

# AURA CF SERIES PCB REPLACEMENT

## WARNINGS

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- **WARNING! ELECTRICAL APPLIANCES CAN CAUSE FIRE, ELECTRIC SHOCK OR DEATH! THIS PROCEDURE WILL EXPOSE THE TECHNICIAN TO LIVE WIRES IF THE HEATER IS NOT PROPERLY REMOVED FROM THE POWER SUPPLY**
- **ENSURE HEATER IS REMOVED FROM POWER SUPPLY AND IS NOT LIVE BEFORE OPENING THE HEATER JUNCTION BOX**
- **PCB REPLACEMENT MUST ONLY BE PERFORMED BY AN ELECTRICIAN**

## RESPONSIBILITIES

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- **This procedure must be performed by an electrician. Inforesight Consumer Products does not take responsibility for damages caused by any field repairs to Aura Products.**
- **It is the sole responsibility of the technician to ensure that the wiring connections are made safely and are in accordance with NEC or local codes having jurisdiction**

## REQUIRED TOOLS

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- **# 2 Philips Screw Driver**
- **Scissors**
- **Wire Stripper**
- **Needle nose pliers**
- **Side cutter pliers**



## PROCEDURE



**BEFORE OPENING THE JUNCTION BOX ENSURE THAT THE HEATER IS DISCONNECTED FROM THE POWER SUPPLY! FAILURE TO DISCONNECT THE POWER SUPPLY COULD RESULT IN ELECTRIC SHOCK OR DEATH!**

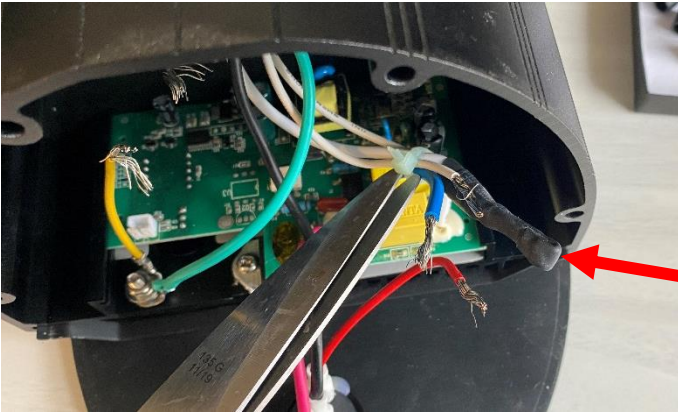
Remove the 4 screws enclosing the junction box using a screwdriver. Set aside the standoff tubes and screws, they will be needed to re-assemble the heater after the PCB has been replaced.



Carefully pull the heater junction box apart.

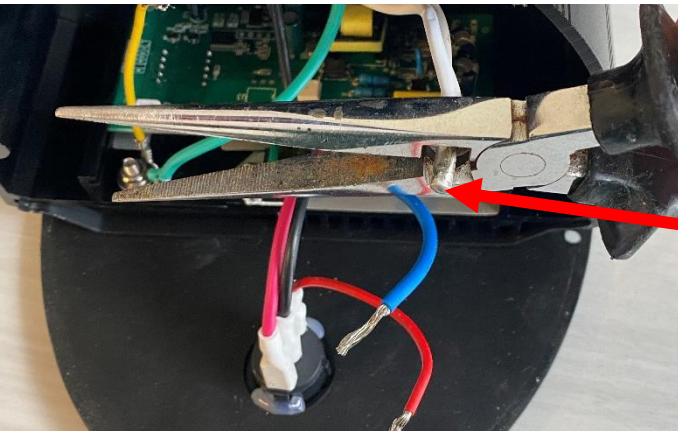


Using the pliers, force open the terminal crimp and remove the wires from the terminal. Remove both terminal crimps to expose all lead wires.



