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World Leader in UV Disinfection Systems

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06/00

Installation, Operation and Maintenance

# Owner's Manual



**Trojan Technologies**

**TROJANUVMAX™**

*Healthy, clean and safe.*

Advanced UV water disinfection systems  
for home, institutional and commercial use.





## SAFETY



Disconnect the AC power from the TrojanUVMax unit before servicing or maintaining the system.

**Caution: Never look directly at the lamp when it is operating.**



Do not plug the unit into an electrical outlet without properly securing the lamp/sleeve into the cell. The light emitted by the lamp will cause serious eye damage and burn unprotected skin.



No user serviceable parts. To avoid electric shock, do **not** remove cover. Only authorized personnel well familiar with this UV system should attempt to replace the lamp or service or maintain this equipment.



Disconnect lamp harness before removing lamp from cell.



Do not plug in if there is water on electrical wiring or the power supply. Always shut off water flow and release water pressure before cleaning or maintaining the unit.



Intended for indoor use only. Power supply must not be exposed to weather elements. In seasonal applications, cell must be drained to prevent freezing when not in use.

## Product Specifications

MODEL	A	B	C	D	E	F
<b>FLOW RATES</b>	<1-3GPM <4-11LPM	2-5GPM 7-19LPM	3-14GPM 11-53LPM	7-28GPM 11-53LPM	7-28GPM 26-106LPM	13-47GPM 49-178LPM
Max. Operating Pressure	125psi	125psi	125psi	125psi	125psi	125psi
Audible/Visual Lamp Failure Alarm	✓	✓	✓	✓	✓	✓
Alarm Reset	—	—	—	✓	✓	✓
Elapsed Time Meter	—	—	—	✓	✓	✓
Dry Contact**	—	—	—	✓	✓	✓
Lamp Replacement Reminder	—	—	—	✓	✓	✓
UV Intensity Monitor Option Available	—	—	—	✓	✓	✓
Water Chamber Material	304SS	304SS	304SS	304SS	316SS	316SS
Electropolished Exterior	—	—	—	✓	✓	✓
* See sizing charts for details. Flow rates shown are at 85% UVT.      **Optional cable for solenoid valve connection.						

