

# Zip ChillTap<sup>®</sup> Sparkling

Commercial - Filtered chilled still and chilled sparkling water



Affix Model Number Label Here

804722



# Contents

Pre-Installation Notes . . . . .	3
Read These Warnings First . . . . .	4
Product Specifications. . . . .	4
Section 1 - Tap Installation. . . . .	5
1.1 - Installing the Tap . . . . .	5
Section 2 - Ventilation . . . . .	6
2.1 - Ventilation (all models) . . . . .	6
2.2 - Extra ventilation. . . . .	7-8
Section 3 - CO <sub>2</sub> Cylinder . . . . .	9
3.1 - Secure the cylinder mounting . . . . .	9
3.2 - Connect the regulator . . . . .	9
3.3 - Connect the gas hose . . . . .	9
3.4 - Test for gas leaks . . . . .	9
Section 4 - Undersink unit installation . . . . .	10
John Guest (J.G.) fittings . . . . .	10
4.1 - Chiller Installation . . . . .	11
4.2 - Hose and Tube connections . . . . .	11
4.3 - Mains Connection . . . . .	12
4.4 - Chilled Still Connection . . . . .	12
4.5 - Chilled Sparkling / Carbonation Valve Connection . . . . .	12
Section 5 - Commissioning . . . . .	14
5.1 - Test and Commission . . . . .	14
5.2 - Adjusting the flow rate . . . . .	15
Section 6 - Maintenance . . . . .	16
6.1 - Water Filter Replacement . . . . .	16
6.2 - Air Filter Change . . . . .	17
6.3 - Gas Bottle Replacement . . . . .	17
Trouble Shooting . . . . .	18
Cleaning . . . . .	19
End of Life Disposal . . . . .	19
Contact Details. . . . .	20

## Pre-Installation Notes

- A. Read the instructions.
- B. Note: All fittings are supplied with the appliance kit except an isolation valve.
- C. Check the water quality to determine if extra filtration will be required.
- D. Check the appliance rating plate and ensure correct power is available for the appliance.
- E. Check the underbench cupboard supporting the appliance is adequate for the total weight of the appliance.
- F. Ensure a potable water supply connection with isolating valve inside the cupboard is 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.

### **Note:**

All plumbing must comply with AS/NZS 3500.4.1 & AS/NZS 3500.4.2

All electrical must comply with AS/NZS 3000 wiring rules

All refrigeration must comply with AS/NZS 3350.2.24

### **Precautions**

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

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

## Read These Warnings First



1. Please read all Precautions, Installation Requirements, Installation Instructions before installing any Zip ChillTap.
2. Never attempt to install any Zip ChillTap without reading all of the applicable instructions.
3. All electrical connections must comply with current wiring rules.
4. This appliance is not designed for use by young children or infirm people without supervision.
5. Young children should be prevented from having access to ensure they are not able to use or play with the chiller.
6. This appliance must be earthed.
7. If the power supply cord is damaged it must be replaced by a Zip Service Provider or a qualified electrician.
8. The power cord and general power outlet must be in a safe and accessible position after installation.
9. Do not remove the cover of the appliance under any circumstances without first isolating the appliance from the power supply.
10. This unit is designed for indoor use and must not be installed outdoors or exposed to the elements of nature.
11. This unit must not be positioned in an area that may be cleaned by a water jet.
12. This unit must not be cleaned by a water jet.
13. 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.
14. 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.
15. The appliance has to be placed in a upright position.

## Product Specifications

Model	Power Rating (kW)	Refrigerant	Height mm	Depth mm (including fittings)	Width mm	Weight empty kg's	Weight full kg's
CS	0.3	134A (100g)	335	442	280	25	26

## Installation Requirements

- Power supply 220-240V AC 50Hz for connection via a 10amp G.P.O.
- Operating temperatures 5°C - 35°C.
- External water pressure 250kPa - 700kPa (2.5 bar - 7 bar)
- Internal Pressure Limiting Valve: 500kPa

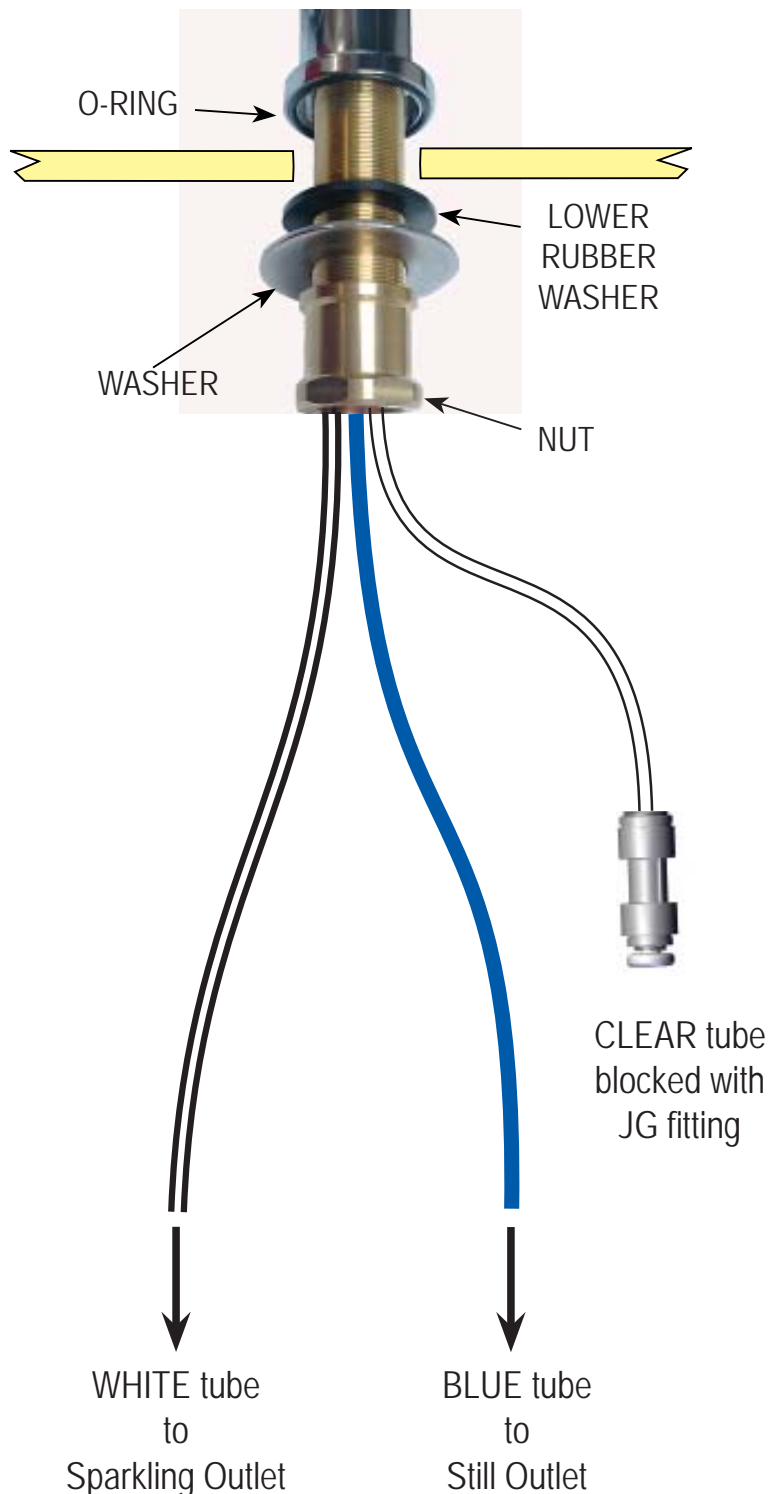
### Frost Protection

If this appliance is located where the 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.

