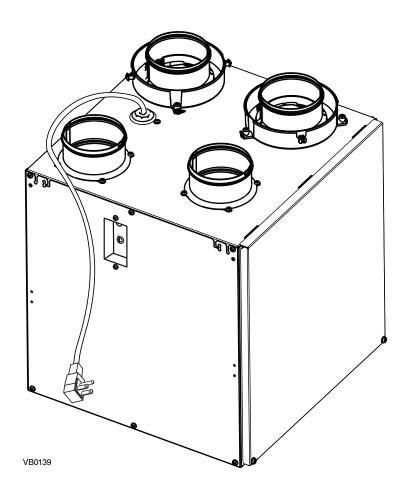
# **USER AND INSTALLER MANUAL**

K7 HRV (PART NO. 44150) 40H (PART NO. 44250)



# INSTALLER: READ THESE INSTRUCTIONS SAVE THEM FOR USER RESIDENTIAL USE ONLY



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.

#### LIMITATION

For residential (domestic) installation only. Installation work and electrical wiring must be done by a qualified person in accordance with all applicable codes and standards, including fire-rated construction codes and standards.

#### **⚠ WARNING**

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

- 1. Use this unit only in the manner intended by the manufacturer.
- 2. Before servicing or cleaning this unit, disconnect power cord from electrical outlet.
- 3. This unit is not designed to provide combustion and/or dilution air for fuel-burning appliances.
- 4. When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 5. Do not use this unit with any solid-state speed control device other than those specified in section 6.1.
- 6. 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.
- 7. Do not install in a cooking area or connect directly to any appliances.
- 8. Do not use to exhaust hazardous or explosive materials and vapors.
- 9. When performing installation, servicing or cleaning this unit, it is recommended to wear safety glasses and gloves.
- 10. When applicable local regulation comprises more restrictive installation and/or certification requirements, the aforementioned requirements prevail on those of this document and the installer agrees to conform to these at his own expenses.

#### **CAUTION**

- 1. To avoid prematurely clogged filters, turn the unit OFF during construction or renovation.
- 2. Please read specification label on product for further information and requirements.
- 3. Be sure to duct air outside Do not intake/exhaust air into spaces within walls or ceiling or into attics, crawl spaces, or garage. Do not attempt to recover the exhaust air from a dryer or a range hood.
- 4. Intended for residential installation only in accordance with the requirements of NFPA 90B (for a unit installed in U.S.A.) or Part 9 of the National Building Code of Canada (for a unit installed in Canada).
- 5. Do not run any air ducts directly above or within 2 ft (0.61 m) of a furnace or its supply plenum, boiler, or other heat producing appliance. If a duct has to be connected to the furnace return plenum, it must be connected 10' (3.1 m) away from plenum's connection to the furnace.
- 6. The ductwork is intended to be installed in compliance with all applicable local and national codes.
- 7. When leaving the house for a long period of time (more than two weeks), a responsible person should regularly check if the unit operates adequately.
- 8. If the ductwork passes through an unconditioned space (e.g.: attic), the unit must operate continuously except when performing maintenance and/or repair. Also, the ambient temperature of the house should never drop below 18°C (65°F).
- 9. At least once a year, the unit mechanical and electronic parts should be inspected by qualified service personnel.
- 10. Do not use your unit during construction or renovation of your house or when sanding drywall. Certain types of dust and vapors may damage your system.
- 11. Make sure at all times that the outside intake and exhaust hoods are free from any snow during the winter season. It is important to check your unit during a big snow storm, so it doesn't draw in any snow. If this is the case, please turn the unit OFF for a few hours.
- 12. Since the electronic control system of the unit uses a microprocessor, it may not operate correctly because of external noise or very short power failure. If this happens, unplug the unit and wait approximately 10 seconds. Then, plug the unit in again.

