

T3 Install & Operation Manual

Safety

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.

The unit should be isolated from the electricity supply before removal of any covers. Great care must be employed when working with high pressure carbon dioxide, and in no cases should the maximum operating pressure of 0.4MPa (4 bar) be exceeded.

- The appliance is not suitable for installation in an area where a water jet could be used.
- The appliance has to be placed in a horizontal position.

WARNING: Keep ventilation openings in the appliance enclosure or in the built-in structure clear of obstruction.

WARNING: When positioning the appliance, ensure the supply cord is not trapped or damaged.

WARNING: Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

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

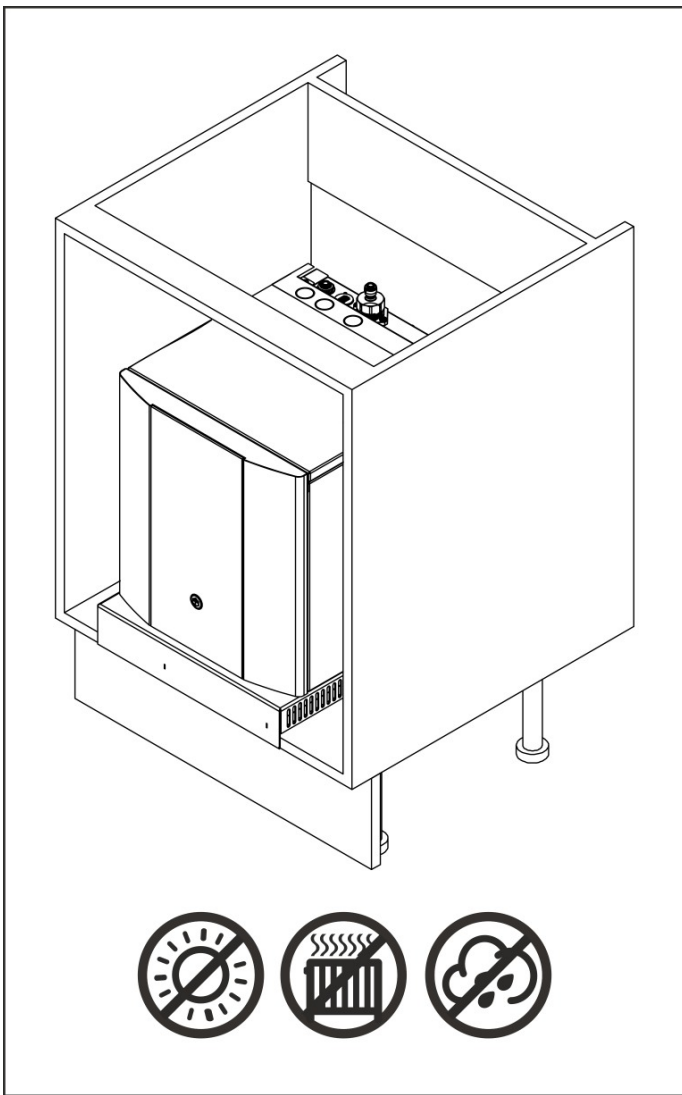
- Staff kitchen areas in shops, offices and other working environments
- Farm houses and by clients in hotels, motels and other residential type environments
- Bed and breakfast type environments
- Catering and similar non-retail applications

A-weighted emission sound pressure level is below 70 dB(A)



R290 is a refrigerant-grade propane used on a wide range of commercial refrigeration and air conditioning units. A highly pure propane, it has a low environmental impact and nominal global warming potential (GWP), meaning it possesses no qualities that can destroy the ozone layer. R290 also is the preferred hydrocarbon alternative of the Environmental Protection Agency (EPA), substituting more harmful fluorocarbon refrigerants like R22, R134a, R404a and R502.

Units with R290 can only be maintained and repaired by authorized technicians who are properly trained and certified.



- Always place the dispenser in its vertical position, on a surface which can capably support its weight.
- During use this machine must remain in its upright position.
- Adequate ventilation must be allowed for – we recommend using the supplied ventilation ducting kit.
- Keep the machine away from sunlight, heat and moisture.
- Power and water supply points must be available near the dispenser, and must meet the criteria specified in the 'Specification' section of this manual.
- The environment where this machine is installed must be free of dust and corrosive/explosive gases.

Waste Electrical Products:

- The WEEE symbol indicates that this item contains electronic components which must be collected and disposed of separately.
- Never dispose of electrical waste in general municipal waste. Collect and dispose of such waste separately.
- Make use of the return and collection systems available to you, or your local recycling programme. Contact your local authority or place of purchase to find out what schemes are available.
- Electrical and electronic equipment contains hazardous substances which, when disposed of incorrectly, may leak into the ground. This can contribute to soil and water pollution which is hazardous to human health; and endangers wildlife.
- It is essential that consumers look to re-use or recycle electrical or electronic waste to avoid it going to landfill sites or incineration without treatment.



Specification

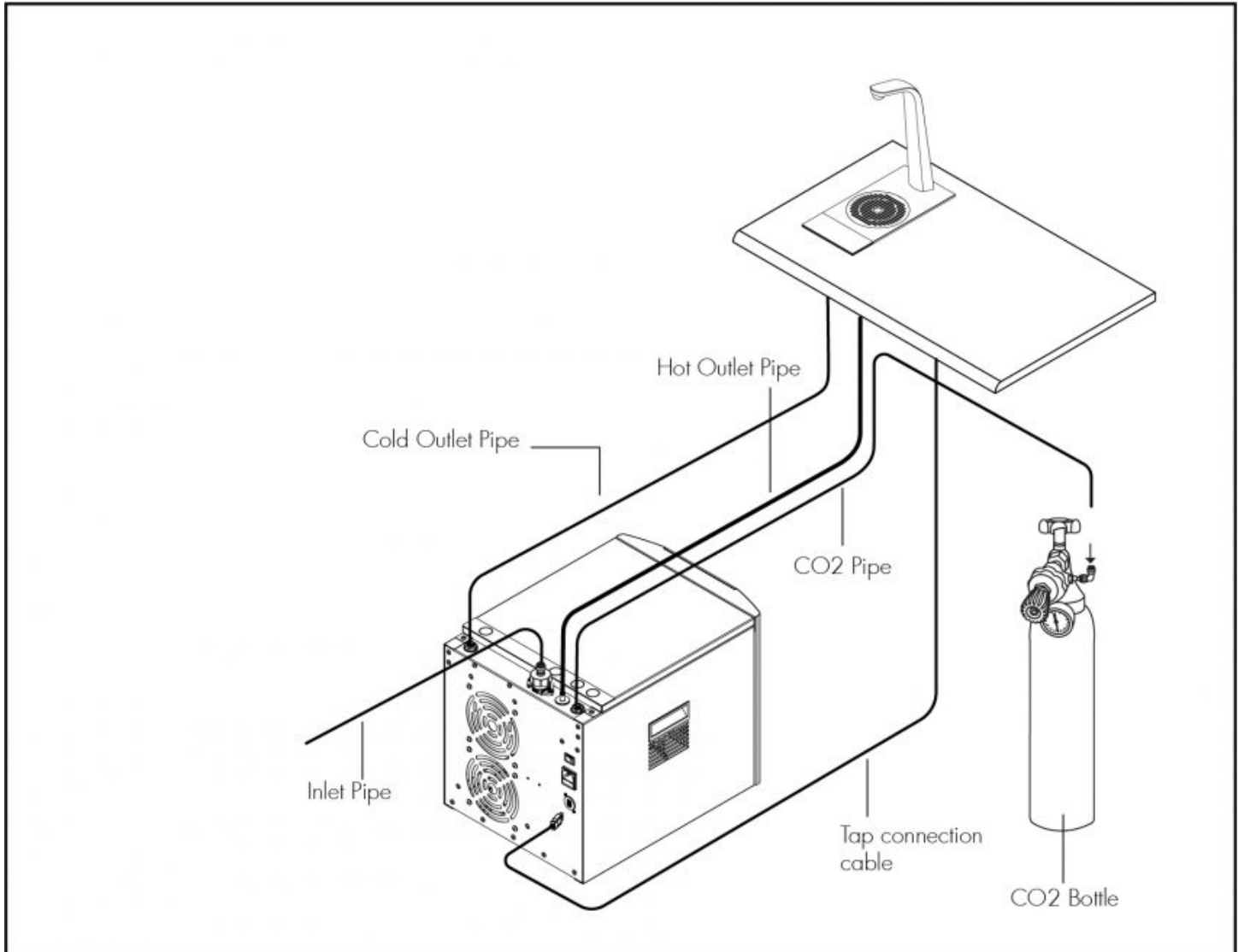
COOLING SYSTEM	Stainless steel direct chill coil encased in a solid-block system for instant response cool down action. Ultra efficiency compression system with capillary control. Environmentally friendly R290 refrigerant.
COLD TEMPERATURE	2°C - 11°C.
OUTPUT PER HOUR (ProCore+)	80 litres Chilled 80 litres Sparkling
DISPENSE	Quadra Neck Faucet with ergonomically designed and situated light touch sensitive controls.
MAXIMUM RUNNING POWER CONSUMPTION - CHILLED, AMBIENT & HOT	ProCore 1.62kW - 230V ProCore+ 1.63kW - 230V
MAXIMUM RUNNING POWER CONSUMPTION - CHILLED, AMBIENT, SPARKLING & HOT	ProCore 1.67kW - 230V ProCore+ 1.71kW - 230V
QUANTITY OF REFRIGERATION GAS	ProCore R290a 33g ProCore+ R290a 40g
POWER SUPPLY	220V - 240V AC (50 Hz)
WATER CONNECTION	Mains in - 3/4" BSP
CO2 CONNECTION	1/4" Push Fit.
DIMENSIONS	(w x d x h) 320 x 470 x 370mm.
WEIGHT	27Kg MAX
RATED CURRENT - CHILLED, AMBIENT & HOT	ProCore 7.0A ProCore+ 7.1A
RATED CURRENT - CHILLED, AMBIENT, SPARKLING & HOT	ProCore 7.3A ProCore+ 7.5A
FUSE RATING	10A
MINIMUM TO MAXIMUM INLET WATER PRESSURE	0.05MPa (0.5 bar) - 1.0 MPa (10 bar) Internally regulated to 0.3 MPa (3 bar)
CO2 PRESSURE	0.4MPa (4 Bar) Maximum
MINIMUM TO MAXIMUM AMBIENT ROOM OPERATING TEMPERATURE	5°C - 35°C
CLIMATIC CLASS	N

Model Overview

Introduction

The T3 & T3+ epitomises cutting-edge design and innovation with its contoured tap and compact ProCore unit. This is our most discreet range and will fit into any environment seamlessly.

The ProCore dispenser is a cooler designed to provide chilled and carbonated water. All the materials and components are tested during the entire production process in order to satisfy all expectations.

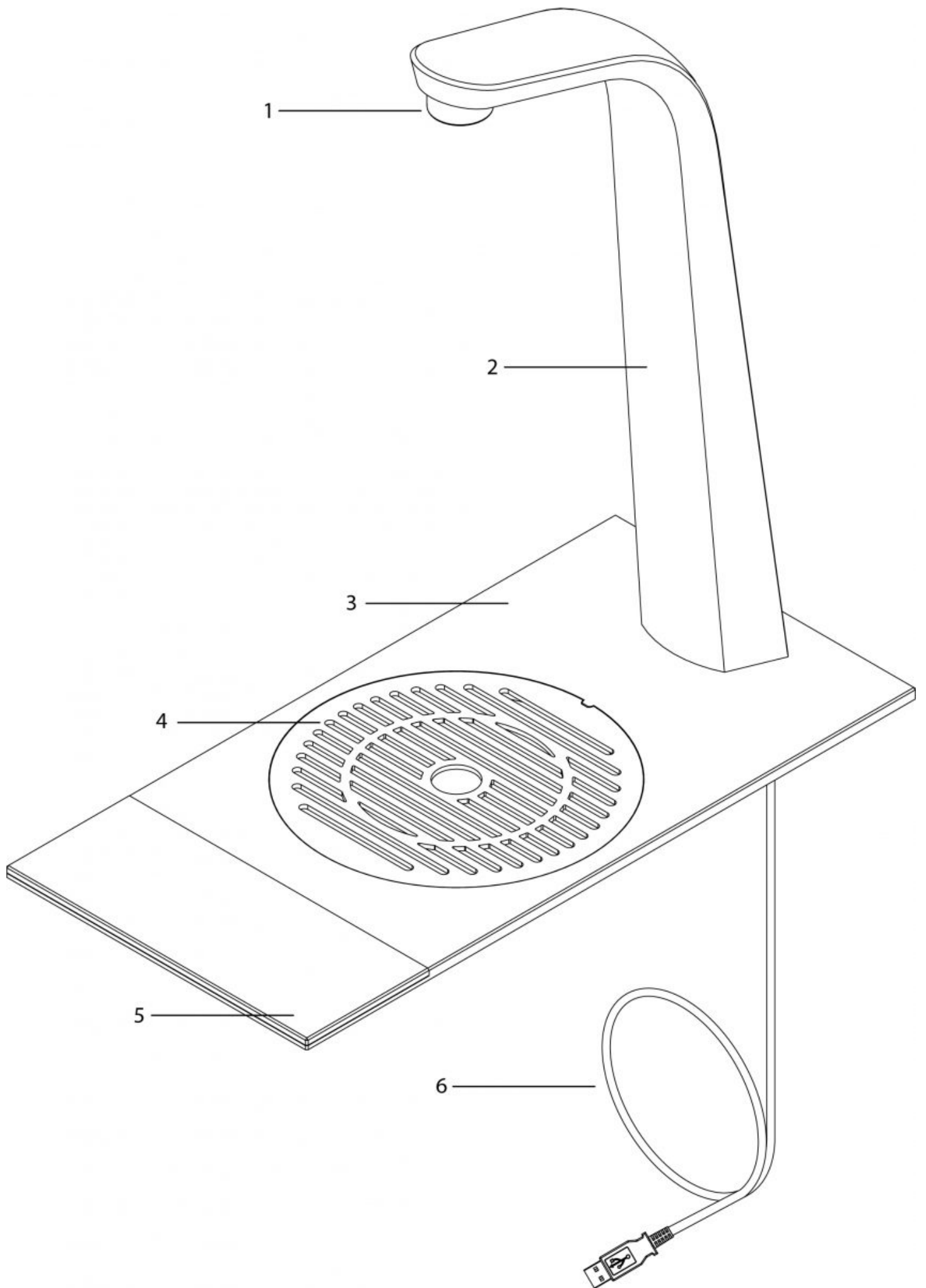


Component/Feature Overview

T3 Tap - Major Components

Contents:

