

PURA™

Max and Max Plus

Point-of-Use Bottle-free Cooler

Operation Manual

Model Numbers

15-LBGH2-PURA

15-LBGH2-UV-PURA

If you are experiencing any operational or technical problems with the cooler machines and cannot troubleshoot the problem yourself, please contact WaterGroup for technical support and please do not return the cooler to the dealer unless you have received the RGA (Return Goods Authorization) Number by the technical support personnel.





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OPERATION MANUAL

Congratulations for choosing a **PURA** point-of-use water bottle-free cooler system. The **PURA Max or Max Plus** dispenses both hot and cold water using either modern multi-filter or optional reverse osmosis technology. **PURA Max Plus** models with a recirculating UV system limit bacterial growth and bio-film within the cold tank system.

The **PURA Max Plus** puts an end to bottled water deliveries by filtering your customer's own water supply of contaminants and bacteria, resulting in a virtually endless supply of crystal clear, filtered water.

The **PURA Max Plus** has been designed to facilitate the use of either the 1240 Series Reverse Osmosis System or the Pentek Filter Quick Change Cartridge System.

Note: In this operation manual, all references to **PURA Max or Max Plus** are denoted by the words "**Max or Max Plus.**"

Note: The **Max or Max Plus** are not intended for use with water that is microbiologically unsafe or of unknown quality without adequate disinfection either before or after the system.

Note: Check with your public works department for applicable local plumbing and sanitation codes. Follow local codes if they differ from the standards used in this manual. To ensure proper and efficient operation of the **Max Plus** to your full satisfaction, carefully follow the instructions in this manual.

Introduction of Recirculating UV System

The Max or Max Plus can be ordered with a factory-installed recirculating ultraviolet (UV) loop system. The system is inexpensively designed to provide years of passive bio-film control of the cold tank system.

The recirculating UV system consists of a small 110V fountain pump, and a four watt germicidal ultraviolet lamp that is contained within a specially-designed stainless steel housing.

The pump is mounted directly underneath the cold tank, and takes suction from the bottom of the cold tank. The UV lamp assembly is mounted vertically next to the cold tank. The pump takes water from the base of the cold tank and circulates it through the UV assembly, returning the water back into the top of the cold tank. The UV lamp housing is designed with a very thin gap from the quartz sleeve to the highly-reflective SS wall of the housing in which the water flows through. This design ensures maximum UV dose and penetration through the water stream as it flows past the UV lamp.

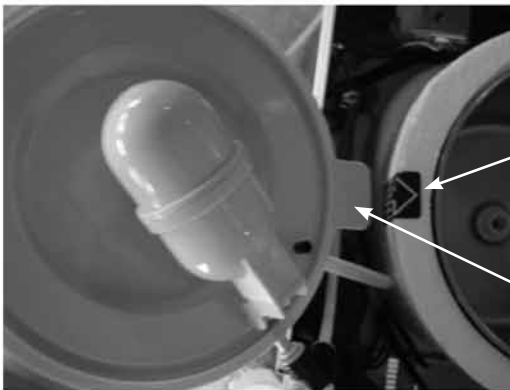
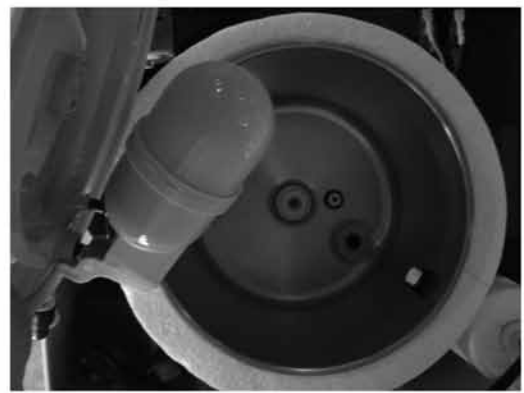
The system is designed to cycle the full cold tank past the UV lamp as much as 60 times per hour, or once per minute. The system has proven to be highly effective at controlling the bio-film growth in the cold tank, thereby minimizing the need for routine cold-tank sanitization.



