



Installation and Operation Instructions

Unitary Air Conditioner Kits

120 V, 208/230 V

Patents 5,334,347, 5,817,276, 5,866,076, 6,245,293, 6,267,924, 6,280,686, 6,313,470, 6,372,186, 6,423,882, 6,500,267, 6,589,476, 6,627,000, 6,783,578 & others pending

Made in USA

NOTE: Read this entire instruction sheet before starting the installation.

IMPORTANT CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult your supplier or Steril-Aire for information or assistance.

Understand the signal words **DANGER**, **WARNING**, or **CAUTION**. These words are universally used for overall safety. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards which could result in personal injury or death. **CAUTION** is used to identify unsafe practices resulting in minor personal injury or product and property damage.

⚠️ WARNING: Before performing maintenance or service on fixture, ensure unit is unplugged. Electrical shock can cause injury or death.

⚠️ CAUTIONS:

- Never expose eyes or skin to UVC light. Wear gloves, face shield/glasses (per ANSI Z87.1) and cover all exposed skin.

- Do not touch Emitter glass without gloves. Damage to Emitter may result. Oil from fingerprints will permanently etch glass of Emitter and weaken structure. If necessary, clean Emitter using a Steril-Aire cleaning kit (isopropyl alcohol and a lint-free wipe may be substituted).
- Voltages outside of the range designed for the unit will void the warranty and do permanent damage to the entire unit.
- Emitter contains a small quantity of mercury. If an Emitter breaks, clean and dispose of with care.
- UVC energy may cause damage to non-metallic components except for UV-rated and HVAC-style drain pans. Select mounting locations that prevent exposure to vulnerable components. If mounting locations are limited, such components shall be protected with UV resistant material such as aluminum foil, aluminum duct tape, metallic shields, etc.
- The qualified installer or agency must use factory kits and accessories when installing this product.

INSTALLATION & OPERATION

NOTE: ENSURE THAT EMITTER IS INSTALLED BEFORE POWER IS APPLIED. INSTALLING EMITTER AFTER POWER HAS BEEN APPLIED WILL TRIGGER THE "END-OF-LAMP-LIFE CIRCUIT" AND THE EMITTER WILL FAIL TO LIGHT. IF THIS HAPPENS, SHUT OFF POWER FOR 10 SECONDS AND THEN TURN POWER BACK ON. EMITTER WILL THEN LIGHT.

1. Disconnect power from unitary air conditioner.
2. Remove outer cover of unitary air conditioner.
CAUTION: Do not drill into coil, refrigerant lines or other mechanical equipment.

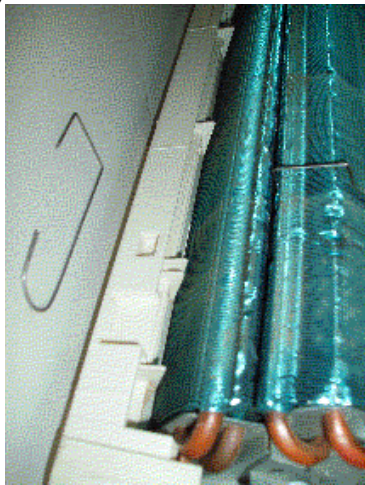
3. Determine location of the Emitter. (*Many types of unitary air conditioners have a removable shroud/heating coil assembly that may adequately accommodate the Emitter.*) The Emitter shall:
 - Be at least 1" away from the heating coil.
 - Not make contact with the blower.
 - Provide direct light onto the cooling coil and drain pan.
 - Not be directly visible from outside of the unitary air conditioner. A baffle may be installed to provide any needed light blockage.

4. Determine an appropriate flat-surfaced location for mounting the power supply with the provided screws. Make sure that the power supply's lead socket (with extension cord, if applicable) can reach the pins of the Emitter and that its wires can reach the power source.
5. If applicable, determine switch location, which shall be on a flat panel near the wiring for the air conditioner controls and power. Make sure the switch can reach the power supply and power source with the available connections. Drill a hole just large enough to accommodate the thread diameter of the switch, and install the switch. Ensure the switch is in the "off" position.
6. Determine appropriate method of installing Emitter given the provided mounting options.
7. Install the Mounting Bracket and Emitter.
 - o If using the Spring Clips, use only on the Emitter's ceramic ends.
 - o If using the Short Hooks, first remove spine between the two upper coils. Cut spine in order to accommodate the support wire. Insert support wire such that its right angle leg slides between the fins of the front coil (see photo below).

drilled on a panel between the coils and blower wheel on the end of unit (see next photo).

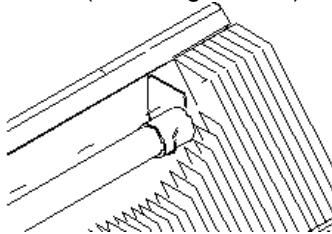


- o If using the optional Flat Plate Lamp Holder, refer to the following images for guidance.

