

AIR CLEANERS/ FILTERS

505,208M
6/2006

HEALTHY CLIMATE® GERMICIDAL LAMP

INSTALLATION INSTRUCTIONS HEALTHY CLIMATE® MODELS C1UVCL10B-1Y, C1UVCL10B-1G, C1UVCL10B-1J

General

The Healthy Climate® germicidal lamp emits ultraviolet (UVC) energy, which has been proven effective in reducing microbes such as viruses, bacteria, yeasts, and molds.

UVC germicidal lights greatly reduce the growth and proliferation of mold and other bioaerosols (bacteria and viruses) on illuminated surfaces.

Germicidal lamps are NOT intended to be used for removal of active mold growth. Existing mold growth must be appropriately removed PRIOR to installation of the germicidal light.

⚠ DANGER

Ultraviolet (UVC) Radiation Hazard.

Any exposure will cause significant eye damage and may cause skin damage.

Do not look into UV light source. Wear UV eye and skin protection. Access panels must be in place during appliance operation. Disconnect power to UVC appliance before general servicing of rooftop equipment.

Application

This device is designed to fit Lennox L Series package units LG/LC/LH 090-150.

This device is equipped with an LED status indicator. LED is on when UV light is on. (Refer to Fig. 4 for details.)

Unique Supplies

- Cotton cloth and gloves for handling and cleaning UVC lamp.
- 5/16" (8mm) drill bit



⚠ WARNING

Electric shock hazard.

Can cause injury or death.

Disconnect all remote electrical power supplies before servicing.

Access panels must be in place during the appliance operation.

Shipping and Packing List

Package 1 of 1 contains:

- 1 - Healthy Climate® germicidal unit
- 1 - UVC lamp
- 1 - Angled mounting bracket
- 1 - Coil access safety shield and interlock
- 1 - Blower access safety shield and interlock
- 1 - Control hat section
- 1 - Mounting hardware
- 1 - Aluminum foil tape roll
- 1 - Installation and maintenance instructions
- 1 - Wiring diagram
- 1 - Warranty sheet
- 1 - Registration card
- 2 - UVC Danger labels
- 2 - Electric shock hazard warning labels
- 1 - LED Notice label

Check parts for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

⚠ WARNING

Risk of property damage, injury, or death.

Installation, adjustments, alterations, service and maintenance must be performed by a qualified service technician.

⚠ WARNING

Potential Mold Spore Release.

Application of UVC lights to existing mold growth can cause respiratory irritation and allergic symptoms.

Do not use UVC lights where active mold growth exists. Remove active mold growth from surfaces prior to operation of UV lights.

