

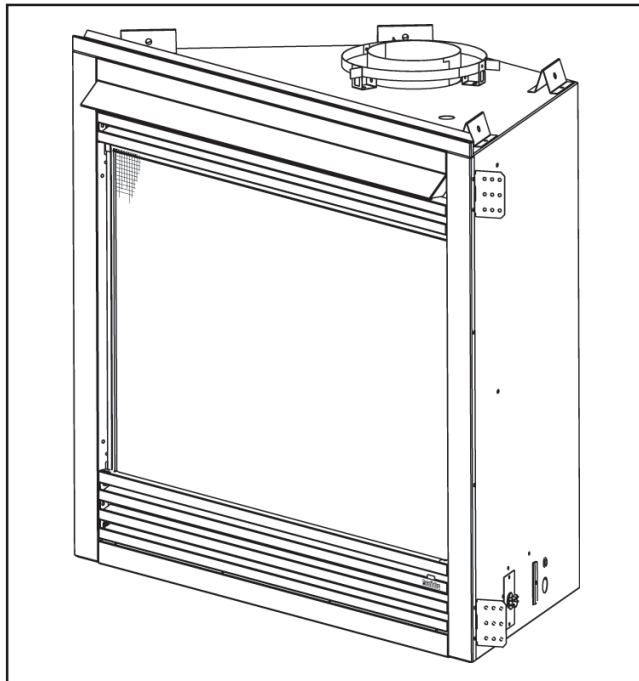
heatilator® Home Products

Hearth & Home Technologies Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52645, phone 1-877-427-8368

GAS-FIRED



INSTALLATION & OPERATING INSTRUCTIONS NOVUS PLUS



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 Novus Plus is designed to be used with the HRV200PLUS only! The Novus 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. 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.

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

CAUTION:
Wear gloves and safety glasses for protection.

SAFETY PRECAUTIONS

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause the Novus 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 appliance will ignite to defrost the HRV core.

A. GAS APPLIANCE SPECIFICATIONS

1. U.S. and Canada Certification

The Novus 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.

4. Glass Specifications/Certifications

Heatilator gas appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the CPSC. The tempered glass has been tested and certified to the requirements of **ANSI Z97.1-1984** and **CPSC 16 CFR 1202**. (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **SPCS 16 CFR Section 1201.5** "Certification and labeling requirements" which refers to **15 USC 2063** stating, "...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

5. Novus Plus Nomenclature

Catalog #	Description
NB4236IPLUS	Natural Gas Appliance with Intermittent Pilot
4236	42 - 42 in. Framing Dimensions, 36 - 36 in. Viewing Area
IL	Intermittent Pilot Ignition, Propane Gas

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	Safety Glasses
Wall-finishing Materials	
Non-corrosive Leak Check Solution	

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

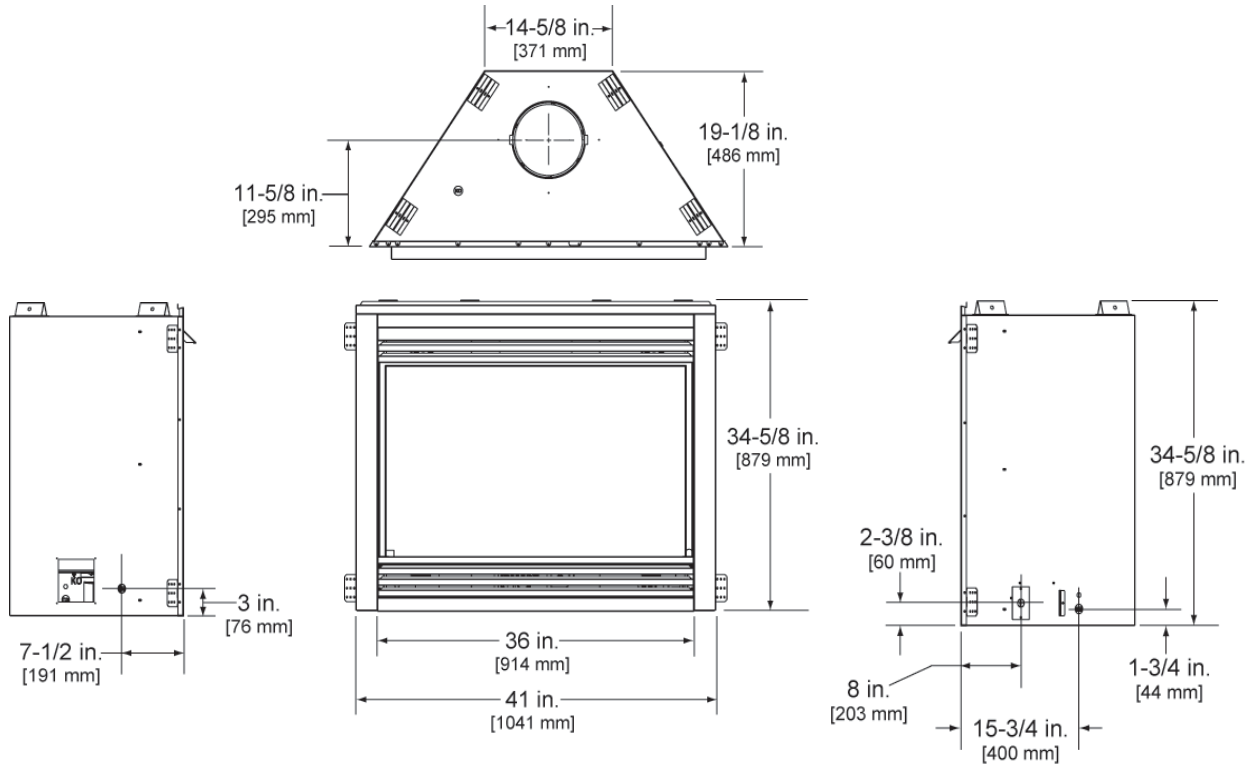
The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

WARNING!

This appliance is tested and listed for use only with the optional accessories listed in these instructions. Use of optional accessories not specifically tested for this appliance could void the warranty and/or result in a safety hazard.

B. DIMENSIONS, LOCATIONS & CLEARANCES

1. Appliance Dimensions



2. Appliance Locations and Space Requirements

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

Note: These are rough framing dimensions only.

WARNING!

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

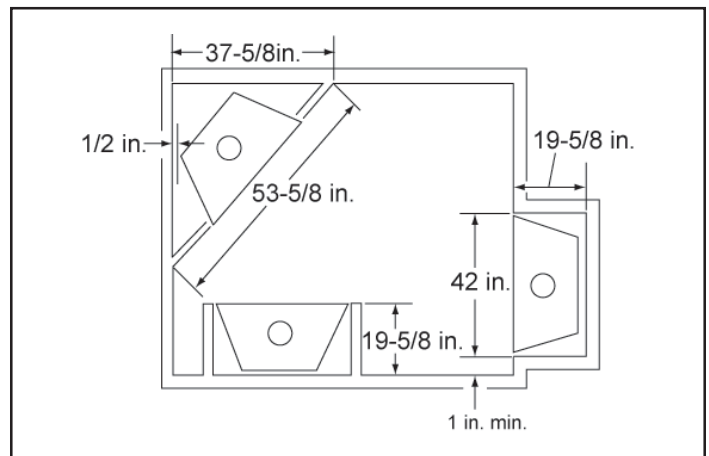


Figure 1 - Appliance Locations

3. Clearances

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

CAUTION:
Provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

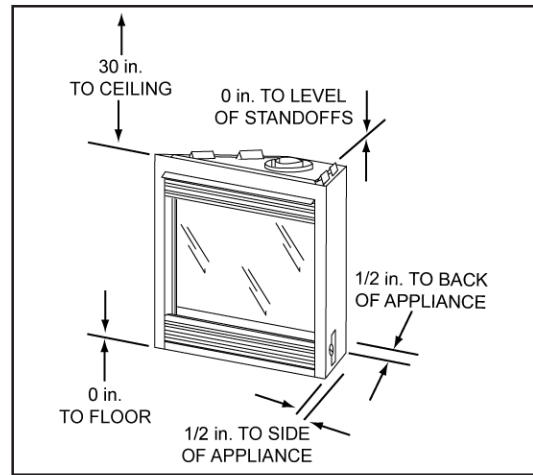


Figure 2
Appliance Clearances to Combustible Materials

C. FRAMING

Figure 3 shows a typical framing of this appliance using combustible materials. Figure 4 shows the mantel heights for mantel projects. All required clearances to combustibles must be adhered to.

