 PROBOIL2X like all other appliances that use hot water can become coated with limescale over time, replacing your filter frequently will help delay this. Depending on the frequency of your usage pattern and the harder the water in your area, the quicker you should expect the limescale to build and therefore will need to be cleaned and descaled.


Only genuine parts must be used to maintain your product warranty, these are available at proboil.co.uk or by calling (+44) 01226 283434.

There are two key parts of the product that likely will need descaling:

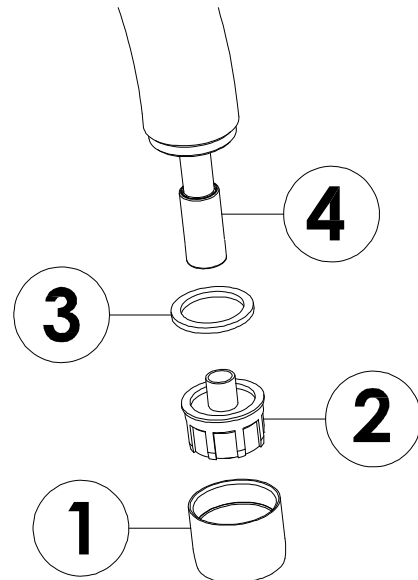
The aerator on the end of the tap/dispenser spout:


If the aerator at the end of the tap spout contains debris or scale then it will reduce the flow rate of the water and may cause more splashing when in use.

The aerator and its housing can be descaled using ordinary white wine vinegar and water solution.

- 1) Press and hold the  key for 1.5 seconds to activate, this will turn the boiler into “standby” mode.
- 2) Unscrew and remove the aerator housing **(1)** anti clockwise (use rubber gloves if you need to get a better grip).
- 3) Whilst holding the spout centre tube **(4)** pull the aerator **(2)** away from the spout.

The method may vary depending on the model installed.



- 4) Place the aerator **(2)** and if required the aerator housing **(1)** into a small cup sufficiently filled with white wine vinegar and water.
- 5) Leave the parts soaking for around 5 minutes
- 6) Clean the scale from the parts using a non-abrasive tool such as a toothbrush. If the scale is not cleared repeat step (5).
- 7) Once clean of scale and debris rinse the parts thoroughly in cold water.
- 8) Reassemble the parts in the reverse order, you must ensure the aerator **(2)** is firmly pushed into the spouts centre tube **(4)**. Also make sure seal **(3)** is in place.
- 9) Press and hold the  key for 1.5 seconds to activate, this will turn the boiler back on from “standby” mode.

The water tank within the PROBOIL.2X boiler:

The filter system provided with PROBOIL will help to prevent of the calcification (scaling) of the boiler. However it will be required from time to time that the PROBOIL will need to be descaled, drained and refilled to ensure the maximum energy efficiency and service life from the product especially in hard water areas. The frequency of descaling will depend entirely on your water hardness, the suggested minimum descaling frequency is once annually. Descaling solutions can be obtained by contacting proboil.co.uk or by calling (+44) 01226 283434.

If the tank within the boiler becomes calcified it will lead to a reduction of both energy efficiency and temperature accuracy of the boiler. The boiler must only be cleaned using only genuine PROBOIL descaling solution to maintain your product warranty, other formulations may cause inadvertent damage.

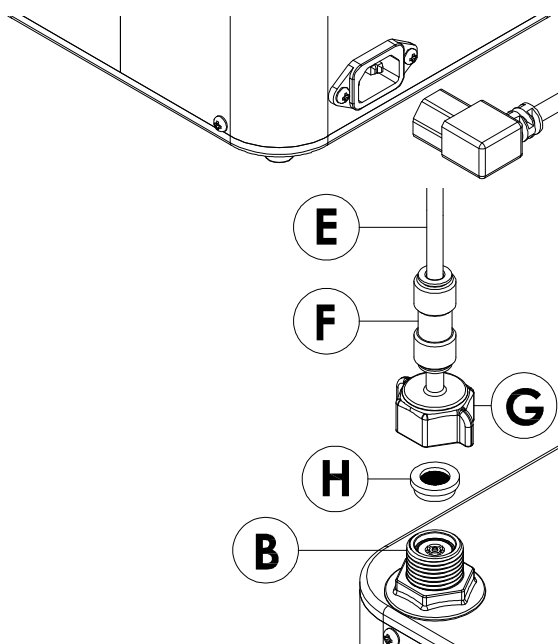
⚠ WARNING: Harmful if swallowed. Irritating to eyes and skin. **KEEP OUT OF REACH OF CHILDREN.** Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. If swallowed, seek medical advice immediately and show this container or label.

