

ChlorKing® Sentry UV

# SENTRY AQUA GUARD LOW PRESSURE UV LIGHT SYSTEM

## Installation, Operation, and Maintenance Manual

FOR ALL SAG MODELS CERTIFIED FOR SECONDARY DISINFECTION

FOR INDOOR INSTALLATION ONLY



**Manufacturer:**

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This manual is subject to change at any time based on system improvements, design changes, authorized modifications, or new information. Please consult ChlorKing-Sentry UV for the latest revision.

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## DESCRIPTION

### GENERAL INFORMATION

The Sentry Aqua Guard system is a low pressure, high output, amalgam, ultraviolet light sterilizer designed for secondary disinfection of commercial swimming pools. This system is certified for indoor installation only. The Sentry Aqua Guard is capable of sterilizing and oxidizing up to 1141 gallons per minute of water. The system operates at light wavelengths of 254nm for sterilizing and 185nm for oxidizing. The Sentry Aqua Guard is designed for commercial service and can be run 24 hours a day. The Sentry Aqua Guard components are outlined in **Figure 1**:

**Figure 1**



## **PRINCIPALS OF OPERATION**

### **UV Light Chamber (See Figure 1)**

The UV Light Chamber is made from highly polished 316L stainless steel or 316L stainless steel lined PVC. Quartz sleeves separate the low pressure, high output amalgam germicidal lamps from the water. The water to be treated flows into the bottom of the chamber. Once in the chamber, the germicidal bulbs produce a minimum 3-log reduction in pathogens. The water is then returned to the source.

### **Power Supply (See Figure 1)**

The power supply provides the current to start and maintain the germicidal lamps. A visual readout of system output is displayed on the face of the power supply. The information includes actual flow in GPM, actual calculated dose in  $\text{mj}/\text{cm}^2$ , and actual lamp intensity in  $\text{w}/\text{cm}^2$  or  $\text{W}/\text{M}^2$ .

## **SPECIFICATIONS, CERTIFICATIONS, AND SIZING GUIDELINES**

The PVC models have demonstrated an ability to provide a 3.5 log inactivation of *Cryptosporidium parvum* at the maximum flow rates shown in the table on the next page. The stainless-steel models have demonstrated an ability to provide a 3.0 log inactivation of *Cryptosporidium parvum* at the maximum flow rates shown in the table on the next page. The test organisms (MS2) were correlated to Crypto using a collimated beam analysis and biosimetry testing as outlined in the EPA UVDGM.

### **MODEL NUMBERS AND DESCRIPTION:**

Model numbers with PVC in the part number are available in a U inlet and outlet configuration. All other models are available in U or Z inlet and outlet configuration.

SAG120A120CR – Sentry Aqua Guard 120A 120  
SAG120A120PVCCR – Sentry Aqua Guard 120A 120 PVC  
SAG240A120CR – Sentry Aqua Guard 240A 120  
SAG240A120PVCCR – Sentry Aqua Guard 220A 120 PVC  
SAG480A120CR – Sentry Aqua Guard 480A 120  
SAG480A120PVCCR – Sentry Aqua Guard 480A 120 PVC  
SAG720A120CR – Sentry Aqua Guard 720A 120  
SAG960A120CR – Sentry Aqua Guard 960A 120  
SAG1200A120CR – Sentry Aqua Guard 1200A 120

**CERTIFICATIONS:** The SAG CR series is certified for indoor installation.

NSF Standard 50 – Certified for Secondary Disinfection  
UL Standard 1081  
CSA Standard C22.2 #218.1

**PERFORMANCE SPECIFICATIONS:**

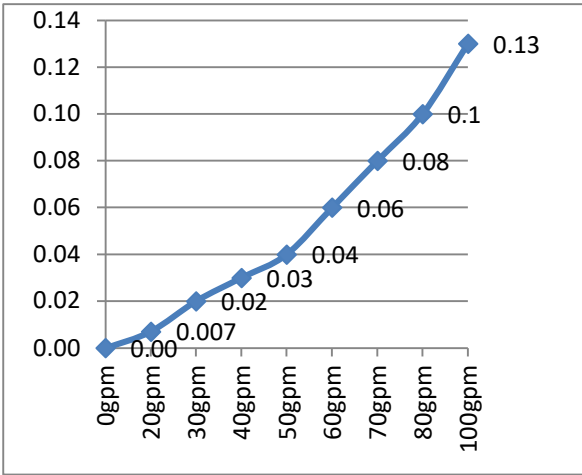
Model #	Rated Pressure (psi)	Max Rated Flow (gpm)	UVT (min)	Effective UV Dose (min)	Reference Intensity (mW/cm <sup>2</sup> )	Rated Power (KW)	Number of Lamps	Volume of Chamber (Gallons)	Length and Diameter of Chamber
SAG120A120CR	50	up to 46	92.3	12	24.1	.12	1	2.16	45"L x 4.5"D
SAG120A120PVCCR	50	up to 58	91.4	15	21.4	.12	1	4.85	45.625"L x 6"D
SAG240A120CR	50	up to 119	92.3	12	28.09	.24	2	4.85	45"L x 6.625"D
SAG240A120PVCCR	50	up to 126	91.4	15	24.38	.24	2	8.6	47.375"L x 8"D
SAG480A120CR	50	up to 352	92.3	12	31.34	.48	4	13.48	49.5"L x 10.75"D
SAG480A120PVCCR	50	up to 333	91.4	15	31.34	.48	4	12.9	47.4"L x 10.75"D
SAG720A120CR	50	up to 620	92.3	12	38.83	.72	6	23.55	53.5"L x 12.75"D
SAG960A120CR	50	up to 770	92.3	12	50.44	.96	8	23.55	53.5"L x 12.75"D
SAG1200A120CR	50	up to 1141	92.3	12	44.72	1.2	10	42	53.5"L x 16"D

**LAMP AND LUV DETECTOR INFORMATION:**

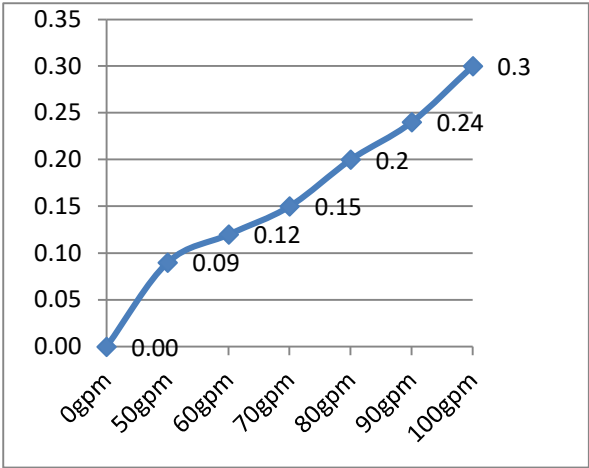
Lamp life - 13,000 hours of operation  
 Lamp part number – LA120W185SP  
 UV detector part number – KITUVCRS

**HEAD LOSS DATA in ft of H2O:**

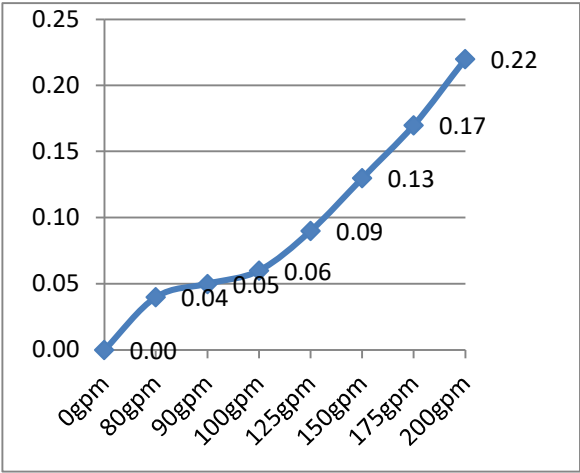
SAG120A120



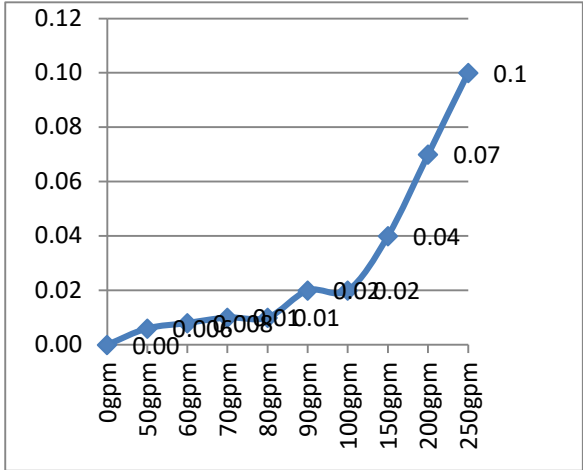
SAG120A120PVC



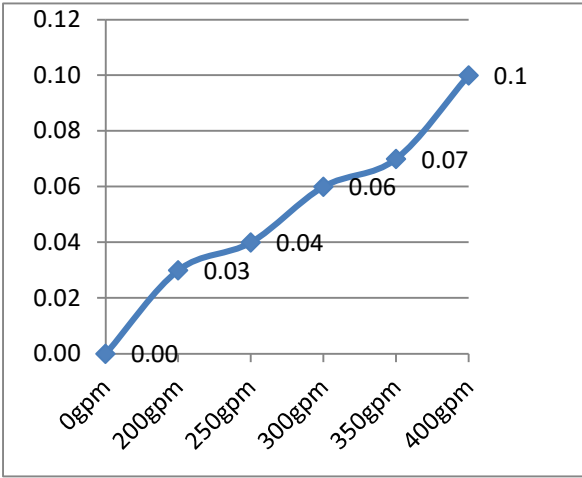
SAG240A120



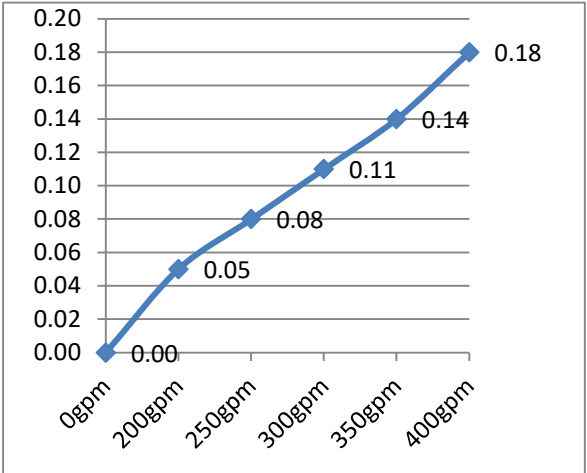
SAG240A120PVC



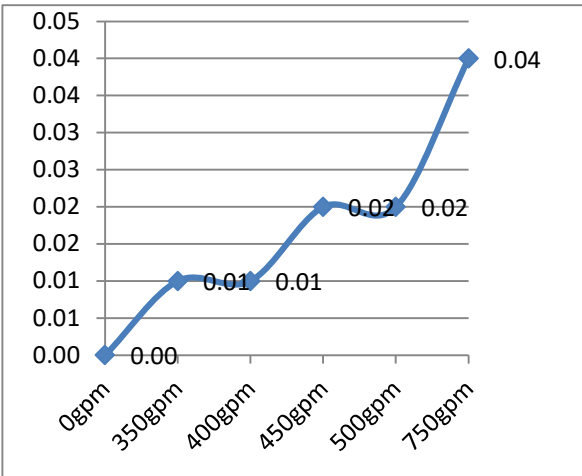
SAG480A120



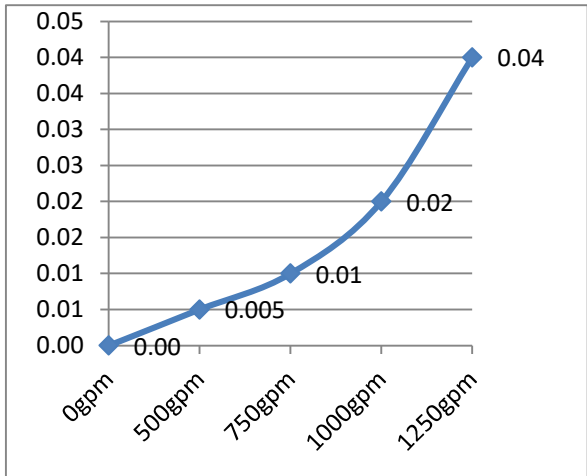
SAG480A120PVC



SAG720A120 and SAG960A120



SAG1200A120





## **ELECTRICAL SPECIFICATIONS:**

Model #	Rated Voltage (AC)	Rated Amps	Fuse	Amp Draw
SAG120A120CR	120	1.5	GSA2	1.2
SAG120A120PVCCR	120	1.5	GSA2	1.2
SAG240A120CR	120	3	GSA4	2.4
SAG240A120PVCCR	120	3	GSA4	2.4
SAG480A120CR	120	6	GSA8	4.8
SAG480A120PVCCR	120	6	GSA8	4.8
SAG720A120CR	120	9	GSA12	7.2
SAG960A120CR	120	10.5	GSA15	9.6
SAG1200A120CR	120	12.5	GSA15	12

## **SIZING GUIDELINES**

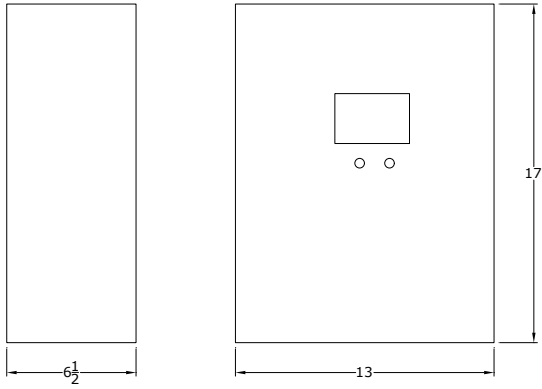
Sentry Aqua Guard UV Sterilizers will effectively treat water up to the maximum rated flow for each size unit (END of lamp life).

UV sizing must comply with local codes. Please contact your local health department for specific requirements or contact your local ChlorKing representative for assistance.

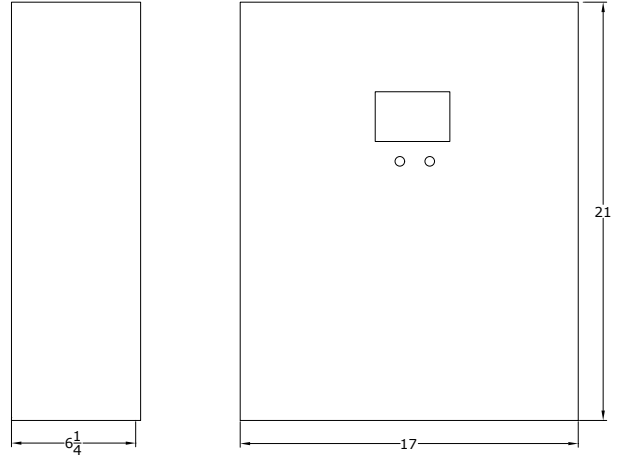
Sizing is based on water temp of 88F and transmittance of 94%. Lower water temperature will impact dose. Contact ChlorKing for more information.