- | | |
|--------------------------------------|-----------------------|
| 1 no T3 | 1 no Connector Cable |
| 1 no Top Plate with Control Panel | 1 no Waste Drain Pipe |
| 1 no Drip Tray | 1 no Fixings Set |
| 1 no 1.0m x 6mm Insulated Water Pipe | |



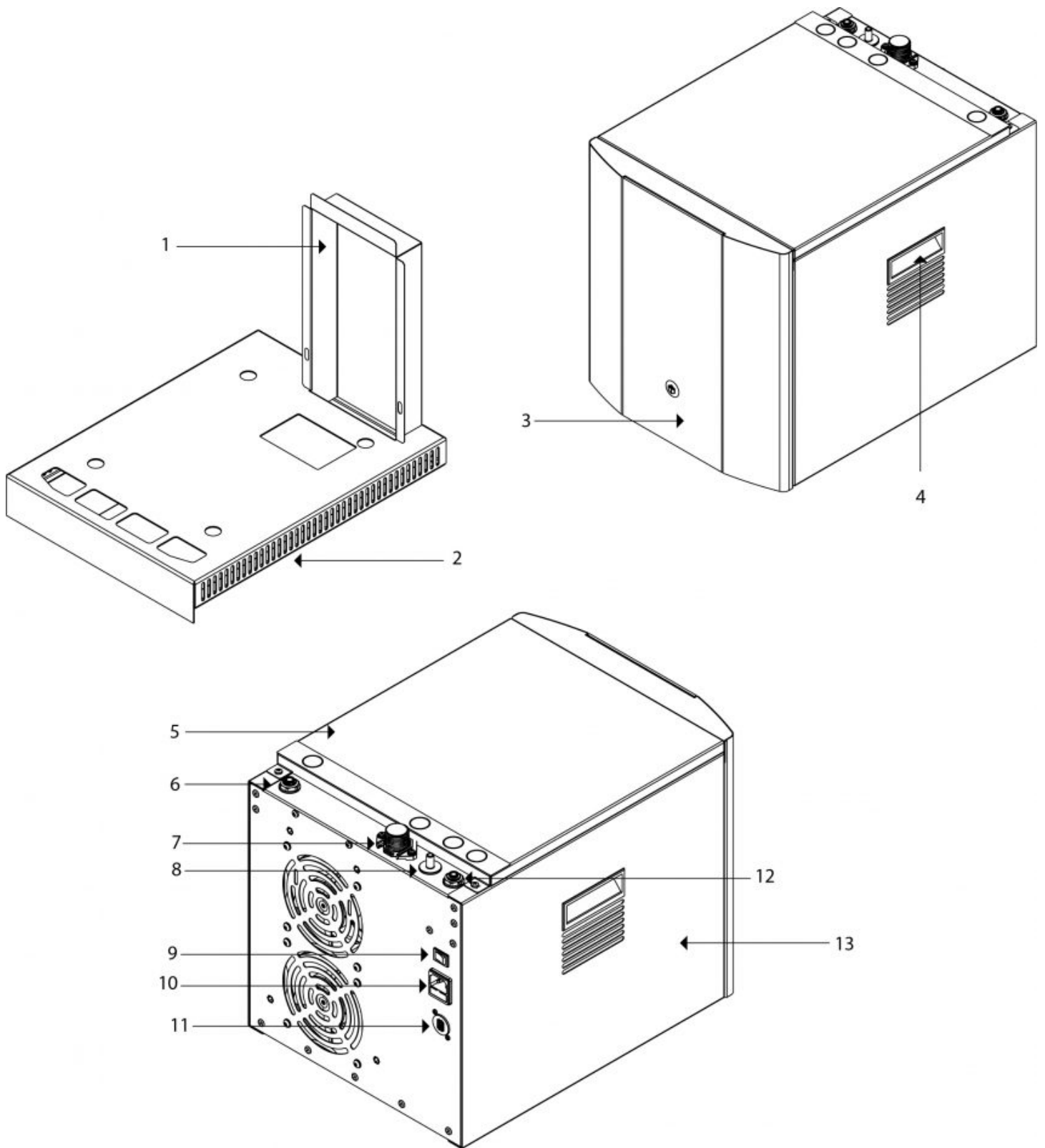
1. Faucet, 2. Main body, 3. Top Mounting Plate, 4. Drip tray, 5. Capacitive touch display, 6. Connector Cable

ProCore Electronic - Major Components

Contents:

- 1 no Undercounter Unit
- 1 no 2.0m Power Cord Set

- 1 no Co2 Regulator with Gauge & Connection tube*
- 1 no ProCore Simple-fit Ventilation Kit



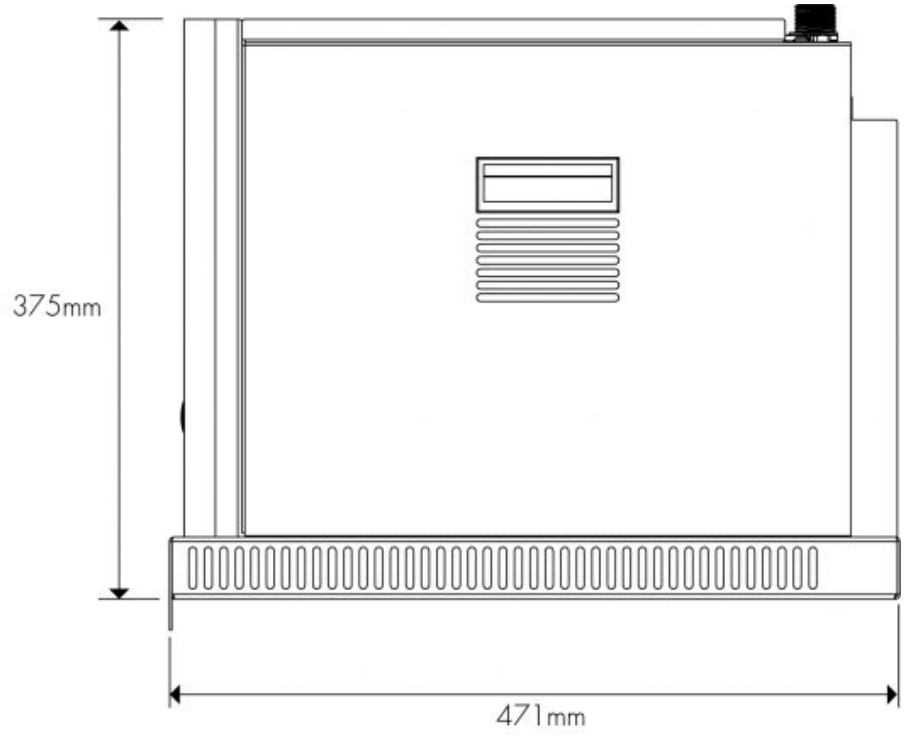
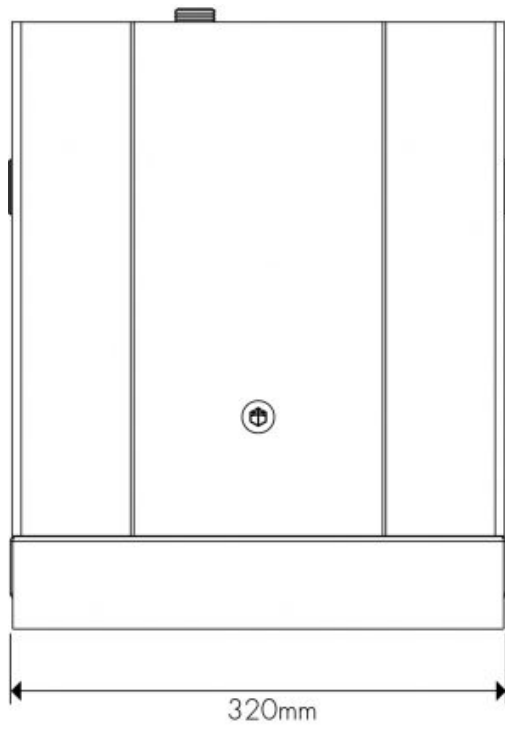
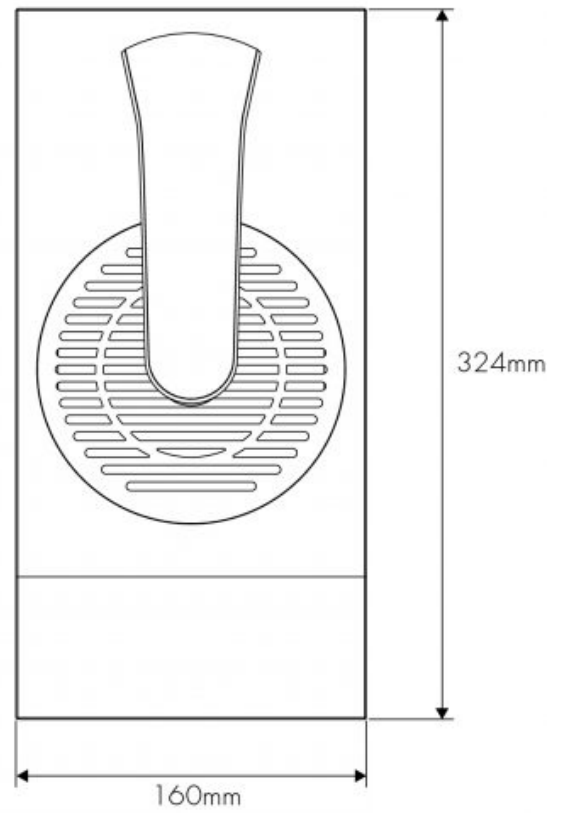
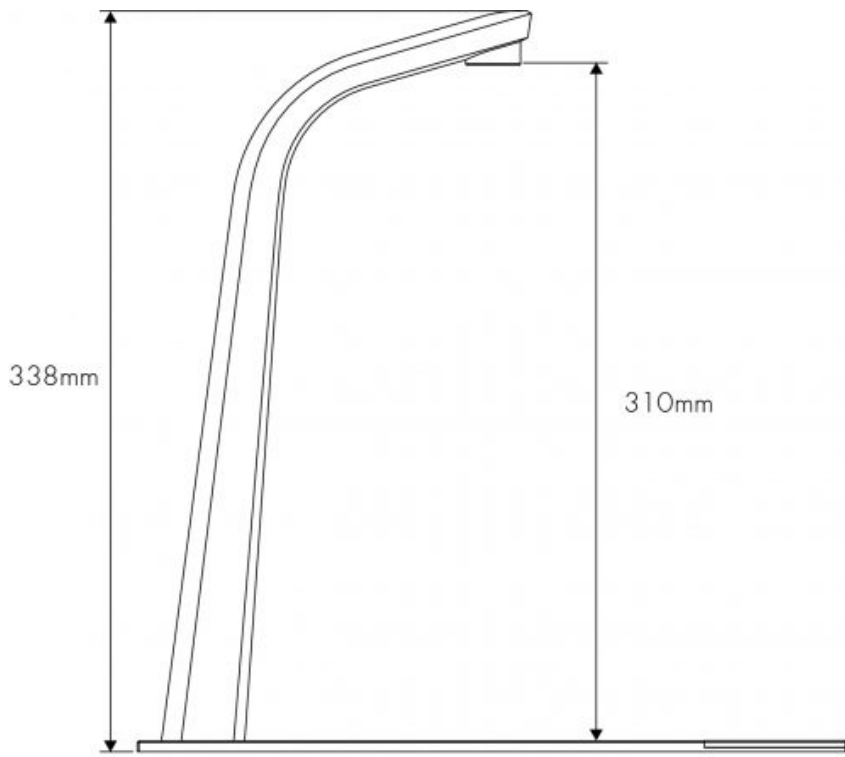
1. ProCore Simple-fit Chimney, 2. ProCore Simple-fit Base, 3. Front Panel, 4. Carry Handle, 5. Top Panel, 6. Water Outlet, 7. Water Inlet, 8. Hot Outlet, 9. On/Off Switch, 10. Power Connection, 11. Tap Connection, 12. CO2 Inlet*, 13. Side Panel

Please Note:

Mains Installation Kit & Filters are supplied as extra items according to individual ordering requirement.