⚠ NOTICE

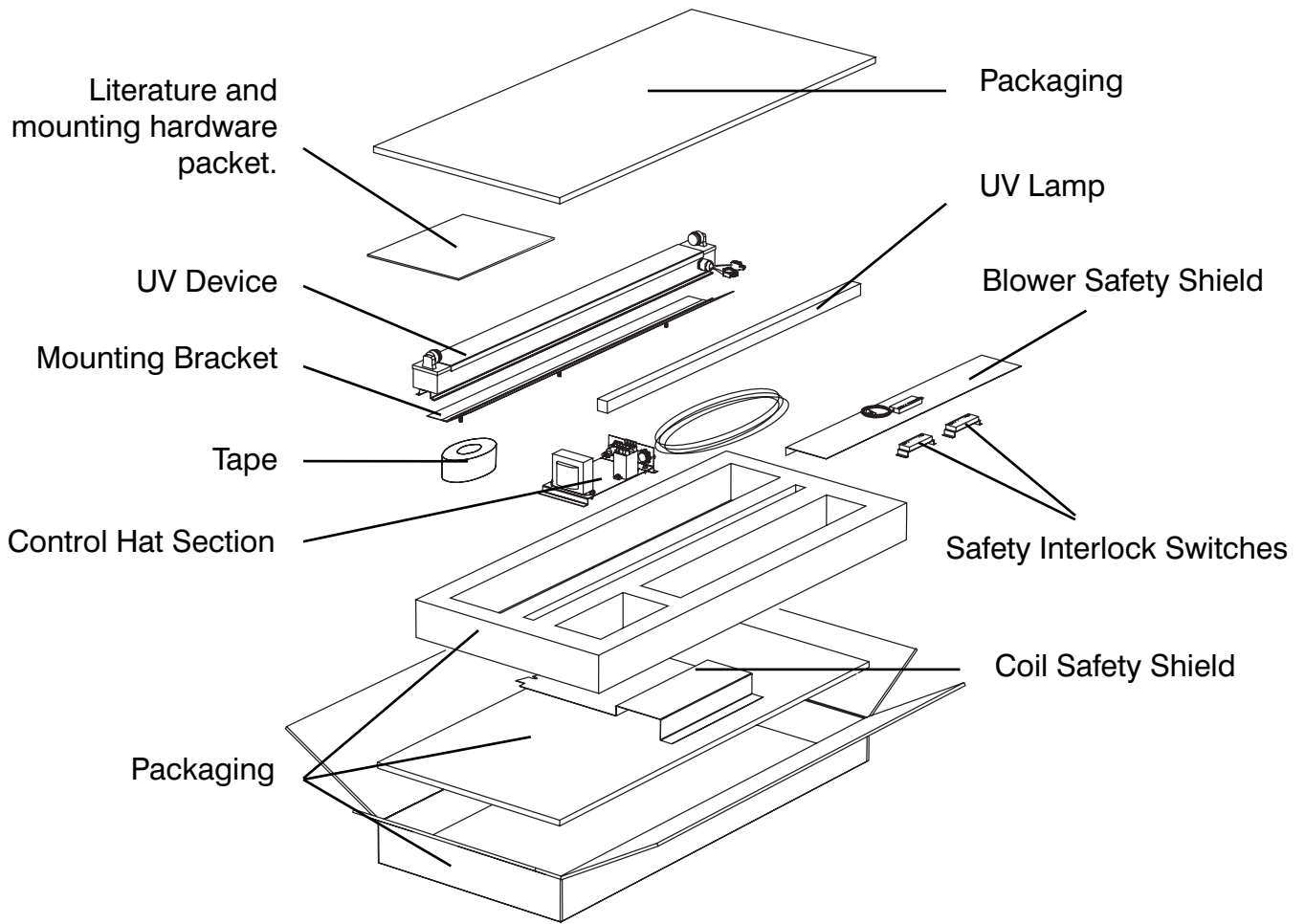
Potential odor emissions.

Odors may be present when some materials are exposed to UV light. These materials may include **Technicoated or E-Coated Coils**. Other materials may include chemicals, solvents, polymers and organic materials.

Some occupants may notice irritation or discomfort.

If odors are present, the UV Lights should be turned off and fresh air should be introduced into the occupied space immediately. Contact your Independent Lennox Dealer.

Unpacking List



Dimensions/Specifications

DIMENSIONS:

36.5" L x 2.5" W x 3.5" H
(927mm x 64mm x 89mm)

ELECTRICAL:

C1UVCL10B-1Y - 208/230V, 50/60Hz, 0.58A.

C1UVCL10B-1G - 460V, 60Hz, 0.58A.

C1UVCL10B-1J - 575V, 60Hz, 0.58A.

Use 600V, 10 amp, fast acting, fuse only.

DEVICE OPERATING TEMPERATURE:

5°F - 149°F (5°C - 60°C) Outside of duct.

Relative humidity: <95%.

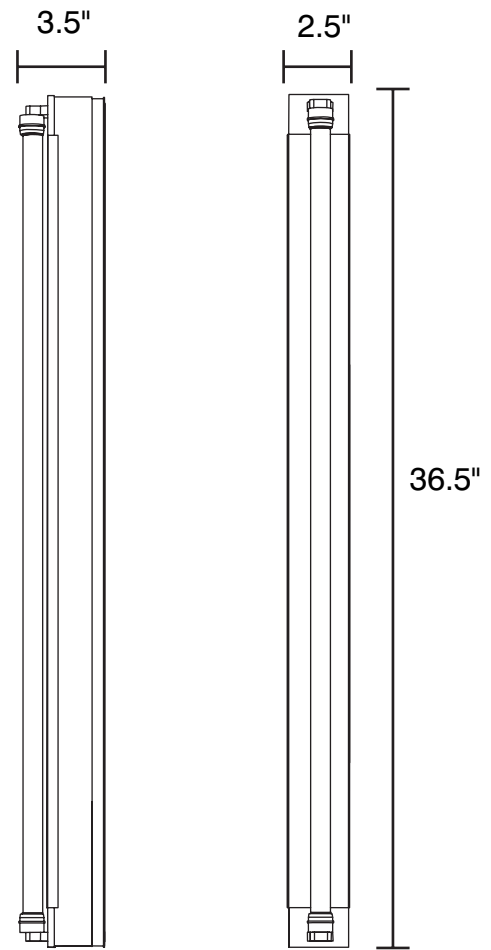
LISTINGS:

ETL Safety Listing File #2002554.

