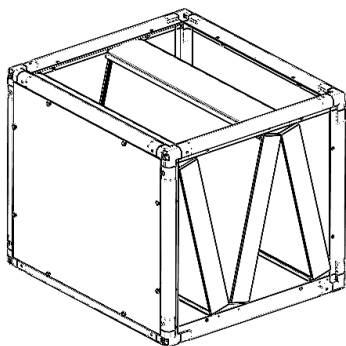


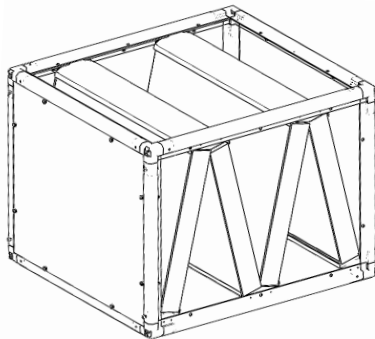
DUST FREE® SIXTEEN

Media Air Cleaner

Installation & Operation Manual



Sixteen (3-ton)
#08611



Sixteen (5-ton)
#08610

BEFORE INSTALLING OR MAINTAINING

- Read all instructions carefully. Failure to do so could damage the equipment or cause harm to yourself or others.
- Acknowledge all warnings.
- Only qualified technicians should perform the installation.
- Install in accordance with national and local wiring regulations and mechanical codes.

GENERAL

This product is designed to be installed into an existing HVAC system for improved indoor air quality.

INCLUDED INSIDE BOX

- Air Cleaner
- Installation & operation manual
- Installation hardware

SPECIFICATIONS

Model	Sixteen (3-ton) #08611	Sixteen (5-ton) #08610
Size (D x H x W)	27.75" x 23.125" x 24.75"	27.75" x 23.25" x 30.75"
Weight	42 lbs.	49 lbs.
Filtration	MERV 16 at 0.3 microns.	
Resistance	0.13" H ₂ O @ 1200 CFM.	0.18" H ₂ O @ 2000 CFM.
Construction	Modular alloy Aluminum chassis, high-strength ABS frame corners, 3003 Aluminum filter rails, painted galvanized steel access panels.	

REPLACEMENT FILTERS

Model	Sixteen (3-ton) Replacement Filter Kit #08600	Sixteen (5-ton) Replacement Filter Kit #08601
Size (D x H x W)	19" x 26.5" x 2.5"	19" x 26.5" x 2.5"
Filters Included	3	4

EPA Establishment No. 73316-TX-1

Dust Free® uses independent labs and universities for product testing.
Visit <http://www.dustfree.com/testing>.

The product and technologies described are not medical devices, and are not intended to diagnose, treat, cure, or prevent any disease or illness.

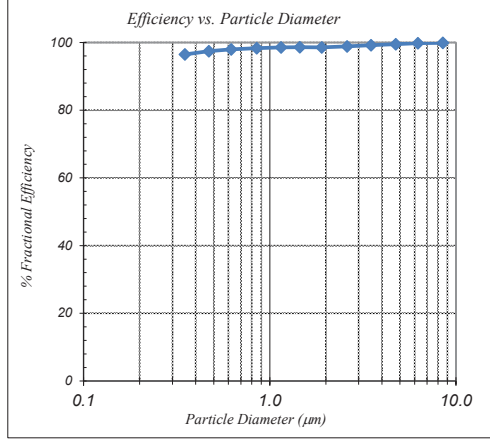
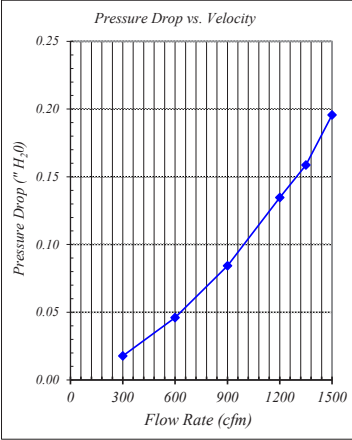
PERFORMANCE DATA - SIXTEEN 3-TON

