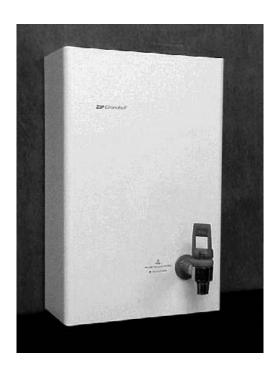
# Zip<sup>®</sup> Econoboil<sup>®</sup>

Budget priced instant boiling water heater for beverages .



Model No.	Description	Reg.No.	Part No.
HS503	Zip Econoboil 3.0 litre White	EB003	103592
HS505	Zip Econoboil 5.0 litre White	EB005	105592



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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 a high altitude thermostat.

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 must operate within are 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) Standard local requirement power cable positioned as shown on the paper mounting template for connection from the rear of the heater to the terminal block within the heater, this will require an isolating switch fitted in the fixed wiring and attached to a secure surface. This switch must provide all pole disconnection and a contact separation of at least 3mm installed in accordance with the wiring rules. Alternatively a standard 220-240V, 13 amp fused spur, within 1500 mm of the Econoboil Unit.

NOTE: When installed with a plug and cord the plug must be accessible

#### Installation Requirements continued

- c) Cold water supply with a minimum working pressure of 0.7 bar and a maximum working pressure of 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.

  If the water pressure is likely to exceed 7 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.

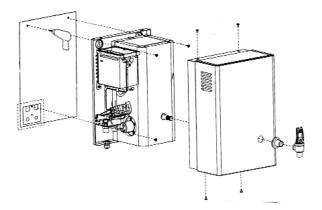
Position the base of the tap to be not less than 200 mm above the draining board (height should be increased only if essential for filling larger vessels).

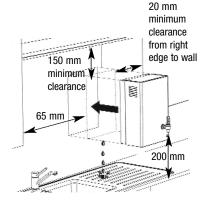
Provide clearance for service access of not less than 150 mm top, 65 mm left, 20 mm right.

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.





#### Aproximate weight when filled

3 Litre model	12.5 kg
5 Litre model	16.5 kg

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.

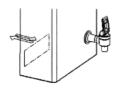
Screw heater chassis to the wall using screws or bolts suited to the walling.

Screws or bolts must be capable of supporting the heater weight when filled.

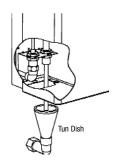
(Refer to table to the left).

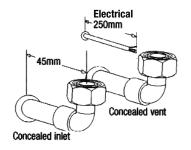
#### **Installation Procedures Continued**

Exposed power and water are connected through base.



Concealed power and water are connected through rear.





#### Step 3 - Connecting

#### a) Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the heater directly to the 1/2" or 15 mm compression fittings.

For concealed plumbing connections, connect the cold water pipe through the rear of the chassis using a 1/2" or 15 mm capillary elbow (# 63 Swivel Elbows).

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 - 0.7 bar, maximum - 7 bar.

**Warning:** If pressure is likely to exceed 7 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.

For exposed vent plumbing, connect vent outlet from the base of heater to a 1/2" or 15 mm 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 tundish to the wall as shown and plumb away to waste.

Tundish part numbers:

Wall Mounted Tun Dish- ZD100 and Straight Tun Dish- ZD101.

#### **Installation Procedures Continued**

#### c) Electrical

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

For exposed electrical connection the unit may be 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.

#### Step 5 - Commissioning

Check previous steps. Turn water supply ON. Water is now flowing into heater, check connections for leaks. Wait approximately 5 minutes and check outlet tap for water. This is acheived by pulling the tap handle forward.

Power is only to be turned on when water is available from this outlet.

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 shown in the table below.

Inlet water Temp.	15° C	10° C
3 Litre models	16 Min.	17 Min.
5 Litre models	16 Min.	17 Min.

## **Operating Procedures**



Pull handle down for water flow than release.

#### **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.

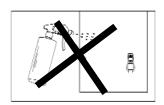
To fill larger vessels such as teapots and saucepans, rotate the tap 180 degrees and pull down until it locks into a horizontal position.

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.



Handle rotates 180° for locked down positions and must be manually returned.

