

Nutripure[®]

GERMICIDAL ULTRAVIOLET SANITARY CONDITIONERS

Models 7-ASC / 8-ASC / 9-ASC



Installation, Operation & Maintenance

Read and Follow All Safety Instructions. Save These Instructions.



ATLANTIC ULTRAVIOLET
CORPORATION[®] SINCE 1963

Manufacturers / Engineers / Sales / Service
Germicidal Ultraviolet – Equipment & Lamps

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Owner's Manual

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These instructions generally describe the installation, operation and maintenance of the **Nutripure®** Sanitary Conditioner. Questions that are not specifically answered by these instructions should be directed to the Factory. Atlantic Ultraviolet Corporation® takes all possible precautions when packaging equipment to prevent damage. Carefully inspect and report all damage upon receipt of product. Do not install damaged equipment. Follow all instructions on all labels and tags. Carefully inspect all packing materials before discarding to prevent the loss of accessories, mounting hardware, spare parts or instructions.


The information and recommendations contained in this publication are based upon data collected by the Atlantic Ultraviolet Corporation® and are believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Specifications and information are subject to change without notice.





SAFETY WARNINGS


- All personnel should be alerted to the potential hazards indicated by the product safety labeling on this unit.
- The following conventions are used to indicate and classify precautions in this manual and on product safety labeling. Failure to observe precautions could result in injury to people or damage to property.

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

 **DANGER** Danger indicates an **IMMINENTLY** hazardous situation, which, if not avoided, **WILL** result in death or serious injury.


 **WARNING** Warning indicates a **POTENTIALLY** hazardous situation, which, if not avoided, **COULD** result in death or serious injury.


 **CAUTION** Caution indicates a **POTENTIALLY** hazardous situation, which, if not avoided, **MAY** result in minor or moderate injury.


 **CAUTION** Caution used without the safety alert symbol indicates a potentially hazardous situation, which, if not avoided, may result in property damage.


 This symbol/pictorial is used to identify an **ELECTRICAL SHOCK** or **ELECTROCUTION** hazard.

 This symbol/pictorial is used to identify an **ULTRAVIOLET LIGHT** hazard.

 This symbol/pictorial is used to identify the need to wear approved ultraviolet blocking eyewear.

 This symbol/pictorial is used to identify the need to wear approved ultraviolet blocking face shield.




 This symbol/pictorial is used to identify the need to wear protective gloves.


 This symbol/pictorial is used to identify components which must not be disposed of in trash




SAFETY INSTRUCTIONS





 **WARNING** To guard against injury, basic safety precautions should be observed, including the following:

1. Read and follow ALL safety instructions.

   **WARNING** Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

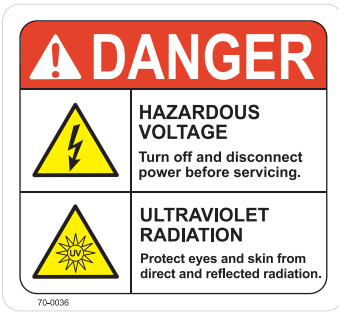
2. Do not use this product for other than its intended purpose as described in this manual.
3. Do not alter design or construction.
4. Do not remove any labels or devices.
5.  **DANGER** To prevent the risk of severe or fatal electrical shock, special precautions must be taken since liquid is present near electrical equipment. Always disconnect power before performing any service or maintenance.

   **WARNING** Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

6. Intended for indoor use only. The sanitary conditioner must be protected from the elements and from extremes in temperature. Ambient operating temperature range is 40°F to 100°F.
7. Do not operate sanitary conditioner if lamp cable, lamp connection, power cord and/or plug are damaged, or if any other damage to the sanitary conditioner is visible or suspected.
8. Electrical power supplied to the sanitary conditioner **MUST** match power requirements listed on the sanitary conditioner.
9. Plug the sanitary conditioner into an approved ground fault circuit interrupt (GFCI) receptacle.
10.   **CAUTION** Do not operate without proper electrical ground.
11. Keep inlet and outlet of the blower clean and clear of debris.
12. Stay clear of blowers or other moving parts that can cause injury.
13.   **WARNING** Always disconnect power to the unit before performing any service or maintenance.
14. Read and follow all notices and warnings on the unit.
15. **SAVE THESE INSTRUCTIONS.**

SAFETY LABELS

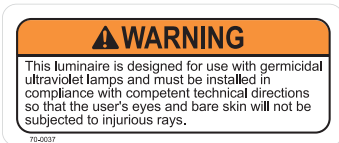
This Nutripure Sanitary Conditioner Unit has the following Warning and Advisory Labels Attached Prior to Shipment:



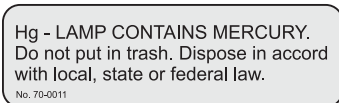
Danger Label: Hazardous Voltage / Ultraviolet Radiation
PN# 70-0036 (Measures: 2.5" x 2.25") (2-Required)



Warning Label: No Standing or Sitting on Unit
PN# 70-0094 (Measures: 5" x 4.9375") (2-Required)



Warning Germicidal UV Label PN# 70-0037
(Measures: 1.25" x 3") (2-Required)



Hg-Lamp Contains Mercury Label PN# 70-0011
(Measures: .75" x 2.50") (2-Required)

CAUTION

It is the User's responsibility to determine and validate the suitability of this equipment for use in the user's system or process.

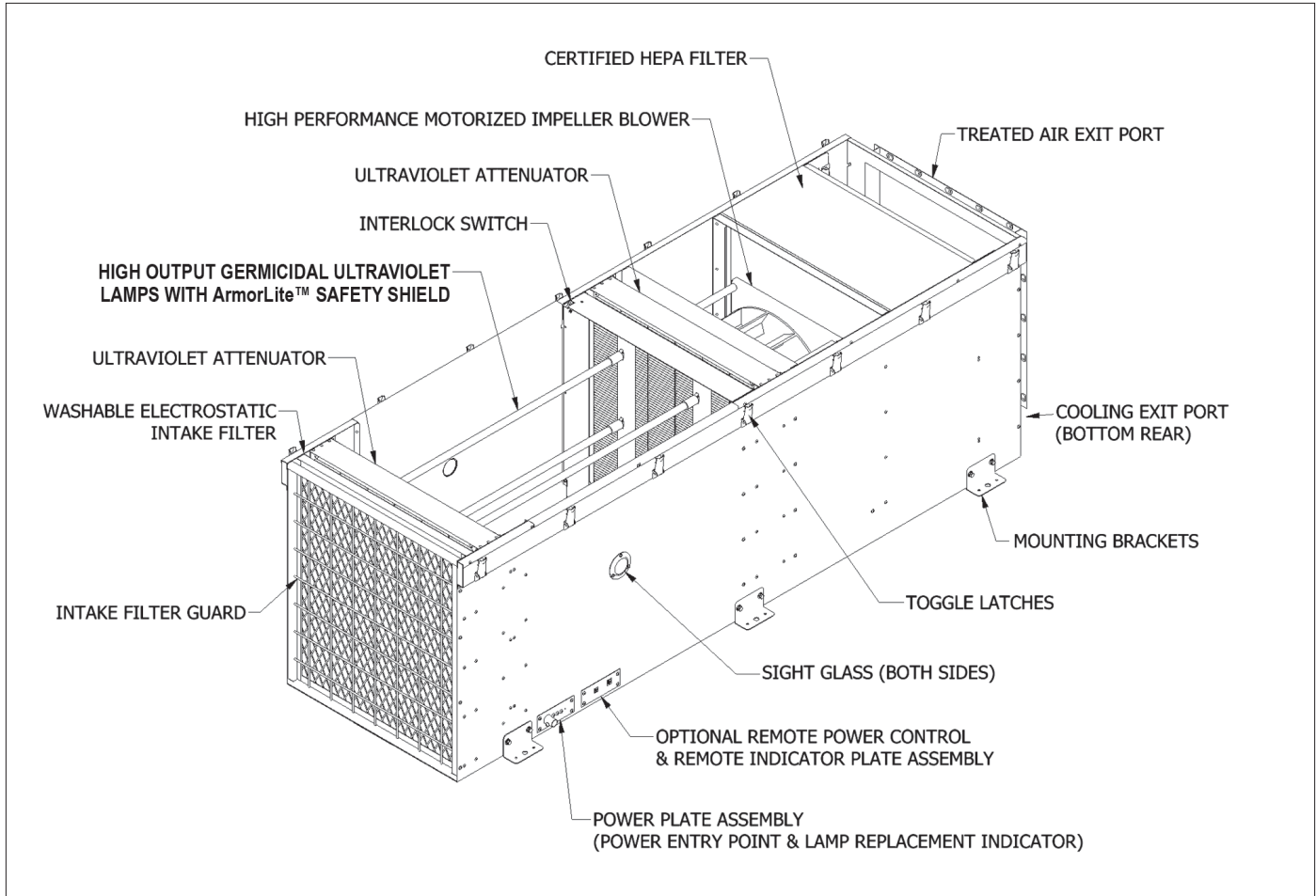
No warranty or representation is made by the manufacturer with respect to the suitability or performance of this equipment or to the results that may be expected from its use.

