



better AIRFLOW *by* DESIGN™

Installation & Maintenance



**CX-AIRE
IN-DUCT AIR PURIFIER**

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

SAFETY INSTRUCTIONS

⚠ WARNING Never expose eyes or skin to UVC light from any source.

- Looking directly at the UVC light may cause permanent eye damage or blindness.
- Never operate the CX-Aire Air Purifier out of the plenum.
- Designed for a closed duct system. Do not mount near a supply or a return air opening.
- Mount the UV lamp unit not less than 181 ft in the line of sight to any openings in the air duct and not less than 44 ft in the line of sight to any non-metallic parts.
- All duct openings in direct line of site of the UVC light must be sealed with aluminum tape or equivalent sealing methods.

⚠ WARNING UVC light will break down plastic materials not rated for UV exposure, like wire insulation, flex duct, drain pans, humidifiers, etc.

- The unit must be mounted at least 30" from the above stated types of materials.
- If it is necessary to mount the unit in direct line of sight of these types of materials, they must be shielded with aluminum foil, aluminum foil tape, or sheet metal.

⚠ WARNING DO NOT mount this unit outdoors.

- This product is designed for indoor installation only (i.e. attics, crawl spaces, basements, etc.).

⚠ WARNING Never touch broken lamp or internal contents of lamp. The lamp contains mercury.

- After opening the carton, unpack and inspect the unit and lamp for damage. Do not install this unit if any damage is noticeable. If lamp is damaged, cracked or broken, do not touch lamp or other contents in carton. Close carton and return to seller immediately.
- In case of accidental exposure to internal contents of lamp, wash hands and any other affected skin area with mild detergent. Remove affected clothing immediately. If skin surface is pierced, seek medical attention immediately.

NOTE: If you touch the glass of the lamp, you should wipe the glass clean with isopropyl alcohol and a lint free wipe. If the lamp is not cleaned, the film from hand oils will cause a reduction in the light intensity.

⚠ WARNING Before installing or servicing a humidifier, air filter, HVAC system, or this unit, etc., always turn all power OFF and have unit unplugged. Electrical shock can cause personal injury or death. Never expose eyes or skin to direct UVC light from any source.

⚠ WARNING To prevent water damage or electric shock, do not mount unit under a humidifier.

⚠ WARNING This product is designed for indoor installation only (i.e. basements, crawl spaces, attics, etc.). For use on gas fired, oil fired, electric and split system heat pump forced air systems*. This product is NOT designed to be mounted outside on gas fired or heat pump packaged units**.

* Split system heat pumps are systems where the air handler and the air conditioning compressor are separate units.

** Packaged units are systems where the air handler and the air conditioning compressor are built together and are installed outside of the building.

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CX-AIRE IN-DUCT AIR PURIFIER

MODEL: CX-Aire

The delivery set includes:

- Ballast assembly and power cord
- Mounting base
- UVC germicidal lamp
- UVC light shield
- Sheet metal mounting screws (6)
- Mounting template
- Ductboard adapter plate



NOTICE This product is not sold as a medical device and is not for the purpose of diagnosis of any disease or condition nor for use in the mitigation, treatment, or prevention of any disease or condition.

SIZING & SELECTING UNITS

SQUARE FOOTAGE	CX-AIRE (for ducts at least 16" wide)	VOLTS / HZ	WATTS	AMPS
Up to 2000	1	120 / 60	30	.5
4000	2	120 / 60	30	.5

Note:

- For applications with multiple systems, one unit per system is recommended.
- For larger applications, multiple units are recommended.

BEFORE INSTALLATION

NOTICE READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE INSTALLATION.

WARNING Disconnect and lock out power supply before performing any installation work. Working on or near energized equipment could result in death or serious injury.

This device MUST be installed by a qualified agency in accordance with the manufacturer's installation instructions. The definition of a qualified agency is any individual, firm, corporation or company that either in person or through a representative is engaged in, and is responsible for, the installation and operation of HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction.

