



Installation and Operation Instructions

Emitter Replacement For Steril-Aire Fixtures

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

SAFETY 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. In regards to the statements below, 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 from any source. 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).
- Emitter contains a small quantity of mercury. If an Emitter breaks, clean and dispose of with care.

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.

SE, SEN, & RSE Fixture Emitters

1. SE/RSE only – Toggle the on/off switch on the fixture to the off position.
2. Turn off power to the fixture.
3. Remove the fixture cover.
4. Detach power supply lead(s) from Emitter(s).
5. Squeeze the loops of the holding spring toward each other to release them from the lances.
6. Lift the holding spring away from the Emitter ceramic end.
7. Carefully remove the Emitter from fixture hole.
8. Grasp the new Emitter only at the ceramic end with the pins. Using care not to graze the Emitter wires against the inner edges of the fixture hole, carefully insert the Emitter into the hole. Ensure that the attached o-ring will sit between the ceramic end and the fixture base.
9. Lower the holding spring over the ceramic end. Firmly push the spring down until the o-ring is flat against the fixture base.
10. Push down one of the spring loops and attach to the appropriate lance on the fixture base. Repeat for the other spring loop.
11. Attach the power supply lead(s) to the Emitter(s), noting the rectangle orientation of

- the pins. Do not force. Rotate socket 90 degrees if necessary.
12. SE/RSE only – Ensure that the fixture cover tabs properly fit into the fixture base grooves.
 13. Reattach the fixture cover and secure with the existing screw(s).
 14. Turn on power to the fixture.
 15. SE/RSE only – The fixture can now operate by toggling the on/off switch to the on position.
 16. The Emitter should now emit a bright blue hue.

DE Fixture Emitters

1. Turn off power to the fixture.
2. Grasping its ceramic ends, rotate the Emitter until its pins can freely slide out of the tombstone (socket) slots. Carefully remove Emitter.
3. Using a new Emitter and grasping only the ceramic ends, align the Emitter pins with the tombstone slots and carefully push the pins into the slots until seated.
4. Rotate the Emitter (about 90°) until one distinct click is heard. The Emitter is now safely locked into place.
5. Return power to the fixture.
6. The Emitter should now emit a bright blue hue.

ESE & ESEN Fixture Emitters

1. ESE only – Toggle the on/off switch on the fixture to the off position.
2. Turn off power to the fixture.
3. Remove the fixture cover.
4. Detach power supply lead(s) from Emitter(s).
5. Squeeze the loops of the holding spring toward each other to release them from the lances.
6. Lift the holding spring away from the Emitter ceramic end.
7. Carefully remove the Emitter from fixture hole.
8. Grasp the new Emitter only at the ceramic end with the pins. Using care not to graze the Emitter wires against the inner edges of the fixture hole, carefully insert the Emitter into the

- hole. Ensure that the attached o-ring will sit between the ceramic end and the fixture base.
9. Lower the holding spring over the ceramic end. Firmly push the spring down until the o-ring is flat against the fixture base.
 10. Push down one of the spring loops and attach to the appropriate lance on the fixture base. Repeat for the other spring loop.
 11. Attach the power supply lead(s) to the Emitter(s), noting the arrow orientation on the emitter and connector. Do not force.
 12. ESE – Ensure that the fixture cover tabs properly fit into the fixture base grooves.
 13. Reattach the fixture cover and secure with the existing screw(s).
 14. Turn on power to the fixture.
 15. ESE only – The fixture can now operate by toggling the on/off switch to the on position.
 16. The Emitter should now emit a bright blue hue.

RIK Fixture Emitters

1. Turn off power to the fixture.
2. Remove ceramic end of emitter from the C-Clip.
3. Slide emitter out of the quick-slip fitting.
4. Grasp the emitter at the ceramic end with the pins.
5. Carefully wiggle the IP67 connector to disconnect from the emitter.
6. Grasp the new Emitter only at the ceramic end with the pins.
7. Push the ceramic end of the emitter into the IP67 connector, noting the arrow orientation on the emitter and connector. Do not force.
8. Slide the ceramic end of the emitter into the quick-slip fitting.
9. Push the ceramic end of the emitter into the C-Clip to hold into place.
10. Turn on power to the fixture.
11. The emitter should now emit a bright blue hue.

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.

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 hrs. of use.

For the U.S., Steril-Aire UVC Emitters are classified along with fluorescent lamps as Universal Waste. Large fluorescent lamp users should manage spent lamps in accordance with federal and state disposal laws. The recycling of spent lamps is encouraged. For a list of recyclers, please visit Lamprecycle.org.

For other countries, please follow local and country guidelines for fluorescent lamp disposal.

TROUBLESHOOTING

Symptom	Recommended Action (in order of priority)
Emitter Does Not Light	<ol style="list-style-type: none"> 1. SE/SEN/RSE fixtures only – Ensure that fixture cover is affixed to base and that it trips the interlock switch. 2. SE/RSE fixtures only – Ensure that on/off switch is set to <i>on</i>. 3. Turn off power for 10 seconds, and then turn power back on. 4. Replace Emitter with known working unit. Normal replacements recommended once per year. 5. Check line voltage. 6. Check wiring to Emitter. 7. Replace power supply.
Low Output (Radiometer Reading) <u>or</u> Visibly Weak Light	<ol style="list-style-type: none"> 1. Replace Emitter with known working unit. 2. Check line voltage. 3. Check wiring to Emitter.
Red/Orange 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.

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