

C UL US LISTED

Hearth & Home Technologies-Mt. Pleasant 1915 W. Saunders Street Mt. Pleasant, Iowa 52641 Division. HON INDUSTRIES

INSTALLATION & OPERATING
INSTRUCTIONS

www.heatilator.com

NOVUS SERIES B-VENT GAS APPLIANCE GNBC30, 33, & 36



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

CAUTION:

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

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.



TABLE OF CONTENTS

	Design and Installation Considerations for B-Vents	3
١.	Applicance Specifications	4
3.	Location and Clearances	5
).	Framing	6
).	Setting the Appliance	7
Ξ.	Venting	7
-	Utilities	11
Э.	Finishing	. 14
┨.	Appliance Preparation	. 14
	Determining the Ignition Type	15
١.	Lighting Instructions	16
ί.	Seasonal Checklist	18
	Start-up Issues	19
Λ.	Maintenance Instructions	. 20
١.	Optional Components	. 22
).	Replacement Parts	25
	Index	27
	Warranty	28

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.

SAFETY PRECAUTIONS

- Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause an appliance malfunction resulting in serious injury and/or property damage.
- Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
- 3. Installation and repair should be done by a qualified service person. This appliance 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.
- 4. This is a vented decorative gas appliance. Do not burn wood or other material in this appliance.
- 5. NEVER leave children unattended when there is a fire burning in the appliance.
- 6. This appliance may only use the approved venting systems shown in these installation instructions. Venting <u>must not be connected</u> to chimney flue servicing a solid fuel burning appliance or a gas fuel burning appliance.

- 7. NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this appliance. Keep any flammable liquids a safe distance from the appliance.
- While servicing this appliance, always shut off all electricity and gas to the appliance. This will prevent possible electrical shock or burns. Also, make sure the appliance is completely cooled before servicing.
- 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.
- Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.



name

DESIGN AND INSTALLATION CONSIDERATIONS FOR B-VENTS

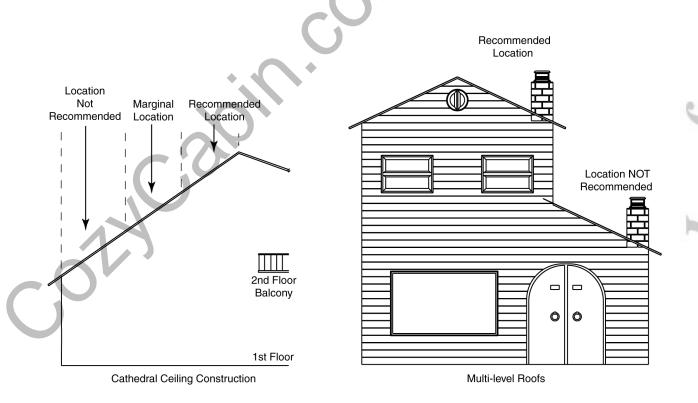
When selecting a location for your B-Vent appliance, it is important to evaluate a number of considerations. Modern construction techniques can create conditions that may not allow your vent to draft properly. This may result in spillage from your B-Vent appliance, as well as cause other combustion appliances to operate incorrectly.

Tightly sealed construction is important for energy efficiency. Unfortunately, a great deal of effort has been directed to tightening up sidewall construction, while considerably less attention has been paid to tightening upper portions of the warm air envelope (insulated ceilings). This has increased the "Stack Effect", a condition that increases the negative pressure generated by the structure. This negative pressure will directly affect the drafting performance of a B-Vent appliance vent. To minimize the negative pressure generated by stack effect, make certain that all ductwork installed in the attic spaces is sealed airtight. Minimize the number of recessed light fixtures installed in the insulated ceiling and use sealed recessed light fixtures. Finally, make certain the whole house fans and attic access panels are tightly sealed. These are important design considerations that must be observed during the design and construction stage of the home.

If you desire to put an appliance in your basement, we recommend that you consider a direct vent gas appliance. Basements always have a significant negative air pressure that causes the B-Vent system to be more susceptible to spillage and cold flue backdrafting. Since direct vent gas appliances are sealed, they are not affected by the negative pressure that exists in basements.

Finally, a B-Vent appliance performs best when the vent (roof termination) is located on the upper half of the roof, especially when cathedral ceilings are present. Vents that are located on the lower half of the roof realize what is known as "lazy flue" and will not draft as well as a vent that is located in the upper portion of the roof. The reason for this is that the stack effect generated by the overall height of the living spaces inside the house will exceed the draft generated by the vent system. If you desire to place an appliance in a location where the termination cap would be located on the lower half of a roof; such as on an outside wall at the base of a cathedral ceiling, we recommend that you consider using a direct vent gas appliance. This will ensure an appliance that operates correctly.

These properties do not affect just your B-Vent appliance. They can cause any woodburning fireplace as well as any conventionally vented (B-Vent) gas appliance to operate improperly. Careful planning at this stage of your project will ensure satisfaction with the operation of your appliance once it is completed.





A. APPLICANCE SPECIFICATIONS

1. U.S. AND CANADA CERTIFICATION

The Novus B-Vent Gas Appliance has been tested in accordance with the ANSI standard Z21.88-2000. In Canada, the current CSA 2.33-2000, IR41, P4, and IR55 and have 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.A., and the CAN/CGA B149, Installation Codes in Canada.

For assistance during installation contact your local dealer or contact Heatilator Technical Services Department, Hearth & Home Technologies, 1915 W. Saunders Street, Mt. Pleasant, lowa 52641, 1-800-843-2848

HEATILATOR® and NOVUS® are registered trademarks of Hearth & Home Technologies

3. 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.