**DIMENSIONS:**

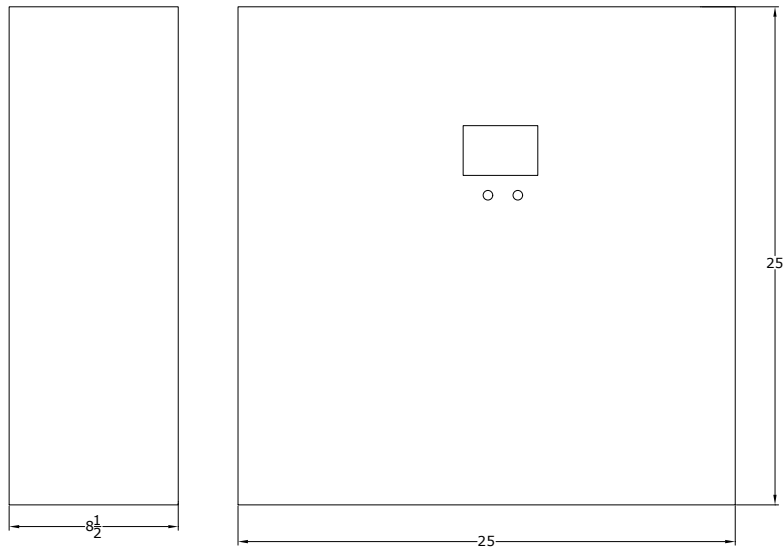
120W and 240W Power Supply



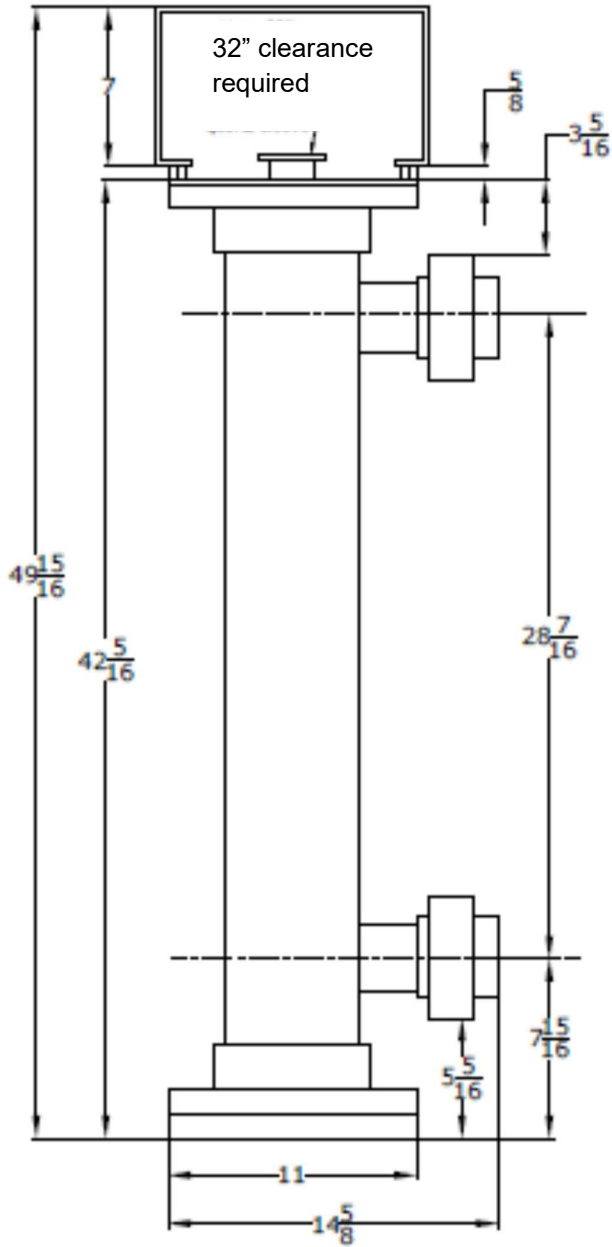
480W and 720W Power Supply



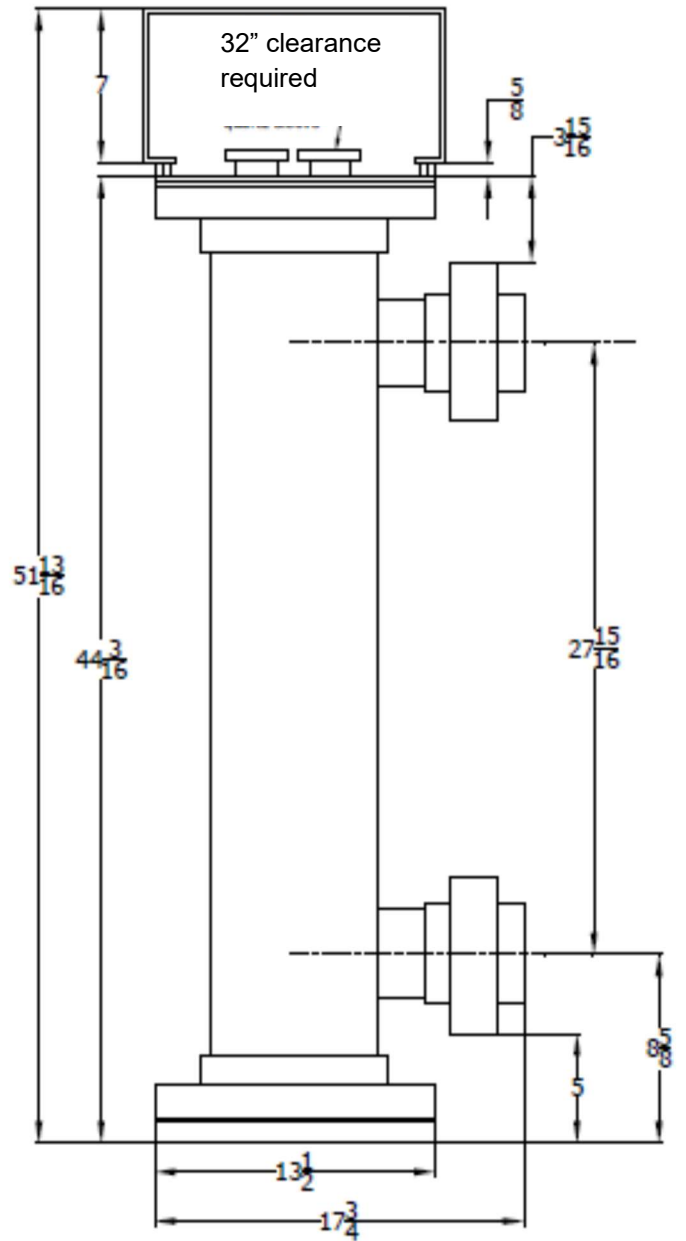
960W and 1200W Power Supply



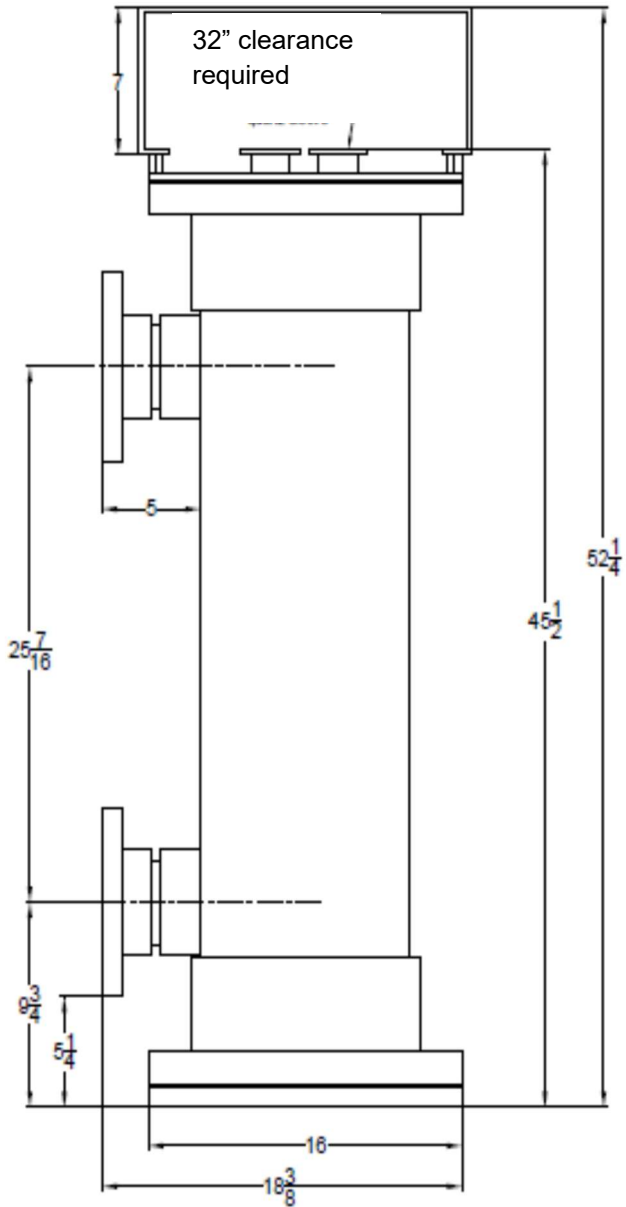
## SAG120A120PVCCR



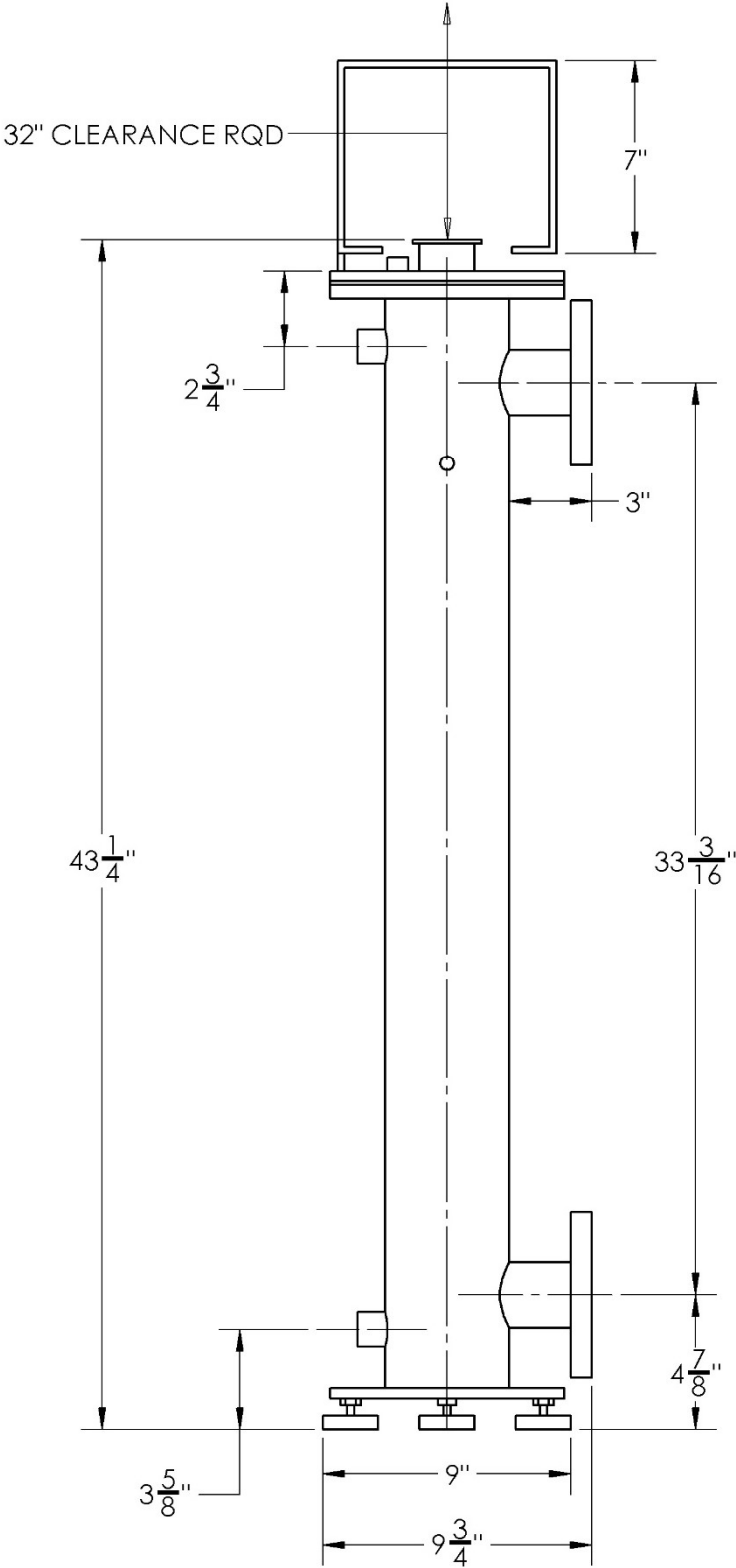
## SAG240A120PVCCR



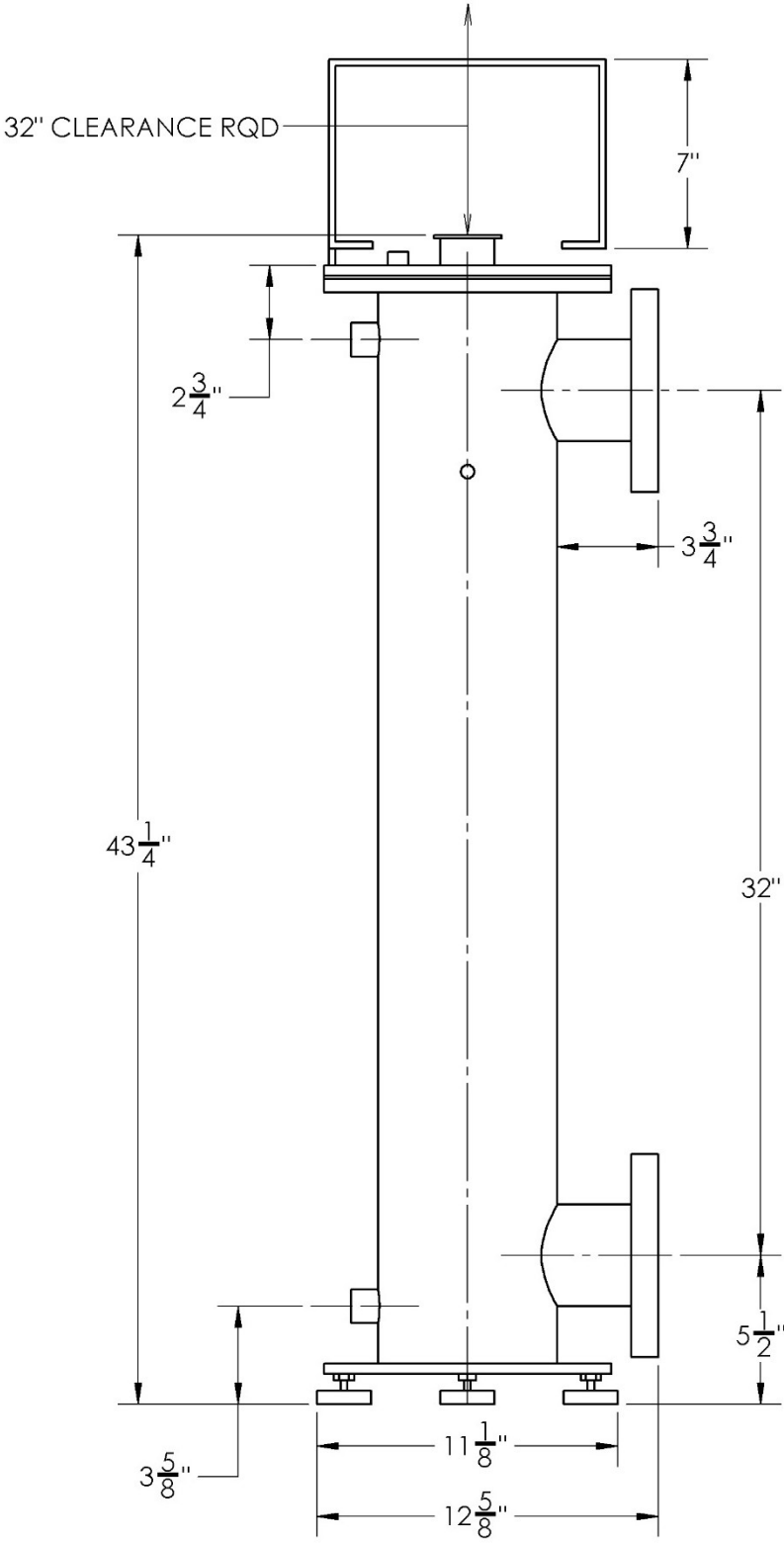
# SAG480A120PVCCR



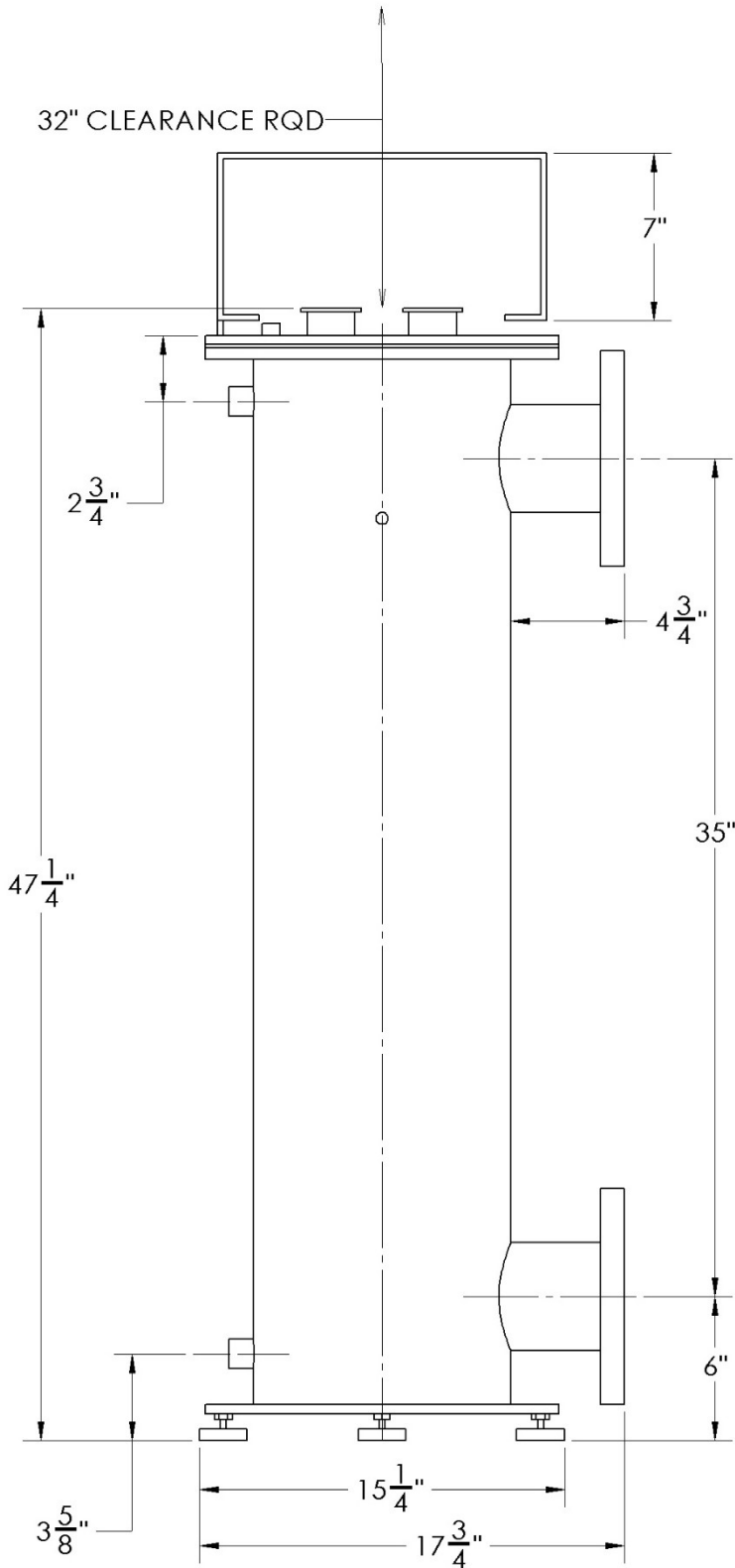
### SAG120A120CR



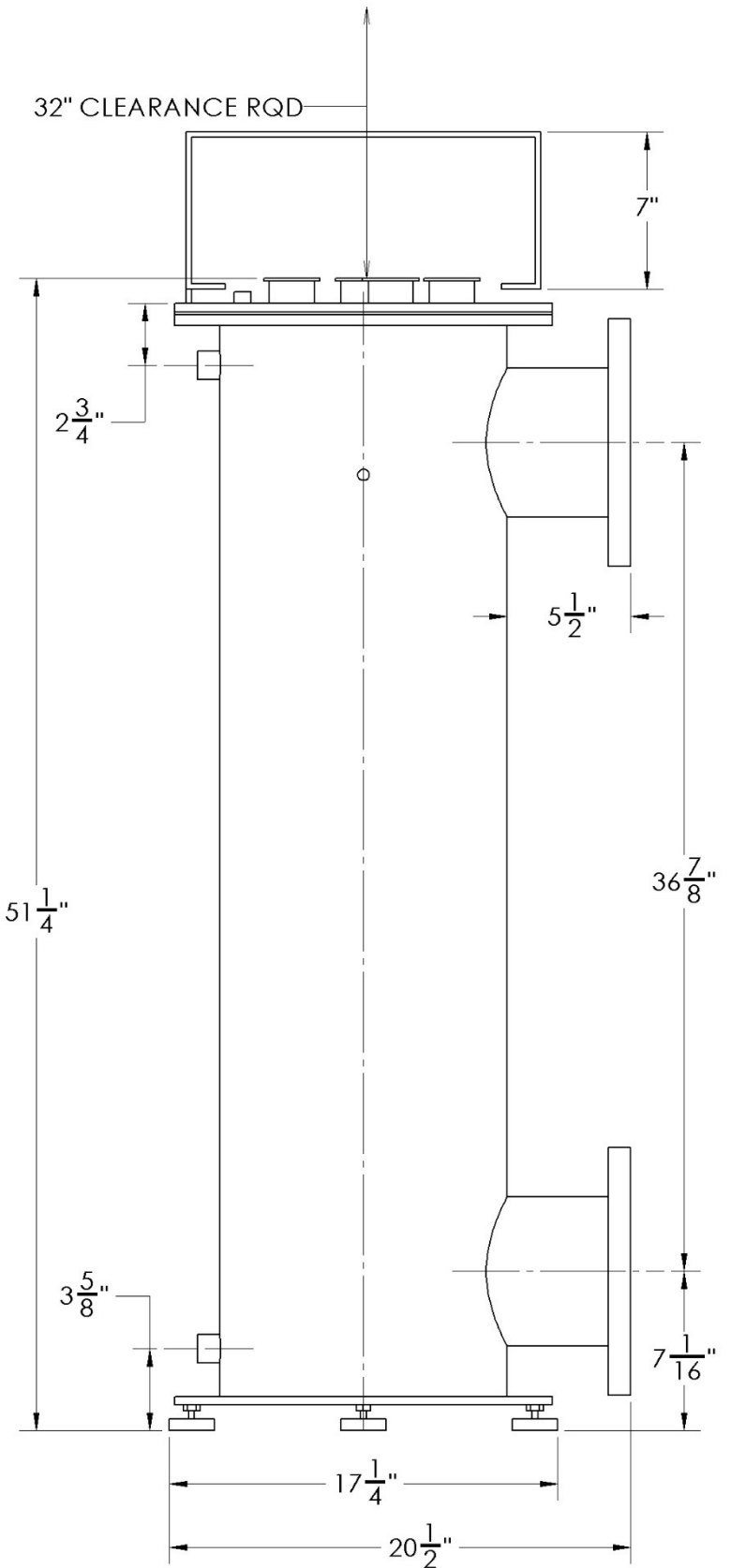
### SAG240A120CR



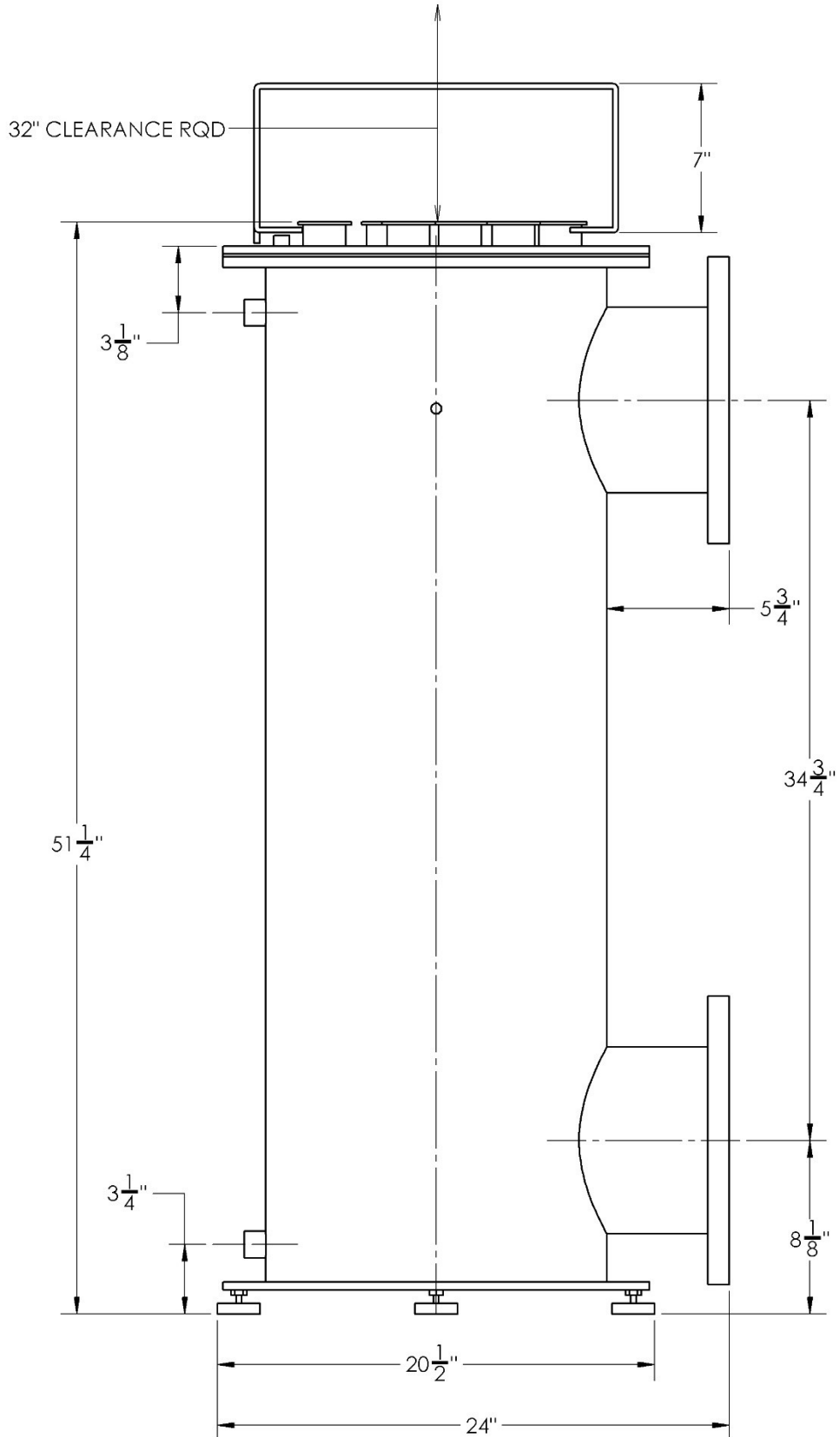
### SAG480A120CR



### SAG720A120CR & SAG960A120CR

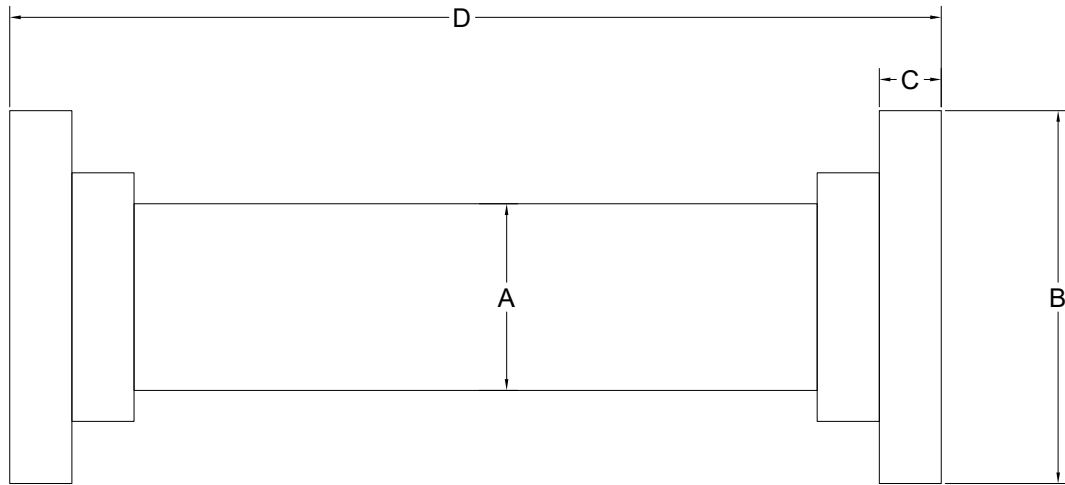


# SAG1200A120CR



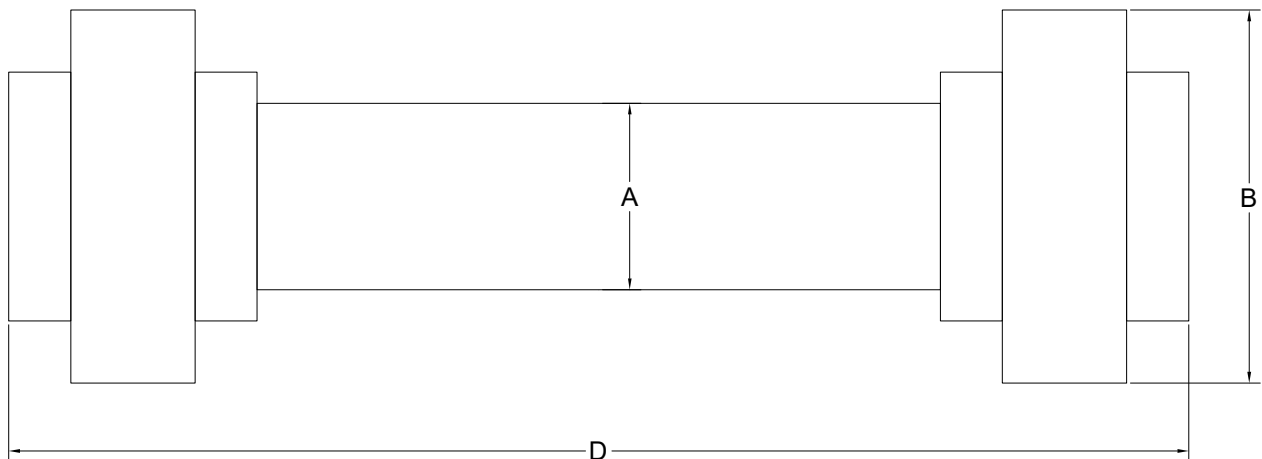
Strainer Spool Dimensions (Flanged)

Nominal Pipe Size	Pipe OD (A)	Flange OD (B)	Flange Thickness (C)	Overall length (D)
2	2 1/2	6	3/4	15 1/2
3	3 1/2	7 1/2	1	16 1/4
4	4 1/2	9	1	17 1/4
6	6 1/2	11	1 1/4	17 1/4
8	8 1/2	13 1/2	1 3/8	18 1/2
10	10 3/4	15 3/4	1 3/4	18 3/4



Strainer Spool Dimensions (Union)

Nominal Pipe Size	Pipe OD (A)	Union OD (B)		Overall length (D)
2	2 1/2	5 1/4		20 1/2
3	3 1/2	7 1/8		21 3/4





## **INSTALLATION**

### **UNPACKING**

Units are shipped from the factory. In the event of damages during shipping, it is the responsibility of the customer to notify the carrier immediately and to file a damage claim. Open the crate carefully and examine all material inside.

