

# RainSoft®

*Environmental Products for the Home ...since 1953*

## QRS SERIES WATER TREATMENT SYSTEM

# Owner's Manual



This product is manufactured in an ISO 9001:2000 certified facility.



The QRS H series is tested and certified by the WQA to NSF/ANSI 42 and 53 for the specific performance claims as verified and substantiated by test data. See the performance data sheet for specific reduction claims.

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**Congratulations** on your purchase of a RainSoft water filtration system.

This Owner's Manual is designed to assist with the operation, maintenance, and installation of the QRS system. It is our sincere hope that this manual is clear, concise, and helpful to you as a new owner.

**Questions?** If you have any questions regarding the installation, operation, or servicing of this system, please contact your local RainSoft Dealer. Your local RainSoft Dealer is familiar with your particular water conditions, and is able to address your concerns promptly and efficiently.

## Operational Specifications

### Plumbing

3/4" to 1 1/4" inch I.D.

### Water Pressure

20 psi – 120 psi (138 kPa – 828 kPa)

### Operating Temperatures

40°F – 100°F (4.4°C – 37.8°C)

### Bypass Valve

The bypass valve enables you to bypass the system in situations of: emergency leaks in the equipment, service calls.

### Existing Plumbing Conditions

Plumbing should be free from lime and/or iron buildup. Piping that contains large amounts of lime and/or iron should be replaced.

### Additional Specifications

- The inlet water should be free of iron and turbidity.
- Do not install this system where water 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 waters that may contain filterable cysts.
- This system must be installed in accordance with all applicable state and local laws and regulations.
- This system must be installed in an area not affected by extreme heat, cold, or the elements. The selected installation area must be adequate for easy service and accessibility.
- The installation must be on a cold water supply.

### Data Chart

| QRS MODEL | QUANTITY OF MEDIA | SERVICE FLOW RATE | PSI DROP@ SERVICE FLOW RATE | CAPACITY FOR VOC REDUCTION | CAPACITY FOR AESTHETIC CHLORINE REDUCTION |
|-----------|-------------------|-------------------|-----------------------------|----------------------------|---|
| 844 H     | 0.9 cu.ft.        | 6.0 gpm           | 3 psi                       | 20,250 gallons             | 90,000 gallons                            |
| 1044 H    | 1.4 cu.ft.        | 8.0 gpm           | 3 psi                       | 31,500 gallons             | 140,000 gallons                           |
| 1054 H    | 2.0 cu.ft.        | 10.0 gpm          | 5 psi                       | 45,000 gallons             | 200,000 gallons                           |
| 1354 H    | 4.0 cu.ft.        | 12.0 gpm          | 6 psi                       | 83,250 gallons             | 370,000 gallons                           |

## Product Certification Information

The QRS H series is tested and certified by the WQA to NSF/ANSI Standard 42 and 53 for the specific performance claims as verified and substantiated by test data.

Water treatment devices sold to retail consumers in California, accompanied by certain health claims, must be certified by the State of California Department of Public Health. This product is not certified in the State of California for the purpose of making health claims.

## Installation Instructions

### 1. Safety Precautions

- To prevent accidents and/or injuries, do not hoist the equipment over your shoulder; use a hand truck.
- Do not lay the system on its side.
- Wear safety glasses and work gloves during installation and service.

### 2. Test the Raw Water

- If water contains iron, manganese or hydrogen sulfide, a separate iron removal system is suggested to be installed prior to the filter, consulting with your local dealer.

### 3. Check the Water Pressure

- The minimum water pressure is 20 psi and the maximum water pressure is 120 psi. Use a pressure gauge to confirm that the water pressure does not exceed 120 psi. If the water pressure does exceed this limit, install a pressure regulator on the inlet pipe to the system. Set the pressure regulator at a maximum of 60 psi, which is the optimum operating pressure.

### 4. Locate a Site for the System

- There is only one requirement needed for a site: the main water source. Locate the system as close to the water meter or pressure tank as possible.
- Place the system in the desired location. The location must have a level, smooth, and clean surface.
- If the system is located outdoors, protect the unit from direct sunlight; direct sunlight can damage the fiberglass and other system components. If necessary, build a box or shed.

### 5. Turn Off the Water and Drain the Plumbing

- Turn off the water at the meter or pressure tank.
- Drain all the pipes. Do not sweat pipes with water in them; steam will damage the plastic parts in the valve.
- To drain the plumbing system, open all faucets in the house and flush the toilets. The water will drain out of the lowest faucet or outlet and air will enter the plumbing system.

### 6. Provide Untreated Water for Irrigation or Outdoor Watering

- If available, run an untreated water line to outside faucet or provide a hose connection on untreated line prior to the system.

