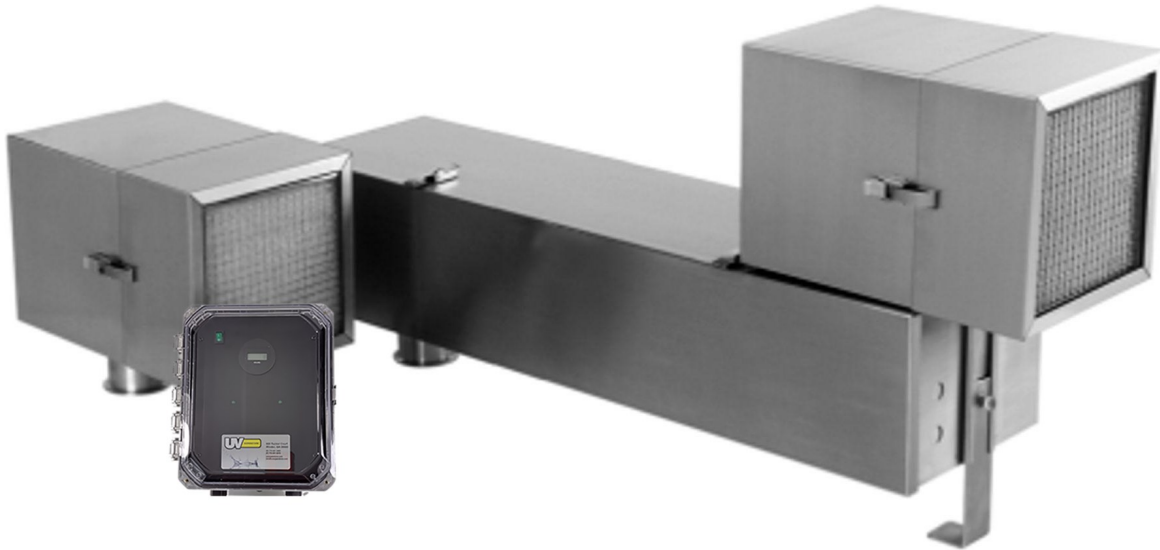


AIR UV SYSTEM

Installation, Operation and Maintenance Manual



Models

AU2S-3S, AU2S-4S

KEEP THIS MANUAL ON HAND

IMPORTANT: Anyone responsible for installation, maintenance or operation of this equipment must have a thorough understanding of the instructions and safety requirements before attempting to install or service this system.



One Source for All Your UV Needs!

Dear Customer:

Thank you for selecting UV Superstore, Inc. to provide the equipment for your ultraviolet air treatment needs. The Air UV System is American Made and is an in-house engineered design that reflects our broad experience in UV water treatment and our commitment to quality craftsmanship. When properly installed and maintained, your UV Superstore, Inc. equipment will provide years of reliable service.

Please review the Installation, Operation and Maintenance (IOM) Manual carefully and keep it on hand for readily available assistance. UV Superstore, Inc. designs its models for service maintenance ease. The manual provides essential information to safely install and service your system.

UV Superstore, Inc. manufactures ultraviolet equipment with the highest quality components available. Your equipment has met thorough testing procedures ensuring the efficiency of your system. As with any equipment regular maintenance procedures are required. You will have to replace your UV lamps and other items from time to time. UV Superstore, Inc. offers a complete line of replacement parts, not only for your products, but for most lines of ultraviolet water treatment equipment. Please call us for details.

UV Superstore, Inc. has built an industry-leading reputation by providing a reliable and knowledgeable technical support team. We stand by ready to assist you in all of your UV water treatment needs. Please contact us with any questions you may have regarding your system.

Best regards,

The UV Superstore, Inc. Team



One Source for All Your UV Needs!



