

PROBOIL.2

User & Installation Guide



www.proboil.co.uk

See top of boiler for contact details

① Please read these instructions carefully and retain for future reference.

We have a policy of continued product and quality development and improvement. Accordingly we reserve the right to amend the specification at any time. All errors and omissions excepted.

Contents

1. PROBOIL User Guide

- 1.1. Important safety and usage considerations
 - Day to day considerations
 - Do not modify the product supplied
 - Sensible fire safety precautions
- 1.2. Using the product
- 1.3. Descaling the PROBOIL system
- 1.4. Draining the PROBOIL system
- 1.5. Filter replacement guide
- 1.6. Troubleshooting & maintenance
- 1.7. Care instructions for your kitchen tap mixer
- 1.8. PROBOIL Warranty Terms and Conditions
- 1.9. Tap Warranty Terms and Conditions

2. PROBOIL Installation Guide

- 2.1. Tap Installation
 - Important Technical Data
 - Installation Preparation
 - Parts and Contents
 - Tap & Filter installation
 - After installation
- 2.2. Boiler Installation
 - Pack contents
 - Installation procedure
 - Fitting the drain valve
 - Locating and fitting the boiler unit
 - Connecting the tubes
 - Calibration procedure
 - How the PROBOIL works
 - Connection summary
 - Spares list
 - Technical Data

1. PROBOIL User Guide

1.1. Important safety and usage considerations

 The boiler unit is provided with 1.2 metres of mains cable with a moulded 3 pin UK plug. **Appliance Fuse Rating – 10 Amp**

 **WARNING:** This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge and if they have been given supervision or instruction concerning use of the appliance in a safe way and have understood the hazards involved. Children should not be allowed to play with the appliance. Cleaning and user maintenance should not be attempted by children without supervision.

 **WARNING:** This appliance must only be used for heating water.

 **WARNING:** This unit is **NOT PRESSURISED** - it is designed to be open vented. The drain valve is there to drain the tap after each use and will drip in operation which is not an indicator of a fault with the appliance. It is **NOT** a tundish.

 **WARNING:** Servicing and maintenance of this product must be carried out by persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned. The PROBOIL system contains no user serviceable parts and should only ever be serviced by the recommended service agent.

 **WARNING:** This product should only be installed into an internal domestic environment with an ambient temperature of 10-40°C. If the unit is accidentally left filled in an unheated environment for a prolonged period, do not switch it on if there is a possibility that the water inside is frozen, it must defrost naturally.

 **WARNING:** All surfaces, especially those made from metal, may become hot whilst in operation. Use caution when touching these surfaces. Inform all users that the surfaces may become hot.

 **WARNING:** Do not open the tank, drain cocks or other emptying devices until the tank has cooled to a safe temperature.

 **WARNING:** Do not use this appliance if you suspect it or any of its hoses are damaged or kinked in any way, or is performing differently from how you would expect.

Never use any appliance with a damaged mains power lead. You should immediately disconnect the power and contact the service agent noted on the top of the boiler.

Day to day considerations:

 If the product is going to remain unused and unattended for a prolonged period, the boiler should be switched off. If the period is extended beyond a typical holiday then we recommend the boiler is also drained. As with any appliance, the water supplies should also be isolated.

 Use of any cleaners with acids, abrasives, alkaline or organic solvents can result in deterioration of the components and will void the warranty.

 Whilst we do not expect you to encounter any leaks you should regularly inspect the system for leaks. If there are signs of water damage, you should immediately remove the unit from service and contact the service agent.

 Cleaning and user maintenance shall not be performed by children without supervision.

Do not modify the product supplied:

 Do not add to, exchange or modify any component of the boiler or mixer tap. The spout exit or any part of the system must not include any additional third party adaptors or connections that will add resistance to the system.

 This appliance is intended to be permanently connected to the water mains.

 We only warrant the original filter type supplied with your boiler which is formulated specifically for the PROBOIL product. If the filter is removed or exchanged for an alternative model it may have a detrimental effect to your system and accordingly will invalidate your warranty. If you have specific or unusual incoming water conditions please contact the service number on the boiler for further advice.

 The boiler and mixer tap are not designed to work with any other combination of appliances other than as shown within this guide.

Sensible fire safety precautions:

 Do not store or use petrol or other flammable rags, paper, aerosols, vapours or liquids in the vicinity of this or any other appliance.

 For safety regulations the plug or means of disconnection must always be accessible after installation.

 Install the unit on a heat-resistant surface. Make sure that the installation surface is firm and level.

 Do not use any water jet or steam near this appliance.

1.2. Using the product

Thank you for choosing this product. Reading this guide you will ensure that the product is used safely and will give its best performance. Throughout this guide, symbols are used to highlight key points or safety considerations.

 = an information point or tip.

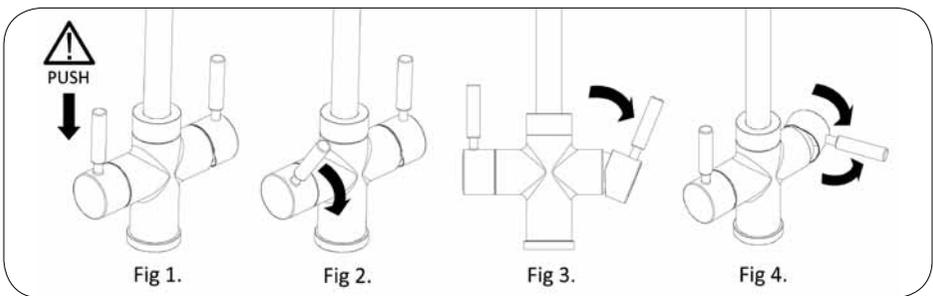
 = a technical or safety consideration or warning.

 = a service, maintenance or care consideration.

 **Your tap can dispense 3 types of water:**

1. **Cold (domestic) water** - This is delivered when the right tap handle is pulled horizontally outwards as shown in (Fig.3) and 20° away from you.
2. **Hot (domestic) water** - This is delivered when the right tap handle is pulled horizontally outwards, then fully forwards as shown in (Fig 4.). Note: for mixed water temperature pull the handle forwards 45°.
3. **Hot (boiled & filtered) water** – Fully push the left hand lever down (Fig 1.) and then simultaneously turn the handle forwards (Fig 2.), the further forwards the lever is turned the greater the flow.

At around 45° rotation is reached (Fig 2.) and the maximum flow is achieved. It is normal for the hot water to take a moment to dispense as the water empties from the product after use.



 Should you see that hot water persistently drips from the centre channel of the tap spout (when the tap is not in use and the boiler indicator red light is switched on) then you should reduce the temperature adjustment dial on the top of the boiler. See the calibration procedure for further information.

Each time the product is used you should flush a small amount of boiled water through before use. Typically this can be used to preheat your cup. If unused for extended periods then flush the product for a longer time.

1.3. Descaling the PROBOIL system

The filter system provided with PROBOIL will help to prevent 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. Descaling solutions can be obtained by contacting the service agent shown on the label on top of the boiler or via www.proboil.co.uk

Ensuring that the filter system is set up correctly and replaced, as required, will reduce the frequency of descaling required.

If you are regularly needing to descale the PROBOIL system then you either need to replace the filter more frequently or check the setup of the filter system.

⚠ 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, so you must use personal protective wear to prevent accidental scalding.



