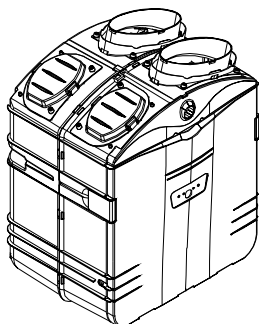
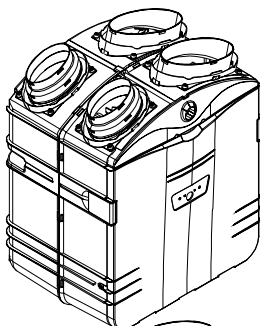


# INSTALLATION INSTRUCTIONS AND USER MANUAL

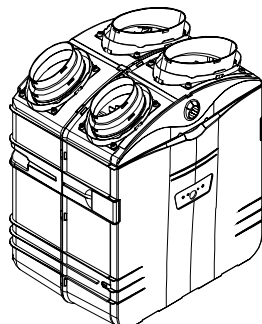
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## MODELS

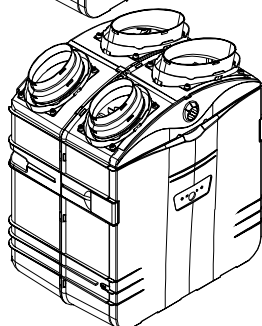
**HEPA 2000\***  
**HF 2.0\***



**HEPA 1000\***  
**HF 1.0\***



**HEPA 3000\***  
**HF 3.0\***



**HEPA 4000\***

VB0061

**\*Patents pending**

NOTE: HEPA 4000 model available in United States only.

RESIDENTIAL USE ONLY

**READ AND SAVE THESE INSTRUCTIONS**

INSTALLER: LEAVE THIS MANUAL WITH THE HOMEOWNER.  
HOMEOWNER: USE AND CARE INFORMATION  
ON PAGES 28 and 32 to 36.

04313 rev C

## ABOUT THIS MANUAL

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First, we want to congratulate you on your purchase of this excellent unit which will allow you and your family to enjoy clean and healthy air throughout your home for years to come!

Because of the large amount of models covered by this publication, the illustrations are typical ones. Some details of your unit may be slightly different than the ones shown.

Please take note that this manual uses the following symbols to emphasize particular information:

### **WARNING**

**Identifies an instruction which, if not followed, might cause serious personal injuries including possibility of death.**

### **CAUTION**

**Denotes an instruction which, if not followed, may severely damage the unit and/or its components.**

NOTE: Indicates supplementary information needed to fully complete an instruction.

We welcome any suggestions you may have concerning this manual and/or the unit, and we would appreciate hearing your comments on ways to better serve you. Please contact us by phone at one of the following numbers:

Exclusively for all HF Models:  
Broan-NuTone Canada Inc.  
1 866 737-7770

Exclusively for all HEPA Models:  
Venmar Ventilation inc.  
1 800 567-3855

## ABOUT THESE UNITS

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### WARNING

---

#### TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSON(S) OBSERVE THE FOLLOWING:

1. This unit is intended for residential installation only.
2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
3. Before replacing filters, servicing or cleaning unit, disconnect power cord from electrical outlet.
4. Installation must be done in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
5. This unit is not designed to provide combustion and/or dilution air for fuel-burning appliances.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
7. Do not use this unit with any solid-state speed control device other than optional wall controls C12, CM, C34 and CMR (sold separately).
8. This unit must be grounded. The power supply cord has a 3-prong grounding plug for your personal safety. It must be plugged into a mating 3-prong grounding receptacle, grounded in accordance with the national electrical code and local codes and ordinances. Do not remove the ground prong. Do not use an extension cord.
9. Do not install in a cooking area or connect directly to any appliances.
10. Do not use to exhaust hazardous or explosive materials and vapors.

### CAUTION

---

1. To avoid premature clogged filters, turn OFF the unit during construction or renovation.
2. Please read specification label on product for further information and requirements.
3. **For HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 and HEPA 4000 units only:** Be sure to duct air outside – Do not intake / exhaust air into spaces within walls or ceiling or into attics, crawl spaces, or garage.
4. Intended for residential installation only in accordance with the requirements of NFPA 90B.
5. Do not run any air ducts directly above or closer than 2 ft (0.61 m) to any furnace or its supply plenum, boiler, or other heat producing appliance. **For HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 and HEPA 4000 units only,** if a duct has to be connected to the furnace return plenum, it must be connected not closer than 9'10" (3 m) from this plenum connection to the furnace. **For HEPA 1000 and HF 1.0 units only,** the distance must be not closer than 2' (0.61 m).
6. The ductwork is intended to be installed in compliance with all local and national codes that are applicable.

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## 1. BEFORE STARTING

---

### 1.1 INSPECT THE CONTENTS OF THE BOXES

#### **WARNING**

**To avoid risk of suffocation, discard the plastic bag wrapping the unit.**

- Inspect the exterior of the unit for shipping damage. Ensure that there is no damage to the door, door latches, main switch, etc.

#### **CAUTION**

**Remove the cardboard strip inside the unit (if applicable).**

- Inspect the interior of the unit for damage. Ensure that blower assembly, heat recovery core (HEPA 3000 et HF 3.0), energy recovery core (HEPA 4000), insulation, dampers (HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 and HEPA 4000), prefilter, HEPA filter, etc. are all intact.

## 2. TYPICAL INSTALLATIONS

---

Installations may vary according to the model number and the position in which the unit is installed. Use the following illustrations as guidelines to help you decide on how your unit will be installed.

All the units should be hung to the joist, and installed either vertically or horizontally. NOTE: For more details, see Point 5.3 in Section 5 INSTALL THE UNIT.

In every case, bathroom fans and a range hood should be used to exhaust stale air. Also, for homes with more than one level, we recommend one exhaust register at the highest level.

There are 3 installation methods: Stand Alone, Central Draw Point and Return-to-Return Installation.

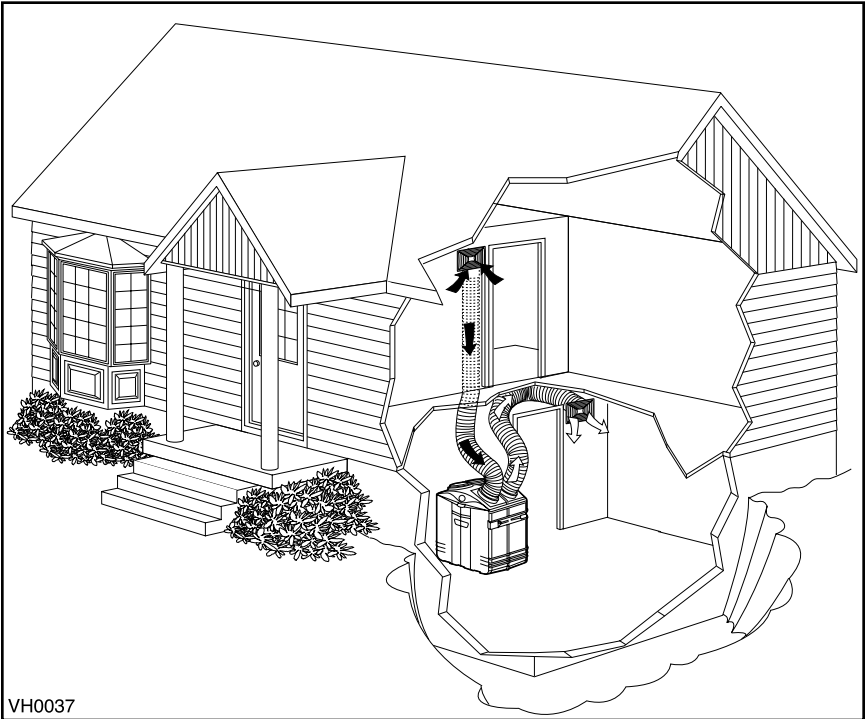
NOTE: An electrical outlet has to be available within 3 feet from the unit.

## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.1 HEPA 1000 AND HF 1.0 UNIT INSTALLATIONS

#### 2.1.1 STAND ALONE (Primarily for homes with radiant hot water or electric baseboard heating.)

Stale air is drawn to the unit by the register located at the highest level of the house. Filtered air is supplied by the register located at the lowest level. See figure below.



## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.1 HEPA 1000 AND HF 1.0 UNIT INSTALLATIONS (CONT'D)

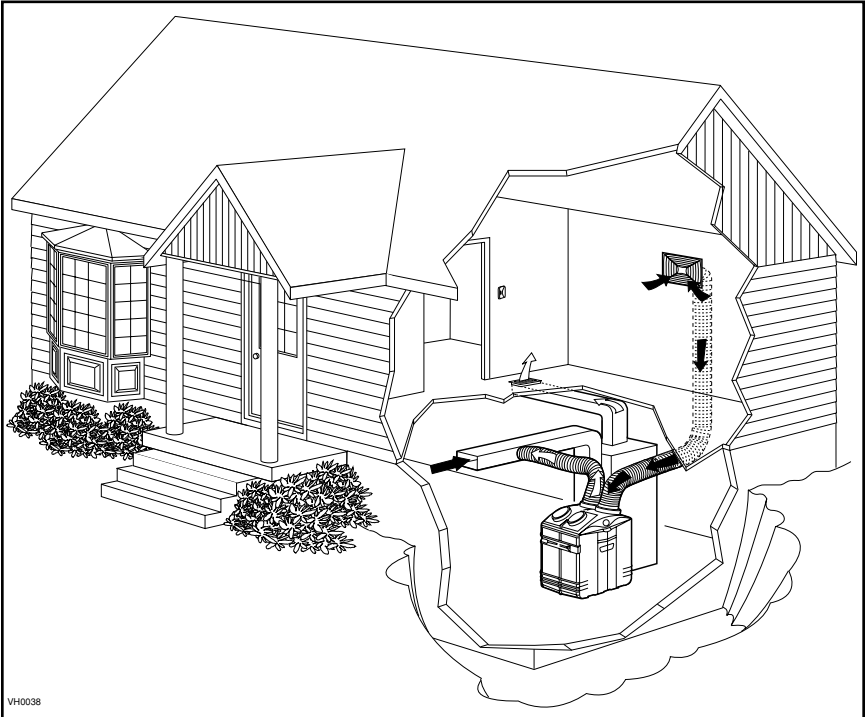
#### 2.1.2 CENTRAL DRAW POINT (CONNECTION TO FORCED AIR SYSTEM)

Stale air is drawn to the unit by the register located at the highest level of the house. Filtered air is supplied to the return (plenum) of the forced air unit.