Static Pressure vs Flow Rate

Flow Rate (CFM)	300	600	900	1200	1350	1500
Dp in "H ₂ O	0.02	0.04	0.08	0.13	0.15	0.18

Efficiency vs Particle Diameter (@ 1200 CFM)

Size Range (µm)	0.3 - 1.0	1.0 - 3.0	3.0 - 10.0
Initial Fractional Efficiency (%)	97.6	98.7	99.6



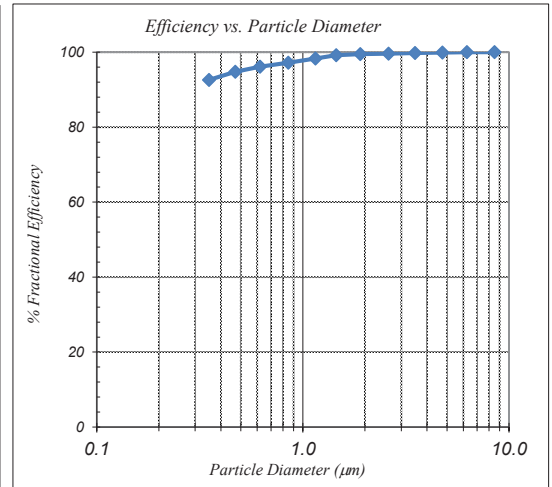
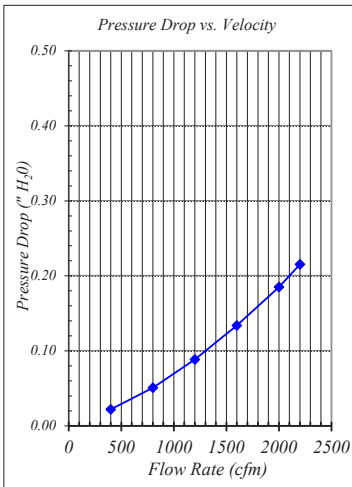
PERFORMANCE DATA - SIXTEEN 5-TON

Static Pressure vs Flow Rate

Flow Rate (CFM)	400	800	1200	1600	2000	2200
Dp in "H ₂ O	0.02	0.05	0.09	0.13	0.18	0.22

Efficiency vs Particle Diameter (@ 2000 CFM)

Size Range (µm)	0.3 - 1.0	1.0 - 3.0	3.0 - 10.0
Initial Fractional Efficiency (%)	95.2	99.2	99.9



PARTS OVERVIEW

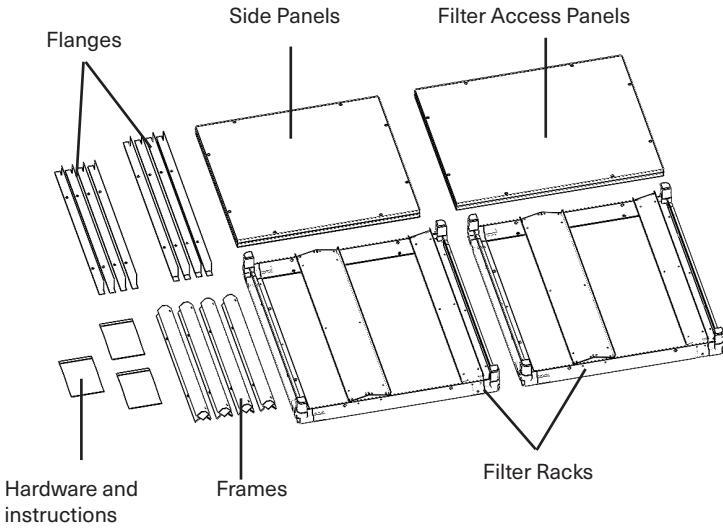


Fig. 1 Sixteen 3-Ton component identification.

