

UVAIRO 500

SERVICE MANUAL



UVairo 
UV-C Air Sanitizers
by GEERPRES®





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INTRODUCTION

Preface

This manual will only benefit all of us if you, and others responsible for the operation and maintenance of this equipment, review this manual and keep it with the machine where it can be referenced for immediate use.

For safety and reliable operation, custom equipment like this machine requires a working understanding of the adjustments and principles of operation by the personnel involved.

To order parts, the correct part number, serial number, and model number of the equipment will be required.

Throughout this manual, features and appearances may vary from your model. Due to CI (continuous improvement), the pictures shown may not depict exactly your machine; however, the concepts are the same.

In this manual, reference is made to the following terms:

NOTE:

Notes are specific and important points which are informative and are included for further information about the particular subject.

CAUTION!

Cautions are procedures, practices, or specific points of information which, if not carefully followed, may result in damage to the machines or equipment or, may lead to minor personal injury.

WARNING! Warnings are procedures, practices, or specific points of information which, if not carefully followed, may result in serious personal injury—even death—or, may result in severe damage to the machinery or equipment. They are preceded by this exclamation diagram.

Parts Ordering

Please refer to the machine model number and part number when ordering parts.

Our normal business hours are 8:00 a.m. to 5:00 p.m. USA Eastern Standard Time (EST), Monday through Friday.

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SAFETY WARNINGS

Read all Safety & Precaution statements throughout this manual.

Personnel Safety

Operations Safety

All powered equipment can and will be dangerous to you if not operated properly. Be certain you are familiar with this machine and its functions before you operate it or perform any maintenance on it. Failure to follow safety precautions could result in serious personal injuries, including the possibility of the loss of life, equipment damage, or failure, and may void the warranty on your machine.

Personnel Responsibilities

The personnel responsible for the machine must be familiar with all safety devices installed on the machine as well as their use. Do not allow unauthorized personnel to operate or perform maintenance on this machine. All personnel involved with the machine must be instructed in the following:

- Safety procedures and accident prevention.
- Specific safety procedures concerning the machine.
- Locations and positions of the operating controls.

Personnel Safety

Do not stick your hand, arm, or any other part of your body into the machine while in operation.

Hazard Labels

Refer to all machine labels that have been placed on the machine to familiarize yourself with the potential hazards on the machine.

Safety Guarding

Do **not** operate the UVairo Air Sanitizer without all guards and covers in place.

WARNING! DO NOT OPERATE WITHOUT ALL guards and components in place and securely fastened. Irreparable damage to your eyes and skin could result!

Personnel Safety

(continued)

Maintenance Safety

Safety Glasses

Make certain UV-C light safety glasses are always worn when servicing this equipment. Anytime you are working on or around the UVairo Air Sanitizer, UV-C safety glasses **MUST BE WORN!** Always wear safety glasses when performing maintenance on this machine.

Machine Cleanliness

After performing maintenance procedures, make certain all tools and equipment are removed from the machine area before resuming operations. Do not leave maintenance tools (wrenches, screwdrivers, etc.) inside the machine components or lying around the machine.

Power Supply

Prior to performing maintenance or cleaning the machine, unplug the machine to remove the electrical power source.

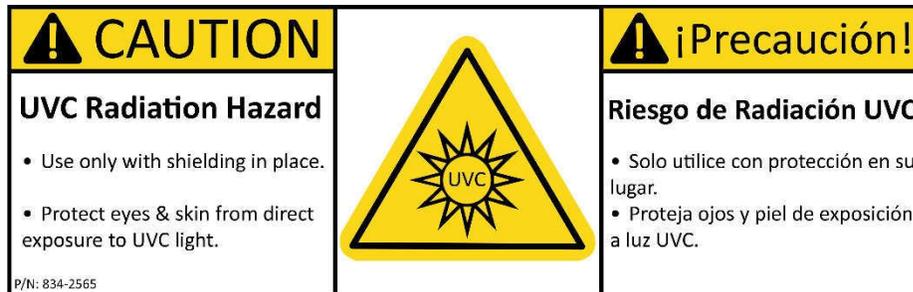
UV-C Light Warnings

WARNING! When performing any servicing that requires the housings to be opened, such as changing the lamps, **MAKE CERTAIN** power is shut-off, unplugged from wall, and allowed to cool.

WARNING! Exposure to UV-C light can cause “sunburn-like” skin irritation, and *irreparable* damage to the eyes.

