



INSTALLATION & SERVICE INSTRUCTIONS



P1PV / P1PVCD Series Coolers

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Technical Specification

Product Dimensions:

- Height: 1,110 mm (43.7 in)
- Width: 320 mm (12.6 in)
- Depth: 345 mm (13.6 in)
- Net Weight: 23 kg (51 lbs)

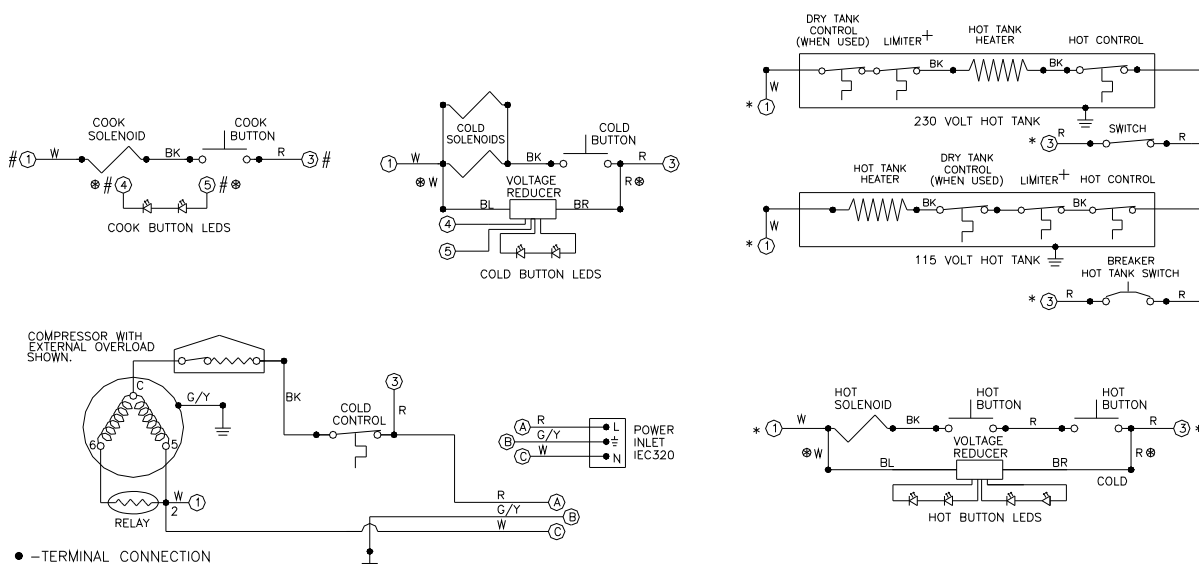
Filter Compartment:

- Height: 560 mm (22 in)
- Width: 260 mm (10.2 in)
- Depth: 120 mm (4.7 in)

Electrical Specification:

Model	P1PVKY P1PVCDKY	P1PVK P1PVCDK	P1PVHSY P1PVCDHSY	P1PVHS P1PVCDHS	P1PVHSKY P1PVCDHSKY	P1PVHSK P1PVCDHSK
Voltage	220/240V, 50Hz	115V, 60Hz	220/240V, 50Hz	115V, 60Hz	220/240V, 50Hz	115V, 60Hz
Current	0.8 A	1.2 A	3.1 A	5.5 A	3.1 A	5.5 A
Power	100 Watts	180 Watts	620 Watts	700 Watts	620 Watts	700 Watts

Wiring Diagram:



- - TERMINAL CONNECTION
- * NOTE: BALLOONED NUMBERS ARE ONLY APPLICABLE TO HOT MODEL UNITS.
- # NOTE: BALLOONED NUMBERS ARE ONLY APPLICABLE TO COOK MODEL UNITS.
- ⊗ NOTE: BALLOONED NUMBERS ARE ONLY APPLICABLE TO 230V UNITS.
- + LIMITER IS RESETTABLE ON SOME MODELS.

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General Information:

- The P1PV & P1PVCD Series coolers are designed for connection to a supply of potable water. The cooler should not be connected to water supplies of unknown bacterial quality or those that are not already fit for human consumption. The machine should only be connected to a potable drinking water supply.
- This unit is suitable for indoor use in domestic, commercial & industrial locations. They should not be sited in locations where they may be subjected to rain or snow.

Cooling System:

- The P1PV & P1PVCD Series coolers use the OASIS Pressure Vessel Direct Chill (PVDC) cooling tank system. The cooling tank is manufactured from 304 Stainless Steel which is non-corrosive and inert.
- The cold water temperature is preset at the factory at approximately 7°C (45°F) – the water temperature is controlled by a thermostat that is located on the back of the unit. Cold water temperatures may be adjusted via a slotted screw on the body of the control (can be accessed through the hole in the metal panel in the filter compartment). Turning this screw in the clockwise direction will make the water colder (and vice versa).

Ambient Water Circuit:

- The water in the ambient water circuit is not cooled - the temperature of the water will be the same as the temperature of the water that comes out of the building water supply and the ambient room temperature. The ambient water should be flushed after long periods of non use.

