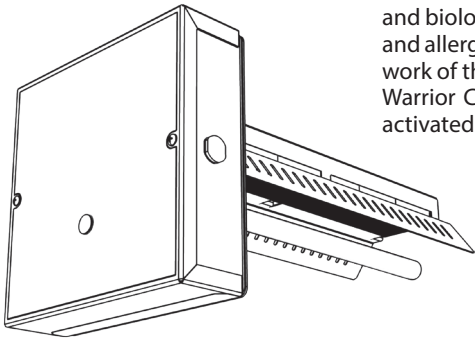


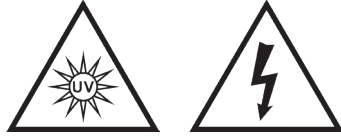


IN-DUCT CARBON AIR PURIFIER INSTALLATION GUIDE

Warrior Carbon reduces odors (volatile organic compounds) and biological contaminants such as mold, bacteria, viruses, and allergens in indoor air. The system is installed in the duct work of the central air system. The award-winning design of Warrior Carbon uses a unique combination UVC light and activated carbon cells to clean the air.



US patent #7,704,463



IMPORTANT!

- Only qualified technicians should install this product*
- Install in accordance with relevant building codes
- Read instructions carefully including safety warnings

WARNING!

PROTECT EYES FROM UV LIGHT
TURN OFF UNIT OR DISCONNECT
BEFORE SERVICING

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1 Installation Notes

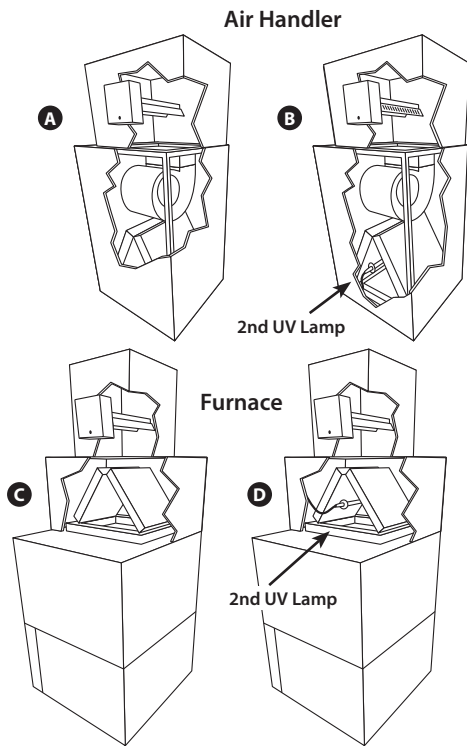
Warrior Carbon is usually installed on the supply side duct just above the air system but can also be installed on the return side if necessary.

The Warrior Carbon unit should be oriented so that the air flows past the UV Light first then into the Matrix Element.

If a second optional UV lamp is used (Warrior Carbon Dual) select a location inside the air system that will allow it to shine on the greatest surface area or the area with the most evident microbial growth. To install the secondary UV light use the Optional 2nd Remote UV Light Installation Instructions provided with Warrior Carbon Dual.

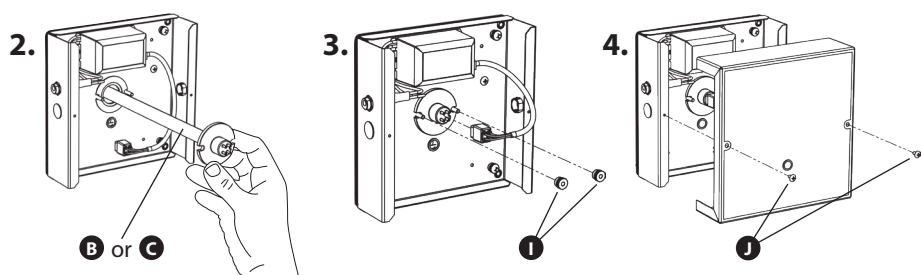
Typical installations include:

- A** Warrior Carbon single in air handler
- B** Warrior Carbon dual in air handler
- C** Warrior Carbon single in Furnace
- D** Warrior Carbon dual in Furnace



3 Attach Power Unit to Duct & Mount UV Lamp

1. Fit the Warrior Carbon Main Unit through hole in duct. Attach directly to metal duct using (4) Self-tapping Screws. If the Backing Plate is used (for duct board etc.) fit the unit over the threaded posts and use (4) Quick Nuts to secure it.
2. Insert UV Lamp.
3. Mount UV Lamp using (2) Quick Nuts and attach lamp connector (be sure to align the four connector pins).
4. Attach the cover with machine screws.