# **TABLE OF CONTENTS**

FOR THE USER				4
1. USING THIS UNIT				4
1.1 Your ventilation system				4
1.2 Integrated Control				4
2. MAINTENANCE				5
2.1 Quarterly Maintenance				5
2.2 Annual Maintenance				5
3. USER'S TROUBLESH	OOTING			5
4. WARRANTY				6
OR THE INSTALLER				7
5. INSTALLATION				7
5.1 Locating the Unit				7
5.2 Installing the ductwork ar	nd registers			7
	em - Supply Side			
	m - Return Side			
· ·	ods			
_	ood Using Tandem®* Transition			
	the Unit			
· ·				
•	optional control			
8. WIRING DIAGRAM				13
9. TROUBLESHOOTING				14
£				
PRODUCT REGIS	STRATION CARD - FICHE	D'ENREGISTRE	MENIT DII P	RUDIT
T KODOCT KEGIS	THATION CAND - HEHE	D ENTREOIST REI	VILITI DO I	KODOII
mandatory. Your answers will be used for meet nous le retourner dans les 10 jours suivan	this questionnaire within 10 days of your purchas arket research studies and reports, and will help u it votre achat à l'adresse inscrite en bas de la page ché et nous aideront à mieux vous servir dans l'av	us to better serve you in the futu e. Veuillez noter que seules les c	ure. <b>IMPORTANT:</b> Veu	illez remplir ce questionnaire
First name - Prénom	La	st name – Nom de famille		
Address – Adresse	Apt. no. – App. City – Ville		Province	Postal code – Code postal
Country – Pays	E-mail address – Courriel		Language preferred	- Langue de correspondance
Telephoneno. (day) – N° de téléphone (jour)	Telephone no.(evening) – N° de téléphone (s	soir)	Date of purchase – D	ate d'achat
Model no.−Nº de modèle	Serial no. – Nº de série	l	/	/
WOOCHTOIN DE HIDUETE	SCHAITIO IN UE SEHE			

### 1. USING THIS UNIT

#### **CAUTION**

Before using this unit for the first time, please take the time to carefully read page 2 of this guide to ensure it is used safely and properly.

#### 1.1 YOUR VENTILATION SYSTEM

Your HRV is designed to provide fresh air to your home while exhausting stale, humid air. By eliminating accumulated pollutants and humidity, it maintains an optimum air quality and an ideal relative humidity. It is equipped with a heat recovery core that is designed specifically to control excess humidity and reduce ventilation costs by recovering the heat energy from the exhausted air, and using that same heat energy to warm the fresh air being supplied. This heat recovery process is accomplished in such a way that the stale air is never mixed with the fresh air.

When the outdoor temperature is below -5°C (23°F), heat recovery creates frost in the module. To maintain proper operation, the unit is programmed to defrost the recovery module. The defrost duration and frequency vary according to the outdoor temperature. After defrosting, the unit returns to the operating mode selected by the user.

#### 1.2 INTEGRATED CONTROL

#### **Unit Booting Sequence**

The unit's booting sequence is similar to a personnal computer's booting sequence. Each time the unit is plugged in after being unplugged, or after a power failure, it will perform a 30-second booting sequence before starting to operate. **No command will be taken until the unit is fully booted.** 

#### **⚠ WARNING**

Risk of electrical shocks. The unit CANNOT be turned off using its push-button control. Before performing any maintenance or servicing, always disconnect the unit from its power source.

This unit is equipped with an integrated control, located on its upper left side.

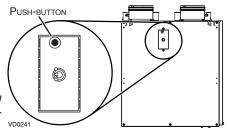
- · At plug in, the unit is in Standby.
- Use the push-button to alternate between Standby and Low Speed.
- Use an optional auxiliary control to set the unit in High Speed.

Are you connected? Please do not hesitate to complete the product registration

card via our Web site at www.bnv.ca

For more convenience, this unit can also be controlled using an optional wall control.

For more information about their operation modes, refer to the *Main and auxiliary wall control User Guide*, included with the ventilation unit and also available at www.vanee.ca or www.venmar.ca.