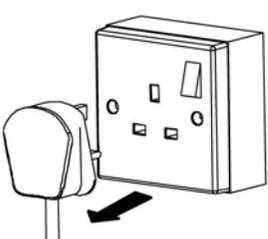
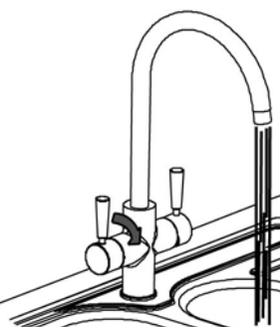
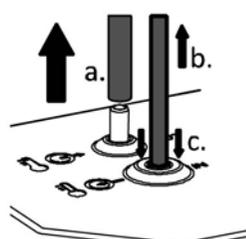
IRRITANT

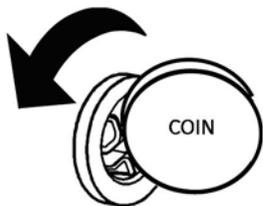
CAUTION: Harmful if swallowed. Irritating to eyes and skin. KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of cold water and seek medical advice. After contact with skin, wash immediately with plenty of water. If swallowed,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

MSDS Available. Ingredients: Sulfamic Acid. Country of origin USA. www.proboil.co.uk for more information.

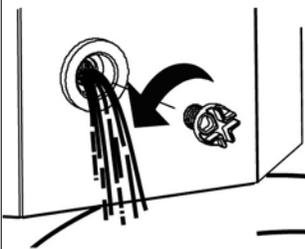


Scan here to link to a video demo

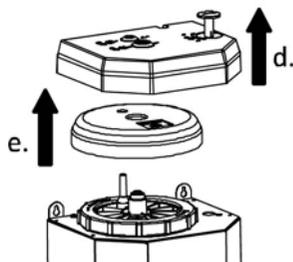
 <p>1. Turn power off, take plug out</p>	 <p>2. Turn on tap until water runs cold, then fully turn off</p>	 <p>3. Firmly pull up rubber hose (a) collar (c) down and pull pipe (b) out simultaneously. Prepare for small spillage. Remove to bench (if desired)</p>
---	--	---



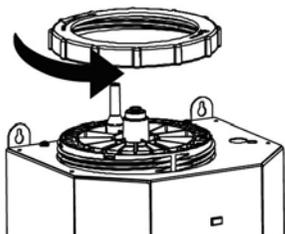
4. Open drain on front of unit.



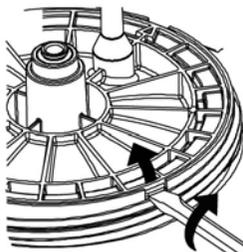
5. Drain fully into a suitable container or sink.



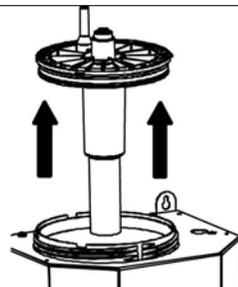
6. Lift away lid & knob (d) and styrene insulation (e).



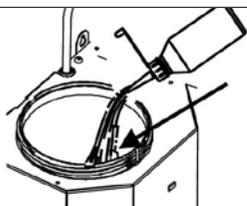
7. Unscrew tank lid ring anti-clockwise.



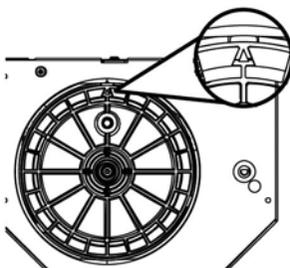
8. Lever lid upwards using screwdriver under 3 x lugs.



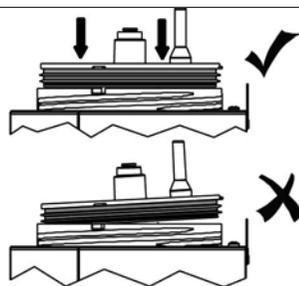
9. Lift lid and rinse out tank with clean cold water.



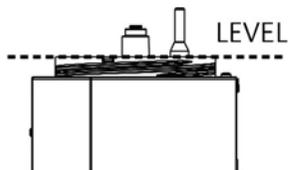
10. Add 1 x bottle of descaler (2 x descaler if heavily scaled). !CAUTION! Take care not to damage tube inside boiler tank.



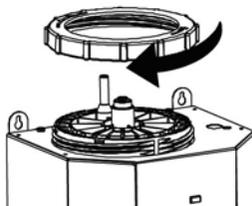
11. Replace tank lid, ensure arrow is to rear as shown.



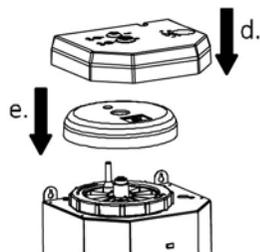
12. Push lid level back onto body as shown.



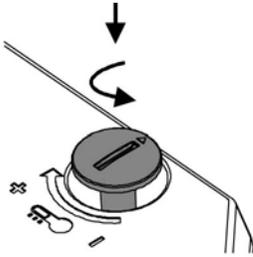
13. Lid fits flush with tank when fully fitted.



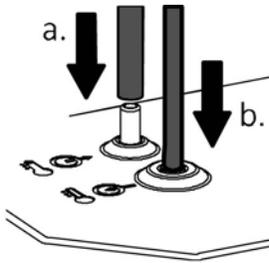
14. Fully fasten tank lid ring clockwise.



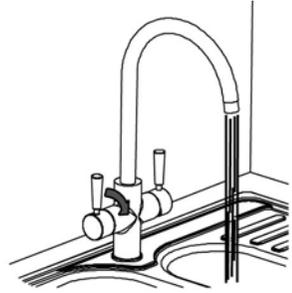
15. Lower lid & knob (d) and styrene insulation (e).



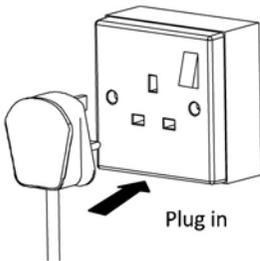
16. Loosely rotate temperature knob until it drops then press down.



17. Push rubber hose (a) and pipe (b) fully onto stems as shown. Return unit to former position.



18. Turn on until water runs through spout, then fully turn off.



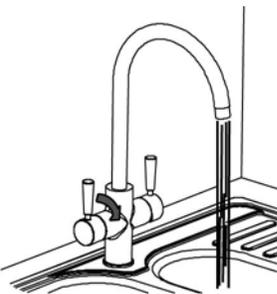
19. Plug the boiler in at the mains.



20. Plug in, and turn power on.



21. Wait 20 minutes for unit to boil (max 30 mins).



22. Turn on water and flush through at least 5 litres. Should any taste persist repeat steps 22 & 23.



23. Wait 12 minutes for unit to re-boil.



24. Re-calibrate temperature knob if necessary. See user manual for details, or visit www.proboil.co.uk

1.4. Draining the PROBOIL system

It might be necessary from time to time to drain the PROBOIL system during servicing and descaling. Please follow the procedure below or watch the video, which can be found via the QR code.



Scan here
to link to
a video
demo

⚠ The water in the PROBOIL tank may be up to 98°C and as such represents a scalding risk if handled without due care. We recommend that the boiler is switched off before draining any stored water. It will take approximately 8 hours (overnight) for a full 98°C tank to naturally cool to a touch safe temperature of 46°C.

The tank can also be made colder more quickly by turning off the power then running the water cold.

Should you need to drain the boiler without allowing it to naturally cool, then you must take adequate care and use personal **protective wear to prevent accidental scalding from hot water, surfaces and steam.**

Once the water has cooled down please follow steps 4 and 5 from the descaling procedure to drain the PROBOIL system.

1.5. Filter replacement guide

The filter system provided with PROBOIL will help to prevent the calcification (scaling) of the boiler and improve the taste of the water. Each installation has a different number of people using it, a different usage pattern and an individual water hardness “GB Clark rating”. Because of this you must judge for yourself if the filter needs changing or not, as no two installations are the same. We recommend replacing the filter at 6 months and a maximum life of 1 year, depending on usage.



Scan here
to link to
a video
demo

Installation preparation

⚠ Before installing your new filter it is essential that you switch off the mains power to the boiler and wait 10 minutes for it to cool before continuing.

⚠ Using any filter type not developed and approved for use with this tap and boiler will invalidate your warranty.

