

Zip Hydrotap® G4 Celsius

Filtered, Boiling, Chilled and Chilled Sparkling drinking water
with unfiltered Hot and Cold ambient water, for residential kitchens



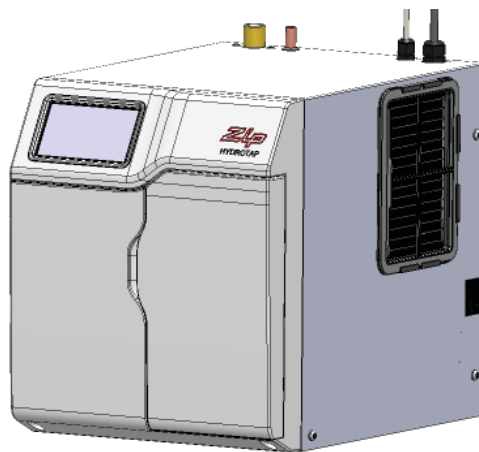
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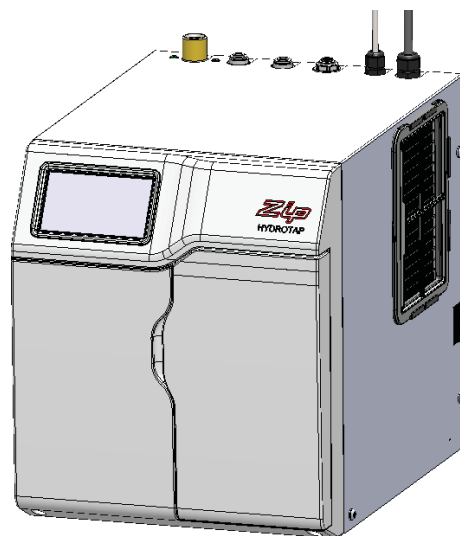
Models



Model BHA



Model CHA



Model CSHA

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Installation checklist

Before Installation:

- A. Read the instructions and check if there is adequate space to mount all of the components.
- B. Note: Not all fittings are supplied with the appliance kit. Isolation valves are not supplied.
- C. Check the mains water pressure is between 172-700kPa for BHA & CHA or 250-700kPa for CSHA units
- D. Check the water quality to determine if extra filtration will be required.
NOTE: This product must be fitted to a potable water supply
- E. Check the appliance rating plate and ensure correct power is available for the appliance.
- F. Check the under counter cupboard 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 outlet and vent pipes are positioned to drain correctly.
- 4. Ensure there is adequate ventilation.
- 5. Check all tubes from the undersink unit to the tap, have a constant rise and there are no sags or kinks in the hoses.
- 6. Check all electrical connections are correct and there are no loose wires.

Commission: (See section 5)

- 7. Flush the supply line before connecting.
- 8. Turn on the water and check for leaks.
- 9. Flush the filters
- 10. Purge the CO₂
- 11. Where applicable, programme the unit to suit the customer's requirements.

General Product Features

Thank you for purchasing a Zip Celsius. Please read and follow these instructions carefully to ensure safe and trouble free service. If service is required, please call 1800 638 633

What is the Zip Celsius ?

The Zip Celsius is a conventional flick mixer tap that dispenses, Boiling or Chilled still and Chilled Sparkling water from the same outlet. The Celsius units are under bench drinking water appliances with a dispensing tap mounted on a kitchen sink or bench. These units utilise a conventional refrigerant compressor to chill the water and a CO₂ gas cylinder to carbonate the chilled water. The Celsius taps will dispense Boiling or Chilled and Chilled Sparkling water using a rotating handle and deliver a mix of Hot and Cold ambient water through a conventional mixer lever.

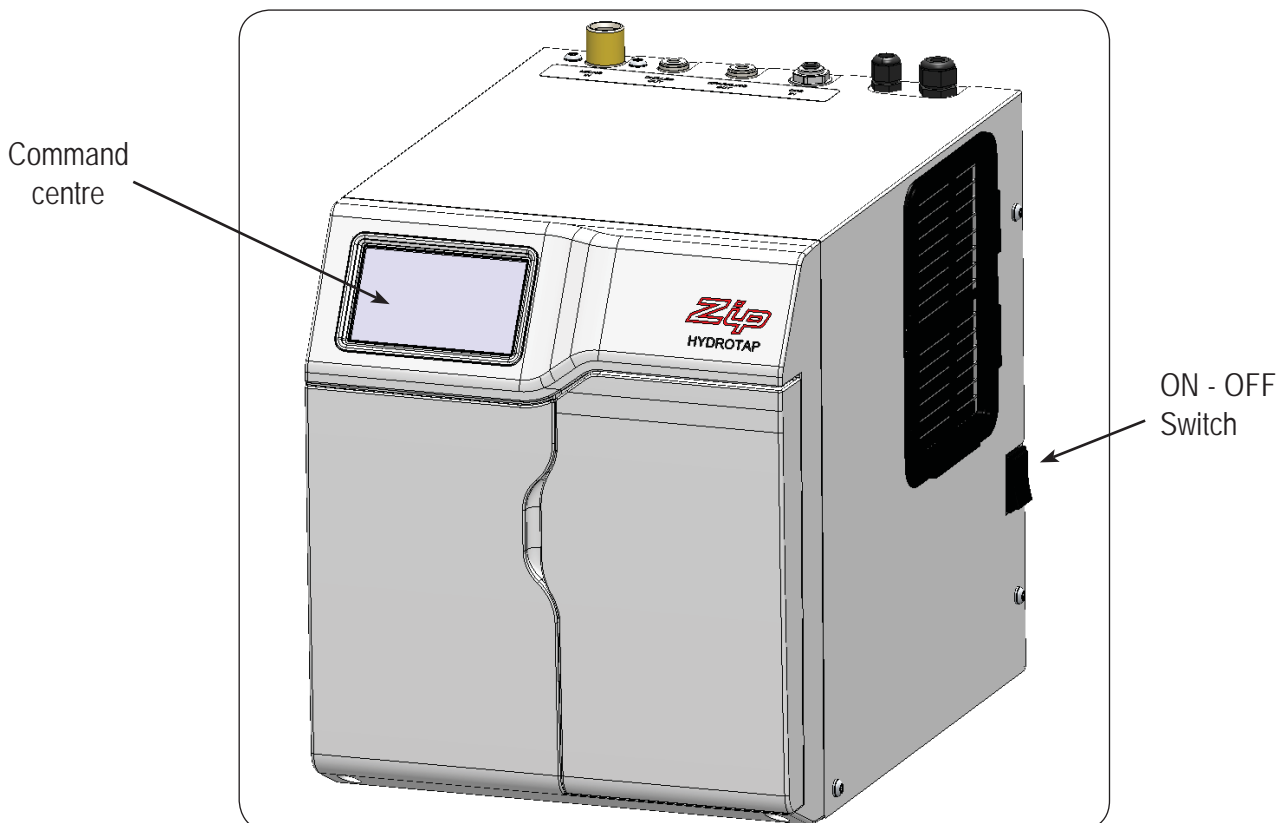
The water filter and CO₂ gas cylinder are disposable items which will require periodic replacement and are covered by a limited OEM warranty.

It is important that the Installation be done safely, correctly and completely, in order to utilise all the benefits the Celsius can provide.

Usage:

The Zip Celsius is intended for use in residential household and similar applications such as, Rural and urban residential Kitchens, Hotels, Motels, Bed and Breakfast and other residential type environments

CSHA - under bench unit



Important Safety Instructions

This manual contains important safety, Installation instructions for the Zip Celsius.

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.



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 shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Refrigerant

The Zip Celsius unit contains R134A refrigerant under pressure. Maintenance of the refrigeration unit must be carried out by an accredited service provider or qualified refrigeration technician.

Qualifications

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.

Venting

Sometimes steam and / or condensed droplets may discharge through a vent outlet at the tap. If the tap is not installed using the Font pedestal, ensure the tap body is located so the tap outlet safely dispenses into the sink bowl area.

Lifting

Take care when lifting the Zip Celsius unit. Some units may exceed safe lifting limits. If you feel this is beyond your personal capabilities, please seek assistance with the lift. The weights of the units are marked on the packaging. Do not lift the unit by the front cover or any connections at the top rear of the unit. Refer to the technical specification for the weight of your product.

Airflow

The ambient operating temperatures, when installed in a cupboard, must be between 5°C - 35°C. The system will operate satisfactorily only if proper air ventilation is provided and only if the recommended air gaps of 50mm on each side are provided. See section 2 for correct Installation details.

Frost Protection

If this appliance is located where the ambient air temperature could fall below 5°C when the unit 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.

Positioning

It is important to ensure the undersink unit is positioned in an accessible area close to the floor level. The unit must have its base mounted in a horizontal position with all inlets and outlets facing up. The Tap must be located above the undersink unit. See section 4 for details.