Table of Contents

Safety Instructions and Information1

Installation.....2

Assembly4

Operation5

Replacement Parts.....6

Drawings.....7

SAFETY INSTRUCTIONS

In order to protect end users and operators from injury, safety precautions must be followed. Important safety issues are outlined in this installation, operation and maintenance manual. The following **WARNING SYMBOLS** will be found throughout the manual to alert the end users to take important precautions:



EYE PROTECTION

This symbol indicates that eye protection must be worn to protect from UV light as well as debris.



HAND PROTECTION

This symbol signifies that hand protection must be worn to protect the lamps from skin oils as well as protect the operator from UV light and sharp materials caused by a broken lamp/quartz.



ELECTRIC SHOCK

This symbol signifies electrical shock possibility.



CAUTION

This symbol indicates a potentially dangerous situation. Failure to adhere to this warning may lead to serious injury and/or death.



INFORMATION

This symbol signifies helpful information.

IMPORTANT SAFETY INFORMATION

UV lamps and their quartz sleeves can become razor sharp if broken. Take care when installing and removing the quartz sleeves. Only hand-tighten compression fittings. Do not use wrenches or other tools.



UV light is extremely harmful to eyes and skin and will cause burns. Do not look directly or indirectly at the UV light. Do not expose your skin for any prolonged time. Use protective clothing and eyewear (make sure it is UV resistant) when servicing equipment. If accidentally exposed to UV light for an extended period, immediately seek medical attention. Symptoms for eye exposure include burning, itching and redness. Symptoms for skin exposure are similar to sun burn.

