

TECHNICAL DOCUMENT

Mach 2 - BEST Update

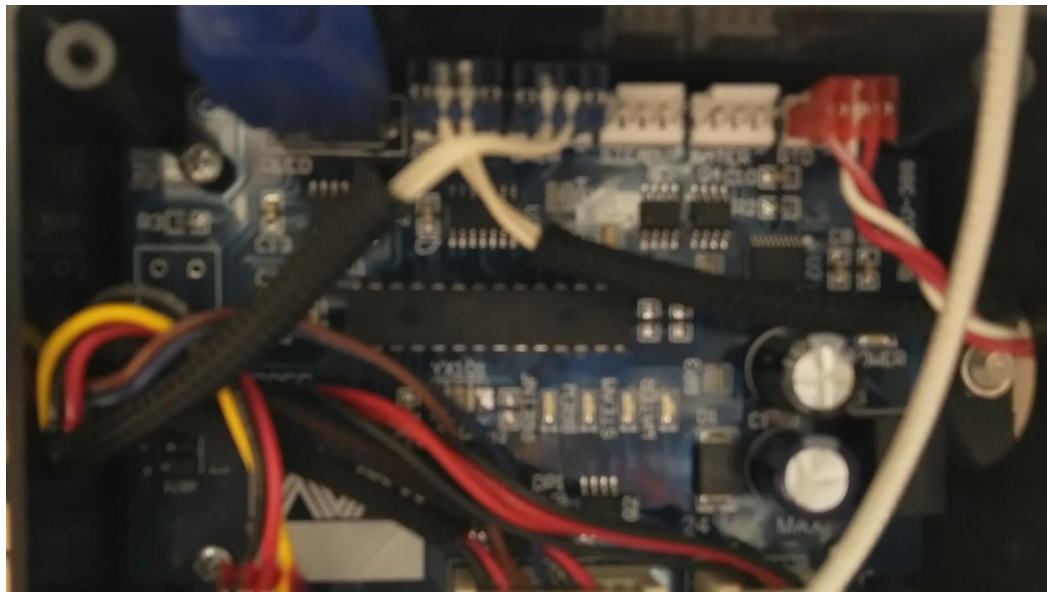
This Installs our new BEST Algorithm to the Mach 2 Machines

We are swapping the UI boards under each group, installing new brew valves and new flow meters

You will need to remove the front, both top and side panels of the machine.

