



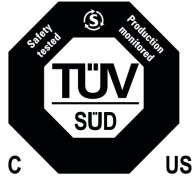
# **GIMNAIRE 2200CBF** HEPA Air Filtration Machine



## Operation and Maintenance Manual

# WARNING

Do not use with combustible or explosive material. Do not expose to water or rain. Connect only to grounded outlet with GFCI device. Disconnect power for cleaning and servicing. This equipment to be operated only by trained personnel.



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

## Safety Warning Instructions:

READ AND SAVE THESE INSTRUCTIONS

This equipment to be operated only by trained personnel.

Do not use with combustible or explosive material.

Do not expose to water or rain.

Connect only to grounded outlet with GFCI device.

Disconnect power for cleaning and servicing.

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

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

## Avertissement de sécurité Instructions:

LIRE ET CONSERVER CES INSTRUCTIONS

Cet équipement doit être utilisé que par un personnel formé.

Ne pas utiliser avec des matières combustibles ou explosives.

Ne pas exposer à l'eau ou à la pluie.

Connectez uniquement à une prise mise à la terre avec un dispositif GFCI.

Coupez l'alimentation électrique pour le nettoyage et l'entretien.

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

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

OmniAire 2200CBF is commonly used on projects where dust control is necessary but HEPA filtration is not a requirement. The 2200CBF machine comes equipped with a 95% ASHRAE bag filter and 2-stage pre-filter. The MERV 15 bag filter has a high capacity and is ideal for collection of silica or bulk dust when cutting or grinding concrete, wood or plaster. The bag filter can easily be replaced with a 99.97% or 99.99% HEPA filter if the job requires HEPA filtration.

## OmniAire 2200CBF Specifications

Airflow: 1000/2000 CFM

Power Requirements: 115 VAC/60 Hz/11.1 Amp

Motor: 1.25 HP with thermal overload

Filtration: MERV 15 bag filter

Optional Filtration: HEPA 99.97%, 0.3  $\mu$  filter; HEPA 99.99%, 0.3  $\mu$  filter; MERV 9 primary/secondary filter, OdorGuard 600 activated carbon filter; VaporTrap V-Bank 36 lbs

Recessed Controls: HIGH/OFF/LOW speed switch; amber change filter indicator light; red power indicator light

Housing: galvanized metal, silicone sealed before riveting; (4) rubber grip handles; (2) 5" hospital grade locking casters, (2) 5' rigid hospital grade casters

Exhaust Collar: 12" diameter

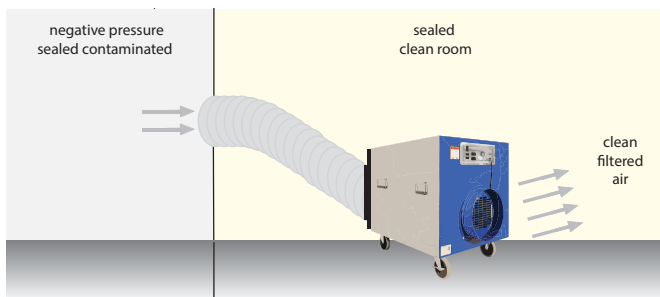
Size/Weight with Filters: 28"W x 32"H x 35"L, 147 lbs.

## Receiving Instructions

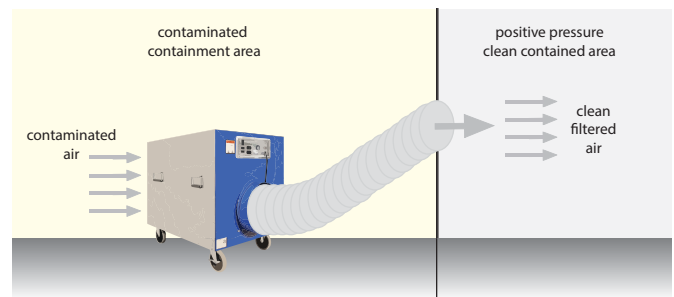
Visually inspect the unit for damage. Remove the primary/secondary filter and ensure that the bag filter has not been dislodged during shipping. The bag filter should be sitting on the filter guides and the filter tabs that hold the HEPA filter in place should be tight.

If the filter is not seated correctly then remove the filter tabs, reposition the filter, and reinstall the filter tabs before operation to ensure that there is no bypass around the filter. If the filter tabs are loose verify that the filter is in the correct position and retighten the filter tab nuts.

## Application Examples



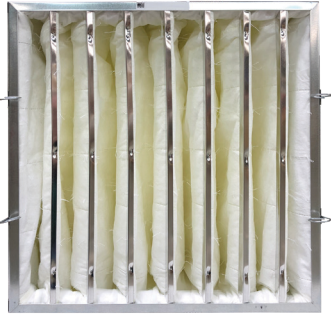
To create **NEGATIVE PRESSURE** inside the containment, more air has to be exhausted out than leaks into the containment. Place the machine inside the containment and hook a flexible duct to the outlet ring of the machine exhausting to outside the containment. (See Above) All of the air being exhausted has gone through the bag filter.



To create **POSITIVE PRESSURE** inside the containment, more air has to be pumped in than leaks out of the containment. Place the machine outside the containment and hook a flexible duct to the outlet ring of the machine ducting the exhaust into the containment. (See Above)

## Maintenance of the OmniAire 2200CBF

Minimum maintenance is required on this unit although as the filters fill up they will need to be replaced. When filters need to be replaced the indicator light will come ON. To replace the filters, please follow the steps below.



bag filter

### Bag Filter Replacement

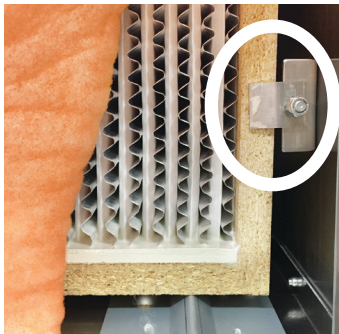
The bag filter housing is pre-installed using filter tabs and nylock nuts, making your machine ready to use. The bag filter is secured inside the housing with 4 P-clips. To remove the bag filter, turn P-clips 90 degrees and pull it out. Then install the new bag filter and secure it using the same P-clips.

### Prefilter Replacement (used with optional HEPA filter)

The primary/secondary filter should be changed when visually loaded with dust or when the filter change light comes ON. This can all be done while the machine is running. Ensure that the orange side of the prefilter is facing the HEPA filter. At this time the filter change light will turn OFF.

When the light does NOT turn off after replacing the prefilter then the HEPA filter is full and should be replaced to maintain airflow.

Please note that even though the HEPA filter is fully loaded the filter is still removing the particulates from the air at the rated efficiency but at a reduced airflow. This will affect the ability of the machine to provide positive or negative pressure within the containment.



filter tab

### HEPA Filter Replacement (optional)

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 1/4-20 Nylock nuts, which require a 7/16" wrench or socket. Remove all 4 filter tab retaining nuts and 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 resealed and tightened at a later time if necessary.

Please note the bag filters have a large dust holding capacity and require replacement when the airflow of the machine drops below required minimum flow. Even when the filter is fully loaded it is still removing the particulates from the air at the rated efficiency but at a reduced airflow. Typically bag filters do not require the use of prefilters.

## Troubleshooting

Your Omnitec Design machine is designed and engineered to provide years of trouble free service. Occasionally though problems do occur. Here are some helpful tips and solutions to common problems.

### ***The machine does not start or just hums when turned on***

1. Check the circuit you have the machine on and ensure that it has power.

2. Remove the bag or 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 is touching the side of the blower housing. The most common reason for this is that due to an impact of some kind the motor mounts have been bent. Remove the motor/blower assembly and replace the bent motor mounts.
3. If the blower wheel spins freely the next thing to check is the capacitor. With the filter still removed from the machine push the blower wheel and as it is spinning turn the power switch on. If the machine runs at this point then the problem is in the capacitor. Ensure that the wiring connected to the capacitor is plugged in and not broken. If the wiring is correct, then the capacitor is faulty. Replace the capacitor.

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

1. This machine MUST be run with a bag or HEPA filter in place. If you are trying to run it without a filter in place the motor will overheat within a few minutes and the thermal overload in the motor will engage. 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. If the machine is allowed to continue 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.
- If the machine does require electrical servicing of the motor or switches the following page contains a wiring diagram to aid in repair or troubleshooting.

**Ordering Info**

OmniAire 2200CBF

Bag Filter MERV 15

Primary/Secondary Two-Stage Filters (box of 20)

HEPA Filter 99.99%, 0.3µ (metal frame)

HEPA FILTER 99.97%, 0.3µ (pb frame)

Bag Filter Housing (includes 1 Bag Filter)

Vapor Trap V-bank Filter

OdorGuard 600 Carbon Filter

ABS Plastic Intake Manifold, 12" Dia.

Quick Clamp, 12"-16" Dia.

