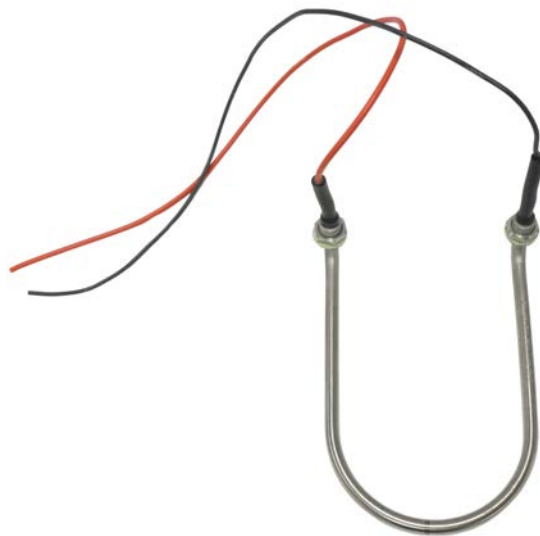

Repair Instructions - Water Bath Heater Replacement

Replace the heating element in a water bath



To suit: TWB Uncirculated Baths from 2019 onwards

Approvals		
Written By:	Reviewed By:	Approved By:
Darren Assey	Michael Devine-Jones	Duncan Smeaton

Safety Reminder

All work should be undertaken by a licenced electrician

These instructions do not purport to address all potential safety issues, if any, associated with the product's use. It is the responsibility of the user of these instructions to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.

Before attempting any of the following, perform the actions listed below:

- Turn OFF power to the machine.
- Unplug the machine.

Summary

These instructions how to remove the water bath heater element and replace it with a new one

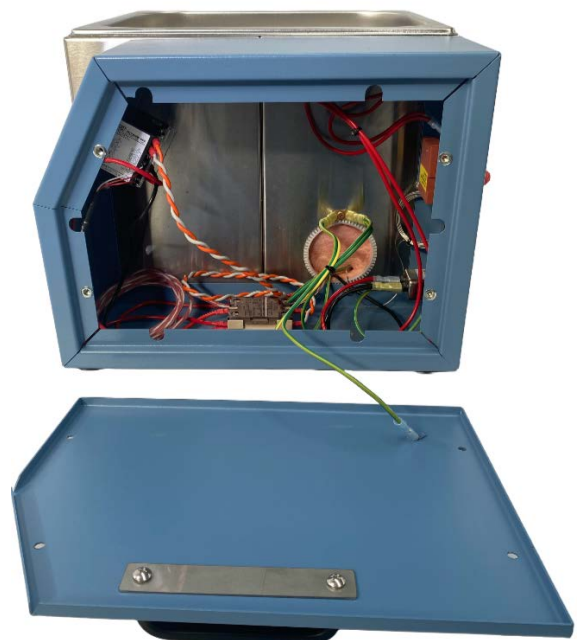
Tools Required	
Screw Driver	Small Flat Head
Screw Driver	Small Philip's Head
Spanner	19mm Open Ended
Spanner	18mm Open Ended
Spanner	14mm Open Ended

Kit Contents		
Item	Description	Quantity
22215 or 22217	Water Bath Heater Element	1
	Silicone Sealent	1 Tube

Section 1: Preparation



Turn off the water bath. Unplug the power cord from the water bath and the power point. Allow the bath to cool, empty the water and ensure it is dry.

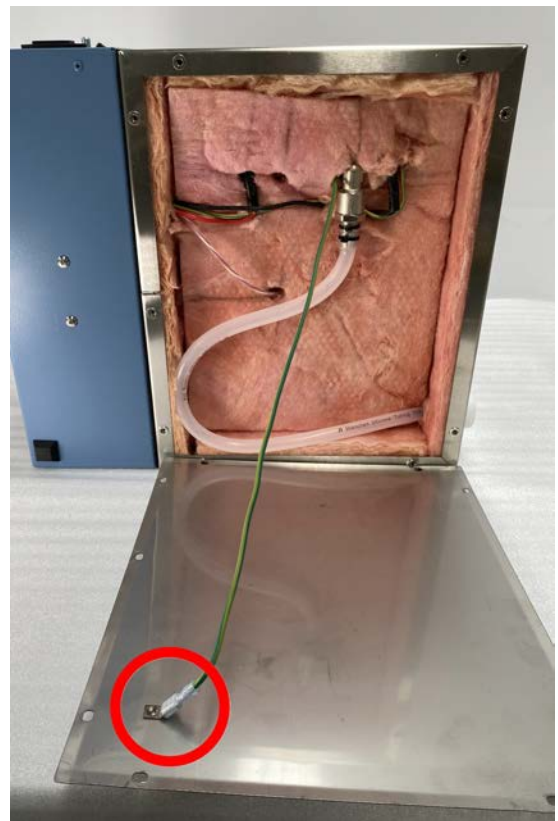


Remove the screws on the blue side of the electric box.