IMPORTANT!

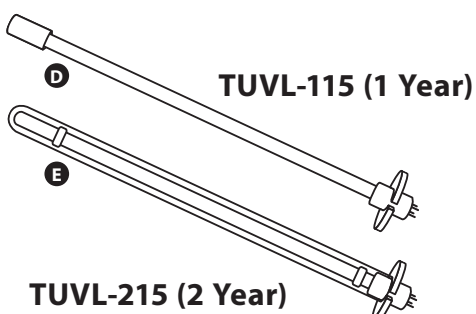
Systems with high 24 VAC loads may require the installation of a separate 24 VAC transformer to power the UV light.

Always use a separate 24 VAC transformer with "communicating" air systems and all Warrior Carbon Dual (WRA-DER) models.

Draws 16 VA, may need to do load calculation: Volts under load X Amps under load.

5 Lamp Replacement

The germicidal UV lamp in Warrior Carbon needs to be replaced periodically. TUVL-115 lamps should be replaced every year. TUVL-215 should be replaced every 2 years. Note: UV lamps will continue to emit visible light but lose germicidal effectiveness over time. You can upgrade to a 2 year lamp with your existing Warrior Carbon Power Unit.



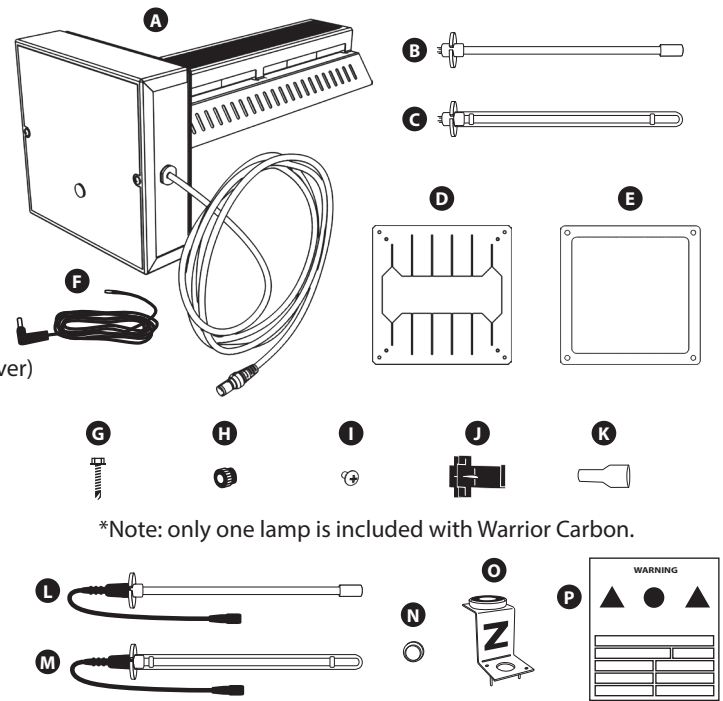
CAUTION!

UV lamps contain small amounts of mercury - dispose of lamps in accordance with local environmental regulations. For more information visit www.lamprecycle.org

Note: Use of replacement UV lamps other than those above voids warranty.