3. On the remaining wires, carefully cut the zip tie, carefully remove the heat shrink to expose a soldered connection

Heat shrink covers the remaining wires

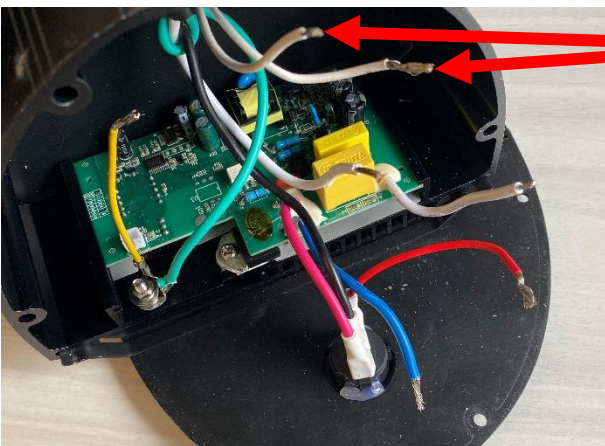


4. Carefully cut the wire solder connection. Remove just the solder to maintain lead wire length

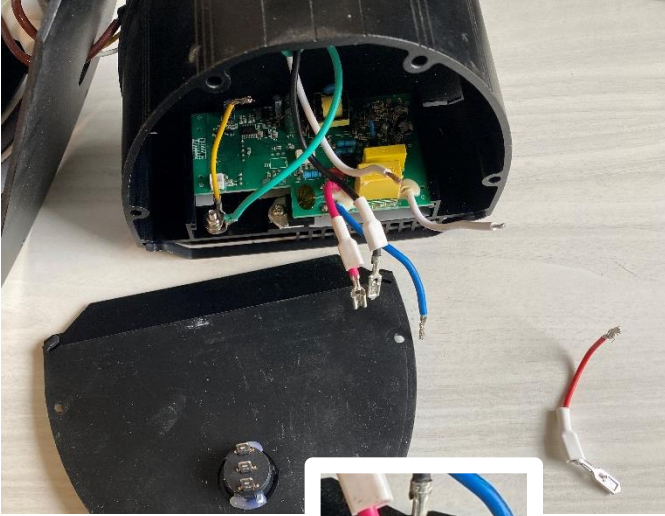
Solder holding wires together



5. Strip the ends of the wires that were previously soldered. The white lead wire on the PCB board does not need to be stripped, as the PCB will be discarded



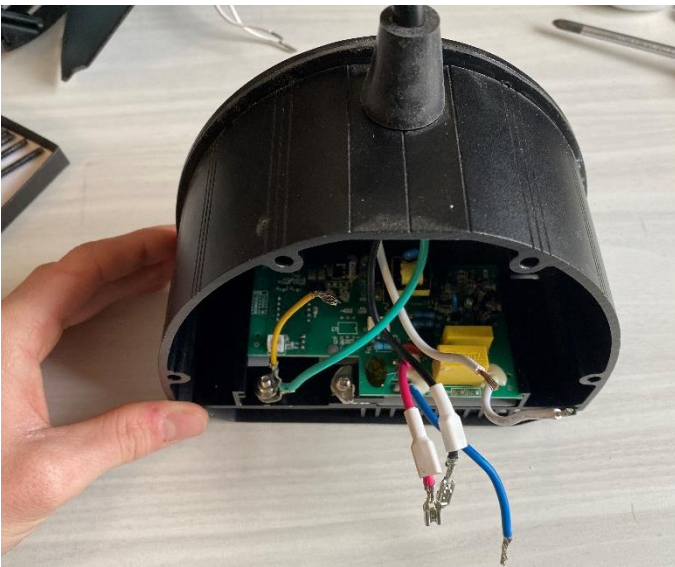
Wires stripped



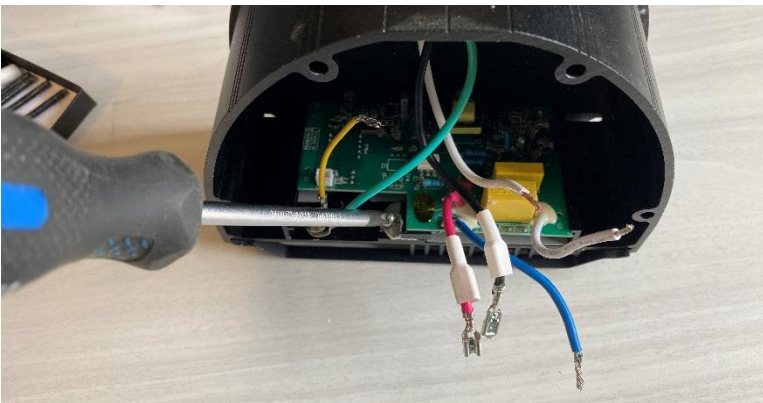
Remove the wires from the toggle switch. To remove the wires, slide the quick connect covers to expose the quick connect. To release the quick connect apply pressure to the small tab shown. Do not discard the loose red wire! It will be needed to reconnect the switch to the PCB board



