

# heatilator®

## Home Products

This appliance has been retired.  
Service parts pages within have been removed.  
For replacement parts, please refer to the individual  
service parts list located on the brand websites.

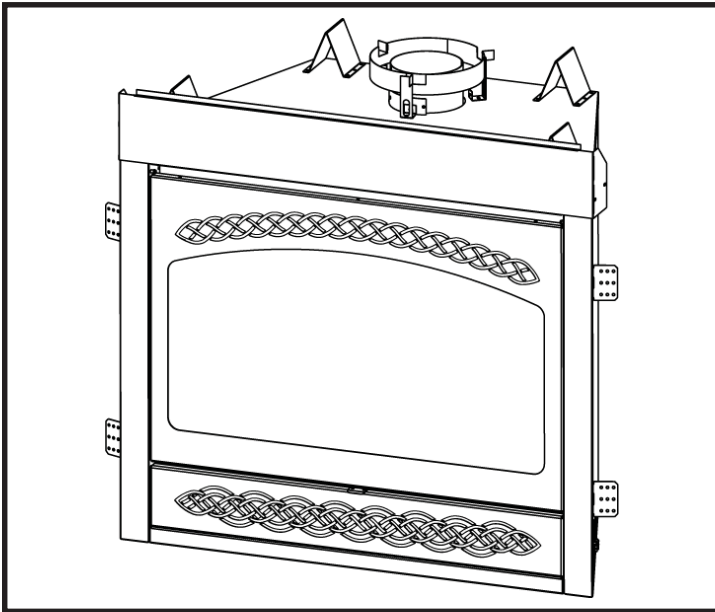
...ries, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52645, phone 1-877-427-8368

**GAS-FIRED**



# INSTALLATION & OPERATING INSTRUCTIONS CALIBER NXT PLUS

**Note:** This appliance **CANNOT** be installed at an elevation above 6,200 ft. (1,890 meters).



**Note:** An arrow (➔) found in the text and in the index signifies change in content.

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- What to do if you smell gas
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### CAUTION:

Do not expose this appliance to the elements (such as rain, etc.).

### WARNING!

The Caliber NXT Plus is designed to be used with the HRV200PLUS only! The Caliber NXT Plus will not vent correctly unless it is connected to the HRV200PLUS. Refer to the HRV200PLUS installation manual for additional installation and venting instructions.

### WARNING!

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

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**WARNING!**

**Do NOT use this appliance if any part has been under water! You must call a qualified service technician immediately to inspect the appliance and to replace any part of the control system or gas control that has been under water.**

### Safety Precautions

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause the Caliber NXT Plus Fresh Air Fireplace (FAF) to malfunction resulting in serious injury and/or property damage.
2. The FAF is designed for use with the HRV200Plus ventilation system. Do not attempt to install without an HRV200Plus ventilator!
3. Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
4. Installation and repair should be done by a qualified service person. The FAF should also be inspected annually by a qualified service person. More frequent inspections/cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
5. This is a power vented gas appliance. Do not burn wood or other material in this FAF.
6. **NEVER** leave children unattended when there is a fire burning in the FAF.
7. **NEVER** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in the FAF. Keep any flammable liquids a safe distance from the FAF.
8. While servicing the FAF, always shut off all electricity and gas to the FAF. This will prevent possible electrical shock or burns. Also, make sure the FAF is completely cooled before servicing.
9. Do not use the FAF if any part has been under water. Immediately call a qualified service technician to inspect the FAF and to replace any part of the control system and any gas control which has been under water.
10. Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

**WARNING!**

**When the HRV200PLUS is in defrost mode, the electric ember bed will light for fifteen seconds then the ember fire flame will ignite to defrost the HRV core.**

## A. GAS APPLIANCE SPECIFICATIONS

### 1. U.S. and Canada Certification

The Caliber NXT Plus has been tested in accordance with the **ANSI standards Z21.50-2000 and Z21.47-1998** in the United States, the current **CSA 2.22-2000** and **CGA 2.3-M98 in Canada**, and has been listed by Underwriters Laboratories Inc. for installation as described in this manual. All components are UL, AGA, CGA or CSA safety certified.

### 2. Local Codes

This installation must conform with local codes. In the absence of local codes, comply with the **National Fuel Gas Code ANSI Z223.1-latest edition** in the U.S., and the **CAN/CGA B149, Installation Codes** in Canada.

If you need assistance during installation, contact your local dealer or the Heatilator Technical Services Dept., Hearth & Home Technologies Inc. (HHT), 1915 W. Saunders St., Mt. Pleasant, IA 52641, 1-877-427-8368. HEATILATOR® is a registered trademark of Hearth & Home Technologies, Inc.

### 3. Efficiency

The efficiency rating of the appliance is a system thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

#### Tools and building supplies normally required for installation:

Saw	Framing Material
Pliers	Surround
Hammer	Caulking Material
Phillips Screwdriver	Gloves
Tape Measure	Framing Square
Plumb Line	Electric Drill and Bits
Level	Wall-finishing materials
Safety Glasses	

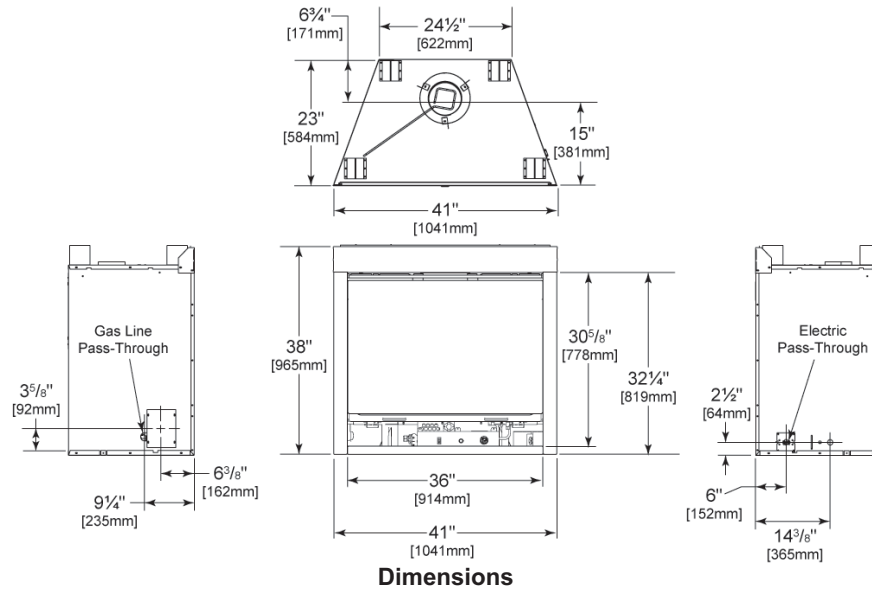
**Note:** Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installations may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

## CALIBER NOMENCLATURE

Catalog #	Description
CNXT70IPLUS	Natural gas appliance, 41" width, 36" opening, intermittent pilot
<b>The following suffixes are defined as follows:</b>	
No suffix	Natural Gas
L	Propane Gas
T	Traditional Refractory
H	Herringbone Refractory
Example	CNXT70ILTPLUS is a propane gas appliance with traditional refractory

## B. LOCATION AND CLEARANCES



**WARNING!**

Due to high temperatures, the gas appliance should be located out of traffic and away from furniture and draperies.

**Note:** This appliance **CANNOT** be installed at an elevation above 6,200 ft. (1,890 meters).

### 1. Appliance Locations and Space Requirements

Figure 1 illustrates a variety of ways the Caliber NXT Plus may be located in a room. The appliance may be installed directly on the floor or raised on a hearth. The appliance is certified for installation in a bedroom or bed/sitting room in the U.S. and Canada. Since this gas appliance is power-vented it does not have to be installed on an exterior wall.

