

# USER GUIDE



VB0157

## MODELS

NOVOFIT 1.5\*



NOVOFIT 2.0

**READ AND SAVE THESE INSTRUCTIONS**



\*This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR requirements only when used in Canada.

## About this Guide

This guide 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.

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**CONGRATULATIONS!** You have made an excellent choice!

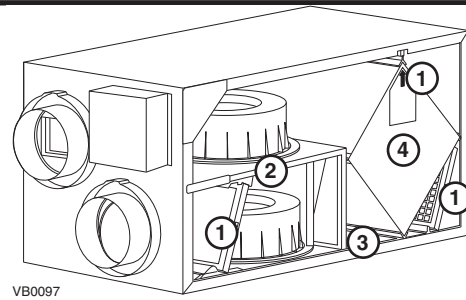
We have prepared this User Manual especially for you. Please read it carefully to ensure you obtain full benefits from your Heat Recovery Ventilator unit.

### **CAUTION**

- Some activities create dust or vapors which may damage your unit. You must therefore turn off and unplug your unit in the following situations:
  - major renovation work
  - housing construction
  - sanding (e.g. gypsum joints, etc.)
  - varnishing
- During very heavy snowstorms, the unit should also be turned off or set on recirculation mode to avoid problems caused by snow entering the unit, even if it is equipped with an anti-gust intake hood.
- At least once in a year, the unit mechanical and electronic parts should be inspected by qualified service personnel.

# 1. UNIT DESCRIPTION

- 1. Filters
- 2. Blowers
- 3. Condensation tray
- 4. Heat recovery core



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## 1.1 SPECIFICATIONS

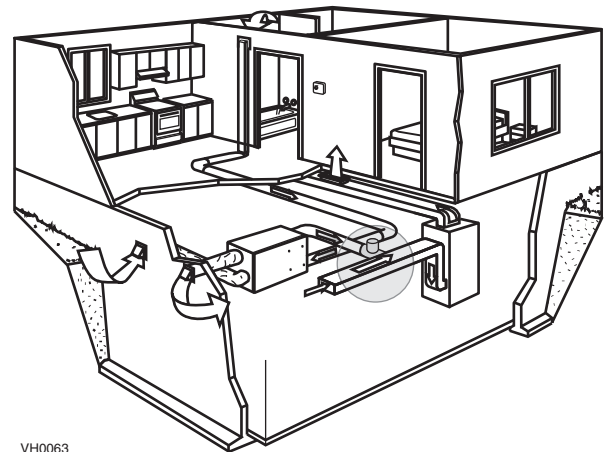
MODEL	NOVOFIT 1.5	NOVOFIT 2.0
WIDTH	30¼" (768 MM)	30¼" (768 MM)
HEIGHT	16½" (419 MM)	16½" (419 MM)
DEPTH	17⅞" (435 MM)	17⅞" (435 MM)
WEIGHT	65 LB (29.5 KG)	67 LB (30.5 KG)
ELECTRICAL SUPPLY	120 V, 60 Hz	120 V, 60 Hz
POWER CONSUMPTION	150 W	240 W

# 2. FUNCTION OF THE HEAT RECOVERY VENTILATOR

Your ventilation system will help eliminate poor air quality problems by drawing the stale and humid air out of the house and replacing it with fresh outside air. By eliminating accumulated pollutants and humidity, it maintains an optimum air quality and an ideal relative humidity during cold season.

The unit is also equipped with a heat recovery core which reduces ventilation costs in winter.