Parts List

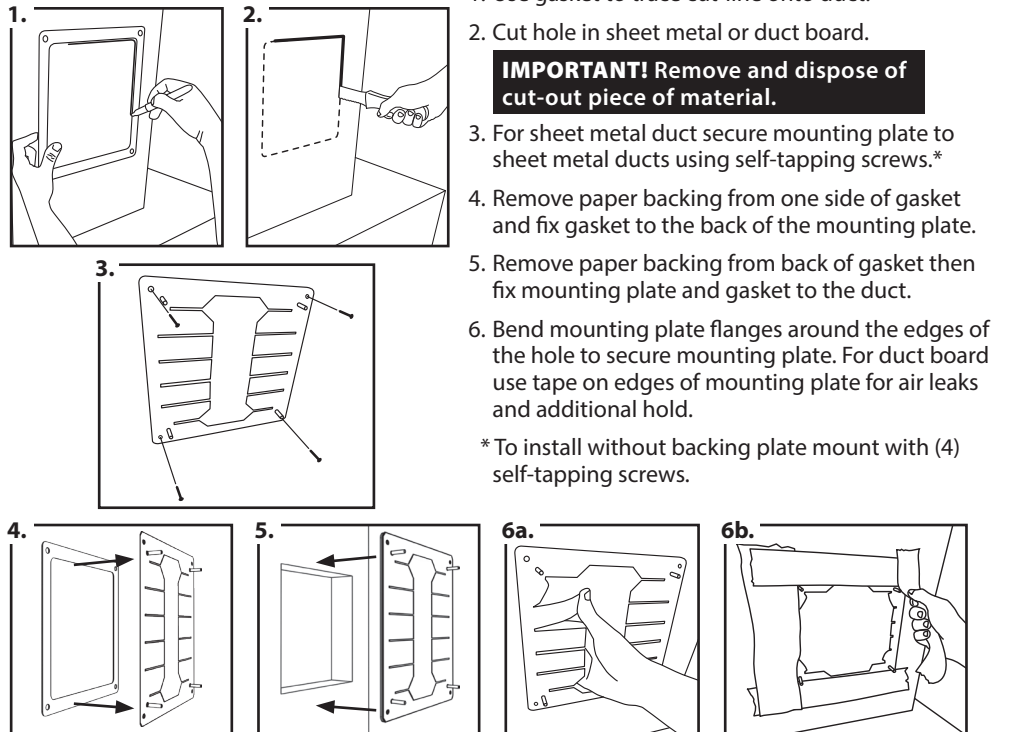
- A** Main Unit
- B** UV Lamp 1 Year*
- C** UV Lamp 2 Year*
- D** Duct Plate
- E** Gasket
- F** Power Cord (ER Model)
- G** Self-tapping Screws
- H** Quick Nut (plastic)
- I** Machine Screws (on cover)
- J** Tap-in Connector
- K** Spade Connector
- L** Optional Remote UV Lamp 1 Year
- M** Optional Remote UV Lamp 2 Year
- N** Sight Glass
- O** "Z" Mounting Bracket
- P** Warning Sticker



*Note: only one lamp is included with Warrior Carbon.

Note: lamp **L** or **M** and parts **N O P** are included with Warrior Carbon Dual.

2 Duct Mounting



1. Use gasket to trace cut-line onto duct.

2. Cut hole in sheet metal or duct board.

IMPORTANT! Remove and dispose of cut-out piece of material.

3. For sheet metal duct secure mounting plate to sheet metal ducts using self-tapping screws.*

4. Remove paper backing from one side of gasket and fix gasket to the back of the mounting plate.

5. Remove paper backing from back of gasket then fix mounting plate and gasket to the duct.

6. Bend mounting plate flanges around the edges of the hole to secure mounting plate. For duct board use tape on edges of mounting plate for air leaks and additional hold.

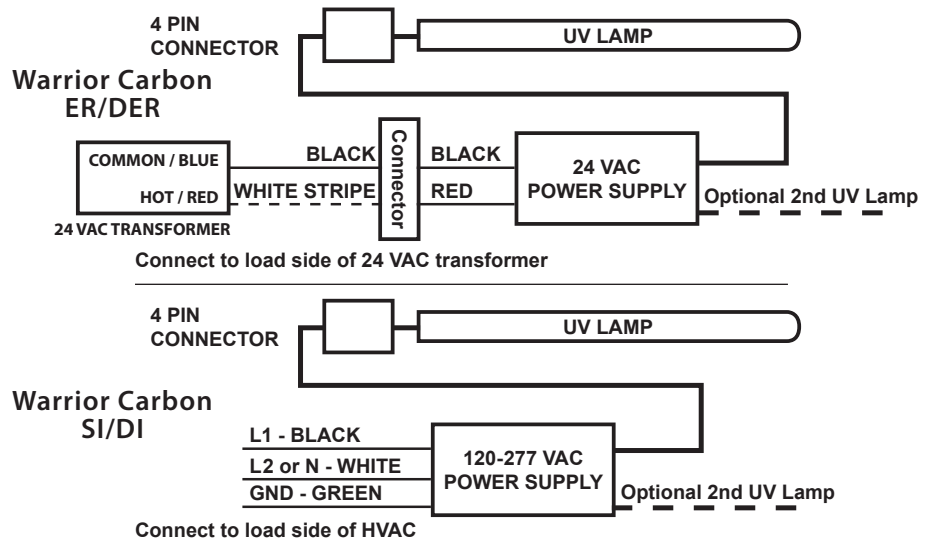
*To install without backing plate mount with (4) self-tapping screws.