Contents include UV Power Supply, Chamber, UV Lamp, Sleeve, Disconnect Gasket, Quick Disconnect Clamp, Valve for Air Bleed, 90 for Air Bleed, Post Chamber Strainer, Flow Switch, and Safety Cover

### **STORAGE**

When storing units, use the original packaging and store under a shelter to protect the contents from weather.

### **SAFETY CONSIDERATIONS**

## **IMPORTANT SAFETY INSTRUCTIONS**

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## **READ AND FOLLOW ALL INSTRUCTIONS**

### **SAVE THESE INSTRUCTIONS**

**WHEN INSTALLING, OPERATING, AND MAINTAINING THIS EQUIPMENT, KEEP SAFETY CONSIDERATIONS FOREMOST. USE PROPER TOOLS, PROTECTIVE CLOTHING, AND EYE PROTECTION WHEN WORKING ON OR INSTALLING THE EQUIPMENT. FOLLOW THE INSTRUCTIONS IN THIS MANUAL AND TAKE ANY ADDITIONAL SAFETY MEASURES APPROPRIATE. BE EXTREMELY CAREFUL IN THE PRESENCE OF HAZARDOUS SUBSTANCES.**

**THE PERSONNEL RESPONSIBLE FOR INSTALLATION, OPERATION, AND MAINTENANCE OF THIS EQUIPMENT MUST BE FULLY FAMILIAR WITH THE CONTENTS OF THIS MANUAL.**

ANY SERVICING OF THIS EQUIPMENT MUST BE DONE WITH THE UNIT FULLY OFF AND DISCONNECTED FROM THE POWER SOURCE AND ALL PRESSURE BLED FROM THE LIQUID LINES.

