H.E.P.A. Air Cleaner
WHOLE HOUSE HEPA FILTRATION SYSTEM

300CFM

Pictured here with the optional collar mount kit

For Technical support call 1-800-578-7873  Form DYN-206 (03/12)
1.1 Unpacking and inspection

Box Content Includes:
- Whole House H.E.P.A. 300CFM
- Power cord, 5 FT
- Plenum seal, 7.5 FT
- Screws, (16) 8 x 32 x 1/2"
- Template

Contact
For Technical Support
- Toll Free: 1-800-578-7873
  Mon.-Fri. 9am-5pm ET

Wiring the Unit
to an ICP 80% or 90% +Furnace

The wiring together of the unit onto an ICP electronic fan control (EFC) board is as simple as 1-2-3. Control boards on different brands of furnaces vary but in principal are all quite similar.

Step 1:
Turn-off electric power to furnace and use a 120V coil SPST N/O relay. Mount relay to a "knockout.

Step 2:
Wire the HOT EAC terminal on the furnace’s EFC board to one side of the 120V coil on the relay. Wire the other side of the 120V coil back to a spare common terminal on the EFC board.

Step 3:
Wire 120V HOT from blower door safety switch (use a splice terminal splitter similar to Johnstone #K21-414) to one side of the open contact on the relay (red wire on L38-180). Wire from the relay to the receptacle you mount in a 2X4 handy-box on the outside of the furnace. Wire the common side of the receptacle to the common terminal on the furnace EFC board.
4. General Maintenance Information

4.1 Changing Filters
After opening the unit’s door, grasp both edges of filter and pull with equal force to slide out the filter.

4.2 Cleaning
Once a year or as needed, clean the interior of the unit (Wall and motor plates) using mild non-abrasive soap and water. It is recommended to use products that are environmentally friendly.

4.3 Troubleshooting
<table>
<thead>
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4.4 Electrical Wiring Diagram

1.2. Technical Data

Dimensions and Clearance

Return Air Plenum Installation

Return Air Plenum and Stand Alone Installations With Collar Mount Kit

Kits and Accessories

Kits and Accessories

COLLAR MOUNT ADAPTER KIT
Part number: CMK500

REPLACEMENT H.E.P.A. FILTER
Part number: RHF562

ANNUAL PRE-FILTERS (2) REPLACEMENT KIT
Part number: ARK564

REPLACEMENT MOTOR ASSEMBLY
Part number: 2RREU25

REPLACEMENT POWER CORD
Part number: PWRC60

Specifications

Filtration Stage 1 & 2
Prefilter with Carbon (ARK564)

Filtration Stage 3
HEPA filter (RHF562)

Weight
28 lbs (12.7 kg)

Return Mount Port Openings
16” x 3.5” (406mm x 89mm)

Collar Mount Port Openings
8” (203mm) Round

Installation type
Plenum, Wall or Floor Mounted

Electrical Supply
120 VAC 60 Hz

Power Consumption
134 W

Certification
CSA

Air flow data
220-300 CFM

* Installation requires kit No. CMK500

IMPORTANT INFORMATION
The manufacturer reserves the right to modify a product, without prior notice, whether in design, color, or specifications, in order to offer all times a quality product that is highly competitive. Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.
2. General Operating Information

Function
The Whole House HEPA system is comprised of a ventilator, speed selection switch, 3 stages of filtration and the cabinet enclosure system. The ventilator pulls air through the pre-filter and pushes the same air through the impregnated carbon pad for odor control and finally the last stage of filtration is the HEPA filter which removes 99.97% of particles 0.3µm in size.

Operation Mode Options
The unit features two speeds of operation for your convenience. The speed selection switch is located on the front of the motor assembly. At lowest speed the unit will provide 220 CFM of clean air while at highest speed, the unit will provide 300 CFM of clean air. It is recommended that the unit be operated on highest speed at all times to maximize the benefits of the HEPA filtration system. If for some reason the filtration needs are not as important then one might operate the unit at low speed.

An access door is provided at the front of the unit to permit access to the filters and speed selection switch. Opening the latch on the right side of the unit will permit the door to swing open. A safety door interlock switch cuts the power to the motor for your safety. If needed the door can be removed from the cabinet hinges by holding the top part of the door with one hand and gently tapping on the bottom edge of the door with the other hand to release the door from its hinges.