Tools and building supplies normally required for installation:

Caulking material

Tools: Building Supplies:
Saw Wall-finishing materials

Pliers Framing material

Hammer Surround

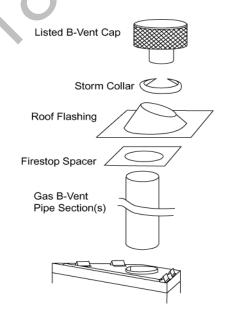
Phillips screwdriver

Tape measure Plumb line Level

Electric drill/bits

Square Gloves

TYPICAL VERTICAL INSTALLATION



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.

We strongly recommend that you DO NOT install B-Vent Gas Appliances in strong negative air locations, such as a basement or a public facility. Living rooms with cathedral ceilings could be susceptible to a negative air situation, but such installations can be overcome through raising the termination, depending on specific installations. This appliance uses room air for normal operation and could have problems establishing a positive draft in a negative air location. In lieu, we recommend a Direct Vent Gas Appliance.

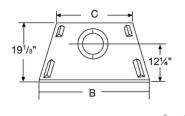


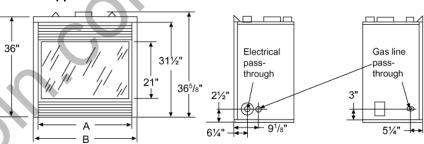
NOVUS NOMENCLATURE

Catalog Number	Description
GNBC36LE	Appliance Order Code Number
GN	Gas NOVUS
В	B-Vent
С	Circulating
36	36 - 36" Appliance 33 - 33" Appliance 30 - 30" Appliance
LE	No suffix - Standing Pilot, Natural Gas L - Standing Pilot, Propane Gas E - Intermittent Pilot, Natural Gas LE - Intermittent Pilot, Propane Gas
GNBC36LEB	Appliance Order Code Number with Upgrade Code Number
В	Black Firebox
F	Fan Kit Upgrade
GNBC36LEB	EXAMPLE - Gas NOVUS, B-Vent, Heat Circulating, 36", Propane Gas, Intermittent Pilot Appliance with Black Firebox
Installation Component	Description
AK14	Outside air kit (highly recommended - not supplied)

B. LOCATION AND CLEARANCES

Appliance Dimensions





MODEL	Α	В	C
30" Series	30"	34 ⁷ / ₈ "	85/8"
33" Series	33"	37 ⁷ /8"	11 ⁵ /8"
36" Series	36"	40 ⁷ /8"	14 ⁵ /8"

WARNING!

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

CAUTION:

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



1. APPLIANCE LOCATIONS AND SPACE REQUIREMENTS

Figure 1 illustrates a variety of ways the appliance may be located in a room. The NOVUS Series may be installed directly on the floor or raised on a hearth. These appliances are certified for installation in a bedroom, bed/sitting rooms or bathrooms in the U.S. and Canada, provided that the bedroom or bathroom has a volume of at least 1350 cubic feet.

Common venting of this gas appliance with other gas appliances is not allowed in multifamily dwellings.

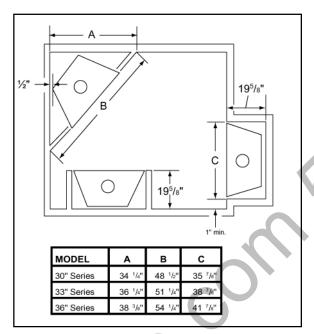


Figure 1 - Appliance Locations

2. CLEARANCES

Figure 2 shows all clearances that must be maintained around the appliance.

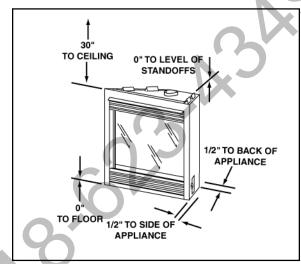


Figure 2
Appliance Clearances to Combustible Materials

C. FRAMING

Figure 3 shows a typical framing of this appliance using combustible materials. All required clearances to combustibles must be adhered to. Mantel height is measured from the base of the appliance.

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

CAUTION:

Wear gloves and safety glasses for protection.

WARNING!

To prevent contact with sagging or loose insulation, the appliance must <u>not</u> be installed against vapor barriers or exposed insulation.

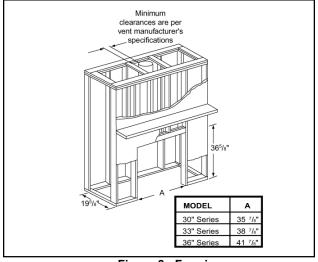


Figure 3 - Framing



st name

CAUTION:

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

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 materials 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!

To prevent contact with sagging or loose insulation, the appliance must <u>not</u> be installed against vapor barriers or exposed insulation. Localized overheating could occur and a fire could result.

E. VENTING

1. VENT HEIGHT

This appliance requires a 5" B-vent for operation. **Never downsize pipe.** It must be terminated above the roof line. Follow all B-vent requirements and installation instructions, including minimum clearances.

The minimum height of vent installation must be nine feet from the top or twelve feet from the base of the appliance. Horizontal run must never exceed 50% of the height of the vent system as shown in Figure 4.

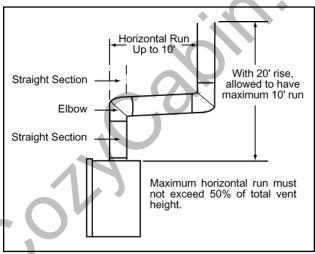


Figure 4
Venting Off the Top of Appliance

Note: Vertical rise off the top of the appliance before elbowing creates a less restrictive venting environment.

