Installation and Service Guide

Point of Use Water Coolers

System Tested and Certified by NSF International to ANSI/NSF Standard 42 & 53 in models PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKY, PDF1AQHK, and PDF1AQHKY for the reduction of Particulates Class I, Chlorine, Lead (high and low alkalinity), cysts, turbidity, and volatile organic chemicals (VOCs). See performance data sheets for individual contaminants and reduction performance.





Reverse Osmosis System Tested and Certified by NSF International to ANSI/NSF Standard 58 in models PDQT1AQK, PDQT1AQKY, PDQT1AQHK, PDQT1AQHKY, PDT1AQK, and PDT1AQHK for the reduction of Total Dissolved Solids (TDS), Barium, Cadmium, Lead, Chromium (Hex), Radium and Pentavalent Arsenic. See Performance Data Sheet and Arsenic Facts section for an explanation of reduction

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115V WATER COOLER SPECIFICATIONS

Cook N' Cold™ Models PDT1AQK, PDQT1AQK, PDF1AQK, and PDQF1AQK

Voltage Size Shipping Weight (Approx) Cold Water Capacity* Compressor Compressor (Full Load) Refrigerant Refrigerant Charge 115VAC ±10%/1 PH/60 Hertz 43-1/2"(109cm)H., 13-1/2"(34cm)W., 16" (41cm)D. 60 lbs. (27kg) 0.5 G.P.H. (1.9 L.P.H.) 1/20 HP 1.1 Amps R 134a 1.875 oz. (53 grams)

Hot, Cook N' Cold™ Models PDT1AQHK, PDQT1AQHK, PDF1AQHK, and PDQF1AQHK

Voltage Size Shipping Weight (Approx) Cold Water Capacity* Hot Water Capacity* Compressor Compressor (Full Load) Refrigerant Refrigerant Charge 115VAC ±10%/1 PH/60 Hertz 43-1/2"(109cm)H., 13-1/2"(34cm)W., 16" (41cm)D. 63 lbs. (29kg) 0.4 G.P.H. (1.5 L.P.H.) 45/6 oz. (45/175ml.) cups 1/20 HP 5.5 Amps R 134a 1.875 oz. (53 grams)

*A.R.I. Ratings: Room Temperature 32°C (90°F); Supply Water Temperature 27°C (80°F); Cold Drinking Water Temperature 10°C (50°F); Hot Drinking Water Temperature 74°C (165°F)

Specifications subject to change without notice.

- ** These units have been manufactured with R134a refrigerant. Repairs to the system must be performed by a Certified Refrigeration Technician only. Always refer to the data plate located on the base of the unit for the proper refrigerant and charge.
- **WARNING:** 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 P.S.I.G.). Failure to comply will void the warranty. The manufacturer accepts no liability for damage caused by excessive water pressure.

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

230V WATER COOLER SPECIFICATIONS

Cook N' Cold™ Models PDT1AQKY, PDQT1AQKY, PDF1AQKY, and PDQF1AQKY

Voltage Size Shipping Weight (Approx) Cold Water Capacity* Compressor Compressor (Full Load) Refrigerant Refrigerant Charge 220-240 Volt, 50/60 Hertz 109cm, (43-1/2")H., 34cm, (13-1/2") W., 41cm, (16") D. 27kg (60 lbs.) 1.9 L.P.H. (0.5 G.P.H.) 1/20 HP 1.1 Amps R 134a 53 grams (1.875 oz.)

Hot, Cook N' Cold™ Models PDT1AQHKY, PDQT1AQHKY, PDF1AQHKY, and PDQF1AQHKY

Voltage Size Shipping Weight (Approx) Cold Water Capacity* Hot Water Capacity* Compressor Compressor (Full Load) Refrigerant Refrigerant Charge 220-240 Volt, 50/60 Hertz 109cm, (43-1/2")H., 34cm, (13-1/2")W., 41cm, (16")D. 29kg, (63 lbs.) 1.5 L.P.H., (0.4 G.P.H.) 45/175ml, (45/6 oz.) cups 1/20 HP 5.5 Amps R 134a 53 grams, (1.875 oz.)

*A.R.I. Ratings: Room Temperature 32°C, (90°F); Supply Water Temperature 27°C, (80°F); Cold Drinking Water Temperature 10°C, (50°F); Hot Drinking Water Temperature 74°C (165°F)

Specifications subject to change without notice.

- ** These units have been manufactured with R134a refrigerant. Repairs to the system must be performed by a Certified Refrigeration Technician only. Always refer to the data plate located on the base of the unit for the proper refrigerant and charge.
- **WARNING:** 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 P.S.I.G.). Failure to comply will void the warranty. The manufacturer accepts no liability for damage caused by excessive water pressure.

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

PDF1AQ, PDQF1AQ SERIES MODELS (Model Numbers 502567, 502568, 502569, 502570, 502563, 502564, 502565, 502566)



CONDITIONS FOR USE

SOURCE WATER SUPPLY			
Community/Private	Chlorinated/non-Chlorinated		
System Pressure	173 - 690 kPA (25 - 100 psig)		
Temperature	4° - 38° (40° - 100°F)		
SYSTEM STATISTICS			
Rated Service Flow*	1.7 Liters/minute (0.45 gallon/minute)		
Rated Capacity (PDQF models only)	6434 Liters (1700 gallons)		
Rated Capacity (PDF models only)	3898 Liters (1030 gallons)		

*Actual rate varies according to water pressure and customer usage.

System conforms to ANSI/NSF 42 & 53 for the specific performance claims in Appendix A as verified and substantiated by test data.

<u>CAUTION</u> DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

SYSTEMS CERTIFIED FOR CYST REDUCTION MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.

NOTE

This drinking water system is for use on potable cold water supplies only.

PDT1AQ, PDQT1AQ SERIES MODELS (Model Numbers 502575, 502576, 502571, 502572, 502573, 502574)



CONDITIONS FOR USE

PRODUCT RATE

PART NUMBER	SYSTEM OUTPUT	PART NUMBER	SYSTEM OUTPUT
033664	170 Liters/day (50 gal/day) *	033666	95 Liters/day (25 gal/day) *
	NSF rating of 87 Liters/day (23 gal/day)		

* Output based on manufacturer rating not NSF testing. Actual rate varies according to water temperature, pressure, TDS levels, and customer usage. The 25 gal/day membrane is an optional replacement element that is not tested or certified by NSF.

MEMBRANE: THIN FILM COMPOSITE

SOURCE WATER SUPPLY		CHEMICAL PARAMETERS	
Community/Private	Chlorinated/non-Chlorinated	Hardness (CaCo ₃)	350 mg/L (<20 grains/gallon U.S.)
System Pressure	242 - 690 kPA (35 -100 psig)	Iron (Fe)	<0.1 mg/L
Temperature	4° - 38° (40° - 100°F)	Manganese (Mn)	<0.05 mg/L
pH Range	3.0 to 11.0	Hydrogen Sulfide (H ₂ S)	0.00 mg/L
Maximum TDS Range	2000 mg/L	Chlorine (Cl ₂)	<2.0 mg/L
Turbidity	<1.0 NTU	¤ Silt Density Index: Value S	Stated in SDI units.
Silt Density Index	<4.0 SDI¤		

System conforms to ANSI/NSF 58 for the specific performance claims in Appendix B as verified and substantiated by test data.

<u>CAUTION</u> DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

SYSTEMS CERTIFIED FOR CYST REDUCTION MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.

NOTE

This drinking water system is for use on potable cold water supplies only.

WATER COOLER SET-UP & PREPARATION INSTRUCTION

A) Inspection

Inspect the carton and water cooler for evidence of rough handling and concealed damage. Damage claims should be filed with the carrier.

B) Inter-Component Connections

Connections between the cold water supply line, filtration unit and optional accessories are accomplished using plastic tubing and push-together quick-connect type fittings.

PLASTIC TUBING

- 1. Cut tube ends square and straight. Do not deform the tube (i.e., cause tube to compress its diameter so it is no longer round).
- 2. Make sure the outer surface of the tube is clear of marks or scratches for a length equal to twice the tube diameter. This allows the "O" ring to seat properly against the tube (See Figure 1).
- 3. Avoid sharp changes in direction when routing the tubing. Sharp turns cause the tubing to flex and deform which reduces its flow capacity.



Push tube through Collet into Body Figure 1 How to Use Quick-Connect Fittings

FILTERS

- The water shut off valve located at the top of the filter set must be in closed position (the handle against the metal back plate) for the filters to be installed or removed. The handle rotates 90° from the left of the valve cover to the front.
- 2. Make sure pressure is relieved through downstream valve before raising filter manifold cover for access to the filters. You will probably want to place a towel under the filters to protect the floor from any inadvertent drops.
- 3. Gently pull at the top of the filter to rotate it off of the bracket stem (see Figure 2 at right).
- Lift filter out of bottom support cup. When removing RO membrane, lean it out and plug drain opening with your finger upon removal. This will limit the amount of water that will leak through the open port.