## WARNING

- CONNECT THE EQUIPMENT ASSEMBLY TO A CIRCUIT PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
- ONLY A CERTIFIED TECHNICIAN MAY INSTALL AND SERVICE THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM.
- MODIFYING THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM IN ANY WAY MAY CAUSE BODILY INJURY AND WILL VOID THE WARRANTY.
- DO NOT ALLOW CHILDREN TO OPERATE THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM.
- ONLY REPLACE COMPONENTS WITH THOSE SPECIFIED BY THE MANUFACTURER.
- WHEN INSTALLING THE SYSTEM, ENSURE THAT POWER IS LINKED TO THE MAIN PUMP POWER SOURCE FOR THE POOL TO ENSURE THAT THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM NEVER OPERATES WHEN THE PUMPS ARE OFF.
- ALL BOXES ON THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM CONTAIN HIGH VOLTAGE COMPONENTS. NEVER OPEN ANY BOX WHILE THE POWER IS ON.
- NEVER OPEN THE **CHLORKING®** SENTRY AQUA GUARD SYSTEM OR LOOK DIRECTLY AT THE UV LAMP WHEN IT IS OPERATING. DIRECT OR INDIRECT EXPOSURE TO THE LIGHT EMITTED BY THE LAMP WILL CAUSE SERIOUS EYE DAMAGE AND SEVERELY BURN UNPROTECTED SKIN.
- REPLACE DAMAGED CORDS IMMEDIATELY.

## **CONSIGNES DE SÉCURITÉ IMPORTANTES**

### **LISEZ ET SUIVEZ TOUTES LES INSTRUCTIONS**

#### **CONSERVEZ CES INSTRUCTIONS**

LORS DE L'INSTALLATION, DE FONCTIONNEMENT ET L'ENTRETIEN DE CET ÉQUIPEMENT, GARDEZ LES CONSIDÉRATIONS SUR LA SÉCURITÉ AVANT TOUT. UTILISER DES OUTILS APPROPRIÉS, DES VÊTEMENTS DE PROTECTION ET LUNETTES DE PROTECTION LORSQU'ILS TRAVAILLENT SUR OU À L'INSTALLATION. SUIVEZ LES INSTRUCTIONS DE CE MANUEL ET PREND LES MESURES DE SÉCURITÉ SUPPLÉMENTAIRES APPROPRIÉES. SOYEZ VIGILANTS EN PRÉSENCE DE SUBSTANCES DANGEREUSES. LE PERSONNEL

CHARGÉ DE L'INSTALLATION, DE FONCTIONNEMENT ET D'ENTRETIEN DE CE MATÉRIEL DOIT ÊTRE PARFAITEMENT FAMILIARISÉ AVEC LE CONTENU DE CE MANUEL. AUCUNE OPÉRATION DE MAINTENANCE DE CET ÉQUIPEMENT DOIT ÊTRE FAITE AVEC L'UNITÉ ENTIÈREMENT ÉTEINT ET DÉBRANCHÉE DE L'ÉLECTRICITÉ ET TOUTE LA PRESSION SAIGNÉ À PARTIR DES LIGNES DE LIQUIDES.

## MISE EN GARDE

CONNECTER LE MONTAGE DE L'ÉQUIPEMENT SUR UN CIRCUIT PROTÉGÉ PAR UN DISJONCTEUR DE FUITE À LA TERRE.

- SEUL un TECHNICIEN CERTIFIÉ PEUT INSTALLER ET ENTREtenir LE SYSTÈME de GARDE AQUA SENTRY **CHLORKING®** .
- MODIFIER LE SYSTÈME de GARDE AQUA SENTRY **CHLORKING®** EN QUELQUE SORTE PEUT CAUSER DES LÉSIONS CORPORELLES ET LA GARANTIE ANNULATION.
- NE LAISSEZ PAS les ENFANTS à EXPLOITER LE SYSTÈME de GARDE AQUA SENTRY **CHLORKING®** .
- REMPLACEZ UNIQUEMENT LES COMPOSANTS AVEC CELLES SPÉCIFIÉES PAR LE FABRICANT.
- LORSQUE VOUS INSTALLEZ LE SYSTÈME, s'ASSURER QUE la PUISSANCE EST LIÉE à LA SOURCE D'ALIMENTATION de POMPE à MAIN POUR LA PISCINE POUR VOUS ASSURER QUE LE SYSTÈME de GARDE AQUA **CHLORKING®** DÉTECTEUR FONCTIONNE JAMAIS QUAND LES POMPES SONT hors SERVICE.
- Toutes LES CASES SUR LE SYSTÈME de GARDE AQUA SENTRY **CHLORKING®** CONTIENNENT DES COMPOSANTS HAUTE TENSION. NE JAMAIS OUVRIR N'IMPORTE QUELLE BOÎTE TANDIS QUE L'APPAREIL EST ALLUMÉ.
- N'OUVREZ JAMAIS LE **CHLORKING®** SENTINELLE GARDE AQUA SYSTEM OU REGARDER DIRECTEMENT LA LAMPE UV LORSQU'IL FONCTIONNE. UNE EXPOSITION DIRECTE OU INDIRECTE À LA LUMIÈRE ÉMISE PAR LA LAMPE VA PROVOQUER DES LÉSIONS OCULAIRES GRAVES ET BRÛLER GRAVEMENT LA PEAU NON PROTÉGÉE.
- REMPLACER LES CORDONS ENDOMMAGÉS IMMÉDIATEMENT.

## PLAN AHEAD

Almost every pump room encountered is different. It is imperative to have prior knowledge of the facility in which the unit is to be installed and to evaluate what type of tools, wall anchors, etc. will be needed to make the installation as problem free as possible. Installations not done in accordance with this manual may not be covered under warranty.

### POWER SUPPLY INSTALLATION (Indoor Only)

#### **WARNING**

**NEVER TRY TO SUPPORT THE WEIGHT OF THE POWER SUPPLY USING ONLY DRYWALL ANCHORS. THE POWER SUPPLY MUST HAVE A STUD FOR SUPPORT!**

#### **CAUTION**

**THE POWER SUPPLY MAY CAUSE INTERFERENCE WITH SENSITIVE ELECTRONICS. AVOID INSTALLING THE POWER SUPPLY AND LAMP LEAD WIRE NEAR SENSITIVE ELECTRONICS.**

Locate a space on the wall, in the pump room, that will accommodate the dimensions of the power supply. The power supply must mount within 5 feet of the UV chamber to ensure that the cables can easily reach the chamber and within 3 feet of a 120 volt, 15-amp wall outlet protected by a ground fault circuit interrupter. On a drywall installation, locate studs to hold the weight of the power supply. Use concrete anchors for installations into concrete walls. Install in an easy to access location. Some installations may require a mounting stand be fabricated based on chamber access.

### UV CHAMBER INSTALLATION (Indoor Only)

Place the UV Chamber on a level surface within 5 feet of the power supply. The chamber may be installed in a vertical or horizontal position. Ensure that the unit is accessible for service by leaving at least 3 feet of open space above or beside the chamber to allow for lamp and sleeve removal. U shaped horizontal installations require that the water is plumbed going down into the inlet of the chamber and coming out in the up direction from the outlet of the chamber. Z shaped horizontal installations should be plumbed so the water is flowing up into the chamber and up out of the chamber. Vertical installations require that the water is plumbed going into the inlet of the chamber (bottom) and out of the outlet of the chamber (top). Secure the chamber with suitable hardware. Ensure the plumbing is adequately supported to prevent strain on the chamber inlet and outlet. Damage resulting from unsupported plumbing will not be covered under warranty.



## QUARTZ SLEEVE INSTALLATION

### CAUTION

**LAMPS AND QUARTZ SLEEVES ARE MADE OF GLASS AND ARE EXTREMELY DELICATE. TAKE CARE WHEN HANDLING OR REPLACING THESE COMPONENTS. WEAR COTTON GLOVES WHEN HANDLING LAMPS. HOLD LAMPS BY THE ENDS ONLY. NEVER TOUCH THE GLASS WITH BARE HANDS. WIPE ANY FINGERPRINTS FROM LAMPS WITH ALCOHOL.**

**QUARTZ SLEEVES ARE SHIPPED WITH SMALL RUBBER STOPS INSIDE THE BOTTOM OF THE SLEEVE. THIS RUBBER STOP MUST REMAIN IN PLACE TO PREVENT DAMAGE FROM LAMP INSTALLATION.**

Place a gasket on the quartz sleeve quick disconnect flange. Carefully lower the quartz sleeve assembly into the chamber. On stainless chambers for SAG480 through SAG1200, the quartz sleeves sit on top of spring assemblies. Quartz sleeves must be carefully lined up with the spring or damage to the sleeve may occur. When the quartz sleeve is properly located in the spring assembly the quick disconnect quartz sleeve assembly will rest about  $\frac{1}{4}$ " to  $\frac{1}{2}$ " above the 2" gasket. Gently press the quick disconnect quartz sleeve assembly into place and install the quick disconnect clamp to secure the sleeve in place.

## LAMP INSTALLATION

### CAUTION

**THE WIRING CONNECTOR FOR THE LAMP MUST BE INSTALLED ON THE LAMP BEFORE THE LAMP IS LOWERED INTO THE QUARTZ SLEEVE OR DAMAGE TO THE LAMP OR QUARTZ SLEEVE MAY OCCUR.**

Place the connector onto the lamp and lower the lamp all the way to the bottom of the quartz sleeve. Screw the viewing cap onto the quick disconnect quartz sleeve assembly. Push the lamp lead wire through the viewing cap until the lamp is against the rubber cushion at the bottom of the quartz sleeve and tighten the liquid tight gland.



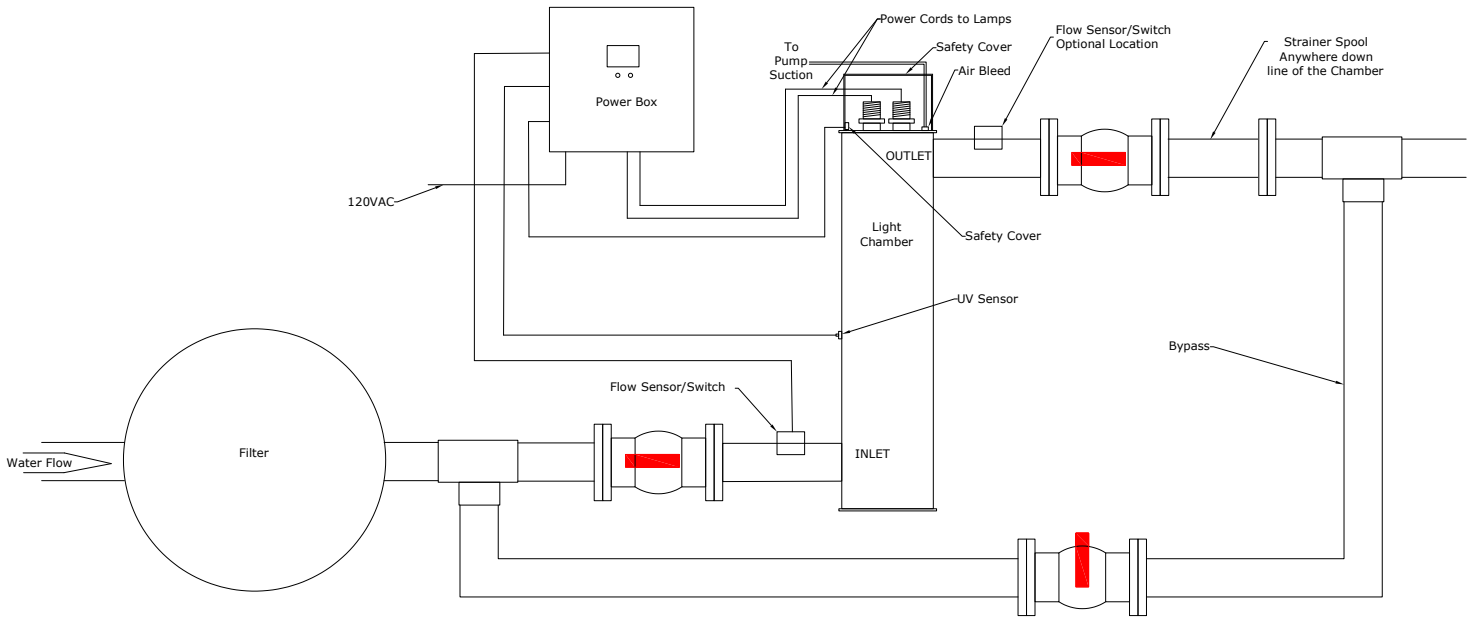
## PLUMBING THE UV CHAMBER

### WARNING

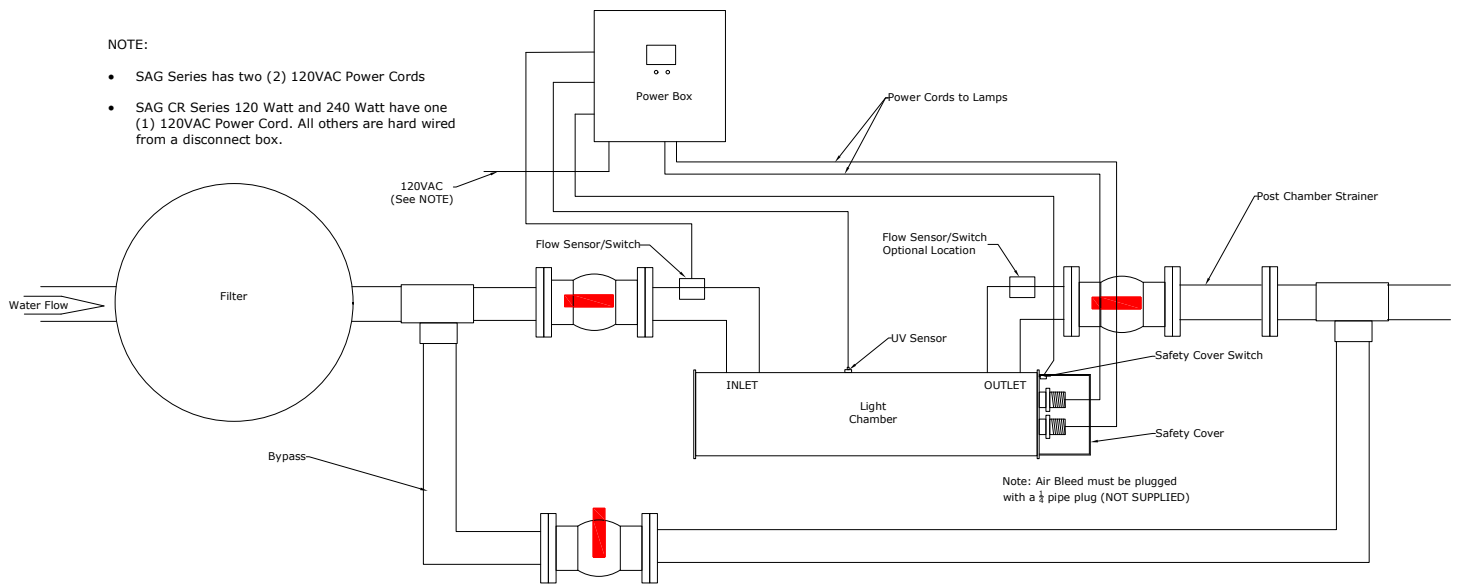
**THE ENTIRE WATER VOLUME OF THE CIRCULATION SYSTEM SHOULD PASS THROUGH THE CHAMBER. INSTALLATION WITHIN A BYPASS IS RECOMMENDED FOR CHAMBER SERVICE.**

**NOTE:** SPRAY PADS NEED TO BE INSTALLED WITH THE PLUMBING BACK TO THE RESEVIOR FOR LOW SPEED PUMPS TO CONTINUE CIRCULATION THROUGH THE CHAMBER, ALLOWING CONTINUOUS OPERATION OF THE UV SYSTEM. ENSURE THE PLUMBING IS ADEQUATELY SUPPORTED TO PREVENT STRAIN ON THE CHAMBER INLET AND OUTLET. DAMAGE RESULTING FROM UNSUPPORTED PLUMBING WILL NOT BE COVERED UNDER WARRANTY.