Hot Water System:

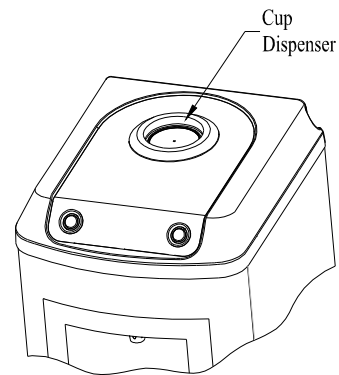
- The P1PV & P1PVCD Series coolers use a two-piece hot tank to aid in cleaning out scale. The hot tank is manufactured from 304 Stainless Steel which is non-corrosive and inert.
- The hot water temperature is preset at the factory at approximately 88°C (190°F) – the water temperature is controlled by a thermostat that is located on the hot tank. Hot water temperatures may be adjusted via a slotted screw on the body of the control (can be accessed through the hole in the metal panel in the filter compartment). Turning this screw in the clockwise direction will make the water hotter (and vice versa).

Compressor:

- The compressor uses the hydrofluorocarbon refrigerant R134a which is a non-Ozone depleting substance with a Global Warming Potential of 1,300. The compressor is controlled by an electromechanical thermostat that controls the temperature of the water in the direct chill unit.

Cup Dispenser:

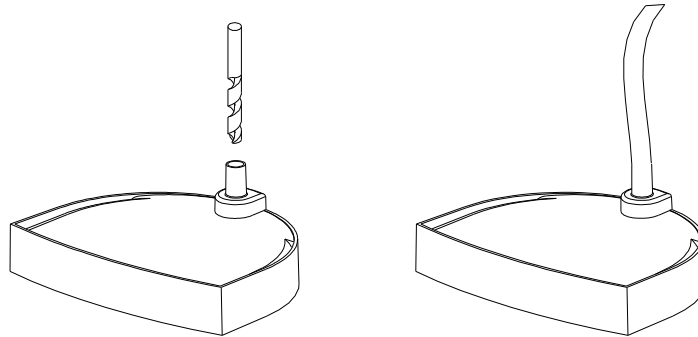
- The P1PVCD Series contains an integrated cup dispenser built into the top of the cooler. This is the only difference between the P1PV Series and the P1PVCD Series.



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Self-Drain Drip Tray:

- The drip tray supplied with the P1PV coolers is fitted with a self-drain facility. To put the self-drain facility into service, follow the instructions listed below:
 - Remove the drip tray from the cooler
 - Remove the grille from the drip tray
 - Using a 8mm (5/16") diameter drill, drill a hole through the bottom of the drip tray stem
 - Fit a flexible hose of 10mm (or 3/8") inner diameter onto the stem
 - Route the hose through the partition to the rear of the unit – you can run this hose directly to a main water drain or connect it to a storage vessel that will need to be emptied at regular intervals



Water Pipe and Fittings:

- All water connection fittings are made by the John Guest Company and are approved to NSF standards 51 and 61. The machine is connected to the water supply by a 1/4" female bulkhead fitting.
- The entire internal water circuit and all the components which come in contact with water are food grade NSF / WRAS approved

Mounting Feet

- The unit is supplied with 4 mounting feet (packed inside the filter compartment). These can be used to level the cooler on uneven surfaces. To install the feet, simply screw them into the 4 threaded holes in the metal base of the cooler

Water Valves:

- Control of water dispensing is achieved by means of mains AC electrical solenoid valves. Three valves are used – two for cold water and one for ambient or hot water (depending on model). The valves remain open when the customer pushes the dispense button for a drink

Panels:

- All external molded panels are made from ABS plastic. The material used is UV resistant and meets all CE and UL requirements for fire safety. All metal panels are made from galvanized steel which is then painted. The galvanized coating provides increased resistance to rust and corrosion.

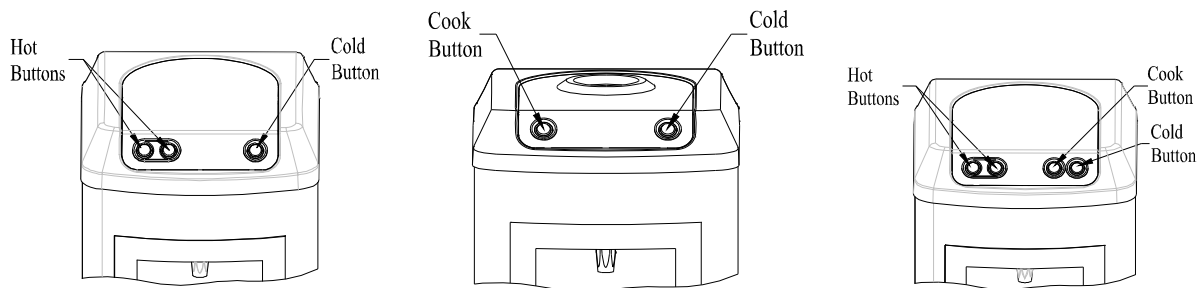
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Spare Parts:

- Tri Palm International supplies spare parts for all of its watercoolers. For European service, please check the OASIS web-site at www.oasis.ie for full illustrated parts breakdowns that give full details of all replacement parts. For service from the United States, refer to the Tri Palm International web-site www.tripalmint.com

Pre-Delivery Inspection:

1. Examine the packaging for signs of damage – report any damage to the carrier.
2. Remove the carton from the cooler – cut the strapping tape and lift the carton from the cooler. Store the carton and corner posts for repacking the cooler prior to shipping it to the customer.
3. Remove the shipping bag from the cooler
4. Carry out a general inspection of the cooler, ensuring that :
 - a) There are no marks or physical damage to the cooler
 - b) All accessories are present
 - c) All wires and electrical connections are in place at the back of the cooler
 - d) All tubes and water connections are in place
 - e) That the cooler is clean and dust free
5. Install your filtration system (see relevant section in this manual)
6. Flush out the water cooler
 - a) Connect the water supply to the bulkhead fitting at the rear of the unit
 - b) Make sure the hot tank switch is off, if applicable, then connect the unit to a power supply
 - c) Caution: The unit is now live and suitable safety precautions should be taken
 - d) For models with hot tanks, the two buttons on the front left of the cooler face must be pressed at the same time to dispense hot water. Press the dispensing button for hot water and keep the button depressed until the water from the outlet runs clear – note that it will take some time to bleed all of the air from the hot tank.



- e) If your model is a Cook N' Cold model, press and keep the button depressed for ambient temperature water until the water from the outlet runs clear.

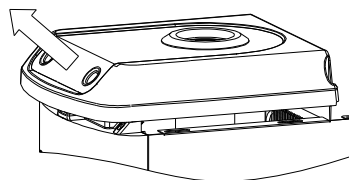
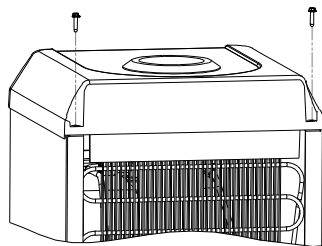
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- f) Press the dispensing button for cold temperature water and keep the button depressed until the water from the outlet runs clear – note that it will take some time to bleed all of the air from the cooling tank
 - g) Carry out a visual inspection for any water leaks
 - h) Disconnect the power supply and water supply from the cooler
 - i) Drain the water cooler (see relevant section below)
7. Replace the shipping bag over the water cooler
 8. Replace the carton over the top of the cooler
 9. The cooler is now ready for transportation to the customer's premises

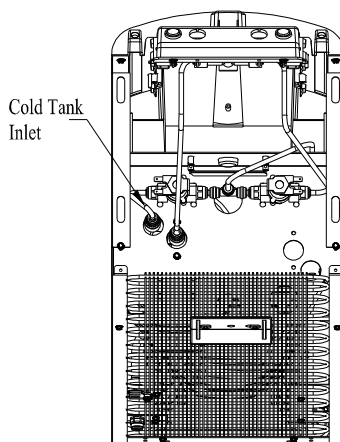
NOTE: Whenever you transport the cooler to or from your premises, you should ensure that a shipping bag is placed over the cooler. This will prevent damage to the cabinet caused by coolers rubbing against one another in the back of the truck or van.

Draining the Water Cooler:

- Isolate the water cooler from the mains water supply – this may be done by closing any shut-off valve fitted to the installation or temporarily disconnecting the cooler from the water supply
- Disconnect the cooler from the power supply
- Remove the top from the unit – remove the two screws at the rear of the top, and lift off the lid assembly



- Looking down on the unit, disconnect the cold water inlet as shown in the diagram to the right.



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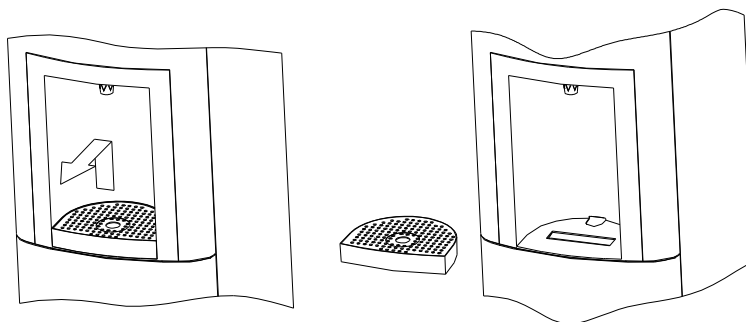
- Remove the screw holding the plug in position on the drain valve at the rear of the unit
- Rotate the plug counter-clockwise and pull from the drain body
- Allow water to drain from the valve
- The drain is located 280mm (11 in) from the floor – ensure that you place a container under the valve prior to opening it. The container needs to have a minimum capacity of 2 litres (2 quarts).
- Re-assemble the cooler by following the above instructions in the reverse order

