



# OmniAire Negative Air / HEPA Air Filtration Machines

OmniAire 2500 Series  
Operation and Maintenance Manual



# WARNING

## SAFETY WARNING INSTRUCTIONS

### READ AND SAVE THESE INSTRUCTIONS

This equipment is to be operated only by trained personnel.



Do not use near combustible or explosive material. Fire may occur.



Do not operate if the cord or plug is damaged. Contact an authorized service facility for examination and/or repair.



Do not expose to water or rain. Electrical shock may occur.



Do not run the cord under the carpeting. Do not cover the cord with throw rugs, runners, or similar coverings. Arrange the cord away from traffic areas and where it is not a tripping hazard.



Connect only to grounded outlet with GFCI device.



Disconnect power for cleaning and servicing.



Disconnect power cord before moving.

## L'AVERTISSEMENT

### INSTRUCTIONS D'AVERTISSEMENT DE SÉCURITÉ

#### LIRE ET CONSERVER CES INSTRUCTIONS

Cet équipement ne doit être utilisé qu'après avoir lu les instructions.



Ne pas utiliser à proximité de matériaux combustibles ou explosifs. Un incendie peut se produire.



Ne pas utiliser si le cordon ou la fiche est endommagé. Contactez un centre de service autorisé pour examen et / ou réparation.



Ne pas exposer à l'eau ou à la pluie. Un choc électrique peut se produire.



Ne pas passer le cordon sous un tapis. Ne pas couvrir le cordon avec des carpettes, les coureurs, ou revêtements simili- laires. Éloigner le cordon des endroits passants et où il n'est pas un risque de déclenchement.



Connecter uniquement à une prise mise à la terre.



Débranchez l'alimentation pour le nettoyage et l'entretien.



Débranchez le cordon d'alimentation avant de vous déplacer.



CONFORMS TO UL STD 507  
CERTIFIED TO CAN/CSA STD  
C22.2 NO. 113-M1984

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## Introduction

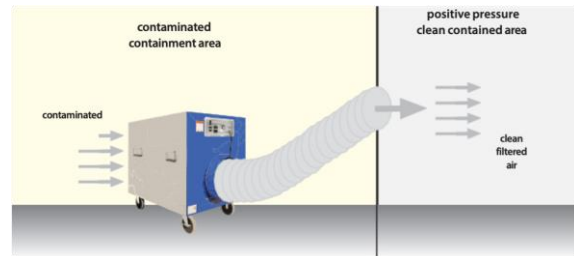
The OmniAire 2500 series is a family of construction-grade negative air machines, featuring three models with progressive features. These machines contain a powerful blower and a 24" x 24" HEPA, either 6" or 12" deep. These machines, along with their many accessories can be used to remove airborne particulates and bio-contaminants in many applications, including abatement and construction. These machines can create positive or negative pressure for containment areas when required. For collection of construction dust from cutting or grinding of concrete, wood, or plaster, the HEPA filter can be replaced with an economical multi-pocket bag filter. For VOCs and odor control, VaporTrap or OdorGuard activated carbon filters can be quickly installed.

## Application Examples

### Creating Negative Air Pressure

To create negative pressure inside the containment area, more air has to be exhausted out than leaks into the containment. Negative air may be required for a workflow (asbestos abatement for example).

Place the machine inside the containment and hook a flexible duct to the outlet ring of the machine exhausting to outside the containment. In this case, all contaminated air is contained inside the negative air pressure space. Alternatively, the machine can be outside the containment space, using a duct and an intake manifold.



### Creating Positive Air Pressure

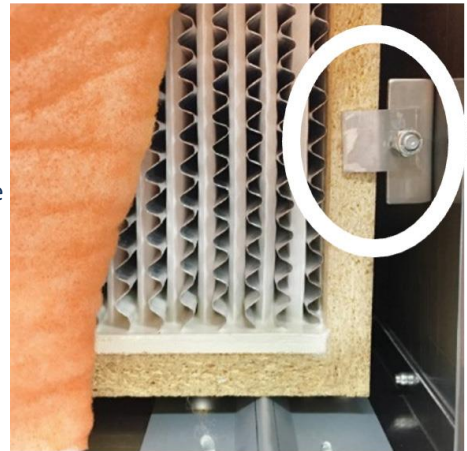
An alternate workflow is to create positive air pressure in the containment area, which ensures that treated air is pumped into the containment area.

