



EQ-400

Whole House Water Filter

# **Rhino**<sup>®</sup>

**CITY WATER** 

Owner's Manual





Meet clean, healthy water. Your new Aquasana® whole house Rhino® system was expertly engineered to reduce contaminants, including chloramines, from the water throughout your entire home.

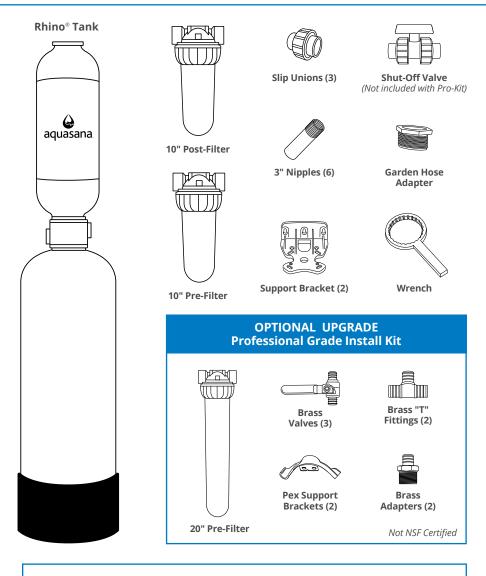
Enjoy the peace of mind that comes from knowing our award-winning water filter technology is working for you.

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# Whole House Water Filter **Rhino**<sup>®</sup>

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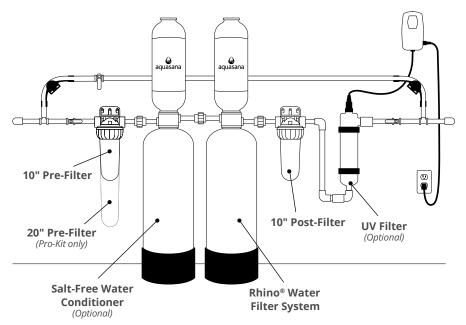
Parts and pieces included with your system will vary depending on your specific order. Please call Customer Service with any questions or concerns **866-662-6885**.

#### Tools recommended for installation:

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

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

(Installation shown below includes Professional Grade Install Kit)



## **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 ( $40^{\circ}$   $90^{\circ}$ 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 (thread sealing 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.

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 2 months. If the flow rate has noticeably decreased, replace your filter cartridge sooner.

**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.

Model: EQ-400

Replacement tank: EQ-400R

## **Additional Replacements:**

20" Pre-Filter: EQ-304-20 10" Pre-Filter: EQ-304 10" Post-Filter: EQ-PFC.35 UV Lamp: AQ-UV-L330C

Salt-Free Conditioner: EQ-AST-WH-R-C

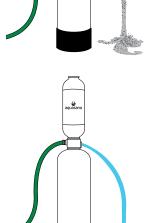
#### **Pre-Condition Rhino Tank**

**NOTE:** It's imperative that this system is flushed properly prior to final installation. The granular carbon used in the bottom tank contains 1-2% by volume of carbon fines that must be flushed out prior to use. Surge flushing is the best method for purging these carbon fines from the media bed.

- Once out of the box, keep the tank upright at all times as to not apply pressure to divider. Remove shipping caps from inlet and outlet ports. Using supplied adapter, connect a garden hose to the inlet port so the water will flow into the system and out of the outlet port.
- Slowly turn faucet on and allow discolored water to flow from outlet into a suitable drainage area. The first few gallons will appear black and cloudy due to carbon fines.

TIP: You may need to slightly shake the tank to help remove carbon fines.

- 3. After an initial 15-minute flushing, begin a period of "surge flushing" by turning water supply on for 30 seconds and then off for 30 seconds, repeating cycle for 15 minutes or until initial surge of water is completely clear and free from discoloration and cloudiness.
- 4. Disconnect the system from the garden hose, be sure the white washers are properly set inside the inlet and outlet ports, and position the system for installation.



## Select Location

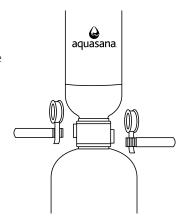
- 1. Pick an appropriate installation location. Unit must be installed in an area where the main water line enters your home, before connecting to the water heater.
- 2. Turn off the main water source prior to installation. Drain water from lines to relieve pressure by turning on a faucet inside your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

**NOTE: DO NOT** install after the water heater or on the hot water line. Components and installation will vary.

## (3) Prepare Rhino Tank

Wrap your pipe nipples with NSF certified plumber's tape. Connect the nipples to the system's inlet and outlet.