**Note:** For best results we recommend a minimum static mains water pressure of 250kPa (2.5 bar).

# Section 1

## Tap Installation



### Special Tools

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

- 25mm diameter sheet metal hole punch for sink tops. (Not supplied)
- 25mm diameter hole saw for timber bench tops. (Not supplied)

### Installing the Tap

Position and install the carafe filler at the back of the sink or on the front, where there is a minimum 52mm wide flat area within the draining area of the sink.

Ensure the distance between the tap and the command centre does not exceed the length of the supplied tubing.

**NOTE:** Hoses are maximum 1000mm in length.

Make sure the selected position allows the carafe filler spout to overhang the sink bowl.

Make sure the selected position allows the carafe filler spout to overhang the sink bowl.

Use a 25mm sheet metal punch to create a neat hole without burrs.

Remove the large nut with the stainless steel and rubber washers from the base of the carafe filler, leaving the rubber-sealing ring (O-ring) in place.

Fit the carafe filler and seal to the sink, oriented so both the operating levers are easily accessible.

Slide first, the rubber washer and then the brass washer, followed by the nut, over the tubes from under the sink, and tighten the nut to secure the carafe filler firmly into place.

**NOTE:** The Clear tube must be trimmed to length and blocked with the JG fitting supplied.



**Warning - Do not reuse the old hose-sets. The unit shall be installed with the new hose-sets supplied.**

# Section 2

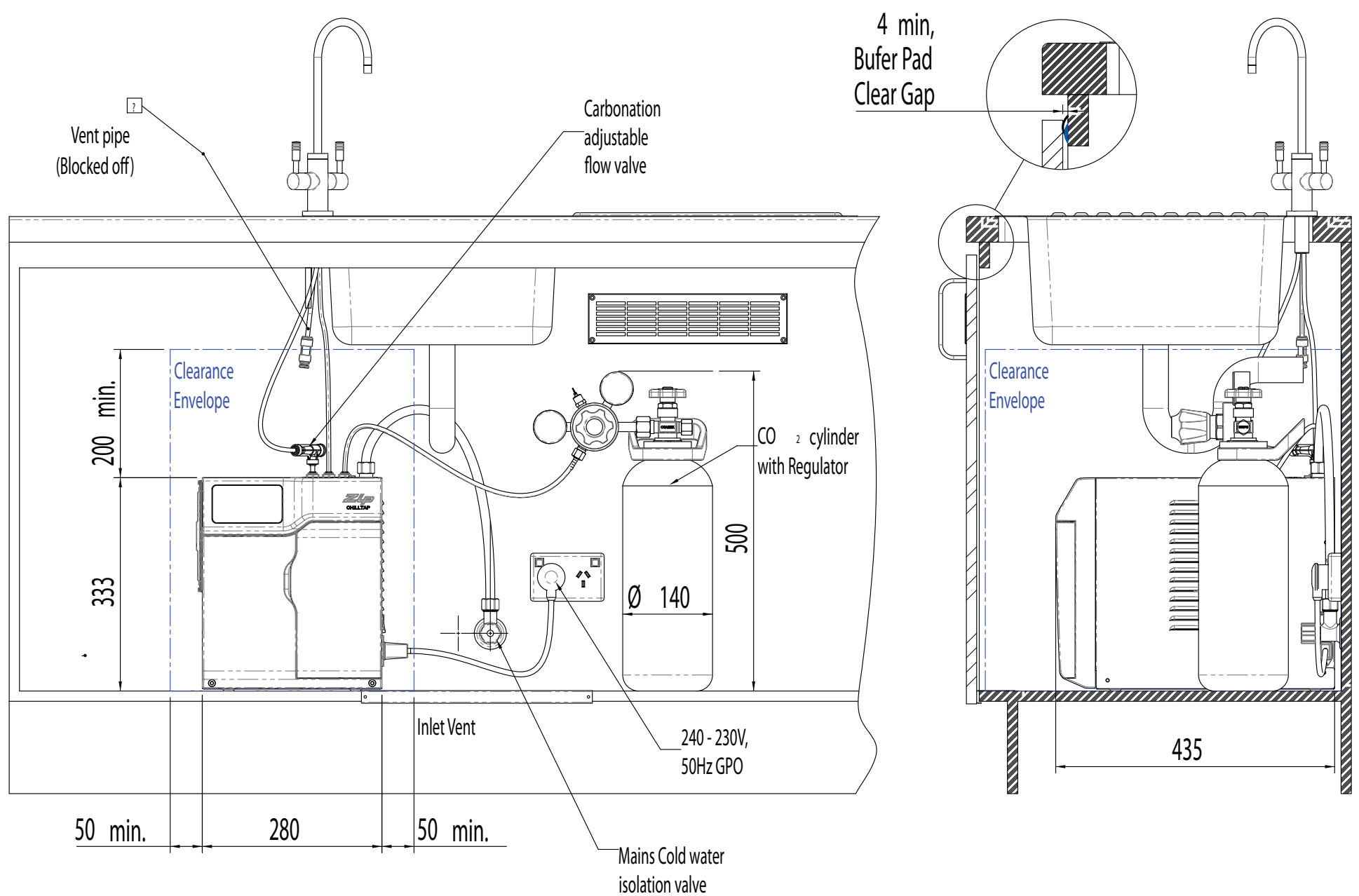
## Ventilation

- When installing air flow ducts, the following tools will be required:
- Jigsaw and 12mm Drill
- Keyhole or Wall Board saw.

### 2.1 - Ventilation for All Models

Proper air circulation must be provided for all 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).