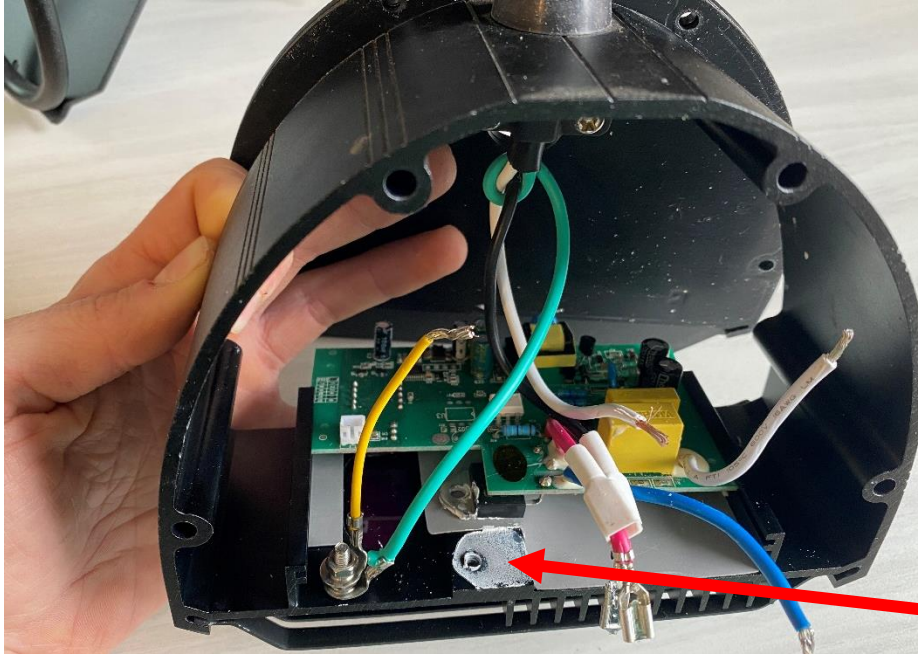
Quick connect tab



Remove the heater junction box from the rest of the heater



Remove the screw and washer locking the PCB board in place. This will disconnect the PCB board from the aluminum base plate

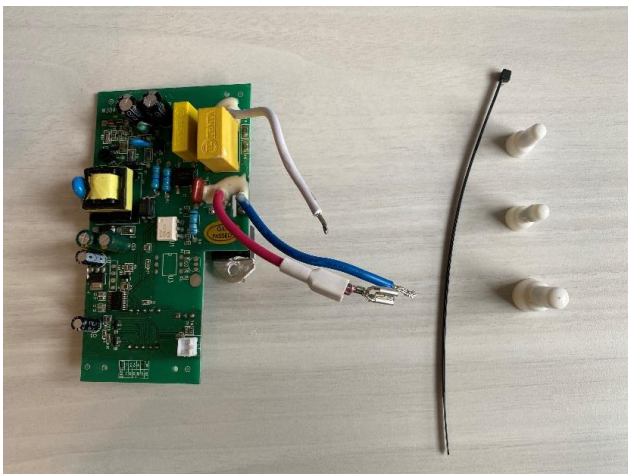


Gently push the silicone gasket and aluminum plate on the back side of the electrical enclosure. Slide the PCB board out the back of the enclosure. Do not remove or wipe away the thermal paste underneath the PCB connection point. The paste ensures proper heat transfer between the PCB board and the enclosure.

Thermal paste residue - do not remove!

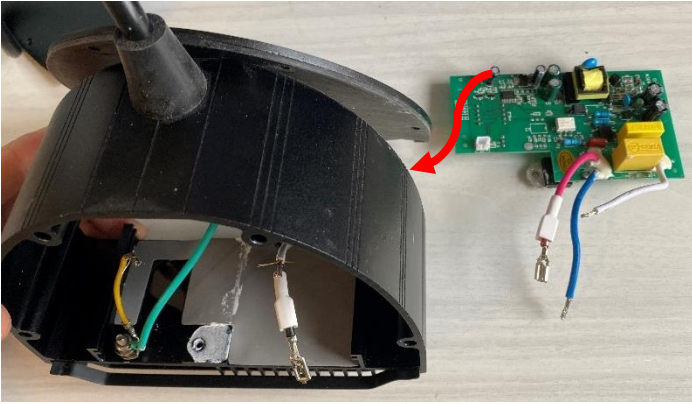


After removing the PCB board the technician should be left with the components shown.

