



# Installation Manual

## 50mm Flange Mount

## **Attention: The Installer**

### ***Fitting the “Xtend PTC element” energy saving system***

The following functions have to take place:

- Electrical power to the geyser has to be off and isolated correctly to ensure user safety
- The drainage pipe has to be taken to a place where water damage cannot occur
- During the drainage process you will want to allow air into the geyser to speed up the drainage process as well as to stop a vacuum forming in the geyser.
- You will need the correct tools, such as 2 x 300mm Shifting Spanners, or 1 x shifter and a good sized water pump pliers, a 13mm spanner or a socket set, a star and a small flat screwdriver, a pliers and/or side cutter, a multimeter.

The process in detail is as follows:

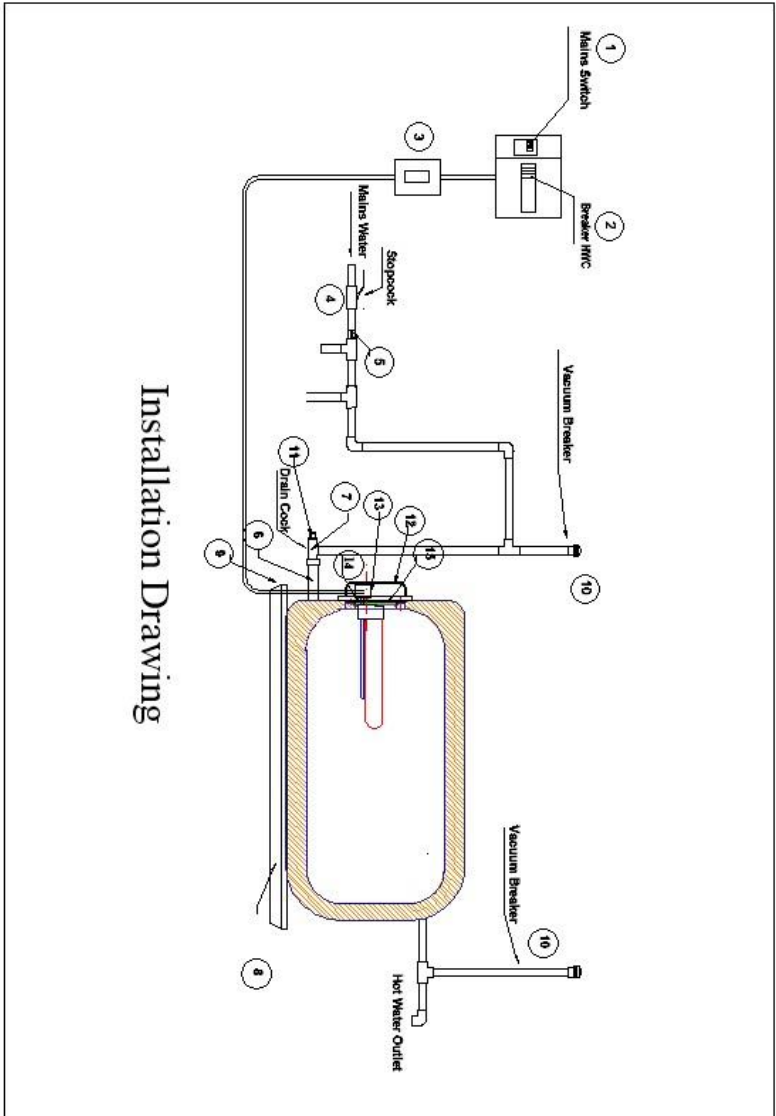
1. Switch off the geyser breaker on your main switchboard. (1/2) It is a good idea to put a piece of tape over the switch in its off position marked “DO NOT SWITCH ON”

2. Once at the geyser look for the isolator switch, (which should be installed), and switch it off. (3). The isolator switch could also be integrated into the electrical cover of the geyser on newer models.
3. Isolate the water supply to the geyser, which will either be a valve (4) or you can close the valve on the Pressure Reducing Valve (5). The cold water inlet to the geyser is the bottom fitting (6)
4. Connect a hose pipe to the drain cock (7) and lead outside or if your geyser has a drip tray (8) then you can drain directly into the tray. (Trace the outlet pipe from the drip tray (9) to ensure that it is discharging outside. Ensure that the pipe is fitted as sometimes, incorrectly, there is no pipe fitted.
5. Open a hot water tap to relieve any pressure still in the geyser.
6. Loosen a vacuum breaker (10) or a Conex connector (10) on the hot water line to allow flow to start or geyser will not drain as it causes a suction!
7. Open the drain valve (11) (counter-clockwise)
8. Wait until the water ceases to run, this could take a while