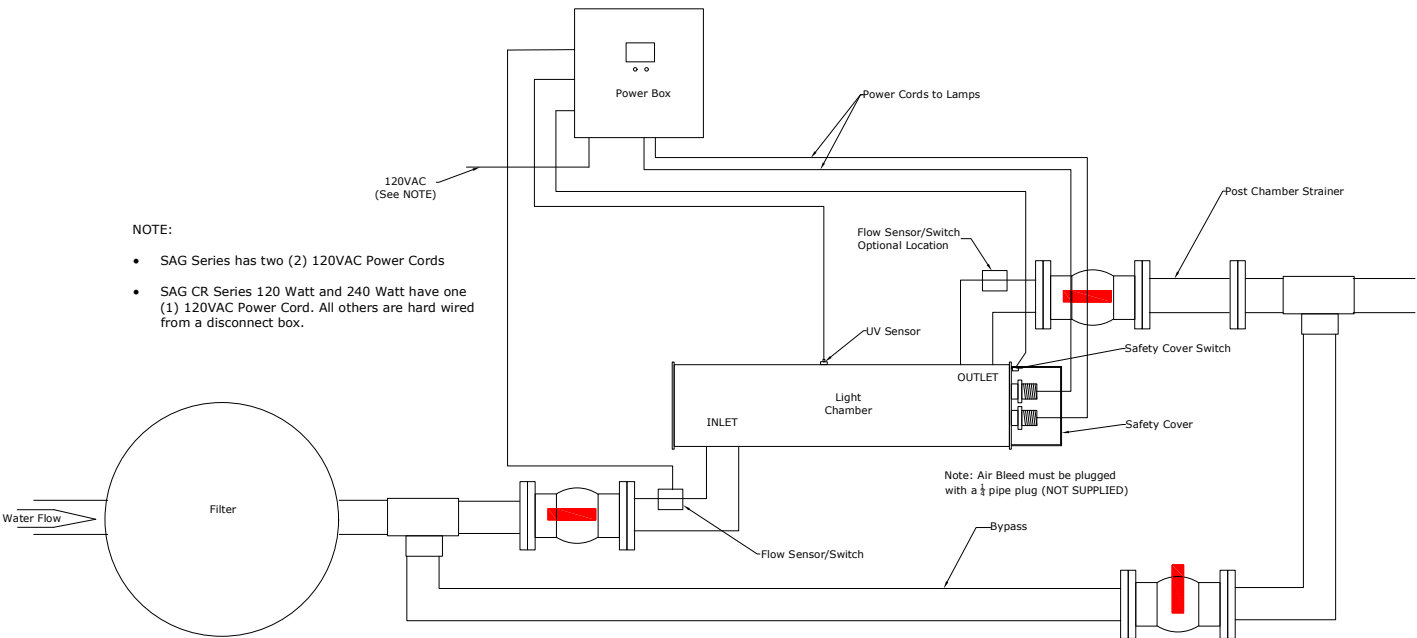
## UV system installation diagram



## UV system installation diagram Horizontal "U"



## UV system installation diagram Horizontal "Z"



The entire water volume of the circulation system should pass through the UV chamber. Plumb the inlet of the UV chamber as close to the outlet of the pool filter as possible. Plumb a bypass around the UV chamber to facilitate service. Use valves to isolate the chamber from the circulation system.

### PLUMBING THE STRAINER

The strainer is installed on outlet side of the UV chamber plumbing. The strainer can be installed anywhere in the return line plumbing that is downstream of the UV chamber outlet. Note that the UV Strainer is flow directional.

### FLOW SWITCH INSTALLATION

Tap the 1/2 inch NPT flow switch into the Chamber inlet or outlet. The flow switch must be installed within the isolation valves. The flow switch cannot be installed in downward flow. Connect the flow switch wire to the connection on the side of the power supply marked Flow.



## OPTIONAL FLOW METER INSTALLATION

The Sentry Aqua Guard system is designed to display flow in real time using a GF brand Signet 2536 Rotor-X-Flow Sensor or a GF brand Signet 2551 Blind Magmeter. Install one of these flow sensors according to the manufacturer's instructions within the isolation valves. Connect the flow switch wire to the connection on the side of the power supply marked Flow.

## PLUMBING THE AIR BLEED

### VERTICAL MOUNT CHAMBERS

**NOTE: Horizontal installations do not need an air bleed. Plug the holes with a 1/4 NPT pipe plug (not supplied) or by installing and closing the supplied valve.**

1. Insert 3/8" elbow into the 3/8" female adapter (shown in figure 1) on top of the UV chamber.
2. Tap 3/8" NPT valve (shown in figure 2) into the pump suction plumbing.
3. Connect the two points with 3/8" tubing.
4. Turn on the pool pump then open the 3/8" valve.

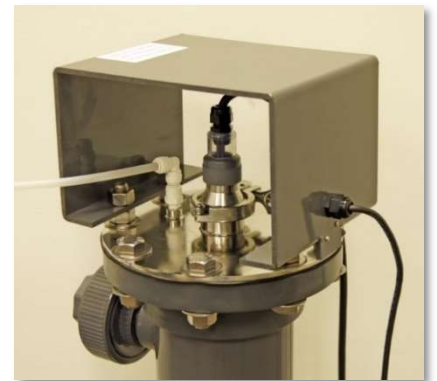


Figure 1



Figure 2

## SYSTEM WIRING

### **WARNING**

**THE EARTH TERMINALS AND THE EQUIPMENT BONDING WIRE MUST BE CONNECTED. THE ELECTRICAL SUPPLY MUST MATCH THE SYSTEM RATED VOLTAGE AND CURRENT. ENSURE THAT POWER IS LINKED TO THE MAIN PUMP POWER SOURCE FOR THE POOL TO ENSURE THAT THE SYSTEM NEVER OPERATES WHEN THE POOL PUMPS ARE OFF.**

All systems must be wired so that when the pool circulation pump is off the power to the ChlorKing® Sentry UV System is off with the exception of spray pads that may have bypass flow through the chamber when the main pumps are off.

SAG120 and SAG240 units are cord connected at the factory for a 120 Vac, 15-amp wall outlet. Connect the power cord to a 120 Vac electrical outlet protected by a ground fault circuit interrupter. SAG480, SAG720, SAG960, and SAG1200 units require permanent field wiring to 120 Vac, 15-amp service protected by a ground fault circuit interrupter.

## SAFETY COVER WIRING

Place the safety cover on top of the UV chamber and attach with the supplied nuts. Be sure the micro-switch is depressed when the cover is installed. Connect the safety cover wire to the connector on the side of the power supply marked Safety Cover.

## UV SENSOR INSTALLATION

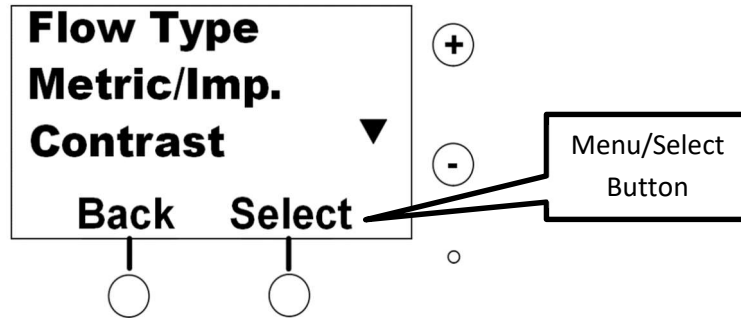
Install the UV sensor into the sensor body. Hand tighten the UV sensor nut. Connect the UV sensor wire to the connector on the side of the power supply marked UV Sensor.

## BONDING THE SYSTEM

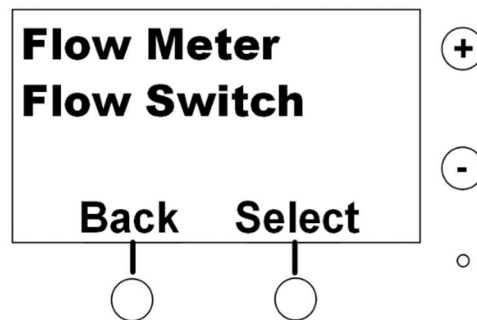
All ChlorKing® Sentry UV System systems require bonding. Bonding is accomplished by connecting a minimum 8 AWG bonding wire from the bonding grid in the equipment room to the UV system power supply and the UV system chamber. The bonding lugs on the power supply and chamber are clearly marked with a decal that reads “Bonding Lugs”.

## UV DISPLAY SETTINGS FOR GF SIGNET FLOW SENSORS

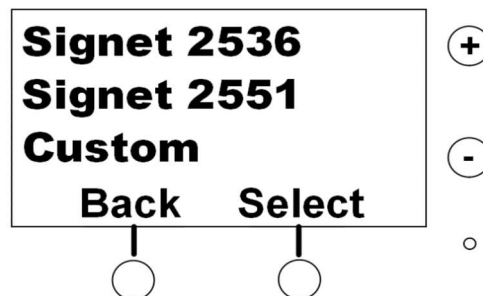
The flow monitoring type will need to be selected and set up on the display. Press the MENU button and scroll using the +/- buttons to highlight Flow Type. Press Select.



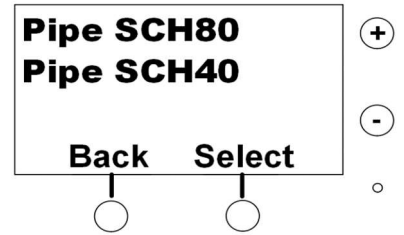
Highlight and Select Flow Meter



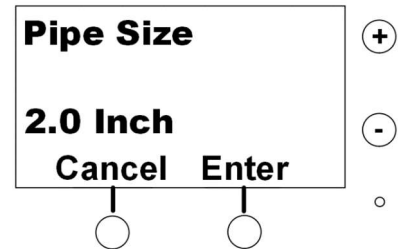
Highlight the flow meter of choice. This product supports the GF Signet 2536 and 2551. Press Select



Highlight and select the schedule of the pipe that the flow sensor is installed in.

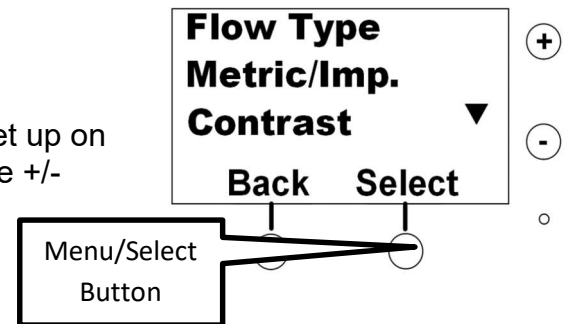


Scroll with the +/- keys to locate pipe size that the flow sensor is installed in, press Enter.

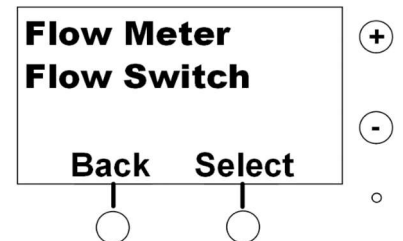


### UV DISPLAY WITH FLOW SWITCHES

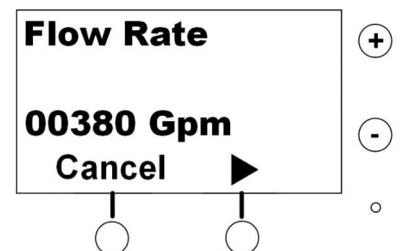
The flow monitoring type will need to be selected and set up on the display. Press the MENU button and scroll using the +/- buttons to highlight Flow Type. Press Select.



Highlight and Select Flow Switch.



Enter the actual pool flow rate.



## OPERATION

### START-UP PROCEDURES

Open the chamber isolation valves and close any bypass valves. Allow the chamber to fill with water. Turn the system on with the switch located on the power supply. Operate the system for 10 minutes to allow the lamps to warm up to full power.

### CHEMISTRY

Your pool water should be balanced in the following range before turning your ChlorKing® Sentry UV system on. Water chemistry outside of the following parameters may void warranty.

Chlorine: 2 – 5 ppm

Ph: 7.2 – 7.6

Alkalinity: 80 – 120

Hardness: 180 – 280 ppm

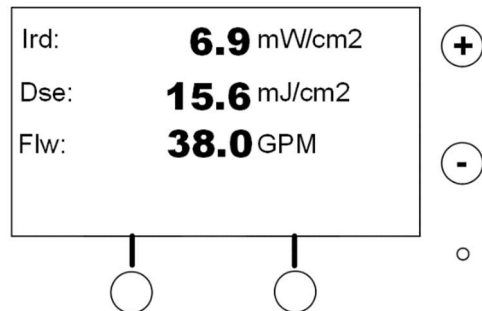
Salt: 3500 – 7000 ppm

Cyanuric acid: 20 – 50 ppm (Outdoor Pools only)

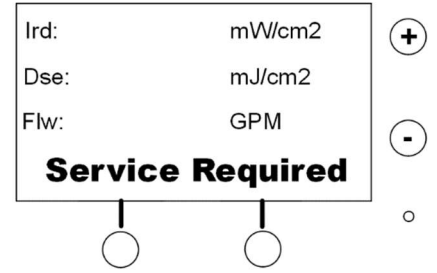
Phosphates: Less than 100 ppb

### UV DISPLAY IN OPERATION

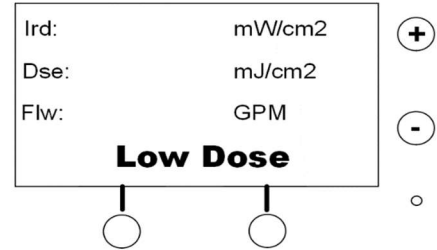
The UV display can display UV dose in  $\text{mJ}/\text{cm}^2$ , UV intensity in  $\text{mW}/\text{cm}^2$  or  $\text{W}/\text{M}^2$ , and flow in real time.



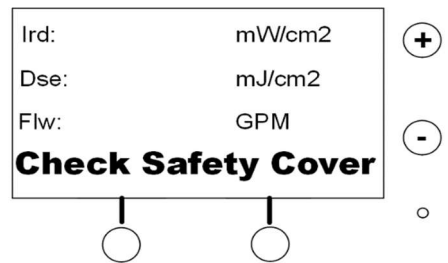
If UV dose falls below 39mj/cm<sup>2</sup> the message **SERVICE REQUIRED** will scroll across the display. This indicates the need for quartz sleeve and sensor window service or lamp replacement.



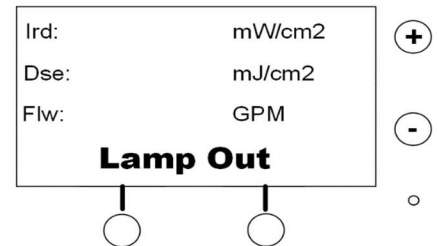
If UV dose falls to below 30mj/cm<sup>2</sup> the message **LOW DOSE** will scroll across the display.



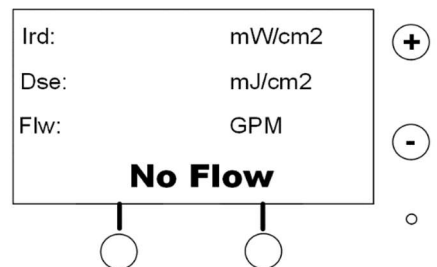
In the event the safety cover is removed while the unit is in operation, the lamps will go out and the message **CHECK SAFETY COVER** will scroll across the display.



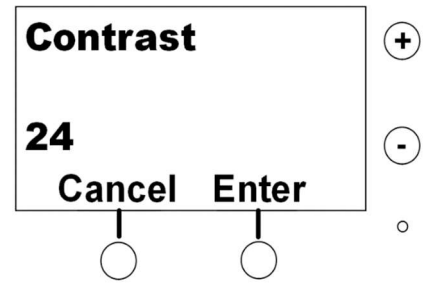
When one or more lamps are not functional the message **LAMP OUT** will scroll across the display.



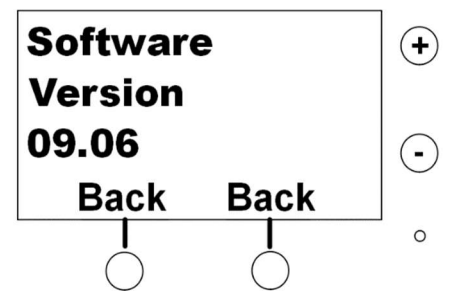
If the flow monitoring device senses no or low flow, the message **NO FLOW** will scroll across the display.



To change the display contrast, press menu, select **Contrast** and adjust with the +/- buttons.



To view the display software version, press menu, **Software Version**.



## WINTERIZATION

The Sentry UV is designed to operate in temperatures above freezing to 104F. To winterize the Sentry UV Chamber, drain the water by removing the drain plug or anode at the base of the chamber.

**Note:** Operating below calculated operational temperatures will impact the dose. Refer to General Specifications and Sizing Guidelines.

## MAINTENANCE

### ROUTINE MAINTENANCE

#### Daily Check

Check the UV display on the power supply daily. Under normal operating conditions, the UV display will indicate a value over 40mJ/cm<sup>2</sup>. A meter display of less than 40mJ/cm<sup>2</sup> an indication that maintenance or repairs are needed. The most common cause is dirty quartz sleeves and sensor window.

### 60 MONTH MAINTENANCE PLAN

See following pages for suggested maintenance. Use QR resources for visual support.





