Maintenance

Quarterly or as Needed

Filters.

Four times per year or as needed, vacuum the filters. Replace filters as needed.

Annually or as Needed

Inside the Unit.

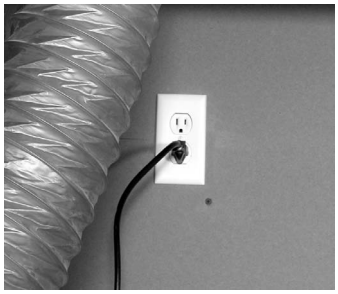
Once a year or as needed, clean the interior of the unit (walls and drain pan) with a mild and non abrasive soap. It is recommended to use products that are environmentally-friendly.

Energy Recovery Core Unit (VNT5070E1000, VNT5150E1000 and VNT5200E1000) and Heat Recovery Core Unit (VNT5070H1000, VNT5150H1000 and VNT5200H1000)

Once a year or as needed, vacuum the four surfaces, let soak in warm water and mild soap for 15 minutes, then spray rinse and let dry.

NOTE: See Cleaning Steps on next page for the above maintenance items.

Cleaning Steps



1. Disconnect the AC power from the unit or the wall.

2. Open the side door panel by opening the two latches on the top of the side panel and lowering the panel to its fully open position Remove both filters from the top left and right sides of the Core, then vacuum both filters.
   Slide out the Core, and clean according to the instructions on the previous page.

3. Clean inside of unit with a damp cloth and wipe dry when finished.

4. Replace the Core and the two filters, re-latch the side panel, then reconnect the AC power to the unit.

Troubleshooting

CAUTION: Servicing the ERV/HRV unit with its electrical circuitry can cause personal injury. Always make sure that power to the unit is disconnected prior to making any connections. Failure to disconnect the power could result in electrical shock. Service should only be performed by a qualified service technician.

Problem	Possible Cause or Symptom	Test Procedure	Solution
• No Power to Unit • HRV/ERV does not turn on. • Speed Control green LED light does not come on.	• Main power is not energized. • HRV/ERV power cord not fully inserted. • HRV/ERV or wall control in the OFF position. • Poor contact between connections on high, low voltage and door switch.	• Check power connection, fuses or circuit breakers. • Ensure power cord is firmly inserted. • Ensure HRV/ERV and or wall controls are in the ON position. • Remove all controls connection leading to unit. • Continuity test of the units power cord.	• Consult certified technician to insure proper installation of main power. • Remove and re-insert power cord firmly. • Remove door and locate the area were the switch compresses the door sealant. Insert behind door sealant a metal edge or small screw to insure proper contact between door safety switch and access door. • Un-plug HRV/ERV, remove access panel from motor mounts and press firmly on all connections. • Replace AC power cord.
• During motor selection on Speed Control while in balancing mode unit (shut off), goes to low speed) or into(INTER mode) once the (+ / -) buttons are pressed.	• Speed Control board not responding. • Balancing mode has been locked.	• Un-plug unit for 30 seconds to re-boot. • Reactivate balancing mode and select motor and press (+ / -) buttons.	• On the Speed Control press and hold both the (+ / -) buttons for 15 seconds or until you receive a solid green light. This will reset HRV/ERV back to factory default mode. Note: Unit must be re-balanced to ensure maximum performance.

Troubleshooting (continued)

Problem	Possible Cause or Symptom	Test Procedure	Solution
• HRV/ERV operating only on high speed, no communication between unit & wall controls. • HRV/ERV supply or exhaust fan runs only on high.	• Dehumidistat of the wall controls activated. • T-3 Timer 20/40/60 mins. activated. • Short circuit between G & R terminals of REMOTES on Speed Control™. • Faulty wire between control and H/ERV. • Faulty wall control.	• Disconnect all wall controls from unit • Ensure all other wall controls are not in override mode. • Inspect the wires to insure not damage. • Remove wall control and verify it at the H/ERV.	• Ensure all wall controls and Speed Control wire connections correspond to their matching letters • Ensure no nails, staples or screws are shorting out the wires. • Replace LVC PCB board, wall control and wires.
• Motor not functioning. • Motor failure.	• Failure to the HVC or LVC PCB board. • Wire connection or wire sequence not corresponding to wiring diagram. • Run capacitor failure	• Resistance test: Unplug H/ERV unit and with a multimeter – Test the motor resistance (BLUE & BLACK wires) of the motor. The range should be between 33-39 Ohms – Then proceed to measure the resistance (BLUE & BROWN wires) the range should be between 56-64 Omhs • If resistance falls within the above ranges the motor is good. • If capacitor is swollen or disfigured, it is definitely bad. • Check amperage in leads going to capacitor when in operation. If capacitor is open, no amperage will flow. • Remove from circuit and check for short circuits or grounds (use ohmmeter only).	• Replace the HVC or LVC Board • Correct faulty connection or wire sequence to correspond to the wiring diagram. • Replace the run capacitor and/or Motor
• Yellow blinking LED on speed controller.	• Defrost Thermister not properly connected to HVC Controller • Defrost Thermister is defective	• Ensure proper connection of thermister. • Remove access panel to expose HVC controller verify defrost thermister is connected to the “T2” terminal on HVC controller. • Unplug defrost thermister from HVC controller & check readings with Ohm meter.	• If defrost thermister is not connected, please plug-in on HVC controller on the terminals marked “TEMP SENSOR”. • Connect the Ohm meter to red terminal and if receive no readings 0, replace defrost thermister.