This device complies with FCC - CFR47 Part 18
Consumer (Class B).

U.S. Patent Nos. 5,334,347, 5,817,276, 6,245,293, 6,267,924,
6,280,686, 6,313,470, 6,627,000, 6,539,727, 6,932,494, 6,550,257.

Specifications subject to change without notice.



Parts Arrangement

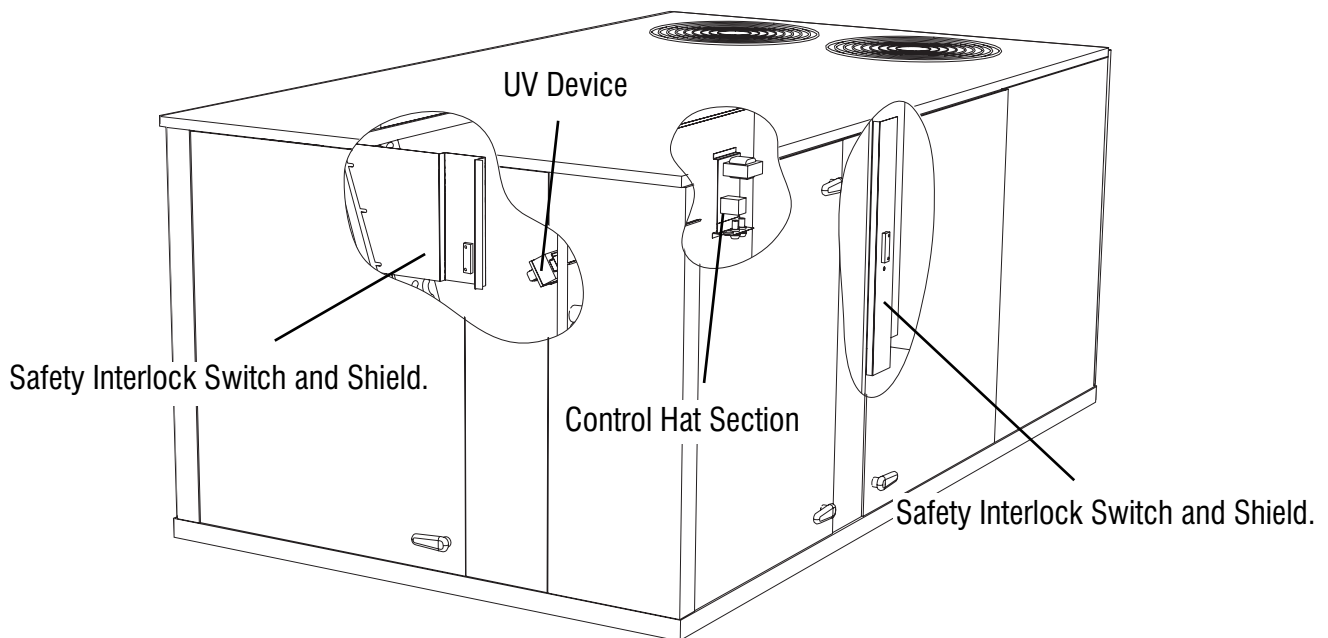


Fig.1 Part Arrangement

Installation

PREPARING THE INSTALLATION LOCATION

Before installing the device:

1. Turn off electrical power to rooftop unit.
2. Open coil, blower, and electrical access doors.

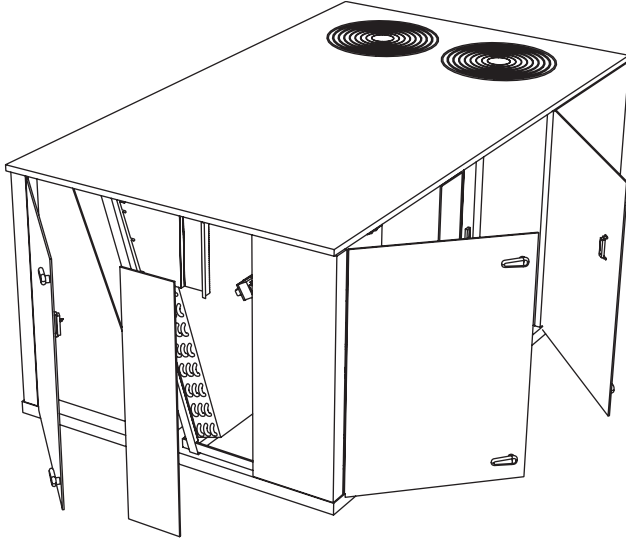


Fig. 2 Open access doors and panels.

