



Crystal Quest® Atmospheric Tanks INSTALLATION AND OPERATION GUIDE



Copyright 2017
Crystal Quest®
All rights reserved
MADE IN THE USA



ATMOSPHERIC TANK KITS

The Atmospheric Tank Kit includes:

1. A storage **tank** in which product is stored at ambient pressure. Atmospheric tanks are designed to operate at pressures ranging from the pressure of the atmosphere. The pressure measurement is made at the top of the liquid.
2. The **Up Float Switch** shuts off the power to your Re-boosterizer Pump once your Atmospheric Holding Tank has filled and the **Down Float Switch** activates the power to your Re-boosterizer Pump once your Atmospheric Holding Tank has emptied to begin refilling it.
3. **Re-boosterizer Pump with SMART Switch** repressurizes the outgoing water line from your Atmospheric Holding Tank back up to 40 – 60 after the Reverse Osmosis process drops the incoming water pressure to zero.





AVAILABLE KITS

PART #	CONTENTS
CQE-ST-165ROK	165 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-220ROK	220 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-305ROK	305 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-550ROK	550 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-600ROK	600 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-1000ROK	1,000 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-2500ROK	2,500 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-5000ROK	5,000 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump
CQE-ST-10KROK	10,000 Gallon Atmospheric Tank, Up/Down Float Switches and 40 gal/60 psi Re-boosterising Pump



TANK INSPECTION

Inspect the tank immediately upon reception. Minor dents and scratches may be acceptable and repaired on site. If damages affect the integrity and performance of the tank, please contact your distributor.

OPERATING SPECIFICATIONS

Temperature Range: 40-85° (4.4-29° C)

IMPORTANT INFORMATION

- When servicing your equipment make sure to unplug the power of both the Re-boosterizer Pump and each Float Switch.
- Only connect each unit to a properly grounded receptacle to reduce the risk of electrical shock. If receptacle or ground is in double, consult a licensed electrician.
- Once installation is complete, observe one complete cycle of each unit so that any potential problems can be addressed.
- Do NOT under any circumstances use this liquid fill control unit for volatile substances, gasoline, or any other combustible liquids.



INSTALLATION

1. If the tank has been received in a satisfactory condition, place the tank in the desired level location and if necessary, anchor to the floor. If possible, leave an area around the tank free from any walls, obstacles, etc. This gives working space for connecting the foam system piping to/from the tank.
2. Up Float Switch - This device is an in-line control for automatic operation of switch-less pump motors to control liquid fill levels within an Atmospheric Holding Tank. The control has a pass-through (or "piggy-back") plug molded into the power supply which allows the user to plug the Re-boosterizer Pump directly into it, and then plug the entire assembly into a standard grounded outlet. The fill level float control comes standard with an adjustable strap for mounting to a discharge pipe in close proximity to the unit. A six inch tether (from front to back of the float control to the initial clamp) is recommended for standard applications. A larger tether may be required for a larger-scale pumping differential.
3. Down Float Switch - This device is an in-line control for automatic operation of switch-less pump motors to control liquid fill levels within an Atmospheric Holding Tank. The control has a pass-through (or "piggy-back") plug molded into the power supply which allows the user to plug the Re-boosterizer Pump directly into it, and then plug the entire assembly into a standard grounded outlet. The fill level float control comes standard with an adjustable strap for mounting to the side of the holding tank. A six inch tether (from front to back of the float control to the initial clamp) is recommended for standard applications. A larger tether may be required for a larger-scale pumping differential.
3. Re-boosterizer Pump -
Location: Select a location as close to the water supply as possible,



INSTALLATION *CONTINUED*

making sure to comply with any state or local codes regarding Re-boosterizer Pump placement. A basement or heated pump house is an optimum location. The equipment must be protected from the elements and have proper ventilation. The temperature around the pump cannot exceed 100° F (38° C) or overload of the pump may occur.

Piping: Piping for installation may be copper, steel, rigid PVC plastic, or flexible polyethylene plastic. Any pipe used must be clean and free of scale particles or rust. Use pipe thread sealant on the male threads of metal pipe. Use thread seal tape with any plastic threads. Ensure all connections are made air tight to insure normal operation.

