

## IMPORTANT SAFETY INSTRUCTIONS

WARNING - to guard against injury, basic safety precautions should be observed, including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. **DANGER** - To avoid possible electric shock, special care should be taken since water is present near electrical equipment. Unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections, do not attempt repairs yourself; refer to an authorized service facility.
  - A. Carefully examine the water sterilizer after installation. It should not be plugged in if there is water on parts not intended to be wet.
  - B. Do not operate the water sterilizer if it has a damaged cord or plug, if it is malfunctioning or if it is dropped or damaged in any manner.
3. Always disconnect water flow and unplug a water sterilizer before performing cleaning or maintenance activities. Never yank the cord to remove from an outlet - grasp the wall plug and pull to disconnect.
4. Do not use this water sterilizer for other than intended use (potable water applications). The use of attachments not approved, recommended or sold by the manufacturer/distributor may cause an unsafe condition.
5. Intended for indoor use only. Do not install this water sterilizer where it will be exposed to the weather or to temperatures below freezing. Do not store this water sterilizer where it will be exposed to the weather. Do not store this water sterilizer where it will be exposed to temperatures below freezing unless all water has been drained from it and the water supply has been disconnected.
6. Read and observe all the important notices and warnings on the water sterilizer.
7. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or Watts than the water sterilizer rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
8. **SAVE THESE INSTRUCTIONS.**

### Package Contents

The Aqua UV Water Sterilizer package contains the following items:

- Aqua UV Water Sterilizer (UV705/708/712) with detachable power supply cord.
- Envelope containing annual Lamp/Sleeve replacement and caution stickers, warranty registration card.

### INSTALLATION OF AQUA UV WATER STERILIZER

The Aqua UV Water Sterilizer has been designed for installation down stream from the point of entry of the water line prior to the line split for your water heater and after all pretreatments (such as filtration, softening, etc).

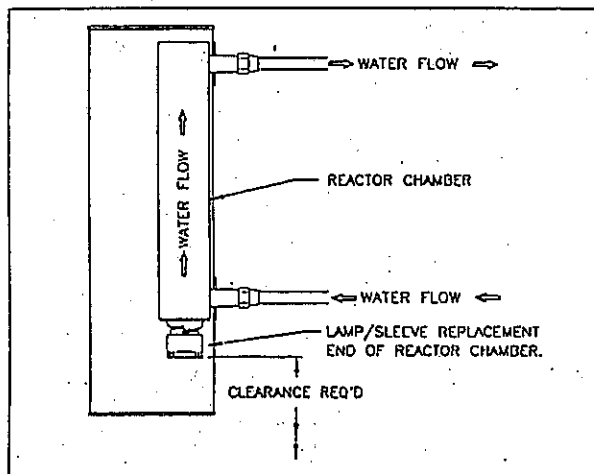


Figure 1: Recommended Installation.

- The reactor chamber should be mounted vertically as shown. The water must flow from the bottom of the reactor chamber to the top. This will ensure proper performance of the Aqua UV Water Sterilizer. If the available space requires that the reactor chamber be mounted horizontally, the position of the fittings **MUST** be facing upward, the inlet **MUST** be connected to the Lamp/Sleeve replacement end of the chamber as shown.
- Enough clearance should be allowed to permit easy Lamp/Sleeve replacement equal to the length of the unit (see illustration for minimum clearance).
- The installation of this equipment may interrupt the grounding continuity of a plumbing system. Consult your local electrical inspector to make sure the installation meets the safety regulations in your residential area.

## LAMP/SLEEVE CLEANING and REPLACEMENT:

### Replacement of the Ultraviolet Lamp/Sleeve

The ultraviolet Lamp/Sleeve employed by this product must be replaced annually for continuous use or bi-annually for cottage applications. This will ensure that water disinfection continues at the desired level.

The only required tool is a common Phillips (cross-head) screwdriver.

