



EQ-OPTM-X

Whole House
Water Filter
OptimH2O®

Owner's Manual





Meet clean, healthy water. Your new Aquasana® Whole House OptimH2O® system was expertly engineered to reduce lead, cysts, and PFOA/PFOS, plus tackles chlorine and chloramines found in city and well water.

Enjoy the peace of mind that comes from knowing our award-winning water filter technology is working for you.

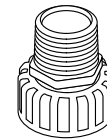
EQ-OPTM-X

Whole House Water Filter OptimH2O®

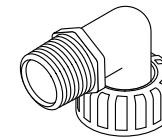
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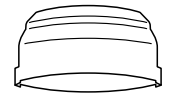
Straight Connectors (2)



Angled Connectors (2)



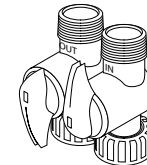
Umbrella Cap



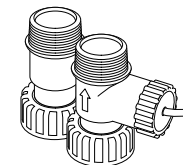
Filter Cap



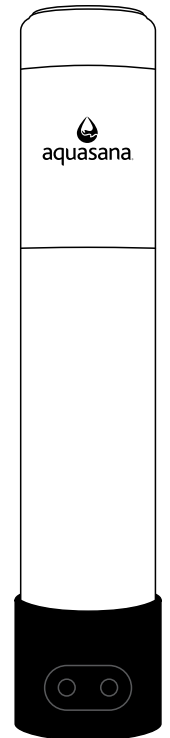
Bypass Manifold



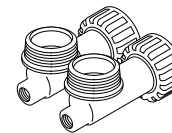
Flow Meter Assembly



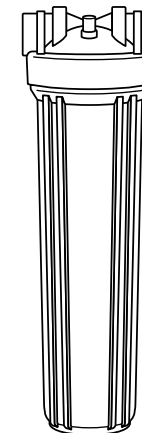
Filter Housing



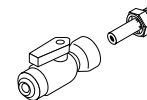
Vertical Elbow



Pre-Filter



Drain Valve Assembly

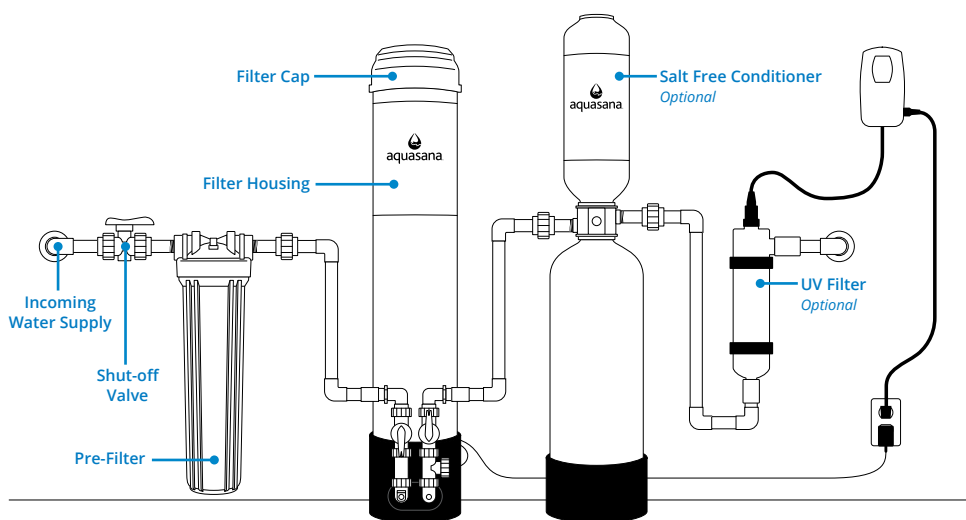


Parts and pieces included with your system will vary depending on your specific order. Please call Customer Service with any questions or concerns **866-662-6885**.

Tools recommended for installation:

- Drill
- Wrench
- Channel locks
- PVC pipe cutter
- NSF approved PVC primer and glue
- NSF certified Plumber's Tape (*thread sealing tape*)
- Copper wire & grounding clamps (*if copper pipes are present*)

If you have added components to your OptimH2O® Water Filter System, note the correct sequencing below.