QUICK-CONNECT FITTINGS

Fittings consist of two parts: a body and a colored collet. The collet color corresponds to the tubing color to be used at that connection (See Figure 1).

- 1. To install a tube, push it through the collet until it seats firmly at the bottom of the fitting.
- 2. To remove a tube, push and hold the collet against the body while pulling the tube out.

NOTE: Systems are shipped with a plug in each external fitting. Remove a plug in the same manner as a tube.



Tube must seat firmly at bottom of fitting



Push Collet against Body to release tube.

5. Follow steps 1 - 4 in reverse to install filters. If a filter is not on completely, the manifold cover will not close.



Figure 2 Installation of Filter

C) Filter/RO Unit Preparation

Warning - Failure to follow these procedures will affect cooler performance and void the warranty.

1) Filter/RO cartridge Installation:

- a) Remove the access door on the front of the unit by grasping the handholds on the sides and pulling off the door. A tap with the palm of your hand about 15cm (6") up the side of the cabinet or at the logo on the door will allow the door to pop off quite easily. *Note marked areas on the replacement parts drawing.*
- b) Refer to the instructions for filter removal and installation under the heading "Filters" in previous section (B) before beginning installation.
- c) For initial installation, remove the plastic packaging holding the float closed, if applicable, and follow the reservoir flushing procedure outlined in subsection 2b that follows. Also, clean the reservoir lid per the instructions in subsection 2c. All new filter sets need to be flushed before use. Subsection 3 describes the filter flushing procedure for a carbon filtration system, while subsection 4 addresses the reverse osmosis system. Before replacing an old filter set, you may want to clean the manifold as described in subsection 2a.

2) Cleaning Procedure EOUIPMENT NEEDED:

- Rubber gloves, sanitary
- Liquid dish soap
- Household bleach Unscented Only (5-1/4% sodium hypochlorite)
- 13mm (0.5") mean diameter stopper
- Plastic bucket
- Plastic bowl
- ¹/₄" OD quick connect plug
- Safety glasses
- "O" ring Lube FDA approved (P/N 030429-001)
- Filter jumper cartridges and 6" cleaning cartridge
- One 1.2m (4') piece of ¼" OD plastic tubing and quick connect union
- One short piece of ¼"OD plastic tubing (approximately 26mm [3"] long)

Note: A clean work area and equipment are essential to properly clean or sanitize the system (i.e., clean hands, tools, and containers). It is recommended that the reservoir and reservoir lid be cleaned and sanitized in your shop to exchange with the one on the cooler being serviced.

- a) Filter Modules
 - Disconnect blue product water tube from reservoir lid assembly. Using the 1.2m (4') blue tubing and John Guest fitting included in kit, connect blue tubing lines together. Run the 1.2m (4') blue tubing down the outside of the cooler and place the open end into the plastic bucket.
 - ii) Shut off other point-of-use systems, then disconnect the water line to these systems from the cooler and plug opening.

- iii) Using the pipet included in the kit, place one ml (¼ tsp) of household bleach in the empty cleaning cartridge.
- iv) Install cleaning cartridge on far right module and make sure all remaining modules are jumpered.
- v) Close the filter manifold cover and open the cooler shut off valve with the water supply on.
- vi) As soon as water begins to flow into the bucket, close the cooler shut off valve.
- vii) Let cooler stand with cleaning solution in it for 20-30 minutes. While waiting, now would be a good time to exchange the reservoir and reservoir lid with a clean set. After the 20-30 minutes are up, open the cooler shut off valve, and flush the system for 2 minutes (approximately 3.78 liters [one gallon]) to remove all traces of cleaning solution.
- viii) Continue on to subsection 3 to flush new filters in a carbon filtration system, use subsection 4 instructions for a reverse osmosis system.
- b) Reservoir Flushing
 - i) Clean the inside of the reservoir with a mild soap solution.
 - ii) Rinse thoroughly with filtered water.
 - iii) Mix a solution of 3 ml (½ teaspoon) of household bleach to 3.78 liters (one gallon) of water.
 - iv) Wipe down the inside of the reservoir with the solution. **Note:** Gloves should be worn during this procedure.
 - v) Rinse the reservoir with filtered water.
 - vi) Completely fill the reservoir with filtered water. Drain the reservoir through the faucets and the hot tank through the hot tank drain.
- c) Reservoir Lid
 - i) Clean all surfaces with a mild soap solution.
 - ii) Rinse thoroughly with filtered water.
 - iii) Mix a solution of 3ml (½ teaspoon) of household bleach to 3.78 liters (one gallon) of water.
 - iv) Wipe down all surfaces with the solution. **Note:** Gloves should be worn during this procedure.
 - v) Rinse thoroughly with filtered water.
 - vi) Insert a short piece of tubing into the elbow on top of the float valve.
 - vii) Use pipet included in kit and squeeze two pipets full of solution into short tubing, using the pipet to seal tube opening. This should be done over a sink or bucket as the chlorine solution will run out the opening of the float valve.
 - viii) Let lid sit for 20 minutes, then flush float valve with filtered water for one minute (approximately 1.9L [½ gallon]).

3) Carbon Filtration Flushing Procedures: Following this procedure will prepare your OASIS®

cooler to deliver the best possible drinking water.

- a) To flush the filters, make sure the carbon filters are in place.
- b) Disconnect the blue tube from the left side elbow of the filter manifold.
- c) Run a ¼" OD tube from the nearest drain location to the open elbow on the filter manifold.
- d) Connect a ¹/₄" OD tube from the inlet fitting to the water supply source.
- e) Turn on water supply, then open the cooler shut off valve.
- f) Flush the filters to drain for approximately 10 minutes.
- g) Close cooler shut off valve to turn off water to filters.

4) **RO Filtration Flushing Procedure**:

Following this procedure will prepare your OASIS® cooler to deliver the best possible drinking water.

- a) To flush the filters, make sure the carbon filters are in place and a clean jumper cartridge is in place of the RO membrane.
- b) Disconnect the blue tube from the left side elbow of the filter manifold.
- c) Run a ¼" OD tube from the nearest drain location to the open elbow on the filter manifold.
- d) Connect a ¹/₄" OD tube from the inlet fitting to the water supply source.
- e) Turn on water supply, then open the cooler shut off valve.
- f) Flush the filters to drain for approximately 10 minutes.
- g) Close cooler shut off valve to turn off water to filters.

- h) Flush the RO membrane using the following instructions.
 - i) Pull out the post carbon filter to gain access to the brine line (see Section B).
 - Remove the vertical red restrictor line from the elbow at the base of the filter set. The red restriction line can be removed by depressing the collet and pulling outward on the red tube as shown in Section B. If the restrictor sticks in the elbow, remove the collet by prying up on it, then pull out the restrictor and replace the collet.
 - iii) Run a ¼" OD tube from the nearest drain to the elbow.
 - iv) Install RO filter and post carbon filter per instructions in section B.
 - v) Open the cooler shut off valve to allow water to flow.
 - vi) Flush membrane for 3-4 minutes.
 - vii) Close the cooler shut off valve.
 - viii) Disconnect drain tubes from brine elbow and filter manifold elbow.
 - ix) Pull out the post carbon filter again, be sure the restrictor is firmly seated in the red tubing, then reinsert the restrictor line into the elbow fitting. Reinsert the blue tube to the filter manifold elbow.
 - x) Reinstall the post carbon filter and close the manifold cover.
- Snap the access door back in place on the front of the unit. Note: There are snap points at the handholds and near the base.

D) Water Cooler Installation Instructions

Note: The following states require a licensed plumber to install cooler; AR, GA, MA, MI, OK, RI, SC, SD, TX, VT and WI. A state-registered installer or contractor may be used in CA, KS, MN, NM and OR.

WARNING: 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 100 P.S.I.G. (690kPA). Failure to comply will void the warranty. The manufacturer accepts no liability for damage caused by excessive water pressure.

- Once reservoir and filter flushing procedures are done, determine the best installation location. Consider customer preference, electrical outlet, cold water line access, and if applicable, drain locations. The unit must be within 4.6m (15 feet) of the source water supply and if applicable, other point-of-use systems or drain pipe. Do not place unit where it will be exposed to freezing temperatures or direct sunlight.
- 2) The water cooler should be located at least 5cm (2") from the wall to assure adequate condenser air circulation.
- 3) Locate your best access to the cold water source. System is to be connected to cold water supply only. Tap into the water line with a saddle tapping valve**, a faucet fitting ball valve, a solder tee, or similar device.

Note: Always check the local plumbing codes before tapping into a water line. **(See the Saddle Tapping Valve Installation Instructions in the Accessory Section of this manual if applicable. Valves are available from the Service Department).

