

# Zip<sup>®</sup> Econoboil<sup>®</sup>

Budget priced instant boiling water for canteens and kitchens.



03592	Zip Econoboil 2.5 litre White	HS403
05592	Zip Econoboil 5.0 litre White	HS405
07592	Zip Econoboil 7.5 litre White	HS407

**Zip<sup>®</sup>**  
Instant Boiling Water



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## Read These Warnings First



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

Never attempt to install any Zip Econoboil instant boiling water heater without reading all of the applicable instructions.

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

The cold water supply to this appliance must be potable and fall within your local authorities guidelines.

The Zip Econoboil instant boiling water heater is not intended for use by young children or infirm people without supervision.

Young children should be prevented from having access to ensure that they are not able to use or play with the heater.

If the installation site is located more than 1000 metres above sea level, the installer should contact Zip for high altitude settings.

This appliance must be earthed. If the power supply cord is damaged it must be replaced by a qualified electrician.

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

Do not use strong, corrosive or abrasive cleaners to clean the case of the heater.

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 does not offer the same protection to the connecting pipework and fittings.

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

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.

## Installation Requirements

Before installing, ensure that the following are available:

- a) Sufficient space to position the heater so there is at least 150 mm clearance above the heater for service access, 65 mm to its left and 20 mm to its right – the tap outlet usually should be positioned at least 200 mm above a draining board or drip tray.
- b) Power supply 13 amp fused spur for connection to the heater via a double pole fused spur with a minimum break rating of 13 amps.

For units with 3.6 Kw element (25 ltr) or multi element units (40 ltr) an isolating switch in the fixed wiring and attached to a secure surface is required. This switch must provide all-pole disconnection and a contact separation of at least 3 mm installed in accordance with wiring rules.

- c) Cold water supply with a minimum working pressure of 1.5 bar and a maximum working pressure of 10 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.  
If the water pressure is likely to exceed 10 bar, a 3.5 bar pressure reducing valve must be installed in the cold water supply line.
- f) 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 200 mm above the draining board (height should be increased only if essential for filling larger vessels).

Provide clearance for service access of not less than 150 mm top, 65 mm left, 20 mm 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.

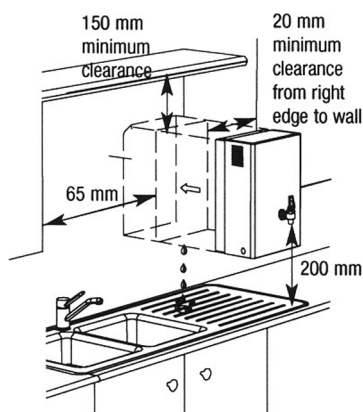
Drill holes for water inlet, vent outlet and wiring if rear access is intended.

Remove cover fastening screws from heater and lift whole cover off heater.

Install plumbing and wiring and prepare pipe ends and wiring ends as required.

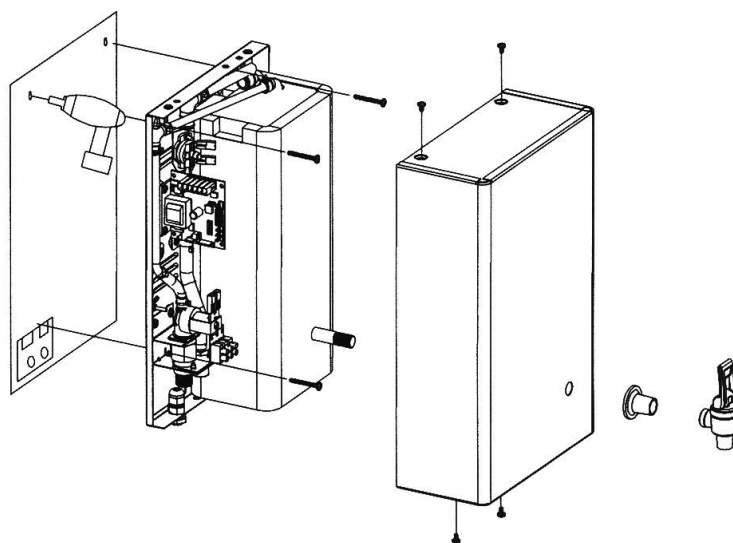
Screw heater chassis to the wall using screws or bolts suited to the walling.