Before installing

- **Lay out system in appropriate configuration. Improper sequence of equipment will affect performance, and could possibly damage your system.**
- **For all installations:** Anticipate the need for additional parts and pieces including but not limited to PEX tubing, clamps, and mounting screws to install unit properly (available at a local home improvement stores or through your plumbing contractor). Due to the varieties of home design, not all configurations can be addressed in this guide.
- **DO NOT** install this filter where the line pressure may exceed 100 psi. The operating pressure range for this filter is between 20psi – 100psi.
- Install on cold water lines only (40° – 90°F).
- Installation of the filtration system must comply with existing state and local plumbing codes. Aquasana and its manufacturer are not liable for consequential or incidental damages due to improper installation.
- **DO NOT** install the unit on its side. It must be installed upright to maximize contact with media bed.

Read all precautions and installation instructions carefully and completely before installing.

Precautions

- Properly tighten all fittings to ensure a leak-free assembly.
- NSF certified Plumber's Tape is the only sealer that can be used on threaded fittings. **DO NOT** use pipe dope or PVC primer/glue on threaded fittings. Exposure to these compounds will damage nipples causing leaks.
- Pick an appropriate installation location. Dimensions of systems vary—always allow an estimated minimum of 60" clearance for height of tank, and a minimum of 45" for floor space.
- Unit must be installed in an area where the main water line enters your home, before connecting to the water heater. **DO NOT** install after a water heater or on the hot water line.
- It is recommended your system be installed indoors and out of direct sunlight. Prolonged exposure to light can weaken plastic components, resulting in filter housing failure. If this is not possible and the system is outdoors or in a sunny area, the unit must be protected from both direct sunlight and freezing temperatures.
- If installing on metallic plumbing, two grounding clamps and #4 copper wire are essential for safety.
- Some local codes may require the use of a licensed plumber or certified installer when disrupting a potable water line.
- In areas with high pressure, a pressure relief valve and a water hammer arrestor may be necessary.

Cleaning

The exterior of your filtration system can be cleaned with warm, soapy water. Rinse well with fresh, clean water.

NOTE: Never use chemical cleaning products on the system's exterior surface as they may damage the housing.

Specifications

This filter system is designed and tested for use with genuine Aquasana parts including replacement filters and all hardware. Use of parts from other manufacturers may result in loss of contaminant reduction performance, system damage or failure. Use of parts from other manufacturers will also void your warranty. Please visit aquasana.com for replacement parts.

A Pre-Filter is included with your system. Sediment levels vary from one location to another. It is recommended to replace your Pre-Filter every 6 months. If the flow rate has noticeably decreased, replace your filter cartridge sooner.

Model: EQ-OPTM-X

Replacement tank: EQ-OPTM-R

Additional Replacements:

20" Pre-Filter: EQ-OPTM-PRE-R

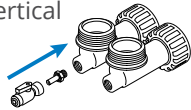
NOTE: DO NOT use pipe solvent (dope), pipe dope may cause damage to plastic fittings. **DO NOT** over-tighten. **DO NOT** install after the water heater or on the hot water line. Components and installation will vary.

1 Select Location

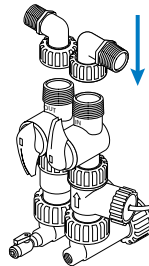
1. Pick an appropriate installation location. Unit must be installed in an area where the main water line enters your home, before connecting to the water heater.
2. Turn off the main water source prior to installation. Drain water from lines to relieve pressure by turning on a faucet inside your home.

2 Assemble Tank

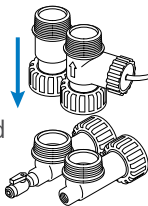
1. Install Drain Valve assembly into Vertical Elbow using the threaded connection & Plumber's Tape.



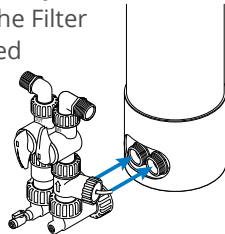
4. Connect the Connectors that are most convenient to your system (Straight or Angled) to the Bypass Manifold.