UVC EXPOSURE PROTECTION (Fig. 3)

Use aluminum foil tape to protect plastic parts, wiring, and tubing insulation exposed to UVC light.

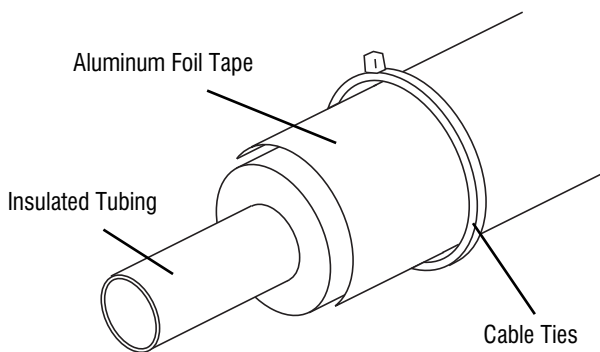


Fig. 3 Wrap exposed tubing insulation with foil tape and cable ties.

INSTALLING THE CONTROL HAT SECTION

1. Mount control hat section in the upper right corner of the electrical compartment using included mounting screws. (Fig. 4)

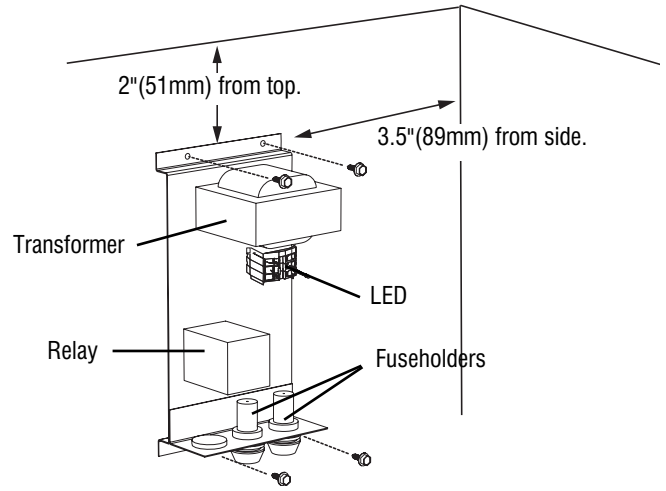


Fig. 4 Install control hat section.

DRILL MOUNTING BRACKET HOLES (Fig. 5)

Use 5/16" (8mm) drill bit to drill three (3) holes into electrical compartment wall to accept mounting bracket studs. **Note: Be sure to drill from the electrical compartment side only to avoid damaging wires, compressor lines, etc.**

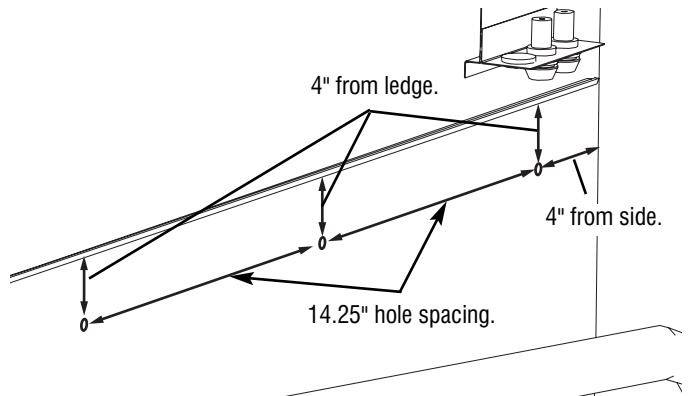


Fig. 5 Drill mounting bracket holes.

⚠ WARNING

Potential Risk of Fire.

Dust, lint and other debris may cause fire if allowed to come in contact with illuminated UVC lamp.

Remove any dust, lint or other debris from lamps and surrounding duct system.

⚠ CAUTION

Potential Risk of Degradation of Materials.