Important Safety Instructions



WARNINGS




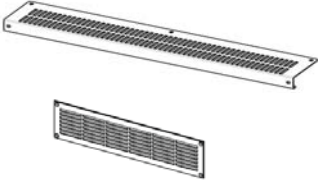

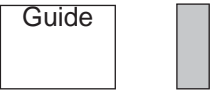

1. The Zip Celsius unit must be earthed. The resistance of the earth connection from each exposed metal part must be less than 1 ohm.
2. All Installation and service work must be completed by trained and suitably qualified Tradespeople. Faulty operation due to unqualified persons working on this product, or any other Zip product may void warranty coverage.
3. All Plumbing must comply with AS/NZS3500.
4. All Electrical must comply with AS/NZS3000
5. All Plumbing and Electrical connections must be made in accordance with local regulations.
6. This product is rated for 230V 50Hz AC operation.
7. Undersink units must never be located near, or cleaned with water jets.
8. Zip appliances are not to be exposed to the elements of nature
9. Due to the process of continuous improvement, Zip Heaters reserves the right to change details mentioned in this manual, without notice.



CO₂ Cylinder Warnings:

- Pressurised container.
- Protect from sunlight.
- Contains gas under pressure, may explode if heated.
- Do not expose to temperatures exceeding 50°C.
- Do not pierce or burn, even after use.
- Do not refill – non rechargeable
- Ensure cylinder is empty before disposal.
- Do not expose to naked flame or any incandescent material.
- Keep out of reach of children.
- High concentration of gas may cause asphyxiation.
- Use only in ventilated areas.
- Store in an area no less than 38 cubic meters.
- Use only in an upright position.
- This bottle must be used with the approved pressure regulator.
- Avoid shock.
- Use according to MSDS. (Material Safety Data Sheet).



Major components and accessories

Parts supplied	Description
	1 off Tap with hoses
	1 off Undersink Unit with air and water filters
	1 off Mains water connection hose
	Vent Kit 1 x Inlet vent 1 x Outlet vent 9 x Screws
	1 x Tee piece for ambient water supply
	1 x User guide and 1 x Quick start guide
	1 off CO ₂ gas cylinder and regulator assy

Accessories	Description
	Replacement CO ₂ Gas Cylinder
	Replacement Filter

Technical Specifications

Residential Models:

BHA = Filtered Boiling water with unfiltered Hot and Cold Ambient water

CHA = Filtered Chilled water with unfiltered Hot and Cold Ambient water

CSHA = Filtered Chilled and Sparkling water with unfiltered Hot and Cold Ambient water

Note: chilled water will continue to be dispensed after the rated capacity has been used, although this may be at slightly higher temperature.

Product covered by these instructions:

** Add an extra 4 kg when full of water

	GPO's Required	Power Rating (kW)	Unit Dimensions W x D x H (mm)	**Dry Weight (Kg)
Chilled Sparkling				
BHA	1x10A	1.425	280 x 313 x 335	8
CHA	1x10A	0.125	280 x 392 x 335	20
CSHA	1x10A	0.3	280 x 392 x 335	23



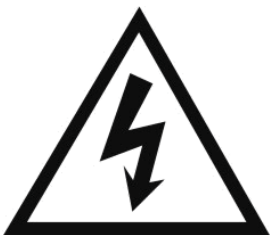
Before installing ensure that the following have been provided at the Installation site:

- Review all the technical specifications.
- Ensure the underbench can support the product weight when full of water.
- Sufficient space in the cupboard to install all of the undersink units in accordance with these Installation Instructions. Refer to technical specification for dimensions. Refer to section 3 & 4, for Installation instructions.
- For Zip Celsius models, a 220-240Vac, 10A GPO will be required.

NOTE: Check all cable and hose lengths against inlet /outlet positions before proceeding (See section 4 for general layout).

- A potable water supply connection with isolating valve inside the cupboard within reach of the braided hoses and positioned so that the connection point and the stop cock will not be obstructed when the undersink units are installed.
- If an external filtration or water softening device is required, then it is important to allow extra space for these items.
- A cold water supply with a minimum working pressure of 172kPa for BHA & CHA or 250kPa for CSHA units and a maximum working pressure of 700kPa connected via an isolation valve.
- The appliance must be placed with it's base in a horizontal position.

IMPORTANT! Do not proceed with the Installation if these requirements are not met.



Section 1

Tap Installation

Special Tools Required:

In addition to normal tools, the following will be required:

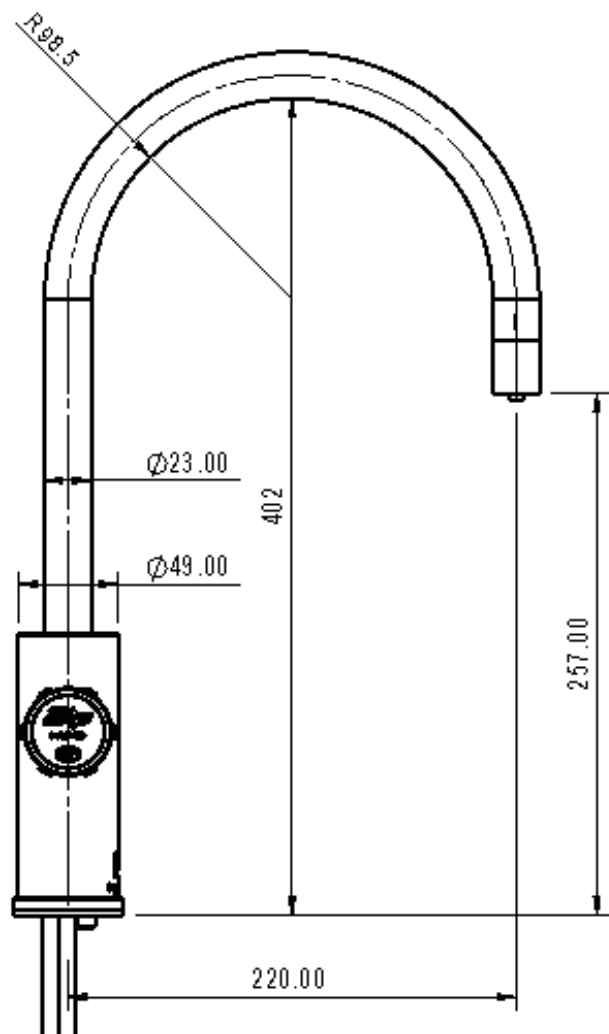
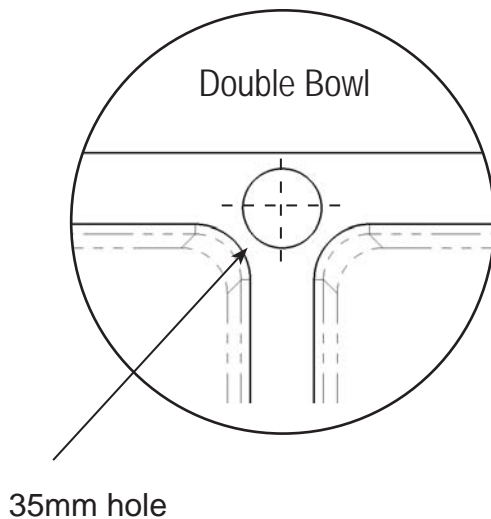
- 35mm diameter sheet metal hole punch for sink tops. (Not supplied)
- 35mm diameter hole saw for timber bench tops. (Not supplied)
- 42mm AF tube spanner or wrench (Not supplied) for fixing tap assembly.



NOTE: Taps are available with ARC or CUBE neck options.

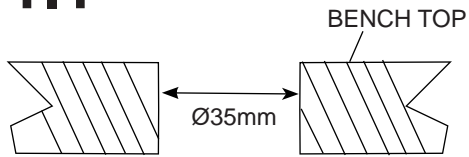
Hole positioning:

Position the tap such that it dispenses into the sink bowl.