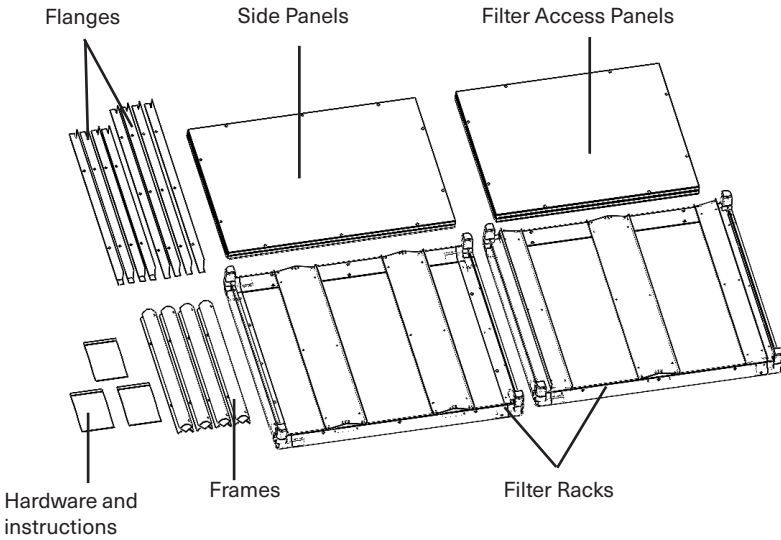


Fig. 2 Sixteen 5-Ton component identification.

ASSEMBLY

Before assembly, remove and identify all components. See page 3. Ensure the entire unit can be moved to the final installation location. If there is not adequate space, the individual components should be moved to the final installation location and assembled in place.

Note: Do not use an impact driver on any of the supplied hardware during assembly. If an electric driver is desired, use an electric drill with the torque output adjusted to the lowest setting to avoid damage to the hardware.

1. Slide qty 4 frame sections onto the black frame corners so that the screw holes align with the threaded holes in the frame corners. Install qty 1 of supplied #10-32 screws into each frame section to secure the frame to the filter rack. See Fig. 3.

For the 3-ton unit, the two filter racks are symmetrical so either can be used for the 'Inlet' or 'Outlet' side of the cabinet. For the 5-ton unit, the two filter racks are marked 'Inlet' or 'Outlet' and should be aligned accordingly.

2. Place the remaining filter rack onto the assembly and use qty 4 of the supplied #10-32 screws to attach the filter rack to the assembly. See Fig. 4.

Note: Ensure proper filter orientation.

For the 3-ton unit ensure the filter racks form a 'N' shape to accept the three filters. For the 5-ton unit ensure the filter racks form a 'M' shape to accept four filters. See Fig. 5.

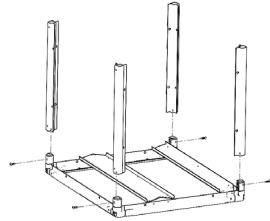


Fig. 3 Install frame sections into frame corners. (3-ton model shown.)

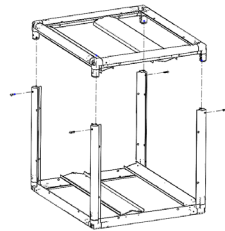


Fig. 4 Install remaining filter rack. (3-ton model shown.)

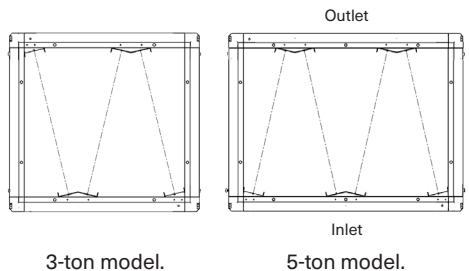


Fig. 5 Proper filter orientation.

ASSEMBLY (Cont'd)

4. Install both side access panels using the ¼-20 shoulder bolts. Each panel will require qty 8 shoulder bolts. See Fig. 6.
5. If desired for installation, mount the flanges to the inlet and outlet. See Fig. 7.
6. Install the filter cabinet as described in the 'Installation' section.

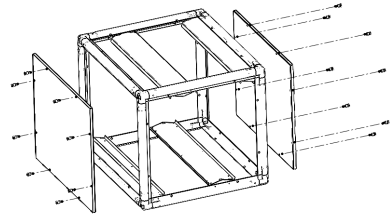


Fig. 6 Install both side access panels. (3-ton model shown.)