⚠ Filters must be replaced at the recommended schedule noted on the filter label. Ensure you write the installation date on the label.

⚠ All parts should be removed from their packaging and inspected for any transport damage and that all parts are present prior to installation.

⚠ When adding or changing the filter a small amount of residual water will remain in the system, so have a small bowl and dry cloth to hand.

⚠ Ensure the left hand (hot water) lever is fully off and that no water is passing through and out of the tap spout end before commencing.

Filter installation

1. Ensure the boiler is powered off and the left hand (hot water) lever is fully off and that no water is passing through and out of the tap spout end before commencing.
2. Unclip the filter cartridge (C7) from the bracket (C6). Remove the pipes (C4) from both ends of filter (C7). To remove the pipes (C4) from the filter (C7) you must firmly push the small white ring on the very end of the filter (C7) towards the middle of the filter whilst simultaneously pulling the pipe (C4) away from the filter body (C7). It is normal for some water to be released when the pipes are removed.
3. Firmly push connect the ¼" pipe (C4) between pushfit (C3) and new filter cartridge inlet (C7), repeat this from the filter cartridge outlet (C7) to the boiler inlet (E1). **You must respect the direction of flow as indicated on the label**, visually check the ends of pipe (C4) are not worn before reconnecting.
4. Clip the filter cartridge (C7) into the bracket (C6) as shown.

After installation of the filter is complete

1. Turn on the hot water handle fully, keep the lever open until all trapped air is expelled and cold (unboiled) water exits the centre channel of the tap spout, then flush a further 10 litres of cold (unboiled) water through the filter, boiler and tap. You may notice discolouration to the water at first. This is loose carbon fines from the filter, it is normal, harmless and will pass with flushing.
2. Whilst flushing as the system starts to refill, check carefully all new water connections for leaks. Once complete, turn off the left hand hot water handle.
3. This filter works best at an approximate flow rate of 2 litres per minute (with the left hand hot water handle fully turned on). This flow rate is determined by the specific incoming cold water pressure to your tap. The filter performance characteristics will be affected if the flow rate is not approximately 2 litres per minute.

To change the flow rate through the filter and boiler adjust the cold water isolation valve (B5 not shown, see tap installation instructions) using a slotted screwdriver, kitchen measuring jug and a watch whilst the left hand hot water handle is fully turned on.

4. Plug in and switch on the boiler, then wait until the water has finished heating fully.
5. After the filter installation is complete we recommend you recheck for any slower leaks.
6. Write the installation date of the filter on its label using a permanent pen.

- Each time the product is used you should flush a small amount of boiled water through before use. Typically this can be used to preheat your cup. If unused for extended periods, then flush the product for a longer time.

Parts and contents

Key	Description
A1	Mixer tap
C1	Cold out (to filter & boiler) flexible hose (including seal)
C2	3/8" M x 1/4" F adaptor
C3	1/4" NPT M x 1/4" pushfit
C4	1/4" outside diameter plastic pipe
C5	Filter bracket screw
C6	Filter bracket
C7	Filter cartridge
E1	Boiler
E2	Flexible boiled water output pipe

Important technical and safety data

Min / Max Cold Water Pressure: 1.5 bar / 5.5 bar*

*Note: If these temperatures or pressures are exceeded, even for short periods, premature wear or damage can result.

 The installation should be periodically checked for damage, if the property is left unattended for a prolonged period we recommend isolating water supplies and switching off the boiler at the mains socket. On reconnection, flush thoroughly.

For boiler service:

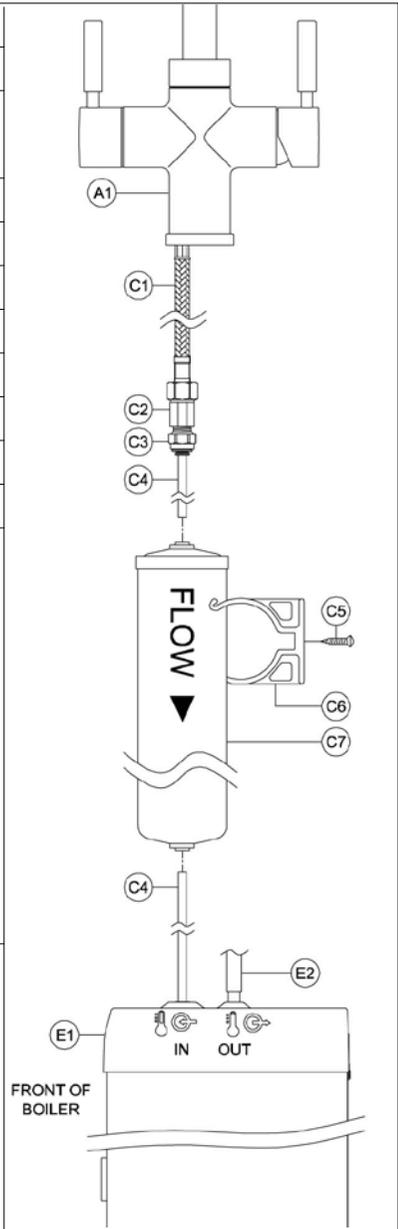
Call: 0330 311 6585

Email: service.request@proboil.co.uk

For replacement filters visit:

www.proboil.co.uk or call +44 (0) 1226 283434

© 04/2017 All errors and omissions excepted.



1.6. Troubleshooting & maintenance

 Servicing and maintenance of this product must be carried out by persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned. The PROBOIL system contains no user serviceable parts and should only ever be serviced by the recommended service agent.

If your PROBOIL is not working satisfactorily, make the following checks before calling out the installer. Any one of these adjustments could restore the performance.

Light not on, water hot.	Unit up to temperature, will light again as the unit temperature drops, this is normal.
Light not on, water cold.	Check electrical supply is connected and switched on and the plug fuse is not blown.
No water flow when tap operated.	Check water supply is on. Note: There can be a short delay dependent on how long the unit has been left unattended.
Tap ejects water when heating, constant boiling.	Thermostat set too high. Turn anti-clockwise to reduce set temperature. Re-calibrate (see page 24). Allow time for drain valve to work.
Water not hot enough.	Thermostat set too low. Turn clockwise slightly to increase set temperature. May need re-calibrating (see page 24).
Boiled water flow reduced.	Check tubes not kinked. Boiler may need descaling.

If you have any doubts about the nature of any issue that you may experience, then please turn off the power to the boiler and contact the service agent. Contact details are listed on the top of the boiler.

Professional service

If the previous checks fail to restore the performance, you should seek professional help.

The person who installed the boiler is probably the best one to investigate and correct it and is certainly the person to contact if you have had a problem in the guarantee period. The following additional checklist is provided for the benefit of a qualified service person.

WARNING:

SWITCH OFF THE ELECTRICITY AT THE LOCAL ISOLATOR BEFORE REMOVING THE COVER TO MAKE CHECKS.

Unit not heating – light on all the time.	Check circuit through element (50.4-58.7 Ohms) – replace. Check continuity through run dry thermostat – replace. Check thermal fuse – replace.
Unit not heating – no light on.	Check fuse in plug. Check circuit through thermostat – replace.
Reduced flow.	Check hoses are not kinked or damaged. Replace/re-route. Check unit not excessively scaled up – De-scale (see relevant section). Descale drain valve (E3) – remove and soak in descaling solution.

1.7. Care instructions for your kitchen tap mixer

To maintain the appearance of this tap, ensure that it is regularly cleaned only using a clean, soft damp cloth. A solution of warm water and a mild liquid detergent may be used where necessary, and then the fitting rinsed thoroughly and wiped dry. Any other cleaning action will invalidate your warranty.

Abrasive cleaners, scouring cleaners and acidic cleaners **must not be used** under any circumstances. Avoid contact with all solvents (including chlorinated solvents, ketones or acetones as these may result in surface deterioration or etching). Also avoid contact with any harsh household chemicals such as oven cleaners, drain cleaners, rust removers, paint strippers and toilet bowl cleaners, bar keepers friend or Brasso.

