

# Air Purifiers for Industrial Applications



**AirRhino 3000 Hood**  
80 lbs of carbon



**AirRhino 2000 VS**  
100 lbs of carbon



**AirArmor custom**



**SSU custom**



**Monomer**  
15 lbs of carbon



**6000 Stainless Vertical with hood**  
24 lbs of carbon



**Print Safe**  
27 lbs of carbon



**I-6500A**  
80 or 160 lbs of carbon



**RSU 24 CC**  
50 lbs of carbon



**AirMarshal**  
36 lbs of carbon



**Fume Extractor Welding**  
40 lbs of carbon



**RSU 48 CC**  
120 lbs of carbon



**electrocorp**  
The Simple Solution™



**RAP 204 CC**  
30 lbs of carbon



**RAP 24**  
60 lbs of carbon

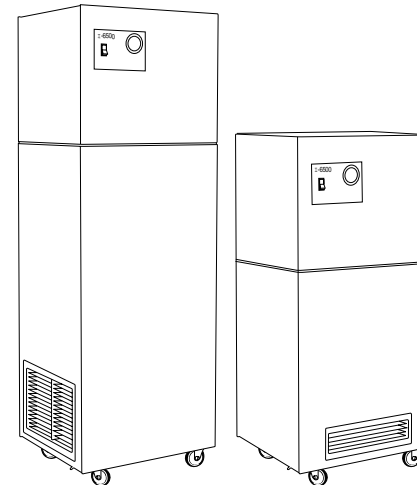


**RAP 48**  
120 lbs of carbon

# I-6500 Series Operations & Maintenance Manual

Manufactured \_\_\_\_\_

Serial number \_\_\_\_\_



I-6500 A

I-6500 B & C

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## 1.0 Introduction

You are now the owner of an **I-6500 SERIES** unit, an advanced effective indoor air purifier. You may now expect a noticeable improvement in your air quality as your **I-6500 SERIES** begins the process of reducing microscopic airborne particulate as well as harmful chemical gases, smoke, dust and pollen.

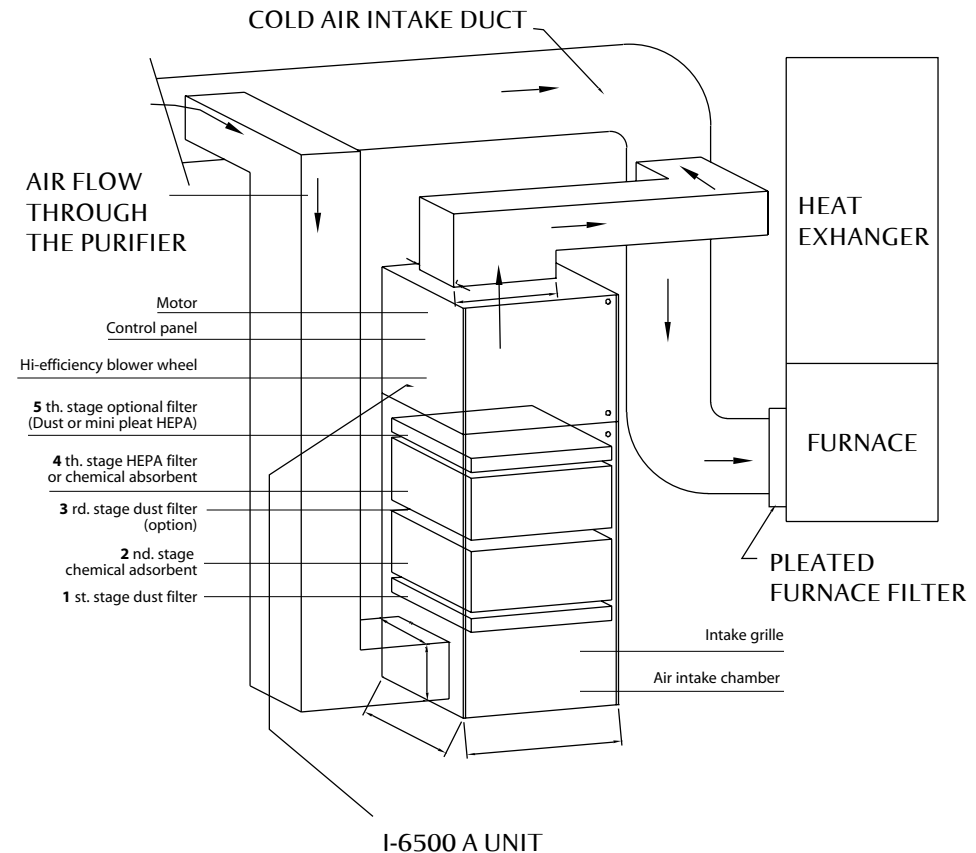
## 2.0 Safety Precautions

- Carefully read all the instructions contained in this manual before operating the unit.
- Keep this manual as it contains information for proper operations and maintenance.
- Keep all fastening hardware tight to ensure that the unit is in safe working condition.
- Familiarize yourself with the way in which filters are removed, installed, and serviced.
- **CAUTION:** All filters must be in place whenever this machine is in operation and doors closed. Operating it with one or more filters missing, the door open, and/or inferior filters in place will cause amperage to increase and the motor to overload. Permanent damage could result.
- Use only on a grounded electrical circuit; do not use a two-wire electrical prong adapter to defeat the three-pronged plug on the end of the cord. Unit must be grounded.
- When servicing, be careful when touching the exterior of the motor as soon as it has been turned off; it may be hot enough to be painful or cause injury. With modern motors, this condition is normal when operated at rated load and voltage, as they are built to operate at higher temperatures.
- **Do not substitute any other filters (particulate or chemical) for those supplied as this will alter the design characteristics.**
- **DO NOT SERVICE MOTOR OR CONTROL PANEL UNLESS UNIT IS UNPLUGGED FROM RECEPTACLE (ITS POWER SUPPLY) !**

## 3.0 Principles of Operation

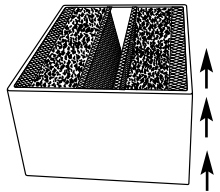
- The **I-6500** features a threefold method of operation:
  - A) Capture general particulate.
  - B) HEPA filter removes microscopic particulate matter.
  - C) Chemically adsorbs, reacts or scrubs toxic or nuisance gases.
- This unit is supplied with an eight-foot cord and two 360 degree swivel casters.
- **FILTER SEQUENCE HAS BEEN SPECIALLY SELECTED FOR YOUR APPLICATION.**

## Diagram of an I-6500 connection as an air handler



### 10.3 Filter Holding Module

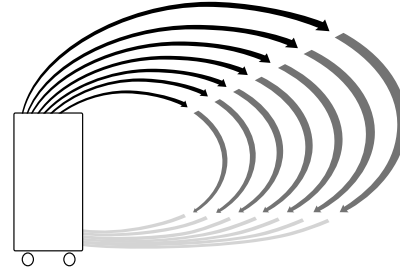
- (1) or (2) Filter Holding Modules.
- Slide into unit as per drawing.
- Please ensure airflow direction arrows on label are pointing up.



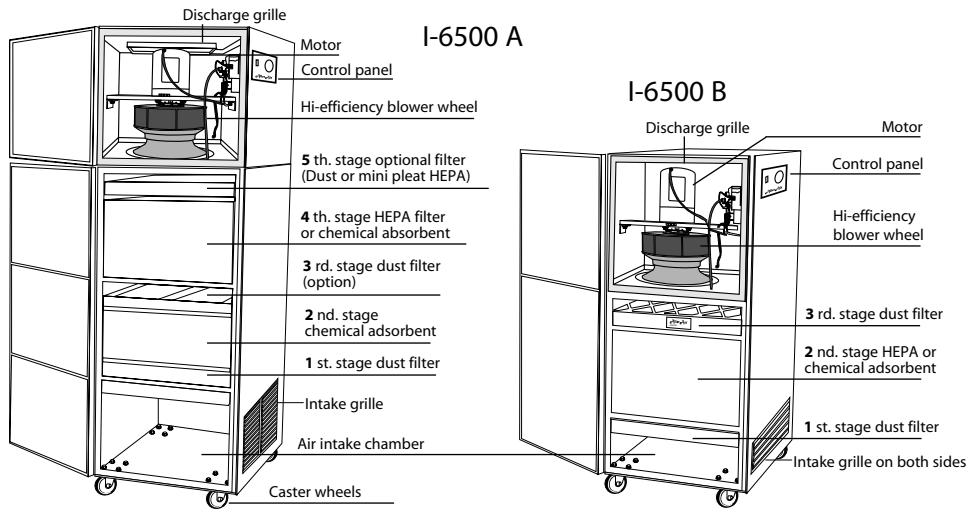
Slide into I-6500 this way.  
Airflow from underneath

**NOTE:**  
Attach panel covers  
on filter canister before  
inserting into unit.

### 10.4 Room Airflow Patterns



### 10.5 General Equipment Layout



### 10.6 Troubleshooting Guide

Symptoms:	Possible Cause:	Suggested Solution:
Unit will not start	<ul style="list-style-type: none"> <li>• Faulty Power Supply</li> <li>• Return or supply grille blocked</li> <li>• HEPA filter improperly installed</li> <li>• Blown fuse</li> <li>• Unit not plugged into receptacle</li> </ul>	<ul style="list-style-type: none"> <li>• Check breaker box</li> <li>• Remove obstruction</li> <li>• See Section 7.2</li> <li>• Replace fuse</li> <li>• Plug unit in</li> </ul>
Excessive noise	<ul style="list-style-type: none"> <li>• Blower wheel contacting cone</li> <li>• Fan isolators loose or off</li> </ul>	<ul style="list-style-type: none"> <li>• Realign / Replace wheel</li> <li>• Replace isolator</li> </ul>
Insufficient airflow	<ul style="list-style-type: none"> <li>• Obstruction in system</li> <li>• Clogged filters</li> </ul>	<ul style="list-style-type: none"> <li>• Remove obstruction</li> <li>• Replace filters</li> </ul>
Excessive airflow	<ul style="list-style-type: none"> <li>• Filters not in place</li> </ul>	<ul style="list-style-type: none"> <li>• Install filters</li> </ul>

## 4.0 System Components

### CABINET

Attractive appliance finish, designed to blend in with any decor. The I-6500 system is mounted on recessed casters for ease of portability.

### FILTERS

- Ashrae-rated dust filters.
- DOP-rated high efficiency HEPA filters.
- Specially selected particulate and chemical filtration.

### BLOWER ASSEMBLY

The blower is factory balanced and tested to ensure quiet and vibration-free operation. The blower in the I-6500 features a motor mounting system designed to reduce vibration.

### CONTROL PANEL

Recessed control panel is designed for easy monitoring. Features include two position on/off switch and visual pressure indicator.

### GRILLES

Strategically located intake and discharge grilles will ensure proper air current and air patterns in the selected environment.

### PLUG

Eight-foot grounded cord for easy placement.

### 4.1 Unit Specifications

Model	I-6500 A	I-6500 B
Air Flow:	750-1000 CFM	500-900 CFM
Pre-filter:	# 65FH0413, (2) only	# 65FH0413
HEPA Filter:	# 65FH0411, (1) only	# 65FH0411
Chemical Filter Assembly:	# 65FC0311, (1) or (2), EXEC # 65FC0312, (1) or (2), VOCARB	# 65FC0311 (1) # 65FC0312 (1)
Dimensions:	Height: 70" Width: 21" Length: 24 1/2"	48" 21" 24 1/2"
Voltage:	120/1/60	120/1/60
Maximum Power Consumption:	390 watts	390 watts
Maximum Current:	5.4 amps	5.4 amps
Approximate Weight:	250 to 340 lbs.	175 to 250 lbs.

## 5.0 Unit Receiving Instructions

### 5.1 Unit Inspection

Upon receipt, inspect unit for either visible or concealed damage. Damage should be immediately reported to the transport company.

The **I-6500 B** units are delivered to you in the following combinations:

- **Particulate Application:**  
18 1/2" x 23 1/2" x 12" HEPA filter with 2" x 18 1/2" x 23 1/2" pre-filter.
- **Odor Application:**  
80 lb carbon filter with pre & post filters.
- **Options:**  
2" x 18 1/2" x 23 1/2" HEPA  
2" x 18 1/2" x 23 1/2" Pleated carbon

The **I-6500 A** units are delivered to you in one of three ways:

- **Particulate Application:**  
Unit contains filters mounted within the unit. 2 - HEPA 99.97% down to 0.3, and 1 - pre-filter.
- **Heavy Duty Odor Application:**  
Unit contains two particulate filters mounted in the unit. The one or two chemical absorbent assemblies are shipped loose in two cardboard boxes on top of the unit. One pre-filter as a standard. Option: one 2" HEPA
- **Normal Dust and Odor Applications:**  
Unit contains a HEPA particulate filter and one odor filter in a cardboard box on top of the unit. Two dust pre & post filters.

### 5.2 Pre Start-up Checklist

**Note: Carbon canister is sent in a separate box and must be installed.**

- Open lower door insert the carbon filter canister (1) or (2) with the rubber gasket down.
- Labels and serial numbers are present for future identification.
- Verify that the power supply is compatible with the equipment (120-volt / 15 amps / a phase / 60 hz). Also check that the unit is plugged into a grounded receptacle.

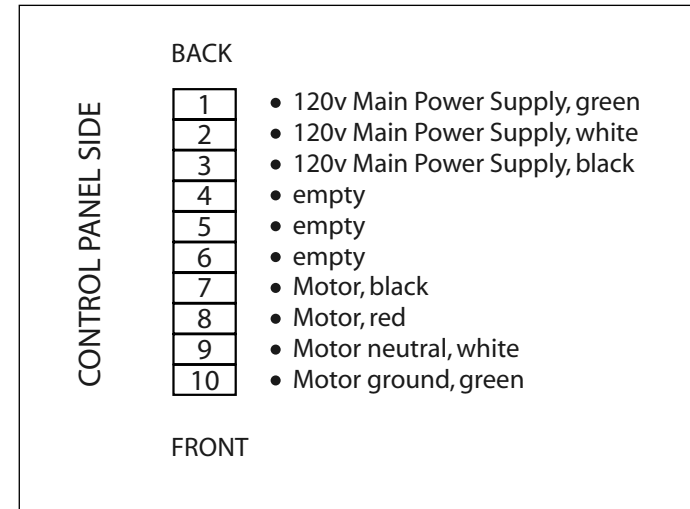
## 6.0 Start-Up

- Place unit on a flat surface, ensure all filters are installed (see Equipment Installation and Filter Maintenance Guide on face of unit).
- Ensure that supply and return air grilles are not obstructed in any way (air circulation patterns will be inhibited if airflow is obstructed).
- Insert male end of cord into 15-amp circuit. Unit should be connected to an independent 15 amp circuit.
- Turn power toggle switch to "HIGH" position to verify that system is operating properly. Do the same in "LOW" position.

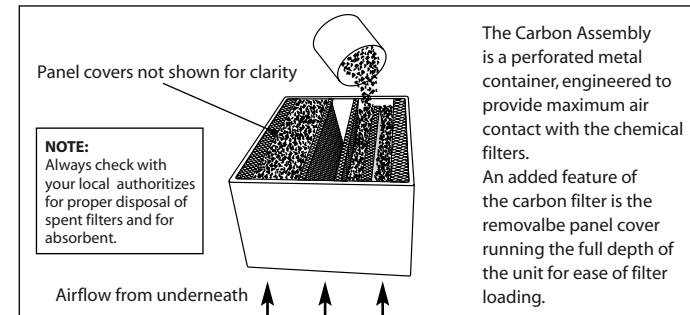
**WARNING: DO NOT OPERATE THE UNIT UNLESS ALL FILTERS ARE IN PLACE.**

## 10.2 Terminal Strip Connections

(ON CONTROL PANEL IN I-6500)



## 10.3 Filter Holding Module



## 9.0 Warranty

**Electrocorp** warrants its equipment to be free from defect in material and workmanship under normal use and service for a period of one year from date of shipment. **Electrocorp's** obligation under this warranty shall be limited to replacing any parts, thereof, which shall be demonstrated to have been defective. This is expressly in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness.

**Electrocorp** claims no warranty as to merchantability or as to the fitness of merchandise for any particular use and shall not be liable for any loss or damage. No person, firm or corporation is authorized to assume for **Electrocorp** any other liability in connection with the sale of these goods. Equipment, parts and material manufactured by others and incorporated in Electrocorp's equipment are warranted by **Electrocorp** only to the extent of the original manufacturer's liability to **Electrocorp**. Expendables are not warranted for any period of time.

### Conditions and Limitations:

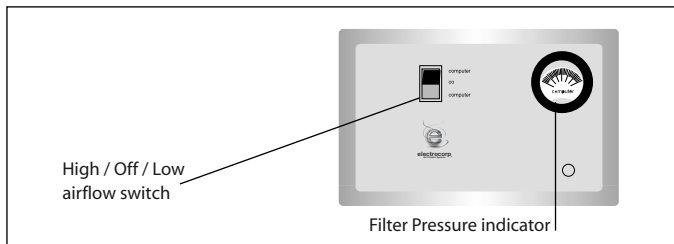
**This warranty does not cover** abuse, misuse, maintenance negligence, improper assembly, acts of vandalism, acts of God, fear wear, modifications of the equipment or installation of a part not recommended by **Electrocorp**, as well as operation of the equipment at voltages other than those specified by **Electrocorp**.

### 9.1 Toxic Gas Adsorbent Purifier

**Electrocorp Model I-6500** room air purifier is designed to scrub the toxic exhaust gas in a 2000 to 3500 cubic foot room. The **Electrocorp Model I-6500** room air purifier is provided with installation and operation instructions. The **Electrocorp Model I-6500** room air purifier includes replaceable filter elements with an activated carbon bed for chemical gas and odor removal; a centrifugal blower is housed in a sandstone gas tight cabinet enclosure.

## 10 Spare Parts, Drawings and Schematics

### 10.1 Control Panel Layout I-6500 SERIES



## 7.0 Equipment Maintenance Procedures

Proper maintenance is critical to extend the life of the filtration system. The information presented below outlines basic maintenance procedures to ensure the **I-6500** units will provide trouble-free operation for years to come. The **I-6500** is designed to allow quick access to the particulate filters, chemical filters, blower/motor and control panel assemblies.

### 7.1 General Filter Maintenance

It is very difficult to predetermine a specific maintenance schedule as the rate of dust loading and chemical filter consumption will vary for each application. Periodic inspection of the filters and pressure gauge during the first few months of operation should help establish an appropriate replacement schedule.

**Electrocorp**, through its years of experience has established the following recommendations for a "typical" replacement filter schedule:

#### IT IS VERY IMPORTANT TO CHANGE FILTERS ON A REGULAR BASIS.

Filter Type	Part No.:	Qty:	Suggested Replacement
Chemical Filters		1 or 2	Every six to twelve months
HEPA Filter		1	Every twelve months
Pre-filter		1	Every two-three months

### 7.2 Particulate Filter Replacement

- Carefully slide out filters along their support channels (see diagram in back of manual).
- Open with appropriate tool to avoid stripping of screws.
- Slide clean filters gently into place.
- If encountering difficulties, confirm that there are no obstructions in the filter track.
- Large HEPA filters should be replaced if the filter gauge on the control panel exceeds - 1.6".
- Large HEPA filters will be installed with gaskets facing down on the filter track.
- Outmost care must be taken not to damage the exposed portions of the HEPA filter.

### 7.3 Unit Inspection

#### Heavy Duty Odor Applications

It is essential that the chemical filters be replaced approximately once every twelve months OR immediately following any detection of odor on the discharge of the system.

After an operating period of twelve months (or when the filters are consumed), call your authorized distributor to purchase a new set of chemical filtration assemblies prior to removal of existing filter / or replacement odor absorbent.

#### To replace CF Filtration Assemblies ( Part NO.: 65FC0312):

- Ensure that the unit is unplugged.
- Open door with appropriate tool to avoid stripping of screws.
- Slide out existing Carbon Filtration Assemblies from the unit. ( See diagram at bottom of last page).
- Remove newly purchased Filtration Assemblies from the box.
- Reinsert new Filtration Assembly back into the system (see diagram on last page of this manual).
- Return door to the closed position and verify that an airtight seal is maintained.
- Place consumed Filtration Assembly directly into reusable cardboard box.

NOTE: It is advised to replace dust filters after replacing Carbon filter.

#### To refill existing Carbon filter cell with new odor absorbent:

- Slide out existing Carbon filters (see diagram on last page of manual).
- Unscrew the two (2) top panel covers and lift off cover.
- Pour out used odor absorbent (**This procedure may be dusty, therefore a dust mask is recommended**).
- Refill Carbon containers with fresh odor absorbent.
- Replace the 2 panel covers and re-insert into unit as per diagram on last page of manual.

NOTE: It is advised to replace dust filters upon replacing the Carbon filter.

### 7.4 CF Assembly Maintenance Option Only

#### Light Duty Odor Applications Pleated Carbon

Filters used in Light Duty Odor Applications are very simple to maintain. When it is time to replace filter, remove used Filters Assembly from the unit and discard.

Replace with new Filters Assembly by sliding filter into proper slot.

### 7.5 Blower Maintenance

#### WARNING:

**SWITCH UNIT OFF AND UNPLUG POWER CORD FROM WALL BEFORE SERVICING THE BLOWER.**

The motor is equipped with electric motor grade double shielded ball bearings and a special lubricant, assuring long life and quiet operation. No extra motor maintenance required.

### 7.6 Annual General Inspection

- The sealing integrity of the **I-6500** essential. Every 12 months, verify that all gaskets are in proper condition. Should the door gaskets adhere slightly to the unit when opening a door, lubricate its surface with a transparent grease or petroleum jelly.
- Should the unit be relocated continuously for optimum efficiency, ensure casters are tightly fastened.

## 8.0 Operation

The air is drawn into the unit through an intake grille located in the side of the unit. The B Series has a smaller inlet. One on each side. The air then passes through the various stages of particulate and odor/gas filtration. Powered by a 120-volt motor/blower assembly, the clean air is then released through the top discharge grille into the controlled space.

### 8.1 Controls

For your convenience, the **I-6500 Series** is equipped with a pressure gauge recessed within the control panel to allow for a visual indication of filter pressure.

**IN THE EVENT OF HIGH FILTER PRESSURE (1.6 WC or more), CALL YOUR AUTHORIZED DISTRIBUTOR IMMEDIATELY TO REPLACE YOUR FILTERS.**

In case control panel servicing is required, and electrical schematic is located in this manual.

### 8.2 Positioning of Unit

Portability was taken into consideration when designing the system. Mounted on four casters, the unit can be wheeled virtually anywhere in the room for optimal convenience. The unit is designed in an up-flow configuration allowing the air to create a "sweeping" effect across the room (see **Airflow Patterns Drawing** at the back), moving across the room in a downward motion. The clean air pushes particulate and gaseous matter towards the floor level and draws it into the intake grille located on the lower door. This configuration allows the particulate which have already accumulated on the ground to be pulled towards the return air grille. This results in a very effective means of cleaning the space.

The **I-6500 Series** is more efficient as it is placed closer to its intended source. Conversely, the unit's efficiency is diminished the further it is placed from the source of pollutants. The unit can be conveniently positioned against a wall. The back of the unit must be placed at least 2" away from the wall such that the power cord remains free flowing. It has been designed so that all servicing is accessed through the front of the unit. The **I-6500 Series** has been uniquely designed for a throw of up to forty feet.