## PLEASE READ BEFORE FITTING / REFER TO IF YOU HAVE A FAULT

The examples below are not faults of the product and therefore are not covered by the product guarantee

BROWN WIRE BURNT THROUGH / SPARKING  LIMESCALE / CALCIFICATION	If the wire has not been clamped down correctly on fit then the brown wire from the element pole to the thermostat become faulty.  The immersion may initially work for quite a number of months but will eventually arc / spark, the brown cable will eventually burn through and overheat.  We recommend you fit an Incoloy element in areas of moderate to hard water and a Titanium element in areas of hard to very hard water. You can also reduce the rate of calcification by fitting the correct length of element, setting the thermostat to the lowest possible temperature and using the element for the shortest time possible.	
COPPER USED IN STAINLESS STEEL CYCLINDER	If any copper parts are fitted inside a stainless steel cylinder, there will be an electrolytic reaction causing the copper parts to corrode. Stainless steel cylinder manufacturers advise use of an Incoloy or Titanium element but with an Incoloy thermostat pocket. Warning: Incoloy & Titanium elements with copper thermostat pockets are also available in the marketplace and these are not suitable for use in stainless steel cylinders.	
INSUFFICIENT WATER COVERAGE	If an element is run without sufficient water coverage, the sheath will anneal (pictures shows example of a copper element which has annealed). This will lead to decreased performance of the product and/or failure by splitting or burning out.  NEW INFO  The heater was examined and the element tube was found to be discoloured and partly oxidised along the heated section of the element.  The discolouration and oxidisation of the element tube could only occur if it were heated in the absence of water, therefore it must have been operated when there was insufficient	

## THERMOSTAT TRIPPING OUT

The reset device in our thermostats is calibrated to read ambient temperature. Nuisance trip outs can occur for a number of reasons. 1) If the cylinder is enclosed in a small airing cupboard with no ventilation this can cause heat build-up. An airing cupboard door needs to have ventilation at the bottom to draw cooler air in. This should solve the issue. 2) A shower pump can draw water from the cylinder faster than it is replenished causing an air lock/insufficient water coverage. 3) Flat top cylinders have also been known to cause issues as air can become trapped under the head of the element.



The reset button is next to the temperature dial.

## **FAQs:**

- Q1. Should I use a sealing compound on the thread?
- A1. No, you only really need to use the washer provided although PTFE tape may help if needed. Also, make sure all sealing surfaces are clean before fitting the element and that no sealant gets into the tank or on the element itself.
- Q2. What is the red brace for on some longer elements?
- A2. This should be removed before fitting as it is for transit support only.
- Q3. Why is the new side mounted element I fitted making a boiling / bubbling noise?
- A3. Possibly because the element is not the same model as the one that was removed. Try fitting a 14" element with a Double Bend.
- Q4. Why is the water just getting warm and not hot?
- A4. Try increasing the temperature that the thermostat is set to, but please ensure that the correct size of element has been fitted to the cylinder.
- Q5. There is a covering of something on the sheathing of the immersion heater and it has stopped working. Why?
- A5. This will probably be a covering of limescale which has come from hard water and has effectively 'choked' the element. A new element of either Incology or Titanium should be refitted.
- Q6. What can I do if the circuit breaker trips at the board when the immersion heater is turned on?
- A6. Generally, this will be because the circuit breaker is of insufficient rating. Please ensure that the circuit breaker fitted has a minimum rating of 25amp and is on its own circuit and that nothing else is connected OR the element has a 'dead short'. Please consult a qualified electrician if in any doubt.
- Q7. Why don't you put a temperature indicator on the thermostat anymore?
- A7. Only because people expected an exact temperature to be maintained. The original markings were for guidance only to show the temperature limits. Now, we only use a '+ or -', albeit the lower setting is generally around 40 Degrees C and the upper setting is around 68 Degrees C. Do not over turn the dial as that will cause irreparable damage.
- Q8. Why is the wiring inside the head of the immersion heater burnt?
- A8. Invariably this is due to an electrical short. Ensure that the wires into the thermostat are securely in place and the retaining screws are suitably secured onto the bared copper wires but NOT over tightened.
- Q9. Why is there water in the base of the brass head of the Immersion Heater?
- A9. That means that there is a potential leak through the thermostat pocket. Please contact us.

- Q10. Why with the old immersion heater could we get steaming hot water and now the new one is nowhere near as hot?
- A10. The new EN standard means that we cannot allow the upper limit of the control thermostat circuit to rise above 70 Degrees C as this will cause ambient temperature problems with nuisance trip outs due to interference with the secondary safety circuit.
- Q11. I have fitted one of your titanium immersion heaters but it doesn't work. I've checked the wiring and made sure the electric feed coming in is switched on. The tank is full of water. What else could be wrong?
- A11. There could be an electric fault, eg a faulty neutral wire could have melted the unit.
- Q12: I fitted one of the immersions which worked for a number of months but then stopped. At first I was able to reset it but when it happened for a third time it would not reset.
- A12: On return of the unit and inspection by manufacturer it was assessed and identified that the screw was not fully screwed down and therefore the unit had 'arced' and got really warm, ie an installation error.
- Q13: I recently ordered a 14" titanium immersion heater. I've installed a few of these before (the copper variety hence the need for titanium). Unfortunately it doesn't work. I've checked my wiring and made sure electric feed coming in is switched on. Tank is full of water. Am I missing something? Is there a faulty batch of these? Just wondering before I call out an electrician to double check everything.
- A13: Customer later replied 'I got an electrician to check the issue. Turns out it was a faulty neutral wire which melted the unit so nothing to do with the immersion heater.