Installation and Operating Instructions

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# Zip Hydroboil

Instant boiling water



HS001	Zip Hydroboil 1.5 Litre White	01552
HS003	Zip Hydroboil 3.0 Litre White	03552
HS005	Zip Hydroboil 5.0 Litre White	05552
HS105	Zip Hydroboil 5.0 Litre Stainless Steel	05551
HS007	Zip Hydroboil 7.5 Litre White	07552
HS107	Zip Hydroboil 7.5 Litre Stainless Steel	07551



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## Description

Wall mounted Over-sink appliance for instant boiling water.

#### Features:

- Designed to operate within 1°C of boiling point.
- Temperature controls automatically cut off the power in the event of temperature control failure, boil dry cutout or a blocked vent pipe.
- Incorporating a pull down tap for precision filling of cups, it also locks 'ON' for filling pots.
- Separates the cold water supply from the boiling chamber and the internal condensing system retains steam within the heater.
- A stainless steel crevice free, boiling chamber with service access ports top and bottom.
- High temperature thermal insulation with provision for service access to the boiling chamber.
- Concealed plumbing and electrical connections.
- Choice of stainless steel or white enamelled steel case.

## **Installation Checklist**

#### **Before Installation:**

- A. Read the instructions.
- B. Note: All fittings are supplied with the appliance kit except isolation valve and pressure reduction valve, which are not supplied.
- C. Check the water quality to determine if extra filtration will be required. A potable mains water supply must be used.

To combat the build up of lime scale, a high performance inline filter (not supplied as standard equipment) may be ordered from your Zip service provider. (See Product Accessories page 4)

- D. Check the appliance rating plate and ensure correct power is available for the appliance.
- E. Check the wall supporting the appliance is adequate for the total weight of the appliance, when full of water.

#### **Before Commissioning:**

- 1. Check the unit has been installed correctly.
- 2. Check all plumbing fittings have been tightened.
- 3. Ensure the vent pipe is positioned to drain correctly.
- 4. Check all electrical connections are correct and there are no loose wires.

#### **Commission:**

- 7. Flush the supply line before connecting.
- 8. Turn on the water, allow to fill and check for leaks.
- 9. Turn on the power.

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## NOTE:

Read all instructions and precautions before proceeding. If in doubt, or need further guidance, please call Zip on 0845 6 005 005.

Please leave these instructions with the end user after installation.

This unit must be installed in accordance with water supply byelaws, current IEE regulations and relevant local authority byelaws.

These products are approved to the LVD and EMC directives and CE endorsed.

Zip Hydroboil has been examined, tested and found when correctly fitted to comply with the requirements of the United Kingdom Water Regulations / Byelaws (Scotland). The products are listed under the WRAS (Water Regulations Advisory Scheme) Water Fittings and Materials Directory.

Zip Heaters (UK) Ltd cannot be held liable for any damages caused by failure to observe these instructions.

## **Product Specifications**

Model	Finish	Capacity Litres	<b>Delivery</b> Cups @ any one time	Recovery Cups per hour	Rating kW @ 230V	Width mm	Depth mm	Height mm	<b>Weight</b> Empty Kg	<b>Weight</b> Filled Kg
HS001	White	1.5	9	100	1.5	289	180	335	7.0	10.0
HS003	White	3.0	18	100	1.5	289	180	431	8.0	12.5
HS005	White	5.0	30	140	2.4	318	198	465	9.5	16.5
HS105	s/steel	5.0	30	140	2.4	318	198	465	9.5	16.5
HS007	White	7.5	45	180	2.4	318	198	578	11.0	20.5
HS107	s/steel	7.5	45	180	2.4	318	198	578	11.0	20.5
Water Inle	Water Inlet Pressure: 0.07 MPa (0.7 bar) minimum / 0.7 MPa (7 bar) maximum. Protection class IP23									

### Accessories:

## **Inline Filter**

FL064 6" (For taste and odour removal with scale reduction)

Drip Tray

ZD001 Stainless Steel (with drain)

ZD002 Stainless Steel (no drain)

## **Cup Dispenser**

ZE001 Stainless Steel

ZE002 White Plastic

ZE010 Mug Rack

### **Counter Stand**

ZE004	For HS001
ZE006	Fot HS003
ZE007	For HS005, HS105
75000	

ZE008 For HS007, HS107

## Tundish

ZD100 Wall Mounted Chrome Tundish

ZD101 Sink Mounted Chrome Tundish

### Water Block

HE45004 Recommended; fitted into the supply line to minimise potential damage in the event of leakage.