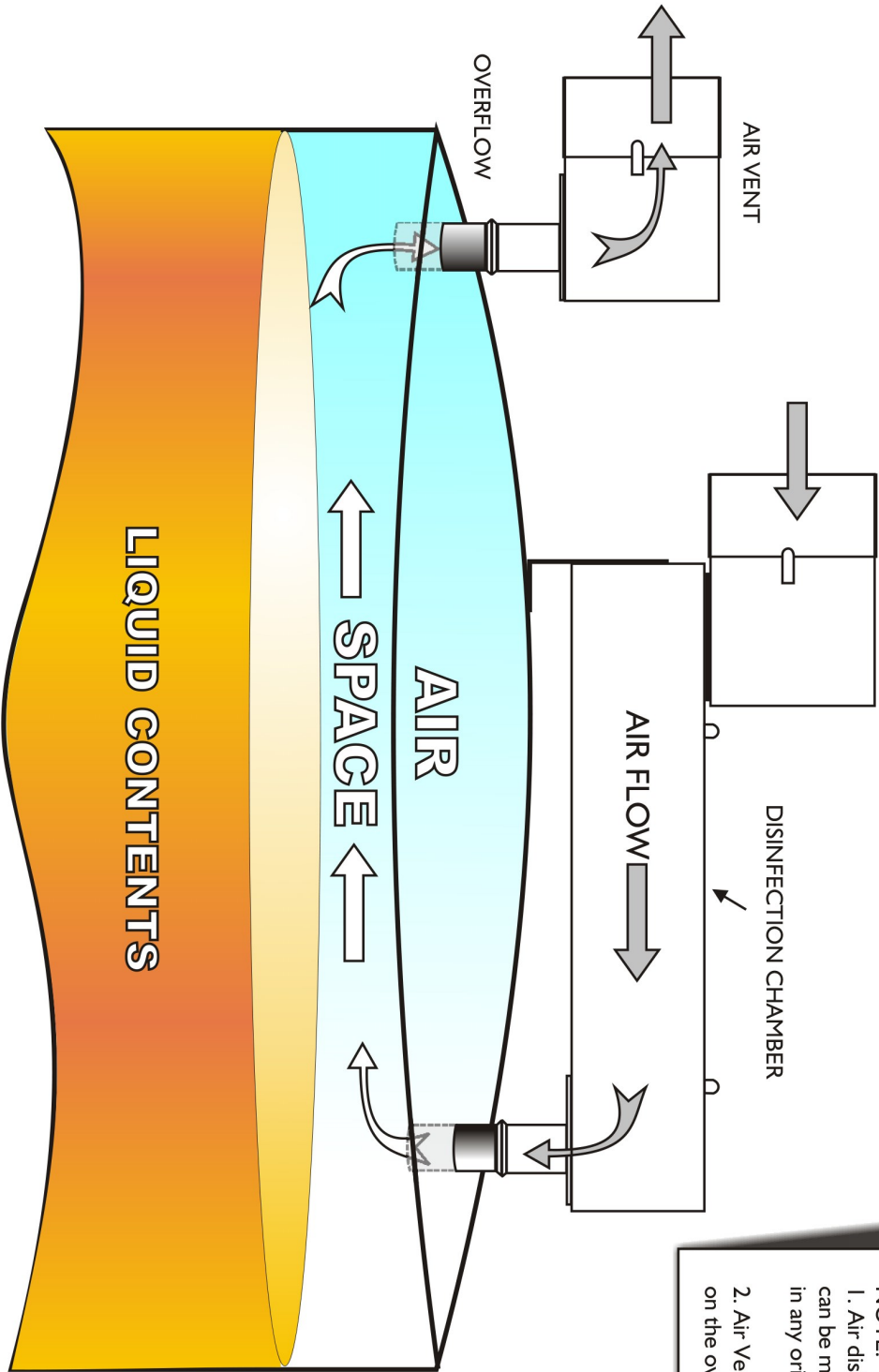


Use cotton gloves when handling lamps and quartz sleeves. Skin oils will adhere to the lamps and sleeves and prevent UV light from properly emanating. If the sleeves become dirty, wipe them with a lint free cloth with denatured alcohol.

INSTALLATION TIPS

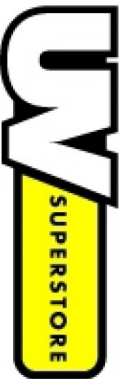


- 1) Air disinfection units should be mounted horizontally when installed on a tank top, and vertically when installed on a tank side. It is highly recommended that the system be mounted to the top of the tank as shown in **“TYPICAL AIR DISINFECTION INSTALLATION” drawing in this manual.**
- 2) Units may be mounted directly to the tank, or remotely with interconnection piping.
- 3) When using interconnection piping, keep the length and directional changes to a minimum. Maximum piping should be kept to a total of no more than ten feet.
- 4) Units may be installed indoors or outdoors. Indoor installations are preferred to keep temperature differentials to a minimum, thereby avoiding excess condensation.
- 5) Locate the unit vertically with the filter (air inlet) facing down in areas where wash downs may flood the filter.
- 6) Locate the unit vertically with filter facing down to avoid filter deterioration from direct sunlight.
- 7) Locate the air disinfection unit so as to avoid overflow from tank flooding the unit. This can usually be accomplished by mounting the fan powered air unit on a line separate from the tank overflow.
- 8) Standard sanitary tri-clamp connection to the fan powered air unit and the non-powered vent is 3” or 4”.
- 9) Electrical connection is made with customer supplied 7 conductor cable to the terminal strips in the lamp box and electrical control box. Units are available in 120V/60HZ/1Ø and 220V/50HZ/1Ø.
- 10) Off-On control panel box with indicator pilot lamps should be located in a visible and easily accessible area. Indicator LED’s show operation of UV lamps.
- 11) In the event of blower failure, lamps will shut off to avoid excessive heat build up.



NOTE:
1. Air disinfection unit can be mounted in any orientation.
2. Air Vent is mounted on the overflow pipe.

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DESCRIPTION: TYPICAL AIR DISINFECTION INSTALLATION				QUOTE NO.	
DRAWN BY:	BR	DATE:	11/05	DWG NO.	
CHECKED BY:	BE	DATE:	8/11/05		
APPROVED BY:		DATE:			
SCALE (8 1/2"X11"):	NONE	LOG NUMBER:			REV.

