



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

# OWNER'S MANUAL AND INSTALLATION INSTRUCTIONS

G136 SERIES GAS APPLIANCE MODELS: G136, G136L, G136E, G136LE FOR RESIDENTIAL USE



### **CAUTION:**

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

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.

### **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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### Please retain this manual for future reference.

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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, to replace any part of the control system and any gas control which has been under water.

### **Safety Precautions**

- I. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause a malfunction resulting in serious injury and/or property damage.
- 2. Always check your local building codes prior to installation. The 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 material, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
- **4.** This is a vented 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 must be vented with a minimum 5" B-Vent system and must terminate above the roof line. Venting must not be connected to a chimney flue servicing a solid fuel burning appliance. Never downsize pipe.
- Use only the fuel gas specified on the rating label of this gas appliance. Keep any flammable liquids a safe distance from the appliance.
- **8.** 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.
- 9. 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 (kPa).
- **10.** 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.
- **11.** Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.
- 12. Provisions shall be made to provide adequate combustion and ventilation air.
- 13. The appliance area shall be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- **14.** The flow of combustion and ventilation air should not be obstructed.



### **DESIGN AND INSTALLATION CONSIDERATIONS FOR B-VENTS**

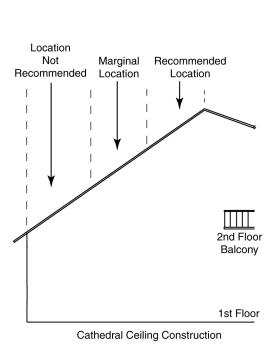
When selecting a location for your B-Vent appliance, it is important to evaluate a number of considerations. Modern construction techniques can create conditions that may not allow your vent to draft properly. This may result in spillage from your B-Vent appliance, as well as cause other combustion appliances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

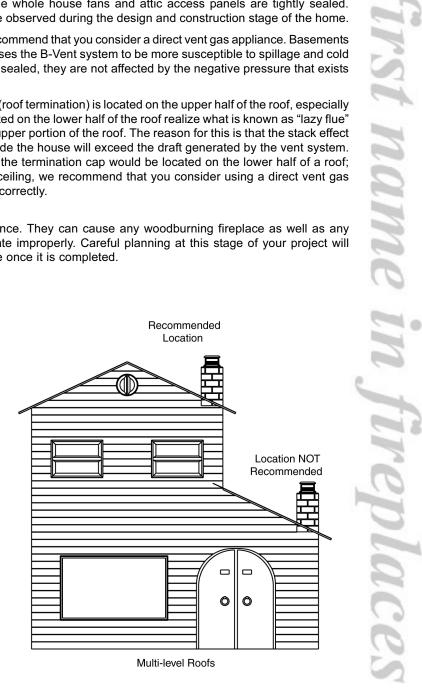
Tightly sealed construction is important for energy efficiency. Unfortunately, a great deal of effort has been directed to tightening up sidewall construction, while considerably less attention has been paid to tightening upper portions of the warm air envelope (insulated ceilings). This has increased 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 duct work 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 back drafting. 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.





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### A. APPLIANCE SPECIFICATIONS

### 1. Certification

The G136 Series Vented Gas Appliance has been tested in accordance with the standard ANSI Z21.50-1998-CGA 2.22-M98 and has been certified by Warnock Hersey for installation and operation as described in these Installation and Operating Instructions. All components are AGA or UL safety certified.

### 2. Local Codes

Check with your local building code agency prior to installing this appliance to ensure compliance with local codes, including the need for permits and follow-up inspections. This appliance must conform with local codes, or in the absence of local codes, comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.; in Canada, the CANI-B149-latest edition.

### 3. Optional Components

This gas appliance has been tested and listed for use with the optional components listed below. Many optional components may be purchased separately and installed at a later date. However, installation of a remote control or fan kit will require electrical power. To avoid costly reconstruction, a separate course of electrical power should be supplied to the appliance at the time of initial installation of the system for possible addition of these accessories at a later date.

### 4. Fuel

Any additions, changes or conversions required in order for the appliance to satisfactorily meet the application needs, must be made by a qualified service technician using factory specified and approved parts.

This product is manufactured to use natural gas or propane gas, depending on model purchased. A natural gas appliance can be converted to use propane gas later, but only if done by a qualified service technician and only if the CKP Natural Gas to Propane Gas Conversion Kit is used. In the event your appliance must be converted back to natural gas from propane, you must use a CKN Propane Gas to Natural Gas Conversion Kit.

If you require assistance during installation, please contact your local dealer or contact Heatilator Technical Services Department, Hearth & Home Technologies, 1915 W. Saunders Street. Mt. Pleasant. Iowa 52641.

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### **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. DESCRIPTION OF THE GAS APPLIANCE**

The G136 Series is a vented gas appliance. While a significant amount of heat is created by the G136, it is not intended to be and should not be used as a heater.

