

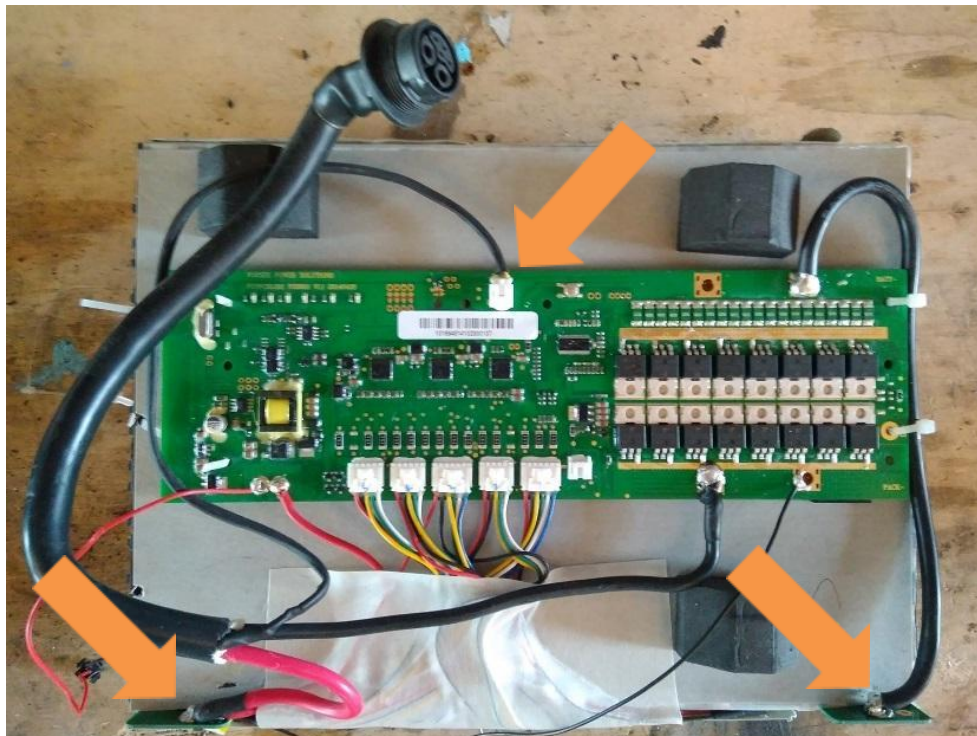


PID	FEBU
Problem description	chogori female replacement
Date of release	30.09.2017

Duration: 45 Minutes

Work-Steps:

- To remove the battery pack from the case, open both the top and bottom cover from the battery, unscrew the connector from the top cover and push the battery pack out to one side. (Careful: Edges of the battery case can be sharp)
- The battery female connector is connected to the battery on two soldering points for the driving current and a small plug for the SOC-Signal.
- The large red and black cable can be removed and the new ones attached by soldering.



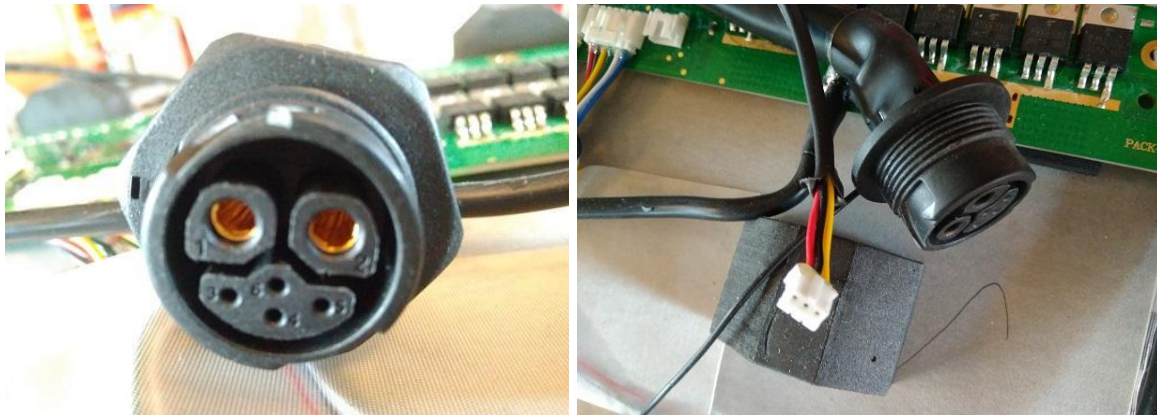
2 VARIANTS ARE POSSIBLE FOR THE SIGNAL WIRES:

Either the white connector currently on the BMS already has 4 pins just like on the newly delivered connector, or it only has 3 pins. In both cases the newly delivered connector can be used.