Indoor Use Only – The equipment must be sheltered from exposure to the elements and extremes in temperature.
Temperature range: 40°F to 100°F.

The user should periodically inspect, clean as necessary and confirm the presence and good legibility of the Product safety labels. Contact the factory for replacement labels in the event that any of the labeling is missing or illegible.

PRODUCT FEATURES

Figure 1 – Model 9-ASC shown (See page 18 for Model 9-ASC with access cover)



PRODUCT APPLICATION

PRINCIPLE OF OPERATION

The **Nutripure**® Sanitary Conditioner design has been carefully conceived to provide germicidal ultraviolet exposure for air disinfection. The treated air is used in the head space of liquid storage tanks helping to prevent condensation. The dosage, as it applies to ultraviolet disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air is exposed. The exposure time, in seconds, is the total time it takes the air to move through the ultraviolet field, produced by the germicidal lamp(s). Exposure time is related to the airflow rate; the higher the airflow, the lower the exposure time or the lower the airflow, the higher the exposure time.

The operation of the **Nutripure**® Sanitary Conditioner is as follows:

1. Air is drawn into the sanitary conditioner through the electrostatic filter.
2. Air is forced into the exposure chamber, where it is irradiated by the germicidal ultraviolet lamps.
3. Sight glass provides positive indication of germicidal lamp operation.
4. The irradiated air is then forced through a certified HEPA Absolute Filter that removes more than 99.97% of particles as small as 0.3 microns.
5. The purified air is then circulated through the head space of the tank, keeping the air temperature inside the tank consistent with the air temperature outside the tank, helping to reduce condensation.
6. Air is exhausted out of tank through a filtered tank vent.

CONSTRUCTION

The **Nutripure**® Sanitary Conditioner consists of:

Genuine **STER-L-RAY**® Germicidal Ultraviolet Lamps with **ArmorLite**™ Safety Shield which deliver ultraviolet energy in the specific wavelength of 254 nanometers (nm), and is highly effective against airborne microbes including: virus, bacteria, and mold spores.

- Specular Polished Exposure Chamber, increases efficiency by reflecting UV rays and limiting uv absorption.
- **Surelite**™ 120 volt, or 230 volt 50/60Hz electronic ballasts.
- Standard, ½ Conduit EMT Fitting, to allow either 120 volt or 230 volt single phase current to be hard wired into the **Nutripure**® through the power plate located on the side of the sanitary conditioner.
- High Flow / High Performance Motorized Impeller Blower.
- Permanent, washable, electrostatic intake filter, capable of removing airborne particles as small as 5 micron.
- Sight glass assemblies, which provide visual indication of germicidal lamp operation without the risk of ultraviolet exposure.
- An enclosure and access cover constructed of stainless steel, type 304. Stainless steel construction provides strength, durability and lasting value.
- Intake Filter Guard constructed of stainless steel, type 304 to protect the electrostatic intake filter from damage.
- Exit Port, constructed of stainless steel type 304 designed to ensure maximum air flow.
- Mounting Brackets, constructed of stainless steel, type 304.
- Certified HEPA Absolute Filter with a .3-micron, 99.97% minimum efficiency rating.

LIMITATION OF USE

CAUTION Exposure to germicidal ultraviolet rays will result in the irritation of the eyes and reddening of the skin. For that reason, it is of the utmost importance that your ultraviolet application be carefully planned and implemented so as to avoid exposure of personnel to direct or reflected ultraviolet rays.

The American Conference of Governmental Industrial Hygienists (ACGIH) has established that the ultraviolet radiant exposure incident on unprotected eyes or skin should not exceed 0.2 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) at 254 nanometers (nm) for an eight (8) hour period (“2004 TLVs® and BEIs®”).

UNPACKING

Remove the **Nutripure**® Sanitary Conditioner from its shipping container. Atlantic Ultraviolet Corporation® takes all possible precautions when packaging this model to prevent damage. Carefully inspect the Sanitary Conditioner for damage, report all damage immediately. Do not assemble or operate if there is any damage, visible or suspected.

Germicidal lamps are packed separately, to ensure maximum protection for the lamps. Keep the lamps aside until ready for installation. When installing lamps into the sanitary conditioner, avoid touching with bare hands. Oils deposited, from fingers, on the lamps **ArmorLite**™ coating could affect ultraviolet transmission.

Carefully inspect all packing materials to prevent the loss of accessories, mounting hardware, spare parts or instructions. Do not discard packing materials until sterile conditioner is assembled and all components are accounted for.

Model 7-ASC:

- 1 – 505 CFM* displacement / 4-lamp **Nutripure**®
- 4 – **STER-L-RAY**® UV Lamps with **ArmorLite**™ Safety Shield
- 1 – **Promate**™ Particulate Filter
- 1 – **Promate**™ Absolute HEPA Filter
- 2 – Ultraviolet Attenuators

Model 8-ASC

- 1 – 950 CFM* displacement / 6-lamp **Nutripure**®
- 6 – **STER-L-RAY**® UV Lamps with **ArmorLite**™ Safety Shield
- 1 – **Promate**™ Particulate Filter
- 1 – **Promate**™ Absolute HEPA Filter
- 2 – Ultraviolet Attenuators

Model 9-ASC

- 1 – 1450 CFM* displacement / 6-lamp **Nutripure**®
- 6 – **STER-L-RAY**® UV Lamps with **ArmorLite**™ Safety Shield
- 1 – **Promate**™ Particulate Filter
- 1 – **Promate**™ Absolute HEPA Filter
- 2 – Ultraviolet Attenuators

*Approximate model output with new filters

INSTALLATION

LOCATION SELECTION

1. Sanitary Conditioner should be installed indoors or in a shelter which will provide protection from the elements.
2. Selected location must be in a properly ventilated area. Air intake should be clear of any obstruction that would hinder or reduce smooth air flow into the Sanitary Conditioner.
3. Selected location should allow enough space for removal of access cover and side power plate assembly(s) which will be required to be removed during routine maintenance procedures.
4. Selected location should be a clean area free from dust and particles which may be drawn into the intake filter.
5. Model can be mounted directly to a tank or remotely using interconnecting ducts. Interconnecting ducts should be designed in a manner which will allow maximum flow of the air exiting the Sanitary Conditioner.
6. **CAUTION** Users of liquid storage tanks are cautioned to adopt suitable measures to prevent overpressure or vacuum within the storage tank or liquid handling system. These conditions can result in structural damage and/or loss of the liquid contents.

The system planner or user is cautioned to avoid any circumstances where the air introduced into the storage tank is significantly warmer or colder than the tank contents as these conditions may cause considerable condensation within the storage tank. Condensation may adversely effect the liquid contents.

MOUNTING OF SANITARY CONDITIONER

1. Sanitary Conditioner must be mounted to a secure platform capable of supporting the total weight of the model.
2. Model should be mounted in the horizontal position to facilitate maintenance.
3. We recommend fastening the Sanitary Conditioner in place utilizing the Vibration Insulators, bolted to the model during shipping (See **Figure 2**), however the model can be bolted down to a secure surface (See **Figure 3**).