*Sparkling versions only

Dimensions



Installation

Installation Requirements

Identify a suitable location for the ProCore unit. It should be positioned within 1.0m of the faucet, and within 2.0m of suitable services connections. Allow enough space to fit the ventilation ducting system.

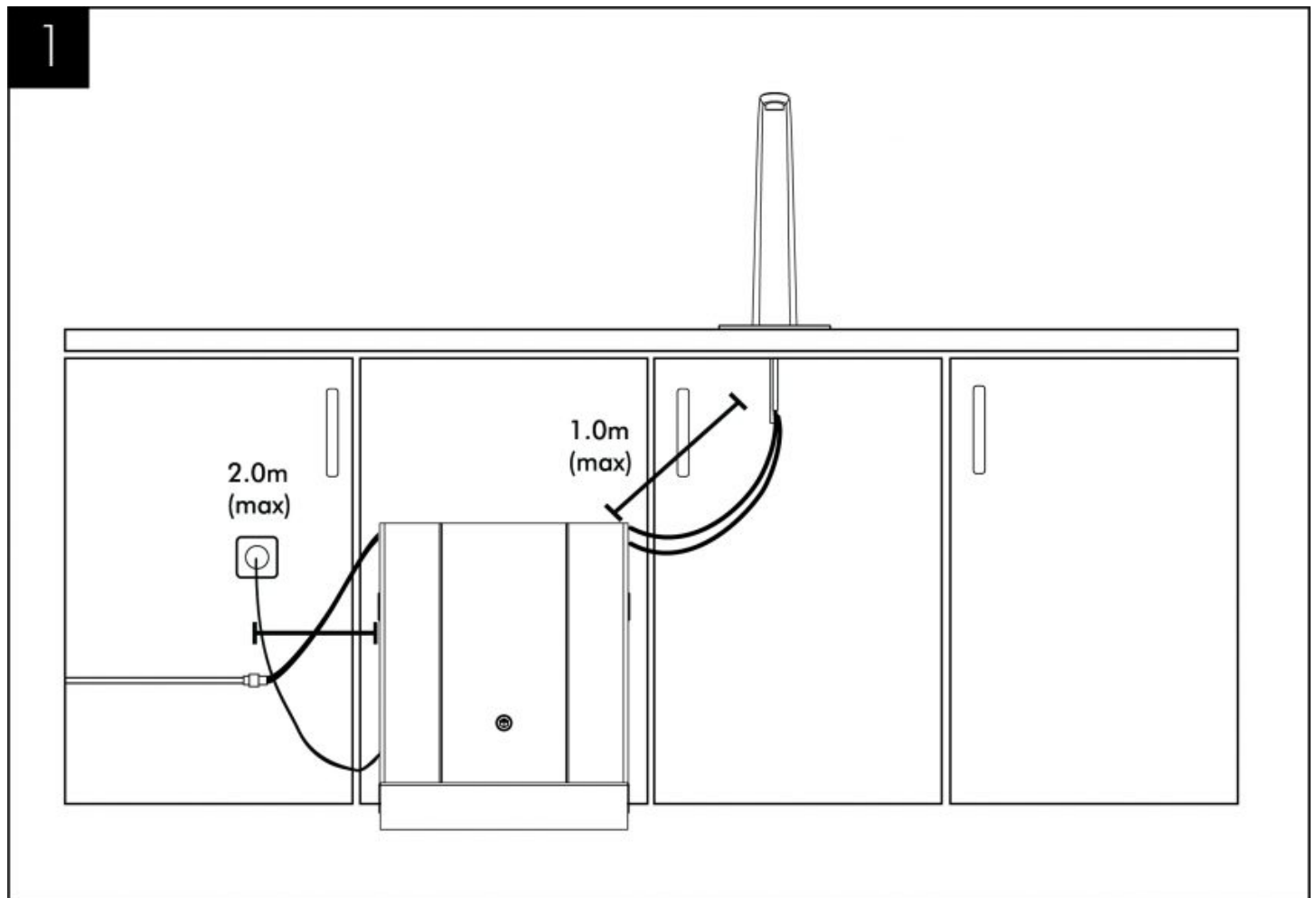
The ProCore unit must be installed in accordance with the relevant requirements of:

- The appropriate building regulations by application of either The Building Regulations (England and Wales), The Building Regulations (Scotland) or The Building Regulations (Northern Ireland). In territories other than those listed the local regulations in force must be complied with.
- The Water Supply (Water Fittings) Regulations (England, Wales and Northern Ireland) or The Water Byelaws in Scotland.

The unit must not be installed where it is liable to freeze. If the unit is thought to be frozen it must not be switched on. It should be allowed to thaw and must then be thoroughly inspected to ensure it is undamaged.

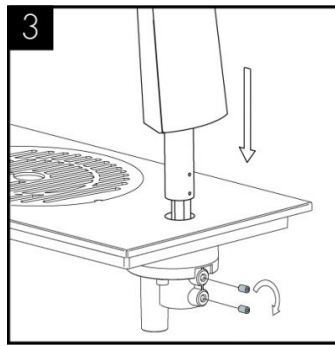
Service Requirements

- Water: Mains potable water – internally regulated to 0.3MPa (3 bar)
- CO₂: Food Grade CO₂ to be supplied
- Min mains pressure 0.05MPa (0.5 bar)
- Electricity: 10A supply – Earth Leakage Protected
- Waste Drain Connection

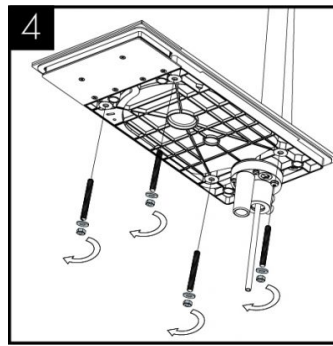




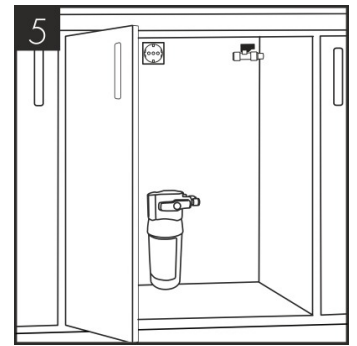
First, install the T3 tap to the top plate base. Line up the tap so it's parallel to the front of the base.



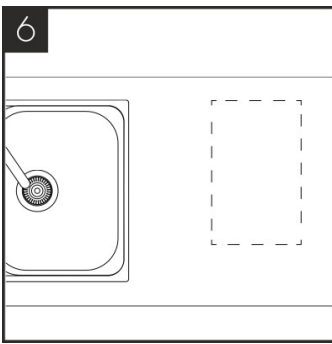
Insert the tap so the fixing screws line up with the indentations. Tighten up the M4 hex screws with an Allen key until the tap is secure.



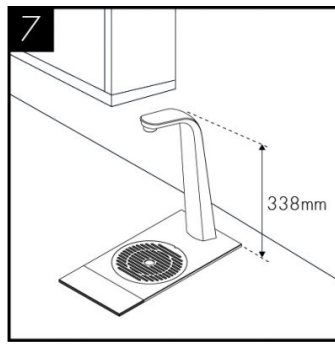
Using the M6 allthreads as provided locate them into the base of the tap and tighten till secure using the flange nuts provided.



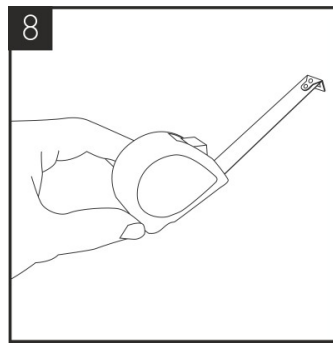
When planning and providing for the connection to the services, always allow for easily accessible service isolator fittings and for the position of an external water filter.



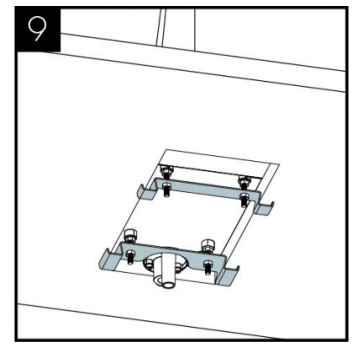
Identify a suitable position for the faucet. Refer to the cut out guide template. Ensure worktop is level to allow system to drain.



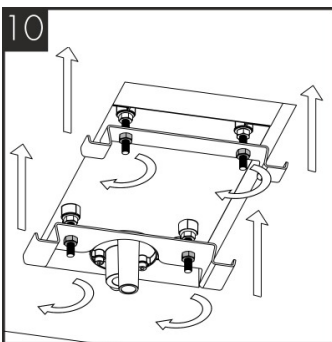
Also allow for the height of the tap head under any overhanging cupboard/shelf.



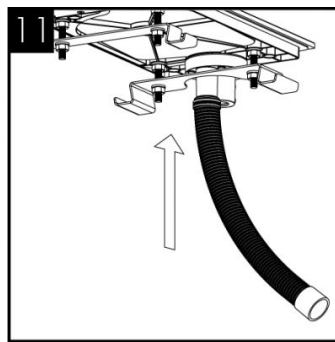
Allow for the space needed for forming the required cut out. Relate the selected position to the underneath of the counter and check for any obstructions.



Allow sufficient space for fitting the worktop fixing brackets.



Tighten the 4 fixing flange nuts so that the worktop brackets are fixed up against the underside of the worktop.

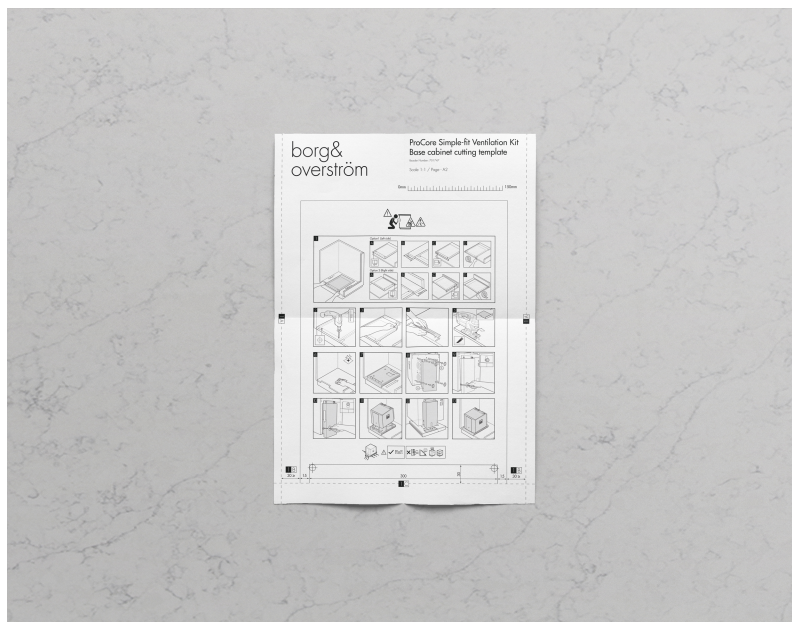


Fit waste pipe and connect to drain ensuring there is a constant fall.

Cutting Templates

ProCore Vent Base Cutting Template

We recommend you check the dimensions of the ProCore Simple-fit Ventilation Kit using the cutting template prior to cutting the base cabinet.