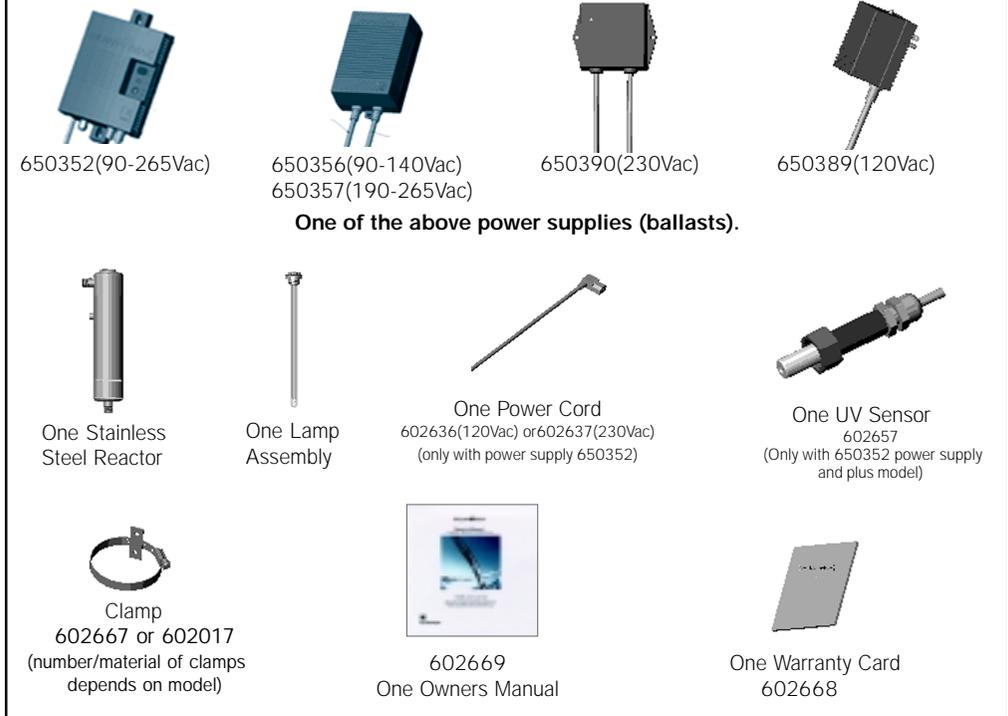
## Troubleshooting

### TrojanUVMax Troubleshooting for Plus Models



SITUATION	POSSIBLE CAUSE	POSSIBLE SOLUTION
Indicator light changes from GREEN to YELLOW and NO alarm is sounding	UV intensity reduced due to lamp aging Coating on the lamp/sleeve has reduced the detected UV intensity Coating on the UV sensor has reduced the detected UV intensity	Replace lamp/sleeve  Coating must be removed for correct operation. Follow procedures manual  Coating must be removed for correct operation. Follow procedures manual
Indicator light glows RED and alarm is sounding	Lamp not operating due to improper connection of lamp harness	Inspect lamp harness and reconnect (Ensure harness SNAPS into place)
Elapsed Time Meter reads A0	Outer quartz sleeve of lamp/sleeve has become coated Coating on the UV sensor has reduced detected UV intensity Lamp not operating due to burnout or damage to electrical pins	Coating must be removed for correct operation. Follow procedures manual Coating on the UV sensor has reduced the detected UV intensity Check for continuity across pins of lamp. Replace lamp if reading is open
Elapsed Time Meter reads E0	System UV sensor has failed to operate correctly	Replace UV sensor
Indicator light glows amber	Low UV signal	Clean sleeve and sensor window. If problem persists, replace lamp Replace UV sensor
Indicator light continues to glow RED and alarm continues to sound after lamp/sleeve replacement	Lamp not operating due to improper connection of lamp harness Lamp not operating due to general or shipping damage	Inspect lamp harness and reconnect. (Ensure harness SNAPS into place)  Check for continuity across pins of lamp. Replace lamp if reading is open
Elapsed Time Meter reads A0	UV sensor failing to detect the correct amount of UV energy	Ensure sensor is clean Ensure lamp/sleeve has been inserted properly. Remove and re-insert Replace UV sensor if defective

## Parts Included in the TrojanUVMax System



## WATER QUALITY PARAMETERS

These are recommended levels, intended for use as a guideline for pre-treatment requirements.

Iron < .3 PPM (.3mg/L)  
Hardness < 120 PPM (7 Grains Per Gallon)  
% UVT > 75%

Total Suspended Solids – TSS < 5 PPM (5mg/L)

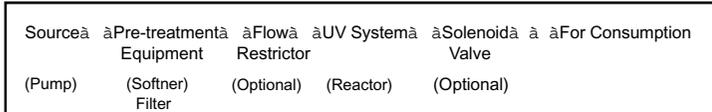
Pre-treatment equipment must be installed BEFORE the UV reactor chamber. Ask your water treatment dealer for further information about water quality and testing. (Note: Shut off valves should be installed before and after the UV unit)

## WATER TREATMENT EQUIPMENT

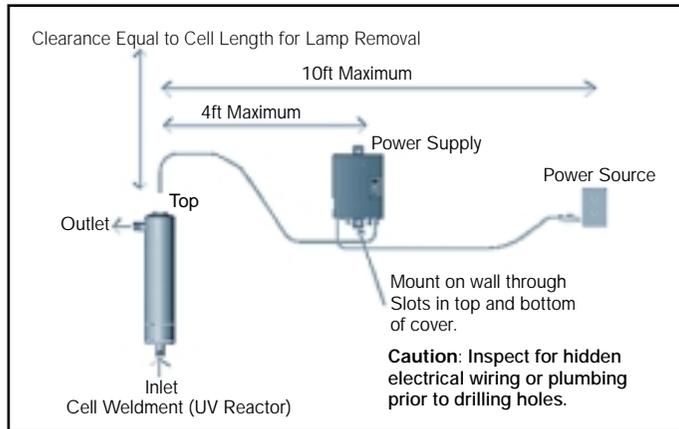
To meet the water quality parameters, you may need to pre-treat your water to ensure appropriate disinfection. Pre-treatment systems can comprise one or a combination of the following elements:

- Sediment Filters
- Carbon Filters
- Iron Removal System
- Water Softener

## EQUIPMENT SEQUENCE



## UNIT D,E,F INSTALLATION



## Troubleshooting

TrojanUVMax Troubleshooting for all Models



SITUATION	POSSIBLE CAUSE	POSSIBLE SOLUTION
Indicator light does NOT glow and alarm does NOT sound	Unit is unplugged No power at AC power outlet Power cord is damaged Power surge caused damage to electrical assembly	Plug unit into AC power outlet Replace fuse or reset breaker Replace power cord Replace power supply
If the breaker continues to trip	Lamp harness is wet Short circuit in the electrical assembly	Clean and dry the lamp harness. Check unit for leaks. Replace power supply
Leak at inlet or outlet	Threaded pipe fittings are leaking  Adapter kit not tight	Clean threads, reseal with Teflon tape, and re-tighten  Check sealing rings and washers
Leak detected from area of reactor chamber	Condensation of moist air on cold reactor chamber (slow accumulation) O-ring at sleeve bolt damaged, deteriorated, or incorrectly installed Sleeve bolt not properly installed (too tight or not tight enough) O-ring at UV sensor is damaged, deteriorated, or incorrectly installed	Control humidity, relocate unit, or insulate reactor chamber Inspect and replace if defective Tighten sleeve nut (finger tight) then tighten 1/4 turn more Inspect and replace if defective
Indicator light glows GREEN and alarm IS sounding	Electronic circuit board failure	Replace power supply
Indicator light glows RED and alarm sounds	Lamp is not operating	Check lamp continuity, replace if reading is open
Elapsed Time Meter changes to indicate L0, L1, L2, or L3	If Elapsed Time Meter indicates 12, lamp should be changed	Check power supply by trying a new lamp Replace lamp. Reset Elapsed Time Meter
Indicator light is flashing RED	Alarm postpone button has been pressed	Check for lamp continuity or if the Elapsed Time Meter reading is 12 or more
Indicator light does not glow and alarm IS sounding	Lamp not operating due to burnout or damage to electrical pins	Check for continuity across pins of lamp. Replace lamp if reading is open
Indication of lamp failure through audio/visual alarms	Lamp not operating due to improper connection of lamp harness	Inspect lamp harness and reconnect (Ensure harness SNAPS into place)
Indicator light glows amber and Elapsed Time Meter reads 11	Lamp has operated for 11 months	Replace lamp within the next month
Elapsed Time Meter changes to FO or F1	Ballast is improperly driving lamp	Restart
Elapsed Time Meter changes to read C0	LED is malfunctioning	Restart
Continuity across pins on lamp OK and alarm still sounds	Power supply failure	Replace power supply

## One-Year Limited Warranty for Lamps, Sleeves, and UV sensors

Trojan guarantees lamps, sleeves, and UV sensors to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this time, Trojan will repair or replace, at its option, any defective parts covered by the warranty.

The warranty period for lamps and sleeves may be verified using date codes in addition to purchase receipts and Trojan's database of registered owners. Trojan will let you know whether the defective item needs to be returned to a Trojan dealer for failure analysis. Replacement lamps and sleeves provided under warranty will be sent to your Trojan dealer.

If the UV sensor experiences a problem that Trojan confirms is covered by warranty, please return the sensor to a Trojan dealer, who will return it to Trojan. Trojan will either repair or replace the sensor and send the sensor to your dealer.

This warranty on lamps, sleeves, and sensors does not include shipping and handling charges, which will be collected from you by the dealer.

Parts replaced under this one-year warranty will be covered under warranty to the end of the original one-year warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations".

## Warranty for Replacement Lamps and Parts

Trojan guarantees replacement lamps, purchased for annual routine maintenance, and other parts purchased to repair components no longer covered by original warranty, to be free from defects in material and workmanship for a period of three (3) months from the date of purchase. During this time, Trojan will repair or replace, at its option, a defective replacement lamp or part free of charge except for shipping and handling charges.

The warranty period on replacement lamps and parts will be verified using date codes or purchase receipts or both. Trojan will let you know whether the defective item needs to be returned to a Trojan dealer for failure analysis. Replacement lamps and parts provided under warranty will be sent to your Trojan dealer.