2. ATTACHING VENTING

- Assembling Vent Sections. Attach straight vent section to the top of appliance. Use only B-vent sections.
- b. Attaching the Vent to the Collar Shield. Three tabs extend from the collar shield to the B-vent section. Screw the tabs to the B-vent section using the self-tapping 1/4" screws supplied with the appliance.
- **c. Using Elbows.** Elbows exceeding 45° from the vertical shall be considered horizontal and therefore adapt horizontal run limitations. See Figure 5.

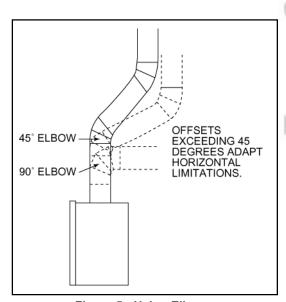


Figure 5 - Using Elbows



WARNING - RISK OF FIRE!

Always maintain minimum clearances or greater around the vent system. Do not pack air spaces with insulation or other material. The flow of combustion and ventilation air must not be obstructed.

WARNING!

The horizontal run of vent must have a 1/4" rise for every 1 ft. of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may present a fire hazard.

3. FIRESTOP SPACER/VENT INSTALLATION

Frame an opening and install a firestop spacer whenever the vent penetrates a ceiling floor area, as shown in Figure 6. Frame the opening with the same sized lumber as used in the ceiling/floor joist. Unless the flue is offset, the hole should be directly above the appliance. DO NOT pack insulation around the vent. Assemble vent sections with three screws per joint.

WARNING!

When vent sections exceeding three feet in length are installed between an offset/return, structural support must be provided to reduce off-center loading and prevent vent sections from separating at the vent joints. Follow all B-vent manufacturer guidelines.

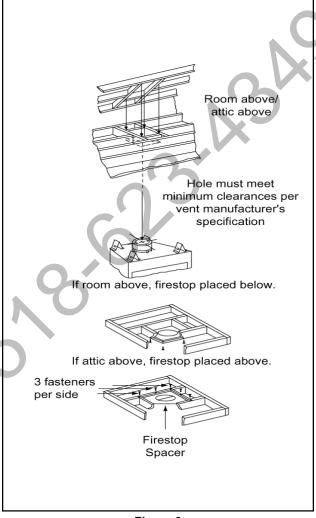


Figure 6
Installing the Firestop Spacer

4. CHASE/TERMINATION INSTALLATION

Figure 7 and Table 1 specify minimum vent heights for various pitched roofs. Vent sections may have to be cut to a certain length.

These vent heights are necessary for safety and do not ensure draft-free operation. Trees, buildings, adjoining roof lines, adverse conditions, etc., may create a need for a taller vent should down drafting occur.

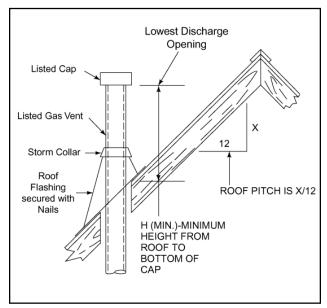


Figure 7
Vent Height for Vertical Termination

TABLE 1

Roof Pitch	<u>H (Min.) Ft.</u>
Flat to 6/12	1.0
6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

Vent Height

5. CHECK VENTING SYSTEM

Check the venting system to assure proper operation. This can be done with a match while the appliance is operating.

Hold a lighted match at the bottom edge of the draft hood opening. If the flames and smoke remain upright, ventilation is acceptable. If the flames and smoke are drawn into the draft hood, this means ventilation is good. If the flames and smoke are forced away from the draft hood, this may indicate a ventilation blockage or down draft resulting in gas spillage into the home. If this occurs, turn off the appliance and do not burn it until it has been inspected by a qualified service person. See Figure 8.

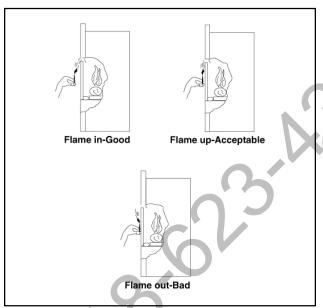


Figure 8
Testing Ventilation

6. INSTALLING AN OUTSIDE AIR KIT (STRONGLY RECOMMENDED)

An outside air kit should be purchased as a feature with this appliance. An outside air kit helps to decrease the amount of room air taken by utilizing outside air for combustion. Figure 9 illustrates two of many possible methods that can be used to supply outside air to the appliance.

A maximum of 40' of air kit ducting is allowed. The air kit must terminate at least one foot below the venting termination and must terminate to the outside.

Note: The outside air kit can terminate at any level with the exception that it must terminate at least one foot below the vent termination cap. The outside air kit inlet thimble should be positioned at least four feet above the ground level in a manner that will not allow snow, leaves, etc. to block the inlet.

WARNING!

Exhaust products of gasoline engines are hazardous. The outside air must not be taken from a garage space, attic spaces, basements or above the roofing where other heating appliances, fans or chimneys exhaust or utilize air.

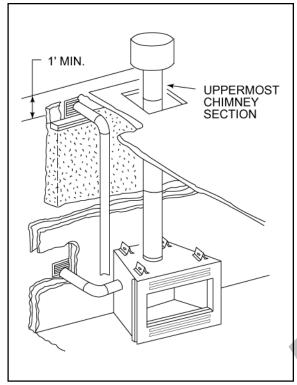


Figure 10 - Air Kit Installation

Figure 9 - Outside Air Locations

- a. The air kit can be installed only on the left side of the appliance. See Figures 10 and 11 for correct orientation of the door assembly and handle. The hinge will be toward the <u>back</u> of the appliance.
- **b.** Remove the cover plate or knockout from the side of the appliance and discard.
- c. Partly open the air kit door. The hinge on the door assembly should be located toward the back of the appliance. If the hinge is not positioned in this manner, the door will not function correctly.
- **d.** Attach the door assembly to the appliance using the screws provided.
- e. Bend down the left tab on the lower left glass retainer. Insert the narrow end of the handle through the tab and into the upper slot on the air kit door.
- f. Check operation by pulling the handle out to open, and pushing it in to close.
- g. Mark and cut a hole in the building side for air entry. This hole should allow some framing (two sides) so the inlet tube assembly may be fastened properly.
- h. Assemble the flexible duct (not supplied) between the door assembly and the inlet tube assembly. Secure it in position with the supplied wire ties.

