

Zip Econoboil™

Installation and Operating Instructions



301042 Zip Econoboil 1.5 litre White

303042 Zip Econoboil 3.0 litre White

305042 Zip Econoboil 5.0 litre White

307042 Zip Econoboil 7.5 litre White

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Note:

All plumbing must comply with the relevant parts of AS/NZS 3500

All electrical must comply with the relevant parts of AS/NZS 60335/3000



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. For products sold in Europe, 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 if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

This appliance is intended to be used in household and similar applications such as

- Staff kitchen areas in shops, offices and other working environments;
- Farm houses and by clients in hotels, motels and other residential type environments;
- Bed and breakfast type environments;
- Catering and similar non-retail applications.

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 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 220- 240 volt 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, OR a standard 10 amp 220- 240 volt power outlet on the wall within 1500 mm of the heater. This switch must provide all-pole disconnection and a contact separation of at least 3 mm installed in accordance with wiring rules, see Step - 3.c.
- c) Cold water supply with a minimum working pressure of 70 kPa and a maximum working pressure of 700 kPa connected via an isolation valve.

Installation Requirements continued

- 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 700 kPa, a 350 kPa 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

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.

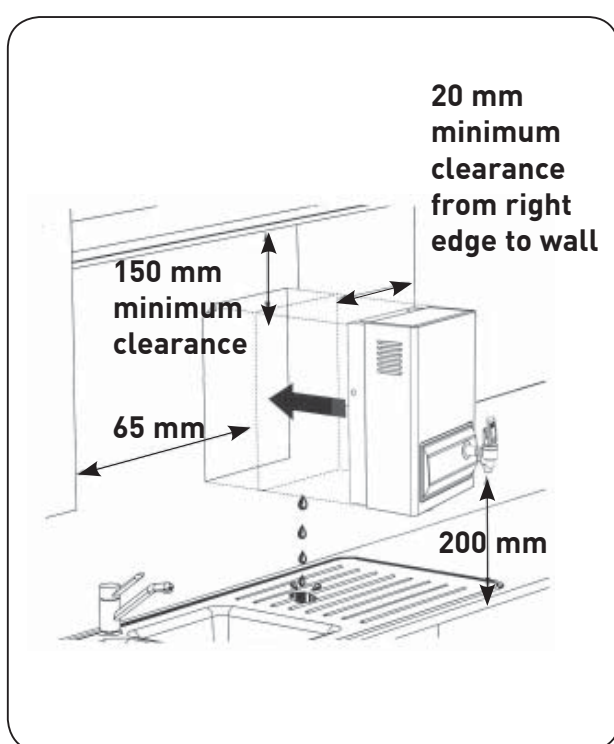
Step 1 – Positioning

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).

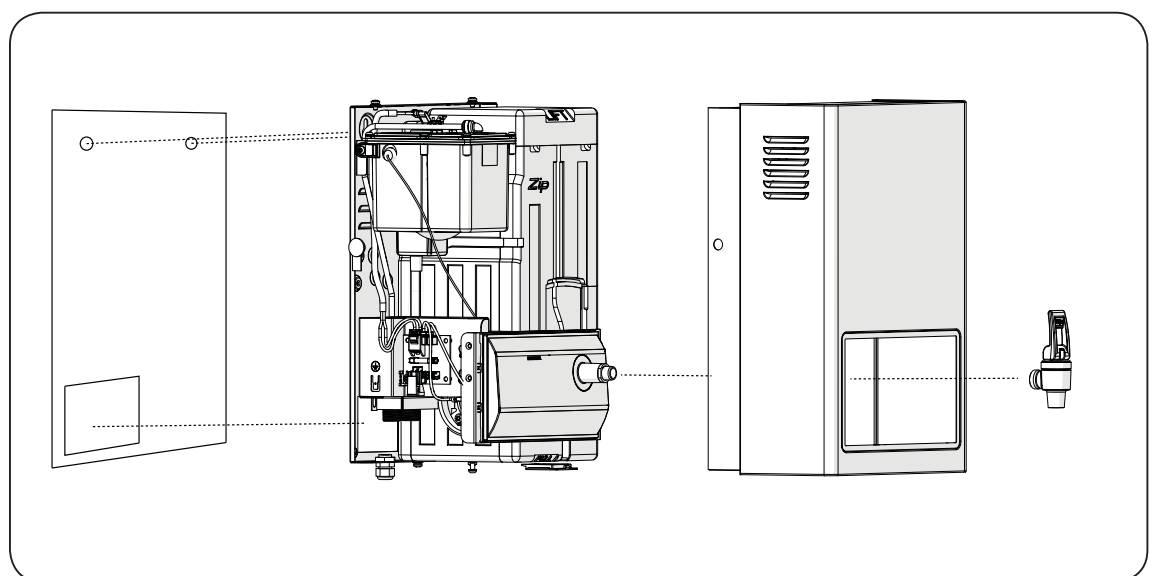
Provide clearance for service access of not less than 150 mm top, 65 mm left, 20 mm right.