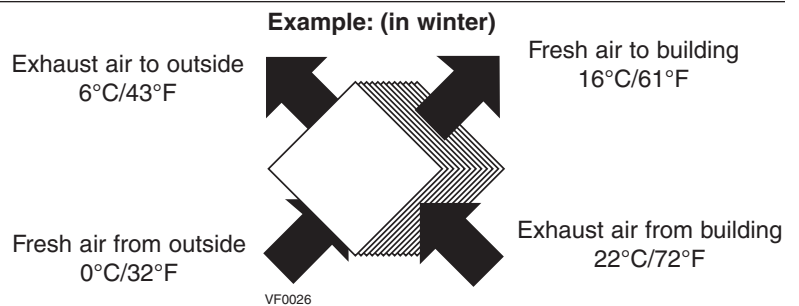
*Shown with a forced air heating system; can also operate on its own.*



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## 2.1 HEAT RECOVERY

Units equipped with a heat recovery core can reduce ventilation costs in winter. The unit draws the heat from the stale air and humid air before it is released and uses it to heat the air coming in from outside. The recovery core is designed in such a way that the stale air is never mixed with the fresh air.



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## 2.2 RECIRCULATION

In recirculation mode, the unit ceases to exchange air with the exterior. Continuous recirculation and a mechanical filter ensure the purification of the ambient air inside the house. The mechanical filter traps dust particle visible to the eye.

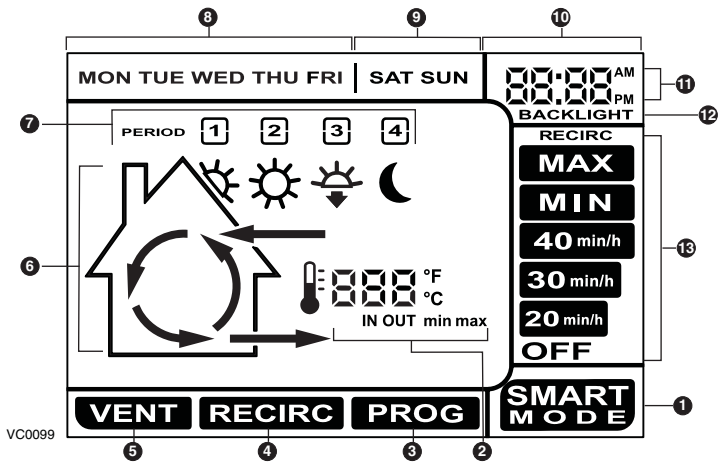
## 2.3 DEFROSTING

When the outside temperature is below -5°C (23°F), heat recovery creates frost in the core. To maintain its proper operation, the unit is programmed to defrost the recovery core. The defrosting frequency varies according to outside temperature. Defrosting lasts 6 minutes (or 10 minutes if set on EXTENDED DEFROST). During the defrost cycle, the unit shifts to maximum speed and the dampers close. After defrosting, the unit returns to the operating mode previously selected by the user.

# 3. CONTROLS

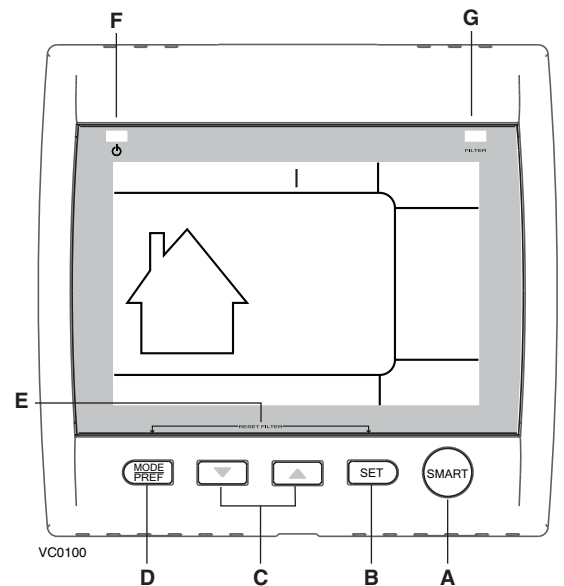
## 3.1 ALTITUDE MAIN CONTROL

- ❶ **SMART Mode.** Entirely automatic mode optimizing the ventilation.
- ❷ **Temperature Indicators.**
- ❸ **Program Mode.** Allows to program the desired ventilation according to the period of the day.
- ❹ **Recirculation Mode.** Manual mode performing air recirculation inside the house.
- ❺ **Ventilation Mode.** Manual mode performing air exchange with the outside.
- ❻ Animated Arrows showing ventilation status (recirculation or air exchange).
- ❼ Periods of the day (morning, day, evening and night).
- ❽ Week days.
- ❾ Week-end days.
- ❿ Hour display.
- ⓫ AM or PM display.
- ⓬ Appears only when setting backlight preferences.
- ⓭ Ventilation / Recirculation speeds and programming options.