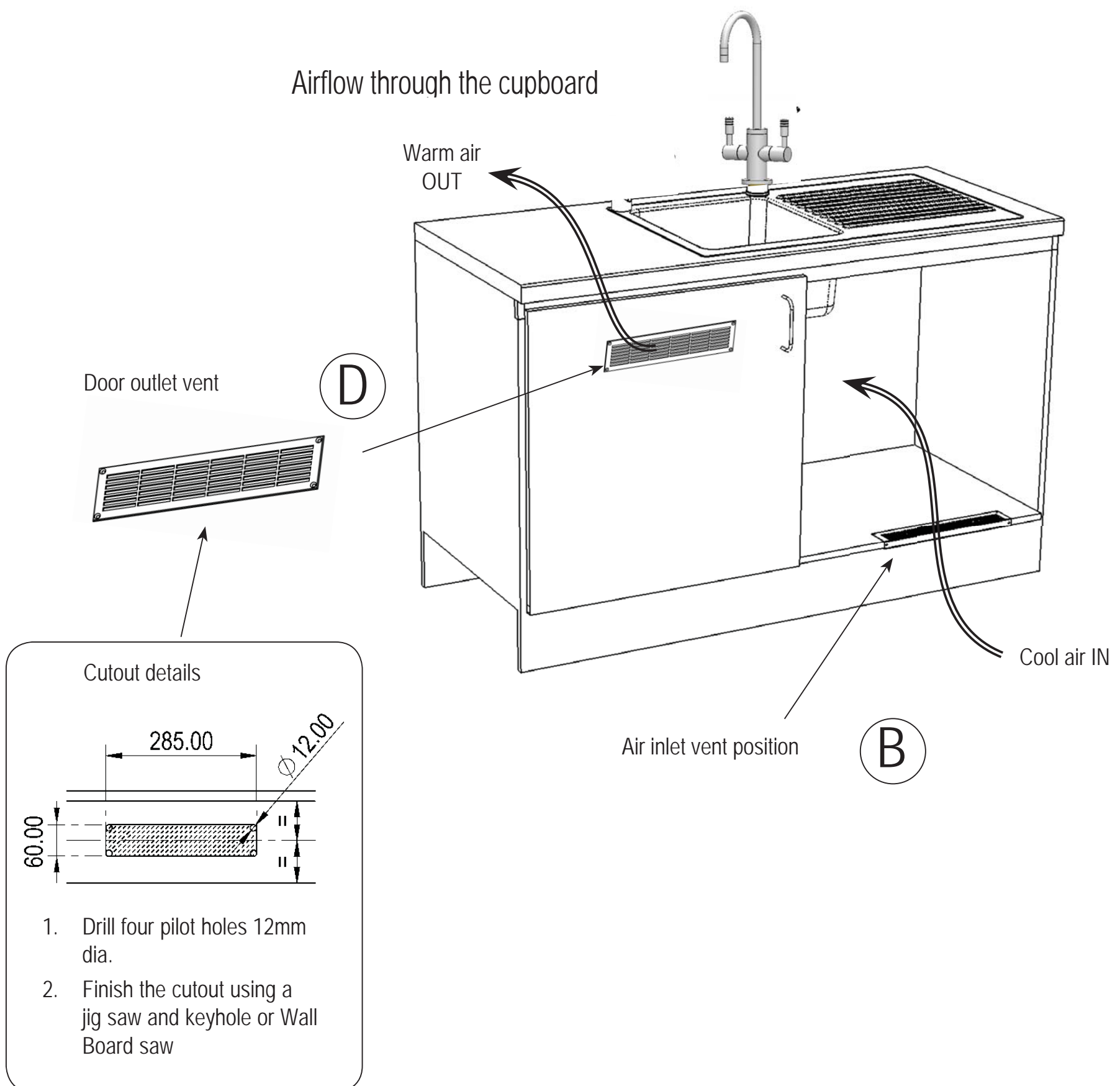
## 2.2 - The following instructions are critical if there is insufficient cupboard air circulation.

If the air flow, using the silicon door buffers, is insufficient, it will be necessary to fit a standard ChillTap 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.

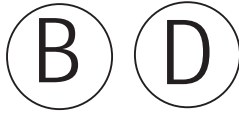
If the airflow is still insufficient to maintain normal operating temperatures then the inlet vent and door outlet vent (See item D below) will need to be fitted.