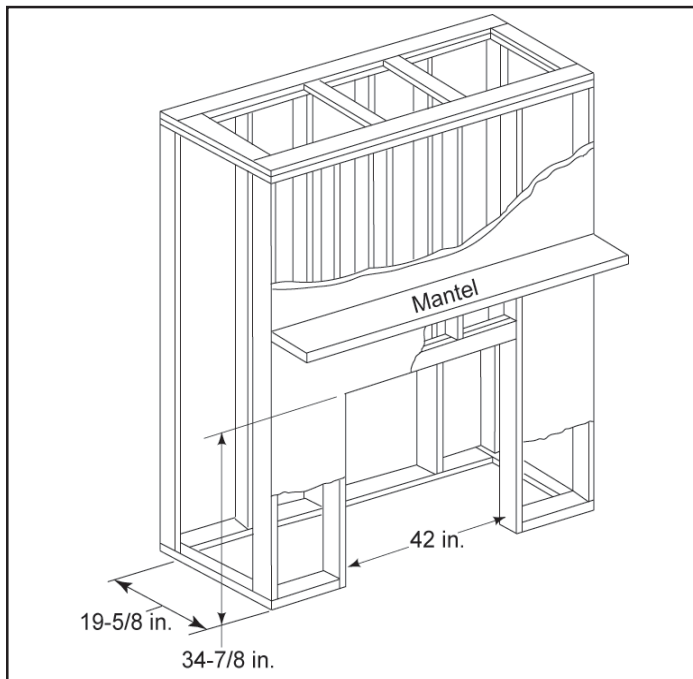


Figure 3 - Framing

Mantel Projection	Mantel Height
9 in. to 12 in.	41 in.
6 in. to 9 in.	39 in.
3 in. to 6 in.	38 in.
0 to 3 in.	36 in.

Framing must be above standoffs

Mantel height listed is measured from the BASE of the appliance

Figure 4 - Mantel Heights

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 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 the appliance 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 framing. The nailing flanges have been positioned 5/8 inch back from the front of the appliance to allow the addition of drywall.

WARNING!

The Novus 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 Novus Plus gas appliance.

F. UTILITIES

1. High Altitude Installation

The Novus 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 appliance is provided with a stainless steel flexible connector and 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 in. FIP connection provided on the manual shutoff valve. 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. See Figure 6 to connect the gas line. Gas connections may also be made by taking out the knockout in the bottom pan to allow connection through the bottom of the appliance.

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.

WARNING!

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

Note: This 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).

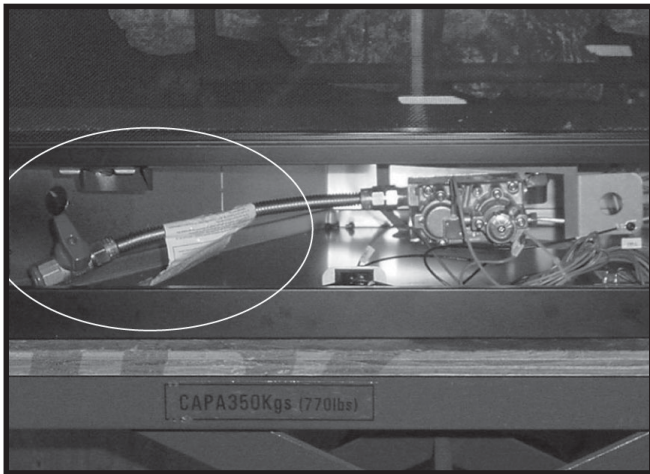


Figure 5 - Flexible Connector and Manual Shutoff Valve

3. Gas Pressure

On the intermittent pilot gas valve, the inlet pressure and manifold (outlet) pressure taps are available on the face of the valve. Pressure taps are immediately upstream of the gas supply connection and accessible for test gauge connection. Table 1 shows optimum gas pressure information. Consult your local gas company for assistance in determining the proper orifice for you altitude or refer to **ANSI Z223.1-latest edition, Appendix F**.

4. Fuel Conversion

In the event your appliance must be converted to use propane, you must use a **DCKVP** conversion kit. To convert your appliance to natural gas, you must use a **DCKVN** conversion kit.

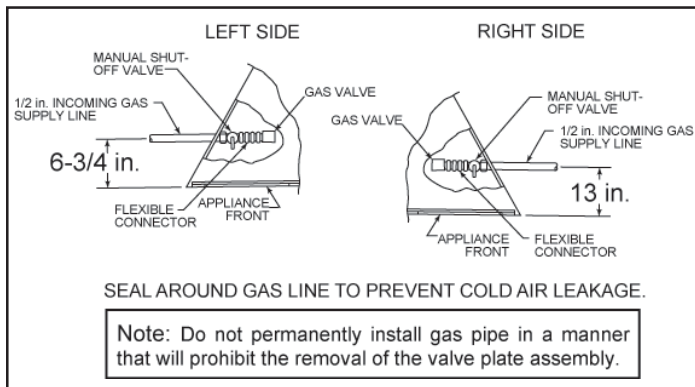


Figure 6 - Gas Line

Table 1

NOVUS PLUS	
Inlet gas supply pressure (NG)	4.5 (min) - 7.0 (max)*
Optimum manifold pressure (NG)	3.5*
Inlet gas supply pressure (LP)	11.0 (min) - 14.0 (max) *
Optimum manifold pressure (LP)	10*
Input Rate (NG)	
NB4236IPLUS (orifice - .109)	33,500/21,500 BTU/hr
Input Rate (LP)	
NB4236LPLUS (orifice - .065)	30,000/24,000 BTU/hr

* Inches water column

5. Wiring

Note: This appliance 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**.

Note: Optional Accessories Requirement: Wiring for optional accessories should be done now to avoid reconstruction.

a. Intermittent Pilot Ignition

- 1) This appliance requires a 110VAC supply to the appliance junction box for operation. A wiring diagram is shown in Figure 7.
- 2) This appliance is equipped with an intermittent pilot control valve which operates on a 3 volt system.
- 3) This appliance is supplied with a 3 volt AC transformer, which requires the installation of the supplied junction box. The junction box must be installed at this time to avoid reconstruction.