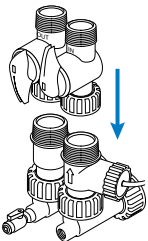
2. Connect the Flow Meter Assembly to the Vertical Elbow. The Flow Meter should be connected on the outlet side (right side) at the bottom of the tank.



5. Connect the Vertical Elbow to the Cap Assembly on the bottom of the Filter Housing. Plugged fittings should be installed on the right side.

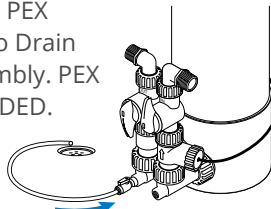


3. Connect the Bypass Manifold to Flow Meter Assembly.



NOTE: Flow direction arrows on bypass are incorrect for this filter application. Plumb unit opposite of arrows.

6. Connect 3/4" PEX Plumbing to Drain Valve Assembly. PEX NOT PROVIDED.

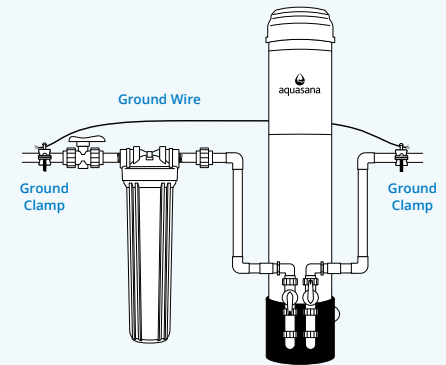


7. Install 3 AAA batteries to the Umbrella Cap; connect to Power Supply. BATTERIES NOT PROVIDED.

3

COPPER PIPES ONLY (proceed to Step 4 for PVC Pipes)

When installing on metallic plumbing, ensure you take the following precautions. Securely install two (2) grounding clamps and a #4 copper wire (not included) across the location where the system will be installed. Tightly clamp at both ends, as shown in the illustration.



⚠ WARNING

ELECTRICAL SHOCK HAZARD
Prior to installation on metallic plumbing, securely install two grounding clamps and a #4 copper wire per installation instructions. Failure to follow these instructions can result in death or electric shock.

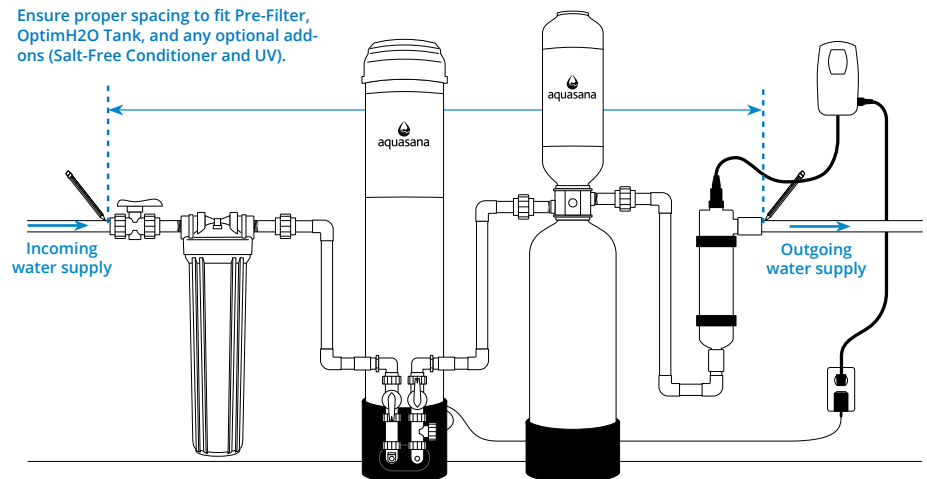
4

Install Shut-off Valve and Ensure Spacing

1. Using a pipe cutter, cut into the main water supply line to install the shut-off valve.
2. Loosely fit shut-off valve to calculate proper spacing of components.
3. Measure distance for Pre-Filter, OptimH2O tank, and optional add-ons (Salt-Free Conditioner and UV) and mark pipe accordingly.

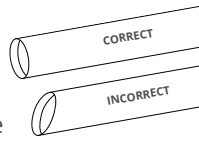
If you're installing additional add-ons make sure to read through those separate installation manuals prior to fully installing your complete system.