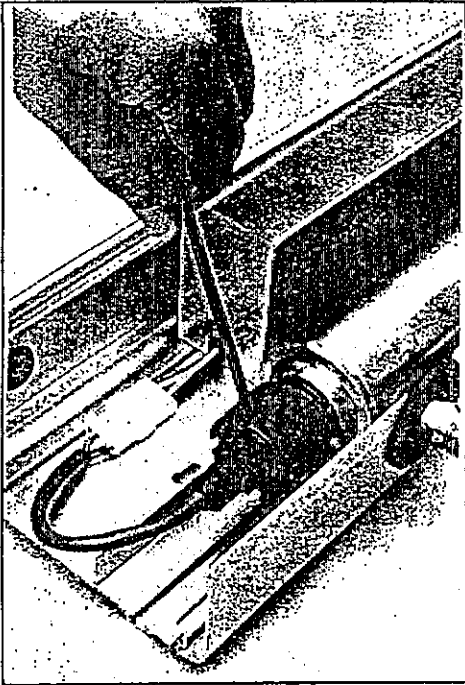


Figure 2: Apply Pressure to Pry Out the Lamp Harness from the Sleeve Bolt.

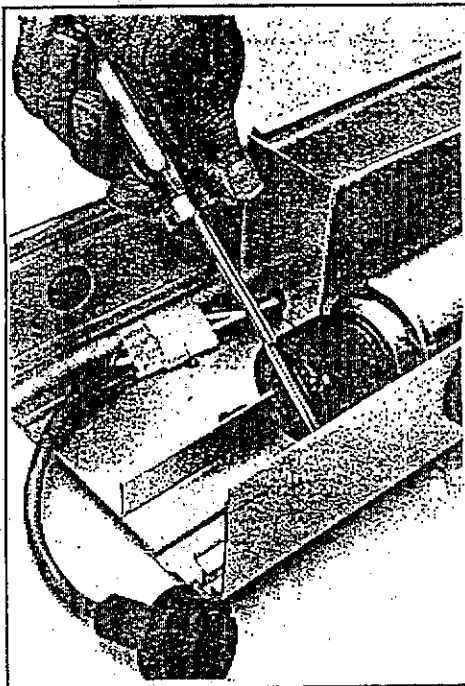


Figure 3: Loosening/Tightening of the Sleeve Bolt.

Step 1: Disconnect the power supply and shut off the water supply to the Aqua UV Water Sterilizer. Drain the water line by opening a faucet and running water.

Step 2: Use a Phillips screwdriver to remove top and bottom screws. Pivot the front cover outward to the left, then remove it from the aluminum case.

Step 3: Remove the lamp harness (illustration in Figure 2). Insert the small screwdriver into one of the slots at the side of the Sleeve Bolt and apply a gentle pressure to pry open the Snap-in Cover of the Lamp Plug. Do not pull on the cord or plug to remove the Lamp Harness as it will shorten the useful life.

Step 4: Using a screwdriver, unscrew the Sleeve Bolt (illustration in Figure 3) and carefully extract the Lamp/Sleeve and attached O-ring from the reactor chamber.

Note: After the sterilizer has been in use for some time, the O-ring will tend to adhere to the Lamp/Sleeve, or may lose its shape. Therefore a replacement O-ring (original manufacturer's replacement) is strongly recommended. Ensure the O-ring and the seating area are clean prior to assembly.

Step 5: Remove the new Lamp/Sleeve from the packaging carefully. It is recommended that the Lamp/Sleeve to be cleaned prior to re-assembly to ensure maximum performance, refer to **Cleaning of the Ultraviolet Lamp/Sleeve** section. Handle the Lamp/Sleeve by the ends only. Avoid touching the Lamp/Sleeve glass with fingers as skin oils will impair proper ultraviolet radiation.

Step 6: Place the new O-ring onto the Lamp/Sleeve. Position the O-ring 2" from the electrical pins of Lamp/Sleeve.

Step 7: Align the Lamp/Sleeve into Sleeve Bolt locking position, then insert into the reactor chamber. Thread the Sleeve Bolt with fingers until secure, then tighten with the screwdriver (as illustrated in Figure 3). Do not over-tighten, the Sleeve Bolt should only be tightened an additional 1/4 to 3/8 turn after it begins to seat on the O-ring.

Step 8: Reconnect the lamp harness by applying pressure to snap it into the Sleeve Bolt.

