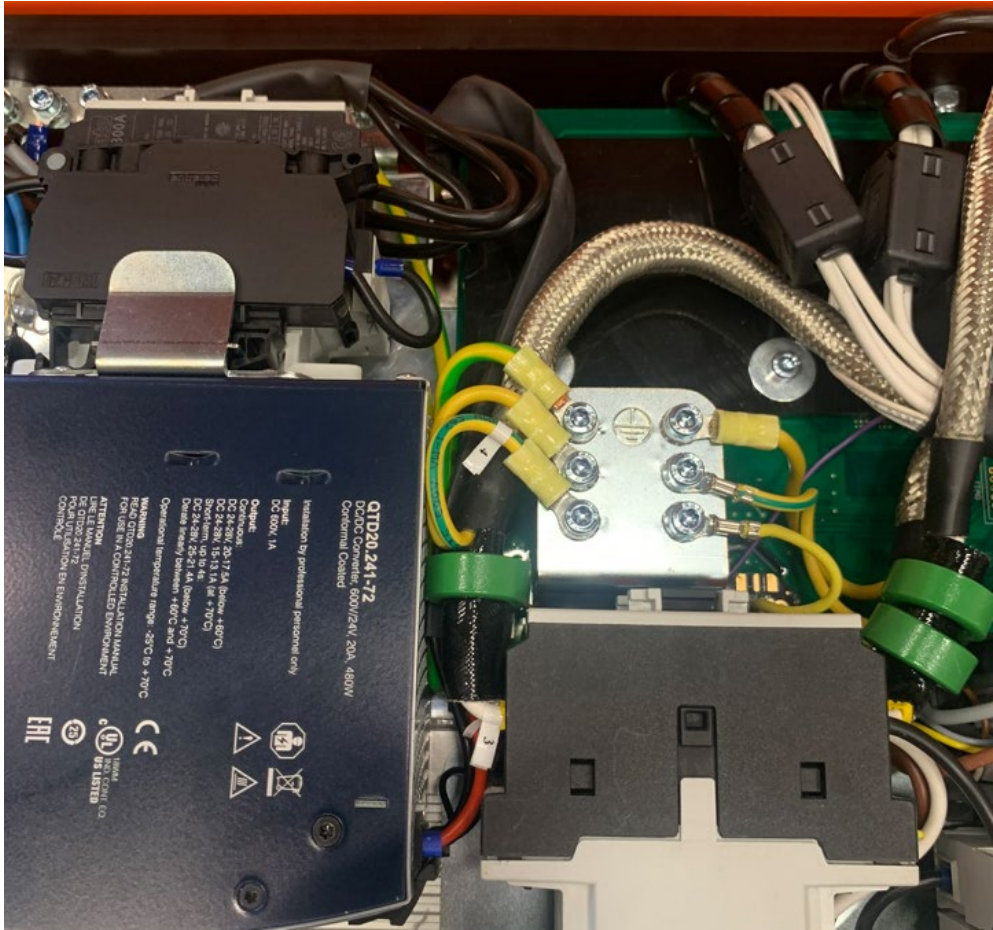
Place the cable as in the picture.






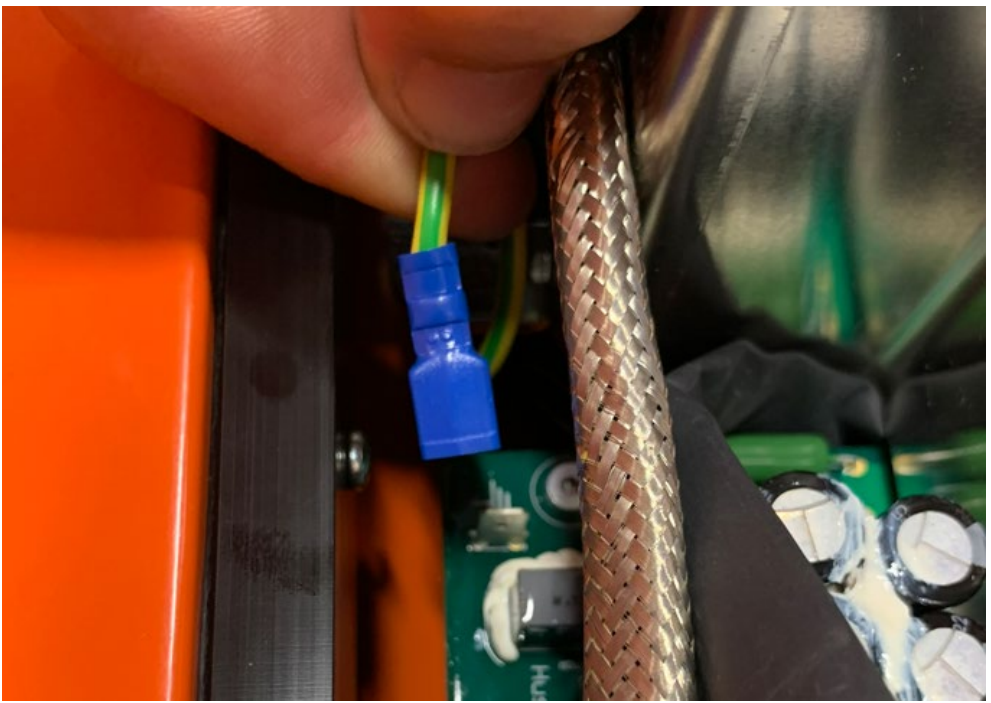
18 Pull out the contactor and connect all 5 cables.