Descaler Ingredients: Sulfamic Acid. Country of origin USA. See www.proboil.co.uk for further information and SDS.

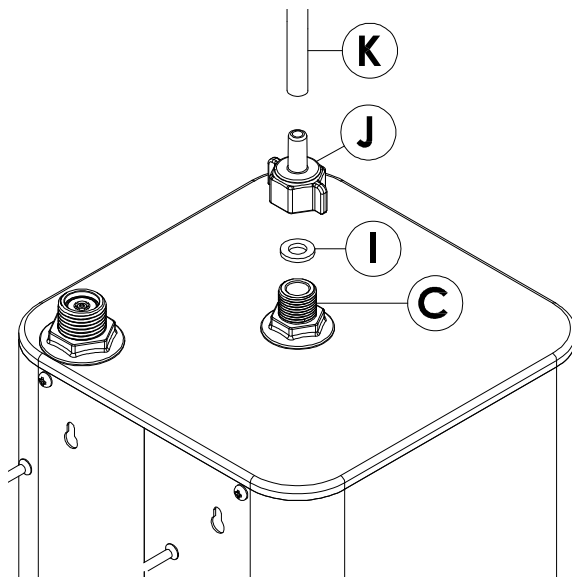
⚠ The descaling chemical is acidic and should only be used and handled as indicated, care should be taken not to ingest, expose to skin, clothing or decorative surfaces. Take care when touching all surfaces and when disconnecting or connecting hoses they may be hot and or generate steam, you must use personal protective wear to prevent accidental scalding.

i During the descaling process you will need to disconnect the boiler power, this will reset the filter life counter. If your boiler is calcified it is likely the filter cartridge is overdue replacement, if this is the case you should change the filter after descaling the boiler.

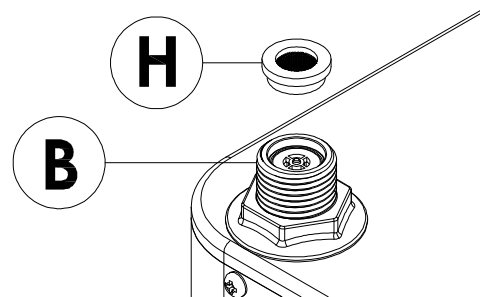
- 1) Press and hold the **⏻** key for 1.5 seconds to activate, this will turn the boiler into standby mode
- 2) Turn the 98°C tap handle on fully, run for at least 3 litres or until the stream of water runs fully cold.
- 3) Pull the mains power plug out from the socket on the left-hand face of the boiler
- 4) Unscrew and detach the blue inlet wing nut connector (**G**) from the top of the boiler (**B**).



- 5) Firmly pull the silicone rubber high temperature output hose (**K**) off from the red outlet wing nut (**J**) connector.
- 6) Lift up then pull the boiler to unhook the boiler from its keyhole slots away from the wall it is mounted on.
- 7) Unscrew and detach the red outlet wing nut (**J**) connector from the top of the boiler (**C**).
- 8) If the 3/8" rubber seal (**I**) becomes detached from the red outlet wing nut (**J**) connector then reinsert it the seal inside connector (**J**).



- 9) Remove the inlet meshed filter seal (**H**) from the boiler inlet (**B**) or inlet adaptor (**G**), rinse the washer in cold water, and use a toothbrush to clean any debris from it. If meshed seal (**H**) is compressed inside inlet (**B**) or adaptor (**G**) then use a cocktail stick (or similar) to remove it.

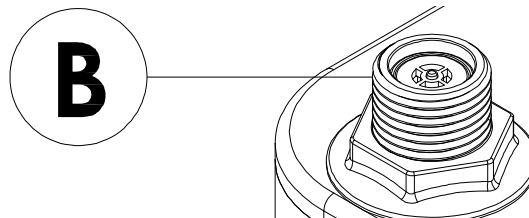


9. Whilst taking care lift the PROBOIL.2X (**A**) unit out from the cabinet and place it on the countertop.

10. Each bottle of PROBOIL descaling solution contains 200ml of descaling solution, one bottle should be enough to descale the tank, however if you believe the tank to be heavily scaled then use both the 200ml bottles supplied.

i You can empty the boiler faster from the outlet (**C**) by depressing the centre of the check valve insert found in the boiler inlet (**B**) whilst the boiler is upside down.