[Download or order the ProCore Vent Base Cutting Template here](#)

Tap & Driptray Cutting Template

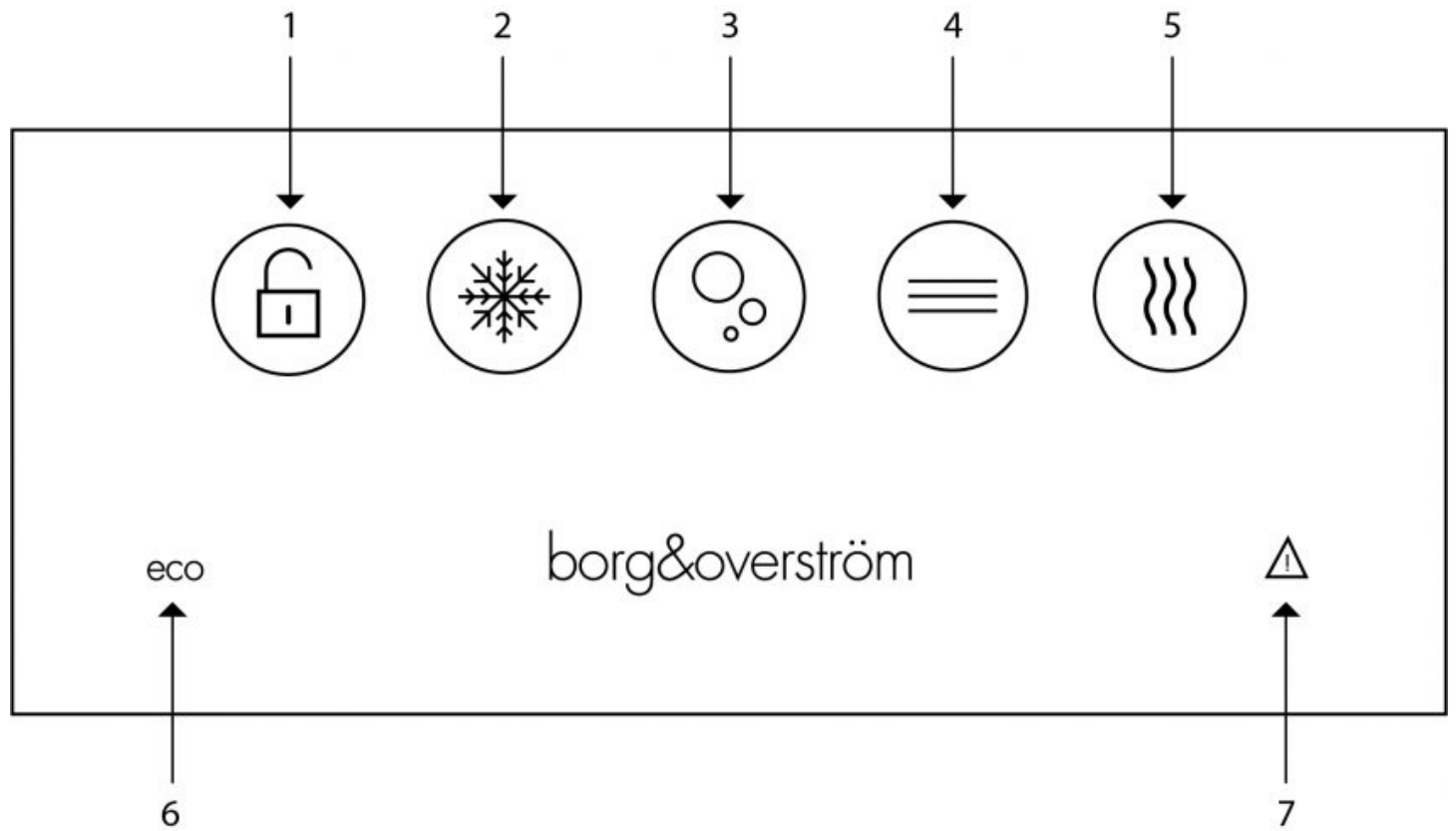
We recommend you check the dimensions of the tap and driptray using the cutting template prior to cutting the work surface.



[Download or order the T2/T3 cutting template here](#)

Operation

Tap Control Panel



1. Unlock Button, 2. Chilled Dispense, 3. Sparkling Dispense, 4. Ambient Dispense, 5. Hot Dispense
6. 'eco' Mode Symbol 7. Warning Symbol.

Basic Functions

Dispensing cold water from unit:

Press and hold dispense icon and release to finish dispense

- Chilled icon flashing – Unit is chilling down
- Sparkling icon flashing – Tank is refilling
- Hot icon flashing – Hot tank is heating up

Dispensing hot water from unit:

Press the unlock icon and then press and hold the hot button to dispense.

'eco' Mode:

'eco' mode symbol illuminates when unit is in 'eco' mode, to awaken unit press and hold any dispense icon. The ProCore will activate 'eco' mode in the below instances

Dispense inactivity
Low room light level

To turn on/off eco mode tap the chilled icon 7 times and hold on the 7th. 2 beeps will indicate Eco is on and 1 beep will mean Eco is off.

Warning Symbol

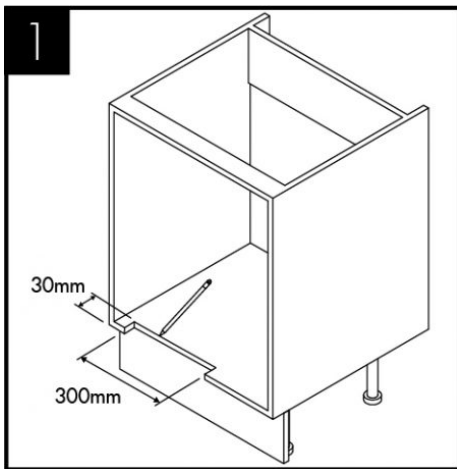
'Warning triangle' symbol will illuminate and flash upon a fault. The number of flashes relates to a particular fault. [Click to view fault codes](#)

Ventilation System Installation

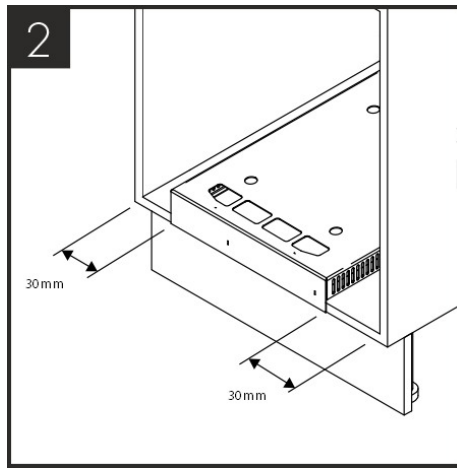
When Borg & Overström undercounter units are installed inside a cabinet or housing, adequate ventilation is recommended to ensure that they operate satisfactorily. During a cooling cycle it is normal for the unit to produce heat, and the purpose of ventilation is to provide a supply of air that can absorb the generated heat which would otherwise accumulate inside the cabinet or housing, and reduce the cooling performance of the unit. The amount

of heat generated by the cooling cycle depends directly upon the amount of usage – the higher the usage, the more heat produced. To provide adequate ventilation we recommend that air grilles/vents are fitted as supplied (or vent apertures formed) in the cabinet to allow an airflow as shown below. Normally this should be enough for all situations.

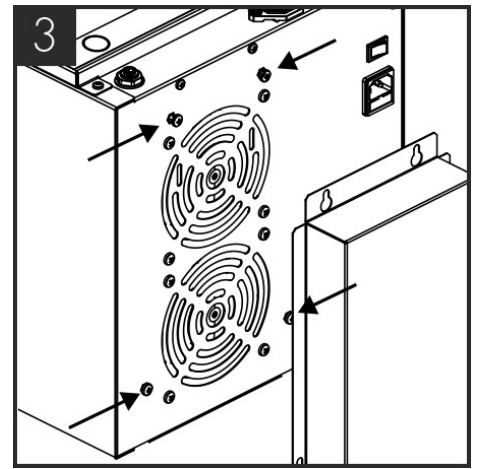
Important: Before making any cuts into the cupboard or kick board, ensure the area to be cut is free from water pipes or electrical cables. There is a risk of serious injury or death if electrical cables are cut, and significant damage to property if a water pipe is cut.



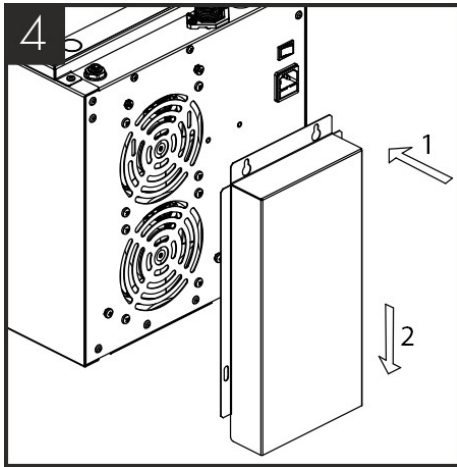
Using the template provided, carefully mark and cut the aperture to the edge of the cabinet.



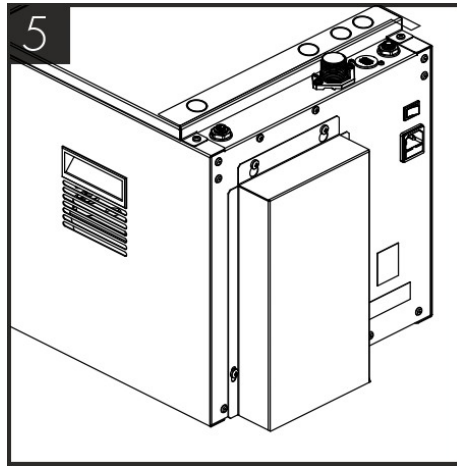
Situate the ProCore Simple-fit ventilation base in place centrally over the aperture. Ensuring that there is a minimum of 30mm air gap to each side.



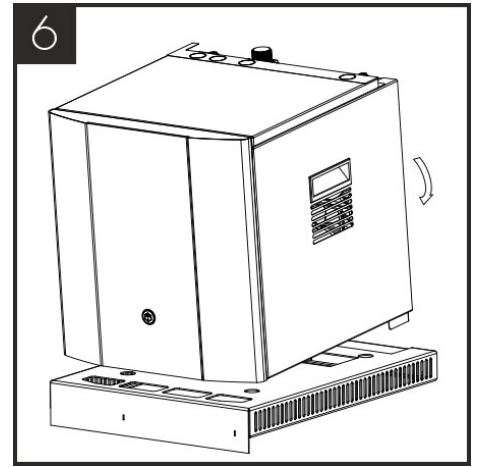
Insert 4 screws into the holes located. Do not overtighten at this stage.



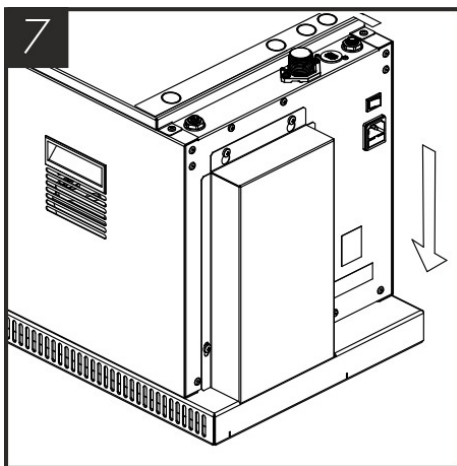
Place the rear vent chimney over the 4 screws and slide downwards into place.



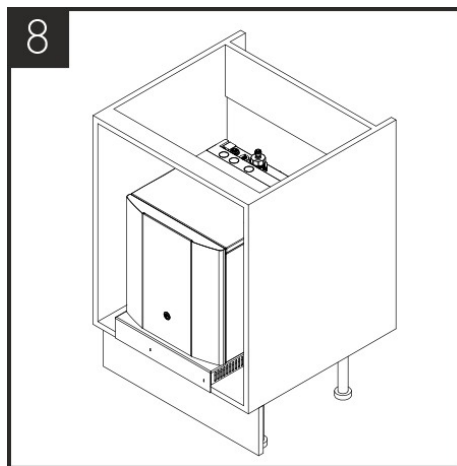
Tighten all 4 fixing screws.



Lift and tilt the unit into position ready to lower.



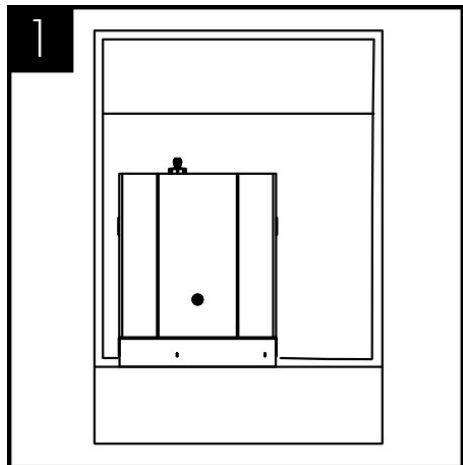
Lower the appliance carefully into position on the ventilation base to ensure the chimney is located correctly in the chimney aperture at the rear of the base.



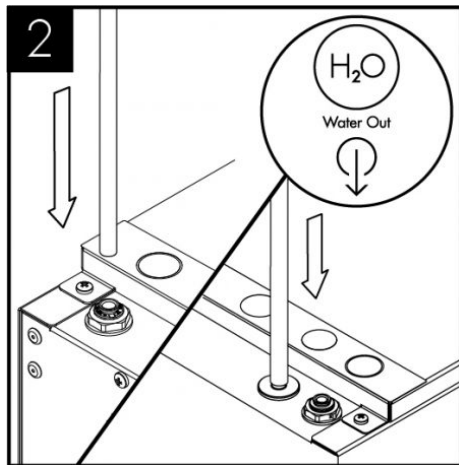
After installation the vents at the front of the cabinet and to the sides of the ventilation base must not be obstructed.

NOTE: Any obstructions will adversely affect the airflow to the appliance causing potential for poor performance, over heating or fridge failure.

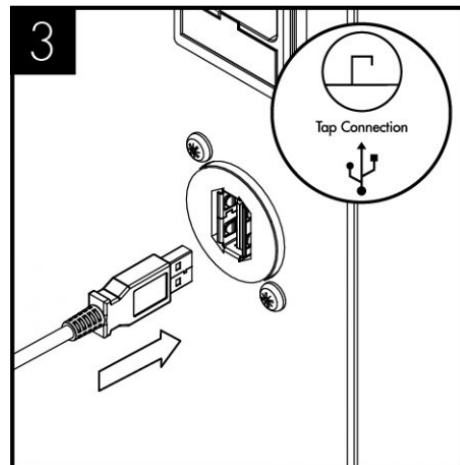
ProCore Installation & Water Connection



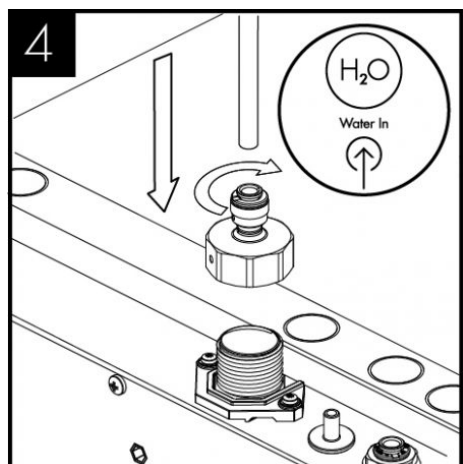
1
Locate the ProCore in a suitable position, using the supplied ventilation base by following the instructions above.



