



Noble Air Purifiers

By: Second Wind Air Purifiers

Installation and Maintenance Manual

Models:

6009

6018

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

PRODUCT

All Noble Air Purifiers are designed to address Heating and Air Conditioning air handling units. Noble 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 Noble Air series:

- Aluminum and Steel enclosure
- Multiple lamp lengths (9 and 18 inches)
- UL/CUL Listed
- Electronic start 120-277 VAC power supply
- Improves efficiency, reduces maintenance
- High intensity lamps
- Over 9000 hours lamp expectancy
- Lifetime unit warranty
- One year lamp warranty

SAFETY PROCEDURES

Please read all instructions carefully to help ensure a correct and SAFE installation of your Noble 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 120/277 VAC may cause serious injury or death. Disconnect power before starting installation or maintenance.

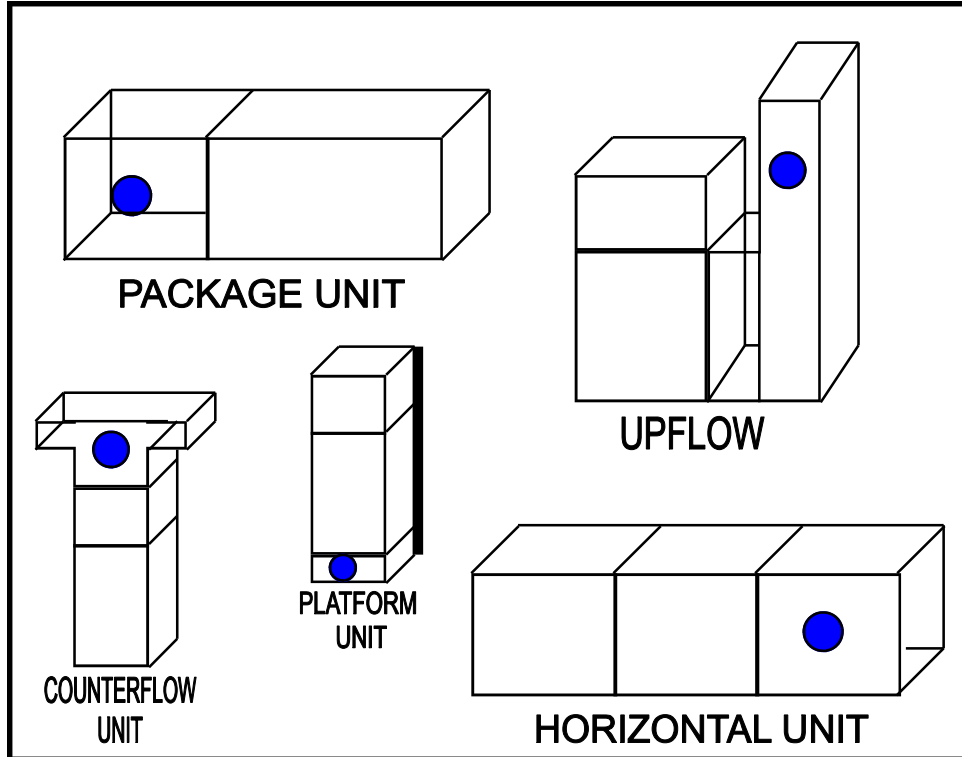
Each UV lamp contains a small amount of mercury. In case of breakage use proper disposal techniques. (pg.5)

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 the degradation of plastics, rubber, and other non-metallic materials with out uv-inhibitors, used in the HVAC system.
 - Install unit in location that prevents exposure to plastics, rubber, and other non-metallic materials to UV light, or shield such materials with aluminum tape, sheet metal, or metal conduit.
 - If equipment or components are not made of UV resistant materials, shield with aluminum tape or sheet metal.
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

Mounting Locations



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.

