

GENESIS AIR 2008B



INSTALLATION AND OPERATIONS MANUAL

PLEASE READ AND SAVE THESE INSTRUCTIONS!

FIFRA ...EPA EST No. 87447--TX--001



OPERATIONS AND MAINTENANCE SCHEDULE

This manual will guide the maintenance personnel in installing and servicing the Genesis Air 2008B unit.

<u>INTRODUCTION</u>	.....	3
<u>INSTALLATION</u>	.....	3
<u>VARIATIONS</u>	.....	4
<u>MAINTENANCE</u>	.....	5
<u>LAMPS</u>	.....	5
GENERAL	.....	5
INSPECTION	.....	5
WIRING DIAGRAM	.....	6
REMOVAL	.....	6
DISPOSAL	.....	6
INSTALLATION	.....	6
<u>CATALYST</u>	.....	7
GENERAL	.....	7
INSPECTION	.....	7
REMOVAL	.....	7
CLEANING	.....	7
DISPOSAL	.....	7
INSTALLATION	.....	7
<u>BALLASTS</u>	.....	7
<u>FILTERS</u>	.....	8
<u>REPLACEMENT PART NUMBERS</u>	.....	8
<u>UL DISCLAIMERS</u>	.....	8
<u>CONTACT INFORMATION</u>	.....	8

INTRODUCTION

The Genesis Air 2008B is a stand-alone unit used to reduce the levels of Volatile Organic Compounds (VOC's) and viable airborne biological contaminants. The unit may be ducted in with a 16" tap for permanent installations or utilized as a roll-around "point-of-use" air purifier.

The 2008B uses one to four Genesis Air PCP Compound panels. For example, a 2008B3 would have three panels installed. A UV shield is mounted between the catalyst and filter to provide protection from escaping UV radiation. The Genesis Air 2008B is suitable for spaces up to 22000 ft³. For recommended unit configurations, consult the 2008 GAP Product Calculator supplied with packet. Contact Genesis Air if you do not have one. All Genesis Air products incorporate 3-step GAP technology: MERV Filtration, UVGI Lamps and Photocatalysis.



INSTALLATION

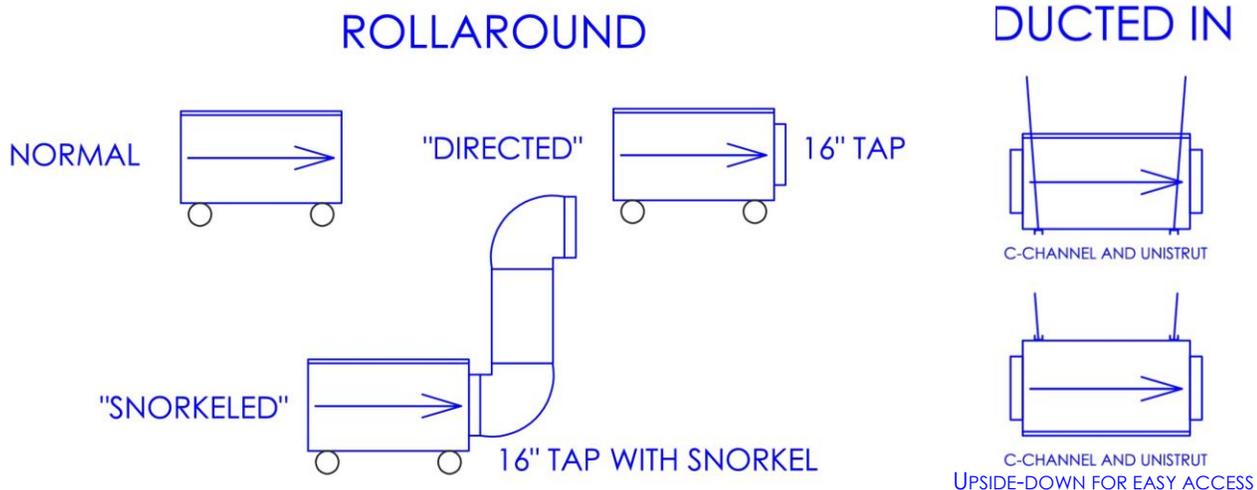
This unit is designed to be installed as a roll-around, portable unit or installed permanently suspended from the roof truss, beams or ceiling. Installation must be completed by competent personnel. **Genesis Air, Inc. assumes no liability for damages or injuries sustained from installations done by other than qualified Genesis Air technicians.**