- 4) Warning: Use only ¼" OD copper tubing to connect your water supply to the cooler access port. Connect your water line to the port labeled "water inlet". The inlet fittings used on the OASIS® Cooler are quick-connect fittings (see section B). Units are shipped with blue plugs in each fitting. Remove the plugs before inserting the tube. A stop valve (not included) is recommended between the inlet connection to the cooler and the water tap.
- 5) The cooler is equipped with a clamp that relieves stress on the water inlet and drain/product water fittings when the cooler is moved. The copper tubing can be coiled and secured in the clamp as shown in Figure 3 below. This configuration will help to reduce the leaks associated with moving a cooler with plumbing still attached as well as removing the stress from the fittings.
- 6) **RO** Cooler only complete instruction 6, Filter models proceed to instruction 7.

Connect a ¹/₄" OD copper tube to the drain fitting located on the back of the unit. This tube should be routed to the most

convenient drain location** such as a sink drain. Note: Always check the local plumbing codes before tapping into a water line. **(See the Drain Saddle Clamp Installation Instructions in the Accessory Section of this manual.) Drain applications that route tubing from a cooler to the ceiling and then into a drain are acceptable. Some reduction in membrane productivity may occur, however, depending on the height of the ceiling and the source water line pressure. Some local plumbing codes require an air gap to be installed between the cooler and the drain connection. Air gaps are available from the service department. Check your local plumbing codes to assure compliance.

7) To speed up the process of priming the unit, you may wish to pour 12 liters (3 gallons) of filtered water into the reservoir. To do so, first remove the cooler top and remove the reservoir lid (see "Reservoir" under the Periodic Maintenance section of the service information for the easiest method). Replace the lid and top after pouring the water into the reservoir.

EXTERNAL PLUMBING INSTRUCTIONS

- 8) Check the available power supply against the water cooler data plate to assure proper electrical service. The voltage specification is $115v \pm 10\%$ (220-240V for "Y" models) and voltage outside of this specification will affect cooler performance and could permanently damage the refrigeration system.
- 9) Verify that the hot tank switch is in the "off" position. Plug power supply cord into receptacle.
- 10) Turn on water supply to cooler, then check for leaks.
- 11) Confirm the system is producing water. An RO system will be venting rinse water to drain through the flow control (1/4" red tubing to drain outlet).

Note: RO system cleans itself automatically be rinsing concentrates from the membrane. Process requires about eight gallons of rejected water for one gallon of product water.

12) Open each faucet until water flows freely.

SCALD.

13) On hot tank models, turn on the hot tank by depressing the switch toward the reset position. The switch is located inside the access door, mounted on the column support.CAUTION: WATER FROM HOT FAUCET CAN

DO NOT USE THE FIRST TWO RESERVOIRS OF WATER.





ACCESSORIES

SADDLE TAPPING VALVE

Part Number 033861-001

NOTE: State and local plumbing codes may prohibit the use of saddle tapping valves^{**}. All connections must conform to applicable plumbing codes.

****All states prohibit the use of saddle tapping valves in commercial applications.** *Do not install feed water assembly*

on the hot water line. Do not turn valve handle before or while installing valve so that piercing lance does not extend past the opening of the rubber gasket.



FOR COPPER PIPE INSTALLATION:

- Choose the location for the saddle valve on the cold water line. To identify which is the hot supply pipe and which is the cold supply, turn on both sides of the sink faucet. The hot water pipe will get considerably warmer. Turn off the hot water side.
- Close the valve supplying water to the location you have chosen. Some mixing type faucets may require that the hot water supply be closed as well.
- Assemble the saddle tapping valve to the supply tubing. Refer to Figure 4 above for detail on the reversible back plate orientation.
- 4) Tighten the screws evenly so the brackets are pretty much parallel. Tighten each screw firmly, but take care not to crush the supply tubing.
- 5) Using the compression fitting items shown in Figure 4, connect the tubing from the filter set inlet to the outlet of the saddle valve.
- 6) Turn the saddle tapping valve handle clockwise until it is completely seated. This pierces the tubing, but the valve is closed.
- 7) Turn on the water supply and allow water to run from the sink faucet for a few minutes to clear the line of any debris from the installation. Check for leaks at the saddle valve. Note: If the flow from the faucet is reduced, clean the aerator at the faucet outlet.

FOR THICKWALL PIPE INSTALLATION:

- Choose the location for the saddle valve on the cold water line. To identify which is the hot supply pipe and which is the cold supply, turn on both sides of the sink faucet. The hot water pipe will get considerably warmer. Turn off the hot water side.
- 2) Close the valve supplying water to the location you have chosen. Some mixing type faucets may require that the hot water supply be closed as well.
- Drill a 5mm (3/16") hole in the pipe with a clean drill bit in a battery powered hand drill. This will avoid potential shock hazard.
- 4) Turn the handle clockwise so that the piercing lance extends past the rubber gasket no more than 5mm(3/16").
- 5) Place the valve body over the hole making sure the lance fits into the hole.
- 6) Tighten the screws evenly so the brackets are pretty much parallel. Tighten each screw firmly, but take care not to crush the supply tubing.
- Using the compression fitting items shown in Figure 4, connect the tubing from the filter set inlet to the outlet of the saddle valve.
- 8) Turn the saddle tapping valve handle clockwise until it is completely seated.
- 9) Turn on the water supply and allow water to run from the sink faucet for a few minutes to clear the line of any debris from the installation. Check for leaks at the saddle valve. Note: If the flow from the faucet is reduced, clean the aerator at the faucet outlet.

DRAIN SADDLE CLAMP ASSEMBLY

(for RO units)

Part Number 033862-001

NOTE: State and local plumbing codes may prohibit the use of saddle clamps. All connections must conform to applicable plumbing codes.

The drain clamp assembly should be installed on a straight length of drainpipe between the "P" or "S" trap and the sink (see Figure 5). If possible, orient the hole to be drilled toward the desired location of the drinking water faucet. Installation should be as far away as practical from the garbage disposal. If you have a double sink, install drain outlet on the sink drain opposite disposal.

Note: For mounting the saddle clamp on a horizontal drain line, the drain hole should be as close as possible to the top of the pipe. The location and orientation of the drain connection to the pipe is critical to the system performance.

- 1) Position drain outlet saddle on drain pipe. Allow adequate space for drilling operation.
- 2) Tighten the bolts evenly, avoiding over tightening.
- 3) Use the opening in the drain saddle as a guide and drill a 7mm (1/4") diameter hole in the drain pipe. Clean any shavings out of the drain saddle connection before installing the push-in fitting.

4) Wrap Teflon tape on the threads of the drain fitting and install it in the drain saddle.





SHUT-OFF "BALL" VALVE ASSEMBLY

Part Number 031177-001 (3/8" tubing) 031177-002 (1/4" tubing) You may wish to have a shut-off valve installed directly



behind the unit. This is an optional precaution to shut off water to the unit, since there is a shut off valve inside the access door already.

IN-LINE AIR GAP ASSEMBLY (for RO units) Part Number 033960-001

NOTE: All connections must conform to applicable plumbing codes.

The Air Gap assembly may be installed anywhere between the unit and the drain. It must be installed in a vertical orientation making it the highest point between the cooler and the drain connection. The inlet barb is for $\frac{1}{4}$ " OD tubing and the outlet barb connects to $\frac{3}{8}$ " OD tubing.



DOW CORNING® COMPOUND 111

Part Number 030429-001

We recommend the use of DOW 111 exclusively to lubricate o-rings on all OASIS® components and systems. This silicone based *FDA approved* lubricant has high viscosity, does not readily evaporate at room temperature, and smoothly adheres to the o-ring. These qualities make DOW 111 an easy to use long lasting lubricant.

SERVICE INFORMATION & GUIDELINES

A) Lubrication

This unit is equipped with a hermetically sealed compressor and no periodic lubrication is necessary.

B) Periodic Maintenance

1) Condenser Cleaning

The black static condenser on the rear of the unit must be kept clean of dirt and lint. Visually inspect every 3 months. To clean it, follow these steps:

- a) Unplug the cooler.
- b) Clean condenser with a small stiff non-wire brush.

2) Filter Changes

Periodic replacement of the filter/RO cartridges will be required. The frequency of the change will be determined by the attributes of the source water. Foul taste or odor may occur if filters are not changed at proper intervals. To change out filters, follow these steps:

- a) Flush a new set of filters per the flushing procedures in Unit Preparation instruction section in your shop. Plug the openings, keeping in mind the RO cartridge has a drain port on the bottom.
- b) Take this vessel set to the installation and install it in place of the existing filter set. Discard the old filter set.