WARNING Never expose eyes or skin to UVC light from any source. Looking directly at the UVC light may cause permanent eye damage or blindness. Never operate the CX-Aire Air Purifying System out of the plenum. Avoid touching the glass portion of the lamp with your hands.

INSTALLATION

STEP 1. CHOOSE A LOCATION FOR THE CX-AIRE

⚠ WARNING To prevent water damage or electric shock, do NOT mount unit under a humidifier.

- CX-Aire may be installed in supply air plenum, return air plenum or above AC coil (Figure 1).
- CX-Aire may be installed directly onto a sheet metal air duct using the mounting template, or onto a fiberglass ductboard using the ductboard adapter plate.
- Choose a suitable location for the unit downstream from the AC coil in the supply air plenum or in the return air plenum; preferably downstream from the air filter.
- For optimum "cleaning" effect on the AC coil, mount the unit in the supply plenum as close as possible to the AC coil (Figure 1).
- Mount the UV lamp unit not less than 181 ft in the line of sight to any openings in the air duct and not less than 44 ft in the line of sight to any non-metallic parts.

⚠ CAUTION Use care to avoid damage to the AC coil, wiring or other components while installing the CX-Aire.

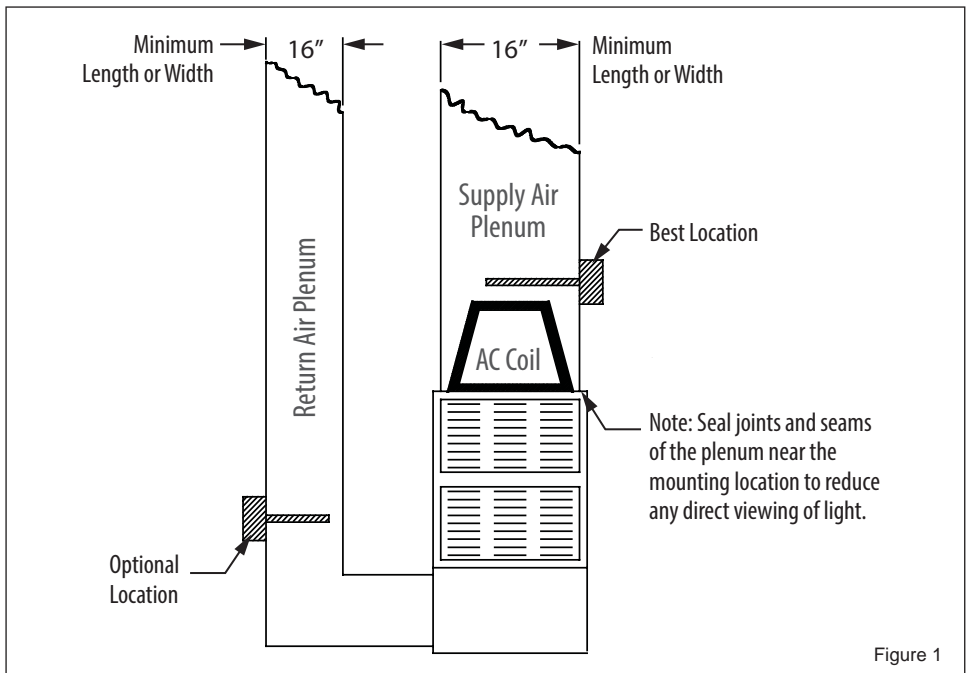


Figure 1

⚠ WARNING Never expose eyes or skin to UVC light from any source. Looking directly at the UVC light may cause permanent eye damage or blindness. Never operate the CX-Aire Air Purifying System out of the plenum. Avoid touching the glass portion of the lamp with your hands.

INSTALLATION

STEP 2. MOUNTING TEMPLATE OR DUCTBOARD ADAPTER PLATE (A or B)

NOTE: If installing on sheet metal air duct, follow step A using the the supplied mounting template. If mounting onto a fiberglass ductboard, follow step B (page 6) using the ductboard adapter plate.