### The HEATILATOR system must consist of the following:

- 1. Gas Appliance
- 2. B-Vent System
- 3. Termination

# Tools and building supplies normally required for installation:

Saw Wall-finishing materials

Pliers Framing material

Hammer Surround

Phillips screwdriver Caulking material

Tape measure Square

Plumb line Electric drill/bits

Level

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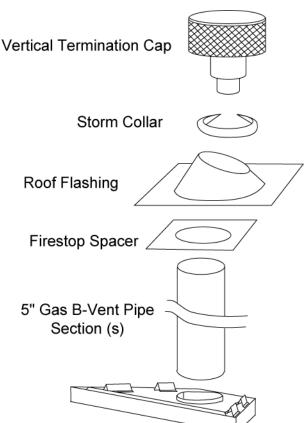
### Optional components include:

- 1. Fan Kit
- 2. Remote Control
- 3. Outside Air Kit
- 4. Glass Doors
- 5. Rheostat Control

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

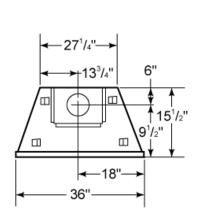
The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

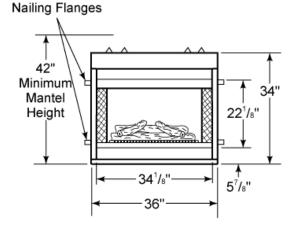
### **Typical Vertical Installations**



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.

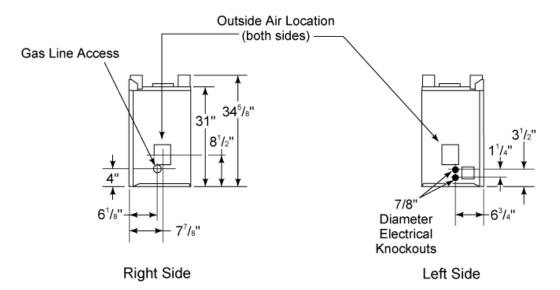
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Front View



**Dimensions** 

Framing dimensions can be found on page 9.



### **C. SYSTEM COMPONENTS**

The Table below is a list of only those components which may be safely used with this decorative gas appliance. Only trim kits supplied by the manufacturer shall be used in the installation of this appliance.

Catalog #	Description
G136	36" natural gas, standing pilot, heat circulating appliance.
G136L	36" propane gas, standing pilot, heat circulating appliance.
G136E	36" natural gas, electronic ignition, heat circulating appliance.
G136LE	36" propane gas, electronic ignition, heat circulating appliance (natural gas models may be converted to propane gas using the CKP Conversion Kit).
AK14	Outside Air Kit
BC10	Fan motor rheostat control, wall mounted.
BC11	Temperature-activated fan control.
RC-SMART-HTL*	Remote control
RCT-MLT-HTL*	Multifunctional Remote: ON/OFF, high/low flame control, room temp., fan speed (standing pilot only)
SMART-STAT-HTL*	Multifunctional remote: ON/OFF, room temp., thermostat temp., timer.
SMART-BATT-HTL*	Multifunctional remote: ON/OFF, thermostat temp., timer.
CKP	Natural gas to propane gas conversion kit.
CKN	Propane gas to natural gas conversion kit.
FK19	Fan Kit (black grille control access panel included)
DM1636	Original style bi-fold black trim glass doors.
DM1636B	Original style bi-fold polished brass trim glass doors.
DF136B	Fixed bi-fold polished brass glass doors.

<sup>\*</sup> Refer to literature to determine which remote is applicable to your needs.

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# D. PRE-INSTALLATION PREPARATION

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.

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

### **WARNING!**

This appliance may use the B-Vent chimney system only and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.

### 1. Gas Pressure

For natural gas, the minimum inlet gas supply pressure is 4.5 inches water column, and the maximum inlet gas pressure is 7.0 inches water column, for the purpose of input adjustment. Input rate is 25,000 BTU/hr. For propane gas, the inlet gas supply pressure must be at least 11.0 inches water column and a maximum 14.0 inches water column.

Pressure taps are provided on the gas control valve, near the outlet to the main burner immediately upstream of the gas supply connection to the appliance, accessible for a test gage connection.

Optimum manifold pressure is 3.5 inches water column for natural gas, and 10.0 inches water column for propane gas.

### 2. High Altitude Installation

### a. U.S. Installation

Appliances are tested and approved for elevations from 0-2000 feet.

When installing this appliance at an elevation above 2000 feet, United States codes require a decrease of the input rating by changing the existing burner orifice.

Input should be reduced 4% for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification. This appliance uses a .096 in./2.44 mm. orifice size on natural gas versions and a .059 in./1.49 mm. orifice size on propane gas versions.

Consult your local gas company for assistance in determining the proper orifice for your location or refer to ANSI Z223.1-latest edition, Appendix F.

### b. Canadian Installation

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.

Consult your local gas company for assistance in determining the proper orifice for you location or refer to **ANSI Z23.1-latest edition, Appendix F**.

### 3. Location and Space Requirements

This appliance may be installed along a wall, across a corner or in an exterior chase. This appliance must be installed so that the draft hood is in the same atmospheric pressure zone as the combustion air inlet and the appliance shall be located so that the relief opening is accessible for checking vent operation. The G136 Series may be installed at a height level with the floor, or it can be raised up from the floor to enhance its visual impact. Figure 1 illustrates a variety of ways the appliance may be located in a room. These appliances are also certified for installation in a bedroom or bed/sitting room in the U.S. and Canada (bedroom installations in Canada require the addition of non-operable doors), provided that the bedroom or bed/sitting room has a volume of at least 1,250 cubic feet.