### CASING INDICATORS AND KEYS

- A SMART key:** Enables and disables the **SMART** mode.
- B Set key:**
  - Press 3 seconds to access setting periods for Program mode.
  - Confirms the chosen option and goes to following setting.
- C Arrow keys:**
  - Adjust ventilation and recirculation speeds.
  - Allows to review the program's period.
  - Adjust Preference and Program values.
- D Mode / Pref key:**
  - **Mode:** Selects whether **Ventilation**, **Recirculation** or **Program** mode.
  - **Pref:** Push 3 seconds to access Preference settings.
- E Reset filter keys:** Press on **B** and **D** keys simultaneously for 5 seconds to turn off (reset) the filter maintenance indicator.
- F Power indicator:** Illuminates when the control is operating.
- G Filter maintenance indicator:** Perform filters maintenance. (Refer to Section 4 Maintenance).



## 3. CONTROLS (CONT'D)

### 3.1 ALTITUDE MAIN CONTROL (CONT'D)

The Altitude main control is pre-programmed and ready to go. All you have to do is to set day and time. Then check the settings below and change if needed.

#### SETTING PREFERENCES

Press on **MODE / PREF** key (**D**) for 3 seconds.

NOTE: You can exit Preferences setting by pressing on **MODE / PREF** key (**D**) for 3 seconds any time in the process, or wait 60 seconds. The modified values will be kept in memory.

#### WHAT WILL YOU SEE

If the control will be set for the very first time, the current day will be the first setting to be made; **MON** (for Monday) will flash on screen.

If the control was previously set up, when setting preferences, the control returns to the last preference chosen on previous setting. While setting Preferences, the corresponding setting value flashes (e.g.: while setting current hour, hour is flashing).

#### HOW TO PROCEED

For every settings in table below:

- Use   to select value.
- Press **SET** key (**B**) to confirm the selected preference and go to next setting.

SETTING	AVAILABLE VALUE	DEFAULT OPTIONS
CURRENT DAY	MON/TUE/WED/THU/FRI/SAT/SUN	MON
HOUR DISPLAY	12:00 <sup>AM</sup> OR 24:00	12:00 <sup>AM</sup>
CURRENT HOUR	FROM 0 TO 12 OR 24	12
CURRENT MINUTE	FROM 00 TO 59	00
TEMPERATURE UNIT	°C OR °F	°C
INSIDE TEMPERATURE DISPLAY	ON OR OFF	ON
MINIMUM OUTSIDE TEMPERATURE FOR AIR EXCHANGE*	-40°C TO 0°C OR -40°F TO 32°F	-25°C OR -13°F
MAXIMUM OUTSIDE TEMPERATURE FOR AIR EXCHANGE*	1°C TO 40°C OR 33°F TO 104°F	27°C OR 81°F
*IN PROG OR SMART MODE, THESE LIMIT VALUES ALLOW TO STOP AIR EXCHANGE WITH THE OUTSIDE		
BACKLIGHT COLOR	BLUE OR GREEN	BLUE
BACKLIGHT DISPLAY	AUTO OR ON	AUTO
AUTO: BACKLIGHT ACTIVATED 10 SECONDS WHEN ANY KEY IS PRESSED. ON: BACKLIGHT ALWAYS ON.		
OFF MODE FOR INTERMITTENT MODE	VENTILATION/RECIRCULATION OR VENTILATION/OFF	VENT/RECIRC.
AFTER A VENTILATION PERIOD, DETERMINES THE SECOND PART OF THE CYCLE (RECIRCULATION OR OFF).		