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



Step 2 – Fastening

Refer to mounting hole template on page 9, select correct model and drill holes where shown.



Approximate Weight When Filled

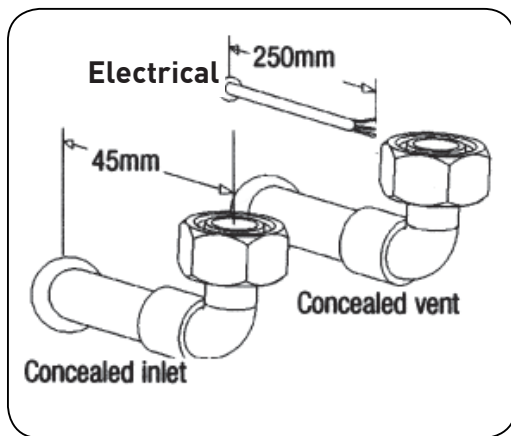
1.5 Litre model	10 kg
3 Litre model	12.5 kg
5.0 Litre model	16.5 kg
7.5 Litre model	20.5 kg

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

Install plumbing and prepare pipe 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).



Step 3 – Connecting

THE FOLLOWING PROCEDURE IS TO BE DONE BY AN AUTHORISED INSTALLER ONLY.

a) Plumbing

For exposed plumbing connection, connect the cold water inlet pipe from the base of the heater directly to the 1/2" or 12.7 mm compression fittings.

For concealed plumbing connections, connect the cold water pipe through the rear of the chassis using a 1/2" or 12.7 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.

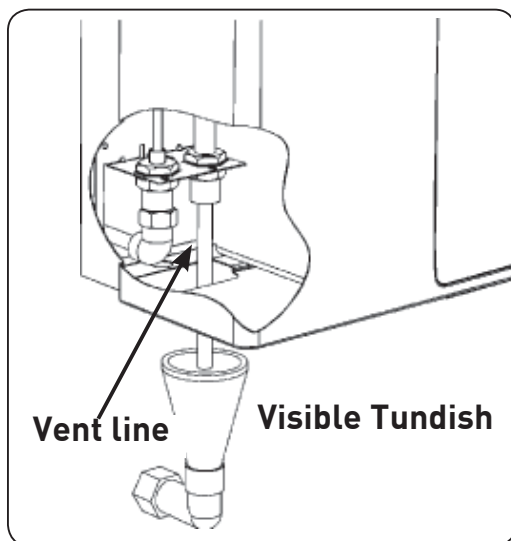
It is recommended that the heater be installed with a stop cock which allows it to be isolated from the mains supply for servicing as required by AS3500.

Water pressure requirements:

Minimum - 70 kPa, maximum - 700 kPa.



Warning: If pressure is likely to exceed 700 kPa, a pressure limiting valve must be installed in the cold water supply line. Zip recommends a valve rated at 350 kPa 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.