IMPORTANT NOTICES ABOUT THE UV SYSTEM

- 1. ALWAYS fill the Max or Max Plus with water before plugging the machine into power.**
Note: The recirculating UV system powers up immediately when the **Max or Max Plus** is plugged into a power outlet, regardless of the position of the hot and cold switches on the rear of the machine, if the UV power switch is on. Filling the hot and cold tanks prior to powering the machine will enhance the life of the recirculating pump.
- 2. Prime the recirculating pump for proper operation.**
Once you fill the hot and cold tanks, and have powered the **Max or Max Plus**, remove the top cover of the machine and make sure water is recirculating through the UV system. In a small percentage of cases, the recirculating pump will require priming. To prime the pump, simply unplug the power cord of the **Max or Max Plus** from the power outlet, and immediately observe the stream of air bubbles that will rise up from the base of the cold tank. Reapply power and the **Max or Max Plus** recirculating system will function normally.
- 3. Replace the UV lamp and filtration/RO components in the Max or Max Plus on an annual basis.**
The lamp is nominally rated at 9,000 hours, or 375 days. This is a nominal rating, which means you can typically expect a full 1 year of life from the lamp. However, voltage fluctuations to the **Max or Max Plus** caused by lightning storms or industrial sources can terminate lamp life prematurely. When the lamp fails, an alarm built into the ballast will announce an audible beep. The alert can be reset by replacing the UV lamp. Note that the UV output of the lamp fades with time, and after 1 year, the lamp needs to be replaced to optimally provide bio-film and bacteria control in the product water. Although you may still see a faint blue glow from the lamp after one year of use, be aware that the UV portion of the light spectrum is no longer present and the UV lamp is no longer providing bacterial control.

The lid, which simply snaps into place, will help minimize mold and mildew buildup inside the cold tank by providing a “sealed” environment. Please note the arrow (with sticker on side of foam insulation) for proper installation. To ensure the level float operates correctly, please align the tab on the new plastic lid with this arrow. Refer to the pictures shown below. This change does not impact the way you setup and operate the machine. Also changed on the unit is the addition of a small GAC filter designed to be placed on the inlet return of the recirculating UV loop inside the cold tank. This filter comes packaged with the machine inside the plastic bag contained in the drip tray. This filter is designed to continually filter impurities in the water, and to eliminate the need for rinsing the machine upon initial installation. The small end of the filter connects into the return port from the UV loop inside the cold tank. This filter does not require replacement on regular intervals. Prior to using the machine, the filter needs to be rinsed and flushed (to a drain, not through the machine) with a gallon of water to remove carbon fines.



Arrow Sticker

Lid Tab





SPECIFICATIONS

Width/Depth/Height	13" x 15" x 44" (33cm x 38cm x 112cm)
Water Connection	1/4 in. tubing
Cold Water Temperature	41° - 43° F adjustable (5.0° C - 6.0° C)
Hot Water Temperature	175° - 180° F (79° - 82° C)
Recommended Service Pressure	40-60 psi (275-414 kPa)
Max Service Pressure	100 psi (862 kPa)
Rated Service Flow	0.5 gpm (1.89 lpm)
Temperature	50-100 F (10-37 C)
Weight	46 lb. (21 kg)
Electrical Supply	120V/60Hz
Control and Unit	0.7 amps
Heater	4.0 amps
Total	4.7 amps

MODEL DESIGNATIONS

Model	Description	Tank Capacity	
15-LBGH2-PURA	Hot/Cold Max, Tower	3.5 liter cold 0.9 Gal	1.6 liter hot 0.4 Gal
15-LBGH2-UV-PURA	Hot/Cold Max Plus, Tower, with UV	3.5 liter cold 0.9 Gal	1.6 liter hot 0.4 Gal

REPLACEMENT COMPONENTS

Components	Part No.	Frequency of Replacement
1240 RO Pre-filter	41400076	12 months or as needed
1240 RO Post Filter	41400009	12 months or as needed
1240 RO Membrane	33001033	As Needed
QC10-SED1R	25568843	Every 500 gallons filtered (*every 5 months)
UV Lamp Housing Assembly, Includes Housing and Quartz Sleeve	89007	As Needed
Ballast and Starter Assembly	89010	As Needed
UV Lamp, 4-Watt, & Harness	89005	12 months or as needed
Circulating Pump, 120V	89009	As Needed
QC10-CBRR	15578543	Every 500 gallons filtered (*every 5 months)

* Based on 3 gallons of water consumption each day.