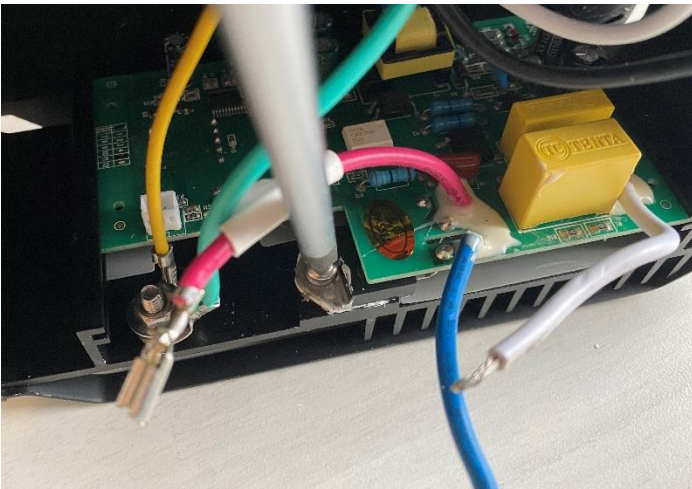


Remove the new components from the package containing the replacement PCB board. The package should include:

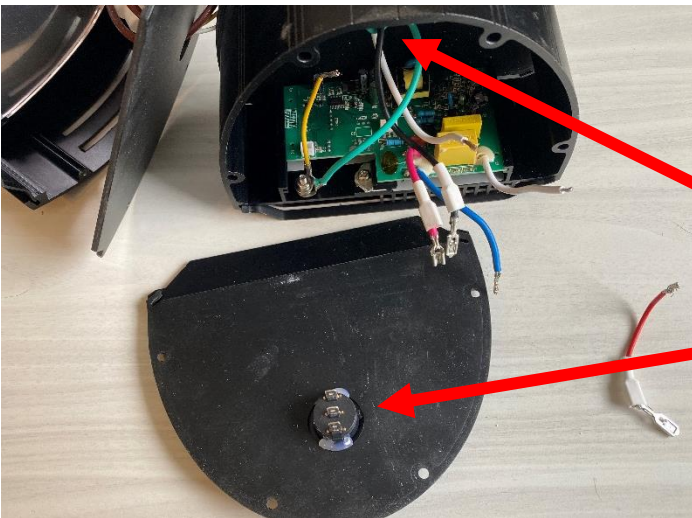
- 2X large wire terminals
- 1X small wire terminal
- 1X Nylon zip tie
- 1X PCB board



Slide the new PCB board in from the back of the enclosure

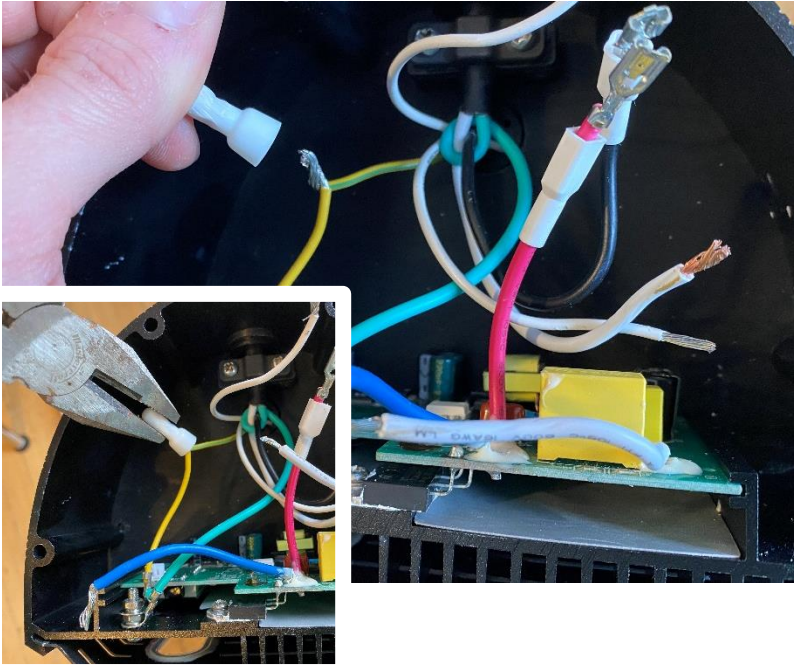


Using the small Philips screw and the screw driver connect the PCB to the aluminum base plate

