

Instruction Sheet

UV Lamp and Quartz Sleeve Replacement/Maintenance

Models: Tap, Tap Plus, Home, Home Plus, Professional, Professional Plus (Excluding, D4, E4, F4, and Plus and Monitored versions)

Read and observe all labels attached to product. See further directions for use, precautionary statements, disinfection claims, storage and disposal information in system product manual.

The S2Q-PA, S2Q-PV, S2Q-P/12VDC, S5Q-PA, S5Q-PV, S5Q-P/12VDC, S8Q-PA, VT1, VT1-DWS, VT4, VT4-DWS12, VT4-DWS, VH150, VH200, VH200-F10, VH410, VH410M, VH410-F20, VP600, VP600M, VP950, and VP950M UV systems disinfect 99.9% of the following pathogens: Cryptosporidium, Giardia, E.Coli and Fecal Coliform.

The SV5Q-PA, SV8Q-PA, VH200-V, VH410-V, and VH410M-V UV systems disinfect heterotrophs to reduce the heterotrophic plate counts (HPC). The UV systems are validated to deliver 16 mJ/cm² which is also sufficient for 99.99% inactivation of E.Coli and 99.9% inactivation of Fecal Coliform.

The S2Q-OZ, S2Q-OZ/2, S8Q-OZ, and S8Q-OZ/2 disinfect the following pathogens: E.Coli, Cryptosporidium and Giardia.

Overview

UV Lamp replacement: The amount of UV light created by the UV lamp decreases over time, requiring that the UV lamp be replaced. The system will automatically notify you when it is time to replace the UV lamp.

Quartz Sleeve replacement/maintenance: Minerals in the water slowly form a coating on the quartz sleeve. This coating must be removed because it reduces the amount of UV light reaching the water, thereby reducing performance. If the quartz sleeve can not be cleaned, it must be replaced.

Section 1 Safety Information

Please read this entire instruction sheet before operating this equipment. Pay attention to all danger, warning, and caution statements in this instruction sheet. Failure to do so could result in serious personal injury or damage to the equipment.

Make sure that the protection provided by this equipment is not impaired. Do not use or install this equipment in any manner other than that specified in the instruction sheet.

1.1 Safety Precautions

⚠ DANGER	
      	<p>Failure to follow these instructions will result in serious injury or death.</p> <p>Shock Hazard - Stored Energy</p> <ul style="list-style-type: none">• Disconnect power to system before performing any maintenance or repair.• There may be more than one source of power. Only connect to a GFCI.• Protective ground• DO NOT touch with wet hands. <p>Pressurized Device - Impalement Hazard</p> <ul style="list-style-type: none">• NEVER perform any physical inspection, repair or maintenance on UV chamber unless UV chamber has been isolated and depressurized.• NEVER service UV lamps, quartz sleeves or associated hardware until depressurization of UV chamber has been confirmed.• DO NOT store any combustible or flammable material close to the system.

⚠ WARNING	
    	<p>Failure to follow these instructions could result in serious injury or death.</p> <p>UV Light Hazard</p> <ul style="list-style-type: none">• ALWAYS use UV protective gear, including gloves and UV safety glasses.• NEVER look directly at illuminated UV lamp, even when using protective gear.• NEVER illuminate UV lamp outside of the UV chamber.• If accidental exposure occurs, immediately cool affected area and consult physician. <p>Contamination Hazard</p> <ul style="list-style-type: none">• If UV lamp breaks, avoid inhalation, ingestion, or exposure to eyes and skin. Wear appropriate clothing and personal protective equipment.• NEVER use a vacuum cleaner to clean up broken UV lamps as this will scatter the mercury. Obey local regulations and guidelines for the removal and disposal of mercury waste. <p>WARNING: This product can expose you to chemicals including Phthalates, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.</p>