3) **Reservoir**

Reservoir cleaning should be done each time the filters are changed. Prepare a spare reservoir assembly following the "Reservoir Flushing" procedures outlined in the Unit Preparation instructions. On hot models inspect the o-rings in the hot tank fitting and the reservoir, which seal the hot tank opening. These should be replaced if they show signs of a flattened diameter. To change to a clean reservoir, follow these steps:

- a) Remove the top by lifting it up and pressing in on the cabinet back about 100mm (4") in from the side and 50mm (2") down from the top.
- b) To remove the reservoir lid, it is easiest to push down slightly near the lid center and lift on each tab at the front of the lid individually. Once

C) Hot Tank Cleaning Instructions

those have loosened, lift up on each of the other two corners so the lid lifts as straight up as possible. This will help avoid the sealing edge from catching as the lid is removed.

- c) Drain the water from the reservoir by opening the cook and/or cold faucet.
- d) Grasp the reservoir using the handholds on top and pull upward. Some resistance is normal because of the tight fit required at the sleeve-onprobe.
- e) Slide the newly sanitized reservoir into place taking care not to touch the inside of the reservoir with bare hands.
- f) Replace the reservoir lid with a clean, sanitized lid when changing the reservoir.
- g) Snap the top back on the cooler.

4) **Batteries**

The water quality monitor is battery powered. The life of the battery is related to the number of times the test button is pressed, but, in general, the battery should be replaced once a year to ensure uninterrupted service. The carbon filter monitor should be reset each time the filters are replaced. Reset the monitor by removing the batteries, then putting them back in.

5) Air Filter

Periodic replacement of the air filter assembly is required to prevent airborne contaminants from entering the reservoir. When the water filters are changed and reservoir is sanitized, it is recommended that the air filter also be replaced.

6) In-line Strainer

Periodic cleaning of the strainer inside the tube at the elbow on the mechanical float is required to maintain water flow. It can be removed from the tube for cleaning or flush water in reverse flow through the strainer. It is recommended that this be done at least as often as the filters are changed.

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

- 1) Normal hot water flow appears restricted.
- 2) Noisy heating cycles are heard.
- 3) Water in the cooling tank is very warm.
- 4) Mineral build-up has imparted a taste to the water.

PLEASE READ AND FOLLOW ALL DIRECTIONS TO PREVENT DAMAGE TO THE UNIT AND TO THE USER.

CAUTION: Because this cleaning process involves very hot water that may scald, the use of rubber gloves is recommended. **KEEP CHILDREN AWAY.**

EQUIPMENT NEEDED:

- 113grams (4 oz.) of citric acid crystals. Critic acid crystals are available in four-ounce and fifty-pound quantities from the address at the end of this manual.
- A pair of rubber gloves.
- A bucket or pan with a 7.5 liters (2 gallon) capacity.
- A funnel with a 10mm (3/8") max diameter at the end.
- A 1 liter (1 quart) measuring container for hot liquids.

HOT TANK CLEANING PROCEDURE

- 1) Unplug the service cord and turn off water supply.
- 2) Draw water from the hot faucet until the water is cool.
- 3) Remove the top and set aside the reservoir lid.
- 4) Place a container under the hot tank drain valve. For convenience, insert a 3/8" OD plastic tube into the opening at the end of the black valve and turn the petcock counterclockwise or simply turn the valve's petcock counterclockwise without the tube into the drain. Drain tank.
- 5) Drain an additional amount of water from the reservoir through a faucet to further expose the hot tank inlet tube opening.
- 6) Close hot tank drain valve.
- 7) Mix 113 grams (4 ounces) of citric acid crystals with one liter (1 quart) of very hot water. (Wearing rubber gloves is recommended).
- Place a funnel inside the reservoir in the left-hand tube (in line with the hot faucet). Carefully pour the hot solution into the funnel. BE CAREFUL NOT TO SCALD YOUR HANDS.
- 9) Remove the funnel and fill the reservoir with 7.5 liters (2 gallons) of water. Open the hot faucet to allow the hot tank to fill.
- 10) Place the reservoir lid on top of the reservoir.
- 11) Plug the service cord into the grounded fused outlet.
- 12) Let the unit stand for at least 20 minutes with the hot tank on.
- 13) Unplug the service cord.
- 14) TURN OFF THE HOT TANK SWITCH FOUND ON THE COLUMN SUPPORT BEHIND THE ACCESS DOOR. CAUTION: FAILURE TO TURN OFF HOT TANK COULD RESULT IN PHYSICAL DAMAGE TO THIS UNIT.
- 15) Remove reservoir lid as before.

D) Cabinet Cleaning Suggestions

- 16) Draw water from the hot faucet until the water is no longer warm.
- 17) Open the hot tank drain valve and catch the water in a pan or bucket. The water will be discolored. NOTE: THIS DRAIN WATER SHOULD BE IMMEDIATELY POURED DOWN A DRAIN TO PREVENT ACCIDENTAL SPILLING. THIS WATER WILL STAIN.
- 18) This is also a good time to sanitize the reservoir as outlined in Section C.2.b of the Unit Preparation instructions on page 7.
- 19) Pour at least 7.5 liters (2 gallons) of water into the reservoir and allow this water to drain out the hot tank drain.
- 20) Close drain valve and replace lid making sure it snaps completely into place.
- 21) Plug the service cord back into the grounded fused outlet and turn on the water supply.
- 22) Allow the unit to fill the reservoir half full. Note: Hot tank should still be turned OFF.
- 23) Open the hot faucet and draw water from the faucet until it flows freely.
- 24) Draw at least one liter (1 quart) of water from each faucet.
- 25) Turn the hot tank switch on (toward the "RESET" position).
- 26) Replace the top of the cabinetry.

Your hot tank should now be clean. If the flow of water or the noisy cycles have not been improved, you should have the unit repaired at an authorized service center. Cleaning the unit in this manner will not only make the unit run more efficiently, but will make the water taste better.

There is no maintenance required on the polycarbonate plastic cabinetry. Only regular cleaning with a common mild soap solution is all that is necessary to remove dirt and grime from the polycarbonate cabinet.

The drip tray is dishwasher safe.

Abrasive cleaners are not recommended because of the potential for scratching.

Flammable cleaners are not recommended because of health and safety reasons.

E) Operating Features

1) Overload Protection

The compressor motor is equipped with an automatic reset protector, which will disconnect the motor from the line in case of an overload.

2) Safety Float

The cooler is designed with a safety mechanism to prevent overfilling. In case the primary fill float fails, a second float is activated as the water level rises. This float shuts off the water to the reservoir (**NOTE: A hard impact or jarring of the unit while it is filling may trip the safety float**). To restart water flow, press the black reset button about half way down on the reservoir lid until the pressure on the safety float is released.

- 3) Monitor Versions
 - a) Water Quality Monitor Reverse Osmosis Filtration Unit: The reverse osmosis water cooler may be equipped with a water quality monitor. This water quality monitor uses dual probes to accurately indicate membrane performance. A split-second power pulse compares the Total Dissolved solids (TDS) level of the feed water with that of the product water. The monitor is activated by pressing the test button. When the button is pressed and momentarily held down, the monitor instantly checks the TDS levels and reports membrane status by illuminating either a green or yellow light located next to the test button. (See following Table 1). Power is supplied by a 9-volt battery located within the access door on the front of the unit.

Either the green "good" light will illuminate indicating above 70% TDS reduction or the yellow "service" light will illuminate indicating below 70% TDS reduction.

Indication	Probable cause	Solution
Green Light	System operating normally	None
Yellow Light	Low or non-usage	Draw two quarts of water from unit Wait 10-minutes and retest
	Membrane depleted or fouled	Drain reservoir, replace membrane and sanitize system.
No Light	Battery dead	Replace battery

REVERSE OSMOSIS WATER QUALITY MONITOR

Table 1 Reverse Osmosis Monitor Indication Reference

b) Water Quality Monitor - Carbon Filtration Unit: The water cooler may be equipped with a gallon monitor. This monitor tracks the number of gallons that flows through the filtration system. The system is preset at the factory to indicate when it is time to change the filters. When the test button is pushed, either the green "good" light will illuminate indicating less than the rated gallon count or the yellow "service" light will illuminate indicating the rated gallon count has been exceeded. The yellow "service" light will illuminate during water flow if a year has passed since previous filter change or the gallon count has been exceeded. Two AA batteries, located inside the monitor box at the filter outlet, supply power to the monitor. The monitor is reset to zero by removing a battery, then putting it back in.

CARBON FILTER WATER QUALITY MONITOR

Indication	Probable cause	Solution
Green Light	System operating normally	None
Yellow Light	Rated capacity is exceeded	Replace filters and reset monitor
No Light	Batteries dead	Replace batteries

 Table 2 Carbon Monitor Indication Reference

4) Safer Faucets

This water cooler incorporates the "safer faucet" for hot water dispensing. This deters accidental dispensing of hot water.