Screws or bolts must be capable of supporting the heater weight when filled. (Please refer to the table on the left).



**Approximate Weight When Filled**

2.5 Litre model	10 kg
5.0 Litre model	13 kg
7.5 Litre model	16 kg



## Installation Procedures Continued

### Step 3 – Connecting

#### a) Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the heater directly to the 15 mm or half-inch 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 mm or half-inch 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.

It is recommended that the heater be installed with a stop cock which allows it to be isolated from the mains supply for servicing.

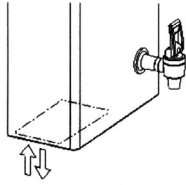
#### Water pressure requirements:

Minimum - 0.2 bar, maximum - 10 bar.

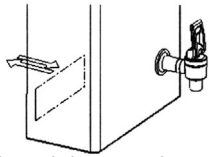
**Warning:** If pressure is likely to exceed 10 bar, a pressure limiting valve must be installed in the cold water supply line. Zip recommends a valve rated at 3.5 bar for this application.

#### b) Venting

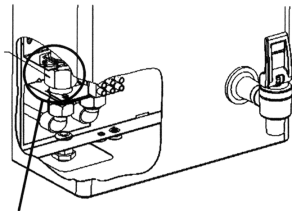
A vent at the base of the heater must be plumbed to a safe visible location as, under certain conditions, it may discharge cold or boiling water and/or steam.



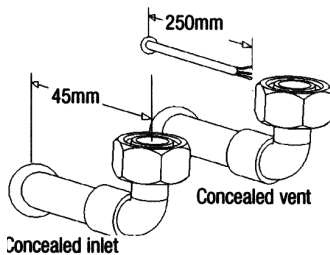
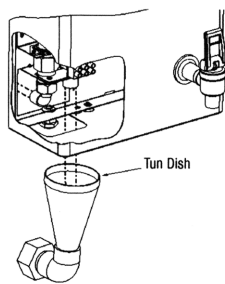
Exposed power and water are connected through base.



Concealed power and water are connected through rear.



**Note:** Ensure the brass hexagonal fitting is securely held with an appropriate spanner while tightening the plumbing connections.

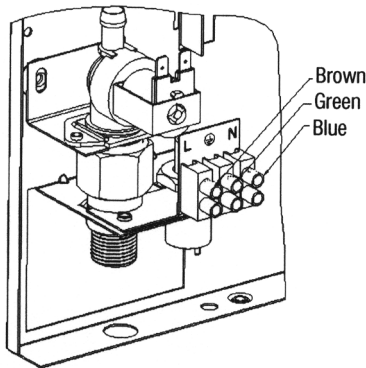


For exposed vent plumbing, connect vent outlet from the base of heater to a 15 mm or half inch OD pipe which has a continuous fall, is no more than 3 metres long, has no more than 3 right angle bends, and discharges to a waste water drain.

For concealed vent plumbing, connect plumbing to the vent outlet from the heater rear using a capillary elbow protruding 45 mm from the wall.

Alternatively attach a tun dish to the wall as shown and plumb away to waste.

## Installation Procedures continued



### c) Electrical

This unit is designed for connection to 220-240 volt AC power supply via a concealed electrical connection.

For exposed electrical connection the unit is fitted with a power cable connected directly to the terminal block through the heater base.

For concealed electrical connection, fit a power cable from the rear through the chassis opening provided directly to the terminal block as shown.

### Step 4 – Assembling

Without the cover on, turn the water on to check for any leaks. These should be apparent in a couple of seconds. If all is dry then isolate water and replace cover. If there are any leaks re-visit plumbing instructions.

With the cover on, fit the red escutcheon over the outlet tube and apply PTFE tape to the threaded portion of the outlet tube.

