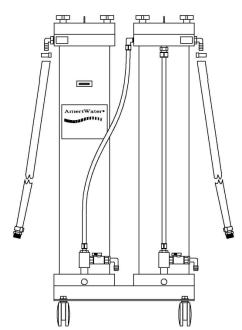


HEALTH CARE SILEX

OPERATION & MAINTENANCE MANUAL



SERIES 00HC-2005

Manufactured With Pride In The USA

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YOUR SILEX SYSTEM

HOW DOES THE SILEX DEIONIZER WORK?

Silex is a simple, maintenance-free system. Works with the healthcare laboratory storage tank, when the resistivity monitor signals that the product water quality has dropped below the desired quality set point, simply exchange the resin packs and send them to AmeriWater for regeneration.

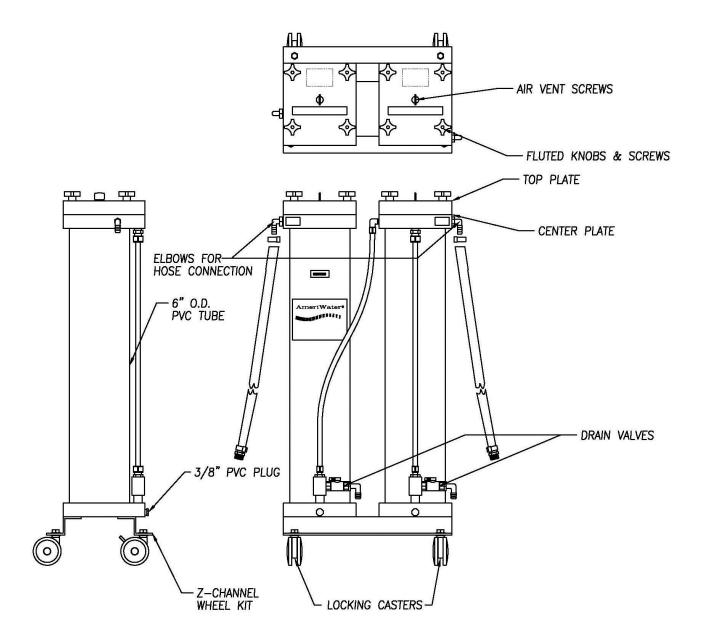
HOW DOES THE REGENERATION WORK?

The AmeriWater regeneration center maintains a stock of freshly regenerated resin packs used in the Silex Deionizer. When resin packs are exhausted, replace the packs in the Silex system with "stand-by" resin packs and return the exhausted packs, along with a regeneration certificate to AmeriWater. AmeriWater will ship a replacement resin pack within a day or two. It's as simple as that!

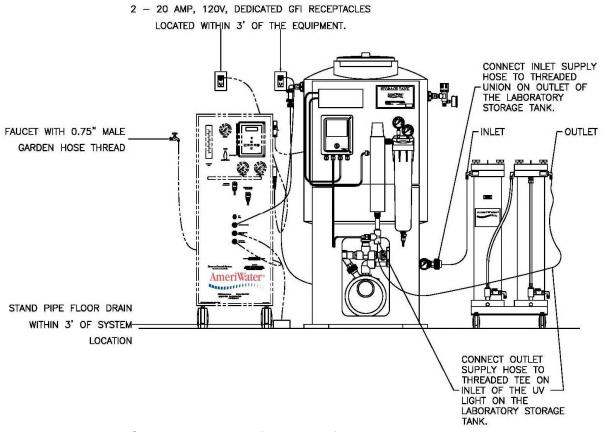
ABOUT THE RESIN PACK

The resin has a shelf life of approximately one year. The resin pack consists of resin contained in a polypropylene bag that never has to be opened. Resin packs are shipped in plastic sleeves to prevent the exchangers from drying out.