Ensure proper spacing to fit Pre-Filter, OptimH2O Tank, and any optional add-ons (Salt-Free Conditioner and UV).



5 Cut Pipes

- Using a pipe cutter, cut into the main water supply line along the marked sections from step 4 to install the shut-off valve and clean ends of pipe. Ensure there are no burrs, sharp edges, or deep scratches. Cut tubing as straight as possible with a utility knife, or an appropriate pipe cutter for copper tubing or PVC.



- Loosely fit shut-off valve to calculate proper spacing of components.

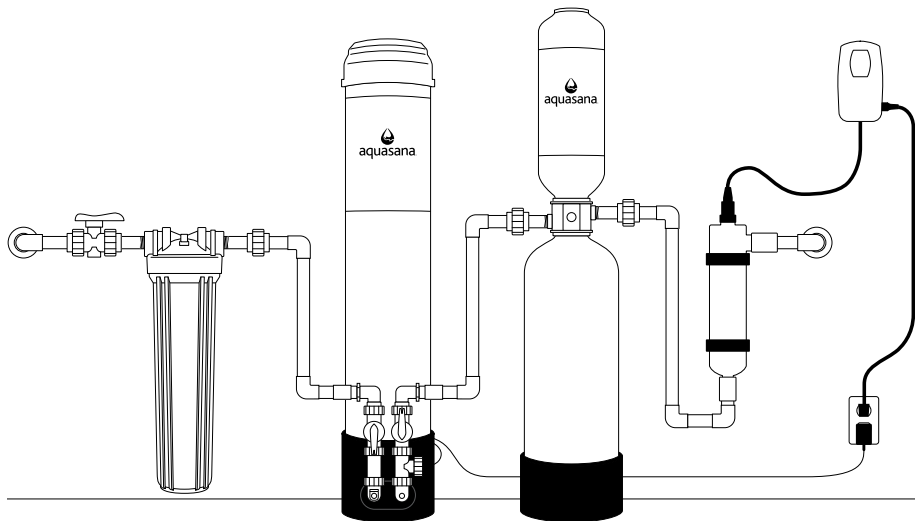
NOTE: DO NOT cut more pipe than necessary. You can cut more pipe later if needed. If you're also installing a bypass loop, do so at this time.

6 Configure System

Fit OptimH2O tank and additional optional add-ons into the system at this time. Screw Pre-Filter support bracket onto the wall and attach filter.

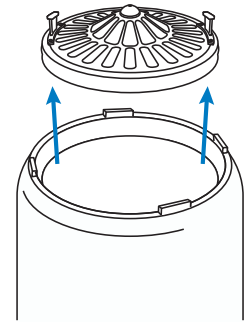
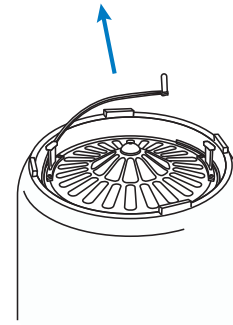
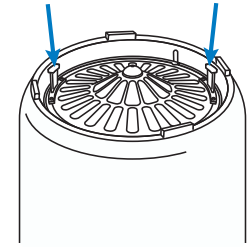
NOTE: Ensure wall material is stable enough for mounting purposes. The filter housing will become very heavy when full of water.

Properly connect system together accordingly (slip fittings, barbed fittings, NSF certified PVC glue, etc.). Ensure all parts are flowing through the "IN" port in the correct direction of water flow.



7 Remove Top Cap

- Push down the top cap with both hands to unseat the snap ring, and remove the snap ring by carefully grasping the handle and pulling inward, then upward. The snap ring should slide completely out of the groove.
- Remove the top tank snap ring. Remove the top cap from the housing assembly. Pull the cap out of the top of the tank by lifting up on the handles.

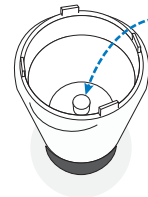


8 Prepare Filter

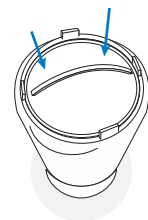
- Remove packaging from the filter cartridge. Place the filter cartridge into the tank with the double O-ring facing down. Position the cartridge so that it is aligned with the bottom, center opening.