⚠ CAUTION Investigate and determine the location of the AC coil prior to drilling holes in duct for mounting unit.

A. Pre-drilling with mounting template

- Apply supplied mounting template to air duct in either a vertical or horizontal position (Figure 2).
- Drill 1/8" diameter mounting holes at positions indicated on template (Figure 3).
- Cut out the large opening (1-1/2" hole) on the template (Figure 3).
- Using a 1/4" to 1/2" drill bit, drill a viewport hole as indicated on the template (Figure 3).

NOTE: DO NOT remove template from duct.

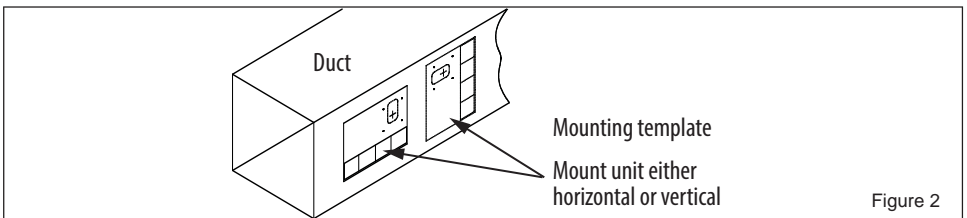


Figure 2

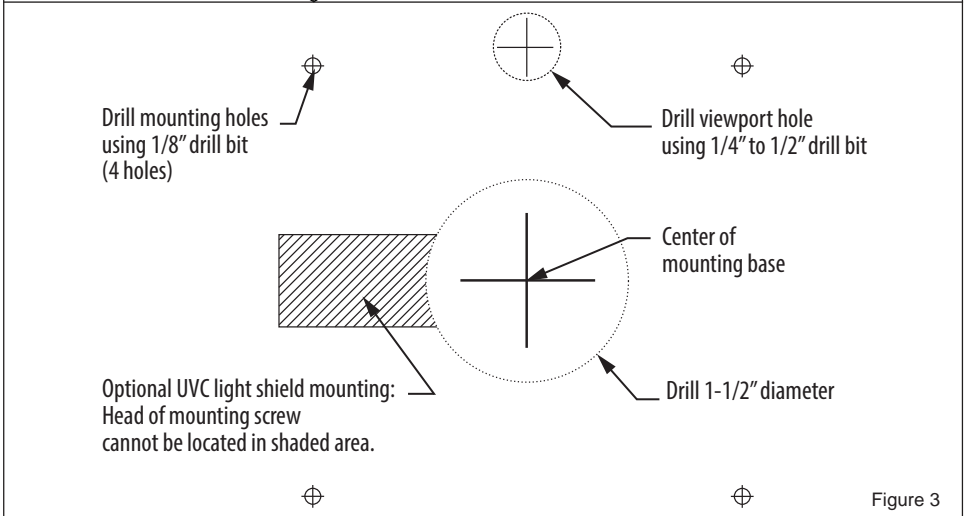


Figure 3

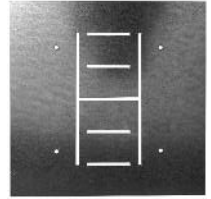
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INSTALLATION

STEP 2. MOUNTING TEMPLATE OR DUCTBOARD ADAPTER PLATE (A or B)

B. Installing ductboard adapter plate

NOTE: Viewport must be located adjacent to either crease formed by this step. Refer to the diagram and instructions below to attach the adapter plate to ductboard. Pay careful attention to reference locations noted on the diagram (Figure 4).



- Mount the supplied metal mounting plate onto the duct with duct tape in either a vertical or horizontal position (Figure 5).
- Bend tabs outward (Figure 6).
- Using a knife or blade, cut out a rectangle opening in the duct using the mounting plate as a template (Figure 7).
- Remove the cut piece of duct (Figure 8).
- Bend both tabs down and through the duct at the first bend point (Figures 9 & 10).
- Bend both tabs at the second bend point up or down to pinch the duct material and grip the duct material (Figures 11 & 12).
- Using a screwdriver or pointed object, locate mounting holes by poking holes through the duct tape (Figure 13).