### Carbon Activated Filtering

For VOCs and odor control, activated carbon filters are designed to remove odors and gaseous pollutants from the air. The PRO-C model comes standard with a Vapor Trap Bulk Activated Carbon Filter for projects that have a primary focus on VOCs and odors removal. The MERV-rated pleated carbon filter and OdorGuard carbon-activated filter can be quickly installed as pre/post-filter. These filters are an effective and quick solution to your VOCs and odor problems.

## Operations

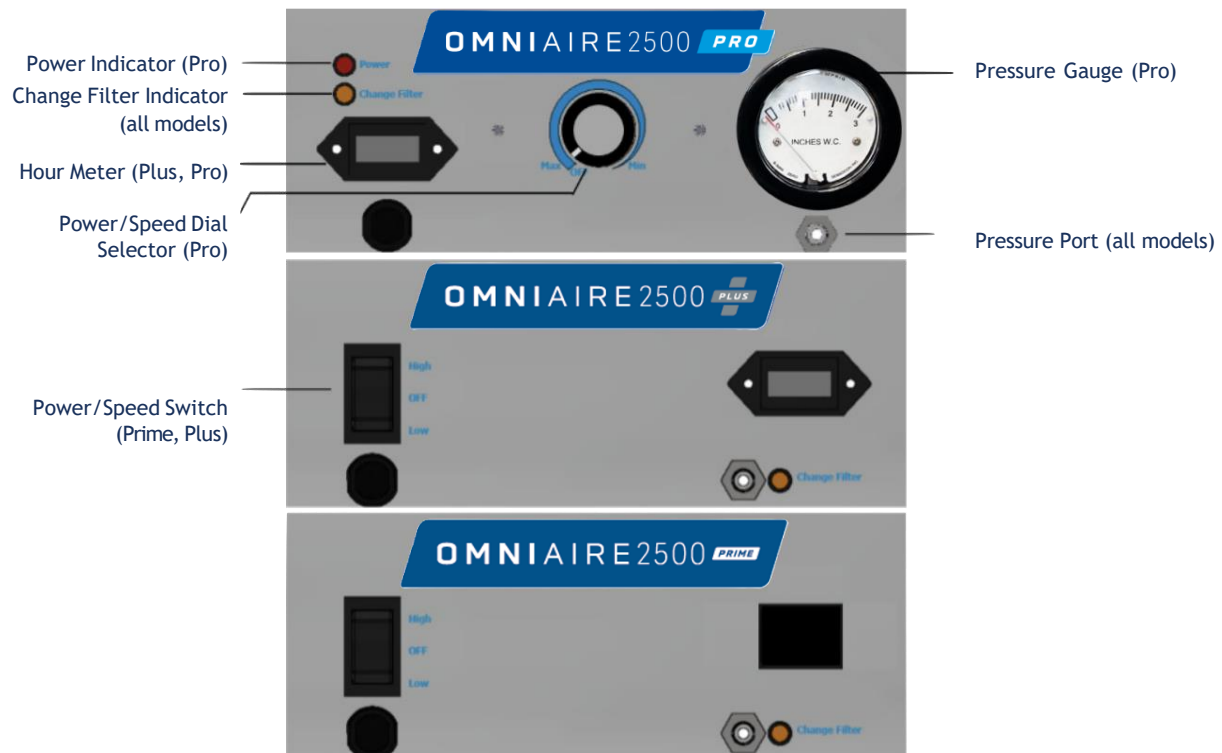
Your OmniAire unit will run 24x7 continuously for years with proper preventative maintenance and prompt replacement of the proper filters. Even when the HEPA filter is fully loaded, the filter is still removing particulates from the air at the rated efficiency yet at a reduced airflow. This will affect the ability of the machine to provide positive or negative pressure within the containment. When the unit's HEPA filter is nearing full capacity, the "change filter" light on the front panel will turn on. At this time you should replace the HEPA filter so that you can maintain the airflow needed.