Figure 2

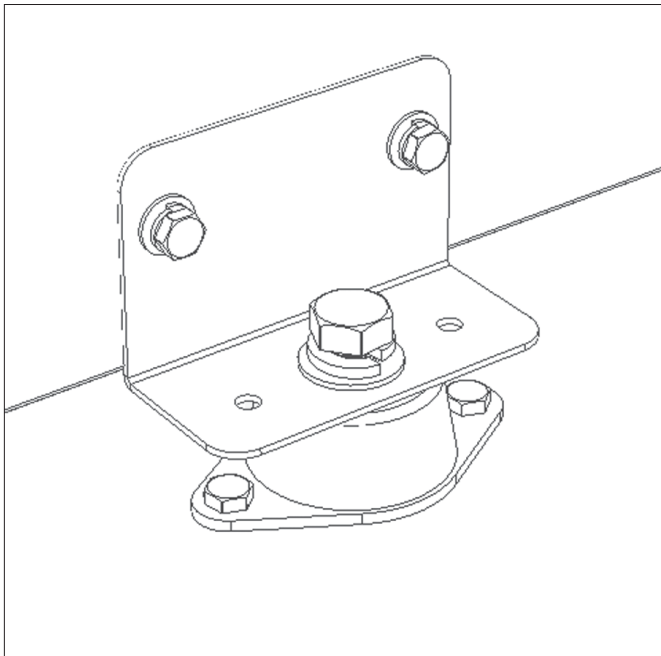
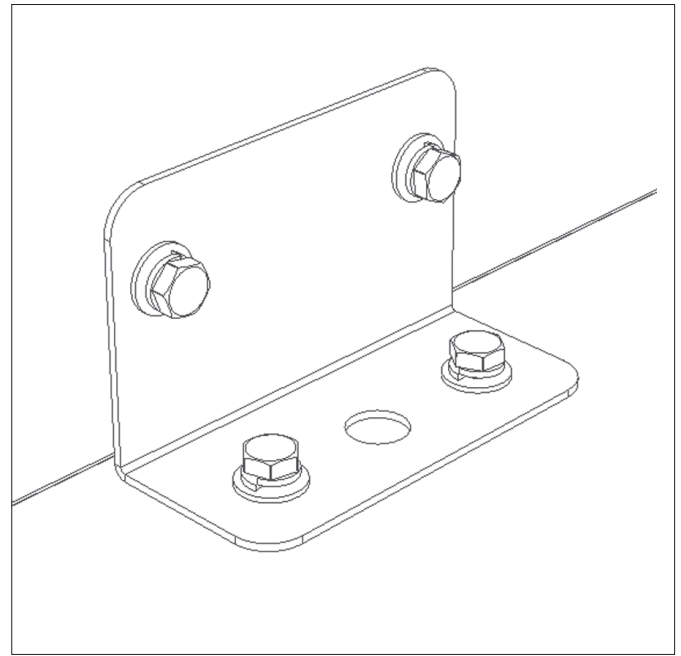


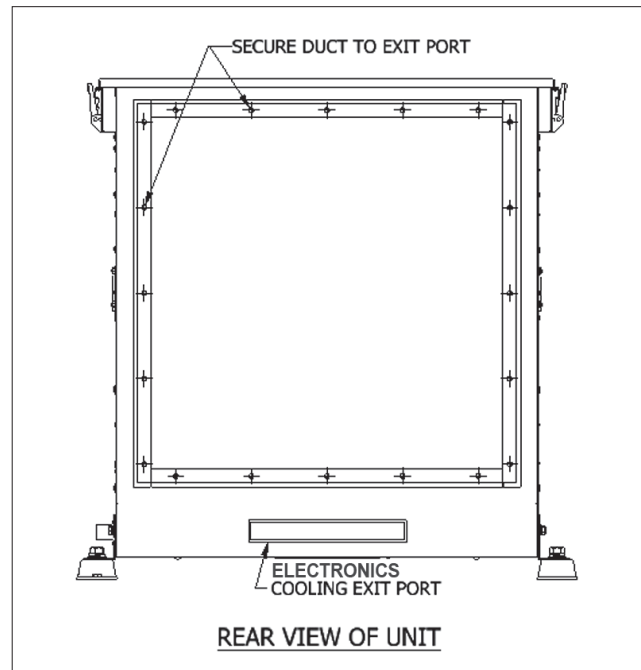
Figure 3



EXIT PORT CONNECTION

1. Securely fasten duct to exit port of the sanitary conditioner. Ensure duct work is completely sealed to the model to prevent any loss of air or intrusion of outside air.
2. Duct work fastened to the exit port must not limit the air flow from the cooling exit port (See **Figure 4**).

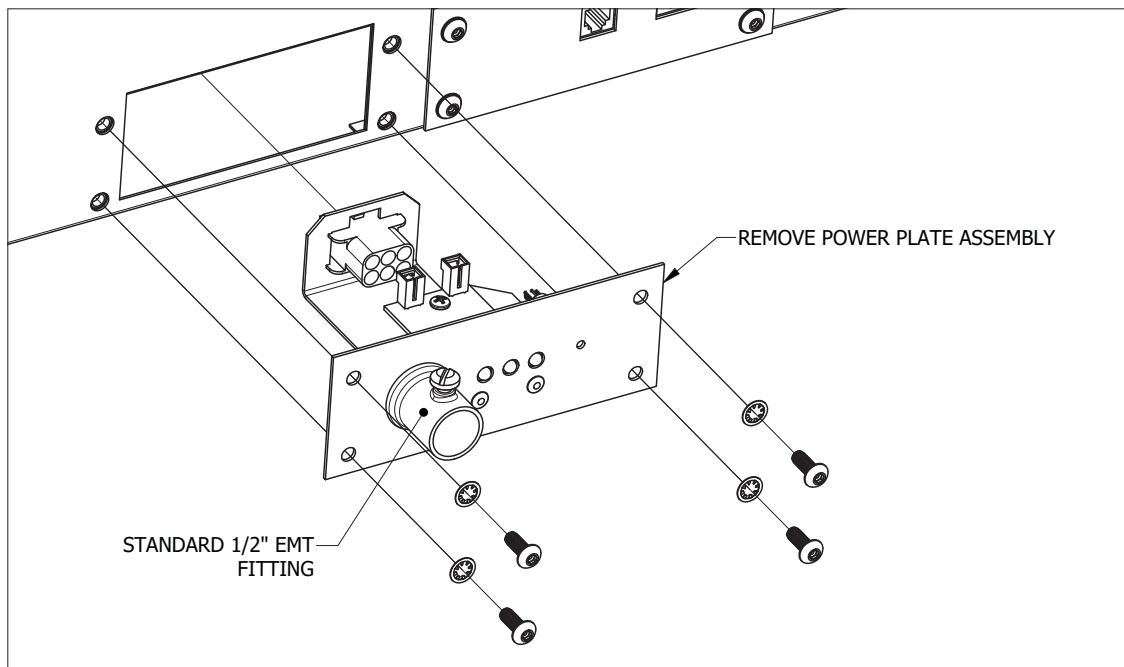
Figure 4



WIRING OF SANITARY CONDITIONER

1. Sanitary conditioner should be connected to power by a licensed electrician to ensure the wiring to the model meets all state and local codes and guidelines.
2. Power to the sanitary conditioner is to enter through a standard 1/2" EMT Conduit fitting. We recommend a remote power switch be placed on or near the model to allow it to be safely powered off for routine maintenance.
3. Remove the Power Plate Assembly to gain access to facilitate wiring of the model (See **Figure 5**).

Figure 5



LAMP INSTALLATION



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠ WARNING Always disconnect power to the fixture before performing any service or maintenance.

⚠ CAUTION Ultraviolet lamps are easily damaged. Exercise care when handling lamps.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove access cover from the sanitary conditioner.
3. Carefully examine the pin configuration on the **STER-L-RAY**® lamps base to ensure that the **STER-L-RAY**® lamp is installed correctly into the lamp connector. (See **Figure 6**, which shows the lamp connector and **Figure 7**, which shows the lamp base, below.)
4. Begin installing the **STER-L-RAY**® lamps in the bottom row first, continue to the next row until all **STER-L-RAY**® lamps have been installed.