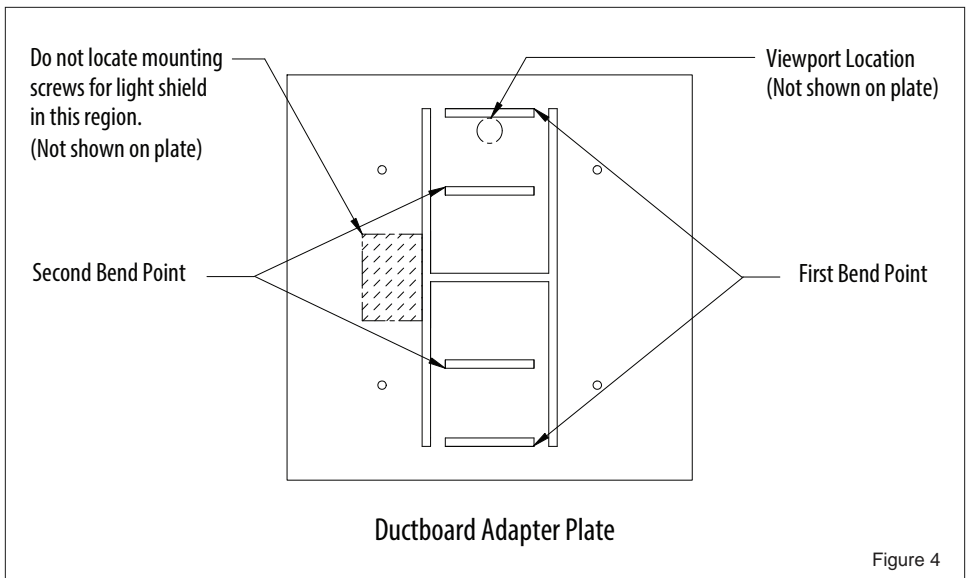


Figure 4

⚠ WARNING Never expose eyes or skin to UVC light from any source. Looking directly at the UVC light may cause permanent eye damage or blindness. Never operate the CX-Aire Air Purifying System out of the plenum. Avoid touching the glass portion of the lamp with your hands.