This will take about 1hr to complete

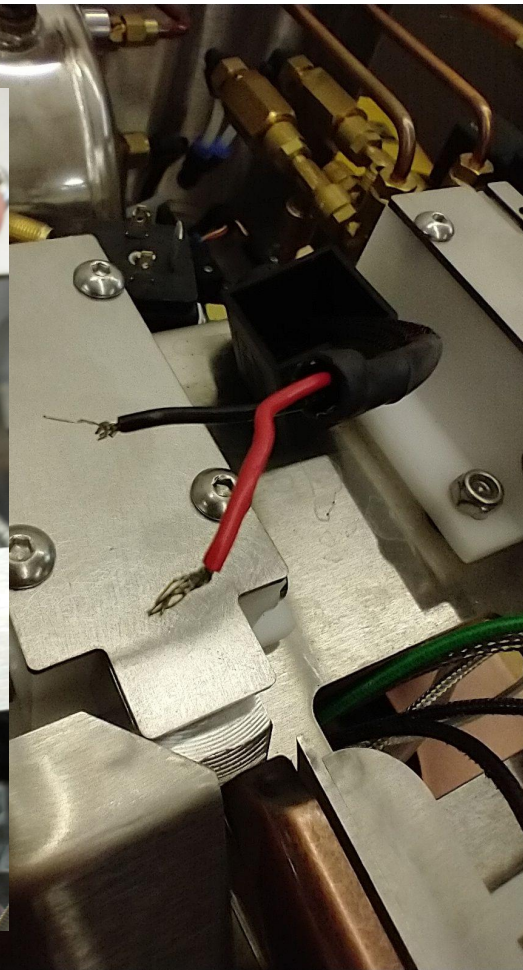
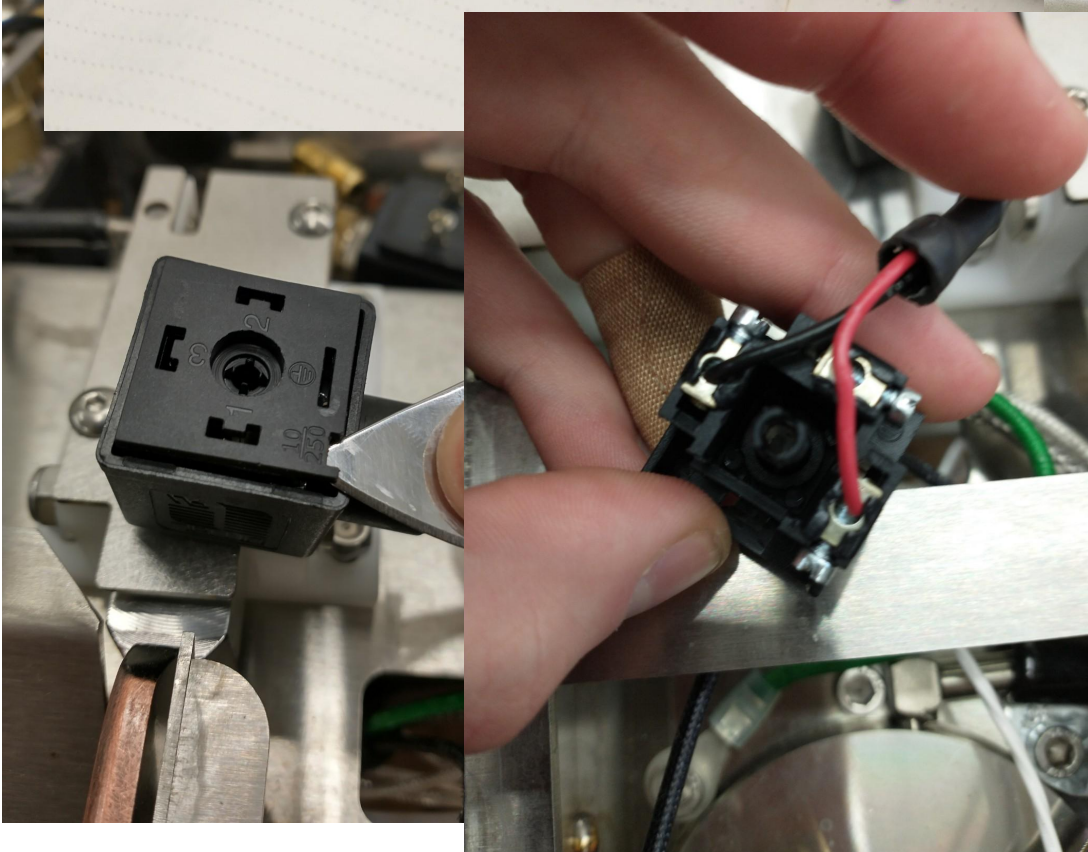
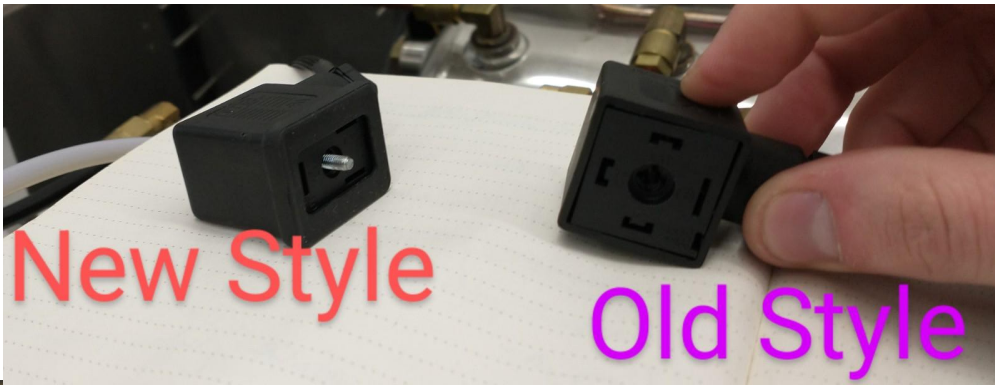
1. UI Board Swap: Turn off the machine. Unplug all connections and pull out the wires from the left and right side of the UI board case.
 - a. Undo the 4 silver screws on each corner and gently pull out the old board.
 - b. Using the same 4 silver screws, pre screw them into the new boards that were included in the package and then finish screwing them into the case and reconnect all connections except for the old flow meters. (You can leave the old flow meter wiring harness in the machine and just ziptie aside)
 - c. Be sure all functions are properly connected when the machines is turn back on after the rest of the update