Recommended Operation
The return plenum mount model operates in conjunction with your forced air heating/cooling system. A forced air distribution system continuously circulates the same air inside your home. The whole house HEPA filtration system operates on the principle of bypass filtration, which means that a portion of the air being returned to the furnace is filtered on each pass. Over time all the air in the home gets cleaned. It is recommended that the furnace blower be in operation whenever the filtration system is in operation. For stand-alone attic installation, the HEPA filtration system must be operated continuously whenever a part of all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (32°F, 0°C).

Maintenance of the unit should be performed at regular interval to keep the benefits of the HEPA filtration unit.

3. General Operating Information
Step 3: Mount Hepa

Make sure to install filter according to air flow direction for maximum performance.

Check for this symbol on each filter and it is located on the unit’s motor plate.

Step 3: (Continued)

Figure 2.3b - Unfold the ducting flairs completely to sandwich the return air plenum between the ducting flair and the filtration unit.

Figure 2.3c - Install unit as usual using all supplied fastening hardware.

Step 4: Finishing

Figure 2.4a - Remove protective plastic covers from all filters and replace them in their proper location (Stage 1, 2 and 3).

Figure 2.4b - Replace door and insert power cord into the receptacle of the filter unit and the other end into wall outlet.

Stand Alone

Atic Installation

Ideal for homes without a forced air heating / cooling system. Allows for air filtration and circulation throughout the home.

HEPA system must be operated continuously whenever a part or all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (0°C, 32°F).

Stand Alone

Basement Installation

Ducting will usually consist of one return with grille from one side of the home, and one supply with grille at the opposite end of the home.

Tips to Installer

It is recommended that the filtration unit have a devoted receptacle with 115V. It is not recommended to connect unit with an extension cord. If no receptacle is available please call an electrical contractor to have one installed.

Stage 1&2: Pre-Filter & Carbon

Stage 3: HEPA Filter

Make sure to install filter according to air flow direction for maximum performance.
2.4 Installing the unit

**Tools required**
- Phillips #2 or Robertson #1 screwdriver
- 3/32” drill bit
- Tin snips or metal shear
- Power Drill

**Location**
Return side connections is to be installed after the last branch on the return air plenum and minimum 2 linear ft distance from furnace.

A 5-ft power cord is supplied with the unit. If not available a 120VAC outlet needs to be supplied.

**Note:**
Refer to the Owner’s Operation Guide (p.9) for details on how to remove the unit’s door and filters.

**Step by step Installation**
Steps involved in the preparation of the plenum mount system are as followed:

**Step 1:** Preparing return air plenum
Find a location that satisfies both service and maintenance requirements and proceed to cut holes as illustrated below.

**Step 2:** Preparing ducting flairs
Remove the door and filters and proceed to cut the insulation as illustrated below.

**Tips to installer**
Interlocking the HEPA filtration unit with the forced air heating / cooling system is possible using an auxiliary relay. Refer to page 11 of this guide for example.

Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.

**Step 2:** (Continued)
Cut the four metal tabs to release the mounting flairs for the inlet and outlet ports.

**Step 2:** (Continued)
Cut the foam tab to release the mounting flairs for the inlet and outlet ports.

**Step 2:** (Continued)
Apply plenum seal tape all around both openings on the back of the unit.

**Step 2:** (Continued)
Bend tabs outward approximately 90 degrees.
### Tools required
- Phillips #2 or Robertson #1 screwdriver
- 3/32” drill bit
- Tin snips or metal shear
- Power Drill

### Location
Return side connections is to be installed after the last branch on the return air plenum and minimum 2 linear ft distance from furnace.

A 5-ft power cord is supplied with the unit. If not available a 120VAC outlet needs to be supplied.

### Note:
Refer to the Owner’s Operation Guide (p.9) for details on how to remove the unit’s door and filters.

### Step by step Installation
Steps involved in the preparation of the plenum mount system are as followed:

1. **Step 1:** Preparing return air plenum
   - Find a location that satisfies both service and maintenance requirements and proceed to cut holes as illustrated below.

