


# Installation, Operation and Maintenance Manual

## Ultra Violet Disinfection System

### Series WUV

**⚠ WARNING**



Read this Manual **BEFORE** using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment. Keep this Manual for future reference.

**THINK SAFETY FIRST**

**⚠ WARNING**

Local building or plumbing codes may require modifications to the information provided. You are required to consult the local building and plumbing codes prior to installation. If the information provided here is not consistent with local building or plumbing codes, the local codes should be followed. This product must be installed by a licensed contractor in accordance with local codes and ordinances.

**⚠ WARNING**

**Need for Periodic Inspection/Maintenance:** This product must be tested periodically in compliance with local codes, but at least once per year or more as service conditions warrant. All products must be retested once maintenance has been performed. Corrosive water conditions and/or unauthorized adjustments or repair could render the product ineffective for the service intended. Regular checking and cleaning of the product's internal and external components helps assure maximum life and proper product function.



Series WUV

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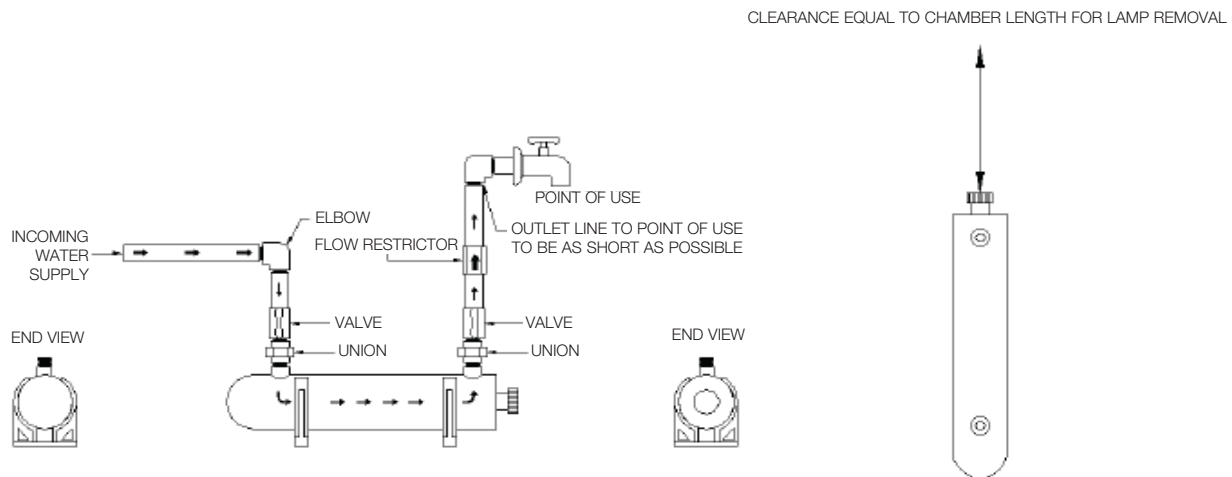
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**⚠ WARNING**

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



# Typical Installation



## Installation Instructions

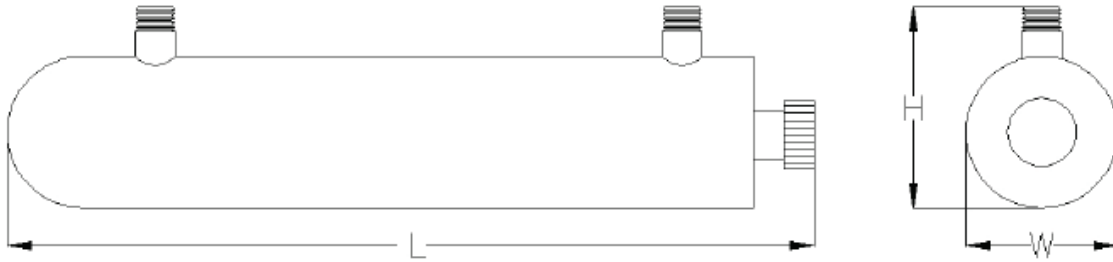
1. Install sterilizer equipment in a readily accessible and well lit location to facilitate inspection and maintenance.
2. Inspect for hidden electrical wiring or plumbing prior to drilling holes.
3. Attach mounting clips to the wall.
4. Insert chamber through mounting clips.
5. Connect to plumbing.
6. Install quartz sleeve and lamp.

### **NOTICE**

**Avoid touching the sides of the quartz sleeve and lamp, handle by the ends only.**

- a) Remove the retainer nut.
  - b) Slide the quartz sleeve into the chamber - closed end first.
  - c) Slide the O-ring over the open end of the quartz sleeve.
  - d) Tighten the retainer nut, hand tight.
  - e) Slide the lamp into the quartz sleeve.
  - f) Connect the lamp to the plug in transformer.
  - g) Cover the lamp connection with the vinyl cap.
7. Turn on the water and inspect for leaks. Repair if necessary.
  8. a) For 110 VAC Units – Plug the transformer into an electrical outlet. An electrical outlet protected by a Ground Fault Circuit Interrupt (GFCI) circuit is recommended.  
b) For 230 VAC Units – Obtain the appropriate plug for your type of receptacle and attach it to the end of the power cord and plug it in.