- If the unit is to be suspended, remove the casters if included. Also, if the unit is to be suspended upside-down for accessibility, the lid should include a pivot hinge from the factory.
- Determine a location for the 2008B unit, above the ceiling for drop-tile or in free air for warehouse, etc. Consider where your returns and supplies will be located,

with the B unit in between, clearance from permanent ductwork, beams, lights, sprinklers or other above-ceiling fixtures. Also, the B must be suspended from something, so make sure there is truss work above. Finally, the B unit is very large, a 24" x 48" opening (minimum) must be made in the ceiling grid. Find a location that would make this easy.

- If your unit has no Unistrut, attach Unistrut where the casters were. The Unistrut should extend 4" on either side of the B unit and be able to support 250 lb.
- If there is no place to bolt all-thread rods on the roof trusses where the B will hang, Unistrut must also be attached to the roof trusses. 3/8" All-thread can be bolted into the unistrut and left to hang.
- Using a material lift, lift the B into position. Run the all-thread thru the Unistrut and bolt down, ensuring the unit is level and not twisted.
- Choose a location for the return/filter section close to the source of odors or biologicals. The filter section(s) should be installed in this general vicinity.
- Using a lift, ladder or scaffolding, remove a ceiling tile above the source next to the return grille. Use judgment here: there needs to be clearance from permanent ductwork, beams, lights, sprinklers or other above-ceiling fixtures.
- Lift the filter section up above the ceiling grid; you may have to angle the unit thru. Once the unit is above the grid, set the unit onto the grid carefully. You should see the 4" particulate filter from the ground.
- Use the same guidelines to add more returns and supply(s).
- Attach ductwork. **Note: If ductwork is altered, installer must insure that no leakage of UV light occurs as a result of ductwork modifications!**
- Airflow is from the filter(s) to the filter side of the B unit, Through the B to the fan side of the B unit, then out to the supply(s).
- Power up the B unit.
- Clean up your mess, and replace ceiling tiles.

