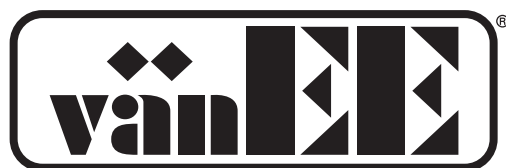


Operating of the models:

**90H AND 190H**



**USER MANUAL**

*Read and save these instructions*

# TABLE OF CONTENTS

CONGRATULATIONS! You have made an excellent choice!

We have prepared this user manual especially for you. Read it carefully to ensure you obtain full benefit from your Heat Recovery Ventilator unit.

- A DESCRIPTION OF UNIT ..... 3
- B FUNCTION OF THE HEAT RECOVERY VENTILATOR .... 3
- C CONTROL ..... 4
- D OPTIONAL CONTROLS ..... 5
- E MAINTENANCE ..... 7
- F TROUBLESHOOTING ..... 8

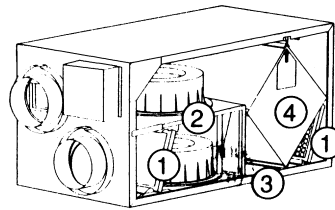
## WARNING

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- 1- Some activities creates **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
- 2- **During very heavy snow storms**, the unit should also be turned off to avoid problems caused by snow entering the unit even if it is equipped with anti-gust intake hood.
- 3- During maintenance and repairs, **the unit must always be turned off, then unplugged.**
- 4- Power disturbances or very short power failures may cause the electronic control microprocessor to malfunction. If it does, disconnect the power plug from the outlet and wait approximately 30 seconds, then plug it back in to resume operation.

## A. DESCRIPTION OF UNIT

- 1- Filters
- 2- Fans
- 3- Condensation tray
- 4- Heat recovery core



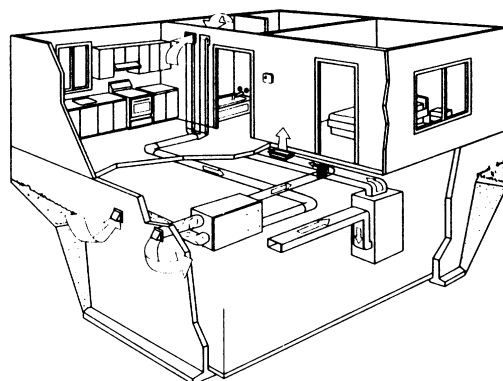
## SPECIFICATIONS

Model	90H	190H
Width	30 1/4" (768 mm)	30 1/4" (768 mm)
Height	16 1/2" (419 mm)	16 1/2" (419 mm)
Depth	17 1/4" (438 mm)	17 1/4" (438 mm)
Weight	66 lb. (30 kg)	68 lb. (31 kg)
Electrical supply	120 Volts, 60 Hz	120 Volts, 60 Hz
Power consumption	150 Watts	240 Watts

## B. FUNCTION OF THE HEAT RECOVERY VENTILATOR

Your ventilation system will help to 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.

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.*

## B. FUNCTION OF THE HEAT RECOVERY VENTILATOR (continued)

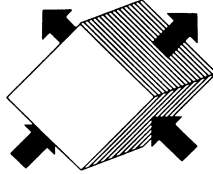
### HEAT RECOVERY

Units equipped with a heat recovery core can reduce ventilation costs in winter. The unit draws the heat from the stale 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.

#### Example: (in winter)

Exhaust air to outside 6°C/43°F

Fresh air to building 16°C/61°F



Fresh air from outside 0°C/32°F

Exhaust air from building 22°C/72°F

### 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 selected by the user.

## C. CONTROL

### 3-POSITION SWITCH

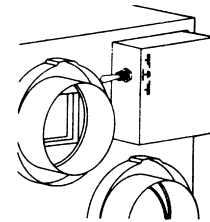
**Location:** Located on the side of unit.

**Purpose:** To adjust air supply and reduce condensation on windows

#### How to operate the unit on a daily basis

Select “LOW” or “HIGH” speed:

- Select “LOW SPEED” for normal daily operation.
- Select “HIGH SPEED” for excess pollutants and humidity (parties, odors, smoke, etc.)



#### How to turn the unit off:

Push switch to the “REMOTE” position.

N.B.: Optional controls can still activate the unit, even when it is in the “REMOTE” position. You must therefore unplug the unit to be absolutely sure it is off.

## D. OPTIONAL CONTROLS

### 1-BRONZE CONTROL

#### Important:

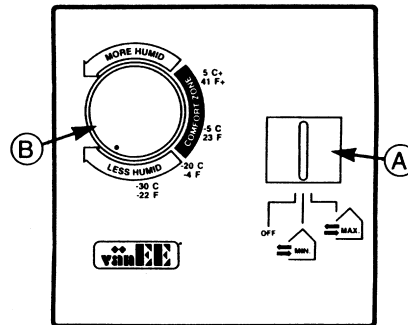
To operate your system with this control, the 3-position switch located on the side of the unit must be set to "REMOTE" position.