Figure 6

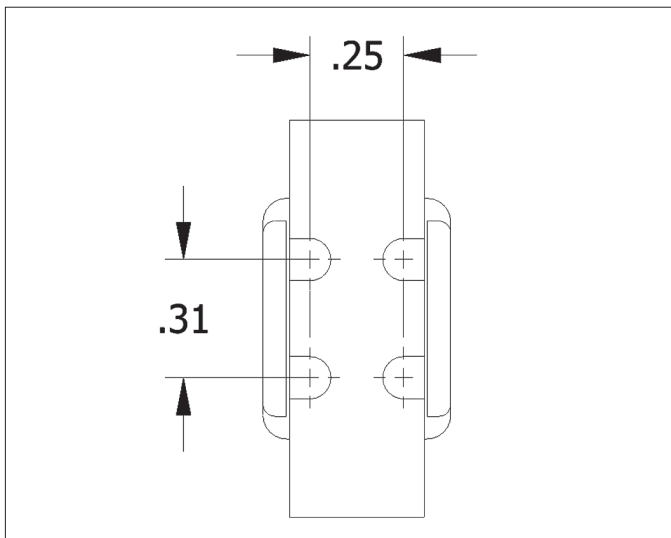
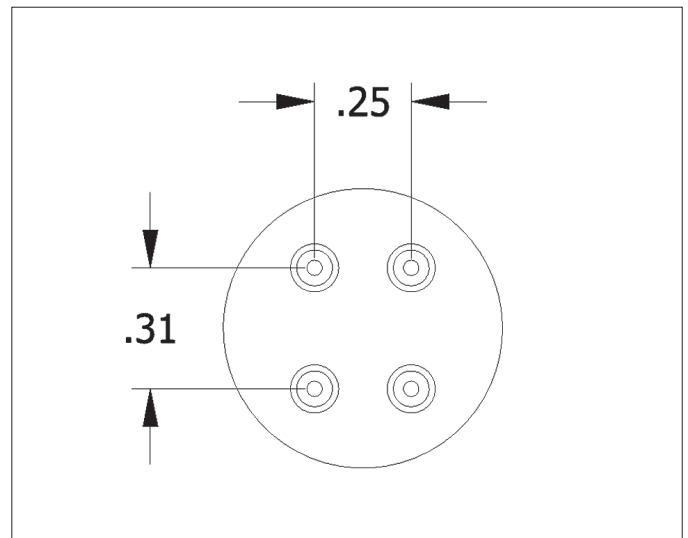


Figure 7



5. Hold the **STER-L-RAY**® lamp by the base and carefully push the **STER-L-RAY**® lamp into the connector (See **Figure 8**).
6. Once the **STER-L-RAY**® lamp is securely seated into the connector, carefully push the **STER-L-RAY**® lamp into the end support (See **Figure 9**).
7. Repeat until all **STER-L-RAY**® lamps have been installed into the sanitary conditioner. Restore power to the model.
8. Wear personal protection equipment, then verify operation by viewing **STER-L-RAY**® lamps. If fixture is not operating properly, go to “**Troubleshooting**” section.



⚠ WARNING Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

Figure 8

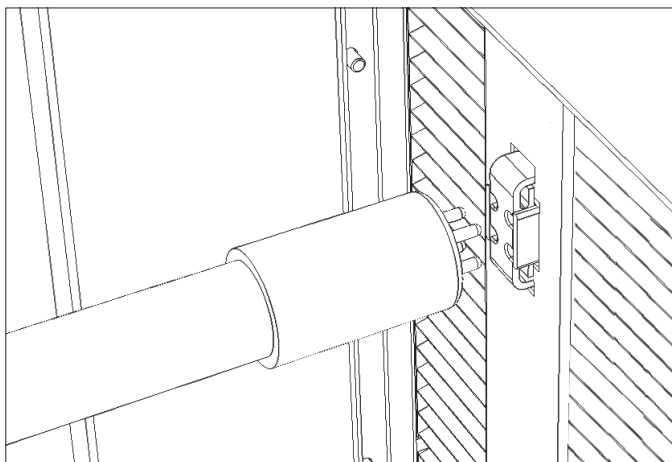
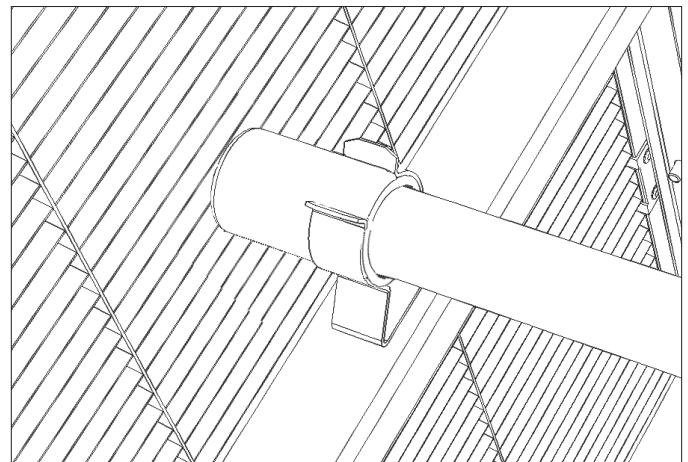


Figure 9



TECHNICAL ASSISTANCE

Atlantic Ultraviolet Corporation® maintains a qualified team of application specialists that can provide technical assistance, which may be required during the use of this equipment. For any questions, concerns, or technical assistance, regarding this sanitary conditioner or any of our other products, contact our application specialists. Contact options can be found in the “User Assistance” section on the back page of this manual.

OPTIONAL ACCESSORIES

1. **SENTINEL® Germicidal Ultraviolet Lamp Operation Indicator:** Monitors individual lamp operation, in any location up to 100 feet from the **Nutripure®** Sanitary Conditioner. Cables are also available in 25, 50, & 100 foot lengths.
2. **Dry-contact output:** for remote indication of any lamp failure (specific lamp failure will be shown on the remote).
3. **Optional Exit Ports:** Can be made to multiple configurations to meet specific needs from standard round or square duct sizes to sanitary ports.
4. **Special Mounting Brackets:** Brackets can be designed to fit most mounting requirements.
5. **Promate™ Safety Glasses (00-1299):** Safety eyewear **MUST** be used as general-purpose safety protection and for additional shielding from ultraviolet rays.
6. **Promate™ Face Shield (00-0126):** Lightweight visor with adjustable headgear provides eye and face protection from germicidal ultraviolet rays.

For more information and purchasing, contact our offices weekdays between 8:30 am and 5:00 pm Eastern time at: Atlantic Ultraviolet Corporation®, 375 Marcus Boulevard, Hauppauge, New York, 11788 • Tel: (631) 273-0500 • Fax: (631) 273-0771
Email: Sales@AtlanticUV.com • Shop: AtlanticUltraviolet.com • Learn More: Ultraviolet.com

MAINTENANCE

 **WARNING** Always disconnect power to the fixture before performing any service or maintenance.

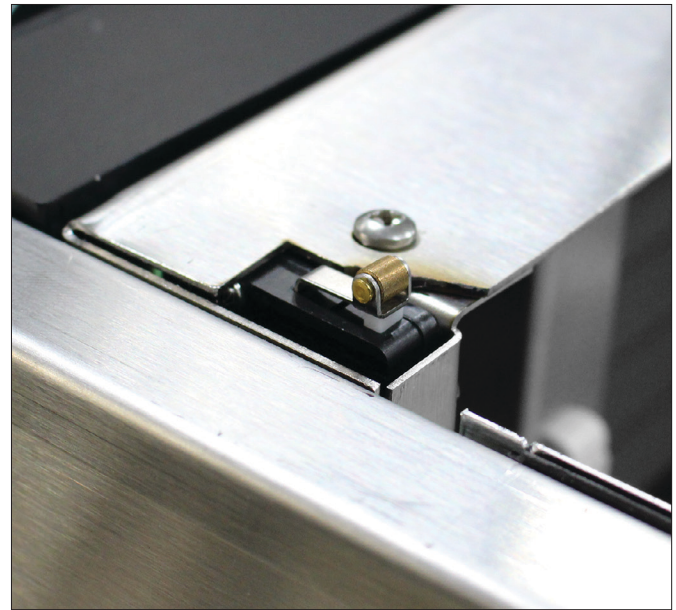
MAINTENANCE OVERVIEW

- The **Nutripure®** is designed to operate with a minimal amount of maintenance. A regular cleaning cycle of the germicidal lamps, interior, sight glass and intake filter(s) **MUST** be established, and carefully maintained, based on inspection and experience. The frequency of cleaning will vary with the conditions surrounding each installation. It is recommended that the germicidal lamps, interior, sight glass and intake filter(s) be cleaned whenever dust or deposits are observed.
- The germicidal ultraviolet lamps used in the **Nutripure®** have a manufacturer’s rated average effective life of 13,000 hours. Lamps may operate longer than their rated effective life, but the reduction in ultraviolet output will make it impractical to use past the manufacturer’s rated life. For maximum efficiency lamp replacement is recommended every six months of continuous operation. Each **Nutripure®** Model 7-ASC, 8-ASC and 9-ASC is equipped with a Lamp Replacement Indicator, which is located next to the incoming power (See **Figure 10**). This indicator monitors lamp life and counts the time that power is applied to the sanitary conditioner and will remember accumulated time even if the power is switched off. A set of three lights are used to indicate the current age of the lamps installed: **Green** = GOOD; **Yellow** = ORDER (Lamp life has 500 hours left); **Red** = REPLACE. This is a timed function rather than a sensor that determines when the **STER-L-RAY®** Lamps need to be changed. Next to the indicator, there is a small hole where a reset switch is located inside. After replacing lamps, reset the Lamp Replacement Indicator to another 6 months of operation by holding a mini screwdriver against the reset switch for about five or more seconds.
- Unless lamp replacement is due to premature failure or breakage, it is recommended that all lamps be replaced at the same time.
- The **Nutripure®** Sanitary Conditioner models have a built in interlock switch under the access cover. Removal of the **Nutripure®** access cover will interrupt power to the lamps and blower. **DO NOT** attempt to bypass or circumvent the interlock switch or its safety function (See **Figure 11**).