UVC light may damage plastics and rubber materials. May cause fabric discoloration.

Avoid UVC light exposure to plastic drain pans, wire insulation, flex duct or other plastic/rubber components.

Installation

INSTALLING THE MOUNTING BRACKET (Fig. 6)

With the holes drilled, install the mounting bracket on the inside of the coil compartment. Use the included nuts/washers to secure the mounting bracket to the compartment wall.

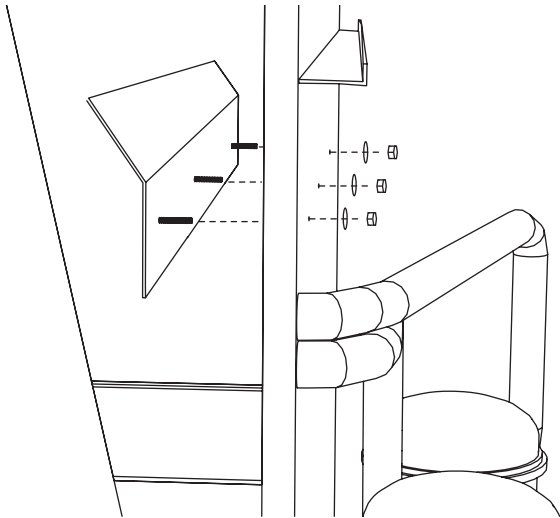


Fig. 6 Install mounting bracket

INSTALLING THE LAMP (Fig. 7)

To install the lamp, remove black plastic splash guards from device and place at both ends of the lamp. Then press lamp ends down onto connectors until each end clicks into place. **Note: Use cotton cloth to remove dirt and fingerprints from lamps.**

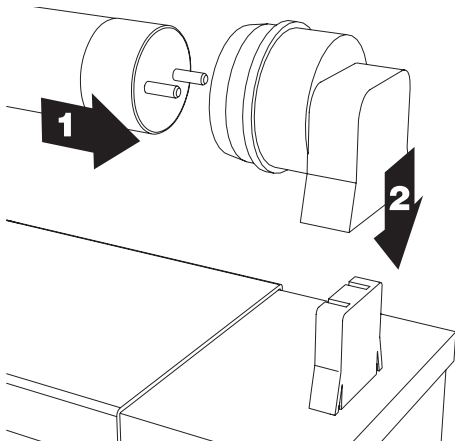


Fig. 7 Install plastic splash guards and snap each end of the lamp into place.

⚠ NOTICE

Clean lamps prior to installation using a cotton cloth to remove dirt and fingerprints.

Failure to clean lamp(s) could shorten the lamp(s) lifespan.

INSTALLING THE DEVICE (Fig. 8)

With the lamp installed, place the device onto the angled mounting bracket as shown.

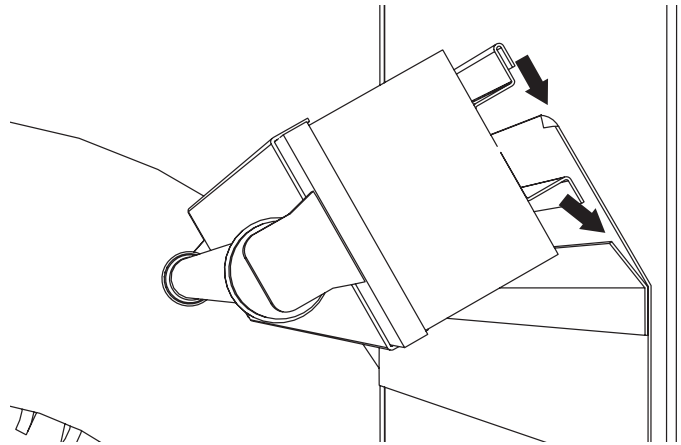


Fig. 8 Place device onto bracket.

⚠ DANGER

Ultraviolet (UVC) Radiation Hazard.

Any exposure will cause significant eye damage and may cause skin damage.

Do not look into UV light source. Wear UV eye and skin protection. Access panels must be in place during appliance operation. Disconnect power to UVC appliance before general servicing of rooftop equipment.

⚠ CAUTION

Sharp Edges Hazard.

Equipment sharp edges can cause injuries.

Use protective gloves when grasping equipment edges.

⚠ CAUTION

Lamp(s) Contain Mercury.

Ingestion or contact with mercury or mercury vapor is hazardous to your health.