INSTALLATION

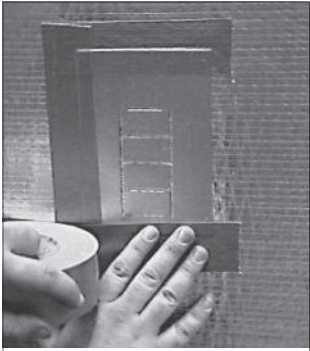


Figure 5

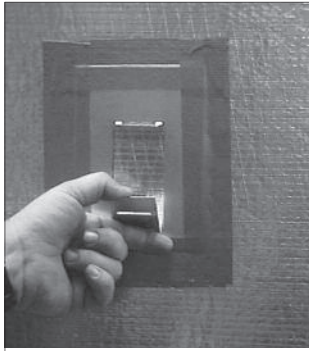


Figure 6

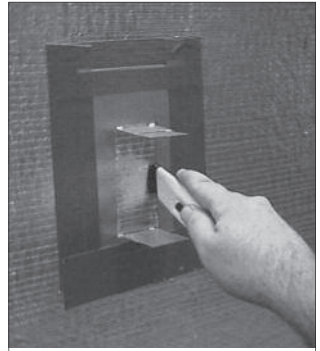


Figure 7

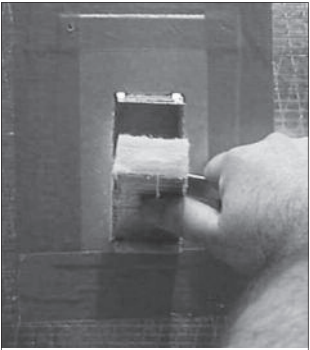


Figure 8

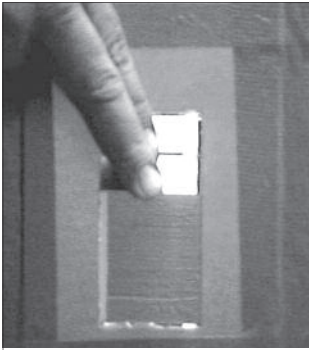


Figure 9

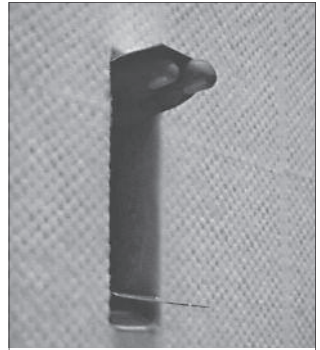


Figure 10

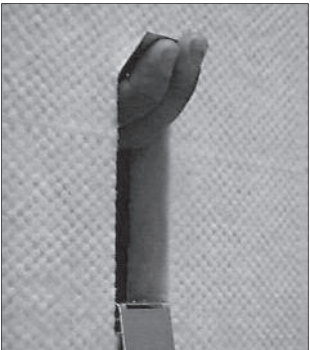


Figure 11

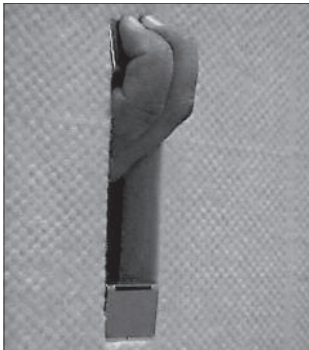


Figure 12

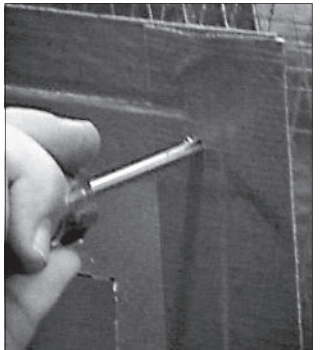


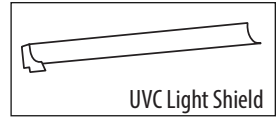
Figure 13

⚠ WARNING Never expose eyes or skin to UVC light from any source. Looking directly at the UVC light may cause permanent eye damage or blindness. Never operate the CX-Aire Air Purifying System out of the plenum. Avoid touching the glass portion of the lamp with your hands.

INSTALLATION

STEP 3. OPTIONAL UVC LIGHT SHIELD

Designed to guard or shield certain plastics, wiring or air filters that may be affected by UVC light.



- The light shield may be mounted at virtually any angle. However, when deciding on a suitable location, the mounting screw head cannot be in the shaded area of template (Figure 14).
- Press shield onto duct wall. Then secure with (2) sheet metal mounting screws (Figure 15).

STEP 4. MOUNTING BASE

- Attach the CX-Aire mounting base onto the plenum with (4) sheet metal mounting screws. (Refer to template in Figure 3.) This must be tight in order to activate the built in safety switch.

NOTE: DO NOT remove template from duct.

Head of mounting screw cannot be located in shaded area.