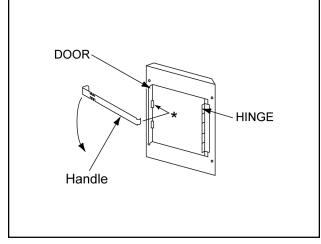


Figure 11 - Door Assembly & Handle



F. UTILITIES

1. HIGH ALTITUDE INSTALLATION

For U.S. installation, appliances are tested and approved for elevations from 0-2000 feet. When installing this appliance at an elevation above 2000 feet, National Fuel Gas Codes require a decrease of the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4% for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification. Orifices are available from your distributor.

For Canada, appliances are certified for elevations from 0-4500 feet. When installing this appliance at an elevation between 0-4500 feet in Canada, the input rating does not need to be reduced. When installing this appliance at an elevation above 4500 feet in Canada, check with local authorities.

2. GAS LINE CONNECTION

The appliance is provided with a stainless steel flexible connector and manual shutoff valve. See Figure 12. 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 13. All connections must be tightened and checked for leaks with a soap and water solution or leak detector. Bleed the gas line to extract any air that may have been trapped inside the pipe.

Note: The 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

On the standing pilot gas control valve and the electronic valve, a pressure tap is included on the front face of the valve.

Table 2 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.

4. FUEL

Do not burn wood or other material in this appliance.

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

In the event your standing pilot appliance must be converted to use propane gas, you must use a CKVP conversion kit. To convert to use natural gas, you must use a CKVN conversion kit.

If your intermittent pilot appliance must be converted to use natural gas, you must use a DCKN conversion kit. To convert to propane, use a DCKP conversion Kit.



Figure 12 - Flexible Connector and Manual Shutoff Valve

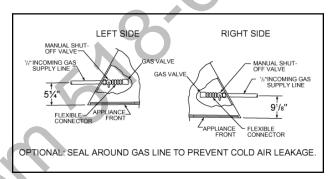


Figure 13 - Gas Line

WARNING!

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

TABLE 2

NOVUS				
Inlet gas Supply pr	essure - N.G.	4.5 (Min.) - 7.0 (Max.)*		
Optimum Manifold	pressure - N.G.	3.5*		
Inlet Gas Supply p	essure - L.P.	11.0 (Min.) - 14.0 (Max.)*		
Optimum Manifold	pressure - L.P.	10.0*		
Input Rate - N.G.	GNBC30	25,000 BTU/hr.		
	GNBC33	25,000 BTU/hr.		
	GNBC36	27,000 BTU/hr.		
Input Rate - L.P.	GNBC33/36	25,000 BTU/hr.		
	GNBC30	24,000 BTU/hr.		
Orifice Size - N.G.	GNBC36	.101 in./2.56 mm		
	GNBC30/33	.096 in./2.43 mm		
Orifice Size - L.P.	GNBC30/33/36	.059 in./1.50 mm		

^{*} inches/water column



ILLONIO

4. WIRING

a. Wall Switch

The installer shall supply a UL-listed or in Canada, a CSA-listed wall switch. This appliance was tested with eighteen feet of <u>UL listed 18 ga. Type CL2 105°C</u>, two conductor "thermostat wire." If other wiring materials are used they shall comply with local codes. In the absence of local codes, they shall comply with the **National Electrical Code ANSI/NFPA 70-latest edition** or **Canadian Electrical Code CSA C22.1.**

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 C2.1.

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

CAUTION:

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

b. Standing Pilot Ignition

This standing pilot appliance does not require a 110V AC supply to operate. It is suggested that a switched 110V junction box be installed to power the optional remote control and/or fan.

Only heater listed appliances may be connected to a thermostat. Use a thermostat that is compatible with a millivolt gas valve. See Figure 14.

WARNING!

This appliance does NOT require a 110VAC supply for operations. Connecting the appliance/wall switch to a 110V AC supply will cause the appliance to malfunction and destroy the valve and thermopile.

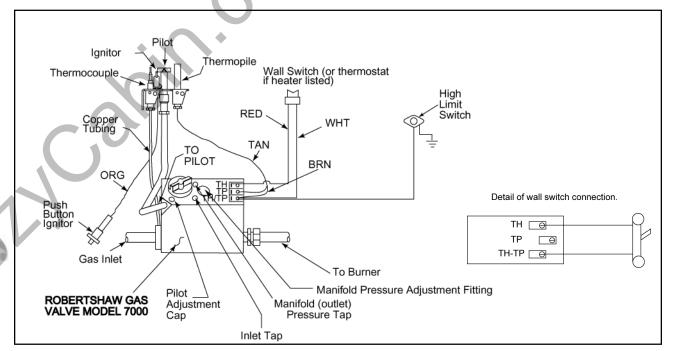


Figure 14 - Standing Pilot Ignition Wiring Diagram



c. Intermittent Pilot Ignition

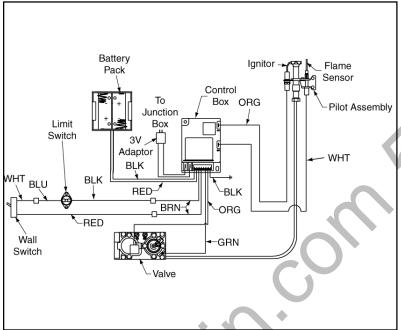
This appliance is equipped with an intermittent pilot control valve which operates on a 3 volt system. See wiring diagram, Figure 15.