Step 9: Reconnect the power supply then check the green monitor light on the side of the case for a steady glow. Note that the audio alarm could sound for a few seconds while the lamp is ignited. The green LED on the side of the unit indicates that the Lamp/Sleeve is operating. The audible alarm will sound when Lamp/Sleeve not operating correctly.

Step 10: Close the faucet, open the water line and check for leaks.

Step 11: Enter the new Lamp/Sleeve replacement date on the Lamp/Sleeve Replacement Label and attach the label to the reactor chamber. Replace and secure the front cover with the screws provided. The Aqua UV Water Sterilizer is ready for use.

## Cleaning of the Ultraviolet Lamp/Sleeve

If the water supply is not pre-treated the Lamp/Sleeve in the reactor chamber may require periodic cleaning.

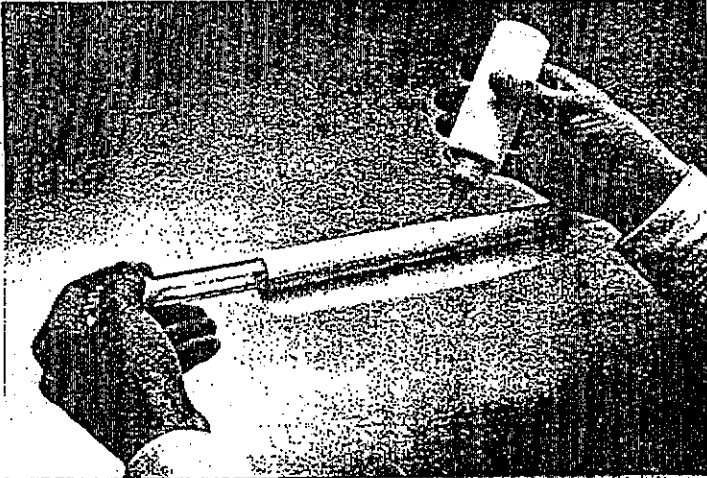


Figure 4: Application of Cleaner with Cloth.

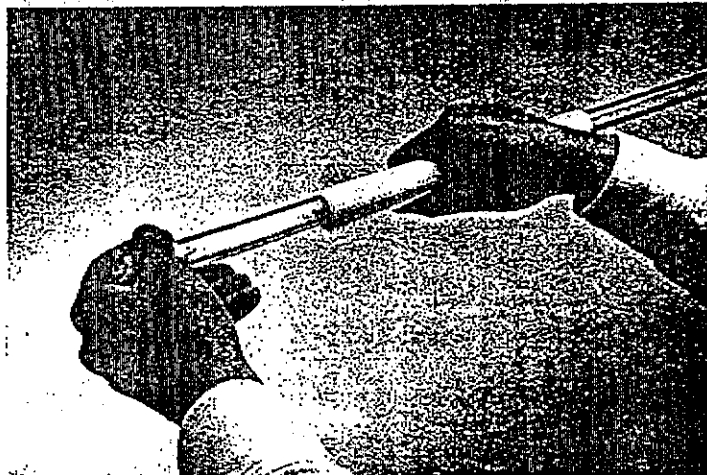


Figure 5: Wiping of the Lamp/Sleeve with Cloth.

Step 1: Follow steps in Replacement of the Ultraviolet Lamp/Sleeve section for removal and reassembly of the Lamp/Sleeve.

Step 2: Clean the Lamp/Sleeve with a commercial product "scale remover" (such as Lime-Away or CLR). Figures 4 and 5 illustrate how the Lamp/Sleeve should be cleaned. When using acidic solution (scale remover) for cleaning follow the manufacturer direction. After the Lamp/Sleeve is cleaned handle it by the ends only. Avoid touching the Lamp/Sleeve glass with fingers as skin oils will impair proper ultraviolet radiation.

### CAUTION:

THE LIGHT GIVEN OFF BY THE ULTRAVIOLET LAMP/SLEEVE CAN CAUSE SERIOUS BURNS TO UNPROTECTED EYES AND SKIN. NEVER LOOK AT THE LAMP/SLEEVE WHEN IT IS RUNNING. DO NOT PLUG THE UNIT INTO THE ELECTRICAL OUTLET WITHOUT HAVING THE LAMP/SLEEVE PROPERLY SECURED INTO THE CHAMBER.