## 3. CONTROLS (CONT'D)

### 3.1 ALTITUDE MAIN CONTROL (CONT'D)

Pressing on **MODE / PREF** key (**D**) successively allows to go from **Ventilation** mode to **Recirculation** mode and then to **Program** mode (**VENT** ⑤ , **RECIRC** ④ and **PROG** ③ on control screen).

- In **Ventilation** Mode, use   to change the ventilation speed (displayed in ⑥ in all options except **RECIRC**).
- In **Recirculation** mode, use   to change the recirculation speed (displayed in ⑥ , OFF, MIN, MAX).
- In **Program** mode, use   to review the period settings without changing them (the period icons are displayed in ⑦).

Pressing once on **A** allows to turn the ventilation unit in Smart mode. On this mode, the ventilation unit operation will be driven by the outdoor temperature and by the indoor conditions. Press once more to exit Smart mode.

### SETTING PERIODS FOR PROGRAM MODE

The Program Mode allows the user to customize the operation of his/her ventilation unit, for week and weekend days. All days are divided in 4 periods. The periods starting hour and ventilation speed are factory set (see below).

DAILY PERIODS DEFAULT SETTINGS			
PERIOD	STARTING	HOUR	MODE
PERIOD 1	(MORNING)	6:00 AM	MIN
PERIOD 2	(DAY)	9:00 AM	20 MIN/H
PERIOD 3	(EVENING)	5:00 PM	MIN
PERIOD 4	(NIGHT)	11:00 PM	20 MIN/H

#### To change these values:

Press on **SET** key (**B**) for 3 seconds, **PROG** (for program) will appear on screen, and week days will flash.

NOTE: You can exit Periods setting by pressing on **SET** key (**B**) for 3 seconds any time in the process, or wait 60 seconds.

- Use   to select between setting week days or weekend days.
- Press **SET** key (**B**) to confirm the choice, and go to setting daily Period 1. (**Period 1** will appear on screen, and hour display will flash.)
- Use   to select the period starting hour.  
NOTE: Time changes by 15 minutes increments.
- Press **SET** key (**B**) to confirm and go to select the ventilation speed or type (will flash on screen).
- Use   to select the ventilation speed or type.
- Press **SET** key (**B**) to confirm and go to daily Period 2. (**Period 2** will appear on screen, and hour display will flash.)

Proceed as for Period 1 for all daily periods. Once the ventilation speed or type for daily Period 4 has been selected:

- Press **SET** key (**B**) to confirm.  
NOTE : If the week days were the first to be set, the weekend days will appear on screen; but if the weekend days were the first to be set, then the week days will appear on screen. (**Period 1** will appear on screen, and hour display will flash.)
- Set periods as described above.

### 3. CONTROLS (CONT'D)

#### 3.2 DECO-TOUCH MAIN CONTROL

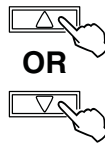
##### BACKLIGHT

If the backlight is not illuminated, the first button pressed (no matter which button) shall turn on the backlight. The backlight remains illuminated for 10 seconds after the last button pressed.

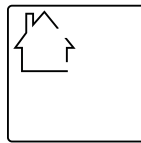


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##### OPERATING MODES

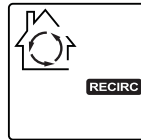


To change the operation mode of the ventilation unit, press the UP or DOWN arrow button. Operating mode label will then scroll up or down on LCD screen.



##### OFF

Put the unit on stand-by mode, so it will only respond to auxiliary controls (if present). On LCD screen, only the House is visible showing the control is powered on. This is the factory default mode.



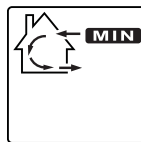
##### RECIRC

Air is recirculated inside the house at high speed.



