INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

rba

RBA2730	Granite Series (Round Button)
RBA2731	Granite Series (Square Button)
RBA2732	Stainless Series (Square Button)
RBA2733	Stainless Series (Round Button)
RBA2739	Heavy Duty Stainless Series

WaterMark
Lic. #W022317

Model	Wall Mounted Water Coolers
Date	27/04/15

Supercedes all previous

Important Information

NOTE TO INSTALLER

1. Prior to roughing-in consult with local, state, and federal codes for proper mounting height. Installation to be done in accordance with AS/NZS 3500.1 and AS/NZS 3500.2
2. Please leave this documentation with the owner of the fixture when finished.
3. Please read this entire booklet before beginning the installation.
4. Check your installation for compliance with plumbing, electrical and other applicable codes.
5. As improvements in the design and performance of RBA products are continuous, specifications may be subject to change without notice. The illustrations and descriptions herein are applicable to production as of the date of this Technical Data Sheet.

IMPORTANT

This fixture is intended to dispense water that has been lowered in temperature, but otherwise remains unchanged by the materials in the water cooler. It is common for electrical equipment to be grounded to water lines either within a structure or away from it. Every attempt should be made to prevent this kind of grounding from generating electrical feedback into the water cooler creating electrolysis. Electrolysis will cause a metallic taste or cause water metal content to increase.

NOTICE

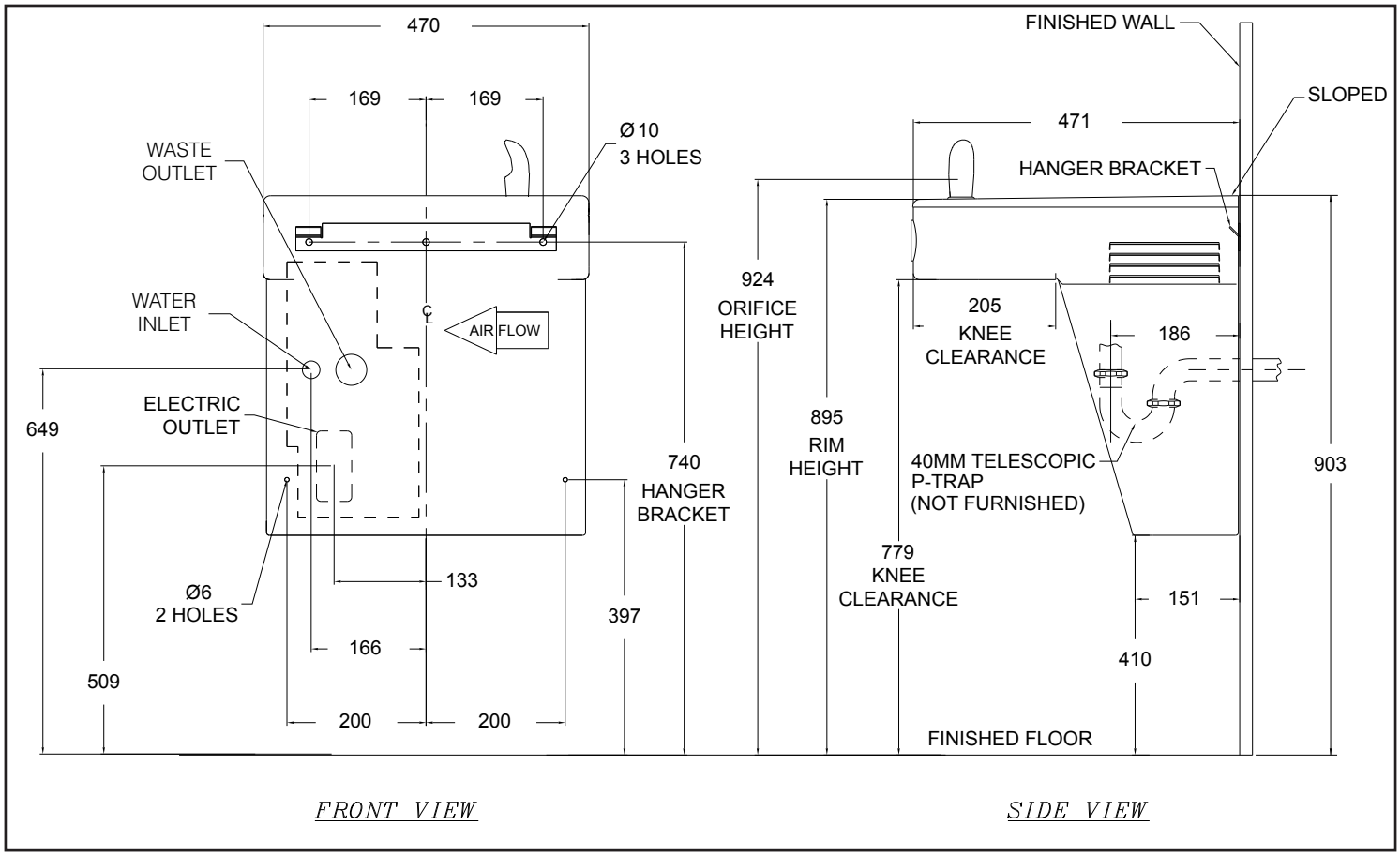
A dielectric coupling must be used to connect the water cooler to the water supply. A nonmetallic strainer is furnished with this water cooler to meet this requirement.