Troubleshooting (continued)

Problem	Possible Cause or Symptom	Test Procedure	Solution
• Exhaust Fan activated Supply Fan off.	• Wiring of fans incorrect on HVC Controller • Unit is in its automatic defrost sequence when defrost thermister measures temperature of -5°C/23°F	• Unplug unit, remove access panel from Exhaust Fan (right motor mount) . Ensure all connections on HVC & LVC board correspond to wiring diagram and that they are securely in place. • Wait 5 to 10 minutes to ensure unit has completed the defrost sequence.	• Ensure wiring corresponds to wiring diagram. • Test the defrost thermister with Ohm meter. • Insure unit completes the defrost sequence is temperature are below -5°C/23°F.
• T-3 Timers not functioning, the LED remains on with a dim green light. • T-3 Timers not functioning, display LED light doesn't appear.	• T-3 timer wires connections do not correspond to the Speed Control™. (G & B connections are inverted) • HRV/ERV does not operate or respond.	• Disconnect all wall controls from unit. • Override TIMER (R & G) connections of the Speed Control™.	• Ensure all wall controls wire connection correspond to the Speed Control™ connections. (Example: B B / G G / R R) (Ref: Wall Control Section of the Installation Guide.)
Air is too dry	Air is too dry		1. Increase humidity level on the dehumidistat. 2. Switch ventilation mode from continuous to intermittent. 3. Install a humidifier.
Air is too humid	Air is too humid		1. Reduce the humidity level on the controller. 2. Make sure that the clothes dryer is vented to the outdoors. 3. Wait for outside temperature to change. For example, it can be very humid at times in the summer. 4. Verify balancing of the ERV/HRV unit (see Balancing Steps on page 25).