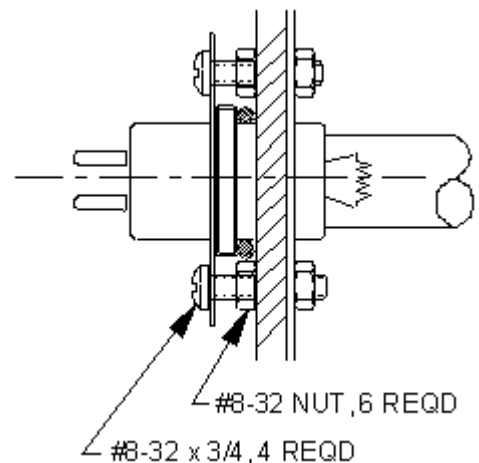
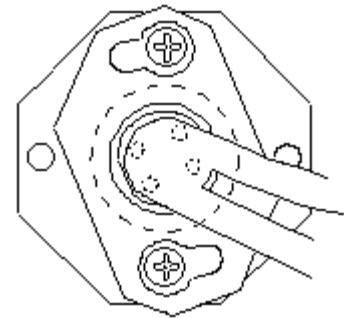


Short Hook

Ensure that Emitter ceramic ends rest on the Short Hooks (see image below).

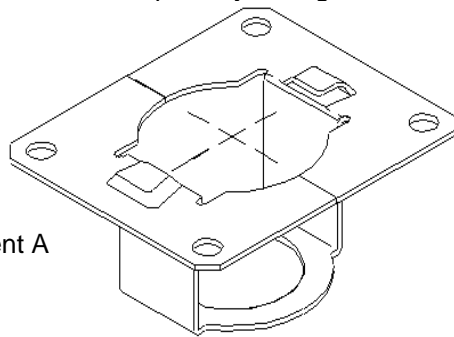


Reinstall the spine pieces. In some cases, one Short Hook may be sufficient where the collared Emitter end can rest in a 13/16" or 7/8" hole

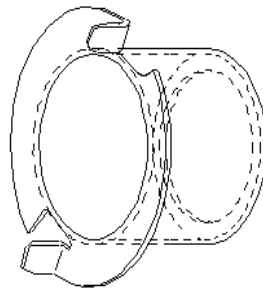


- o If using the optional Insert Lamp Holder, please note the following:

- a) Drill 1-1/4" hole on a panel to accommodate component A and secure A with screws.
- b) Slide Emitter partially through A.



Component A



Component B

- c) Slide component B (collared end first) onto power supply's cord or extension cord and install cord onto Emitter pins (see next photo).



- d) Slide Emitter and comp. B through A, and twist and lock B under A's tabs (see photo below).



8. Connect the socket from the power supply or extension cord to the Emitter pins.
9. Complete all power connections.
10. Reconnect power to the air conditioner, and toggle the installed switch, if applicable, to the "on" position. The Emitter should emit a bright blue hue, indicating that it is working properly.
11. Replace outer cover of air conditioner.

MAINTENANCE

Emitters need to be periodically replaced to maintain design output. The change-out basis depends upon the application, number of times switched on/off per day, and the hours of operation. Emitters are to be replaced when output falls to 50% of initial output (or as specified)

by actual radiometer measurements. A Steril-Aire UVC Radiometer Kit may be used for such measurements. If a radiometer is unavailable, Emitters should be replaced after 9,000 hours of use.

TROUBLESHOOTING

Symptom	Recommended Action (in order of priority)
Emitter™ Does Not Light	<ol style="list-style-type: none">1. Turn off power for 10 seconds, and then turn power back on.2. Check line voltage.3. Check wiring to Emitter.4. Replace Emitter with new unit. Normal replacements recommended once per year.5. Replace power supply.
Low Output (Radiometer Reading) <u>or</u> Visibly Weak Emitter Light	<ol style="list-style-type: none">1. Check line voltage.2. Check wiring to Emitter.3. Replace Emitter with new unit.
Red/Orange Emitter Light	<ol style="list-style-type: none">1. Check ambient temperature. If the temperature is at or below 35°F, Emitter is too cold to operate properly.2. If ambient temperature is in excess of 35°F, follow actions for the Low Output symptom.

WARRANTY

To activate the warranty for the Kit, the provided warranty card must be completed and returned to Steril-Aire.

Thank you for choosing the #1 "UVC for HVAC" product sold worldwide. Please contact your local supplier or Steril-Aire directly if we can provide any further information or service. Your satisfaction is very important to us.
Please call **1-800-2-STERIL** or log onto **www.steril-aire.com**.

Steril-Aire, Inc. cannot and does not guarantee that all organisms will be inactivated or killed or that use of Steril-Aire, Inc. UVC Emitters will prevent infection or illness.