Filter Installation:

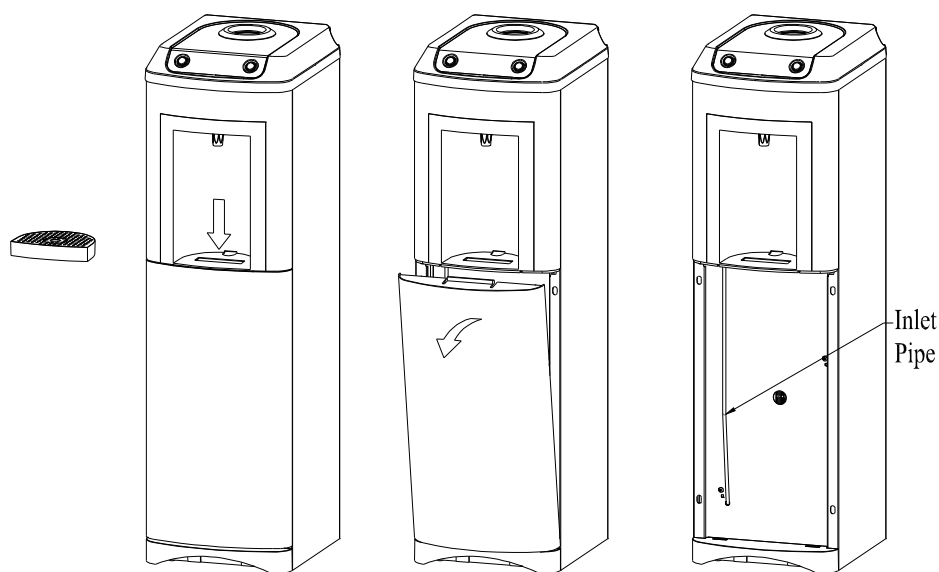
The P1PV and P1PVCD series coolers contain a large filter compartment that can be directly accessed from the front of the unit.

Accessing Filter Compartment:

- Lift out and remove the drip tray



- Depress the clip visible through the slot in the alcove and lean the top of the door forward



- Remove the door from the cooler
- The water supply tube is now visible on the left hand side of the filter compartment

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Installing the filter system:

- It is recommended that you use a filter system with ¼” push-fit connections for both inlet and outlet
- Refer to the instructions provided with the filter system prior to installation
- Attach the filter system to the metal column support – you can drill holes as required for mounting screws
- Cut the water supply tube and connect the lower portion to the inlet side of the filter system and the upper portion to the outlet side of the filter system

Installing the cooler:

EUROPE ONLY

The European Point of Use Water Distribution Association (EPDWA) provides formal Hygiene Awareness and Installation training courses. All staff involved in the installation and sanitising of POU water coolers for an EPDWA member company must receive this training.

The purpose of this training program is to provide an overview of POU systems offered by OASIS and an introduction to the basic guidelines that should be followed when installing an OASIS water cooler onto an existing mains water system.

It is recommended that all companies undertake the necessary EPDWA training courses to help maintain the professional image of the industry

A documented site survey must be conducted prior to installing a cooler in a facility. Copies of all surveys should be held at the installer’s premises. The purpose of the survey is to ensure that the cooler is installed in a suitable location.

The general installation guidelines below should be followed:

- The cooler must be located on a floor that is smooth, level and easily cleaned.
- Do not locate the cooler in direct sunlight.
- Do not locate the cooler next to a radiator.
- Do not locate the cooler within or directly adjacent to toilet facilities.
- Do not locate the cooler in constantly damp areas, beneath dripping pipes, or where water may collect underfoot.

Examine the proposed cooler location for the following:

- Location of electrical supply
 - The cooler should be installed no more than 2 meters (6 feet) from the nearest electrical outlet.
 - It should be possible to access the plug when the cooler is in its final position.
- Location of potable water supply
 - The cooler must be attached to a potable water source.

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- The length of small bore tubing (usually ¼”) used to connect the cooler to the water supply should be kept to a minimum and must not exceed 20 meters (65 feet).
- If the planned cooler location is more than 20 meters (65 feet) from the connection point to the water source, then an additional water supply line should be added.

Fittings:

All fittings and piping used to attach the water cooler to the water supply must be approved to the relevant local standards.

These fittings can be purchased from Tri Palm International or Tri Palm International can refer you to reputable suppliers of Point-of-Use parts in your market place.

Installation:

Each installation should include the following components

- Pressure limiting devices should be installed to protect the cooler and supply tubing from water pressure surges in locations where they may occur.
- Each cooler should have an independent isolating valve. This is intended so that the cooler can be replaced without draining long lengths of piping.

EUROPE ONLY

In accordance with EPDWA guidelines, the installation must also include the following additional components:

- A non return valve must be fitted at the point of connection to the water supply.
- An anti leak device must be fitted at the point of connection to the water supply downstream of the isolating and non return valves.