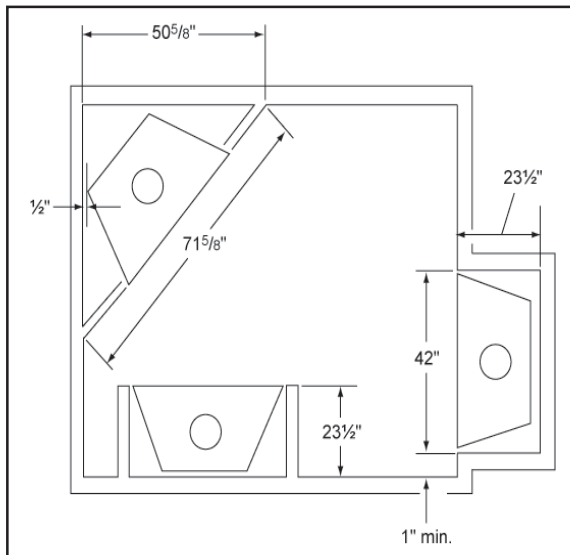


Figure 1 - Appliance Locations

### 2. Clearances

Figure 2 shows all clearances that must be maintained around the gas appliance. See HRV200PLUS installation instructions for venting clearance requirements.

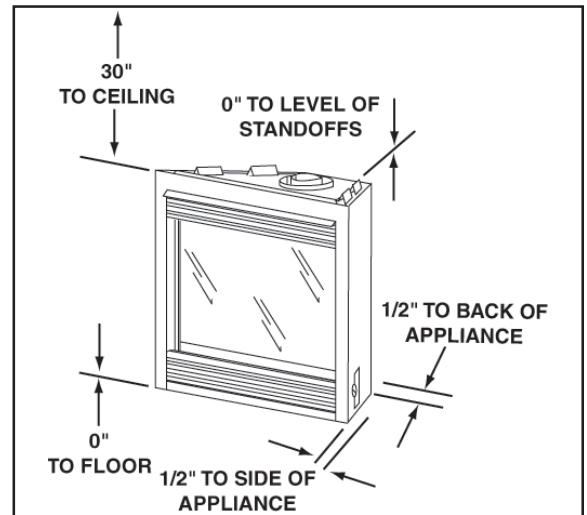


Figure 2  
Appliance Clearances to Combustible Materials

**CAUTION:**

Do not expose this gas appliance to the elements (such as rain, etc.).

## C. FRAMING

Figure 3 shows typical framing of the Caliber NXT Plus using combustible materials. Figure 4 shows the minimum mantel heights. All required clearances to combustibles must be adhered to.

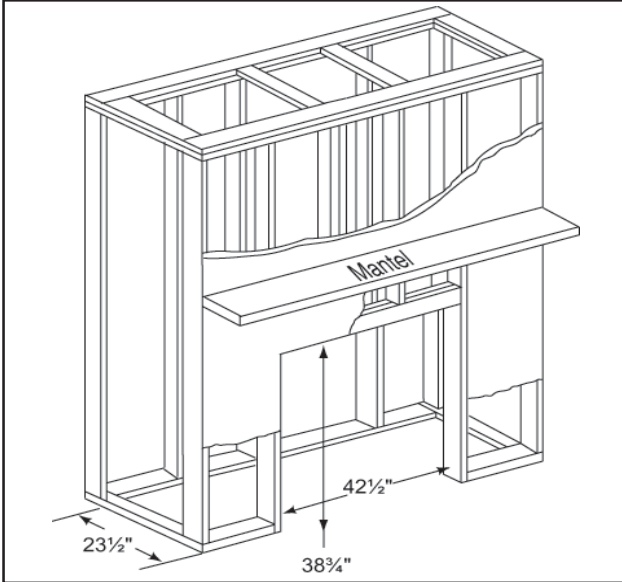


Figure 3 - Framing

Mantel Projection	Height
9" - 12"	52"
6" - 9"	49"
3" - 6"	46"
0 - 3"	43"

Framing must be above standoffs.

Mantel height listed is measured from the BASE of the appliance.  
12" is the maximum mantel projection allowed.

Figure 4 - Mantel Heights

**CAUTION:**  
Wear gloves and safety glasses for protection.

**CAUTION:**  
Provide adequate accessibility clearances around the upper and lower grilles for servicing and proper operation.

**WARNING!**  
To prevent contact with sagging or loose insulation, the gas appliance must not be installed against vapor barriers or exposed insulation.

**WARNING!**  
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

## D. SETTING THE APPLIANCE

This gas appliance may be placed on a smooth, combustible or noncombustible continuous, flat surface. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance. Slide the appliance into position and level from side-to-side and front-to-back. Shim with noncombustible material as necessary.

Secure the appliance by bending out the nailing flanges on each side of the appliance and nail to the framing. The nailing flanges have been positioned 5/8" back from the front of the gas appliance to allow the addition of drywall.

**WARNING!**  
The Caliber NXT Plus must be power vented with the HRV200PLUS and must not be connected to a chimney flue.

## E. VENTING

**WARNING!**  
Refer to the HRV200PLUS installation manual for proper venting configurations for the Caliber NXT Plus gas appliance.

## F. UTILITIES

### 1. High Altitude Installation

The Caliber NXT Plus is power vented. High altitude gas appliance considerations are no longer of concern, as long as the gas appliance is properly installed with the HRV200PLUS properly balanced (refer to HRV200PLUS manual).

### 2. Connect the Gas Line

The Caliber NXT Plus is provided with a stainless steel flexible connector and a listed (and Commonwealth of Massachusetts approved) T-handle manual shutoff valve. See Figure 5. The incoming gas line should be piped into the valve compartment and connected to the 1/2" FIP connection provided on the manual shutoff valve. See Figure 6 to connect the gas line. **Optional:** Seal around gas line to prevent cold air leakage.

- ➔ All connections must be tightened and checked for leaks with a commercially available, non-corrosive leak check solution. Be sure to rinse off the solution when done leak testing.

Bleed the gas line to extract any air that may have been trapped inside the pipe.

**Note:** Have the gas supply line installed in accordance with building codes by a qualified installer approved and/or licensed as required by the locality. In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.

**Note:** This gas appliance and its manual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

### 3. Gas Pressure

A pressure tap is included on the front face of the intermittent pilot ignition gas control valve.

Table 1 shows optimum gas pressure information. Consult your local gas company for assistance in determining the proper orifice for your altitude or refer to **ANSI Z223.1-latest edition, Appendix F**.

Table 2 shows orifice sizes and BTU ratings.

### 4. Field Fuel Conversion

Natural or propane gas conversions necessary to meet the application need to be installed by a qualified technician using Hearth & Home Technologies specified and approved parts.

If your appliance must be converted to use propane, use a DCKVP-NXTPLUS conversion kit; to use natural gas, use a DCKVN-NXTPLUS conversion kit.

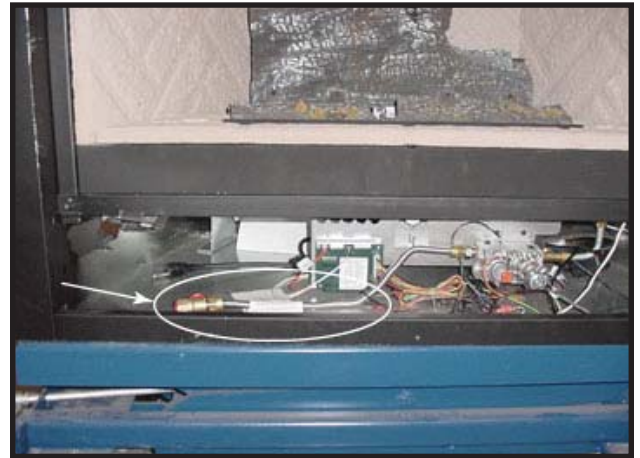


Figure 5  
Flex Connector & Manual Shutoff Valve

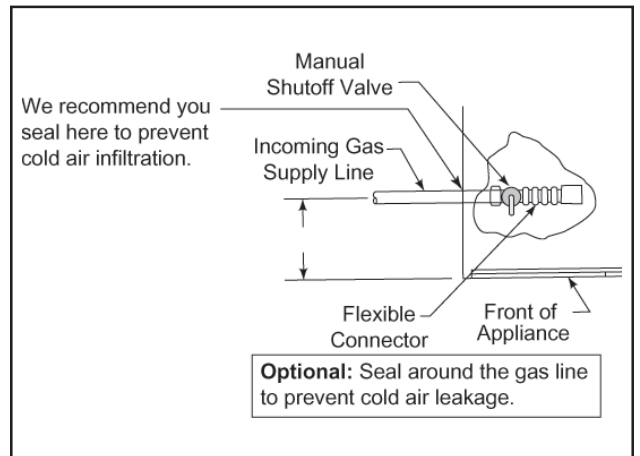


Figure 6 - Gas Line

**WARNING!**

This valve has been preset at the factory. Altering settings may result in fire hazard or bodily injury.