Section 1: Preparation

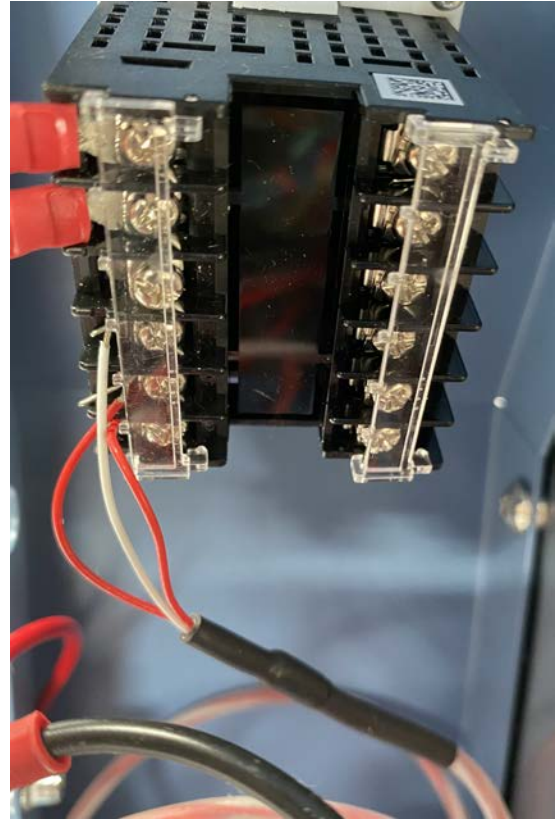
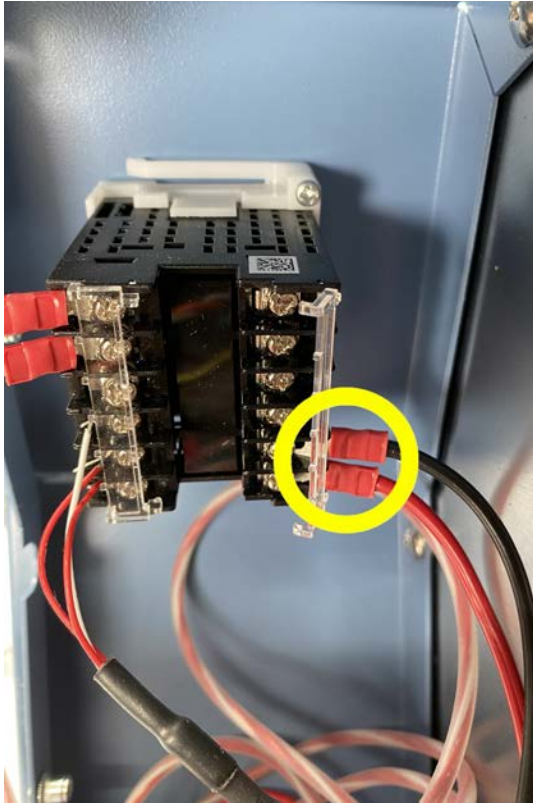


Remove the side panel and disconnect the earth wire

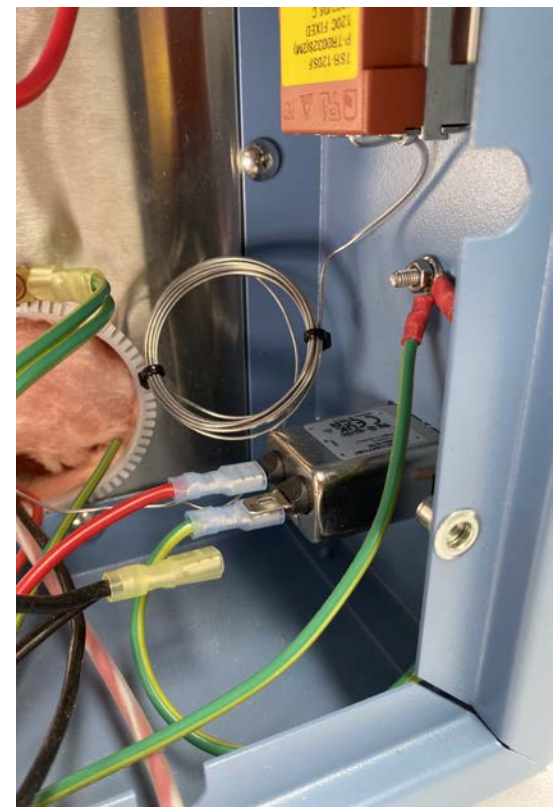


Turn the water bath on its side, unscrew the bottom panel, and disconnect the earth lead to remove it.