## SENTRY UV MAINTENANCE SCHEDULE: 60 MONTH

	SENTRY UV MAINTENANCE SCHEDULE: 60 MONTH																				
Location																					
Model																					
Serial Number																					
Suggested Maintenance Items	3 month	6 month	9 month	12 month	15 month	18 month	21 month	24 month	27 month	30 month	33 month	36 month	39 month	42 month	45 month	48 month	51 month	54 month	57 month	60 month	
Wipe down the UV chamber	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Address any leaks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Clean sleeves*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Clean sensor window*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect electrical connections		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Order replacement lamps**			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Replace lamps					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Order replacement sleeves**									X	X	X	X	X	X	X	X	X	X	X	X	X
Replace sleeves										X	X	X	X	X	X	X	X	X	X	X	X
Confirm AC AMP Draw***		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

\* Indicates As Needed, may be required more often

\*\* See Parts Guide

\*\*\*See Electrical Specifications or Contact Technical Support

For troubleshooting support please see Technical Guide or contact ChlorKing at 800.536.8180

## 1. Record Dose Displayed on Screen

The Sentry UV displays dose on screen. An adequate dose is 40mj/cm<sup>2</sup> to 60mj/cm<sup>2</sup>. When the UV dose falls to 39mj/cm<sup>2</sup> the green LED will go out and the yellow LED will illuminate. This indicates the need for quartz sleeve and sensor window service or lamp replacement. If the yellow LED is ignored and dose drops to 30mj/cm<sup>2</sup>, the yellow LED will begin to flash. This indicates that service is critical. If no display is present, pls see Section 6 for troubleshooting.



## 2. Wipe Down the UV Chamber

The Sentry UV chamber should be wiped down to prevent premature or unnecessary component failure or degradation. Using a lint free cloth and a mild soap solution, wipe the chamber down from top to bottom. This will also assist the operator with any leak identification addressed in the next maintenance item.

## 3. Identify and Address Any Leaks

The UV chamber has threaded and gasketed connections that should be inspected. Addressing leaks immediately will avoid unnecessary damage and is an essential part of proactive maintenance.

If a leak is observed, the connection is leaking and should be addressed by isolating the machine, draining the chamber as needed, and cleaning the impacted area. Fresh thread tape or a replacement gasket should be applied, and the fitting resecured. If a cracked or faulty component is the cause of the leak, refer to the UV Parts Guide and contact ChlorKing Sentry for assistance.



## 4. Clean the Sleeves

Overtime, mineral deposits will coat the UV sleeve and prevent UV light from effectively penetrating through this build up. Sleeves should be cleaned quarterly or as dose on screen drops. Reference QR code for video instruction.

## 5. Clean the Sensor

The UV sensor monitors light intensity within the chamber. Deposits can coat the quartz window and prevent accurate readings. Reference QR code for video instruction on cleaning the sensor window.



## 6. Inspect Electrical Connections

With all incoming power disconnected, inspect all electrical connections for any discoloration or damage. Check the tightness of all screw connections. Ensure all wire nut connections are tight.

## 7. Order Replacement Lamps

UV lamps have a useful life of 13,000 hours of operation. They should be proactively replaced every 1.5 years. Reference Parts Guide and contact an authorized Chlorking dealer with the unit serial number to place order.

## 8. Replace UV Lamps

Reference QR code for video instruction on replacing the sleeves. Guidance on proper methods of handling broken fluorescent lamps or disposal is available from the US EPA and from many state agencies and local health and environmental authorities. The EPA guidelines can be found at [Mercury | US EPA](#).

## 9. Order Replacement Sleeves

UV Sleeves can become etched with mineral deposits and will be required to replace once they no longer become clean following service. Reference Parts Guide and contact an authorized Chlorking dealer with the unit serial number to place order.

## 10. Replace Sleeves

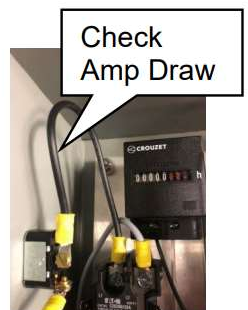
Reference QR code for video instruction on replacing the sleeves.

## 11. Confirm Incoming AC AMPS

Using a voltmeter set to AC AMPS, clamp meter around wire in the upper left corner of power supply. Expected AMP draw listed under ELECTRICAL SPECIFICATIONS for the specific model. If expected AMPS are not displayed, contact technical support for instruction.



UV VIDEOS



## Cleaning the Quartz Sleeve and UV Sensor Window Manually

### **CAUTION**

**LAMPS AND QUARTZ SLEEVES ARE MADE OF GLASS AND ARE EXTREMELY DELICATE. TAKE CARE WHEN HANDLING OR REPLACING THESE COMPONENTS. WEAR COTTON GLOVES WHEN HANDLING LAMPS. HOLD LAMPS BY THE ENDS ONLY. NEVER TOUCH THE GLASS WITH BARE HANDS. WIPE ANY FINGERPRINTS FROM LAMPS WITH ALCOHOL.**

**QUARTZ SLEEVES ARE SHIPPED WITH SMALL RUBBER STOPS AT THE BOTTOM OF THE SLEEVE. THIS RUBBER STOP MUST REMAIN IN PLACE TO PREVENT DAMAGE FROM LAMP INSTALLATION.**

Unplug the unit from the power source to prevent the risk of electric shock or system damage. Isolate the chamber from the pool circulation system by opening the bypass valve and closing the inlet and outlet valves and the air bleed if installed. Drain the chamber. Remove the safety cover. Loosen the liquid tight gland and remove the viewing cap. Lift the lamp out of the quartz sleeve without disconnecting it from the wiring harness. Once the lamp is completely free of the quartz sleeve it can be safely disconnected from the wiring harness. Remove the quick disconnect clamp and remove the sleeve from the chamber.

NOTE: If the power supply is within 5 feet of the UV chamber, the quartz sleeve may be removed without disconnecting or removing the lamp.

### **WARNING**

**Read all cautions and directions provided with the muriatic acid used. Always add acid to water. Use only with adequate ventilation. If strong odor is noticed, STOP, ventilation is inadequate. Leave area immediately. If the work area is not well ventilated, you MUST use a properly fitted and maintained NIOSH approved respirator for acid fumes.**

Clean the quartz sleeve by wiping with a clean cotton cloth and a standard glass cleaner. Sleeves with calcium accumulation will require cleaning with a 5:1 water and muriatic acid solution. Check the gasket on the quartz sleeve quick disconnect flange. Carefully lower the quartz sleeve assembly into the chamber. On stainless chambers for SAG480 through SAG1200 the quartz sleeves sit on top of spring assemblies. Quartz sleeves must be carefully lined up with the spring or damage to the sleeve may occur. (see page 24 for details) Gently press the quartz sleeve into place and install the quick disconnect clamp to secure the sleeve in place. Reinstall the lamp and system safety cover.

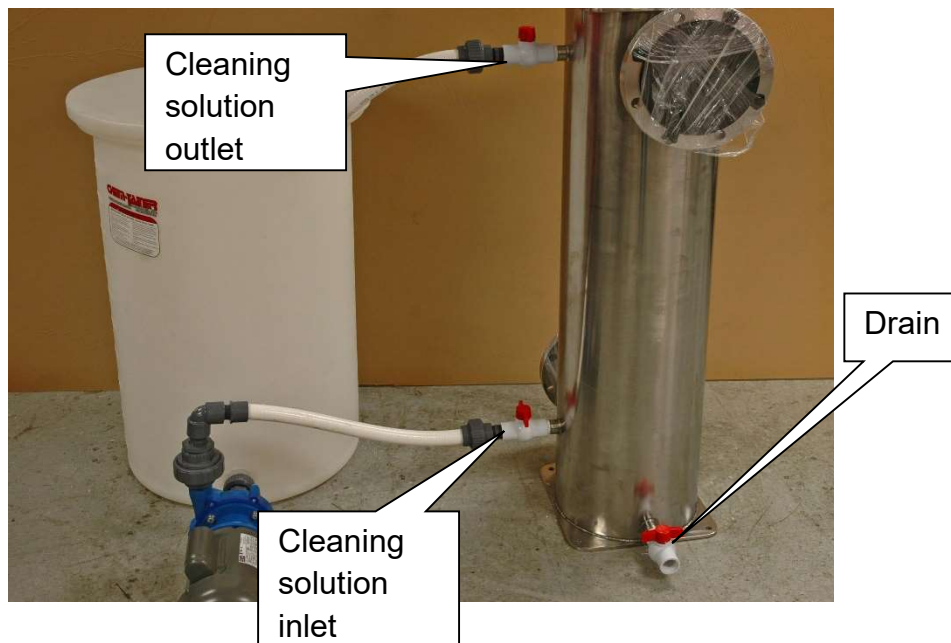
Remove the UV sensor from the sensor body window, then remove the sensor body window from the chamber boss. Clean the face of the quartz window by wiping with a

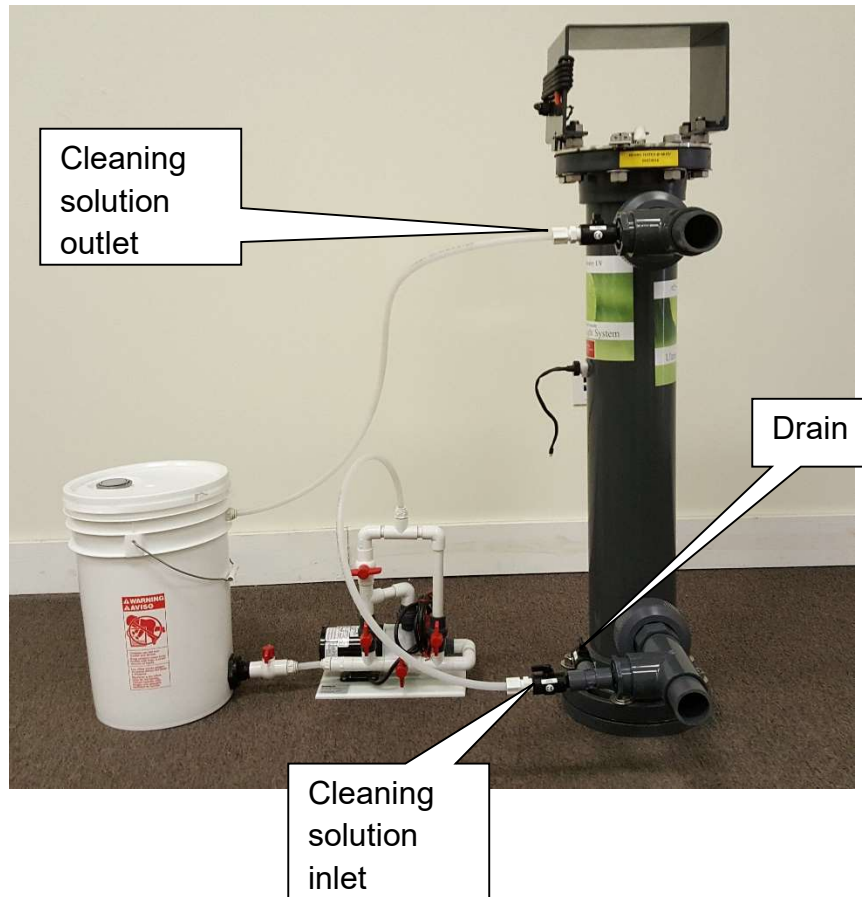
clean cotton cloth and standard glass cleaner. Windows with calcium accumulation will require cleaning with a 5:1 water and muriatic acid solution. Reinstall the sensor body, window making sure the O-ring is in place. Reinstall the sensor.

### Cleaning Quartz Sleeve and UV Monitor Window Chemically

Unplug the unit from the power source to prevent the risk of electric shock or system damage. Isolate the chamber from the pool circulation system by opening the bypass valve and closing the inlet and outlet valves. Drain the chamber. Connect a ChlorKing Acid Washer or other suitable cleaning setup to the chamber. See examples in **Figure 3**. Water and muriatic acid are mixed in the cleaning solution tank at a ratio of 5:1. Five parts water to one-part muriatic acid. Flush the chamber for 2 to 5 minutes with cleaning solution. Drain the cleaning solution from the chamber. When using the ChlorKing Acid Wash System the solution is pumped back into the cleaning solution tank for reuse. Remove the cleaning solution hoses from the chamber and close the cleaning solution valves. Open the inlet and out valves to restore pool circulation to the chamber.

**Figure 3**





## LAMP REPLACEMENT

Lamps are designed to provide a useful service life of 13,000 hours. After that time, the lamps will need replacing.

### CAUTION

**LAMPS AND QUARTZ SLEEVES ARE MADE OF GLASS AND ARE EXTREMELY DELICATE. CARE SHOULD BE TAKEN WHEN HANDLING OR REPLACING THESE COMPONENTS. WEAR COTTON GLOVES WHEN HANDLING LAMPS. HOLD LAMPS BY THE ENDS ONLY. NEVER TOUCH THE GLASS WITH BARE HANDS. WIPE ANY FINGERPRINTS FROM LAMPS WITH ALCOHOL.**

Unplug the unit from the power source to prevent the risk of electric shock or system damage. Loosen the liquid tight gland and remove the viewing cap. Lift the lamp out of the quartz sleeve without disconnecting it from the wiring harness. Once the lamp is completely free of the quartz sleeve it can be safely disconnected from the wiring harness.

## CAUTION

**THE WIRING CONNECTOR FOR THE LAMP MUST BE INSTALLED ON THE LAMP BEFORE THE LAMP IS LOWERED INTO THE QUARTZ SLEEVE OR DAMAGE TO THE LAMP AND SLEEVE MAY OCCUR.**

Place the connector onto the lamp and lower the lamp all the way to the bottom of the quartz sleeve. Screw the viewing cap onto the quick disconnect quartz sleeve assembly (see page 25) and tighten the liquid tight gland.

### **RECOMMENDED BROKEN LAMP HANDLING PRACTICES**

Guidance on proper methods of handling broken fluorescent lamps is available from the US EPA and from many state agencies and local health and environmental authorities. The EPA guidelines can be found at <http://www.epa.gov/mercury/spills/index.htm>.



## TROUBLESHOOTING

### CONTACT TECHNICAL SUPPORT

Technical resources can be found at [www.chlorking.com/tech](http://www.chlorking.com/tech) or call 1-800-536-8180. Select Technical Support option for assistance.

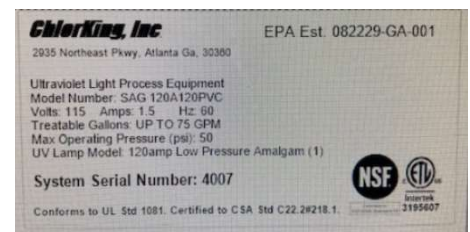
A customer service ticket can be submitted by using the Customer Service Form at [www.chlorking.com/contact-us](http://www.chlorking.com/contact-us) or by sending an email to [techsupport@chlorking.com](mailto:techsupport@chlorking.com).

Technical support will need the system model number and system serial number to assist you. Please have these ready when you call. The model number and serial number are located on the data plate. The data plate is located on the left side of the power box and shown below.

### ORDERING PARTS

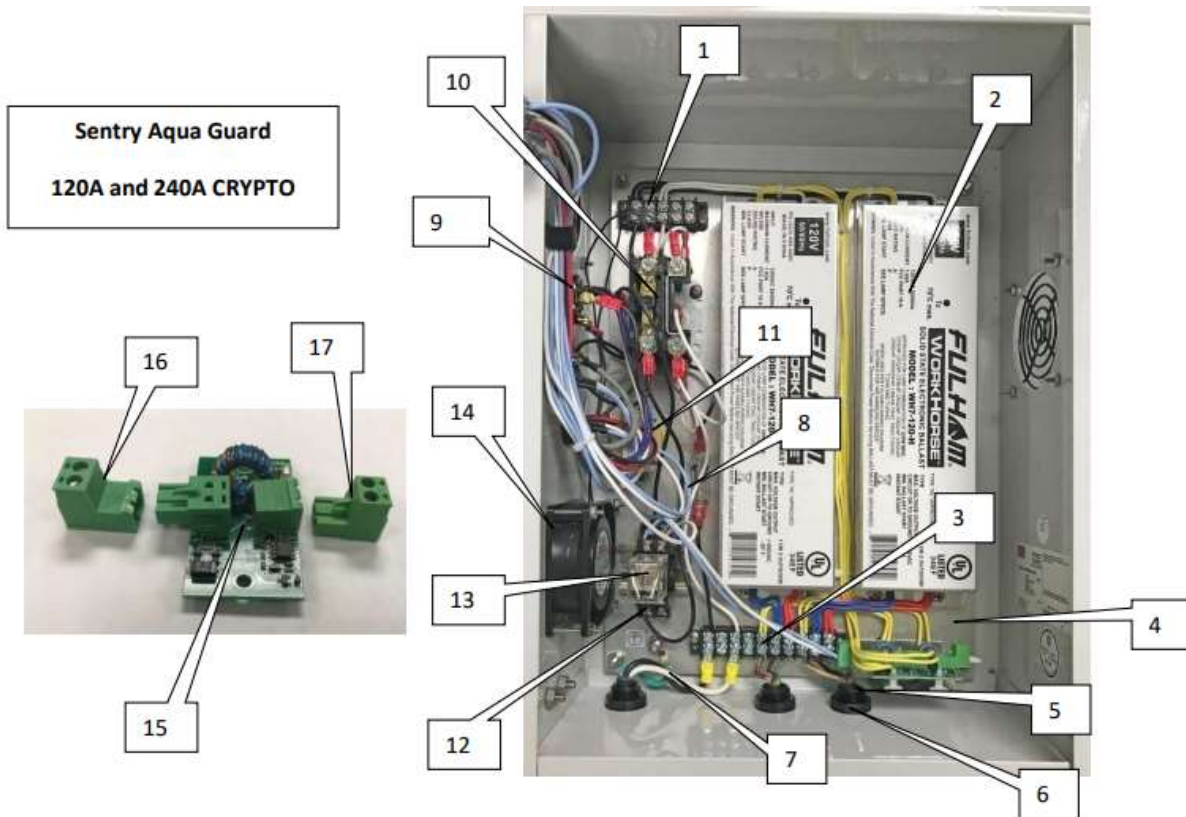
Parts can be ordered through an authorized ChlorKing dealer. Please contact ChlorKing at [www.chlorking.com/replacement-parts](http://www.chlorking.com/replacement-parts), by emailing [service@chlorking.com](mailto:service@chlorking.com), or by calling 1-800-536-8180 to be connected with a dealer in your area.