Figure 10



Figure 11



CLEANING GERMICIDAL LAMPS & REFLECTOR



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠️ WARNING Always disconnect power to the fixture before performing any service or maintenance.

⚠️ CAUTION Ultraviolet lamps are easily damaged. Exercise care when handling lamps.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove access cover from the model.

⚠️ CAUTION Removal of the Nutripure® access cover will cause the interlock switch to interrupt power to the lamps and blower. Do not attempt to bypass or circumvent the interlock switch or its safety feature.

3. The **STER-L-RAY®** Germicidal Ultraviolet Lamps used in the **Nutripure®** are covered with a special protective covering referred to as **ArmorLite™** Safety Shield. **DO NOT** remove this protective coating. **ArmorLite™** Safety Shield encapsulates the lamp to contain broken glass and mercury in the event of lamp breakage. This facilitates safe disposal of the broken lamp and prevents contamination of the **Nutripure®** sanitary conditioner. Moisten a clean, lint-free cloth with alcohol, or suitable glass cleaner and wipe the outer surface of lamp(s) to remove any visible fingerprints, smears or dust from the lamp surface.
4. Repeat this on the surface of the reflector as necessary.
5. Remove any larger particles of dust or dirt in this area with the use of a vacuum.
6. Repeat until all **STER-L-RAY®** lamps and the reflector, as well as the surrounding area, have been properly cleaned.
7. Re-install the access cover and re-fasten latches.
8. Restore power to the sanitary conditioner.



⚠️ WARNING Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

REPLACING GERMICIDAL LAMPS



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠ WARNING Always disconnect power to the fixture before performing any service or maintenance.

⚠ CAUTION Ultraviolet lamps are easily damaged. Exercise care when handling lamps.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove access cover from the sanitary conditioner.

⚠ CAUTION Removal of the Nutripure® access cover will cause the interlock switch to interrupt power to the lamps and blower. Do not attempt to bypass or circumvent the interlock switch or its safety feature.

3. Starting from the top, remove each **STER-L-RAY**® lamp by holding the lamp by the base and carefully pull the lamp away from the connector, while removing pressure off the **STER-L-RAY**® lamp from the end supports (See **Figure 12**).
4. Once the lamp is clear from the connector, carefully lift **STER-L-RAY**® lamp away from the far end support, and remove **STER-L-RAY**® lamp from the sanitary conditioner (See **Figure 13**).
5. Repeat until all **STER-L-RAY**® lamps have been removed from the sanitary conditioner.

Figure 12

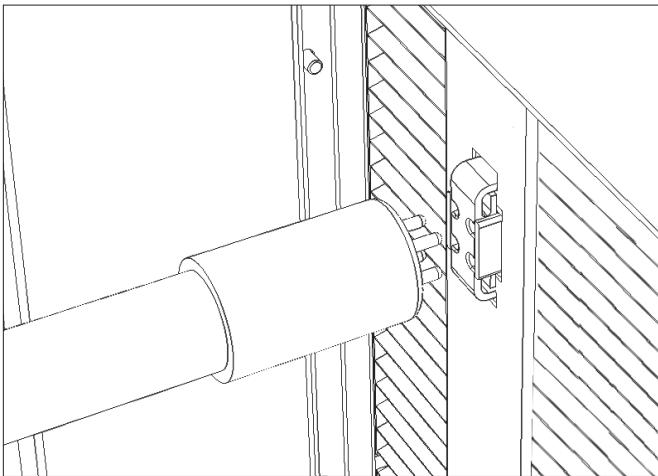
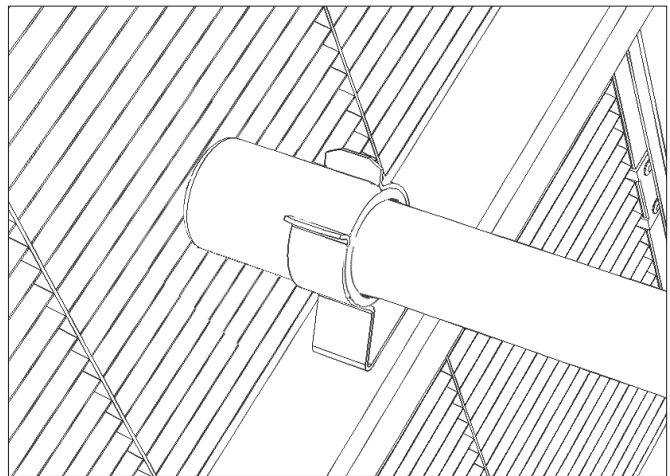


Figure 13



6. When installing the new lamps, carefully examine the pin configuration on the lamps base to ensure that the lamp is installed correctly into the lamp connector. (See **Figure 14**, which shows the lamp connector and **Figure 15**, which shows the lamp base, below.)

Figure 14

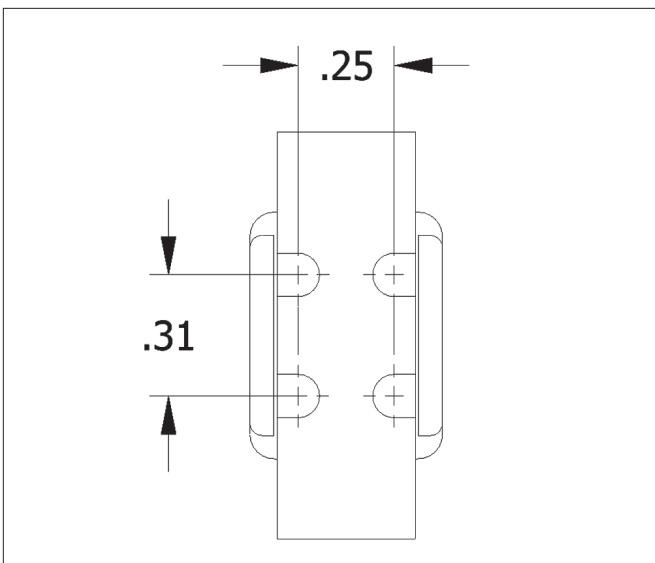
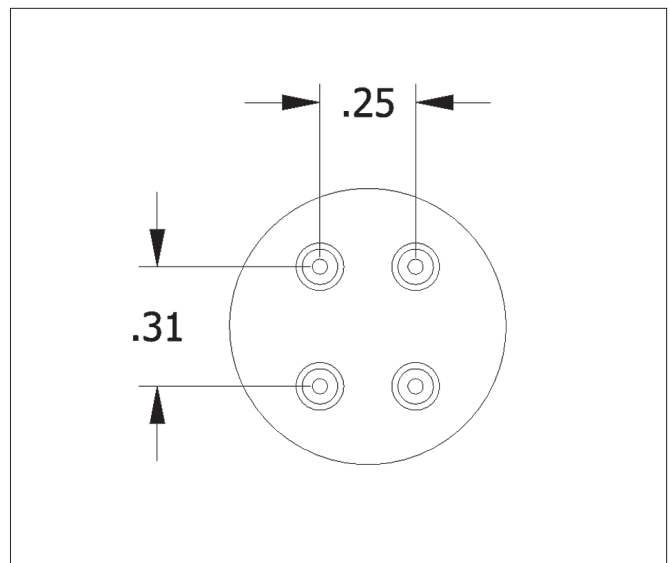


Figure 15



7. Begin installing the **STER-L-RAY**® lamps in the bottom row of the sanitary conditioner first, follow with the next row until all **STER-L-RAY**® lamps have been replaced.
8. Ensure all **STER-L-RAY**® lamps are properly positioned and seated against the socket.
9. Re-install the cover and re-fasten latches.
10. Restore power to the sanitary conditioner.
11. Verify lamps are operating by observing the lamp through the **Promate**™ sight glass ports located on either side of the sanitary conditioner.
12. If any **STER-L-RAY**® lamp fails to operate, refer to the “**Troubleshooting**” section of this manual.

CLEANING AND/OR REPLACING FILTER



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠️ WARNING Always disconnect power to the fixture before performing any service or maintenance.