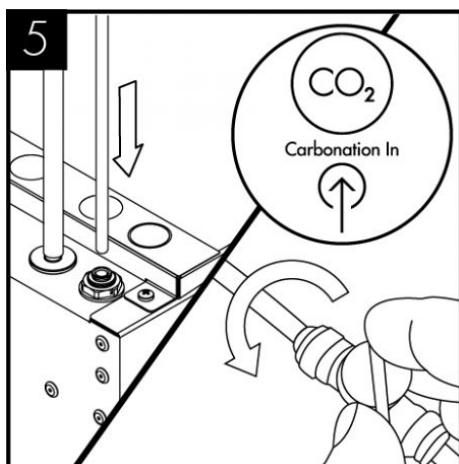
2
Connect the T3 tap to the water outlets.



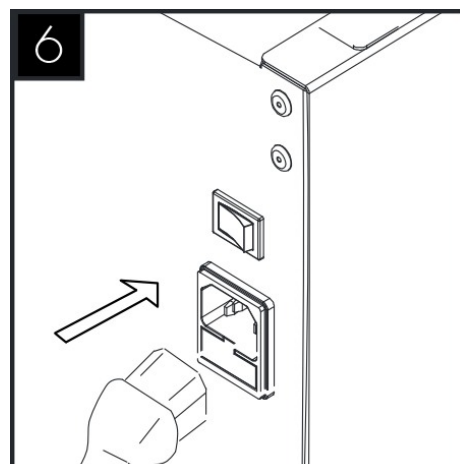
3
Connect the T3 Tap USB to the ProCore unit.



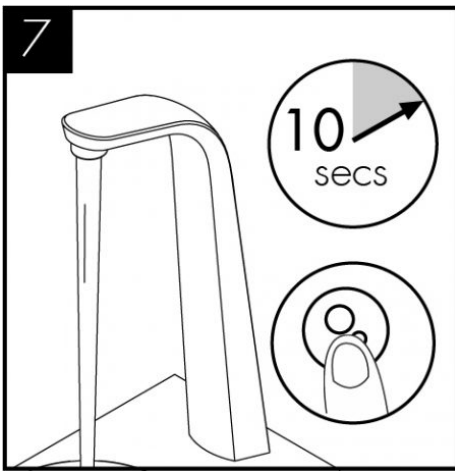
4
Connect the Water Inlet adapter as supplied and connect to water supply.



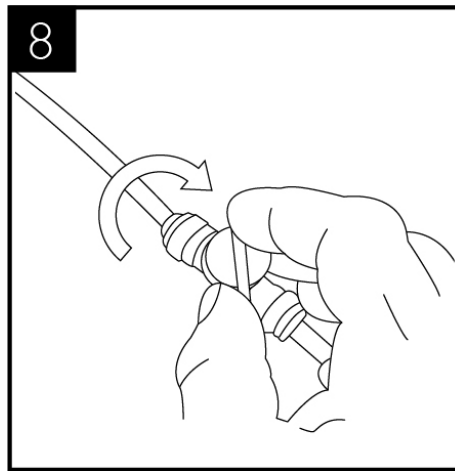
5
Connect the CO2 supply from gas regulator, ensuring the pressure is set to max 58 PSI (4 bar), and turn on the supply (See CO2 Installation section)



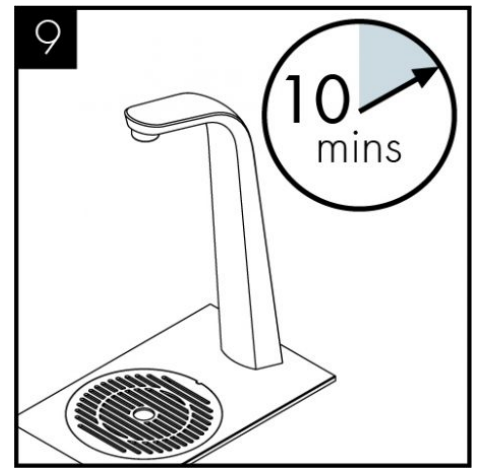
6
Connect the unit to the electricity supply. The unit will then go into commissioning mode, see hot tank commissioning section below before proceeding to step 7.



The carbonator should be purged of air by activating the sparkling water dispense for approximately 10 seconds.



Turn on the water supply to fill the tank.



Allow the machine to stand for 8 - 12 minutes for the initial chilling process to complete.

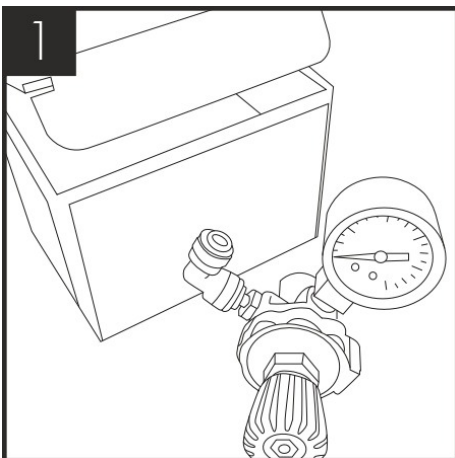
Hot Tank Commissioning

On initial start up the 'Unlock' and 'Hot' icon will be flashing, this means the unit is in commissioning mode. To commission the hot tank safely please follow the below steps:

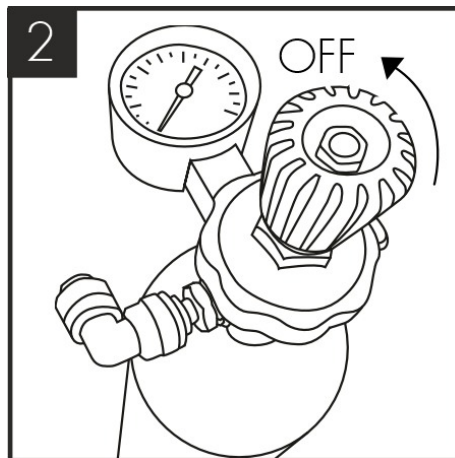
1. Press the 'Unlock' icon then hold the 'Hot' icon to start filling the hot tank. This will time out after 30s.
2. To continue filling the tank, repeat step 1 as many times as is required until water flows from the tap outlet.
3. After water has been dispensed from the outlet, press and hold the 'Unlock' icon for 10 seconds until the unit beeps.
4. The 'Unlock' icon will now be solid and the 'Hot' icon slowly flashing. The ProCore or ProCore+ is now active.

*Expect dripping on hot dispense until the tank has reached temperature and initial dispense made. This will only occur on first heating cycle on initial start-up.

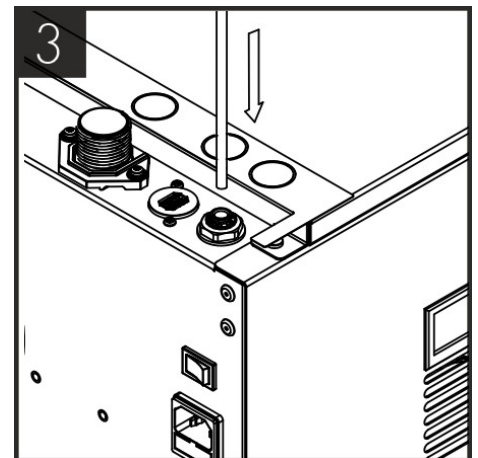
CO2 Bottle Installation - Sparkling Versions Only



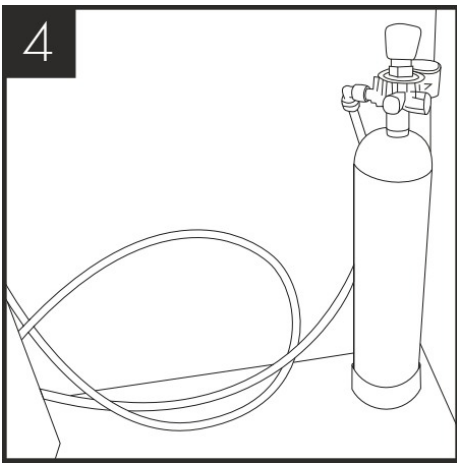
Unpack CO2 Regulator and fit elbow fitting to spigot outlet.



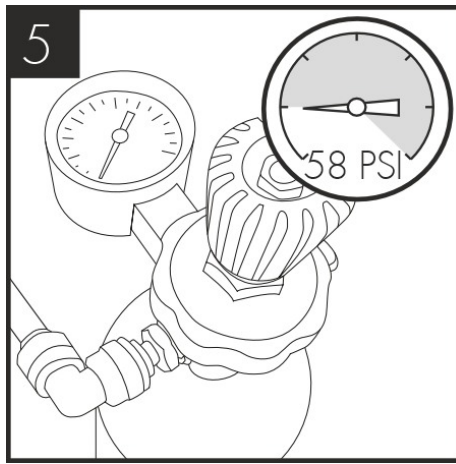
Attach the regulator to the disposable CO2 bottle, ensuring the small pressure relief vent in the stem is facing away from you or anyone else. Ensure the regulator is closed. Hand tighten securely.



Connect the assembled CO2 bottle and regulator to the CO2 inlet using a 1/4" pipe.



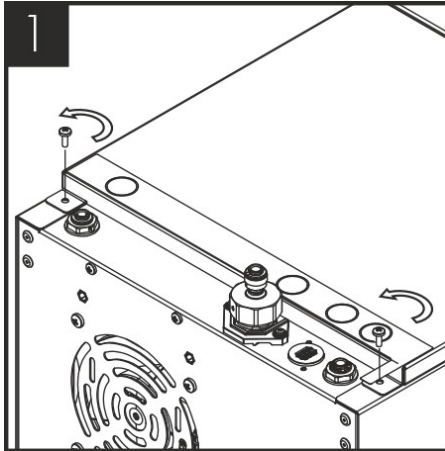
4
Stand the cylinder in a suitable place.



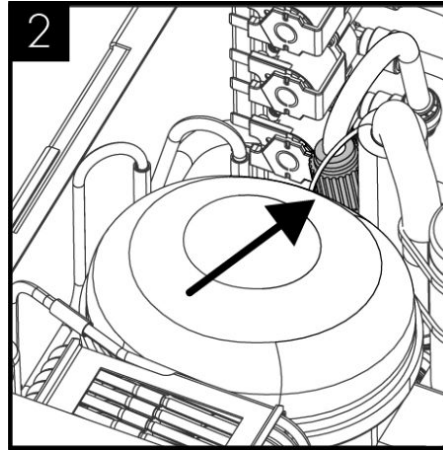
5
We recommend between 3.5 - 4 bar (58 PSI) (max). Do not exceed 4 bar pressure.

Sparkling Water Flow Rate - Sparkling Versions Only

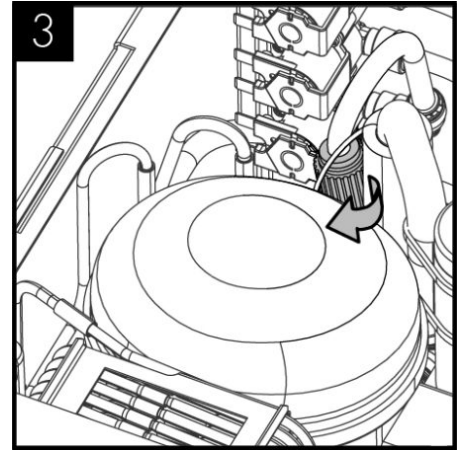
NOTE: Sparkling water flow rate factory setting = 2.4L per minute MAX. This may need adjusting depending on inlet pressure. To do so follow below steps:



1
Remove the 2 screws holding the unit lid down and slide the lid off.



2
Locate the flow control adjuster, this can be found towards the front of the unit.



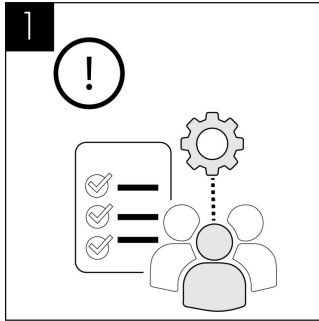
3
Flow can then be adjusted as follows: turning the cap anti-clockwise to increase flow and clockwise to restrict flow. After each adjustment the flow rate should be timed to an acceptable flow rate and/or uninterrupted sparkling dispense.

Once the correct flow rate is achieved place the cover back on to the unit by sliding it in place and replacing the screws.

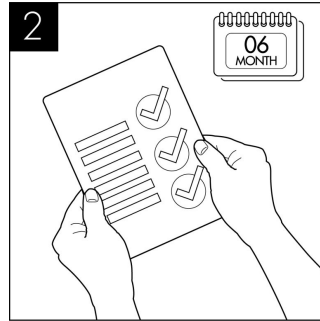
Maintenance & Cleaning

Sanitisation Guide

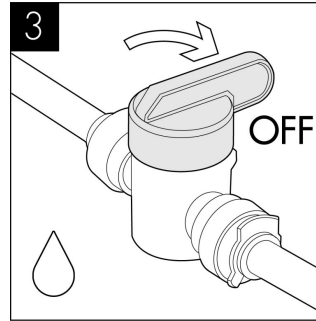
NOTE: Failure to use sanitising products and processes approved by Borg & Overström will invalidate your warranty.