### **WARNING!**

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



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### 4. Clearances

The following clearances to combustibles must be maintained: Minimum clearances to the top standoffs of the appliance - 0", floor - 0", back - ½", sides - ½", face of the appliance to ceiling - 30". Minimum clearances to venting are as follows: Horizontal run sections require a 3" minimum air space on the top and a 1" minimum air space on the sides and bottom of the vent section. Venting that is vertical requires a 1" minimum air space completely around the vent section. See Figure 1.

### 5. Framing the Gas Appliance

The G136 Series Gas Appliance will fit a framed opening of 37" w x 16" d x 34-3/4" h.

Figure 2 shows a typical framing of this appliance assuming combustible materials are used. All required clearances to combustibles around the appliance must be adhered to. A 1/2" air space clearance must be maintained at the back and sides of the appliance. Any framing on top of the appliance must be above the top standoffs. Vent sections for a horizontal run require a 3" minimum air space clearance on top and a 1" minimum air space clearance on the sides and bottom. Vertical vent sections require a 1" minimum air space clearance completely around the vent section.

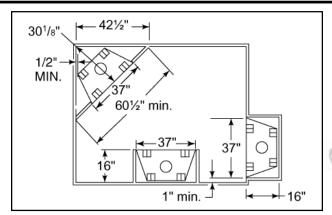


Figure 1
Appliance Locations and Clearances

**Note:** If an optional fan kit 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 to the wall in order to avoid reconstruction.

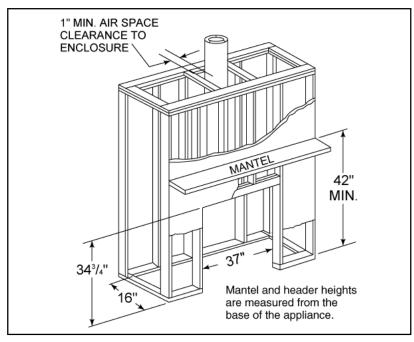


Figure 2 - Framing Requirements

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### 6. Finishing Materials

Only noncombustible materials may be used to cover the black surface of the appliance front.

### a. Combustible Materials

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.

### b. Noncombustible 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 a combination of the materials.

### c. High Temperature Sealant Material

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

After completing the framing and applying the facing material (dry wall) over the framing, a noncombustible sealant, one-half inch wide maximum, must be used to close off any gaps at the top and sides between the appliance and facing to prevent cold air leaks. See Figure 3.

### **WARNING!**

Hood and control access panel on this appliance cannot, in any way, be covered as it may create a fire hazard. Draft relief openings must not be covered or blocked.

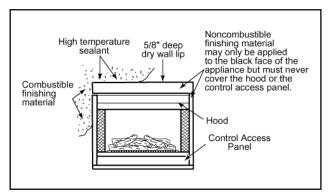


Figure 3 - Finishing Materials



place

### E. STEP-BY-STEP INSTALLATION

### **WARNING!**

Before starting, do the following:

- 1. Wear gloves and safety glasses for protection.
- 2. Keep hand tools in good condition. Sharpen cutting edges and make sure tool handles are secure.
- 3. Always maintain the minimum air space required to the enclosure to prevent fire.

### 1. Positioning the Gas Appliance

This appliance may be placed on either a combustible or noncombustible continuous, flat surface. If the appliance is installed on combustible flooring other than wood, a metal panel needs to be installed underneath the appliance extending its full width and depth. Slide the appliance into position and level from side-to-side and front-to-back. Shim with noncombustible material, such as sheet metal, as necessary.

Secure the appliance by bending out the nailing flanges located on each side of the appliance and nailing the appliance to the framing. See Figure 4.

### 2. Termination

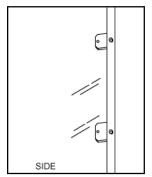
Common venting of this gas appliance with other gas appliances is not allowed in multifamily dwellings.

Possible problems which may occur from common venting are usually more costly and does not prevent possible spillage of flue gas products into other occupied spaces sharing the common vent. Noise is easily transmitted from one area to another if common venting is used.

Note: This appliance requires the use of a 5" B-vent for operation and must be terminated above the roof line. Never downsize pipe. Follow all B-vent requirements and installation instructions.

The minimum height of vent installation must be 9' from the top or 12' from the base of the appliance. Horizontal run must never exceed 50% of the height of the vent system as shown in Figure 5.

The following figures are the maximum distances from the base of the appliance, as well as the minimum air space clearances that must be maintained during termination of this appliance. Maximum straight unsupported rise - 25 feet; maximum horizontal unsupported run - 3 feet; air space clearances around vertical rise - 1" on all sides; air space clearances around the horizontal run - 3" on top and 1" on sides and bottom; maximum height - 40' from the base of the appliance. Every 1' of horizontal run requires at least 2' of vertical rise.