The **Nutripure**® Sanitary Conditioners are fitted with one removable, washable, electrostatic air filter. The Model 9ASC also has one disposable filter. **DO NOT** apply oil, or adhesive sprays to the filter.

In most applications, regular vacuuming will maintain peak performance; periodically flushing filter(s) with clean water is recommended whenever vacuuming fails to restore a clean appearance.

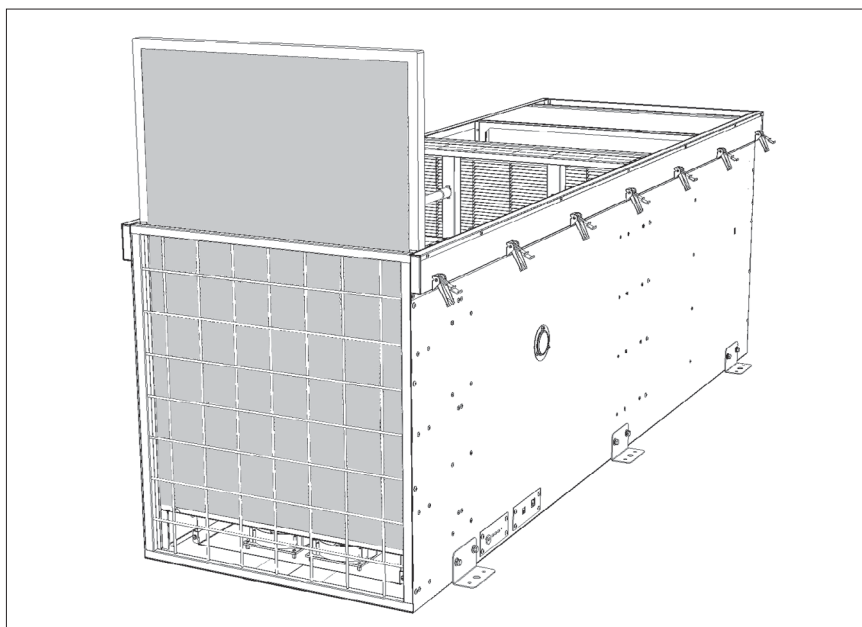
Filter may be cleaned repeatedly without loss of efficiency. The frequency of cleaning will vary with the conditions surrounding each installation.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove the access cover from the sanitary conditioner.

⚠️ CAUTION Removal of the **Nutripure**® top cover will cause the interlock switch to interrupt power to the sanitary conditioner. Do not attempt to bypass or circumvent the interlock switch or its safety feature.

3. Holding the top frame of the intake filter, gently slide the filter out of the filter guides (See **Figure 16**).
4. Once out of the sanitary conditioner, inspect for damage or voids in the filters surface. The filter should be replaced if damage is found that would allow particles to pass into the model.
5. Use a vacuum to remove any trapped dust or dirt. If vacuuming fails to thoroughly clean the filter, immerse the filter in soapy water followed by clean rinse water. Be careful not to use a strong spray from a hose or faucet that would disrupt the filter media. Allow the filter to completely dry before re-installing into the sanitary conditioner.
6. Re-install the filter into the sanitary conditioner.
7. Re-install the cover and re-fasten latches.
8. Restore power to the sanitary conditioner.

Figure 16 (Model 9-ASC Shown)



CLEANING ULTRAVIOLET ATTENUATORS



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠️ WARNING Always disconnect power to the fixture before performing any service or maintenance.

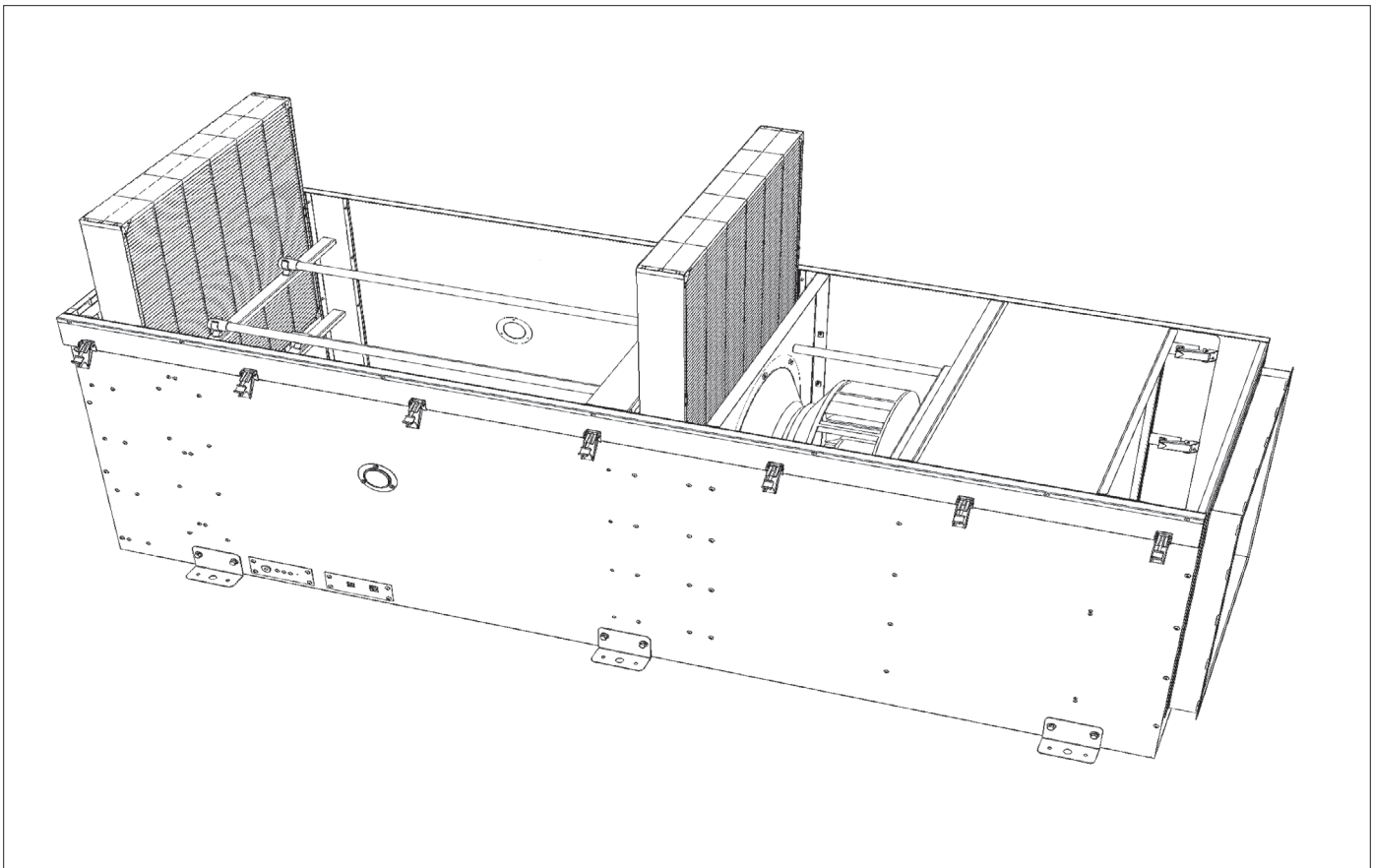
The Nutripure® Sanitary Conditioners are fitted with two removable Ultraviolet Attenuators, one located directly after the intake filter and one directly after the lamp compartment. The purpose of these Ultraviolet Attenuators is to protect the Intake Filter and Absolute Filter from germicidal ultraviolet rays, which could cause premature aging of these filters. This is done by trapping the ultraviolet rays inside the Attenuators while allowing air to pass efficiently through the sanitary conditioner.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove the cover from the model.

⚠️ CAUTION Removal of the Nutripure® top cover will cause the interlock switch to interrupt power to the sanitary conditioner. Do not attempt to bypass or circumvent the interlock switch or its safety feature.

3. Holding the top frame of the Ultraviolet Attenuators, gently slide the Ultraviolet Attenuators out of the guides (See Figure 17).
4. Once out of the sanitary conditioner, use a vacuum to remove any dust or dirt from the Ultraviolet Attenuators as well in the area of the guides.
5. Re-install the Attenuators into the sanitary conditioner.
6. Re-install the access cover and fasten latches.
7. Restore power to the model.

Figure 17 (Model 9-ASC Shown)



REPLACING ABSOLUTE AIR FILTER



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

⚠️ WARNING Always disconnect power to the fixture before performing any service or maintenance.