The appliance is supplied with a battery pack and 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 reconstruction. The battery pack requires two D cell batteries (not included). Batteries cannot be placed in the battery pack while using the 3 volt AC transformer. Conversely, the transformer must be unplugged if the battery pack is used.

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 C221.1.

CAUTION:

Battery polarity must be correct or control module damage will occur.





d. Junction Box Wiring

We recommend you operate the two outlets on separate circuits, one side hot full time, one side switched. This allows independent operation of the appliance and fan. Independent operation is obtained by using minimum 14-3 with ground Romex and separating the two outlets by breking out the tab as shown in Figure 16.

6. JUNCTION BOX INSTALLATION INSTRUCTIONS

- Remove the junction box assembly from the valve compartment.
- b. If the box is being wired from the OUTSIDE of the appliance:
 - Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
 - Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.

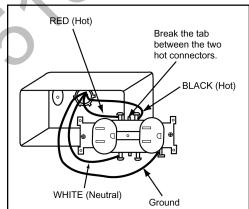


Figure 16 - Junction Box Detail

- 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 appliance:
 - Pull the electrical wires from outside the appliance through this opening into the valve compartment.
 - Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
 - 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 appliance installation, assemble the receptacle and cover to the box and install on the inside of the appliance.



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" inch wide minimum, must be used to close off gaps between the appliance and facing to prevent cold air leaks. See Figure 17.

Combustible Temperature Sealant Lip Noncombustible material only may cover the black face of the displance but must be ver closer. The grites.

Figure 17 - Finishing Materials

WARNING!

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

Note: If an optional fan or hand held remote control are to be used, wiring must be done prior to finishing to avoid reconstruction.

Note: The remote wall switch must be wired prior to applying the finishing material in order to avoid reconstruction.

H. APPLIANCE PREPARATION

1. ATTACHING 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 18.

2. UPPER GRILLE PANEL REMOVAL

Grasp the upper grille panel and remove the rubber pins holding the grille. See Figure 19.

3. CONTROL ACCESS PANEL REMOVAL

Release the spring pin on the right hand side of the control access panel. See Figure 20.

Figure 19 - Upper Grille Panel Removal

4. GLASS AND SCREEN REMOVAL

See page 21 of this manual.



Figure 18 - Hood Placement



Figure 20 - Control Access Panel Removal



5. APPLIANCE PREPARATION

a. Log Set

Remove the two shipping bands from the log set (Figure 21a) and reassemble. The log set should look similar to that in Figure 21b.



Figure 21a - Log Set for NOVUS



Figure 21b - Log Set for NOVUS

Placing the Lava Rock and Vermiculite
 See Figure 22 for lava rock and vermiculite placement.

WARNING - RISK OF CARBON MONOXIDE!

Do not hit or strike glass. Do not operate this appliance with the glass removed, broken or not sealed.

c. Placing the Rock Wool

Place a small amount of 1/2" diameter pieces (dimesize) of rock wool on the burner pan so that the rock wool touches but does not cover the holes in the burner pan. This will provide the "glowing embers" look. See Figure 22.

6. GLASS AND SCREEN REPLACEMENT

See page 21 of this instruction manual.

7. CONTROL ACCESS PANEL REPLACEMENT

Place the control access panel as shown in Figure 23.

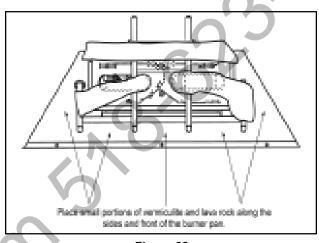


Figure 22
Placing the Vermiculite, Lava Rock and Rock Wool
(logs removed for clarity)



Figure 23 - Replacing the Control Access Panel

1. DETERMINING THE IGNITION TYPE

To determine whether your appliance is an intermittent pilot ignition or a standing pilot ignition, open the control access panel (Figure 23) to examine the wiring system. If your system has a red ignitor button, as shown in Figure 24, you own a standing pilot ignition appliance. If no red ignitor button is present, you own an intermittent pilot ignition appliance.

You may also check the rating label located on the inside of the control access panel to determine ignition type.



Figure 24 - Standing Pilot Ignition



J. LIGHTING INSTRUCTIONS

1. INTERMITTENT PILOT IGNITION

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING!

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

- 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 supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- **C.** Use only your hand to close the gas line. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- 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 as been under water.

INTERMITTENT PILOT IGNITION LIGHTING INSTRUCTIONS

- 1. Turn wall switch to the OFF position.
- 2. This appliance is equipped with an ignition device which automatically lights the pilot. **Do not** try to light the pilot by hand.
- 3. Open control access panel and turn manual shutoff valve to "CLOSED".
- **4.** 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 do not smell gas, go on to the next step.
- 5. Turn the manual shutoff valve to "OPEN".
- 6. Turn the wall switch to the ON position.
- 7. If the appliance will not operate, follow the instructions "TO TURN OFF THE GAS TO THE APPLIANCE" and call your service technician or gas supplier.
- 8. If using the battery pack and the appliance will not operate, check the batteries for sufficient charge and replace if necessary.

TO TURN OFF THE GAS TO THE APPLIANCE

- 1. Turn off the wall switch.
- Open control access panel. Turn manual shutoff valve to the CLOSED position. Do NOT force.
- 3. Close control access panel.





2. STANDING PILOT IGNITION

FOR YOUR SAFETY READ BEFORE LIGHTING THE STANDING PILOT.

WARNING!