## Operating Procedures continued

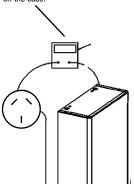


#### **Cleaning Case**

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 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.

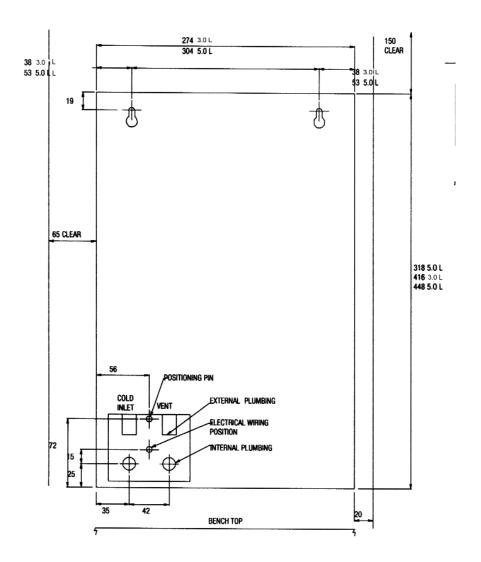
Warning- the water may be boiling - show extra care.

5. Test that in every instance the electrical resistance does not exceed 1 ohm.

## **Problem Solving**

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

## **Wall Mounting Template Dimensions & Wiring Diagram**



## **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.



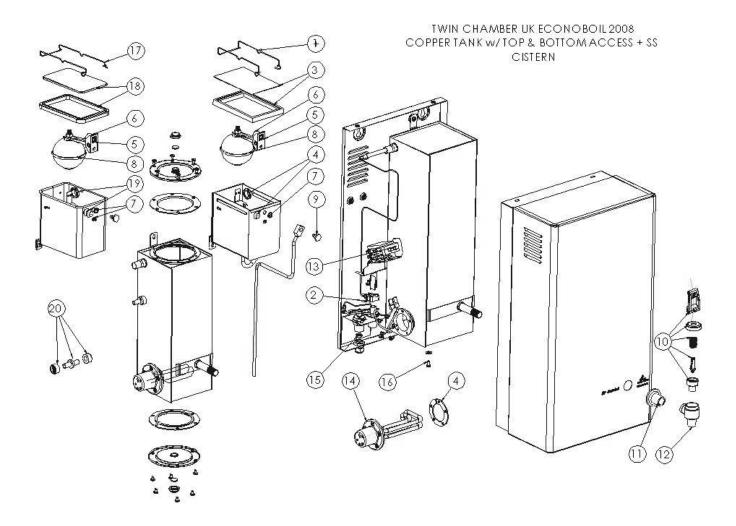
Within each of the European Union member countries, provisions have been made for the collection and recycling of unwanted electrical and electronic equipment.

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact Zip Customer Service for advice on 0845 602 4533

## **Spare Parts List**

ITEM	KIT NO	DESCRIPTION
1	90126	CISTERN LID CLIP KIT
2	90127	OVERLOAD KIT
3	90128	CISTERN LID AND GASKET KIT
4	90115	GROMMET & GASKET KIT
5	90083	FLOAT VALVE KIT W/ FLOAT
6	90069	Jumper valve kit W/ Seals
7	90108	O'RINGS & GASKET KIT
8	90102	CISTERN FLOAT KIT W/ NUT & SCREW
9	90495	BANJO SCREW
10	90501	TAP TOP KIT
11	90512	ESCUTCHEON KIT
12	90502	TAP ASSY COMPLETE
13	90081	THERMOSTAT KIT
14	90045	ELEMENT KIT 1500W 3Litre
14	90085	ELEMENT KIT 2400W 5 Litre
15	90107	FILTER KIT COLD INLET BUSH
16	90175	Drain Plug Kit
STAINLESS STEEL CISTERN VERSION		
17	90487	CISTERN LID CLAMP KIT
18	90488	CISTERN LID & GASKET KIT
19	90779	CISTERN GROMMET & GASKET KIT EB SS CISTERN
20	90493	METERING TUBE KIT 1500W
20	90494	METERING TUBE KIT 2400W

## **Exploded View Diagram**



## **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 12 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 travellingtime 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.

#### **Head Office**

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