

VALVE-LESS SUCTION SIDE INSTALLATION

For Above Ground Pools

How You're UltraPure™ Automatic Water Cleaner™ Works

The *UltraPure*™ *Automatic Water Cleaner*™ produces the strongest Oxidizer (Ozone) commercially available for pool (and spa) water treatment. *UltraPure*™ *Automatic Water Cleaners*™ take over the oxidation work usually done by chlorine (or bromine). Incomplete oxidation by chlorine, accounts for up to 70% of its usage and 100% of its problems. With an *UltraPure*™ *Automatic Water Cleaner*™ installed, Ozone removes compounds that normally combine with chlorine. Obnoxious combined chlorine compounds (chloramines and scum lines) are not formed. Once this oxidation is accomplished, smaller amounts of chlorine provide a 'free - available' residual that is a very effective biocide to kill viruses, bacteria and algae. This produces superb water quality and minimizes chemical usage. *Using UltraPure*™ *Automatic Water Cleaners*™ result in the least amount of chemicals of any method currently available for pool (and spa) water treatment.

Keep UltraPure Running For:

- A nature fresh bottled-water swimming experience
- Cost savings, fewer chemicals & less maintenance
- Extended life of pool equipment & longer filter runs

When UltraPure is Working:

- There's a blue light & a champagne mist from the return(s)
- Combined chlorine readings are never above 0.5 ppm
- Chlorine associated problems are eliminated

Parts, Options, Accessories & Requirements

Above Ground (AG) unit comes complete with:

- ✓ (1) 15 foot 'piggy-back' 3-prong grounded cord set (120V)
- √ (1) Ground lug for #6 bonding wire
- √ (1) AG Valve-Less Suction Side Parts Package
- √ (1) Above ground pump pad stand
- (4) Above ground pump pad stand mounting bolts & washers



Above Ground Unit

To Install you will need:



Flow meter Kit (0-10) Part No. 1008037

Above Ground Valve-Less Suction Side Parts Package (AGV-SSPP) comes complete with:

- √ (1) 1/4" NPT x 3/8" 'glow' compression fitting elbow
- √ (1) 4" by 1/4" Air Flow Control Insert™ (AFCI™)
- √ (4) #8 x 3/4" mounting screws
- √ (1) 8 Foot length of 3/8" O.D. black tubing
- ✓ (1) 1/2 lb. 1/4" MPT x 3/8" tubing compression fitting check valve
- √ (1) Warranty Card and Owners Manual

Part No. 1008000

General Information

The suction side method of installing your $UltraPure^{TM}$ Automatic Water CleanerTM is very simple. The compression fitting check valve is installed on the suction side of the pump. With the pool pump running and our exclusive Airflow Control InsertTM (AFCITM) in place, Ozone and air is drawn into the pump. This Ozone (air mix) goes through the pump impeller and the Ozone is pressurized into the water, and enters the filter. As much as 70 - 95% of the Ozone is absorbed by the water before it leaves the filter and the remainder is absorbed in the return lines on the way back to the pool. When the pump shuts off, our 1/2 lb. compression fitting check valve prevents water from leaking back into the unit.

Each *UltraPure*™ *Automatic Water Cleaner*™ has a standard Valve-Less Suction Side Parts Package. If you wish to utilize an alternate injection device, it must be purchased separately. Our Model Number indicates unit capacity at 6 - 12 hours of operation per day. All UPP units have United States Gallon & Pump Size recommendations listed in the chart on page 4. Upsize or downsize the units according to the daily pump run time.



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To successfully install our suction side units, you must consider the following points:

- a) An air draw above the maximum will lower the effectiveness.
- b) Smaller sized pools may require an airflow rate in the lower end of the typical airflow: e.g. A UPP15 on a 12,000 USG pool can use 3 - 7 cfh;
 - A UPP25 on a 25,000 USG pool can use 4 10 cfh
- c) Increase run time when bather loads are very heavy and when weather conditions are severe.

Above Ground Suction Side Installation

A) Site Selection

- 1. Ensure the SITE SELECTION on the pump pad conforms to local electrical codes.
- 2. Select a pump pad location, within fifteen (15) feet of a 120 Volt power source; no more than eight (8) feet from the suction side injection point. A qualified electrician should perform the electrical procedure(s).
- 3. Ensure your UltraPure™ Automatic Water Cleaner™ is tied into the pump power supply and the plug is grounded in accordance with local electrical codes, or simply plug the pump into the back of the plug supplied with the UltraPure™ Automatic Water Cleaner™ cord set.
- 4. This electrical 'hook-up' ties the *UltraPure™ Automatic Water Cleaner™* into the pump power supply. By operating your UltraPure™ Automatic Water Cleaner™ 8 – 12 hours per day, bulb life is extended.