Honeywell OS and Parts List

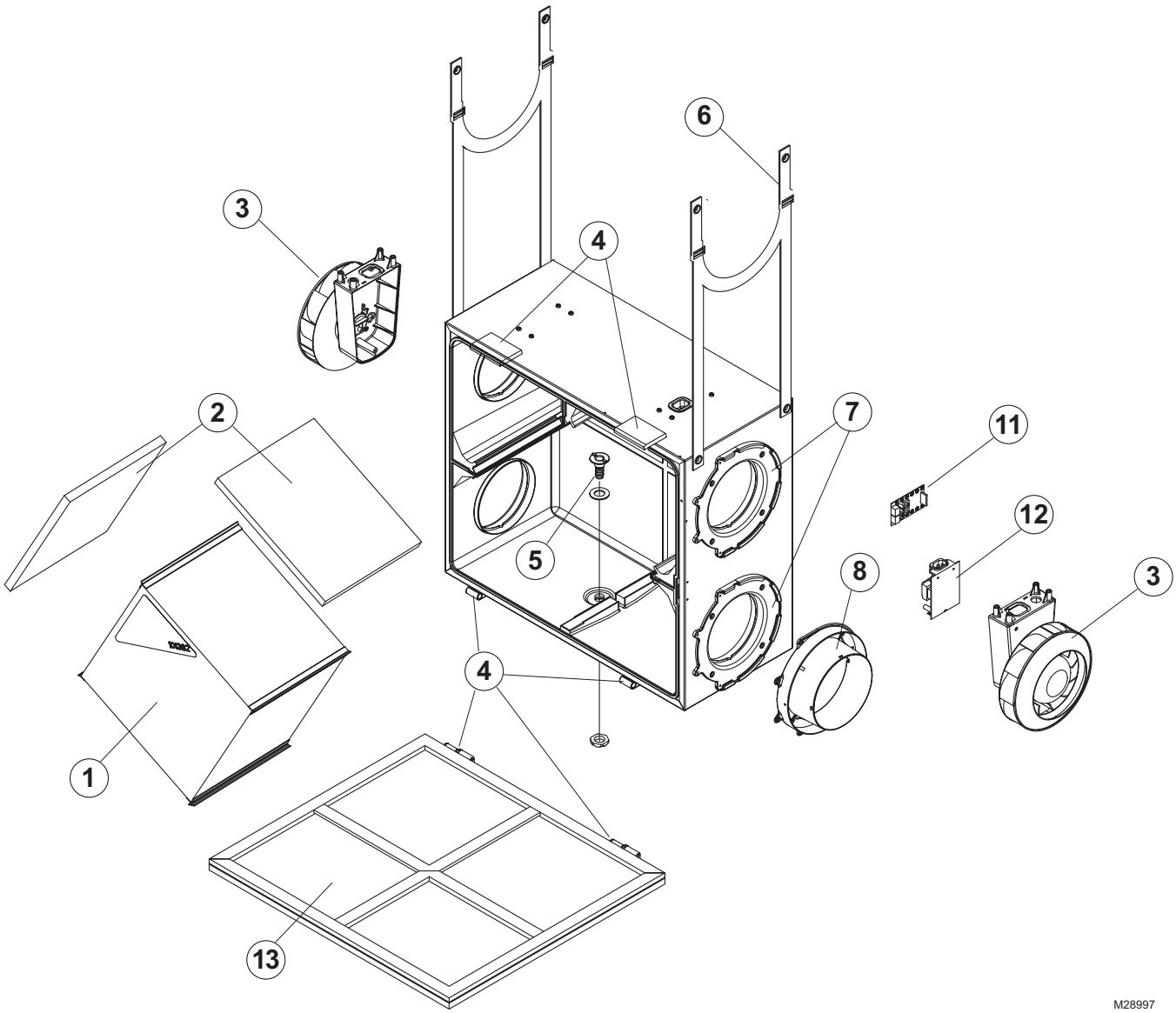
Honeywell OS List		
Honeywell OS Number	**Controls**	**Ventilator Type**
VNT5070H1000	No	HRV
VNT5070E1000	No	ERV
VNT5150H1000	No	HRV
VNT5150E1000	No	ERV
VNT5200H1000	No	HRV
VNT5200E1000	No	ERV

Parts List (see illustration on page 38 or 39 for figure number references)				
Figure Number	**Description**	**VNT5070**	**VNT5150**	**VNT5200**
1	Polypropylene HRV Core	50063805-001 9” Core	50053952-001 10” Core	50053952-002 15” Core
	Enthalpy ERV Core	50063805-002 9” Core	50053952-003 10” Core	50053952-004 15” Core
2	Replacement Filter Kit	50063805-003	50053952-005	50053952-006
3	Replacement Motor	50063805-004	5053952-010	
4	Latch & Hinge Kit	50053952-014		
5	Condensation Drain Fitting Kit	50053952-011		
6	Adjustable Hanging Strap Set (optional on VNT5070)	50053952-009		
7	6" diameter Plastic Keeper	N/A	50053952-008	
8	6" diameter Plastic Double Collar	N/A	50053952-007	
9	5” diameter Plastic Keeper	50063805-006	N/A	
10	5” diameter Plastic Collar	50063805-005	N/A	
11	Replacement LVC Electronic Board (Speed Control)	50063805-010	50053952-012	
12	Replacement HVC Electronic Board	50053952-013		
13	Front Access Door	50063805-007	50053952-015	
14	Mounting Bracket	50063805-008	N/A	
15	Matrix Ventilation Hood	50063805-009	N/A	

Parts List (not illustrated)	
Honeywell Part Number	**Description**
50053952-016	Drain Cap (VNT5150E1000V and VNT5200E1000 only)
50053952-020	20/40/60 Minute Timer

Parts Illustration (VNT5150 and VNT5200)

See the Parts List table on page 37 for items referenced by figure numbers 1 through 11 in the exploded illustration below.



Parts Illustration (VNT5070)

See the Parts List table on page 37 for items referenced by figure numbers 1 through 11 in the exploded illustration below (VNT5150 and VNT5200).