5) *Temperature Control*

Both the hot tank and the cold reservoir have temperature controls, which can be adjusted with a small bladed screwdriver. The cold control can be turned clockwise for cooler water and counterclockwise for warmer water in quarter turn adjustments. The hot tank thermostat can be turned clockwise for hotter water.

SYSTEM TROUBLE SHOOTING GUIDE

Symptom	Probable Cause	Solution
No water	Water supply is turned OFF	Turn water ON. Verify OASIS® water
		shut-off valve is open
	Sefete Electhes tringed	
	Safety Float has upped	button down about half way until you feel
		the pressure release
Not enough water	Water supply is blocked	Clear restriction rotate valve handle on
	water suppry is brocked	tap water feed valve, check in-line strainer
		at mechanical float
	Clogged filter cartridges are restricting	Replace sediment and carbon filters
	water flow	
Leak at fitting	Tubing not pushed completely into fitting	Push tube into fitting past O-ring seal
	Defective teha	Cut damaged and off of take or realized
	Delective tube	tube
		lube
	Worn or damaged O-ring	Replace O-ring*
Water has an offensive taste and/or odor	Filters depleted	Replace filters, clean and sanitize system
	-	
	Reservoir needs cleaned	Drain reservoir, sanitize and let it refill
		(RO systems take several hours to
		completely fill)
Leak at filter	Bracket stem has nick or scratches	Replace bracket**
	O-ring has nick or scratches	Replace filter cartridge
Leak at saddle tapping valve	Loose clamp	Tighten clamp screws, do not crush source
II C	r r	water tubing
		-
	Tubing deformed	Cut damaged area off of tube or replace
		tube and sleeve
No hot water	Hot tank switch is turned OFF	Turn switch ON (reset)
	Circuit needs to be reset	Turn switch off then back ON
No cold water	Cooler not plugged in	Plug cooler into outlet
	Water drawn in less time than cooler can	Let cooler run for 2 hours and recheck
	recover	
	Refrigerant loss	Call authorized service center or customer
		service number on the back page of this
Hot watan from soom towns out on family	Hot tonk noode alaon-4	manual.
not water from room temperature faucet	HOI TANK NEEDS Cleaned	guidelines on page 12)
		guidennes on page 12).
	Hot tank thermostat failed	Call authorized service center or customer
		service number on the back page of this
		manual.

*Always check that there is adequate lubricant (P\N 030429-001) on O-rings before installation. **To replace a bracket, all brackets must first be removed from the plate as a unit.

ADDITIONAL TROUBLE SHOOTING FOR REVERSE OSMOSIS SYSTEM

Symptom	Probable Cause	Solution
Not enough water	Low water pressure	Check water line pressure. Unit will not
		operate at less than 242 kPA (35 psig)
	Reservoir is depleted	Consider additional coolers to meet water
		need or, if applicable, higher production
		membrane
	Clogged filter is restricting water flow	Replace sediment and carbon filters
No drain water	Clogged flow restrictor	Replace flow restrictor
Leaking drain assembly	Misalignment of hole in drain saddle	Realign drain saddle
	Drain saddle clamp is loose	Tighten bolts to compress gasket more
Leak from air gap	Hole or drain tube is blocked	Remove debris
	Misalignment of hole in drain saddle	Realign drain saddle
	Drain line is restricted	Clean out drain line
Water has an offensive taste and/or odor	Carbon post-filter is depleted	Replace carbon post-filter cartridge
	Sediment/Carbon filters depleted	Replace filters, clean system
	Membrane depleted or fouled	If Water Quality Monitor reads yellow or
		if TDS test is unsatisfactory, drain
		reservoir, replace membrane and clean
		system

SERVICING THE CARBON FILTER SYSTEM

Filtration Assembly	Component	Routine	OASIS®
Major Components	Part Number	Maintenance	Warranty
Sediment Filter	033660	Replace filters as required	System: 5 years limited (See
Carbon Filter	033663	or every 6 to 12 months	page 22 for details)
Carbon Filter, lead	033665	depending on feed water	See page iii in Appendix A for
		quality	filter warranty

PARTS - MAINTENANCE- WARRANTY INFORMATION

ROUTINE MAINTENANCE

Service Requirements	Recommended Service Intervals
To insure the system operates at its optimum level, certain routine	Replace filters ever 6 to 12 months depending on feed water
maintenance must be performed.	quality.
Frequency of maintenance performance will depend on feed	
water quality and level of system usage.	Replace batteries for monitor yearly depending on usage.



PARTS AND SERVICE AVAILABLE THROUGH YOUR OASIS® DEALER

Item	Description	Part No.	Item	Description	Part No.
1	Plate, Filter Top	033584-003	8	Bracket, Filter System	033582-004
2	Bracket, Filter Upper	033670	9	Label, Carbon set	033481-005
3	Connector, Module	033672-001	10	Monitor, Flow	033598-001
4	Bracket, Filter Lower	033671-001		Battery, AA	033486-002
5	Housing, Valve Cover	033667-001	11	Filter, Sediment	033660
6	Valve Assy, Straight Ball	033724-001	12	Filter, Carbon	033663
7	Ftg, JG Elbow, Plug in White	029994-003	13	Filter, Lead/Cyst	033665

Figure 7 Parts Breakdown

SERVICING THE REVERSE OSMOSIS SYSTEM

Reverse Osmosis Unit Reverse Osmosis Unit Component Component **OASIS® Major Components** Parts **Major Components** Parts Warranty Number Number Sediment Pre-Filter 033660 Thin Film Composite Membrane: System: 5 years limited (See Extruded Pre-Carbon Filter 95 LPD (25GPD) ** 033666 page 22 for details) 033661 190 LPD (50GPD) ** See page iv in Appendix B for Extruded Post-Carbon 033663 033664 NSF rating of 87 LPD (23 GPD) filter warranty Filter

PARTS – WARRANTY INFORMATION

** GPD refers to Gallons per Day, LPD refers to Liters per Day. Actual rate varies according to water temperature, pressure, TDS levels, and customer usage. The 25 GPD membrane is an optional replacement element that is not tested or certified by NSF.

ROUTINE MAINTENANCE

Service Requirements	Recommended Service Intervals
To insure the system operates at its optimum level, certain routine	Replace filters every 6-12 months depending on feed water
maintenance must be performed.	quality.
Frequency of maintenance performance will depend on feed water quality and level of system usage.	Replace membrane as required based on periodic TDS rejection tests or Water Quality Monitor.
CLEAN: Each time filters are replace. SANITIZE: At least once a year and each time membrane is replaced.	Replace battery for Water Quality Monitor yearly depending on usage.



PARTS AND SERVICE AVAILABLE THROUGH YOUR OASIS® DEALER

Item	Description	Part Number
1	Plate, Filter Top	033584-004
2	Bracket, Filter Upper	033670
3	Connector, Module	033672-001
4	Bracket, Filter Lower	033671-001
5	Housing, Valve Cover	033667-001
6	Valve Assy, Straight Ball	033724-001
7	Bracket, RO Filter Lower	033671-002
8	Ftg, JG Union Elbow	028481-001
9	Ftg, JG, Elbow, Plug in Blue	029994-002
10	Ftg, JG, Elbow, Plug in Yellow	029994-004

Item	Description	Part Number
11	Bracket, Filter System	033582-004
12	Label, RO Set	033481-004
13	Flow Restrictor	
	50 GPD	031728-004
	25 GPD	031728-003
14	Filter, Sediment	033660
15	Filter, Pre-carbon	033661
16	Filter, RO Membrane	
	50 GPD	033664
	25 GPD	033666
17	Filter, Carbon	033663

Figure 8 Parts Breakdown

REPLACEMENT PARTS BREAKDOWN



PARTS LIST

	Cabinet Assy Model		PDF1AQK(Y)		PDF1AQHK(Y)		PDQF1AQK(Y)		PDQF1AQHK(Y)
Item	Part Description	Qty		Qty		Qty		Qty	
No									
1	O-ring, 0.424ID x 0.103			4	030858-212			4	030858-212
2	Elbow Assy, Hot Faucet			1	033395-001			1	033395-001
3	Faucet Assy, Cold	1	032052-002	1	032052-002				
4	Faucet Assy, Cook	1	032052-001	1	032052-001	1	032052-001	1	032052-001
5	Faucet Assy, Hot			1	032052-003			1	032052-003
6	Gasket, Faucet	2	031429-001	3	031429-001	2	031429-001	3	031429-001
7	Tube, Supply	1	033397-001	2	033397-001	1	033397-001	2	033397-001
8	Gasket	1	028706-005	1	028706-005	1	028706-005	1	028706-005
9	Arm Assy, RO					1	033476-001	1	033476-001
10	Screw, Shoulder RO					1	033475-001	1	033475-001
11	Weight, RO					1	033474-001	1	033474-001
12	Hanger Assy, RO					1	033472-001	1	033472-001
13	Fitting, EL-0.25	1	028481-001	1	028481-001	1	028481-001	1	028481-001
17	Strainer, In-Line	1	033264-002	1	033264-002	1	033264-002	1	033264-002
18	Filter Assy, Air	1	031823-002	1	031823-002	1	031823-002	1	031823-002
19	Screw, Pan Hd Type	3	026630-036	3	026630-036	3	026630-036	3	026630-036
	#8-16x0.050								
20	Button, Float Reset	1	033286-001	1	033286-001	1	033286-001	1	033286-001
21	Arm, Reset	1	033285-001	1	033285-001	1	033285-001	1	033285-001
22	Cover, Water Qual Monitor					1	033224-002	1	033224-002
23	Board Assy, Wtr Qual Monitor					1	033598-001	1	033598-001
24	Pushbutton, Qual Mon						030417-001	1	030417-001
25	Valve, Duckbill Check	1	027403-003	1	027403-003	1	027403-003	1	027403-003