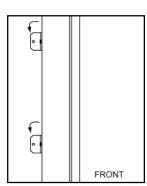


Figure 4 - Nailing Flanges

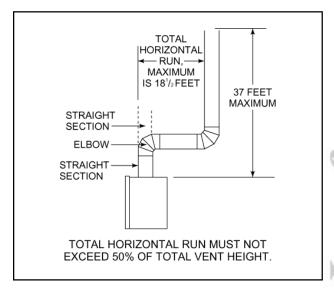


Figure 5
Venting Off The Top of Appliance

**Note:** 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 the possibility of a fire.

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### a. Assembling Vent Sections

Attach a straight vent section to the top of the appliance. Elbows directly off the top of the appliance are allowed but are strongly not recommended. This may cause the appliance to operate ineffectively. Secure the attached vent section to the appliance with the three screws supplied. Use only B-vent sections.

### b. Using Elbows

Elbows exceeding 45 degrees from the vertical shall be considered horizontal and therefore adapt horizontal run limitations. Each such elbow shall be considered the equivalent of 2 feet of horizontal run. See Figure 6.

### c. Penetrating the Ceiling

Mark and cut out an opening in the ceiling for the firestop spacer. Frame the opening with the same size lumber used in the ceiling joists.

### d. Installing the Firestop Spacers

Firestop spacers must be used whenever the venting penetrates a ceiling/floor area.

In all situations, firestop spacers are to be nailed to the ceiling joists from the bottom or appliance side, EXCEPT when the space above is an insulated ceiling or attic space. In this situation, the firestop spacer must be nailed from the top side to prevent loose insulation from falling into the required one inch air space around the vent system.

Install the firestop spacer by positioning and nailing the four sides of the firestop spacer to the joists using a minimum of three nails per side.

### e. Securing Vent System

Continue assembling the vent sections up through the firestop spacers as needed. Vent sections must be locked into position. Elbows and chimney stabilizers have straps for securing these parts to joists or rafters.

### f. Marking the Exit Point in the Roof

Locate the point where the venting will exit the roof by plumbing down to the center of the vent system. Drive a nail up through the roof to mark the center. See Figure 7.

**Note:** Be sure to provide intermediate support for the vent during construction and check to be sure inadvertent loading has not dislodged the vent from the appliance or any vent joint.

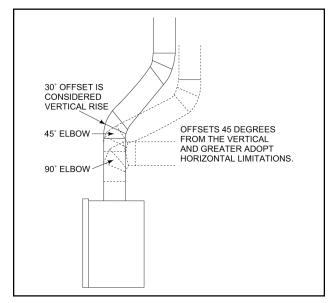


Figure 6 - Using Elbows

### **WARNING!**

When vent sections exceeding 3 feet in length are installed between an offset and 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.

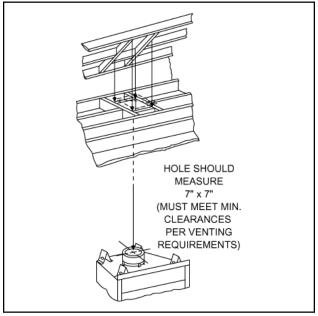


Figure 7 - Exiting Through the Roof



### g. Cutting Out the Hole in the Roof

Measure to either side of the nail and mark that 7" x 7" opening required (must meet minimum clearances per venting requirements). This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See Chapter 25 of the Uniform Building Code for Roof Framing details. A one inch minimum air space clearance must be maintained between the vent section and the roof.

### h. Install Roof Flashing or Site-Constructed Chase Top

Position a roof flashing or a site-constructed chase to and secure into place.

### i. Assembling Vent Sections

Continue to add vent sections through the roof opening, maintaining at least a one inch air space clearance.

### j. Termination Cap

Major building codes specify a minimum termination height above the roof top depending on the roof pitch. It is strongly recommended that the cap should be at least 2' higher than anything within 10' of it, and a minimum of 3' out of the roof. This will help to ensure the best air flow.

### 1) Unlisted Cap

If you are using an unlisted termination cap and your vent section is at least 8 feet from the vertical wall, follow Figure 8 and Table 1 to determine the allowable termination height and location.

Measure the roof pitch. Roof pitch is X/12 as shown in Figure 8. Find your roof pitch in Table 1 to determine the minimum height the termination cap must be located from the point where the vent section penetrates the roof (H in Figure 8).

### 2) Listed Cap

If you are using a listed termination cap, you must follow the manufacturer's installation instructions for minimum clearances to roof and any obstructions.

These termination heights are necessary in the interest of safety and do not guarantee proper operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc. may create a need for a taller roof termination should down drafting occur.

To install the termination cap, slide the cap vent sections into the vent pipe. Secure the cap using the screws provided.

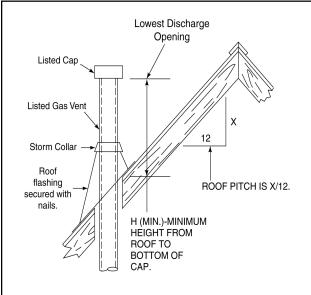


Figure 8
Termination Height if Termination Location is at least 8' from a Vertical Wall

Roof Pitch	H (Min.) feet
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

Table 1
Minimum Termination Height

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### k. Checking the Vent System

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

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

If you have installed optional doors, close the doors and conduct the test following the same instructions above. See Figure 9.

### 3. Double Check Venting

When construction of the entire vent system has been completed, double check to make sure all venting pipes and termination caps are unobstructed.

### 4. Gas Line Installation

Install the gas line piping into the right side of the gas appliance. A manual shutoff valve (supplied) should always be used. See Figure 10.