## **Pressure Reducer**

AQ3 Combined pressure reducer (set at 3.5 bar) and line strainer.

## **Read These Warnings First**

### **IMPORTANT:**

## PLEASE READ THESE INSTRUCTIONS CAREFULLY.

NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. RETAIN THESE INSTRUCTIONS FOR FUTURE USE.

WARNING:	Situations that could cause injury to yourself or others.
CAUTION:	Situations that could cause damage to your appliance or other equipment.
NOTE:	Notes, usage tips or additional information.

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## **Read These Warnings First Continued**

## Safety

This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



Please read all installation requirements, installation procedures and precautions before installing any Zip Hydroboil instant boiling water heater.

Never attempt to install any Zip Hydroboil instant boiling water heater without reading all of the applicable instructions. Care should be taken to avoid touching the metal body of the tap which can become very hot.

In some hard water areas where mineral scale accumulation in the boiling chamber of the Zip Hydroboil may become a problem, consideration should be given to the maintenance required. A suitable form of water treatment may be necessary.

As the installer, it is your responsibility to supply (if necessary) and install all valves as required by local regulations and relevant standards.

The plumbing installation must be done in accordance with local Water Authority regulations and these Installation Instructions.

## Here This appliance must be earthed.

If the power cable is damaged it must be repaired only by a qualified technician. To avoid hazards, all installation procedures must be carried out by a suitably qualified tradesperson. The power cable and power outlet must be in a safe visible position for connection.

The power cable must be adequately secured.

Do not remove the cover of the heater under any circumstances without first isolating the heater from the power supply.

The appliance, its wiring and piping must not be modified in any way.

The appliance must be completely filled with water before being switched on.

In case of malfunction isolate the power supply immediately. In case of leaks also isolate the water supply. Repairs must only be carried out by Zip Heaters (UK) Ltd or an authorised Zip service engineer.

### Lifting

Take care when lifting the Zip Hydroboil unit. Some units may exceed safe lifting limits. If you feel this is beyond your personal capabilities, please seek assistance with the lift. See specifications on page 4 for weights.

## **Operating Conditions:**

The ambient temperatures this unit should operate within is 5°C - 50°C.

Frost protection: If this heater is located where ambient air temperature could fall below 5°C; when the heater is not in use, do not turn off the appliance electrically. This safeguard will protect the unit from frost damage but does not offer the same protection to the connecting pipework and fittings.

This heater is intended only for indoor use and should never be installed outdoors or be exposed to the elements of nature.

This unit must not be positioned in an area that may be cleaned by a water jet. This unit must not be cleaned by a water jet. **Cleaning:** 

Hydroboil should only be wiped clean with a damp cloth. Never use abrasive cleaning agents or solvents on any part of the Hydroboil, particularly the tap.

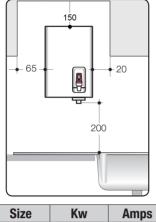
## Installation Requirements

Before installing, ensure that the following are available:

Sufficient space to position the heater so there is at least 150mm clearance above the heater for service access, 65mm to its left and 20mm to its right the tap outlet usually should be positioned at least 200mm above a draining board or drip tray.

## Installation Requirements Continued

## Minimum Clearance in mm



Size	Kw	Amps
1.5 Ltr	1.5 kW	13 A
3.0 Ltr	2.4 kW	13 A
5.0 Ltr	2.4 kW	13 A
7.5 Ltr	2.4 kW	13 A

b. Electrical supply.

A standard 13 amp double pole fused spur on the wall within 1500mm of the heater.

Isolation switches must have a contact separation of at least 3mm in all poles. The circuit should be protected by a suitably rated RCD. The electrical installation should comply with current IEE regulations and any Local Authority requirements.