**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.

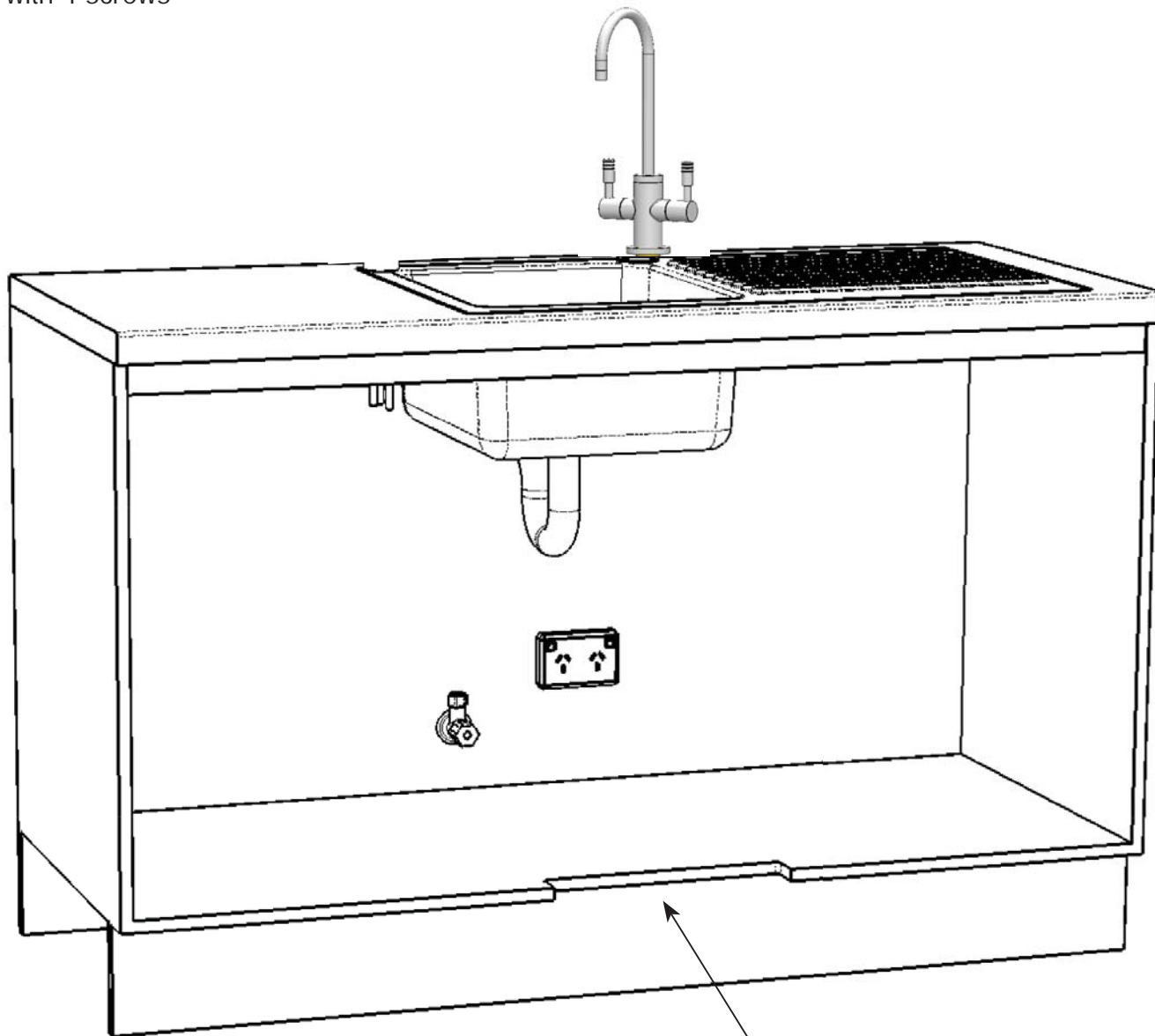


## Ventilation

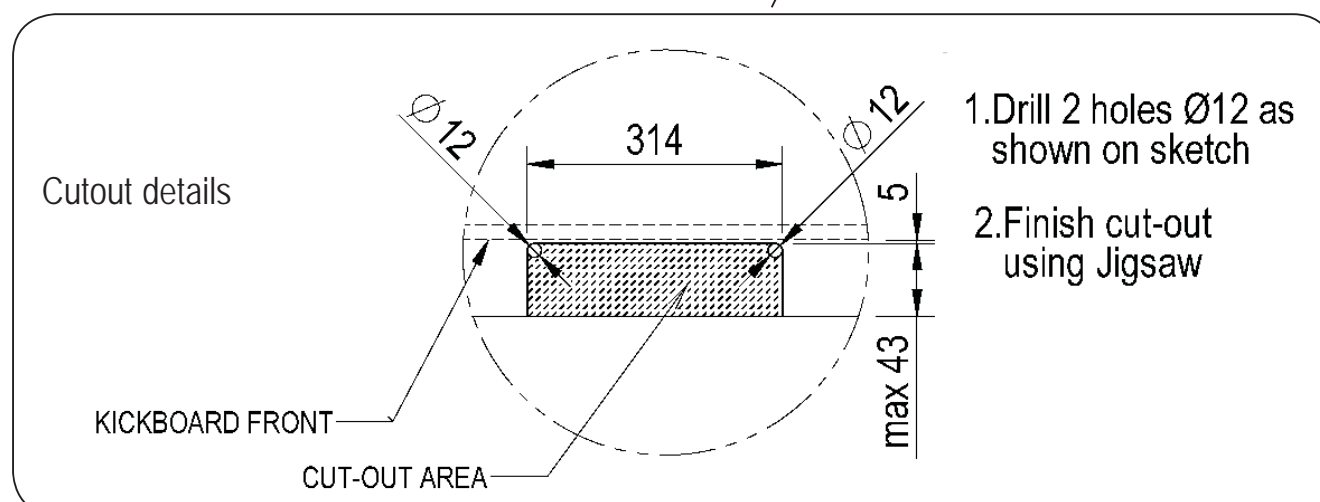
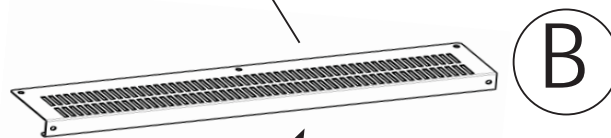
Typical Cut out procedure for



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

## CO<sub>2</sub> Cylinder

**WARNING:** This cylinder must be installed in an open plan area or in an enclosed room, with a volume no less than 50m<sup>3</sup>. If more than 1 gas cylinder containing CO<sub>2</sub> 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 a complete list of warnings. (See: [www.zipindustries.com](http://www.zipindustries.com))

### 3.1 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 CO<sub>2</sub> may be discharged from the connection to the regulator as the bottle and the regulator are assembled together. Any CO<sub>2</sub> released will be cold. Continue to screw on the regulator to stop this leakage.

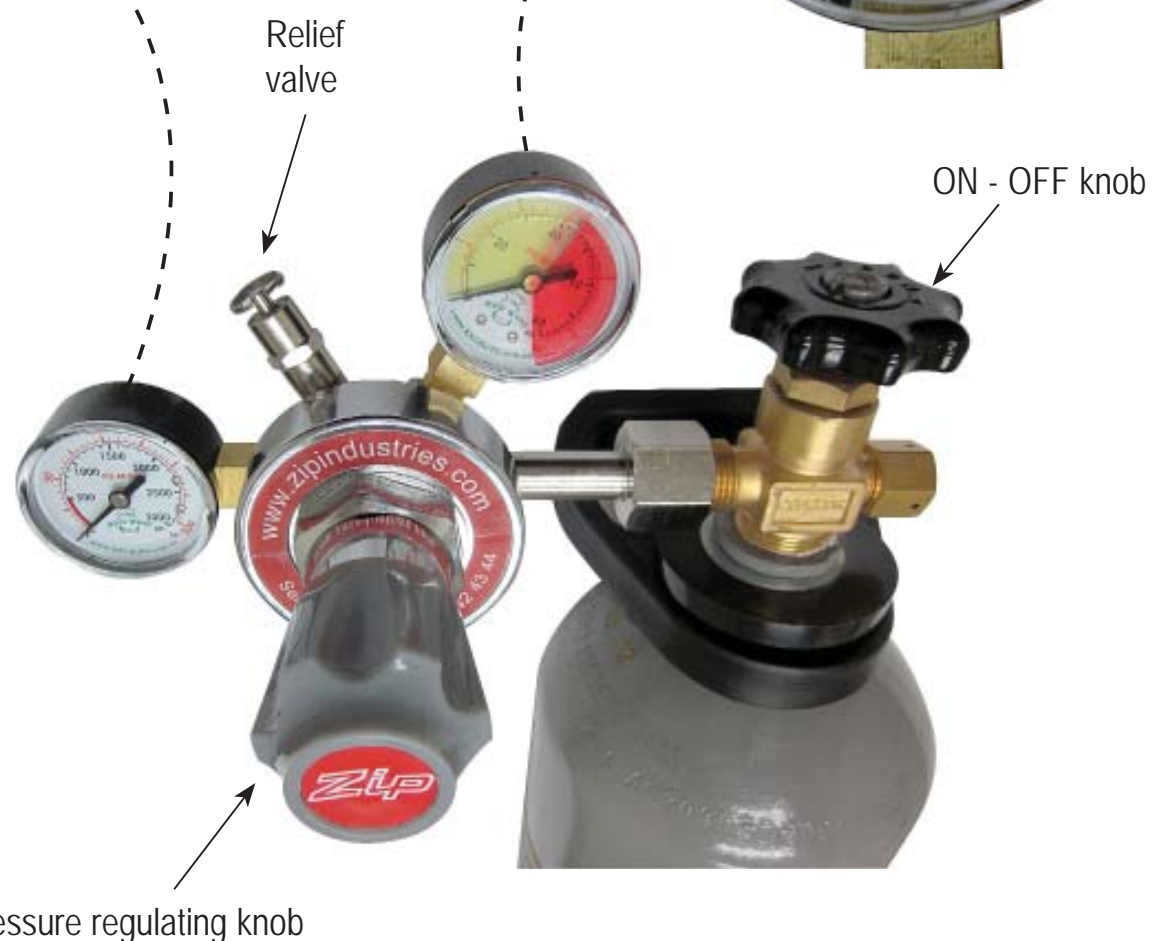
#### CO<sub>2</sub> Regulator (Commercial)

This gauge shows the pressure in the bottle and indicates when the bottle is empty. Initial bottle pressure will be 35-40 bar.

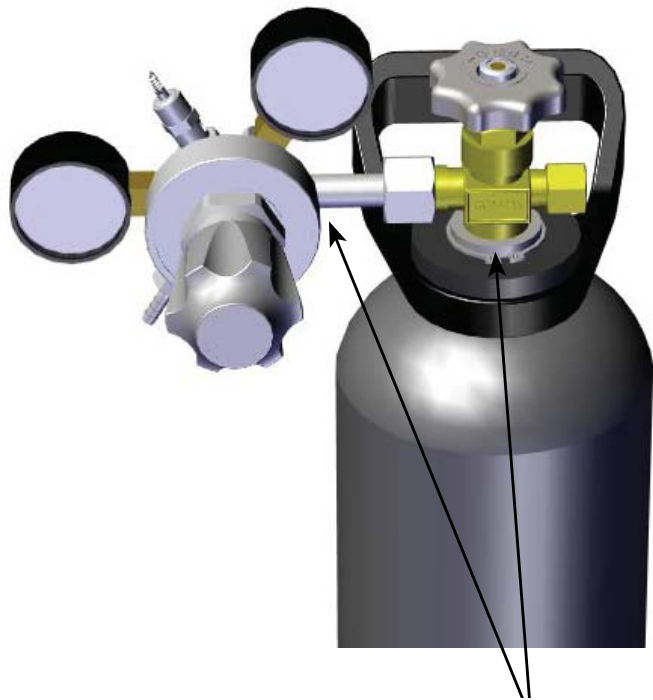
This gauge shows the adjustable limit (2.7- 3.0 bar) required for the ChillTap to function correctly



**NOTE:** be careful not to lose the small sealing olive in the end of the braided hose. This olive is necessary to ensure a gas tight seal between the braided hose and the regulator.