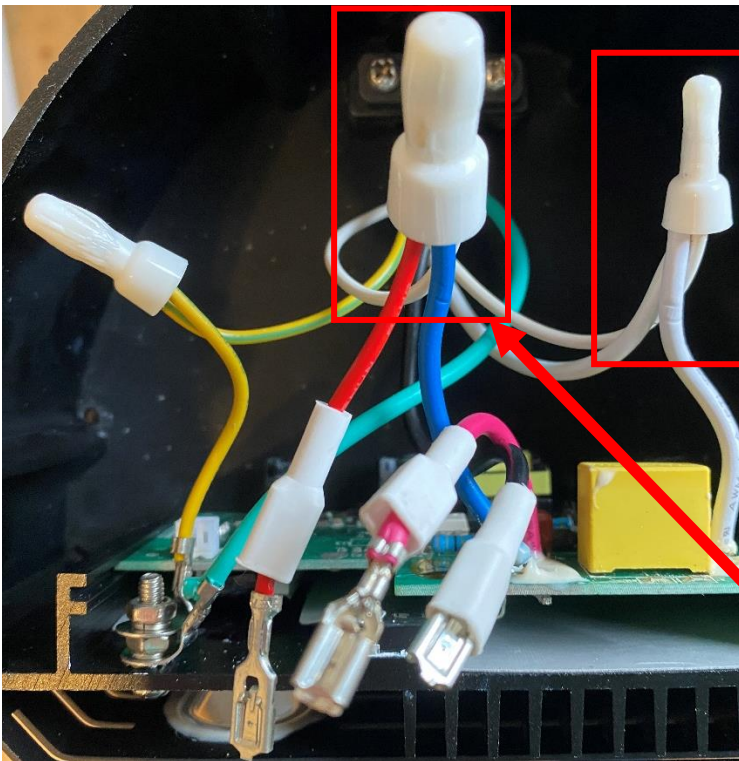


Re-attach the electrical enclosure by pulling the emitter lead wires and the ground wire back through the opening on the back of the enclosure.

The electrical enclosure front cover and back cover are identical parts, the opening on the back cover is located in the same position as the switch on the front cover



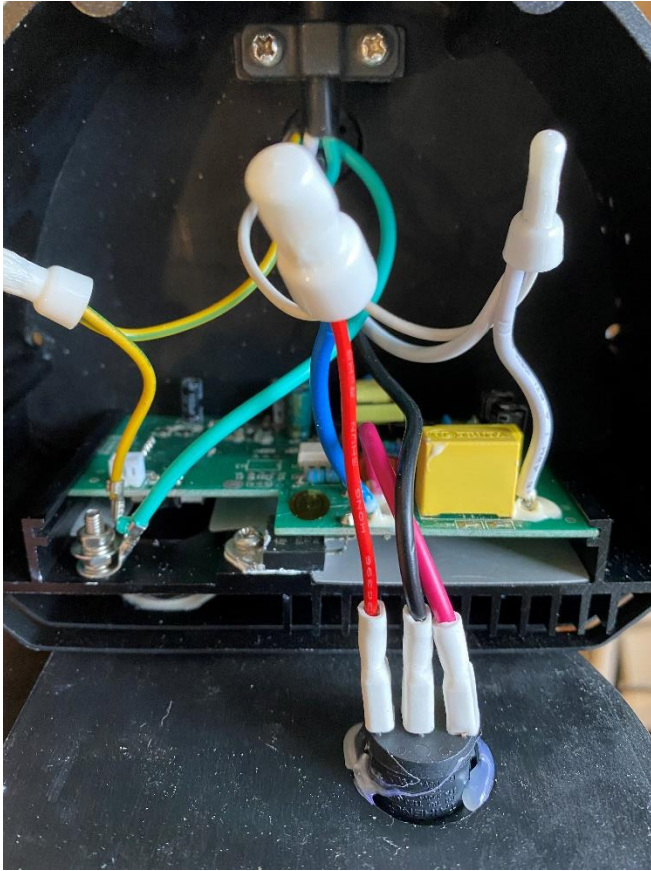
Twist the ground wires together ensuring a solid connection, insert the wires into the small wire terminal and crimp using the side cutter pliers or the wire stripper.