⚠ CAUTION	
    	<p>Failure to follow these instructions could result in minor or moderate injury.</p> <p>Thermal Hazard</p> <ul style="list-style-type: none">• Allow UV lamps, UV chamber to cool for a minimum of 10 (ten) minutes before handling.• When there is no water flow, the water in the chamber will become hot. To prevent scalding, allow the system to cool for 10 minutes before draining the system. <p>Personal Injury Hazard</p> <ul style="list-style-type: none">• UV lamps and quartz sleeves are fragile. Do not strike, bend or apply pressure, or they will break.• DO NOT handle UV lamps or quartz sleeves with bare hands. Wear rubber or latex gloves to handle previously installed UV lamps and soiled quartz sleeves to protect against contaminants. Wear cotton gloves to handle new UV lamps and clean quartz sleeves. <p>Hg Exposure</p> <ul style="list-style-type: none">• The UV lamp contains mercury. If the lamp breaks, then avoid inhalation or ingestion of the debris and avoid exposure to eyes and skin. Never use a vacuum cleaner to clean up a broken lamp as this may scatter the spilled mercury. Obey local regulations and guidelines for the removal and disposal of mercury waste.

NOTICE

Avoid Injury

- Read and understand this Instruction Sheet before operating and performing any maintenance on this equipment.

System Protection

- To protect the Controller, a UL 1449 certified (or equivalent) transient voltage surge suppressor is strongly recommended.

Section 2 Maintenance

⚠ WARNING



- Always disconnect power before performing any work on the UV system.
- Always shut-off water flow and release water pressure before servicing.
- Replace the UV lamp annually (or biennially if seasonal home use) to ensure maximum performance.
- Always drain the chamber when closing a seasonal home or leaving the unit in an area subject to freezing temperatures.

2.1 Replacing UV Lamp

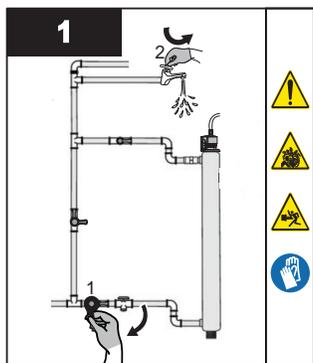
NOTICE

Do not use water during replacement of UV lamp.

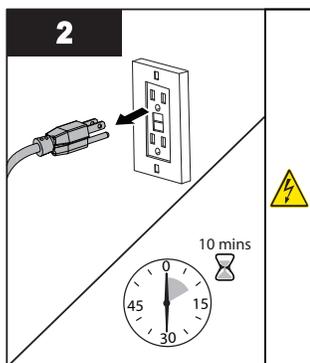
The amount of UV light created by the UV lamp decreases over time, requiring that the UV lamp be replaced. The system will automatically notify you when it is time to replace the UV lamp.

Note: Not applicable to TAP systems.

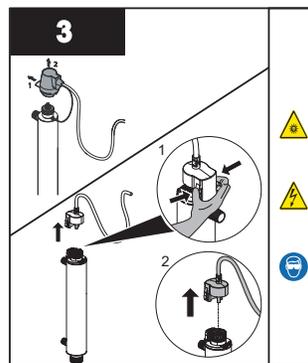
Procedure:



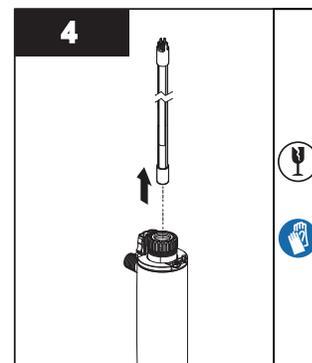
- Close main water supply to the UV System, and then open a tap downstream of the UV System to release



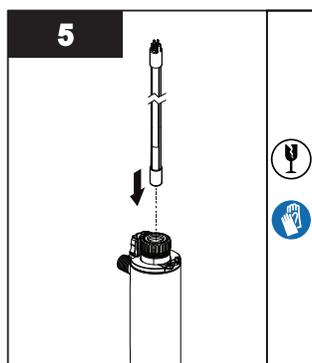
- Disconnect main power source and allow the unit to cool for 10 minutes.
Note: Ensure there is no other power source connected such as, Solenoid Junction Box.



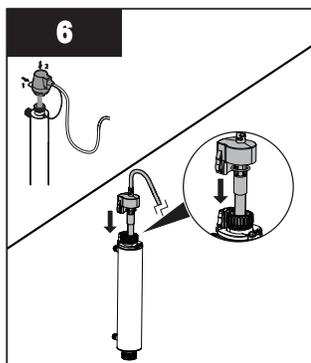
- Remove the UV lamp connector.
Note: Follow illustration that shows your specific connector.