4 Connecting to Power

IMPORTANT

Before connecting to power confirm which Warrior Carbon model is being installed. Turn off main power source before installation. Model information is printed on the Power Unit cover.

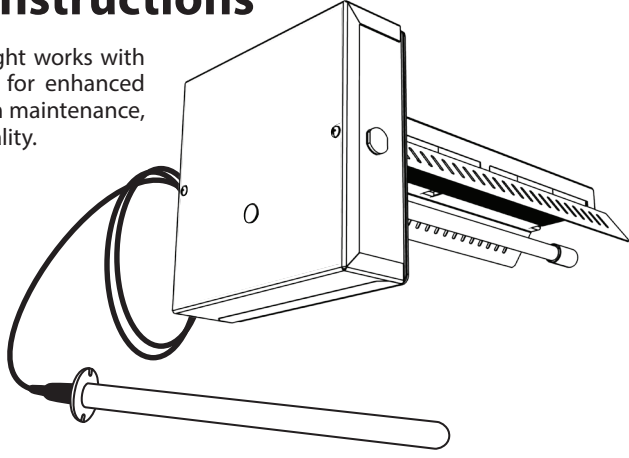
IMPORTANT! Must be wired to constant power - do not connect to blower relay.



Register your product at:
www.iaqwarranty.com

Optional 2nd Remote UV Light Installation Instructions

The optional Remote UV Light works with the Warrior Carbon system for enhanced disinfection, reduced system maintenance, and improved indoor air quality.



IMPORTANT!

- Dual lamps are wired in series - both must be connected for lamps to light
- Only qualified technicians should install this product
- Install in accordance with relevant building codes
- Read instructions carefully including safety warnings

Installation Notes

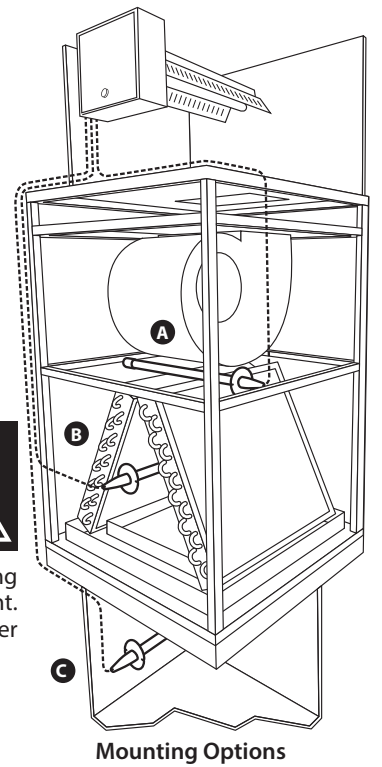
Before installing the Remote UV Light it is necessary to determine the optimal mounting location inside the air system. First, look for the area with the heaviest mold growth. Also consider a location that will allow the germicidal UV light to shine on the greatest surface area.

Some typical mounting locations:

- A** Across top of coils
- B** Coil "A" plate
- C** Return-side duct

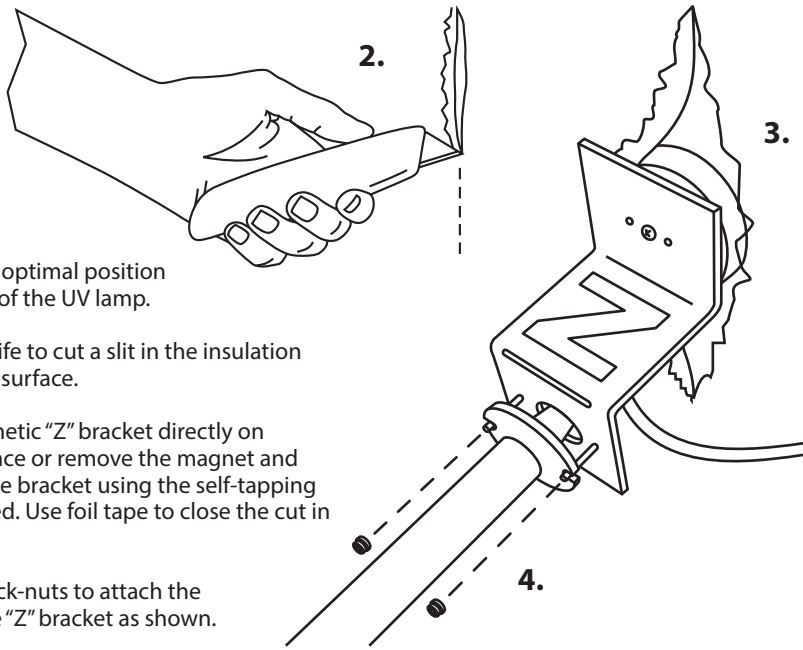


Important: some materials inside the air system (including filter media, flex duct, wiring etc.) may not be UV light resistant. Use the optional UV shield (part #TUV-SHIELD-LPC) or cover the materials with reflective tape.