ELECTRICAL USAGE SPECIFICATIONS

Model: 15-LBGH2-PURA (hot/cold), 15-LBGH2-UV (hot/cold with UV)

Component	Amp Draw
Heater	4.0
Compressor	0.7
Total	4.7

PRE-INSTALLATION PROCEDURES

Sanitizing Procedures

This **sanitizing procedure** must be completed prior to installing the Max or Max Plus. The materials required for the sanitizing procedure are listed below.

Materials Needed:

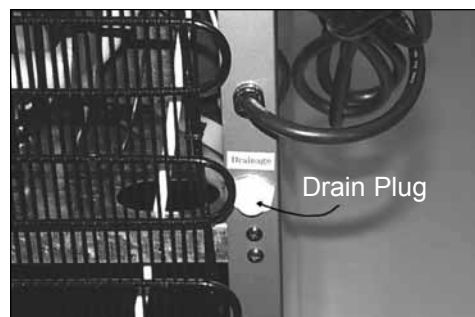
Phillips Screwdriver

Household Bleach (5.25% Sodium Hypochlorite)

¼" Food grade Polyethelyne Tubing, approx. 4 ft. length

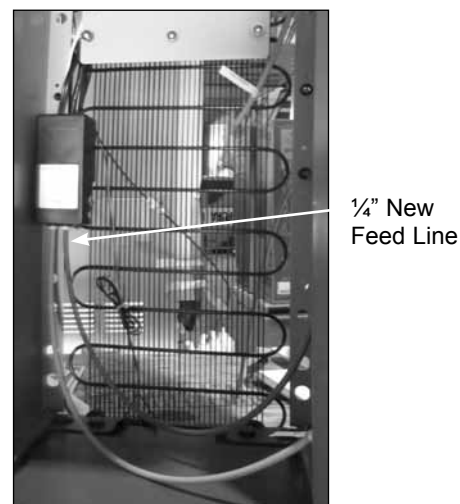
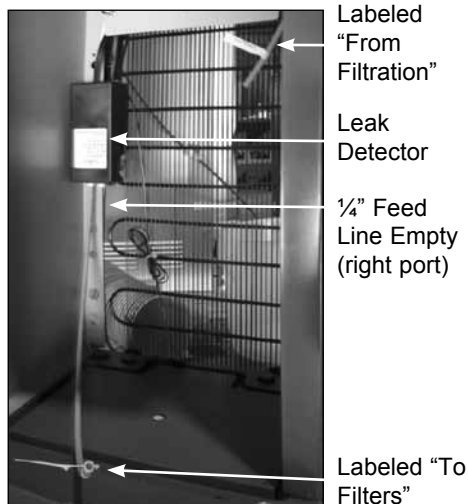
A Pitcher

1. Unpack the **Max or Max Plus** and check for damage.
2. Remove the top panel by removing the two Phillips head screws at each rear corner. Pull up on the rear corners of the top panel and set aside.
3. Pour 1.5 gallons of fresh filtered water into the cold tank.
4. Add ¼ cup of bleach to the full cold tank. Allow this water to remain in the tank for 5-10 minutes.
5. Using pliers, remove the drain plug located on the right rear side of the unit.
6. Catch the drain water in a pitcher or similar container and dispose of it.
7. Rinse 3 gallons of fresh filtered water through the system.



Pre-Install Preparation – Filter Configuration

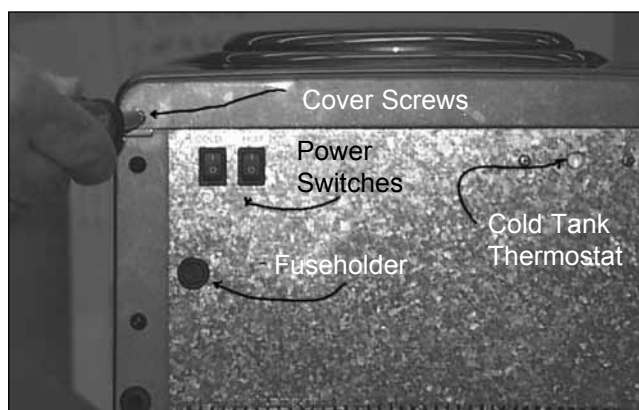
1. Rinse the filters you are using with the **Max or Max Plus** in your shop sink. Refer to 54753 Installation Manual. Rinse at least 5 gallons of tap water through the filters.
2. Insert a 4-foot length of ¼" tubing into the rubber grommet on the back of the unit. This is your water feed line for the unit. Push the tubing through the grommet until only approx. 1 foot of tubing remains on the outside of the unit. See picture below.
3. Install a ¼" shut off on the end of the tubing that protrudes from the unit. Attach the other end of the shut off to the water supply.
4. Open the filter compartment by grasping the filter access door on the right side and pulling it forward. See picture below.





