

TECHNICAL DOCUMENT

4019 Mach Two steam valve not turning on

If you press the steam activation lever and no steam is coming out of one wand we have a few steps to troubleshoot. If both wands are not working please see the steam boiler documentation.

- 1. Remove the steam tip and test the steam function. Make sure the steam tip is clear.
- 2. If clear, run the group closest to the steam wand in question to remove the screen saver on the screen. When you press the steam activator a S will show up on the screen. If you do not have an S, that means the sensor is not communicating with the board and not reading an input. We must then check all connections.



Testing the sensor to board connection.

• Make sure the connector pins are fully pushed in and making good contact on both the male and female ends.

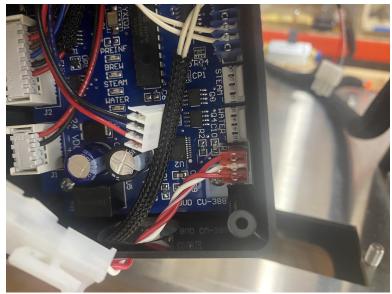


 If ok, remove the front panel and remove the board cover of the UI board

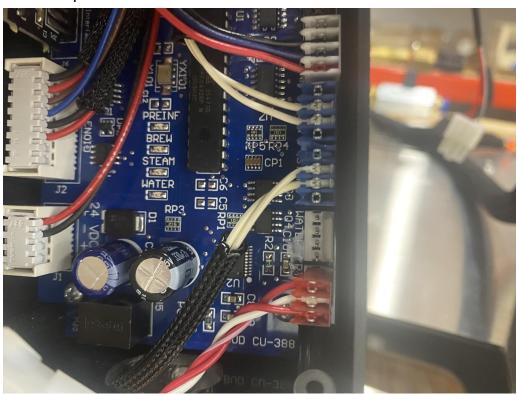


 Make sure the connector is plugged into the correct pin and not miss aligned





- There is always a red power light on the board when powered on. Each input signal will also display a red light when it's received a signal and sent 24v out to the component.
- If everything looks ok unplug one of the other inputs and swap the plugs around to see if they activate. If the steam turns on and the other output does not we have a bad UI board.



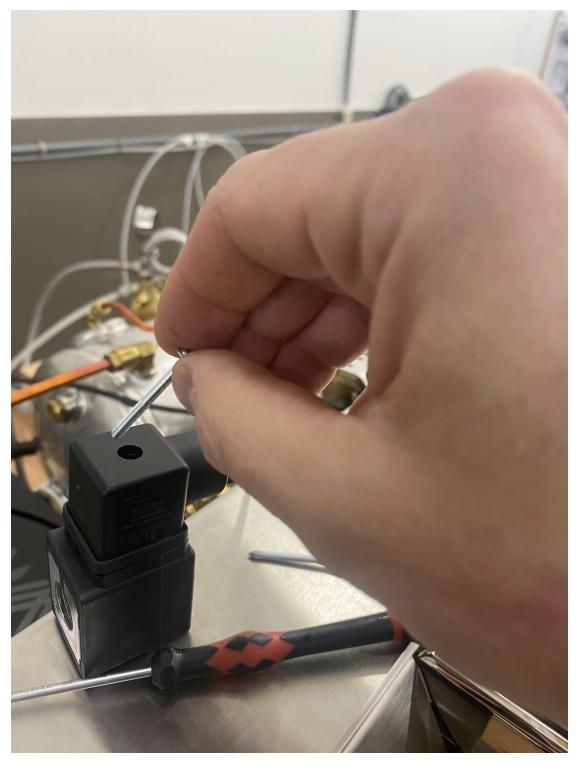
3. If S is on the screen then the board is receiving an input signal from the sensor and needs to check the outgoing voltage to the Steam Valve, make sure wires are properly connected and test the steam valve coil. (You will need a voltmeter to further test). Tip- you can test for magnetism at the 14mm nut when the steam wand is activated to skip these steps and confirm you have power to the valve / coil.