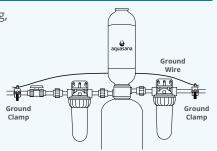
**NOTE: DO NOT** use pipe solvent (dope), as solvents in some types of pipe dope may cause damage to plastic fittings. Do not over-tighten to prevent damage to filter head.



## **4**)

#### **COPPER PIPES ONLY** (proceed to Step 5 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.



#### **AWARNING**



#### **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.

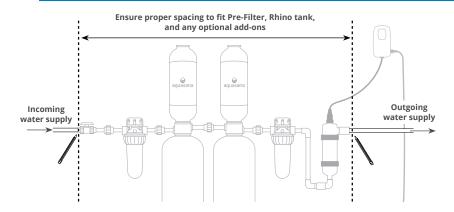
## (5) Install Shut-off Valve and Ensure Spacing (Cont. on next page)

- 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, Rhino 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.

## (5) Install Shut-off Valve and Ensure Spacing (Cont. from previous page)

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



#### 6 Cut Pipes

Cut pipe along the marked sections from step 5 and clean ends of pipe. Ensure there are no burrs, sharp edges or deep scratches.

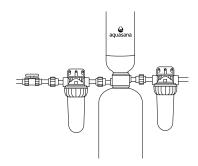
**NOTE:** Cut tubing as straight as possible with a utility knife, or an appropriate pipe cutter for copper tubing or PVC.

## **7** Configure System

Fit Rhino tank and additional optional add-ons into the system at this time.

Screw Pre-Filter and Post-Filter support brackets onto the wall and attach filters.

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.



CORRECT

INCORRECT

## 8 Final System Check

Once installation is complete, allow proper time for glue to dry according to manufacturer instructions. Then, slowly turn water on and inspect for leaks.

After inspecting for leaks, turn on the faucet closest to the installed unit and allow water to run for 5-10 minutes for the final flushing period.



Performance Data Sheet for the EQ-400 Aquasana Whole House Rhino® Water Filter System								
Models	Replacement	Max Operating pressure	Rated capacity	Operating temp. range	Rated flow			
EQ-400	EQ-400R	100 psi	400,000 gallons	40-90° F	7.0 gpm			
Manufactured by: Aquasana, Inc. 6310 Midway Road · Haltom City, Texas 76117 · 866-662-6885								

This system has been independently tested for reduction of chloramines on standard chloraminated tap water.

#### **Data Summary Table**

Sample Point	Accumulated Volume (gal)	Dynamic Pressure (psi)	Chloramine, Free Available (mg/L)		Flow Rate (gpm)	% Reduction
ronit	Effluent 1	Influent	Influent	Effluent 1	Effluent 1	Effluent 1
Startup	10	60	3.21	<0.01	7.10	79.9%
10%	50,000	60	2.84	0.13	6.99	95.4%
20%	100,000	60	3.10	0.39	6.98	87.4%
30%	150,000	60	3.08	0.87	6.84	71.8%
40%	200,000	60	3.00	0.76	7.05	74.7%
50%	250,000	60	2.99	1.07	6.94	65.2%
60%	300,000	60	3.08	1.31	6.99	57.5%
70%	350,000	60	3.23	1.75	7.15	45.8%
80%	400,000	60	3.19	0.75	7.10	76.5%



For use with municipally treated water only. 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.



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.

# RHINO® 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 Rhino 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 (herinafter "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/capacity (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 capacity 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.

RHINO SYSTEM WARRANTY COVERAGE					
Model	Lifespan/Capacity				
EQ-400	4 Years / 400,000 Gallons				
Installation Kit (includes pre-filter, post-filter, and fittings purchased with original system)	1 Year				

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

- 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 Manufacturers 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.
- 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.
- 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.



Free Shipping



Discount Replacements



Extended Warranty



No Contract

#### **CONTACT US TO LEARN MORE**

waterforlife@aquasana.com





## **LOVE IT?**

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



## **NEED HELP?**

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

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