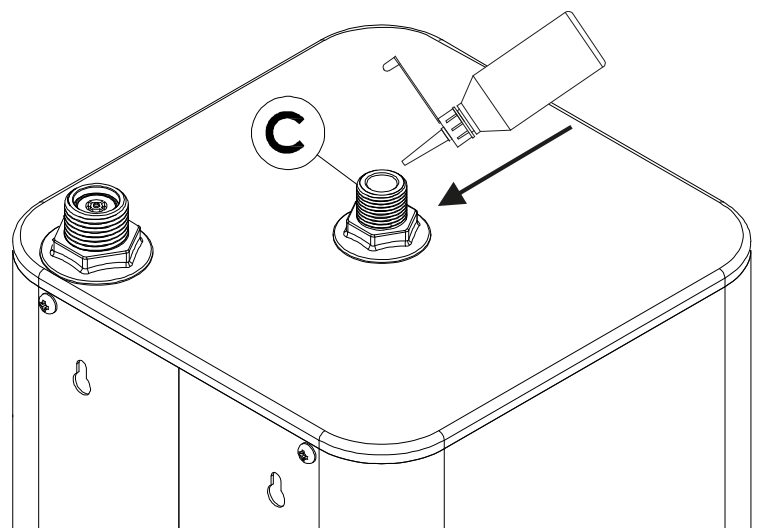
11. Tip the boiler upside down so the boilers centre outlet (**C**) is over the sink, you must empty the boiler as much as possible of water and any debris, tip the boiler back and forth to hear how much water remains inside if you are unsure.



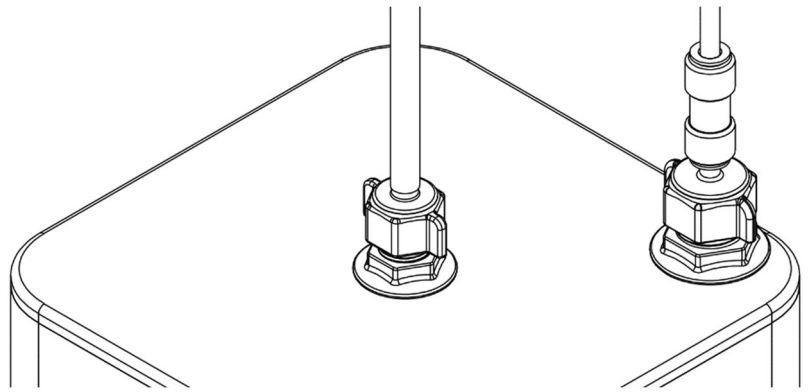
12. Shake the descaler bottle(s) thoroughly.


13. Cut the top from the bottle nozzle(s) using sharp scissors.

14. Carefully squeeze the entire contents of the bottle(s) into the outlet (**C**) of the tank.

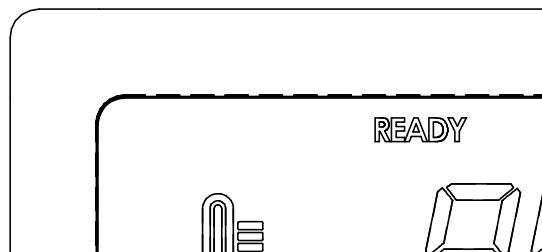


15. Reconnect all the removed parts from the boiler in the reverse order listed above. **(do not use a spanner or overtighten connectors G or J)**



16. Turn on the 98°C tap handle on slowly, keep the handle on until you see water exit the spout of the tap then turn it off immediately.
17. Press and hold the  key for 1.5 seconds to activate, this will turn the boiler back on from “standby” mode.
18. Use the **+** and **-** key to change the target temperature on screen.
Change the pre-set water target temperature to 85°C

19. Wait for the PROBOIL.2X unit to display “READY” onscreen



20. **Take note of the time and wait for no longer than a further 30 minutes maximum** for the descaler liquid to work. It is normal for an odour to be present during this time.
21. **Remove the aerator from the end of the spout** (see previous section for details).





Note if the aerator is not removed you can expect to block the aerator with partially dissolved scale, this must be avoided.

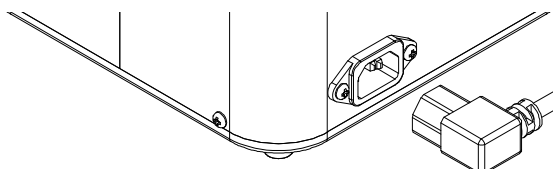
Turn the 98°C tap handle on fully, **allow to run for at least 20 litres** (use a kitchen measuring jug) or until the water stream runs clear.