PRE-INSTALLATION PROCEDURES CONT'D

5. Insert the pre-rinsed filters into the filter heads on the filter mounting bracket.
6. Attach the end of the ¼" feed line that was installed in step 2 into the open fitting on the bottom right side of the leak detector.
7. Attach the end of the ¼" line from the leak detector, Labeled "To Filter", into the inlet of the filter.
8. Attach the cold water tank ¼" supply tubing, Labeled "From Filtration", (furnished with the unit) to the outlet of the filter.
9. Connect the source water to the ¼" shutoff you installed on the feed water line in step 4.
10. Turn on the source water. Allow the tanks in the **Max or Max Plus** to fill.
11. Depress the cold and hot water spigots and verify that water dispenses from both tanks.
12. Plug the unit into a 120V outlet. If the unit has the recirculating UV system installed, verify the pump has primed as discussed on page 2 of this manual.
13. Turn on the Hot and Cold power switches.



14. Allow the unit to sit for one hour. Dispense water from the Hot and Cold spigots after that hour has elapsed. The water in the Hot and Cold tanks should have reached set temperature. If not, call the dealer from where you purchased this unit.
15. Check all filters and other connections for leaks.
16. Turn off the hot and cold switches.
- 17. UNPLUG the machine before draining!!**
18. Drain ½ gallon of water through the hot tank spigot. This is done to reduce the water temperature in the hot tank.
19. Remove the drain plug and drain the remaining water from the unit.
20. The unit is now ready for installation.

NOTE: DO NOT lay the unit down. The **Max or Max Plus** must remain upright at all times.

Pre-Install Preparation – 1240 Reverse Osmosis System Configuration (Optional)

Refer to 54753 Installation Manual

Pre-Install Preparation – Pentek Quick Connect Cartridge Filter (Optional)

Refer to 54753 Installation Manual

SAFETY PRECAUTIONS

- **WARNING: THIS APPLIANCE MUST BE GROUNDED!!**
- Keep small children away from the unit to avoid accidental dispensing of the hot water.
- Pressure regulators shall be used on all installations to maintain operating pressures between 40 – 60 psi.

6 - MONTH SERVICE FOR FILTER / REVERSE OSMOSIS CONFIGURATION UNITS

1. Replace the Filter and/or RO membrane as recommended in the Replacement Components Table.
2. For models equipped with the UV recirculating system, replace the UV lamp as recommended in the Replacement Components Table.
3. Clean the condenser grill.
4. Check to make sure there is a 2" clearance around the unit.
5. Inspect electrical and water connections.
6. Flush 5 gallons of water through the unit. This is done to ensure that the new filters are completely rinsed.
7. Check for leaks.
8. Verify that the unit is running to the customer's satisfaction.

12 - MONTH SERVICE FOR FILTER / REVERSE OSMOSIS CONFIGURATION UNITS

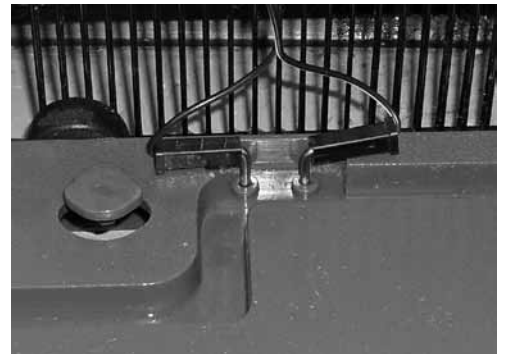
1. Replace the Filter and/or RO membrane as recommended in the Replacement Components Table.
2. For models equipped with the UV recirculating system, replace the UV lamp as recommended in the Replacement Components Table.
3. Turn off the Hot and Cold tank buttons.
4. Unplug the machine from power.
5. Drain ½ gallon of water through the hot tank spigot.
6. Drain all the water from the unit.
7. Shut off the source water supply.
8. Fill the unit with fresh filtered water.
9. Add ¼ cup household bleach to the cold water tank.
10. Use a clean, non-metallic scouring brush to scrub the surfaces of the cold tank.
11. Drain the bleach solution through the spigots and drain outlet.
12. Rinse the tanks with 3 gallons of fresh filtered water.
13. Open up the source water supply and allow the tanks to fill.
14. Check all water connections for leaks.
15. Turn on the Hot and Cold switches.