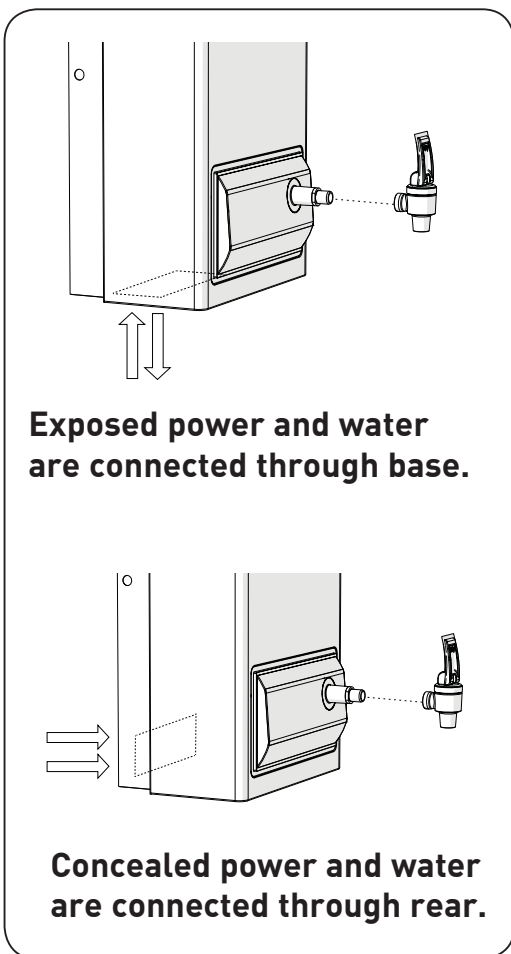
For exposed vent plumbing, connect vent outlet from the base of heater to a 1/2" or 12.7 mm pipe which has a continuous fall, is no more than 3 metres long, has no more than 3 right angle bends, and discharges to a waste water drain.

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

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

Tun Dish part numbers:

Wall Mounted Tun Dish- 99017 and Benchtop Tun Dish- 99018.



c) Electrical

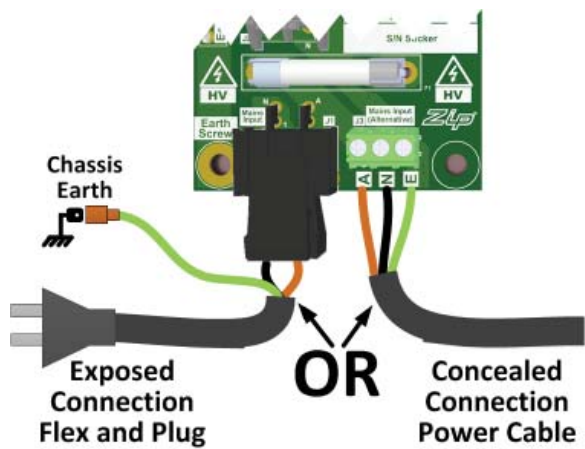


Do not turn the power ON yet. Power is only to be turned on after the cover and the tap is fitted and the unit is filled with water.

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 an exposed electrical connection, the pre-fitted flex and plug cable is plugged into the PCB as shown. Use a standard 10 amp 220-240 volt power outlet within 1500 mm from the heater with adequate power for the unit.

Installation Procedures Continued



For a concealed electrical connection, disconnect the pre-fitted flex and plug cable at the PCB connector and discard. Connect the concealed power cable through the rear access opening to the green terminal block on the PCB.

For concealed electrical connection, an isolation switch should be installed.

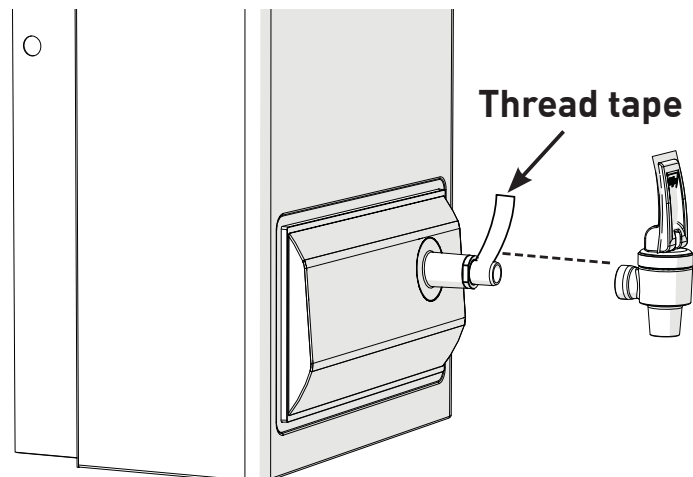
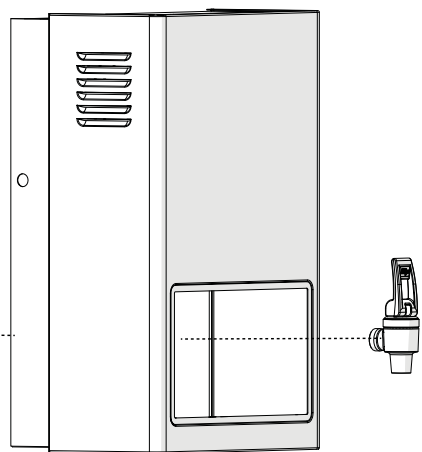
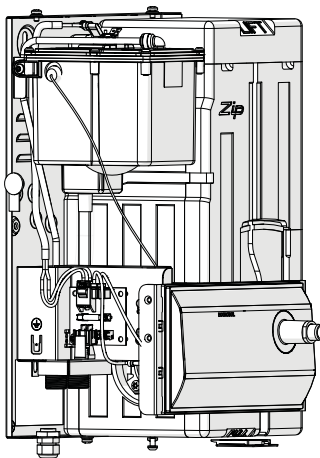
Check that the earth is connected through the PCB to the chassis with an ohm meter.