## General Conditions and Limitations

None of the above warranties cover damage caused by scratches or imperfections that do not materially impair the operation of the product.

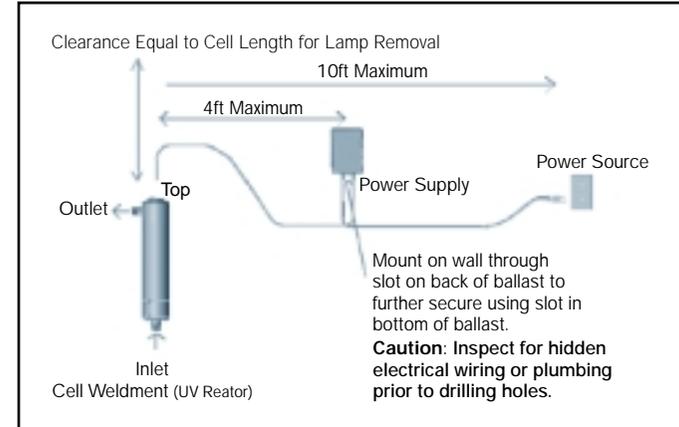
The warranties also do not cover products that are not installed as outlined in the applicable Owner's Manual.

The limited warranties described above are the only warranties applicable to the Trojan products listed in the "Specific Warranty

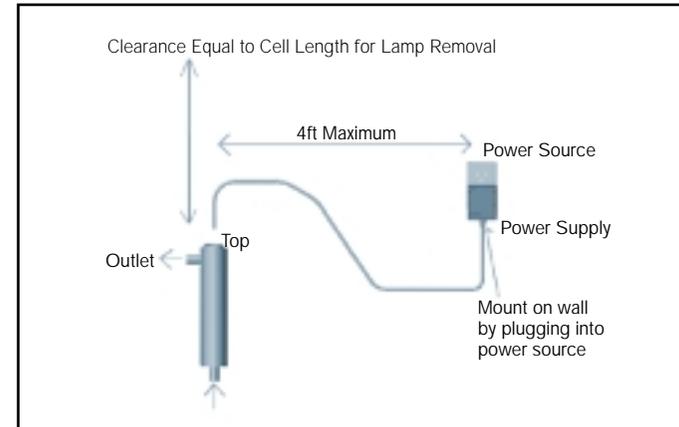
Coverage" section. These limited warranties outline the exclusive remedy for all claims based on a failure of or defect in any of these products, whether the claim is based on contract, tort (including negligence), strict liability, or otherwise. These warranties are in lieu of all other warranties whether written, oral, implied, or statutory. Without limitation, no warranty of merchantability or of fitness for a particular purpose shall apply to any of these products.

Trojan does not assume any liability for personal injury or property damage caused by the use or misuse of any of the above products. Trojan shall not in any event be liable for special, incidental, indirect, or consequential damages. Trojan's liability shall, in all instances, be limited to repair or replacement of the defective product or part and this liability will terminate upon expiration of the applicable warranty period.