Leak Detector Reset Instructions

Your **Max** or **Max Plus** cooler comes with a leak detector installed in the cabinet of the cooler.



The cabinet floor comes with a built in trough to catch any water. In the trough are two (2) probes that are wired to the leak detector. Should the probes detect water in the trough, a signal is sent to the leak detector and automatically shuts off the water supply to your **Max** or **Max Plus** cooler.



Note that the red switch has popped out from the side of the leak detector.

Steps to Reset the Leak Detector

- Unplug the power supply.
- Shut off all switches on the back of the cooler.
- Clean and dry all water on the floor and in the trough.
- Reset the red trip switch by pushing up and in on the red switch.



Plug the unit into a 120V outlet. For the **Max Plus** with UV system installed, verify the pump has primed as discussed on page 2 of this manual. Turn on the Hot and Cold power switches.

UV Lamp Replacement (For Max Plus Systems)

The UV lamp needs to be replaced in every 12 months. In occasions of lamp failure, an audible alarm will announce an audible beep will can be reset by installing a new UV lamp. Follow the procedure given below to change the UV lamp and harness assembly.

- **WARNING: NEVER LOOK DIRECTLY AT A LIGHTED UV LAMP. ULTRAVIOLET RAYS CAN BE HARMFUL TO EYES**

1. Switch OFF the Hot, Cold and UV lamp switches located at the back of the unit. Disconnect the unit from power.
2. Remove the top cover of the unit by removing the two screws located at the back of the unit as shown in Figure 1.
3. Disconnect the UV lamp harness connector located inside the unit at the front. Please refer to Figure 2.
4. Gently pull the lamp off from the Styrofoam housing by grabbing the harness as shown in Figures 3 and 4. Make sure the UV lamp is pulled vertically straight upwards to avoid UV lamp breakage.
5. Install the new lamp and harness assembly inside the Styrofoam housing. Connect the harness connector of the new lamp with the unit.
6. Install the top cover of the unit by replacing the screws removed in Step 2.
7. Connect the unit to power and switch ON the UV, Hot and cold switches of the unit.



