



# UBCO Controller latching test

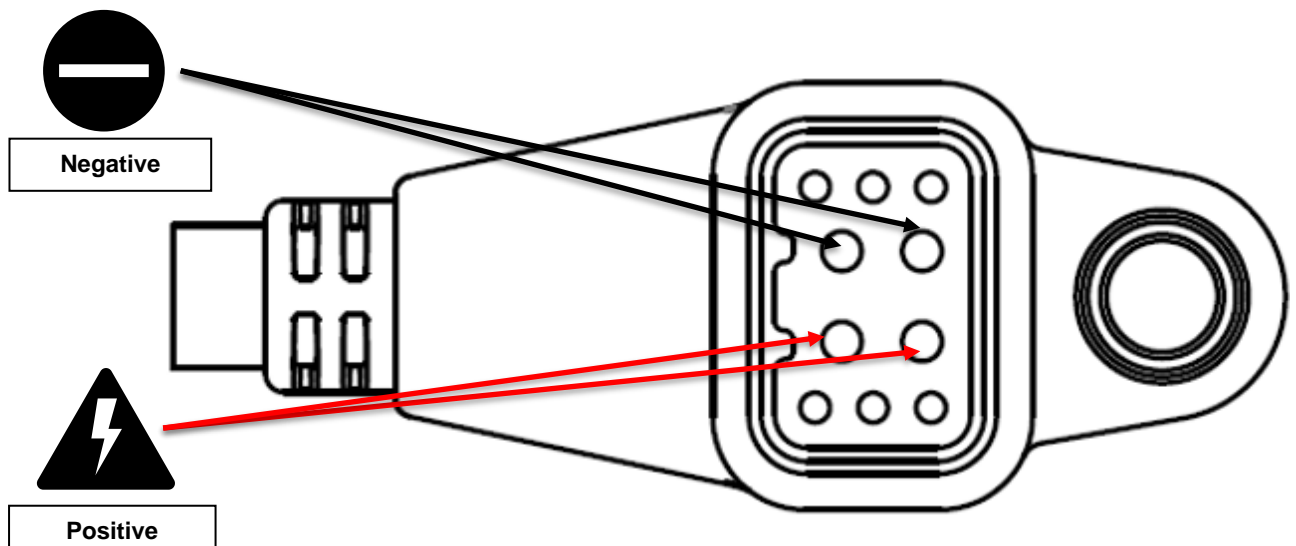
**WARNING:** Under **NO circumstances** connect a battery or operate the bike with a faulty controller. Do not attempt to carry out repairs if you are not a qualified or trained technician, working on electronic equipment can be dangerous.

This document outlines how to test if your controller has latched together – meaning the positive and negative power supply is short circuited. Please follow the steps below if you are an authorised UBCO dealer.

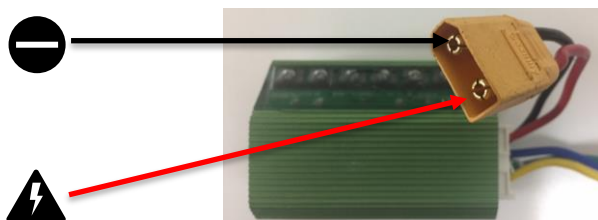
**Steps:**

1. Disconnect the battery
2. With the battery plug pins facing towards you, as pictured below, use your multi-meter to check for continuity between the **positive** and **negative** pins on the battery plug indicated in the picture below.
  - a. Test the two left-side pins (positive and negative).
  - b. Test the two right-side pins (positive and negative).
  - c. Test the pins diagonally (left-hand negative and right-hand positive) followed by (right-hand negative and left-hand positive).
  - d. If in either of the steps (A, B or C) you have continuity, a short circuit is present which may indicate a controller fault. **DO NOT ATTEMPT TO PLUG THE BATTERY IN UNDER ANY CIRCUMSTANCES.**

Pin position	Function
	negative
	positive



3. With the battery still disconnected remove the centre console from the UBCO 2x2 and Un-plug the controllers, check for continuity at the main power input to each controller (as shown below), this would indicate a faulty controller.



4. If a short circuit is present, replace the faulty controller and re-test step 3.
5. Re-connect your controllers and re-test the battery plug starting from step No:1 through to step No:8
6. If there is no controller short circuit present after re-testing, Re-connect the battery and Update the motor maps via the UBCO user app.
7. Test the bike operations.
8. If there are no faults present, Re-assemble your UBCO 2x2 and test ride the bike