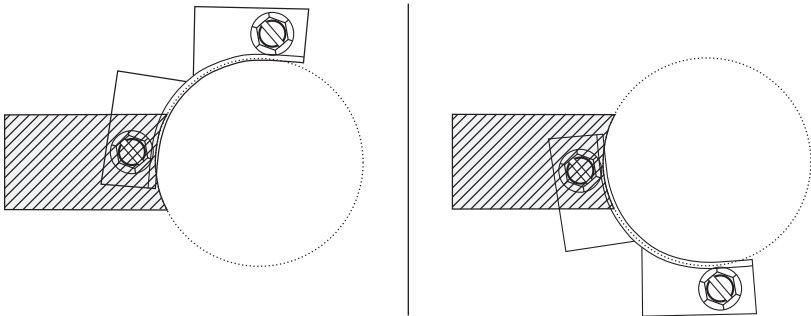


Figure 14

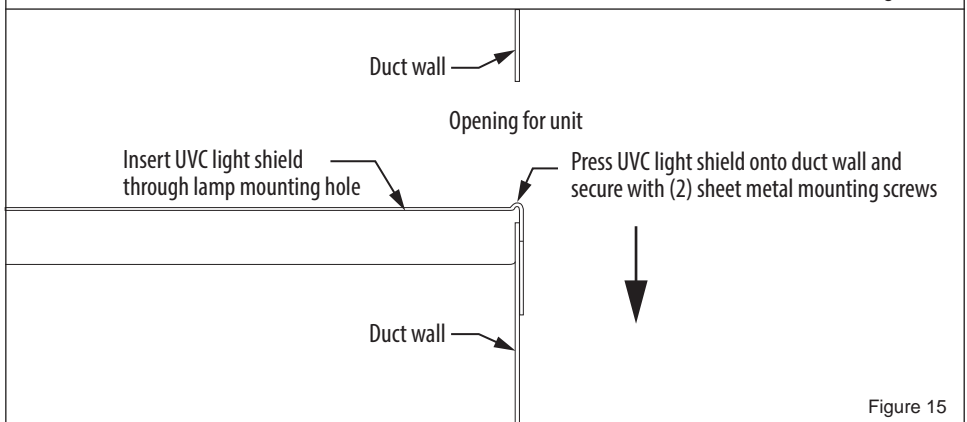


Figure 15

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INSTALLATION

STEP 5. UVC LAMP & BALLAST

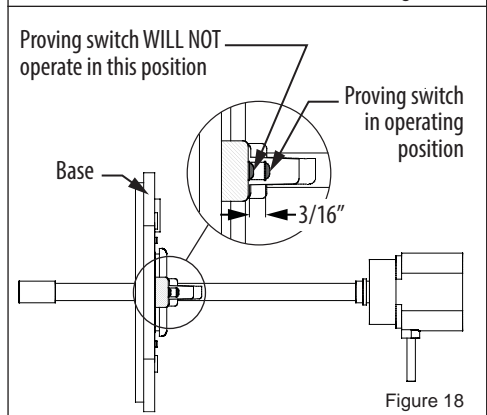
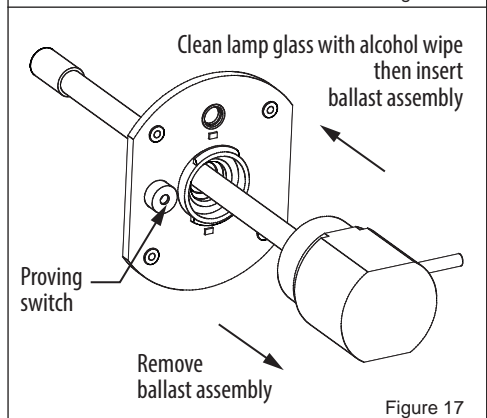
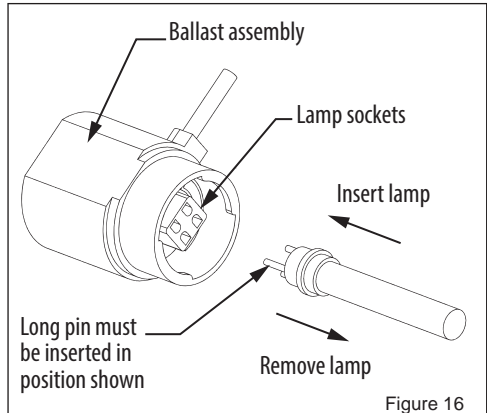
- A. Do not touch the glass section of the lamp with bare hands. Oils on hands tend to reduce lamp intensity. Install lamp into ballast (Figure 16).
- B. Wipe off the lamp glass with the supplied alcohol wipe. Then insert the lamp through the center hole of the mounting base (Figure 17). The power cord must be 90 degrees to the viewport hole on the mounting base.
- C. With the ballast pressed against the mounting base, rotate the ballast clockwise 90 degrees.
- D. Do not wire the unit into the appliance fan circuit. Premature failure of the ballast and lamp will occur. The warranty will be voided. Plug the power supply cord into a standard 120VAC electric outlet. Check lamp operation by looking through the viewport hole.
NOTE: The viewport hole is made of glass and will not allow any UVC rays to pass through. A blue glow should be seen in the duct.
- E. If blue glow is not seen, make sure the base is properly installed onto duct. There is a proving switch located on the base that needs to be seated properly onto the duct.