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

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- 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

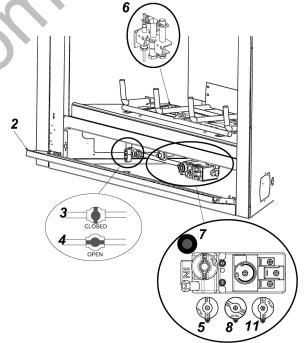
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn manual shutoff valve. Never use tools. If the manual shutoff valve will not push in or turn 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 as been under water.

LIGHTING INSTRUCTIONS

STOP! READ THE SAFETY INFORMATION ABOVE ON THIS LABEL!

- Turn off all wall switches to the appliance. Set thermostat to lowest setting
- 2. Open control access panel.
- 3. Turn manual shutoff valve to "CLOSED". Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 4. Turn manual shutoff valve to "OPEN".
- Turn pilot knob clockwise to "OFF". Knob may have to be depressed to pass the "PILOT" position.
- 6. Locate pilot assembly inside appliance.
- 7. Locate red ignitor button.
- 8. Turn pilot knob to "PILOT" and push in.
- Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears.
- Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 4-9.
- Release and turn the knob counterclockwise to "ON".
 To light main burner, turn wall switch to "ON". Do not light by hand.
- If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

Note: To light main burner, turn the wall switch to "ON". Do not light by hand.



TO TURN OFF THE GAS TO THE APPLIANCE

- Turn off the wall switch or set thermostat to lowest setting.
- 2. Open control access panel.
- 3. Turn the manual shutoff valve to CLOSED position. Do not force.
- 4. Close control access panel.



K. SEASONAL CHECKLIST

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 an appliance must be replaced prior to operating this appliance.

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

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 from combustible materials, Gasoline and other flammable vapors and liquids.

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.

1. STANDING PILOT IGNITION OPERATION

- a. Hearth & Home Technologies recommends you leave the pilot on year round.
- Lighting the Appliance During Regular Use
 Turn the wall switch to "ON".
- c. Shutdown During Regular Use Turn the wall switch to "OFF".
- d. Long Term Shutdown
- 1) Turn all wall switches to "OFF".
- 2) Turn pilot knob on valve to "OFF".
- 3) Turn the gas line to "CLOSED".
- 4) To relight the pilot and appliance, see page 17.

2. INTERMITTENT PILOT IGNITION OPERATION

- a. Lighting the Appliance During Regular Use Turn the wall switch to "ON".
- Shutdown During Regular Use
 Turn the wall switch to "OFF".
- c. Long Term Shutdown
 - 1) Turn all wall switches to "OFF".
 - 2) Turn the manual shutoff valve to "CLOSED".
 - 3) To relight the appliance, see page 16.

3. FUEL

Do not burn wood or other material in this appliance.

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

In the event your standing pilot appliance must be converted to use propane gas, you must use a CKVP conversion kit. To convert to use natural gas, you must use a CKVN conversion kit.

If your intermittent pilot appliance must be converted to use natural gas, you must use a DCKN conversion kit. To convert to propane, use a DCKP conversion kit.



4. OUTSIDE AIR KIT OPERATION

The outside air kit should be purchased with this appliance. The outside air kit helps to decrease the amount of room air taken, by utilizing outside air for combustion. It is strongly recommended that it be installed.

To operate the outside air kit, before starting the appliance, open the control access panel. Grasp the small, black handle located on the left side of the appliance, just below the glass retainer. See Figure 25. Lift the handle out of its slot and pull towards the front. The outside air door should open. Replace the handle back in the slot on the bracket from which it was removed (so the outside air door remains open) and close the control access panel. When through burning the appliance, open the panel, grasp the handle and push the outside air door closed.

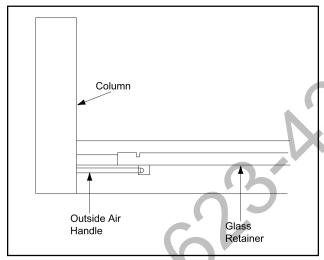


Figure 25 - Outside Air Kit Operation

L. START-UP ISSUES

Issues:		Possible Causes and Solutions:		
1.	Condensation on the glass.	1.	This is a result of gas combusion and temperature variations. As the appliance warms up, this condensation should disappear.	
2.	Blue flames.	2.	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn.	
3.	Odor from the appliance.	3.	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing.	
4.	Film on the glass.	4.	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 4-6 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive clearner, such as Brasso may be necessary.	

WARNING!

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



rentac

M. MAINTENANCE INSTRUCTIONS

1. CLEANING 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 (where applicable). Always turn off the wall switch (or remote control) and gas valve before cleaning.

2. CHECKING FLAME PATTERNS

Visually 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 (intermittent pilot) or thermopile and thermocouple (standing pilot) tips should be covered with flame. See Figures 26 and 27.

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. See Figure 28. If the vent configuration is correct, yet the flames are lifting or ghosting, shut off gas to the appliance and contact the dealer you purchased the appliance from.

Note: The look of the flames and embers may differ based on the type of fuel and venting assembly that is required.

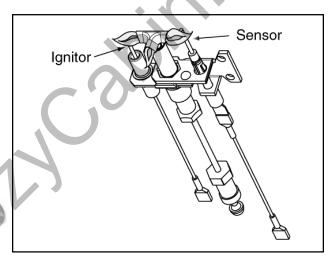


Figure 26 Intermittent Pilot Ignition Assembly

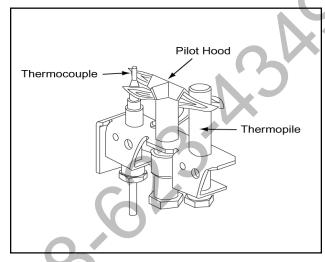


Figure 27 Standing Pilot

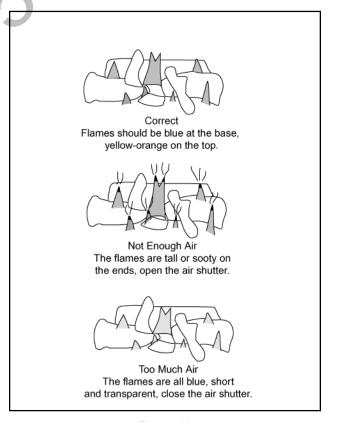


Figure 28 Flame Patterns



17 fr

3. VENTING SYSTEM INSPECTION

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.