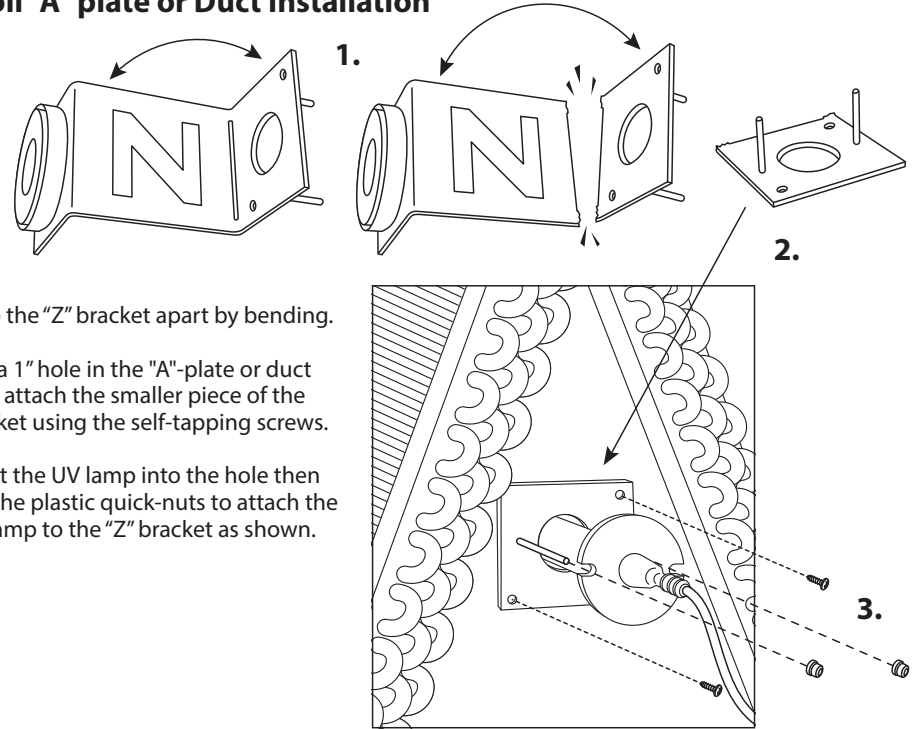
Mounting Options

1 Air Handler Interior Surface Installation



1. Determine the optimal position for placement of the UV lamp.
2. Use a utility knife to cut a slit in the insulation on the interior surface.
3. Place the magnetic "Z" bracket directly on the metal surface or remove the magnet and hard-mount the bracket using the self-tapping screws provided. Use foil tape to close the cut in the insulation.
4. Use plastic quick-nuts to attach the UV lamp to the "Z" bracket as shown.

2 Coil "A" plate or Duct Installation

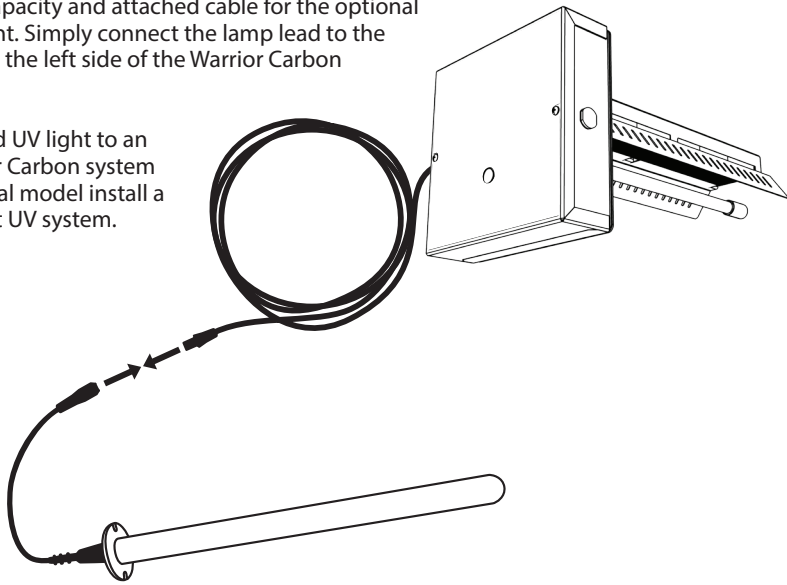


1. Snap the "Z" bracket apart by bending.
2. Drill a 1" hole in the "A"-plate or duct then attach the smaller piece of the bracket using the self-tapping screws.
3. Insert the UV lamp into the hole then use the plastic quick-nuts to attach the UV lamp to the "Z" bracket as shown.