# CALIBER NXT PLUS INSTALLATION INSTRUCTIONS

CALIBER NXT PLUS	
Inlet Gas Supply Pressure (N.G.)	4.5 (min.) - 7.0 (max.) in w.c.
Optimal Manifold Pressure (N.G.)	3.5 in. w.c.
Inlet Gas Supply Pressure (L.P.)	11.0 (min.) - 14.0 (max.) in. w.c.
Optimum Manifold Pressure (L.P.)	10 in. w.c.

CALIBER NXT PLUS	
Input Rate (N.G.)	47,000 BTU/hr.
Input Rate (L.P.)	44,000 BTU/hr.
Orifice Size (N.G.) Front	.059 in./1.49 mm
Orifice Size (N.G.) Back	.117 in./2.97 mm
Orifice Size (L.P.) Front	.039 in./.99 mm
Orifice Size (L.P.) Back	.066 in./1.68 mm

**Table 1**  
Gas Information for Intermittent Pilot Ignition

**Table 2**  
Gas Information for Intermittent Pilot Ignition

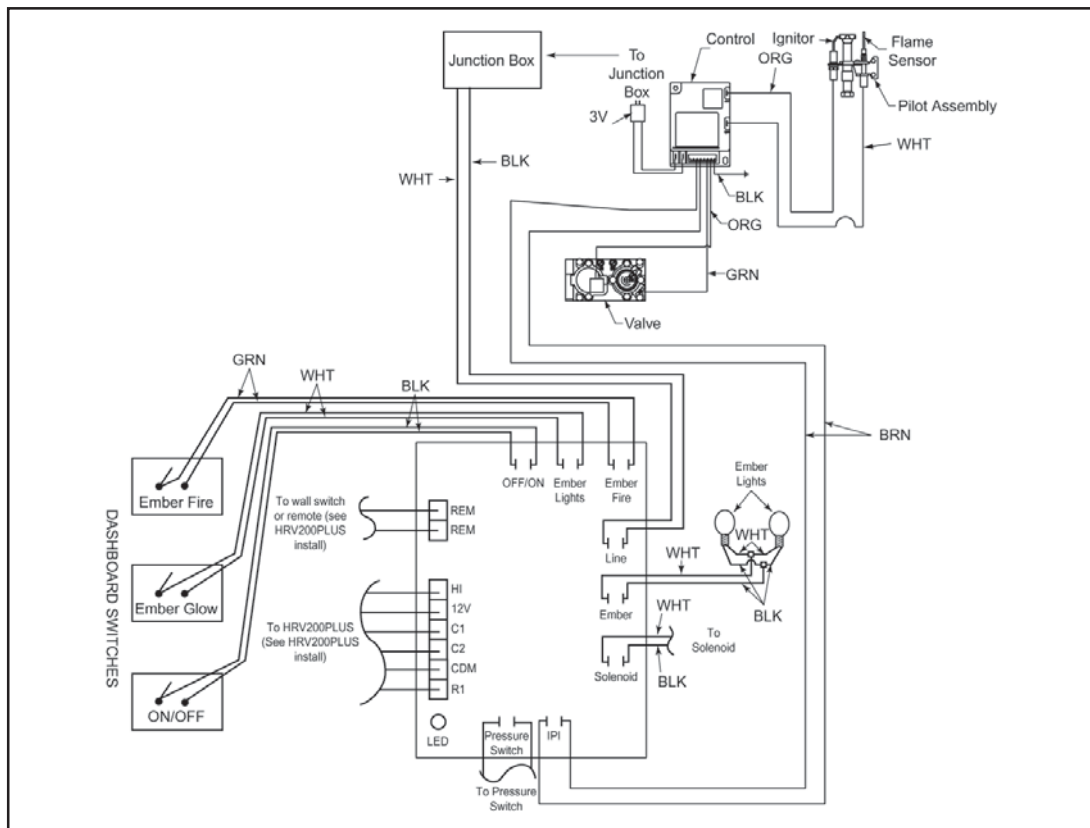
## 5. Wiring - Intermittent Pilot Ignition (IPI)

- a. **Caliber NXT Plus Requirements:** This gas appliance requires a 110VAC supply to the gas appliance junction box for operation. A wiring diagram is shown in Figure 7.

The Caliber NXT Plus is equipped with an intermittent pilot control valve which operates on a 3 volt system. See ignition wiring diagram, Figure 7.

The Caliber NXT Plus is supplied with a 3 volt AC transformer, which requires the installation of the supplied junction box. It is highly recommended that the junction box be installed at this time to avoid future reconstruction.

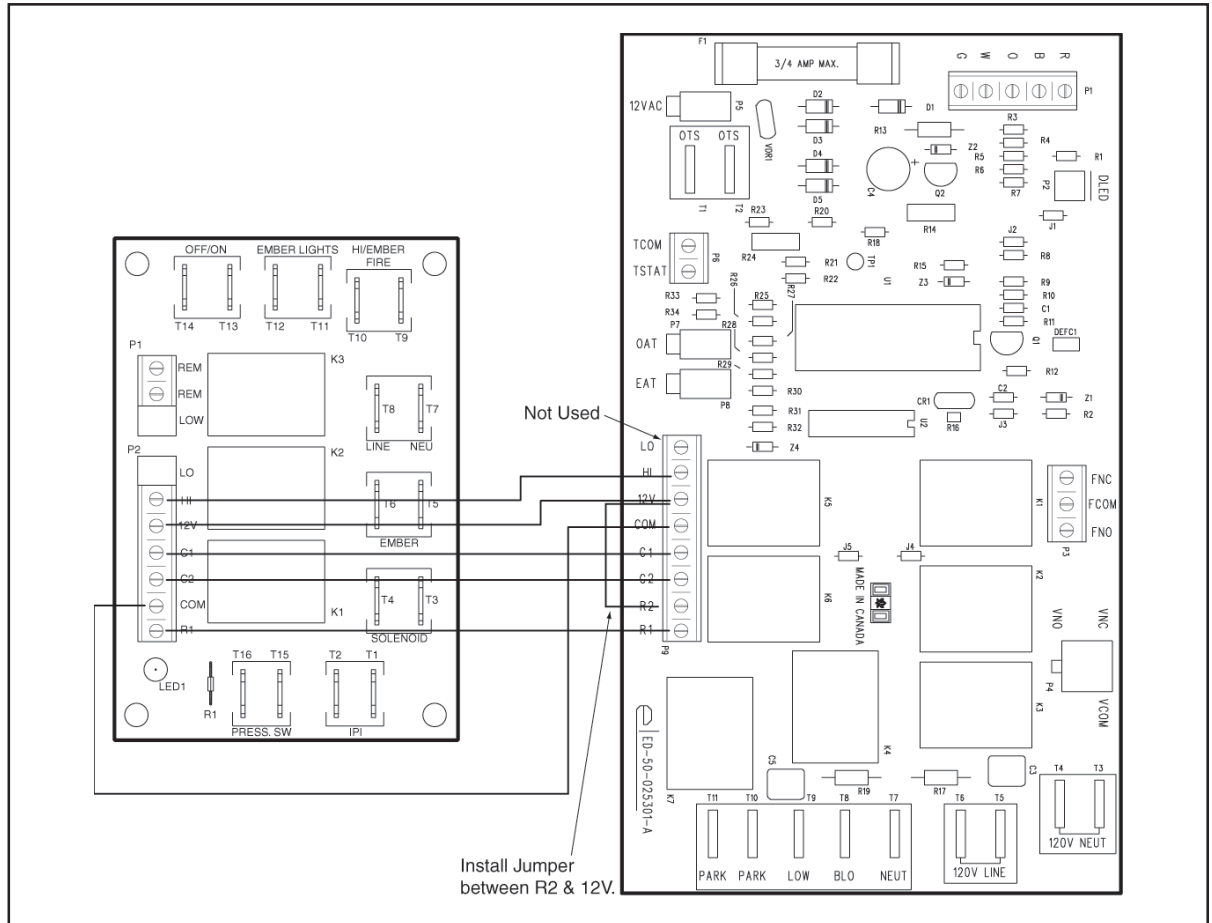
**Note:** The Caliber NXT Plus must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code, CSA C22.1**.