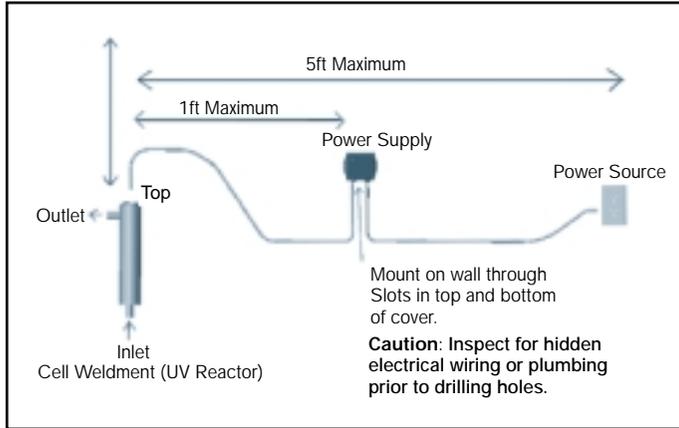
## UNIT B,C INSTALLATION



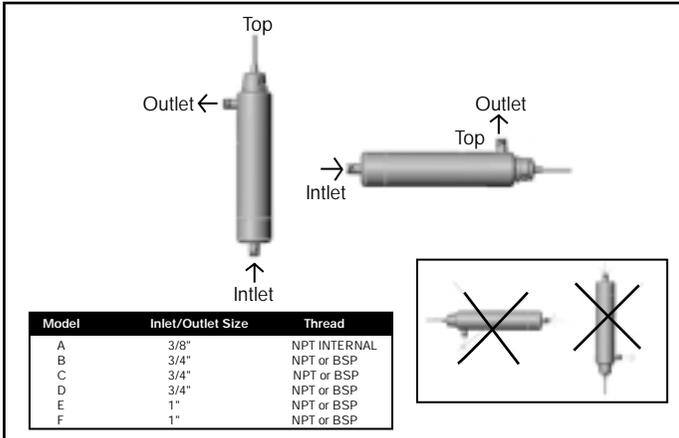
## UNIT A 120V INSTALLATION



## UNIT A 230V INSTALLATION



## CELL (REACTOR) INSTALLATION



## OPERATION

### 1. Cleaning the distribution lines.

Once the UV system is installed, any contamination in the distribution lines between the UV system and your taps and water outlets (i.e., the downstream distribution lines) must be removed. Similarly, if your power goes out and your TrojanUVMax system is not equipped with an automatic shut-off feature, you must also disinfect the downstream distribution lines.

To perform this cleaning operation, first remove any filter housing and fill the filter container with bleach (remove the filter for this process). Replace the filter housing and allow water to flow to all faucets (hot and cold), your washing machine, and all toilets. Once you can smell the bleach, allow it to sit in the lines for two to four hours, then completely flush all the lines and replace the filter. Any contamination will have been removed.

## Trojan Technologies Inc. Limited Warranty

### Our Commitment

To maximize the superior quality of Trojan UV disinfection, each product must be properly sized, installed, and maintained. If you experience difficulty with your Trojan product, our Technical Support Centre is available to help you.

During the applicable warranty period noted below, Trojan will provide warranty coverage, described below, for your product. After the product's warranty expires, repairs and replacement parts can be provided to you for a reasonable charge.

### How to Get Help

To obtain help under this warranty, contact the Trojan Technical Support Center at 1-800-265-5774 or by email at [service@trojanuv.com](mailto:service@trojanuv.com). Please have available the model number, the date of purchase, the

name of the dealer from whom you purchased your Trojan product ("the source dealer"), as well as a description of the problem you are experiencing. A Trojan technician will help you troubleshoot the problem and isolate the defective part.

For more information, please refer to the Troubleshooting section of your Owner's Manual. (Owner's Manual information is also available at [www.trojanuv.com](http://www.trojanuv.com).)

To establish proof of purchase to make a warranty claim, you will need to either retain your original invoice or complete and return a warranty card, which will register you as a product owner in Trojan's database.

### Specific Warranty Coverage

Warranty coverage is specific to the following Trojan products:

- Trojan UVMax
- Advantage Series
- UV700 Series
- UV600 Series

## Five-Year Limited Warranty for Structural, Hardware, and Electrical Components

Trojan guarantees the structural, hardware, and electrical components to be free from defects in material and workmanship for a period of five (5) years from the date of purchase. During this time, Trojan will repair or replace, at its option, any defective parts covered by the warranty.

Please return the defective part to a Trojan dealer, who will return it to Trojan. Trojan will either make the necessary repairs or, if Trojan determines that a replacement is required, provide a replacement part. Trojan will then send the part to the dealer. This warranty does not include shipping and handling charges, which will be collected from you by the dealer.

## PART IDENTIFICATION

Model	Lamp Harness	Power Supply 120V 230V	Power Cord 120V 230V	Model	Lamp	O-Ring	Quartz Sleeve	Sleeve Bolt	Remote Options	UV Sensor		
A	N/A	650389	650390	N/A	A	602658	002045	602659-000	602665	602661	602657	
B	N/A	650356	650357	N/A	B	602654-001	002045	602659-001	602665	602661	602657	
C	N/A	650356	650357	N/A	C	602654-002	002045	602659-002	602665	602661	602657	
D	602662	650352	650352	602636	602637	D	602654-002	002045	602659-002	602665	602661	602657
E	602662	650352	650352	602636	602637	E	602654-003	002045	602659-003	602665	602661	602657
F	602662	650352	650352	602636	602637	E	602654-004	002045	602659-004	602665	602661	602657