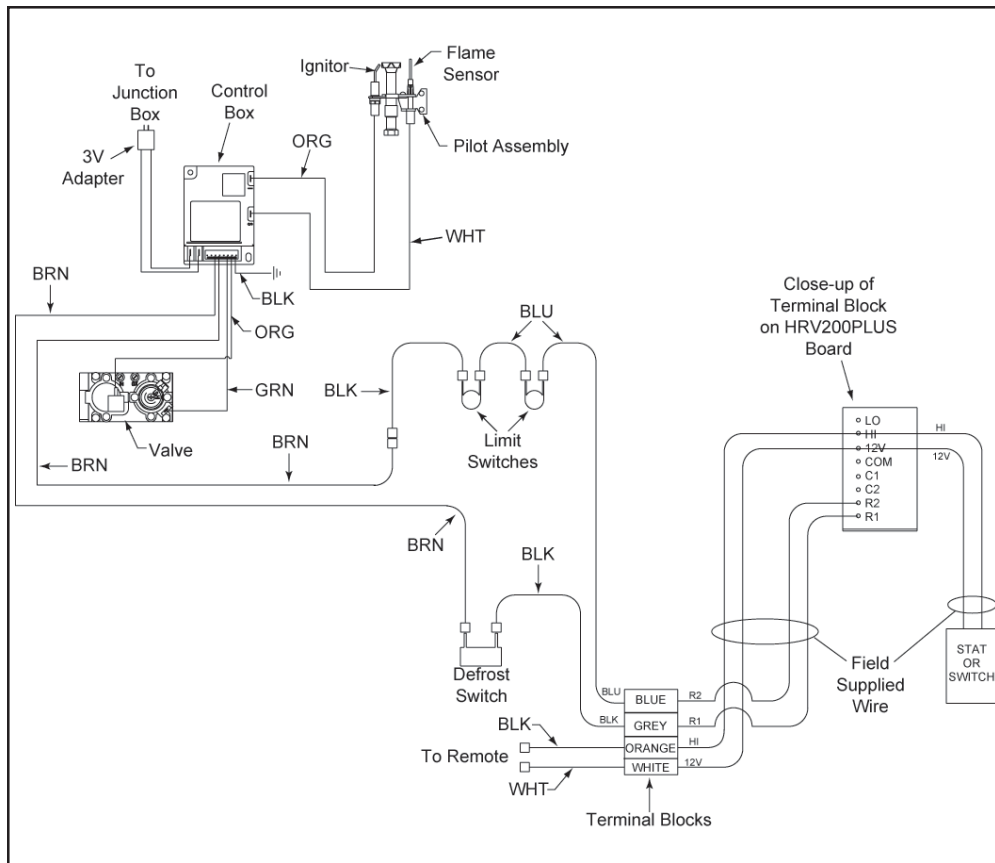


Figure 7 - Intermittent Pilot Ignition Wiring Diagram

WARNING!
This intermittent pilot ignition appliance **DOES** require a 110VAC supply for operation.

CAUTION:
Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

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

b. Connecting Field-Supplied Wire to Terminal Blocks in Appliance

- 1) Disconnect all power.
- 2) Strip the end of the low voltage wire to 1/4 in.
- 3) Put the blade of a small straight screwdriver in the slot at the top of the appropriate terminal, press down on screwdriver to open spring clamp and slide the correct low voltage wire into the side of the same slot you are pressing on.
- 4) Release pressure from screwdriver to secure wire.
- 5) Tug on the wire to make sure of a tight connection in the terminal.
- 6) Repeat this procedure for each colored block.

c. HRV200PLUS Control Wiring

The Novus Plus is designed to operate as a system with the HRV200PLUS. Four 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.

1) Defrost Override & Terminal Block

This appliance comes with a defrost override switch and a terminal block. The switch and appliance side of the terminal block are pre-wired. Four-wire thermostat wire must be run from the appliance to the HRV200PLUS and wired according to the wiring diagram in Figure 8.

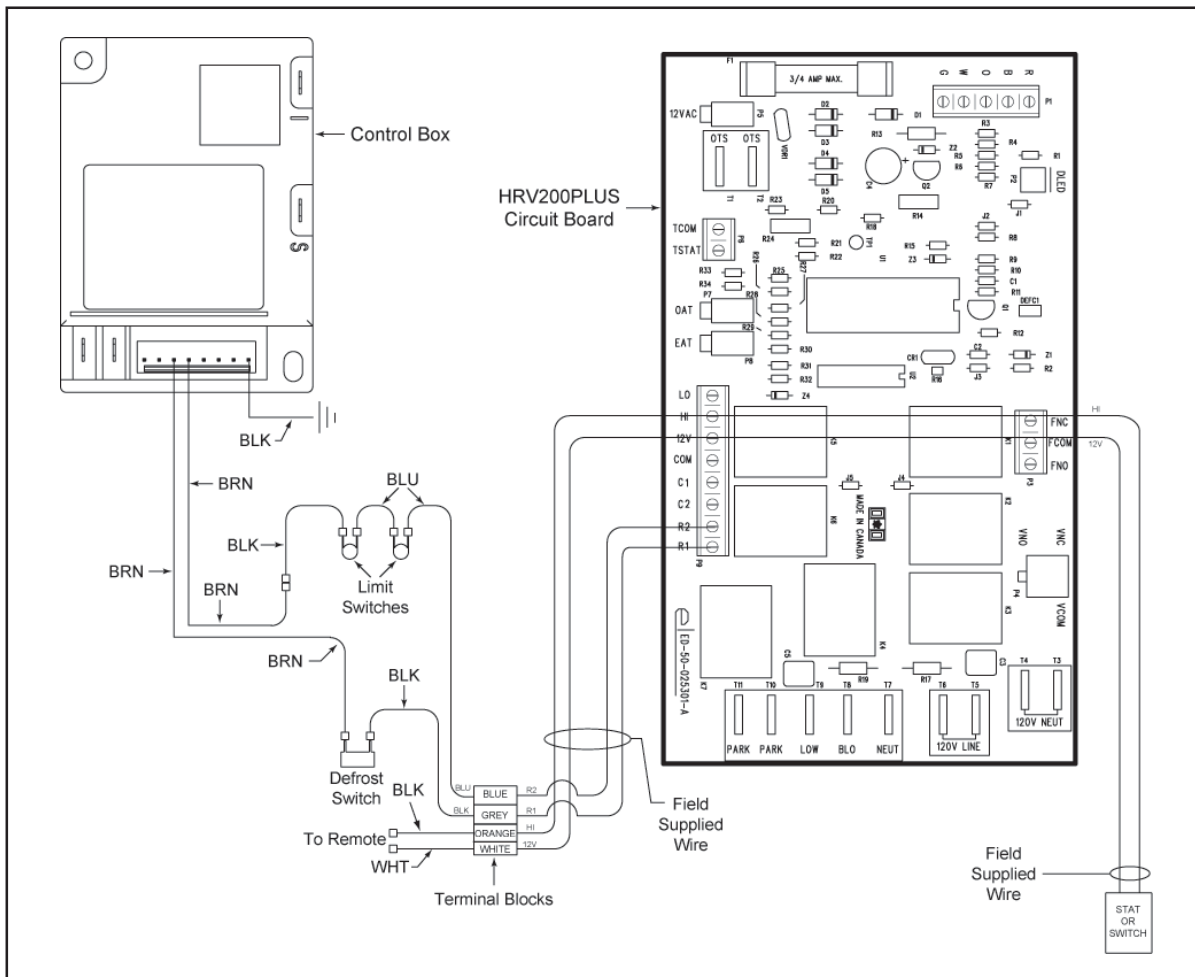


Figure 8 - Novus Plus & HRV200PLUS Boards Wired Together

- 2) Connect a second two-wire or thermostat wire from the HRV to a wall switch or thermostat to operate the system. This is the recommended way to operate the system. If a remote is added, connect it to the black wire (male connector) and to the white wire (female connector) supplied wired to the terminal block. Refer to the wiring diagram. If the system is wired with a remote and a wall switch (or thermostat) according to the wiring diagram, either the remote or wall switch can turn the system on or off. If a remote is used to turn the system on then it must be used to turn the system off. This also applies to the wall switch.
- 3) The appliance will not light under any circumstances with the Defrost Override Switch off. The HRV200PLUS may freeze up during cold weather operation if this switch is left off. This switch should be left on for normal operation. Do not use this switch to operate the fireplace.

d. Optional Accessories Requirements

Wiring for optional accessories should be done now to avoid reconstruction.