Note: To avoid damage to the air filters, it is recommended to install the filters after installation. When inserting the air filters, make sure the air flow indicators are in the same direction as the system airflow.

Refer to page 8 for filter installation.

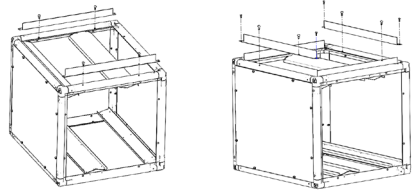


Fig. 7 Mount flanges to inlet and outlet. (3-ton model shown.)

INSTALLATION

Identify a suitable location to install the Dust Free Sixteen in the primary return duct of the HVAC system. A minimum clearance of 26.75" must be available in front of the filter access door to allow for filter replacement.

Assemble the unit as shown on page 4. Ensure there is adequate space to maneuver the unit to the installation location. Otherwise, the unit should to be assembled at the installation location.

It is recommended to use the entire area of the inlet and outlet to reduce air flow resistance. Restricting the inlet or outlet will result in increased air flow resistance and reduced filter lifespan. Adapting ductwork to the supplied inlet and outlet flanges will result in the best performance. If a ductwork transition is required during installation, each transition should be a minimum of 8" long for optimized airflow.

If round or flex duct is used, install a square to round transition. Do not use a plate and round collar as this will reduce filter life and increase air flow resistance.

The Dust Free Sixteen is a versatile filter cabinet and can be installed in the following applications:

Inline Horizontal flow, down flow return, Furnace platform, suspended hanging. See page 7.

Note: If using the supplied eye bolts to suspend the unit, remove the shoulder bolts on the top face and install with jam nut. (Fig. 12)

Ensure that all ductwork is properly sealed to prevent leakage or contamination of the air stream.



WARNING

Falling Hazard.

Can cause injury or damage.

Suspension of the unit should be done by a licensed HVAC technician or installer.



NOTICE

Qualified Technicians Only.

This device must be installed in compliance with all national and local electrical and mechanical codes. Failure to do so will void Dust Free® warranty.

INSTALLATION EXAMPLES

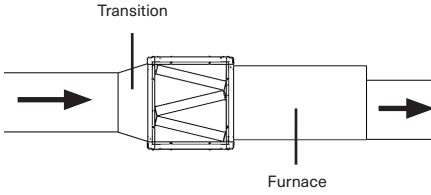


Fig. 8 Horizontal flow.

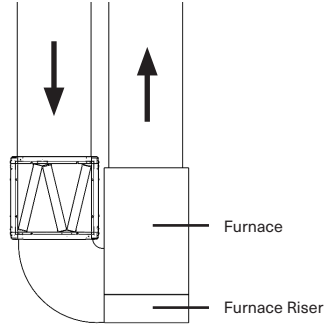


Fig. 9 Upflow.

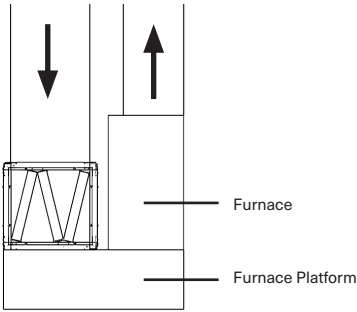


Fig. 10 Furnace platform.

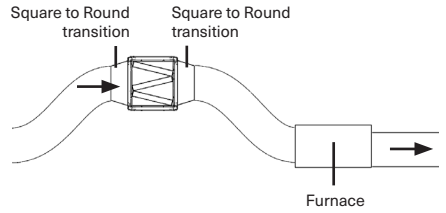


Fig. 11 Remote mount.

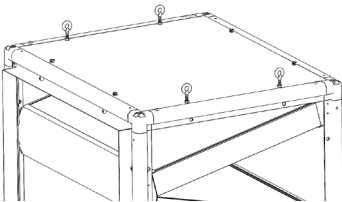


Fig. 12 Eyebolt installation

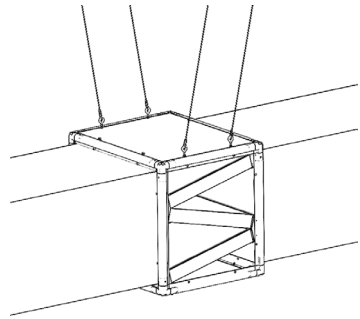


Fig. 13 Suspended unit.