ASSEMBLY

The Air Disinfection Unit is shipped mostly assembled and will require minor attention at time of installation. The component parts are:

- Disinfection Chamber (Lamp Box)
- Filter-Blower Box
- Filter-Vent Box
- Control Panel
- Piping Connection Fittings (2)

DISINFECTION CHAMBER (LAMP BOX)

This cabinet contains the ultraviolet lamps and the terminal strip for “Power-In” and “Control” terminations. This cabinet has mechanical connections for the filter-blower box and for piping connection fitting.

FILTER-BLOWER BOX

This box contains the blower (fan) for the system along with two (2) washable electrostatic filters and one (1) HEPA filter. This box mounts on top of the disinfection chamber. The power wire for the blower is fed through to the terminal strip.

PIPING CONNECTION FITTING

The piping connection fitting is 3” or 4” sanitary tri-clamp. This fitting supplied as a standard. Optional screw thread configuration can be supplied upon request. One each is to be connected on the disinfection chamber and the filter-vent box.

FILTER-VENT BOX

The filter-vent box contains two (2) washable electrostatic filters and one (1) HEPA filter.

CONTROL PANEL

Connections 1—6 plus a ground wire, supplied by the customer, is required from the Control Panel to the Lamp Box.

The customer supplied wire from the Control Panel through the strain relief of the Lamp Box should be connected as per wiring diagram.

Once the control panel is in the power “ON” position, lamps, blower and lamp status LED’s will be on.

In the event of blower failure, lamps will shut off.

OPERATION

TO START UNIT

1. Once the unit is connected and the Lamp Box is closed, flip the power switch to “ON”. Blower and lamps will turn on.
2. All indicator lights on control panel should remain lit.

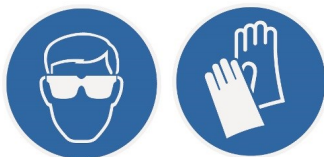
TO STOP UNIT

1. Turn the power switch to “OFF” position.
2. All indicator lights on control panel should now be off.

INDICATOR LAMPS OUT

1. If either UV lamp fails, the corresponding indicator lamp will turn off.
2. If the blower fails, or the filters are clogged, the corresponding indicator lamp will turn off. Additionally, the system will shut down due to low airflow.