6. Install the Junction Box

- a. If the box is being wired from the OUTSIDE of the appliance:
 - 1) Remove the cover plate located on the outer shell (right side).
 - 2) Install the supplied Romex connector in the cover plate.
 - 3) Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
 - 4) Make all necessary wire connections and reattach the cover plate to the outer shell.
- b. If the box is being wired from the INSIDE of the appliance:
 - 1) Remove the screw attaching the junction box to the outer shell, rotate the junction box inward to disengage it from the outer shell.
 - 2) Pull the electrical wires from outside the appliance through this opening into the valve compartment.

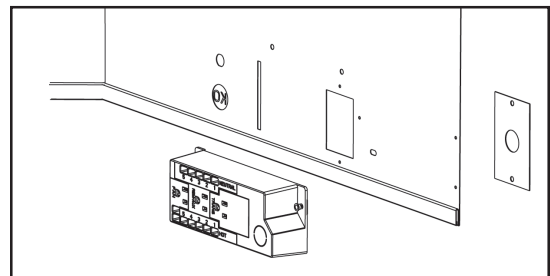


Figure 9 - Junction Box Detail

- 3) Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- 4) Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.

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 in. wide minimum bead, must be used to close off gaps between the appliance and facing to prevent cold air leaks. See Figure 10.

4. Combustible Mantel

A combustible mantel may be installed. Please refer to "Framing".

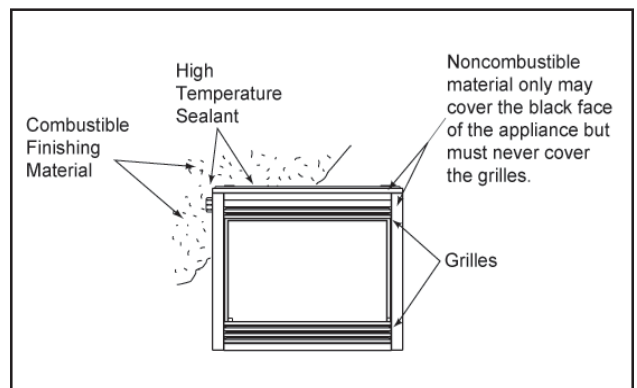


Figure 10 - Finishing Materials

WARNING!
Grilles on this appliance cannot, in any way, be covered as it may create a fire hazard.

H. APPLIANCE PREPARATION

1. Attach the Hood

The hood is to be located above the glass panel. The hood must be attached or a fire hazard may result. Locate the four screws just inside the upper section of the appliance. Position the hood and slide into position. Tighten the four screws. See Figure 11.

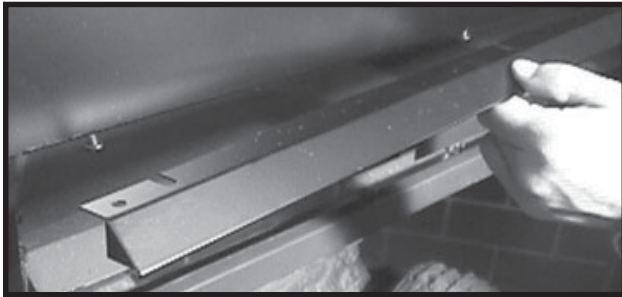


Figure 11 - Attaching the Hood

2. Remove the Upper Grille Panel

Grasp the upper grille panel and remove the rubber pins holding the grille in place. See Figure 12.



Figure 12 - Upper Grille Panel Removal

3. Remove the Control Access Panel

Grasp the control access panel and lift up and towards you to remove. See Figure 13.



Figure 13 - Control Access Panel Removal

4. Remove the Glass and Screen

See "Cleaning the Glass" in "Maintenance Instructions".

5. Prepare the Appliance

a. Log Set

The log set should look similar to that in Figure 14.

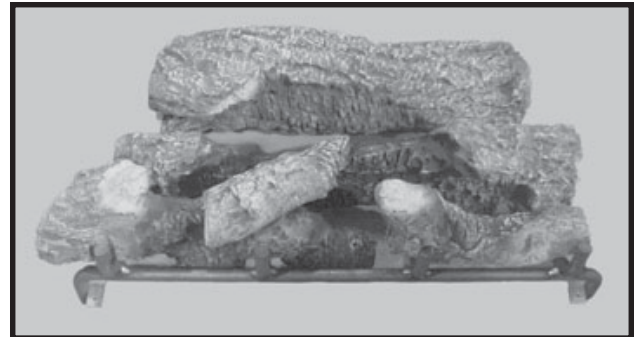


Figure 14 - Log Set

b. Place the Lava Rock and Vermiculite

See Figures 15 and 16 for lava rock and vermiculite placement. It is not necessary to use the entire bag. Save the remainder for future use.



Figure 15 - Placing the Lava Rock



Figure 16 - Placing the Vermiculite

c. Place the Rock Wool

Place a small amount of 1/2 in. diameter pieces (dime-size) of rock wool on the burner pan so that the rock wool touches but does not cover the holes in the burner pan. See Figure 17. This will provide the “glowing embers” look. It is not necessary to use the entire bag. Save the remaining rock wool for future use.



Figure 17 - Placing the Rock Wool

d. Place the Fire Glow (not supplied)

Fire Glow (FIRE98) is a flame colorant material that adds to the realism of the gas appliance flame. After placing the rock wool in the appliance, sprinkle some of the fire glow on top of the rock wool. As with the lava rock, vermiculite and rock wool, it is not necessary to use the entire bag. Save the remaining Fire Glow for future use.

6. Replace the Glass

See “Cleaning the Glass” in “Maintenance Instructions”.

7. Replace the Control Access Panel

Place the control access panel on the pins as shown in Figure 18.

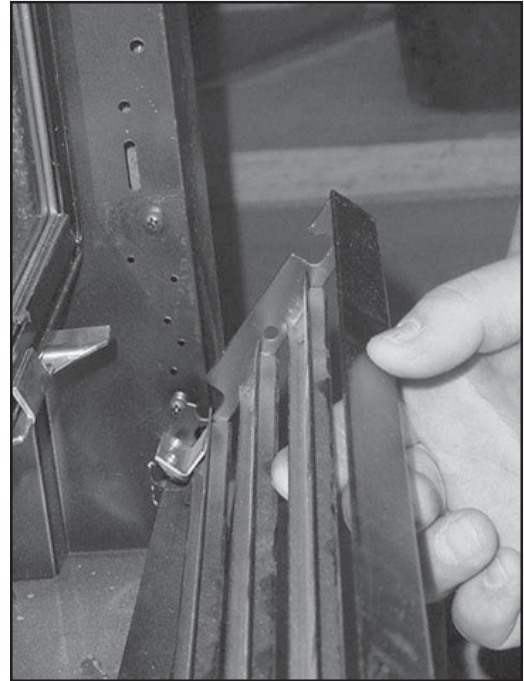


Figure 18 - Replacing the Control Access Panel

I. SEQUENCE OF OPERATION

The Novus 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 Novus 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 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) Turns blowers on to high speed.
 - 2) Positions HRV200PLUS dampers (if installed) for appliance operation.
 - 3) Presents a 15-second delay (pre-purge) before burners are lit.
 - 4) Sends a 12VDC signal to the gas appliance burner (by energizing relay K2 on the circuit board) and closing the contacts between the R1 and R2 terminals to initiate the ignition sequence.
- d. The Novus Plus does the following:
 - 1) The Novus Plus awaits the signal from the HRV200PLUS to light the burners.
 - 2) When the contact between R1 and R2 closes in the HRV200PLUS, the intermittent pilot ignition (IPI) system activates and lights the burners.
 - 3) When the user demand for appliance operation is removed, the HRV200PLUS de-energizes C2 and R1 terminals, terminating burner operation.
 - 4) There is a 20-second delay (post-purge) on the HRV high fan and a 5-minute delay on the HRV low fan.
- e. The HRV200PLUS shuts off.