Screw the tap assembly clockwise onto the outlet tube until it touches the escutcheon without pressure. Continue to turn the tap one full rotation until the handle is fully vertical. If the tap still “feels loose” continue to rotate one further turn leaving the tap in a vertical position.



Applying PTFE tape

### Step 5 – Commissioning

Check previous steps. Turn water supply ON, check connections for leaks.

Turn power ON. After a short period, boiling water will be available and will be maintained close to boiling point thereafter. Initial heating periods are :

Inlet water Temperature	15°C	10°C
2.5 Litre models	16 minutes	17 minutes
5.0 Litre models	16 minutes	17 minutes
7.5 Litre models	23 minutes	24 minutes



The escutcheon located between the tap and case

## Operating Procedures

### Tap Operation

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

For instant boiling water, gently pull the top of the tap forward.

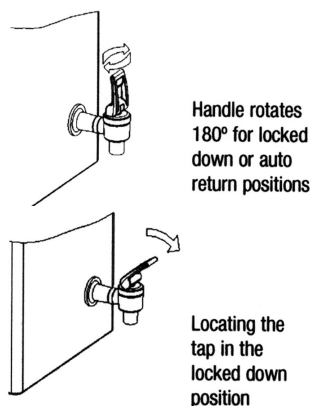
Boiling water will flow until the tap handle is released.

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

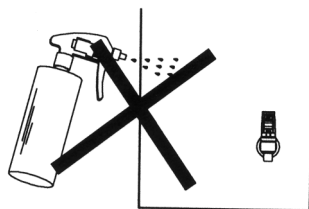
To fill larger vessels such as teapots and saucepans, rotate the tap 180 degrees and depress it until it locks into a horizontal position.

Boiling water will flow until the tap 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.



## Operating Procedures continued

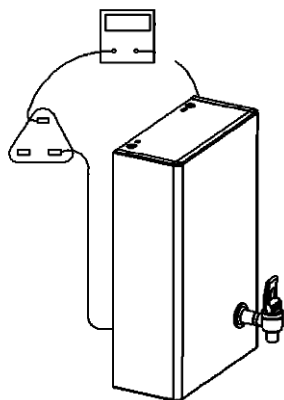


### Cleaning Case

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

## Earthing Continuity Verification

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.



### Warning: this appliance must be earthed.

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

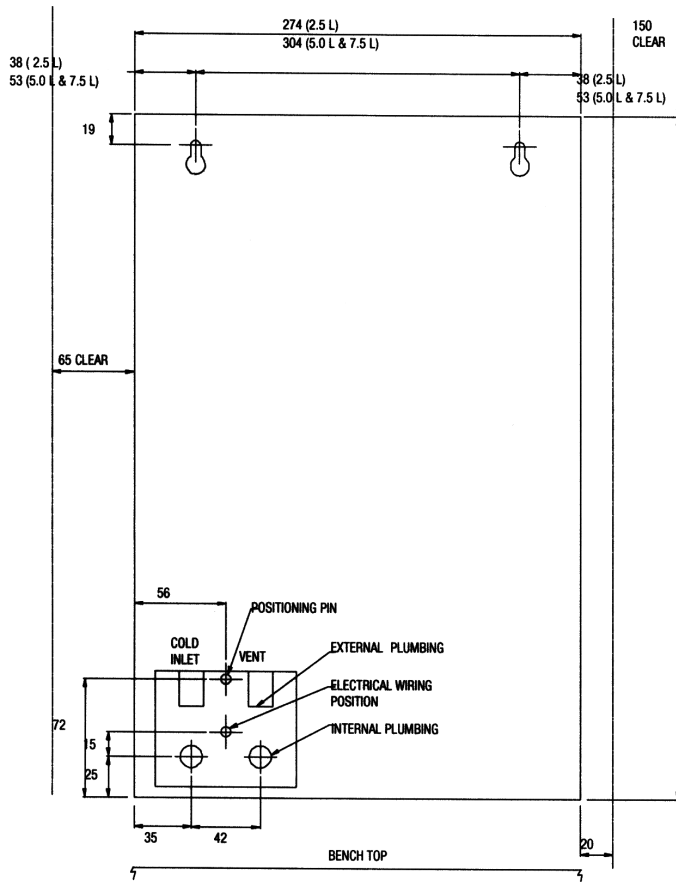
1. Isolate power supply.
2. Set meter to 0 ohm with leads connected together.
3. Connect one test lead to the earth pin on the three pin plug.
4. Connect the other test lead to a bare patch of metal (preferably on the edge) of the top of the cover, then to the front cover of the unit, and then to the tap top under the plastic paddle. This can be achieved by inserting the probe up from behind the paddle without losing water.  
**Warning-** the water may be boiling - show extra care.
5. Test that in every instance the electrical resistance does not exceed 1 ohm.