You will need the system model number and system serial number to order parts. Please have these ready when you call. The model number and serial number are located on the data plate. The data plate is located on the left side of the power box and shown below.

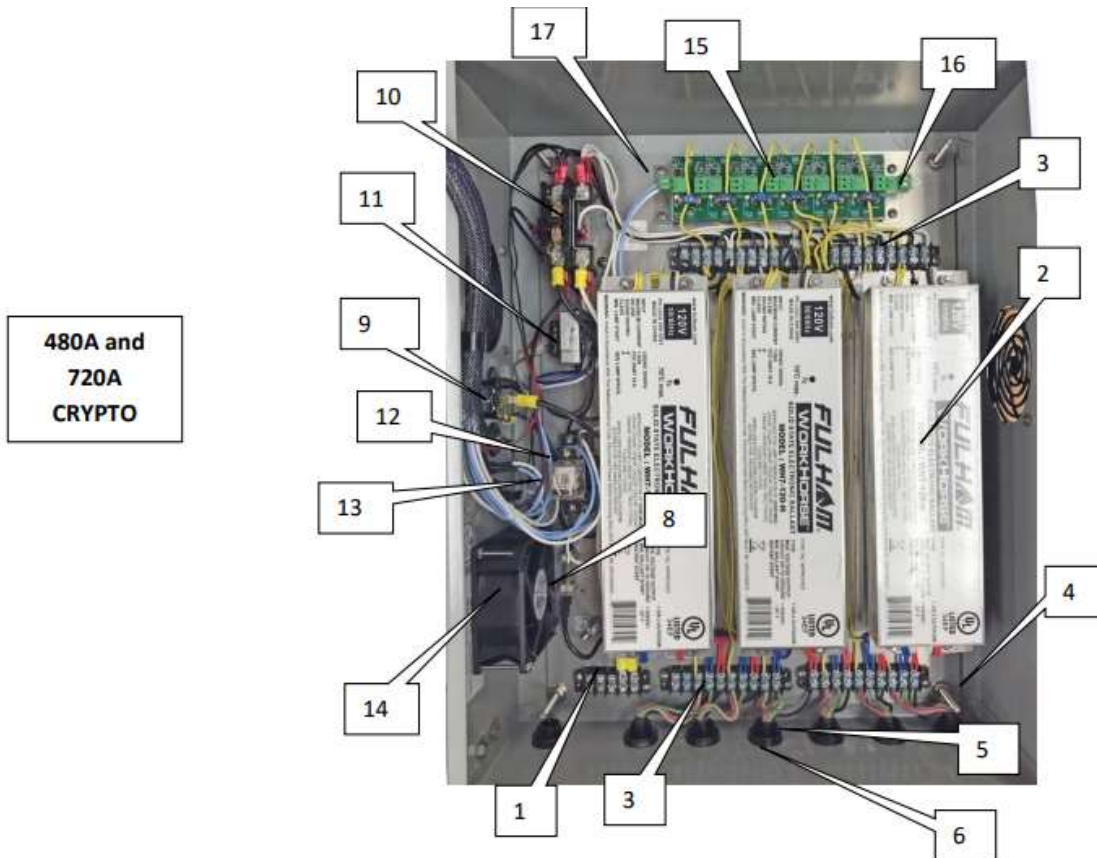




## PARTS GUIDE

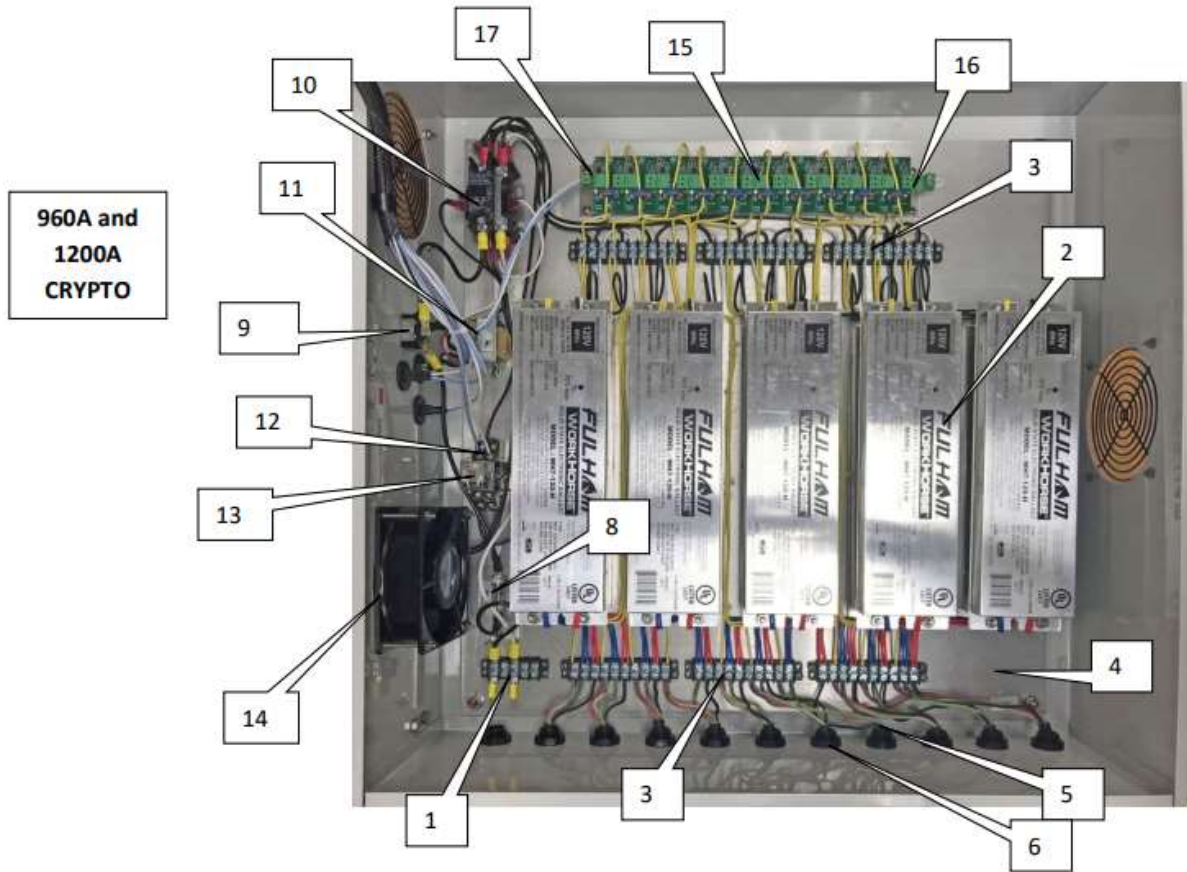


#	Description	Part Number
	<b>Power Supply</b>	<b>PS120A120V CRYPT or 240A120V CRYPT</b>
1	Terminal block 5 pos 18AWG	TB100-05SP
2	Ballast - WH7-120-H	WH7-120-H
3	Terminal block 10 pos 18AWG	TB100-10SP
4	Panel mount for 16X12 box	P1612CR
5	Liquid tight fitting ½ small	3231
6	Liquid Tight locknut ½	8463
7	Power cord male 15A 12AWG4	123MSJTOW4
8	Fuse holder glass 1-1/4 tabs	354801GY
8A	Fuse glass time delay	GSA2 for 120CR or GSA4 for 240CR
9	Toggle switch on/off 115V	2FAA04-73-XCH1
10	Contactor	C25CNB125A
11	Transformer 12V 120/230V (Wired)	KITFD4120
12	Relay Socket	SH2B05
13	Relay 12 VDC Coil	K10P-11D15-12
14	Fan Tubeaxial AC 3.15" X 1"	UF80B12-BWHR
15	Lamp Current Monitor 2	S-LCML2
16	Terminal Block Receptacle	1786174
17	Terminal Block Plug	1757019

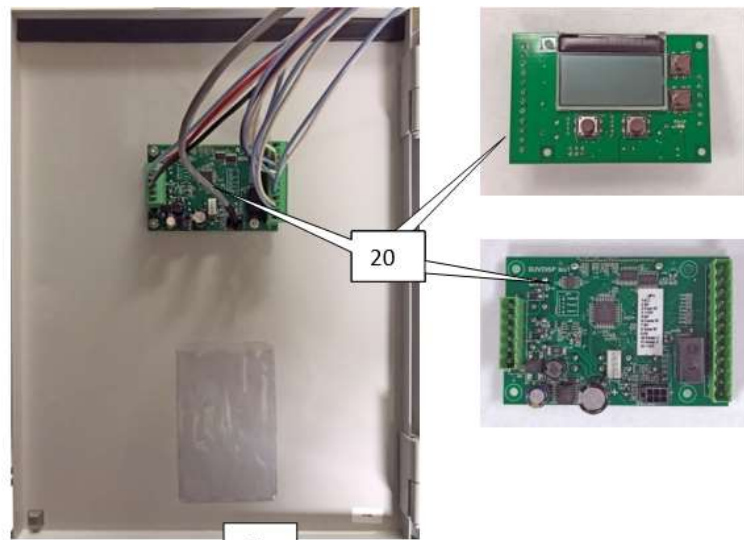


**480A and  
720A  
CRYPTO**

#	Description	Part Number
	<b>Power Supply</b>	<b>PS120A480V CRYPT or 720A120V CRYPT</b>
1	Terminal block 5 pos 18AWG	TB100-05SP
2	Ballast - WH7-120-H	WH7-120-H
3	Terminal block 10 pos 18AWG	TB100-10SP
4	Panel mount 20 X 16	P2016CR
5	Liquid tight fitting ½ small	3231
6	Liquid Tight locknut ½	8463
8	Fuse holder glass 1-1/4 tabs	354801GY
8A	Fuse glass time delay	GSA8 for 480CR or GSA12 for 720CR
9	Toggle switch on/off 115V	2FAA04-73-XCK1
10	Contactor	C25CNB125A
11	Transformer 12V 120/230V (Wired)	KITFD4120
12	Relay Socket	SH2B05
13	Relay 12 VDC Coil	K10P-11D15-12
14	FAN AXIAL 92X38MM 100-240VAC	LPH92A99-BWHR
15	Lamp Current Monitor Legacy 2	S-LCML2
16	Terminal Block Receptacle	1786174
17	Terminal Block Plug	1757019



#	Description	Part Number
	<b>Power Supply</b>	<b>PS120A960V CRYPT or 1200A120V CRYPT</b>
1	Terminal block 5 pos 18AWG	TB100-05SP
2	Ballast - WH7-120-H	WH7-120-H
3	Terminal block 10 pos 18AWG	TB100-10SP
4	Panel mount 24 X 24	P2424CR
5	Liquid tight fitting ½ small	3231
6	Liquid Tight locknut ½	8463
8	Fuse holder glass 1-1/4 tabs	354801GY
8A	Fuse glass time delay	GSA15
9	Toggle switch on/off 115V	2FAA04-73-XCK1
10	Contactor	C25CNB125A
11	Transformer 12V 120/230V (Wired)	KITFD4120
12	Relay Socket	SH2B05
13	Relay 12 VDC Coil	K10P-11D15-12
14	Fan 115V, 106CFM 120X38MM	OA109AP-11-1TB(SF) or UF12A12-BWHR
15	Lamp Current Monitor Legacy	S-LCML2
16	Terminal Block Receptacle	1786174
17	Terminal Block Plug	1757019

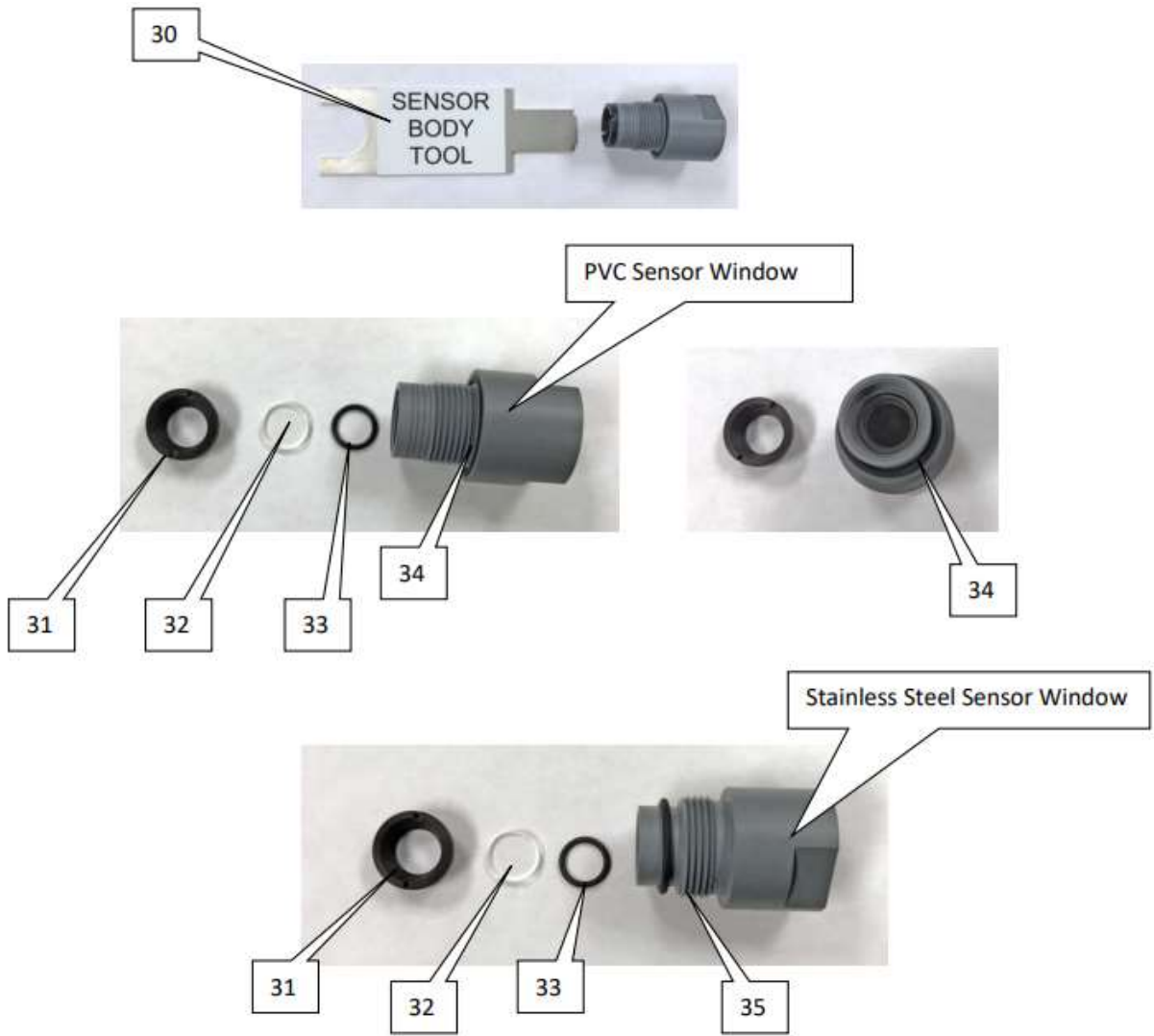


#	Description	Part Number
20	MONITOR CONROL LEGACY DISP	S-XDISPL2-B1
21	Power Cord Male 15A 12AWG 4	123MSJTOW4 (120 & 240 ONLY)
22	Power Supply Lead Wire 8.25 Large Sentry Pin	KITPSLW8.25LGSP
23	Liquid tight fitting 1/2 small & Locknut	3231 & 8463
24	Switch Boot	C1131/27
25	Fan Guard Vent 80mm Black	<b>G80-18B</b> for 120/240, <b>G92-16B</b> for 480/720, <b>G109-15AB</b> for 960/1200
26	Bonding Lug	ADR6