### 5. Gas Line Connection

The appliance is provided with a stainless steel flexible connector and a listed (and Commonwealth of Massachusetts approved) T-handle manual shutoff valve. See Figure 10. 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 10 to connected the gas line. Optional: Seal around the gas line to prevent cold air leakage.

All connections must be tightened and checked for leaks with a soap and water solution or a leak detector.

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

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

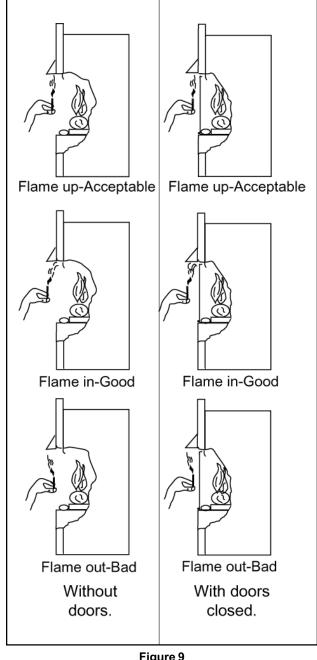


Figure 9
Testing Ventilation

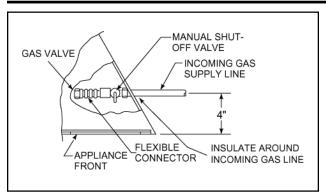


Figure 10 - Gas Line

**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).

**Note:** Although each appliance is leak tested in the factory, it is mandatory during the first burn for you to check for leaks. These may occur due to handling, shipping, installation and the like and are beyond the control of Hearth & Home Technologies. Every joint, including the valve, pilot, fittings, etc. must be checked.

### 6. Control Access Panel Removal

To open the control access panel, gently lift upward and pull on the upper outside edges of the panel as shown in Figure 11. The top part of the control access panel will rotate downward.

Two spring hinges secure the lower portion of the control access panel into place. See Figure 12. Simply pull the hinges toward the center of the control access panel and then pull out the entire control access panel See Figure 13. To replace the control access panel, reverse this process.

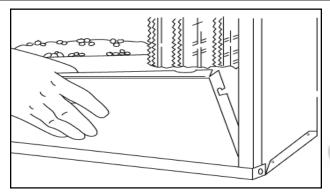


Figure 11 - Open Control Access Panel

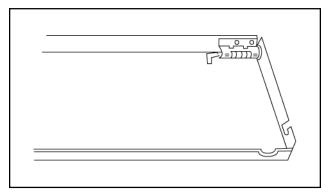


Figure 12 - Spring Hinges on Control Access Panel

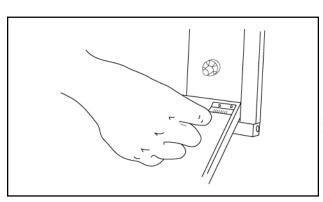


Figure 13 - Control Access Panel Removal

### **WARNING!**

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

# tirenlace first name

### 7. 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 CSA C22.1 Canadian Electrical Code, Part 1 Safety Standard for Electrical Installations. This appliance is not intended for use with a thermostat. The addition of a thermostat will void the warranty and may create a fire hazard.

**Note:** Field installed wires must be grounded. Two 110V AC supplies are required if an optional fan kit is to be used.

### a. Electronic Ignition

### 1) Appliance Requirements

This appliance requires a 110V AC supply from a remote wall switch to the appliance junction box for operation. A wiring diagram is shown in Figure 14.

### 2) Remote Wall Switch

Position the junction box in the desired place on the wall. Run the provided wire from the junction box. Connect it to a wall switch and mount the wall switch inside the junction box.

### 3) Optional Accessories Requirements

Optional accessories may be added now or at a later date, however, wiring should be done now to avoid significant wall reconstruction. Two black wires are for the optional 110 volt switched fan. The optional fan kit requires a separate 110V AC supply to the appliance junction box for operation, as shown in Figure 14. In line with this junction box, you must have an ON/OFF switch or a fan motor speed control. No additional 110V AC supplies are required for the fan motor speed control or the remote control. One black wire and the one white wire are for supplying 110 volt for ignition and for the optional 110 volt switched remote control. Wiring diagrams are provided with all accessories.

**Note:** Extended lengths of wire will reduce millivolt readings and may cause appliance shutdowns.

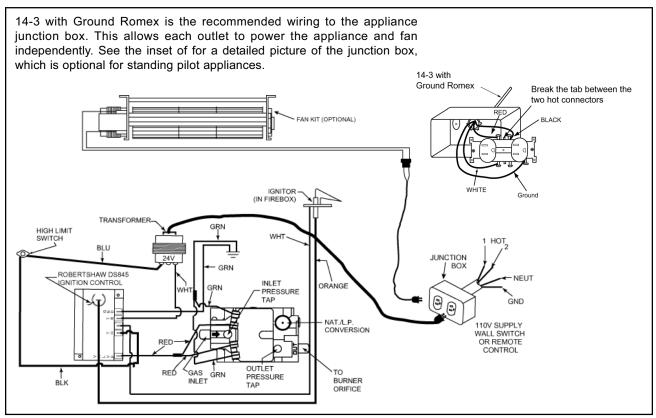


Figure 14 - Electronic Ignition Wiring Diagram



### b. Standing Pilot Ignition

### 1) Remote Wall Switch

Position the junction box (not provided) in the desired place on the wall. Wiring located for the wall switch will be found protruding from the left side of the appliance. Run the wire to the junction box, connect to a wall switch and mount the wall switch inside the junction box. A wiring diagram is shown in Figure 15.