For this type of installation, it is not essential that the forced air system blower runs when the unit is in operation, but we recommend it.

See figure below.

NOTE: Home with multiple forced air systems should have 1 unit on each system.



### CAUTION

**Do not connect the unit (HEPA 1000 or HF 1.0) on any forced air system supply duct. Connect it only to the air return duct. Do not install duct or duct connector directly above the forced air unit or not less than 2' (0.61 m) of the plenum connection to the forced air unit, as measured along the length of the duct.**



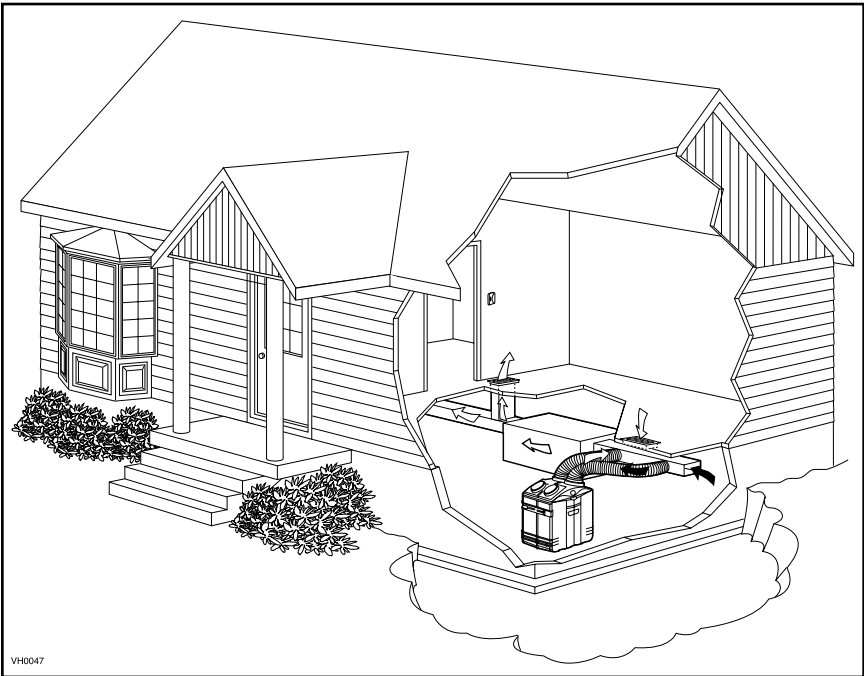
## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.1 HEPA 1000 AND HF 1.0 UNIT INSTALLATIONS (CONT'D)

#### 2.1.3 RETURN-RETURN INSTALLATION (CONNECTION TO A FORCED AIR SYSTEM)

Filtered air and stale air flow through the forced air system ducts which simplifies the installation. Filtered air is supplied to the return (plenum) of the forced air unit. To avoid cross-contamination and achieve highest efficiencies, the forced air system blower must always be ON (or the unit efficiency will be affected). See figure below.

NOTE: Home with multiple forced air systems should have 1 unit on each system.



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### CAUTION

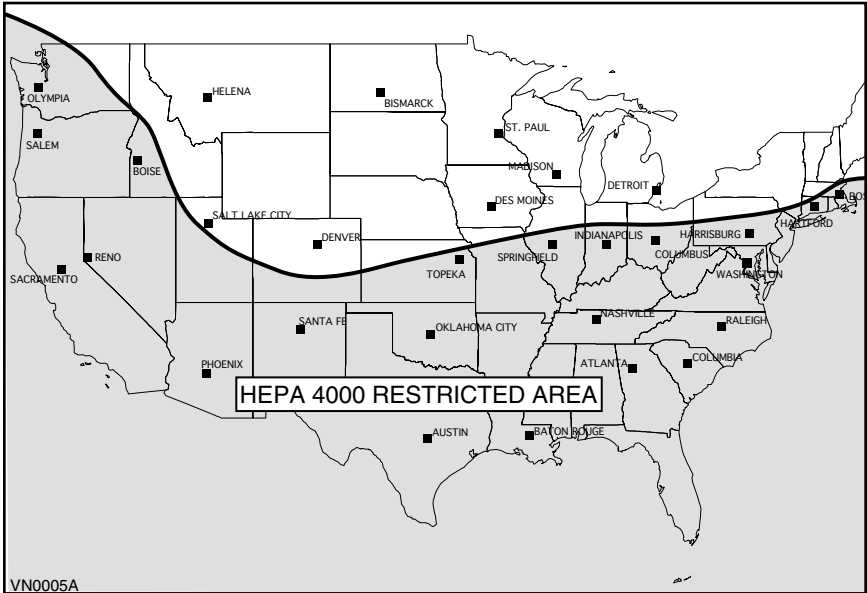
Do not connect the unit (HEPA 1000 or HF 1.0) on any forced air system supply duct. Connect it only to the air return duct. Do not install duct or duct connector directly above the forced air unit or not less than 2' (0.61 m) of the plenum connection to the forced air unit, as measured along the length of the duct.

## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.2 INSTALLATION FOR HEPA 4000 ONLY

#### 2.2.1 GEOGRAPHICAL LOCATION

The HEPA 4000 unit was created to meet specific requirements related to geographic locations. Take a look on the map below. The shaded area shows where the HEPA 4000 can be installed.



### CAUTION

**Never install an HEPA 4000 unit out of the HEPA 4000 restricted area.**

NOTE: The HEPA 4000 unit is designed to assist in the management of humidity introduced into the home. In extreme humidity conditions, the use of additional dehumidification may be desirable. Quickly remove all excess moisture and keep areas clean.

## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.2 INSTALLATION FOR HEPA 4000 ONLY (CONT'D)

#### 2.2.2 HEPA 4000 ATTIC INSTALLATION

All 3 types of installation can be used in the attic (Stand Alone, Central Draw Point or Return-Return). The example shown below is a Return-Return installation (connection to a forced air system).

#### CAUTION

**Due to the potential temperature difference between the attic and the rest of the house, all unit ducts must be insulated.**

#### CAUTION

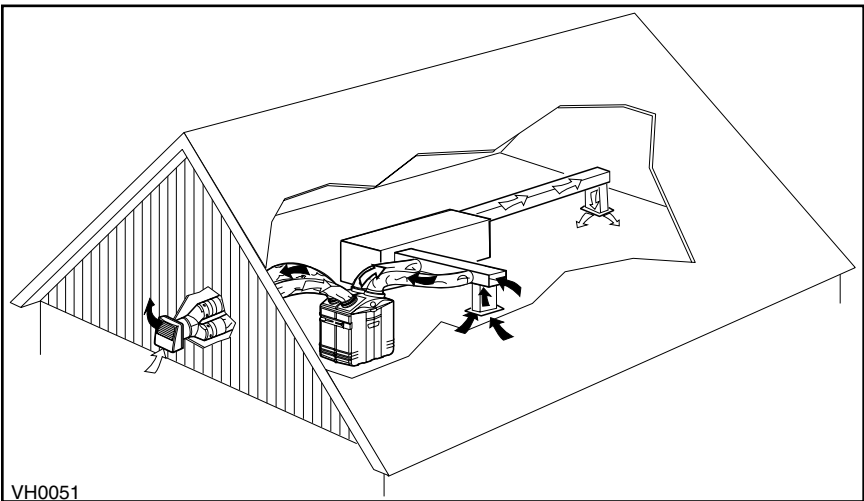
**The attic temperature must always be above 0°C (32°F).**

A portion of stale air is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit.

To avoid the cross-contamination and achieve highest efficiencies, the forced air system blower must always be ON (or the unit efficiency will be affected).

See figure below.

NOTE: Home with multiple forced air systems should have 1 unit on each system.



#### CAUTION

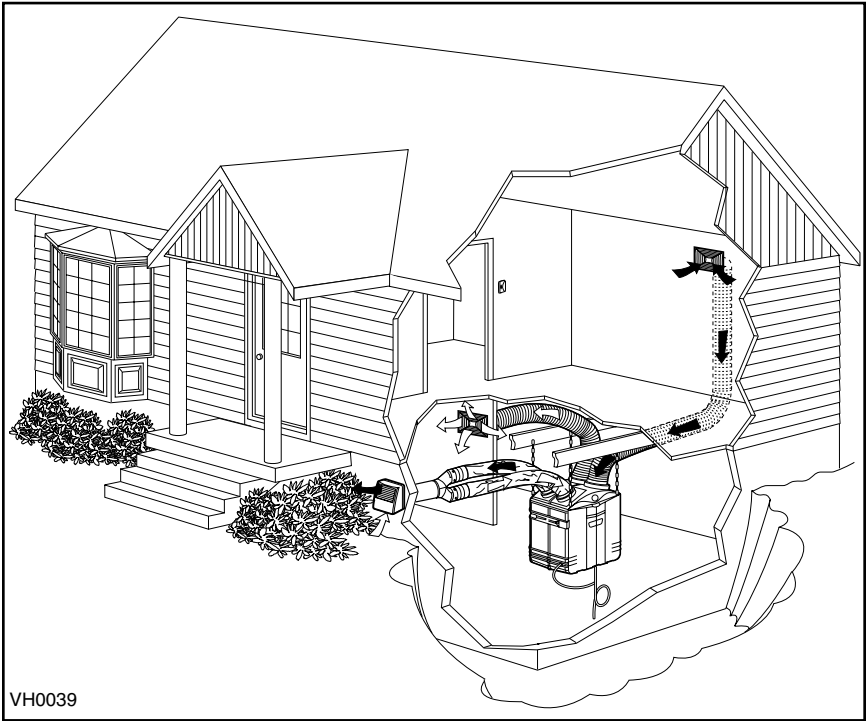
**Do not connect the HEPA 4000 on any forced air system supply duct. Connect it only to the air return duct. Do not install duct or duct connector directly above the forced air unit or not less than 9'10" (3 m) of the plenum connection to the forced air unit, as measured along the length of the duct.**

## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.3 HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNIT INSTALLATIONS

#### 2.3.1 STAND ALONE (Primarily for homes with radiant hot water or electric baseboard heating.)

A portion of stale air (coming from the register located at the highest level of the house) is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. Fresh filtered air is supplied by the register located in the lowest livable level. See figure below.



## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.3 HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNIT INSTALLATIONS (CONT'D)

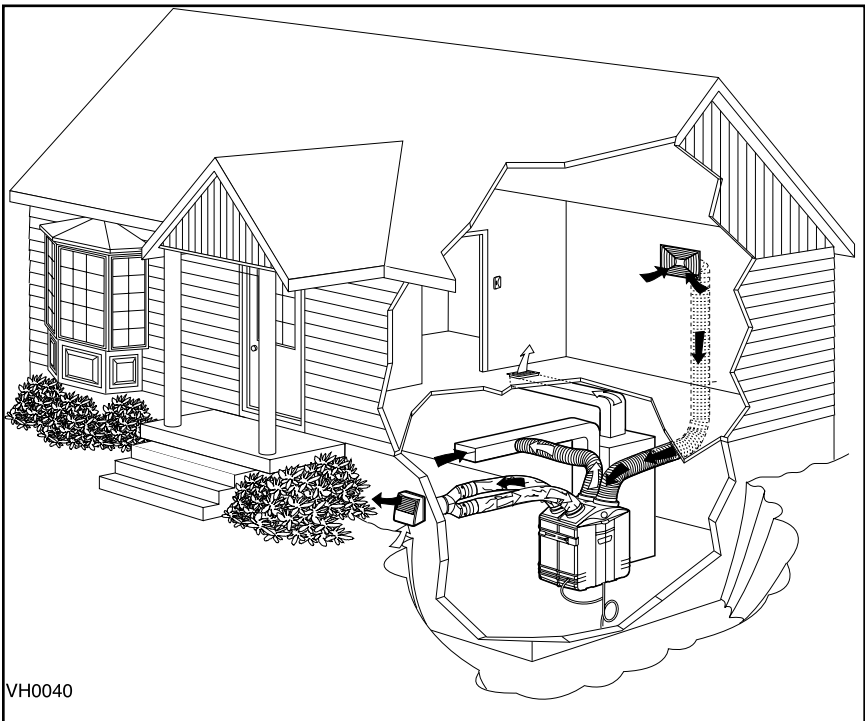
#### 2.3.2 CENTRAL DRAW POINT (CONNECTION TO A FORCED AIR SYSTEM)

A portion of stale air (coming from the register located in the highest level of the house) is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit.

For this type of installation, it is not essential that the forced air system blower runs when the unit is in operation, but we recommend it.

See figure below.

NOTE: Home with multiple forced air systems should have 1 unit on each system.



### CAUTION

Do not connect the unit (HEPA 2000, HF2.0, HEPA 3000, HF 3.0 or HEPA 4000) on any forced air system supply duct. Connect it only to the air return duct. Do not install duct or duct connector directly above the forced air unit or not less than 9'10" (3 m) of the plenum connection to the forced air unit, as measured along the length of the duct.

## 2. TYPICAL INSTALLATIONS (CONT'D)

### 2.3 HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNIT INSTALLATIONS (CONT'D)

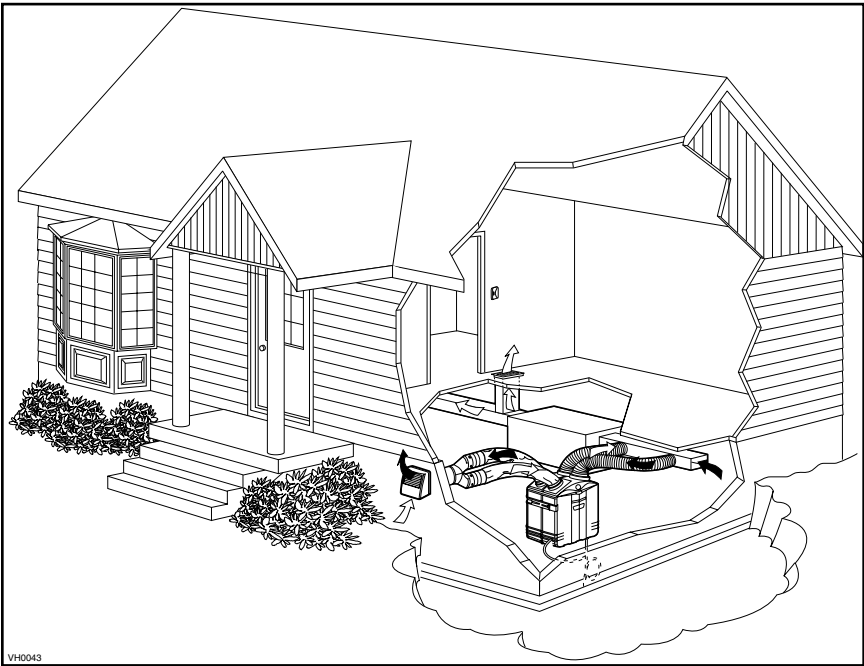
#### 2.3.3 RETURN-TO-RETURN INSTALLATION (CONNECTION TO A FORCED AIR SYSTEM)

A portion of stale air is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit.

To avoid the cross-contamination and achieve highest efficiencies, the forced air system blower must always be ON (or the unit efficiency will be affected).

The HEPA 2000 and HF 2.0 units need to be ON all the time, since they don't have motorized dampers. If these units are OFF, then the forced air unit will draw outdoor air inside.

NOTE: Home with multiple forced air systems should have 1 unit on each system.

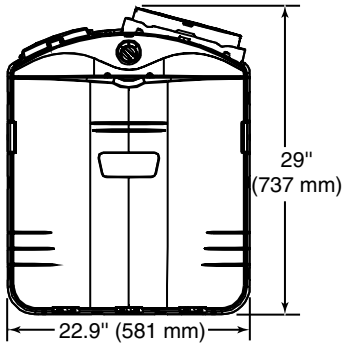


### CAUTION

**Do not connect the unit (HEPA 2000, HF2.0, HEPA 3000, HF 3.0 or HEPA 4000) on any forced air system supply duct. Connect it only to the air return duct. Do not install duct or duct connector directly above the forced air unit or not less than 9'10" (3 m) of the plenum connection to the forced air unit, as measured along the length of the duct.**

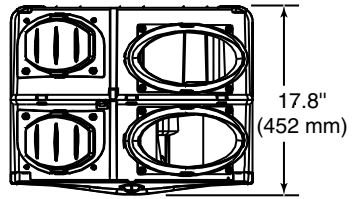
### 3. DIMENSIONS

#### 3.1 HEPA 1000 AND HF 1.0 UNITS



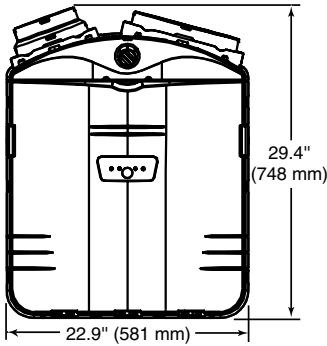
VK0047

FRONT VIEW



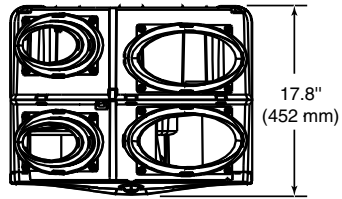
TOP VIEW

#### 3.2 HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNITS



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FRONT VIEW

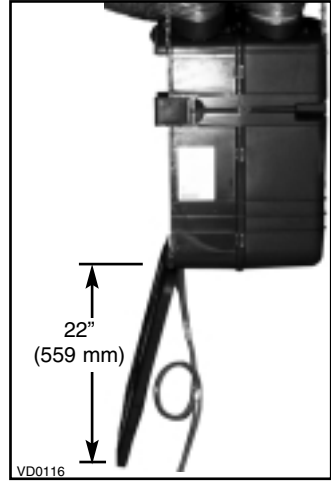
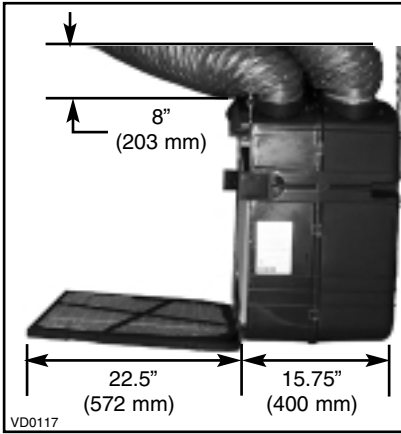


TOP VIEW

### 3. DIMENSIONS (CONT'D)

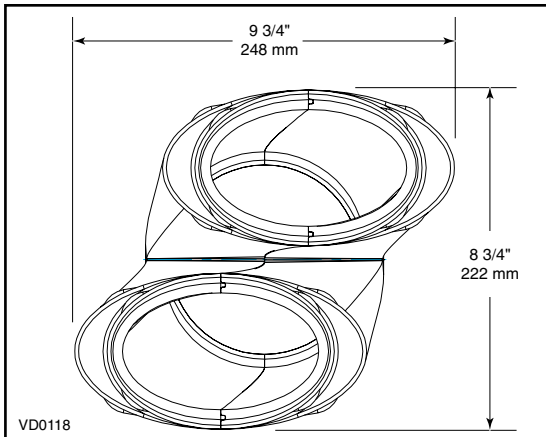
#### 3.3 MOUNTING AND SERVICING CONSIDERATIONS

- The two following pictures are showing the minimum clearance needed to open the door completely.



NOTE: A minimum of 8" (203 mm) clearance from any obstruction on top of the unit is required for the ductwork radius turn.

- The joist opening needed to install the Tandem<sup>®</sup> transition must be 9 3/4" (248 mm) minimum. Also, the maximum height of the Tandem<sup>®</sup> transition is 8 3/4" (222 mm). See Tandem<sup>®</sup> transition end view below.