Warning: Do not connect both options. It is essential that the flex and plug cable is removed from the PCB if the concealed connection is used. Otherwise the GPO plug will become live.

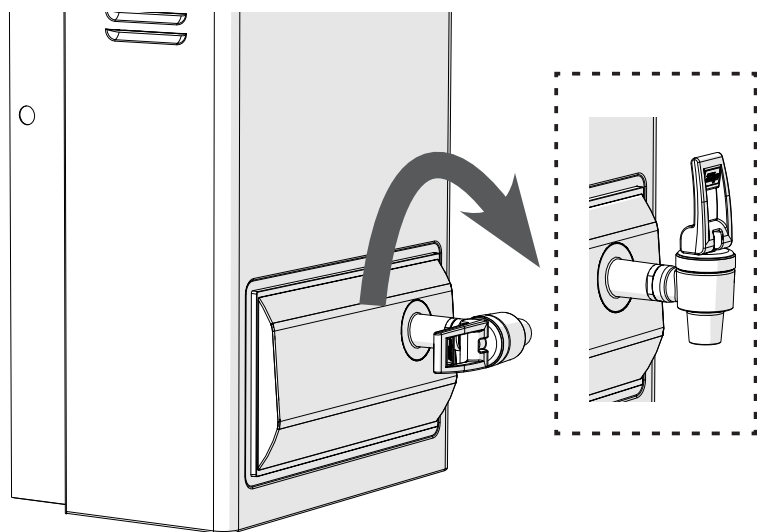
Installation Procedures Continued

Step 4 – Tap installation

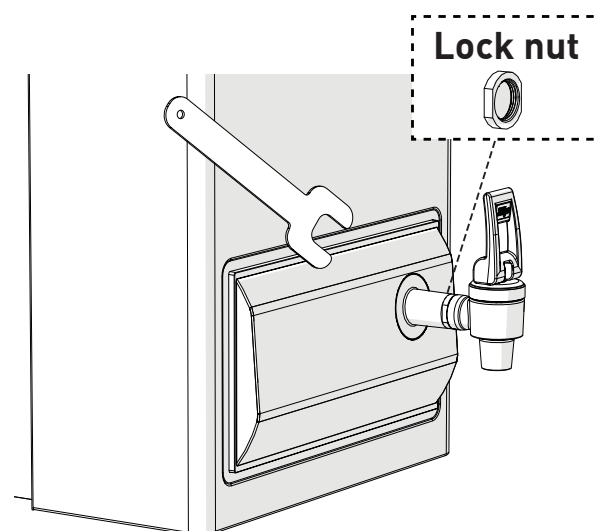


1. Fit the cover to the unit and fix with screws top and bottom.

2. Before installing the tap, ensure enough thread tape is applied to the thread.



3. Turn the tap fully clockwise to the end stop and stopped at upright position.



4. Use the spanner to tighten the lock nut anti-clockwise.

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 achieved by pulling the tap handle forward.

Once water is flowing from the outlet proceed to next step.