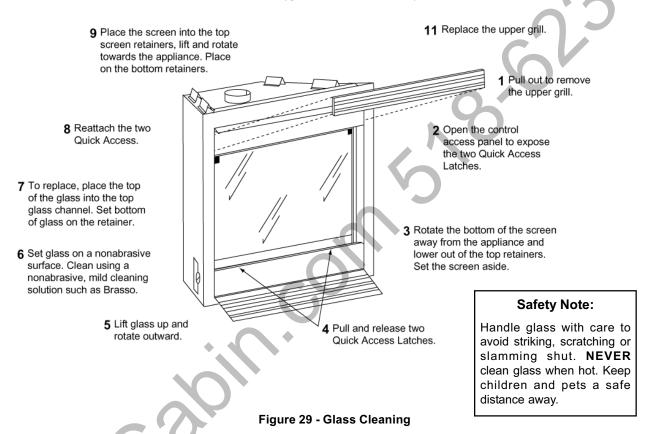
4. CLEANING THE GLASS

See Figure 29.

Never operate this appliance without the glass properly secured in place or if the glass is broken.

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 PIECES ARE HOT! Replace glass with only a Heatilator glass panel assembly ordered direct or through your local distributor. Never use substitute material. Only fully tempered soda lime safety glass may be used on this appliance.

10 Close the control access panel.



5. LOG REMOVAL/REPLACEMENT

If removal of the logs becomes necessary, remove the two screws at the front of the grate. Grasp the two outside upright grate bars. Pull the log set toward the front and up, off the burner. See Figure 30.

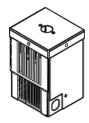
To replace the log set, grasp the two outside upright grate bars. Push and lower the log set onto the burner pan, making sure the back of the left most grate bar slides through the grate mounting bracket attached to the hearth pan. Attach the two screws at the front of the grate.



Figure 30 - Log Removal

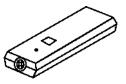


N. OPTIONAL COMPONENTS



BC10
Fan Motor Rheostat Control

BC14
Automatic Variable Blower
Control



RC-SMART-HTL

Remote Control

RC-BATT-HTL

Battery-operated Remote Control

(Standing Pilot)

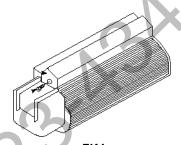
RCT-MLT-HTL

Multi-Function

SMART-STAT-HTL Remote Control with Thermostat Control SMART-BATT-HTL

Remote Control

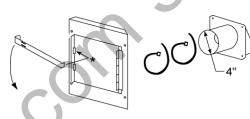
Battery-operated Remote Control with Thermostat Control



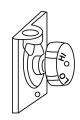
FK4
Fan Kit
(33" & 36" appliances only)
FK21
Fan Kit (30" appliances only)



WSK-MLT-HTL Multi-Function Wall Switch



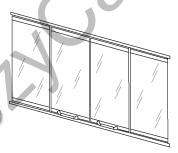
AK14 Outside Air Kit (strongly recommended)



(Natural Gas Standing Pilot MF2 Adjustable Flame Control (Propane Gas Standing Pilot)

MF1

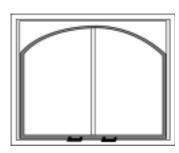
Adjustable Flame Control



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



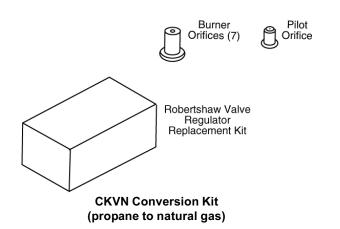
DFBN36 Fixed Bay Door (36" Appliances only)

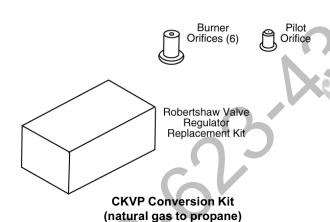


DFA30/B DFA33/B DFA36/B/S Fixed Cabinet Style Arched Glass Door

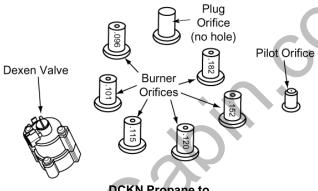


ROBERTSHAW STANDING PILOT CONVERSION KITS

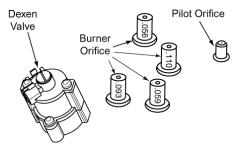




INTERMITTENT PILOT CONVERSION KITS

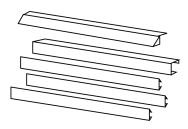


DCKN Propane to Natural Gas Conversion Kit (Intermittent Pilot)

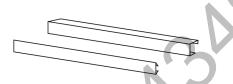


DCKP Natural Gas to Propane Conversion Kit (Intermittent Pilot)





TKN03B/S, TKN33B/S,TKN63B/S Trim Kits



TKN05B/S, TKN35B/S, TKN65B/S Trim Kits



QKE1B QKE2B Quick Tile Brass Surround

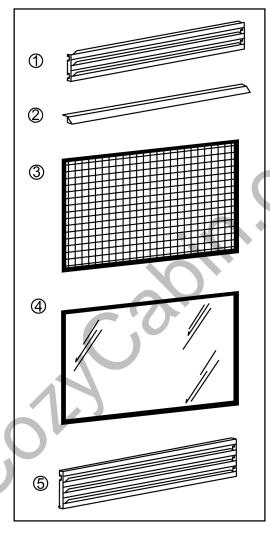


O. REPLACEMENT PARTS

Replacement parts are available from your distributor/dealer.