CSHA Tap connections

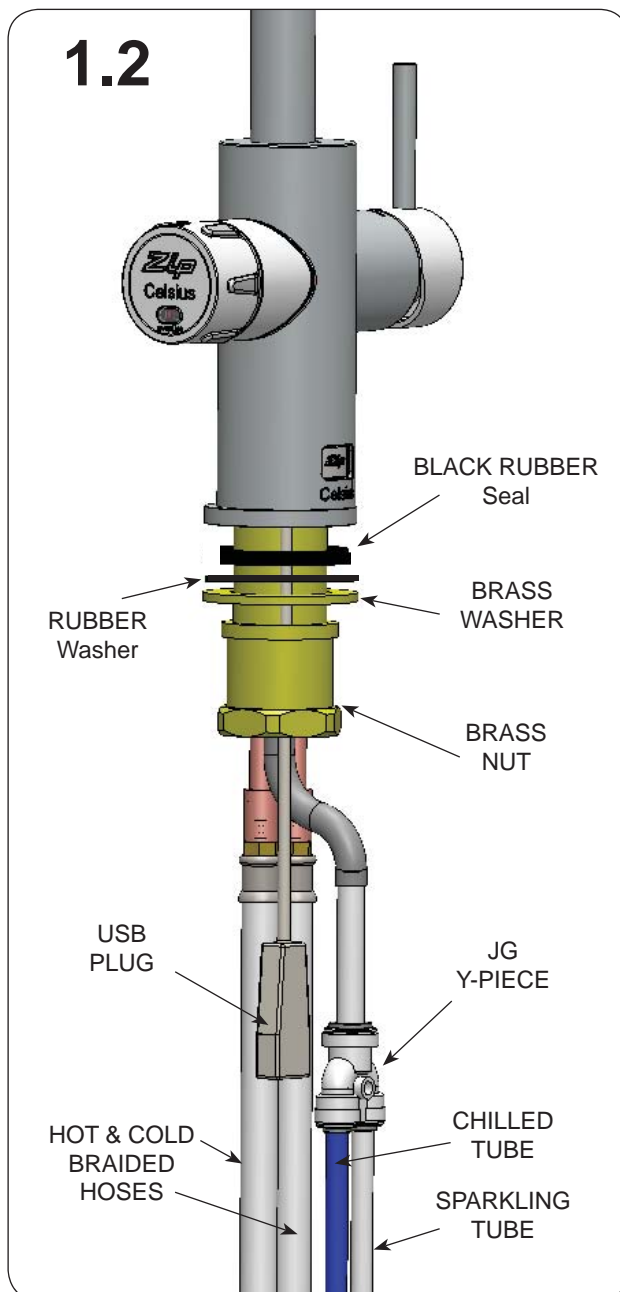
1.1



Cut a 35mm hole in the bench / sink top.

Chilled Sparkling Tap components

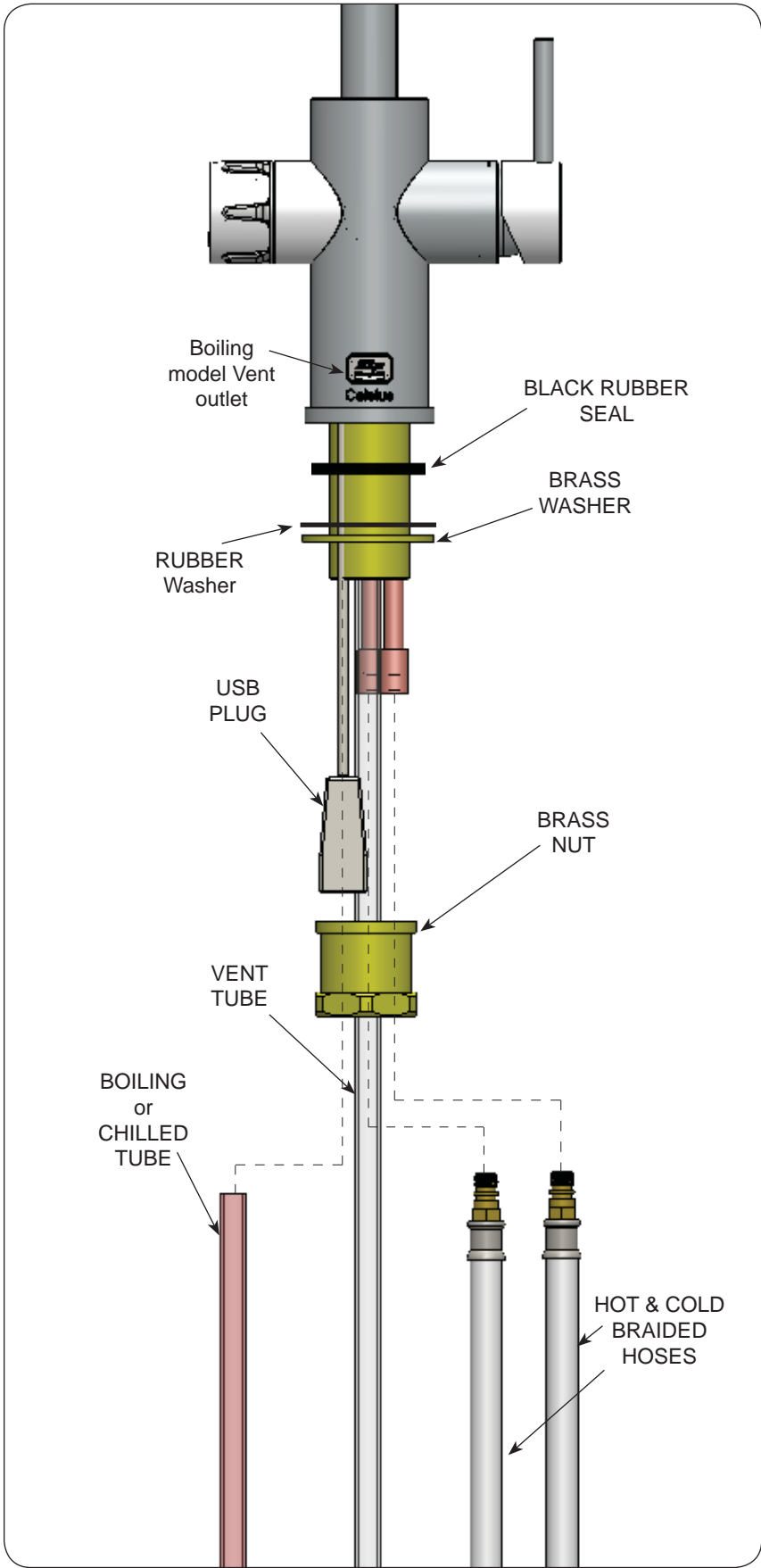
1.2



Note: Trim all plastic tubes to minimise any dead leg of water.



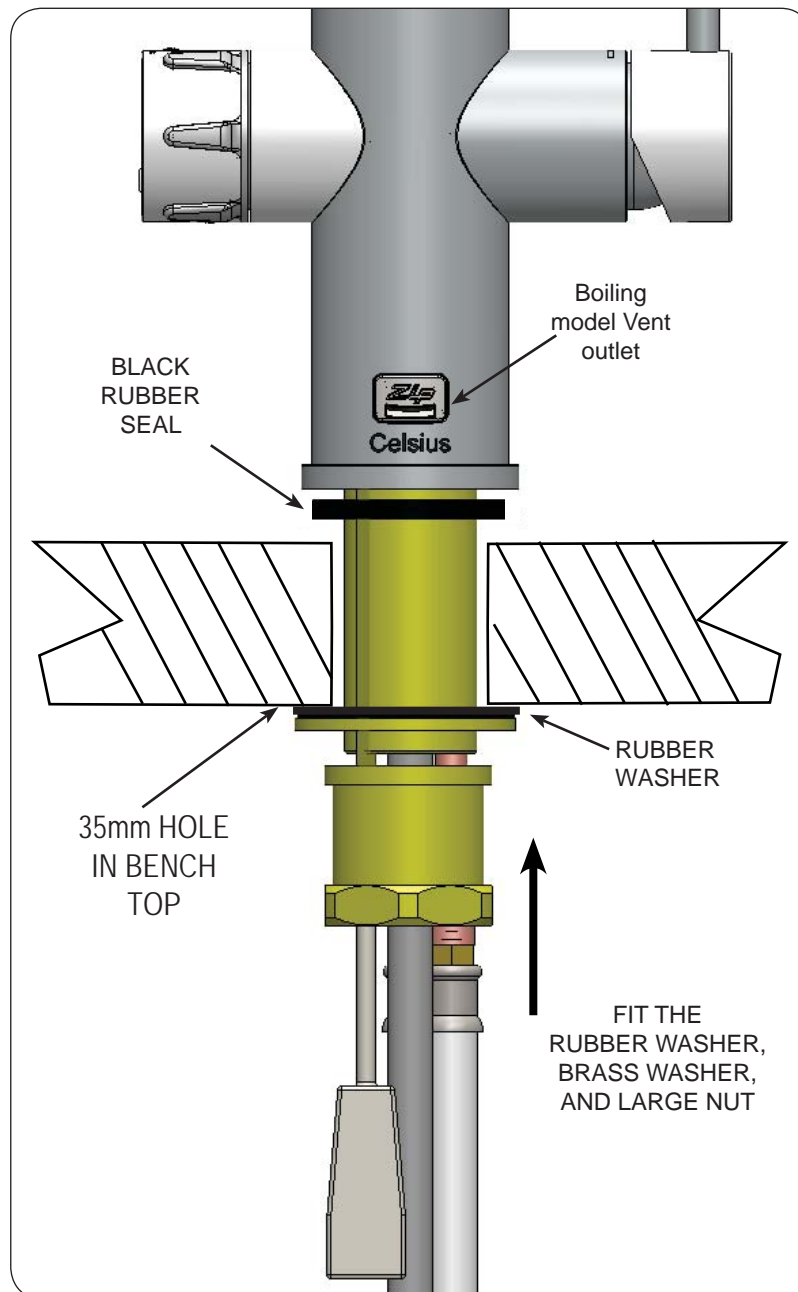
1.3



Tap Installation

1.4

- Pass all the hoses, tubes and USB lead through the 35mm hole.
- Ensure the black rubber seal is correctly positioned to give a water tight seal



Secure the rubber & brass washers and large nut from inside the cupboard space, as shown above.