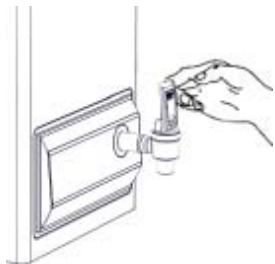


Warning! Power is only to be turned on when water is available from this outlet.

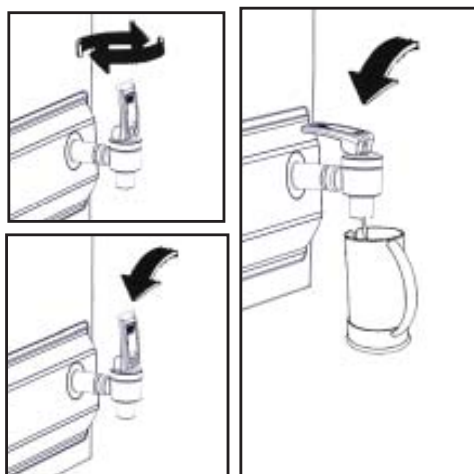
Turn power ON. After a short period, boiling water will be available and will be maintained close to boiling point thereafter. Initial heating periods are shown in the table below.

Inlet water Temperature	15°C	10°C
1.5 Litre models	10 minutes	11 minutes
3 Litre models	16 minutes	17 minutes
5.0 Litre models	16 minutes	17 minutes
7.5 Litre models	23 minutes	24 minutes

Operating Procedures



Pull handle down for water flow than release.



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

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.

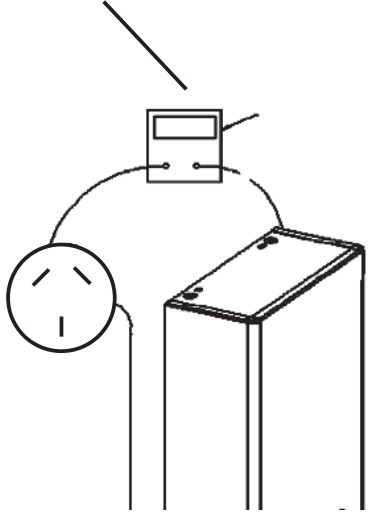
This operation gives fingertip flow control for safe filling of cups and mugs.

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.

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.



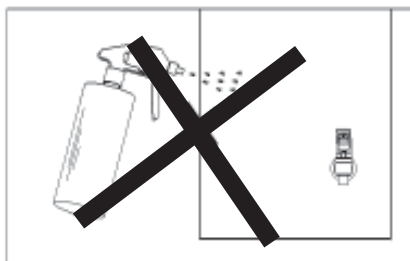
Warning- the water may be boiling - show extra care.

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 meter tube, blocked strainer, jammed ball valve assembly.	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.