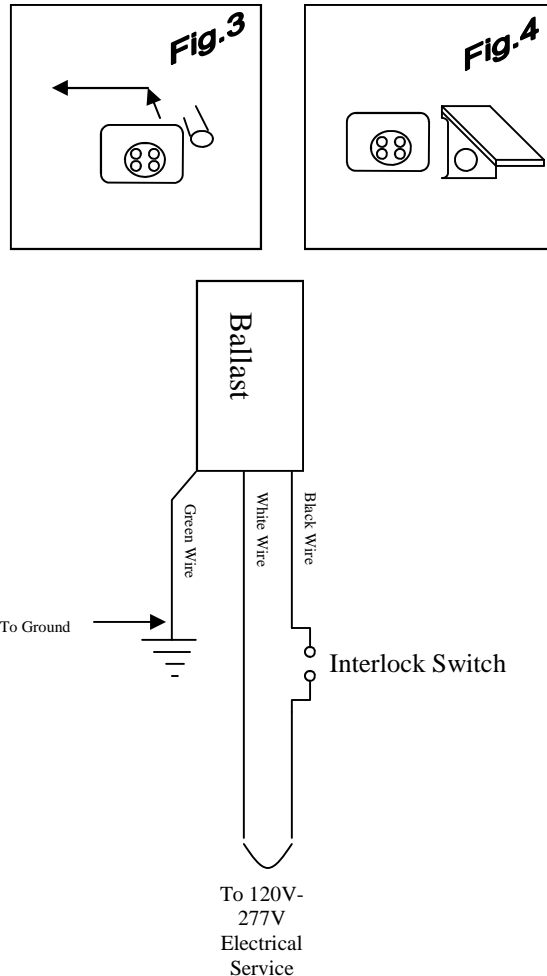
Installation Tools

- Electric Drill
- Phillips screwdriver
- 2"-2.25" hole cutter
- 3/32" drill bit
- Eye protection
- Tape measure
- Aluminum tape and sealant
- Number 10 nut driver
- Multimeter

INSTALLATION

- The installation should be done by a qualified HVAC contractor. Unit must be installed in compliance with all national and local electrical and mechanical codes. Failure to do so will void UL safety listing and Nobel Air warranty.
- Read all safety instructions at the beginning of this manual. Failure to do so could lead to personal injury and/or equipment damage.
- In cases where molds are already present on the evaporator coil, it is recommended that a qualified HVAC technician clean the coil before the installation of the UV lamp.
- **Protect all non-UV resistant materials from direct UV exposure with aluminum tape or metal conduit.**
- **CAUTION: Ultraviolet light can be harmful to your sight, do not look at the lamp when it is illuminated.**

1. For metal ductwork use the Noble Air unit (after the cover has been removed) as a template mark for the lamp, sight glass and securing holes at the desired installation location. Remove the unit. (For duct board installation refer to page 5)
2. Drill the lamp hole with a 2" - 2.25" hole cutter. With the 3/32" drill bit, make pilot holes for the mounting screws.
3. Check that the UNIT BASE lines up with the holes in the duct and that the UNIT BASE fully contacts the duct.
4. Apply the supplied foam sealant to the back of the unit. Position the UNIT BASE so all the holes align, use #10 x 5/8" or longer sheet metal screws and mount the UNIT BASE to the HVAC system.
5. Use the alcohol wipe to remove any dirt or fingerprints from the lamp.
6. Insert the lamp into the lamp hole. Place the bracket next to the ceramic lip of the lamp and screw the nuts until the lamp is secure, making a seal against the UNIT BASE (Fig 3-4).
7. Attach the lamp connector to the lamp. There is only one way to attach the connector to the lamp. If it does not go on, rotate the connector 90 degrees and try again.
8. Place warning labels (included) on the duct: one on the duct near the UV lamp and the other near the air handler.
9. Close the cover, screw the cover closed to make sure the safety interlock switch is activated. Turn on electrical service, unit is always energized.



Duct Board Installation

1. Place the supplied mounting template on the duct board at the desired location. Use duct tape to secure the template to the duct board. (Fig. A)
2. Bend holding tabs towards you. (Fig. B)
3. Use a utility knife to cut a rectangular hole in the duct board and remove the rectangular piece that has been cut. (Fig. C & Fig. D)
4. Bend holding tabs into duct work to secure the mounting template. (Fig. E & Fig. F)
5. With the cover off the Noble Air Unit, line up the mounting holes with the template mounting holes and screw the unit to the mounting template. (Fig. G)
6. Install cover and secure the nuts. (Fig. H)
7. Plug unit into a 120 volt outlet, unit remains on continuously. If unit needs to be plugged into a 240 volt outlet, refer to cord replacement instructions with 240 volt cord.



