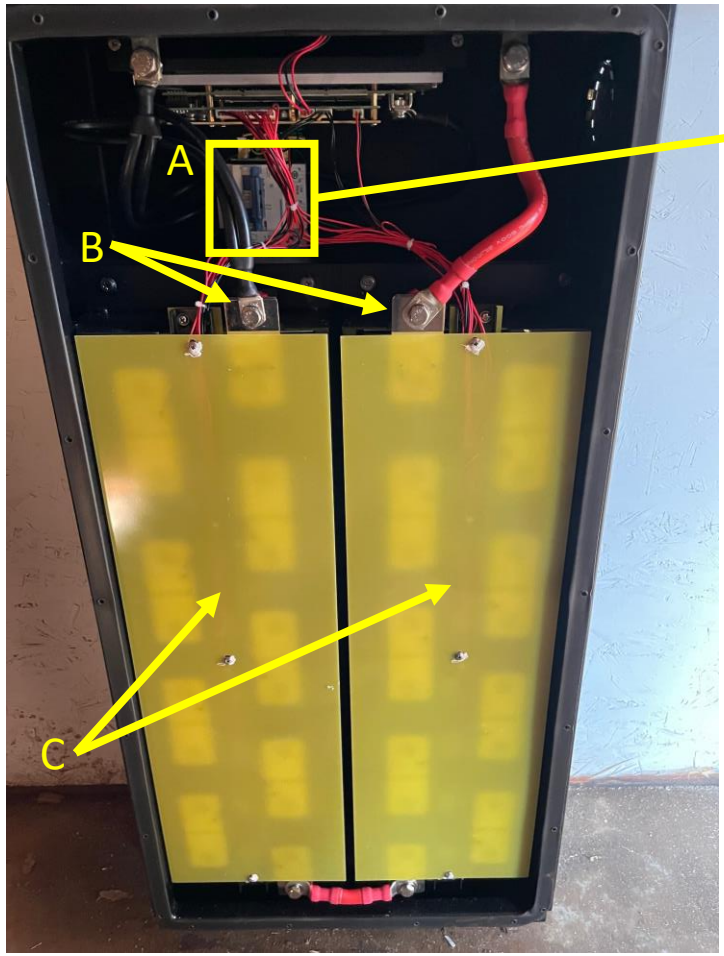
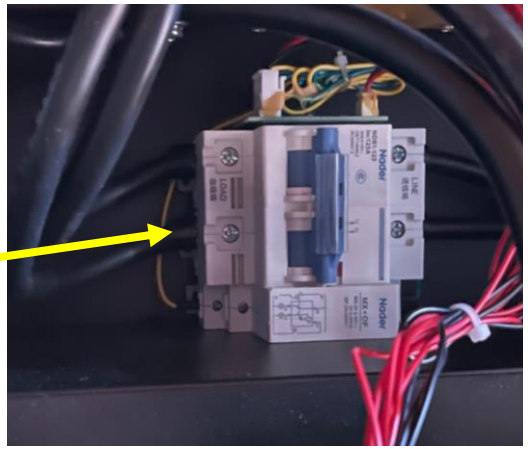
LIONENERGY

# Charging Unbalanced Cells on the Sanctuary Battery

One of the reasons the BMS cuts voltage is due to unbalanced cells within the battery banks.
The following steps will walk you through resolving this issue

- Remove the front cover of the Sanctuary Battery
- First check if the BMS Breaker has been tripped
    - If tripped, the Breaker will be in the left position
    - If not tripped, the Breaker will be in the right position (A)
- Check the voltage at the main battery terminals (B)
- Remove the two yellow films covering the cells (C)



