Part Numbers: P103-RRPUVL-012, P103-RRPUVL-018

SAFETY CONSIDERATIONS

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

Untrained personnel can perform basic maintenance functions such as changing lamps. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit or accessory, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.

⚠️ WARNING
Before installing accessory or performing maintenance or service on accessory, turn off main power switch to unit. Electrical shock can cause injury or death. There may be more than one disconnect switch.

⚠️ CAUTION
Never expose eyes or skin to UV (ultraviolet) light from any source. Lamp must be off before entering HVAC (heating, ventilation, and air conditioning) unit to perform maintenance or service. Personal injury may result.

⚠️ CAUTION
Do not touch lamp glass without gloves. Wipe lamp clean after handling.

⚠️ CAUTION
The lamp contains a small quantity of mercury. If a lamp breaks, clean area and dispose of lamp with care.

GENERAL

Totaline’s Fusion Residential UV Germicidal Object Irradiator is designed to kill bacteria, viruses, mold, and fungus that may be found in a HVAC unit. The irradiator also eliminates odors that may develop. The high output, low temperature UV Germicidal Object Irradiator is preferably installed in the supply section over the coil. The Fusion UV Germicidal Object Irradiator is a simple and easy installation to an existing HVAC unit and incorporates a quick release mechanism to clean or replace the lamp. See Fig. 1.

The Fusion Residential UV Germicidal Object Irradiator can be used on 110-volt or 220-volt applications. Additional installation procedures are required for 220-volt installation. The

⚠️ CAUTION
If the drainpan is plastic, it must be protected with a reflective material, such as metal tape.

3. Ultraviolet light may damage certain plastics and exposed non-UV-C (Ultraviolet Radiation, C-Band) protected wires or drainpan. Wrap exposed plastic and wiring with aluminum tape or use metal conduit.
4. Remove the control box from its package. Open the cover of the box by loosening the screw 1 or 2 turns to the left. Swing cover open to allow mounting plate access.
5. Using the back plate as a template, mark off the four corner holes and the center of the 1-in. diameter lamp access hole to be cut in the plenum.
6. Drill the four corner holes 1/8-in. diameter and the 1-in.
hole.
7. Remove the protective paper from the foam on the back
so the unit will be properly sealed when installed.
8. Secure the control box to the plenum using four
no. 8 x 1/2-in. sheet metal screws.
9. Open the carton containing the lamp and remove the
Styrofoam packaging.
10. Insert front of the lamp through the center hole and
slowly insert lamp completely until the face of the metal
plate of the lamp touches the metal backplate and through
the two standoff screws. Turn the metal disc to the right
so the two elongated holes of the outer metal ring are
touching the screws. When in place, tighten the two
screws using a Phillips screwdriver.
11. Connect the ceramic white plug with the four colored
wires onto the lamp pins. The plug is designed so that it
can only be installed one way. You may have to rotate the
socket 90 degrees to line up the pins with the holes.
12. Close cover and secure by tightening the Phillips screw
on the right side.
13. To install the UV indicator plug, drill a 3/8-in. diameter
hole in the plenum return in the area around the installed unit.
14. Insert the indicator plug into this hole and push to lock
into place.
15. The Fusion UV Germicidal Object Irradiator can now be
plugged into a standard 110-volt receptacle for 100-volt
operation. For 220-volt operation, perform Step 16.
16. The Fusion UV Germicidal Object Irradiator is shipped
from the factory for 110-volt operation; for 220-volt
operation, perform the following:
   a. Move the ballast switch from the 110-volt setting to
      the 220-volt setting. The ballast switch is inside the
      Fusion UV Germicidal Object Irradiator and can be
      accessed with the cover open. Close the cover after
      changing position of switch.
   b. The 3-pronged plug cannot be used. Remove the
      plug. Strip the wires at the end of the cord and hard-
wire the cord into a 220-volt circuit or attach a
      220-volt plug.

NOTE: With 110-volt wiring, the white wire is neutral, the
green wire is ground, and the black wire is “hot,” carrying
the electricity. With 220-volt wiring, both the black and
white wires “hot,” and the green wire is neutral or ground.

OPERATION
To start the Fusion UV Germicidal Object Irradiator, simply
press the switch to | (on) position. The switch is illuminated to
show when power is on. Within a few seconds, the UV lamp
will energize. To ensure that the UV Germicidal Object Irradi-
ator is on, look at the indicator plug. It should be reflecting the
bluish color of the UV lamp. While lit, lamp color should be
light blue. If lamp color changes to red or flickers, replace the
lamp. Lamps that are not light blue will not emit ultraviolet
radiation and will not kill harmful bacteria or fungi.

MAINTENANCE
Disconnect all power before performing any maintenance
or service.

The ultraviolet lamp should be cleaned every two to three
months. Simply open the control box by loosening the Phillips
screw on the side. Disconnect the white socket from the lamp.
Slightly loosen the two screws that hold the lamp mounting
plate. Rotate the lamp to the left to disengage the head of the
screws and simply pull the lamp out. Be careful not to touch
the glass of the lamp with fingers. Clean the lamp with a soft
tissue and alcohol based solution. Reverse the above procedure
to reinstall the lamp.

Lamps need periodic replacement to maintain design speci-
fications. Replace lamps after 6000 hours of operation or
1 year, whichever comes first. Contact your dealer for replace-
ment lamps.