Cleaning



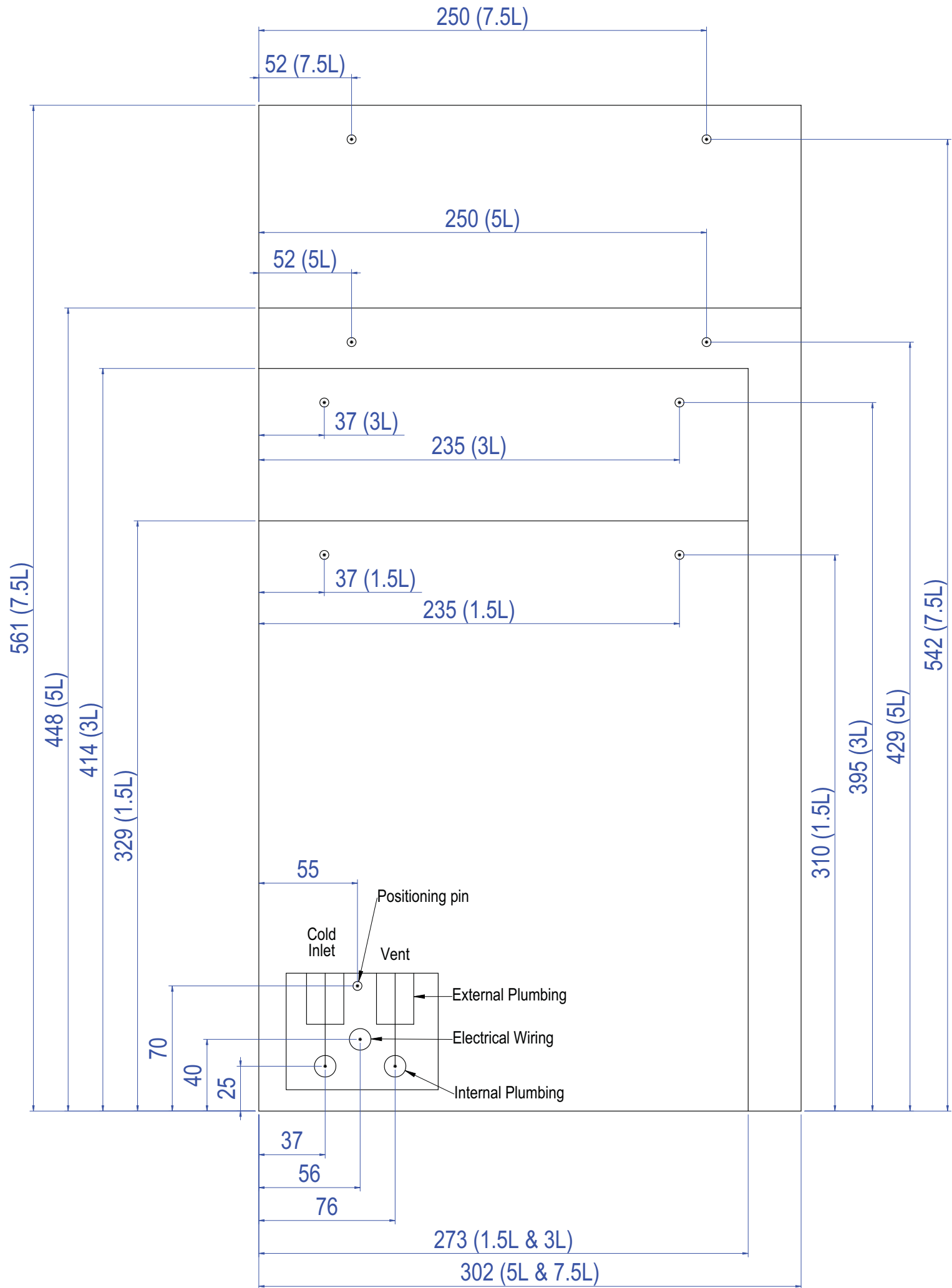
Cleaning Case

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

End of Life Disposal

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact your local city council for collection centre details.