2. HRV200PLUS Defrost Mode

WARNING!

The appliance may operate to defrost the HRV200PLUS at any time.

- 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) Positions HRV200PLUS dampers (if installed) for appliance operations.
 - 3) Presents a 15-second delay (pre-purge) before burners are lit.
 - 4) Closes the contacts between the R1 and R2 terminals to initiate the ignition sequence (by energizing relay K1 on the circuit board).
- c. **The Novus Plus does the following:**
 - 1) The Novus Plus awaits the signal from the HRV200PLUS to light the burners.
 - 2) When the contact between R1 and R2 closes in the HRV200PLUS, the intermittent pilot ignition (IPI) system activates and lights the burners.
 - 3) When the user demand for appliance operation is removed, the HRV200PLUS de-energizes C2 and R1 terminals, terminating burner operation.
 - 4) There is a 20-second delay (post-purge) on the HRV high fan and a 5-minute delay on the HRV low fan.
- d. **The HRV200PLUS shuts 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.

- | | |
|--|---|
| <p>A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.</p> <p>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.</p> <p>WHAT TO DO IF YOU SMELL GAS</p> <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • If you cannot reach your gas supplier, call the fire department. <p>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.</p> <p>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.</p> |
|--|---|

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.

- | | |
|--|--|
| <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 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

- | | |
|---|--|
| <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 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 this appliance must be replaced prior to operating this appliance. Clothing or other flammable material should not be placed on or near the appliance.

Note: Installation and repair should be done by a qualified service person. The 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 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 glass is sealed and in the proper position.
- * Ensure that the flow of combustion and ventilation air is not obstructed.

WARNING!

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

1. Intermittent Pilot Ignition Operation

a. Lighting the appliance during regular use

Turn the wall switch to "ON".

b. Shut down during regular use

Turn the wall switch to "OFF".

c. Shut down the appliance for a long period of time

- 1) Turn all switches to "OFF".
- 2) Turn the manual shutoff valve to "CLOSED".
- 3) To relight the appliance, see page 14.

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 made by a qualified technician using Hearth & Home Technologies brand specified and approved parts.
- c. If your intermittent pilot appliance must be converted to use propane, you must use a **DCKVP** conversion kit. To convert to use natural gas, use a **DCKVN** 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. 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.	
	5. Control wiring between appliance and HRV200PLUS incorrect	Check wiring for correct connections and continuity.	
	6. Appliance terminal block wired incorrectly	Check appliance wiring per wiring diagram.	
	7. Inadequate draft causing limit switches to shut appliance off		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.	
		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.	

WARNING!

This appliance is equipped with two automatic reset, high temperature limit switches. If the appliance cycles on and off during normal operation, refer to "Possible Cause" item #7 above.

M. MAINTENANCE INSTRUCTIONS

1. Annual Maintenance

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

2. Clean the Burner and Control Compartment

Keep the burner and control compartment clean by brushing and vacuuming at least once a year. Failure to do this may shorten the fan's life. Always turn off the wall switch and the gas valve before cleaning.

3. HRV200PLUS

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

4. Check the Flame Patterns

- a. Check the flame of the burner periodically, making sure the flames are steady, not lifting or floating. The flame color should be blue with yellow tips. The sensor should be covered with flame from the pilot. See Figure 19.
 - **Correct** - Flames should be blue at the base, yellow-orange at the top.
 - **Not Enough Air** - The flames are tall or sooty on the ends. Open the air shutter.
 - **Too Much Air** - The flames are all blue, short and transparent. Close the air shutter.

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.

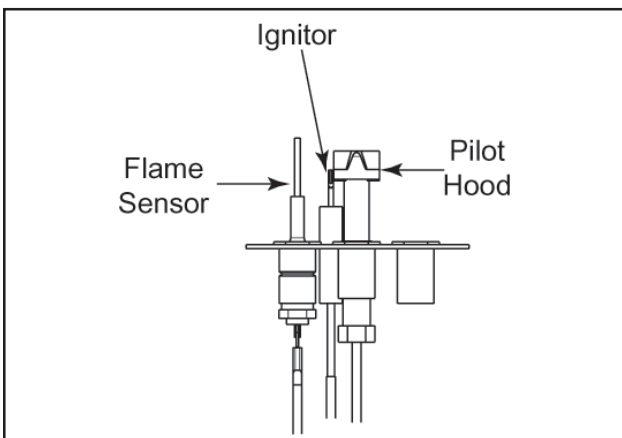


Figure 19 - Intermittent Pilot Ignition Assembly

- b. If the vent configuration is installed incorrectly, the vent may cause the flames inside the appliance to lift or "ghost," which is a dangerous situation. Inspect the flames after installation to ensure proper performance. If the vent configuration is correct, yet the flames are lifting or ghosting, shut off the gas to the appliance and contact the dealer.

- c. To reduce the possibility of soot, we have provided your appliance with an adjustable air shutter. Your air shutter is provided at 1/8 in. open for natural gas appliances, at 3/8 in. open for propane (30 in./33 in.) appliances, and fully open for 36 in. and 42 in. propane appliances. In the event soot is accumulating in your appliance, the air shutter should be opened farther. This can be done by opening the control access panel and locating the two wing studs and two wing nuts attaching the valve assembly to the firebox. Remove the wing nuts and wing studs, slide the valve assembly to the left and lower. Rotate the valve assembly horizontally and remove from underneath the appliance. See Figure 20.

Note: To avoid damage to the pilot assembly, remove the valve assembly pilot side first, as shown in Figure 20.



Figure 20 - Removing the Valve Assembly

- d. Locate the air shutter mounted on the end of the main burner. Loosen the locking screw, open the air shutter, and tighten the locking screw. See Figure 21.
- e. Replace the valve assembly, wing nuts and wing studs as removed, making sure to line the orifice up with the main burner neck.