VARIATIONS



MAINTENANCE

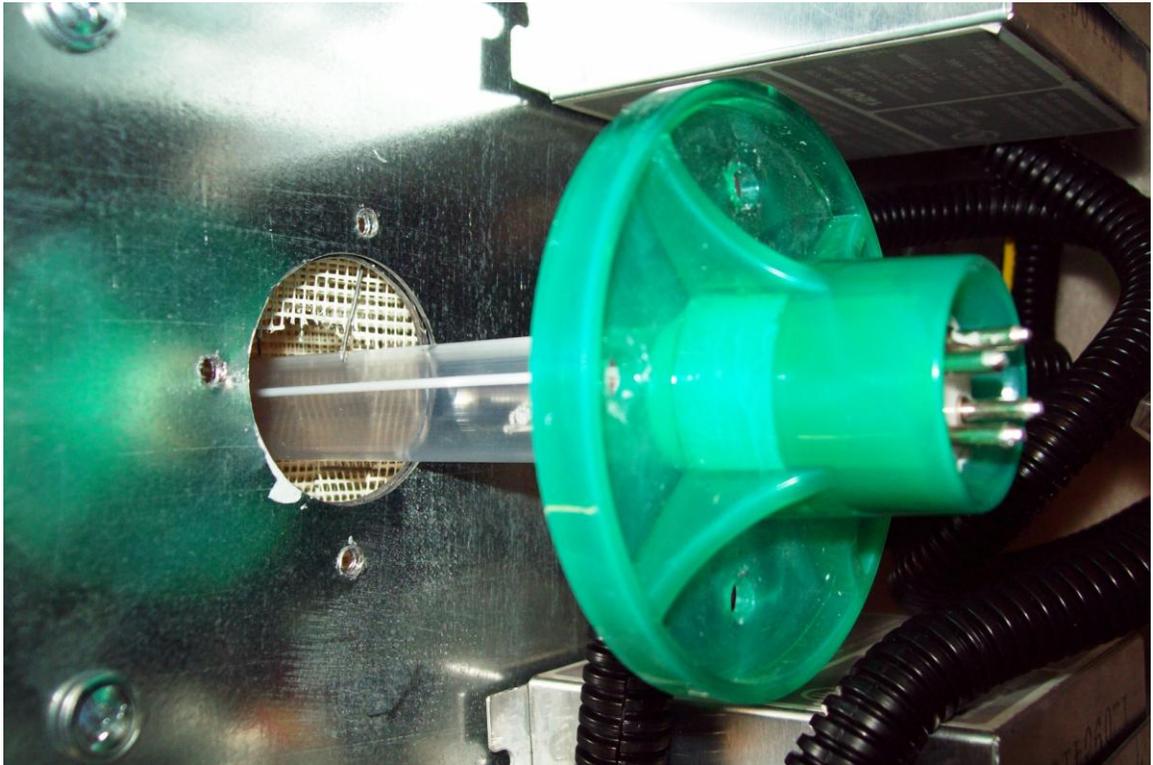
LAMPS

- ALL MAINTENANCE PERSONNEL MUST WEAR UV PROTECTIVE FACE SHIELDING. ALL EXPOSED SKIN MUST BE PROTECTED BY UV RESISTANT CLOTHING.

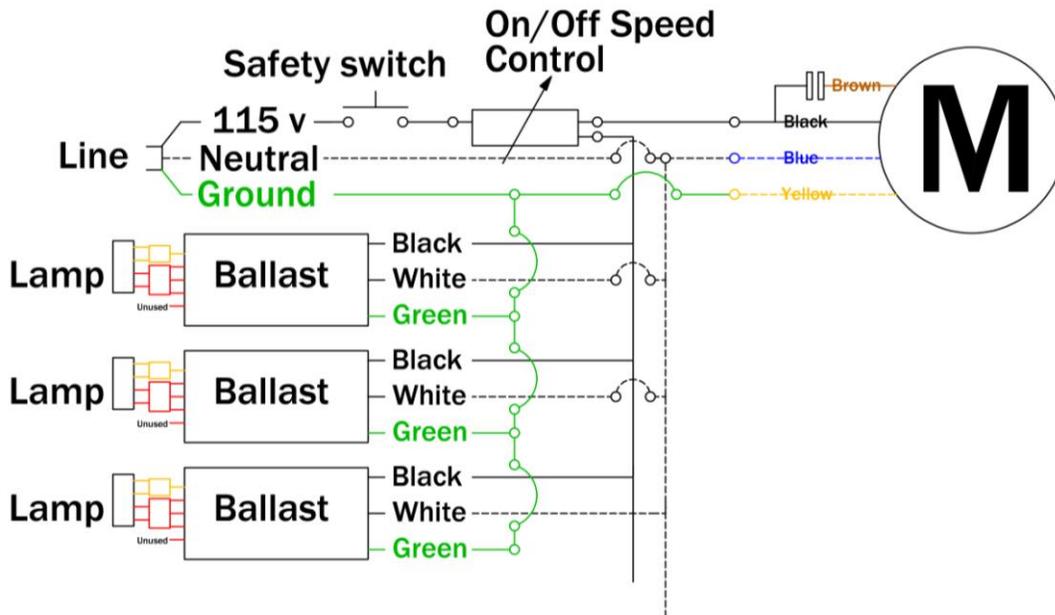
GENERAL

To operate effectively, the lamps must be replaced every 16 months, as the intensity of the lamps decreases over time. The catalyst must be energized by the lamps to create the field of hydroxyl radicals that is required to remove VOC's and biologicals. Without the proper lamp output, VOC's and biologicals will not be reduced!

INSPECTION



- **To inspect the lamps, the lamps must be powered. Wear UV resistant face shielding and personal protective equipment!**
- The lid may be opened to examine the lamps. To do this, you must wear UV protection!
- Wearing UV protective clothing and safety glasses open the lid. Depress the safety switch and examine the lamps. In the above picture, notice the lack of intensity in the lamp that is not plugged in. Be sure that the speed control is not turned to the off position. If lamps are all lit, the Greensleeves will emit a bright green glow. Reattach the lid.
- If a lamp is unlit, ensure the lamp is plugged in firmly to receptacle. If lamp remains unlit, replace the lamp with Genesis Air GA20HO. If the new lamp does not light, the problem may be in the ballast or wiring. Call your Genesis Air Representative for assistance.