## 4. INSTALL THE UNIT

---

### 4.1 LOCATING AND MOUNTING THE UNIT

Choose an appropriate location for the unit.

- Within an area of the house where the ambient temperature is between 10°C (50°F) and 65°C (149°F) (basement, furnace room, closet, etc.).
- So as to provide easy access to the interior of the unit, for filter maintenance.
- Close to an exterior wall, so as to limit the length of the insulated flexible duct to and from the unit (not necessary for HEPA 1000 and HF 1.0 units).
- Away from hot chimneys and other fire hazards.
- Allow for a power source (standard 3-prong grounding outlet).
- Close to a drain. If no drain is close by, use a pail to collect run-off. (for HEPA 3000 and HF 3.0 units only).

Here are the tools and materials needed to perform the installation:

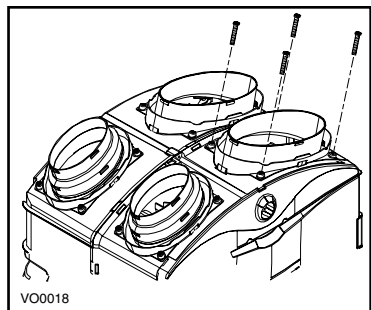
- Phillips screwdriver #2 or Robertson #1
- Hammer and flat blade screwdriver (for plenum connection installation only, to make holes in existing metal duct)
- Scissors or utility knife (to cut duct tape)
- Duct tape
- Tin snips or metal shear (for plenum connection installation only, to cut ductwork)
- Aluminum duct tape (for plenum connection installation only)
- Jig saw (except for the HEPA 1000 unit)
- Caulking gun and caulking (except for HEPA 1000 and HF 1.0 units)

### 4.2 MOUNT THE PORTS ON THE UNIT

Mount the 8" oval ports and the 5" to 6" oval ports on the top of the unit using the screws provided in the hardware box (4 screws #8 x 3/4" long per port).

NOTES: 1. The HEPA 1000 and the HF 1.0 units don't have the 5" to 6" oval ports.

2. If an optional wall control has to be installed, do not install the front 8" oval port at this time.

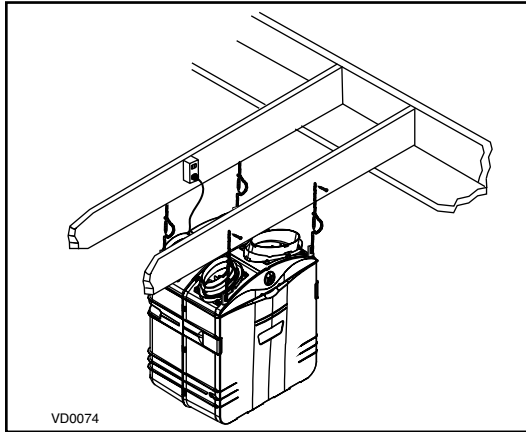


## 4. INSTALL THE UNIT (CONT'D)

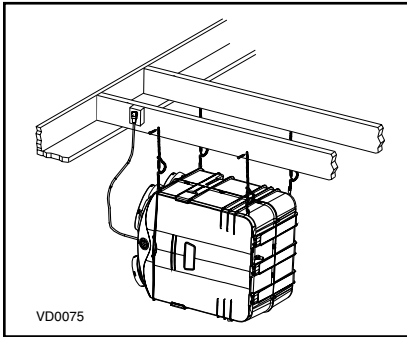
### 4.3 HOW TO HANG THE UNIT

Use the 4 chains and springs in the hardware pack provided with the unit. According to your needs, you can install the unit either in vertical or horizontal position.

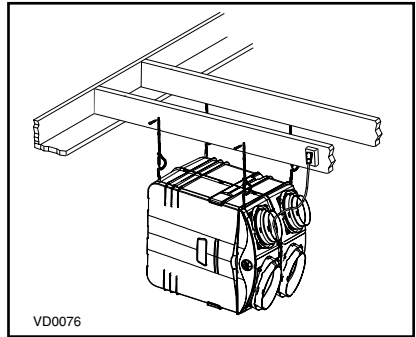
#### VERTICAL POSITION - ALL MODELS



#### HORIZONTAL POSITION (LEFT SIDE) ALL MODELS



#### HORIZONTAL POSITION (RIGHT SIDE) MODELS HEPA 1000, HF 1.0 HEPA 2000, HF 2.0 AND HEPA 4000 ONLY



## 4. INSTALL THE UNIT (CONT'D)

### 4.3 HOW TO HANG THE UNIT (CONT'D)

- Turn the switch knob to OFF position in order to unlock the door. Unlatch the door and open it. Using a screwdriver, remove the 2 retaining screws of the front plate and carefully remove the front plate from the unit.



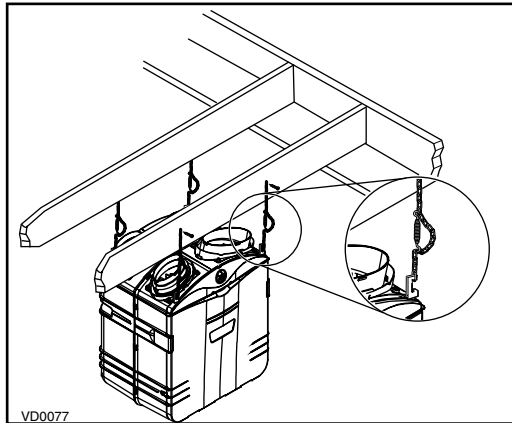
- Insert the 4 hooks in the square holes and fix them to the unit using 4 screws #8 - 32 x 3/4".

NOTE: If an optional wall control has to be installed, go to Section 5.0 on pages 29 to 31. If not, continue the installation.

- Reinstall the front plate and close the door.



- Hang the unit to the floor joist, using 4 #8 x 1 1/2" screws, 4 chains and 4 spings. See following illustration.



### 4.4 PLANNING OF THE DUCTWORK

- Keep it simple. Plan for a minimum of bends and joints.
- Keep the length of outside insulated duct to a minimum (not for HEPA 1000).
- Do not ventilate crawl spaces or cold rooms. Do not attempt to recover the exhaust air from a dryer or a range hood. This would cause clogging of the filters and recovery module (if applicable).
- If the house has two floors or more, be sure to plan for at least one exhaust register on the highest lived-in level.

## 4. INSTALL THE UNIT (CONT'D)

### 4.5 INSTALLING 8" DUCTS AND REGISTERS

#### 4.5.1 STAND ALONE SYSTEM (AS ILLUSTRATED IN SECTIONS 2.1.1 AND 2.3.1)

##### Stale air exhaust ductwork

### ⚠ WARNING

**Never install a stale air exhaust register in a closed room where a combustion device operates, such as a gas furnace, a gas water heater or a fireplace.**

- Install the stale air exhaust register in the main area where the contaminants are produced: kitchen, living room, etc. Position the register as far from the stairway as possible and in such a way that the air circulates in all the lived-in spaces in the house. If desired, you can install another register (sold separately).

NOTE: If an additional register is installed, connect it to a 8" flexible duct.

- If the register is installed in the kitchen, it must be located at least 4 feet (1.2 m) from the range.
- Install the register 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall OR install it in the ceiling.

##### Fresh / Filtered air distribution ductwork

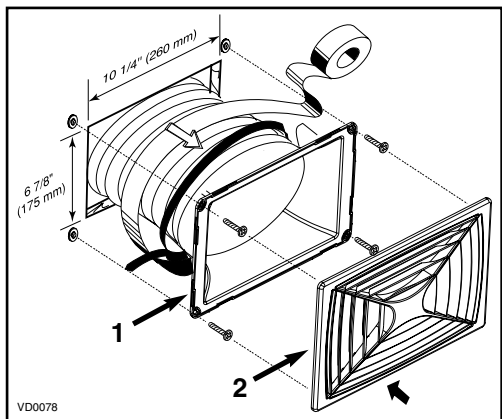
- Install the fresh / filtered air distribution register in a large, open area in the lowest level to ensure the greatest possible air circulation. Keep in mind that the filtered air register must be located as far as possible from the stale air register. If desired, you can install another register (sold separately).

NOTE: If an additional register is installed, connect it to a 8" flexible duct.

- Install the register in the ceiling OR 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall. The duct length should be at least 15' (4.6 m). (The filtered air will then flow through the room and mix with room air, ensuring a continuous recirculating airflow.)

##### How to connect the 8" flexible duct to the registers and unit ports.

- Once the register location is determined, cut out a 10-1/4" x 6 7/8" (260 mm x 175 mm) hole. Run one end of the 8" flexible duct through the hole and fix it to the duct connector (1), using a 30" tie wrap and duct tape. Fix the duct connector to the wall (or ceiling) using its 4 plastic anchors and 4 #8 x 3/4" screws. Then, snap on the register (2).

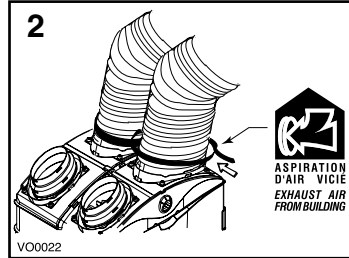
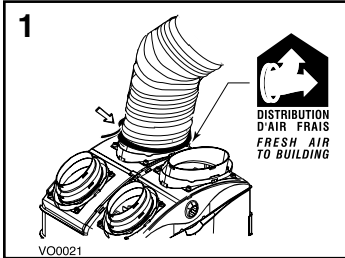


## 4. INSTALL THE UNIT (CONT'D)

### 4.5 INSTALLING 8" DUCTS AND REGISTERS (CONT'D)

#### How to connect the 8" flexible duct to the registers and unit ports (cont'd)

- Using the colored sticker dot included, identify which duct it is (red dot for stale airflow and blue dot for filtered airflow). Repeat the procedure for the other register.
- Each port is identified on top of the unit (see illustrations below). Attach the fresh air to building duct (the one with the blue dot) to its corresponding port, using tie wrap (1). Then, attach the exhaust air from building duct (the one with the red dot) to the other 8" port (2).