Fig. A



Fig. B



Fig. C



Fig. D



Fig. E

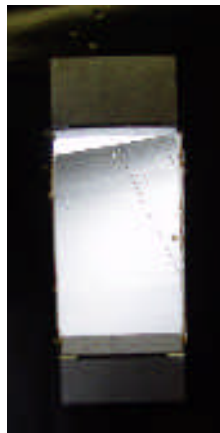


Fig. F

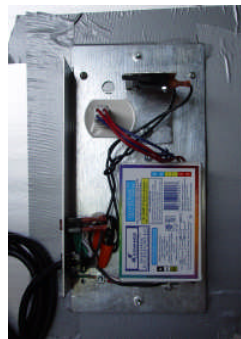


Fig. G



Fig. H

LAMP REPLACEMENT

The Noble Air Ultraviolet Germicidal 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.

-
- The installation should be done by a qualified HVAC contractor.
 - 1. Disconnect electrical service
 - 2. Remove Noble Air cover.
 - 3. Disconnect the lamp connector from the lamp base.
 - 4. Unscrew the nut for the lamp bracket and move or remove the bracket from the lamp base. 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.
 - 6. Place lamp bracket next to new lamp base and secure with the nut.
 - 7. Attach lamp connector to the lamp base.
 - 8. Install the cover and screw tight to make sure the interlock switch is activated.
 - 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

- 18 inch replacement lamp 6018.....1076-2Special
-
- 9 inch replacement lamp 6009.....1068A-Special
-
- Ballast 6009,6018.....1651B
-
- Lamp Connector.....1014
-
- Interlock Switch.....1047

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

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

All Noble Air Purification systems that are attached to your Heating, Ventilation and Air Conditioning System (HVAC) have a (1) one year unit warranty. The lamps for all the HVAC attached units have a (1) year warranty.(MODELS: 6009,6018)

ONE (1) YEAR COVERAGE LAMPS

The lamps are warranted by Noble Air for a period of one (1) year from the date of the original installation, when installed and operated in accordance with Noble Air recommendations. If during this period a lamp fails, Noble Air will provide a free replacement. You must pay shipping charges and all other costs of warranty service. Noble Air will not pay labor involved in diagnostic calls or in removing, servicing, or replacing parts.

LIFETIME COVERAGE UNIT

The covered equipment and covered components are warranted by Noble Air for a period of lifetime from the date of the original unit installation, when installed and operated in accordance with Noble Air recommendations. If during this period a covered component fails, Noble Air will repair or replace the part. You must pay shipping charges and all other costs of warranty service. Noble Air 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 Noble Air 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 Noble Air instructions will void warranty.

WARRANTY LIMITATIONS

This warranty will be voided if the covered equipment (only Noble Air replacement parts or units are warranteed) is removed from the original installation site. This warranty does not cover damage or defect resulting from:

- 1 Accident, neglect or unreasonable use or operation of the equipment, including operation of electrical equipment at voltages other than the range specified on the unit name plate.
- 2 Modification, change or alteration of the equipment, except as directed by Noble Air The furnishings of replacement parts under terms of this warranty will apply to the original warranty period and will not extend the warranty.

Noble Air makes no express warranties other than the warranty specified above. All implied warranties, including the implied warranty of merchantability and fitness for a particular purpose, are limited to the duration of the warranty specified above. Liability for incidental and consequential damages is excluded and is not covered by this warranty. Some States do not allow limitations on the duration of an implied warranty or the exclusion or limitation of incidental or consequential damages, so the limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Noble Air shall not be liable for any default or delay in performance under this warranty caused by any contingency beyond their control.

WARRANTY PROCEDURES

All Noble Air Purification systems that are attached to your Heating, Ventilation and Air Conditioning System (HVAC) have a lifetime limited warranty. The lamps for all the HVAC attached units have a (1) year warranty.(MODELS: 6009,6018)

- 1 Be prepared to furnish the following information:
 - a- Complete model number and serial number
 - b- Proof of installation date if warranty claim is made by other than a qualified service dealer who maintains records of your installation date and service history.
 - c- An accurate description of the problem.
 - d- Date of failure.
- 2 Call the installing dealer that you purchased your Noble Air from.
- 3 If the installing dealer is unable to provide warranty parts, contact:

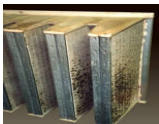
Call, write, fax or e-mail:	Second Wind Air Purifiers	
	711 Park Ave.	
	Medina, NY 14103	
	1-800-387-4565	PHONE
	585-798-5751	FAX
	secwind3@rochester.rr.com	E-Mail

NOBLE Air Purifiers
Manufactured by:
Second Wind Air Purifiers
Models:
6009
6018

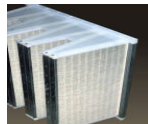
**Ultraviolet Germicidal Units
for Heating Ventilation
and Air Conditioning Systems**

Since the first ultraviolet irradiation system was used successfully in 1909, ultraviolet irradiation has had a 94 year performance history. Noble Air uses the ultraviolet wavelength at 253.7nm, ultraviolet radiation lethal to microorganisms. Noble air purifiers can reduce mold, bacterial, or viral airborne microbes in all areas of a Heating Ventilation and Air Conditioning system (HVAC).

Return Before



Return After



The Noble Air Purifier is the perfect choice for small or large applications . Noble Air uses ultraviolet germicidal light to disinfect mold, bacteria, and infectious disease in the air stream. Noble Air purifiers are designed for surface and air disinfection.



The Noble Air Purifier is the perfect choice for small or large applications . Noble Air uses ultraviolet germicidal light to disinfect mold, bacteria, and infectious disease in the air stream. Noble Air purifiers are designed for surface and air disinfection.

Features and Benefits

- Available for all applications
- Disinfects mold
- Inexpensive to operate
- Surface and Air Indoor Air Quality Control
- High intensity Ultraviolet Lamps
- lifetime unit warranty
- 1 year lamp warranty
- Over 9000 hours lamp expectancy
- Electronic start power supply ranges from 120/277 VAC

SPECIFICATIONS

Noble Air Purification 6009 and 6018 units are mounted in the return or supply to accommodate most HVAC systems. The units install anywhere in the system to disinfect molds, bacteria and viruses. The housing is steel and comes in 2 sizes (9" and 18" lamps). All units are manufacturer assembled and tested.

Models 6009 and 6018:

The power source is a electronic, Class P, Sound rated A, Type HL, NO PCB's, type 1 outdoor ballast meeting EMI requirements of CFR Title 47 Part 18 consumer. The operating range is 120-277 VAC and the current is 425ma@120vac. The ballast is designed to operate at any airflow and relative humidity.

Noble Air lamps operate at 253.7 nm, ideal for air disinfection, good for use at any velocities, temperatures ranging from 30 - 170 F. Every lamp has an extended lamp life coating which helps maintain intensity levels at 85% even after a year of operation. They are a standard, T5 (15mm) diameter lamp. Base of the type "L" quartz glass is ceramic, with triple-coiled electrodes made of molybdenum lead in a clamped filament design. Lamp connectors are 4-pin single ended circling sockets. Lamp life shall not be less than 9000 hours.

Submitted device shall be tested under typical HVAC conditions and in accordance with the general provisions of IES Lighting Handbook, 1981 applications Volume. Total output per one inch arc length shall be not less than 10uW/cm2 at 1 meter in air of 45 F and 400 fpm

Dimensions:

6009- 6"W x 3.25" H x 10.25"L x 16" probe depth
6018- 6"W x 3.25"H x 10.25"L x 7.5" probe depth

Weight

6009 - 6 lbs.
6018 - 6 lbs.

Power Electronic Ballast

6009: 120-277 VAC

6018: 120-277 VAC

Lamps

	18"	9"
Base Face in. -	17.2	8.4
Length mm -	436.0	212.0
Arc Length in.-	14.2	5.2
mm -	360	131
Current mA-	425	425
Wattage W-	40	25
Voltage @60Hz-	86	32
UV Output W-	10	5
UV Output @1M		
uW/cm2 -	75	35
Lamp life hours-	9000	9000

Wiring

Number 18 teflon coated wire 600V, 105C.

Warranty

6009

1-Year Lamps

lifetime -Year Unit

6018

1-Year Lamps

lifetime -Year Unit

DEALER IMPRINT:

**Noble Air Purifiers
Manufactured By:
Second Wind Air Purifiers
711 Park Ave
Medina, New York 14103
1-800-387-4565
585-798-5751 FAX
www.secondwindairpurifier.com**