Take care when handling lamps. If lamp is broken, avoid contact with mercury.

Installation

INSTALL SHIELDS

UV shields are installed in the coil and blower compartments.

1. Mount coil compartment shield to frame with included sheet metal screws. Mullion is in front of shield flange. (Fig. 9.)
2. Mount blower compartment shield to frame with included sheet metal screws. (Fig. 10.) Position shield to the top of the compartment. Be sure to route safety interlock switch cord through grommet.

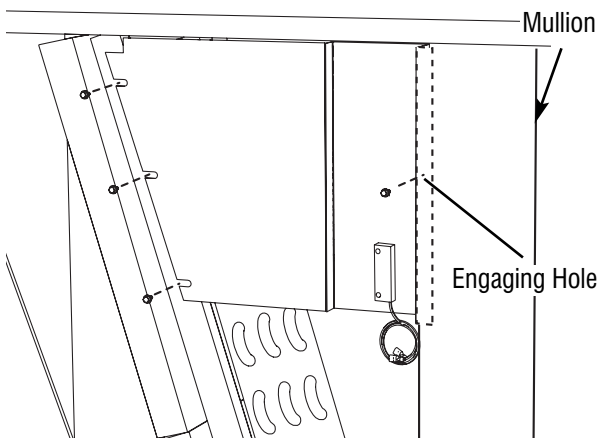


Fig. 9 Mount shield in coil compartment.

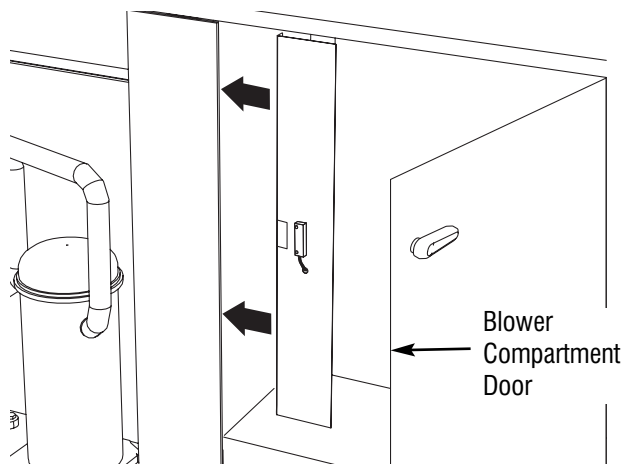


Fig. 10 Mount shield in blower compartment.

INSTALL SAFETY INTERLOCK ACTUATORS

The safety interlock actuators mount so that power to the device is automatically disconnected anytime the access door is opened.

Mount the remote safety interlock actuators to the blower and coil access doors using the included self drilling screws. (Fig. 11.)

Note: Actuators should be positioned directly across from the safety interlock switches when the doors are closed.

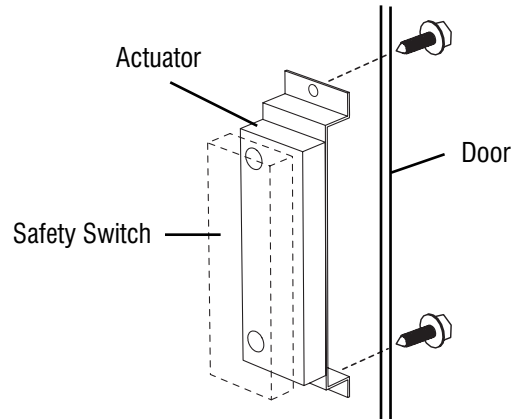


Fig. 11 Mount safety interlock actuators to access doors.

⚠ WARNING

Electrical Safety Hazard.

Can cause injury or death.

Do not alter power cord. Any alteration is a violation of ETL and UL listing and will void the Lennox warranty.

Installation

CONNECT HARNESS

Route harness through existing knockouts between the coil compartment, blower compartment, and electrical compartment. Use included wire ties to secure harness to existing wiring. (See Fig. 12.)

Connect white wire to L1 of compressor contactor. Connect red wire to L2 of compressor contactor. Connect purple wire and gray wire to TB34 low voltage terminal. (See Fig. 13.) (Refer to wiring diagram included separately.)

Connect UVC device to harness.

Connect safety interlock switches. Use Included jumper wire to connect safety interlock switches together. Then connect to harness. (See Fig. 14.)