NOTE: Use a 8" insulated duct (not included) if the duct will have to go through a non-tempered room (eg: in northern area, not heated attic in winter or attic not cooled in southern area). Also, if you plan to stop the unit for more than 12 hours, we recommend to cover the duct with R12 insulation.

#### 4.5.2 CENTRAL DRAW POINT (AS ILLUSTRATED IN SECTIONS 2.1.2 AND 2.3.2)

##### Stale air ductwork

Same as for Stand Alone System, described in point 4.5.1.

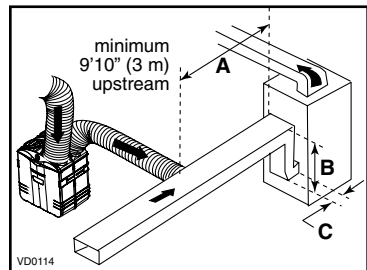
##### Fresh/Filtered air ductwork (Return side connection)

### ⚠ WARNING

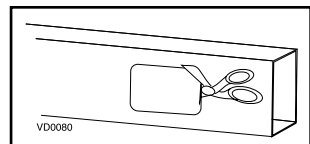
When performing duct connections, always use approved tools and materials. Respect all corresponding laws and/or safety regulations. Please refer to your local building code.

- Trace a 10 1/4" x 6 7/8" (260 mm x 175mm) opening on the forced air unit return duct at a minimum linear distance of 9' 10" (3 m) upstream (from forced air unit drop: **A+B+C**).

NOTE: For Hepa 1000 and HF 1.0 units only, the minimum linear distance is 2' (0.61 m) upstream (**A+B+C**).



- Using a metal shear or a hammer and a flat blade screwdriver, punch a hole into the furnace/air handler return duct. Then, using metal shear, cut out the rectangular hole.



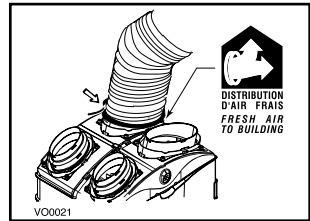
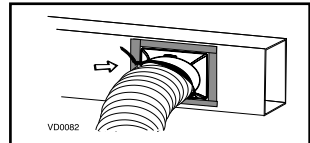
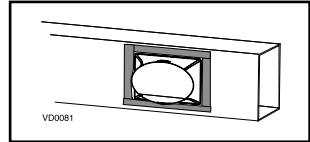
## 4. INSTALL THE UNIT (CONT'D)

### 4.5 INSTALLING 8" DUCTS AND REGISTERS (CONT'D)

#### 4.5.2 CENTRAL DRAW POINT (AS ILLUSTRATED IN SECTIONS 2.1.2 AND 2.3.2) (CONT'D)

##### Filtered air ductwork (Return side connection) (cont'd)

- Fix the duct connector to the forced air unit duct using its 4 retaining screws (#8 x 3/4" long). Seal with duct tape.
- Take one end of the 8" flexible duct and slide it over the duct connector. Secure with a tie wrap. Carefully seal the connection with duct tape. Identify the duct using the blue sticker dot included.
- Attach this duct to the **FRESH AIR TO BUILDING** port (see icon on the top of the unit), using tie wrap and duct tape.



#### 4.5.3 RETURN-TO-RETURN (AS ILLUSTRATED IN SECTIONS 2.1.3 AND 2.3.3)

### WARNING

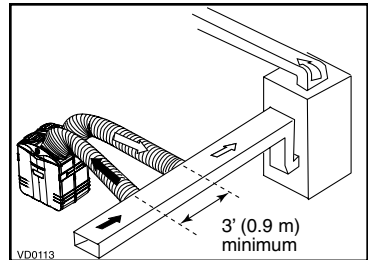
When performing duct connections, always use approved tools and materials. Respect all corresponding laws and/or safety regulations. Please refer to your local building code.

##### Fresh/Filtered air ductwork (Return side connection)

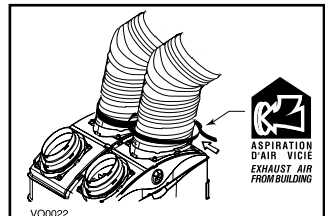
Same as for Central Draw Point, described in point 4.5.2.

##### Stale air ductwork (Return side connection)

- Locate the stale air ductwork opening at least 3' (0.9 m) from the fresh/filtered air ductwork connection. Proceed as for the fresh/filtered air ductwork, but instead of using the blue dot sticker to identify the duct, use the red dot.



- Attach this duct to the **EXHAUST AIR FROM BUILDING** port (see icon on the top of the unit), using tie wrap and duct tape.



## 4. INSTALL THE UNIT (CONT'D)

### 4.6 INSTALLING INSULATED FLEXIBLE DUCTS (HEPA 2000, HF2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNITS ONLY)

#### CAUTION

**Make sure the vapor barrier on the insulated ducts does not tear during installation.**

Use the following procedure for connecting the insulated flexible ducts to the Tandem® transition\* (*EXHAUST AIR TO OUTSIDE* and *FRESH AIR FROM OUTSIDE*).

NOTE: If the joist are perpendicular to the ducts, or if the connection to the exterior hood is in a limited area, your installation will need two exterior hoods instead of one. In this case, do not use the Tandem® transition. Identify each insulated duct. For fresh air from outside duct, use the blue sticker dots (one dot at each end). For exhaust air to outside duct, use the red sticker dots (one dot at each end). Then, go to point 4.6.2 and refer to the optional single hood enclosed instructions.

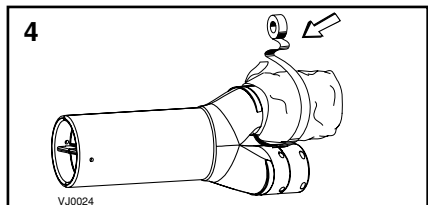
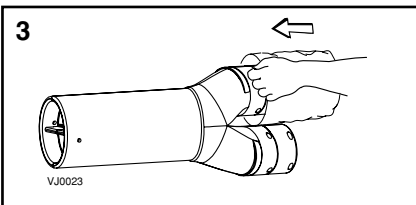
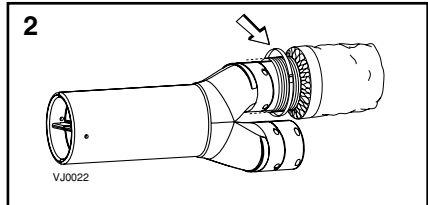
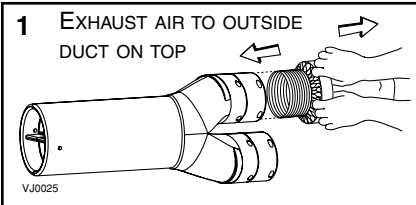
\*Patent pending.

#### 4.6.1 CONNECTION TO TANDEM® TRANSITION

1. For each duct, pull back the insulation to expose the interior flexible duct.
2. Connect the interior flexible duct to the smaller part of the Tandem® transition (5" oval) using a 24" tie wrap.

NOTE: If you are using a 6" diameter insulated duct, use the bigger part of the Tandem® transition (6" oval).

3. Pull the insulation over the joint. Pull the vapor barrier over the insulation.
4. Apply duct tape gently to the joint in order to make an airtight seal. See figures below.



Identify each insulated duct. For fresh air from outside duct, use the blue sticker dots (one dot at each end). For exhaust air to outside duct, use the red sticker dots (one dot at each end). **Be careful to identify the exhaust air to outside duct (red dot) at the upper section of the transition.**

## 4. INSTALL THE UNIT (CONT'D)

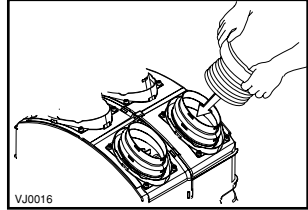
### 4.6 INSTALLING INSULATED FLEXIBLE DUCTS

(HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNITS ONLY) (CONT'D)

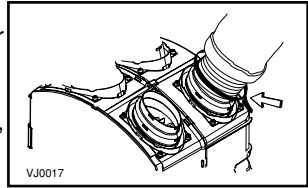
#### 4.6.2 CONNECTION TO THE 5" TO 6" OVAL PORTS OF THE UNIT

Use the following procedure for connecting the insulated flexible ducts to the 5" to 6" oval ports of the unit (*EXHAUST AIR TO OUTSIDE* and *FRESH AIR FROM OUTSIDE*).

1. Pull back the insulation to expose the flexible duct.

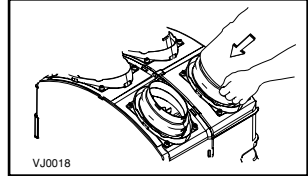


2. Connect the interior flexible duct to the smaller part of the port (5" oval) using a 24" tie wrap.

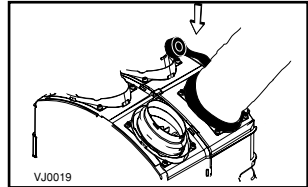


NOTE: If you are using a 6" diameter insulated duct, use the bigger part of the port (6" oval).

3. Pull the insulation over the joint and tuck it between the inner and outer rings of the port. Pull the vapor barrier over the insulation and over the outer ring of the port.