Enregistrez-vous en ligne! N'hésitez pas à remplir la fiche d'enregistrement

du produit sur notre site Internet au www.bnv.ca

	<del>Ļ</del>						
product updates and	eive occasional informations from			Aimeriez-vous recevo de nos produits? Quels problèmes essa	ir plus de détails sur nos p Oui/Non	romotions, offres de rab	•
What problem were you trying to solve with your purchase? (Check each one that applies to you.)		carefully. Indicate the importance of your purchase decision on a scale of 1 (less		par cet achat? (Cochez toutes les cases pertinentes)		ci-dessous. Sur une échelle de 1 (étant le moin important) à 5 (étant le plus important), veuil-	
□ Bad odors □ Respiratory problems □ Excess of humidity □ Temperature standardization □ Lack of fresh air	☐ Dust ☐ Mildew ☐ Allergies ☐ No specific problems ☐ Others	important) to 5 (most  Price Warranty Product design Ventilation capacity Filter maintenance	Important).  Heat recovery Controls Ease of cleaning Manufacturer's reputation Ease of use		☐ Poussières ☐ Moisissures ☐ Allergies ☐ Pas de problèmes spécifiques ☐ Autres (Précisez SVP)	lez indiquer l'importane ux dans votre décisior  — Prix — Garantie — Design du produit — Débit de ventilation — Indicateur	n d'achat.  Récupération d'énergie Fonctions Facilité de nettoyage Réputation
Who installed your unit? indicator Noise level			Qui a installé l'appareil?		d'entretien du filtre du fabricant  Oualité de filtration — Simplicité		
☐ Home builder ☐ Recommended installer	☐ Friend / family ☐ Contractor ☐ Yourself	— Filtration quality — Recirculation	Other	☐ Constructeur de la maison ☐ Installateur recommandé	☐ Ami/membre de la famille ☐ Entrepreneur ☐ Vous-même	Qualité de filtration     Recirculation     Récupération     de chaleur	d'utilisation Niveau de bruit Autres (Précisez SVP)

### 2. MAINTENANCE

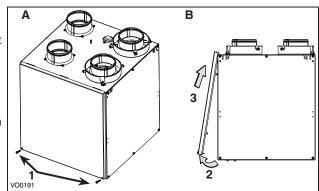
#### 2.1 QUARTERLY MAINTENANCE

#### **⚠ WARNING**

Risk of electric shock. Before performing any maintenance or servicing, always disconnect the unit from its power source.

When cleaning the unit, it is recommended to wear safety glasses and gloves.

- 1. Unplug the unit.
- 2. Remove the unit door by following these steps:
  - A. Remove both door lower mechanical screws no. 8-32 x 1" (1) and set aside
  - B. Open (2) and lift out the door (3)
- 3. Slide out both filters (4) from the unit.
- 4. Slide out the core (5) from the unit.
- 5. Clean the inside walls of the unit with a clean damp cloth, then wipe with a clean dry one.
- Wash both core filters under lukewarm 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 and a soft brush attachment.
- 8. Slide the cleaned core and filters into the unit.



# **CAUTION**

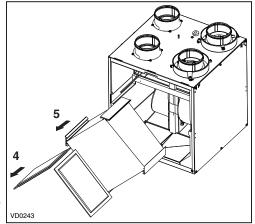
# Follow the instructions on the core label to reinstall it correctly.

 Reinstall the door. Secure it with both mechanical screws no. 8-32 x 1" previously removed and plug the unit. The unit will return to its previous setting after a 30-second boot sequence.

#### 2.2 ANNUAL MAINTENANCE

Perform Quarterly Maintenance up to step 6, then perform the following:

- 1. Allow the core to soak for 3 hours in a solution of lukewarm water and mild liquid soap.
- 2. Rinse it thoroughly and shake it to remove excess water. Allow to dry and reinstall.
- 3. Clean the exterior hoods.