**Figure 7 - Intermittent Pilot Ignition Wiring Diagram**

**b. HRV200PLUS Control Wiring**

The Caliber NXT Plus is designed to operate as a system with the HRV200PLUS. Six low-voltage wires are required to electrically connect the two appliances. Common 24 gauge solid conductor thermostat wire, or equivalent may be used. The connections are illustrated in Figure 8. A short jumper wire is required to be field installed between R2 and 12V on the HRV200PLUS control board.



**Figure 8 - Caliber NXT Plus & HRV200PLUS Boards Wired Together**



### c. Dashboard Switches

This appliance comes with three dashboard control switches installed.

#### 1) Flame - On/Off

Turns the appliance burner operation on and off. This switch may be overridden by the use of a wall switch, remote control or hearth thermostat connected to the REM terminals.

#### 2) Electric Embers - On/Off

Turns electric ember lights on and off. Electric ember lights are optional only when the appliance burners are not in use. Electric ember lights are always on during flame operation.

#### 3) Hi Fire/Ember Fire

Turns rear burner on for HI FIRE operation and turns rear burner off for EMBER FIRE operation.

### d. Accessory Wiring

This appliance can be installed and operated using the switches installed in the dashboard. No other controls are necessary. If desired, additional controls such as wall switches, remote controls and thermostats may be installed. These accessories must be connected to the appliance using the REM terminals on the control board. A wiring diagram is shown in Figure 9.

**Note:** When wired as shown the appliance will operate when any of the following actions occur:

1. The FLAME dashboard switch is placed in the "ON" position, or
2. The remote control is placed in the "ON" mode, or
3. The wall switch (or thermostat) is placed in the "ON" position.

**Note:** Accessory circulating fans CANNOT be used with the Caliber NXT Plus.

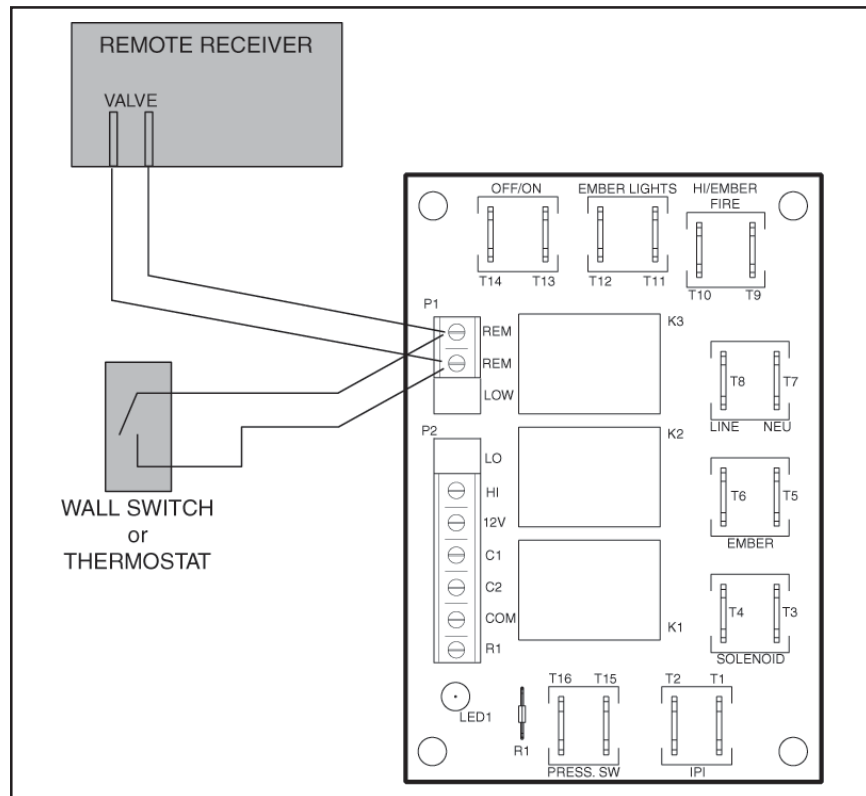
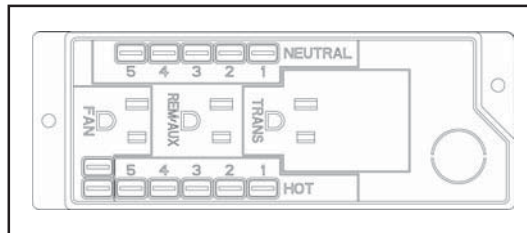


Figure 9 - Circuit Board to Switches

**6. Junction Box Installation**

- a. Remove the junction box assembly (Figure 10) from the valve compartment.
- b. If the box is being wired from the OUTSIDE of the gas appliance:
  - 1) Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - 2) Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
  - 3) Attach the junction box assembly to the outside of the appliance with the two screws provided.
- c. If the box is being wired from the INSIDE of the gas appliance:
  - 1) Pull the electrical wires from outside the appliance through this opening into the valve compartment.
  - 2) Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - 3) Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
  - 4) Attach the junction box assembly to the inside of the appliance with the two screws provided.
- d. If the box is not to be wired at the time of the Caliber NXT Plus installation, assemble the receptacle and cover to the box and install on the inside of the appliance.

**Figure 10 - Junction Box Detail**

## G. FINISHING

### 1. Combustible Finishing Material

Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or unplastered (this includes drywall).

### 2. Noncombustible Finishing Material

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or combination thereof, or have a UL Fire rating of Zero (0).

### 3. High Temperature Sealant Material

Sealants that will withstand high temperatures: General Electric RTV103 (Black) or equivalent; Rutland, Inc. Appliance Mortar #63 or equivalent.

A high temperature sealant, 1/8" minimum bead width, must be used to close off gaps between the appliance and facing to prevent cold air leaks. See Figure 11.

A combustible mantel may be installed. Please refer to Figure 4, page 5.

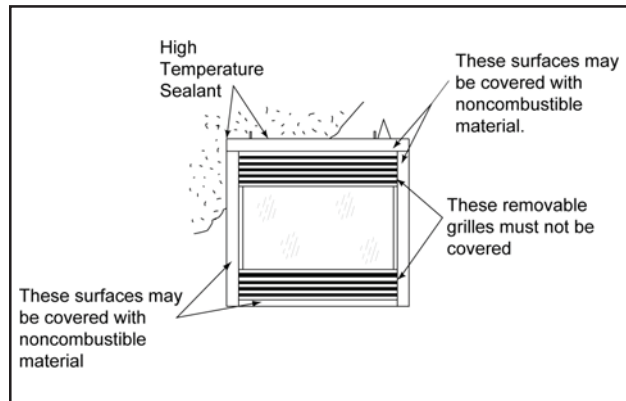


Figure 11 - Finishing Materials

## H. GAS APPLIANCE PREPARATION

### 1. Set the Logs (See Replacement Parts, Complete Log Set for log numbers)

- a. Place LEFT FRONT LOG (#9) on the far left grate bar so the notch on the log sets on the horizontal portion of the grate bar and the body of the log is on the grate burner. See Figure 12.
- b. Place LEFT TOP LOG (#5) on the white notches of the left center log and back log. Set the log so that the "Y" is pointed down. See Figure 13.



Figure 12 - Place Left Front Log



Figure 13 - Place Left Top Log

- c. Place RIGHT CENTER LOG (#4) on the white notches in the left center log and the back log. The log should set on the log tab welded to the back of the far right grate bar. The long leg of the "Y" in the log should point towards the front center of the log set. See Figure 14.