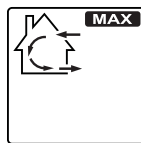
##### 20 MIN/H

The ventilation unit exchanges air intermittently on a one hour cycle as follows: OFF for 40 min. (or recirculation on high speed for 40 min., see next page) and then exchange air during 20 min. on low speed. Repeat cycle after the 20 min. of air exchange.



##### MIN

Air is exchanged with the outside on low speed.



##### MAX

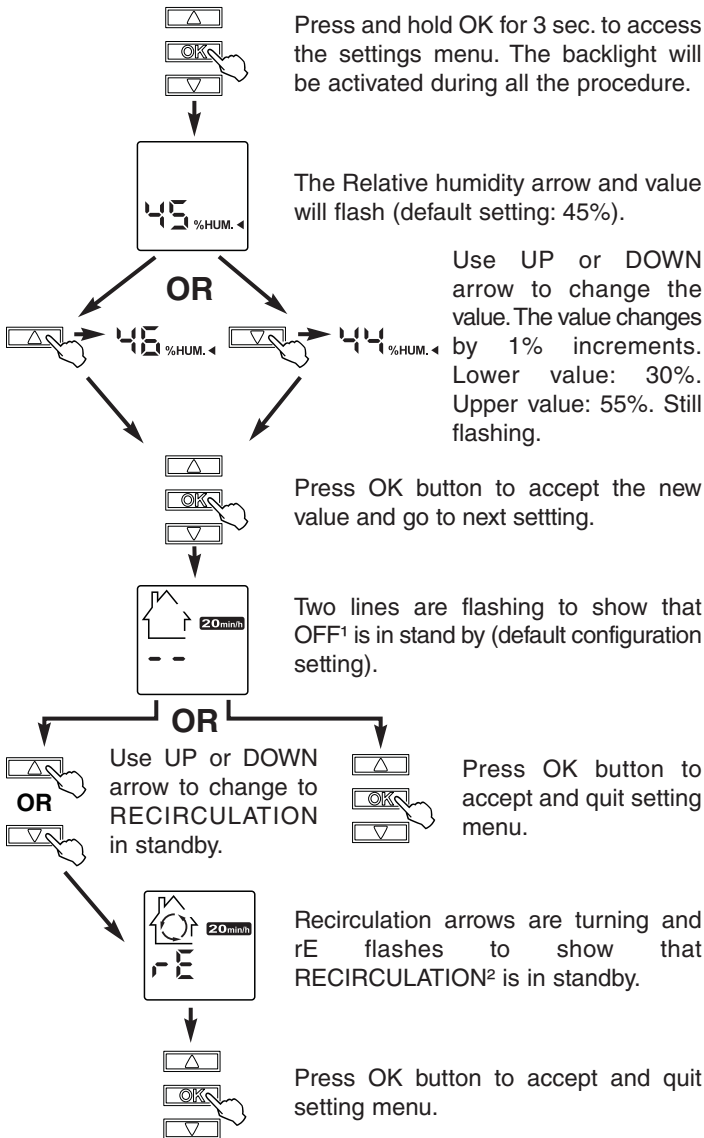
Air is exchanged with the outside on high speed.

# 3. CONTROLS (CONT'D)

## 3.2 DECO-TOUCH MAIN CONTROL (CONT'D)

### HOW TO SET THE RELATIVE HUMIDITY (RH) LEVEL AND CHOOSE BETWEEN OFF IN STANDBY OR RECIRCULATION IN STAND-BY

Setting the relative humidity level allows to select the maximum desired indoor humidity level (in percentage). This value will be used to start the dehumidistat override (air exchange in high speed).



<sup>1</sup>OFF IN STAND BY: On 20 min/h mode, the ventilation unit is OFF during 40 minutes and exchange air with the outside on low speed during the remaining 20 minutes of the hour. This is the default value.

<sup>2</sup>RECIRCULATION IN STAND BY: On 20 min/h mode, the ventilation unit recirculates the inside air for 40 minutes on high speed and exchange air with the outside on low speed during the remaining 20 minutes of the hour.