#### 3. USER'S TROUBLESHOOTING

PROBLEMS	TRY THIS
Nothing works.	<ul> <li>Make sure that the unit is plugged in.</li> <li>Make sure that the unit is receiving power from the house circuit breaker.</li> <li>Press once on the unit's integrated push button to make sure unit is not in Stanby mode (see section 1.2)</li> </ul>
Condensation on windows. (Air too humid.)	<ul> <li>If possible, turn the unit in high speed until the situation is corrected.</li> <li>Leave curtains half-open to allow air circulation.</li> <li>Store all firewood in a closed room with a dehumidifier or in a well ventilated room, or store the wood outdoors.</li> <li>Do not adjust the thermostat of your heating system below 18°C (64°F).</li> </ul>
Inside air too dry.	Temporarily use a humidifier.
Air too cold at the air supply grille.	<ul> <li>Do not adjust the thermostat of your heating system below 18°C (64°F).</li> <li>Make sure that the exterior hood is not blocked.</li> <li>Turn the unit in low speed.</li> <li>Install a duct heater (contact your installer)</li> </ul>

Contact customer service at 1-800-567-3855 for any unresolved issue.

#### 4. WARRANTY

This ventilation unit is a high quality product, built and packaged with care. The manufacturer warrants to the original purchaser of its product, that such products will be free from defects for the period stated below, from date of original purchase. For all units, the warranty covers parts only against any operational defect. This 5-year warranty is subject to performance of the core maintenance according to the recommendations in this manual. The heat recovery core (HRV) has a limited lifetime warranty. If any defect should occur, we urge you to read the user guide carefully. If the problem persists, observe the following rules:

#### **RULES TO FOLLOW**

If the unit is defective, contact your ventilation contractor (see address on your manual's cover page). The contractor will determine with you the reason for the defect, and if needed, do the replacement or repair. If ever it is impossible to reach your ventilation contractor, call 1-800-567-3855 (North America); the personnel will be pleased to give you the phone number of a distributor or service center near you.

#### REPLACEMENT PARTS AND REPAIR

In order to ensure your ventilation unit remains in good working condition, you must use the manufacturer's genuine replacement parts only. The manufacturer's 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. The manufacturer also recommends that you contact a service depot certified by the manufacturer for all replacement parts and repair.

#### **BILL OF PURCHASE**

No replacement or repair covered by the warranty will be carried out unless the unit is accompanied by a copy of the original bill of purchase. Please retain your original.

#### MISCELLANEOUS COSTS

In each case, the labor costs for the removal of a defective part and/or installation of a compliant part will not be covered by the manufacturer.

#### **CONDITIONS AND LIMITATIONS**

These units are created for residential use only and must be used in a building as defined below:

**Building**: All structures zoned and/or erected for the act, process or art of human or animal habitation and/or the storage or

warehousing of goods.

Residential use: Dwelling, lodging, suite: Building, or part of a building, intended to act as either the domicile to one or several people

which can include general sanitary, food consumption and rest facilities. Buildings of only one room or a group of rooms including those occupied by a tenant or owner; comprise the lodgings, the individual rooms of the motels, hotels, rooming/lodging houses, boarding/half-way/foster homes, dormitories, and suites, as well as the stores and the

business establishments constituted by only one room in a dwelling.

Commercial use: Agricultural establishment, commercial establishment for assembly, care, or detention: Building or part of a building that

does not contain a dwelling, situated on land dedicated to agriculture or farming and used primarily to shelter animals, or for the production, the storage or the treatment of agricultural or horticultural products or animal food. Building or part of a building, used for the display or retail of goods, professional or personal services, or commodities. Building, or part of a building used by persons gathering for civic activities, religious or political assembly, tourism, educational/vocational training, recreation or the consumption of food or drink. Building, or part of a building used to shelter persons of impaired physical or psychological states, persons requiring palliative care or medical treatments, or persons for

reasons out of their control, cannot escape harm or threat of danger autonomously.

Industrial use: Building, or part of a building, used for the assembly, the manufacture, the creation, the treatment, the repair or the

storage of products and combustible materials and that contain fuels that when ignited or exploded in sufficient quantity

may constitute a risk of fire.

The above warranty applies to all cases where the damage is not a result of poor installation, improper use, mistreatment or negligence, acts of God, or any other circumstances beyond the control of the manufacturer. Furthermore, the manufacturer will not be held responsible for any bodily injury or damage to personal property or real estate, whether caused directly or indirectly by the unit. This warranty supersedes all prior warranties.