	Cabinet Assy Model		PDT1AQK(Y)		PDT1AQHK(Y)		PDQT1AQK(Y)		PDQT1AQHK(Y)
Item	Part Description	Qty		Qty		Qty		Qty	
No		-						-	
1	O-ring, 0.424ID x 0.103			4	030858-212			4	030858-212
2	Elbow Assy, Hot Faucet			1	033395-001			1	033395-001
3	Faucet Assy, Cold	1	032052-002	1	032052-002				
4	Faucet Assy, Cook	1	032052-001	1	032052-001	1	032052-001	1	032052-001
5	Faucet Assy, Hot			1	032052-003			1	032052-003
6	Gasket, Faucet	2	031429-001	3	031429-001	2	031429-001	3	031429-001
7	Tube, Supply	1	033397-001	2	033397-001	1	033397-001	2	033397-001
8	Gasket	2	028706-005	2	028706-005	2	028706-005	2	028706-005
9	Arm Assy, RO	1	033476-001	1	033476-001	1	033476-001	1	033476-001
10	Screw, Shoulder RO	1	033475-001	1	033475-001	1	033475-001	1	033475-001
11	Weight, RO	1	033474-001	1	033474-001	1	033474-001	1	033474-001
12	Hanger Assy, RO	1	033472-001	1	033472-001	1	033472-001	1	033472-001
13	Fitting, EL-0.25	2	028481-001	2	028481-001	2	028481-001	2	028481-001
14	Fitting, STR-0.25	1	028483-001	1	028483-001	1	028483-001	1	028483-001
15	Locknut	1	030056-001	1	030056-001	1	030056-001	1	030056-001
16	Grommet, RO	1	019078-009	1	019078-009	1	019078-009	1	019078-009
17	Strainer, In-Line	1	033264-002	1	033264-002	1	033264-002	1	033264-002
18	Filter Assy, Air	1	031823-002	1	031823-002	1	031823-002	1	031823-002
19	Screw, Pan Hd Type	3	026630-036	3	026630-036	3	026630-036	3	026630-036
	#8-16x0.050								
20	Button, Float Reset	1	033286-001	1	033286-001	1	033286-001	1	033286-001
21	Arm, Reset	1	033285-001	1	033285-001	1	033285-001	1	033285-001
22	Cover, Water Qual Monitor					1	033224-002	1	033224-002
23	Board Assy, Wtr Qual Monitor					1	033598-001	1	033598-001
24	Pushbutton, Qual Mon					1	030417-001	1	030417-001
25	Valve, Duckbill Check	1	027403-003	1	027403-003	1	027403-003	1	027403-003

ELECTRICAL DIAGRAM



OASIS® WATER COOLER LIMITED WARRANTY

FIRST YEAR:

The Manufacturer promises the original purchaser (user) to repair or, at the Manufacturer's option, to replace any part of this water cooler which proves to be inoperative due to a defect in material or workmanship under normal use, for a period of one year from the date of original installation or for a period of eighteen (18) months after date of shipment from the factory, whichever occurs first. During the one year warranty, the Manufacturer will, through its approved service center or factory repair department, provide labor and parts necessary to correct such inoperative condition at no charge, if the water cooler has been installed and operated in accordance with the written instructions furnished with the water cooler.

If it becomes necessary to ship the inoperative water cooler to the approved service center or factory repair department, the Manufacturer will pay the transportation charges both ways via common carrier. Local delivery charges are not covered.

The cost of labor required to disconnect and reconnect plumbing and electrical connections will be the responsibility of the user (owner).

SECOND THROUGH FIFTH YEAR:

The Manufacturer promises within the second through fifth year to repair, or at its option, to replace any part of the sealed refrigeration system (compressor, condenser, evaporator, compartment evaporator and interconnecting refrigerant lines, or the internal cold water system cooling tank) which prove to be inoperative due to a defect in material or workmanship. The Manufacturer will provide through its approved service center or the factory repair department, the labor at no charge, to install such parts of the sealed refrigeration or cold water system.

If it becomes necessary to ship the inoperative water cooler to the approved service center or factory repair department for a sealed refrigeration system repair, the Manufacturer will pay the transportation charge both ways via common carrier. Local delivery charges are not covered.

The cost of labor, to diagnose a sealed refrigeration system or cold water system failure, the cost of labor required to disconnect and reconnect plumbing and electrical connections or the labor to remove the refrigeration system from the water cooler, will be the responsibility of the user (owner).

In addition to the sealed refrigeration or cold water system coverage, if any of the following parts become inoperative due to a defect in material of workmanship, the Manufacturer promises to replace the part at no charge providing the part is removed and returned, properly tagged, to the nearest approved service center or the factory.

These parts are: hot tank, hot tank thermostat, heat limiter, cold thermostat, compressor starting relay and overload, PC board and mechanical float assembly.

The labor to change the parts in the above paragraph will be the responsibility of the user (owner).

GENERAL PROVISIONS AND EXCLUSIONS:

This warranty applies only within the Continental Limits of the United States of America and Canada.

This warranty does not apply and no agreement, either expressed or implied, shall be applicable if the affixed serial number is removed, defaced or obliterated.

This warranty does not apply if service of the sealed refrigeration system or cold water system or parts furnished as original equipment by the Manufacturer are not obtained from an approved service center or the factory.

This warranty does not apply to any water components that become inoperative due to liming conditions.

This warranty does not apply to any water cooler or components that become inoperable because of a failure to satisfy standards or regulations adopted by any government or agency thereof subsequent to the date of shipment from the factory.

This warranty does not cover performance, failure or damages of any part resulting from external causes such as alterations, abuse, misuse, misapplication, corrosion or acts of God.

WARNING

The warranty and the Underwriters' Laboratory listing or the Conformity to the European Union Directive for this machine are automatically voided if this machine is altered, modified, or combined with any other machine or device. Alteration or modification of this machine may cause serious flooding and/or hazardous electrical shock or fire.

Except as set forth herein, the Manufacturer makes no other warranty, guarantee or agreement expressed, implied or statutory, including any implied warranty of merchantability or fitness for a particular purpose.

The foregoing is in lieu of all other agreements expressed, implied or statutory, and all other obligations or liabilities of the Manufacturer. The Manufacturer does not assume or authorize any person to assume any obligations of liability in connection with this product. In no event will the Manufacturer be liable for special or consequential damages or for any delay in the performance of this agreement due to causes beyond their control.

EXPORT WARRANTY

The OASIS Export Warranty shall apply to all areas outside of the Continental Limits of the United States and Canada. The Export Warranty shall mirror the domestic warranty outlined above in all respects except that a) the Export Warranty shall have no coverage for the Second through Fifth years, and b) the owner (user) shall be responsible for any and all transportation charges to and from the closest OASIS repair facility.

APPENDIX A

Performance Data Sheet

for OASIS® Carbon Filtration Models

PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKY, PDF1AQHK, and PDF1AQHKY



Performance Data Sheet

OASIS[®] Model Numbers: 502563, 502564, 502565, 502566, 502567, 502568, 502569 & 502570

WATER COOLER MODELS PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKK, PDF1AQHKY, PDF1AQHKY

The system conforms to ANSI/NSF 42 and 53 for the specific performance claims as verified and substantiated by test data. The system has been tested according to ANSI/NSF 42 and 53 for reduction of substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in ANSI/NSF 42 and 53.