The following general guidelines apply to the water supply line:

- Pipework should avoid light fittings and electrical and gas piping
- Pipework in public view should be securely and neatly fixed.
- All pipework should be accessible and clearly labeled.
- Pipework should be lagged when necessary to avoid freezing or high temperatures.

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Sanitisation:

EPDWA guidelines state:

- All coolers must be sanitized before commissioning
- When a customer signs up to the sanitisation program, the cooler should be sanitized every 6 months
- Sanitisation should be carried out in accordance with the manufacturer's instructions – see attached documents.

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Connecting Water Cooler to Water Supply:

All OASIS POU water coolers are supplied with a push-fit connector that should be used to connect the cooler to the water supply. Tri Palm International recommends that these guidelines should be followed when installing the cooler:

Use ¼” diameter tubing to connect the water supply to the water cooler. Although 6 mm tubing will appear to fit, it is approximately 5% smaller in size. The use of 6mm tubing will result in a leak.

A pressure regulator, such as a slow flow regulator, must be installed in front of the unit’s water inlet if the water pressure (including any possible pressure spikes) could exceed 690 kPA (100 psig.). Failure to comply will void the warranty. The manufacturer accepts no liability for damage caused by excessive water pressure.

Installing the water cooler at your customer’s premises:

1. Carry the cooler in the upright position to the customer’s premises - use the handle at the rear of the unit.
2. Remove the shipping bag from the cooler.
3. Carry out a general inspection of the cooler, ensuring that :
 - a) There are no marks or physical damage to the cooler.
 - b) That all accessories are present.
 - c) That all the wires and electrical connections are in place at the back of the cooler.
 - d) That the cooler is clean and dust free.
 - e) Sit the machine as close to the electrical and water supply as possible with a 50mm (2”) air gap at both sides and back of the machine. Mount the machine on a firm flat surface so that it cannot topple over. Please remember that the machine should not be exposed to direct sunlight or heat sources above 32°C (90°F).
 - f) It is advisable that the water supply and electrical supply be within 2 meters (6 feet) of the machine for ease of installation.
 - g) Level the machine using the adjustable feet.
6. Connect the water cooler to a potable water supply.
7. Inspect the electrical socket, the machine plug and the power cable for any transit damage. Make sure the hot tank switch is off, then plug the power lead into the back of the machine. As soon as you plug the machine into a suitable power supply, you can start to flush water through the machine.
8. Press both buttons on the front left to dispense hot temperature water, if applicable, and keep the buttons depressed until the water from the outlet runs clear – note that it will take some time to bleed all of the air from the hot tank.
9. Press the dispensing water for ambient temperature water, if applicable, and keep the button depressed until the water from the outlet runs clear.

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10. Press the dispensing water for cold temperature water and keep the button depressed until the water from the outlet runs clear – note that it will take some time to bleed all of the air from the cooling tank.
11. Carry out a visual inspection for any water leaks.
12. The direct chill system will start cooling immediately and is now ready for use by the customer.

General Troubleshooting Guidelines:

- No water flow when any dispense button is pressed:
 - Ensure that the unit is connected to the electrical supply, and that power is going to the unit.
 - Ensure that the unit is connected to a water supply and that any shut-off valve is in the “Open” position.
 - Ensure that any leak detection device (if installed) is in the “Open” position – if the leak detector has been triggered then it needs to be reset.
 - Ensure that any filter fitted within the unit is not blocked with sediment.
 - Ensure that any shut-off valve in the filter system is in the “Open” position.
- Water flows from the ambient or hot system, no water flows from cold system:
 - Water within cooling system is frozen.
 - Check the thermostat setting – turn counter-clockwise to increase the temperature setting of the cold water.
 - Disconnect the power from the unit and allow the ice inside the cooler to melt.
- Water dispensed from the cold system is not chilled:
 - Ensure that the cooler is not located in direct sunlight.
 - Check that the thermostat on the rear of the unit has not been turned off.
 - Check if the compressor is running – if not, then replace starting relay.
 - If the compressor is running and no cold water is available, then there may be a fault in the refrigeration system.
- Bad taste:
 - Flush the machine for a period of 15 minutes. If the bad taste persists, contact your authorized service provider.
- Low flow of cold water:
 - If this happens in the cold water circuit, there may be a problem with freezing. Refer to the notes for “no water flow from cold system” above.
- Low flow of water for all circuits of the machine:
 - Ensure that the filter is not blocked
 - Ensure all valves in the system are in the fully open position
 - Check the water supply pressure

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Accessing the Internal Chassis

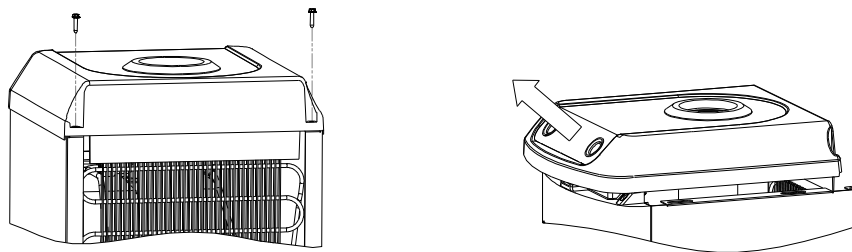
In order to carry out repairs to the refrigeration system, you may need to remove the side panel(s) from the cabinet. Please follow the instructions given below to carry out this operation:

Safety Instructions:

- Isolate the water cooler from the water supply – this may be done by closing any shut-off valve fitted to the installation or temporarily disconnecting the cooler from the water supply.
- Disconnect the cooler from the power supply.