The Nutripure® Sanitary Conditioners are fitted with one removable, high-efficiency particulate air filters, (HEPA), which removes 99.97% of all particles greater the 0.3 micrometers from the air that passes through it. The standard for replacing a HEPA filter is after one year of normal usage.

1. Disconnect power to the sanitary conditioner.
2. Release all cover latches and carefully remove the access cover from the model.

⚠️ CAUTION Removal of the Nutripure® top cover will cause the interlock switch to interrupt power to the sanitary conditioner. Do not attempt to bypass or circumvent the interlock switch or its safety feature.

Figure 18

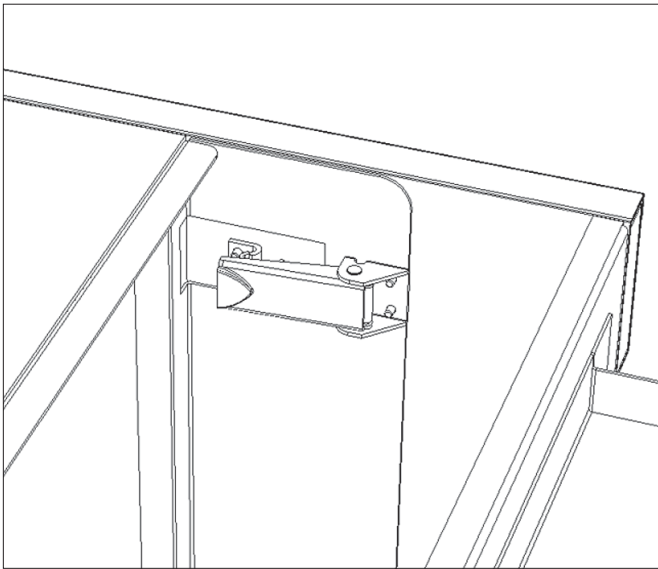
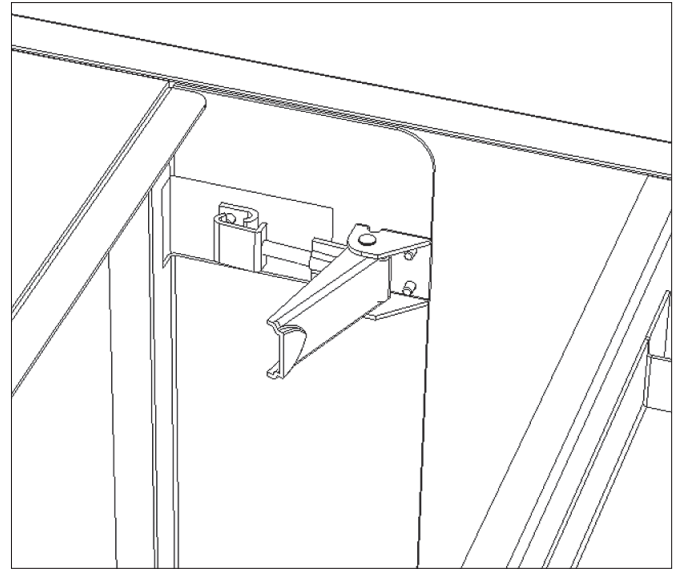
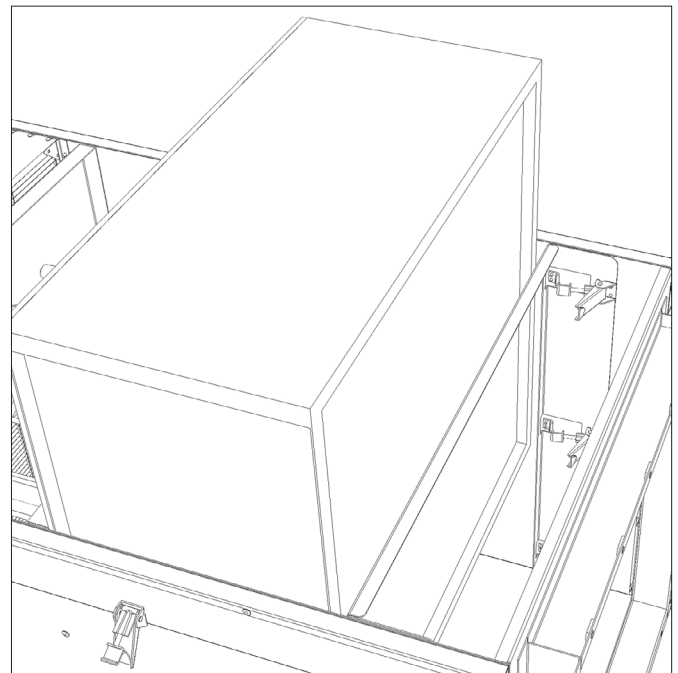


Figure 19



3. Release all the latches on the HEPA Filter Clamp (See **Figure 18** and **Figure 19**).
4. Carefully slide the HEPA Filter Clamp away from the Absolute Filter, then slide the HEPA filter from the bulkhead to provide room to grab the filter from both sides.
5. While supporting the HEPA Filter on two sides, remove the filter from the model and discard (See **Figure 20**).
6. Re-install a new HEPA Filter and follow clamping instructions in reverse order.
7. Re-install the access cover and re-fasten latches.
8. Restore power to the sanitary conditioner.

Figure 20



BREAKAGE

CAUTION Broken Quartz is SHARP.



Wear protective gloves when handling broken ultraviolet lamp(s). In the event of breakage, **DO NOT** use a household vacuum cleaner to pick up quartz fragments. Sweep up debris into a plastic bag and dispose of properly.

DISPOSAL OF MERCURY ADDED LAMPS



Germicidal ultraviolet lamps, like standard fluorescent lamps contain small amounts of mercury. Mercury added lamps should not be placed in the trash. Dispose of properly. For further information regarding the disposal and recycling of lamps containing mercury, along with Federal and State requirements visit LampRecycle.org. For more information on **STER-L-RAY**[®] Germicidal Ultraviolet Lamps, visit AtlanticUltraviolet.com or Ultraviolet.com.

TROUBLESHOOTING

WARNING Always disconnect power to the fixture before performing any service or maintenance.



Use personal protection equipment, such as gloves; long sleeves with no gaps between cuffs and gloves, and ultraviolet resistant face shield, if troubleshooting **Nutripure**[®].

IMPORTANT: This fixture is to be serviced **ONLY** by qualified, and appropriately licensed, personnel.

Table 1 – Troubleshooting

Problem	Possible Cause	Corrective Action
Nutripure [®] not operating	No electrical power	Verify that the sanitary conditioner is connected to a live power source.
	Power connections, to fixture, loose or disconnected	Verify power connections to fixture are fully engaged.
Internal blower not functioning	Loose power connection	Confirm connection to blowers; connections are tight and making full contact.
	Faulty blower motor	Replace blower motor.
STER-L-RAY [®] Germicidal lamp not operating	STER-L-RAY [®] Germicidal Lamp inoperative	Swap suspect lamp, with known good lamp. If known good lamp does not operate, replace ballast.
	STER-L-RAY [®] Germicidal Lamp not properly seated	Confirm contact between lamp and lampholder is tight, and that lampholder is making full contact with lamp.

If the above measures fail to correct the problem(s) contact our UV Application Specialists. Contact options can be found in the “User Assistance” section of this manual located on the back page.

TECHNICAL SPECIFICATIONS

Table 2 – Technical Specifications

Model:		7-ASC	8-ASC	9-ASC
Free Air Displacement:		560 CFM	1057 CFM	1828 CFM
Voltage:		120v 50/60Hz	120v 50/60Hz	230v 50/60Hz
Amperage:		4.66 A	10.02 A	9.75 A
Dimensions:	Length (inches)	63-1/8"	74-1/4"	81-15/16"
	Width (inches)	17-5/16"	21-1/4"	27-3/8"
	Height (inches)	14-3/8"	20-1/4"	27-7/16"
	Exposure Chamber Length	30"	36"	36"
Lamp Data:	Lamp Quantity	4	6	6
	UV Watts per Lamp ①	23W	28W	54W
	Total UV Watts per Unit ②	92W	168W	324W
Ballast Quantity:		4	6	6
Particulate Filter:		14" x 12" x 1"	18" x 18" x 1"	24" x 27" x 1"
Absolute Filter:		14" x 12" x 12"	18" x 18" x 12"	24" x 24" x 12"
Disposable Filter:		—	—	24" x 27" x 2"

① Wattage is lamp watts only and does not include ballast loss.