## Problem Solving

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Fails to fill on initial startup.	No power supply or no water supply. Possible internal adjustment needed.	Check power and water is available and turned on. If this does not rectify the problem call Zip on 0870 608 8888.
Runs out of boiling water and fails to refill. Not heating. Outlet tap dripping. Overflow from vent. Excess steam from the vent or overload tripping. Overload tripping but no excess steam. Low water temperature.	As above.	As above.

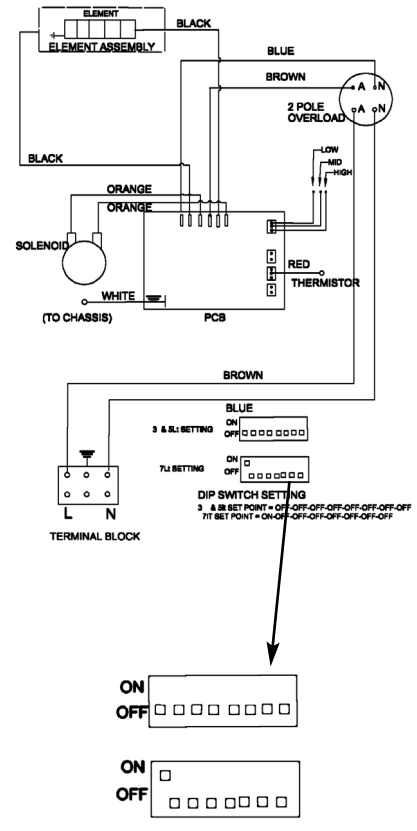


# Wall Mounting Template Dimensions & Electrical Diagram

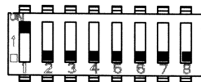


318 5.0 L  
416 2.5 L  
448 5.0 L  
561 7.5 L

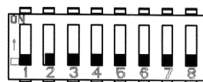
2.5 L, 5 L & 7.5 L HB SINGLE ELEMENT WITH MMS PCB CONTROLLER WIRING DIAGRAM



## Temperature Setting



Factory setting for a 7.5 litre  
Switch No. 1 is ON.



Factory setting for 2.5 litre to 5 litre  
All switches OFF.