- c. A potable cold water supply with a minimum working pressure of 0.07 MPa (0.7 bar) and a maximum working pressure of 0.7 MPa (7 bar) connected via an isolation valve.
- d. Outlet drainage to a sink draining board or to a drip tray.
- e. Access to drainage from a vent situated at the base of the heater.
- f. If the water pressure is likely to exceed 0.7 MPa (7 bar), a 0.35 MPa (3.5 bar) pressure reducing valve must be installed in the cold water supply line.
- g. In all installation instances the walls of the heater must be vertical and the base horizontal, there can be no exceptions to this rule.

## Installation Procedures

## Before You Begin

Locate the paper mounting-hole template packed with the heater. Read the installation and operating instructions completely.

Decide whether to install with concealed or exposed plumbing and/or electrical connections. Concealed connections are preferred for superior appearance.

### Step 1 – Positioning

Position the heater so the tap will drain on to a draining board or drip tray. Position the base of the tap to be not less than 200mm above the draining board (height should be increased only if essential for filling larger vessels). Provide clearance for service access of not less than 150mm top, 65mm left, 20mm right.

Mark corner positions for the heater on the wall so as to position the paper mounting-hole template.

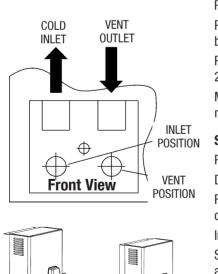
### Step 2 – Fastening

Position mounting-hole template on wall and drill holes where shown.

Drill holes for water inlet, vent outlet and wiring if rear access is intended. Remove cover fastening screws (as shown below) from heater and lift whole cover off heater.

Install plumbing and wiring and prepare pipe ends and wiring ends as shown. Screw heater chassis to the wall using the supplied fixings, ensure the fixings are suitable for the substrate. If not supply your own suitable fixings.

Ensure the mounting surface is capable of supporting the weight of the filled unit, fixings must be capable of supporting the heater weight when filled. See Product specifications for filled weights.

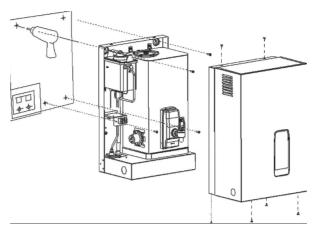


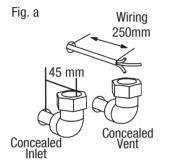
0<sup>10</sup> Exposed Services Concealed Services

## Installation Procedures Continued

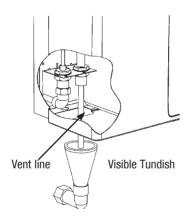
## Approximate Weights When Filled

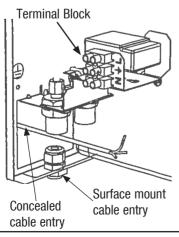
1.5 Litre models	10 kg
3.0 Litre models	12.5 kg
5.0 Litre models	16.5 kg
7.5 Litre models	20.5 kg













#### Step 3 - Connecting

#### a) Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the heater directly to the 15mm ( $\frac{1}{2}$ ") compression fittings with the nuts and olives provided.

For concealed plumbing connections, connect the cold water pipe through the rear of the chassis using a  $15 \text{mm} (\frac{1}{2})$  capillary elbow.

Cold water pipes must be flushed before connection to the inlet. Any clogging due to sediment or fines will adversely affect the operation of the heater.

The heater must be installed with an isolating valve which allows it to be isolated from the mains supply for servicing.

#### Water pressure requirements:

Minimum - 0.07 MPa (0.7 bar) Maximum - 0.7 MPa (7 bar).

Caution: If pressure is likely to exceed 0.7 MPa (7 bar), a pressure limiting valve must be installed in the cold water supply line. Zip recommends a valve rated at 3.5 bar (0.35 MPa) for this application (Zip part No. AQ3).

### b) Venting

A vent at the base of the heater must be plumbed to a safe visible location as, under certain conditions, it may discharge cold or boiling water and / or steam.

For exposed vent plumbing, connect vent outlet from the base of heater to a 15mm or half inch OD pipe which has a continuous fall, is no more than 3 metres long, has no more than 3 right angle bends, and discharges to a waste water drain.

For concealed vent plumbing (Fig. a), connect plumbing to the vent outlet from the heater rear using a capillary elbow protruding 45mm from the wall. The plumbing must then be directed to a tundish that must be in a visible location before being plumbed away to waste.