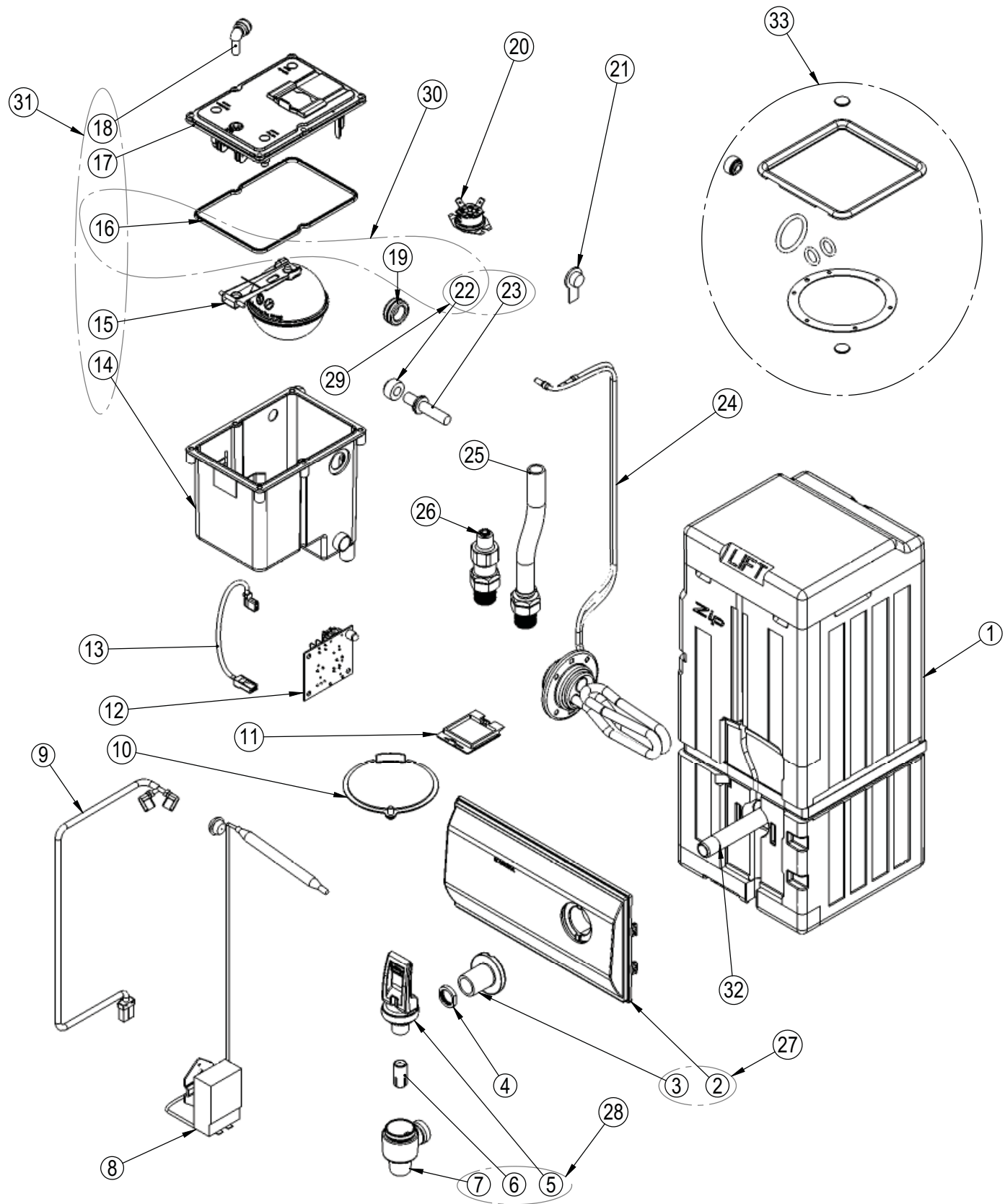
Wall Mounting Template Dimensions



Spare Parts List

Item	Kit Number	Description
1	90700	EB 1.5 Ltr Tank Assy
	94443	EB & AB 3 Ltr Tank Assy
	94444	EB & AB 5 Ltr Tank Assy
	94445	EB & AB 7.5 Ltr Tank Assy
2	94446	EB Fascia
	94476	EB Fascia Grey
3	94447	Escutcheon
4	94448	Tap Lock Nut
5	90501	Tap Top Assy
6	93730	Flow Insert
7	94478	Tap Body
8	90081	Thermostat
9	94449	Loom, PCB to Overload
10	94450	Plug, Filter
11	94451	Plug, HB Outlet
12	94452	PCB, EB
13	94453	Loom, 6.3 QC
14	94454	Cistern Tank
15	94455	Ball Valve assy
16	94456	Cistern Gasket
17	94457	Cistern Lid EB & AB
18	93118	Elbow Stem 1/4"
19	90100	Grommet, Cistern to Tank
20	94458	Overload
21	94459	Side release plug
22	94460	Seal transfer tube
23	94461	Metering Tube
24	94462	Element assy 1500W 1.5 & 3
	94463	Element assy 2400W 5 & 7.5
25	94464	Bush Vent assy 1.5 ltr
	94465	Bush Vent assy 3 ltr
	94466	Bush Vent assy 5 ltr
	94467	Bush Vent assy 7.5 ltr
26	94468	Inlet assy
27	94469	Fascia Kit
28	94470	Tap assy
29	90493	Metering tube kit 1.5 & 3 Ltr
	90494	Metering tube kit 5 & 7.5 Ltr
30	94471	Cistern Gasket kit
31	94472	Cistern assy
32	90506	Tap Outlet
33	94473	Hot Tank Gasket kit 1.5 & 3 Ltr
	94474	Hot Tank Gasket kit 5 & 7.5 Ltr

Exploded View Diagram



Contact Details

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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.

The standard cup referred to in this publication is 167 ml (6 fl oz).

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