3 Remote UV Light Configuration

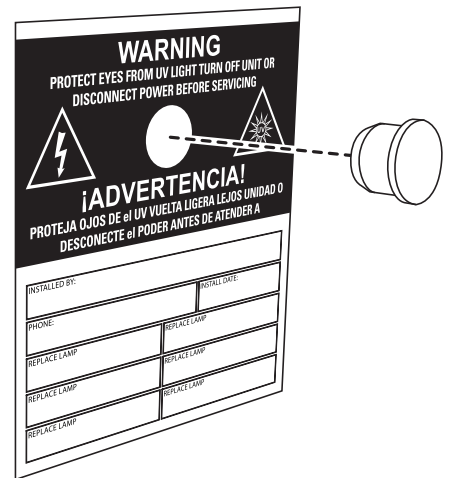
IMPORTANT! Only the Warrior Carbon Dual model has the electrical capacity and attached cable for the optional Remote UV Light. Simply connect the lamp lead to the power cable on the left side of the Warrior Carbon Power Unit.

To add a second UV light to an existing Warrior Carbon system that is not a Dual model install a separate Patriot UV system.



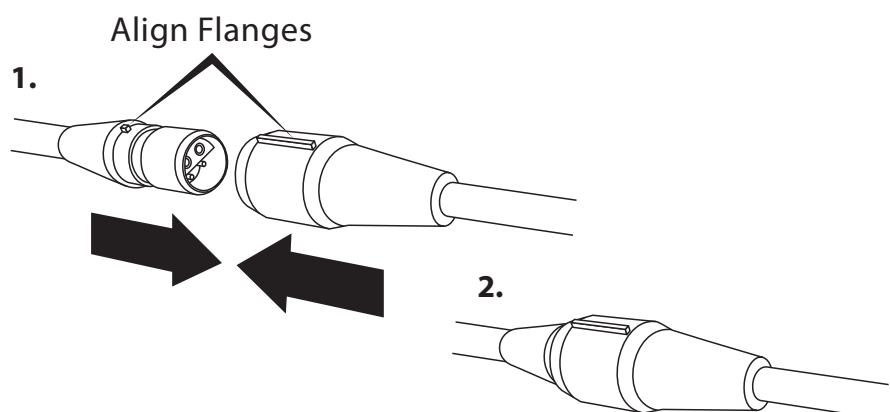
4 Sight Glass Installation

1. Find a suitable location on the outside of the duct-work near the UV Lamp installation and apply the warning/lamp replacement sticker.
2. Drill a 1/2" hole through the orange circle on the sticker. Press the UV safety viewport into hole.
3. Turn on the power and use the sight glass to confirm that the UV Lamp is operating.



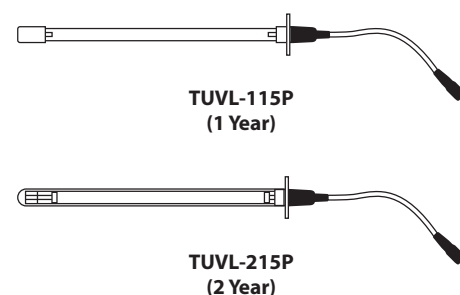
5 Remote UV Lamp Connection

1. When all the other components are properly installed connect the UV Lamp cable to the Warrior Carbon Power supply cable.
2. Make sure the flanges are aligned and then push the connectors firmly together. A tight connection ensures a proper water-resistant seal.



6 Lamp Replacement

The germicidal UV lamp in the Remote UV Light needs to be replaced periodically. A TUVL-115P lamp should be replaced every year. The TUVL-215P should be replaced every 2 years. Note: UV lamps will continue to emit visible light but lose germicidal effectiveness over time. You can upgrade to a 2 year with your existing power supply.



Hg CAUTION! UV lamps contain small amounts of mercury - dispose of lamps in accordance with local environmental regulations. For more information visit www.lamprecycle.org