Prior to operating the machine, always check that the HEPA filter is securely in place. Tighten filter tabs if necessary. The HEPA filter is secured with four filter tabs as shown in the photo. It is critical that the HEPA seal is in place to ensure all air passes through the HEPA. These tabs are secured with 1/4-20 Nylock nuts, which require a 7/16" wrench or socket.

**Do not operate the unit without a HEPA filter in place.**

Refer to the figure below for the location and description of controls available for each of the three models. To operate the machine, turn the dial from Off to the desired speed (Pro model) or flip the switch to the High or Low speed (Prime and Plus models).



## Maintenance

### Preventative Maintenance

The motor and blower do not require maintenance and your OmniAire machine will run for years with proper regular replacement of the filters. In addition, the unit's power cord should be inspected for cuts or other damage regularly.

### Prefilter Replacement

The secondary filter should be changed when the filter shows signs of load. Simply raise the screen in the back of the machine and swap out the filter. **NOTE for OA2500 PRIME users or other users with a 6" Deep HEPA:** In this case, there will be a gap between the HEPA filter and the back edge of the unit. You can keep the prefilter in place by rotating the HEPA clips for the 12" deep HEPA to hold the prefilter in place, as illustrated below:



### HEPA Filter Replacement

During your projects, your HEPA filter purifies the air and gradually becomes loaded with sub-micron particulates. Even when the HEPA filter is fully loaded, the filter is still removing particulates from the air at the rated efficiency yet at a reduced airflow. This will affect the ability of the machine to provide positive or negative pressure within the containment.

To replace the HEPA filter unplug the machine and remove the screen/manifold to remove the prefilter. You will see 4 filter tabs holding the HEPA filter in place (see photo). These tabs are secured with 4 10mm bolts, which require a 10mm driver or socket to remove.



Remove all 4 filter tab retaining nuts remove the filter tabs and set aside. Slide the HEPA filter out along the filter guides and remove it from the machine. **ALWAYS TREAT THE USED HEPA FILTER AS HAZMAT AND PROCESS IT ACCORDING TO YOUR ESTABLISHED HAZMAT PROCEDURES.**

To replace the HEPA filter ensure that the gasket on the HEPA filter faces inwards toward the flange, slide the filter in place along the filter guides and re-install the filter tabs and filter tab securing nuts. The nuts should initially be tightened to where the stud is flush with the end of the nut. This will compress the gasket on the filter approximately 1/2 of the thickness. This allows for the filter to be reseated and tightened at a later time if necessary.

### **Bag Filter Replacement**

For projects that do not require a HEPA filter, the economical bag filter can be used to control the dust at construction sites. The bag filter housing can be installed in place of the HEPA filter. The Bag filter with a MERV-15 rating and multi-pocket configuration has a large dust-holding capacity and requires replacement when the airflow of the machine drops below your required minimum flow.

The bag filter housing can be installed in place of the HEPA filter using the filter tabs and Nylock nuts. The bag filter is secured inside the housing with 4 P-clips. To remove the filter turn the P-clips 90 degrees and pull it out. Then install the new bag filter and secure it using the P-clips.

### **Vapor Trap Carbon Filter**

Activated carbon filters are designed to remove odors and gaseous pollutants from the air. These filters are an effective and quick solution to your VOCs and odor problems. The selection of the carbon filter depends on the type and amount of the gaseous pollutants. You will need to determine the requirements of your application. The Vapor Trap is a disposable V-Bank, 24"x24"x12" filter and contains 27lb of activated granular carbon. It can be installed in place of a HEPA filter. We recommend using our primary/secondary filter in front of the Vapor Trap to extend its odor absorption capacity.

### **Pressure Sensor Calibration**

Your machine is equipped with a pressure sensor to indicate when the HEPA filter is nearing its capacity. After replacing the HEPA filter, it may be necessary to recalibrate the pressure sensor, especially if you're using a different filter model or a non-OCA branded HEPA filter. This calibration ensures that the "change filter" indicator light accurately reflects when the filter needs to be replaced.

For detailed step-by-step instructions on how to calibrate the pressure sensor, please refer to the Pressure Sensor Calibration Guide included with your machine or available at <https://omnicleanair.com/adjustment-pressure-sensor/>.