UV LAMP REPLACEMENT



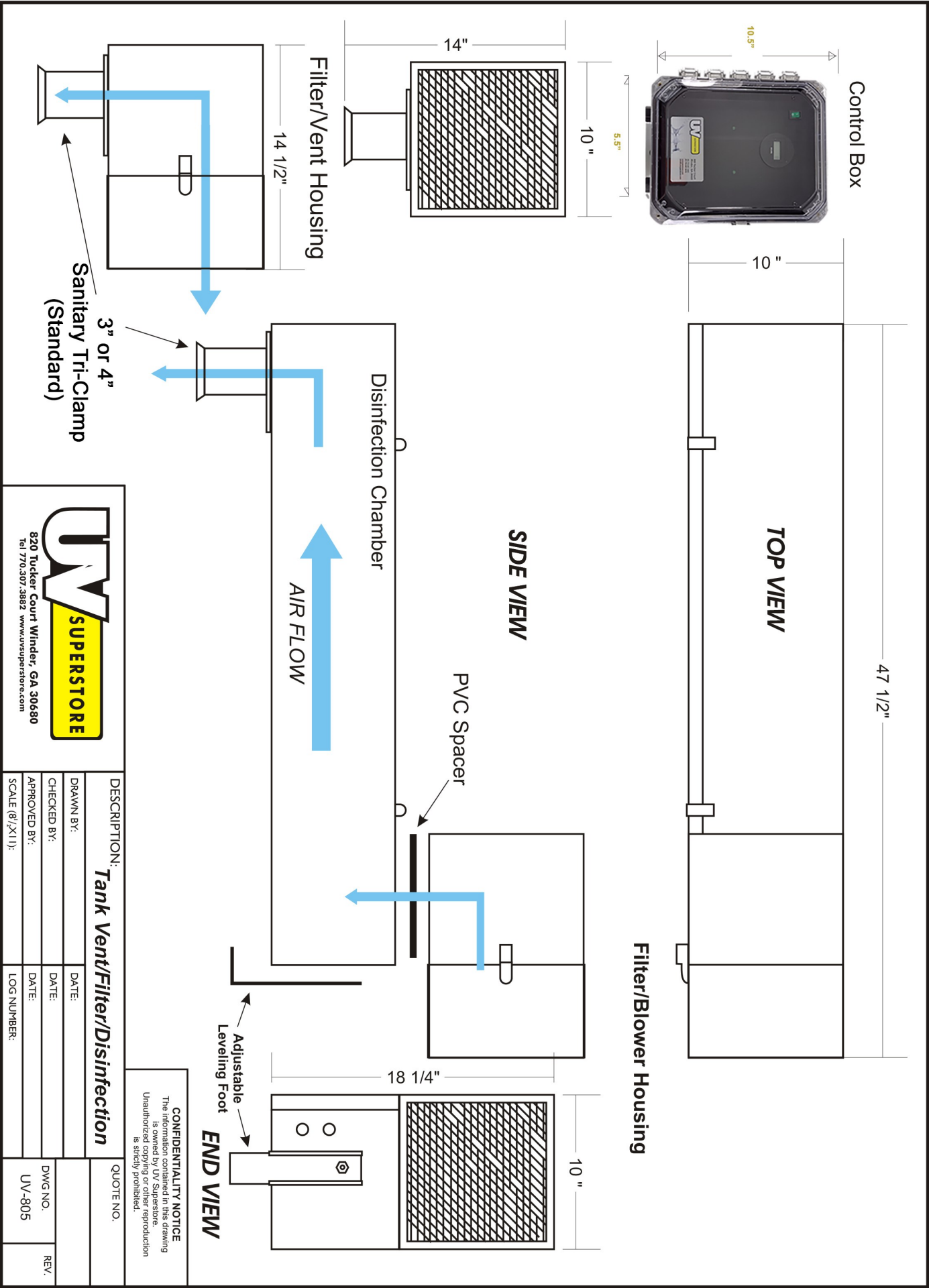
1. UV lamps should be replaced every 9,000 hours of running time. This is approximately every 12 months.
2. Turn off power to the unit to replace the lamps.