When installing the base, make sure the plated washer on the switch is raised approximately 3/16". The proving switch must be fully engaged (Figure 18).

STEP 6. SEALING

- A. With aluminum or foil tape, seal all joints and seams of the plenum near the mounting location to reduce any direct viewing of light.

NOTE: DO NOT remove template from duct.



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TROUBLESHOOTING

⚠ WARNING Only qualified personnel should work on electrical equipment. Working on or near energized equipment could result in death or serious injury.

1. Check to make sure 120VAC power is available at the electrical outlet.
2. Do not wire the unit into the appliance fan circuit. This will cause premature ballast or lamp failure and void the warranty. For proper operation, the unit requires 120VAC at all times.
3. Pull back metal washer on mounting base. If lamp comes on, the base needs tightening to ensure that the safety switch is fully engaged.
4. If lamp does not light up, rotate ballast slightly clockwise or counterclockwise.
5. If lamp does not light up after rotating ballast, replace lamp.
6. If unit still does not light up after replacing lamp, replace unit.

RECOMMENDED MAINTENANCE

⚠ WARNING Unplug unit from the electrical outlet before commencing inspection and cleaning.

NOTE: Wear oil-free cotton gloves prior to maintenance in case of accidental breakage of glass.

1. The lamp should be inspected and cleaned at least every 6 months. Frequency depends upon the environment such as the type of air filter, duration of use and replacement cycle.
2. To maintain maximum output intensity, replace the CX-Aire-RL lamp every 2 years. The lamp should operate continuously for maximum lamp life and light effectiveness.

REPLACEMENT PARTS

Replacement parts are available from the following sources:

- Your local HVAC wholesaler or contractor
- Continental Fan Manufacturing Inc., Buffalo, NY (1-800-779-4021)
- www.continentalfan.com

MODEL	DESCRIPTION	UPC CODE
CX-Aire-RL	16" UVC Lamp (1 Only)	6 27249 12224 1
CX-Aire-TB	Ballast	6 27249 12225 8

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LAMP REPLACEMENT PROCEDURE

⚠ WARNING Unplug unit from the electrical outlet before starting replacement procedure.

NOTE: Wear oil-free cotton gloves prior to procedure in case of accidental breakage of glass.

1. Rotate the CX-Aire ballast assembly counterclockwise until it stops (Figure 19).
2. Remove the ballast assembly and lamp from the mounting base (Figure 20).
3. Remove the lamp from the lamp socket (Figure 21).
4. Install the replacement lamp into lamp socket. Do not handle the lamp with bare hands. Oils on the hands tend to reduce lamp intensity.
5. Wipe off the glass with the supplied alcohol wipe.
6. Position the ballast assembly power cord 90 degrees to the viewport hole on the mounting base and press the ballast against the mounting base. Rotate the ballast assembly clockwise until it stops and is locked in place (Figure 22).
7. After assembly is firmly in place, plug the power supply cord back into the standard electrical outlet. Check lamp operation by looking through the viewport hole. A blue glow should be seen in the duct.
8. After replacing the lamp, make sure to install the Lamp Replacement Label. Print the date on the label and apply to the side of ballast assembly.

NOTE: If blue light leaks through any portion of plenum and/or around mounting plate, unplug power supply cord immediately and seal affected areas and/or rotate ballast and repeat step #6 above.

