SUPPLEMENTAL INSTRUCTIONS

8620-344 Q-TEC[™] UV-C LED Field Kit

\land WARNING

Electrical shock hazard.

Disconnect the remote electric power supply or supplies before servicing.

Failure to do so can result in serious injury or death.

A WARNING

Exposed moving parts.

Disconnect all electrical power before servicing.

Failure to do so can result in severe injury or amputation.

Sharp metallic edges.

Take care and wear appropriate protective devices to avoid accidental contact with sharp edges.

Failure to do so can result in personal injury.

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Ultraviolet band C (UV-C) 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, protect components with UV-resistant material such as aluminum foil, aluminum duct tape, metallic shields, etc.



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UV radiation hazard. Use only with shielding in place. Protect eyes and skin from exposure to UV light.

Overview

The UV-C field-installed light kit utilizes UV-C LED lighting technology to sterilize and improve overall air quality within an occupied space. UV-C exposure is proven to damage the DNA of microorganisms and render them inactive aiding in preventing the spread of diseases.



Bard Manufacturing Company, Inc. Bryan, Ohio 43506

www.bardhvac.com

Manual: 7960-911A Supersedes: 7960-911 Date: 3-14-22

Product Specifications

Model		
Olympia UV-C Light F15T5-15W-UVC-DL		
Electrical Specs		
Input Voltage	120-277VAC	
Power Consumption	15W	
Frequency	50/60Hz	
Dimensional Specs		
Unit Dimensions	15-1/8" L x 3/4" H x 1" D	
Weight	1 lb	
Performance		
Irradiance	170µW/cm ²	
UL Listing and Certifications		
Compliance and Certifications	UL 1598	
	CSA C22.2#250.0	
	UL 8750	
	UL 2043	
	CE	
	RoHS Directive	
"UV-C LED Light Bar Installed" Label 7961-622-0375 is located near unit serial plate		

Dimensions

\land WARNING

UV-C exposure can cause burns to skin and damage eyes.

Ensure proper safety precautions are taken during installation.

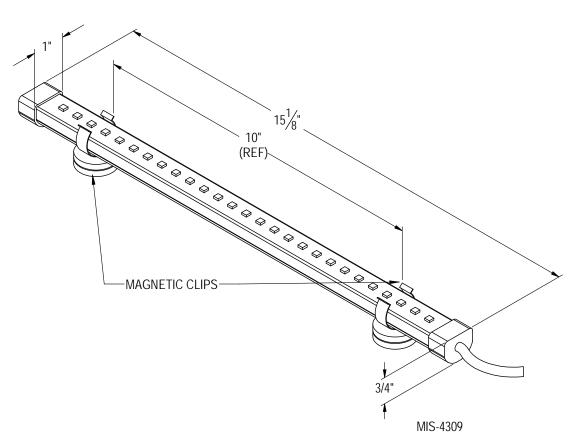
A trained, experienced technician must install the UV-C field kit.

Personal Protective Equipment (PPE)

UV radiation is absorbed by clothing, plastic or glass. Once absorbed, the UV radiation is no longer active. Wear UV goggles or face shield. Cover any exposed skin with coats, gloves, etc.

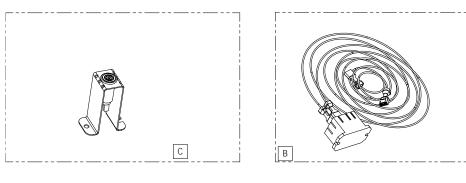
UV-C band light spectrum is not visible to the eye.

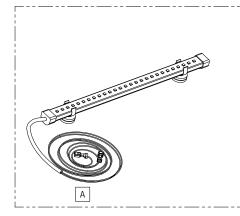
- **NOTE:** The health aspects associated with the use of this product and its ability to aid in disinfection of environmental air have not been investigated by UL.
- **NOTE:** Color shift or chalking may occur without affecting structural properties.

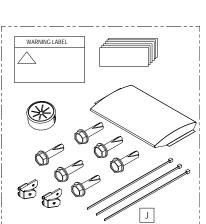


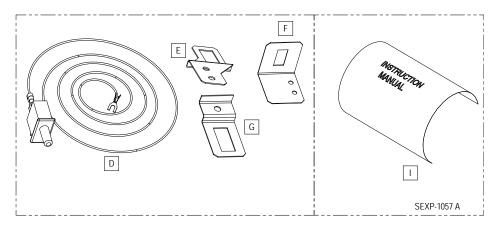
Parts List

Reference Letter	Bard P/N	Description	Qty.
A	910-2181	15" UV-C Assembly	1
В	910-2182	Relay Assembly	1
С	910-2183	Red Indicator Light Assembly	1
D	910-2184	Door Panel Switch Assembly (Interlock Safety Device)	1
E	113-908	Bracket (WH/Q-TEC Q**H/A4 Units)	1
F	113-909	Bracket (I-TEC Units)	1
G	113-913	Bracket (Q-TEC Units)	1
I	Per Model	Supplemental Instructions Manuals and Wire Diagrams	4/2
J	400-0467	Parts Bag – Two (2) Multiplier Terminals, Six (6) Screws, Three (3) Zip Ties, Six (6) Pieces of Foil Tape, Bushing, UV-C Warning Label and "UV-C LED Light Bar Installed" Label	1