Where the tap has a removable aerator on the spout exit it can be removed and cleaned periodically to maintain optimum flow performance. The inner plastic tube **MUST** be reconnected correctly afterwards.

1.8. PROBOIL Warranty Terms and Conditions

If you believe your product has developed a fault, firstly isolate the product from the mains power and water then please contact the service agent (details shown on the top of the boiler). Do not wait to do this once you suspect a fault. Please have the model and serial numbers to hand when calling.

Your PROBOIL boiler system is guaranteed against defective materials and workmanship for 2 years after installation provided the installation is registered, the system has been installed domestically and used strictly in accordance with the instructions supplied. That any failure is not due to accident, misuse, abuse, unsuitable water conditions, failure to service or maintain, alteration, modification or repair by any party not expressly nominated by the manufacturer.

Where any additional service or maintenance contract is subscribed to and is valid then these terms and conditions may be superseded and or improved. You should check for any appropriate additional cover that it may offer to these standard terms.

The manufacturer may, where appropriate, provide replacement parts for your product or repair or replace all or part of your product at their discretion under this warranty. Any associated or ancillary costs to be incurred by you as a result of replacement of the product or parts under this guarantee, must in all cases be previously approved by the manufacturer. This guarantee is in addition to and does not affect your statutory rights.

No warranty applies to the filter cartridge life, this is effected by the setup, varying water quality and personal pattern of usage and as such the combination of these variables is untestable. The information provided on filter life is from independent laboratory testing and as such is provided in good faith. Any product warranty is invalidated if the recommended filter cartridge or descaling solutions are not used or if the filter is set up incorrectly or not replaced as required, according to your personal water conditions in order to protect the PROBOIL working life and efficiency. No warranty applies to wear and tear expected to occur during the normal course of use, including without limitation, cosmetic rust, scratches, dents or comparable and reasonably expected losses or damages.

These installation guidelines have been prepared for your direction and you must exercise due care at all times. We do not accept responsibility for problems that may occur through improper installation. Whilst assembling the product take care not to accidentally loosen any screwed or fixed assemblies.

Once the installation is completed as instructed, the installer should check carefully for any leaks. Periodically you should visually check for any slower leaks also for prudence, if this is impractical, due to the nature of the usage or property occupation, we suggest installing a standard market leak preventer.

It is the responsibility of the installer to ensure that your product is fitted in accordance with Local Water Byelaws.

Errors and omissions excepted. Should you find any errors in this guide please inform us to help continually improve any future revisions of our literature.

1.9. Tap Warranty Terms and Conditions

In the unlikely event that you should experience any defect in the materials or workmanship of your new Abode mixer within 5 years of purchase, the purchaser's sole remedy shall be the replacement (at the manufacturer's discretion) of all or any part of the product that is defective. All working parts and valves are guaranteed for a period of 5 years from purchase. Decorative surface finishes and O-rings are guaranteed for 1 year from the date of purchase provided that our advice concerning care has been observed and no scouring agents have been used. This is provided that the mixer or tap has been used for normal domestic purposes and that the care, installation and maintenance instructions have been observed. The warranty extends to the original purchaser only.

Marks, scuffs and scratches caused by improper installation or accidental damage are not covered by this guarantee. Neither are shade variations or any damage or defect caused by incorrect installation or abuse of the fitting.

As we are continuously improving and developing our range of products, finishes & colours, in the event of a valid claim, we may not be able to provide an identical replacement for the defective product throughout the guarantee period. Where an identical product is no longer available, we will supply the nearest equivalent from our then current product range. In assessing your claim, we must be given the opportunity to inspect the product as installed prior to removal. Any product returns must be packaged as received and complete.

No other warranties, express or implied, are made, including merchantability or fitness for a particular purpose. Under no circumstances shall the manufacturer be liable for any loss or damage arising from the purchase, use or inability to use this product, or for any special, indirect, incidental or consequential damages. No liability is accepted for consequential damage to other household fixtures, fittings or furnishings arising from this claim, even if attached to the product. No installer, dealer, agent or employee of Norcros Group (Holdings) Ltd. has the authority to modify the obligations or limitations of this warranty.

2. PROBOIL Installation Guide

2.1. Tap installation

Important Technical Data

Minimum operating pressure (hot): 0.75 bar	Minimum operating pressure (cold): 1.5 bar (with filter)
Maximum operating pressure: 5.5 bar*	Maximum domestic hot water temperature: 70°C*
Flow characteristics: Domestic Hot & Cold share outer single flow spout. Boiled water: Through centre spout channel.	Recommended domestic hot water temperature: 46°C

*If these temperatures or pressures are exceeded, even for short periods, damage can result. In these instances a thermostatic mixing or pressure reducing valve should be installed.

This product is manufactured in accordance with recognised European standards. Please ensure that your kitchen mixer is fitted in accordance with Local Water Byelaws.

Where hot and cold water mix within the tap, then suitable non return (check) valves should be installed to both the hot and cold supplies to prevent backflow, a preinstalled non return valve on the cold supply flexi hose (B1) is already supplied (see instructions key).

Hot and cold supply pressures should be as closely balanced as possible for best results. Supply pipes should maintain the maximum diameter until immediately before the fitting. The differential between the hot and cold water supply temperatures should be sufficient to allow correct mixing function.

These installation guidelines have been prepared for your direction and you must exercise due care at all times. We do not accept responsibility for problems that may occur through improper installation. Whilst assembling the tap take care not to accidentally loosen any factory fixed assemblies.

This tap has been 100% assembly tested; therefore you may expect a small residual amount of water to remain in the tap when delivered. Any water marks can be removed using the above care advice.

Installation preparation

 Before installing the new mixer it is essential that you thoroughly flush through the supply pipes in order to remove any remaining solder, swarf or impurities from your system. Failure to carry out this simple procedure could cause problems or damage to the workings of the mixertap or boiler.

We recommend installing particle filters (not shown) and isolation valves (B5) to both the hot and cold feed pipes in an accessible position. This will help to prevent premature failure of the valves and ease any future maintenance.

Ensure you have suitable domestic hot and cold water pressure before installing this product (see technical data for more information).

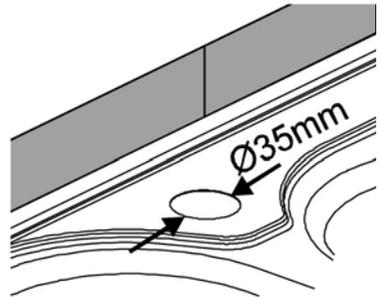
All parts should be removed from their packaging and inspected for any transport damage and that all parts are present prior to installation.

Shut off your water heating system and ensure that your mains stopcock is closed. Open the lowest hot and cold taps in the house and allow the water to run until fully stopped.

If replacing an existing tap, remove the tap & clean the end of the feed pipes using wire wool, the tap hole area should be free from dirt and sealant. Loosely position the tap and tail pipes to check if any alteration to the existing pipework is required. If this is the case do this now.

This mixertap requires a $\varnothing 35\text{mm}$ tap hole.

This tap is designed to be installed in a worktop with a maximum thickness of 50mm. Ensure you have suitable domestic hot and cold water pressure before installing this product (see technical data for more information).