LIMITED WARRANTY

Acorn Aqua warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of original shipment or for 18 months after the date of shipment from the factory, whichever comes first. The compressor, condenser and refrigeration tubing is warranted for five years. Acorn's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Acorn is notified in writing within one year from date of shipment, F.O.B. Industry, California.

This warranty does not cover installation or labor charges and does not apply to materials, which have been damaged by other causes such as mishandling or improper care or abnormal use. The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy of Acorn under this warranty. Acorn shall not be liable under any circumstances for incidental, consequential or direct charges caused by defects in the materials, or any delay in the repair or replacement thereof. This warranty is in lieu of all other warranties expressed or implied. Product maintenance instructions are issued with each unit and disregard or non-compliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be protected on jobsite during construction and must be properly maintained after the water has been introduced into the water cooler or drinking fountain, or Acorn's limited warranty is void.

ROUGH-IN AND DIMENSIONAL DRAWINGS



GENERAL NOTES

1. All dimensions are in mm
2. Allow 102 mm minimum clearance per side for ventilation
3. Dimensions shown are for recommended adult height. Adjust vertical dimensions as necessary to comply with federal, state, & local codes.
4. Stop valve, trap, & electrical outlet not supplied.
5. IMPORTANT: Cooler must be attached to wall with anchor screws (supplied by others)

Dimensions shown for 895mm water cooler rim height.

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IMPORTANT

1. 40mm Telescopic P-Trap, Water Supply Service Angle Stop Valve and Electrical Plug-In Receptacle to be supplied by others in accordance with local codes.
2. Provide 102mm minimum clear space on fixture sides to allow for proper ventilation through cabinet louvers.
3. Water supply is a male 1/2" BSP connection. Waste is 1 1/2" [40mm] BSP outlet connection.
4. Completely flush supply lines of all foreign debris before connecting to fixture. Water cooler designed to not cause problems with taste, odor, color, or sediment. Optional water filter,is available should any of these problems arise from the water supply. Contact RBA Group for more info.
5. Do NOT solder tubes inserted into the strainer as damage to the o-ring may result.
6. All burrs must be removed from outside of cut tubes before inserting into strainer or other components.
7. Power supply must be identical in voltage, cycle and phase to that specified on the cooler dataplate. Electrical outlet and furnished power cord with plug must be used to supply power to fixture. Do NOT wire compressor directly to the power supply.
8. This unit must be grounded per the requirements of applicable electrical codes.
9. WARNING: Warranty is voided if installation is not made following current installation instructions and if components are assembled to the fixture that is not approved by the manufacturer.
10. Fixture operates within water pressure range of 200 to 500 kPa. Acorn Aqua will not warranty fixtures damaged when connected to supply lines with flow pressure lower than 200 kPa or higher than 500 kPa. A pressure regulator must be furnished by others on supply line if inlet pressure is greater than 500 kPa.
11. Fixture operaes within water temperature range of 4°C to 30°C
12. Due to cold waste water, we recomend the p-trap supplied by installer be insulated to prevent excessive condensation.