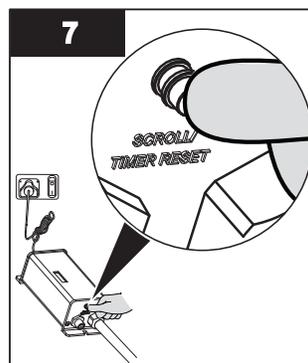
- Remove the UV lamp.



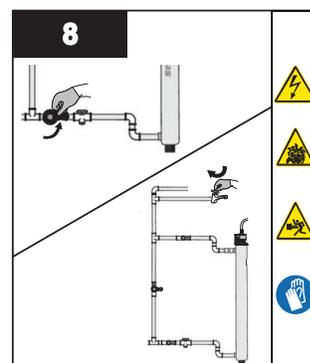
- Re-insert the new UV lamp inside the quartz sleeve.
- Attach the connector to the UV lamp and note that the connector will only allow correct installation in one position.



- Place and tighten the UV lamp connector.
- Follow illustration that shows your specific connector.



- Hold down the timer reset button and reapply power to the controller until you see **[-SET-]**, then release timer reset button.
- A 5 second delay will occur until you hear an audible tone and LED display will read once again **[365]**.



- Open the inlet valve slowly.
- Close the downstream tap once the UV chamber is filled with water, and inspect for any leakages.

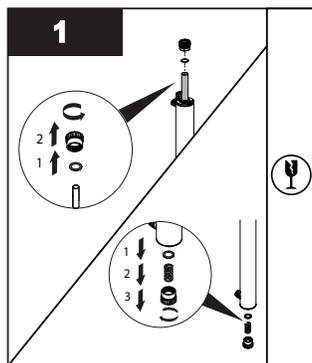
2.2 Cleaning and Replacing Quartz Sleeve

Note: Minerals in the water slowly form a coating on the quartz sleeve. This coating must be removed because it reduces the amount of UV light reaching the water, thereby reducing performance. If the sleeve can not be cleaned, it must be replaced.

Prerequisites:

- Shut off water supply and drain all lines.
- Remove the UV lamp. Refer to [Section 2.1](#).

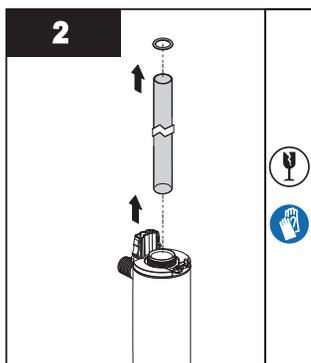
Procedure:



All models:

- Remove the top retaining nut and O-ring.
- Remove the bottom retaining nut, Spring and loosen the O-ring to drain the water.

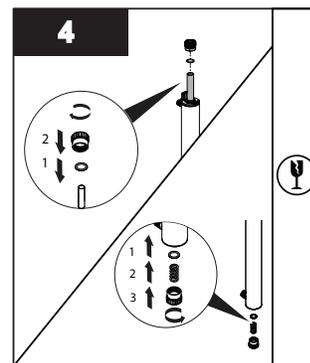
Note: Ensure that the quartz sleeve does not slide through.



- Remove the quartz sleeve from the UV chamber.



- Clean the quartz sleeve with a cloth soaked in CLR, vinegar or some other mild acid and then rinse with water.



All models:

- Re-insert the quartz sleeve with O-ring(s), Spring, and retaining nut(s).
- Hand tighten the retaining nut(s), taking care not to over-tighten.
- When service is complete, assemble the prerequisites in the reverse order of disassembly.
- Perform the cleaning procedure. Refer to Owner's Manual.



425 Clair Rd. W, Guelph, Ontario, Canada N1L 1R1
t. (+1) 519.763.1032 • tf. (+1) 800.265.7246 (US and Canada only)
t. (+31) 73 747 0144 (Europe only) • f. (+1) 519.763.5069
e-mail: info@viqua.com
www.viqua.com