Section 2

Ventilation

When installing air flow ducts, the following tools will be required:

- Jigsaw and
- Keyhole or Wall Board saw.

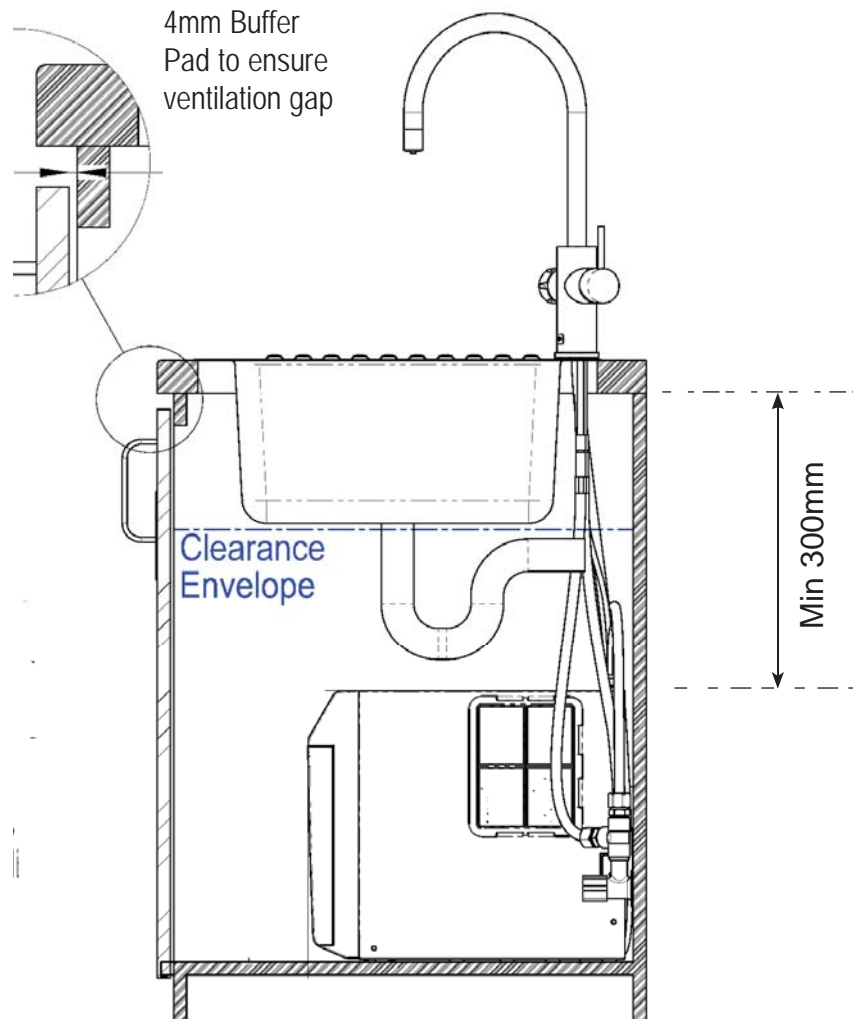
2.1 Ventilation for All Models

Proper air circulation must be provided for all Boiling and Chilled models. The system will operate correctly only if the recommended air gaps are achieved during Installation. The minimum requirement is for a 50mm air gap either side and 300mm above of the undersink unit.

It is important that the 4mm door buffers (For all installations) are fitted to the inside edge of the cupboard door to allow sufficient air circulation inside the cupboard. (See the diagram below). Under normal circumstances, these buffers are sufficient for residential models.



IMPORTANT: See section 4 for clearances.



Ventilation

2.2 The following instructions are critical if there is insufficient cupboard air circulation.

If the air flow, using the silicon door buffers, is insufficient, it will be necessary to fit a standard vent kit, which ensures heat dissipation through natural convection via installed vents.

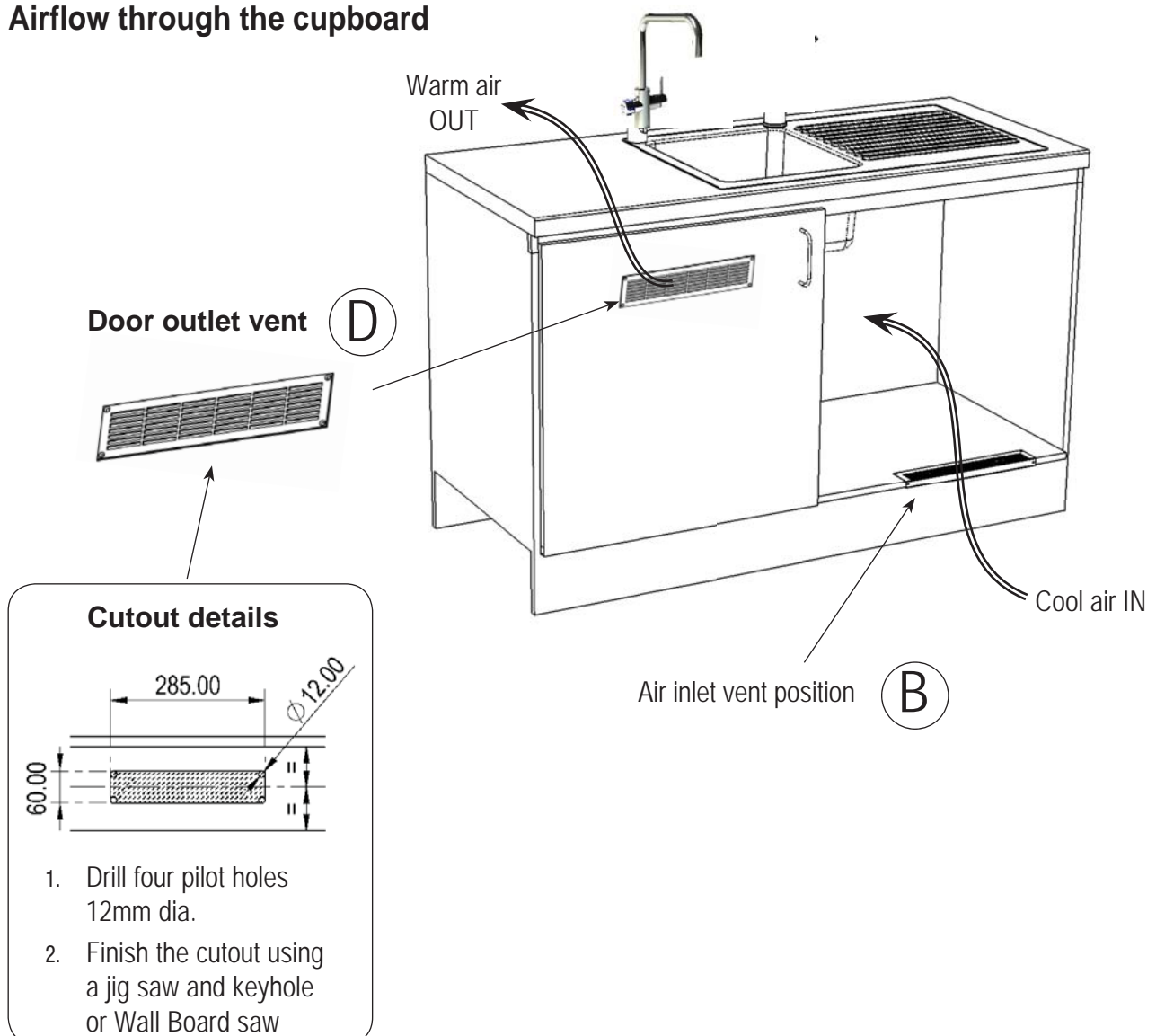
For high use applications, where the cupboard space temperature is near 35°C, or higher, the inlet vent (See Item B below) and silicon buffers, need to be fitted. If the airflow is still insufficient to maintain normal operating temperatures then the door outlet vent (See item D below) will need to be fitted.

Alternatively a fan kit may be installed, using the AUX din plug on the right hand side of the appliance (Contact your local service centre for availability).



Note: The vent kit has to be installed in a way that allows air to be drawn in from the bottom of the cupboard and expelled through the top of the cupboard. Therefore placement of the outlet vent should be towards the top of the door or on the side of the cupboard.