Flexible Duct, 12" Dia. x 25' L

Flexible Duct, Wire & Fiber Reinforced

Flexible Duct, 12" Dia. x 25' L

Flexible Duct, Wire & Fiber Reinforced

**Part #**

OAA2200CBF

OBF10

OAP2424

OAH2424G

OAH2424L

HBF2200

OCVT2424

OG2424D

OAIM2200-12

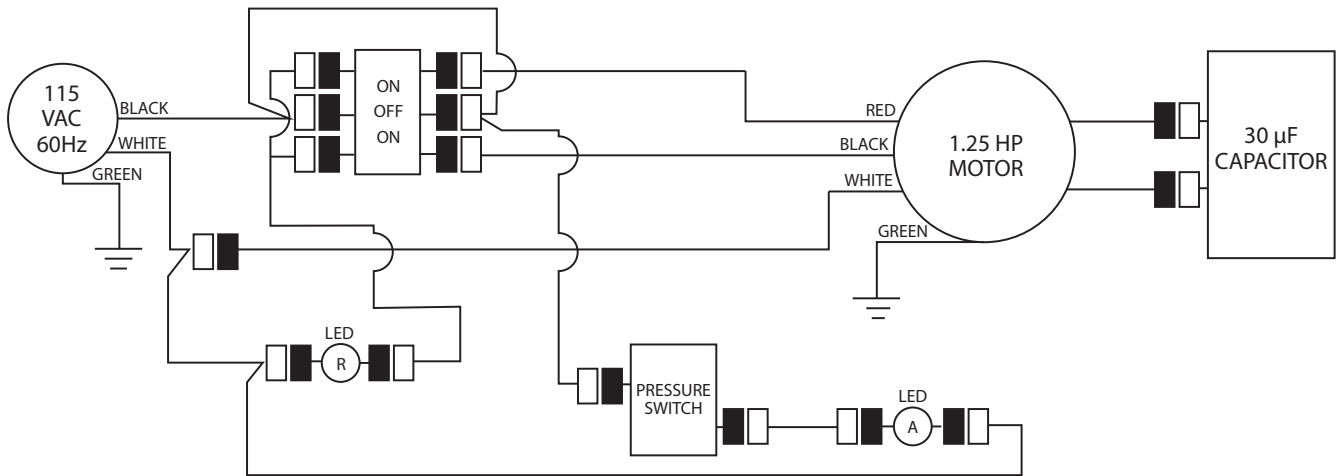
QCW14

OADI2

OADI2R

OADI2

OADI2R



**Diagram Legend**

- Wiring Connector
- ⌋ Terminated (Capped) Wire
- Ⓡ Red LED Light
- ⓐ Amber LED Light
- ⓐ Green LED Light

**GMNITEC**  
DESIGN

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|                           |                          |                 |
|---------------------------|--------------------------|-----------------|
| MODEL<br><b>OA2200CBF</b> |                          |                 |
| Wiring Diagram            |                          |                 |
| DRAWN BY:<br>A. Briceno   |                          | REV<br>A        |
| SCALE<br>Not to Scale     | DATE<br>November 9, 2018 | SHEET<br>1 of 1 |

## Omnitec Design LIMITED WARRANTY

Omnitec Design warrants, for a period of twelve (12) months from the date of purchase, that all Products, component parts and accessories, excluding filters, will be free from defects in material and workmanship under normal use and service.

THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS F.O.B., Omnitec Design 4640 Campus Place Ste. 100, Mukilteo, WA 98275  
Phone: 425-290-3922

In order to keep this warranty in effect for the aforementioned twelve-month period, the purchaser must (i) promptly, i.e., immediately upon discovery, inform Omnitec Design's customer service of any defects, and (ii) properly use and maintain the Product prior to the discovery of any defect.

This warranty does not cover normal wear and tear or defects caused by (i) improper or negligent handling or unauthorized modifications; (ii) defective or improper premises, chemical, or electrical influences; or (iii) weather or other forces of nature.

In order to provide the best customer service possible, Omnitec Design requests that purchaser completes the enclosed LIMITED WARRANTY REGISTRATION FORM and returns it to Omnitec Design within 30 days of purchase date.

### LIMITATIONS OF WARRANTY

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES AND OBLIGATIONS OF Omnitec Design OR ITS SUPPLIERS, EXPRESS OR IMPLIED, AND Omnitec Design EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

### LIMITATION OF REMEDY

**Under no circumstances shall Omnitec Design or any supplier of Omnitec Design be liable for any loss or damage,** 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.

### PRODUCT SUITABILITY

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