Figure 14 - Place Right Center Log

## 2. Silica Rock - Techno Sil

- a. You will need to paint the silica rocks with the supplied spray paint to create the most realistic look. See Figures 15-16.



Figure 15 - Silica Rocks



Figure 16 - Painting the Rocks

- b. Place the silica rock so that it completely covers the ember bed. See Figure 17.



Figure 17 - Place Silica Rocks

## 3. Place the Lava Rock

- Place the lava rock generously around the ember bed and right up to the front lip of the hearth pan. See Figure 18.



Figure 18 - Lava Rock Placement

## I. SEQUENCE OF OPERATION

The Caliber NXT Plus must be installed with an HRV200PLUS. The appliance and ventilator operate as a system. The HRV200PLUS controls many of the operational sequences for the system, and the Caliber NXT Plus gas appliance maintains safety control for the combustion process.

The sequence of operation for the system is as follows:

### 1. Appliance Mode

- a. The user creates a demand for system operation using dashboard control, remote control, wall switch or thermostat.
- b. A 12VDC signal is sent from the HI terminal on the appliance circuit board to the HRV200PLUS.
- c. The HRV200PLUS does the following:
  - 1) Blower motor on HIGH for system pre-purge.
  - 2) C2 terminal is energized 12 VDC activating the electric ember lights on the Fresh Air Fireplace.
  - 3) Fifteen-second pre-purge timer activates while the HRV closes the alternate exhaust damper.
  - 4) C1 terminal is energized 12 VDC to override pressure switch in the Fresh Air Fireplace.
- d. R1 is energized 12 VDC activating the IPI ignition circuit to initiate the fireplace ignition process. **In the HRV, the R2 terminal must be jumpered to 12V to supply power to R1 at the Fresh Air Fireplace.**
- e. Thirty-second draft-proving delay timer activates.
- f. The Fresh Air Fireplace lights.
- g. The thirty-second draft-proving delay timer expires, C1 terminal is de-energized and the Fresh Air Fireplace pressure switch is monitored for sufficient flow at the flue collar for proper operation. **IF SUFFICIENT FLOW IS NOT SENSED AT THE FLUE COLLAR OF THE FRESH AIR FIREPLACE AFTER THIRTY SECONDS OF OPERATION, THE FRESH AIR FIREPLACE FLAMES WILL EXTINGUISH LEAVING THE ELECTRIC EMBERS ILLUMINATED ONLY. THE FRESH AIR FIREPLACE WILL NOT SUSTAIN NORMAL OPERATION UNTIL THE LACK OF FLOW IS CORRECTED!**
- h. When there is adequate draft at the flow sensor and 12 VDC is present at the R1 terminal on the circuit board, the green LED on the lower right side of the board illuminates.
- i. When the user demand for appliance operation is removed, the HRV200PLUS de-energizes C1 and R1 terminals, terminating burner operation.
- j. There is a 20 second delay (post-purge).
- k. The HRV200PLUS de-energizes C1, turning the ember bed lights off.
- l. The HRV200PLUS executes a five-minute low speed post purge.

**2. HRV200PLUS Defrost Mode**

**WARNING!**

The appliance may operate to defrost the HRV200PLUS when the flame switch is in the "OFF" position. The appliance will only operate in "EMBER FIRE" mode during HRV200PLUS defrost.

- a. The HRV200PLUS demands gas appliance operation for defrost. This occurs when the following conditions exist:
  - 1) The appliance is not in use.
  - 2) The outdoor temperature falls below 25° F.
  - 3) The DEFC1 jumper is not installed on the HRV200PLUS circuit board.
- b. The HRV200PLUS does the following:
  - 1) Turns blowers on to high speed.
  - 2) Sends a 12VDC signal to the C2 terminal to light the ember bed lights (by energizing relay K3 on the appliance circuit board). This acts to notify the user the appliance is preparing to operate.
  - 3) Positions HRV200PLUS dampers (if installed) for appliance operations.
  - 4) Performs a 15 second delay (pre-purge) before the burners are lit.
  - 5) Sends a 12VDC signal to the R1 terminal to initiate the ignition sequence (by energizing relay K1 on the circuit board).
  - 6) Sends a 12VDC signal to the C1 terminal to override the pressure switch for the first thirty seconds of ignition.
- c. The Caliber NXT Plus senses adequate draft in the flow sensor (located in the appliance flue collar) to close the flow pressure switch.
- d. The intermittent pilot ignition (IPI) system activates and lights the ember fire burner only.
- e. After thirty seconds, the HRV200PLUS de-energizes C1, placing the pressure switch into the Caliber NXT Plus control circuit. The pressure switch monitors the flow at the flue collar of the Caliber NXT Plus and shuts the appliance burners off if adequate flow is not present.
- f. When the user demand for appliance operation is removed, the HRV200PLUS de-energizes the R1 terminal terminating burner operation.
- g. There is a 20 second delay (post-purge).
- h. The HRV200PLUS de-energizes C1, turning the ember bed lights off.

**Note:** The HRV200PLUS can use indoor air instead of the gas appliance for defrost if the optional defrost kit (part # HRV99DEFKIT) is installed.

## J. LIGHTING INSTRUCTIONS

### ○ FOR YOUR SAFETY READ BEFORE LIGHTING

**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

**WARNING:** This appliance must be vented and electrically interfaced to an HRV200PLUS to operate properly. Do not attempt to operate the appliance without an HRV200PLUS to provide proper draft to remove flue products. Failure to comply with both the appliance installation instructions and the HRV200PLUS installation instructions may cause property damage, personal injury or death.

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
  - B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
  - C. Use only your hand to push in and move the gas control valve or turn the gas control knob. Never use tools. If the lever or knob will not move by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
  - D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### LIGHTING INSTRUCTIONS

**WARNING:** The HRV200PLUS has an automatic defrost mode which can light the burner even though the "ON/OFF" switch for the appliance is in the "OFF" position. Turn off all electric power to the appliance and the HRV200PLUS to avoid unanticipated burner ignition.

1. STOP! Read the safety information above on this label.
2. Turn wall switch to the "OFF" position or thermostat to the lowest setting.
3. Turn off all electric power to the appliance and the HRV200PLUS.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do NOT try to light the pilot by hand.
5. Wait five minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
6. To turn on the burner, turn on all electric power to this appliance and the HRV200PLUS, and turn on the wall switch or set the thermostat to the desired setting.
7. There is a fifteen second delay before the burners light.
8. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

### TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch or set thermostat to lowest setting.
2. Turn off all electric power to the appliance and the HRV200PLUS if service is to be performed.
3. Push the gas control lever in and move to the "OFF" position or push the gas control lever to the "OFF" position. Do not force.
4. Replace the control access panel.

Due to high surface temperatures, keep children, clothing and furniture away.  
Keep burner and control compartment clean. See installation and operating instructions accompanying the appliance.

4034-122A

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.

This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

**CAUTION:** Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

### WARNING RISK OF FIRE

This appliance is intended to burn a specified gas fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or use any other type of gas burner system.

**WARNING:** Disconnect the electric power from the appliance and the HRV200PLUS before servicing. If for any reason the original wire supplied with the appliance must be replaced, it must be replaced with 105° C or its equivalent.

For use with natural gas or propane. A conversion kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel.

\* Also certified for installation in a bedroom or a bed-sitting room.  
\* For U.S. only!

## K. SEASONAL CHECK LIST

### **WARNING!**

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

### **CAUTION:**

Any safety screen or guard removed for servicing the Caliber NXT Plus must be replaced prior to operating the gas appliance.

Clothing or other flammable material should not be placed on or near the gas appliance.

**Note:** Installation and repair should be done by a qualified service person. The gas appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

### **BEFORE OPERATING THIS GAS APPLIANCE HAVE A QUALIFIED TECHNICIAN:**

- \* Review proper placement of logs, rock wool, lava rock, and vermiculite.
- \* Check the wiring.
- \* Check the air shutter adjustment.
- \* Ensure that there are no gas leaks.
- \* Ensure that the flow of combustion and ventilation air is not obstructed.

