

MAVAM ESPRESSO, LLC

TECHNICAL DOCUMENT

4014 Leak on a Group Head that takes out Cartridge Heater or SSR

Warning! includes high voltage, turn the machine off before you work on any machine and unplug it.

All Machines built before 2018 or any machine with non metal brew valve exhaust need to be updated. Please read the [Brew Valve Update document](#) on the technical page and contact parts@mavamespresso.com to arrange an order for the update kit for your machine.

If you have the brass exhaust fittings and have found a leak on top of the group there are a few things to check. In some cases a bad leak on top of the group may short the cartridge heater and in some rare cases may also take out the SSR.

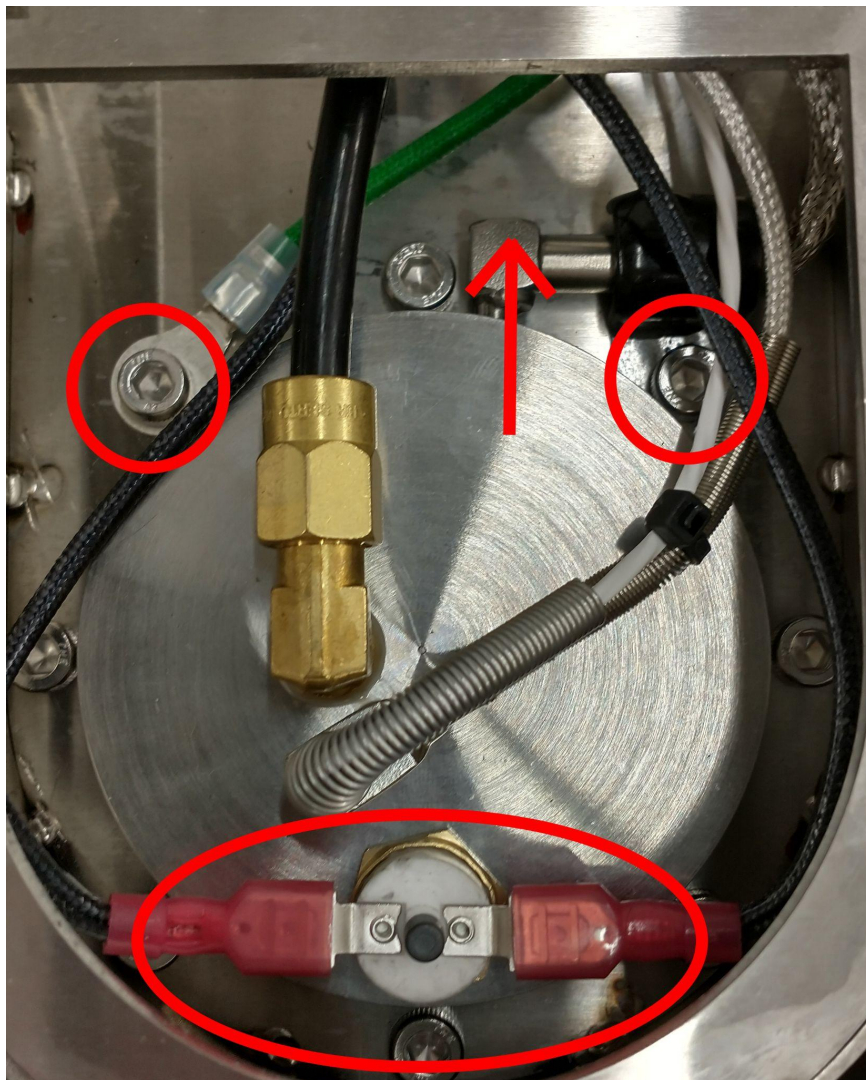


- Remove the BU front panel and shut off the specific group. Then, run pre-infusion, no pumps should activate, and then remove the brew valve, tighten or replace the brew valve exhaust fitting as required. Clean up the top of the group so you can easily spot a leak in the future.

If the heater is not heating or overheating, once the water leak is fixed and cleaned click the high limit switch. If the cartridge heater is still not heating or very visible water damage now you can replace the heater.

To remove the heater:

1. Make sure you have removed the brew valve. Unplug the connection in the group upright
2. Unplug the power connections from the high limit switch. Unscrew the bolts holding the ground wire and the bolt holding down the heater clamp.
3. The heater slides back and out. To install the new one the procedure is the same in reverse.



If you have replaced the heater and the group is still overheating you may need to replace the 24v SSR. [The relay layouts for the Under Counter machines are here.](#)

- a. Make sure the machine is turned off, transfer connections to the new corresponding SSR in the layout. Unscrew old, there will be thermal paste, apply more if needed. Reuse the same screws and tighten it securely.
- b. Now turn the machine back on to check that the group is now heating properly.



The Mach Two has a relay board per group and this will need to be replaced for the appropriate group. Group 1 starts at the top to the lowest depending on how many groups.

- a. **Turn off and unplug the machine.**
- b. Undo the wired connections and apply them exactly the same on the new board. You may now unscrew the nuts holding the old board on the bracket, 4 per relay board, and replace with new and wired relay board.
- c. Now turn the machine back on and test that the group is now heating properly now.