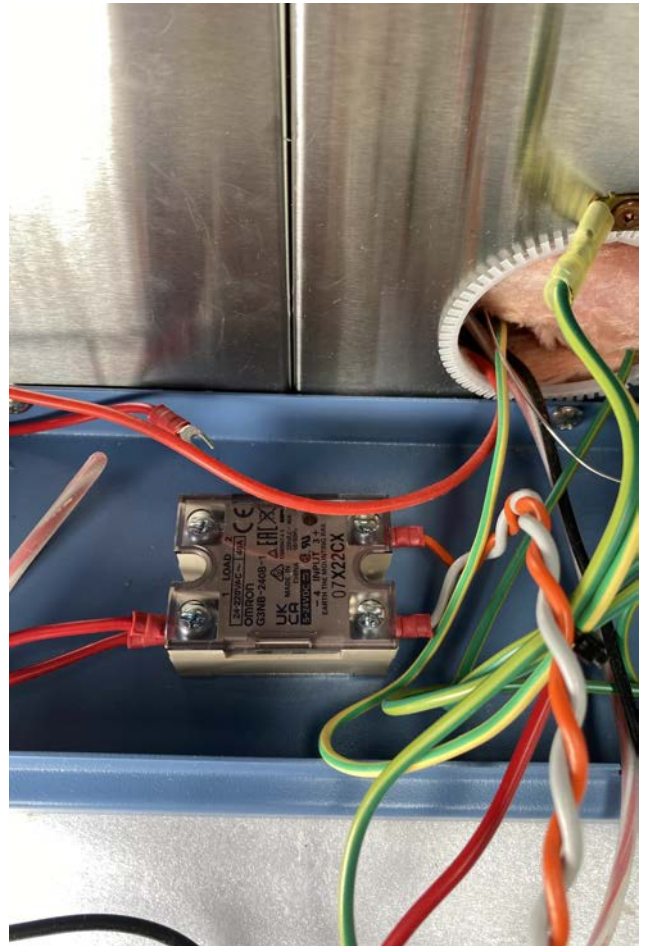
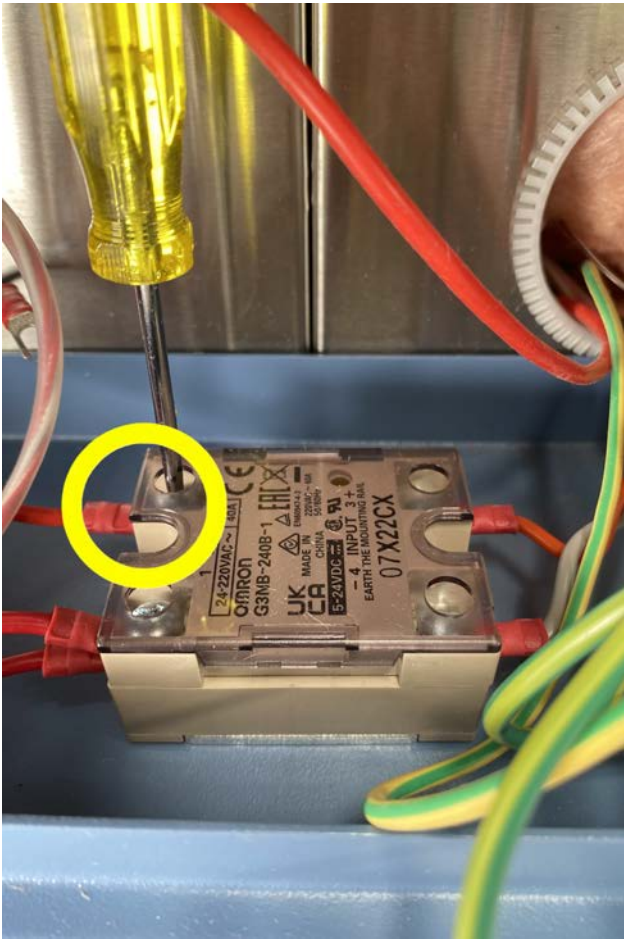
Section 2: Heating Element Removal



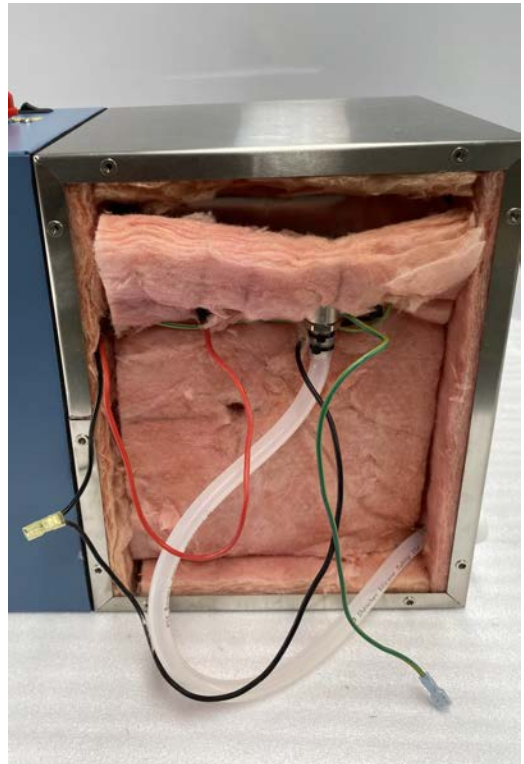
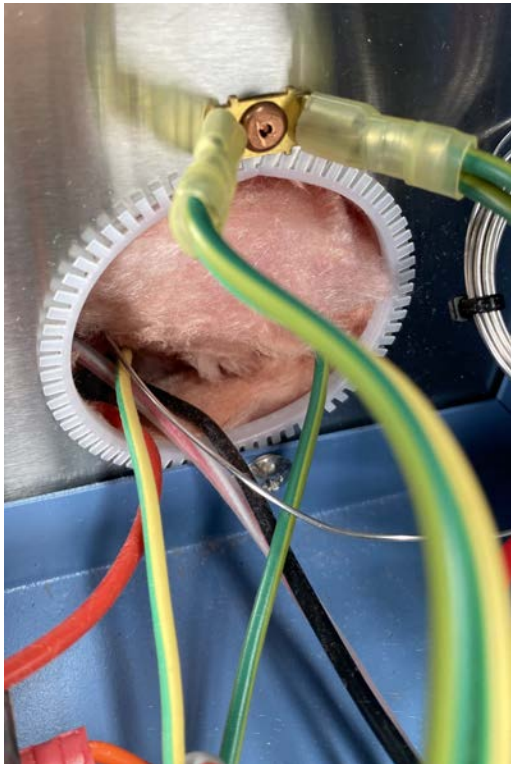
Remove the fork connectors from the controller as shown above.