**! For Massachusetts Residents Only:**  
• The Commonwealth of Massachusetts Plumbing Code 248 CMR shall be adhered to. A licensed plumber shall be used for this installation

**! Important Note: The system can only be installed outdoors in climates that do not reach freezing levels.**

## 7. Install the Pipe Connector (Yoke) to the Bypass Valve

- Connect the raw water pipe to the inlet pipe connection of the yoke. See Figure 1 for the correct direction of flow. The arrow molded into bypass valve also indicates the direction of flow.
- Connect the treated water pipe to the outlet pipe connection on the yoke. See Figure 1 for the correct direction of flow. The arrow molded into bypass valve also indicates the direction of flow.
- Support all plumbing connected to the yoke; too much weight will cause a leak.
- Do not point the soldering torch directly at the mineral tank or control valve. These composite materials will last a lifetime, but cannot withstand the intense heat from a torch.
- Avoid short connections of pipe between the system outlet and the water heater inlet. If you can't avoid a short connection, move the system to another location. As a last resort, install a heat trap or check valve. If this causes "water hammer", install a "water hammer" suppressor.
- Connect the yoke to the bypass valve .
- Install the flow restrictor between the bypass and the couplings, as indicated in Figure 1.
- Connect the bypass couplers to the QRS head and tighten all screws.

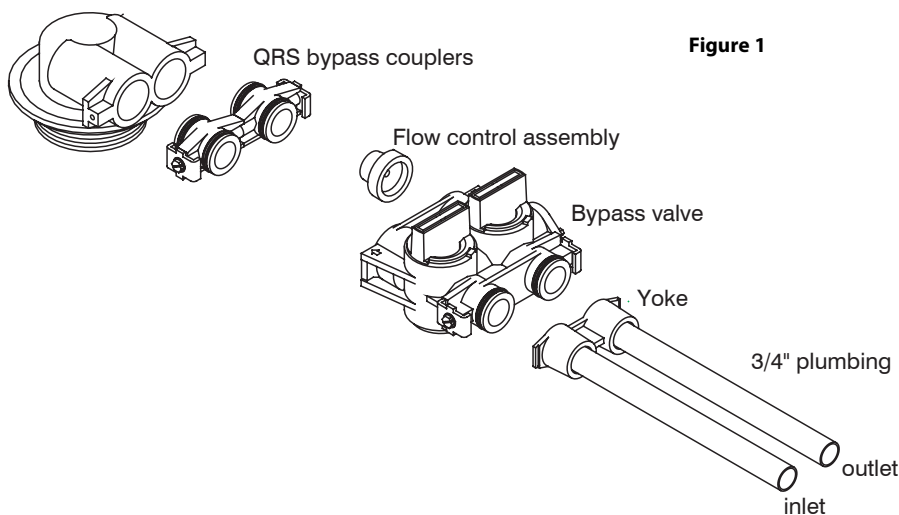
**Helpful Tip:** Water heaters can sometimes transmit heat back down the cold water pipe into the control valve. It may be necessary to install a back-flow prevention device to prevent this from occurring.

**Important Note:** The bypass valve is not designed to withstand heat from soldering or twisting from the attached threaded connections.

## 8. Set the Bypass Valve to Bypass

- Move the bypass valve handles to the bypass position (see figure 1). The bypass valve handles should be perpendicular to the pipes.
- Bypass any additional equipment that was installed with this system (if applicable).

\* Control valve & tank not shown



# System Start Up

## 1. Turn on the Water and Check for Leaks

- Close all faucets that were opened in **Step 5** of the **Installation Instructions**.
- Turn the water back on at the meter or pressure tank.
- Check for leaks. If a leak is present, drain the plumbing again before soldering.

## 2. Flush the System

- Open a cold water faucet and allow water to run for a few minutes or until all foreign material from the installation is washed out; close the faucet.
- Slowly move the bypass valve handles to the service position. The bypass valve handles should be parallel to the pipes.
- Allow water to completely fill the tank.
- To purge any air trapped in the system, open a cold water faucet and allow water to run for at least 2 minutes; close the faucet.
- To flush any remaining hard water from the hot water heater, run hot water in the bathtub until cold; close the faucet.

## 3. Test the Water


- Test the water for the particular contaminant that the system is designed to remove.

**The installation is complete and the system is ready for use.**

# Maintenance Requirements

## Replacing the Filter Media

The filter media will eventually become exhausted or consumed and will need to be replaced. RainSoft replacement filter media (part number 14826) is available through your local RainSoft Dealer. If you are unable to order replacement parts from your local RainSoft Dealer, please contact RainSoft at 1-800-860-7638 for assistance.