2. **Step 2:** Preparing ducting flairs
   - Remove the door and filters and proceed to cut the insulation as illustrated below.

### Tips to installer
Interlocking the HEPA filtration unit with the forced air heating / cooling system is possible using an auxiliary relay. Refer to page 11 of this guide for example.

Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.

### Step 2:(Continued)
Cut the four metal tabs to release the mounting flairs for the inlet and outlet ports.

- **figure 2.2a:** Cut the insulation along the inside edge of both inlet and outlet ports to remove the insulation from the port openings.

- **figure 2.2b:** One cut permits the clean removal of the insulation piece.

- **figure 2.2c:** The unit should look like this when the foam piece is removed.

- **figure 2.2d:** - Tape template to return air plenum. Cut opening with metal shears and predrill for the securing screws.

- **figure 2.2e:** - Remove template.

- **figure 2.2f:** Bend tabs outward approximately 90 degrees.

- **figure 2.2g:** Apply plenum seal tape all around both openings on the back of the unit.
2.4 Installing the unit (Continued)

Step 3: (Continued)

- Mount Hepa

Step 3: Mount Hepa

- Unfold the ducting flairs completely to sandwich the return air plenum between the ducting flair and the filtration unit.

Step 3: (Continued)

- Install unit as usual using all supplied fastening hardware.

Step 4: Finishing

- Replace door and insert power cord into the receptacle of the filter units and the other end into wall outlet.

2.3 Types of Installation: Stand-Alone

Stand Alone

Attic Installation

Ideal for homes without a forced air heating / cooling system. Allows for air filtration and circulation throughout the home.

HEPA system must be operated continuously whenever a part or all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (0°C, 32°F).

Stand Alone

Basement Installation

Ducting will usually consist of one return with grille from one side of the home, and one supply with grille at the opposite end of the home.

Tips to Installer

It is recommended that the filtration unit have a dedicated receptacle with 115V. It is not recommended to connect unit with an extension cord. If no receptacle is available please call an electrical contractor to have one installed.

MAKE SURE TO INSTALL FILTER ACCORDING TO AIR FLOW DIRECTION FOR MAXIMUM PERFORMANCE

Check for this symbol on each filter and it is located on the unit’s motor plate.
2. Information for the Installer

2.1 Planning the Installation

The Whole House HEPA unit is a versatile appliance with multiple installations configuration. It is recommended to take your time in planning the installation. Several installations are illustrated herein for Whole House filtration applications:

- Return to return integrated with the forced air heating/cooling system.
- Central draw points using dedicated duct system
- Consult the manufacturer for other special applications.

2.2 Type of Installation: Return to Return Integrated System

Ducting Flair System

The Whole House HEPA Filtration system is designed to install directly onto the return air plenum of the forced air heating/cooling system. Choosing this type of installation eliminates the need to externally duct the HEPA filter unit to the plenum system. If you choose this type of installation, it is recommended that you run the fan on your forced air system continuously to maximize its cleaning ability.

TIPS to installer

The Whole House HEPA Filtration system does not replace the filter from the forced air heating/cooling system. Regular maintenance of this filter is necessary to permit the good operation of the forced air heating/cooling system.

Optional collar system

Using kit no. CMK500 the Whole House HEPA Filtration system can be converted to use 8 inch round collars for application requiring ducting. The kit includes two, 8 inch round collars, two mounting brackets for wall or floor mounting, installation guide and fasteners.

Installation SHOULD BE PERFORMED BY A CERTIFIED PROFESSIONAL.

Consult your HVAC product manufacturer if the usage of this product will affect the performance of your forced air heating/cooling system.

Function

The Whole House HEPA system is comprised of a ventilator, speed selection switch, 3 stages of filtration and the cabinet enclosure system. The ventilator pulls air through the pre-filter and pushes the same air through the impregnated carbon pad for odor control and finally the last stage of filtration is the HEPA filter which removes 99.97% of particles 0.3µm in size.

Operation Mode Options

The unit features two speeds of operation for your convenience. The speed selection switch is located on the front of the motor assembly. At lowest speed the unit will provide 220 CFM of clean air while at highest speed, the unit will provide 300 CFM of clean air. It is recommended that the unit be operated on highest speed at all times to maximize the benefits of the HEPA filtration system. If for some reason the filtration needs are not as important then one might operate the unit at low speed.

