

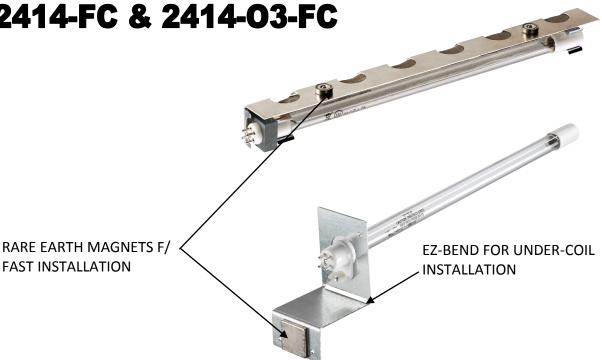
# 24V Coil Clean **Installation Manual**

**FOR MODELS:** 

2412-FC & 2412-03-FC

2414 & 2414-03

2414-FC & 2414-03-FC



### **RECOMMENDED TOOLS**

- Electric Drill
- Phillips screwdriver •
- Tin snips
- Eye protection
- Tape measure
- Aluminum tape & sealant
- Multimeter
- Hex Driver

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## SAFETY CONCERNS

### WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

- Read instruction manual before operating the units.
- 2 Eye damage may result from directly viewing the light produced by these lamps. To reduce the risk of exposure to UV radiation, take UV-radiation protective measures for personnel during servicing.
- This fixture is designed for use with germicidal UV-C lamps and must be installed in compliance with competent technical directions so that user's eyes and bare skin will not be subjected to injurious rays.
- 4 UV Light Hazard. To prevent exposure to ultraviolet light, be sure the ultraviolet air treatment system is disconnected before servicing any part of the HVAC system or removing any access panel or the equivalent.
- 5 There shall not be any openings in the duct that would emit light.
- 6 There shall not be any duct supply or return air openings or any other openings that are in direct line-of-sight of the UV bulb.
- 7 Check damaged parts: Before further use of the unit, any damaged part should be carefully checked to ensure that the unit will operate properly. Any part that is damaged should be properly repaired or replaced.
- 8 Always service unit with Second Wind replacement parts & recommended accessories (i.e. lamps, ballast).

### CAUTION: Disconnect power before starting installation or maintenance.

- 1 Personal Injury Hazard. Power supply can cause electrical shock. Disconnect power supply before servicing or beginning installation.
- 2 Risk of exposure to excessive ultraviolet (UV) radiation—Do not operate without complete lamp enclosure in place or if sight lens is damaged.
- 3 Equipment Damage Hazard. Ultraviolet 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 insulations, etc. If mounting options are limited, items above should be protected with ultraviolet resistant materials such as aluminum foil, aluminum duct tape, or metallic shields.
- 4 Electrical shock hazard from 24 volt or 120/277 VAC may cause serious injury or death.
- 5 Follow Proper Disposal Techniques for UV lamps (pg.3)
- Wear protective gloves and safety glasses when handling lamp. To prevent injury, unplug lamp connector and allow to cool for 10 minutes before servicing.

#### **INSTALLATION LOCATION:**

- 1. Products shall be mounted only on to metal components of air ducts or air handlers (AHU)
- 2. Mounting shall be such that all surfaces in the duct where appliance forms parts of the duct shall be made of metal.
- 3. All wiring within adjacent heating and air conditioning equipment, for example, shall be shaded from direct line-of-sight from the UV bulb or shall be UV-rated.

## **MOUNTING LOCATIONS**

- 1. Install the lamp where you have easy access.
- 2. Drilling is not required for mounting over or around coil exterior. Before installation under A-coil make sure before drilling into equipment that there is nothing in the way that would be damaged. Z –bracket to be clipped at EZ bend to enable mount of lamp under A-coil
- 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.

## 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.

**Transformer**—If a transformer is employed to provide power to the unit (not provided by Second Wind), it should be tested in accordance with instructions provided with unit when installed.

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 is broken read the 'Lamp Disposal' section of this manual.

## LAMP REPLACEMENT

The Second Wind Ultraviolet Germicidal Photo-catalytic 24 Volt Lamp is designed for 9000-11,000 hours of continuous operation. After 9000 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.

- 1. Disconnect electrical service and turn unit off.
- 2. Remove screws from remote lamp connector (if present, external mount units and newer models may be magnet mounted.
- 3. Disconnect the lamp connector from the lamp base.
- 4. Remove the nuts from the 24 volt 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. If the new lamp is dirty or has fingerprints on it remove with an alcohol wipe.
- 6. Place lamp bracket over new lamp base and secure with the nuts.
- 7. Attach lamp connector to the lamp base and use nuts to secure.
- 8. Turn on electrical service and unit.
- If lamp does not immediately illuminate, turn off electrical service and unit. Then rotate bulb 180 degrees to reverse pin contacts in connector.

Model	Replacement
	Lamp(s)
2414	1082LR
2412-FC	1083LR
2412-O3-FC	1083LR-O3
2414-O3	1082 SIPT
2414-FC	1082LR
2414-O3-FC	1082 SIPT
older models may not be shown, contact us for	
support	

## **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.