2. The lamp must be replaced after 12 months of operation. Failure to replace the lamp will reduce the disinfection strength of the TrojanUVMax system.  
**Note:** Maximum operating

**Note:** when the UV system is first plugged in, the alarm will sound temporarily until the lamp is operational.

### Trojan UV Max Models A, B, or C

**Power Supply**  
 Model A is 104-126 at 60Hz or 216-253V at 50Hz. Models B & C are 90-140V or 190-265V at 50 or 60Hz.

**Visual Alarm**  
 When the unit is operating properly, the LED on the ballast will be green. If the lamp is not operating, the LED will not light.

**Audible Alarm**  
 When the unit is operating properly, no sound will be emitted. If the lamp is not operating, the unit's alarm will beep until either the problem is corrected or the system is unplugged from the electrical outlet. The 230V version of Unit A is not equipped with an audible alarm.

*If you experience either or both alarms, see the Troubleshooting Section of this manual.*

### TrojanUVMax Models D, E, or F

**Power Supply**  
 Models D, E, and F have an auto ranging power supply that will accept 90-265V at 50 or 60Hz.

**Visual Alarm**  
 During normal operation the LED will be green. The LED will turn yellow after 11 months of operation or, on the Plus models, if the sensors detect a low UV signal.

*The LED will turn red if the lamp is not operating properly or if the UV signal from the sensor is low.*

*After 12 months of lamp operation, the LED will turn red, indicating that the lamp must be replaced. The LED is always on while the lamp is on.*

**Audible Alarm**  
 During normal operation no beeping sound is emitted. If the lamp is not operating or the UV signal from the sensor is low, the unit's alarm will beep. After 12 months of lamp operation, the unit's alarm will beep. If you experience either or both alarms, see the Troubleshooting Section of this manual.

**Elapsed Time Meter**  
 The Elapsed Time Meter shows you the number of months that your lamp has been operating. You should replace the lamp after it has been operating for 12 months.

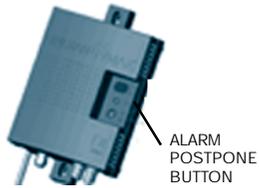
- After 11 months the LED turns yellow.
- After 12 months the LED turns red and an alarm sounds.

- After 14 months the alarm postpone is disabled, indicating that the lamp should be replaced and that it is not providing proper disinfection.
- After lamp replacement, this meter should be reset (see Elapsed Time Meter Re-Set).

*The Elapsed Time Meter also indicates the source of the problem should the unit malfunction. See the Troubleshooting Section for details.*

## Alarm Post Button

This Alarm has two functions:



### 1. 24-Hour Postpone Function

When the unit is in alarm, the LED is red and an alarm beeps. If you press the Alarm Postpone Button for less than two seconds, the LED will flash red and the audible alarm will stop. The unit is still in alarm,

but the beeping stops for your convenience until you can contact a dealer. This alarm will re-occur after 24 hours if its cause has not been corrected.

If the unit detects another problem during the 24-hour alarm postpone period, it will go into alarm again, the LED will turn solid red, and the alarm will sound.

*After 14 months of lamp operation, the alarm postpone will not work until the lamp is replaced.*

### 2. Elapsed Time Meter Re-Set

After the lamp has been changed, the Elapsed Time Meter should be reset by following the procedure below:

- Disconnect the power supply from the outlet.
- Press and hold the reset button.
- Connect the power supply to the outlet while pressing the reset button (the display will flash and the LED will be green).
- Hold the reset button until

the LED flashes red. Release the reset button.

### Dry Contacts

This feature provides switching for the operation of a solenoid valve or remote alarm. When the LED turns red because the lamp is not operating properly or the UV sensor signals the UV output is low, the contacts will open causing the solenoid to stop the water flow or a remote alarm to sound. The dry contact remains closed if the LED turns Red because the lamp has been in operation for 12 months or more.

### UV Intensity Monitor (Sensor)

Measures the UV intensity given off by the lamp and ensures that this intensity is above the minimum requirement to provide proper disinfection. This level is factory set for a dose of 38000 microwatt seconds per square centimetre at 75% UVT and the systems designed flow rate is not field adjustable. See you dealer for proper system sizing.