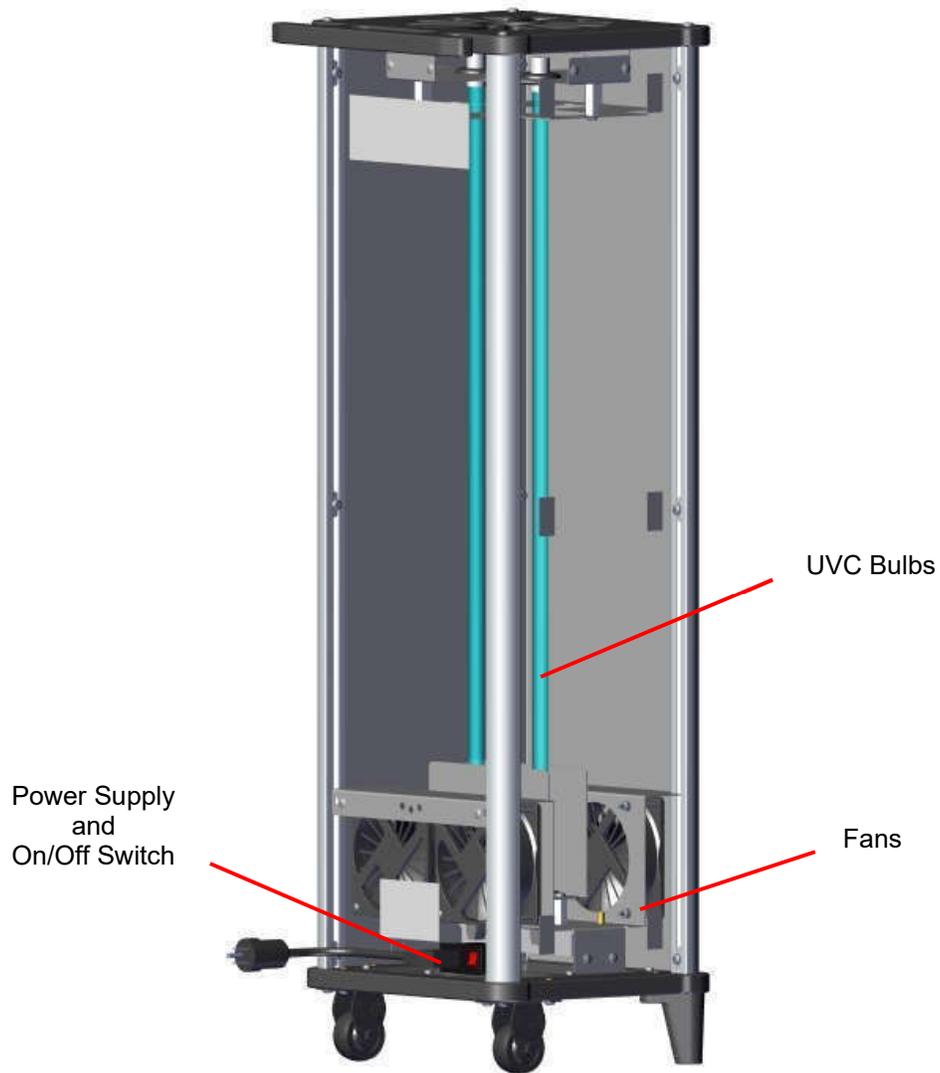
Warning Labels

Obey them!



OPERATIONS

System Overview



UVairo 500 Overview

System Overview

(continued)

UV-C Lamps

The UV-C lamps are extremely powerful and should be treated with appropriate caution. Refer to the safety section for precautions.

UV-C light can kill micro-organisms when they are exposed to it for enough time. The rate at which micro-organisms are killed depends on the wavelength of the light, the intensity of the light, and the exposure time. Depending on the application, the UVairo Air Sanitizer has been designed to kill in a range of 90% to 99.99% of all potentially harmful organisms.

Light Box

The heart of the UVairo Air Sanitizer is the UV-C lamp chamber (the light box). This stainless-steel structure is made up of the external shell and internal reflectors/lamp holders.

Lamp Life

The lamps have a rated life of 9000 hours of operation. 9000 hours is the point at which the actual output of UV-C light may start to drop below 90% of the original, and the risk of inadequate dosage exceeds allowable tolerances.

Air Infeed

The UVairo Air Sanitizer uses forced-air for both cooling the UV-C lamps and for feeding air into the UV-C box.

Power Supply

On the backside of the machine is an on/off switch, power cable, and power supply fuse. CAUTION: Do not tamper with the three prongs or remove the grounding prong.

CLEANING

Cleaning Notes

The UVairo Air Purifier is a precision machine that must be cared for and cleaned on a regular basis. The interior of the light chamber should be blown-out with clean, compressed shop air on a weekly basis to remove any accumulated dust and debris that could cause shadowing of the UV-C lamps.

CAUTION: **No Abrasive Pads!** Do not use any abrasive pad or similar Scotch-Brite® material on any parts of the machine. Unsightly scratching and micro-scratching of the surfaces will result.

Plastic Cleaning

Use soft, white cloths and a specific plastic cleaner when cleaning the plastic. Do **NOT** use paper towels. Micro-scratching and a damaged finish will result if cleaners and materials other than those specified for plastic are used. *Recommend using Geerpres Advantex® Single-Use Microfiber wipes for cleaning.*

CAUTION: Do not use any type of caustic cleaner or solvent-type cleaner on the polycarbonate doors of the machine, nor any type of Scotch-Brite® material, or equivalent.