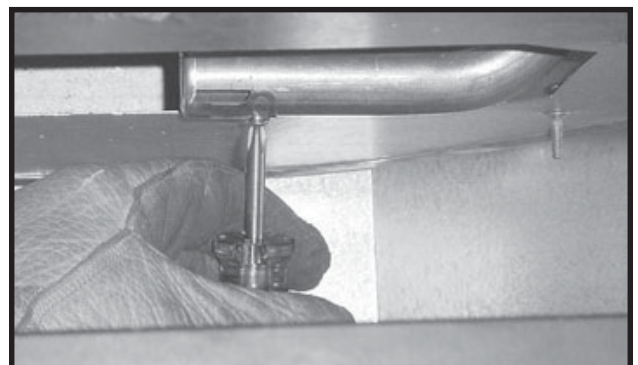


Figure 21 - Air Shutter Adjustment

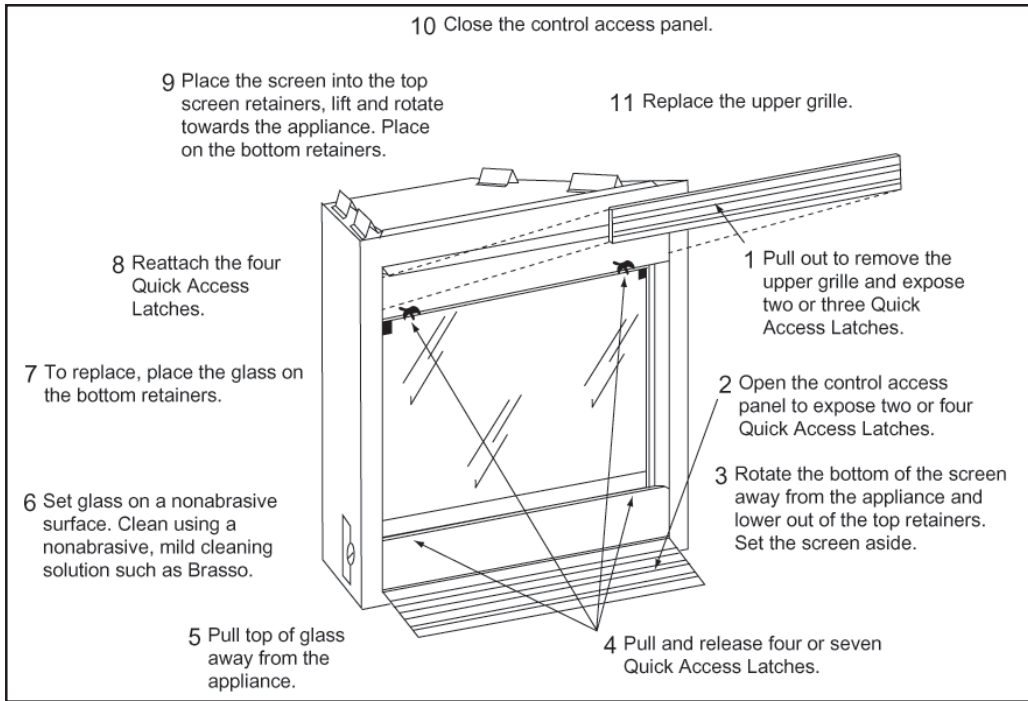
5. Inspect the Venting System

The appliance and venting system should be inspected before use, and at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

6. Cleaning the Glass (See Figure 22.)

In the event of glass breakage, carefully remove the glass frame. This will allow the removal of all glass fragments and sheet metal edge protection strips. Vacuum all remaining glass pieces with a shop vac. **DO NOT VACUUM IF THE PIECES ARE HOT!**

Replace glass with only a Heatilator Glass Panel Assembly ordered through your local distributor. Never use substitute material. Only fully tempered soda lime safety glass or ceramic glass may be used on this appliance.



SAFETY NOTE: Handle glass with care to avoid striking, scratching or slamming shut. **NEVER** clean the glass when it is hot. Keep children and pets a safe distance away.

WARNING!
NEVER operate this appliance without the glass properly secured in place or if the glass is broken or chipped.

Figure 22 - Glass Cleaning

7. Log Removal/Replacement

If removal of the logs becomes necessary, remove two screws from the front of the grate. Lift and pull the log set towards the front of the appliance, up and off the burner. See Figure 23.

To replace the logs, push and lower the log set onto the burner pan, making sure the back of the right most grate bar slides through the grate mounting bracket attached to the hearth pan. Replace the screws in the grate.

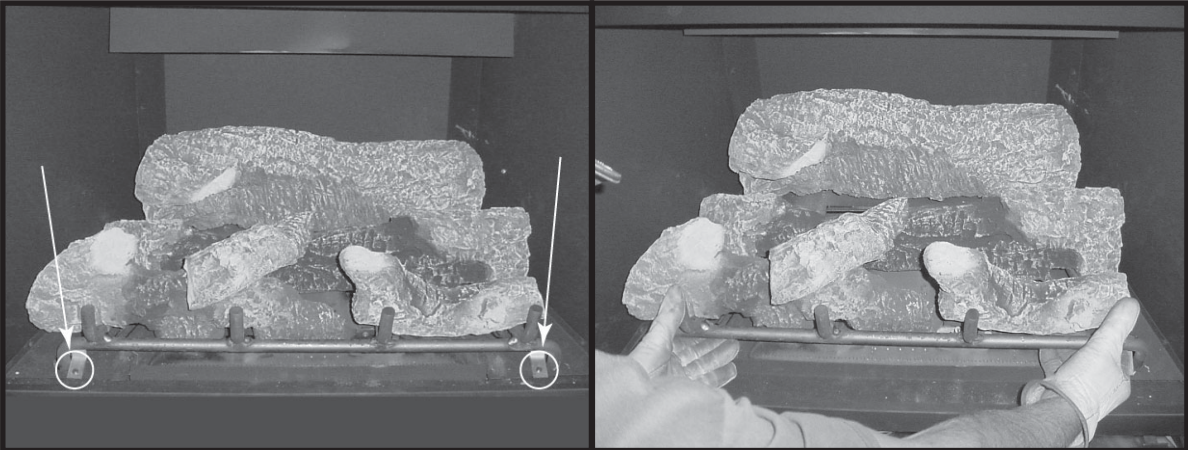
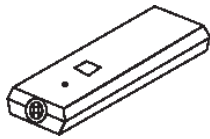


Figure 23 - Log Removal

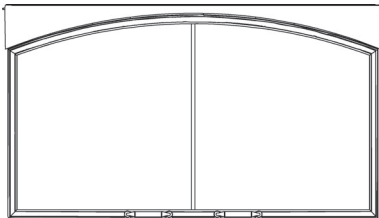
N. OPTIONAL COMPONENTS



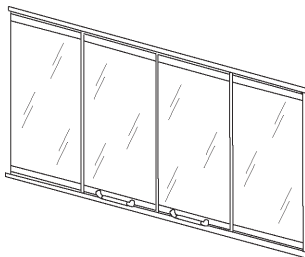
- RC-SMART-HTL**
Remote Control
- RC-BATT-HTL**
Battery-operated Remote Control
- RCT-MLT-HTL**
Multi-Function
Remote Control
- SMART-STAT-HTL**
Remote Control with
Thermostat Control
- SMART-BATT-HTL**
Battery-operated Remote Control
with Thermostat Control

COLOR KEY

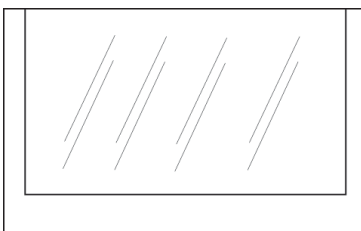
Suffix	Finish
none	Black
B	Brass
S	Stainless Steel
AC	Antique Copper
BN	Brushed Nickel
CP	Copper
PT	Pewter



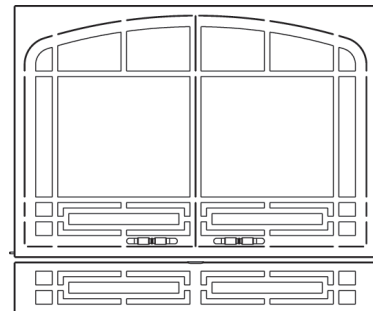
DFA30/B/S, DFA33/B/S, DFA36/B/S, DFA42B/S
Arched Glass Door



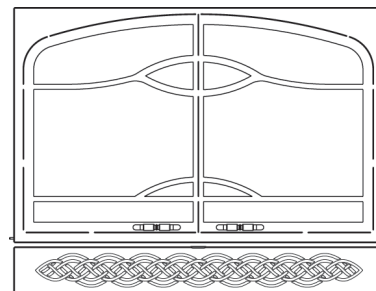
DFN0B/S, DFN3B/S, DFN6B/S, DFC2B/S
Fixed Glass Door



GP30 - Ceramic Glass - 30 in.
GP33 - Ceramic Glass - 33 in.
GP36 - Ceramic Glass - 36 in.