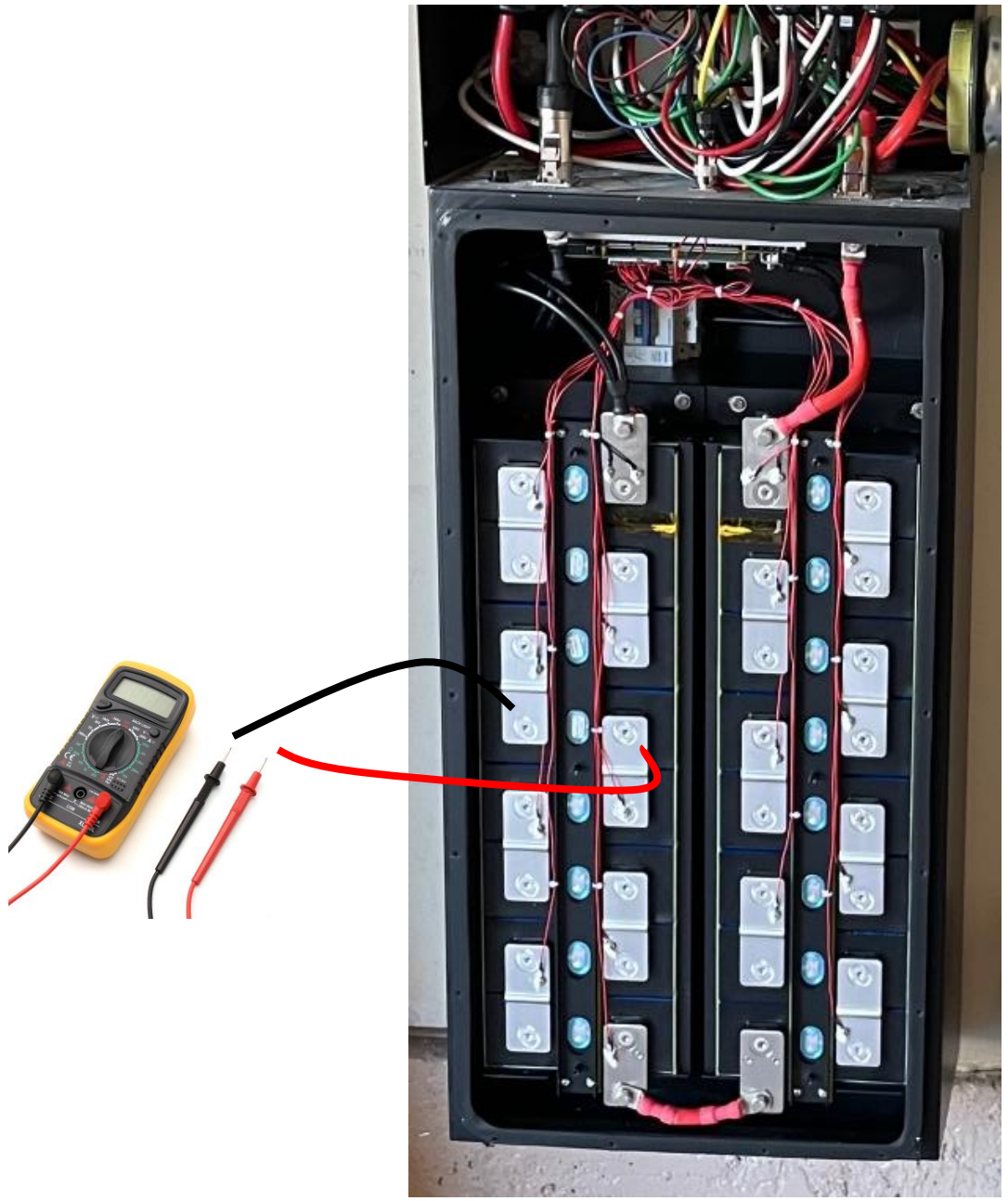
Once the yellow films have been removed, you will see 2 banks of 8 cells wired in series. Using a DC volt meter, check and write down the voltage across each of the cells.

Typically, the cells all sit around 3 volts.

No cell should be less than 1.5 volts, or greater than 3.7 volts.

If an imbalance greater than 0.5 volts is present, the BMS will cut voltage running from the battery banks to the battery receptacles above the enclosure.

If you find a cell that is significantly less than the rest, you will need to charge the cell with a DC power supply.



Connect the DC power supply’s alligator leads to the low cell.

Turn on the DC power supply and charge the cell at 3 volts and up to 5 amps until the cell voltage matches the rest of the bank.

Repeat this for any additional imbalanced cells.