

TROUBLESHOOTING

If the unit does not work, check the following:

Electrical Supply/Wiring—Verify that the electrical service is operating correctly.

Ballast—If lamp still is not illuminating check the wiring to the ballast. If the ballast is wired properly and the lamp still does not illuminate, replace the ballast. With a fully electronic ballast there is no resistance testing.

Lamp—Verify that the lamp is not broken and is properly seated in the lamp connector. To check this, follow steps in the 'Lamp Replacement' section with one exception : you should not remove and replace the lamp. If the lamp still does not light, rotate the lamp connector 180°, re-attach to lamp., close cover and turn power back on. If the lamp is broken read the 'Lamp Disposal' section of this manual.

SECOND WIND AIR PURIFIER LIMITED WARRANTY APPLIES IN U.S.A. AND CANADA

This Second Wind Model 2124/2124-REMOTE 24volt Air Purification systems that is attached to your Heating, Ventilation and Air Conditioning System (HVAC) has a Limited Lifetime unit warranty. **Units must be registered through www.secondwindairpurifier.com or contact Customer Service at 800-387-4565 to register your product.** Unregistered products will not receive warranty consideration.

ONE (1) YEAR COVERAGE LAMPS AND LIFETIME COVERAGE BALLAST

The lamps are warranted by Second Wind for a period of one (1) year from the date of the original installation. The ballast is warranted for the lifetime of the product when the unit is installed. Ballast warranty is not valid if unit is removed from original air handling system. This is effective only when installed and operated in accordance with Second Wind guidelines. If during these periods listed a lamp or ballast fails, Second Wind will provide a free replacement. You must pay shipping charges and all other costs of warranty service. Second Wind will not pay labor involved in diagnostic calls or in removing, servicing, or replacing parts. Second Wind recommends replacement of the UV lamp every 9,000 hours, the intensity of the lamps will diminish over time.

LIFETIME COVERAGE UNIT

The covered equipment and covered components are warranted by Second Wind for a Lifetime from the date of the original unit installation, when installed and operated in accordance with Second Wind recommendations. If during this period a covered component fails, Second Wind will repair or replace the part. You must pay shipping charges and all other costs of warranty service. Second Wind will not pay labor involved in diagnostic calls or in removing, servicing, or replacing parts.

REPAIRS

All repairs of covered components must be made with authorized service parts. Labor charges resulting from diagnostic calls or service are not covered by this warranty.

CARE OF EQUIPMENT

Your new Second Wind Purifier must be properly installed, operated and maintained in accordance with the unit installation, operation, and maintenance instructions provided with each unit. Failure to provide maintenance per Second Wind instructions will void warranty.

PRODUCT

Index:	Page
Product	2
Safety Procedures	2
Mounting Location	3
Tools	3
Installation	4,5
Lamp Replacement/Disposal And Parts List	6
Troubleshooting	7
Warranty	7 & 8

All Second Wind Air Purifiers are designed to for use in Heating and Air Conditioning air handling units. Second Wind air purifiers use ultraviolet germicidal light at a frequency of 254 nanometers to disinfect biological growth in return or supply air stream . Some key features of the 2124 & 2124-REMOTE model purifier are:

- Lamp lengths (14 inches)
- **24 VAC power supply**
- Improves efficiency, reduces maintenance
- High intensity lamps
- Over 16,000 hours lamp expectancy
- Lifetime unit warranty
- Lifetime ballast warranty
- 1 year lamp warranty

SAFETY PROCEDURES

Please read all instructions carefully to help ensure a correct and SAFE installation of your Second Wind Ultraviolet Germicidal Air Purifier. Failure to do so could damage the equipment or cause harm to yourself or others. Only qualified Heating Ventilation and Air Conditioning (HVAC) technicians should perform the installation.

READ ALL WARNINGS AND CAUTIONS

WARNING

Ultraviolet (UV) light can be harmful to eyes and skin, causing loss of sight and sunburn. When installing, do not put unit in an area that allows the UV lamp to be visible . Turn off electrical service before servicing unit.

Electrical shock hazard from 24Volt or 120/277 VAC may cause serious injury or death. Disconnect power before starting installation or maintenance.

Each UV lamp contains a small amount of mercury. In case of breakage use proper disposal techniques. (pg.6)

Wear protective gloves and safety glasses when handling lamp. To prevent injury, unplug lamp connector and allow to cool for 10 minutes before servicing.