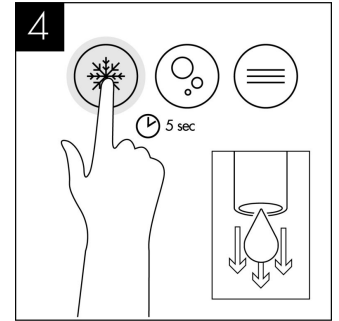
This operation must only be carried out by trained staff.



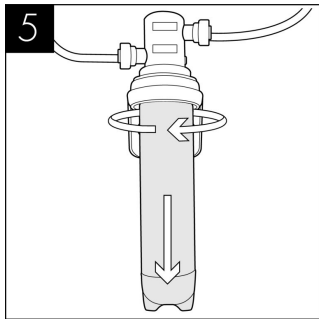
A sanitisation procedure is recommended every 6 months.



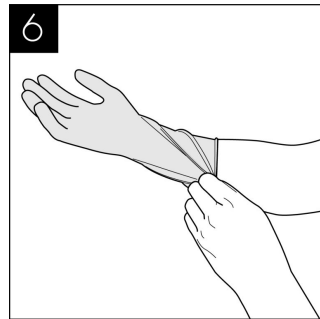
Turn off incoming mains water



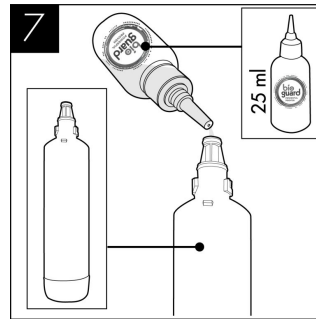
Briefly press chilled dispense button to release internal water pressure from the machine.



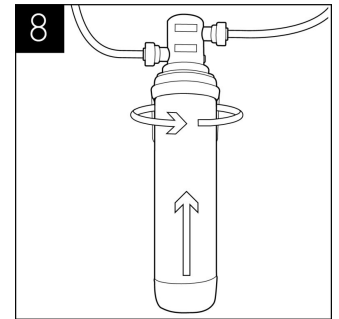
Remove the existing filter



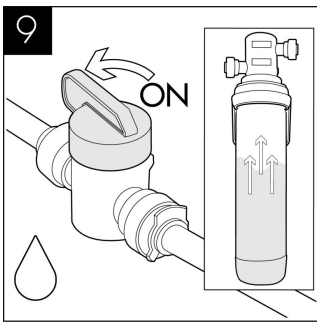
Use hand gel and put on protective gloves.



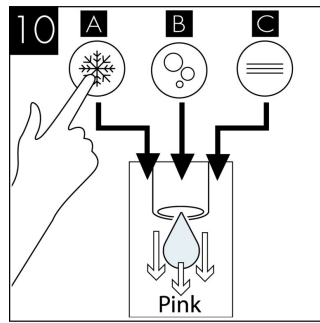
Add 25 ml of Bioguard Internal Sanitising Solution to a clean and empty service filter cartridge.



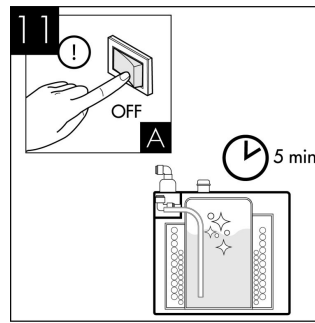
Connect to filter head.



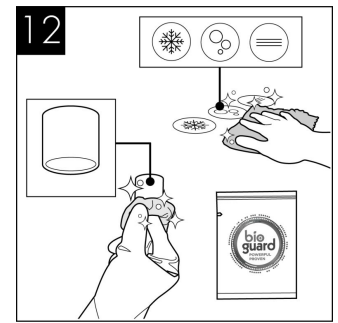
Turn on incoming water, allow the service filter cartridge to fill



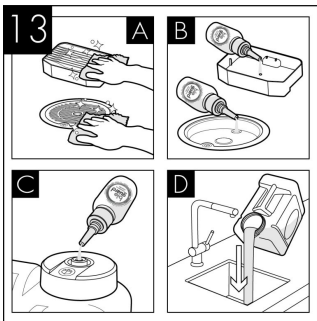
Dispense water using the chilled button until the water appears pink. Repeat with sparkling & ambient water buttons.



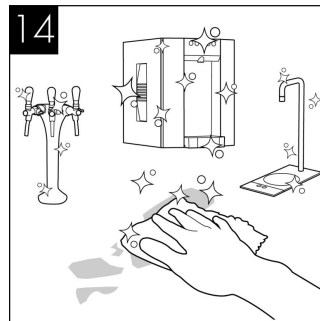
Leave the solution inside machine for sanitisation to take effect (minimum 5 minutes) while thoroughly cleaning the dispenser externally. (All maintenance operations must be carried out with the dispenser switched off.)



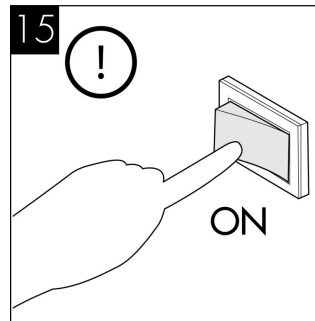
Pay particular attention to the dispense faucet and the push button controls. For this use Sterizen External Sanitiser and Sanitising Wipes.



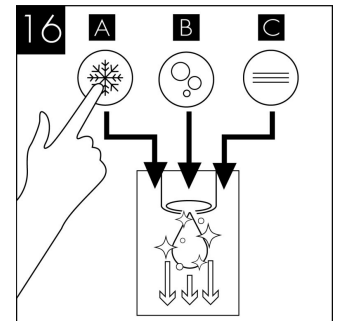
Remember to include the drip tray. If a Waste Overflow System is fitted, empty this and flush through with a small amount of sanitisation fluid if needed.



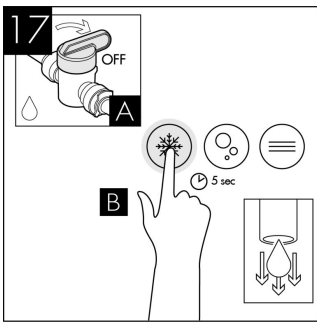
Attend to any cosmetic marks as needed. For this we recommend the use of Bioguard External Sanitiser.



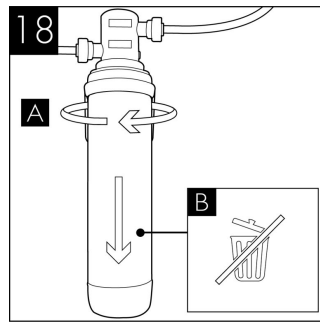
Reconnect the power and switch on the dispenser.



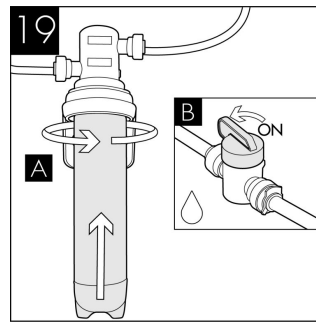
When the external cleaning (minimum 5 minutes) is completed, flush the machine using the chilled button with clean water until the dispense water runs clear. Repeat briefly with the ambient and sparkling buttons if present.



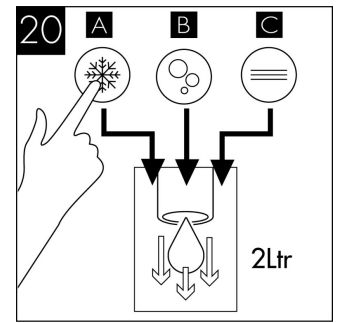
Turn off water and briefly press chilled dispense button to release internal water pressure from the machine.



Remove the service filter. Retain service filter for reuse.



Fit new filter and turn on incoming water supply.



Pre-flush the new filter to waste using the chilled button until the water appears clear and is free of air. Flush through a small amount of water to check all functions.



Please note that this sanitisation fluid contains an active caustic/alkaline agent.

Always use responsibly and with care remembering that due to its alkaline nature unnecessary concentrated/prolonged contact with any materials, including metals, can cause damage. Always rinse all contact surfaces after use with clean water.

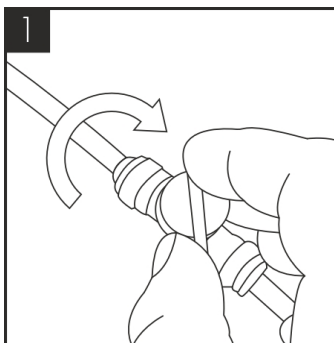


Avoid skin contact and wear protective gloves when handling sanitisation fluids.



In the event of any skin contact, flush immediately with clean, cold water.

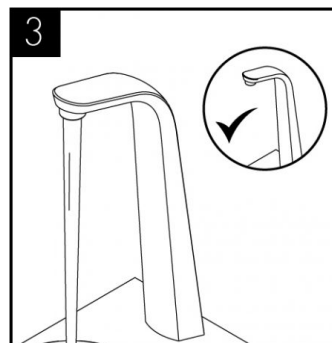
Emptying the CO2 Tank



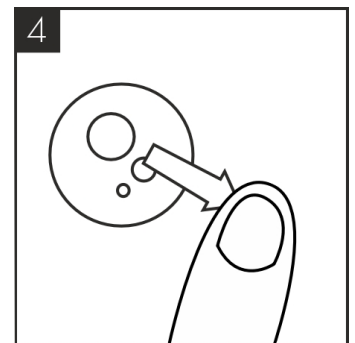
Turn off the water supply.



Press and hold the Sparkling water dispense button until all the water is expelled and only CO2 gas is being released.



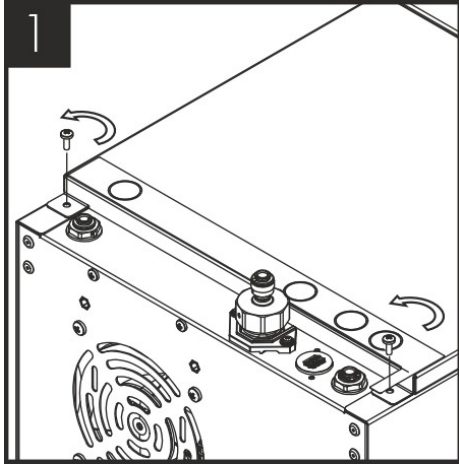
The tank is empty of sparkling water when only CO2 is being released.



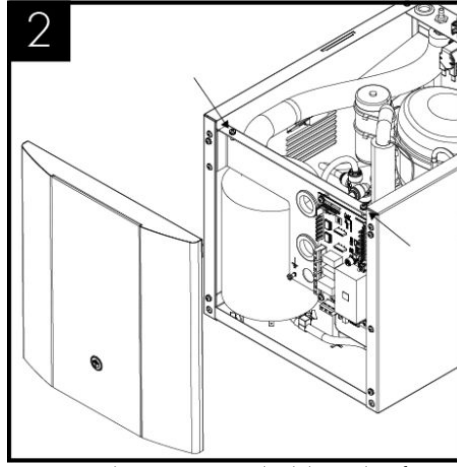
Ensure to release the Sparkling water button and take care to avoid releasing excess amounts of CO2 gas as this may damage the tank.

Draining the Hot Tank

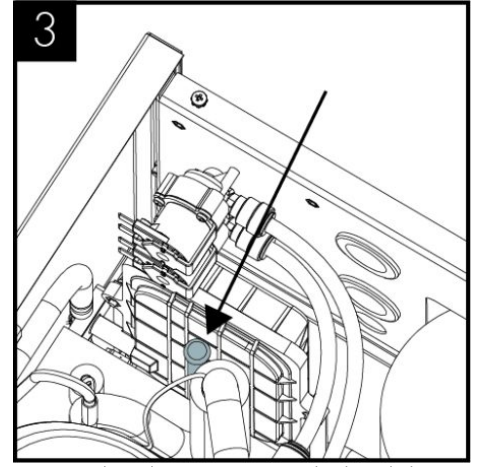
To drain the hot tank proceed with the following steps:



Remove the 2 screws holding the unit lid down and slide the lid off.



Remove the 2 screws holding the front panel in place and lift off and set aside.



Locate the drain pipe just behind the inlet expansion tank towards the front of the unit. Pull the bung out of the pipe and drain the water into a jug.

Once the tank is fully drained ensure the bung is then fully pushed back in.