FILTER INSTALLATION AND REPLACEMENT

1. Remove access panel. See Fig. 14.
2. If replacing, remove existing filters.
3. Starting at the bottom, insert new filters, being careful to match the airflow arrows on the filters with those on the air cleaner cabinet. (See Figs. 15 and 16).

Note: Sixteen (3-Ton) requires three filters. Sixteen (5-Ton) requires four filters.

4. Replace access panel.

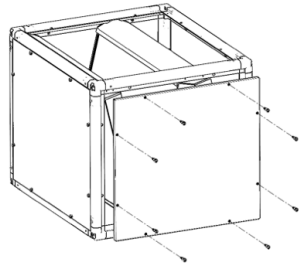


Fig. 14 Access panel removal and replacement. (3-ton model shown.)

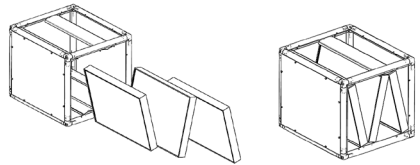


Fig. 15 Filter orientation, 3-ton model.

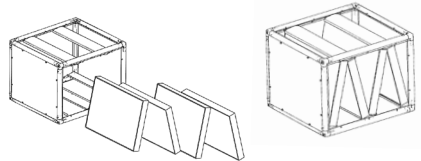


Fig. 16 Filter orientation, 5-ton model.

WARRANTY REGISTRATION

Register all new Dust Free equipment online at <https://dustfree.com/resources/warranty/>



WARRANTY

Dust Free LP warrants this Sixteen media air cleaner (product), for as long as the purchaser owns the real property where the product is installed, to be free from defects in materials and workmanship under normal use and service, for a period three (3) years from the date of installation. This warranty does not cover filters.

In order to be eligible for service under the warranty the product **MUST** be registered online at <https://dustfree.com/resources/warranty> within 10 days from the date of installation.

This warranty does not cover cosmetic damage, damage due to acts of God, damage as a result of handling or shipment, negligence, misuse, connection to improper voltage, improper maintenance, or abuse. This warranty is void if defect(s) result from failure to have this unit installed by a qualified, properly licensed, heating and air conditioning contractor in compliance with all local building and construction codes.

Dust Free LP's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any covered component of the Sixteen which is found to be defective within the parameters defined herein. Dust Free LP reserves the right to replace or repair the defective part or component.

DUST FREE LP SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.) THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE AND DUST FREE LP EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, WORKMANSHIP, OR FITNESS FOR A PARTICULAR USE. If the limited warranty is void due to failure to use a qualified contractor all disclaimers of implied warranties shall be effective upon installation.

How to make a warranty claim or have questions answered:

Should you have a warranty claim or questions about the warranty policy, contact the distributor or dealer from which you purchased the product. Proof of original purchase, prior product online registration, and proof of identity that the original purchasing party is filing the claim is required in order to initiate a warranty claim. Defective parts must be returned no later than thirty (30) days after the failure to the installing contractor together with the model number, serial number, and date of installation. All service and removal must be performed by a licensed HVAC contractor. You must pay shipping charges and all other costs of warranty service. Warranty is only valid the United States and Canada.

THIS WARRANTY SHALL NOT OBLIGATE THE MANUFACTURER FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY THE INSTALLING CONTRACTOR AS CONTRASTED TO DEFECTS IN THE GERMICIDAL LIGHT ITSELF.

NOTE: Do not return any products or parts to the factory without a factory issued Return Authorization number issued by the Dust Free LP customer service department.

In the event you have any questions concerning the use and care of this product or this warranty which have not been answered to your satisfaction by the distributor or dealer, please call or write the factory.

Dust Free®

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