If you extend beyond the wall switch wires provided, you must not use wire nut extensions, but replace existing wires with desired length.

### 2) Optional Accessories Requirements

Optional accessories may be added now or at a later date. However, wiring should be done now to avoid significant wall reconstruction later if accessories are added. Two black wires are for the optional 110 volt switched fan. The optional fan kit requires a 110V AC supply to the appliance junction box for operation. In line with this junction box, you must have an ON/OFF switch or a fan motor speed control. No additional supplies are required for the fan motor speed control. One black wire and the one white wire are for the optional 110 volt switched remote control. The remote control requires a separate 110V AC supply directly to the appliance junction box, as shown in Figure 14. Wiring diagrams are provided with all accessories.

### 8. Junction Box Installation

- Remove the junction box assembly from the valve compartment.
- 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.
  - Attach the junction box assembly to the outside of the appliance with the two screws provided.
- 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.
  - 2) Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - 3) Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
  - 4) Attach the junction box assembly to the inside of the appliance with the two screws provided.
- **d.** If the box is not to be wired at the time of appliance installation, assemble the receptacle and cover to the box and install on the inside of the appliance.

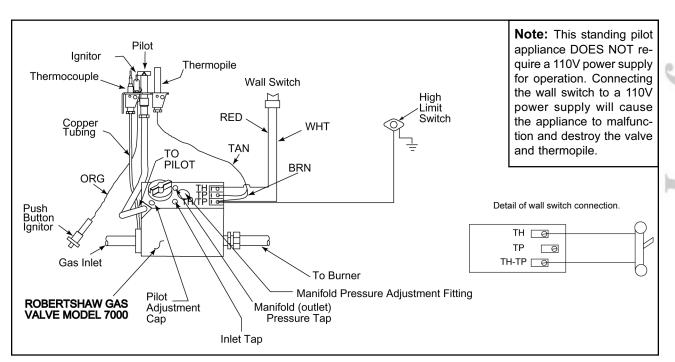


Figure 15
Standing Pilot Ignition Wiring Diagram

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# Outside Air Kit Installation (strongly recommended)

Many possible locations on either side of the appliance are available for your outside air inlet. Figure 16 demonstrates two possible locations. 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. See Figure 16. Be sure to check vent height requirements for the appliance before attempting any basement location. 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. Ducting must be ordered separately. The vent inlet must be connected to an air supply outside of the building and must not exit higher than the building soffit.

### **WARNING!**

When locating the appliance in a space projecting into a garage, the outside air must not be taken from the garage space. Exhaust products of gasoline engines are hazardous. Do not install outside air ducts such that the air may be drawn from attic spaces, basements, or above the roofing where other heating appliances or fans and chimneys, exhaust or utilize air.

## a. Assembling the Control Arm of the Outside Air

Connect the control arm onto the damper assembly. See Figure 17. Remove the access panel on the side of the appliance in which you intend to install the air kit.

### b. Installing the Damper of the Outside Air Kit

Insert the control arm through the rectangular opening in the side of the appliance. The notches on the control arm should be placed downward. The hinge on the damper should face toward the front of the appliance. If the hinge and the control arm are not positioned in this manner, the damper will not function correctly. Figure 18 demonstrates the correct order in which the air kit assembly should take place.

Attach the damper assembly to the appliance using the screws provided in the fastener package.

### **WARNING!**

Significant cold air may infiltrate through the duct or other parts of this system. To guard against this, check for light leaks with a flashlight and seal these with duct tape and/or insulation.

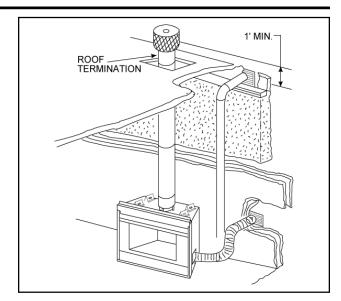


Figure 16 - Outside Air Kit Installation

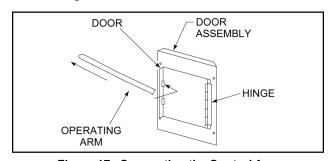


Figure 17 - Connecting the Control Arm

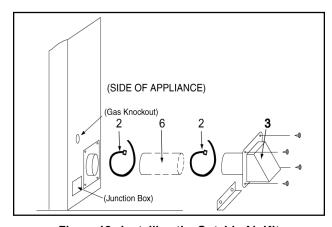


Figure 18 - Installing the Outside Air Kit

Table 2 - Outside Air Kit Parts

Item	Description	Qty.
1	Damper Assembly	1
2	Clamp Band	2
3	Tube Assembly	1
4	Control Arm	1
5	Fastener Package	1
6	Flexible Connector	not supplied



Check the operation of the air kit damper by pulling the control arm out to a fully open position, catching the last notch of the control arm to lock it in place. Push the control arm inward to fully close the damper. Intermediate notches in the control arm can be used to adjust incoming air.