 **Helpful Tip: We recommend replacing the filter media every three years (or earlier if necessary). Your local RainSoft Dealer can give you specific replacement schedules based on your water usage and incoming water quality.**

## Testing Your Water

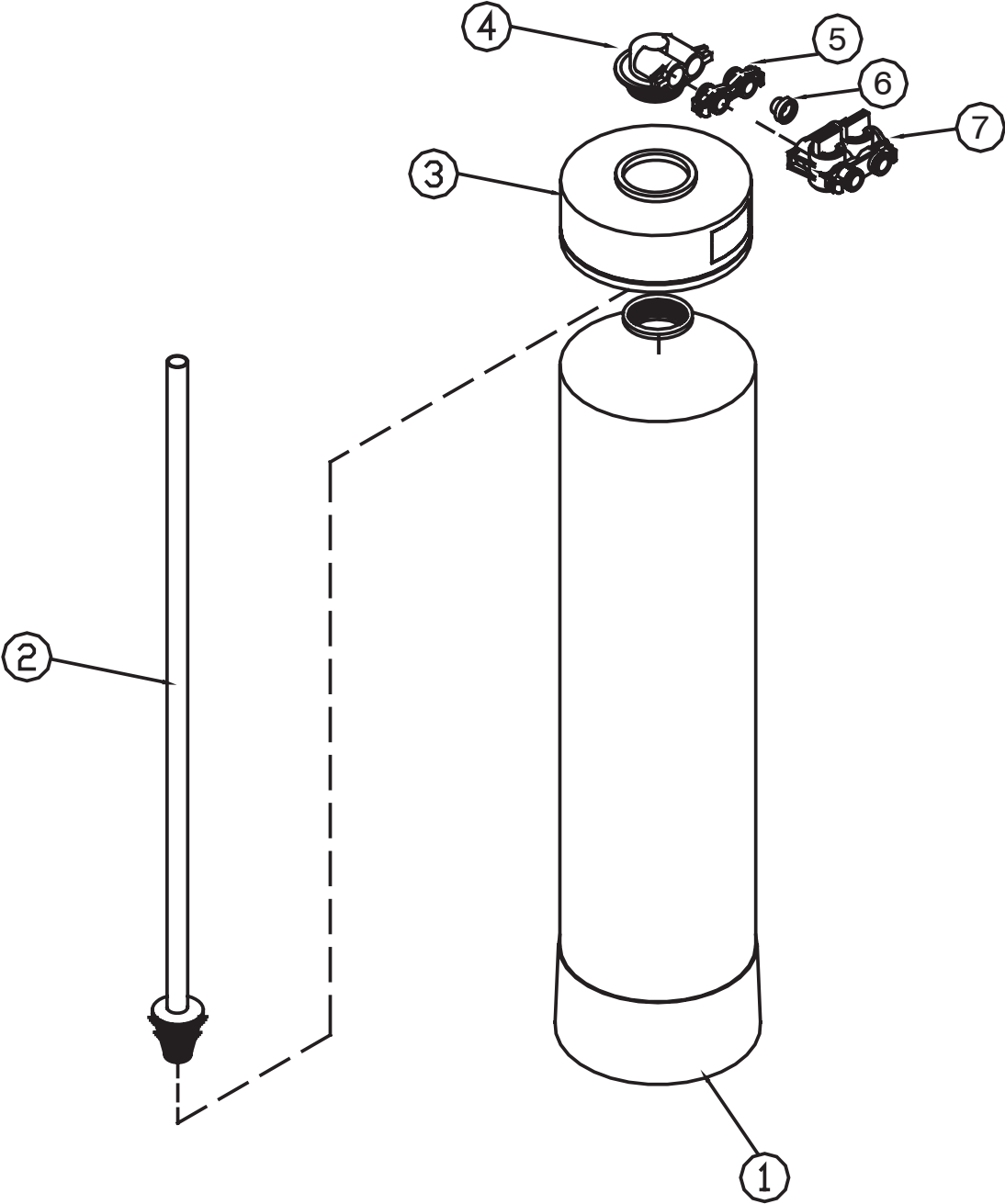
If you are relying on this system to reduce contaminants, we recommend having your water tested periodically (two times a year minimum) to ensure that the system is performing properly. Your local RainSoft Dealer can arrange this testing for a nominal fee.