• To test all three remove the 14mm nut from the steam valve coil

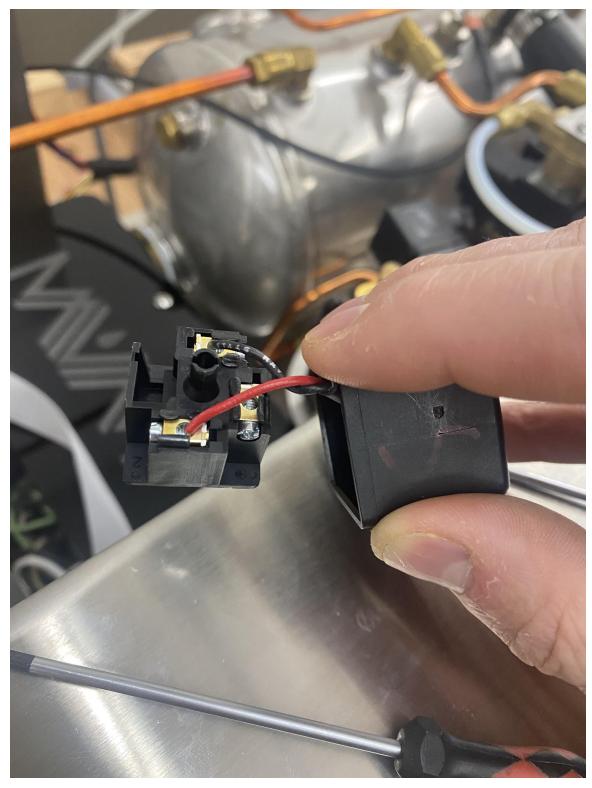




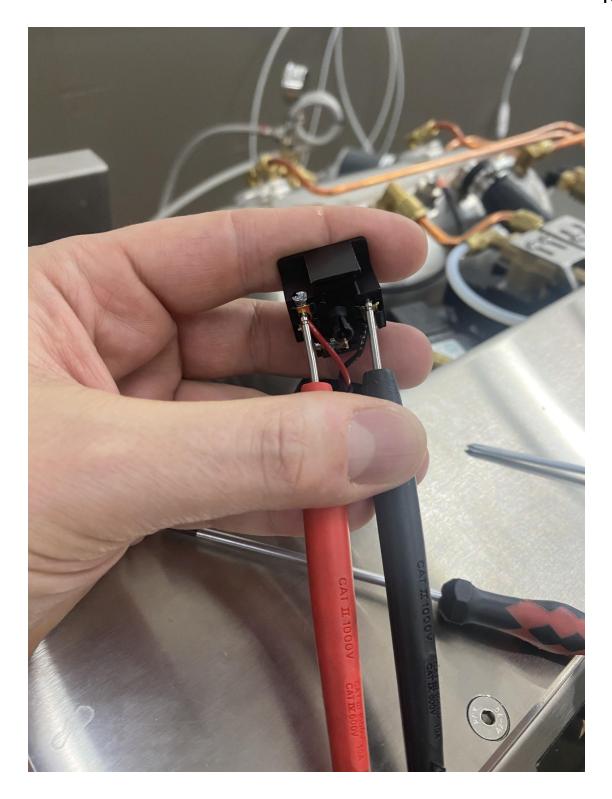
 With a small phillips screwdriver remove the electrical connection from the coil and pull the screw all the way out.



• Seperate the electrical connection from the coil and open the electrical connection as shown below. (a small flat head can assist)

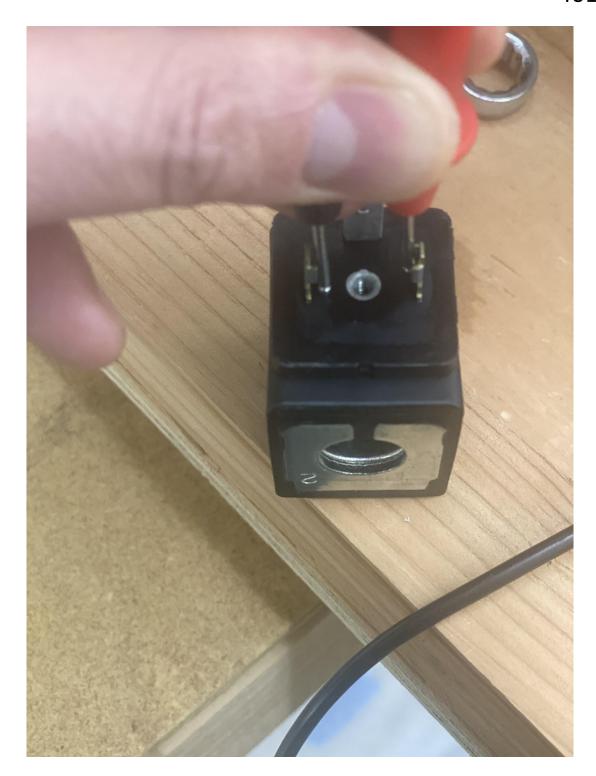


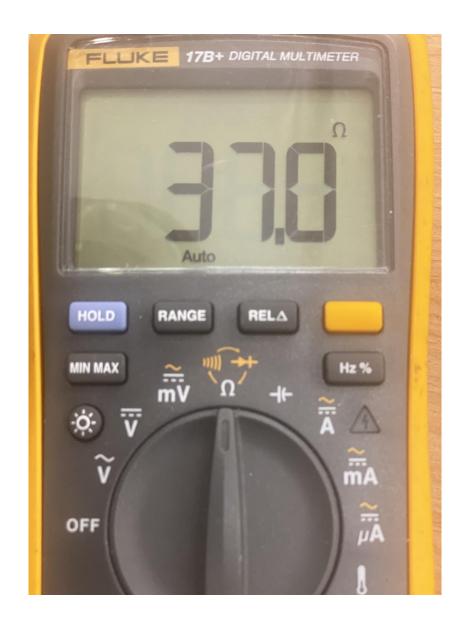
 You will now have access to inspect both wires and installed properly and can now activate the steam wand and see if you get 24v DC on your voltmeter.





- If you have 24v DC the machine is working correctly. You now need to test the Steam Valve coil. If you do not have 24v DC check the wiring on the UI board.
- To test the Steam Valve coil. Put your voltmeter in Ohms and test across the coils power terminals. If you have a reading of 35-40 ohms then the coil is working.





4. If all electrical input and output functions are correct check the steam system for a steam blockage due to mineral build up.