## Troubleshooting

Your OmniAire Negative Pressure Machine is designed and manufactured to provide years of trouble-free performance. If there is a problem, please reach out for technical support and we are happy to help.

### **The machine does not start**

1. Check that the unit is plugged in and there is 115VAC available. On the Pro model, when selecting a speed the red indicator light should come on. On the Prime and Plus models, select either LOW or HIGH speed to turn on the unit.
2. Contact Omni CleanAir technical support to troubleshoot further.

### **The machine just hums when turned on**

1. Unplug the unit.
2. Remove the HEPA filter and push the blower wheel by hand. If it does not move freely or if you hear a grinding/scraping noise as you spin it, then the blower wheel touches the side of the blower housing. This may be due to an impact of some kind and the motor mounts have been bent. Remove the motor/blower assembly and replace the bent motor mounts.
3. If the blower spins freely, check the capacitor. With the HEPA filter still removed from the machine, ensure that the wiring connected to the capacitor is plugged in and not broken. Re-plug the unit into the power outlet keeping the switch in the OFF position. Then push the blower wheel, remove your arm, and as it is spinning turn the speed selector switch to LOW. **[ENSURE NO CLOTHING OR HAIR IS CLOSE TO THE MOTOR.]** If the machine keeps running, the capacitor needs to be replaced.

### **The machine will run for a few minutes then turn off**

1. The machine must have a HEPA filter (or bag filter or Vapor Trap filter) installed to operate properly. If you are trying to run it without a filter in place, the motor will overheat within a few minutes and the thermal overload will engage and shut it down. Let the motor cool off for 30 minutes, install the filter and try running the machine again.
2. If the filter is in place and the machine still shuts off after a few minutes then the motor is faulty. Replace the motor.

### **The machine vibrates excessively when running**

1. This is an indication that the motor bearings are worn out. If the machine continues running, at this point the vibration will cause the center hub of the blower wheel to separate from the wheel requiring replacement of both the motor and blower. Replace the motor. Wiring diagram can be provided.



## Available Models

OA2500 PRIME, OA2500 PLUS, OA2500 PLUS-A, OA2500 PLUS-B, OA2500 PRO, OA2500 PRO-C

## Parts and Accessories

Family	OA2500
Prime Model	OA2500 PRIME
Plus Model	OA2500 PLUS
Plus-A Model	OA2500 PLUS-A
Plus-B Model	OA2500 PLUS-B
Pro Model	OA2500 PRO
Pro-C Model	OA2500 PRO-C
HEPA Filter 6" depth 99.97%	OA2500-10
HEPA Filter 12" depth 99.97%	OA2500-20
HEPA Filter 12" depth 99.7%, High Capacity	OA2500-30
HEPA Filter 12" depth 99.99%	OA2500-40
HEPA Filter 12" depth 99.99%, High Capacity	OA2500-50
Vapor Trap V-bank Carbon Filter	OCVT2424
Multi-pocket Bag Filter	OBF10
MERV-8 Pleated Pre-filter	OPF24241
OdorGuard 600 Carbon Filter	OG2424D
1" Pleated Carbon Filter	OG24241
Intake Manifold Kit (Manifold, clamp, duct)	OAIM2200-12KIT
ABS Plastic Intake Manifold, 12" Dia.	OAIM2200-12
Quick Clamp, 12"	QCW14
Flexible Duct, 12" Dia. x 25' L, Wire & Fiber Reinforced	OAD12R
Replacement Duct Ring	OADR-12

## Product Specifications

Family	OA2500
CFM TrueCFM™ - Prime Model	1000 CFM to 2500 CFM based on speed settings and filter selection
CFM TrueCFM™ - Plus Model	
CFM TrueCFM™ - Pro Model	
Noise (6 foot distance)	70 db - 74 db
Weight (lbs)	114 lbs
Power Consumption	115 VAC/60 Hz/12 Amp w/CB
Size	36"W x 28"H x 31" L

# Omni CleanAir Limited Warranty

This warranty policy covers equipment (machines and accessories) sold by Omni CleanAir and applies to the OmniClean, OmniTec, and AgriAir portfolio of brands.