To other PCP Compounds

REMOVAL

- Power the Genesis Air unit down using the kill switch or breaker to unit.
- Remove the lid.
- Unplug the harness that connects the faulty lamp to the ballast.
- Unscrew the GreenSleeve mount from the base of the unit and remove lamp from the catalyst panel with a twisting motion so as not to deform the catalyst pleats. Retain screws.

DISPOSAL

- In most states and provinces, UVGI lamps may be disposed of in the same manner as fluorescent lamps. While UVGI lamps contain a trace amount of mercury, the quantity is so minute that disposal is not regulated by federal standards (established by the EPA). Individual states and provinces may have established disposal standards. Please adhere to your local regulations.

INSTALLATION

- Installation is the reverse of removal. The lamps are slowly twisted through the catalyst material until the GreenSleeve is resting against the ballast tray. If the lamp binds excessively against the catalyst, do not force. Remove and try again.
- Once the base of the lamp is against the tray, screw down the Greensleeve base using the same holes as removed. Do not overtighten!
- The rest of installation is the reverse of removal.

CATALYST

- ALL UNITS MUST BE POWERED DOWN BEFORE SERVICING.
- ALL MAINTENANCE PERSONNEL MUST WEAR UV PROTECTIVE SAFETY GLASSES. ALL EXPOSED SKIN MUST BE PROTECTED BY UV RESISTANT CLOTHING.

GENERAL

Genesis Air recommends catalyst replacement every 15 years to provide an efficient system. As debris and contaminants accumulate on the catalyst, the effectiveness of the catalyst is decreased. The catalyst must be inspected periodically for build up of particulate.

INSPECTION

- Turn off power to the 2008B unit. Unplug unit from service.
- Remove the lid.
- If the catalyst appears clean and free of particulate, congratulations! Otherwise, proceed to removal.

REMOVAL

- **If the catalyst will be cleaned and reused, keep track of orientation so they will be returned from the order they were removed. This will prevent installation problems.**
- Remove the lid, and then disconnect the harness that powers the catalyst.
- Remove panel from unit.

CLEANING

- If the catalyst needs cleaning, remove catalyst panel, then remove lamps. Proceed to a wash bay, mop sink or other washing area.
- Shake or brush heavy particulate from the catalyst.
- With the ballast tray facing upwards, spray catalyst liberally using Nu-Calgon CalClean, Special HD or other suitable coil cleaner on catalyst only. **Do not immerse ballasts in cleanser!** Allow to sit 15 minutes, and then wash off with water. **Do not immerse ballasts in water! Do not remove installation reminders!**
- Allow catalyst to dry completely before returning to service. May be dried in the sun.

DISPOSAL

- Individual states and provinces may have established disposal standards. Please adhere to your local regulations.

INSTALLATION

- Installation is the reverse of removal.

BALLASTS

The ballasts supply power to the lamps. They are located in the Genesis Air PCP Drop-In catalyst panels. If a lamp is unlit and a new lamp attached to the same harness will not light, the ballast may be at fault. If a ballast failure is suspected, contact Genesis Air for replacement options.

FILTERS

The filters help protect the catalyst and lamps from dirt and debris. They should be inspected and replaced regularly. Genesis Air recommends MERV-13 or higher filters.

REPLACEMENT PART NUMBERS AND SCHEDULE

Lamps, catalyst and ballast should only be replaced by the Genesis Air equivalent.

<u>REPLACEMENT PARTS</u>		
	DESCRIPTION	GENESIS AIR PART NUMBER
BALLAST	Fulham WH-5	GA5
LAMPS	First Light 2813	GA20HO
FILTER	20" x 24" x 4" MERV 13	GA2024413
CATALYST	20" x 24" x 6"	GA2021PCP

UL DISCLAIMERS

- The health aspects associated with the use of this product and its ability to aid in disinfection of environment air have not been investigated by UL.
- Use only 20" First Light type T5 15 UVC Watt lamps.

<p>Genesis Air, Inc. 5202 CR 7350 Suite D Lubbock, TX 79424 806.745.7000 Phone 806.745.9200 Fax info@genesisaair.com www.genesisaair.com</p>	
--	--