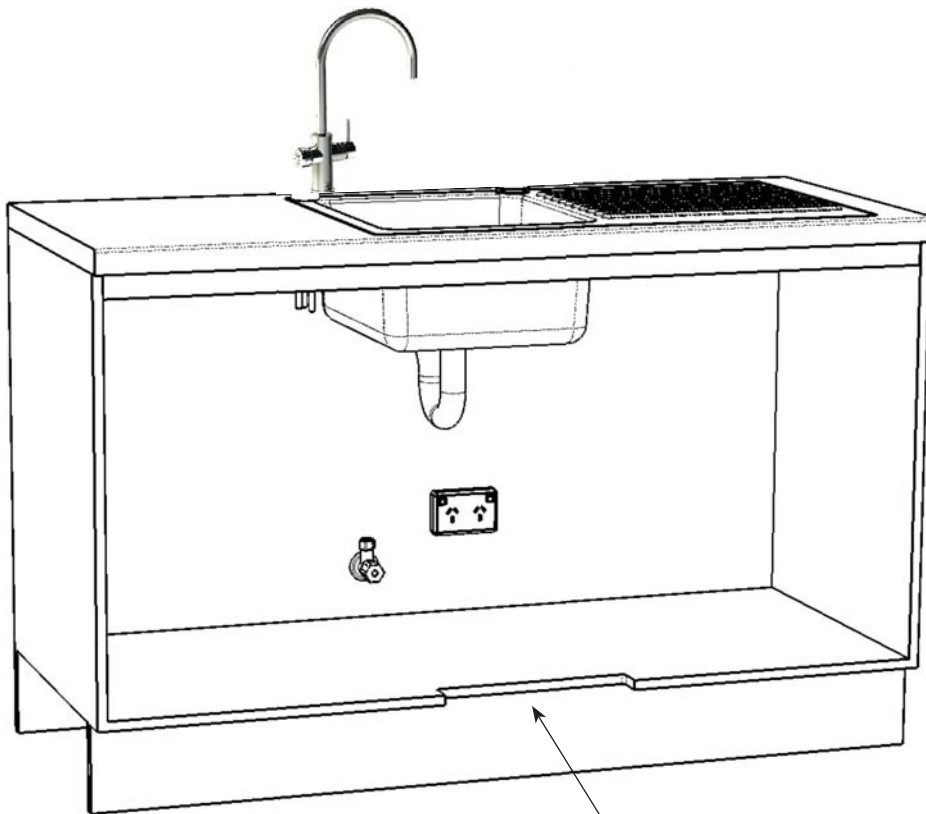
Airflow through the cupboard



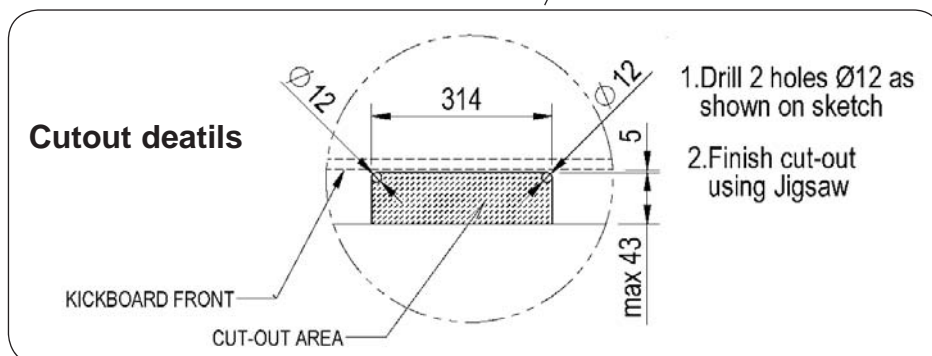
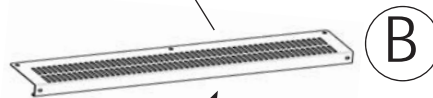
Ventilation

2.3 Typical Cut out procedure for (B) (D)

1. Mark out and cut the air inlet and door outlet holes as shown
2. Ensure the air inlet vent and air outlet vent are positioned at opposite ends of the same cupboard space.
3. Fit the inlet vent, as shown and secure with 5 screws
4. If required, fit the outlet vent, as shown in the hottest part (top) of the cupboard and secure with 4 screws



Air inlet vent



Section 3

CSHA - CO₂ Cylinder

3.1 Secure the cylinder mounting

Secure the gas bottle supplied to a suitable wall, within 1 metre of the unit, in an upright position. This is done by screwing the metal plate holding the Hook-and-loop strap to a cupboard wall, 200mm above the floor or base of the cupboard. Make sure the gas bottle can stand before securing to the wall. Due to regulatory requirements the gas bottle must be stored securely and in an upright position.

3.2 Connect the regulator:

Make sure the regulator knob is turned fully anti-clockwise to the end-stop before fitting. Fit the regulator to the gas bottle. Be aware that some CO₂ may be discharged from the connection during assembly. To avoid excess gas leakage, promptly screw the regulator on to the bottle.

3.3 Connect the gas hose:

Connect the braided gas hose to the top of the undersink unit via the John Guest fitting marked 'Gas IN'. Then connect the threaded end to the regulator, taking care not to lose the plastic olive located inside the threaded nut. To turn the gas ON, rotate the regulator knob clockwise and adjust to 2.7-3.0 bar (270-300kPa). The arrow should sit in the green section of the regulator gauge; it should not fall in the red or yellow sections.

3.4 Test for gas leaks:

Using soapy water perform a leak test. Apply the soapy water to the gas connections using a sponge. If any bubbles appear and grow, there is a gas leak at the connection. Clean away the soapy residue and tighten or refit the leaking connection. Make sure the regulator is turned off when tightening or refitting the leaking connection.

Refit the gas bottle to the Hook-and-loop strap and secure the bottle in an upright position.

 **NOTE:** Care must be taken when working with high pressure carbon dioxide, and in no cases should the normal operating pressure of 2.7-3.0 bar (270-300kPa) be exceeded.

Connect the unit to the mains power supply.

WARNING:

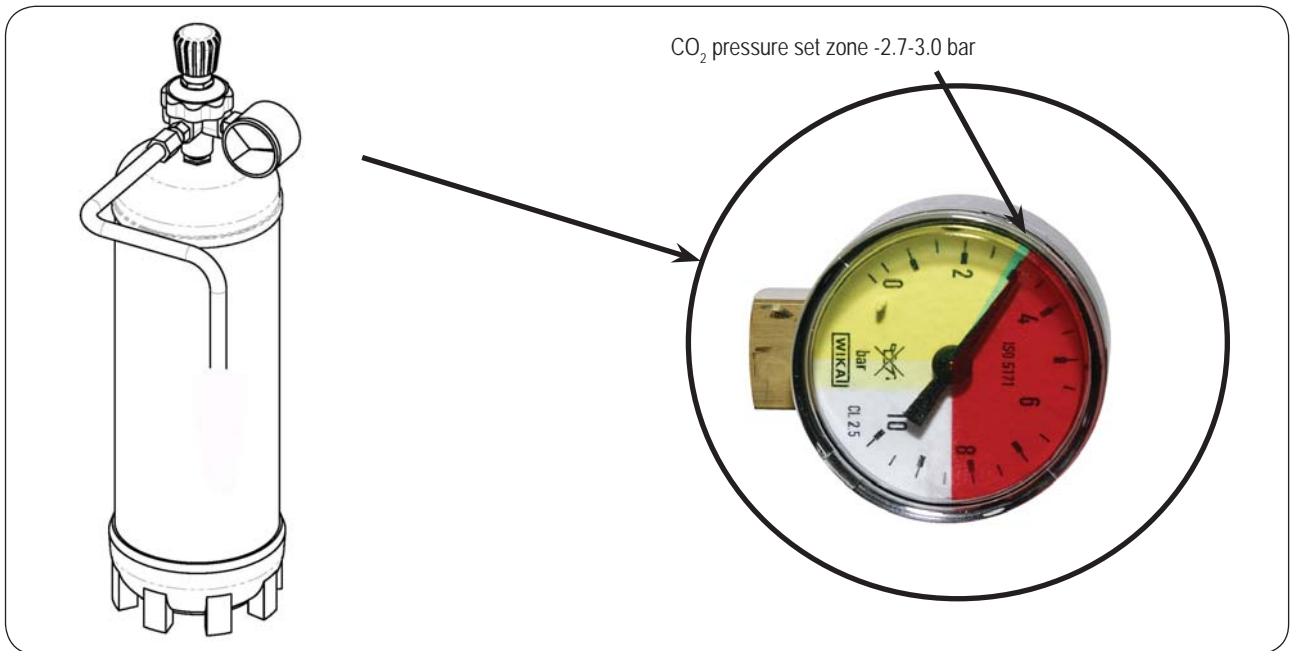
A gas cylinder containing 1kg of CO₂ should be installed in a well ventilated area or an area no less than 38m³.

If more than 1 gas cylinder containing 1kg of CO₂ is present within the same location, the recommended ventilated area should be in proportion to the number of gas cylinders stored in that location.

A ventilated area is a non-enclosed area which could include the kitchen, living room etc.

See gas bottle and MSDS sheet for complete list of warnings.

CO₂ Connections



After replacing a bottle or after making a gas connection:

Stage 1:

1. Turn the gas OFF
2. Using soapy water applied with a sponge, or with a brush, cover all of the gas joints with a liberal amount of soap suds.