SILEX FEATURES

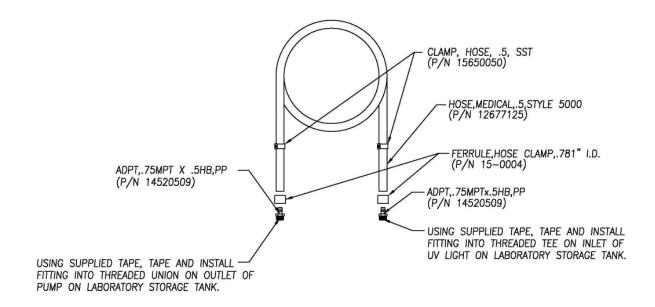


INSTALLATION IN 9 EASY STEPS



- 1. Locate the Silex system on a firm, level foundation.
- 2. It is recommended, but not required, to locate the system near a standard floor drain or sump.
- 3. Using supplied tape, tape and install both poly adapters, one adapter threads into the union on the outlet of the pump on the laboratory storage tank, while the other threads into the tee on the inlet of the UV light housing on the laboratory storage tank.
- 4. Connect the inlet supply hose to the hose barb fitting on the left side (labeled inlet) of the system (while facing the label). Use the hose clamps provided with the system to secure the hose to the hose barb fitting. Once hose is connected to Silex, connect opposite end to threaded union on outlet of the pump on laboratory storage tank.

SILEX HOSE KIT



NOTE: CUSTOMER TO CUT HOSE AND INSTALL HOSE CLAMPS AND FITTINGS AS REQUIRED.

NOTE: 16 feet of hose has been provided with the Silex system. Cut the hose to the desired lengths for the inlet hose and outlet hose and install the provided fittings as needed (See drawing below).

- 5. Connect the outlet hose to the hose barb fitting on the right side (labeled outlet) of the system (while facing the label). Use the hose clamps provided with the system to secure the hose to the hose barb fitting. Once hose is connected to Silex, connect opposite end to tee on the bottom of UV lamp on laboratory storage tank.
- 6. The Silex Deionizer is designed to operate at pressures up to 50 PSI (Pounds per Square Inch). The maximum flow for each deionizer is 3 GPM (Gallons Per Minute).

7. Install the resin pack(s):

a. Remove the cover plates by unscrewing the four black knobs on each plate. To break the seal between the cover plates and the upper plates, use a slotted screw driver in the pry notch located in the top of each upper plate. Open the drain valve at the bottom of each column.



 Remove the resin pack from the shipping box and open the tied end of the plastic sleeve.
 <u>DO NOT</u> remove the resin pack from the plastic sleeve at this time.





c. Stretch the resin pack over your arm to elongate the pack, and feed it into the Silex column allowing the pack to slide out of the plastic sleeve.



d. Replace the cover plate and tighten the black knobs. Be sure to tighten the knobs evenly by screwing in the knobs in opposite corners simultaneously. Repeat for the other two corners.



- e. Close the drain valve at the bottom of the column.
- f. Repeat steps a. through e. for each of the columns.
- 8. Open the air vents located on the top of the cover plates and turn on the water supply.

 Tighten the air vents closed when water begins to escape through the vents.
- 9. Allow several gallons of water to run through the Silex system. Continue running water through the system until the water quality light changes from red to green. The green light indicates that the Silex is producing deionized water.



RESIN PACK EXCHANGE

RESIN PACK EXCHANGE

- 1. Turn the ON/OFF switch on the control box to OFF. Turn off the water supply to the Silex system.
- 2. Open the air vents located in the center of the cover plates.
- 3. Place a container under the Drain Valves located on the bottom plates of the system. Open the valves and allow the water to drain into the container. The container may be emptied at a drain.
- 4. Remove the cover plates by unscrewing the black knobs located at each corner of the cover plates.
- 5. Pull the exhausted resin pack part of the way out of the column and lay it over the top of the system.

NOTE: If the Drain Valve located on the bottom plate is not open, a vacuum will be created making it difficult to remove the resin pack.

- 6. Slowly pull the exhausted pack over the side of the column while sliding it out of the column and into the plastic sleeve that it was shipped in.
- 7. Remove the new resin pack from the shipping box and open the tied end of the plastic sleeve. Stretch the resin pack over your arm to elongate the pack. Feed the pack into the column allowing it to slide out of the plastic sleeve. Save the plastic sleeve for the return shipment of the resin pack at the next exchange.
- 8. Carefully wipe the O-rings and the grooves on the top plate and cover plate to remove any debris from the surfaces that must seal together.
- 9. Replace the cover plates and tighten the knobs. To ensure proper tightening and a good seal, tighten the knobs in opposite corners simultaneously. Repeat for the other two corners.
- 10. Turn on the water supply to the Silex system and remove trapped air by loosening the air vents located in the center of the cover plates. Tighten the air vents when water begins to escape through the vent. This ensures that all of the air has been removed from the system and maximizes the life and efficiency of the resin packs.
- 11. Allow water to run through the system for 1 to 2 minutes prior to placing the Silex system in service.

