

OCTOBER 2023

TXA heater not heating correctly

TOOLS NEEDED

- *Hand tools and Multimeter*

PROCEDURE

If your heater is not heating correctly please check the following:

- STEP 1** Check for any burnt components/wires and be sure all the connections are secure. If any components are burnt, please go to NOTE 1.
- STEP 2** Check AC line voltage to be sure it is correct, (L1 to L2, L2 to L3 and L1 to L3). Then check L1, 2 and 3 to ground.
- STEP 3** Be sure your controller is configured correctly according to the O&M manual and the settings on the sticker inside your heater.
- STEP 4** If applicable, please check the LED on the low water cut off board in your heater. The green LED should be on indicating there is water in the heat chambers.
- STEP 5** Be sure you have water flowing and go into diagnostic mode by pressing the up and down arrows together for 1 second and let go. The display will start scrolling through different numbers where F=flow rate gpm, i=inlet temperature, o=outlet temperature. If the F is 000 then the flow meter is not recognizing flow and it will not heat. Please remove the flow meter and clean or replace.

NOTE 1

It is important to resolve the root cause of the problem before replacing components or it could cause a failure again. Before replacing any part, please confirm the following:

1. Ohm out each heating element.
(See Tech Tip on how to check the resistance of a heating element)
2. Ohm out each Triac.
(See Tech tip on how to test a Triac)

NOTE 2

If any triacs fail, please replace all the triacs in the heater as a set.

4. Ohm out each fuse to make sure it is good
5. Replace any burnt or bad components and wires.
6. Check for any loose connections, wire crimps or shorted wires.

NOTE 3

If you do not replace all the failed components at the same time, it could result in the failure of components again.

NOTE 4

Be sure to fill the heater and flush water through for a few minutes without power to ensure all the air is out and it won't dry fire the elements.

NOTE 5

If the control board has been replaced, it needs to be programed for the correct kW and other settings. Do this with power on and the water shut off according to the O&M Manual.