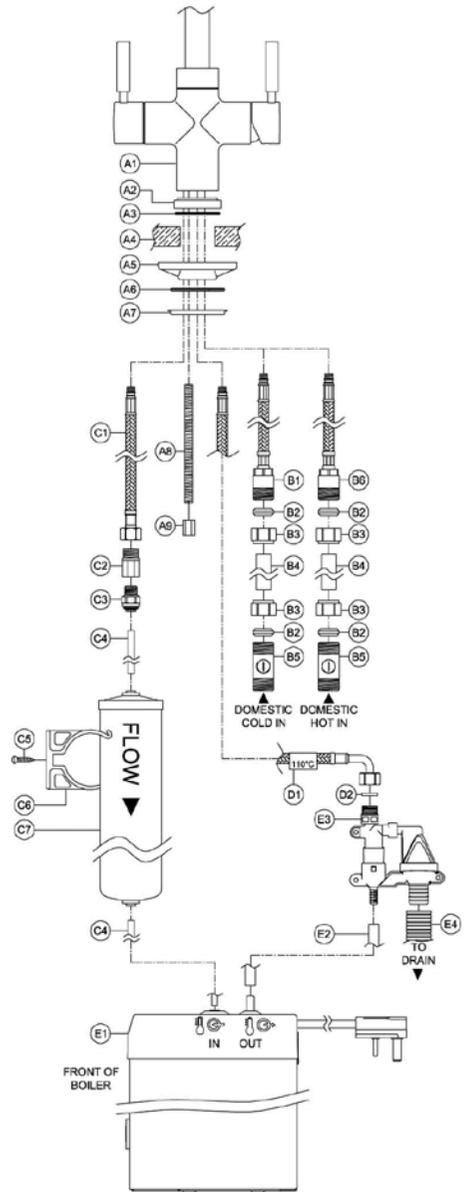


Parts and contents

Key	Description	Qty
A1	Mixer tap	1
A2	Base plinth	1
A3	Base plinth seal	1
A4	Sink or worktop (max. 50mm)	1
A5	White triangular plate (for steel sinks only)	1
A6	Lower gasket	1
A7	Metal horseshoe	1
A8	Fixing stud	1
A9	Fixing nut	1
B1	Domestic cold flexible hose (including non-return valve)	1
B2	15mm olive	1
B3	15mm nut	1
B4	15mm pipe	1
B5	15mm isolation valve	1
B6	Domestic hot flexible hose (excluding non-return valve)	1
C1	Cold out (to filter & boiler) flexible hose (including seal)	1
C2	3/8" M x 1/4" F adaptor	1
C3	1/4" NPT M x 1/4" pushfit	1
C4	1/4" outside diameter plastic pipe	1*
C5	Filter bracket screw	1
C6	Filter bracket	1
C7	Filter cartridge	1
D1	110° rated hot water hose (from boiler output)	1
D2	3/8" fibre seal	1
E1	Boiler	1*
E2	Flexible boiled water output pipe	1*
E3	Connecting tundish assembly	1*
E4	Flexible drain pipe	1*

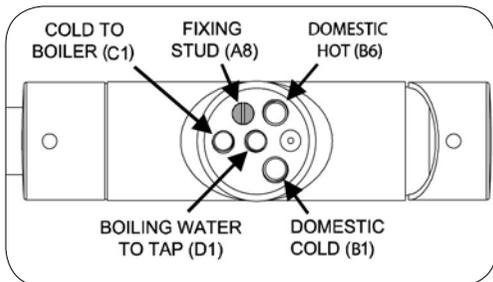
*Part supplied with boiler pack.

 Do not switch on the boiler until instructed.



Tap & Filter Installation

This diagram shows the view of the base of the tap (A1) with the boiling water handle to the left of the body.



This diagram shows the markings on boiler (E1) to indicate the inlet and outlet. See the boiler instructions for further detail.



boiler hot water outlet



boiler cold water inlet

Install the tap:

1. Screw the fixing stud (A8) into base of tap (A1) as shown on the diagram.
2. Place the base plinth (A2) and base plinth seal (A3) onto the base of the tap (A1).
3. Hand tighten the domestic hot flexi hose (B6) as shown in the diagram.
4. Hand tighten the domestic cold flexi hose (B1) as shown in the diagram.
5. Hand tighten the cold out flexi hose (C1) as shown in the diagram.
6. Hand tighten the 110°  rated hot flexi hose (D1) into the centre inlet as shown on the diagram.
7. Place the tap (A1-A3) centrally and straight to the tap hole, passing the fixing stud (A8), flexi hoses (B1, B6, C1, D1) through the tap hole.
8. Pass the lower gasket (A6) then the metal horseshoe (A7) over the fixing stud (A8). Note: only if the tap is to be fitted to a stainless steel sink then the white triangular plate (A5) can be fitted where shown to improve the stability of the tap.
9. Using an 11mm box spanner or small adjustable spanner tighten fixing nut (A9) onto the fixing stud (A8).
10. Screw pushfit (C3) into adaptor (C2), **we recommend using PTFE tape (do not use sealing compound) on the thread of pushfit (C3) to make a good seal without applying excessive force (which may damage the plastic pushfit if overtightened).**
11. Screw pushfit (C3) and adaptor (C2) into the cold out flexi hose (C1).
12. Connect the cold water flexi hose (B1) to the cold water isolation valve (B5) using a section of 15mm pipe (B4) and compression nuts (B3) and olives (B2). Repeat the process to connect the domestic hot flexi hose (B6) to the domestic hot water supply.

Install the Filter:

1. Find a suitable place to mount the filter cartridge (C7) under the sink. It must be mounted vertically as shown, easily accessible (to be changed periodically), away from any heat source and close enough not to exceed the available length of the ¼" plastic pipe (C4) supplied.
2. Using the self-tapping screw (C5) securely fix the filter bracket (C6) to the cabinet wall.
3. Write the installation date onto the filter label in permanent pen then clip the filter cartridge (C7) into the bracket (C6) as shown. You must respect the direction of flow as indicated.
4. Measure and then cut required length of ¼" pipe (C4) to connect pushfit (C3) to the filter cartridge (C7) inlet, then from the filter cartridge (C7) outlet to the boiler inlet (E1) leave a little additional length on both pipes to allow the filter cartridge (C7) to be unclipped and replaced more easily by the customer. The ¼" pipe (C4) must be cut cleanly and squarely with a sharp tube snip.
5. Firmly push connect the ¼" pipe (C4) between pushfit (C3) and filter cartridge inlet (C7), repeat this from the filter cartridge (C7) outlet to the boiler inlet (E1).

After Installation

1. Please refer to 'boiler installation and user guide' for the next steps and complete the installation. **Do not plug in the boiler until advised.**
2. Reconnect the domestic hot and cold water supplies then open isolation valves (B5). As the system starts to refill, check carefully all new water connections for leaks. After the product installation is complete we recommend you recheck for any slower leaks.
3. Turn on the left hand hot water handle fully, keeping the lever open until all air is expelled and cold (unboiled) water exits the centre channel of the tap spout, flush a further 10 litres of cold (unboiled) water through the filter, boiler and tap. You may notice a discolouration to the water at first. This is loose carbon fines from the optional filter. It is normal, harmless and will pass with flushing. Once complete turn off the left hand hot water handle.
4. Plug in and switch on the boiler, then wait until the water has finished heating fully.
5. Clean the tap with a damp soft cloth and a mild detergent to remove any grease marks created during installation as per the care instructions.

 Do not add to, exchange or modify any component of the boiler or mixer tap, only genuine parts must be used. The spout exit or any part of the system must not include any additional third party adaptors, components or connections that will add resistance or modify the system.

 The installation should be periodically checked for damage. If the property is left unattended for a prolonged period we recommend isolating water supplies and switching off the boiler at the mains socket. On reconnection flush thoroughly.