RESIN PACK REGENERATION

Regeneration certificates are used to simplify the exchange of your exhausted Silex system packs. Certificates need to be purchased and kept on hand prior to resin pack regeneration replacement. Simply follow these steps:

- 1. Fill out a regeneration certificate by printing your name, phone number, company and address.
- When you send each pack to AmeriWater, enclose the regeneration certificate in the box. AmeriWater will ship you a freshly regenerated resin pack.
- 3. To order more certificates, contact the company that originally sold you the deionizer. Be sure to keep regeneration certificates on hand to ensure uninterrupted service.
- 4. It is recommended to send the exhausted resin to AmeriWater immediately after exchange. This will allow time for shipment and will maintain your uninterrupted supply of deionized water.

AmeriWater Resin Regeneration Certificate This certificate has been purchased and will be used as payment for the resin pack regeneration service. When you send each pack to AmeriWater, enclose this regeneration certificate in the box. AmeriWater will ship you a freshly regenerated resin pack. To order more certificates, contact the company that originally sold you the deionizer. Fill out for return shipment to: Name Phone () Company Address City Stato/Zip www.ameriwater.com 415865 45101C Ultra Pure Resin Pack Ship exhausted pack and certificate to: AmeriWater to: Ameri

Certificates Make Exchanging Packs a Breeze!

Fill out and enclose in box for return shipment

- NO Paperwork
 - NO Phone Calls
 - NO Purchase Orders

SERVICING YOUR SILEX SYSTEM

DISINFECTION

It is recommended that the Silex system be disinfected periodically to assure continuous high-quality product water. To efficiently and quickly disinfect the system, follow these easy steps:

- 1. Turn the ON/OFF switch on the control box to OFF. Turn off the water supply to the Silex system.
- 2. Remove all resin packs from the system. Reference the instructions for resin pack exchange on page 6.
- 3. Pour one tablespoon of household chlorine bleach (5% solution) into each filter sump as well as each Silex column.
- 4. Close all drain valves, and sample ports and open the air vents located in the center of the top plates.
- 5. Turn on the water supply to the Silex system and allow the system to fill with water until the presence of chlorine can be detected at the outlet of the system.
- 6. Turn off the water supply to the Silex system and allow the system to soak for 15 minutes.
- 7. After the 15-minute soak time, turn on the water supply to the system. Allow the system to flush until chlorine is no longer detected.
- 8. Drain the water out of the system by placing a container under the drain valves and opening the valves. Close all valves when water is no longer flowing out of them.
- 9. Install new resin packs in the Silex columns. Reference the resin pack instructions on page 6.

Apart from regular resin pack exchange and periodic disinfection, the Silex system requires no maintenance. In the event that the system is damaged, all parts can be ordered from AmeriWater by calling 1-800-535-5585.

CONSUMABLES

Part #	Name
DI-45101C	Regeneration Certificate, Ultra-pure, .5 cubic feet
DI-45101S	STARTUP PACK ULTRA PURE .48CUFT

STANDARD REPLACEMENT PARTS

Part #	Name
0119-0109	Hose Kit
0119-0001	Wheel Kit, Silex Dual
0119-0008	Drain Tee Assembly
0119-0010	Column, Silex Assembly
19300001-00	Silex O-Ring
19530901	Air Vent
19560310	Knob Assembly
94560412	Caster, Twin Wheel,60mm,with Brake
94560413	Caster, Twin Wheel,60mm, no Brake



WARRANTY POLICY

The buyer has a lifetime warranty on the PVC housing and a one year warranty on all other equipment and parts, excluding non-durable components (e.g., resin packs); provided that the system is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the system is not damaged as the result of any unusual force of nature such as, but not limited to, flood, hurricane, tornado or earthquake.

The warranty covers the replacement of equipment and/or parts only. The warranty does <u>not</u> cover labor charges or travel expenses resulting from the service of equipment. The manufacturer is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages, or other circumstances beyond its control.

To obtain warranty service, notice must be given to the manufacturer within 30 days of the discovery of the defect.

There are no warranties on the SILEX system beyond those specifically described above. All implied warranties, including any implied warranty of merchantability or of fitness for a particular purpose are disclaimed to the extent they might extend beyond the above periods. The sole obligation of the manufacturer under these warranties is to replace or repair the component or part which proves to be defective within the specified time period, and the manufacturer is not liable for consequential or incidental damages. No dealer, agent, representative, or other person is authorized to extend or expand the warranties expressly described above.

Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damage, so the limitations and exclusions in the warranty 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.