	<b>S-SBW120SSL2</b> SENSOR BODY WINDOW <u>120SS</u>
	<b>S-SBW240SSL2</b> SENSOR BODY WINDOW <u>240SS</u>
	<b>S-SBW480SSL2</b> SENSOR BODY WINDOW <u>480SS</u>
	<b>S-SBW720SSL2</b> SENSOR BODY WINDOW <u>720SS</u>
	<b>S-SBW960SSL2</b> SENSOR BODY WINDOW <u>960SS</u>
	<b>S-SBW1200SSL2</b> SENSOR BODY WINDOW <u>1200SS</u>
	<b>S-SRNUT</b> SENSOR RETAINING NUT

	<b>S-SBW120PVCL2</b> SENSOR BODY WINDOW <u>120PVC</u>
	<b>S-SRNU TL</b> SENSOR RETAINING NUT LONG <u>FOR 120PVC ONLY</u>
	<b>S-SBW240PVCL2</b> SENSOR BODY WINDOW <u>240PVC</u>
	<b>S-SBW480PVCL2</b> SENSOR BODY WINDOW <u>480PVC</u>
	<b>S-SRNUT</b> SENSOR RETAINING NUT FOR 240 & 480 PVC



#	Description	Part Number
30	SENSOR BODY WINDOW TOOL	S-SBWTOOL
31	SENSOR BODY WINDOW CAP	S-SBWCAP
32	MONITOR QUARTZ WINDOW	C-W
33	O RING 2MM X 13 VITON 70 DURO	OR2X13
34	O RING 2.5MMX29 VITON 70 DURO	OR2.5X29
35	O RING 2.5MMX25 VITON 70 DURO	OR2.5X25
36	MONITOR HEAD LEGACY 2 SENSOR	S-MHL2S
37	PVC CHAMBER BOSS 1-1/4	S-CBPVC114
38	SS	S-PLUG32X2
39	PVC	S-PLUG28X2

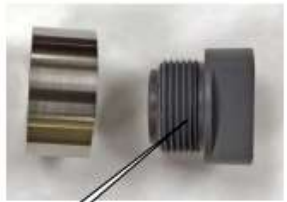
For SS Chamber



For PVC Chamber



37



38

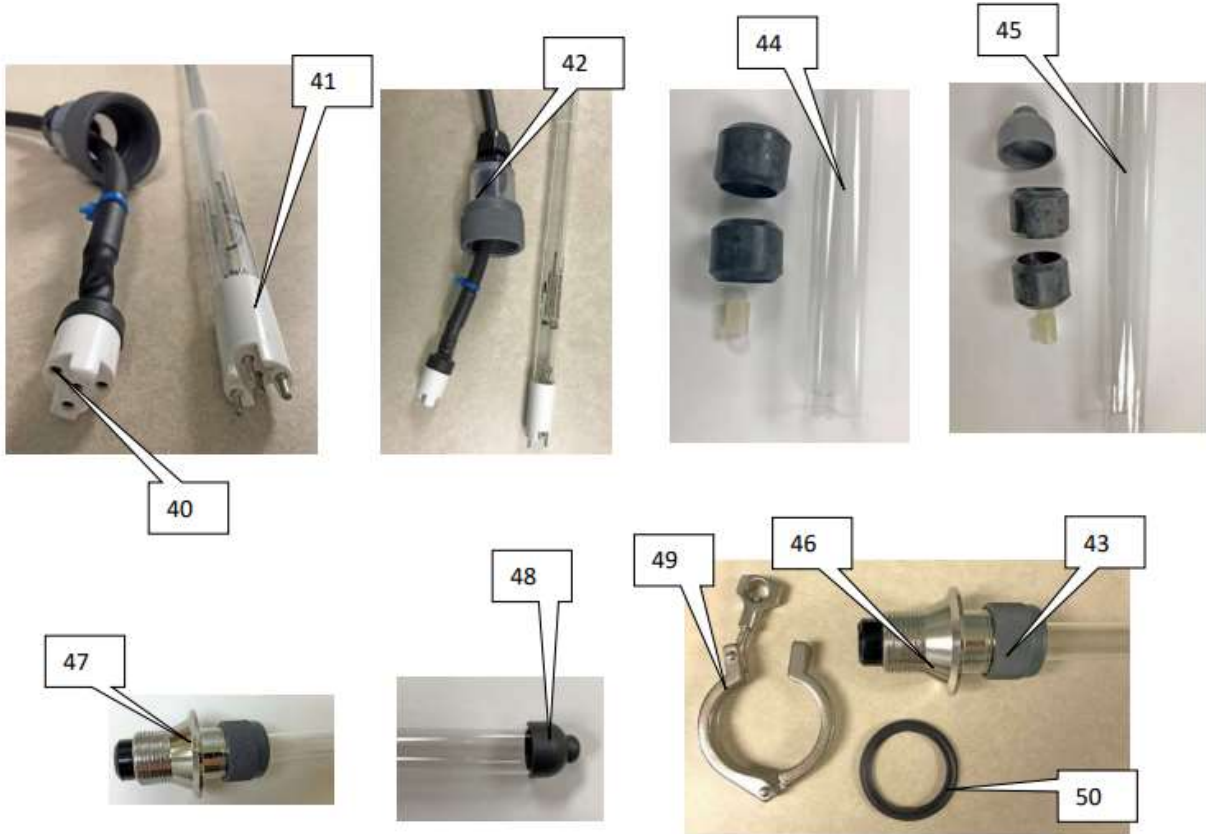


39



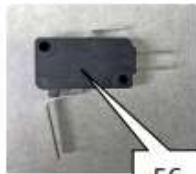
36





#	Description	Part Number
40	Power Supply Lead Wire 8.25 Large Sentry Pin	KITPSLW8.25LGSP
41	Lamp 120W 185 Amalgam Sentry Pin	LA120W185SP
42	Cap Viewing 1" Compression	CAPVCOMP1LG
43	Quick Disconnect Cap Compression 1" PVC	QDCAP1PVC
44	Kit Quartz Sleeve Standard W/ Gaskets	KITQSSTD
45	Kit Quartz Sleeve Standard W/ Gaskets & Spring Guide	KITQSSTDG
46	Quick Disconnect Quartz Sleeve Standard Assy.	QDCQSSTDA
47	Quick Disconnect Quartz Sleeve Standard Assy. W/ Spring Guide	QDCQSSTDASG
48	Cap Spring Guide	CAPQSPSG
49	Quick Disconnect Clamp 2"	QDCL2
50	Quick Disconnect Gasket 2"	QDGK2





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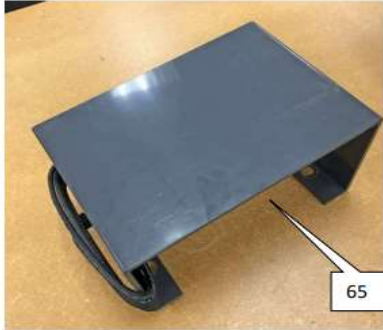
59



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61

#	Description	Part Number
55	Safety Cover Lead Wire with Switch Connector	KITSCLW10
56	Micro Switch for Safety Cover	V7-1B1908-022
57	FLOW SWITCH KIT W/MSC 2T CRYPTO	FSKHARWIL2MSCCR (for 120 ONLY)
58	FLOW SWITCH KIT W/MSC 2 NOT CRYPTO	FSKHARWIL2MSCNOTCR (for 240 - 1200)
59	Air Bleed Kit	KITAIRBLEED
60	1" Zinc Anode	KIT SACRIFICIAL ZINC ANODE 1"
61	3/4" Zinc Anode	KIT SACRIFICIAL ZINC ANODE 3/4"



#	Description	Part Number
<b>65</b>	COVER SAFETY 120 TOP FLANGE GR (Stainless chamber)	SUVSC120TF
	COVER SAFETY 240 TOP FLANGE GR (Stainless chamber)	SUVSC240TF
	COVER SAFETY 480 TOP FLANGE GR (Stainless chamber)	SUVSC480TF
	COVER SAFETY 720 TOP FLANGE GR (Stainless chamber)	SUVSC720TF
	COVER SAFETY 960 TOP FLANGE GR (Stainless chamber)	SUVSC960TF
	COVER SAFETY 1200 TOP FLANGE GR (Stainless chamber)	SUVSC1200TF
	COVER SAFETY 6 PVC (PVC chamber)	SUVSC120PVC6
	COVER SAFETY 8 PVC (PVC chamber)	SUVSC240PVC8
	COVER SAFETY 10PVC (PVC chamber)	SUVSC480PVC10
	<b>NOTE: If safety cover is white drop the TF from the part number</b>	
<b>66</b>	GASKET 4" CUSTOM FLANGE (for 120 Stainless Chamber)	EP4CFG
	GASKET 6" CUSTOM FLANGE (for 240 Stainless Chamber)	EP6CFG
	GASKET 10" CUSTOM FLANGE (for 480 Stainless Chamber)	EP10CFG
	GASKET 12" CUSTOM FLANGE (for 720 & 960 Stainless Chamber)	EP12CFG
	GASKET 16" CUSTOM FLANGE (for 1200 Stainless Chamber)	EP16CFG
	GASKET 6 NEOPRENE RUBBER (for 120 PVC Chamber)	NR201-060
	GASKET 6 NEOPRENE RUBBER (for 120 PVC Chamber)	NR201-080
	GASKET 10 NEOPRENE RUBBER (for 480 PVC Chamber)	NR201-100

## ACCESSORIES

PART NUMBER	COMPONENT	DESCRIPTION
KITDCB240-30CR	Pump Control	The Sentry UV Pump Control Box is designed to disable the pool circulation pump if the Sentry UV system is not operating or is operating below a set output.
KITAA24VDC	Audible Alarm	The Sentry Aqua Guard External Visual and Audible Alarm is used to alert staff in the event the Sentry Aqua Guard UV system has a fault.
KITFSTL	Delay Box	A flow switch delay to prevent rapid lamp cycling on SAG supplemental UV systems

To see other products offered, visit [www.chlorking.com](http://www.chlorking.com)



## ARRANTY INFORMATION

### HOW TO OBTAIN HELP

To get help under this warranty, visit your local dealer or contact ChlorKing® - Sentry UV at 1-800-536-8180 or by email at [www.sentryuv.com](http://www.sentryuv.com) or [www.chlorking.com](http://www.chlorking.com). Please have available the model number, the system serial number, the date of purchase, the name of the dealer from whom you purchased your ChlorKing® - Sentry UV product, as well as a description of the problem that you are experiencing. A ChlorKing® - Sentry UV technician will help you troubleshoot the problem and locate the defective part.

### RETURNING A PRODUCT

To return a ChlorKing® - Sentry UV product, you must first call a ChlorKing® - Sentry UV technician at the number above and discuss the problem you are experiencing. The technician will then determine your warranty status and will let you know whether you need to send the unit back for further observation and testing.

If so, ChlorKing® - Sentry UV will issue you a Return Authorization (RA) number that must be prominently displayed on all sides of the packaging. The unit must be properly packed in bubble wrap, placed in a cardboard box, then placed in another larger cardboard box filled with packing (Styrofoam) “peanuts” or bolted onto a secured pallet with side walls and shipped to the following address: (Insurance on the package is also required.)

**Sentry UV, Inc.**  
**Return Service Department**  
**2935 Northeast Parkway**  
**Atlanta, GA 30360**

Warranty will be based on the ChlorKing® - Sentry UV technician’s opinion as to whether the defect was originated at the time of manufacture. Removing the unit from its current installed position, as well as the return shipping charges to ChlorKing® - Sentry UV shall be at customer’s expense. This warranty does not include shipping and handling charges, which must be paid before package is shipped. Once the unit is received, evaluated, and the problem determined to be due to an error in manufacturing, the repairs/adjustments will be made, and the unit will be shipped back to customer at ChlorKing® - Sentry UV’s expense. However, should ChlorKing® - Sentry UV determine that problem is NOT caused because of manufacturer error, ChlorKing® - Sentry UV will call customer to discuss findings and options. If the item in question is no longer under warranty, ChlorKing® - Sentry UV will provide an estimate of cost to repair. Your authorization and a valid credit card will be required prior to making any repairs.

## **ACTIVATING WARRANTY VALIDATING WARRANTY AND MAKING A WARRANTY CLAIM**

To validate this warranty, establish proof of purchase, and make a warranty claim, you must complete and return the Owner Registration for Warranty Form and submit a copy of the original receipt clearly showing the date and place of purchase.

## **WARRANTIES FOR CHAMBER, PARTS, LAMPS, AND BALLASTS**

ChlorKing® - Sentry UV will, to the original purchaser, warranty the Stainless Steel UV Light Product from defects in material and workmanship for 12 months or one (1) year from the original date of purchase as validated by the proof of purchase or receipt. During this time, ChlorKing® - Sentry UV will repair or replace, at its option, any defective parts covered by the warranty:

**Chamber.** The stainless chamber carries a **three-year** warranty. You may be required to return item for inspection. The PVC chamber carries a **one-year** warranty.

**PVC Parts.** All PVC parts carry a **one-year** warranty. You may be required to return item(s) for inspection.

**Lamps.** All lamps carry a **90-day** only warranty, and only for its intended electrical use. If there is a manufacturer's defect found with the lamp within the 90 days, ChlorKing® - Sentry UV will replace it.

## **WARRANTIES FOR QUARTZ SLEEVE**

ChlorKing® - Sentry UV does not guarantee the quartz sleeve, because it is made entirely of glass and is easily broken.

## **GENERAL CONDITIONS AND LIMITATIONS**

None of the above warranties cover damage caused by improper use or maintenance, accidents, acts of God, minor scratches, or imperfections that do not materially impair the operation of the product. Nor do the warranties cover products not installed as outlined in this document.

The warranty on lamps, ballasts, housings, or the unit in its entirety does not include shipping and handling charges, which will be collected at the time of shipment.

Parts replaced under the warranties above are covered to the end of the ORIGINAL warranty period.

**Warranty is void if unit is not connected to a GFCI 120V/240V breaker.**

The following also void warranty:  
If product labels are defaced or removed.

If housing has been painted.

If product has been improperly installed or maintained by user. Product must be serviced by ChlorKing® - Sentry UV or authorized personnel only.

If product has been abused, misused or damaged by the user.

If product has been damaged by electrical surges, electrical spikes, electrical brownouts, or improper voltage.

We have set forth recommendations and certain installation requirements in this document. Provided they are followed, and the unit is operated in the environment and manner intended, we will repair or replace a defective part within the 12-month period from the time of purchase.

Any damage to the unit as a result of installation, shipping, packing, and/or handling is not covered by this warranty. Any implied warranty other than written herein is not part of this warranty. This warranty gives you specific rights. You may have other rights, which will vary from state to state. This warranty cannot be transferred. Any attempt to make repairs through any source other than ChlorKing® - Sentry UV or authorized person will void the warranty.

ChlorKing® - Sentry UV does not assume any liability for personal injury or property damage caused by the use or misuse of any of the above products. ChlorKing® - Sentry UV shall not in any event be liable for special, incidental, indirect, or consequential damages. ChlorKing® - Sentry UV'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 application warranty period.

## Warranty Registration Card

Please complete and return to activate ChlorKing® warranty  
Please mail or fax to ChlorKing® inc. P.O. Box 80823, Atlanta, GA, 30366 Fax: 770-685-6576

Dealer Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Tel: \_\_\_\_\_

Installation site of equipment: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Date of purchase: \_\_\_\_\_ Serial number: \_\_\_\_\_

1. Pool size: \_\_\_\_\_ 2. Pool finish: \_\_\_\_\_

3. Indoor / Outdoor: \_\_\_\_\_ 4. Heated: Yes / no

5. Filter Type: \_\_\_\_\_ 6. Pool Age: \_\_\_\_\_

7. New or existing pool: \_\_\_\_\_ 7. Controller installed: Yes / No

8. If controller installed, what make and model: \_\_\_\_\_