NOTE: You should see a small opening centered in the bottom of the tank.

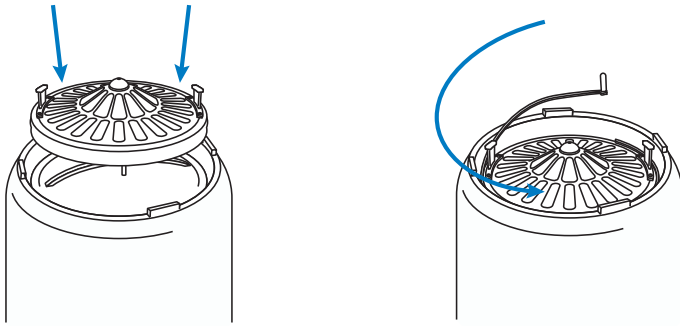


- Press down on the cartridge so that the double O-ring seal moves into place within the bottom, center opening.



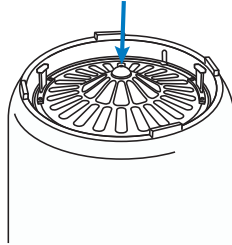
9 Reattach Top Cap

1. Reposition the top cap into its original location.
2. Reattach top tank snap ring. Pull up on the top cap to seat the O-rings.



10 Final System Check

1. Once installation is complete, allow proper time for glue to dry according to manufacturer instructions.
2. Push down on the red depressurization button on the top cap to relieve the system of air. Keep the button pushed down as you slowly turn the water back on. DO NOT release the button until all air pressure is fully released and water comes out of the red depressurization button.
3. Release the red button and inspect the system for leaks. After inspecting for leaks, allow water to run through the system for 10 minutes for the final flushing period.



Water Meter

The totalizer keeps track of the gallons using a water meter. The water meter is a turbine style meter with a magnetic pickup that sends a pulse to the electronics for every revolution of the meter turbine. The meter turbine is removable for inspection and cleaning. Make sure water is bypassed or turned off when removing the meter for maintenance. The meter has a three pin plug that connects to the electronic board.

Power Monitoring & Battery Mode

The board monitors the 12V dc power and the battery power. If there is a power failure and no batteries are installed, the current totalizer value will be saved to non-volatile memory. When power is resumed, the totalizer count will resume from when it had previously lost power.

The LEDs should shut off during battery mode. If the totalizer is to the yellow or red state or if the battery voltage gets low, the LEDs will flash on in the appropriate colors for 0.125 seconds every 4 seconds. If the pushbutton is pressed in battery mode, the LEDs will turn on for 4 seconds and then return to battery mode.

Pushbutton

The pushbutton allows for the totalizer to be reset.

To reset the totalizer, the user should press and hold the button for 3 seconds. When the totalizer is reset LEDs should flash green 3 times to confirm it is reset.

LEDs

Normal colors for the LEDs are Green, Yellow, and Red. Depending on the Totalizer value.

- **Green** = 0–90% of the totalizer max
- **Yellow** = 90–100% of the totalizer max
- **Red** \geq 100% of the totalizer max

If there is flow, the LEDs should alternately turn off in the following pattern: 1-2-3-2 (repeat). The frequency that they turn off is linearly correspondent to the flow rate being received from the water meter. For every 1 revolution from the meter, the LED pattern should be incremented to turn off the next LED. If there are no pulse edges for 2 seconds, all the LEDs will turn on solid.

If the battery is low, the middle LED (#2) will turn White. The battery is checked only once an hour to minimize the battery drain from checking the voltage.

Power

This unit is to be powered using +12V DC. The power input is a wire tail with a 2.5mm, center positive barrel jack.

The totalizer has a battery backup. The battery backup uses 3 AAA size batteries. The battery holder is a part of the PCB assembly and can be accessed by removing the lid to the filter. Battery life will vary based on water flow when running on battery mode and type of batteries used. With high continuous flow, the batteries are expected to last approximately 14 days. With no flow, the batteries are expected to last approximately 6 months.