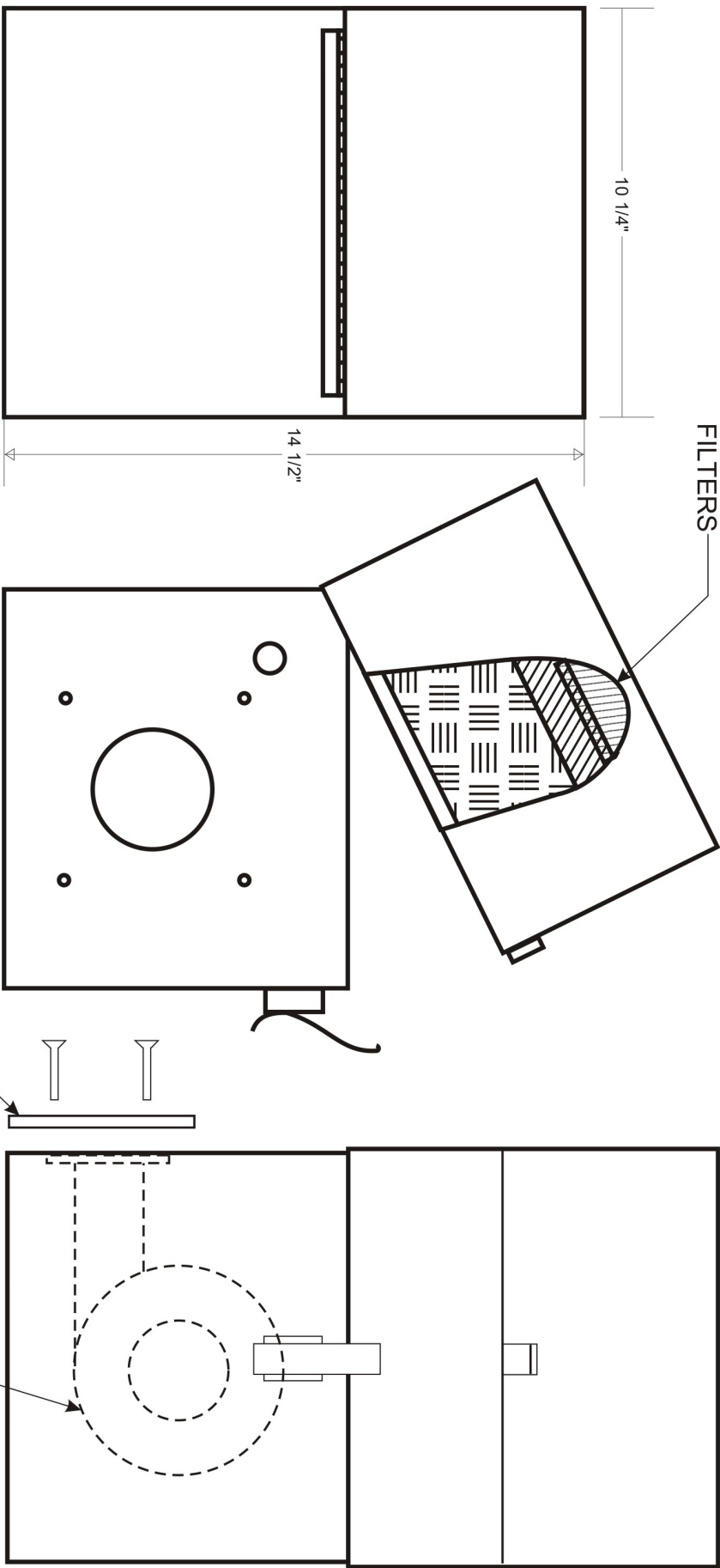
FILTER REPLACEMENT

1. Filters need to be replaced based on the amount of contaminants in the air being captured.
2. Washable electrostatic filters can be cleaned by reverse flow washing and soaking.
3. HEPA filters are not washable.
4. Minimum suggested maintenance is once a year at time of lamp change.

REPLACEMENT PARTS

PART NUMBER	DESCRIPTION	QTY REQUIRED
FLT-025	Electrostatic Filter	4
FLT-035-3	HEPA Filter	2
GL-5843-4S74R	Germicidal UV Lamp 254NM	2
B140CFM-120V	Blower 120V/60HZ	1
B140CFM-220V	Blower 230V/50/60HZ	1
BLST0033	Ballast 100V-277V 50/60HZ	2
LH0002	Lamp Harness	2