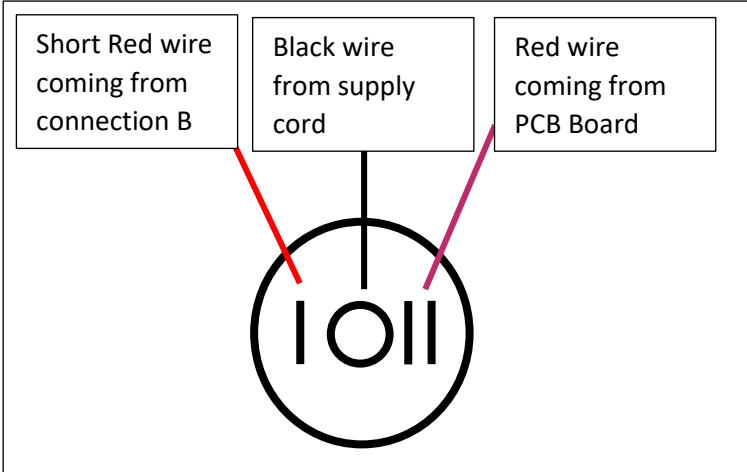
Connect the remaining wires using the same technique as the previous step

Connection A: must include one lead wire coming from the element, the loose line from the supply cable and the white line going into the PCB.

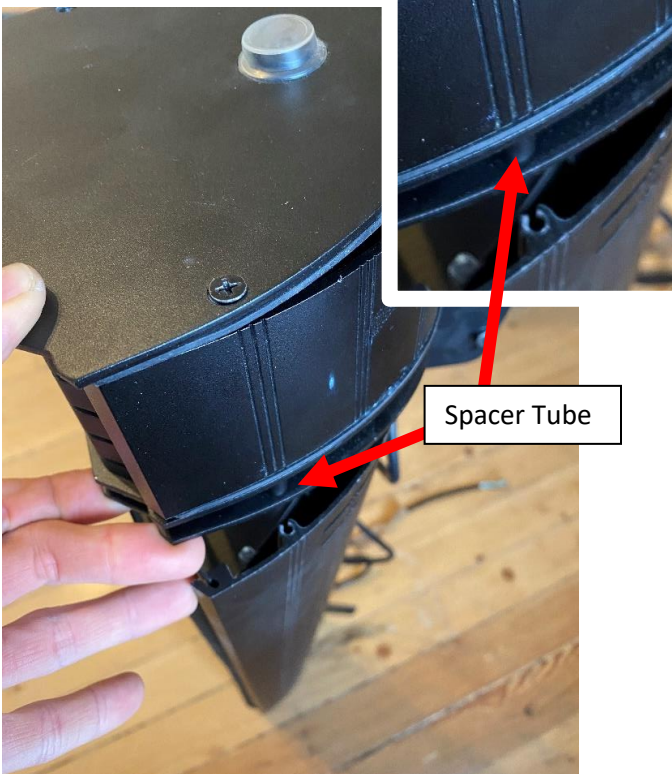
Connection B: must include one lead wire coming from the element, the blue line connected to the PCB and the red wire including the quick connect.



Reconnect the quick connects to the switch.  
Connect wires as shown in diagrams



Stand the heater on its end, ensure that the silicone cord grommet is firmly inserted into the electrical enclosure. Make sure both gaskets are still in place. Using the long Philips screws, reconnect the electrical enclosure to the heater body. Ensure the standoff tubes are in place before screwing the heater back together.



Test the heater for connectivity. Supply power to the heater, the PCB screen should show the power level. LO indicates power is supplied but the element is off. Flip the toggle switch to (I) to engage the remote control. Using the remote control, cycle heat settings 1 through 6. Turn the toggle switch back to (O) to turn the heater off. Turn the toggle switch to (II) and the heater should go straight to full heat output. If the heater operates as described, the PCB has been successfully replaced.

If the heater does not perform as described above, remove the heater from power and double check the connections in the electrical enclosure.



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