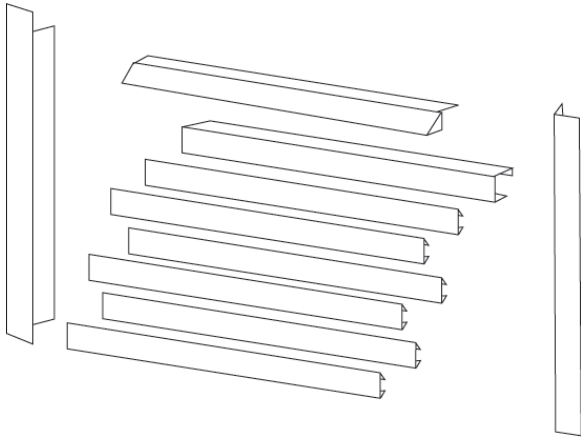


FFAC30/30AC/30BN/30PT
FFAC33/33AC/33BN/33PT
FFAC36/36AC/36BN/36PT
FFAC42/42AC/42BN/42PT
Front Face

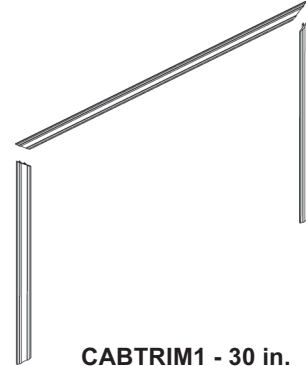


FFM30/30AC/30BN/30PT
FFM33/33AC/33BN/33PT
FFM36/36AC/36BN/36PT
FFM42/42AC/42BN/42PT
Front Face

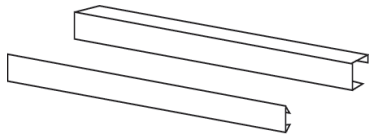
OPTIONAL COMPONENTS (con't)



TKN02S - 30 in.
TKN32S - 33 in.
TKN62B - 36 in.
TKN22B/S - 42 in.
Full-Face Trim Kits



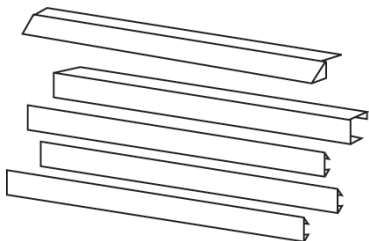
CABTRIM1 - 30 in.
CABTRIM2 - 33 in.
CABTRIM3 - 36 in.
Cabinet Trim



TKN05B/S/PT/BN - 30 in.
TKN35B/S/PT/BN - 33 in.
TKN65B/S/PT/BN - 36 in.
TKN25B/S/PT/BN - 42 in.
Trim Kits



QKE1B - 30 in.
QKE2B - 33 in.
QKE3B - 36 in.
Quick Tile Brass Surround



TKN03B/S/PT/BN - 30 in.
TKN33B/S/PT/BN - 33 in.
TKN63B/S/PT/BN - 36 in.
TKN23B/S/PT/BN - 42 in.
Trim Kits

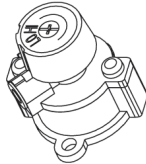
COLOR KEY

Suffix	Finish
none	Black
B	Brass
S	Stainless Steel
AC	Antique Copper
BN	Brushed Nickel
CP	Copper
PT	Pewter

OPTIONAL COMPONENTS (con't)

Dexen Intermittent Pilot Conversion Kits

Dexen Valve
Regulator
Replacement Kit



Burner
Orifices



Pilot Orifice

**DCKVN Propane to
Natural Gas
Conversion Kit
(Intermittent Pilot)**

**DCKVP Natural Gas
to Propane
Conversion Kit
(Intermittent Pilot)**

Includes:

**Dexen Valve
Burner Orifices
Plug Orifice (no hole)
Pilot Orifice**

→ O. REPLACEMENT PARTS

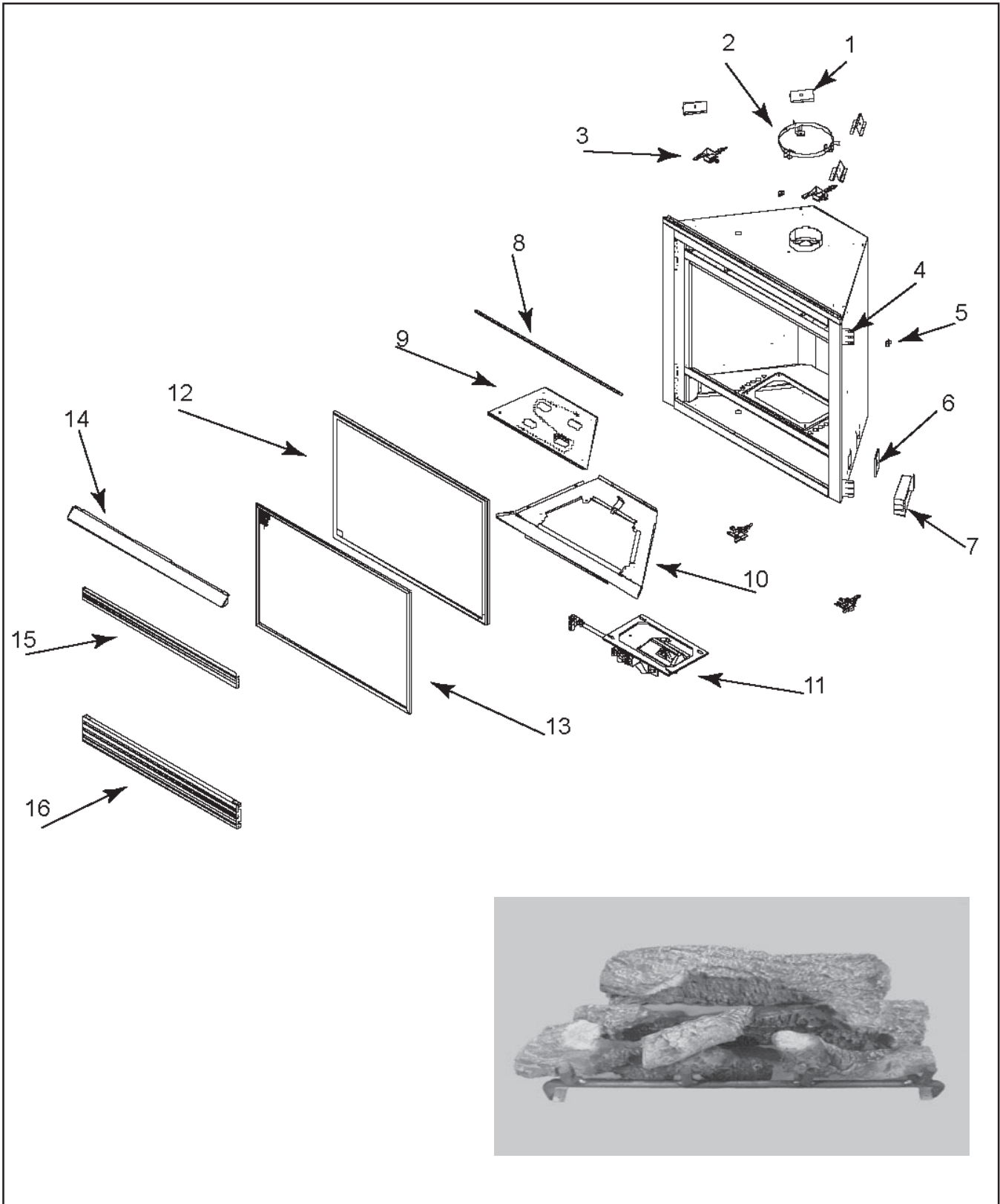
heatilator[®]
The first name in fireplaces