B) Installation Steps

- 1. Shut off the pump and use the Above Ground Valve-Less Suction Side Parts Package (AGV-SSPP Part No. 1008000).
- 2. Strainer Basket Installation: Remove the drain plug from the hair-lint basket of the pump and apply Teflon tape to 1/2 lb check valve and thread into the pump drain plug.



Strainer Basket Installation

- 3. Your *UltraPure™ Automatic Water Cleaner™* comes complete with a 'Pump Pad Mounting Stand' thus allowing your unit to installed securely and is designed for optimum performance. Install the cord set and air intake end of your UltraPure™ Automatic Water Cleaner™ end sitting on the 'Pump Pad Mounting Stand'
- 4. Plug your *UltraPure™ Automatic Water Cleaner™* cord set into the pump pad 120V receptacle and plug the pump cord into the back of the UltraPure™ Automatic Water Cleaner™ cord set. A qualified electrician should perform the electrical procedure(s).



Pump Pad Stand



Plug & Cord Set



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- 5. With the pump off, connect the black 3/8" tubing to the compression fitting check valve at the pump basket.
- 6. Thread the 1/4" NPT x 3/8" **compression fitting 'glow' elbow** into the 1/4" threaded hole opposite the cord end of the unit.
- 7. To control the airflow through the unit, insert the 1/4" Air Flow Control Insert™ (AFCI™) half way in the (unit) end of the 3/8" tubing. Turn the power **ON**; **START** the pump; and, **CHECK** that the 'glow' Kynar compression elbow lights up a blue/green colour. With pump running, adjust the air draw to suit the pump size while ensuring it does not exceed the maximum for the unit size. The airflow is adjusted by moving the *Air Flow Control Insert™* (*AFCI™*) in for less airflow and out for more airflow. Once the desired airflow is attained, cut the excess *Air Flow Control Insert™* (*AFCI™*) off and discard it. Push the remaining portion of the *Air Flow Control Insert™* (*AFCI™*), 2" 3", into the tubing. Connect the 3/8" tubing with the *Air Flow Control Insert™* (*AFCI™*) inside, to the compression-fitting elbow in the *UltraPure™ Automatic Water Cleaner™*. Your installation is complete. With the pump running, your *UltraPure™ Automatic Water Cleaner™* is introducing the strongest *Oxidizer* commercially available into the pool water.
- 8. **With the pump on**, ensure a 'fine bubble mist' is entering the pool through one or more returns. Shut the pump off and ensure that most of the air is leaving the filter, i.e. there is no surge or back up of air through the suction (skimmer) line. Ensure that the 1/2 lb. check valve is not allowing air to bubble back into the pump basket when the pump is turned off.

Air Flow Control Insert™ (AFCI™) Guide



Insert AFCI™ in 3/8" Black Tubing



Set Optimal Airflow



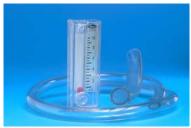
Cut Excess AFCI™ & push 2" - 3" Inside
Tube



Insert Tubing in Glow Fitting Elbow & Start Pump

Pump Size & Air Draw Chart

Model	USG	Pump Size (Minimum)		Airflow Rate (Cubic Feet Per Hour - cfh)				
Wiodei				TYPICAL	Recommended			
UPP15	15,000	1.0	HP	3 - 7	5			
UPP25	25,000	1.5	HP	4 - 10	7			



Part No. 1008037



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Swimming Pool Operating Guidelines With Your UltraPure™ Automatic Water Cleaner™

Test the water regularly using a water test kit available through your dealer or service company.

TEST	IDEAL RANGE				
Bromine or	4.0 ppm				
Free Chlorine (FAC)	2.0 ppm				
Total Chlorine (T.C.)	Up To 0.5 ppm Above the FAC Reading				
рН	7.4 -7.8				
Total Alkalinity	100 - 130 ppm				
Calcium Hardness	200 - 250 ppm				
Total Dissolved Solids	300 - 1200 ppm				

The free chlorine/bromine residual should be maintained at all times. Outdoor pools on chlorine require a stabilizer. Pools may require a shock treatment after very heavy usage, heavy rains or wind storms.

Trouble Shooting And Repair

A. Potential Air - Draw Problems

- 1. Pump Is Overly Noisy Or Looses Prime While Running
- 2. Air 'Blow Back' Through The Skimmer Line(s)
- 3. The 'Bubble Mist' Stops Coming Back Into The Pool

B. Potential Unit or Water Problems

- 1. Lamps Are Off
- 2. There Is A Build Up Of Combined Chlorine (Or Bromine)

Please contact us at 877 281-7603 should any of the listed '**POTENTIAL PROBLEMS**' occur or visit our web site waterquality.net

Testing for water efficacy

- Use chlorine and The UltraPure™ Automatic Water Cleaner™ for best results.
- Use a DPD test kit or test strips to test for Free Available and Total Chlorine.
- If the difference between Total Chlorine and Free Available Chlorine is 0.5 ppm or less, The *UltraPure™ Automatic Water Cleaner™*, is doing its job, i.e. removing contaminants that form combined chlorine compounds (Chloramines) and use up chlorine. THE UNIT IS AN AUTOMATIC TURBO INJECTED SHOCK TREATMENT to remove or alter (non living) bather wastes.