22. If dirt, debris or scale remain inside the tank then you can repeat the process steps 1-21 (as above) again if needed.
23. Once completed reassemble the spout aerator **(2)** in the reverse order, you must ensure the aerator **(2)** is firmly pushed into the spouts centre tube **(4)**.
24. Should any residual taste from the descaler remain flush additional water through the boiler until it subsides.

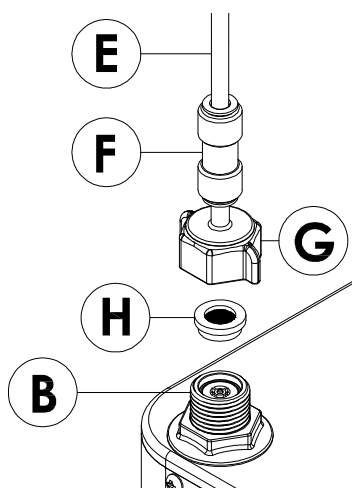
1.2.4 Cleaning and sterilising the PROBOIL system internal tank:

 Periodically it is prudent to clean the PROBOIL.2X boiler this might because the boiler has been left switched off for long periods, possible contamination from dirt or debris, unwanted taste. When you clean the boiler we recommend you follow the descaling procedure first.

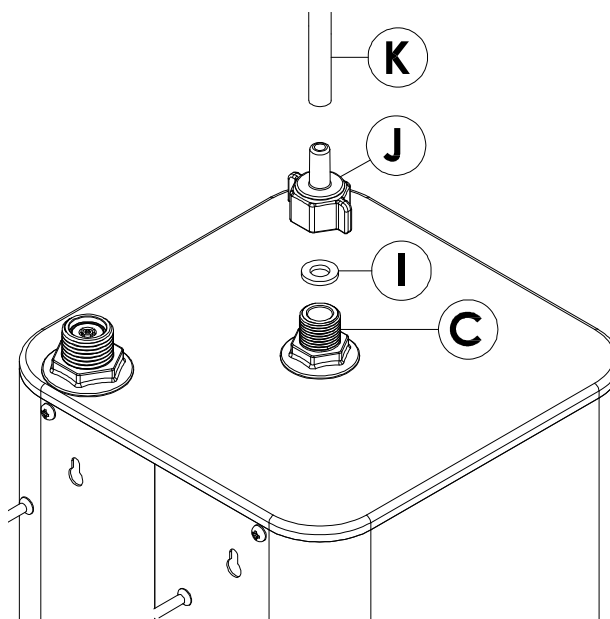
- 1) Press and hold the  key for 1.5 seconds to activate, this will turn the boiler into standby mode.
- 2) Turn the 98°C tap handle on fully, run for at least 3 litres or until the stream runs fully cold.
- 3) Pull the mains power plug out from the socket on the left-hand face of the boiler



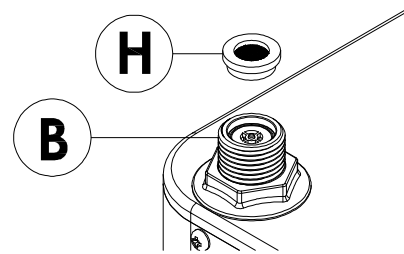
- 4) Unscrew and detach the blue inlet wing nut connector (**G**) from the top of the boiler (**B**).



- 5) Firmly pull the silicone rubber high temperature output hose off from the red outlet wing nut (**K**) connector.
- 6) Lift up then pull the boiler to unhook the boiler from its keyhole slots away from the wall it is mounted on.
- 7) Unscrew and detach the red outlet wing nut (**J**) connector from the top of the boiler (**C**).
- 8) If the 3/8" rubber seal (**I**) becomes detached from the red outlet wing nut (**J**) connector then reinsert it the seal inside connector (**J**).



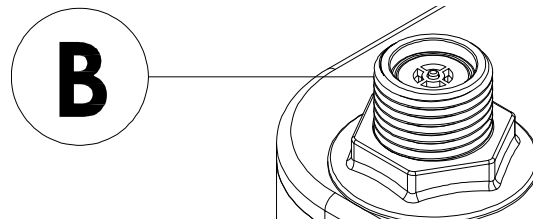
- 9) Remove the inlet meshed filter seal (**H**) from the boiler inlet (**B**) or inlet adaptor (**G**), rinse the washer in cold water, and use a toothbrush to clean any debris from it. If meshed seal (**H**) is compressed inside inlet (**B**) or adaptor (**G**) then use a cocktail stick (or similar) to remove it.