Installation and Start up

INSTALLATION

1. Mount hanger bracket to wall horizontally level as shown in Roughing-In and Dimensional Drawing.
   Note: Adjust height of bracket if bubbler outlet height is required to vary from that shown.
   WARNING: Hanger Bracket MUST be securely anchored to wall with fasteners sufficient to support weight of cooler.
2. Remove the bottom cover from the water cooler and set aside in a safe place. Save the screws in a secure location for re-use in later stages of installation.
3. Hang the water cooler on the hanger bracket, ensuring the bracket tabs engage AND seat in the slots in the back of the water cooler. Verify water cooler is level, left to right AND front to back.
   Caution: The bubbler stream may be adversely affected if unit is not square and level. Bottom of unit and louvers should be used as reference to verify unit is square and plumb.
4. Anchor water cooler to wall at other mounting points in base. Shim lower rear mounting points to level unit if necessary.
5. Thoroughly flush the supply line and then connect water cooler to water supply angle stop valve (by others).
6. Make p-trap waste connection using a 40mm telescopic P-trap (by others) OR using 40mm trap extension & P-trap (by others).

START UP

1. Before connecting power supply and assembling bottom cover to water cooler, but after thoroughly flushing the supply line and connecting it to the fixture, turn on building water supply and check all connections for leaks.
2. Air within the water cooler system or the structure supply piping will cause an irregular bubbler outlet stream until purged out by incoming water. Covering the bubbler with a clean cup (or similar object) is recommended when first activating water cooler to prevent excessive splashing. Depress the push button until steady water stream is achieved.
3. If water flow requires adjustment, insert a slotted narrow blade screwdriver in the hole centered on the underside of the fixture in the knee clearance area up to the flow regulator, or in the centre of the button actuator to the flow regulator depending on the model you have. Turning clockwise will increase flow and turning counterclockwise will decrease flow.
4. Recheck all water and drain connections with water flowing through system.
5. With power still NOT connected, carefully manually rotate cooling fan to insure proper clearance and free fan action.
6. Plug water cooler in to electrical outlet and make sure unit begins to function.
7. Assemble bottom cover to water cooler with screws furnished.

Cleaning and Maintenance

1. Motors have lifetime lubrication and do not require scheduled maintenance.
2. Excess dirt or poor ventilation will cause the compressor overload protector to turn the compressor off and it will cycle on and off with no cold water coming out of bubbler. Periodically clean with vacuum cleaner, air hose or brush the condenser fins and cabinet ventilation louvers.In environments where dirt and dust is more prevalent, clean more frequently.
3. Periodically remove access panels and clean out in-line strainer.
4. Do NOT use harsh chemicals, abrasive or petroleum based cleaners. Use of these will void the Acorn Aqua warranty.
5. Exterior panels can be cleaned using mild household detergents or warm, soapy water. Extra care must be used cleaning chrome plated items and mirror finished stainless steel. They can scratch easily and should only be cleaned using a clean, soft cloth and mild soap with water or a mild glass cleaner.

Trouble Shooting

IMPORTANT: Before making any of the repairs listed, make sure the water cooler is disconnected from the electrical supply and the water supply valve is shut off.

Adjustments

a Cartridge – The water flow can be adjusted using a slotted narrow blade screwdriver and turning clockwise to increase flow and counterclockwise to decrease flow.

b Cold Water Thermostat – The water temperature can be adjusted using a slotted screwdriver and turning clockwise to make colder and counterclockwise to make warmer.

c Bubbler Stream – Bubbler can be rotated slightly to direct the stream backwards or forwards. Adjust the stream to minimize splashing. Splashing may occur from bubbler stream if the unit is not level. Shim lower mounting points, if necessary, to level cooler.

Compressor Does Not Run

a Check the electrical receptacle for power and correct voltage. The incoming voltage must be within 10% of the rated voltage on the serial nameplate.

b The cold thermostat is accessible by removing the bottom access cover. If the cold thermostat capillary bulb loses its charge or becomes kinked it will fail in the open position causing a disruption of power to the compressor. Unplug the water cooler and using and ohm meter check for continuity across the two electrical terminals on the thermostat. Install a new thermostat if there is no continuity.

c Check for loose wires within the compressor box. The incoming power leads must be connected to the overload and relay.

d If all components check positive for continuity then test the wiring harness plug for continuity to see if there is a broken wire within the wiring harness insulation.