## CLEANING THE UV LAMP QUARTZ SLEEVE

If the water is not sufficiently pre-treated, the lamp quartz sleeve in the water reactor chamber may require periodic cleaning to remove accumulation of iron or hardness.

1. Follow the steps in Installation or Replacement of UV Lamp/ Sleeve section to remove the lamp/sleeve.
2. Clean the lamp/sleeve by using a commercial scale remover such as Lime-Away or CLR on a high-quality lint-free cotton swab. When using acidic solution (scale remover), follow the manufacturer's directions for proper use and safety. After the lamp/sleeve is cleaned, handle it by the ends only.
3. Follow the steps in Installation or Replacement of UV Lamp/ Sleeve section to install the lamp/sleeve.



**Note:** Handle lamp/sleeve at the ends only.

**Note:** Keep lamp and lamp pins dry.

**Note:** If the lamp/sleeve requires cleaning, the UV sensor will likely require cleaning as well. Refer to the Cleaning the UV Sensor section for instructions.



## CLEANING THE UV SENSOR

(Plus models only)

1. Follow the steps in UV Intensity Monitor and Installation Removal section to remove the UV sensor.
2. Clean the quartz window of the UV sensor with a commercial scale remover (such as *Lime-Away* or *CLR*) on a high-quality lint-free

cotton swab. When using acidic solution (scale remover), follow the manufacturer's directions for proper use and safety. Inspect the window to ensure that it is clean, clear, and dry.

3. Follow the steps in UV Intensity Monitor and Installation Removal section to remove the UV sensor.

**Note:** Do not attempt to tighten, loosen, or open the sealed UV sensor probe. Contamination of the UV sensor or loss of function may result.

## CLEANING TIPS

**Note:**

You may need to use other types of cleaners depending upon the minerals in your water supply. Vinegar or isopropyl alcohol or both can be used to remove grease and film on the UV sensor, but they may not fully remove scaling. In such cases, use a commercial scale remover such as Lime-Away or CLR.

**Note:**

If you find that you have to clean the sensor frequently, you should have your pre-treatment equipment evaluated and possibly upgraded.

## UV INTENSITY MONITOR INSTALLATION AND REMOVAL



*To operate properly, the Plus system requires that a UV sensor be correctly installed. An adjustable wrench is required to install this sensor*

### Note:

The UV sensor is fragile and must be handled with care. The quartz window in the end of the UV sensor is made of high quality quartz and may break or chip if mishandled. Handle the UV sensor by the steel, plastic, and brass parts only. **Note** that pulling on the attached cord may shorten the UV sensor's life.



### Install

1. Always disconnect the power to the electrical sub-assembly before installing, servicing, or maintaining the UV system. To avoid injury, avoid directly exposing skin or eyes to UV light. After disconnecting the power, allow the system to cool for five minutes. Shut off the water to the unit and open a downstream tap to release the pressure.

2. Inspect the o-ring on the UV sensor for damage or wear (replace only with Trojan Part 002026P). Ensure that the o-ring and seating area are clean prior to assembly. Insert the UV sensor into the port in the water reactor chamber. Screw the brass nut on finger tight (a wrench should not be needed for tightening, although a 15/16" open-ended wrench or adjustable wrench with 1" jaws may be lightly used).
3. Connect the power to the power supply and check that the LED is green. The alarm may sound until the lamp is operating properly.
4. Close the tap, open the water line, and check for leaks.

### Remove

1. Shut off the water.
2. Open a tap downstream from the unit to release pressure.
3. Unplug the power supply.
4. Let the lamp cool for five minutes.
5. To remove the UV sensor, undo the large brass nut holding the UV sensor in place and withdraw the UV sensor. A 15/16" open-ended wrench or adjustable wrench may be required to loosen the brass nut.



*Be sure to remove all traces of cleaning solution by thoroughly rinsing the sleeve prior to replacing it into the cell. Follow the Lamp/sleeve replacement instructions below.*



### CAUTION:

*UV-C rays are present when unit is operating. Qualified persons should carefully follow the instructions to avoid injury to eyes and skin.*

## Service & Maintenance

### Lamp Replacement

The lamp's UV intensity decreases over time. You can safely use your lamp for 12 months, after which it must be replaced. For instance, if you use your system for 12 continuous months, you must replace your lamp at the end of this period. If you use the system only six months each year, you would need to change your lamp at the end of the second six-month period.