## CO<sub>2</sub> Cylinder



Test for leaks at these two points

### 3.4 Test for gas leaks:

Using soapy water perform a leak test. Turn the gas OFF. Apply the soapy water to the gas connections using a sponge or brush. Cover all of the gas joints with a liberal amount of suds.

Turn ON the gas. Inspect the joint for leaks. If any bubbles appear and grow, there is a gas leak at the connection. The joint will need to be resealed and tested again. 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.

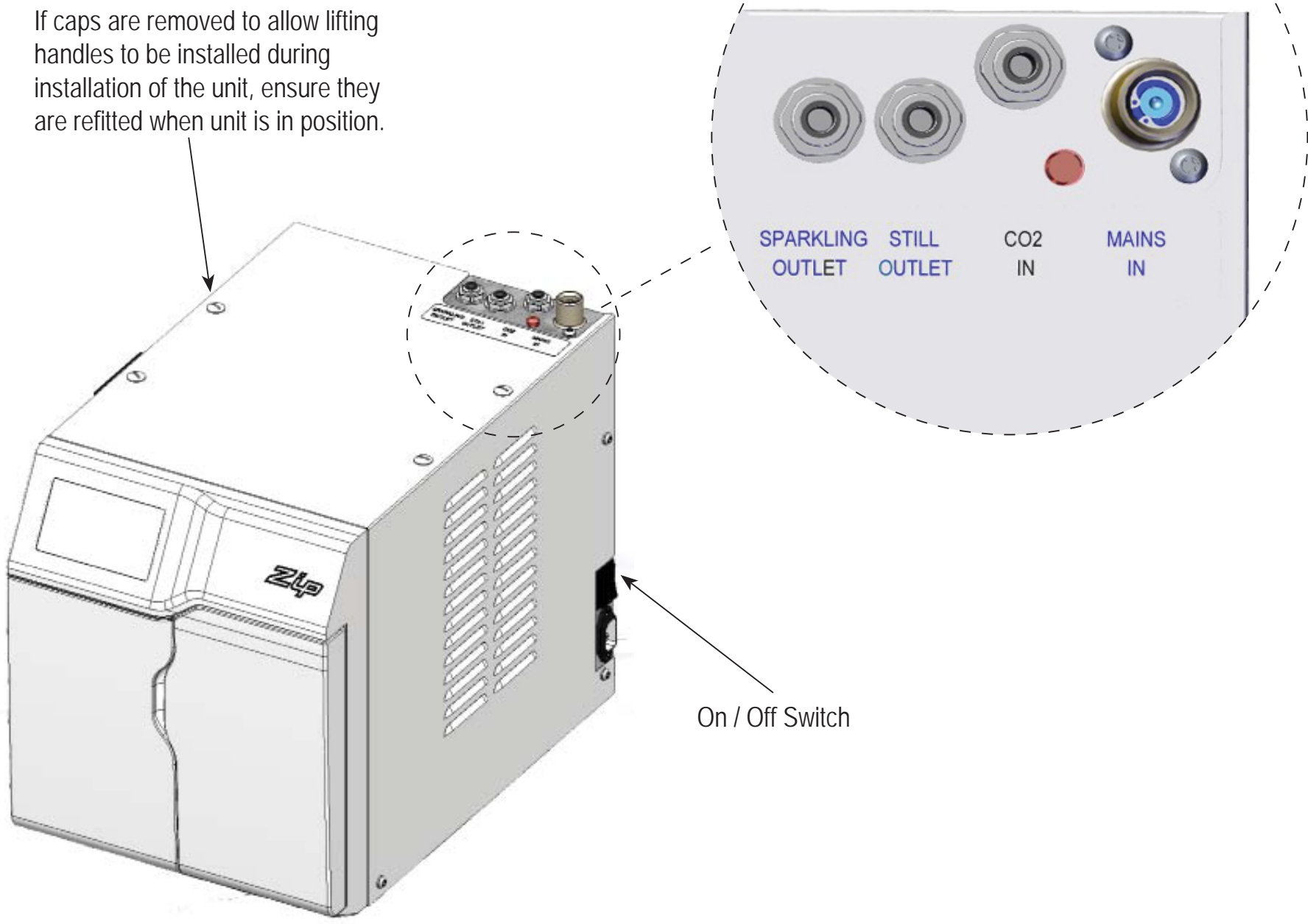


### IMPORTANT:

**After replacing a bottle or after making a gas connection, check for gas leaks between regulator and bottle, and between regulator and braided hose.**

# Section 4

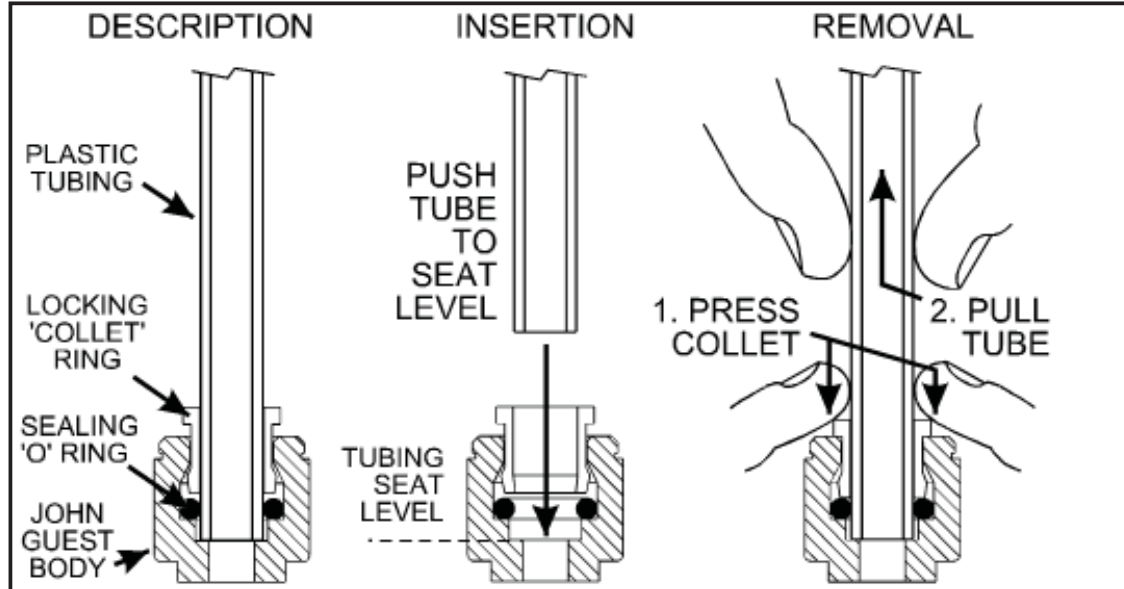
## Undersink Unit Installation



### John Guest (JG) fittings

General instructions for John Guest connections

**NOTE:** Ensure all John Guest tube ends are cut clean and square.



# Undersink Unit Installation

**Note:** To avoid water leaks, take care when bending rigid plastic tubing. The tube must not be kinked or crushed around a bend, as the tube may contain water under pressure. Therefore be careful not to nick, scratch or damage the tube during installation.