Compressor Runs – Water Is Warm

a The most common cause for a water cooler to run without producing cold water is a loss of refrigerant. The water cooler must be taken to a certified refrigerant technician for repairs.

b Make sure the condenser fan motor is operative. The fan blade must turn freely to help remove the heat of compression.

c An incorrect refrigerant charge, restriction or defective compressor (not pumping) will also cause the compressor to run without producing cold water. All these signs indicate a problem within the refrigeration system and the water cooler must be checked by an authorized service company.

Compressor Cycling On Overload Protector

a A dirty condenser or a blocked fan will cause a high head pressure and frequent cycling of the overload protector.

b Check the incoming voltage to make sure it is within 10% of the serial nameplate rating.

c A restriction or moisture in the system will also cause intermittent cycling. A certified refrigeration mechanic should be contacted in this situation.

d Change the overload or relay if defective.

Noisy Operation

a Check to make sure the fan blade is rotating freely.

b Make sure the water cooler is correctly mounted to the wall. Absence of the two lower mounting bolts may cause excess noise and vibration.

c Check the compressor mounting to make sure the pins and clips are not rattling. If the compressor appears to be noisy internally, it must be replaced.

Restricted Or No Water Flow

a Ensure water supply service stop valve is fully open.

b Verify minimum 200 kPa supply line flow pressure.

c Check for twists or kinks in bubbler tubing.

d Check the water inlet strainer. Sediment from the main supply can get trapped in the screen along with installation materials such as pipe dope and flux. The screen should be cleaned and checked on a regular basis and replace if needed.

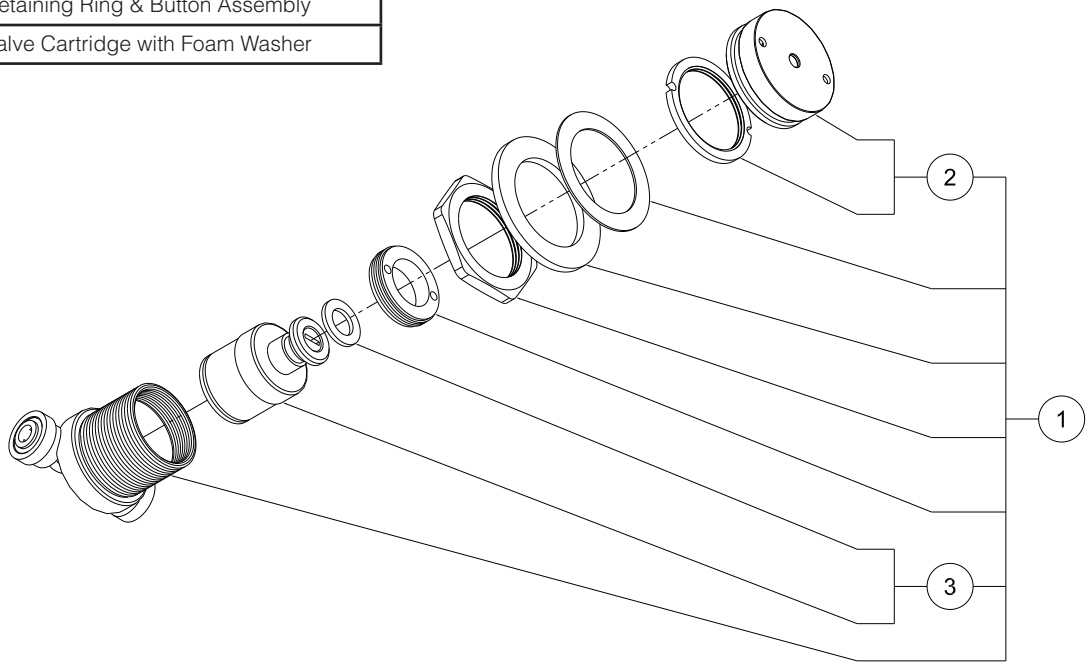
e The cartridge valve located in the water control assembly or bubbler can also become clogged with foreign material. The cartridge valve can only be replaced and not repaired.

f The water cooler may also develop a freezing condition in which the water will become frozen inside the evaporator coil. This indicates a refrigeration problem where the thermostat is turned down to low or thermostat failure, in which case the water cooler needs to be checked by a qualified technician.