CAUTION

1. Ultraviolet (UV) light can cause color shift or surface degradation and sometimes structural degradation of non-metallic components. Select mounting location that prevents exposure to plastic flexible duct components, polyurethane foam insulation material, rubber hoses, wire insulation, etc. If mounting options are limited, items above should be protected with ultraviolet resistant material such as aluminum foil, aluminum duct tape, or metallic shields.
2. Ultraviolet lamps
 - Do not install lamp inside coil.
 - Do not install lamp below any water source.
 - Failure to remove fingerprints from lamp could shorten lifespan. (clean with denatured alcohol)
 - Dispose of broken and replacement lamps at your local waste management office. For information on local disposal laws refer to www.lamprecycle.org

LAMP REPLACEMENT

The Second Wind 2124 Model Air Ultraviolet Germicidal Lamp is designed for 16,000 hours of continuous operation. After 16,000 hours intensity of the lamp inside the duct diminishes and should be replaced. Even if the lamp is still illuminated, replacement of the lamp is recommended by a qualified HVAC Service Technician.

- **The installation should be done by a qualified HVAC contractor.**
1. Disconnect or turn off electrical service
 2. Remove cover.
 3. Disconnect the lamp connector from the lamp base.
 4. Unscrew the nut for the lamp bracket and remove old lamp (**Be careful old lamp may still be hot !**).
 5. Replace the old lamp with the new lamp, making sure the new lamp is clean. Remove fingerprints and dirt with an alcohol wipe before installing in PCO module.
 6. Ensure ceramic end of lamp opposite connector pins securely rest in grommet end of PCO module. Secure lamp to unit with supplied 8-32 wing nut (Fig 4).
 7. Attach lamp connector to the lamp base.
 8. Close enclosure cover and screw tight.
 9. Turn on electrical service.

LAMP DISPOSAL

UV lamps contain mercury like other household lamps and must be disposed of properly. **State requirements and recycling opportunities vary, go to www.lamprecycle.org for State Regulations & Contacts.** Please contact your county waste collection department for proper disposal details.

USE GLOVES AND EYE PROTECTION

If a lamp is broken, **do not use a vacuum cleaner to pick up the waste** . Instead, sweep up the waste into a plastic bag and seal. Contact your county waste collection department for proper disposal details.

REPLACEMENT PARTS

- 14" SIPT replacement lamp102-944
- Ballast replacement.....2414EL-R (2124)
2414L-R (2124 REMOTE)
- Duct Board Kit f/ 2124.....102-945
- Lamp Connector.....102-411

Mounting Locations

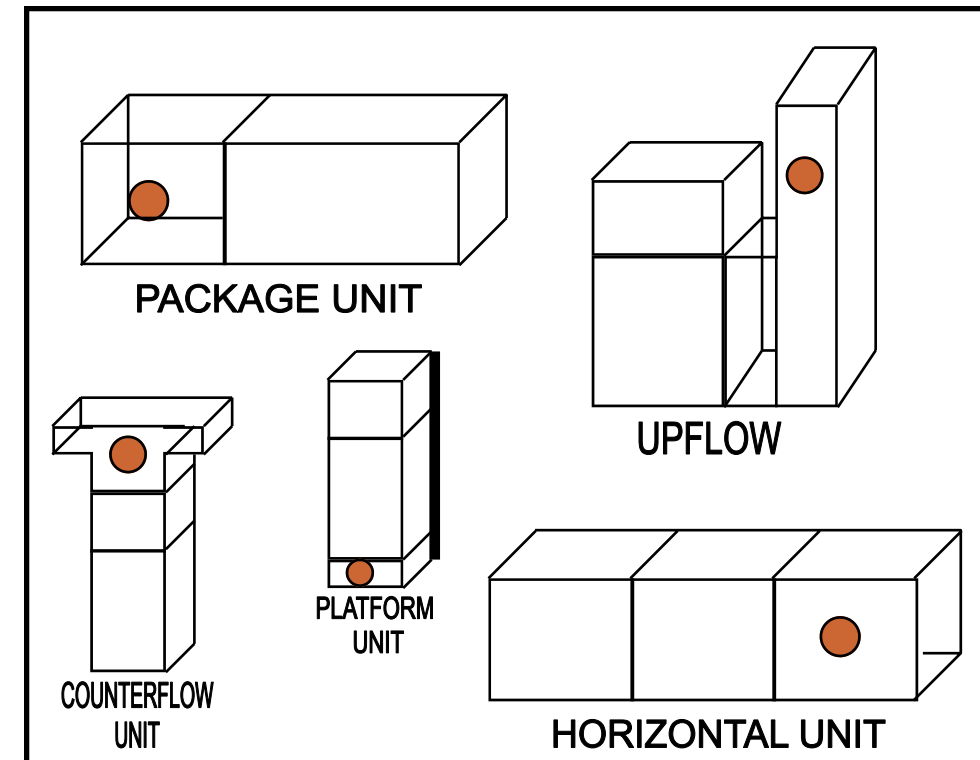


Fig.1

Mounting Location

1. Install the lamp where you have easy access.
2. Make sure before drilling into equipment that there is nothing in the way that would be damaged.
3. The lamp should be installed a minimum of 2-3 inches, maximum 36 inches away from the coil or pan surface.
4. When looking for a mounting location, try to install the unit away from non UV resistant plastics, rubber, and other non metallic materials. Shield these components using sheet metal, aluminum tape, or metal conduit (see page 2, CAUTION notes)
5. 2124 REMOTE unit can be mounted in secure location within 4-5ft of predetermined lamp location. Lamp leads can reach approximately 5ft from chassis mount location. Measure and check mount location for chassis and lamp before securing in place

