MAVAM ESPRESSO, LLC

TECHNICAL DOCUMENT

4016 Steam / Hot water / Autofill Valves Replacements



<u>Steam & Hot Water Solenoid Valve Replacement:</u>

Tools needed: 3mm Hex key (*Mach 2) or 4mm Hex key (*UC), Phillips Screwdriver, 10mm, 12mm, 14mm (*Mach 2), Adjustable wrench (*UC)

We use Ruby Seal solenoid valves for our Steam, Hot Water and Autofill valves. These are low voltage at 24v DC and all share the same bodies.

1. Place the machine into fill mode, this stops the machine from heating but otherwise still functions. Run both Steam Wands and Hot Water multiple times to clear the steam

Warning: Parts may still be hot! Proceed with caution.

boiler and the lines.

2. *UC: Disconnect both the brass 6mm nut from the wands side and stainless steel hose (Adjustable wrench) connection only on the valve. Now, undo the two 10mm nuts that hold the valve's bracket on the frame.



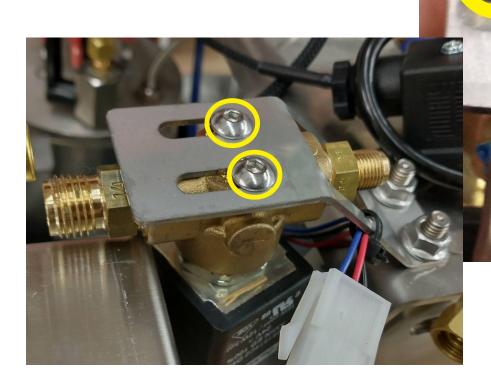
*Mach 2: First, you will need to remove the top cover and cup tray and then disconnect the brass 6mm nut from the wand's side and brass 8mm nut, 14mm wrench, from the copper tubing connection only on the valve.

3. Unscrew the electrical boot and keep screw & rubber gasket *Note: Set aside for valve install. Be gentle with the boot and connecting wires, they are fragile.

4. Remove the 2 screws connecting the solenoid valve to the mounting bracket.

*UC: You will need a 4mm hex key

*Mach 2: You will need a 3mm hex key



- 5. Reverse the process with new Solenoid Valve with preassembled fittings specific to your model, when ordered.
- 6. Tighten all connections and change the machine to ON mode, this mode will apply heat to the machine. *Check for Leaks and place in fill mode and redo connection, if necessary.

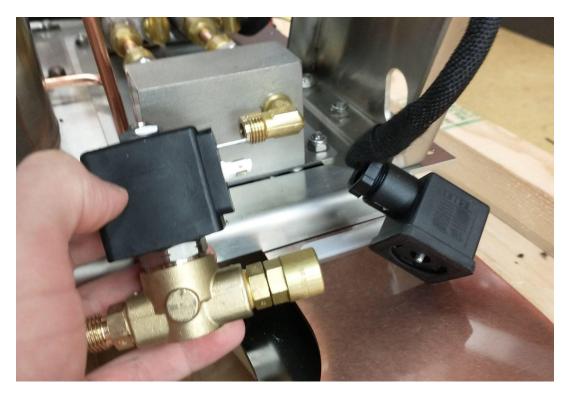
Autofill Valve Replacement: Warning: Parts may be hot! High voltage area. Power off and Unplug machine before servicing.

Tools Needed: 3mm Hex key, 2.5mm Hex key, Phillips Screwdriver, 12mm, 14mm

- Turn the shut off valve in the connection from the steam boiler and autofill valve.
- 2. Shut off incoming water to the machine (Unplug any pumps if they try to run during this, remember to match the colors to the s.s. hoses when reconnecting)



3. Unscrew the autofill boot and save the rubber gasket & screw for reinstalling. *Note: Handle with care these wires are fragile and cannot be near any water that may leak out. If water does leak out, clean up with a towel before continuing.



- 4. Disconnect brass fittings from both sides of the autofill (12mm or 14mm depending on model)
- 5. To Install new Autofill valve, place new valve in with preassembled fittings specific to your model and reverse the steps. *Check for Leaks once the steps are completed, while the machine is on and running at full temperature.