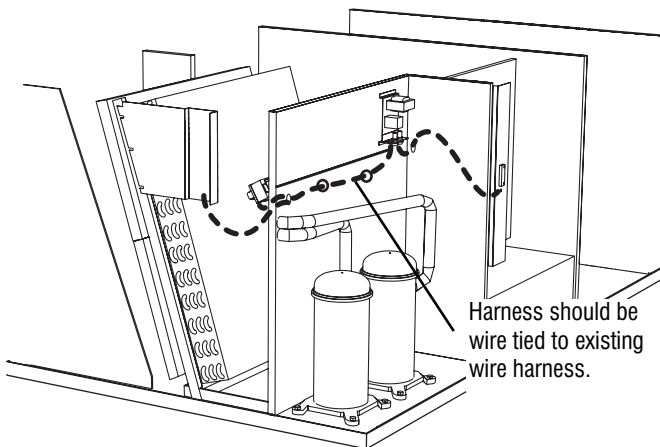


Fig. 12 Connect harness.

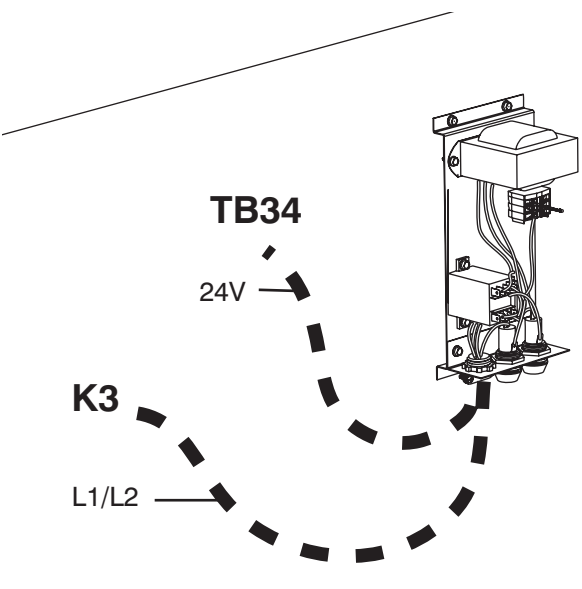


Fig. 13 Connect to TB34 and K3 terminals.

Harness from control hat section.

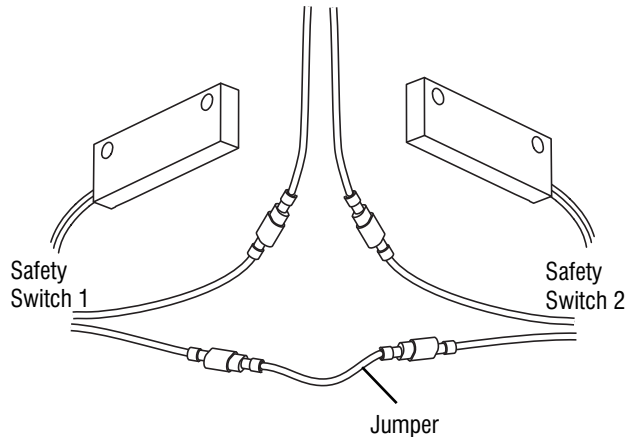


Fig. 14 Connect safety interlock switches to jumper and harness.

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Can cause injury or death.

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FINISH INSTALLATION

Apply wiring diagram and LED Notice label inside compressor compartment. (See Fig. 15.) Surface must be clean prior to applying label.

Close all access panels/doors and connect power.

Apply UVC Danger and Electric Shock Hazard labels to blower access panels so they are clearly visible. (See Fig. 16.) Surface must be clean prior to applying label.

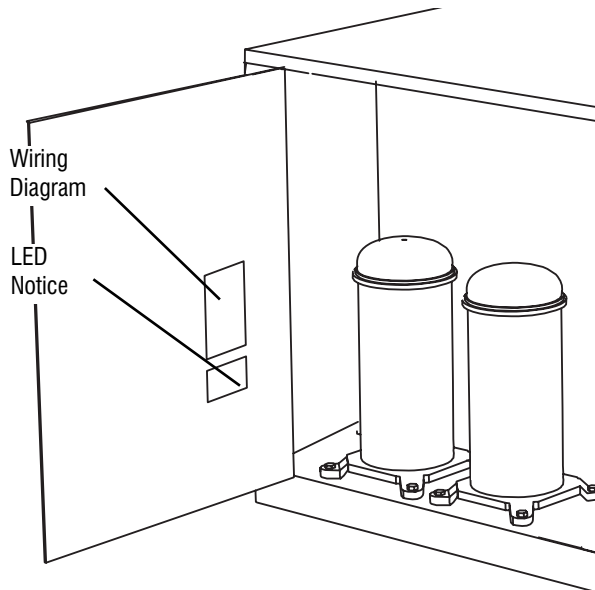


Fig. 15 Apply wiring diagram and LED notice labels.