**Location:** Located in the busiest area of the house

**Purpose:** To adjust air supply and select desired indoor humidity level.

#### Adjusting the AIR SUPPLY CONTROL:

- a) **Select** speed "MIN." or "MAX." using switch A (as shown on diagram).
  - Select "MIN." (minimum speed) for normal daily operation (24 hours a day all year round).
  - Select "MAX." (maximum speed) for excess pollutants and humidity (parties, odors, smoke, etc.)
- b) To **turn the unit off**, place selector at the "OFF" position. Optional controls however may still be active.



#### Adjusting the HUMIDITY CONTROL:

##### Setting during the summer months:

Normally there is no condensation on your windows during this period which therefore eliminates the need of the humidity control. Set knob B at the "SUMMER" position during this period.

##### Setting during the fall, winter and spring months:

- **METHOD 1** (fast and simple for new users):
  - a) Determine approximately the outside daytime temperature.
  - b) Set knob B to this temperature.

*Continue using this method for about a month before trying method 2 suggested below.*

- **METHOD 2** (more precise adjustment):

Use METHOD 2 (steps **a** to **f** below) if there is **condensation on your windows** after using METHOD 1 for at least a month. As ventilation needs vary from one house to another (depending on cooking habits, frequency of showers, washing, window construction, etc.), an adjustment based on outside temperature may not adequately solve the condensation problem in your house.

- a) **Select** "MIN."
- b) **Turn knob B** clockwise until you hear a click.
- c) **Turn knob B** a notch below the click.
- d) Twelve to 24 hours later, **check** if there is still condensation on the windows.
- e) If there is, **repeat** steps **b, c, d** above (until desired results are obtained).

## D. OPTIONAL CONTROLS (continued)

- f) **Compare** the 2 values: that obtained with METHOD 1 and that obtained with METHOD 2. **Use** the variance for future reference. For example: If there is a 3 degree variance, you can conclude that, for your house, an adjustment of 3 degrees below the outside temperature is required for optimum condensation control.

**WARNING: Do not select a temperature below - 20°C. This could lead to excessive dryness in the air causing discomfort for the occupants.**

### 2-HUMIDITY CONTROL

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

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

**In the fall, winter and spring:**

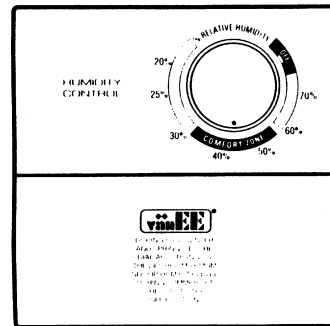
Adjust knob to the desired maximum humidity level.

**WARNING: Do not select a humidity level below 30%.**

**This could lead to excessive dryness in the air causing discomfort for the occupants.**

**In the summer:**

Adjust knob to the "OFF" position.



### 3-TIMERS

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

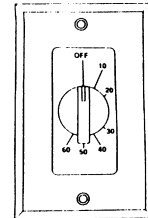
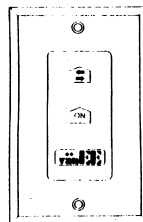
**Purpose:** To eliminate excess humidity produced by showers or other periodic activities producing pollutants.

- **20 minutes push-button timer:**

Set the push-button to "ON": The fan motor will then operate at high speed for 20 minutes and the indicator will light up. (To stop activation, push on time, the unit will then get back to previous selection.)

- **60 minutes timer:**

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



# E. MAINTENANCE

## 1 REGULAR

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### **Air filters:**

The air filters are washable. Under normal conditions, we recommend that they be washed 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:**

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.

IMPORTANT NOTE: Hot water and a strong detergent will damage the heat recovery core.

### **Intake hood:**

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

### **Motor:**

The motors are factory lubricated for life. Do not oil bushings.

## 2 PROLONGED

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Annual service should include:

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

### **NOTE:**

Ask your installer for an annual service contract.

## F. TROUBLESHOOTING

If you think your unit is malfunctioning, check some of the following.

	PROBLEM	TRY THIS...
1	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.</li></ul>
2	Condensation on windows. (air too humid)	<ul style="list-style-type: none"><li>• Adjust the humidity control knob as per instructions (see section D).</li><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>• Do not adjust the thermostat of your heating system below 18°C (64°F).</li></ul>
3	Air too dry	<ul style="list-style-type: none"><li>• Do not adjust your humidity control below 30%.</li><li>• Operate the unit at low speed</li><li>• Temporarily use a humidifier.</li></ul>
4	Air too cold at the air supply grille	<ul style="list-style-type: none"><li>• Make sure the stale air exhaust hood outside the house is not blocked.</li><li>• Operate the unit at low speed</li><li>• Have the system's balancing checked.</li><li>• Have the unit's defrosting system checked.</li><li>• Install a duct heater.</li></ul>

If the problem continues, contact your installer at the telephone number and address indicated below or call the following number for assistance:

**1-800-567-3855**

**ADDRESS OF YOUR INSTALLER**

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