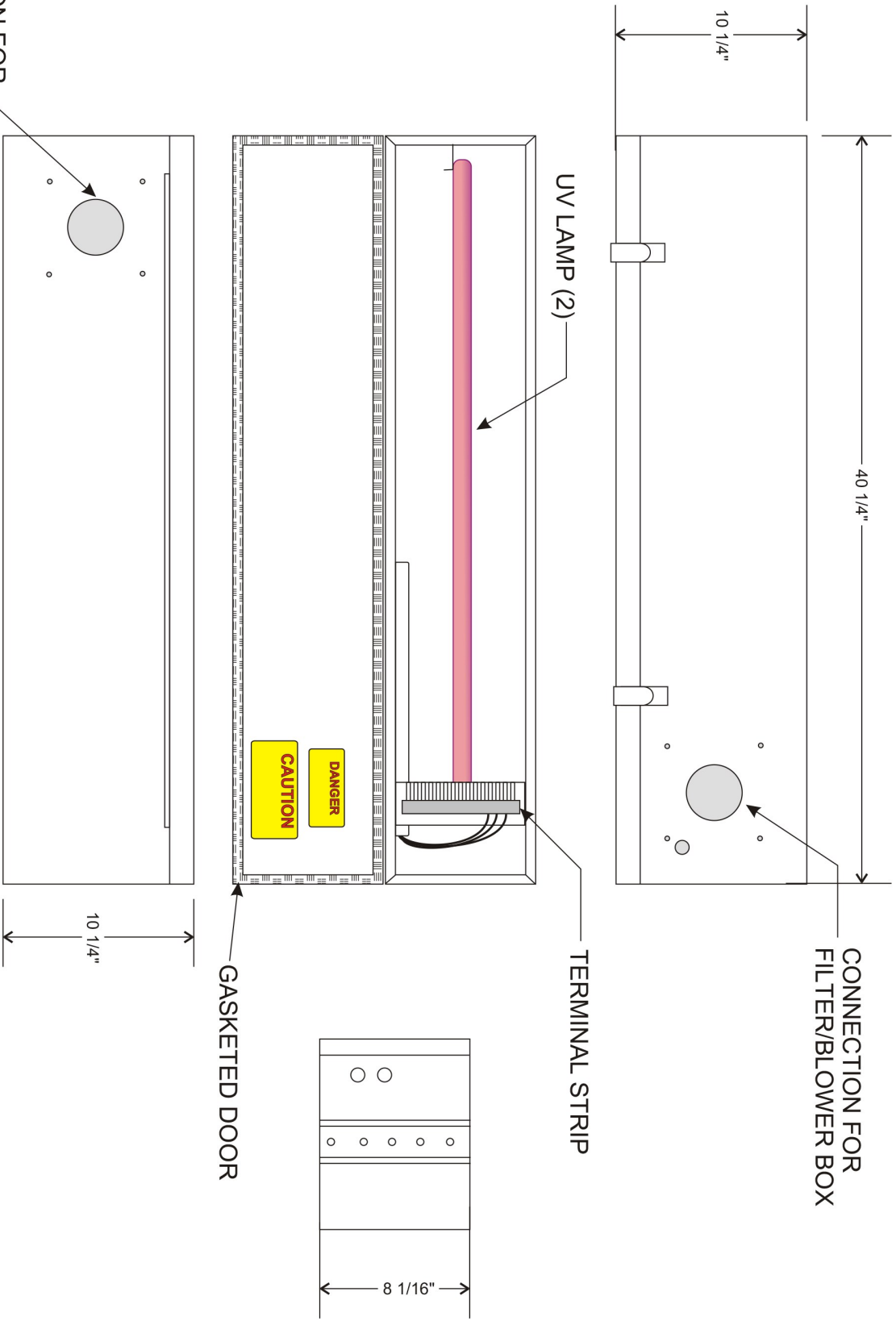


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820 Tucker Court Winder, GA 30680
Tel 770.307.3882 www.uvsuperstore.com

DESCRIPTION:				QUOTE NO.	
OUTLINE, BLOWER/ FILTER BOX					
DRAWN BY:	BR	DATE:	8/18/05	DWG NO. UV-1490	
CHECKED BY:		DATE:			
APPROVED BY:		DATE:			
SCALE (8 1/2"x11"):	1:4	LOG NUMBER:			
				REV.	



CONNECTION FOR
TANK ADAPTER

CONNECTION FOR
FILTER/BLOWER BOX

UV LAMP (2)