### c. Cutting the Exterior Hole

Mark and cut out a 4" diameter hole in the exterior wall for air entry. This hole should allow framing (minimum of two sides) so the 4" tube assembly may be nailed into position, flush with the exterior wall of the building.

### d. Attaching the Flexible Duct

Assemble the flexible duct between the damper assembly and the tube assembly. Secure it into position with the provided clamp bands and screws.

### 10. Finishing

Install the hood by using the three screws provided. See Figure 19 for the position of the hood.

When finishing the face of the appliance, combustible material may be brought up to the sides of the appliance, but must never overlap onto the black metal. The black metal may be covered with noncombustible material only.

**Note:** You cannot cover any portion of the hood or control access panel on this appliance, as this may create a fire hazard. See Figure 19 for hood and control access panel locations.

After applying the finishing material, a noncombustible sealant, one-half inch wide maximum, must be used to close off any gaps at the top and sides between the appliance and finishing to prevent cold air leaks. See Figure 19.

A combustible mantel may be installed at a minimum of 42 inches above the base of the appliance.

### 11. Positioning the Logs

Place the medium sized log in the back log brackets as shown in Figure 20. Place the larger log in front. The front log is shaped to cover the burner tube. For this reason, it has an extra piece which protrudes from one end of the log. Be sure this piece is positioned to the left side of the firebox. See Figure 21.

Lay the two smaller logs across the larger logs, as shown in Figure 22, making sure they are positioned so they do not cover (come into direct contact with) the flames. If the logs impinge the flame (set directly over the flame) excessive carbon can occur.

### 12. Placing the Lava Rock

Spread the lava rock in the tray just in front of the logs, covering the front burner tube. Depending on your taste, additional lava rock may be placed on the floor of the burn chamber around the tray.

**Note:** The placement of the logs, lava rock and rock wool is very critical to the looks of the appliance during its operation. Please take time during this portion of the setup to achieve the best appearance.

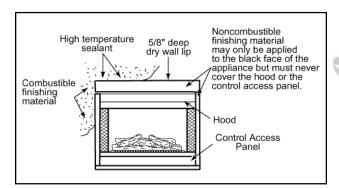


Figure 19 - Finishing Materials

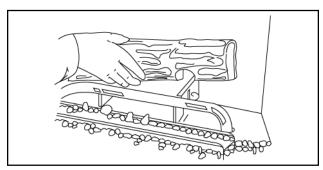


Figure 20 - Positioning the Logs

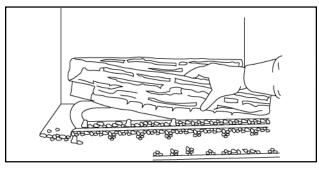


Figure 21 - Positioning the Logs

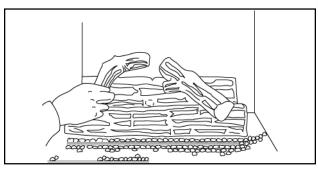


Figure 22 - Positioning the Logs

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### 13. Placing the Rock Wool

Break the rock wool into pieces, no bigger than 1/2" diameter and place them over the lava rock in the tray. This will create the glowing ember appearance when the flame touches the rock wool. Do not cover the burner ports.

### 14. Glass Door Installation

**Note:** A fixed glass door (DF136B) must be installed for the appliance to be used in the Commonwealth of Massachusetts. With a fixed glass door installed, there is more than one square inch per 1000 BTU for combustion air to enter the appliance.

Before beginning door installation procedures, remove the clear, plastic protective covering that has been placed on the upper and lower brass sections of each door panel.

### a. Installing Door Clip Covers

The door clip covers are not used if the gas appliance uses the optional lower grille. To install the door clip covers loosen the two screws located at the bottom of the appliance opening on each of the columns. Slide the recessed portion behind the screw heads and secure the screws.

### b. Attaching the Pivot Brackets

Attach the bottom pivot brackets (two each) to the bottom edge of the opening of the gas appliance (two screws each). See Figures 23 and 24.

### c. Attaching the Top Door Support

Attach the door support at the top of the appliance opening on each column using screws provided (two each side). See Figure 24.

**Note:** Do not secure (screw) the upper pivot bracket until the door is positioned.

### d. Positioning the Doors

Place the upper pivot bracket on the top door pin and insert the bottom pin of the door into bottom pivot bracket. Attach the upper pivot bracket to the door support using screws provided (two each clip). See Figures 24 and 25. Close doors and raise door support until door clip is caught under the door support.

Install the second door in the same manner.

### e. Leveling the Doors

Doors may be leveled by repositioning the pivot brackets and pivot clips in the screw slots. Loosen the screws, level the doors, then tighten the screws. Do not over tighten the screws.

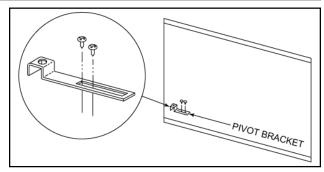


Figure 23
Close-up of Pivot Bracket

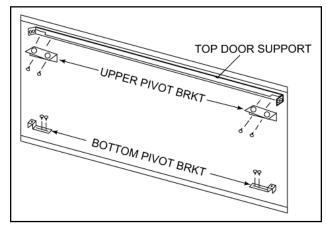


Figure 24
Positioning the Pivot Clips and Brackets

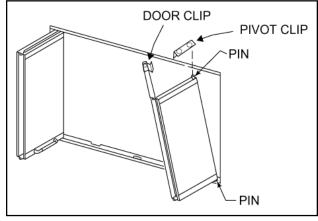


Figure 25
Installing the Glass Doors

### **WARNING!**

Do not operate this appliance if the glass is broken or cracked.