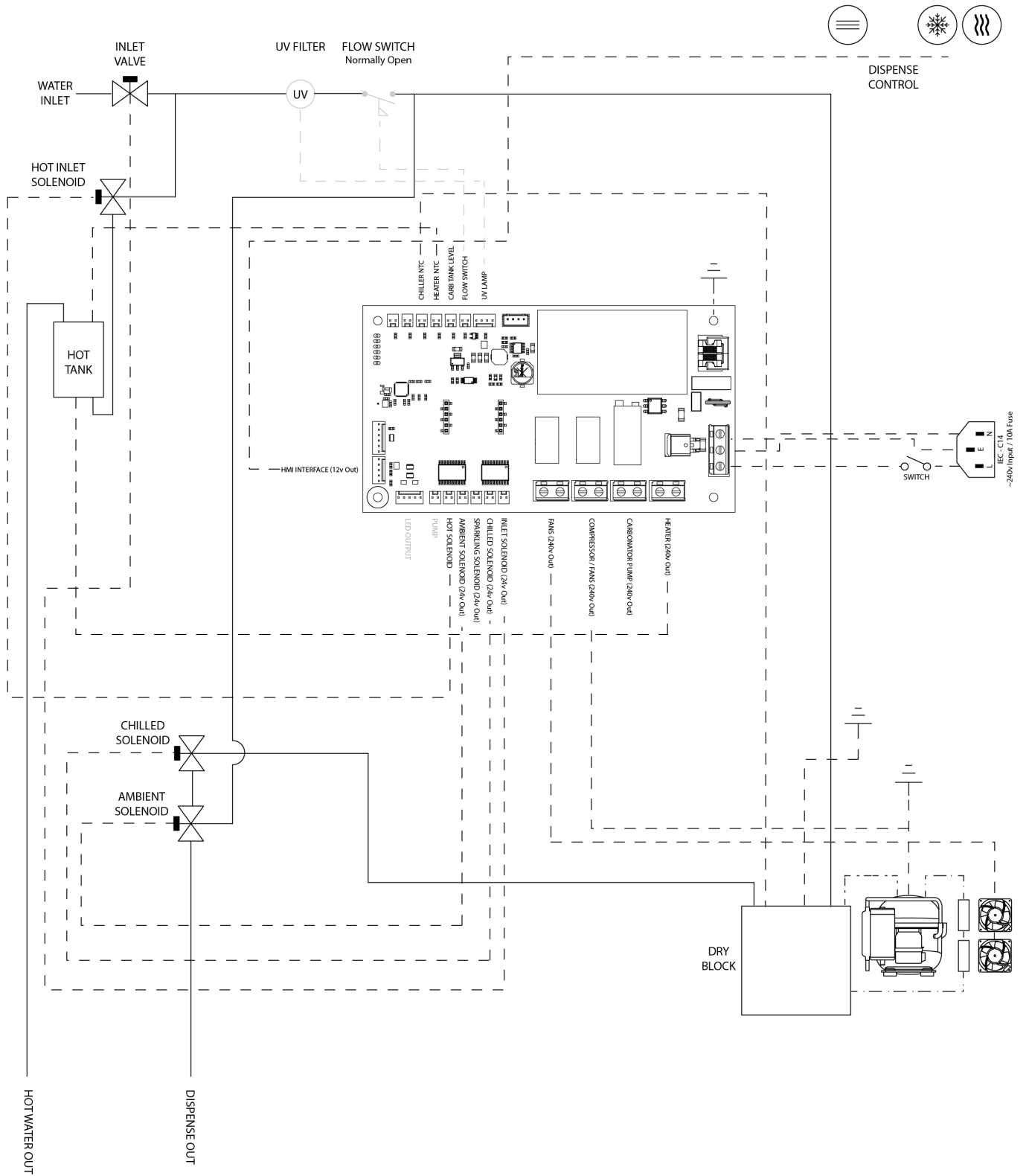
Advanced Troubleshooting

Fault Diagnostics

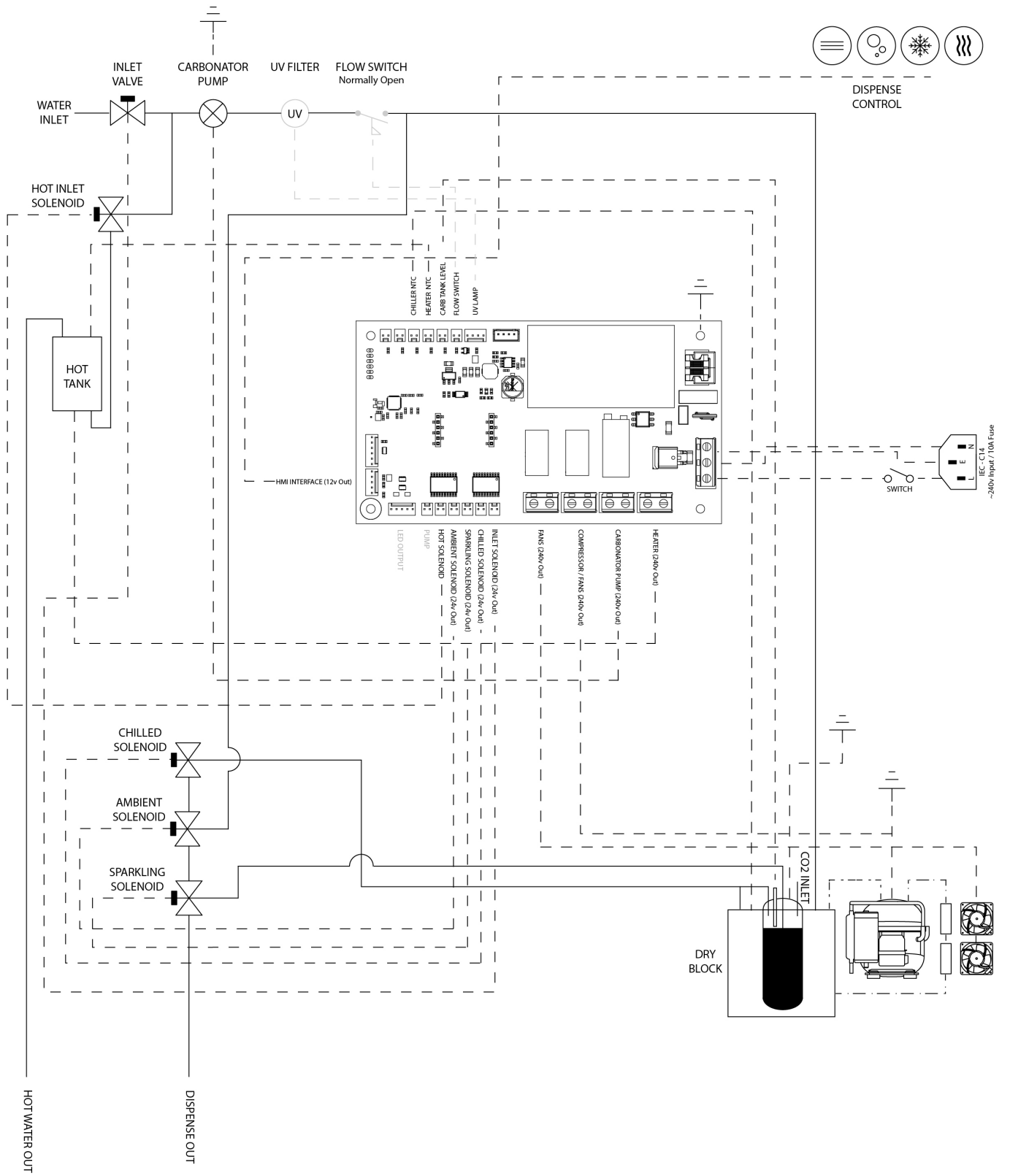
Problem/Report	Possible Cause	Suggested Action
No Water Dispensing	Power supply turned off	Check the power supply has been fitted properly and turned on.
	Water Pressure Regulator	Check water flow through the regulator. Replace if necessary.
	Check Tap HMI Control	Check fault codes.
	Water isolated from machine	Check water inlet supply.
	Commissioning mode	Ensure hot tank is full by dispensing hot option and then take unit out of commissioning mode.
	Lock icon not pressed	To dispense from hot, press the lock symbol first then hot shortly after.
No Sparkling Water	No CO2 pressure	Check CO2 bottle, regulator and non-return valve. Supply pressure should be 58 psi (4bar), replace as necessary.
	Carbonator Tank Not Filling	Check carbonator probe for possible short circuit to ground. Check for pump timeout, cycle power off & on then purge carbonator.
Poor Quality Carbonation	Incorrect CO2 Pressure	Check CO2 bottle, regulator and non-return valve. Supply pressure should be 58 psi (4bar), replace as necessary.
	Air in Carbonator Tank	Visit to view steps for purging tank.
	Residue in Carbonator Tank	After prolonged use, a surface film can develop within the carbonator tank. Refer to cleaning and sanitising instructions.
Warm Drinks	Insufficient cooling air flow through the fridge.	Check that the condenser is not blocked. Check supply to cooling fans (230V AC). If supply present replace fans. If supply not present move on to the compressor. The supply to the fans and the compressor are linked.
	Compressor not running	Check supply to compressor (230V AC). Check NTC probe is not faulty Check for system over heat. Allow the unit to cool and check for airflow obstructions. Once the unit has cooled the fridge system will restart. If the problem persists contact technical support.
	Fridge failure (See fault codes)	If compressor & fan are running and there is no cooling contact technical support.
Water lying in bottom of machine	Leak in pipe work and/or filter	Contact your distributor.
Not all symbols displayed	Unit is in heater commissioning mode	Check water is dispensing then hold lock symbol for 10 seconds.

Technical Information

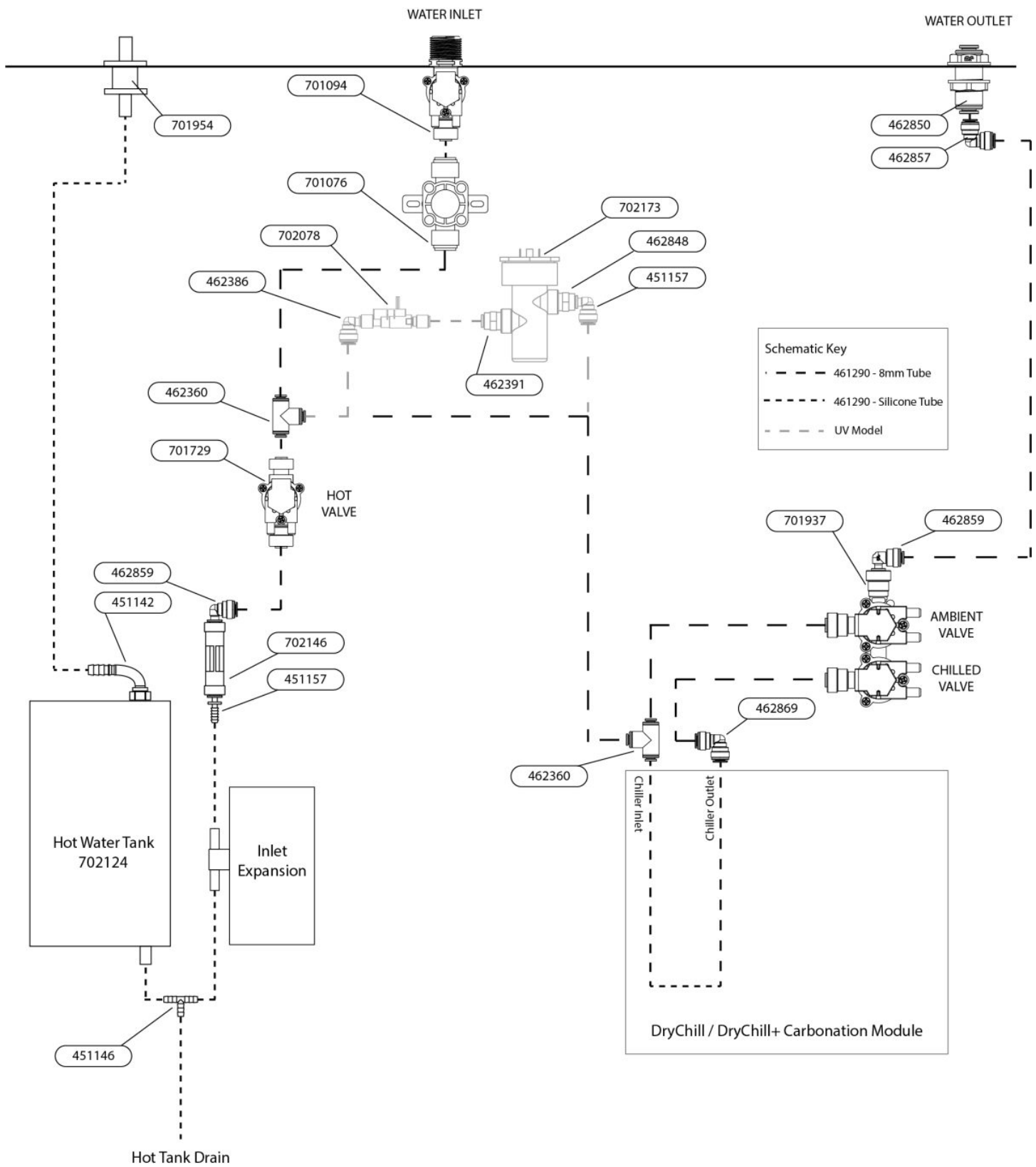
T3/T3+ Chilled, Ambient & Hot Circuit Schematic