## 4.1 - Chiller Installation

Place the chiller unit into the cupboard with the proposed outlet tap position as close as possible, to minimise the length of tubing exposed between the chiller unit and the outlet tap. (The tubing length is limited to 1000mm)

Allow at least 50mm around the chiller unit to permit free airflow. Both the top and the front of the chiller must remain accessible for servicing purposes.

## 4.2 - Hose and Tube connections:

**NOTE:** You must separately supply and install an isolation valve (not supplied) in the water supply line before the connection to the product.

Connect the braided hose to the isolation valve. For best results we recommend a minimum static pressure of 250kPa (2.5 bar).

## 4.3 Mains Connection (with chiller inlet):

Connect the braided hose from the isolation valve to the top of the undersink unit, marked MAINS IN.

## 4.4 - Chilled Still Connection:

Remove the plug fitted into the connection marked "Still Outlet" by first depressing the collet and simultaneously pulling out the plug. Measure and trim the 1/4" blue tube from the carafe tap to the JG fitting marked "Still Outlet" on the top rear of the chiller unit. Before making connection, insulate the tube with the loose length of the foam insulation, trim the insulation to the correct length, which is about 5-10mm shorter than blue tube. Push the blue tube fully into the John Guest fitting marked "Still Outlet". Make sure all connections to John Guest fittings are pushed in past the "O"ring to full depth.

## 4.5 - Chilled Sparkling / Carbonation Valve Connection:

1. Remove the plug fitted into the connection marked "Sparkling Outlet" by first depressing the collet and simultaneously pulling out the plug. Fit the carbonation valve to the sparkling outlet connection on top of the unit as shown in FIG.1.
2. Measure and trim the 1/4" white tube from the carafe tap.
3. Before making connection, insulate the tube with the loose length of the foam insulation, trim the insulation to the correct length, which is about 5-10mm shorter than white tube.

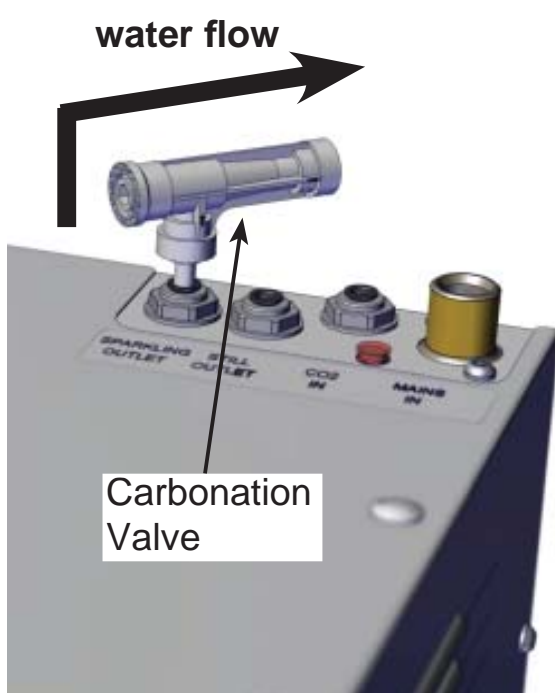


FIG.1

## Undersink Unit Installation

4. Connect the white tube to the carbonation valve as shown in FIG.2. Push the white tube fully into the in carbonation valve. Make sure all connections are pushed in past the "O"ring to full depth.

5. Arranging tubes in the most direct route between tap outlet and unit.

The tap connection is now complete.

**IMPORTANT:** The Clear tube is non functional. However, it must be trimmed to length and blocked with the JG fitting supplied, otherwise water will leak from it whenever the tap is operated.

**Note:** After dispensing sparkling water, a small amount will remain in the carafe filler. If the next drink is to be still water and you do not wish any trace of sparkling water, the still water should be running for approximately 1 second before filling your glass or bottle. The same is applicable if still water is dispensed prior to dispensing sparkling water.

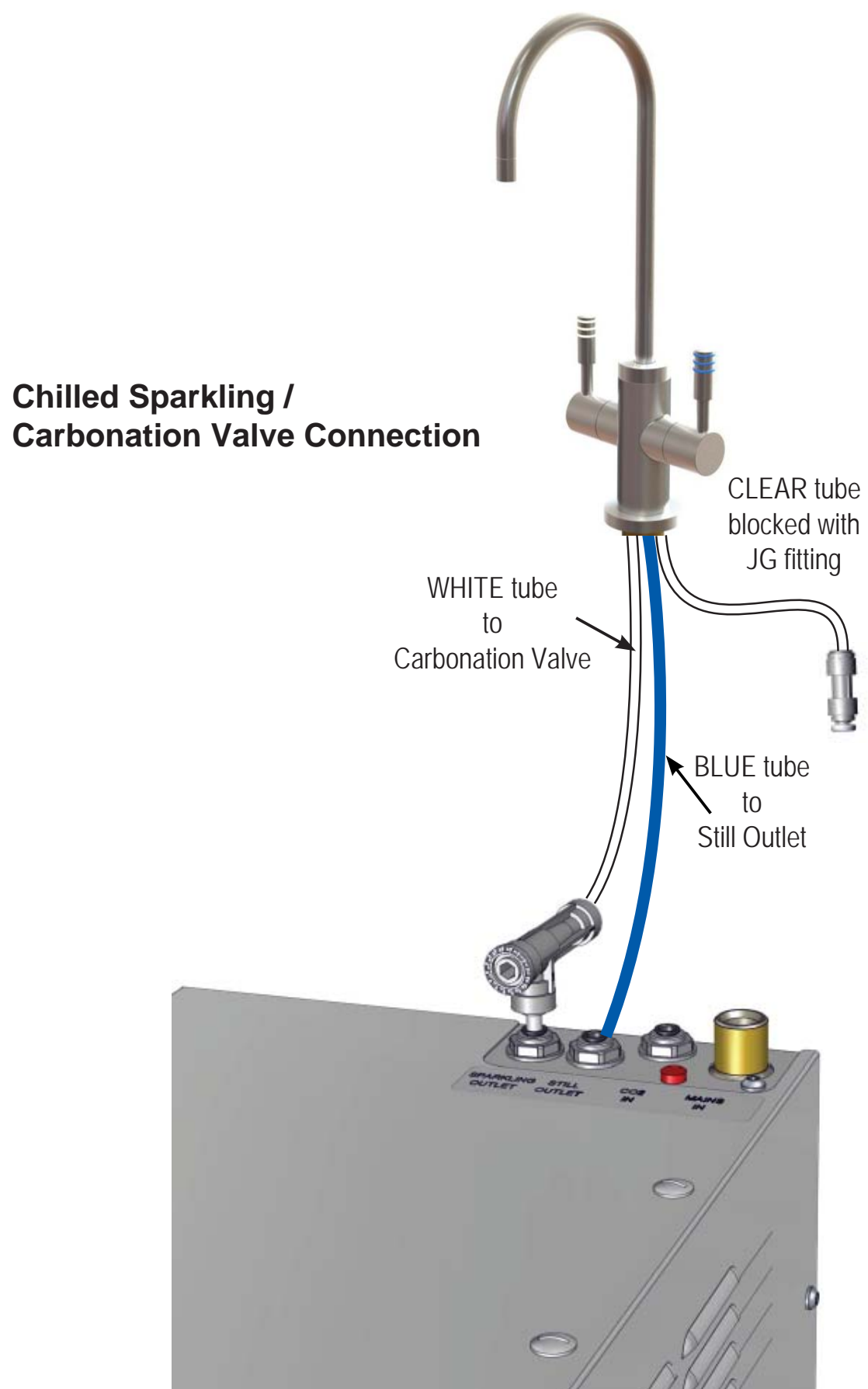


FIG.2

# Section 5

## Commissioning

### 5.1 - Test and Commission:

Do NOT turn power or water on to the unit. The carbonator must be purged first with the CO<sub>2</sub> gas. Failure to do so will result in poor tasting water. Turn the sparkling water lever on (white ringed lever) The CO<sub>2</sub> will start to run out of the tap. Gas will purge or escape from the tap at this point. Let it run for approximately 5 seconds to completely fill the tank. Close the sparkling lever by rotating back to upright.