Cartridge Valve Parts Breakdown

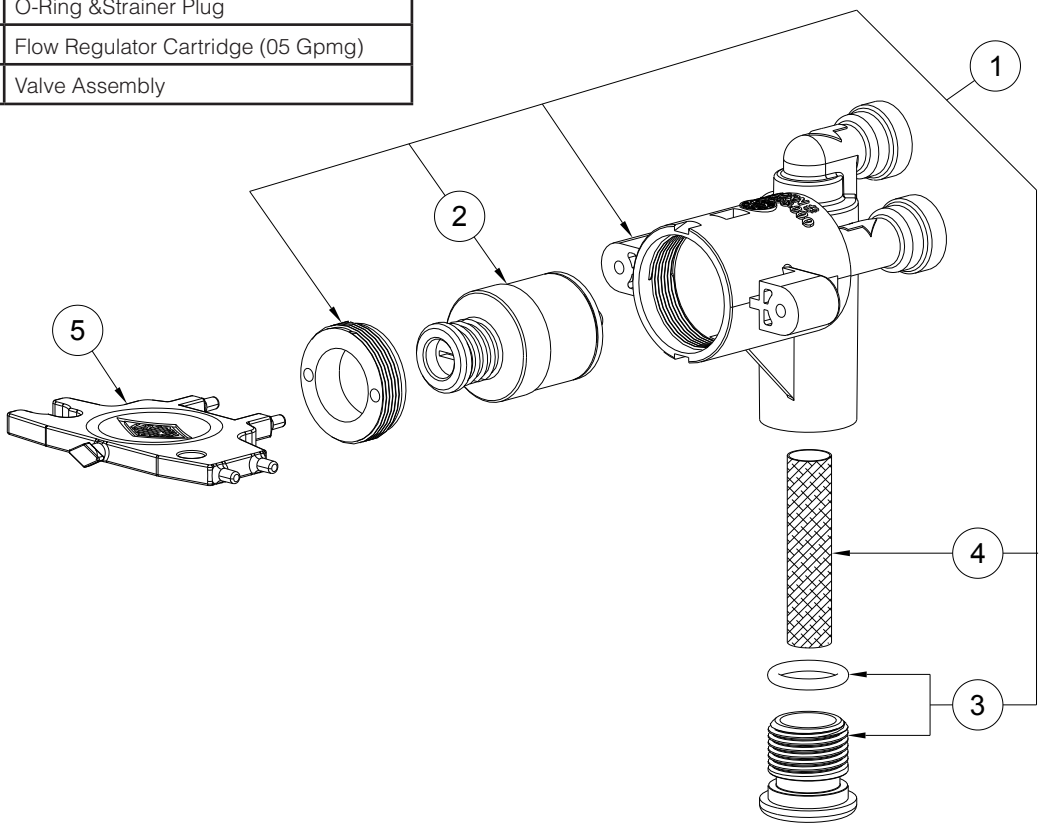
ROUND BUTTON VALVE CARTRIDGE BREAKDOWN

ITEM #	PART NUMBER	DESCRIPTION
1	7000-065-001	Recessed Pushbutton Valve Assembly
2	7000-068-001	Retaining Ring & Button Assembly
3	7000-069-001	Valve Cartridge with Foam Washer



RECTANGLE BUTTON VALVE CARTRIDGE BREAKDOWN

ITEM #	PART NUMBER	DESCRIPTION
5	7003-830-000	Universal Maintanance tool
4	7003-864-000	Strainer Filter Screen
3	7003-097-001	O-Ring &Strainer Plug
2	7000-060-000	Flow Regulator Cartridge (05 Gpmg)
1	7003-095-001	Valve Assembly

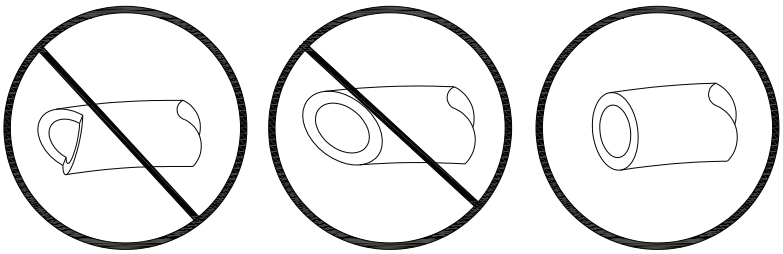


Push-in Fitting Installation

> **Note:** Fittings and tube should be kept clean, bagged and undamaged prior to installation.