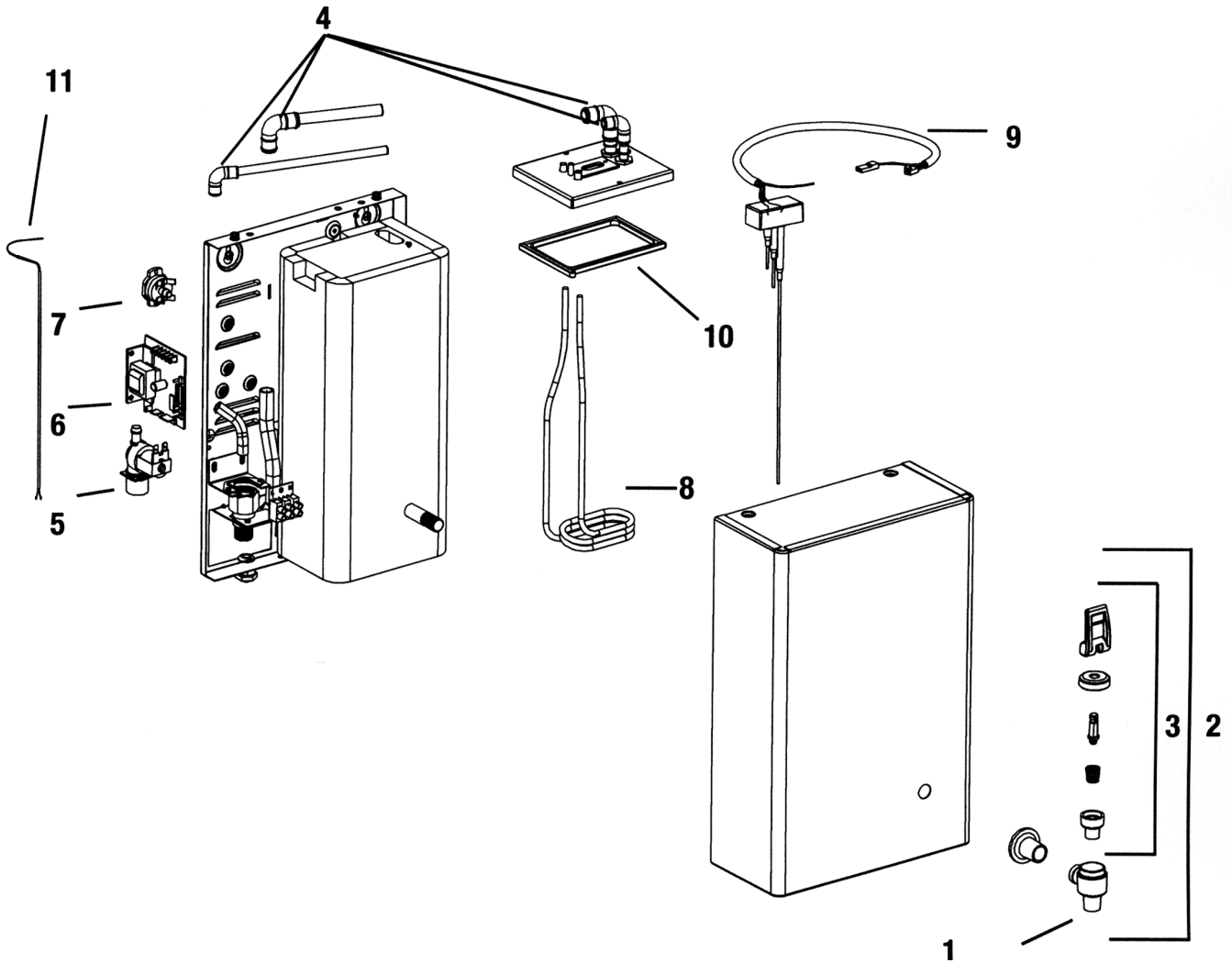


All models - when altitude is above 1000 meters or there is excessive steam evident set No's. 1 & 2 ON.

## Spare Parts List

KEY	PART NO.	DESCRIPTION
1	90512	Escutcheon Kit
2	90502	Tap Assembly Kit Complete
3	90501	Tap Top Kit
4	90588	Silicon Elbows Kit
5	90578	Solenoid Assembly Kit - 240 volt - flow rate 0.5 ltr / minute
6	90586	Econoboil PCB Kit
7	90579	Overload Kit 90 deg
8	90585	Element Kit 7ltr
	90584	Element Kit 5ltr
	90583	Element Kit 3ltr
9	90577	Level Sensor Kit 7ltr
	90576	Level Sensor Kit 5ltr
	90575	Level Sensor Kit 3ltr
10	90581	Tank Gasket Kit 5 & 7ltr
	90580	Tank Gasket Kit 3ltr
11	90587	Temperature Probe Kit

# Exploded View Diagram



## Warranty Information

The Zip appliance you have chosen is precision-built from the finest materials available and should give many years of trouble free service.

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) Pty 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 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](http://www.zipheaters.co.uk) and look under the heading "Warranty".

### Head Office

Zip Heaters (UK) Pty. Ltd.  
14/15 Bertie Ward Way  
Rashe's Green Dereham  
NORFOLK NR19 1TE

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