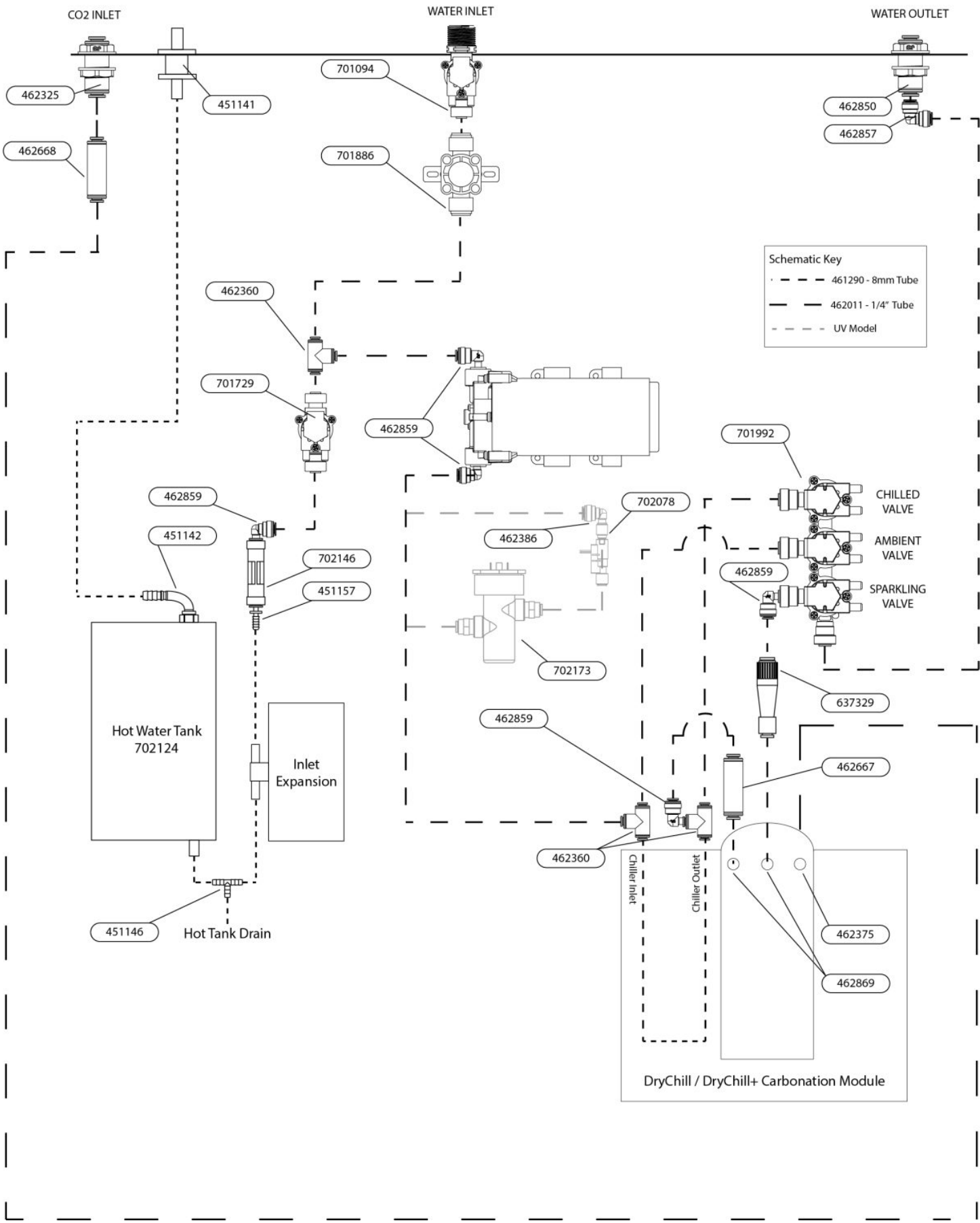
T3/T3+ Chilled, Ambient, Sparkling & Hot Circuit Schematic



Water Pathway - Chilled, Ambient & Hot



Water Pathway - Chilled, Ambient, Sparkling & Hot



Schematic Key

- - - - -	461290 - 8mm Tube
— — — — —	462011 - 1/4" Tube
- - - - -	UV Model

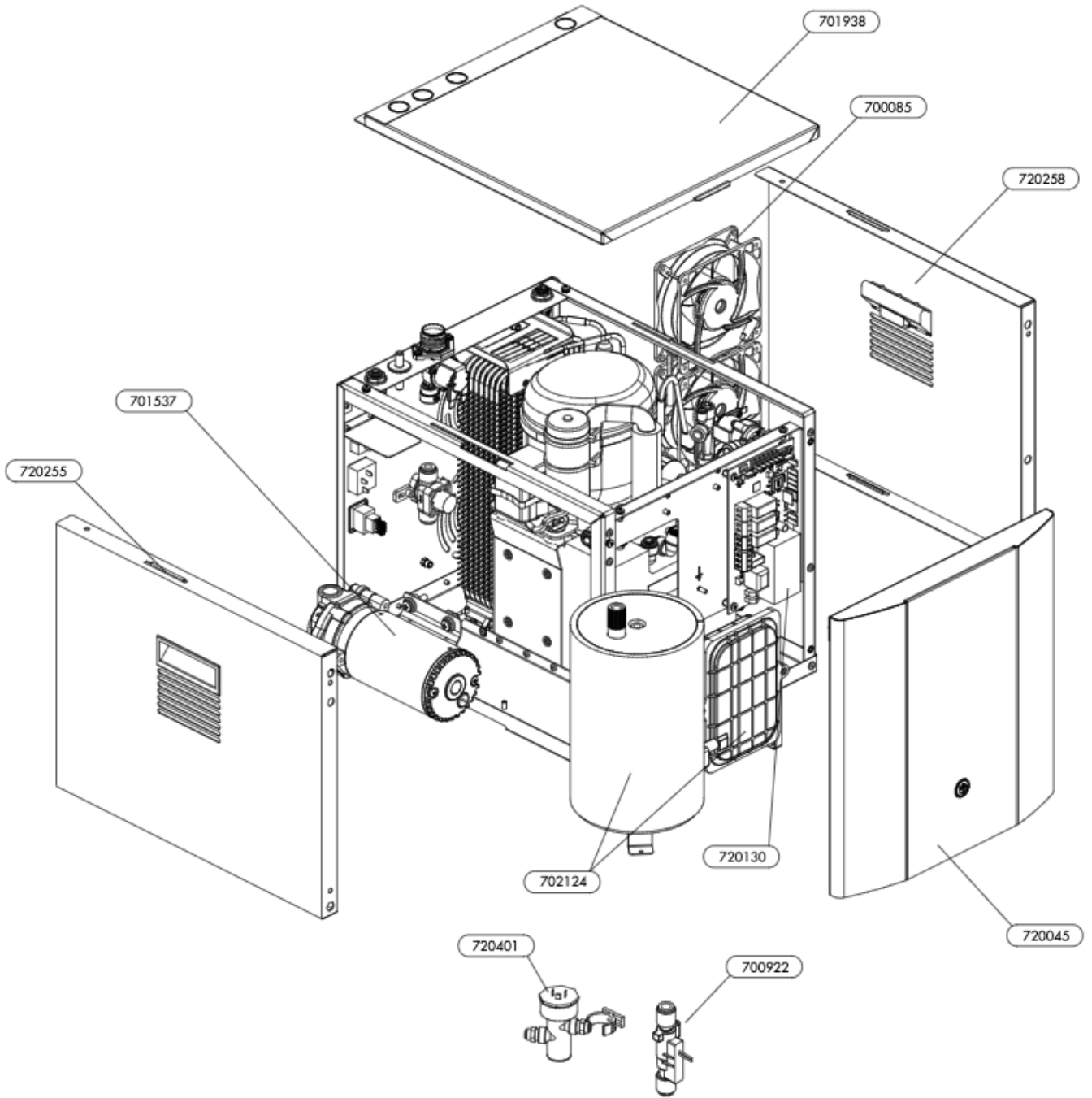
CHILLED VALVE
 AMBIENT VALVE
 SPARKLING VALVE

Chiller Inlet
 Chiller Outlet
 DryChill / DryChill+ Carbonation Module

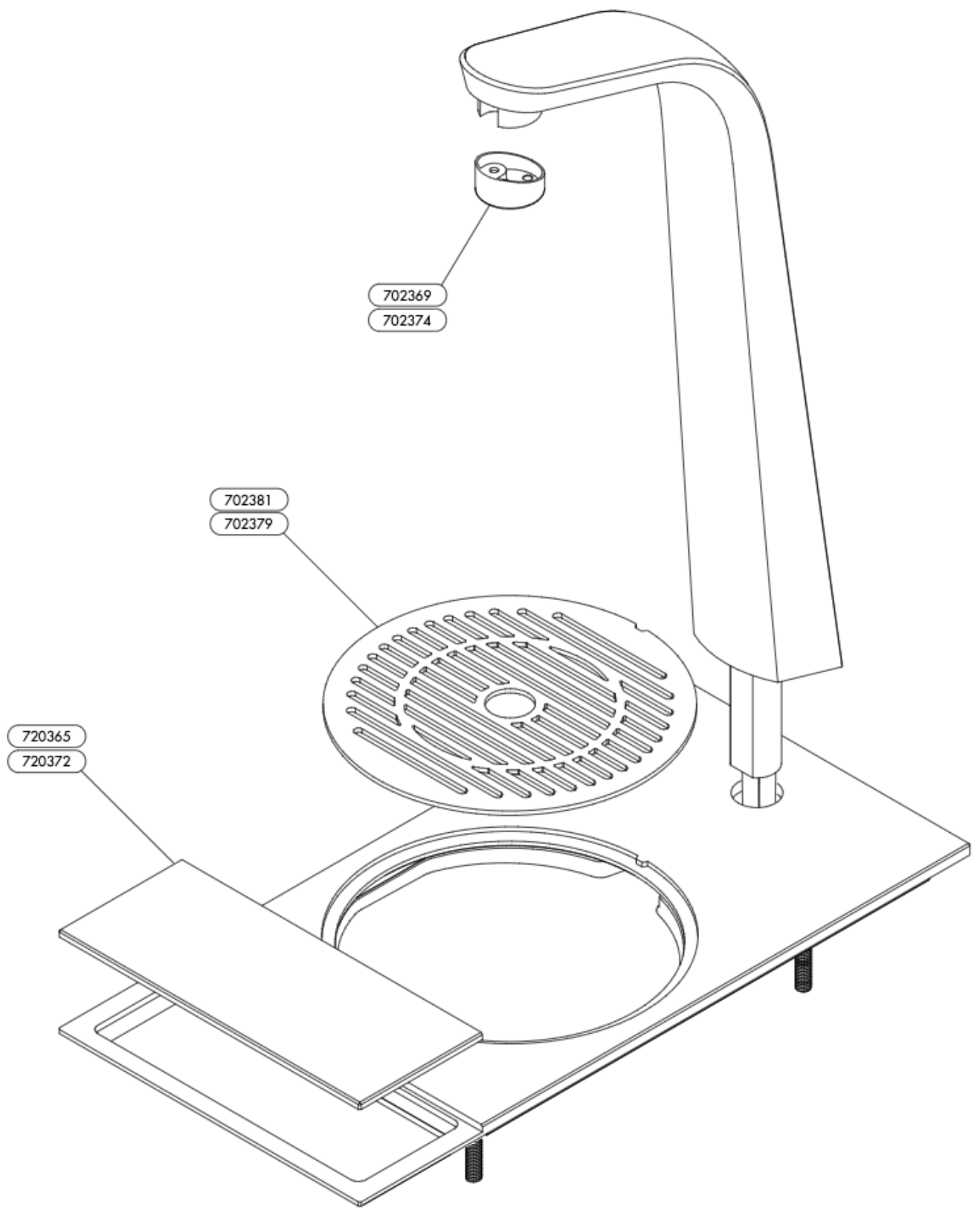
Spares

ProCore/ProCore+ Exploded Parts Diagram





T3/T3+ Exploded Parts Diagram



Spares List

Part No.	Description	CHA	CSAH
720130	Main Control PCBA	•	•
701938	Top Panel Asm	•	•
720258	Right Panel Asm	•	•
720255	Left Panel Asm	•	•
720045	Front Panel Asm	•	•
701537	Pump	•	•
700085	Cooling Fan	•	•
702124	Hot Water Tank and Inlet Expansion Chamber Asm	•	•
720401	UV Asm	•	•
700922	Flow Switch	•	•

Part No.	Description	CHA	CSAH
701094	3/4" BSP Inlet Solenoid	•	•
462325	1/4" Bulkhead Connector		•
462850	6mm Bulkhead Connector	•	•
701076	8mm PRV - ProCore+	•	•
701937	8mm 2 Way Solenoid	•	
701992	8mm 3 Way Solenoid		•
701729	Hot Inlet Solenoid	•	•
462859	8mm Stem Elbow	•	•
462869	8mm Equal Elbow	•	•
462360	8mm Equal Tee	•	•
462375	5/16" - 1/4" Elbow		•
462857	8>6mm Reducing Elbow	•	•
637329	8mm Compensator		•
462667	8mm Safety Check Valve		•
462668	1/4" Safety Check Valve		•

Part No.	Description	CHA	CSAH
702374	Tap Outlet Plated Silver	•	•
702369	Tap Outlet Plated Black	•	•
702381	Cup Stand Plated Black	•	•
702379	Cup Stand Plated Silver	•	•
720365	T3 CHA HMI Lens Asm	•	
720372	T3 CSAH HMI Lens Asm		•