# 5. INSTALLATION

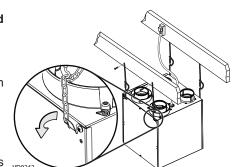
#### CAUTION

Before installing this unit, please take the time to carefully read page 2 of this guide to ensure it is installed safely and properly.

#### 5.1 LOCATING 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 50°C (122°F) (basement, furnace room, closet, etc.)
- Away from living areas (dining room, living room, bedroom), if possible
- So as to provide easy access to the interior of the unit, for maintenance
- Close to an exterior wall, so as to limit the length of the insulated flexible duct to and from the unit
- Away from hot chimneys and other fire hazards
- · Allow for a standard 3-prong grounding outlet within 3 feet of the unit
- Close to a drain. If no drain is close by, use a pail to collect run-off
- Slightly bend all 4 hooks located on both sides of the unit in order to hang it to ceiling joists with the 4 chains and springs provided. See illustration aside.



#### **CAUTION**

Make sure the unit is level.

# 5.2 Installing the ductwork and registers

#### **⚠ 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.
- When performing duct connections, always use approved tools and materials. Respect all corresponding laws and safety regulations. Please refer to your local building code.
- · Keep it simple. Plan for a minimum of bends and joints
- Keep the length of insulated ducts to a minimum
- · If the house has two floors or more, be sure to plan for at least one exhaust register at the highest lived-in level

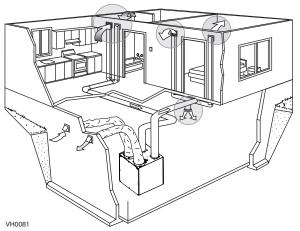
#### 5.2.1 FULLY DUCTED SYSTEM

#### Stale air exhaust ductwork

- Install the stale air exhaust registers where the contaminants are produced: kitchen, living room, etc. Position the registers <u>as far from the stairway as possible</u> and in such a way that the air circulates in all the lived-in spaces in the house
- If a register is installed in the kitchen, it must be located at least 4 feet (1.2 m) away from the range
- Install the registers on an interior wall, 6 to 12 inches (152 to 305 mm) away from the ceiling OR in the ceiling

#### Fresh air distribution ductwork

- Install the fresh air distribution registers in bedrooms, dining rooms, living room and basement
- Keep in mind that the fresh air registers must be located as far as possible from the stale air registers
- Install the registers either in the ceiling or high on the walls, with the air flow directed towards the ceiling
- If a register must be installed in the floor, direct the airflow up the wall



5.2 Installing the ductwork and registers (cont'd)

5.2.2 CENTRAL DRAW POINT SYSTEM - SUPPLY SIDE

# **CAUTION**

When performing duct connections to the furnace supply duct, use metal ducts appropriately sized to support the additional airflow produced by the unit.

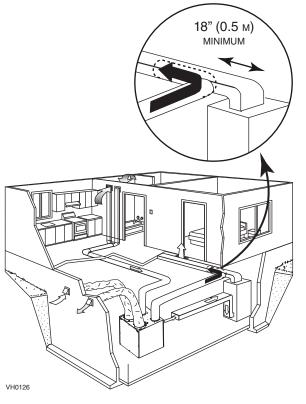
#### Stale air exhaust ductwork

Same as for fully ducted system (see section 5.2.1)

#### Fresh air distribution ductwork

- Cut an opening into the furnace supply duct at least 18 inches (0.5 m) away from the furnace/air handler
- Connect this opening to the Fresh air distribution port of the unit (use a metal duct, see figure aside)
- Make sure the unit <u>duct forms an elbow inside the furnace/air handler ductwork.</u>

NOTE: For this type of installation, it is recommended, however not essential, that the furnace blower be synchronized with the unit.