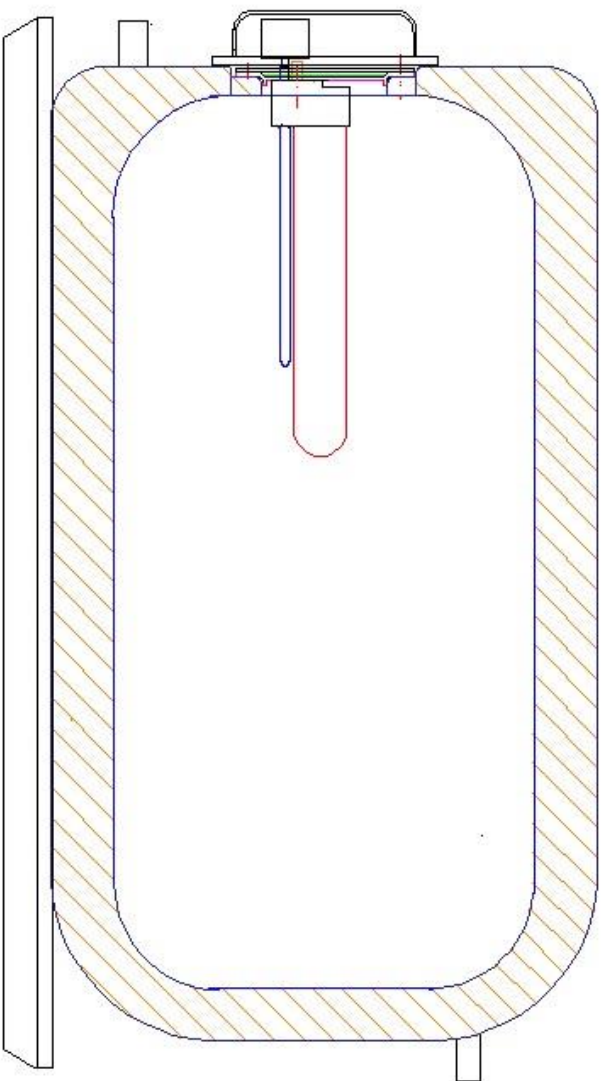
9. Remove the electrical cover plate (12) screws and place to one side. (have a container so as not to lose the screws)
10. Check with the multimeter (set to Volts) to ensure that there is NO reading and that the power is indeed Off at the terminals at the thermostat (13)
11. Remove the thermostat by pulling out.
12. Remove earth cable connected on flange plate. (14)
13. Loosen the six bolts that secure the flange plate (15). (put them into your container)
14. Remove the flange plate assembly
15. Ensure that the flange gasket has been removed. (It should come out with plate)
16. Take the Xtend PTC element unit out of the box, fit to the removed flange plate of the geyser.
17. If fitting to a Kwikot geyser refer to drawing on **page 7**. All other flange plate geysers fitting as per normal. (I.e. Heattech)
18. Refit the six bolts
19. Tighten the bolts evenly.  
Fit the original thermostat that was removed (Step 11) by pushing in firmly. Make sure that the spade terminals of the thermostat engage correctly with the terminals of the element. **Set thermostat to 50° C**
20. Re-Tighten the vacuum breaker or Conex, reverse of step .6
21. Close drain cock

22. Ensure that there is a hot water tap open
23. Open mains water, reverse of step 3.
24. When you have a steady flow coming out of the hot water tap, close it
25. The geyser is now under pressure, check for leaks at the flange and everywhere you have worked.
26. If there are no leaks, refit the two cables (live & neutral) to the new thermostat, reverse of step 11 as well as the Earth cable ( reverse of step 12)
27. Fit the safety cover, reverse of step 9.
28. Switch on the power, reverse of steps 1&2.

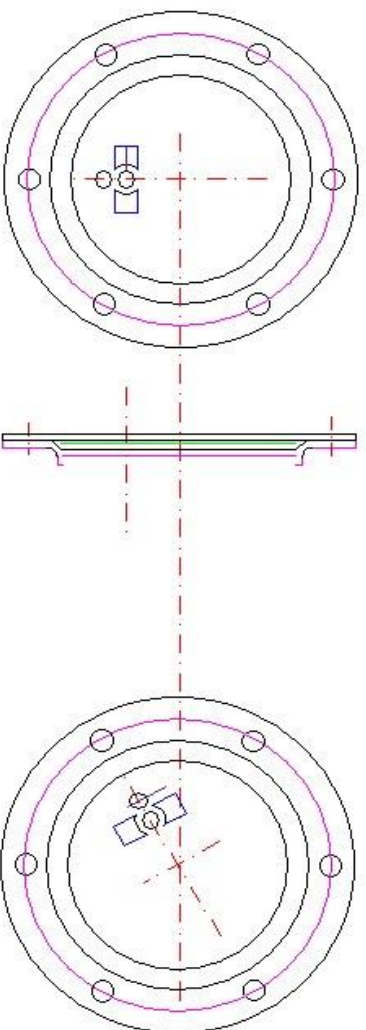
**The installation is complete.**



Installation Drawing



**Installation Drawing for 50mm PTC Flange Element**



**Kwikot Flange Plate**

**Rotate plate clockwise to the next hole - 60°  
as shown above**

**Xtend Flange element recommended installation for Kwikot Geyser**