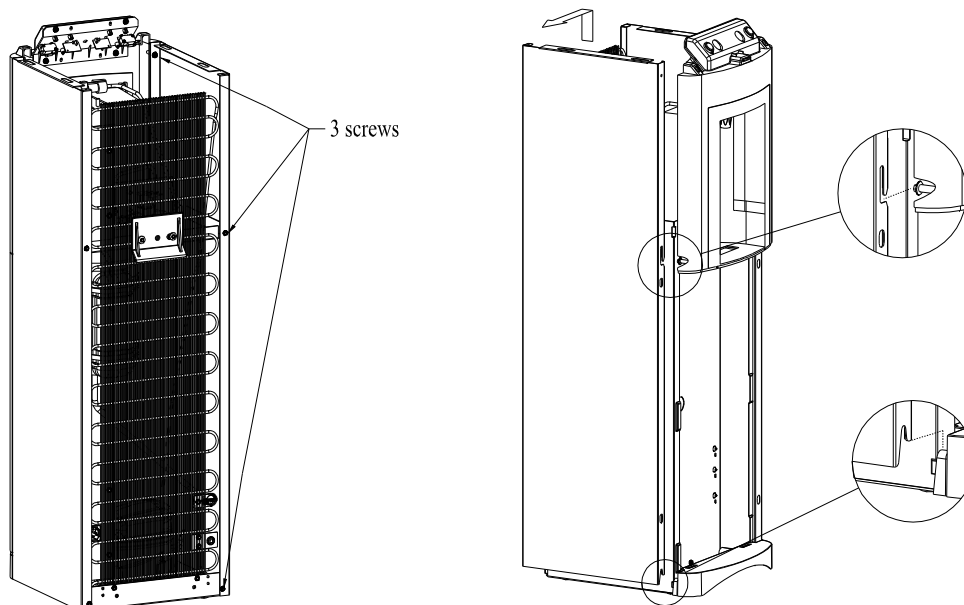
Remove Top from the Cooler:

- Remove the two screws at the rear of the top, and lift off the lid assembly



Remove Side Panel

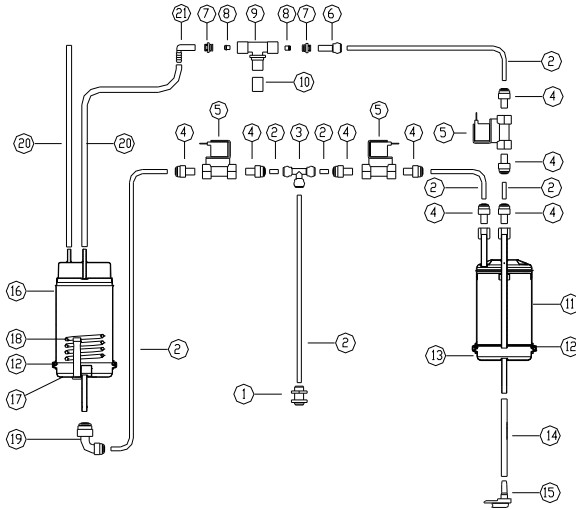
- Remove the three screws as shown
- Raise the panel vertically by about 25mm (1”) so that it clears the molded base and the key slot, then lift the panel away from the cooler



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Cleaning and Sanitizing Instructions:

This procedure should be used for initial cleaning prior to installation and also for on-site sanitization. The diagram below illustrates the water circuit used in all PV-DC model coolers:



No	230V	115V	Description
1	028913-002	028913-002	JG FITTING, BULKHEAD CONNECTOR
2	029959-002	029959-002	TUBING, 1/4"
3	029199-003	029199-003	JG FITTING, TEE PIECE, 1/4"
4	034277-002	034277-002	JG FITTING, 1/4" BSP
5	034613-001	034613-002	SOLENOID VALVE 230V
6	030552-101	030552-101	JG FITTING, 3/8" TO 1/4" REDUCER
7	028672-001	028672-001	CARTRIDGE, HALF SET
8	035351-002	035351-002	CHECK VALVE
9	034663-001	034663-001	WATER OUTLET MOULDED
10	034625-001	034625-001	SPOUT, WATER OUTLET
11	034506-001	034506-001	COOLING TANK, HEAD
12	030858-407	030858-407	O-RING
13	034507-002	034507-002	COOLING TANK, BASE
14	034782-001	034782-001	DRAIN TUBE, 3/8" OD
15	034361-001	034361-001	DRAIN VALVE ASSY
16	036033-001	036033-001	HOT TANK HEAD
17	036134-001	036134-001	HOT TANK BASE
18	032487-004	032487-003	HEATING ELEMENT
19	028768-101	028768-101	JG FITTING, 3/8" ELBOW
20	034734-002	034734-002	TUBING, 3/8" OUTLET/VENT