4. Apply duct tape gently to the joint in order to make an airtight seal.

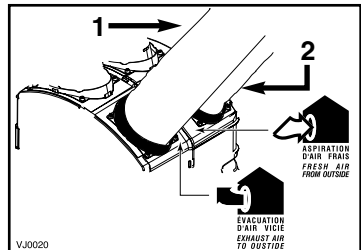


### CAUTION

**Avoid compressing the insulation when you pull the tape tightly around the joint. Compressed insulation loses its insulation properties and causes water dripping due to condensation on the exterior surface of the duct.**

5. Repeat steps 1 to 4 for the other 5" to 6" port.

See figure beside to find the *EXHAUST AIR TO OUTSIDE* (1) and *FRESH AIR FROM OUTSIDE* (2) oval ports on the top of the unit. **Be careful to connect the right insulated duct to its corresponding port.**



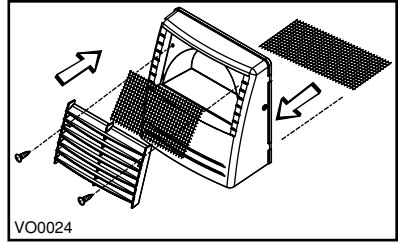


## 4. INSTALL THE UNIT (CONT'D)

### 4.7 INSTALLING DUAL EXTERIOR HOOD\* (HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNITS ONLY)

#### 4.7.1 ASSEMBLING DUAL EXTERIOR HOOD

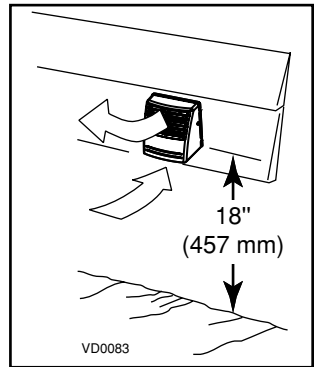
Exterior dual hood is coming in separate parts. Using 2 #8 x 3/4" screws, assemble the top metal screen and the plastic grille to the dual exterior hood. Then, slide the bottom metal screen to the dual exterior hood. See illustration beside.



\*Patent pending

#### 4.7.2 LOCATING THE DUAL EXTERIOR HOOD

The dual exterior hood must be installed at a minimum distance of 18 inches (457 mm) from the ground. See illustration beside.



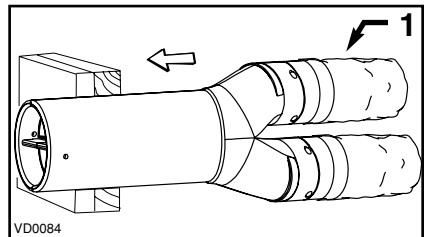
### **⚠ WARNING**

**Make sure this hood is at least 3 feet (0.9 m) away from any of the following:**

- **High efficiency furnace vent.**
- **Gas meter exhaust, gas barbecue-grill.**
- **Any exhaust from a combustion source.**
- **Garbage bin and any other source of contamination.**

#### 4.7.3 CONNECTING TANDEM® TRANSITION TO THE DUAL EXTERIOR HOOD

1. Using a jig saw, cut a 6" diameter hole in the exterior wall and insert the Tandem® transition through this hole.



1) EXHAUST AIR TO OUTSIDE duct

### **CAUTION**

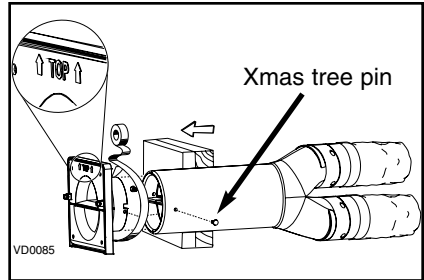
**The Tandem® transition must be inserted in such a way that the EXHAUST AIR TO OUTSIDE duct will be located on the top.**

## 4. INSTALL THE UNIT (CONT'D)

### 4.7 INSTALLING DUAL EXTERIOR HOOD (HEPA 2000, HF 2.0, HEPA 3000, HF 3.0 AND HEPA 4000 UNITS ONLY) (CONT'D)

#### 4.7.3 CONNECTING TANDEM® TRANSITION TO EXTERIOR DUAL HOOD (CONT'D)

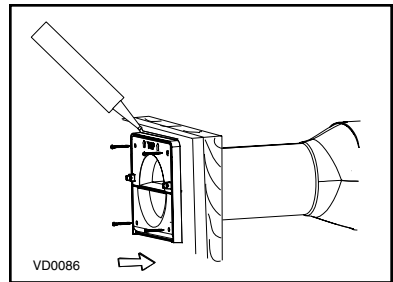
2. Joint the end of the Tandem® transition to the rear of the exterior backplate. Secure with 2 Xmas tree pins and seal properly with duct tape.



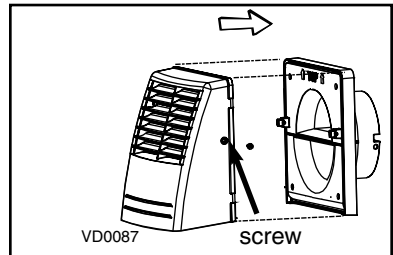
### CAUTION

The exterior backplate must be installed with the word "TOP" pointing upward.

3. Lean the exterior backplate to the exterior wall. Using 4 #8 x 1 1/2" screws, fix it to the wall. Seal the outline with caulking.

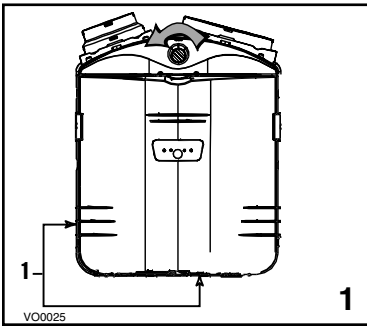


4. Snap the assembled exterior hood on its backplate and secure with 2 provided screws (#8 x 3/4" long).

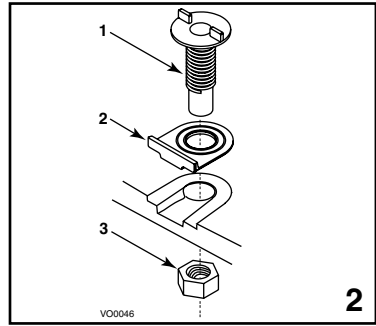


## 4. INSTALL THE UNIT (CONT'D)

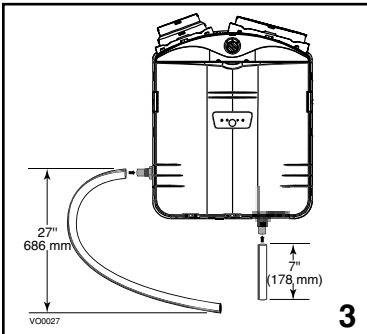
### 4.8 CONNECTING THE DRAIN (HEPA 3000 AND HF 3.0 UNITS ONLY)



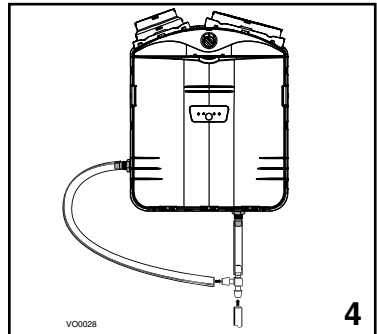
1. Remove the door by turning the switch knob to the OFF position (to unlock the door). Then, unlatch the door and open it. Slide out the core assembly to access the 2 drain fitting hole locations (1). Punch out the holes.



2. Hand tighten the 2 plastic drain fittings (1) using the gaskets (2) and nuts (3) as shown. Close the door.

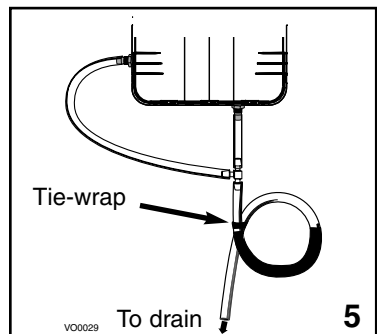


3. Cut 2 sections of plastic tubing; one 7" (178 mm) long and one 27" (686 mm) long, and attach them to each drain fitting as shown.



4. Join these 2 sections to the "T" junction and main tube as shown.

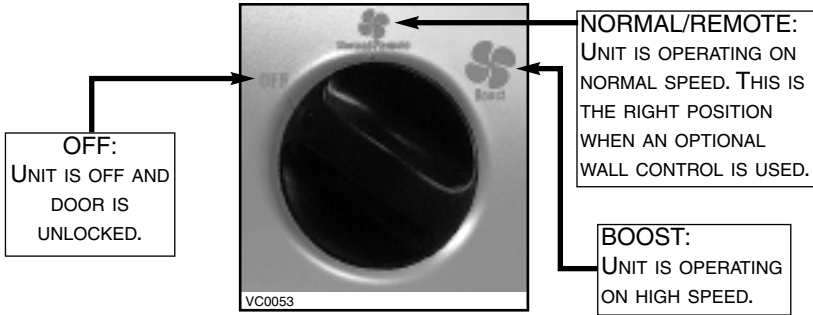
5. Make a water trap loop in the tube to prevent the unit from drawing unpleasant odors from the drain source. Make sure this loop is situated BELOW the "T" as shown. This will prevent water from being drawn back up into the unit in case of negative pressure. Run the tube to the floor drain or an alternative drain pipe or pail. Be sure there is a slight slope for the run-off.



## 5. CONTROLS

### 5.1 MAIN SWITCH

All units are equipped with a 3-position main switch, located on the front panel.



### 5.2 OPTIONAL WALL CONTROLS

There are 2 optional wall controls available: C12 / CM control (intended for HEPA 1000 / HF 1.0 and HEPA 2000 / HF 2.0 units only) and C34 / CMR control (intended HEPA 3000 / HF 3.0 and HEPA 4000 units only).



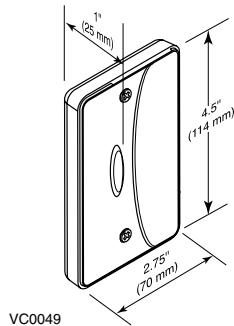
**C12 CONTROL**  
**CM CONTROL**



**C34 CONTROL**  
**CMR CONTROL**

### 5.3 DIMENSIONS

Dimensions are the same for both C12 / CM and C34 / CMR models.