Note: Should no CO<sub>2</sub> gas be expelled, check if regulator valve is open.

Turn on the still water lever (blue ringed lever) then turn on the water supply to the unit. First air, then water will flow from the tap. Allow the water to continue to flow for about 7.5 litres, which is required to activate the filter. Once this has been done turn off the still water lever.

Connect the unit to the mains power supply and turn ON. Confirm the ON/OFF switch at the side of the undersink unit is on.

The compressor and fan will start, and the water pump will operate for approximately 20 seconds to fill the carbonator vessel.

After approximately 5 minutes, the compressor and fan will stop as the chiller has reached its normal operating temperature.

To achieve an optimal level of carbonation, it is beneficial to purge the carbonation vessel again by isolating the water and electrical supply, and opening the sparkling lever on the tap until gas is expelled for approximately 5 seconds. Close the tap and turn on water and power. Wait 20 seconds and the sparkling water should be ready for use.

**Important:** Optimal carbonation levels occur at low water temperatures. Excessive flow rates of carbonated water will result in poor drink quality and malfunction of system. It is recommended that the flow rate for carbonated water should be approximately 1.2-1.6 litres/minute.

The lever on the right (Blue rings) is used for chilled still filtered water and the lever on the left (White rings) is used for chilled sparkling filtered water.

Chilled water is obtained by rotating the lever on the right, to a horizontal position. The water is chilled by a refrigeration unit fitted within the cabinet stand, under the basin.

With the carafe tap, you can obtain chilled water within the rated capacity, for as long as you leave the lever in the open (horizontal) position. When finished, return the lever to the OFF (upright) position.

Sparkling water is obtained in the same way as the chilled water, by rotating the lever on the left hand side of the carafe tap.

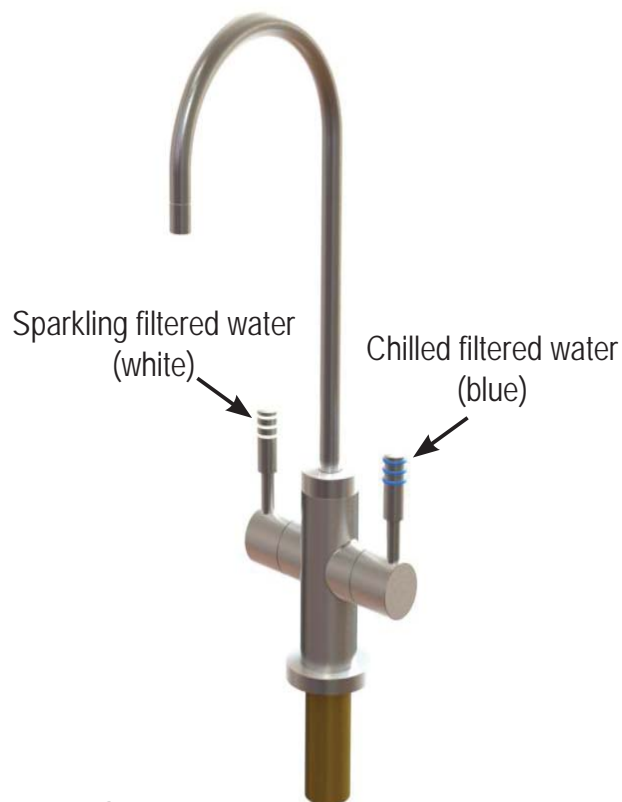


FIG.1

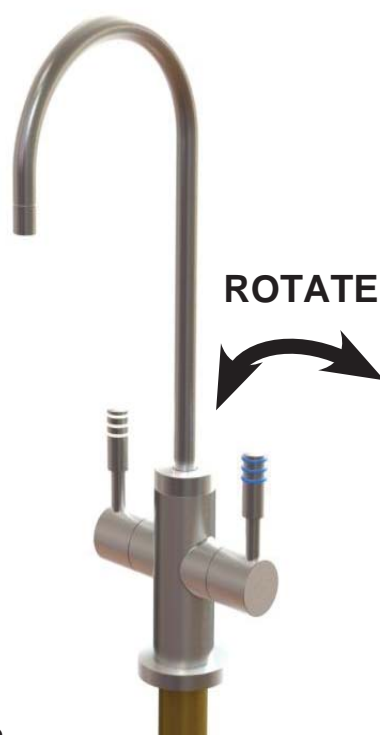


FIG.2

### 5.2 Adjusting the flow rate

Rotate to adjust  
water flow



FIG.3

The carbonation valve has an adjustable flow rate. The optimum setting for the valve is 1.6 litres per minute. Using a 6mm Allen key or a large flat blade screw driver, you can adjust the flow on the valve.

1. After product commissioning and CO<sub>2</sub> purge, you are now ready to adjust carbonator water flow rate.
2. To adjust the flow rate, rotate the adjustment screw anti-clockwise to increase the flow and clockwise to decrease the flow, see FIG.3. (Use 1/4 or 1/2 turn increments)
3. To measure the flow rate you have set, use a measuring cup or jug and run the sparkling water for 15 seconds. Multiply the amount of water dispensed in that 15 seconds by 4 to get your flow rate in litres per minute. 1.6 litres per minute is the optimum flow rate.



**Warning - Take care NOT to use excessive force during adjustment of the carbonation valve.**

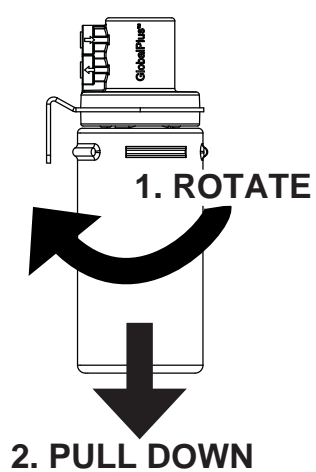
# Section 6

## Maintenance

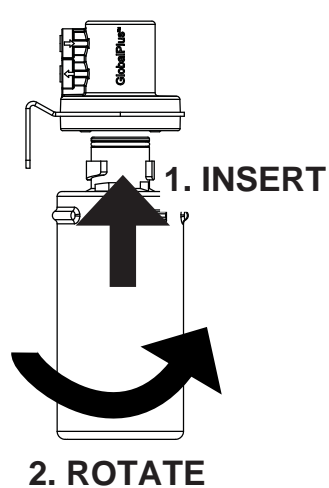
### 6.1 Water Filter Replacement

**NOTE:** For safe operation, the filter cartridge should be replaced every 6-12 months, or earlier if you notice a persistent reduction in water pressure from the appliance or an unpleasant taste or odour in the water.