9. UVC lamps contain a small amount of mercury, like a typical fluorescent lamp. Check with your local waste management authority for local disposal or recycling requirements.

⚠ WARNING Never touch broken lamp or internal contents of lamp. The lamp contains mercury.

NOTE: In case of accidental exposure to internal contents of lamp, wash hands and any other affected skin area with a mild detergent. Remove affected clothing immediately. If skin surface is pierced, seek medical attention immediately.

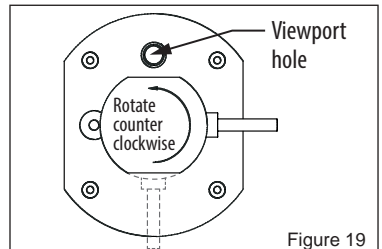


Figure 19

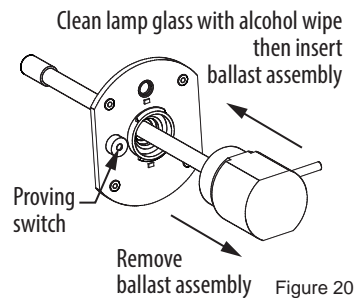


Figure 20

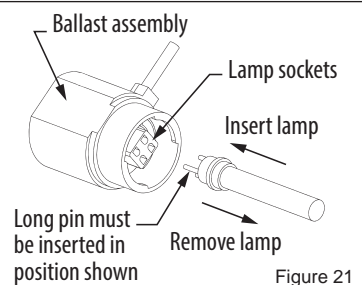


Figure 21

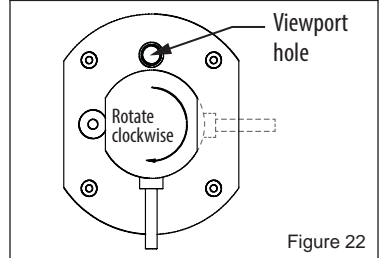


Figure 22

⚠ WARNING Never expose eyes or skin to UVC light from any source. Looking directly at the UVC light may cause permanent eye damage or blindness. Never operate the CX-Aire Air Purifying System out of the plenum. Avoid touching the glass portion of the lamp with your hands.

CLEAN-UP OF BROKEN LAMPS

NOTICE

See warnings on page two of this manual.

UVC lamps contain a small amount of mercury, like a typical fluorescent lamp. DO NOT touch any of the mercury with your bare hands.

1. While wearing disposable, non-absorbent protective gloves, carefully pick up the large pieces of glass with your hands.
2. Then, vacuum the entire area with a standard household vacuum cleaner ensuring the removal of all lamp material.
3. Dispose of the pieces of glass, the vacuum cleaner bag, and the disposable gloves in a sealed garbage bag.
4. Check with your local waste management authority for local disposal or recycling requirements.
5. Wash hands and remove and wash clothes for added safety measures.

LIMITED WARRANTY

Subject to the provisions of the clauses herein, Vendor agrees to correct any defect or defects in workmanship or materials which may develop under proper and normal use, by repair or by replacement of the defective part or equipment, at Vendor's option, FOB factory. Unless otherwise stated, the warranty period for the CX-Aire shall be ten (10) years from date of shipment. The exceptions to this warrant period are:

UVC Lamp - ninety (90) days

This warranty is provided to the original Buyer, and may not be transferred, sold or bartered. Motors, drives, electrical controls and other components manufactured for Vendor by others are not covered by these warranty provisions. All warranty claims must be processed through point of purchase. All warranty repair work must be performed either at the factory or by a factory certified service center. For additional information regarding warranties, see Vendor document: Limited Warranty-1105.

CONNECTION CERTIFICATE

Company name _____

Installed by _____

Installation date _____

Signature _____

The health aspects associated with the use of these products and their ability to aid in disinfecting of environmental air have not been investigated by UL.

CX-AIRE-I&M-2012



www.continentalfan.com | 1-800-779-4021

Buffalo, New York | Mississauga, Ontario | Dayton, Ohio