4. SMART Switch -

Starting: When the control unit is connected to the electrical network, the green "Power On" LED lights up, and the yellow "Pump On" LED lights up as well to indicate that the pump is in operation. The pump begins to operate for 1 – 2 minutes enabling the system to fill the pipes and reach the required operating pressure. If this lapse is insufficient for proper start-up, the red "Failure" LED lights up. If this occurs, press and hold the "Restart" button and wait, with a tap open, until the red "Failure" LED is off. Once the "Restart" button is released, close the tap and wait for the unit to stop once it reaches its optimum pressure of 30 – 60 psi.

Functioning: With optimum pressure achieved, the unit is programmed to perform all of the pump control operations automatically. If the unit should experience operational issues such



INSTALLATION *CONTINUED*

as water failure, obstruction of the suction pipe, etc., The unit automatically detects the problem and the red "Failure" LED will light up, as well as shut down the pump to prevent potential damages caused by the unit working in the absence of water. Once the problem is addressed, the system can be restarted by pressing the "Restart" button.

TANKS SOLD SEPARATELY

TANK CAPACITY	DIA.	HEIGHT	SPECIFIC GRAVITY	PART #
165 Gallon Storage Tank	31"	56"	1.5	CQE-ST-00401
220 Gallon Storage Tank	36"	55"	2.0	CQE-ST-00402
305 Gallon Storage Tank	46"	50"	1.5	CQE-ST-00403
550 Gallon Storage Tank	67"	44"	1.5	CQE-ST-00404
600 Gallon Storage Tank	46"	91"	2.0	CQE-ST-00405
1,000 Gallon Storage Tank	64"	80"	1.5	CQE-ST-00406
2,500 Gallon Storage Tank	102"	86"	1.5	CQE-ST-00407
5,000 Gallon Storage Tank	102"	152"	1.5	CQE-ST-00408
10,000 Gallon Storage Tank	141"	160"	1.5	CQE-ST-00409



ONE-YEAR LIMITED WARRANTY

CRYSTAL QUEST® warrants your CRYSTAL QUEST® Atmospheric Tank for one year from the date of purchase against all defects in materials and workmanship when used in compliance with the manual. CRYSTAL QUEST® disclaims all implied warranties including, without limitation, warranties of merchantability and fitness for a particular purpose. If for any reason the product proves to be defective within one year from the date of purchase (90 days for filter cartridge), please call for assistance. This warranty gives you specific legal rights and you may have other legal rights which vary from state to state. CRYSTAL QUEST® assumes no responsibility for incidental or consequential damages, for damages arising out of misuse of the product, or the use of any unauthorized attachment. Some states do not allow the exclusion or limitation of implied warranties or incidental or consequential damages; therefore, the above limitations or exclusions may not apply to you. Should service be required during or after the warranty period or should you have any questions regarding how to use your CRYSTAL QUEST® Atmospheric Tank, contact our Technical Support Department at service@crystalquest.com, Monday through Friday, 9 A.M. to 5 P.M. Eastern Time.

KEEP THIS MANUAL FOR FUTURE REFERENCE AND UNIT MAINTENANCE

Online warranty information
<http://crystalquest.com/warranty.htm>

Product design is subject to change without notice.

For further assistance, contact your Crystal Quest dealer
or visit us at www.crystalquest.com

To view the latest edition of the Atmospheric Tanks Guide, visit CrystalQuest.com

Please note all drawings, pictures, colors and sizes are approximate for illustrative purposes only and may not exactly resemble the end product.



AUTHORIZED DISTRIBUTOR

Should service be required during or after the warranty period or should you have any questions regarding how to use your Commercial Water Purification System, please contact manufacturer's Technical Support Department Monday through Friday, 9 AM to 5 PM Eastern Time, or your authorized CRYSTAL QUEST dealer:



Mailing Address:
FilterWater.com
P.O. Box 968
Southampton, PA 18966
USA

<http://www.FilterWater.com>
Tel. +1 (800) 439-0263
Fax +1 (215) 354-0304
Email: Sales@filterwater.com