Alternatively attach the tundish to the wall (Fig. b) and plumb away to waste.

#### c) Electrical

For concealed electrical connection, run the power cable through the rear access opening of the heater to the terminal block within the heater.

For surface mount installation run the power cable through the cable entry gland at the bottom of the unit to the terminal block within the heater. Ensure the cable is firmly secured.

Isolation switches must have a contact separation of at least 3mm in all poles.

Do not turn the power ON until water flows from the tap.

## Installation Procedures Continued





Inlet water temperature	15°C	10°C
1.5 Litre models	10 min	11 min
3.0 Litre models	16 min	17 min
5.0 Litre models	16 min	17 min
7.5 Litre models	23 min	24 min

#### Step 4 – Assembling

Position the casing back on to the heater and secure with the two top and two bottom Torx screws.

## **Tap Fitting**

## (I) Caution! To ensure correct fitment of the tap assembly, follow the instruction a to c below carefully.

Remove the black plastic cap from the hot outlet tube. PTFE tape has been pre-applied to the hot outlet tube (check it is in good condition before proceeding).

If not remove the damaged PTFE tape and carefully apply two to three complete turns of new PTFE tape onto the threads in a clockwise direction as shown alongside.

- a. Screw the tap assembly clockwise on to the tap outlet tube.
- b. Continue turning clockwise until the tap assembly just touches the fascia without pressure.
- c. Continue to turn the tap up to one full turn maximum until the tap lever is in the upright position. (Do not force the tap upright; if you cannot get the tap to the upright position without applying undue force, remove the tap, start the thread in a new position or apply a few more turns of PTFE and repeat the procedure.

## Step 5 – Commissioning

Check previous steps. Turn water supply ON. Water is now flowing into the heater, check all connections for leaks. Wait approximately 5 minutes and check outlet tap for water. This is achieved by pulling the tap handle forward. **Do Not** turn on the power at this stage.

Ensure the tap handle is correctly adjusted to its optimum position.

- Screw the red knurled cap clockwise until hand tight without using excessive force or a tool of any kind.
- Slowly unscrew the knurled cap anti-clockwise until the tap starts to drip.
- Tighten the knurled cap a half a turn clockwise. The dripping will stop and the tap will be set at the optimum position.

When the tap has been adjusted and the unit is full of water turn the power on. The light in the tap fascia will light to show power is on.

After a short period, boiling water will be available and will be maintained close to boiling point thereafter. Initial heating periods are shown in the table on the left.

## **Operating Procedures**

### Tap Operation

Zip Hydroboil is fitted with a two-way tap for instant boiling water.

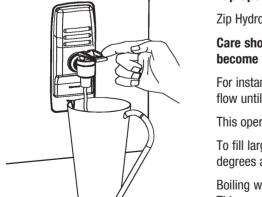
## Care should be taken not to touch the metal body of the tap which can become very hot.

For instant boiling water, gently pull the tap lever forward. Boiling water will flow until the tap handle is released.

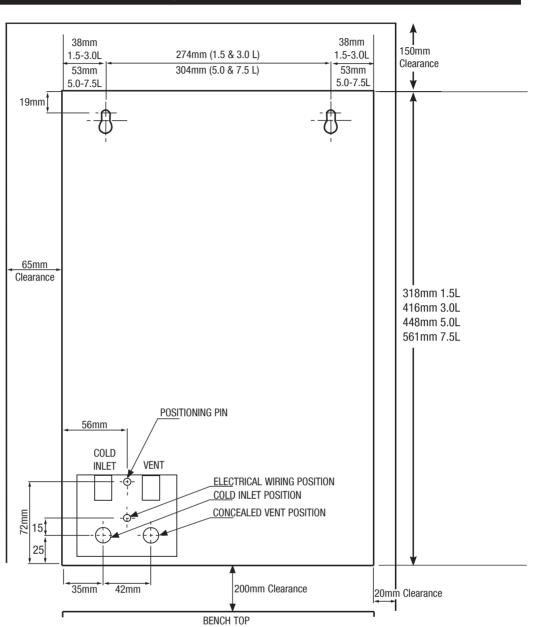
This operation gives fingertip flow control for safe filling of cups and mugs.