### Sleeve Cleaning

Minerals in the water will eventually coat the quartz sleeve that protects the lamp. This coating must be cleaned off periodically because it reduces the UV intensity reaching the water. Once a month, check the sleeve and clean it if you can see a mineral coating starting to form. You can use acid solutions or cleaners such as Limeaway or CLR as well as vinegar to clean the sleeve.

### Installation or Replacement UV Lamp/ Sleeve

**Note:** For component description see Part Identification section.

### Lamp Removal

1. Shut off water.
2. Open a tap downstream of UV unit to release pressure.
3. Unplug power supply.
4. Let lamp cool down for 5 minutes.
5. Remove lamp harness: *Release safety clips by gently applying pressure outward on finger tabs and push harness off the lamp end. A flat screwdriver may be required to lightly pry the snap fingers over the snap ridges. At the same time pull up on the harness plug, which sticks out the top of the safety cover. Caution do not pull on cord of lamp harness and do not pry too hard on snap fingers.*
6. Position a pail under the black plastic end to prevent spillage.
7. Unscrew the lamp/sleeve assembly and carefully remove the lamp and sleeve from the cell. (Handle lamp/sleeve at the ends only). An

## Lamp Removal

adjustable wrench capable of opening to 1.6" can be placed on the flat sides of the sleeve bolt, just below the snap ridges.

- To remove lamp from sleeve, use a glove or cloth to support and hold on to the lamp and sleeve – unscrew the lamp from the sleeve bolt – be careful not to drop the sleeve. Place the adjustable wrench on the flats at the side of the sleeve bolt and a screw driver shaft into one of the slots in the top of the lamp end.

## Install Lamp

- Ensure o-ring and seating area are clean prior to assembly. Replace the o-rings and the sleeve bolt on the quartz sleeve and put the lamp into the quartz sleeve. Be careful not to jam the nylon spacers on the lamp into the quartz sleeve. Gently coax the spacer inside the quartz sleeve. If excessive force is applied, the outward pressure on the inside diameter of the quartz sleeve will fracture the quartz sleeve. Slide the lamp into the quartz sleeve until the top of the sleeve meets the bottom of the groove in the lamp end. Screw the lamp end and sleeve bolt together while ensuring that the quartz sleeve remains at the bottom of

the groove in the lamp end. Once the o-ring begins to sit in position, place a screwdriver shaft in one of the slots in the top of the lamp end and an adjustable wrench on the flats at the side of the sleeve bolt. Further tighten the lamp end 1/5<sup>th</sup> of a revolution. Caution: Do not over tighten. Over tightening will break the quartz sleeve.

- Ensure o-ring and seating area are clean prior to assembly. Carefully replace the lamp/sleeve assembly into the cell. Centre it with the spring in the opposite end of the cell and screw the assembly into the cell. Once the o-ring begins to sit in position, place an adjustable wrench on the flats of the sleeve bolt and tighten sleeve bolt ¼ turn.  
**Caution:** Over-tightening the sleeve bolt will break the quartz sleeve.
- Reconnect the lamp harness by placing the safety cover over the sleeve bolt. Ensure that the green and yellow ground wire and strain relief wire coil up under the cover. Keep wires away from the snap fingers. Place the cover over the sleeve bolt. Rotate the plug that protrudes from the top of the cover until the slot in the plug aligns with the tab between the lamp pins on

the lamp end. Once they are aligned, push down on the cover and the harness will snap on.

- If the sleeve required cleaning, the UV intensity sensor will also need cleaning (on PLUS models only). Refer to Cleaning the UV sensor section of instructions.
- Reconnect the power supply and check that the LED is green. The alarm will sound until the lamp operates properly.
- Close the downstream faucet that you had opened earlier, open the water line, and check for leaks.
- Enter the date on the lamp replacement label.

**Note:** During lamp replacement, the ground and strain relief wire of the lamp harness should always remain connected to the stud on the water reactor chamber. Wires are fastened to the stud by locknut.