### **1. Intermittent Pilot Ignition Operation**

- a. **Lighting the appliance during regular use:** Turn dashboard and/or wall switch to "ON".
- b. **Shutdown during regular use:** Turn all switches to "OFF".
- c. **To shut down the appliance for a long period of time:**
  - 1) Turn all switches to "OFF".
  - 2) Turn the manual shutoff valve to "CLOSED".
- d. To relight the appliance, see page 15.

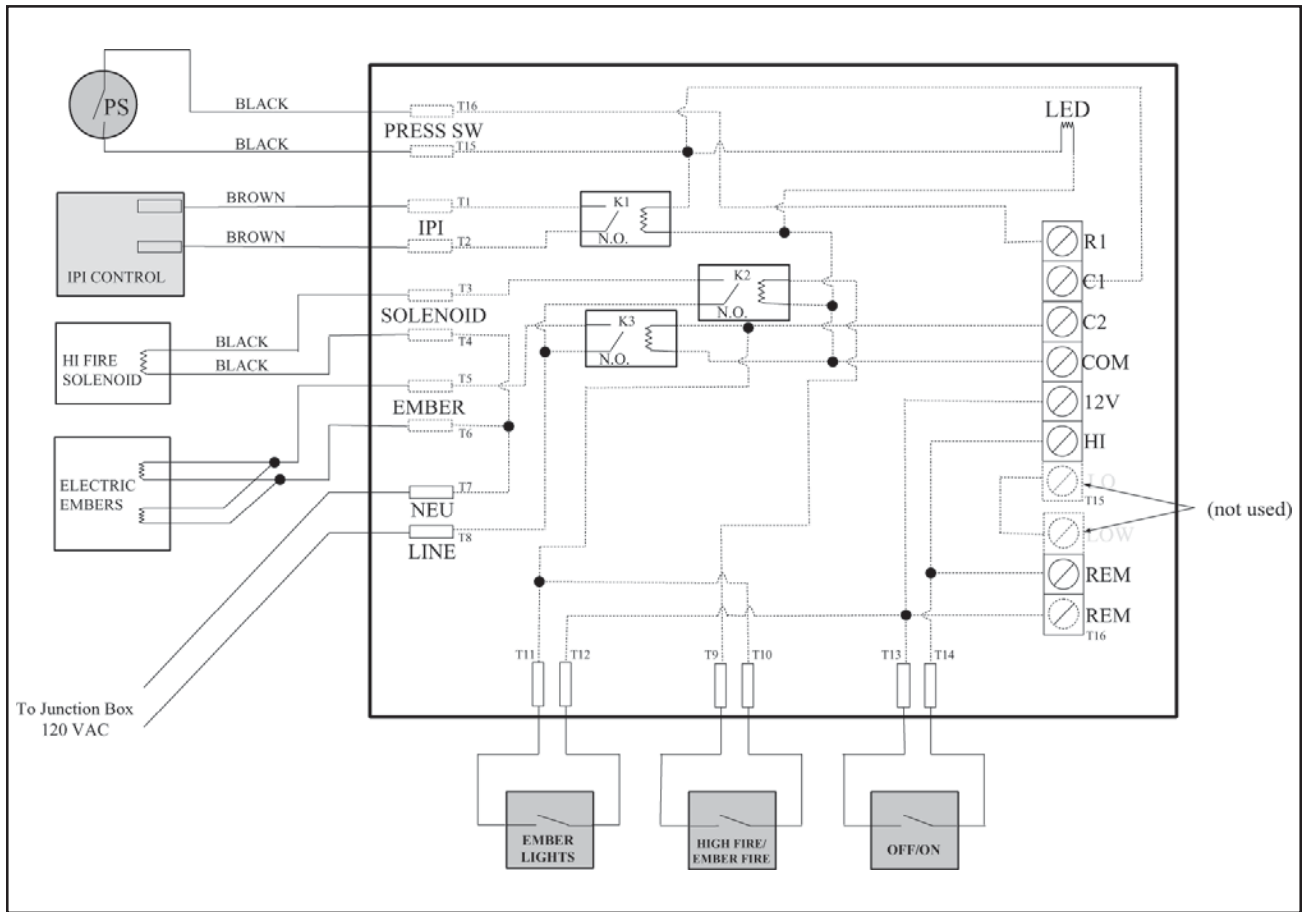
### **2. Fuel**

- a. Do not burn wood or other material in the appliance.
- b. Natural or propane gas conversions necessary to meet the application need to be done by a qualified technician using Hearth & Home Technologies specified and approved parts.
- c. If your intermittent pilot ignition appliance must be converted to use propane, you must use a DCKVP-NXTPLUS Conversion Kit. To convert to use natural gas, use a DCKVN-NXTPLUS Conversion Kit.



## L. START-UP ISSUES

TROUBLESHOOTING GUIDE		
Issues & Notes	Possible Causes	Solution
1. Blue flames	1. Cold start	This is normal operation and the flames will begin to yellow as the burners and logs heat.
	2. Glowing embers/rockwool not installed	Ensure rockwool is placed per the installation instructions.
2. Odor from the appliance	1. New appliance	The appliance may release an odor for the first several hours of operation from paint curing and manufacturing oils burning off. This is normal and will dissipate with time.
3. Appliance does not turn on	1. No power to appliance	Check breaker and disconnects to the appliance.
	2. No power to HRV200PLUS	Check breaker to HRV200PLUS and ensure ventilator is plugged in with the door closed.
	3. No signal from the appliance to the HRV200PLUS; i.e., 12V DC not present at "HI" terminal	Check the dashboard "FLAME" switch. Check any accessory switches connected to REM terminals. Replace as needed.
	4. No signal from the HRV200PLUS to the appliance; i.e., 12V DC not present at "R1" terminal	Check HRV200PLUS cuircuit board for jumper between 12V and R2 terminals. Install as needed.
	5. Control wiring between appliance and HRV200PLUS incorrect	Check wiring for correct connections and continuity.
	6. Appliance circuit board wired incorrectly	Check appliance wiring per wiring diagram.
	7. Inadequate draft	Check HRV200PLUS filters - clean as needed.
		Check HRV200PLUS exhaust termination - repair, clean or replace as needed.
		Check appliance exhaust venting and connections. Ensure venting is not kinked or crushed. Ensure all connections are properly installed and secured.
		Check HRV200PLUS blower motor. Ensure motor is operating on high speed.
		Check HRV200PLUS blower wheels. Ensure blower wheels are clean - service as necessary per HRV200PLUS manual.
8. Pressure switch hose cracked or disconnected	Check HRV200PLUS heat exchanger core. Clean and service as necessary per HRV200PLUS manual.	
	Check any dampers installed in the appliance exhaust or HRV200PLUS exhaust venting. Ensure dampers are properly set.	
9. Pressure switch bad	Check hose connecting flow sensor tube to pressure switch connector. Ensure no cracks or kinks exist. Replace as needed.	
10. Appliance circuit board bad	Install a T-connector into the pressure switch tubing and connect a digital manometer or magnahelic gauge. If pressure reads 0.15 in. w.c. or greater and the pressure switch electrical contacts remain open, replace pressure switch.	
11. Flow sensor plugged	Check appliance circuit board per the schematic shown in Figure 19. Replace as necessary.	
		Attach a hose to the flow sensor tube and attempt to blow through the sensor. If the sensor is plugged, apply sufficient pressure to clear the sensor. Always assess the cause for flow sensor plugging.



**Figure 19 - Appliance Circuit Board Wiring**

**WARNING!**

Do not use this gas appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

**WARNING!**

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids in the gas appliance. Keep any flammable liquids a safe distance from the appliance.

**WARNING!**

Keep the area near the appliance clear and free of combustible materials, gasoline and other flammable vapors and liquids.

**WARNING!**

If sooting occurs or combustible material is burned in the gas appliance, it could cause the PRESSURE SWITCH ports to close and prevent the appliance from working. Refer to HRV200PLUS manual.

## M. MAINTENANCE INSTRUCTIONS

### 1. Annual Maintenance

To ensure that your gas appliance operates in a safe and efficient manner, it needs to be inspected at least on an annual basis by a qualified field service person. Like any gas appliance, This gas appliance must be tuned up to ensure optimum performance.