DATA SHEET REDUCTION CLAIMS

ANSI/NSF STANDARD 42

CARBON FILTER TESTED: Lead/Cyst

Substance	Influent challenge concentration	Avg. % Rej.	Reduction requirement
Chlorine	$2.0 \text{ mg/L} \pm 10\%$	≥ 97.5	≥ 50%
Particulate, Class I particles	At least 10,000 particles/ml	99.6	≥ 85%
0.5 μm to <1 μm			

ANSI/NSF STANDARD 53

CARBON FILTER TESTED: Lead/Cyst

Substance	Influent challenge	Avg.	Maximum permissible product water		
	Concentration mg/L	% Rej.	concentration mg/L		
Turbidity	11 ± 1 NTU	97.7	0.5 NTU		
Lead	$0.15 \pm 10\%$	>99	0.010		
VOC	Refer to pages iv and v for individual contaminant performance data.				

Substance	Influent challenge concentration	Avg. % Rej.	Reduction Requirement		
Cysts	Min. 50,000/L	99.99	99.95%		
NOTE: Certification for Cysts reduction includes Cryptosporidium and Giardia lamblia.					

OUTPUT PERFORMANCE

RATED AT CONTAMINANT REDUCTION TEST PARAMETERS SERVICE FLOW RATE AND CAPACITY

1.7 Liters/minute (0.45 gallon/minute)

Actual rate varies according to water pressure.

6434 Liters (1700 gallons) for PDQF models (see next page for monitor specifications) 3898 Liters (1030 gallons) for PDF models

NOTES:

- a) Testing was performed under standard laboratory conditions. System performance may vary according to local water conditions.
- b) Contaminants listed in this Data Sheet are not necessarily in your water.
- c) We recommend your water be tested to determine treatment requirements.
- d) Cooler electrical requirements are 115VAC ±10%, 1 phase, 60 Hertz for models without 'Y' on descriptor end. Model names ending in 'Y' require 220-240 Volt, 1 phase, 50/60 Hertz.



Performance Data Sheet

OASIS[®] Model Numbers: 502563, 502564, 502565, 502566, 502567, 502568, 502569 & 502570 WATER COOLER MODELS PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKY,

PDF1AQHK, PDF1AQHKY

REFERENCE DATA

CONDITIONS FOR SYSTEM USE

Source Water Supply	y Profile	Application Guidelines			
Community/Private	Chlorinated/NonChlorinated	Use this drinking water system on potable water supply only			
System Pressure	173 – 690 kPa (25-100 psig)	CAUTION: Do not use with water that is microbiologically			
		unsafe or of unknown quality without adequate disinfection			
Temperature	4° - 38° C (40° - 100° F)	$\overline{OO^{\circ} F)}$ before or after the system.			
NUTE: Systems cert	iffed for cyst reduction may be us	sed on disinfected waters that may contain filterable cysts.			

Filtration Assembly	Component	Routine Maintenance
Major Components	Part Number	
Sediment Filter	033660	Replace filters as required or every 6 to 12 months depending on feed water
Carbon Filter	033663	quality.
Carbon Filter, lead	033665	

Water Quality Monitor / Performance Indicator: A monitor is used to track the number of gallons that flows through the filtration system on the PDQF series models. The monitor is preset at the factory to indicate when it is time to change the filters. When the test button is pushed, either the green "good" light will illuminate indicating less than the rated gallon count or the yellow "service" light will illuminate indicating the rated gallon count has been exceeded. The yellow "service" light will illuminate during water flow if a year has passed since previous filter change or the gallon count has been exceeded. The monitor should be reset each time the filters are replaced. Two AA batteries, located inside the monitor box at the filter outlet, supply power to the monitor. Reset the monitor by removing the batteries, then putting them back in. Replace batteries yearly or at filter change to ensure uninterrupted monitoring.

Hot Tanks: Water coolers need to be cleaned periodically to prevent mineral buildup inside the heating tank. The quantity of minerals in the water and the amount of water used determine the frequency of cleaning.

PARTS AND SERVICE AVAILABLE THROUGH YOUR OASIS® DEALER

FILTER CARTRIDGE WARRANTY

Subject to the conditions and limitations described below, OASIS® warrants the filter cartridges to be free from defects in material and workmanship under normal use within the operating specifications listed in the conditions for use specified in this data sheet. During the warranty period, OASIS will replace the defective filter free of charge provided that the filter has been installed and operated in compliance with the written instructions furnished with this product.

The above warranty will not apply to the filters that are damaged because of neglect, misuse, alteration, accident, misapplication, physical damage, bacterial attack, sediment or damage caused by fire, act of God, freezing or hot water.

This warranty is void if filters are altered in any way. Consequential and incidental damages are not recoverable under this warranty. OASIS assumes no warranty liability in connection with the Filtration system other than specified herein.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

This warranty gives you specific legal rights, and you may have other rights that vary by state.



Performance Data Sheet OADID OASIS® Model Numbers: 502563, 502564, 502565, 502566, 502567, 502568, 502569 & 502570

WATER COOLER MODELS PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKY, PDF1AQHK, PDF1AQHKY

VOLATILE ORGANIC CHEMICALS/VOC's

NOTE: Volatile Organic Chemicals (VOC's) are synthetic chemicals that readily vaporize at room temperature.

CARBON FILTERS TESTED: 1m Extruded carbon, Lead/Cyst

Substance	Influent challenge	Maximum permissible	Drinking water
	concentration mg/L	product water	regulatory level ¹
		concentration mg/L	(MCL/MAC)
			mg/L
Alachlor	0.050	0.001	0.002
Atrazine	0.100	0.003	0.003
Benzene	0.081	0.001	0.005
Carbofuran	0.190	0.001	0.040
Carbon Tetrachloride	0.078	0.0018	0.005
Chlorobenzene	0.077	0.001	0.100
Chloropicrin	0.015	0.0002	
2,4-D	0.110	0.0017	0.070
Dibromochloropropane (DBCP)	0.052	0.00002	0.0002
o-Dichlorobenzene	0.080	0.001	0.600
p-Dichlorobenzene	0.040	0.001	0.075
1.2-Dichloroethane	0.088	0.0048	0.005
1,1-Dichloroethylene	0.083	0.001	0.007
Cis-1,2-Dichloroethylene	0.170	0.0005	0.070
Trans-1,2-Dichloroethylene	0.086	0.001	0.100
1,2-Dichloropropane	0.080	0.001	0.005
Cis-1,3-Dichloropropylene	0.079	0.001	
Dinoseb	0.170	0.0002	0.007
Endrin	0.053	0.00059	0.002
Ethylbenzene	0.088	0.001	0.700
Ethylene Dibromide (EDB)	0.044	0.00002	0.00005
Haloacetonitriles (HAN):			
Bromochloroacetonitrile	0.0022	0.0005	
Dibromoacetonitrile	0.024	0.0006	
Dichloroacetonitrile	0.0096	0.0002	
Trichloroacetonitrile	0.0015	0.0003	
Haloketones (HK):			
1,1-dichloro-2-propanone	0.0072	0.0001	
1,1,1-trichloro-2- propanone	0.0082	0.0003	
Heptachlor	0.080	0.0004	0.0004
Heptachlor epoxide	0.0107	0.0002	0.0002
Hexachlorobutadiene	0.044	0.001	
Hexachlorocyclopentadiene	0.060	0.000002	0.050
Lindane	0.055	0.00001	0.0002
Methoxychlor	0.050	0.0001	0.040
Pentachlorophenol	0.096	0.001	0.001
Simazine	0.120	0.004	0.004
Styrene	0.150	0.0005	0.100



 Performance Data Sheet
 UADID

 OASIS® Model Numbers: 502563, 502564, 502565, 502566, 502567, 502568, 502569
 & 502570

WATER COOLER MODELS PDQF1AQK, PDQF1AQKY, PDQF1AQHK, PDQF1AQHKY, PDF1AQK, PDF1AQKY, PDF1AQHK, PDF1AQHKY

Substance	Influent challenge concentration mg/L	Maximum permissible product water concentration mg/L	Drinking water regulatory level ¹ (MCL/MAC)
			mg/L
1,1,2,2-tetrachloroethane	0.081	0.001	
Tetrachloroethylene	0.081	0.001	0.005
Toluene	0.078	0.001	1.000
2,4,5-TP (silvex)	0.270	0.0016	0.050
Tribromoacetic acid	0.042	0.001	
1,2,4-Trichlorobenzene	0.160	0.0005	0.070
1,1,1-Trichloroethane	0.084	0.0046	0.200
1,1,2-Trichloroethane	0.150	0.0005	0.005
Trichloroethelyne	0.180	0.001	0.005
Trihalomethanes (includes):			
Chloroform (surrogate			
chemical)	0.300	0.015	0.080
Bromoform			
Bromodichloromethane			
Chlorodibromomethane			
Xylenes (total)	0.070	0.001	10

VOLATILE ORGANIC CHEMICALS/VOC's (continued)

Notes

- These harmonized values were agreed upon by representatives of USEPA and Health Canada for the purpose 1. of evaluating products to the requirements of ANSI/NSF Standard 53.
- Influent challenge levels are average influent concentrations determined in surrogate qualification testing. 2.
- Maximum permissible product water concentration was not observed but was set at the detection limit of the 3. analysis.
- 4. Maximum permissible product water concentration is set at a value determined in surrogate qualification testing.
- 5. Maximum permissible product water level calculated at chloroform 95% breakthrough point as determined in surrogate qualification testing.
- The surrogate test results for heptachlor epoxide demonstrated a 98% reduction. These data were used to 6. calculate an upper occurrence concentration, which would produce a maximum product water level at the MCL.