5.2.3 CENTRAL DRAW POINT SYSTEM - RETURN SIDE

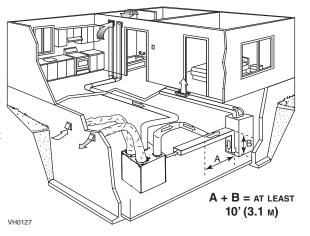
# Stale air exhaust ductwork

Same as for fully ducted system (see section 5.2.1)

#### Fresh air distribution ductwork

- Cut an opening into the furnace return duct not less than 10 feet (3.1 m) from the furnace/air handler (A+B)
- Connect this opening to the Fresh air distribution port of the unit (see figure beside)

NOTE : For this type of installation, it is recommended, however not essential, that the furnace blower be synchronized with the unit.



#### For the Installer

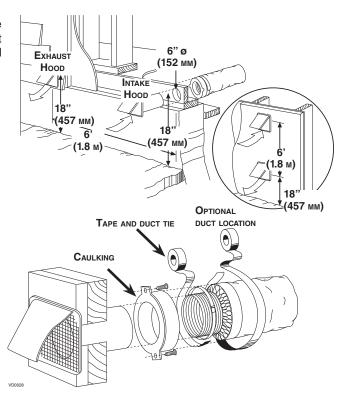
#### 5.3 INSTALLING THE EXTERIOR HOODS

Refer to illustration aside to connect the insulated duct to the hoods. Place a "FRESH AIR INTAKE" sticker on corresponding hood. An "Anti-Gust Intake Hood" should be installed in regions where a lot of snow is expected to fall.

# **⚠ WARNING**

Make sure that both hoods are at least 18 inches above the ground and that the intake hood is at least 6 feet (1.8 m) away from any of the following:

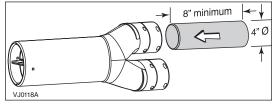
- Exhaust hood
- Dryer exhaust, high efficiency furnace vent, central vacuum vent
- Gas meter exhaust, gas barbecue-grill
- Any exhaust from a combustion source
- Garbage bin and any other source of contamination



# 5.4 Installing Dual Exterior Hood Using Tandem®\* Transition Kit (optional)

If desired, a dual exterior hood can be used instead of 2 exterior hoods to connect inulated ducts. The joist opening needed to install the Tandem® transition is 9¾" minimum. The maximum height of the Tandem® transition is 8¾".

To connect 4" insulated flexible ducts to the 5" oval ends of the Tandem® transition (Exhaust air to outside and Fresh air from outside), connect an adapter to the Tandem® transition (not included) as follows.



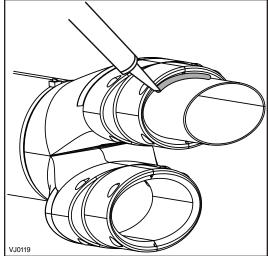
# For each duct connection:

- 1. Slightly squeeze a section of 4" round metal duct, at least 8" long, to insert it into the oval opening of the Tandem® transition and push it all the way in.
- Using silicon, seal the joint between the outside of the metal duct and Tandem<sup>®</sup> transition, and allow silicon to dry completely.
- 3. From this point on, follow the instructions included with the Tandem $^{\circ}$  transition kit (part no.14690).

# **CAUTION**

When connecting insulated flexible duct to the Tandem® transition, pull the interior flexible duct over the adapter all the way to the silicon joint and secure using a tie wrap. Then pull the insulation over the joint, making sure that no part is left without insulation.

\*Patented.



#### For the Installer

#### 5.5 Connecting the Ducts to the Unit

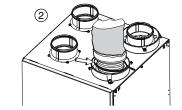
**NOTE:** This unit was designed to be connected to ducts of at least 4" in diameter, but can be connected to bigger sized ducts by using an appropriate transition (e.g.: 4" diameter to 5" diameter transition).

# **CAUTION**

Make sure the vapor barrier on the insulated ducts does not tear during installation to avoid condensation within the ducts.