### 2. Cleaning the Burner and Control Compartment

Keep the burner and control compartment clean by brushing and vacuuming at least once a year. Always turn the wall (or dashboard switch) and the gas valve off before cleaning.

**Note:** After extended periods of burning, film may build up on the flame sensor (intermittent pilot ignition). The flame sensor should be cleaned annually with emery cloth to remove this build up.

### 3. HRV200PLUS

Please refer to the HRV200PLUS manual for additional maintenance requirements for the ventilation portion of the Caliber NXT Plus.

### 4. Ember Bed Bulb Replacement

- a. Remove two screws from dash plate holding each bulb bracket.
- b. Pull socket down and forward to access bulb, replace the bulb and return to installed position. See Figure 20.



Figure 20 - Ember Bed Bulb Replacement

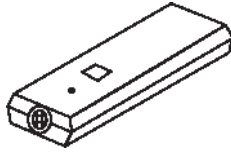
### 5. Log Removal/Replacement

If removal of the logs becomes necessary, remove the three loose logs first. Remove screws on each end of the burner assembly. Lift the grate burner assembly up until the right side clears the hearth refractory. While still lifting, swing the right end towards you until the opposite end of the assembly clears the hearth.

To remove the back log, remove the screws holding the log bracket. Lift the log and bracket out of the appliance.

To remove the hearth logs, remove screws and lift out.

## N. OPTIONAL COMPONENTS

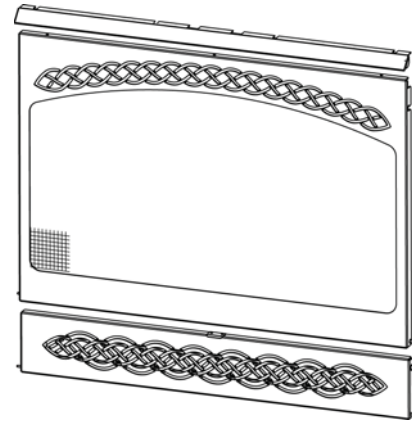


**RC-SMART-HTL**  
Remote Control  
**RCT-MLT-HTL**  
Multi-Function  
Remote Control  
**SMART-STAT-HTL**  
Remote Control with  
Thermostat Control

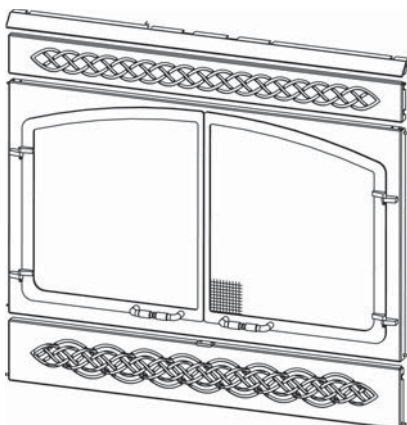
**Note:** Battery operated remote controls are not used. The Caliber NXT Plus must be hard wired.



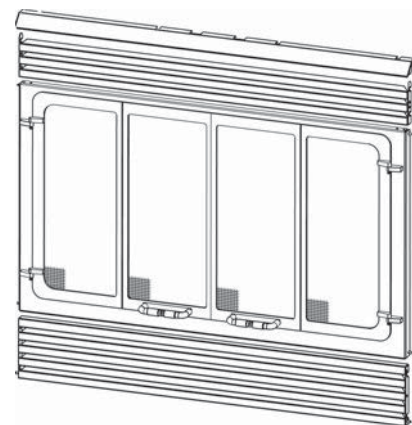
**WSK-MLT-HTL**  
Multi-Function Wall Switch



**FF-NXT 70 PWT-P**

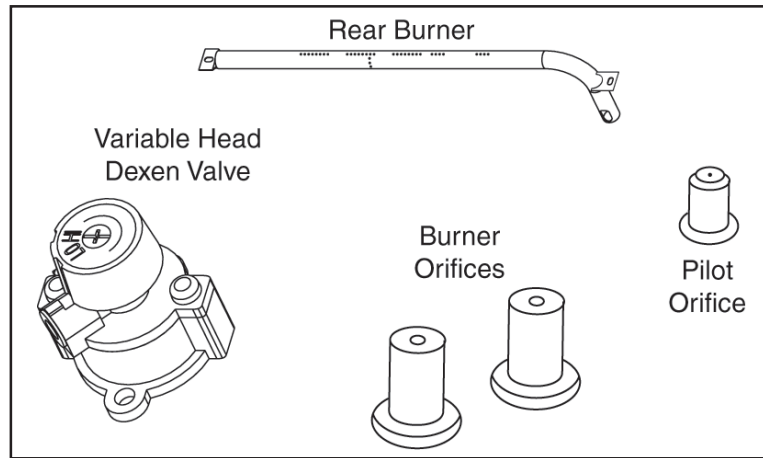


**FF-NXT 70 AC**

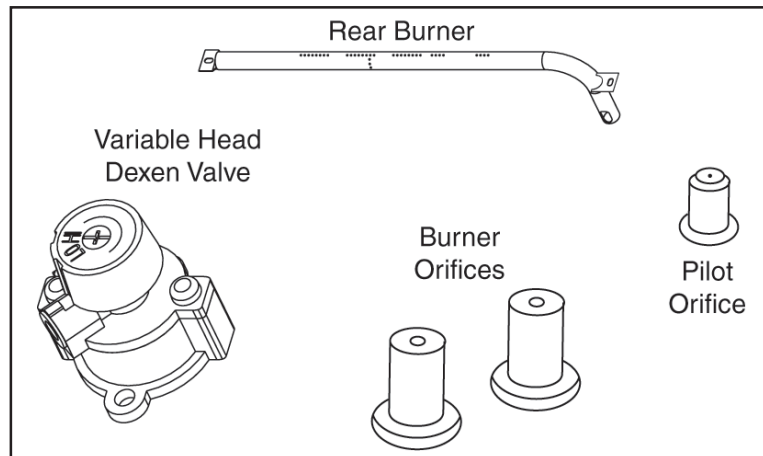


**Bi-fold Door face**

## OPTIONAL COMPONENTS (con't)



**DCKVN-NXTPLUS  
Conversion Kit  
Propane to Natural Gas  
(IPI)**

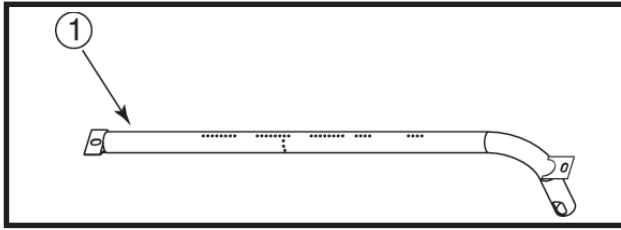


**DCKVP-NXTPLUS  
Conversion Kit  
Natural to Propane Gas  
(IPI)**

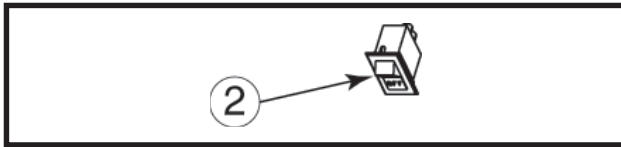
## REPLACEMENT PARTS (con't)