### GENERAL NOTE:

For periods of absence less than one month, it is not necessary to shut off the water supply or disconnect power. For seasonal applications such as summer cottages, where there is a chance of winter freeze up, the flow to the unit should be shut off and the water lines drained.

### WARRANTY CERTIFICATE

ALL AQUA UV STRUCTURAL, HARDWARE AND ELECTRICAL SYSTEMS ARE GUARANTEED TO BE FREE OF MATERIAL DEFECTS FOR 5 YEARS ON A PRO-RATED BASIS. ALL LAMPS ARE GUARANTEED TO BE FREE OF MATERIAL DEFECTS FOR 1 YEAR. THIS WARRANTY WILL BE VOID IF THE PRODUCT IS ALTERED OR MISUSED IN ANY WAY.

NEITHER THE SELLER NOR THE MANUFACTURER IS LIABLE FOR ANY INJURY, LOSS OR DAMAGE ARISING EITHER DIRECTLY OR CONSEQUENTLY FROM THE USE OR MISUSE OF THIS PRODUCT. THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHATSOEVER IN CONNECTION WITH THE INSTALLATION AND USE OF THE STERILIZER.

NO EXPRESSED, IMPLIED OR STATUTORY WARRANTY OTHER THAN HEREIN SET FORTH IS MADE OR AUTHORIZED TO BE MADE.

## TROUBLESHOOTING OF AQUA UV WATER STERILIZER

Note the following guidelines are offered as suggestions for solving problems that may be detected during normal operation of the Aqua UV700 series products. The end user should read through and understand an entire instruction prior to taking action. If the symptoms described do not relate the problem or if the suggested corrective actions are ineffective contact your installer or dealer.

	PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
1	The Green LED is off and the Audible Alarm is on.	Lamp/Sleeve not working.	Check the Lamp/Sleeve and replace using the section on removal/replacement of the ultraviolet Lamp/Sleeve as a reference.
		Lamp Harness not connected properly.	Inspect Lamp Harness and reconnect.
		Lamp/Sleeve electrical pins damaged.	Check Lamp/Sleeve for damage, replace if necessary. Refer to the section on removal/replacement of the ultraviolet Lamp/Sleeve as a reference.
		Power surge caused damage to Electrical Sub-Assembly.	Contact installer/dealer for repair/service. May need to install an electrical surge protector.
2	The Green LED is off and the Audible Alarm is off.	No power at AC outlet.	Replace fuse or reset breaker.
		Power supply cord damaged.	Replace power supply cord.
		Power surge caused damage to electrical sub-assembly.	Contact installer/dealer for repair/service. May need to install an electrical surge protector.
3	Fuse keeps blowing or breaker is tripping.	Lamp Harness is wet.	Check for leaks then clean and dry the Lamp Harness.
		Short-circuit in electrical sub-assembly.	Contact installer/dealer for repair/service.
4	Chamber leaks at inlet/outlet.	Adaptors employed are loose.	Check sealing rings and washers.
		Threaded metal pipe fittings leaking at threads.	Clean threads, reseal with Teflon tape and tighten.
5	Reactor chamber leaks at bottom.	O-ring has deteriorated.	Refer to section on replacement of Lamp/Sleeve. Replace O-ring.
		O-ring improperly installed.	Refer to section on replacement of Lamp/Sleeve. Replace O-ring.
		Sleeve Bolt not properly installed.	Refer to section on replacement of Lamp/Sleeve to reconnect Sleeve Bolt and replace O-ring.

## REPLACEMENT PARTS FOR AQUA UV WATER STERILIZER

### Aqua UV Part Number

UV775  
UV750  
UV776  
UV798

### Description

UV705 Ultraviolet Lamp/Sleeve  
UV708 Ultraviolet Lamp/Sleeve  
UV712 Ultraviolet Lamp/Sleeve  
O-Ring Seal for Ultraviolet Lamp/Sleeve - package of ten



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