

Tools that must be taken to perform Hyrdatherm repairs:

Multimeter with the capability to read ohms. 5/32" d Hex Wrench (Allen Wrench) Ratchet or combo wrench with 7/16" socket 1/4" nut driver Knife, exacto knife, or equivalent 1 5/8 th Ratchet or combo wrench 7/16 th Ratchet or combo wrench 7/8 th Ratchet or combo wrench Phillips head screw driver Recommended nylon putty knife. Torque Wrench

When a unit is not heating: Check the high limit switch and heating element:

***Turn off and unplug the unit before attempting any work.

***The highlimit switch is the 2" brass nut that is either in the bottom of the tank or on the back wall depending on the manufacturer date.

To test a High Limit Switch and heating element:

Models with the highlimit switch in the bottom of the tank:

Next you will need to remove the four screws on the front of the control panel to access wires (this is for units where the high limit switch is in the bottom of the tank). For models with the high limit switch in the bottom you can look for plugs R2 and P2 which will be connected.

You will need to test across P2 (test the pins inside the connector, if you are unsure which ones look for the two with wires going into them).

To test the heating element simply look for connectors P8 and R8. Check across with an ohm meter on R8 (test the pins inside the connector, if you are unsure which ones look for the two with wires going into them).

Models with the highlimit switch in the back wall of the tank:

For models with the high limit switch in the back of the tank, you will need to reach around the back of the control panel and unplug the wire from the control box. On this, you will find two more connectors, one goes to the highlimit switch and the other goes to the heating element.

The long cord runs to the highlimit switch and the shorter cord runs to the heating element.

To test, you will need an Ohm meter, test the connectors (pins inside the connectors), on the side that runs to the heating element and measure across. For the hi-limit you will need to unplug the connector and measure peak to peak (the side of both connectors that looks like a point).

***There are in-between models that will have the old control box and the high limit switch in the bottom of the tank. The wires will be the setup the same as models with the highlimit switch in the back wall.

High Limit Thermo sensor should measure 9-10K ohms (room temp)

High limit switch should measure 0 or near zero.

Heating element should be around 14 ohms (12.5-15.5, is ok).

If unit is still not repaired, or is not functioning properly, please double check all connections to ensure they have a good connection and no pins were broken.

Also, check to ensure grounds are connected correctly.

*****FOR REPLACEMENT OF THE HIGHLIMIT SWITCH, PLEASE FOLLOW THE INSTRUCTIONS IN THE MANUAL! THE PLASTIC HOUSING SHOULD NOT BE DISASSEMBLED FOR ANY REASON.**

***** THE HEATING ELEMENT SHOULD BE TOURQUED TO 20 FT LBS.**