Figure 1



Figure 2

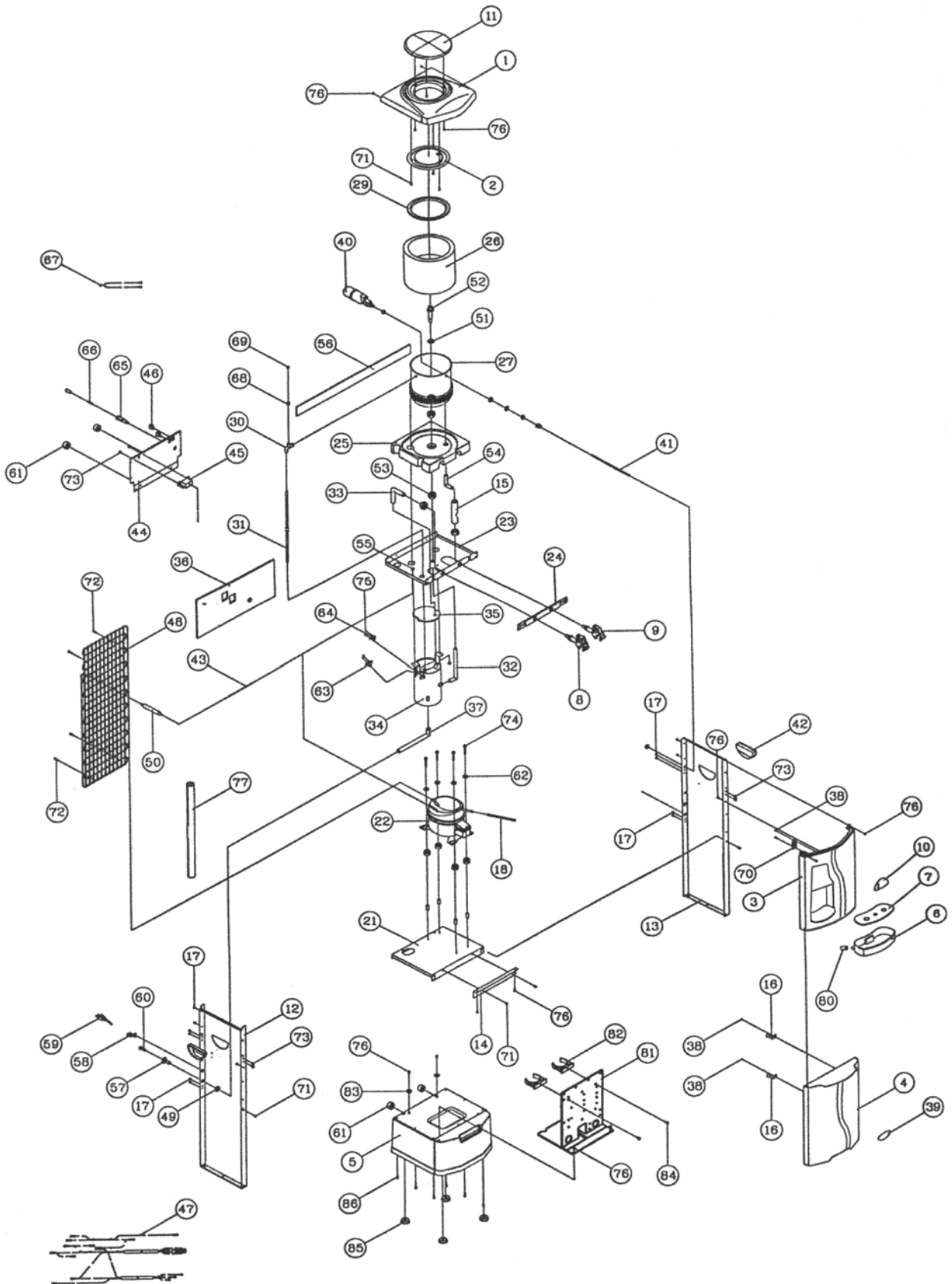


Figure 3



Figure 4

PARTS BREAKDOWN



REPLACEMENT PART NUMBERS

Item	Part #	Item Description	Item	Part #	Item Description
1	151000	Top Cover	41	–	1/4" RO Water Pipe
2	151002	Dust Cover	42	151081	Handle, Side Panel, L or R
3	–	Upper Front Cover	44	151090	Back Panel
4	–	Lower Front Door	45	151095	Thermostat, Capillary, Cold
5	151012	Base	46	151098	Switch, Power
6	–	Drip Tray	47	151100	Main Wiring
7	–	Drip Tray Grill	48	151060	Wire Condenser
8	151030	Hot Water Tap w/Safety Device	49	151110	Nut, Plastic, White
9	151031	Cold Water Tap	50	151080	Filter Dryer
10		Indicating Panel	51	151111	Outlet Connector
11	151034	Main Water Tank Cover	52	151112	Outlet Connector Stem
12	151040	Left Side Panel (Looking @ Front)	53	151113	Nut, Tap, Cold Tank
13	151041	Right Side Panel (Looking @ Front)	54	151114	Tube, 75mm, Silicon, L-Shaped
14	151045	Front Mounting Bracket	55	–	Screw, w/Washer, Metric, M4x7
15	151046	Insulation, For Water Line to	58	151125	Power Cord Protector
16	151047	Spring Latch, Front Door	59	151126	Power Cord
17	–	Screw, Metric, M4x8 Black	60	151130	Plug, Hot Water Drain
19	151050	Spring Clip	61	151131	Insulator, Rubber, Base
20	151051	Protective Rubber Grommet	62	–	Washer, Compressor Bolt
21	151052	Shelf, Middle	63	151135	Thermal Overload, Manual-Reset
22	151053	Compressor	64	151136	Thermostat, Hot Tank
23	151054	Shelf, Upper	65	151140	Fuseholder
24	151055	Mounting Plate, Water Taps	66	151141	Fuse
25	151056	Insulation, Cold Tank, Bottom	67	151142	Fuse Wiring
26	151057	Insulation, Cold Tank, Upper	68	–	Cover, Hot Tank Vent Tube
27	151070	Cold Tank Assembly	69	–	Air Filter, Vent Tube
28	–	Water Connector, Inlet	70	–	PCB, Front Display
29	–	Seal, Cold Tank, Silicon, Upper	71	–	Screw, Metric, M4x12, Stainless
30	–	Elbow, Silicon, T-Type	72	–	Screw, Metric, M4x25, Black
31	–	Tube, 8mm, Silicon, 10 inches	73	–	Screw, Metric, M4x6
32	–	Tube, 160mm, Silicon, L-shaped	74	–	Screw, Flat Head, Compressor
33	–	Tube, 50mm, Silicon, L-Shaped	75	–	Screw, Metric, M3x4, Zinc
34	151075	Hot Water Tank	76	–	Screw, Metric, M4x12, Zinc
35	151076	Insulation, Hot Tank, Top	77	151160	Insulated Sleeve
36	151077	Insulation, Hot Tank, Lower	*78	151161	Ballast, 110V, NO ALARM
37	–	Tube, 175mm, Silicon L-Shaped	*79	89005	UV Lamp & Harness
38	–	Screw, Metric, M3x8	*80	89007	Housing, Assy, UV
39	–	Label of Lower Front Plate	*81	89009	Pump, Assy
40	151065	Hydraulic Type Floating Valve	*82	89010	Ballast, Assy