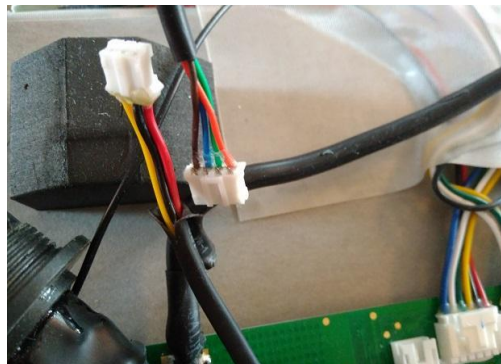
If the 3-pin version is currently used, the wires of the newly delivered connector definitely have to be individually connected to the pins (or the cut off ends of the old wires) of the old plug. (See explanation below).

If the 4-pin version is currently used, the plug does not have to be changed, but it should still be checked if the position of the wires in the new plug is the same as in the old one.

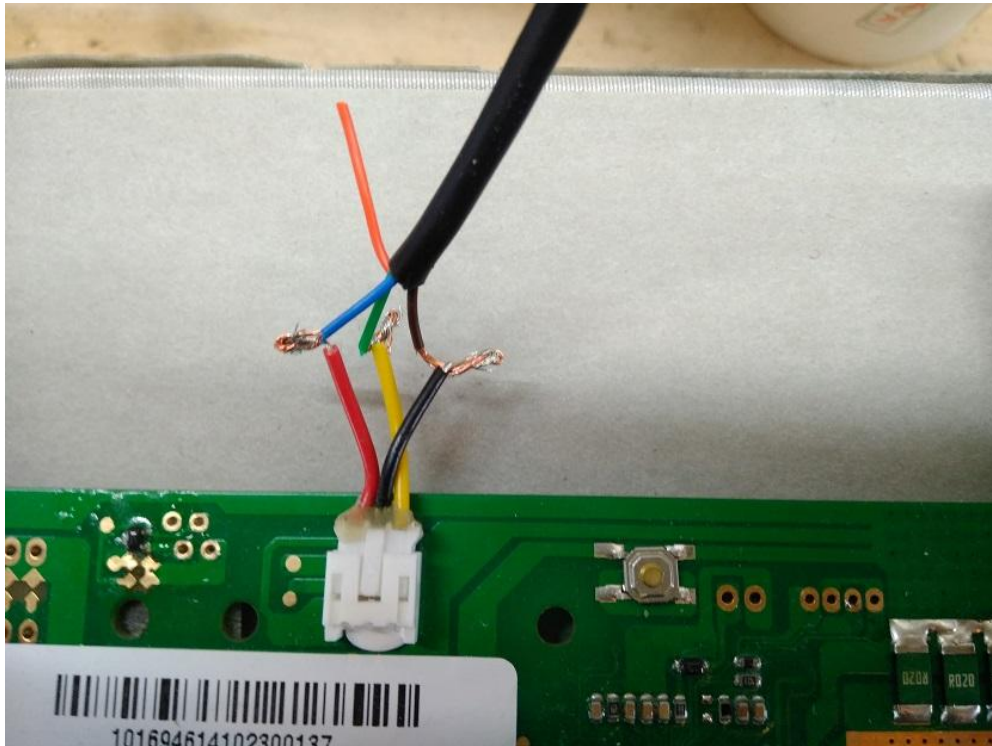
- To ensure the correct fit of the signal wires, unplug the white connector. Use a Multimeter to find out, which pin on the connector (or cable color) corresponds with which number shown on the chogori connector.



- In case the 3-pin version is currently used or if the 4-pin version is used put the position of the wires is different, the wires have to be adjusted. The goal is to connect the colored thin cables of the new chogori cable with the correct pins of the old chogori cable. (Careful: Even if the colors on the old and the new connector are the same, they do not always correspond to the same pin)



- Then, connect the colored cables of the new chogori cable with the correct colored cables on the white connector on the BMS so that the numbers on the connector lead to the same pin on the BMS as before.
- The connection can be made by soldering, twisting, or crimping. The picture below shows a possible connection. (Careful: Before putting the battery back together, the cable connections need to be isolated to avoid shorts.)



- Before putting the battery pack back into the case, test the function of the SOC indication by connecting the battery pack to the scooter. (Careful: Do not touch the board of the BMS or any electrical contacts when doing the test)

Additional check:

Since you have already opened the battery casing to change the connector, please also check the following:

- Are the four foam blocks present on both sides of the battery pack?

[insert images of both sides of the soft pack]

- Are the six flat foam blocks present on the underside of the battery casing? [insert image of lower part]