Recommended Installation Tools

- Electric Drill
- Phillips screwdriver
- 2-3/4"-3" hole cutter
- 1/8" drill bit
- Eye protection
- Marker
- Installation Template
- Tape measure
- Aluminum tape and sealant
- Nut driver, 8/32 & 5/16"
- Multimeter
- Tinsnips

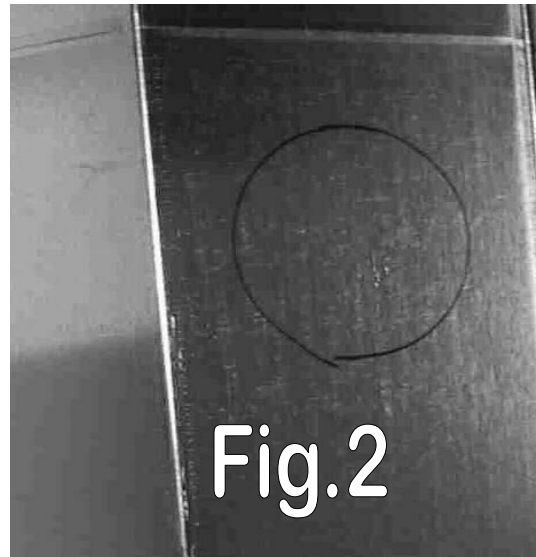


Fig.2



Fig.3

Lamp hole

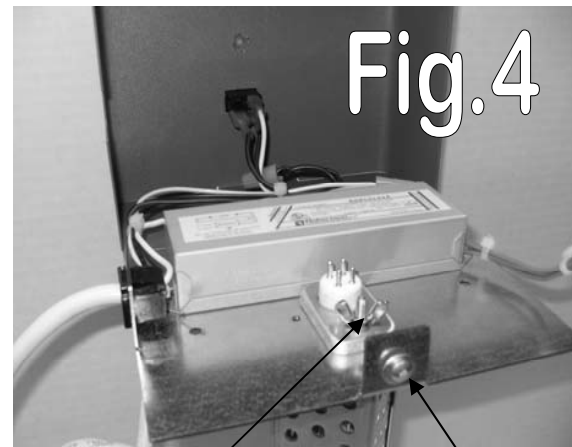


Fig.4

Wingnut

Enclosure
Screw



Lamp Module separate from
Chassis in 2124-REMOTE
Lamp leads extend from top
of chassis

Fig.5

INSTALLATION

- Installation should be done by a qualified HVAC contractor.
- Read all safety instructions (Page 2) at the beginning of this manual.
- Make sure unit is installed so that the UV light **can not** be seen directly through any ducts.

See Page 4 for Installation Photographs and Figures

- 1 Mark mounting hole locations with $\text{Ø}1/8''$ drill tip or marker on mounting surface. Drill $\text{Ø}1/8''$ holes in mount locations.
- 2 For 2124 Model Only. Trace location of lamp cutout opening. OPTION: If you will not be using a hole saw, punch $\text{Ø}1/2''$ hole in center of lamp cutout opening.

For 2124-REMOTE Model - go to step 4
- 3 Cut Lamp hole with 2-3/4 to 3'' diameter hole saw. OPTION: if you are not using a hole saw, trace $\text{Ø}3''$ circle as shown (Fig 2) on template on intended mount surface. Cut-out Rectangular shape with tinsnips.
- 4 Unscrew enclosure screw from chassis and open. Remove adhesive from back of enclosure (if present) and position over mounting holes on already drilled. Press unit against mounting surface and secure with self tapping screws provided.
- 5 Carefully install system into prepared hole saw or tinsnip cutout (2124 model only).
- 6 Ensure that the unit base fully contacts the mounting location.
- 7 2124-REMOTE unit only - position UVC Lamp/PCO Module in position above coil as desired with magnets. Install lamp connector from chassis to 4-pin lamp end of UVC Lamp/PCO Module. Install LED lens provided in hardware kit so lamp operation is visible from outside of air handler
8. Close the cover of chassis and secure.
9. With the power switch in the off position, connect the 2124 purifier to 24 volt power supply. Turn the switch to the on position for 2124 Models.
- 10 The air purifier is designed to remain on continuously with the fan of the HVAC system running also. If lamp is operating, the sight glass will illuminate. If it is not refer to the troubleshooting section of this manual.