Service Parts

Exploded Parts Diagram

NOVUS PLUS

Beginning Manufacturing Date: 1/19/04





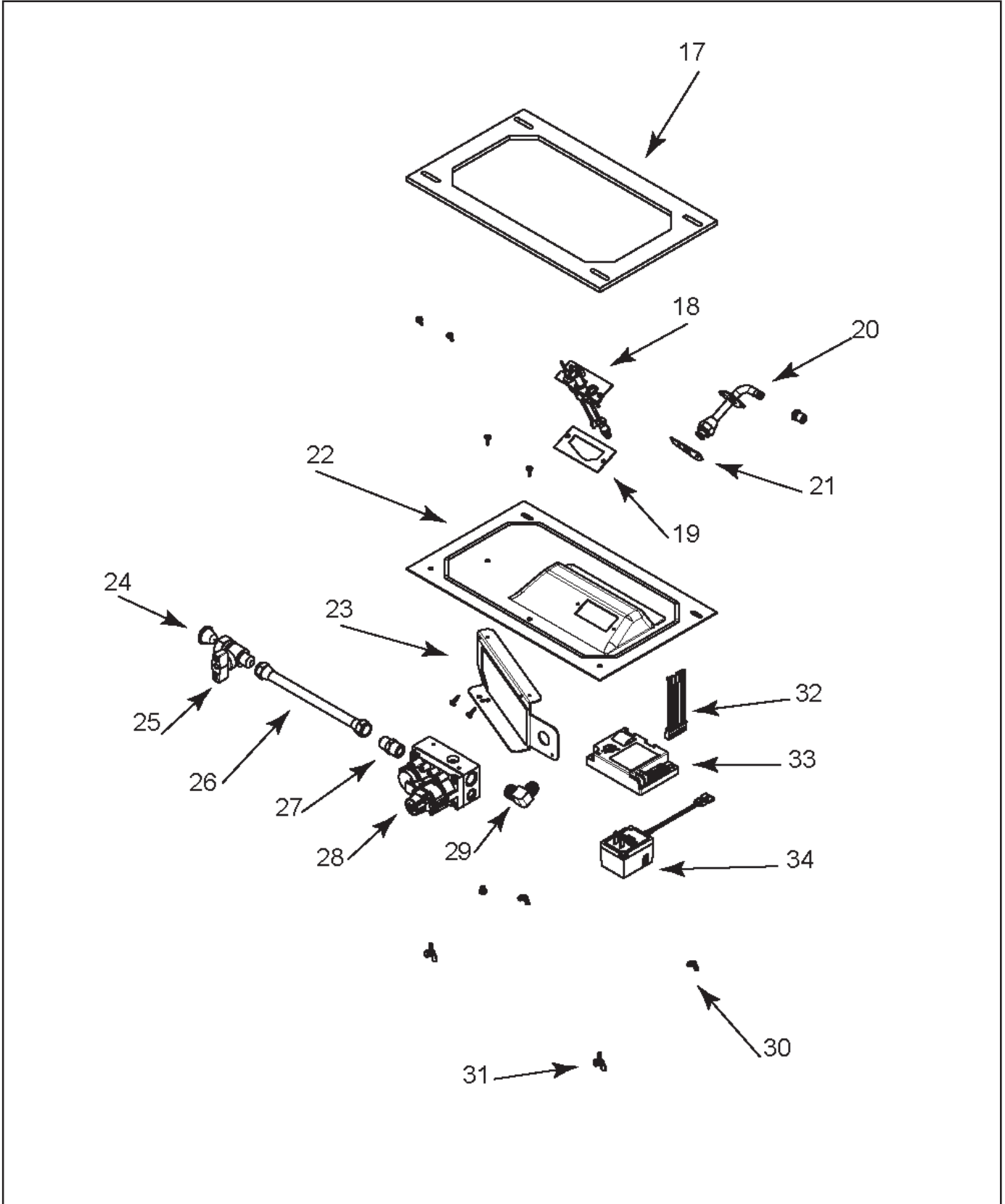
Service Parts

NOVUS PLUS

Service Parts List

Beginning Manufacturing Date: 1/19/04

#	Description of Part	NB4236IPLUS	NB4236ILPLUS	Qty.	R
1	Top Standoff	31779	31779	4	N
2	Collar Shield Assy	4031-040	4031-040	1	N
3	Glass Clip Support Assy	33858	33858	4	Y
4	Nailing Flange	31190	31190	4	N
5	Grommet	25741	25741	1	Y
6	Cover Plate	4031-222	4031-222	1	Y
7	Junction Box (plastic)	4021-013	4021-013	1	Y
8	36" Glass Shield	4031-219	4031-219	1	Y
9	Burner Assy	4031-062	4031-062	1	Y
10	Hearth Pan	4031-497	4031-497	1	Y
11	Valve Assy	4031-025	4031-026	1	Y
12	Glass Frame Assembly	4000-052	4000-052	1	Y
13	Screen Assembly	26804	26804	1	Y
14	36" Hood	4031-211	4031-211	1	Y
15	Upper Grille Assembly	4031-082	4031-082	1	Y
16	Lower Grille Assembly	4031-078	4031-078	1	Y
	36" Drywall Lip	4031-207	4031-207	1	N
	Log / Grate Assembly	4031-090	4031-090	1	Y
	Grate Assembly	4031-092	4031-092	1	Y
	36" / 42" Front Left Log	4031-273	4031-273	1	Y
	36" / 42" Front Right Log	4031-274	4031-274	1	Y
	36" / 42" Middle Log	4031-280	4031-280	1	Y
	36" / 42" Top Log	4031-276	4031-276	1	Y
	36" Back Log	4031-277	4031-277	1	Y
	Screw Sleeve	4021-057	4021-057	1	Y
	Lava Rock (1lb)	23509	23509	1	Y
	Mineral Wool	14333B	14333B	1	Y
	Wool, Rock, Vermiculite	30831	30831	1	Y
For replacement parts for ventilator, refer to HRV200PLUS parts listing.					





Service Parts

NOVUS PLUS

Service Parts List

Beginning Manufacturing Date: 1/19/04

#	Description of Part	NB4236IPLUS	NB4236ILPLUS	Qty.	R
17	Valve Plate Gasket	4031-149	4031-149	1	Y
18	Pilot Assembly	4021-025	4021-026	1	Y
19	Pilot Gasket	4021-042	4021-042	1	N
20	Bulkhead	4031-192	4031-192	1	Y
21	Bulkhead Gasket	4021-043	4021-043	1	N
22	Valve Plate	4031-146	4031-146	1	Y
23	Valve Bracket "Dexen"	4031-153	4031-153	1	Y
24	Dust Cap	23491	23491	1	Y
25	On / Off Valve	15697	15697	1	Y
26	16" Flex Gas Line	17245B	17245B	1	Y
27	Brass Fitting 3/8 NPT to 3/8 Flare	17069	17069	1	Y
28	Variable Dexen Valve	750-500	750-501	1	Y
29	Brass Connector 90 Flex	4021-045	4021-045	1	Y
30	Wing Nut	25329	25329	2	Y
31	Wing Screw	4021-034	4021-034	2	N
32	Wire Assembly	593-590A	593-590A	1	Y
33	Control Module	593-592	593-592	1	Y
34	3V Adaptor Plug	593-593A	593-593A	1	Y
	Orifice	4021-061	4021-062	1	Y

HOMEOWNER'S NOTES PAGE

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Novus Plus Gas Appliance
Limited Warranty

Hearth & Home Technologies Inc. ("HHT") extends the following warranty for Heatilator® Novus 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.
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.