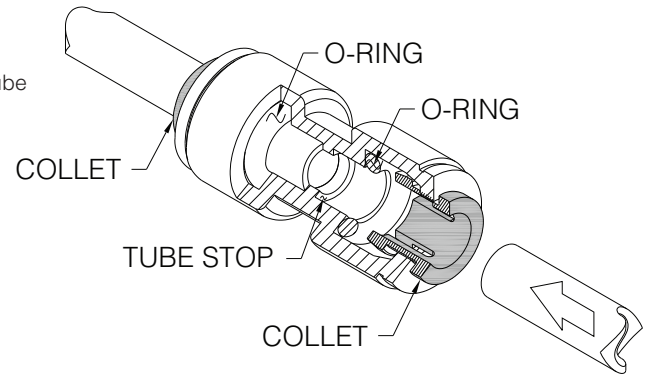
TO CUT TUBE

Cut to fit length of 1/4" PE tubing and remove any burrs or sharp edges. Ensure that the outside diameter is free from score marks. Tube ends should be square.

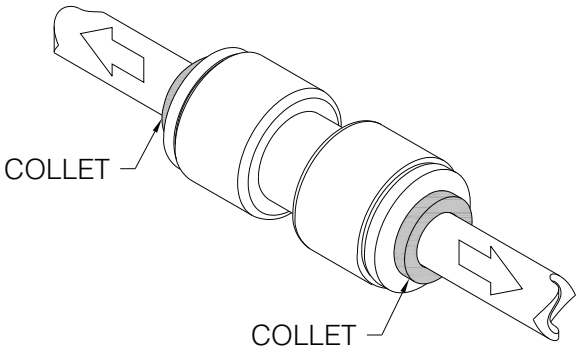


INSERTING THE TUBE

1. Firmly and fully insert the tubing end into the push-in fitting up to the tube stop located approximately ½" deep.

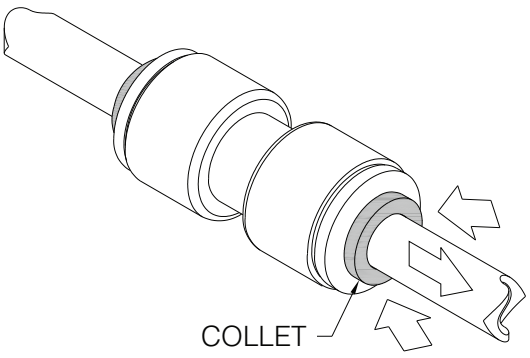


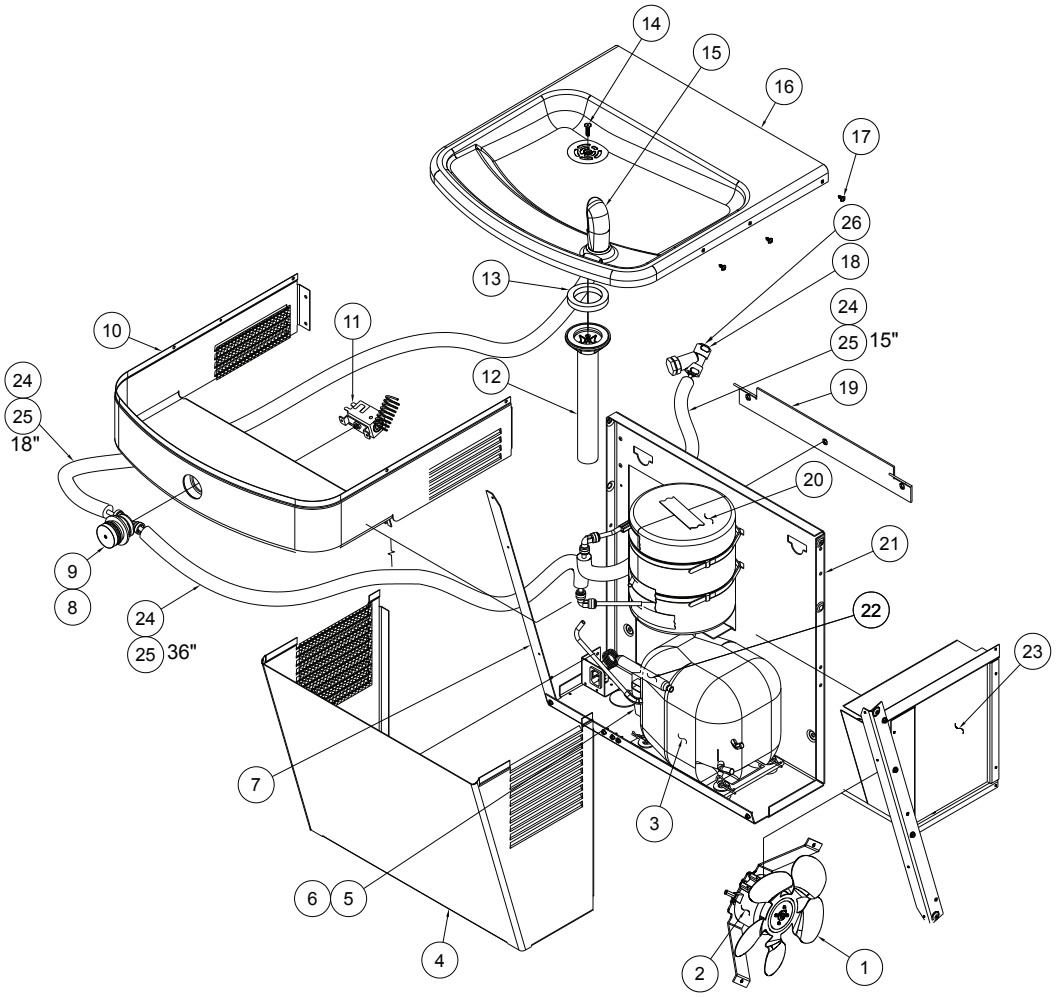
2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



DISCONNECTING THE TUBE

To disconnect the tube from the fitting ensure that the water line is depressurized. Push collet square towards the push-in fitting body and hold. While holding the collet in, pull on the PE tubing to remove from the push-in fitting.





ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	7003-355-000	Fan Blade	**14**	0124-032-000	Allen Flat Head Screw
2	7012-062-001	Fan Motor – 220V	**15**	7000-410-002	Flexi Bubbler Assembly
3	7012-030-000	Compressor – 220V		7000-012-001	Stainless Bubbler Assembly
4	7003-004-020	Lower Cabinet - Granite	**16**	7003-001-199	Basin Top
	7003-035-001	VR Stainless Steel Lower Cabinet	**17**	0124-051-000	Screw, Allen Pan Head
5	7012-031-000	Start Relay – 220V	**18**	7000-021-001	“Y” Strainer
6	7012-032-000	Start Capacitor – 220V	**19**	7003-014-199	Hanger Bracket
7	7003-007-199	Support Strut	**20**	7003 120-001	Evaporator Assembly
8	7000-065-001	Recessed Push Button Valve Assy.	**21**	7003-003-199	Back Panel
9	7000-069-001	Valve Cartridge With Foam Washer	**22**	7012-050-000	Filter / Dryer
10	7003-016-001	VR Stainless Steel Apron Assembly	**23**	7003-201-000	Condenser
	7003-017-001	VR Granite Apron Assembly	**24**	2169-000-000	Tubing, Blue 1/4” OD
11	7003-250-000	Cold Control	**25**	7012-055-000	Foam Pipe Insulation 3/8” I.D.x1/4” thk
12	7000-014-199	Waste Connection	**26**	2993-416-199	½” BSP Inlet Adapter
13	7000-006-000	Gasket, Flat Drain Adapter			

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Notes

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