Stage 2:


1. Turn ON the gas
2. Inspect the joint for leaks
3. If any bubbles appear, the joint will need to be resealed.

Section 4

Undersink Unit Installation

4.1 Hose fitting

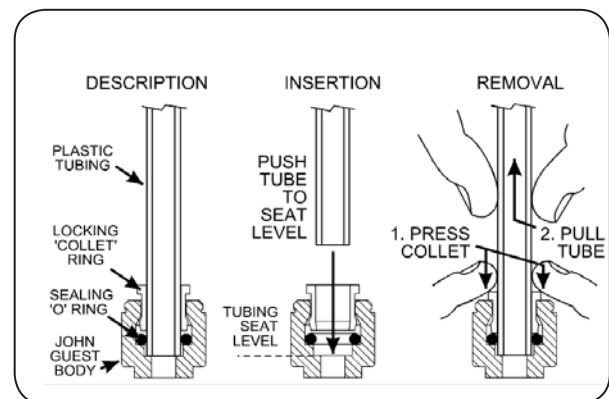
Install the mains water braided hose to the undersink unit before locating the unit in place.

-  **Note:** The connection hoses supplied with the tap head assembly and cold inlet CANNOT be lengthened.
Note: Insulate the Blue and White tubes after trimming to length

John Guest fittings (Insertion and removal)

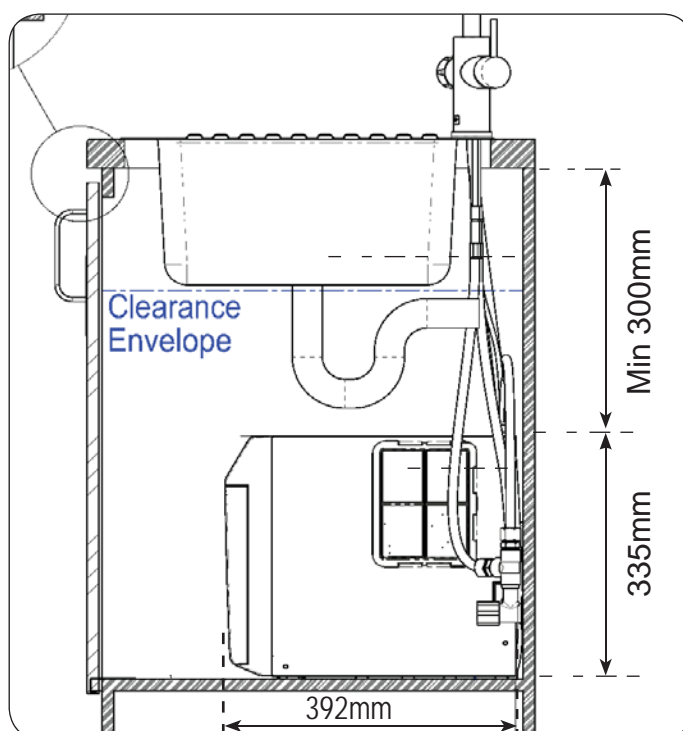
Be careful when cutting the poly tube so that there are no rough edges and that the tube is not distorted.

1. Use a sharp knife to ensure the tube has a clean, straight edge. Do not cut at an angle.
2. Remove any swarf or unwanted material.
3. Push the tube into the John Guest fitting making sure all connections to the John Guest fittings are pushed in past the "O"ring to full depth, at least 15-16mm.
4. Check for a good joint by pulling back on the tube. If the tube comes out, of the fitting, repeat the above step.
5. To remove the tube, press the collet into the fitting and at the same time pull back on the tube.



Common kitchen layout

4.2 Clearances

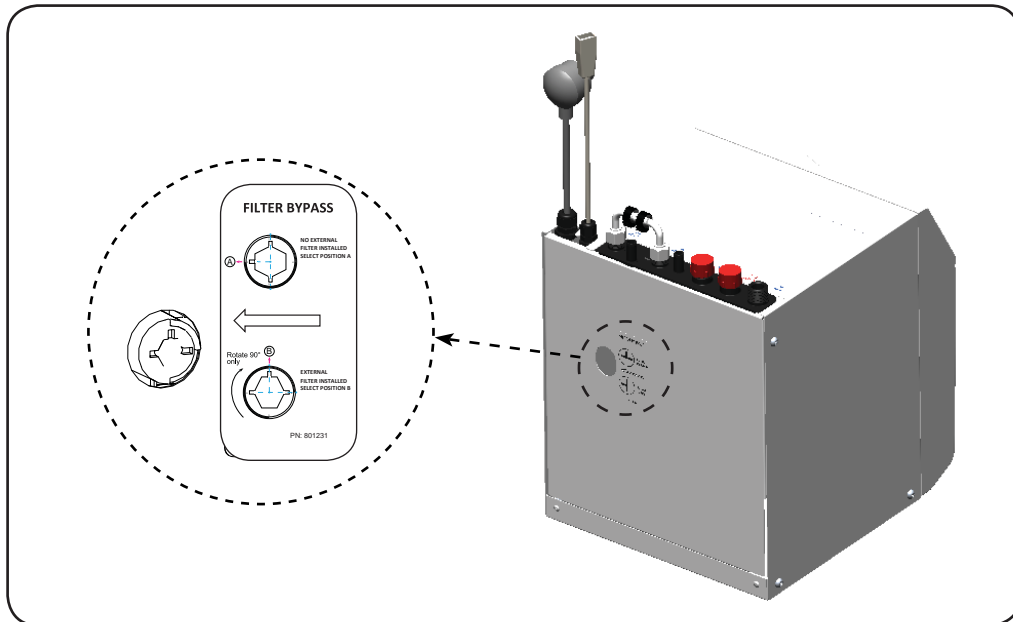


BHA Installation

Note: Before you install a unit, determine whether a water softener or an external filter is required.

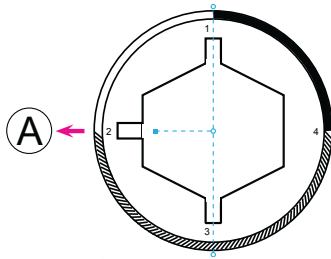
4.3 External Bypass Valve

The diverter bypass valve allows the user to choose to have the boiling feed water bypass the internal filter and only be filtered by the external filtration. This diverter valve is located at the rear panel of the Zip HydroTap undersink unit, see the image below.

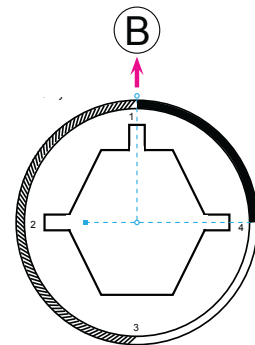


Check the table below to determine which filter bypass position you need for your product.