TESTED AND CERTIFIED TO ANSI/NSF® 42 & 53 FOR SPECIFIC CONTAMINANT CLAIMS AS VERIFIED AND SUBSTANTIATED BY TEST DATA



APPENDIX B

Performance Data Sheet

for OASIS® Reverse Osmosis Filtration Models

PDQT1AQK, PDQT1AQKY, PDQT1AQHK, PDQT1AQHKY, PDT1AQK, and PDT1AQHK

Performance Data Sheet

OASIS (NSF)

OASIS[®] Model Numbers: 502571, 502572, 502573, 502574, 502575 & 502576

WATER COOLER MODELS PDQT1AQK, PDQT1AQKY, PDQT1AQHK, PDQT1AQHKY, PDT1AQK, PDT1AQHK

The system has been tested according to ANSI/NSF 58 for reduction of substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in ANSI/NSF 58.

			MEMBRANE TYPE: Thin Film Composite
Substance	Influent challenge concentration mg/L	Avg. % Rej.	Maximum permissible product water concentration mg/L
Arsenic (pentavalent)	$0.30 \pm 10\%$	99.3	0.010
Barium	$10.0\pm10\%$	98	2.0
Cadmium	$0.03\pm10\%$	98	0.005
Chromium (hexavalent)	$0.3 \pm 10\%$	94	0.1
Lead	$0.15\pm10\%$	99.2	0.010
Radium 226/228	25 pCi/L ± 10%	80	5 pCi/L
Total dissolved solids	750 ± 40	96	187
Turbidity	11 NTU ± 1	>99.5	0.5 NTU

Substance	Influent challenge concentration	Avg. % Rej.	Reduction Requirement	
Cysts	Minimum 50,000/ml	>99.99	99.95%	
NOTE: Certification for Cyst Reduction includes Cryptosporidium and Giardia lamblia				

NOTES:

- 1. Barium used as surrogate for Radium under NSF® protocols.
- 2. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (<u>combined</u> chlorine) is <u>not</u> sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section below for further information.

COMMENTS:

- a) Testing was performed under standard laboratory conditions. System performance may vary according to local water conditions.
- b) Contaminants listed on this page are not necessarily in your water.
- c) This reverse osmosis system contains a replaceable component critical to the efficiency of the system.
 Replacement of the reverse osmosis component should be with one of identical specifications, as defined by the manufacturer, to assure the same efficiency and contaminate reduction performance.
- d) We recommend your water be tested to determine requirements.
- e) Cooler electrical requirements are 115VAC <u>+</u>10%, 1 phase, 60 Hertz for models without 'Y' on descriptor end. Model names ending in 'Y' require 220-240 Volt, 1 phase, 50/60 Hertz.



Performance Data Sheet

OASIS[®] Model Numbers: 502571, 502572, 502573, 502574, 502575 & 502576

WATER COOLER MODELS PDQT1AQK, PDQT1AQKY, PDQT1AQHK, PDQT1AQHKY, PDT1AQK, PDT1AQHK

OUTPUT PERFORMANCE

PERFORMANCE SPECIFICATIONS Daily Production Rating

Test production rate	Manufacturer nominal production rate
87 Liters/day (23 gal/day)	189 Liters/day (50 gal/day)
Nome	

NOTES:

a) Test production rate is NSF performance result. Performance Specifications testing based on standard laboratory conditions (water pressure of 345 kPa (50 psig), temperature of 25°C (77°F) and 200-500 mg/L TDS). Manufacturer rating based on 414 kPa (60 psig) net pressure on membrane, temperature of 25°C (77°F) and 500 mg/L TDS).

b) Actual production rates vary according to water temperature, pressure, TDS levels, membrane variations and customer usage.

Installation Source Water Profile		Application Guidelines	
Community/Private	Chlorinated/NonChlorinated	Use this drinking water system on potable water supply only	
System Pressure	173 – 690 kPa (25-100 psig)	CAUTION: Do not use with water that is	
Temperature	4° - 38° C (40° - 100° F)	microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.	
NOTE: System certified for cyst reduction may be used on disinfected water that may contain filterable cysts.			

REFERENCE DATA

ARSENIC FACTS

Arsenic (abbreviated As) is found naturally in some well water. Arsenic in water has no color, taste or odor, so it must be measured by a lab test. Public water utilities must have their water tested for arsenic. You can get the test results from your water utility, if you wish. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified laboratories. Information about arsenic in water can be found on the Internet at the US Environmental Protection Agency website: <u>www.epa.gov/safewater/arsenic.html</u>.

There are two forms of arsenic: pentavalent arsenic (also called As(V), As(+5), and arsenate) and trivalent arsenic (also called As(III), As(+3), and arsenite). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Special sampling procedures are needed for a lab to determine what type and how much of each type of arsenic is in the water. Check with the laboratories in your area to see if they can provide this type of service.

Reverse osmosis (RO) water treatment systems do not remove trivalent arsenic from water very well. However, RO systems are very effective at removing pentavalent arsenic. A <u>free</u> chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A <u>combined</u> chlorine residual (also called chloramine) may not convert all the trivalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

The OASIS RO Models [PDQT1AQK(Y), PDQT1AQHK(Y), PDT1AQK, PDT1AQHK] are designed to remove pentavalent arsenic. They will not convert trivalent arsenic to pentavalent arsenic. The system was tested under lab conditions. Under those conditions, the system reduced 0.30 mg/L pentavalent arsenic to 0.010 mg/L (ppm) (the USEPA standard for drinking water) or less. The performance of the system may be different at your installation. Have the treated water tested for arsenic to check if the system is working properly.

The RO component of the above models must be replaced per the routine maintenance instructions to ensure the system will continue to remove pentavalent arsenic.

Reverse Osmosis Unit	Component	Routine Maintenance
Major Components	Part Number	
Sediment Pre-Filter	033660	Replace filters as required or every 6 to 12 months
Extruded Pre-Carbon Filter	033661	depending on feed water quality.
Extruded Post-Carbon Filter	033663	
Thin Film Composite Membrane:		Replace membrane as required based on periodic TDS
190 LPD (50GPD)	033664	rejection tests or Water Quality Monitor, depending on
		model.

Water Quality Monitor: A water quality monitor is used to indicate membrane performance on the PDQT series models. Using dual probes, a split-second power pulse compares the Total Dissolved solids (TDS) level of the feed water with that of the product water. Pressing the test button on the front face of the cooler activates the monitor. When the button is pressed and momentarily held down, the monitor instantly checks the TDS levels and reports membrane status by illuminating either a green or yellow light located next to the test button. Either the green "good" light will illuminate indicating above 70% TDS reduction or the yellow "service" light will illuminate indicating below 70% TDS reduction. Power is supplied by a 9-volt battery located within the access door on the front of the unit.

The PDT series models do not have a monitor. These reverse osmosis systems contain a replaceable treatment component critical for effective reduction of total dissolved solids. The product water shall be tested periodically to verify that the system is performing satisfactorily.

PARTS AND SERVICE AVAILABLE THROUGH YOUR OASIS® DEALER

OASIS® FILTRATION LIMITED WARRANTY

FILTER AND RO MEMBRANE LIMITED WARRANTY FILTER CARTRIDGE WARRANTY

Subject to the conditions and limitations described below, OASIS® warrants the filter cartridges to be free from defects in material and workmanship under normal use within the operating specifications listed in the conditions for use specified in this manual. During the warranty period, OASIS will replace the defective filter free of charge provided that the filter has been installed and operated in compliance with the written instructions furnished with this product.

RO MEMBRANE WARRANTY

Membranes carry a twelve (12) month provided warranty as follows: Credit $1/12^{th}$ of the replacement cost for each unused month provided the system is installed and maintained according to factory instructions and the unit is operated within the specifications listed in the conditions for use specified in this manual.

CONDITIONS OF FILTER WARRANTY

The above warranty will not apply to the filters or RO membranes that are damaged because of neglect, misuse, alteration, accident, misapplication, physical damage, fouling and/or scaling of membranes by minerals, bacterial attack, sediment or damage caused by fire, act of God, freezing or hot water.

This warranty is void if filters or membranes are altered in any way. Consequential and incidental damages are not recoverable under this warranty. OASIS assumes no warranty liability in connection with the Reverse Osmosis or Filtration system other than specified herein.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

This warranty gives you specific legal rights, and you may have other rights that vary by state.



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