Remove the spade connector from the noise filter on the back of the power plug as shown above.



Remove the fork connector from the relay as shown above.



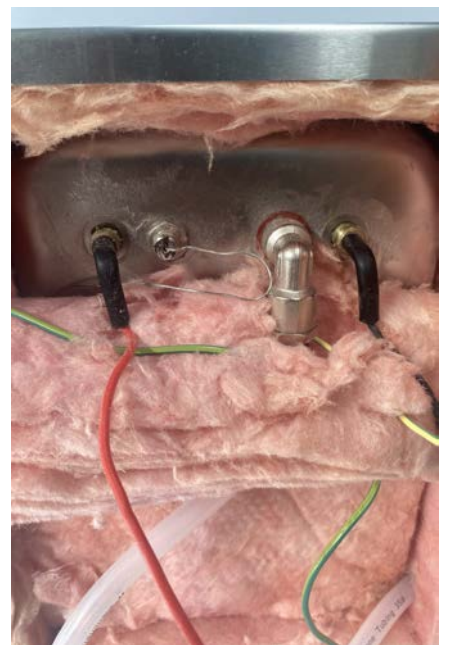
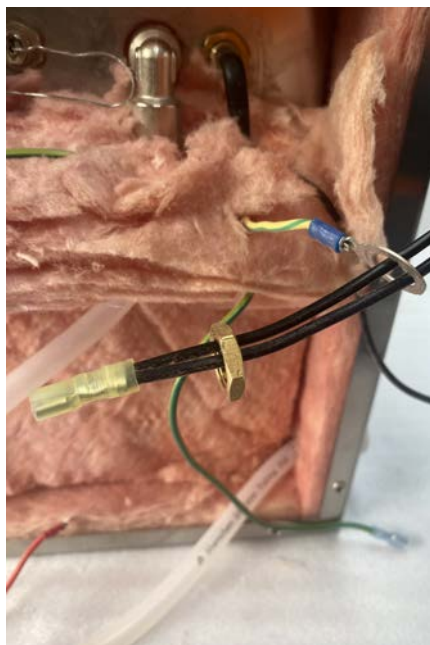
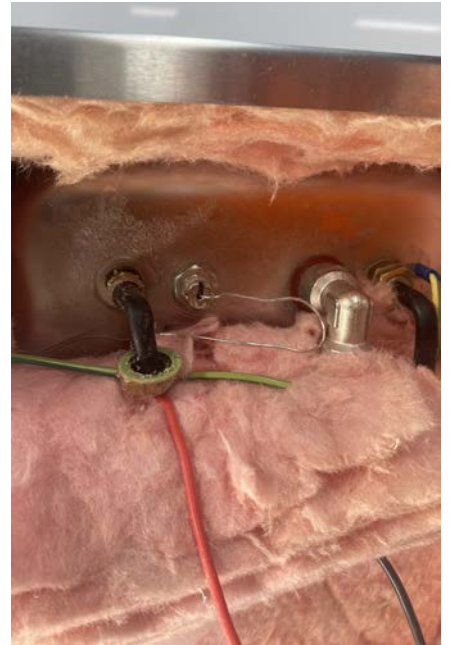
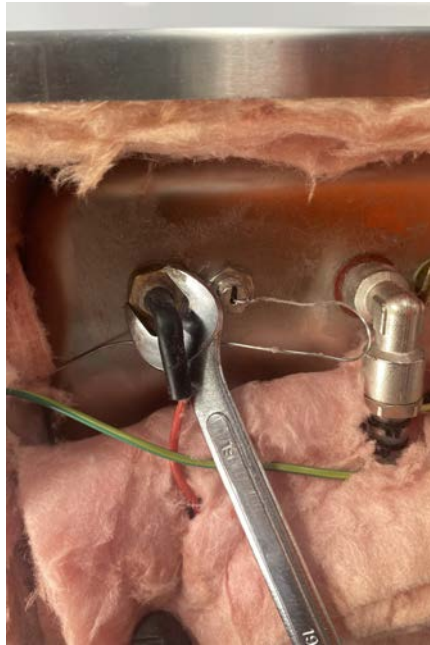
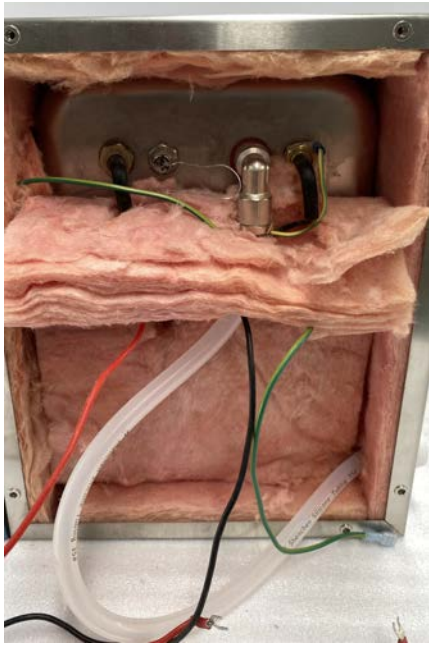
Slide the wires you have disconnected through the port hole in the side of the electrical box.