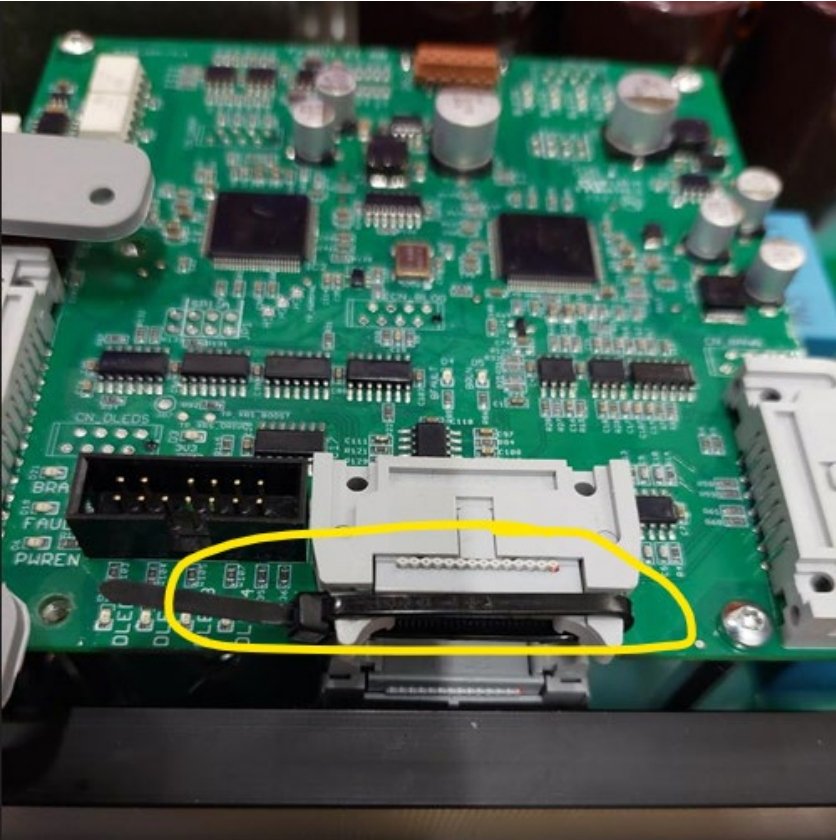

NOTE!
Make sure to be careful with the purple cable.



19	<p>Place back the contactor.</p> <p>NOTE! Be careful with both the thin purple and brown cable.</p>	
20	<p>Flip the PP around.</p>	

21	Connect the 24VDC contact to the main board.	 A close-up photograph of the main board's connector area. A green printed circuit board (PCB) is visible with various electronic components. A black plastic connector is mounted on the board, and a red wire is being inserted into one of its terminals. A braided metal shielded cable is also visible on the left side of the frame.
22	Connect the fan contact.	 A close-up photograph showing a person's hand holding a black plastic connector with two red wires. The hand is positioning the connector to be plugged into a terminal on the main board. The background shows the orange interior of the machine's housing and other wiring.

23	Tighten the cable with a cable tie.	
24	Reconnect the earth cable.	

25	<p>We have seen cases where the contact, marked in the picture, comes lose.</p> <p>Please make sure that the contact is correctly fitted, and use tape or a cable tie to secure it.</p>	
26	<p>Secured with tape.</p>	
27	<p>DONE!</p>	