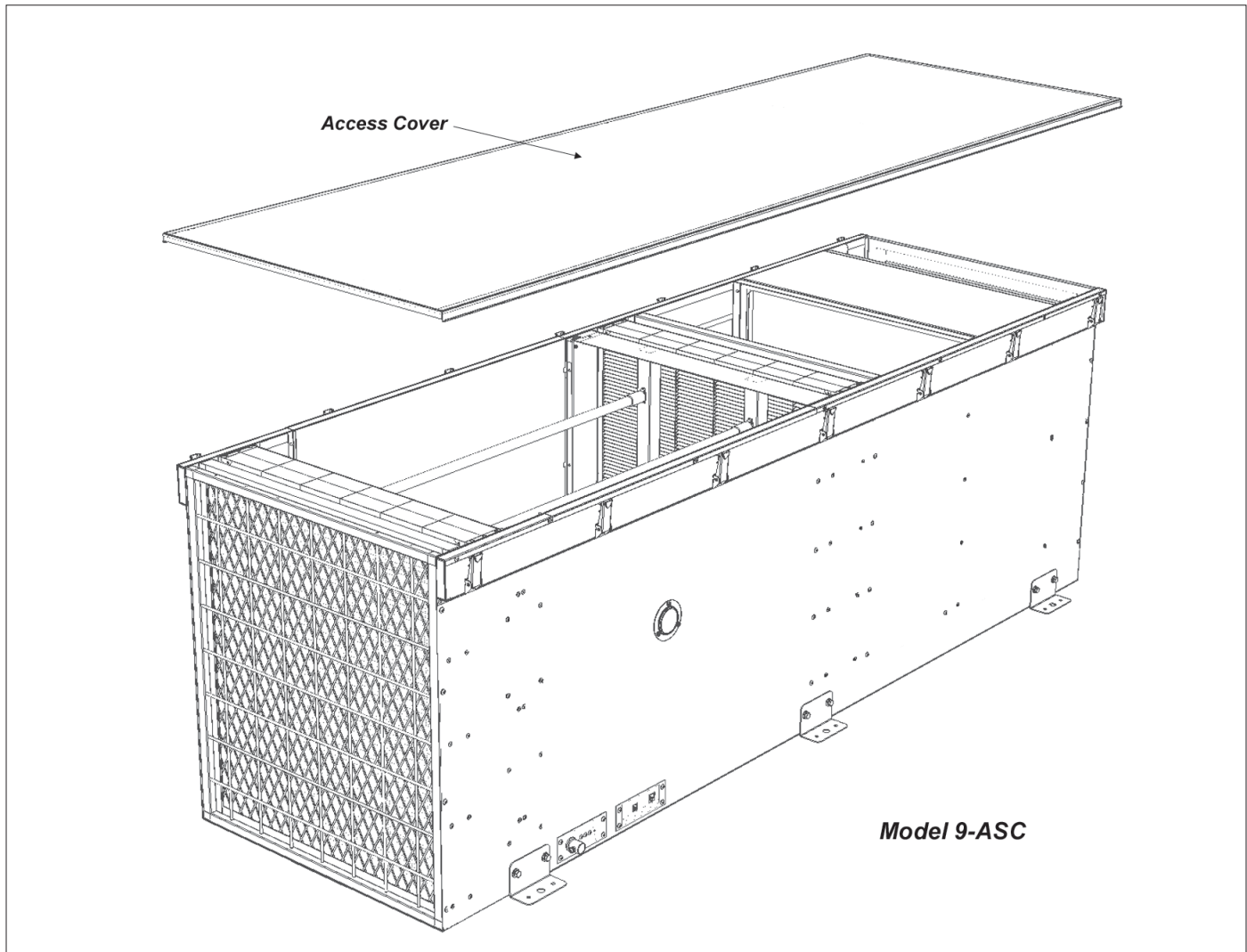
② Ultraviolet output at 254nm at 100 hours and 80° F (approximate).

All specifications, dimensional data, etc. are approximate and subject to change without notice.

REPLACEMENT PARTS

Table 3 – Replacement Parts

Model	7-ASC	8-ASC	9-ASC
STER-L-RAY® Lamp with ArmorLite™	05-6016	05-6017	05-6018
Surelite™ Ballast	10-0091	10-0091	10-0510
Promate™ Electrostatic Filter	40-0034B	40-5175A	40-1399A
Disposable Filter	—	—	40-0693
Promate™ HEPA Filter	40-0148A	40-5174A	40-1396A
Unit Blower	40-5043 (120v) / 40-5068 (220v)	40-5171A	40-5105A
Blower Capacitor	35-0739 (120v) / 35-0797(220v)	35-1790	35-0798
Ultraviolet Attenuators	40-5024A	40-5192A1	40-5111A
Electronic Cooling Blower	Not Required	Not Required	35-0268



MAINTENANCE NOTES

USER ASSISTANCE

Atlantic Ultraviolet Corporation® makes every effort to ensure that the **Nutripure®** Sanitary Conditioner is a product of superior quality and workmanship. This manual describes the installation, operation and maintenance of the **Nutripure®** Sanitary Conditioner.

Please read and become familiar with the contents of this manual before installing or using this model. If after reading the manual you still have questions, or concerns, regarding the installation or use of this model, contact our offices, weekdays between 8:30 am and 5:00 pm Eastern Time, at:

Atlantic Ultraviolet Corporation®
375 Marcus Boulevard
Hauppauge, New York, 11788
Tel: (631) 273-0500
Fax: (631) 273-0771
Email: Sales@AtlanticUV.com
Shop: AtlanticUltraviolet.com
Learn More: Ultraviolet.com

PATENT NOTICE

No attempt has been made to determine the patent status of applications illustrated or described in this publication. Inclusion in this publication of any design or method of use, which may be patented, is not to be construed as promoting or sanctioning unauthorized use.

WARRANTY & PRODUCT REGISTRATION

We warrant this product to the original owner to be free from defects in material and workmanship when installed in accordance with Atlantic Ultraviolet Corporation® specifications for a period of time as follows:

UV Water Purifier Chambers – Type 316 stainless steel chambers will have a Twelve (12) year Limited Warranty on the stainless steel chamber, from the date of original purchase while the Type 304 stainless steel chambers will have a Six (6) year Limited Warranty on the stainless steel chamber.

UV Air Disinfection Housing – Three (3) year Limited Warranty on the metal housing, from the date of original purchase.

Ballasts – Three (3) year Limited Warranty, from the date of original purchase.

UV Lamps, Monitoring Devices, Optional Accessories, and Other Parts – One (1) year Limited Warranty from the date of original purchase.

Within the warranty period we shall repair or replace such products, which are returned to us with shipping charges prepaid and which are determined by us to be defective. This warranty will not apply to any product, which has been subjected to misuse, negligence or accident; or misapplied; or modified; or repaired by unauthorized person; or improperly installed. Warranty will be null and void if any of the product's original labels are removed. This Limited warranty excludes the cost of labor.

The Buyer shall inspect the product promptly after receipt and shall notify us at our main office in writing of claims, including claims of breach of warranty, within thirty (30) days after the Buyer discovers or should have discovered the facts upon which the claim is based. Failure of the Buyer to give written notice of a claim within the time period shall be deemed to be a waiver of such claim.

The provisions of the above warranty are our sole obligation and exclude all other remedies or warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, whether or not purposes or specifications are described herein. We further disclaim any responsibility whatsoever to the customer, or to any person for injury to person, damage to, or loss of property or value caused by any product which has been subjected to misuse, negligence, accident; or modified or repaired by unauthorized persons; or improperly installed.

Under no circumstances shall the Company be liable for any incidental, consequential or special damages; losses or expenses arising from the contract for this product, or in connection with the use of, or inability to use, our product for any purpose whatsoever.

Be sure to register your product and validate purchase within 30 days –registration is simple and will take less than 2 minutes to do.

NOTE – failure to register your purchase may jeopardize warranty.

Go to AtlanticUltraviolet.com and scroll down to the bottom of the page, under “Trust” click the “Warranty Registration Form”, complete and click “Submit”. Or click on “Warranty Registration PDF” to download the warranty registration card as a PDF, complete and mail to us at 375 Marcus Boulevard, Hauppauge, NY 11788, or simply fax to (631) 273-0771. If you prefer to register by phone, please call (631) 273-0500 and our customer service staff will be glad to assist you.

For your convenience, record the following information below. The model and serial number can be found on a label located on the **Nutripure®** Sanitary Conditioner. Keep this manual, along with proof of purchase, handy when contacting our offices.

Purchased From:	Date:
Model:	Serial No.: