Thank you for purchasing the Dust Free® Series 2000 air purification system. The Series 2000 system reduces air contaminants by drawing them through three stages of air filtration with an electrically powered blower. Air first enters the pre-filter which removes coarse dust, lint, and fibers, while also prolonging the life of the main filter. The main filter is efficient on particles down through .3 microns (1 micron = .00004”). Finally, the air passes through the optional adsorbent filters to reduce airborne chemical gas contaminants (see chemical adsorbent applications).

**FEATURES OF THE SERIES 2000**
- Easily installed above a drop ceiling for appearance and quiet operation.
- Separate supply and return allows air pattern engineering.
- Modular design provides for single or multiple supply and returns for greater effectiveness.

**AIR PATTERN MANAGEMENT**
Effective air cleaning requires air pattern management—using the clean filtered air coming from the systems supply grille(s) to push the contaminants to the system return grille(s) where the dirty air is drawn into the air cleaner to be filtered.

**SYSTEM CONFIGURATIONS**
The Series 2000 is designed for a wide variety of applications through the use of modular components. The system may be installed in two basic configurations depending on application requirements and available space in the installation area.

**CONFIGURATION B**
The layout of this configuration uses 12" duct (not included) to separate the supply and blower from the filter module. The filtered air will sweep airborne contaminants toward the return. The system can be located so that the return/filter/blower module) is directly over the contaminant source. The supply should be located so that discharge air directs contaminated air back to the return. An additional air supply grille may be used by installing a wye and additional duct.

**CONFIGURATION C**
This configuration layout fully distributes the components of the Series 2000 to minimize noise and maximize control of room air patterns. Returns should be located near contaminant sources. The supplies should be located so that the optional curved blade louvers direct filtered air toward the returns. The blower is hung above the T-bar ceiling. This arrangement uses filtered air to sweep airborne contaminants back to the return grille/filter housing. For maximum effectiveness two return/filter modules and two or more air supply grilles are used.
**SPECIFICATIONS**

**Materials:** 20 gauge galvanized steel

**Motor:** 3/4 HP, single phase, permanently lubricated. Thermal protection.

**Blower:** Direct Drive, forward incline blower.

**Power:** 115 V, 50/60 HZ, Three speed control, 8 ft. three-prong power cord is included.

**Circuit:** 15 amp circuit 8.5 FLA (Full Load Amps)

**Controls:** Three (3) speed, remote mounted, low voltage switch.

**Air Volume:** 1250 CFM (35.4 CMM), depending on filter configuration.

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**Supply Plenum and Grille**

**Dimensions:** 11.75"L x 23.75"W x 18"H  
(29.8 x 60.3 x 45.7 cm)

**Weight:** 7 lbs. (3.2kg)

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**Blower Module**

**Dimensions:** 27.06"L x 20.13"W x 15.13"H  
(68.6 x 50.8 x 38.1 cm)

**Weight:** 48 lbs. (21.8kg)

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**Filter Housing and Plenum**

**Dimensions:**
- **Filter Housing** 27"L x 20"W x 11.5"H  
  (68.6 x 50.8 x 29.2 cm)
- **Plenum** 32.75"L x 23.75"W x 6.75"H  
  (83.2 x 60.3 x 17.1 cm)

**Weight:**
- **Filter Housing** 16 lbs. (7.3kg)
- **Plenum** 25 lbs. (11.3kg)
PREPARATION
Determine the desired location of return(s) and supply(s). Remove ceiling panels in those locations and inspect the areas above the T-bar ceiling for anything that would interfere with installation of the components. For module units, a minimum of 18" vertical clearance is required between the deck and T-bar ceiling. Minimum 12" clearance is required for duct work. Position of components may have to be moved slightly to clear obstructions.

CONNECTING POWER
The Series 2000 system is supplied with an eight foot, three-prong power cord. It may be plugged into any 115VAC, 50/60 Hz, 15 amp outlet. If desired, the power cord can be removed and the system can be wired directly to a building circuit. Refer to local codes or NEC.

RUNNING DUCT
Inspect the area where duct will be routed for obstructions. Metal duct is preferred for maximum airflow. In some cases, because of obstructions and system layout, flex duct must be used. Care should be taken to keep the duct as straight and level as possible to avoid significant pressure drops. Total ducting, inlet and outlet, should not exceed 60 feet.

ASSEMBLY
Lay the filter module plenums on the floor upside down. Remove the filters from the filter module and place the modules upside down on the plenums. Open access doors, align screw holes and attach the two modules with four machine screws.