2. Valve Change/ Solenoid Boot change

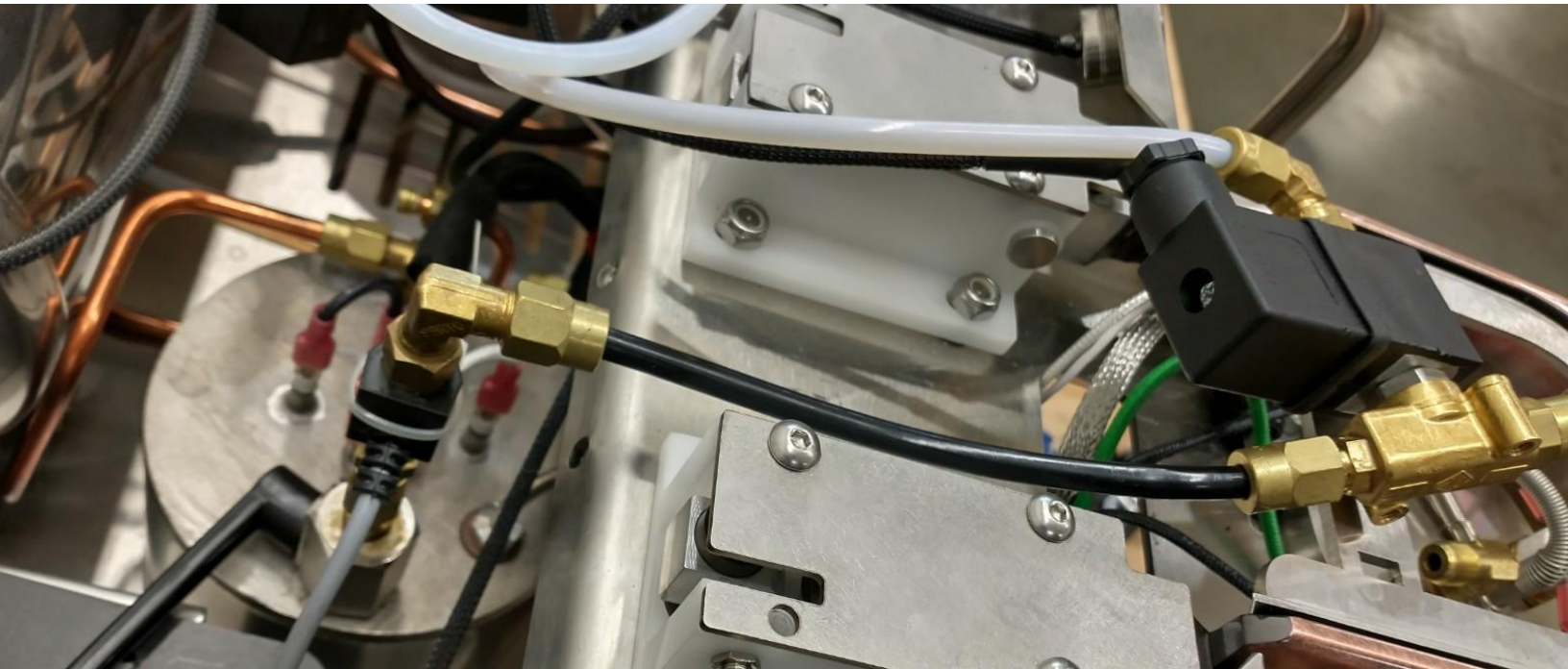
- a. Turn off the water at the brew boiler connection and disconnect the Solenoid boot and set aside for now. Disconnect the water line connection at the elbow on the grouphead and then at the brass fitting on the brew boiler shut off, you will leave this brass fitting in the shut off valve, also has the jet there, clean if necessary. Remove the old valve and old teflon connections.
- b. Changing the boot is as simple as installing the *new style (Same as our UC models) Make sure when installing a new boot the wires are not damaged and

redo connections now if they are in poor shape. (**See Photo example below of poor wire connection after use/ trim off bad and re strip the wire to expose fresh wire)



3. New Flow Meters and Valve installation:

- a. Simply tighten down new connections as photo shows
- b. Flow meter connects directly to the brew boiler shut off, then using the extra black teflon tubing you can cut to size and use the extras teflon tube fittings to get the size right and connect it to the grouphead elbow fitting.
- c. Connect the New Style boot and tighten



- d. Plug in the Flow meter to the same port on the UI Board using the attached jumper to it.
- e. Power on the machine and double check your handy work and confirm flow meters pulses are counting for both preinfusion and brew and all buttons activate the correct function. You will have to reprogram any automatic settings for customers.