Equipment:

- Household bleach (5% sodium hypochlorite)
- Mild soap solution
- Plastic bucket
- One 12" length of 1/4"OD plastic tubing

Preparation of Filter Cleaning Cartridge:

- In order to get cleaning solution into contact with all of the water-contact surfaces it is recommended that you prepare a filter cleaning cartridge. This should consist of an empty filter housing and head assembly (i.e. does not contain a filter media).
- To prepare the cleaning cartridge, place 1 ml (1/4 tsp) of the sodium hypochlorite solution into the empty housing and then re-fit the head

Sanitization Instructions:

- Temporarily disconnect the water cooler from the water supply
- Remove the front door and the top from the cooler. If no filter has been installed in the cooler, disconnect the blue tubing from the tee that connects to the bulkhead fitting on the back of the cooler. Connect it to the inlet side of the filter cleaning cartridge.
 - Note: If a filter system has been installed in the cooler, use the filter cleaning cartridge to bypass the filter system (i.e. disconnect the tube attached to the inlet of the filter system and fit it to the inlet of the filter cleaning cartridge)
- For coolers with no filters in them, use a 12" length of 1/4" blue tubing to connect the outlet side of the filter cleaning cartridge to the tee. If filters are installed in the cooler, you should

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disconnect the tube from the filter outlet and connect it to the outlet of the filter cleaning cartridge.

- Reconnect the cooler to the mains water supply.
- Allow the reservoir to fill with water (leave for about 5 minutes) dispensing water from both the cold and ambient systems to bleed all air from the system.
- Let the cooler stand with cleaning solution in it for 20-30 minutes.
- After the 20-30 minutes are up dispense water from both systems for 2 minutes to remove all traces of cleaning solution.
- Disconnect the cooler from the mains water supply and remove the filter cleaning cartridge.
- Reconnect the blue tube to the tee-piece (or reconnect the filter system).
- Reconnect the cooler to the water supply.

General Cabinetry Cleaning:

- Turn off the power at the wall socket and remove the power cord at the rear of the machine.
- Wear clean rubber gloves to carry out the cleaning functions.
- Remove and clean the drip tray assembly.
- Wipe down all machine surfaces with a mild soap solution or mild cleaner.
- Replace the drip tray.
- Re-connect the machine and turn on the power and check for correct operation

Descaling the hot tank

Equipment

- Hot tank De-scaling solution : Dissolve 125 grams of citric acid crystals in 1 litre of hot water
- Bucket or pan with 8 - 10 litre capacity
- Rubber gloves

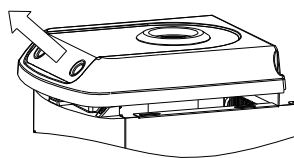
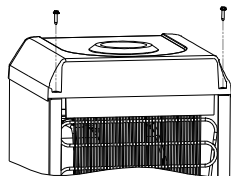
Cleaning Procedure

Water coolers need to be cleaned periodically to prevent mineral build-up inside the heating tank. The frequency of cleaning is determined by the quantity of minerals in the water and the amount of water used. The hot tank may require cleaning when:

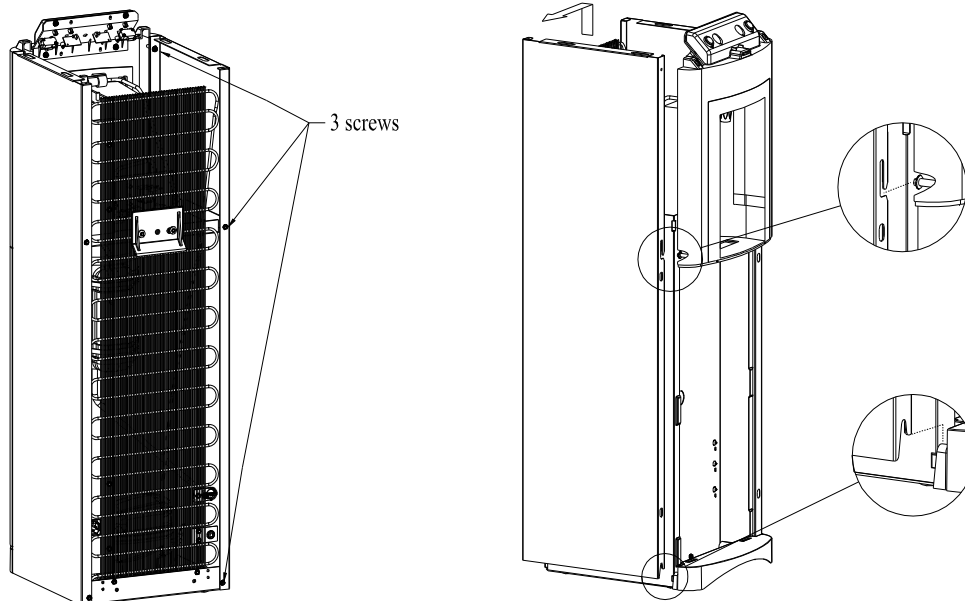
- Normal hot water flow appears restricted.
- Noisy heating cycles are heard.
- Mineral build-up has imparted a taste to the water.