*not shown

TROUBLESHOOTING

If you are experiencing any operational or technical problems with the cooler machines and cannot troubleshoot the problem yourself, please contact 1-800-288-1891 for technical support and please do not return the cooler to the dealer unless you have received the RGA (Return Goods Authorization) Number by the technical support personnel.

1. No hot water? Check power to the compressor. Check wiring, lights, breaker.
2. No cold water? Rotate the cold tank thermostat fully clockwise. Wait 3 minutes, is the compressor running? If the compressor is not running, then check the thermostat.
3. Check the thermostat by taking an ohms reading across the electrical connectors on the thermostat. They should read 0 ohms. If they read infinity, the thermostat is faulty. Replace the thermostat.
4. If the thermostat checks OK, but the compressor is not running either the starter or overload on the side of the compressor have failed or have become loose. Check connections.
5. If the compressor is running and is very hot to the touch the refrigerant may have leaked out.
6. If the compressor is cool to the touch, then the compressor has failed. Replace compressor.

Things to check are power (by seeing if there's hot water), cold thermostat (when it is fully turned clockwise), compressor starter and overload relays, and gas leak. If you surmise a gas leak, you should find oil on one of the welded copper lines leading to and from the compressor.

WARRANTY

Limited Warranty for the PURA® Max and Max Plus Water Treatment System

This water treatment system is warranted against defects in materials and workmanship for a period of one (1) year from the date of purchase or rental by the original dealer, or initial lessor, but in no event longer than twenty-four (24) months from the date of manufacture.

Provided a claim is based on a defect in materials or workmanship; and provided the claim is made within the warranty period; and provided the user has used and maintained the equipment in accordance with the manufacturer's instructions, WaterGroup will replace the defective parts free of charge. If the unit is returned to WaterGroup for repair, the purchaser shall bear the cost of freight in both directions unless the dealer and WaterGroup agree to a different arrangement.

This warranty does not apply to damage caused by, or resulting from, shipping, accident, alteration, misuse or abuse, unauthorized or improper installation, or to units used outside the country where the unit was rented or purchased. The effects from chlorine corrosion, scaling and normal wear are specifically excluded from this warranty.

WaterGroup hereby disclaims any and all implied warranties including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The manufacturer or its agents shall not be liable for consequential damages, whether economic or otherwise, resulting from breach of this limited warranty or any implied warranty. Failure to follow all instructions for operation and maintenance provided with this unit voids the warranty.

This warranty gives you specific legal rights and you may also have other rights which may vary from country to country.

WATERGROUP INC. WATERGROUP COMPANIES INC.
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