6



Item #	Part #	Description	Qty.
1	22123	Upper Grille - 36"	1
	22122	Upper Grille - 33"	1
	22121	Upper Grille - 30"	1
2	21993	Hood - 36"	1
	21992	Hood - 33"	1
	21991	Hood - 30"	1
3	26804	Screen Assembly - 36"	1
	26803	Screen Assembly - 33"	1
	26802	Screen Assembly - 30"	1
4	24523	Glass w/Frame - 36"	1
	24522	Glass w/Frame - 33"	1
	24521	Glass w/Frame - 30"	1
5	21582	Lower Grille - 36"	1
	21581	Lower Grille - 33"	1
	21580	Lower Grille - 30"	1
6	34051	33/36" Novus Log Set	1
	34923	30" Novus Log Set	1

Visit our Website @www.heatilator.com for a dealer/distributor near you!



Homeowner's Notes Page



Index

G	ĸ
Gas Codes 4, 11 Glass Certifications/Specifications 4 Condensation 19 Film on 19 H High Temperature Sealant 14 Hood 14 I Ignition Determining the Type 15 Intermittent Pilot 18 Standing Pilot 18 Input Rate 11	Replacement Parts 25 Rock Wool 15 S Seasonal Checklist 18 Fuel 18 Intermittent Pilot Operation 18 Standing Pilot Ignition Operation 18 Space Requirements 6 Standing Pilot Ignition Operation 18 Start-up Issues Blue Flames 19 Condensation on Glass 19 Film on Glass 19 Odor 19 T
Junction Box Installation 13 Junction Box Wiring 13 L Lava Rock 15 Lighting Instructions Intermittent Pilot 16 Standing Pilot Ignition 17 Location 5 Locations 6 Log Removal/Replacement 21	Termination Installation 8 U Upper Grille 14 Utilities Gas Line Connection 11 Gas Pressure 11 High Altitude Installation 11 Wiring 12 Intermittent Pilot Ignition 13 Standing Pilot Ignition 12
Log Set 15, 25	V
Maintenance Burner & Control Compartment 20 Flame Patterns 20 Mantel 6 N Nomenclature 5 Noncombustible Finishing Material 14 O Odor 19 Optional Components 22 Outside Air Kit 22	Ventilation 9 Venting Attaching to the Appliance 7 Check the System 9 System Inspection 21 Vent Height 7 Vermiculite 15 Vertical Installation 4 W Wall Switch 12, 22 Wiring Intermittent Pilot Ignition 13 Standing Pilot Ignition 12
	Gas Codes 4, 11 Glass Certifications/Specifications 4 Condensation 19 Film on 19 H High Temperature Sealant 14 Hood 14 I Ignition Determining the Type 15 Intermittent Pilot 18 Standing Pilot 18 Input Rate 11 J Junction Box Installation 13 Junction Box Wiring 13 L Lava Rock 15 Lighting Instructions Intermittent Pilot 16 Standing Pilot Ignition 17 Location 5 Locations 6 Log Removal/Replacement 21 Log Set 15, 25 M Maintenance Burner & Control Compartment 20 Flame Patterns 20 Mantel 6 N Nomenclature 5 Noncombustible Finishing Material 14 O Odor 19

Operation 19



Hearth & Home Technologies-Mt. Pleasant 1915 W. Saunders Street Mt. Pleasant, Iowa 52641 Division, HON INDUSTRIES www.heatilator.com

Gas Appliance (Fireplace) Limited Lifetime Warranty

HEARTH & HOME TECHNOLOGIES ("HHT") extends the following warranty for HEATILATOR® gas appliances installed in the United States of America or Canada (the "Appliance"). 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.

<u>Limited Lifetime Warranty.</u>

HHT warrants the Appliance for component failure due to a manufacturing defect of any of the following components: combustion chamber, burner pan, and logs. The Limited Lifetime Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the period the Appliance is owned by the original homeowner only, and is nontransferable.

1 Year Limited Warranty.

HHT warrants the Appliance to be free from failure of any of the following components for a period of one year after installation: valve, flexible gas line connector, glass panel, fan, direct vent chimney components, factory paint, gasket, piezo ignitor, thermopile, thermocouple, junction box, pilot assembly, shutoff valve, high limit switch, refractory liners, transformer, and control box. If the Heatilator Appliance is found to be defective in either material or workmanship within one year of the date of original installation, HHT will provide replacement parts at no charge and pay reasonable labor and freight costs, and is for the period of one year following the date of original installation of the Appliance.

Conditions, Exclusions, & Limitations of Liability.

- A. Both the Limited Lifetime and 1 Year Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. HHT's obligation under this warranty does not extend to damages resulting from (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, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) use of fuels other than those specified in the Operating Instructions; (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 is limited to only the component parts manufactured or supplied by HHT.
- B. HHT's liability under both the Limited Lifetime Warranty and the 1 Year Limited Warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) or at HHT's discretion, providing replacement parts at no charge and paying reasonable labor and freight costs.
- C. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED AROVE
- **D.** Some states do not allow exclusions or limitations of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights which vary from state to state.

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, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at www.heatilator.com/contact.asp.
- 2. Provide proof of purchase, model number, serial number, and manufacturing date code 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 1-800-843-2848.

©2001 Heatilator® is a Registered Trademark of Hearth & Home Technologies