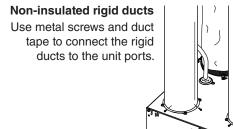
- 1. Pull back the insulation to expose the flexible duct.
- 2. Attach the flexible duct to the port using a tie wrap.
- 3. Pull the insulation over the joint and tuck it in between the inner and outer rings of the double collar.
- 4. Pull down the vapor barrier (shaded part in illustrations below) over the outer ring to cover it completely. Apply duct tape to the joint to make an airtight seal. Avoid compressing the insulation when pulling the tape tightly around the joint.



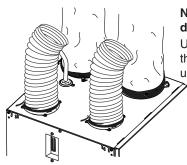












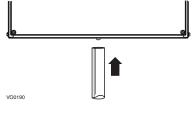
Non-insulated flexible ducts

Use tie wraps to connect the flexible ducts to the unit ports.

## 5.6 Connecting the Drain

1. Connect the plastic tube to the drain fitting located under the unit.

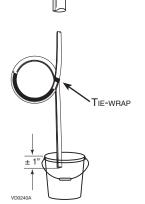
VJ0073



2. Make a water trap loop in the tube to prevent the unit from drawing unpleasant odors from the drain source. Run the tube to the floor drain or to an alternative drain pipe or pail.

#### **CAUTION**

If using a pail to collect water, locate the tube end approximately 1" into the pail in order to prevent water from being drawn back up into the unit.



# 6. CONTROLS

# 6.1 OPTIONAL CONTROLS

This unit may be controlled using one of the following optional auxiliary wall controls:

- Dehumidistat
- 20-minute lighted push-button timer
- 60-minute crank timer

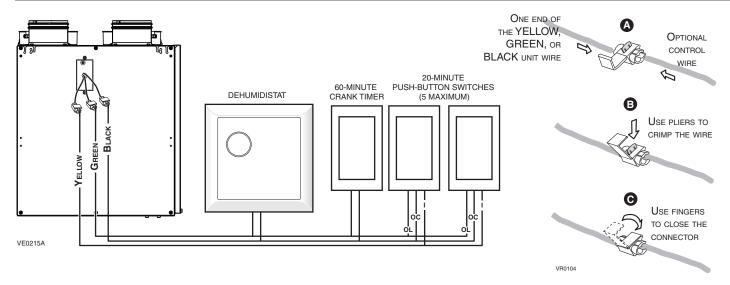
#### 6.2 ELECTRICAL CONNECTION TO OPTIONAL CONTROL

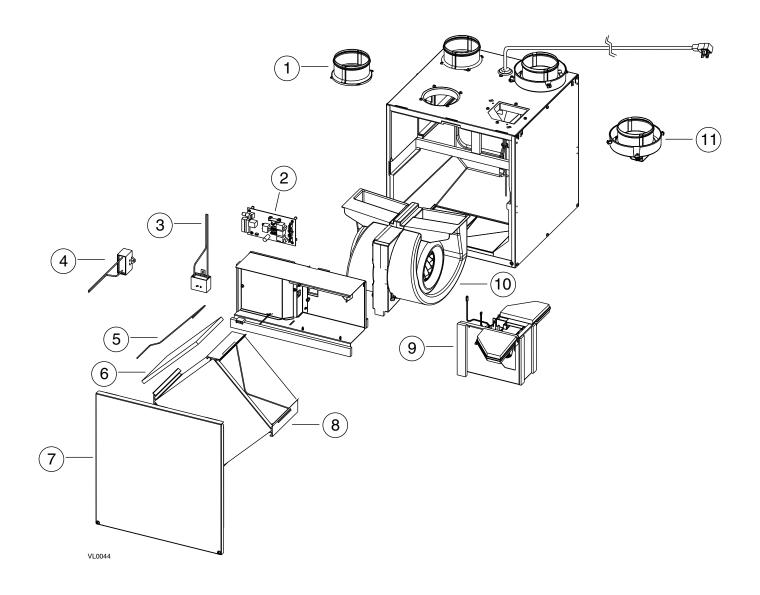
#### **⚠ WARNING**

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**

Make sure that there are no short-circuit between the wires or with any other components on the wall control. Avoid poor wiring connections. To reduce electrical interference (noise) potential, do not run wall control wiring next to control contactors or near light dimming circuits, electrical motors, dwelling/building power or lighting wiring, or power distribution panel.