Installation

Field-supplied tools needed:

- Appropriate personal protection equipment, including gloves and safety glasses
- Electrical meter to verify power status
- Drill
- Phillips head screwdriver
- 5/16" nut driver

Installation Procedure

- 1. Disconnect all power to HVACR unit. Use the meter to verify that power has been disconnected.
- 2. Open front doors and remove/open inner control panel cover.
- 3. Remove blower housing cover (large upper panel).
- 4. Attach two (2) magnetic clips to the UV light assembly (see **Dimensions** drawing on page 2).
- 5. Install UV light assembly onto wire channel to the right of the blower assembly with the attached magnetic clips (see Figure 1).
- 6. Route wires into control panel through upper right bushing as shown in Figure 1.
- Connect red wire from UV light assembly to "NO" contact on the relay assembly (see Field Installation Diagram on page 9).

8. Determine unit supply voltage—located on the unit serial plate. Connect black wire from UV light assembly to:

(230V-1PH) – "L2" (230V-3PH) – "L3" (460V-3PH) – Terminal block. If terminal block is full, remove another wire and use a multiplier supplied with kit. Reconnect both wires.

See Field Installation Diagram on page 9.

9. Connect red wire from "COM" on relay assembly to:

(230V-1PH) – "L1" (230V-3PH) – "L1" (460V-3PH) – Terminal block. If terminal block is full, remove another wire and use a multiplier supplied with kit. Reconnect both wires.

See Field Installation Diagram on page 9.

- 10. Connect short orange wire from relay assembly to indicator light assembly.
- 11. Connect short black/white wire from relay assembly to indicator light.
- 12. Install relay and indicator light assemblies in control panel using self-drilling screws provided (see Figure 2 model is noted above image).
- 13. Install door panel switch into corresponding Q-TEC mounting bracket (see Figure 3 on page 6 model is noted above image). Door panel switch acts as interlock safety device to disable UV light source upon removal of blower access panel preventing UV exposure.

FIGURE 1 Install UV Light Assembly and Route Wires

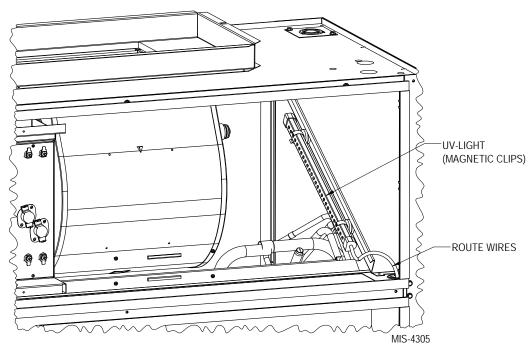
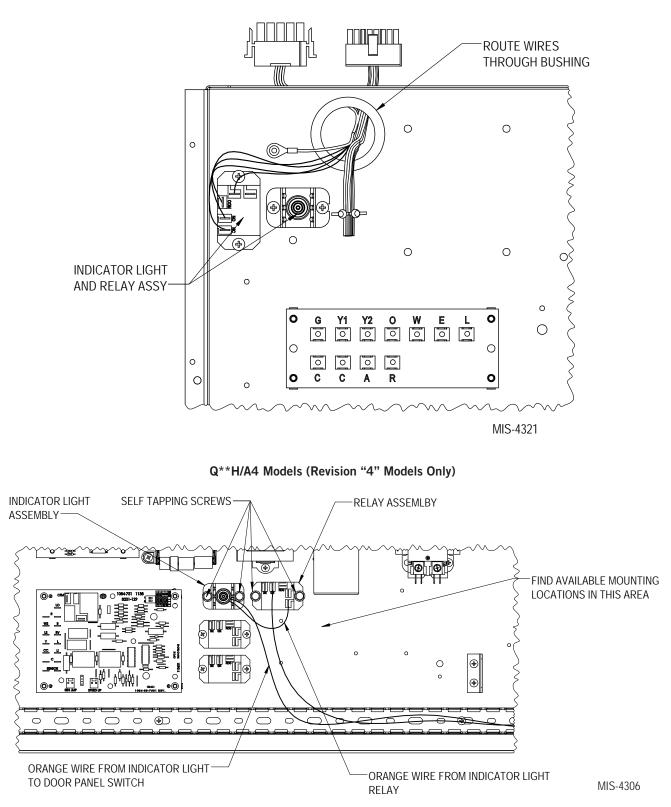
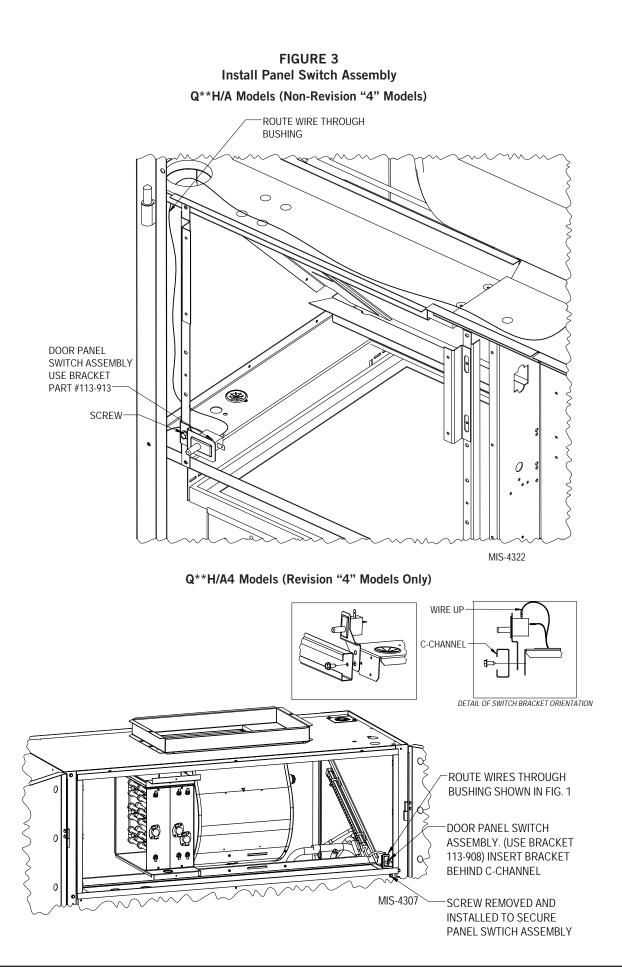


