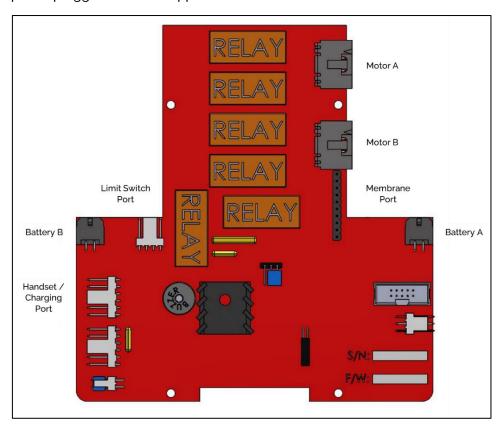
# **PCB and Limit Switch Testing Guide**

## Covering All Variants of the CP Lift Family

This document will guide you on how to determine a fault with the PCB and Limit Switch of the portable lift. Follow the steps below to determine if the PCB and limit switches are functioning correctly.

The diagram below shows each connection port found on the PCB and what component plugs into each port. Ensure that each port is plugged in (where applicable).



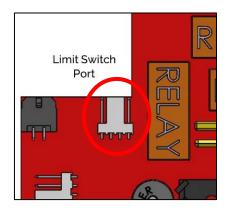
Each of the below troubleshooting guidelines requires a multi-meter to test power inputs and outputs from the board. Prepare the multi-meter by setting it to read DC volts, the red lead (positive) should be plugged into the voltage port, and the black lead (negative) should be plugged into the COM port. The display screen should show a reading of 0.0 volts.



### Are the limit switches receiving power?

#### Step 1

Determine the location of the limit switch port, this is located centrally on the left-hand side of the board.



#### Step 2

Ensure that the batteries are charged, if unsure of battery status, allow the batteries to charge for at least 20 minutes for sufficient power prior to testing.

#### Step 3

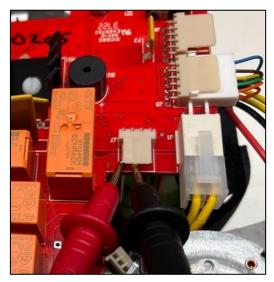
Disconnect the limit switch cable from the port.

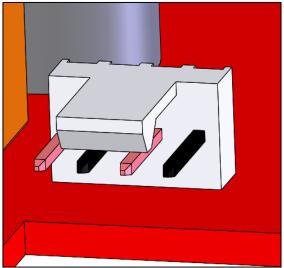
#### Step 4

The two left terminals provide power to the upper limit switch, the two right terminals provide power to the lower limit switch.

#### Upper limit switch

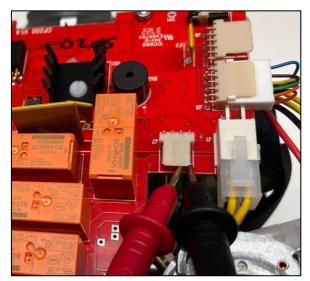
To determine if the voltage is running through the port. Touch the black (negative) lead onto the black wire terminal (second terminal), and the red (positive) lead onto the red wire terminal (first terminal). (See image for reference). This should display between **4.5 and 5v**.

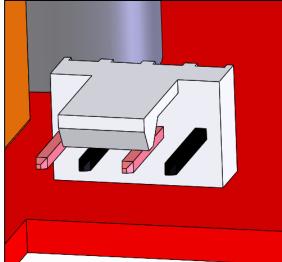




#### Lower limit switch

To determine if the voltage is running through the port. Touch the black (negative) lead onto the black wire terminal (fourth terminal), and the red (positive) lead onto the brown wire terminal (third terminal). (See image for reference). This should display between **4.5** and **5v**.





If either limit switch port is not receiving the minimum voltage, then there is a fault in the board. The board must be replaced.

If both limit switch ports are receiving the correct voltage, then there is a fault with the limit switches. The limit switch assembly must be replaced.

#### **Test Complete**