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Recommended Operation

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For stand-alone attic installation, the HEPA filtration system must be operated continuously whenever a part of all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (32°F, 0°C). Maintenance of the unit should be performed at regular interval to keep the benefits of the HEPA filtration unit.
4. General Maintenance Information

4.1 Changing Filters
After opening the unit’s door, grasp both edges of filter and pull with equal force to slide out the filter.

4.2 Cleaning
Once a year or as needed, clean the interior of the unit (Wall and motor plates) using mild non-abrasive soap and water. It is recommended to use products that are environmentally friendly.

4.3 Troubleshooting

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| Unit operates only on one speed. | Possible loose wire inside electrical box, contact your local contractor. |
| Unit vibrates | Check for excessive dust buildup or missing balancing weight on the impeller wheel. |

4.4 Electrical Wiring Diagram

Kits and Accessories
- COLLAR MOUNT ADAPTER KIT  
  Part number: CMK500
- REPLACEMENT H.E.P.A. FILTER  
  Part number: RHF562
- ANNUAL PRE-FILTERS (2) REPLACEMENT KIT  
  Part number: ARK564
- REPLACEMENT MOTOR ASSEMBLY  
  Part number: 2RREU25
- REPLACEMENT POWER CORD  
  Part number: PWRC60

1.2. Technical Data

Dimensions and Clearance

Return Air Plenum Installation

- Front View
- Side View - Clearance
- Back View

Return Air Plenum and Stand Alone Installations
- With Collar Mount Kit

Specifications
- Filtration Stage 1 & 2: Prefilter with Carbon (ARK564)
- Filtration Stage 3: H.E.P.A. filter (RHF562)
- Weight: 28 lbs (12.7 kg)
- Plenum Mount Port Opening: 16” x 4.5” (406 mm x 114 mm)
- Collar Mount Port Opening: 8” (203 mm) Round
- Installation type: Plenum, Wall or Floor Mounted
- Electrical Supply: 120 VAC, 60 Hz
- Power Consumption: 134 W
- Air flow data: 220 - 300 CFM

* Installation requires kit No. CMK500

IMPORTANT INFORMATION
- The manufacturer reserves the right to modify a product, without prior notice, whether in design, color or specifications, in order to offer at all times a quality product that is highly competitive.  
- Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician.
1.1 Unpacking and Inspection

- Whole House H.E.P.A. 300CFM
- Power cord, 5 FT
- Plenum seal, 7.5 FT
- Screws, (16) 8 x 32 x 1/2”
- Template

2. Installation Guide

- 2.1 Planning the installation
- 2.2 Type of installation: Return to Return
- 2.3 Type of installation: Stand-Alone
- 2.4 Installing the unit

3. Owner’s Operation Guide

- 3.1 General Operating Information

4. Maintenance Guide

- 4.1 Changing filters
- 4.2 Cleaning unit
- 4.3 Auxiliary relay control module

Contact

For Technical Support
- Toll Free: 1-800-578-7873
- Mon.-Fri. 9am-5pm ET

Wiring the Unit to an ICP 80% or 90% Furnace

Warning: Instructions listed for interlocking the filtration unit to a furnace is an example only. Actual wiring of interlock connection may vary depending on the system.

Step 1:
- Turn-off electric power to furnace and use a 120V coil SPST N/O relay.
- Mount relay to a "knockout.

Step 2:
- Wire the HOTEAC terminal on the furnace’s EFC board to one side of the 120V coil on the relay. Wire the other side of the 120V coil back to a spare common terminal on the EFC board.

Step 3:
- Wire 120V HOT from blower door safety switch (use a splice terminal splitter similar to Johnstone #21-414) to one side of the open contact on the relay (red wires on L38-180). Wire from the relay to a receptacle you mount in a 2X4 handy-box on the outside of the furnace. Wire the common side of the receptacle to the common terminal on the furnace EFC board.
H.E.P.A. Air Cleaner
WHOLE HOUSE HEPA FILTRATION SYSTEM

300CFM

Pictured here with the optional collar mount kit.