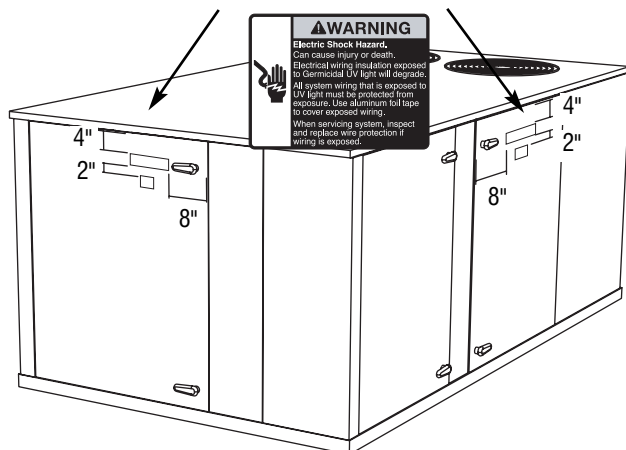
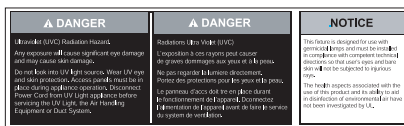


Fig. 16 Apply UVC and shock hazard warning labels.

Maintenance

For all maintenance, contact a qualified HVAC technician.

IF THE LED DOES NOT ILLUMINATE

1. Check for proper power.
2. Check lamp for proper connection.
3. Check safety interlock switches.
4. Check fuses.

LAMP REPLACEMENT(Annually)

The lamp should be replaced annually even if it appears to be operating normally. UVC energy production diminishes over time.

1. Turn off power to the unit.
2. Open the coil access door.
3. Remove coil access panel.
4. Disconnect device power and LED cords.
5. Pull device out of mounting bracket.
6. Pull up at each end of the lamp to disengage the lamp from the connectors.
7. Remove splash guards at each end of old lamp and place on new lamp. (See page 5.)
8. Place ends of new lamp over each connector and snap in place. Be sure to clean lamp of dust and fingerprints.
9. Slide device into mounting bracket.
10. Reconnect device power and LED cords.
11. Replace coil access panel.
12. Close coil access door.
13. Turn on power to the unit.

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LAMP DISPOSAL

Hg-LAMP CONTAINS MERCURY.

Manage in accord with disposal laws.

Refer to www.lamprecycle.org or call 1-800-9-LENNOX.

PROPER CLEAN-UP TECHNIQUE IN CASE OF LAMP BREAKAGE

- Wear protective gloves, eyewear and mask.
- Sweep the broken glass and debris into a plastic bag, seal the bag, and dispose of properly. Contact your local waste management office for proper disposal.
- **Do not use a vacuum cleaner. Do not incinerate.**

Replacement Parts

Description	C1UVCL10B-1Y	C1UVCL10B-1G	C1UVCL10B-1J
UVC Lamp	X7623	X7623	X7623
Transformer	-	96M07	96M08
Relay	67K65	67K65	67K65
Ballast	X7625	X7625	X7625
Safety Switch	64X53	64X53	64X53

Contact your local Lennox dealer to order replacement parts. For the Lennox dealer nearest you, dial 1-800-9-Lennox. Visit us at <http://www.Lennox.com>

WARNING

Personal Burn Hazard.

Personal injury may result from hot lamps.

During replacement, allow lamp to cool for 10 minutes before removing lamp from fixture.

WARNING

Potential Risk of Fire.

Dust, lint and other debris may cause fire if allowed to come in contact with illuminated UVC lamp.

Remove any dust, lint or other debris from lamps and surrounding duct system.

CAUTION

Lamp(s) Contain Mercury.

Ingestion or contact with mercury or mercury vapor is hazardous to your health.

Take care when handling lamps. If lamp is broken, avoid contact with mercury.