Stainless Steel Cleaning

Use soft, white cloths and a specific, high quality stainless-steel cleaner to avoid scratching the mirror-like surface and to keep the unit looking clean. *Recommend using Geerpres Advantex® Single-Use Microfiber wipes for cleaning.*



Lamp Cleaning

Lamp Reflectors

The stainless-steel lamp reflectors must be kept clean to maintain their bright, polished surfaces to ensure proper air sanitation.

UV-C Lamps

The lamps can be wiped down with a cloth soaked with tap water (use no chemicals), and then wiped dry.

Machine Enclosure

CAUTION: Do not spray the device with water or cleaner as these are not sealed units.

MAINTENANCE

Changing the Lamps

1. Disconnect the power. Allow time for blubs to cool before beginning the changing process – THEY ARE HOT!
2. Unscrew top four bolts. Bolts are Easily Removed with a Screwdriver.



Top Plate Screws



Removing the Bolts

3. Remove the plastic top plate.



Top Plate Removed

Changing the Lamps

1. Disconnect the Lamps.
 - a. Firmly grasp a lamp,
 - b. Lift lamp out of its pocket.

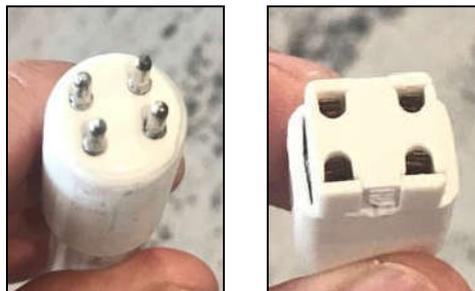
Note the alignment sticker on the top of the bulb. The picture depicts the correct orientation for removing and replacing the bulbs.

Caution: Do not twist the lamp when pulling out! Sheering of the lamp pins may occur!



Alignment Sticker

2. *Gently* slide the new lamps into the pockets, connecting the new lamps with the *slightly* rectangular connections. Note: if it doesn't connect, slowly rotate until the pins align and the lamp "drops in" to place. Press firmly to secure it.

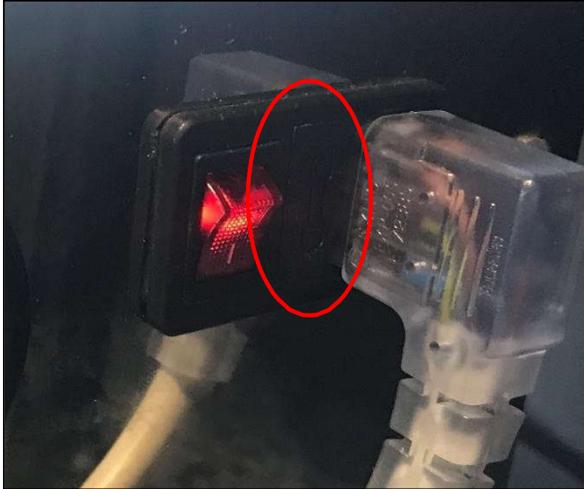


Slightly Rectangular Lamp Plug Shape

3. Put plastic plate back on and screw it into place.
4. Plug the unit back in.

Changing the Power Supply Fuse

Tucked between the On/Off switch and the power cord plug-in is a fuse insert. Unplug the cord from the wall and from the machine, pry open the fuse insert from inside the power cord plug-in, and replace the fuse.



Fuse Location



Pry out the Fuse Insert



Fuse in the Insert

Service Parts List

Item	Geerpres Part #	Kit Qty
UV-C Lamp	560500UV	2
Caster	560500C2	2
Foot	560500FT	2

Preventative Maintenance

Monthly Maintenance

Mesh: Inspect

Inspect for dust. Clean dust from bottom mesh to maintain airflow, if needed.

3-Month Maintenance

Mesh: Clean

Clean bottom mesh to clear out dust *at least* every 3 months.

Yearly Maintenance

Lamps: Change

Change the lamps every year, at a minimum. Their effectiveness reduces after approximately 9000 hours of use (one year), based on a 24/7 run schedule.

PROFESSIONAL CLEANING SOLUTIONS



Creating value and efficiency is at the heart of a comprehensive approach to solutions for the healthcare, educational, and cleaning industries. The Geerpres® system includes quality, warranted products, hardware, air purification, and advanced supplies.

Geerpres® has a history of providing innovative cleaning products and supplies. Our high-quality, stainless steel cleaning products offer superior antimicrobial properties required in the healthcare environment. In business for over 85 years, Geerpres® EVS carts, steel wringers, and seamless buckets have been the industry standard in environmental services, including hospitals, cleanroom/critical environment, food service, education, military and more. Today, Geerpres® has expanded to include patented self-dispensing microfiber applicators, disposable mops and wipes that virtually eliminate cross-contamination concerns, and a durable powder-coated EVS cart line.



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