9. Whilst taking care lift the PROBOIL.2X (**A**) unit out from the base unit and place it on the countertop.

10. Tip the boiler upside down so the boilers centre outlet (**C**) is over the sink, you must empty the boiler as much as possible of water and any debris, tip the boiler back and forth to hear how much water remains inside if you are unsure.

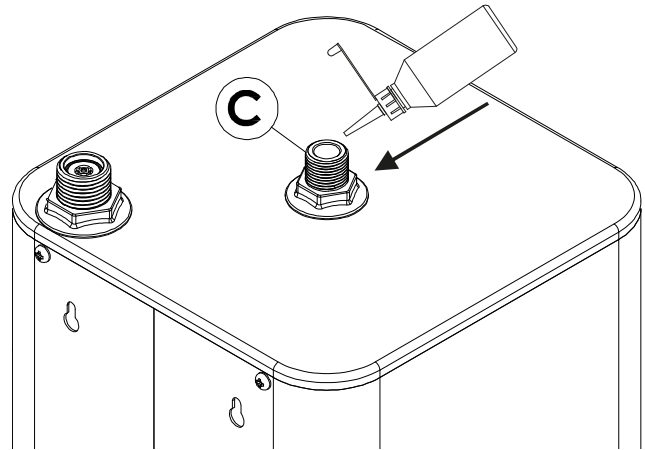
i You can empty the boiler faster from the outlet (**C**) by depressing the centre of the check valve insert found in the boiler inlet (**B**) whilst the boiler is upside down.



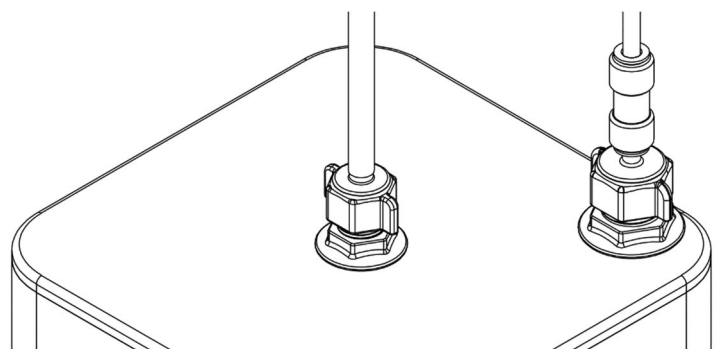
11. Use only a non-aggressive infant sterilising solution (for example "Milton" concentrate). Always read the label regarding the dilution

i The total Proboil tank volume is **2.1 litres** so for a 0.6% v/v Milton concentrate liquid we suggest you require a maximum of 13ml of concentrate.

Carefully measure out the sterilising solution then tip the required amount of the solution into the centre boiler outlet.

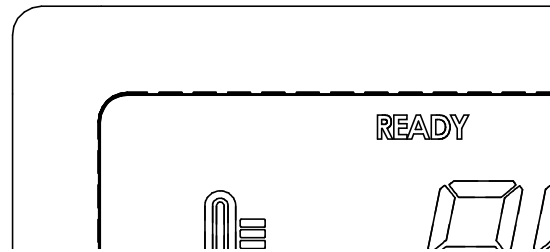


12. Reconnect all the removed parts from the boiler in the reverse order listed above. **(do not use a spanner or overtighten connectors G or J)**



13. Turn on the 98°C tap handle on slowly, keep the handle on until you see water exit the spout of the tap then turn it off immediately.
14. Press and hold the **⏻** key for 1.5 seconds to activate, this will turn the boiler back on from "standby" mode
15. Use the **+** and **-** key to change the target temperature on screen.
Change the pre-set water **target temperature to 98°C**

16. Wait for the PROBOIL.2X unit to display "READY" onscreen

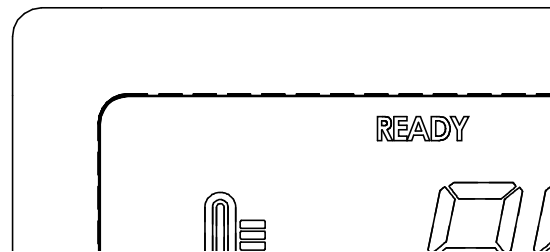


17. Take note of the time and wait for **no longer than a further 10 minutes maximum** for the sterilising liquid to work. It is normal for an odour to be present during this time.

18. Turn the boiler back into standby mode

19. Turn on the 98°C tap handle on fully, keep the handle on for a minimum of 5 minutes.

20. Turn the boiler back on and set it to the desired target temperature, wait until the display shows "READY".



21. If dirt, debris or taste remains then you can flush the tap for a further 5 minutes or repeat the process steps 1-20 again if needed.