Instructions:

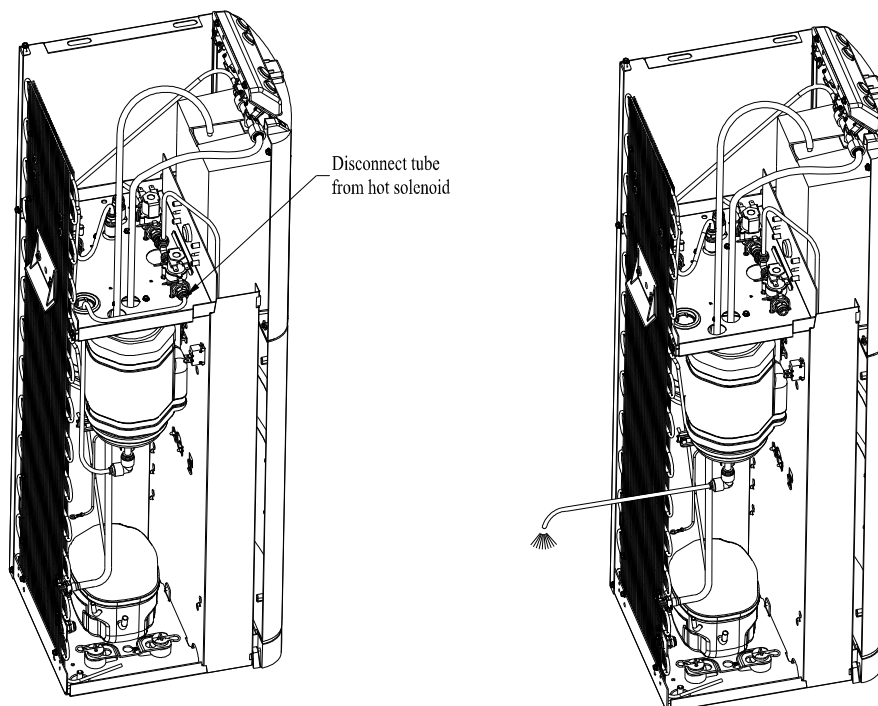
- Turn off the hot tank switch and dispense hot water from the outlet until the water is cool
- Temporarily disconnect the water cooler from the water supply
- Remove the front door, top and RH side panel from the cooler.



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- Disconnect the blue tube running from the solenoid to the hot tank inlet – see figure for location of this tube



- Thread the blue tubing through the hole in the shelf as shown above – as soon as the free end of the tube is below the hot tank, water will start to drain from the hot tank

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- Allow this water to empty into an open bucket
- Remove the hot tank from the cooler as follows:
 - Disconnect earth wire from column support
 - Disconnect live & neutral wires from hot tank switch and heat limiter
 - Disconnect vent pipe from front panel
 - Disconnect outlet pipe from water outlet assembly
 - Support the tank while removing the two screws attaching the tank to the shelf
 - Withdraw the tank from the column support
- Temporarily plug the vent and hot tank outlet
- Prepare a descaling solution by mixing 125 grams of citric acid crystals with one litre of very hot water. (Wearing rubber gloves is recommended)
- Turn the hot tank upside down and pour the descaling solution into the hot tank inlet tube using a funnel
- Let the unit stand for at least twenty minutes.
- Drain the descaling solution through the hot tank inlet tube
- Replace the hot tank and rebuild the cooler
- Reconnect the cooler to the mains supply
- Drain at least 5 litres of hot water from the outlet before switching on the hot tank

THIS APPLIANCE MUST BE EARTHED.

This appliance is not suitable for unsupervised use by young children or aged and infirm persons. The warranty, Underwriter's Laboratory certification and CE certification for this machine are automatically void if any alteration, modification, or combination with any other machine or device is deemed to be the source of any claim. The UL and CE certification may be void as the result of any alteration or modification. The manufacturer accepts no liability resulting from any alteration, modification, or combination with any other machine or device.

EXCEPT AS SET FORTH HEREIN, THE MANUFACTURER MAKES NO OTHER WARRANTY, GUARANTEE, OR AGREEMENT EXPRESSED, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Manufacturing location:

Europe

OASIS East Sp.z o.o.

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