#### REMOVE FILTER



#### INSERT FILTER



#### Water Filter Change:

1. Turn off the water and power supply to the unit.
2. Turn the still water lever (blue ringed lever) on, to release any water pressure in the unit. Once water has stopped running from the tap turn off the lever.
3. Turn the filter clock wise and gently pull the cartridge down. The cartridge should release from the filter head. Dispose of the filter cartridge responsibly. Clean any water that has pooled below the filter head.
4. Fit a new filter by turning filter anticlockwise and gently pushing up. The filter will click or lock into place.
5. Turn the still water tap on.
6. Turn on the water supply to the unit. Allow 7.5 litres to flow from the outlet.
7. Turn off the still water lever.
8. Turn on the power supply to the unit.



#### Warning

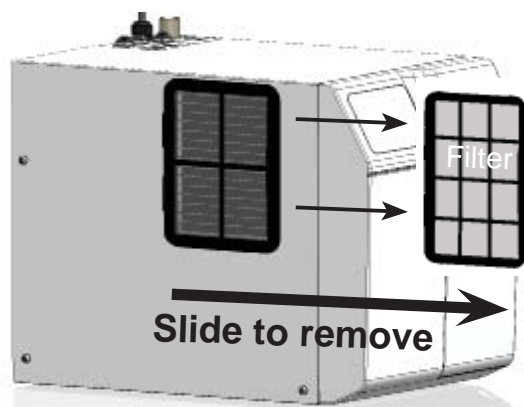
Not changing filtration cartridges when required, may cause the water to become biologically unsafe.

If the Zip ChillTap is switched off for a long period of time (e.g. More than a weekend), run water through the chilled water outlet for at least 5 minutes before consumption.

Use only a Zip Filter to match that used with this ChillTap (if fitted). Replacement filter cartridges can be obtained through plumbing suppliers or directly from Zip. Replacement instructions come with the filter cartridges.

Before attempting to disconnect or remove the filter cartridge from the housing, isolate (turn off) the water supply prior to the filter system, and then relieve the system pressure by operating the chilled water outlet tap until the water ceases to flow.





### 6.2 Air Filter Change:

The Zip ChillTap air filter is conveniently located on the outside of the condenser. The filter screen is a sliding fit in the plastic housing on the left hand side of the under sink unit. The screen may be removed for cleaning, by sliding it forward. This needs to be inspected at least quarterly, cleaned and replaced if damaged.

**Note:** For best performance the unit should only be operated with a clean air filter screen, correctly fitted in place. Maintain, at least, a 50mm air gap in front of the screen at all times. Take care not to allow cloths or other soft materials to accidentally block the air inlet.

### 6.3 Gas Bottle Replacement:



1. Turn off the water and power supply to the chilled sparkling unit.
2. Turn off the regulator on top of the bottle. The regulator has a left hand thread, to turn off, turn anticlockwise until shut.
3. Remove the CO2 bottle from its mounting and unscrew the bottle from the regulator. The braided hose may be left connected to the regulator, or, for convenience, removed and refitted to the regulator and new bottle.
4. Connect the new bottle to the regulator. Be aware that some CO2 may be discharged from the connection to the regulator when the bottle and the regulator are assembled together. Any CO2 released will be cold.
5. Ensure the braided hose is correctly fitted to the regulator, with the sealing olive in place, before turning on the gas.
6. Turn the regulator on
7. Turn the sparkling lever to the on position. Leave it on until all the water has been purged through the tap. Let the tap run for a further 10 seconds to purge the CO2 through the tank. Turn off the sparkling lever.
8. Turn on the cold water supply first and then the power supply.
9. Wait 20 seconds and then turn on the sparkling lever and wait for water to start to come through.
10. Dispense some sparkling water from the tap. Perform a taste test.

### Service

There are no user serviceable parts but there are dangerous voltages present within the unit. All service work must only be carried out by a suitably qualified and experienced service person.

Before calling for service, check that both the water and electricity supplies are turned 'ON' and OK.

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

## Trouble Shooting

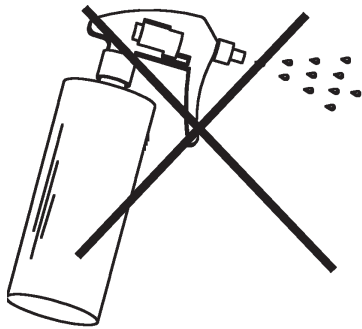
Prior to any fault finding, please ensure all water connections to the chiller are sound and that the incoming water supply is turned on. Also ensure that all electrical connections to the chiller are secure and that the chiller has had adequate time to cool down.

Symptom	Possible Cause	Responsibility	Solution
No still water	Mains water not connected or turned on	User or Service Technician	Connect or turn on water supply.
	Water pressure regulator failed	Service Technician	Contact local Zip Service Provider.
	Unit frozen up	Service Technician	Contact local Zip Service Provider.
No sparkling water	No CO2 pressure	User	Check pressure of CO2 bottle. Regulator to be set to 2.7-3.0 bar.
	Internal fault	Service Technician	Contact local Zip Service Provider.
Poor levels of carbonation in drinks	Water Temperature high	User	See Warm drinks symptom below, or allow chilled system time to recover.
	Incorrect CO2 pressure	User	Check CO2 regulator. Supply pressure should be 2.7-3.0 bar, adjust or replace as necessary.
	Air in carbonation can	User	Purge system as described on page 15 "Gas Bottle Replacement".
	Residue in carbonation can	Service Technician	Contact local Zip Service Provider.
	Carbonation can is overfilled	Service Technician	Contact local Zip Service Provider..

## Trouble Shooting continued

Symptom	Possible Cause	Responsibility	Solution
Warm drinks	No power	User or Service Technician	Restore power to the unit.
	Thermostat faulty or out of calibration.	Service Technician	Contact local Zip Service Provider.
	Insufficient cooling air flow through the refrigeration system	Service Technician	Contact local Zip Service Provider.
	Refrigeration failure	Service Technician	Contact local Zip Service Provider.
	Rated chilled water capacity has be expended	User	Allow unit sufficient time to recover.

## Cleaning



Never use strong, corrosive or abrasive cleaning materials on the Zip ChillTap. Wipe clean the outer surfaces with a sponge or a soft cloth using a mild soap and water.

The louvres on the sides of the chiller unit need to be kept free of dust and lint to permit free flow of air through the vents. They should be checked regularly, at least monthly, and dusted or vacuumed.

Sanitising the Carbonation unit, may be required when the quality of sparkling water deteriorates. Please contact your local Zip service provider.

## 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.

## Contact Details

### Head Office

Zip Heaters (Aust) Pty. Ltd.  
ABN: 46 000 578 727  
67 Allingham Street  
Condell Park NSW 2200  
Postal: Locked Bag 80  
Bankstown 1885 Australia

Website: [www.zipwater.com](http://www.zipwater.com)

Facsimile: (02) 9796 3858  
Telephone: (02) 9796 3100

### Sales & Service.

Free Call: 1 800 63 86 33  
Customer Care.  
Free Call: 1 800 42 43 44

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 glass is 200 ml (7 fl oz).

The terms "Zip" and "ChillTap" 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.