To fill larger vessels such as teapots and saucepans, rotate the lever 180 degrees and depress it until it locks into a horizontal position.

Boiling water will flow until the lever is returned to its normal vertical position. This operation allows the vessel to be filled without holding your hand where it may be affected by steam.



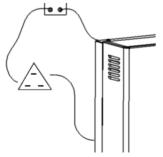
## **Template Dimensions**



## **Earthing Continuity Verification & Electrical Diagram**

**Warning:** This appliance must be earthed.

If required, an earth continuity test can be performed by testing between the earth pin on the products lead and a exposed piece of metal on the case and the tap body.



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Isolate power supply.
 Set meter to 0 ohm w

- 2. Set meter to 0 ohm with leads connected together.
- 3. Connect one test lead to the earth pin on the three pin plug.

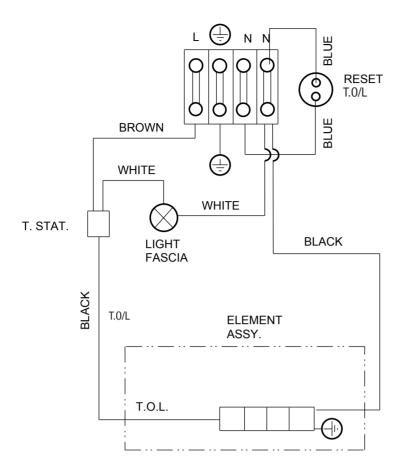
5 or better. Class 5 denotes an accuracy of 5% full scale deflection.

4. Connect the other test lead to a bare patch of metal (preferably on the edge) of the top of the cover, then to the front cover of the unit, and then to the tap top under the plastic paddle. This can be achieved by inserting the probe up from behind the paddle without losing water.
Marning: The water may be boiling - show extra care.

Following remedial service the earthing continuity of the heater must be checked by

a qualified technician using an appliance tester, or continuity tester of accuracy Class

5. Test that in every instance the electrical resistance does not exceed 10hm.



## Wiring Diagram

Single Element up to 3kW with 1 Pole. T.O/L: Thermal Over Load. Thermostat Controlled

## **Problem Solving**

Symptom	Possible Cause	Solution	
	Water isolating valve turned off.	Check isolation valve is turned on.	
	Blocked filter or meter tube.		
Fails to dispense water.	Blocked strainer.	Contact 7in authorized agent	
	Jammed ball valve assembly.	Contact Zip authorised agent.	
	Airlock in transfer tube.		
Water not boiling.	No power.	Check power supply.	
water not bonnig.	Faulty thermostat, element or cutout.	Contact Zip authorised agent.	
Runs out of boiling water and fails to refill.		Contact Zip authorised agent.	
Outlet tap drips.			
Overflow from vent.			
Excessive steam from vent.			
Power "on" but no heat.	Internal adjustment.		
Overload repeatedly tripping with excessive steam.			
Overload repeatedly tripping without excessive			
steam			

## **Maintenance / Cleaning**

For maintenance and six monthly safety checks, please refer to the Preventative Maintenance sheet No.85695 included with the Hydroboil.

Maintenance should be carried out by a Zip authorised technician.

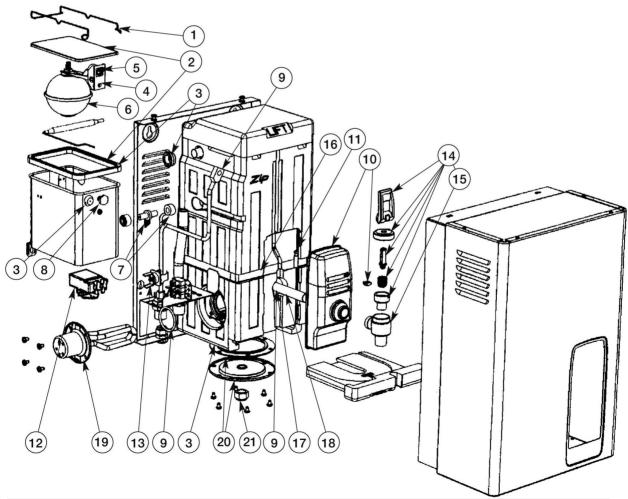
**Cleaning Case:** Do not use strong, corrosive, spray or abrasive cleaners. Clean the case with a soft cloth or brush and mild soap and water.