# Specifications



MODEL NO.	FLOW RATE (GPM)	PIPE SIZE	DIMENSIONS (L X W X H)	ELECTRICAL	SHIPPING (LBS.)
WUV2-110	2	1/2" MNPT	18" x 6" x 5 3/8"	110-130 v / 50-60 Hz	6
WUV2-230	2	1/2" MNPT	18" x 6" x 5 3/8"	200-250 v / 50-60 Hz	6
WUV6-110	6	3/4" MNPT	25 1/2" x 6" x 5 3/8"	110-130 v / 50-60 Hz	7
WUV6-230	6	3/4" MNPT	25 1/2" x 6" x 5 3/8"	200-250 v / 50-60 Hz	7
WUV8-110	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	9
WUV8-230	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	9
WUV12-110	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	17
WUV12-230	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	17

Notes: Line cord and lamp lead wire omitted for clarity.

## Replacing UV Lamp and Servicing UV System

### NOTICE

Avoid touching the sides of the quartz sleeve and lamp, handle by the ends only.

### WARNING

Step 1 Disconnect power.

### WARNING

Step 2 Turn water off and open valve downstream of system to relieve pressure.

Step 3 Remove vinyl cap and unscrew the nut.

Step 4 Carefully withdraw lamp approximately 2 inches from chamber.

Step 5 While holding lamp end carefully remove lamp socket on end now exposed.

Step 6 Carefully withdraw lamp from chamber.

Step 7 Carefully remove O-ring from the end of quartz sleeve.

Step 8 Carefully remove quartz sleeve.

Step 9 To reinstall follow Steps 8 through 1 in reverse.

## Replacement Parts

FLOW RATE (GPM)	BULB MODEL	BALLAST MODEL	QUARTZ SLEEVE MODEL
2	WUVLAMP2	WUVBALLAST2	WUVQS2
6	WUVLAMP6	WUVBALLAST6-12	WUVQS6
8	WUVLAMP8	WUVBALLAST6-12	WUVQS8
12	WUVLAMP12	WUVBALLAST6-12	WUVQS12

## Maintenance Suggestion

To operate the sterilizer properly and attain its maximum efficiency, the following maintenance is recommended:

1. Quartz sleeve cleaning or replacement:
  - a) Quartz sleeve is to be cleaned every 6-12 months, clean with glass cleaner.
  - b) Quartz sleeve is to be replaced every 24 months.
2. UV lamp replacement is recommended every 8000-9000 hours of operation (approx. 12 months of continuous service).

### CAUTION

Ultraviolet lamp and quartz sleeve are easily damaged. Pay attention when removing or replacing lamp and quartz sleeve.

## Operating Conditions

Maximum Operating Pressure: 125psi (8.9 bar)

Maximum Operating Temperature: 104°F (40°C)

Minimum Operating Temperature: 36°F (2°C)

UV Dose At End Of Lamp Life (1 year or 9,000 Hours): 30mj/cm<sup>2</sup>

Maximum Iron: Less Than .3 PPM

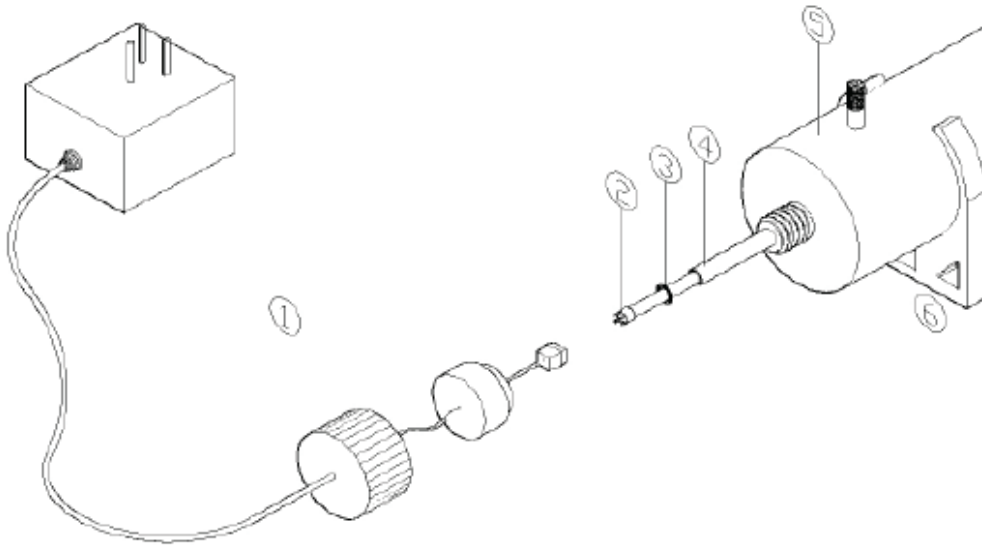
Maximum Manganese: Less Than .05 PPM

Maximum Turbidity: Less Than 5 NTU

Maximum Hydrogen Sulfide: Less Than .05 PPM

Maximum Hardness: Less Than 7 Grains Per Gallon as CaCO<sub>3</sub>

# Parts List



ITEM	DESCRIPTION
1	Ballast Assembly
2	Germicidal Ultraviolet Lamp
3	Rubber O-ring
4	Quartz Sleeve
5	Chamber
6	Mounting Clip

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
**For more information:** [www.watts.com/prop65](http://www.watts.com/prop65)

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