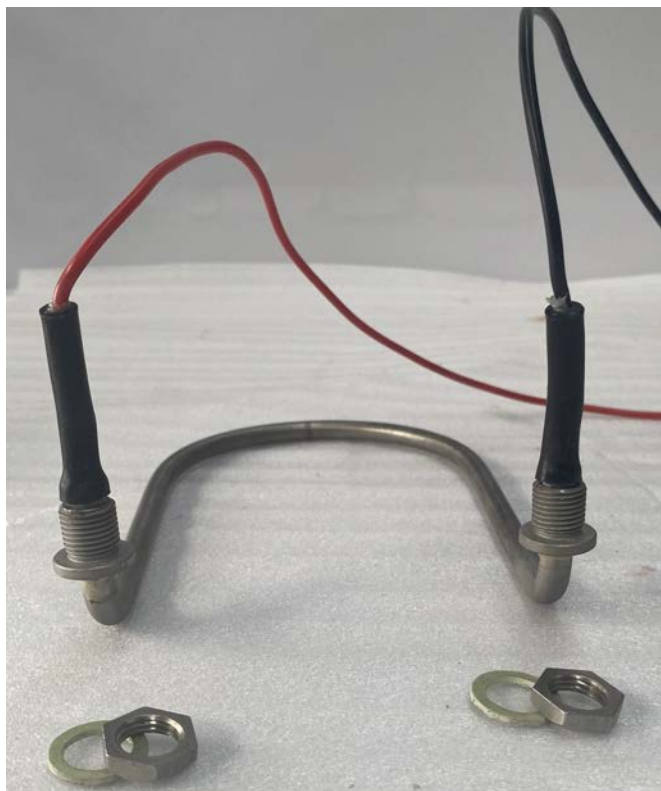
Twist off the retaining clips to remove the thermostat bulb from the heating element, taking care not to damage it.

Pull back the insulation to expose the retaining nuts on the back of the heating element. Undo the nuts using a 19mm spanner. Once loose, slide the nut and the washer off the end of the wires. You can now remove the element by pushing the element from the underside and angling it so you can slide it through the holes on the underside of the bath.

Note: It is recommended that disposable gloves be used when handling insulation.



Section 3: Heating element installation



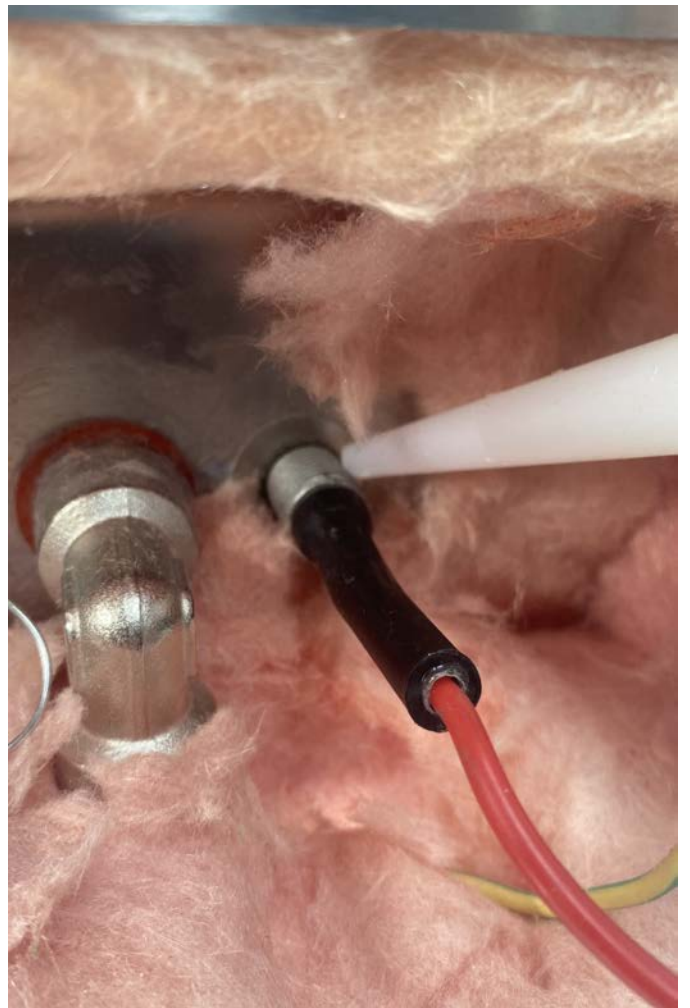
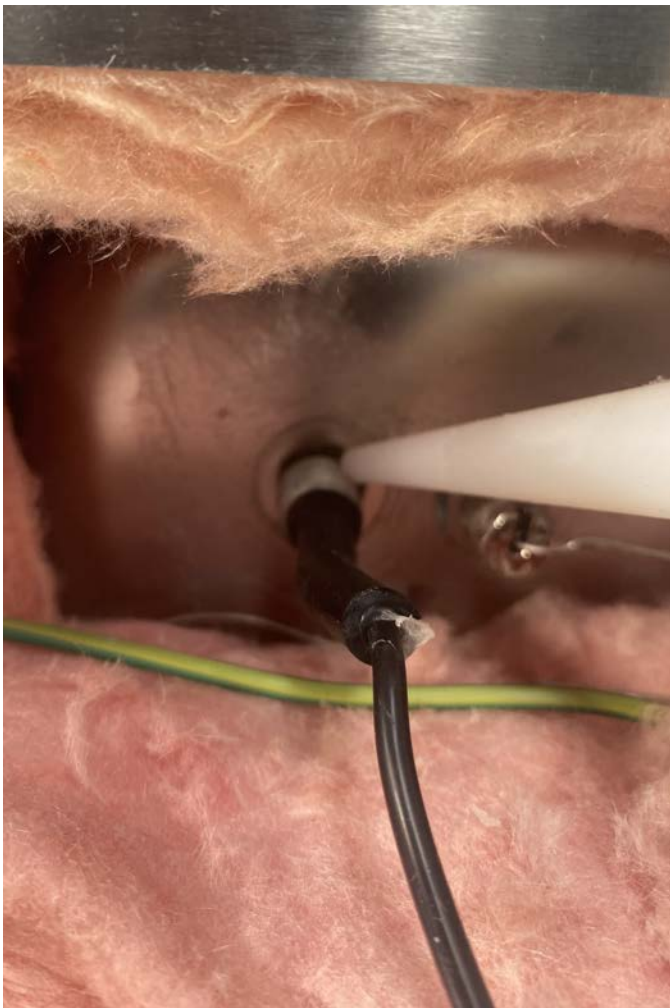
Unscrew the nuts from the supplied element.