### DEHUMIDISTAT OVERRIDE SELECTION

In the operating modes MIN, MAX, 20 MIN/H and RECIRC, the user can select a dehumidistat override so that if the relative humidity (RH) in the house exceeds the RH setting previously stored, the ventilation unit will exchange in high speed until the target indoor RH setting is reached.

An air exchanger is not a dehumidifier, but it can change the indoor relative humidity by bringing in drier or more humid air from outside during non heating season. The dehumidistat override function is useful to reduce indoor RH when the outdoor air is cool and dry during the heating season. Select a target RH between 30% and 55% according to your comfort. When outdoor relative humidity is high (e.g. in summer), turn off the override by pressing OK until the RH display disappears.

When the dehumidistat override is activated, the AUTO indicator will appear on LCD screen to show that the actual mode is being overridden. Also, the relative humidity appears (if it was not shown, see example beside). Once the target humidity level is reached, the unit goes back into its original operating mode and AUTO disappears from LCD screen.

NOTE: If the actual mode is MAX, only the relative humidity level appears on screen; AUTO label will not appear.

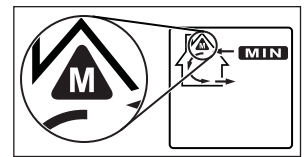
To engage the dehumidistat override, press OK. The actual indoor RH and the %HUM label appear on LCD screen.

NOTE: If the actual RH is less than 20%, then the humidity indicator will display "LO", and if the actual RH is greater than 80%, then the humidity indicator will display "HI".

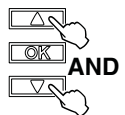
To turn off the dehumidistat override, press OK again. The RH and %HUM display will disappear from LCD screen.

### MAINTENANCE INDICATOR

The maintenance indicator is represented by an M in a rounded triangle, at the top of the house (see beside). If this indicator is flashing, perform the regular maintenance, and if it is not flashing, perform the annual maintenance (refer to Section 4).



**Resetting Maintenance Indicator:** Press simultaneously on both arrow buttons, Maintenance indicator will disappear from LCD screen.



### POWER FAILURE

After a power failure, the wall control returns to its original operation mode. All settings are kept in memory.



## 3. CONTROLS (CONT'D)

### 3.3 20/40/60-MINUTE PUSH-BUTTON TIMER (AUXILIARY CONTROL)

**Location:** Located in the bathroom or in other locations where there is temporary humidity excess or pollutants.

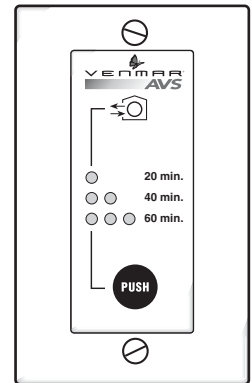
**Purpose:** To eliminate excess humidity produced by showers or other periodic activities producing pollutants.

Within 2 seconds, push one time for 20 minutes, two times for 40 minutes or three times for 60 minutes activation.

Results expected:

1. Motor speed: high for 20, 40 or 60 minutes.
2. Indicator light GOES « ON » and flashes every 5 seconds (one time to indicate a 20-minute operation, two times for a 40-minute and three times for a 60-minute operation.
3. Air exchange indicator light goes « ON »

NOTE: To stop activation, push one more time.



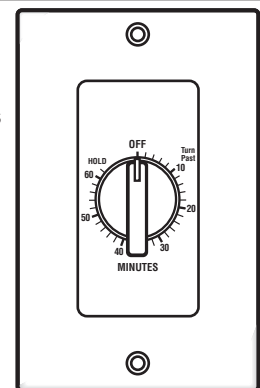
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### 3.4 60-MINUTE MECHANICAL TIMER (AUXILIARY CONTROL)

**Location:** Located in the bathroom or in other locations where there is temporary humidity excess or pollutants.

**Purpose:** To eliminate excess humidity produced by showers or other periodic activities producing pollutants.

This control makes the system operate at high speed for periods varying from 10 to 60 minutes.