#	Description of Part	CNXT70ITPLUS	CNXT70ILTPLUS	CNXT70IHPLUS	CNXT70ILHPLUS	Qty.	R
1	Solenoid Valve	570-305	570-305	570-305	570-305	1	Y
2	Control Module	593-592	593-592	593-592	593-592	1	Y
3	3V Adaptor Plug	593-593A	593-593A	593-593A	593-593A	1	Y
4	Variable Dexen Valve	750-500	750-501	750-500	750-501	1	Y
5	Pilot Bracket	4000-198	4000-198	4000-198	4000-198	1	N
6	IM Pilot Assy	4021-005	4021-006	4021-005	4021-006	1	Y
7	Orifice .117 Nat .066LP	4021-054	4021-059	4021-054	4021-059	1	Y
8	Light Enclosure Assy.	4034-011	4034-011	4034-011	4034-011	1	N
9	Light Assy.	4034-012	4034-012	4034-012	4034-012	2	Y
	Halogen Light	33961	33961	33961	33961	1	Y
10	Valve Plate	4034-067	4034-067	4034-067	4034-067	1	N
11	Control Panel	4034-068	4034-068	4034-068	4034-068	1	N
12	Circuit Board	4034-085	4034-085	4034-085	4034-085	1	Y
13	Gas Tube Back 3/8	4034-095	4034-095	4034-095	4034-095	1	Y
14	Gas Tube Back Short 3/8	4034-096	4034-096	4034-096	4034-096	1	N
15	Gas Tube Back Long 3/8	4034-097	4034-097	4034-097	4034-097	1	N
16	Pressure Switch	4034-103	4034-103	4034-103	4034-103	1	Y
17	Silicone Tube	4034-109	4034-109	4034-109	4034-109	1	Y
18	Wire Assembly	4034-124	4034-124	4034-124	4034-124	1	Y
19	Screw 10-32 x 3/16 Ph PHL MS Z	12387A	12387A	12387A	12387A	2	N
20	Screw 10-24 x 1/4" Machine Scre	12388	12388	12388	12388	2	N
21	Orifice .059 Nat .039 LP	13445	4021-060	13445	4021-060	1	Y
22	Brass Connector 90 - Flex	14326	14326	14326	14326	1	Y
23	ON/OFF Valve	15697	15697	15697	15697	1	Y
24	SS Flex Gas Line 16"	17245B	17245B	17245B	17245B	1	Y
25	Brass Elbow	17524	17524	17524	17524	2	Y
26	Dust Cap	23491	23491	23491	23491	1	Y
27	Grommet	25005	25005	25005	25005	1	Y
28	Brass Fitting Tee	25059	25059	25059	25059	1	Y
29	Grommet 1" OD	27763	27763	27763	27763	1	Y
30	Bulkhead Union 3/8"	13405A	13405A	13405A	13405A	2	Y
	SMS #8x1/2 PPH	12460	12460	12460	12460	14	Y
	Velcro-Hook	17439A	17439A	17439A	17439A	2	Y
	Velcro-Tape	17440A	17440A	17440A	17440A	2	Y
	Wire Assy LOBLK8FF	4034-026	4034-026	4034-026	4034-026	2	Y
	Wire Assy LOBLK20FF	4034-027	4034-027	4034-027	4034-027	1	Y
	Wire Assy LOWHT20FF	4034-028	4034-028	4034-028	4034-028	1	Y
	Wire Assy LOBLK24FF	4034-029	4034-029	4034-029	4034-029	1	Y
	Wire Assy LOWHT24FF	4034-031	4034-031	4034-031	4034-031	1	Y
	White Jumper Wire	4034-032	4034-032	4034-032	4034-032	1	Y
	Black Jumper Wire	4034-033	4034-033	4034-033	4034-033	1	Y
	Wire Assy LOWHT8FF	4034-035	4034-035	4034-035	4034-035	2	Y
	Wire Assy LOGRN8FF	4034-036	4034-036	4034-036	4034-036	2	Y
	Wire Assy LOBLK8FF	4034-039	4034-039	4034-039	4034-039	2	Y

**REPLACEMENT PARTS (con't)**

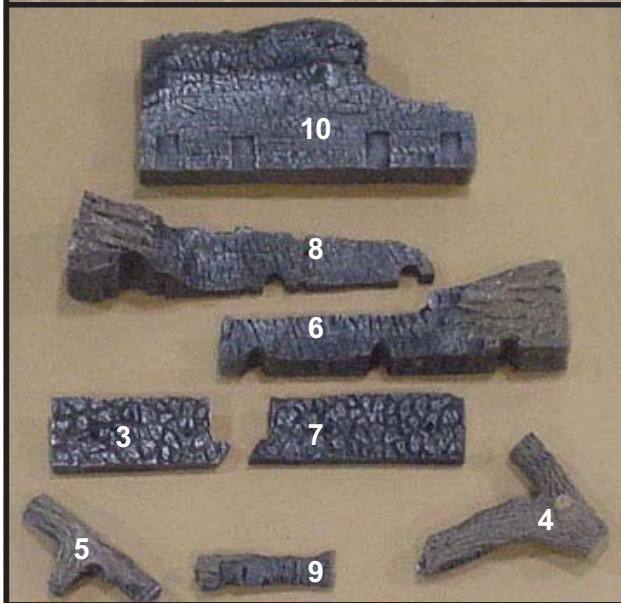


**Rear Burner Assembly**



**Dashboard Components**

Item #	Description	Part #
1	Rear Burner Assembly-Nat Gas	4034-015
1	Rear Burner Assembly-LP	4034-016
	Dashboard Assembly	4034-024
2	Dashboard, Rocker Switch	12652
n/s	Fire Glow	FIRE98
n/s	Rockwool	14333B
n/s	Vermiculite	28746
n/s	Lava Rock	28911
n/s	Replacement Bulbs	33961
n/s	Ember Bed Film	4034-065
n/s	Circuit Board - Fireplace	4034-085
n/s	Solenoid Valve - Fireplace	570-305
n/s	Pressure Switch	4034-103



**Log Set**

	Description	Part #
1	Grate w/Log Set	4000-159
2	Log Assembly, Back	4000-157
3	Log, Left Hearth	4000-025
4	Log, Right Center	4000-026
5	Log, Left Top	33863
6	Log, Right Front	4000-028
7	Log, Right Hearth	4000-029
8	Log, Left Center	4000-030
9	Log, Left Front	4000-031
10	Log, Back	4000-032

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## Homeowner's Notes Page



**Homeowner's Notes Page**

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## Caliber NXT Plus Gas Appliance Limited Warranty

**Hearth & Home Technologies Inc.** ("HHT") extends the following warranty for Heatilator® Caliber NXT Plus ("Appliance") products installed in homes in the United States of America and Canada. Dealers and employees of HHT have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty. This warranty gives you specific legal rights. You may also have other rights, which vary from state to state, regarding limitations on how long an implied warranty lasts, or that do not allow exclusion or limitation of incidental or consequential damages.

### Limited 5-Year Warranty

HHT warrants that all components of your Appliance, except for the combustion chamber, burner tubes and logs, will be free from defects in material and workmanship for five years from the date of installation. The Limited 5-Year Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the original user only, and is nontransferable.

### Limited 20-Year Warranty

HHT warrants that the combustion chamber, burner tubes and logs of your Appliance will be free from defects in material and workmanship for twenty years from the date of installation. The Limited 20-Year Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the original owner only, and is nontransferable.

### Conditions, Exclusions, & Limitations of Liability

- A. The Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. These Limited Warranties do not extend to defects caused by: (1) installation, operation or maintenance of the Appliance not in accordance with the Installation Instructions, Operating Instructions, and the Listing Agent Identification Label furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, accident or unworkmanlike repairs; (4) environmental conditions, additional air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) interconnection with other appliances such as central vacuums or clothes dryers; (6) installation or use of components not supplied with the Appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the Appliance not expressly authorized and approved by HHT in writing. This warranty does not extend to products not manufactured or supplied by HHT.
- B. This warranty is limited to the replacement or repair of defective components or workmanship. Your sole remedy, and HHT's sole obligation under this warranty shall be HHT repairing or, at its discretion, replacing the defective components. **In no event shall HHT be liable for any incidental or consequential damages caused by your Appliance.**
- C. **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTIES SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY OF THE APPLICABLE COMPONENTS SPECIFIED ABOVE. TO THE EXTENT PERMITTED BY LAW, HHT DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING SPECIFICALLY THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

### How to Obtain Service

To obtain service under this warranty you must:

1. Send written notice of the claimed condition to Heatilator Technical Service Department, Hearth & Home Technologies Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at [www.heatilator.com/contact.asp](http://www.heatilator.com/contact.asp).
2. Provide proof of purchase, proof of date of installation, model number and serial number to HHT.
3. Provide HHT reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
4. Obtain HHT's consent to any warranty work before the work is done.

### Additional Information

If you would like information on current Heatilator products or want to locate a dealer in your area, call: 1-877-427-8368.