Apply a bead of the silicon to the flange of the element located under the threads.

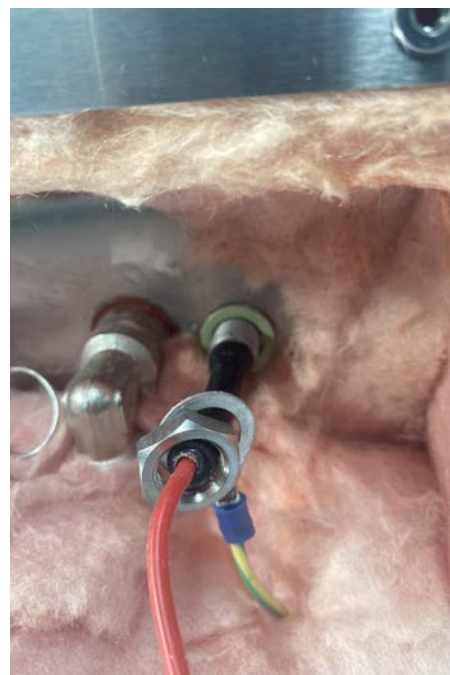
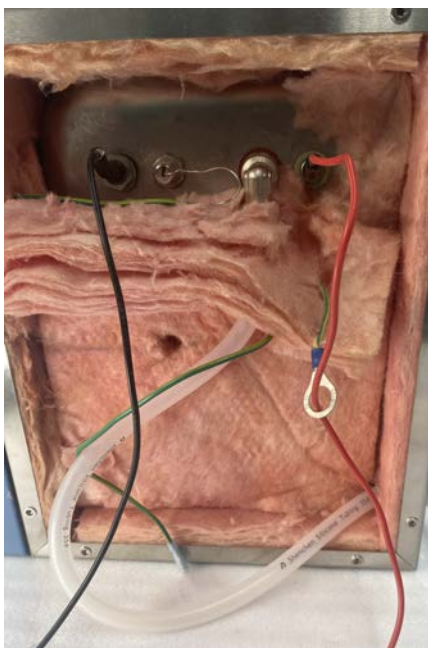
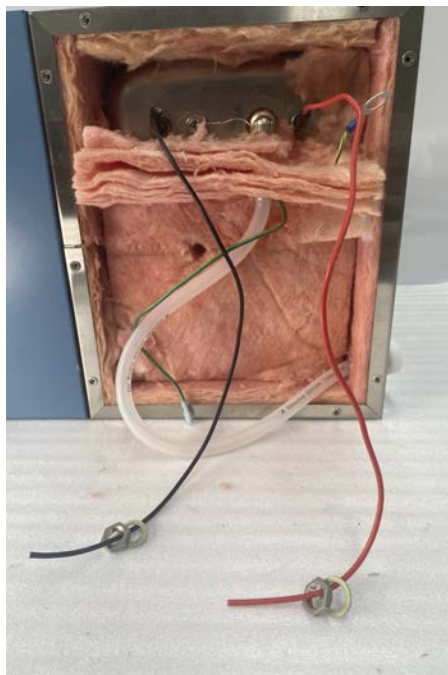


Install the new heating element into the bath from the inside, making sure the wires are pushed through the mounting holes. Don't forget to reattached the clips and the reset thermostat bulb carefully.