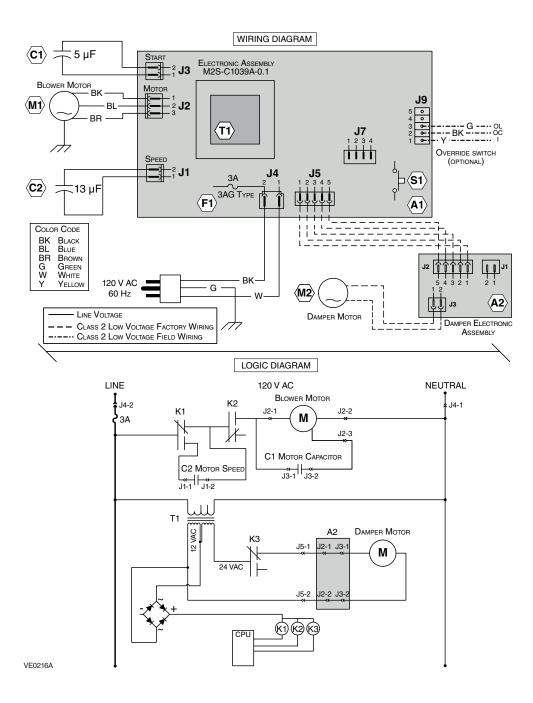
No.	DESCRIPTION	QTY.	K7 HRV	40H
1	4" Round Metal Port	2	18854	
2	Electronic Board	1	19205	
3	Capacitor 5 μF	1	160	)42
4	Capacitor 13 µF	1	19210	
5	Filter Retaining Wires (pair)	1	19208	
6	Core Filters (pair)	1	18883	
7	Door Assembly	1	19201	19203
8	Heat Recovery Core	1	18884	
9	Damper System Assembly	1	18882	
10	Blower Assembly	1	18867	
11	4" Round Port with Plastic Collar	2	18866	
12	Hardware Kit (not illustrated)	1	19214	

#### REPLACEMENT PARTS AND REPAIR

In order to ensure your ventilation unit remains in good working condition, you must use the manufacturer genuine replacement parts only. The manufacturer 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. The manufacturer recommends to contact a certified service depot for all replacement parts and repair.

# **⚠ WARNING**

- Risk of electrical shocks. Before performing any maintenance or servicing, always disconnect the unit from its power source.
- This product is equipped with an overload protection (fuse). A blown fuse indicates an overload or a shortcircuit situation. If the fuse blows, unplug the product from the outlet. Discontinue using the unit and contact technical support.



Replace the damper

assembly.

# 9. TROUBLESHOOTING

#### **⚠ WARNING** Risk of electric shocks. Electronic board connections must be checked by qualified personnel only. Unplug auxiliary controls Uplug unit Wait 1 minute. During this time, open the door. Yes Plug unit back. Beware of live and moving parts. Unit performs a 30-second booting sequence. Can you hear the relays and see the dampers move? Does the damper motor run beyond Is the power outlet No No yes the 30-second energized? booting sequence? Refer to an Replace the damper Yes No electrician. assembly. Connect the GREEN and BLACK optional control wires. Is the fuse on the Reboot unit. Once the booting sequence is completed, electronic board Yes unit should start in high speed. blown? Does the unit now work at high speed? Use a voltmeter. Discontinue using Is there 120 VAC the unit and contact No between J4-1 and technical support. J4-2? Yes No Use a voltmeter. Is there 24 VAC Yes No between J5-1 and Using a multimeter, verify that there is an ohm J5-2? value on the motor connector are as follows: Replace the motor. Between BLUE and BLACK wires Between BLUE and BROWN wires Power cord is Between BROWN and BLACK wires defective. Call No Is there an ohm value on all three connections? technical support. Replace the Yes No Yes electronic board.

Service technicians only: If you require assistance or have questions after performing the above troubleshooting, call: 1-800-649-0372.

Replace the motor

and the start

capacitor.

Replace the board.