# Troubleshooting Guide

| Symptom                          | Cause                                 | Solution  |
|----------------------------------|---------------------------------------|---|
| <b>1. Poor water quality</b>     | 1. The raw water has changed.         | 1. Call your RainSoft Dealer for a new water analysis.  |
| <b>2. Taste/Odor</b>             | 1. The filter media may be exhausted. | 1. Call your RainSoft Dealer to replace the filter media (part number 17626).   |
| <b>3. Loss of water pressure</b> | 1. Low pressure to the system.        | 1. Bypass the system to confirm the problem. <ul style="list-style-type: none"><li>• If the problem still exists after bypass, it is not related to the RainSoft equipment. Have your water distribution system checked.</li><li>• If the problem is resolved after bypass, contact your RainSoft Dealer for service.</li></ul> |

**If the troubleshooting guide did not resolve your problem, please contact your local RainSoft Dealer for service. If you cannot locate your local RainSoft Dealer, please contact RainSoft Customer Service at 1-800-860-7638 or logon to [www.rainsoft.com](http://www.rainsoft.com) for the name and location of your nearest authorized Dealer.**

# Exploded View



## Parts List

| ITEM | QUANTITY | PART NUMBER                      | DESCRIPTION  |
|------|----------|----------------------------------|--|
| 1    | 1        | 14587<br>16342<br>14597<br>14602 | <b>TANK WITH BASE</b><br>MODEL 844 H<br>MODEL 1044 H<br>MODEL 1054 H<br>MODEL 1354 H   |
| 2    | 1        | 18623<br>18851<br>18962          | <b>RISER PIPE ASSEMBLY</b><br>MODELS 844 H /1044 H<br>MODEL 1054 H<br>MODEL 1354 H   |
| 3    | 1        | 19777<br>19778<br>N/A            | <b>TANK COLLAR</b><br>MODEL 844 H<br>MODELS 1044 H /1054 H<br>MODEL 1354 H   |
| 4    | 1        | 19574                            | <b>COMPOSITE QRS HEAD</b>  |
| 5    | 1        | 19245                            | <b>QRS BYPASS ADAPTER</b>  |
| 6    | 1        | 51111<br>51112<br>51114<br>51115 | <b>FLOW CONTROL ASSEMBLY</b><br>MODEL 844 H (RED)<br>MODEL 1044 H (GREEN)<br>MODEL 1054 H (TAN/ORANGE)<br>MODEL 1354 H (BLACK) |
| 7    | 1        | 17557                            | <b>BYPASS ASSEMBLY</b>   |

# *Limited Lifetime Warranty*

*For as long as you own the equipment*

RainSoft Division of Aquion Water Treatment Products, believing its

## **WATER FILTRATION SYSTEM**

to be of exceptional quality, hereby warrants said equipment to its first purchaser at retail as follows:

**THE TREATMENT TANK AND VALVE ARE WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR THE LIFETIME OF THE FIRST PURCHASER AT RETAIL.**

**THE ELECTRICAL PARTS ARE WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR FIVE YEARS AND PRO-RATA WARRANTED FOR AN ADDITIONAL FIVE YEARS.**

**THE FILTER MEDIA IS NOT WARRANTED. THE FILTER MEDIA SERVICE LIFE IS DEPENDENT ON SPECIFIC WATER CONDITIONS AND USAGE.**

This warranty begins at the time the equipment is first connected for use, and is contingent upon the return of a signed owner's registration card.

This warranty does not require replacement of the entire unit. If the equipment does not perform properly, you should request service from the dealer that sold you the equipment. If you are not satisfied, you should notify our Customer Service Manager. If we are not able to arrange local servicing, you should send the defective part(s) (or, if you prefer, send the entire unit,) directly to the manufacturer, freight prepaid, with proof of purchase and a copy of this warranty. The defective part(s) (or entire unit) will either be repaired or new RainSoft part(s) furnished, for a nominal charge to cover labor, handling, packing and the increase, if any, in the retail price of the part(s) since the date of purchase. Genuine RainSoft parts must be used. Failure to use genuine RainSoft parts will void the warranty and certifications.

This warranty does not include labor charges, and does not cover installation, transportation, or any other claims or torts. Some states do not allow the exclusion or limitation of incidental or consequential damages, so parts of the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a State court, or a Federal District Court.

This warranty is void if equipment is not installed and operated according to instructions. It does not apply to damage caused by abuse, accident, neglect, freezing, fire, or other abnormal conditions beyond the company's control. This warranty is void on any part from which the manufacturing date has been removed or made illegible.

Benefits will be provided by various types of RainSoft equipment when installed and operated according to the manufacturer's recommendations. Operational, maintenance and replacement requirements are essential for the product to perform as advertised. All claims are based on the best available information at the time of printing. Manufacturer makes no representations as to the suitability of this equipment for a particular application. Buyer relies entirely on the dealer's recommendations in the purchase of this equipment.

Independent RainSoft dealers may include, together with your RainSoft product, a product or component that is not manufactured by RainSoft or their parent company, AWTP, LLC. Any non-RainSoft product may be covered by the manufacturer of that product, and is not covered by the RainSoft warranty. AWTP, LLC does not warrant that your RainSoft product and the non-RainSoft product will perform properly when used together, and assumes no liability therefore.

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# NOTES



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