Warranty should be claimed through your dealer. If warranty cannot be handled through your dealer, please obtain a Return Goods Authorization (RGA) number, which allows you to send your unit to a local warranty repair station. Call 1 877 281 7603. Replacement or spare parts must be purchased through your dealer.



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IMPORTANT SAFETY INSTRUCTIONS

UV LIGHT IS HARMFUL TO EYES AND EXPOSED SKIN; TURN OFF ELECTRICAL SUPPLY BEFORE OPENING UNIT.

Ozone is considered to be toxic above certain concentrations and exposure times in air. If the ozone concentration in the water exceeds the equilibrium state the excess ozone will be emitted into the air. The Occupational Safety and Health Administration has set a short term exposure limit of 0.3 ppm (0.6 mg/m³) and 0.2 ppm (0.2 mg/m³) time weighted average, over an 8-hour day, five days per week. There are ozone removal methods that may be considered prior to the addition of the chemical disinfectant:

- I. Degassing by means of aerated flow;
- II. Granular activated carbon filter.

When the equipment is located in an enclosed room consideration should be given to having adequate exhaust in case of ozone releases. The exhaust system should provide a minimum of three air changes per hour to comply with OSHA limits. In addition, an ambient air ozone monitor should be installed.

Ozone systems, which operate under vacuum, should not present the danger of ozone leaks into the treatment room.

Important Safety Instructions

- READ AND FOLLOW ALL INSTRUCTIONS.
- 2. Connect to a grounded, grounding type receptacle only.
- 3. Do not bury cord.
- 4. WARNING To reduce risk of electrical shock, replace damaged cord immediately.
- 5. Install at least 5 ft. from inside wall of the pool using nonmetallic plumbing. Install ozone generator no less than 1 ft. above the maximum water level to prevent water from contacting electrical equipment. Install in accordance with the installation instructions.
- 6. WARNING Short-term inhalation of high concentrations of ozone and long-term inhalation of low concentrations of ozone can cause serious harmful physiological effects. Do not inhale ozone gas produced by this device.
- 7. SAVE THESE INSTRUCTIONS.



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Warranty Registration Form

To activate your warranty, please take a moment to fill out and return this form. It must be returned to UltraPure Water Quality (UWQ) Inc. within 30 days of purchase. No warranty will be registered without this card.

Date Purchased				Unit Purchased From (Build Name)					
Month	Day	Year							
Above Ground Model				Volt/Hz			Serial Number (blacked out numbers on label)		
UPP15		UPP25		120/60					
First Name				itial Last			t Name		
Address Suite Number									
City					State/Province			Zip/Postal Code	
Area Code & Phone	Number	Area Code & Fa	x Numbe	er		E-Mail Ad	dress		

Terms and Conditions of Warranty

- 1. To validate this warranty, the 'Registration of Purchase' form should be completed and mailed within 30 days of installation.
- 2. We warrant that the Pool UltraPure™ Automatic Water Cleaner™ and all components are free from defects in material and workmanship for a period of 2 Years from the date of delivery to the first owner. This warranty is not transferable.
- 3. To make a warranty claim you must:
 - a) Call 877 281-7603 and obtain an RGA (Return Goods Authorization) number. No claim will be accepted without an RGA number.
 - i) UltraPure Water Quality Inc. will send out a local area authorized warranty/field service representative (in applicable areas).

OR

- ii) If no authorized warranty/field service representative is in the area the manufactured goods, in need of service, should be shipped (with RGA) to the address on the RGA form, **freight, pre-paid.** Any returned item deemed faulty due to manufacturer defect will be repaired or replaced and shipped back to the customer at no charge to the customer.
- c) The owner of the UWQ goods may be responsible for all expenses if the field serviced (i) or returned item (ii) is deemed operational, or not under warranty. Non-warranty goods will be shipped back to the customer at customer's expense.
- 4. This warranty supercedes any previously printed or issued warranty.
- 5. Warranty will be void if manufacturers installation instructions are not followed.
- Warranty will be void unless our factory-approved parts are used and properly installed by an authorized representative according to UWQ recommendations contained in the instruction manual attached.
- 7. Warranty does not extend to parts misused, mishandling, neglect, accident, damage, flood, fire or other causes beyond the control of the manufacturer. The warranty does not extend to consequential damage

Please Mail Original and Retain a Copy for Your Records

UltraPure Water Quality Inc., 1175 Appleby Line, Unit B2, Burlington, Ontario - L7L 5H9

Phone: 905 335-4085 Fax: 905 335-1483 Customer Service: 877 281-7603