2.2. Boiler Installation

Pack contents



Boiler unit



Drain valve



Screw fixing pack



Tube pack (Hot, Cold & Drain)

Tools you will require:

- 17mm & 19mm Spanner or adjustable spanners
- A drill + $\varnothing 5.0$ & $\varnothing 5.5$ masonry bits (wall mount only)
- No.2 Pozi-drive screwdriver
- Pencil
- Scissors / cutters for tubes

Installation procedure

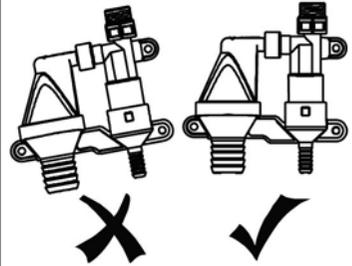
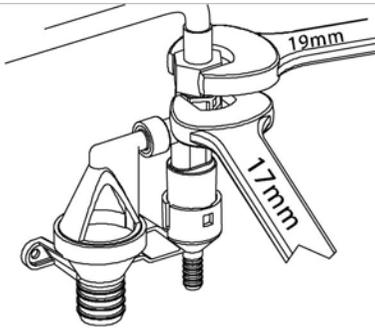
This boiler has to be fitted with the mixertap mentioned in (section 2.1.) with four pipe connections (Hot, Cold, Boiler feed and Boiling hot return). The unit also requires a 24mm barbed drain connector in the sink waste plumbing which is normally used for a dish washer / washing machine (not supplied).

Choose a site for the boiler; it is designed to be fitted in the cupboard under the sink. It can stand on a flat level surface or be mounted on the wall inside, whichever is more convenient (See fitting the boiler diagram on page 23).

The installation order is as follows:

- Fit the mixertap in (section 2.1.) if not already done so.
- Fit the drain valve.
- Fit the boiler.
- Connect the tubes.
- Commission / Calibrate

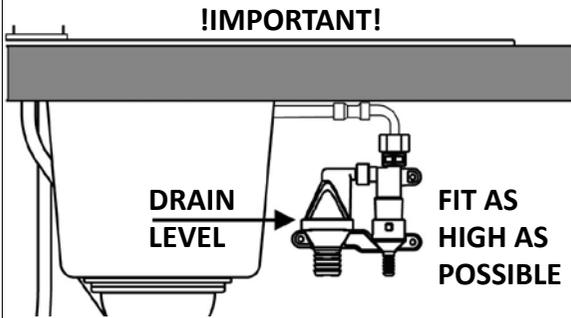
Fitting the drain valve



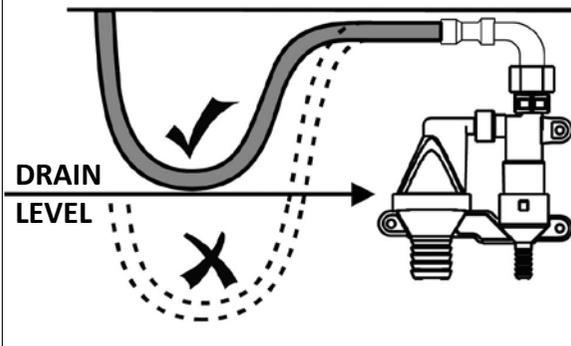
Connect drain valve assembly (E3) to the hot water hose (D1) ensuring fibre seal (D2) is in place.

You may wish to leave this connection loose until the final position of the valve is known.

**!!IMPORTANT!
MUST BE
LEVEL**

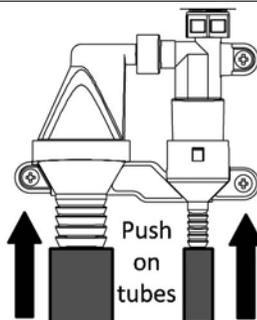
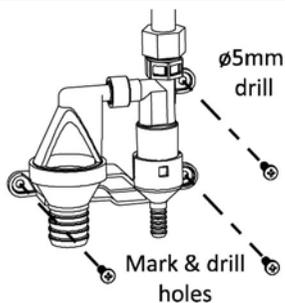


The drain valve (E3) needs to be fitted as high as possible. This is to help prevent the possibility of a blocked sink flowing out to the drain valve (E3).



!!IMPORTANT!

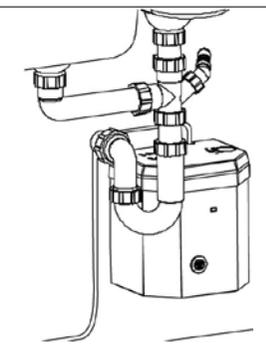
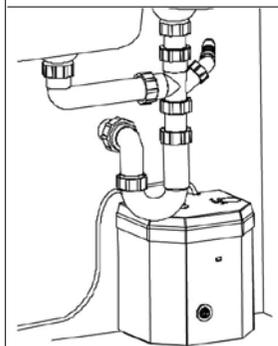
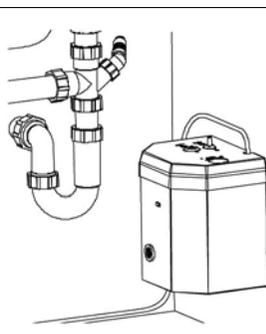
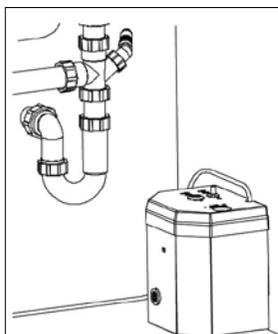
Down loops in the hot hose (D1) are permitted as long as they are not lower than the drain level of the valve at any point. If they drop below this level the valve will not function correctly.



When locating the drain valve (E3) beware of the following:

- Not kinking the tube (E2) from the tap.
- The location of the drain on the sink waste as the tubing does need to be a clear run, not twisted.
- Consider the location of the boiler relative to the drain valve (E3). A shorter run will be less heat loss.
- Connect the drain tube (E4) and the hot feed tube (E2) to the drain valve (E3) – Push fully home.