If no external filter is installed, select position A

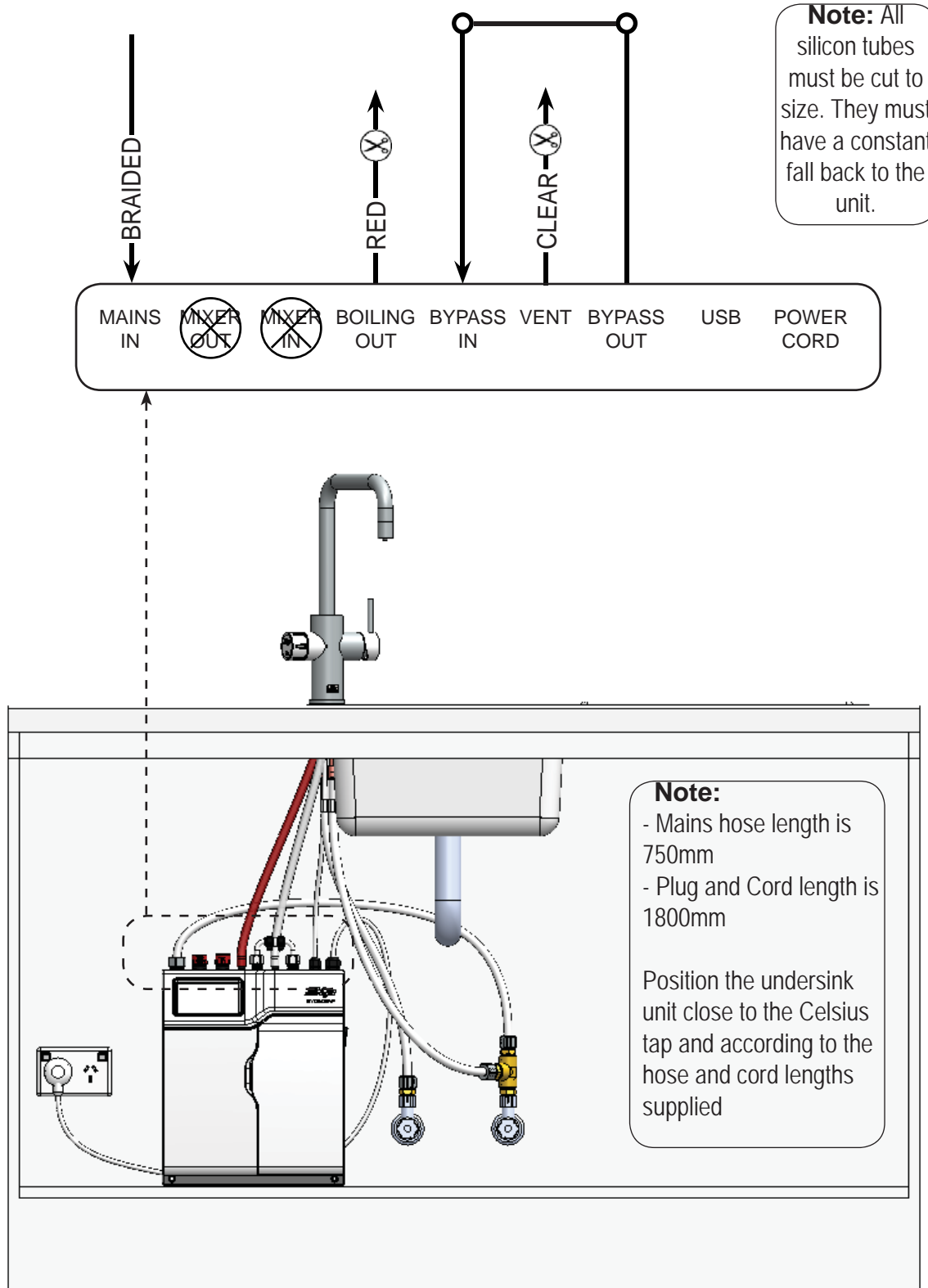


If an external filter is installed, select position B



Installation Instructions

4.4 Model BHA

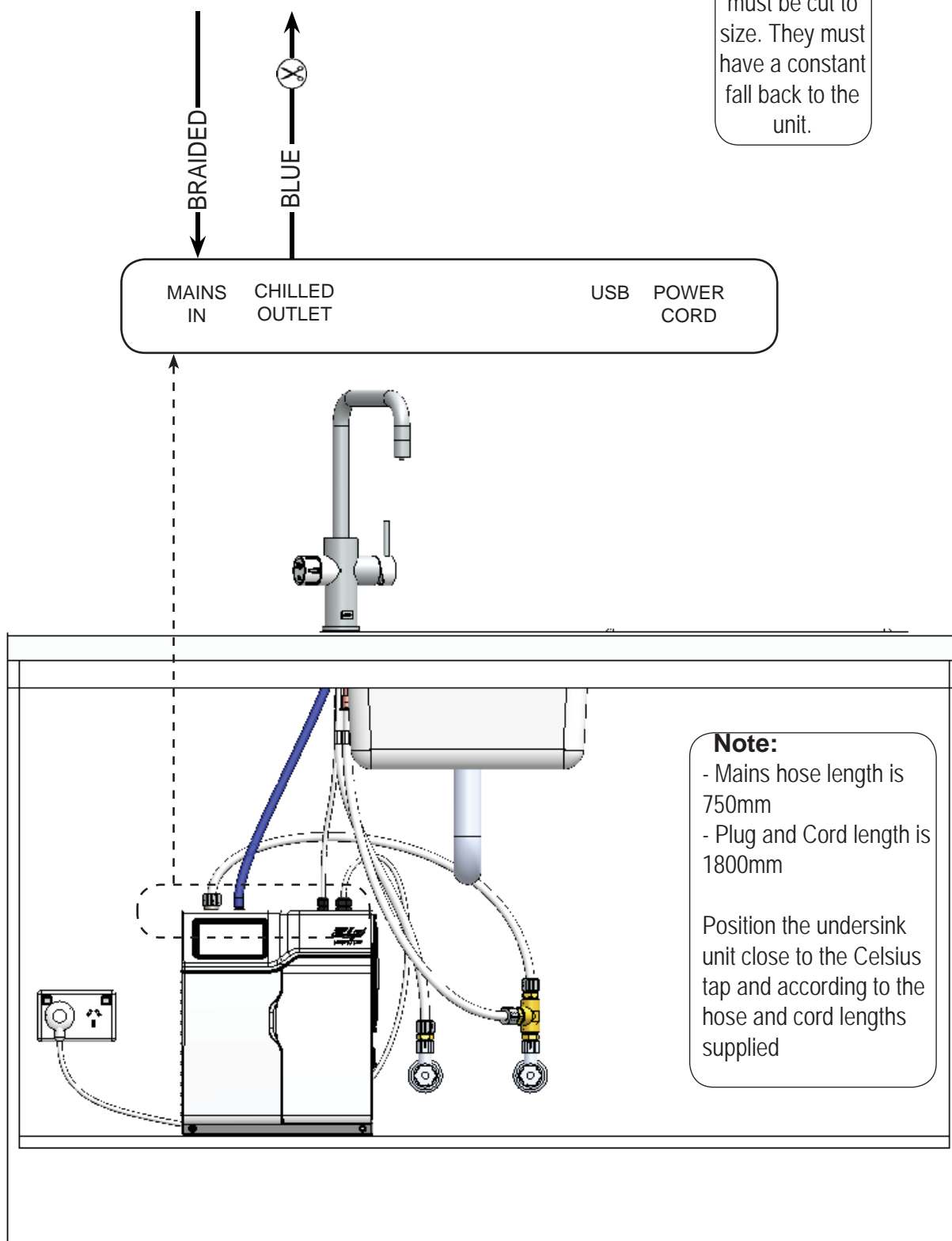


Note: The Celsius tap requires the Tee piece, as supplied, to be fitted in the cold water supply line, from the isolation valve (Not supplied), to the mixer tap. (See diagrams)

: Not required for standard BHA HydroTap models.

4.5 Model CHA

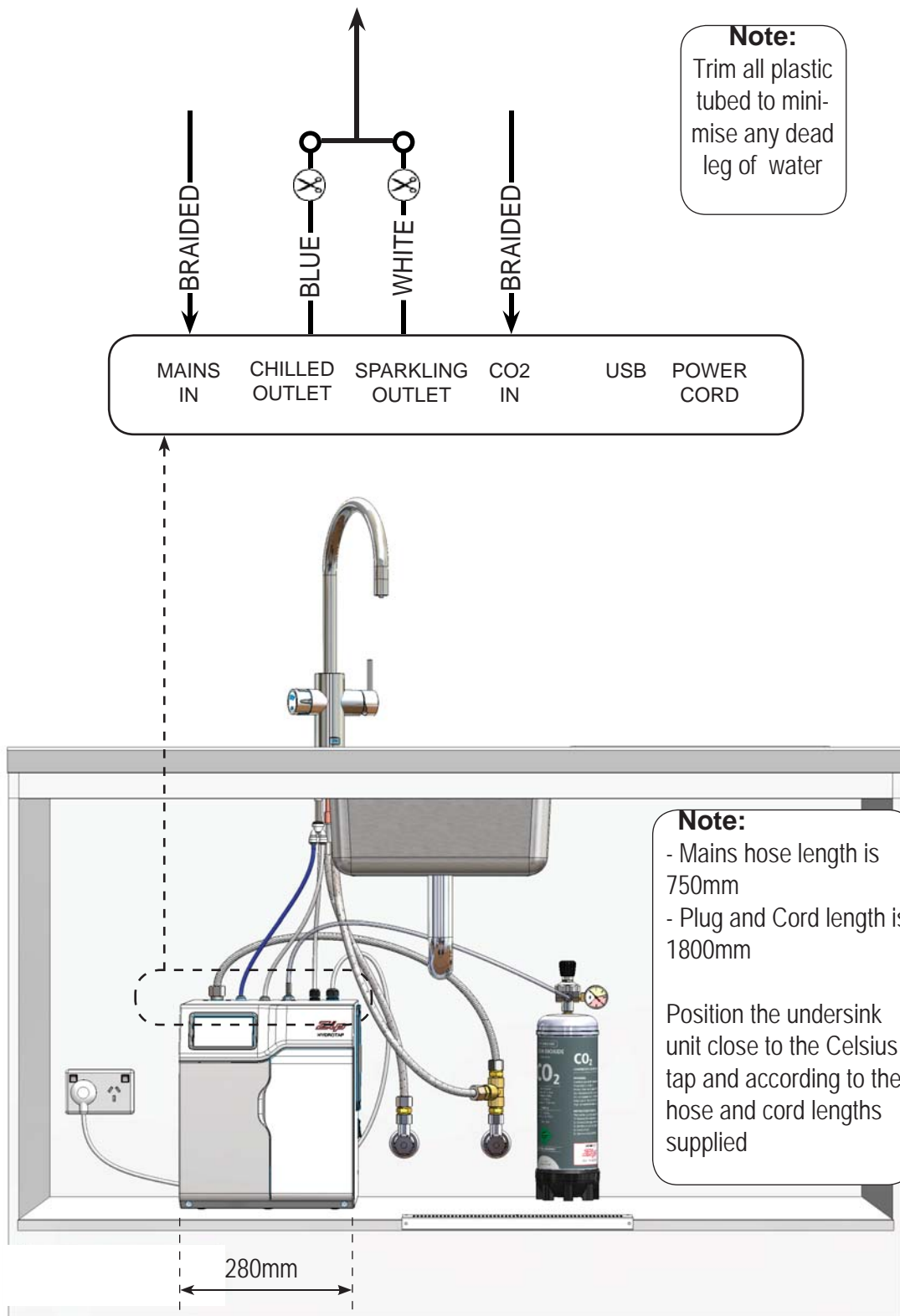
Note: All silicon tubes must be cut to size. They must have a constant fall back to the unit.