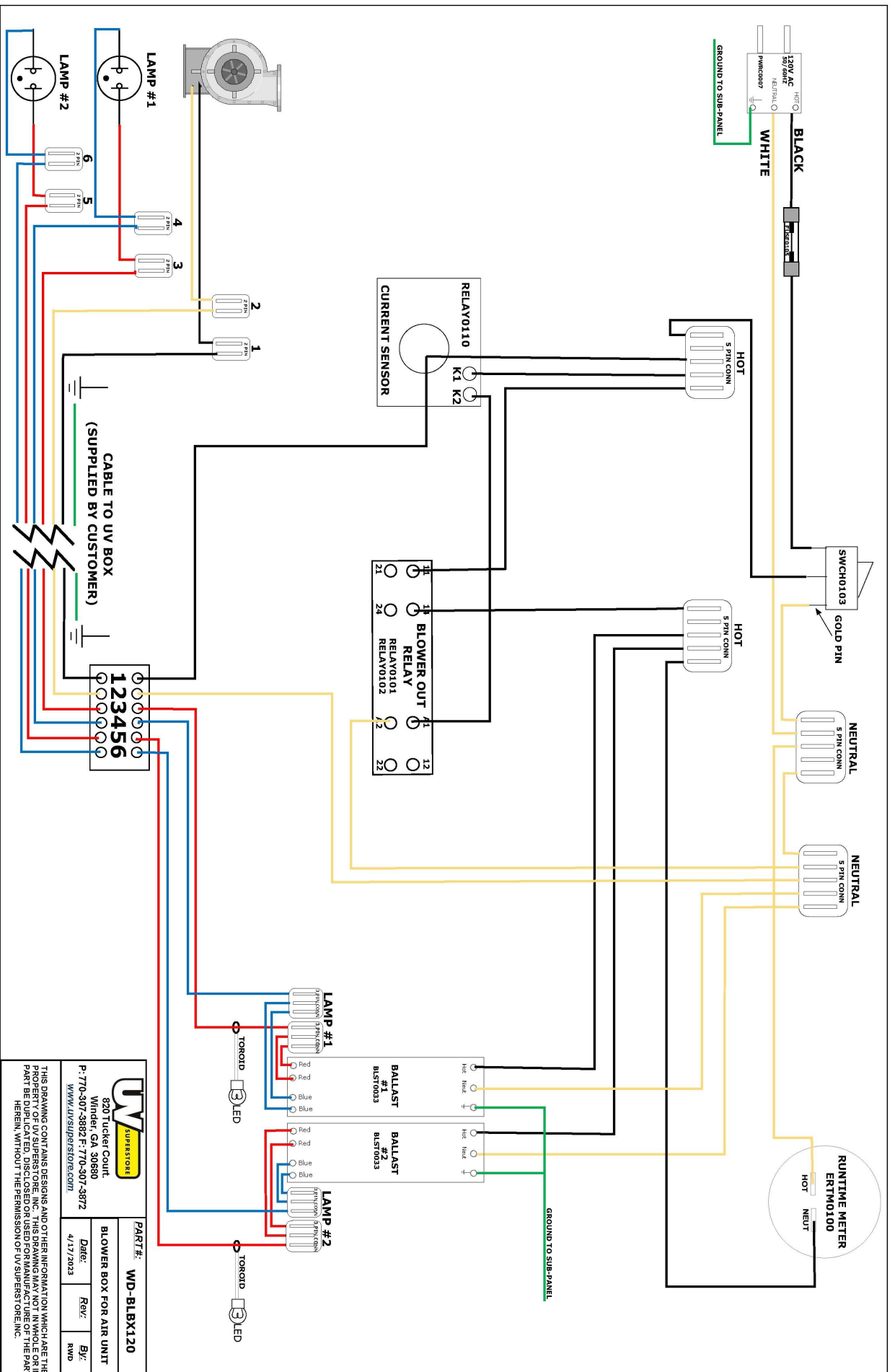
TERMINAL STRIP

GASKETED DOOR

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Tel 770.307.3882 www.uvsuperstore.com

DESCRIPTION: OUTLINE, UV AIR UNIT, BASIC UNIT		QUOTE NO.	
DRAWN BY:	BR	DATE:	8/18/05
CHECKED BY:		DATE:	
APPROVED BY:		DATE:	
SCALE (8 1/2"X11):	1:8	LOG NUMBER:	
		DWG NO.	UV-1482
		REV.	





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