Only trained and authorized personnel should work on electrical components. Opening the motor compartment or controller module will expose live components, possibly resulting in electric shock or death.
BLOWER MODULE
Locate a suitable position between the return air and supply air grille(s) and hang the blower module using eight gauge wire, 200 lb. chain, and “S” hooks or cable and clamps may be substituted. The wire must be attached to suitable anchor points on the true ceiling or deck such as a beam or joist, or Hilti™ type anchors. Raise the module to desired location.

AIR SUPPLIES
Position supply grille(s)/plenum(s) in the selected location. Optional supplies with louvers should be oriented so that discharge air is directed towards the return grille(s). A safety strap or wire anchored to the true ceiling should be attached to the module.

DUCT
Connect modules with duct, taking care to make runs as straight and level as possible. Support duct with wire or strap as needed. Tape all joints and seams. If the space between the grid ceiling and true ceiling is not air conditioned, duct and equipment should be insulated. On systems with multiple air supplies, a minimum three foot long, straight piece of rigid or flex duct should be installed between the wye and the blower module discharge. If the duct runs are unequal in length, a damper (not included) should be installed on the short run for balance.

INSTALLATION OF SERIES 2000B(SERIES 2000C SIMILAR)

Do not use less than four wires/chains to suspend the modules from the ceiling. The wires/chains should not angle more than 15° from perpendicular.

The blower should be positioned above the T-bar ceiling. Allow sufficient room below the blower module so that the bottom panel can be removed to permit removal of the motor or blower. Be sure the blower is oriented with the direction of the system air flow.
UNIT OPERATION

1. Open the filter module by pulling grille door down. Safety latches support all filter media.

2. If the optional adsorbent filter is to be used, remove it from the plastic bag and lay it in the media tray. Install the media tray in the filter module. Secure by sliding safety latches on the media tray.

3. Install the particulate filter. If no adsorbent filter is being used, a 6" deep particulate filter should be installed. If the adsorbent filter is being used, a 4" deep particulate filter should be installed. Be sure, side with Velcro® tabs is facing down. Pull out safety latches to retain filter.

4. Attach foam pre-filter to particulate filter using the Velcro® tabs.

5. Close the grille door.

6. Turn unit on by rotating switch clockwise. The switch allows a three speed adjustment in discharge air flow.

7. Discharge air can be directed as needed by adjusting the optional louvers on the air supply(s).

The particulate filter will become more restrictive as it gets dirty. It may be necessary to increase blower speed by adjusting the control knob to maintain desired air flow.
**PREFILTER**
Clean at least once per month, more often in dirty environments. The foam pre-filter is attached to the particulate filter with Velcro® tabs. Remove it from the unit and wash by hand with a mild detergent. Rinse in clean water and squeeze dry.

**PARTICULATE FILTER**
Change when there is a noticeable reduction in air flow. Remove pre-filter, then the particulate filter. Properly dispose of the filter (it cannot be cleaned). Install new particulate filter of proper size and type.

**CHEMICAL ADSORBENT FILTER**
Change when odors become more noticeable. The potassium permanganate will turn from purple to brown; Type 5 will turn from yellow to white when saturated. There is no color change for carbon or Type A adsorbents.
To change the adsorbent filter, remove the pre-filter and particulate filter. Release the safety latches and carefully lower it from the module. Carefully remove the adsorbent filter from the media tray and place it in a plastic trash bag. Avoid breathing the adsorbent dust. Wipe out any dust accumulation in the media tray. Lay new adsorbent filter in the tray and replace filter in the filter module as described previously.
<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tr>
<td>915-0014-001</td>
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<td>950-0015-003</td>
<td>Carbon Filter Holding Tray</td>
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<tr>
<td>920-0003-006</td>
<td>Carbon Web Filter</td>
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<tr>
<td>935-0025-001</td>
<td>Heavy Duty Carbon (19 lb of carbon)</td>
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<td>915-0013-003</td>
<td>95% 4&quot; Pleated Filter</td>
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<td>915-0013-001</td>
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<td>920-0007-001</td>
<td>4&quot; Mini Pleat Filter</td>
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<td>Wall Mount Single Unit Controller</td>
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<td>975-0114-001</td>
<td>12&quot;x12&quot;x12&quot; Wye (required for 2000 C)</td>
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<td>750-0046-001</td>
<td>Safety Switch</td>
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