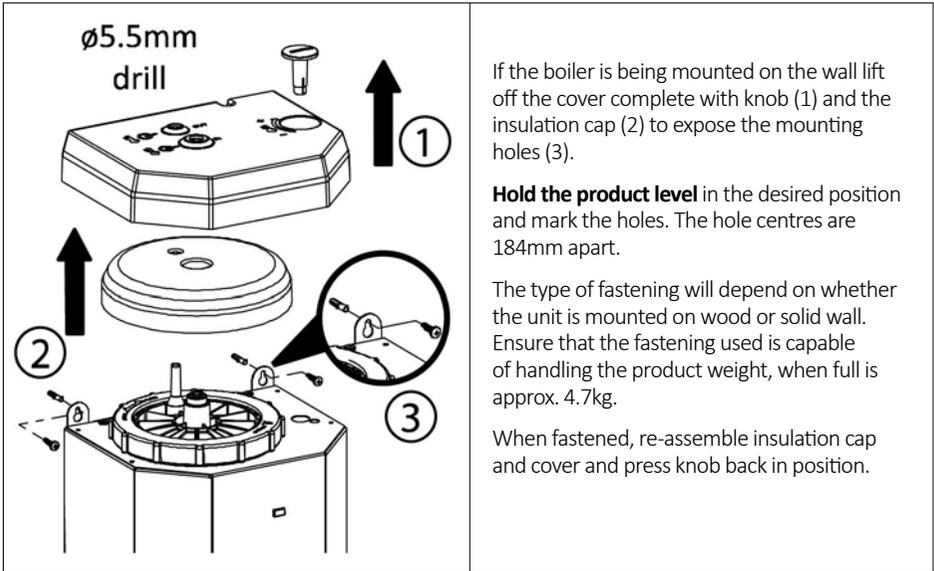
Locating and fitting the boiler unit



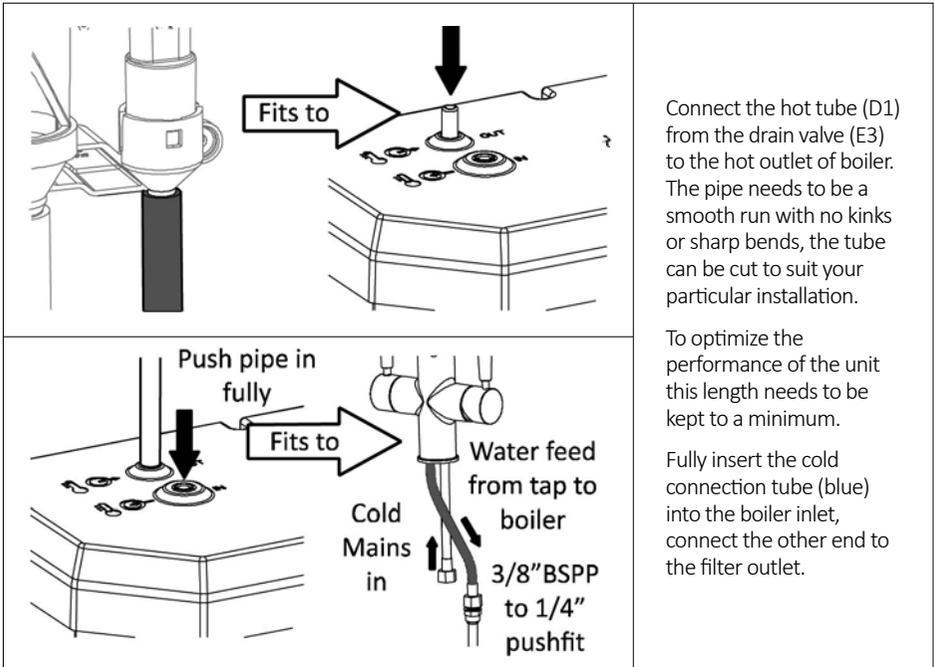
The boiler unit can be free standing or mounted on the wall inside the cupboard.

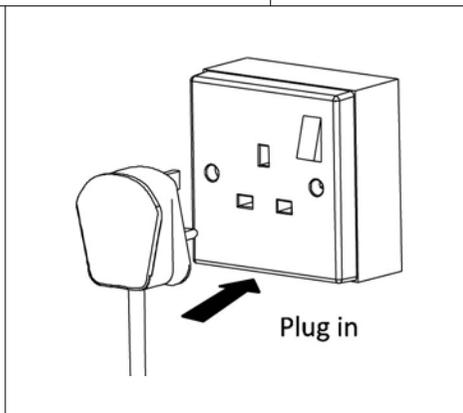
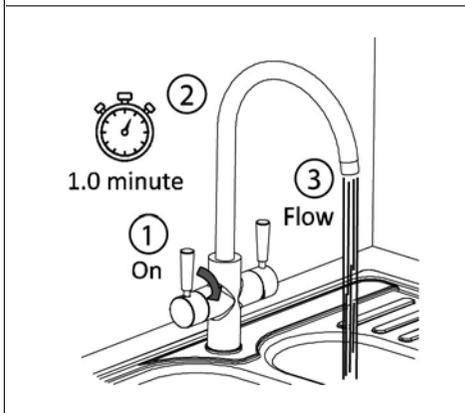
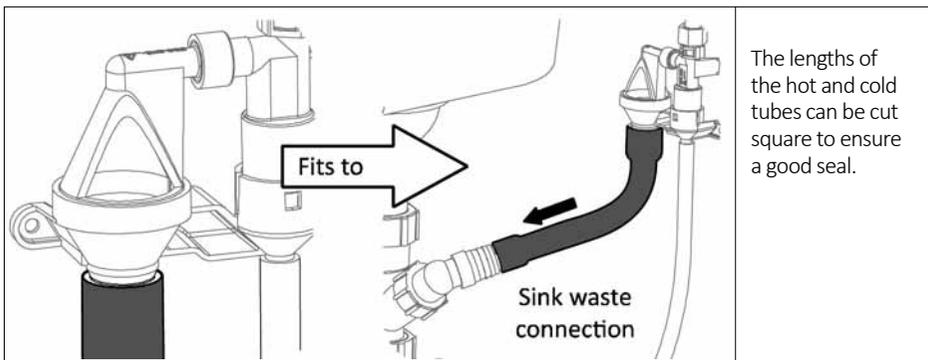
Points to consider:

- Location of drain valve to boiler
- Location of electric supply
- Clearances from other obstructions under the sink
- Access required to remove the unit to service it and enough space to place a container in front of (or under) it to drain it
- The boiler plug must be accessible at all times to allow unimpeded service access, isolation and removal. The power wire should not pass through a hole in the cabinet smaller than the plug



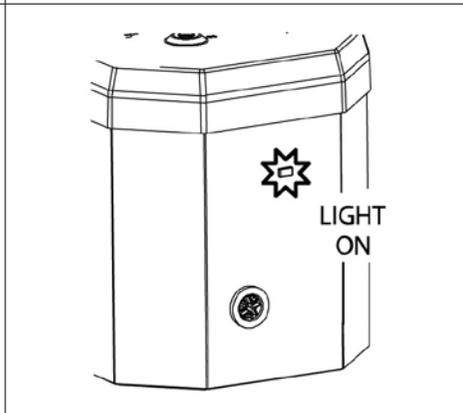
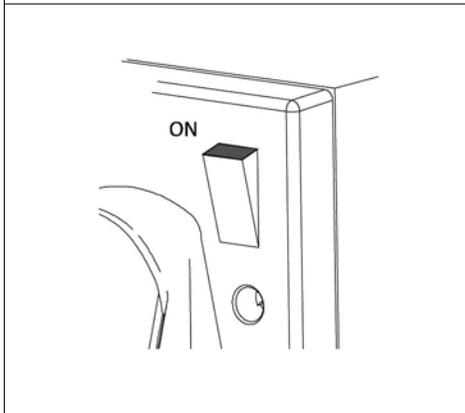
Connecting the tubes





1. Pull the lever forwards for approximately 1 minute or until water flows.

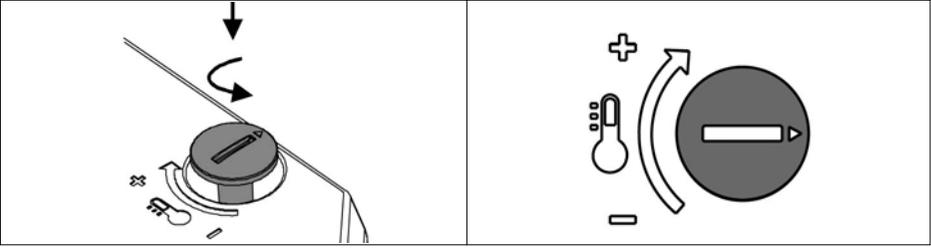
2. Plug the boiler in at the mains.



3. Turn the boiler on at the mains.

4. The red light will come on when the boiler is turned on.

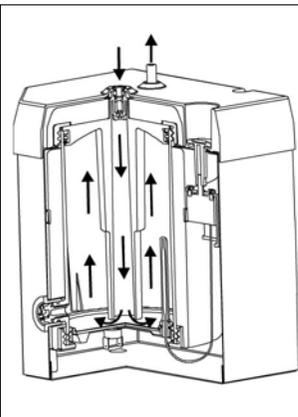
Calibration procedure



1. Loosely rotate temperature knob until it drops then press down.
2. Turn the calibration knob **fully clockwise and wait** for the boiler to boil freely. (Approx. **12 minutes** from cold). When fully boiled the water may come from the tap spout without the handle being turned on.
3. Whilst the unit is boiling turn the **knob slowly anti-clockwise** until you hear a “click” (the light on the front will go out). IMPORTANT – DO NOT over-rotate the knob as the movement is limited to $\frac{3}{4}$ of a turn only.
4. To **check the setting** run the tap until the water runs out cold and allow the boiler to reheat back up. If set correctly, the unit will switch off automatically indicated by the light going out on the front. **You may have to repeat** this a couple of times to optimize the setting.
5. If the boiler is set too high the unit will boil too often and hot water may drip or be ejected from the tap outlet. Due to atmospheric pressure this setting may need to be adjusted from time to time to optimize the performance.

IMPORTANT NOTE: The tap may drip during this process as the drain valve requires time to work.