## 5. CONTROLS (CONT'D)

### 5.4 INSTALLATION OF THE OPTIONAL WALL CONTROLS (CONTROLS C12 / CM AND C34 / CMR)

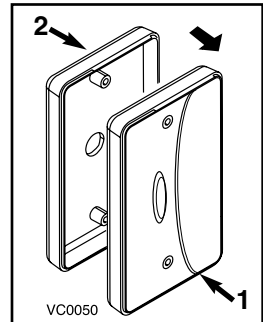
#### **WARNING**

**Always disconnect the unit before making any connections. Failure in disconnecting power could result in electrical shock or damage of the wall control or electronic module inside the unit.**

#### **CAUTION**

**Never install more than one optional wall control per unit.**

1. Determine the more convenient location for the control.

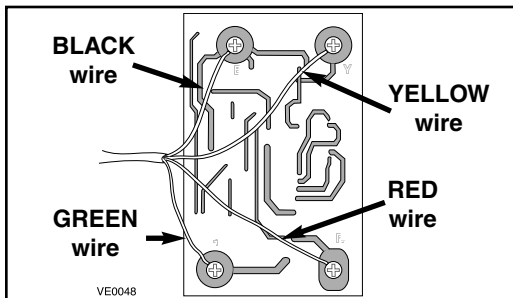


2. Remove the cover plate control (1). If you prefer to have your optional main control mounted on an approved outlet box or an approved mounting bracket (not included), discard the backplate (2).

#### **WARNING**

**To avoid risk of electrical shocks, never install another wire in the same electrical box than the one for the optional wall control.**

3. Take one end of the cable and pass it through the wall control backplate (or outlet box or mounting bracket).
4. Splice back this end of the cable to access to the 4 wires. Remove the insulated sleeve of each wire ends. Make a loop with each bare end wire to hook them to their corresponding screw. Connect YELLOW wire to "Y" screw, RED wire to "R" screw, GREEN to "G" screw and BLACK to "B" screw. See illustration below.



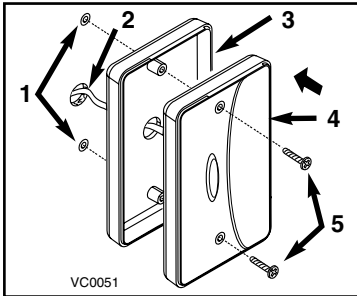
#### **WARNING**

**Make sure that the wires don't short circuit between themselves or by touching any other components on the wall control.**

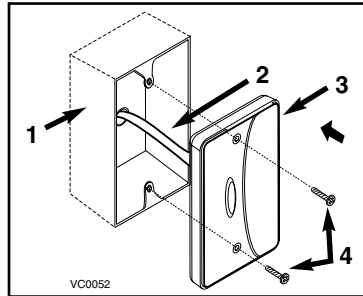
## 5. CONTROLS (CONT'D)

### 5.4 INSTALLATION OF THE OPTIONAL WALL CONTROLS (CONTROLS C12 / CM AND C34 / CMR) (CONT'D)

5. Pass the other end of the cable through the wall. Reinstall the cover plate. Using wall anchors (not included) and provided screws, mount the wall control on the wall. See illustrations below.



- 1) Wall anchors
- 2) Control cable
- 3) Control backplate
- 4) Control
- 5) Screws



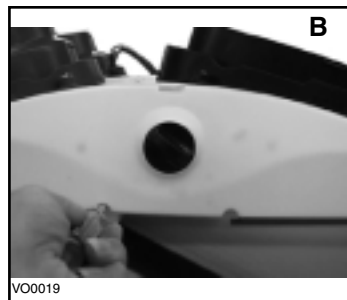
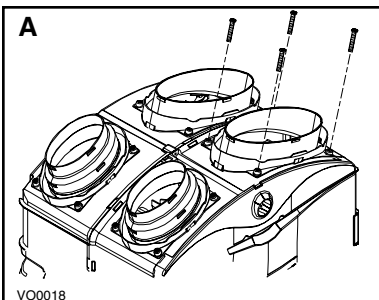
- 1) Outlet box
- 2) Control cable
- 3) Control
- 4) Screws

6. Route the cable to the unit.

### CAUTION

Keep control low voltage wiring at least 1 foot (305 mm) away from motors, lightning ballast, light dimming circuit and power distribution panel. Do not route control wiring along with house power wiring. Avoid poor wiring connections. Failure to follow these practices can introduce electrical interference, which can cause erratic control operations.

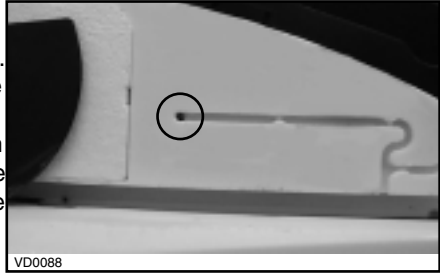
7. Remove the front 8" oval port (A) and the front panel (B) of the unit by unscrewing their retaining screws.



## 5. CONTROLS (CONT'D)

### 5.4 INSTALLATION OF THE OPTIONAL WALL CONTROLS (CONTROLS C12 / CM AND C34 / CMR) (CONT'D)

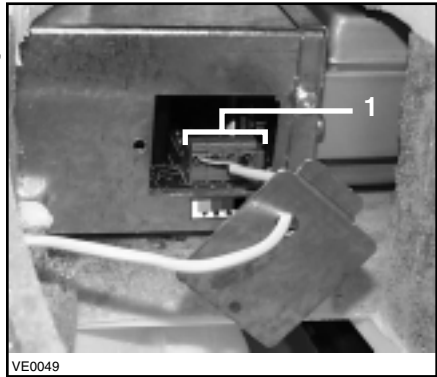
8. Using a small rod, pierce a hole through the unit at the end of the wire channel. (See picture beside.) Splice back the end of the cable to access the 4 wires. Remove the insulated sleeve of each wire ends. Insert the end of the cable through the unit, using the small hole previously done.



9. In order to access the unit PCB terminals, remove the side door located on the electrical box and punch out its knock out. Run the cable through the knock-out hole and connect each wire in their corresponding terminal (YELLOW in "Y", RED in "R", GREEN in "G" and BLACK in "B").

NOTE: Push forward slightly on the little tabs (1) to ease insertion of each wires.

See picture beside.



10. Reinstall the side door on the electrical box and the 8" oval port on the unit.

11. Route the wire through its channel and reinstall the front panel on the unit. See picture beside.



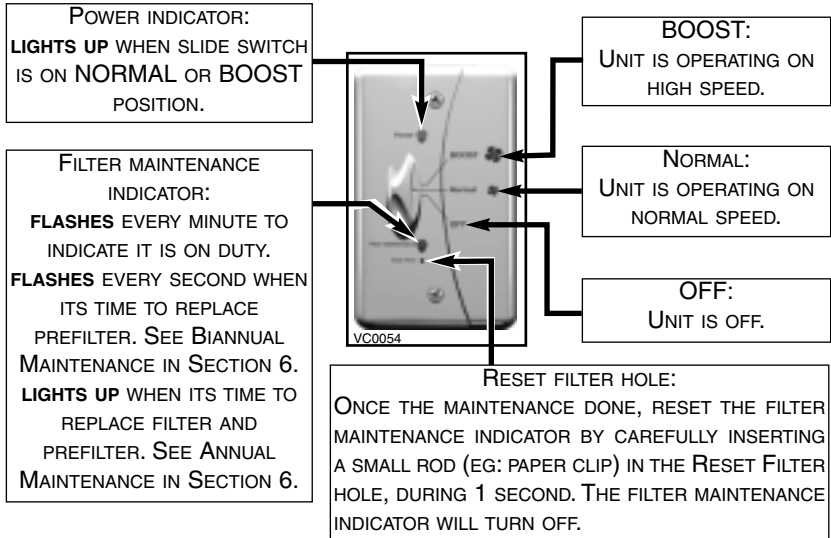
12. If the installation is not completed, return to Section 4 on page 19. If the installation is completed, plug the unit.

NOTE: When using an optional wall control, the main switch on the unit must always be positioned to NORMAL/REMOTE.

## 5. CONTROLS (CONT'D)

### 5.5 OPERATING C12 / CM CONTROL

#### 5.5.1 C12 / CM CONTROL DESCRIPTION



#### 5.5.2 USING C12 / CM CONTROL

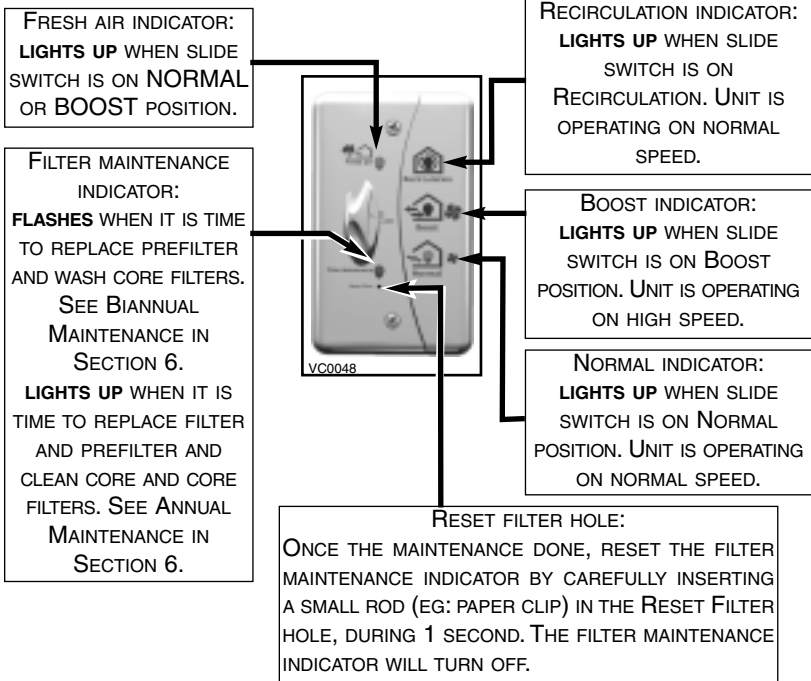
- **OFF:** To stop the unit, slide the button on this position.
- **NORMAL:** For a day-to-day usage, slide the button on this position. The unit then will operate on normal speed.
- **BOOST:** For a high speed operation, slide the button on this position. Generally used when extreme conditions occur, eg.: parties, smokers, etc.



## 5. CONTROLS (CONT'D)

### 5.6 OPERATING C34 / CMR CONTROL

#### 5.6.1 C34 / CMR CONTROL DESCRIPTION



#### 5.6.2 USING C34 / CMR CONTROL

- **OFF:** To stop the unit, slide the button on this position.
- **NORMAL:** For a day-to-day usage, slide the button on this position. The unit then will operate on normal speed.
- **BOOST:** For a high speed operation, slide the button on this position. Generally used when extreme conditions occur, eg.: parties, smokers, etc.
- **RECIRCULATION:** For a normal speed operation, without exchanging air with the outside, slide the button on this position. This mode is recommended in high humidity days (rain, heat wave). Also, use it when the outside temperature is extremely cold and/or the inside air is too dry. It can be used also to recirculate the heat coming from a wood stove throughout the house, or the fresh air from a cooling system.