Testing Performed under NSF/ANSI Standards 53 and P473 in accordance with the California Department of Health Services Drinking Water Treatment Device Program. This system has been tested according to NSF/ANSI 53 & P473 for reduction of the 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 NSF/ANSI 53 and P473.

Performance Data for the OptimH2O Whole House Filter					
Model	Replacement	Micron Rating	Size	Operating Pressure Range	Operating Temp. Range
EQ-OPTM	EQ-OPTM-R	0.5	8" x 42"	20-125 psig / 1.38-8.6 bar	34-120° F / 1-50° C
Electrical Requirements			Rated Capacity		
Grounded & Unswitched 115V outlet, 3 AAA Batteries			106,750 Gallons @ 4.82GPM / 404,092 L @ 18.25 LPM		
NSF/ANSI 53			NSF P473		
99.62% lead and cysts reduction			98.2% PFOA/PFOS reduction		
Distributed by: Aquasana, Inc. 6310 Midway Road · Haltom City, Texas 76117 · 866-662-6885					



The OptimH2O filter is IAPMO Tested and Certified to NSF/ANSI Standard 53 to reduce both soluble and particulate forms of lead and cysts, and to NSF/ANSI Standard P473 to reduce perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

Internally tested Performance Data for the Aquasana Whole House Water Filter		
Parameter	Influent Challenge Chlorine	Overall % reduction
Chlorine, Chloramines Reduction	3 mg/L ±10%	>90%



Do not use with water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.

- All contaminants reduced by this filter are listed.
- Not all contaminants listed may be present in your water.
- Does not remove all contaminants that may be present in tap water.
- Manufactured from NSF/ANSI standard 61 and California Prop 65 Compliant certified coconut shell carbon and raw materials.



Filter is only to be used with cold water.



Filter usage must comply with all state and local laws.



Testing was performed under standard laboratory conditions, actual performance may vary.



Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.



See owner's manual for general installation conditions and needs plus manufacturer's limited warranty.

OPTIMH2O® WATER FILTER LIMITED WARRANTY

Who is covered

AQUASANA AND ITS SUPPLIERS, (herein collectively referred to as "Manufacturer") warrants to the owner of the home where the water filter is initially installed (hereinafter "Owner"). The warranty is restricted to the water filter used in a single-family residence in the United States of America and is void if moved from the original installation location.

What is covered

This Warranty covers defects in materials or workmanship during the limited warranty period of your Aquasana OptimH2O Whole House Filtration System including sub-components purchased with original system (may or may not include pre-filter, post-filter, and fittings), except as provided below. The water filter is warranted only when it is installed, operated and maintained in accordance with the instructions accompanying the water filter found on Aquasana.com. A water filter should be installed in such a manner that, if the tank or any connection thereto should leak, the resulting flow of water will not cause damage to the area in which it is installed. For detailed instructions read the manual accompanying the water filter and review drawings in the manual.

For how long

This warranty runs for months specified in chart below from the date of purchase by a consumer (hereinafter "Warranty Period"). No warranty coverage will be provided if the claimant is unable to provide proof of purchase. Water conditions and use rates may limit the functional lifespan of your filter. This Limited Warranty does not extend to the full estimated life span of the filter.

What Aquasana will do

1. If necessary, the Manufacturer will provide a replacement that fulfills the remaining estimated lifespan (see chart) of your original purchase and send it to you with installation instructions. If industry standards, product improvements or product obsolescence prohibit Manufacturer from furnishing an identical model replacement water filter under this warranty, the Owner will be furnished with a new water filter of comparable remaining lifespan and functionality; however, the Owner will be charged for the additional value of the item(s) which Manufacturer has incorporated in the replacement water filter.

OPTIMH2O SYSTEM WARRANTY COVERAGE

Model	Lifespan
EQ-OPTM-X	5 Years
Installation Kit <i>(includes pre-filter and fittings purchased with original system)</i>	1 Year

This warranty does not include the UV Filter. See full warranty information for the UV Filter in the original UV manual.