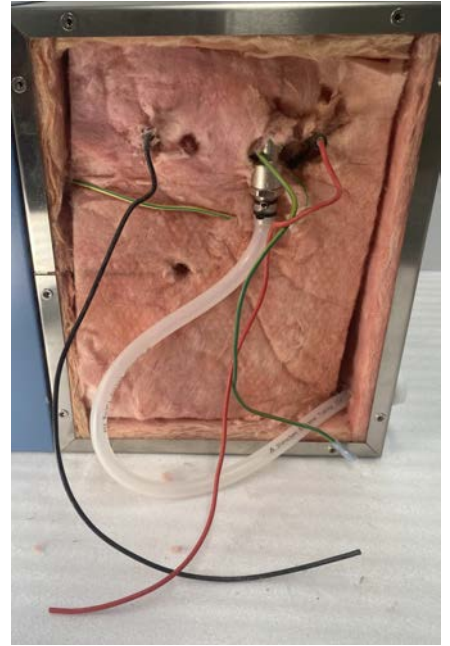
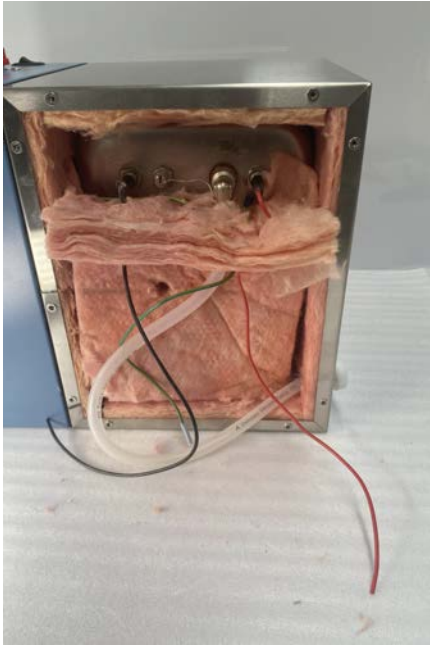


Apply bead of sealant to each of the threads of the heating element. Screw on the nut and tighten.

Thread a fibre washer and retaining nut onto the wires of the heating element and tighten firmly using a 19mm spanner.



Thread the earth lead onto any other side of the heating element and secure it using one of retaining nuts that are used on the heating element. Tighten firmly using a 19mm spanner.