Note: The Celsius tap requires the Tee piece, as supplied, to be fitted in the cold water supply line, from the isolation valve (Not supplied), to the mixer tap. (See diagrams)

Installation Instructions

4.6 Model CSHA



Note: The Celsius tap require the Tee piece, as supplied, to be fitted in the cold water supply line, from the isolation valve (Not supplied), to the mixer tap. (See diagrams)

Section 5

Commissioning

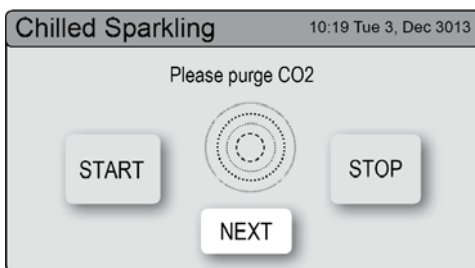
The Celsius is now ready to be commissioned.

- Turn ON the water and check for any leaks.
- Turn the power ON at the GPO and at the side of the undersink unit.
- Familiarise yourself with the operation of the Tap, in preparation for use (See User Guide).
- Select the language option from the view screen.
- Follow the Installation instructions below (and review Section C of the User Guide).
- After commissioning, the system may be customised by selecting further options in Section G - Settings, within the User Guide.

5.1 - CO₂ Purge (Model CSHA)



NOTE: at first commissioning, the system will select the CO₂ Purge screen automatically.

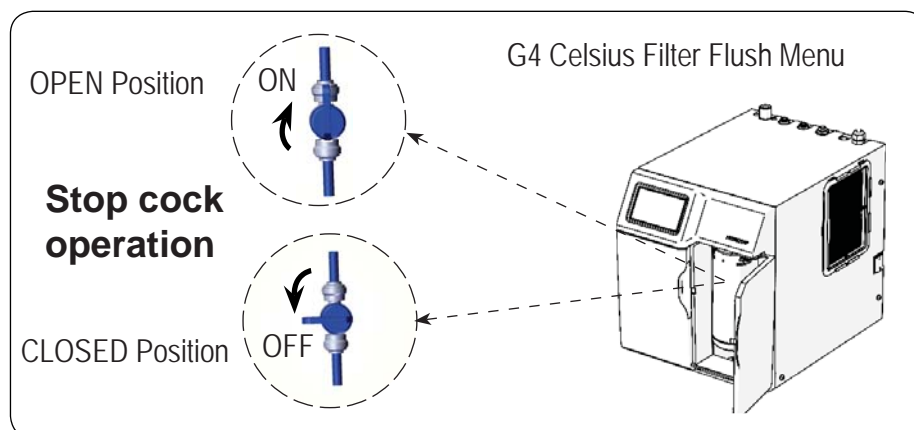


1. Press the [START] button to commence the purging process.
2. Purge for 10 seconds and ensure all water has stopped flowing through the tap. (You will hear the CO₂ gas escaping from the tap).
3. Press the [Stop] button.
4. Press [Next] for the filter flush screen

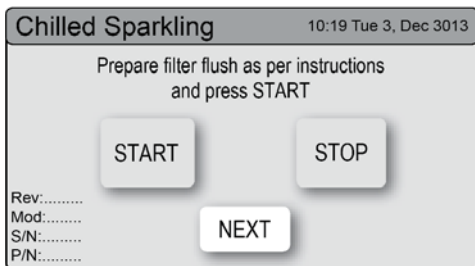
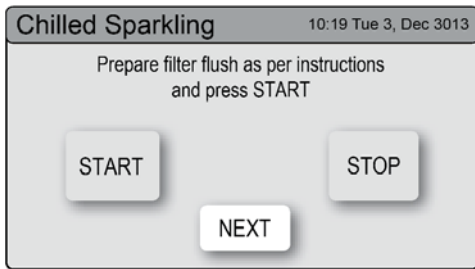
5.2 - Filter Flush (Model BHA; CHA & CSHA)

Have a 10L bucket or similar container (not supplied) at the ready to hold the water that will be ejected while the Filter Flush Mode is in operation. Open the filter access door on the front of the unit and the filter cartridge will be exposed. Located to the rear RHS of the cartridge is a flush line, approx 600mm long and the flush line stop cock. Place the valve end of the flush line into the bucket or container (not supplied).


NOTE: the flush line may be extended using 1/4" JG tube (Not supplied)



Commissioning

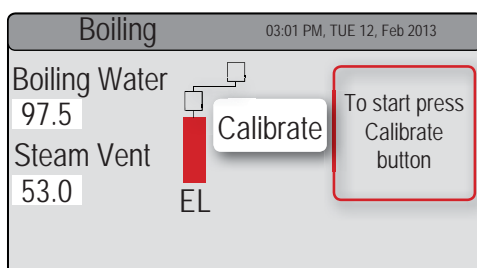


1. Press [Start] [Stop] buttons to start and stop the filter flush.
2. Turn the flush line stop cock ON (See diagram).
3. Press [Start] and allow at least 10 litres of water (1 x Std Bucket) to flush through the filter.
4. For convenience, the product details will be displayed in the screen.
5. Once the filter flush is finished, Turn the stop cock OFF then press [Stop] to end filter flush mode.

 **NOTE:** For any subsequent filter changes or any operational procedures, please refer to the Celsius user guide, located inside the filter housing access door.

5.3 - Boiling Calibration (Model BHA)

The Zip HydroTap is equipped with a self-calibrating program to adjust for altitude. On start up, the controls take the system through a calibration process. Once this mode is complete the system reverts back to normal operation.



- Press the calibration button and the system will commence the Boiling calibration procedure. This will take approx 5-6 minutes.

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.

Trouble Shooting

System Fault Message	Possible Cause	Solutions
Power board fault	Electrical disruption	Check power supply and all fuses
Interface fault	Internal fault	Call Zip Service
Level board fault	Internal fault	Call Zip Service
Condenser screen blocked	Blocked Air filter	Remove blockage / Clean filter / check user guide
Water leak, Isolate mains	Water leak	Turn off mains water supply / Call for service
Compressor over-run	Compressor too Hot	Check ventilation
Water supply failed	No water	Check water supply is turned ON
Hot sensor Open	Internal fault	Call Zip Service
Hot sensor Closed	Internal fault	Call Zip Service
Cold sensor Open	Internal fault	Call Zip Service
Cold sensor Closed	Internal fault	Call Zip Service
Flood sensor Open	Internal fault	Call Zip Service
Condenser sensor Closed	Internal fault	Check Ventilation / Call Zip Service
Condenser sensor Open	Internal fault	Check ventilation / Call Zip service
Heater fuse / driver fault	Internal fault	Call Zip Service
Heater driver fault	No hot water	Call Zip Service
Compressor driver fault	No chilled water	Call Zip Service
Hot sensor degraded	Internal fault	Call Zip Service
Condenser overtemp.	Blocked air filter	Remove blockage / Clean filter / check user guide
A DC Pump is faulty	Internal fault	Call Zip Service
Steam is too cool	Internal fault	Call Zip Service
Steam sensor Open	Internal fault	Call Zip Service
Steam sensor Closed	Internal fault	Call Zip Service
Over Steamed	Internal fault	Call Zip Service
Hot tank overfilled	Internal fault	Call Zip Service
Comp Fuse/Driver Fault	Internal fault	Call Zip Service
Hot tank under filled	Low water pressure	Check water supply
Boil dry protection	Safety activated	Turn OFF / On power to reset
Flash Mem corrupted	Internal fault	Call Zip Service
Flow Sensor Fault	Internal fault	Call Zip Service

Call an electrician, a plumber, or Zip for a free call in Australia on 1800-638-633 for assistance, service, spare parts or enquiries.

Notes

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 terms "Zip" and "Celsius" are registered trade marks of Zip Heaters (Aust) Pty Ltd.

Zip products described in this publication are manufactured under one or more of the following patents: AU675601, AU637412, AU635979, GB0422305, GB2065848, US4354049, US5103859, US5099825 and SA2006/08043. Other patents are in force and patent applications are pending.