How the PROBOIL works



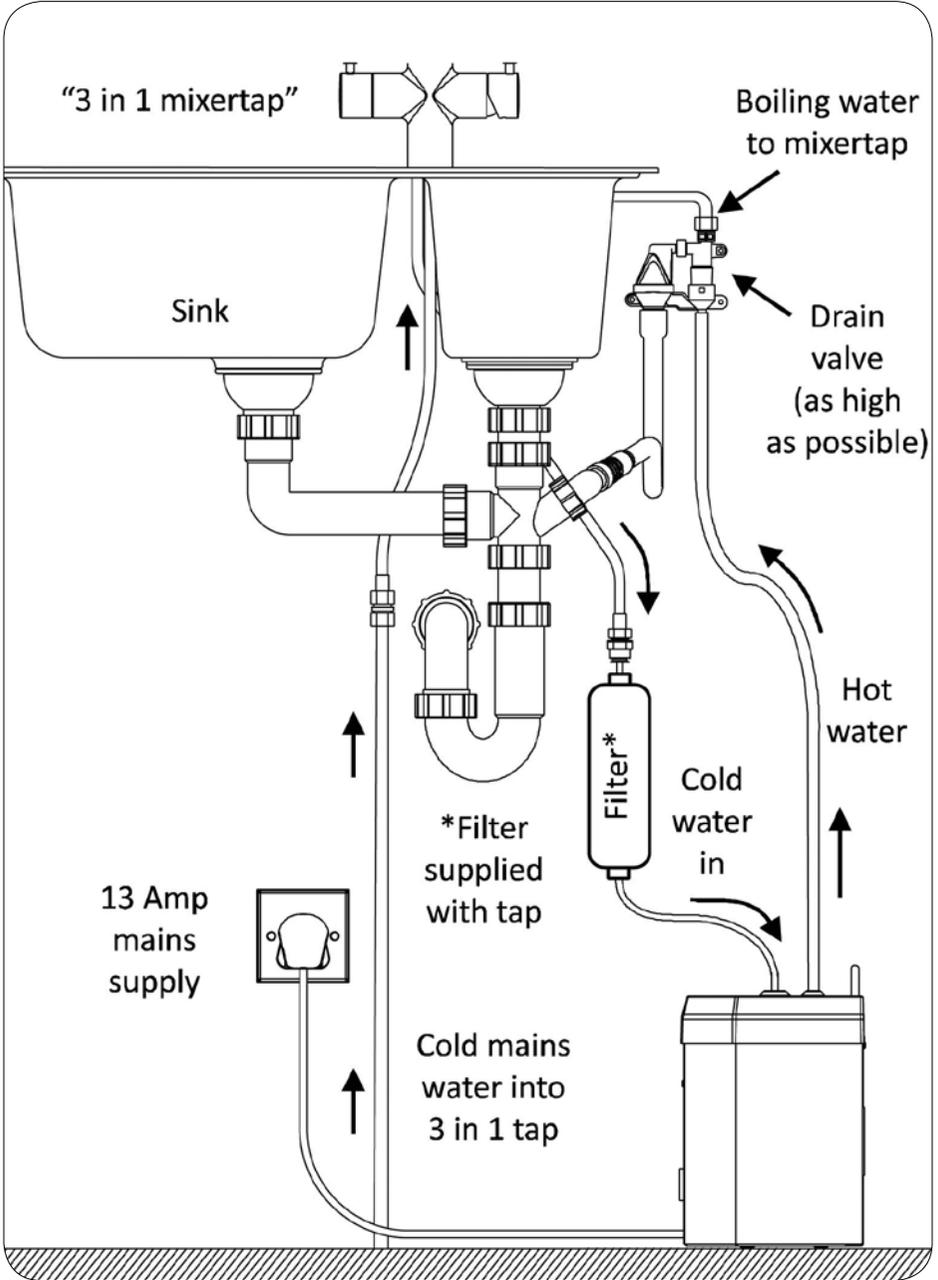
This boiler works on displacement i.e. the cold water is fed into the bottom of the tank which then forces the hot water out of the top. The water temperature is controlled via thermostat. The setting of this is designed to allow the user to set the highest temperature while not allowing the unit to boil continuously.

For additional safety the unit also has a boil dry thermostat and a thermal fuse.

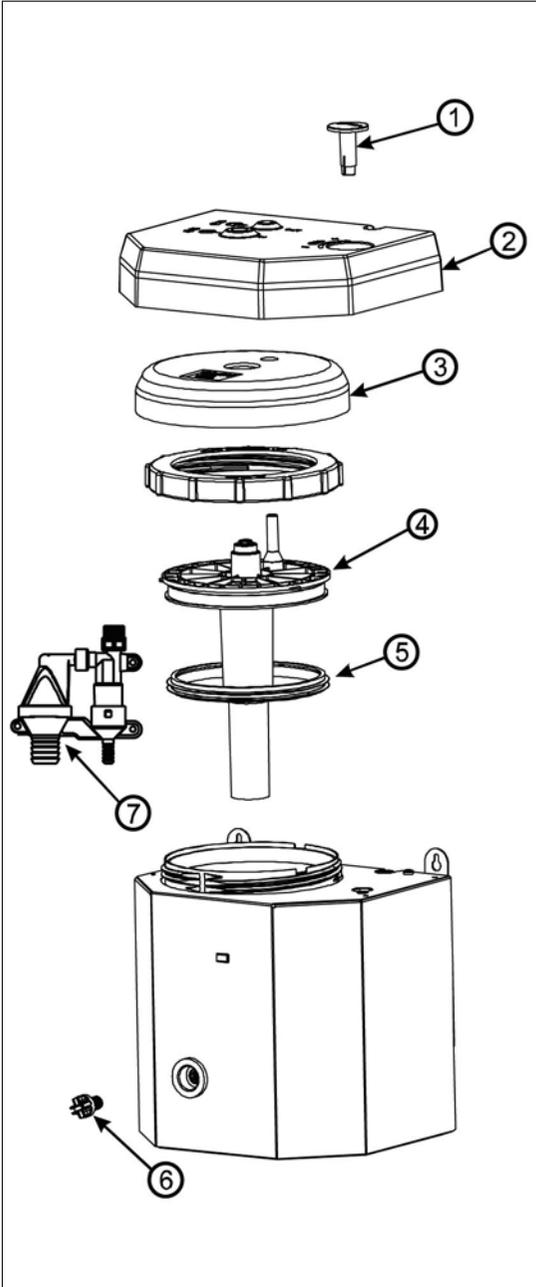
A drain/tundish valve is connected to the outlet which will drip slightly when running. This is normal and is designed to drain down the tap after it is used.

Note: The drain/tundish valve does take time to fully drain the tap, so repeated draw offs can cause the tap to drip while heating back up. Once drained the tap will not drip.

Connection Summary



Spares list



1. Control knob – 95-719821
2. Top lid – 95-719822
3. Top insulation – 95-719823
4. Tank lid complete – 95-719824
5. Tank rubber seal – 95-719825
6. Drain plug – 95-719826
7. Drain valve complete – 95-719827
8. Hose pack (3 tubes) – 95-719828

Technical data

Dimensions (mm) –
H 238 W 217 D 176

Weight empty – **2.8kg**

Weight full – **4.7kg**

Unit capacity – **2.0 Litres**

Unit loading – **1000 watts @230V**

Supply voltage – **220-240V ac**

Inlet connection – **¼" push fit**

Boiler outlet – **8mm plain shank**

Drain valve – **3/8" BSP thread**

Flow rate – **1.8 Litres/minutes**

Time to fill (from empty) – **1.0 minutes**

Time to heat up from cold – **12 minutes**

Recovery time – **8 minutes**

Min. water pressure – **2.5 bar**

Max. water pressure – **8.0 bar**

Temperature range – **65 – 98°C**