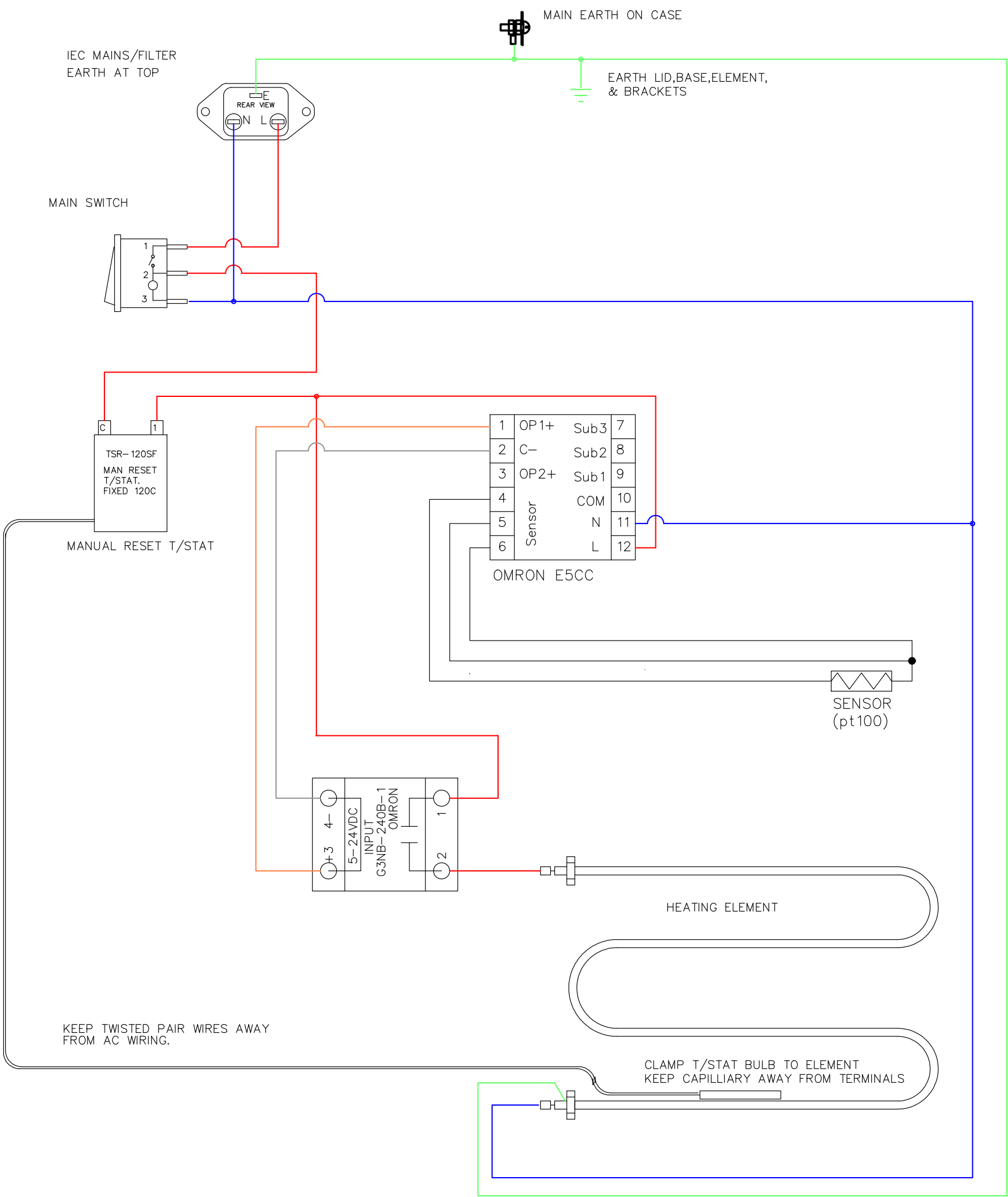


Slide the active, neutral and earth wires of the heating element through the insulation and put the insulation back in place.

Using the wiring diagram on the next page as a guide, reconnect the the wires of the heating element back to the back to the relay and the reset the thermostat.

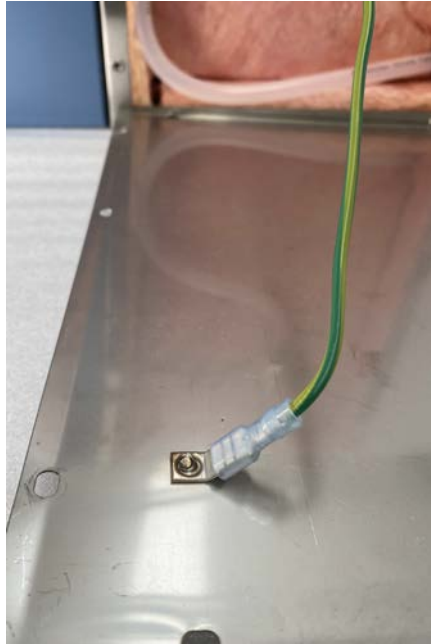
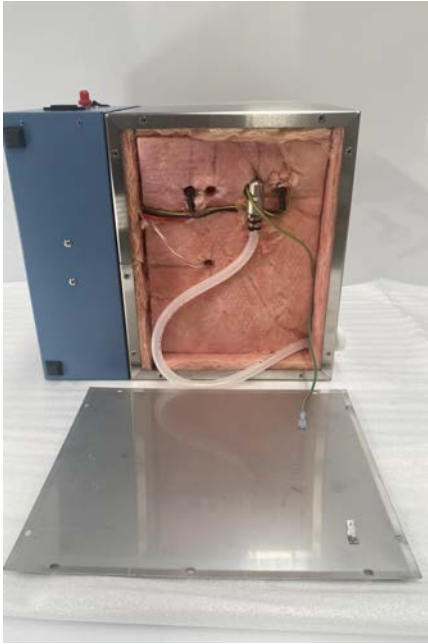
A Note on Wiring:

Due to the multiple model revisions of Thermoline Water bath, the fixing of the wiring has been changed and revised depending on the model and year of the water bath. Please reconnect the wiring of the new element to the controller as per original connections of the old heating element. The current wiring diagram has been included in these instructions.



MODEL No:	TWB-12	TWB-24	TWB-48
ELEMENT:	500watts	900watts	2000watts
CCT.BKR:	10 Amps	10 Amps	10 Amps
WIRE SIZE:	1.0 sq,mm V105	1.0 sq,mm V105	1.0 sq,mm V105

PRODUCT:	BATHS:UNCIRCULATED, DIGITAL.	15-11-19: New Design Water Bath. Fitted with E5CC
MODELS:	TWB-12, TWB-24 & TWB-48	07-12-18: Changed Main (Rocker) Switch.
DRAWING No:	TWB 12, 24 & 48 WIRING DIAGRAM	19-10-16: Changed from adjustable safety to fixed thermostat @ 120C
DESCRIPTION:	WIRING DIAGRAM FOR UNCIRCULATED BATHS DIGITAL CONTROL, MANUAL RESET T/STAT STD.	27-3-12: 10 amp main switch.
ISSUE DATE:	15-11-19	15-2-11: Changed mains wiring to manual reset thermostat.



Once the heating element has been reconnected, reconnect the earth wire to the base of the panel of the water bath and then screw the base back to the bottom of the bath.



Reconnect the earth wire to the side panel and fix it back into place with the screws removed earlier.

Section 4: Power ON



Screw the cover onto the electrical box and plug in the power cord. The unit is now ready to turn on.

Section 5: Support and Contact

Repair and Support is available over the telephone Monday through Thursday from 8:30am to 4pm and Friday 8:30am to 2pm. Please contact service@thermoline.com.au for email technical support. You can also visit our website at www.thermoline.com.au for access to additional useful troubleshooting guides, operating manuals, and technical information.

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