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## 4. MAINTENANCE

### ⚠ WARNING

**In order to prevent personal injury, turn off the unit and unplug it before performing maintenance. It is recommended to wear safety glasses and gloves when performing maintenance.**

### 4.1 REGULAR

**Air filters:** The air filters are washable. Under normal conditions, we recommend to wash them every 3 months.

- Use a vacuum cleaner to remove the heaviest portion of accumulated dust.
- Then, wash in water and mild soap.

**Heat Recovery Core:**

### CAUTION

**Hot water and a strong detergent will damage the heat recovery core.**

The heat recovery core must be handled with care. We recommend to wash it once a year, at the end of summer, in order to ensure maximum efficiency of the plastic partitions. Allow the heat recovery core to soak for 3 hours in a solution of warm water and mild soap. Rinse under a heavy stream of water.

**Intake hood:** Regularly check the screen in the exterior intake hood and clean when necessary. Also check during very cold weather because ice may build up on the screen located in the exterior intake hood.

**Motor:** The motor is factory lubricated for life. Do not oil bushings.

### 4.2 PROLONGED


Annual service should include:

- Cleaning filters, heat recovery core and the exterior intake hood.
- Cleaning the blades of the blower wheels.
- Cleaning the condensation tray with soapy water (make sure the drain is not clogged).

NOTE: Ask your installer for an annual service contract.

## 5. TROUBLESHOOTING

If the unit does not work properly, reset the unit by unplugging it for one minute and then replug it. If it still not working properly, refer to table below.

	TYPE OF PROBLEM	TRY THIS...
1.	On Altitude wall control, there is no outside temperature displayed on screen  .	<ul style="list-style-type: none"> <li>At its very start-up or after a power failure, it takes some minutes before the outside temperature appears on screen. Set the wall control on MIN or MAX in VENT Mode.</li> <li>If the problem is not solved by the above, contact your installer.</li> </ul>
2.	On Altitude or Deco-Touch wall control, error code E1 or E3 appears on screen.	<ul style="list-style-type: none"> <li>Contact your installer.</li> </ul>
3.	Nothing works.	<ul style="list-style-type: none"> <li>See if the unit is plugged in.</li> <li>See if the unit is receiving power from the house circuit breaker or fuse.</li> </ul>
4.	Condensation on windows. (Air too humid.)	<ul style="list-style-type: none"> <li>Operate the unit at maximum speed (MAX.) during activities generating excess humidity (family gatherings, extra cooking, etc.).</li> <li>Leave curtains half-open to allow air circulation.</li> <li>Store all firewood in a close room with a dehumidifier or in a well ventilated room, or store the wood outside.</li> <li>Keep the temperature in your house above 18°C (64°F).</li> </ul>
5.	Air too dry.	<ul style="list-style-type: none"> <li>Operate the unit at low speed (MIN.).</li> <li>Temporarily switch to the intermittent mode.</li> <li>Temporarily use a humidifier.</li> </ul>
6.	Air too cold at the air supply grille.	<ul style="list-style-type: none"> <li>Make sure the outside hoods are not blocked.</li> <li>Operate the unit at low speed (MIN.).</li> <li>Have the system's balancing checked.</li> <li>Have the unit's defrost system checked.</li> <li>Install a duct heater.</li> </ul>

If the problem continues, contact your installer at the phone number and address listed below or call the following number for authorized service center nearest you:

- **1-800-567-3855**

### YOUR INSTALLER'S ADDRESS

### REPLACEMENT PARTS AND REPAIR

In order to ensure your ventilation unit remains in good working condition, you must use Venmar Ventilation Inc. genuine replacement parts only. The Venmar Ventilation Inc. genuine replacement parts are specially designed for each unit and are manufactured to comply with all the applicable certification standards and maintain a high standard of safety. Any third party replacement part used may cause serious damage and drastically reduce the performance level of your unit, which will result in premature failing. Also, Venmar Ventilation Inc. recommends to contact a certified service depot for all replacement parts and repairs.