2. Component Part – If any component part proves to Manufacturer's satisfaction to be defective in material or workmanship within the warranty period listed on the data plate label, the Manufacturer will furnish the Owner with a replacement for the defective part(s).
3. Return of Defective Water Filter and Component Parts – Manufacturer reserves the right to examine the alleged defect in the water filter or component part(s), and it will be the Owner's obligation to return the water filter and/or component part(s) to the Manufacturer at the Manufacturer's request.
 - a. When returning a water filter, it must include all component parts.
 - b. When returning component part(s), they must be individually tagged and identified with the water filter's model number, date of purchase, and date of installation.

What is not covered

1. This warranty does not cover filter cartridges and any systems that were not installed in compliance with the instructions or that have been abused or operated incorrectly.
2. The Limited Warranty stated herein is in lieu of any and all warranties, express or implied (whether written or oral), including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.
3. Manufacturer shall not be liable for any incidental, consequential, special, or contingent damages or expenses, arising, directly or indirectly, from any defect in the water filter or the use of the water filter.
4. Manufacturer shall not be liable for any water damage arising, directly or indirectly, from any defect in the water filter or component part(s) or from its use.
5. Manufacturer shall not be liable for any damage or product failures caused by any of the following:
 - The water filter or any of its component parts have been subject to misuse, alteration, neglect or accident.
 - The water filter has not been installed in accordance with the applicable local plumbing and/or building code(s) and/or regulations or in their absence.
 - The water filter is not installed, operated and maintained in accordance with the printed Manufacturer's instructions, including if the water filter has any additional aftermarket equipment introduced into the sealed system not approved by the manufacturer.
 - The water filter is exposed to highly corrosive conditions.
 - The water filter is not continuously supplied with potable water.
 - The water filter is not operated within the factory calibrated temperature limits.
 - The water filter is removed from its original installation location.
 - The water filter is installed in direct sunlight or exposed to freezing temperatures.
 - The water filter or any of its component parts fail due to iron or sediment build-up.
 - Clogging due to purchaser's failure to replace the Pre-Filter cartridge.
 - Damage caused by fire, flood or acts of God.
 - Damage caused by over-pressurization in the water line.
6. This warranty does not cover damage caused by the use of parts that are not genuine Aquasana parts. This includes, but is not limited to replacement filters, faucets, and/or diverter valves.
7. Except when specifically prohibited by the applicable state law, the Owner, and not the Manufacturer, shall be liable for and shall pay for all charges for labor or other expenses incurred in the removal, repair or replacement of the water filter or any component part(s) claimed to be defective or any expense incurred to remedy any defect in the product. Such charges may include, but are not necessarily limited to:
 - a. All freight, shipping, handling and delivery costs of forwarding a new water filter or replacement part(s) to the owner.
 - b. All costs necessary or incidental in removing the water filter or component part(s) and installing a new water filter or component part(s).
 - c. Any material required to complete, and/or permits required for, installation of a new water filter or replacement part(s), and
 - d. All costs necessary or incidental in returning the water filter or component part(s) to a location designated by the manufacturer.

How to get service

To receive service under this Warranty, you must contact Aquasana (A. O. Smith Water Treatment (North America), Inc.) at 1-866-662-6885 or warranty@aquasana.com within the Warranty Period to describe the problem to a customer service representative who will verify that the product is under warranty and determine whether a part or the system will be replaced and whether you must send back the unit. You will be required to provide proof of purchase and proof of proper installation.



Replace your filters on time, without worry — auto-delivered to you, for less.

It's important to change your filters using genuine Aquasana replacements for continued water filtration and optimum system performance. This is why we offer our no contract, auto-ship filter replacement program called Water for Life®.



Free Shipping

Replacements shipped directly to you, right when you need them, at no extra cost.



Discount Replacements

Lock in a 15% discount on filters to ensure you always get the best price.



Extended Warranty

Our performance promise to you – free replacement parts, just in case.



No Contract

Replacing your filters is serious – but your commitment doesn't have to be.

CONTACT US TO LEARN MORE



866-662-6885



waterforlife@aquasana.com



LOVE IT?

Please let us know with a review on Aquasana or your retailer's site.



NEED HELP?

Give us a call at **866-662-6885** and tell us what's going on.

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877.332.7873 Canada
www.aquasana.com