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Spare Parts						
Key	Part No	Description	Key	Part No	Description	
1	SP90487	Cistern lid clamp kit	16	SP90504	Strap & key kit 5 & 7.5 litres	
2	SP90488	Cistern lid gasket kit	17	SP90505	Tap nut kit	
3	SP90490	Gasket kit	18	SP90506	Tap extension	
4	SP90083	Float valve kit, with float	19	SP80563	Element kit 1.5kW 110v 1.5 & 3 litres	
5	SP90069	Jumper valve kit, with seals	19	SP90485	Element kit 1.5kW 240v 1.5 & 3 litres	
6	SP90102	Cistern float	19	SP90486	Element kit 2.4kW 240v 5.0 & 7.5 litres	
7	SP90493	Transfer tube kit – 1.5kW	20	SP90491	Cleaning hole cover kit	
7	SP90494	Transfer tube kit – 2.4kW	21	SP90492	Drain cap & seal kit	
7	SP90531	Transfer tube kit – 3kW		SP90522	Cistern jet nozzle kit	
8	SP90495	Banjo screw		SP90132	Hot tank lid & gaskets for 5 & 7.5 litres	
9	SP90496	0-ring kit complete		SP90131	Hot tank lid & gaskets for 1.5 & 3.0 litres	
10	SP90517	Fascia & lens kit		SP90130	Lid clips	
11	SP90110	Fascia light kit		SP81230	Tap Flow restrictor	
12	SP90081	Thermostat kit 1.5 – 25 litres		SP88296	Cistern tank 1.5 – 7.5 litres	
13	SP90127	Overload kit, other HS models		SP88490	Cistern Tank Grommet Kit	
14	SP90501	Tap top kit		SP88394	3L Main tank complete	
15	SP90502	Tap assembly complete		SP88264	5L Main tank complete	
16	SP90503	Strap & key kit 1.5 – 3 litres		SP88381	7.5L Main tank complete	



## End of life disposal



The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for the collection and recycling of unwanted electrical and electronic equipment.

In order to preserve our environment we ask that you dispose of this product correctly. Please contact Zip Customer Service for advice on 0845 6 005 005.

## **Warranty Information**

Certain warranties may be implied by law into your contract with Zip. The warranty provided below is additional to these implied warranties and nothing set out below shall limit your statutory rights or rights at law. Zip Heaters (UK) Ltd warrants that, should any part fail within 24 calendar months of installation, that part will be repaired or replaced free of charge by Zip or its Distributor or Service Provider, except as set out below, provided the appliance is installed and used strictly in accordance with the instructions supplied, and that failure is not due to accident, misuse, abuse, unsuitable water conditions, or to any alteration, modification or repair by any party not expressly nominated by Zip.

No costs are payable by the customer other than any mileage or travelling-time charges incurred by a Zip Service Provider or the cost of removal, cartage and re-installation of any component of the appliance if it needs to be returned for repair to Zip or its Distributor.

This warranty does not cover damage resulting from non-operation of the appliance, the use of non authorised parts or consequential damage to any other goods, furnishings or property.

No warranty applies to the life of any filtration cartridge installed with the appliance as cartridge life may vary according to water quality and the rate of water consumption.

Zip does not exclude, restrict or modify any liability that cannot be excluded, restricted or modified or which cannot, except to a limited extent, be excluded, restricted or modified as between the owner or user and Zip under the laws applicable.

Furthermore, this warranty does not displace any statutory warranty, but, to the extent to which Zip is entitled to do so, the liability of Zip under any statutory warranty will be limited at Zip's option to the replacement of the appliance or supply of equivalent appliance, the payment of the cost of replacing the appliance or acquiring an equivalent appliance, or the payment of the cost of having the appliance repaired or the repair of the appliance.

#### **Registering Your Purchase**

Registering your Zip installation on the Zip website may help to establish date of installation should it become necessary to service the appliance under terms of the Zip warranty. To register your installation go to www.zipheaters.co.uk and look under the heading "Warranty".

As Zip policy is one of continuous product improvement, changes to specifications may be made without prior notice. Images in this booklet have been modified and may not be true representations of the finished goods.





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