Omni CleanAir warrants that our products are free from defects in workmanship and materials under normal use during the warranty period.

All OmniClean machines including the OCA500, 1200, and 1500 series, excluding consumables come with a standard two (2) year warranty. All OmniTec and AgriAir machines excluding consumables come with a standard one (1) year warranty. Warranty covers parts and labor only, excluding consumables. Consumables (HEPA filters, prefilters, carbon filters, and UV light bulbs) carry no warranty other than to be free of defects upon arrival. Non-Consumable accessories come with a standard ninety (90) day warranty.

The warranty extends to the following parties:

- Customers (individuals or companies) to whom Omni CleanAir directly sells products covered by this policy.
- Customers (both individuals and companies) who purchase Omni CleanAir products from an authorized distributor or reseller.

This limited warranty is not transferable or assignable to any subsequent purchaser and is only applicable in the country where the product was originally purchased.

The following circumstances are not covered by this warranty policy:

- Damage caused by an act of nature such as flood, fire, wind, earthquake, or lightning.
- Damaged caused during shipping or an impact event with other objects.
- Damaged caused by improper care or negligence.
- Damaged cause by misuse, abuse, mishandling, or misapplication.
- Damaged caused by alteration or adjustments by unauthorized personnel.

Under no circumstances shall Omni CleanAir or any supplier of Omni CleanAir be liable for any loss, damage or expense, including, but not limited to, loss or damage arising out of the failure of the products to operate for any period of time, inconvenience, the use of rental or replacement equipment, loss of profits or other economic loss, or general, direct, special, indirect, incidental or consequential damages or property damages.

Many states and localities have their own varied codes and regulations governing sales, construction, installation, and/or use of Equipment for certain purposes. While Omni CleanAir attempts to assure that its Equipment comply with such codes, it cannot guarantee compliance, and cannot be responsible how Equipment is installed or used. Omni CleanAir recommends that, before purchasing and using Equipment purchasers review the Equipment application, and federal, state and local regulations, to be sure that the Equipment installation and use will comply with them.

Omni CleanAir offers extended warranty through the GOLD CARE MEMBERSHIP PROGRAM, for as long as membership status is maintained.

For more information please visit [omnicleanair.com/resources/gold-care-membership](https://omnicleanair.com/resources/gold-care-membership)

## To Submit a Warranty Claim or Receive Technical Support

Contact our Technical Support Department at 425 290 3922 or by email at [support@omnicleanair.com](mailto:support@omnicleanair.com). Hours are Monday-Friday 7:30am-4:00pm PST. Please have the product model name and serial number available, along with the purchase date and invoice number, if applicable. Our service technicians will work with you to diagnose your technical issue and recommend a suitable course of action to solve your problems quickly and to your satisfaction.

If it is determined that your product is defective and under warranty, OmniClean will repair or replace, at our discretion, any faulty parts or equipment. A Return Merchandise Authorization (RMA) will be issued for the defective product.

Customer to arrange and ship the product to Omni CleanAir at the customer's expense and must use original packaging. For units that have failed within 30 days, Omni CleanAir will pay the cost of return shipping from the customer's site. If Omni CleanAir determines that the Warranty Claim is valid, Omni CleanAir will be responsible for shipping the repaired product to the customer upon completion of any repairs or replacements.

In instances where equipment is damaged in transit wither while being returned to Omni CleanAir or after repairs have been completed, Omni CleanAir and the customer will need to work together to resolve these situations with the freight carrier(s) involved.

- If a shipment is made on the customer's account with a third party freight carrier, the customer is responsible for filing any claim for reimbursement and will be responsible for any associated repairs or the replacement of the Equipment is in question.
- If a shipment is made on the Omni CleanAir's account with a third party freight carrier, and the equipment arrives at the customer's location clearly damaged, it is the responsibility of the Customer to reject the freight carriers delivery. If the customer accepts the shipment and determines after the fact that the equipment was damaged during shipment, the customer is responsible to provide photos, an inspection report, and any other information to Omni CleanAir within 14 days, in order for Omni CleanAir to file a claim with the third party freight carrier. Once the claim has been filed Omni CleanAir will work with the customer to address the damage incurred.