FIGURE 2 Install Relay and Indicator Light Assemblies

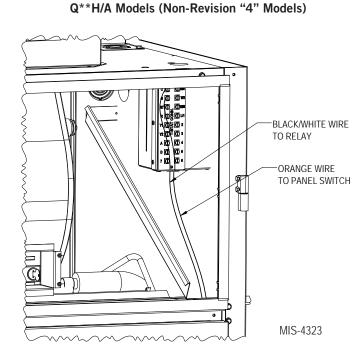
Q**H/A Models (Non-Revision "4" Models)



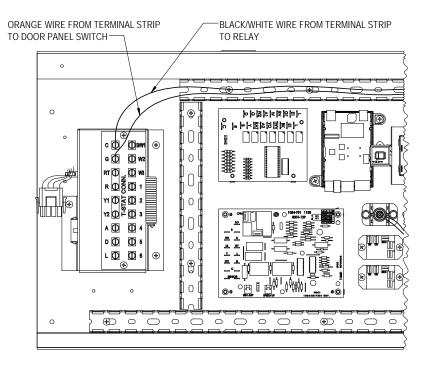


- 14. Install panel switch as shown in Figure 3. Model is noted above image. Route orange wire into control panel bushing.
- 15. Route long orange wire from relay assembly through control panel bushing and connect to "NO" contact on panel switch assembly.
- 16. Seat spade end of orange wire from panel switch assembly under the "G" terminal on low voltage strip assembly, then seat spade end of black/white wire from coil on relay assembly under the "C" terminal on low voltage strip (see Figure 4 – model is noted above image).











17. Wires can be dressed with provided zip ties or by tucking into wire channels. Ensure wires are secured away from sharp edges and moving parts to prevent damage.

Cover wires and plastic components within a distance of 6" of the UV light with foil tape to create a protective barrier from the UV light.

18. UV light will not function without blower panel installed because of door panel switch (interlock safety switch). Do NOT press door panel switch with blower panel removed as the UV source could become active and create UV exposure.

Replace blower access cover (large upper panel).

Adhere UV-C Warning Label 7961-963 to blower access panel.

Adhere "UV-C LED Light Bar Installed" Label 7961-622-0375 to unit serial plate. (Serial plate is silver and located on the exterior of the unit cabinet or on a service panel with "5253-039-XXXX" printed in the lower right corner.) 19. Now that blower panel is installed, UV light operation can be safely verified. Restore power to unit and provide a "G" call signal from the thermostat. Operation can be confirmed if indicator light installed in Step 7 is ON in control panel.

Do NOT attempt to look at UV source to confirm operation!



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UV radiation hazard. Use only with shielding in place. Protect eyes and skin from exposure to UV light.

- 20. Disconnect power to unit. Replace all inner and outer panel covers.
- 21. Restore power to unit.

FIGURE 5 Field Installation Diagram