## 6. MAINTENANCE

### WARNING

**Risk of electrical shocks. Before performing any maintenance or servicing, always disconnect the unit from its power source.**

#### 6.1 BIENNIAL MAINTENANCE (ESSENTIAL)

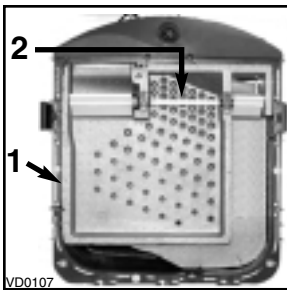
If your unit is equipped with an optional wall control (C12 / CM or C34 / CMR) you should perform this maintenance when the **Filter Maintenance light is flashing**. Otherwise, this maintenance must be performed every 6 months to ensure your unit proper operation for years to come. Follow these steps:

1. Turn switch knob to OFF to unlock the door.
2. Unlatch the door and open it. Clean the inner side of the door with a clean damp cloth, then wipe with a dry one.
3. Slide out the air diffuser (HEPA 2000 and HF 2.0 units only), the recovery core (HEPA 3000 and HF 3.0 units only), the energy recovery core (HEPA 4000 units only) and the filter cartridge from the unit.

NOTES: 1. On HEPA 2000 and HF 2.0 only, never grab the white shaft (item 2)

to pull out the air diffuser.

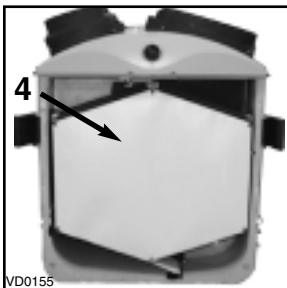
2. To remove the filter cartridge, pull on its tabs (item 5).



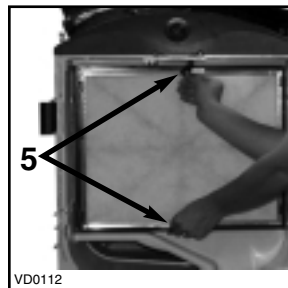
1) Air diffuser  
2) White Shaft



3) Heat Recovery Core



4) Energy recovery Core

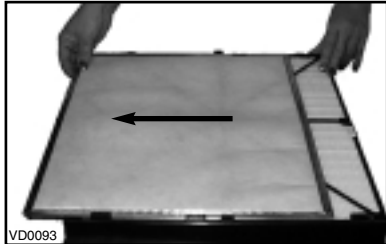
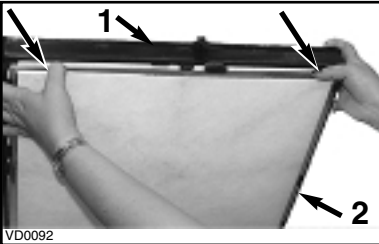


5) Filter Cartridge Tabs

## 6. MAINTENANCE (CONT'D)

### 6.1 BIENNIAL MAINTENANCE (ESSENTIAL) (CONT'D)

- Using your thumbs, push on the prefilter\* side to disengage it from the filter cartridge. Then, slide it out of the filter cartridge and discard it. Install the new prefilter\* by reversing this operation.



- Filter cartridge
- Prefilter

NOTE: If you are using a washable foam filter (MERV 8), vacuum to remove most of the dust. Let it soak in a solution of warm water and mild soap. Rinse thoroughly and let dry before reinstalling it.

\* When using a washable foam filter (MERV 8), there is no prefilter.

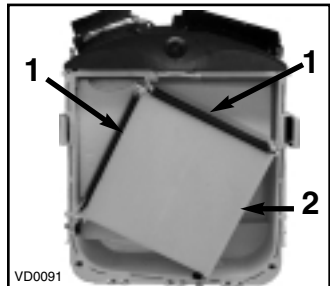
- Clean the inside walls of the unit with a clean damp cloth, then wipe with a dry one.

#### **For HEPA 2000 and HF 2.0 only**

Clean the air diffuser with a clean damp cloth, then wipe with a dry one. Once the air diffuser completely dry, slide it back into the unit.

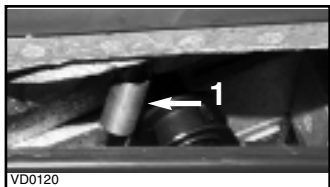
#### **For HEPA 3000, HF 3.0 and HEPA 4000 only**

Wash the 2 core filters under hot water with mild soap. Rinse thoroughly and let dry completely before reinstalling on the core. Remove the dust on the core using a vacuum cleaner with a soft brush attachment.



- Core filters
- Core

NOTE: Make sure the damper spring (1) is still inside the left front port opening before reinstalling the recovery module.



- Damper spring

## 6. MAINTENANCE (CONT'D)

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### 6.1 BIENNIAL MAINTENANCE (ESSENTIAL) (CONT'D)

6. Close the door, close the latches and turn ON the switch knob to its previous position.
7. If your unit is equipped with an optional wall control (C12 / CM) or C34 / CMR), reset the filter maintenance indicator by inserting a small rod (eg: paper clip end) into the reset filter hole of the optional wall control. Press lightly until the Filter Maintenance indicator light turns off.

### 6.2 ANNUAL MAINTENANCE (ESSENTIAL)

If your unit is equipped with an optional wall control (C12 / CM or C34 / CMR) you should perform this maintenance when the **Filter Maintenance light stays ON**. Otherwise, this maintenance must be performed once a year to ensure your unit proper operation for years to come. Proceed as the Biannual Maintenance (Section 6.1), but instead of replacing the prefilter (point 4), discard the complete HEPA Filter cartridge (including prefilter). Install a new HEPA filter cartridge (or a new pleated filter cartridge) with a new prefilter on it.

NOTE: If you are using a washable foam filter, just do the same operations as the Biannual Maintenance (Section 6.1).

### 6.3 MASTER RESET (C12 / CM AND C34 / CMR CONTROLS)

Use the master reset only if you replace the filters before the annual maintenance indicator is on. By inserting a small rod (eg: paper clip end) during 5 seconds and more into the reset filter hole of the optional wall control, a master reset will be done and both biannual and annual maintenance filter are reset.

C12 / CM Control: The filter maintenance indicator will flash 1/4 second.

C34 / CMR Control: If the wall control is in "Off" position, "Fresh air" light indicator will flash for 1 second.

If the wall control is in "Normal" or "Boost" position, the unit motor, the "Fresh air" light indicator and speed light indicator ("Normal" or "Boost") will turn off for 3 seconds.

If the wall control is in "Recirculation" position, the "Recirculation" light indicator and the unit motor will turn off during 3 seconds.

## 7. PARTS ORDERING CHART

No. Description	Part Number	HEPA 1000	HEPA 2000
		HF 1.0	HF 2.0
1 Prefilter Kit (2)	05123	1	1
2 HEPA Pleated Filter Kit	04803	1	1
3 MERV 12 Filter Kit*	04804	1	1
4 Foam Filter MERV 8 Kit*	04852	1	1
5 Core Filter Kit (2)	05120	-	-
6 Single Exterior Hood Kit**	13940	-	1
7 Wall Control C12**	04862	1	1

No. Description	Part Number	HEPA 3000	HEPA 4000
		HF 3.0	
1 Prefilter Kit (2)	05123	1	1
2 HEPA Pleated Filter Kit	04803	1	1
3 MERV 12 Filter Kit*	04804	1	1
4 Foam Filter MERV 8 Kit*	04852	1	1
5A Core Filter Kit (2)	05120	1	-
5B Core Filter Kit (2)	05689	-	1
6 Single Exterior Hood Kit**	13940	1	1
7 Wall Control C34**	04391	1	1

\*The HEPA filter is factory installed in all our units. However, when it will be time to be replaced, a pleated filter or a foam filter can be purchased, but the filtration efficiency will not be the same as a HEPA filter.

\*\*Items 6 and 7 are optionals.

All listed parts are available where you have bought your unit.

NOTE: Please note that parts not listed are not available; those parts require assembly knowledge that only manufacturer can guarantee.

## 8. TROUBLESHOOTING

PROBLEMS	SOLUTIONS
1. Unit does not start at Normal or Boost position.	<ul style="list-style-type: none"> <li>• Check breaker or fuse in main distribution panel.</li> <li>• Check there is 120V at the electrical outlet.</li> <li>• Make sure the unit main switch is properly set in Normal or Boost position.</li> <li>• If a wall control (C12 / CM or C34 / CMR) is connected, disconnect control wire from the unit, then make sure the unit main switch is properly set in Normal or Boost position.</li> </ul>
2. Unit does not run at Normal speed, but runs at Boost.	<ul style="list-style-type: none"> <li>• If a wall control (C12 / CM or C34 / CMR) is used, disconnect control wire from the unit. Then, if the unit runs at Normal speed, check control wiring and wall control connections.</li> </ul>
3. Unit is not operating as per the selected mode.	<ul style="list-style-type: none"> <li>• Check if the unit main switch is in "Normal/Remote" position.</li> <li>• Check wall control wiring.</li> </ul>
4. Wall control indicators do not work properly or not at all.	<ul style="list-style-type: none"> <li>• Check wall control wiring.</li> </ul>
5. On C34 / CMR wall control only, 1 or 2 light indicators are flashing every second.	<ul style="list-style-type: none"> <li>• Check if the unit main switch is in "Normal/Remote" position.</li> <li>• Check wall control wiring.</li> </ul>

If the problem is still not solved, call your installer or the nearest approved Service Center.

Also, you can reach the Customer Service Department at the following telephone numbers:

Exclusively for models HEPA 1000, HEPA 2000, HEPA 3000 and HEPA 4000:  
1 800 567-3855.

Exclusively for models HF 1.0, HF 2.0 and HF 3.0:  
1 866 737-7770.