### **WARNING!**

Do not hit, strike, or slam shut the glass.



### F. OPERATING INSTRUCTIONS

### 1. Determine the Ignition

To determine whether your appliance is an electronic ignition or a standing pilot ignition, open the control access panel to examine the wiring system. If your system has a red push button (as shown in Figure 26), you own a standing pilot ignition appliance. If no red button is present, you own an electronic ignition appliance.

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

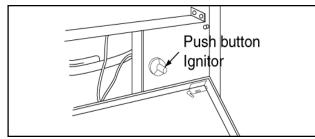


Figure 26 - Standing Pilot Ignition

### 2. Standing 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 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 knob. Never use tools, If the lever or knob will not move by hand, don't try to repair it call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use the 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.

### STANDING PILOT LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above.
- 2. Turn the switch to the "OFF" position.
- 3. Turn off all electric power to the appliance.
- 4. Open control access panel.
- 5. Turn gas control knob clockwise to "OFF."
- Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to next step.
- Find pilot follow metal tube from gas control. The pilot is behind the burner tube.
- 8. Turn knob on control counterclockwise to "Pilot".
- Push in the knob all the way and hold it in. Immediately light the pilot by pressing the red ignitor button. Continue to hold the control knob in for about (1) minute after the

- pilot is lit. Release button and it will pop back up. Pilot should remain lit. If it goes out, repeat Steps 5 through 9.
- If button does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- Turn gas control knob counterclockwise to "ON". Knob can be turned to "ON" only if the control knob is popped out.
- 11. Close control access panel.
- 12. Turn on all electrical power to the appliance.

### TO TURN OFF GAS TO APPLIANCE •

- Turn off the wall switch.
- Turn off all electrical power to the appliance if service is to be performed.
- Open control access panel.
- 4. Turn gas control clockwise to "OFF". Do not force.
- 5. Close control access panel.



### 3. Electronic 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 does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- B. BEFORE OPERATING, 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 and move the gas control lever or turn the gas control knob. Never use tools. If the lever or knob will not move by hand, don't try to repair it call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use the 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.

### ELECTRONIC LIGHTING INSTRUCTIONS =

- 1. STOP! Read the safety information above on this label.
- 2. Turn wall switch to the "OFF" position.
- 3. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light burner by hand.
- 4. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above no this label. If you don't smell gas, go on to the next step.
- 5. To turn on burner, turn on the wall switch.
- 6. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

### TO TURN OFF GAS TO APPLIANCE =

1. Turn off the wall switch.

3. Close control access panel.

2. Turn gas line to "OFF". Do not force.



### **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:**

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

Before operating this appliance, please review the safety precautions given on page 2 as well as the items listed below:

- Check to make sure the logs, rock wool and lava rock have all been placed correctly. Refer to Steps 11, 12 and 13 on pages 19 and 20.
- Check to see that all wiring is correct and enclosed to prevent possible shock. This is done by opening the control access panel (follow Step 4 below) to access the control area.
- Check to ensure there are no gas leaks. This may be done with a soap and water solution or gas sniffer
- **4.** Verify that all venting and caps are unobstructed.
- Read and understand these instructions thoroughly before attempting to operate this appliance.

### 4. Control Access Panel Removal

To remove the control access panel, gently lift upward and tug on the outside top edges of the panel as shown in Figure 27. The top of the panel will rotate downward

Two spring hinges secure the lower portion of the control access panel into place. See Figures 28 and 29. Simply pull the hinges toward the center of the panel and then pull out the entire control access panel. To replace the panel, reverse this action.

If you own an electronic ignition appliance, at this point skip Step 5 on the following page and continue with Step 6 on page 25.

**Note:** 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.

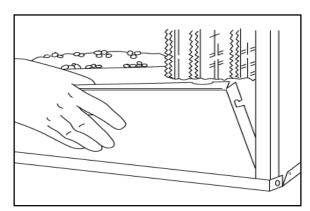


Figure 27 - Control Access Panel Removal

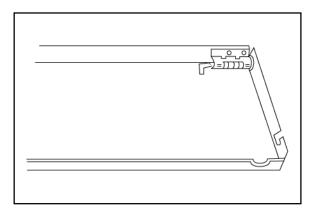


Figure 28 - Spring Hinges

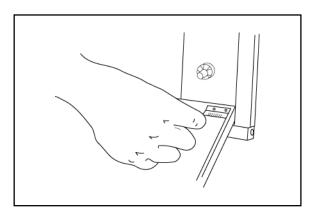


Figure 29 - Control Access Panel Removal

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### 5. Standing Pilot Operation

### a. Initial and Seasonal Lighting Procedure

Initial lighting constitutes the first time the appliance has been lit after installation. Seasonal lighting refers to lighting the appliance after it has been unused and the gas valve has been turned to OFF.

Be sure the remote wall switch and the gas knob (located behind the control access panel) have been turned to the OFF position. See Figure 30. Also, your appliance may have a rocker ON/OFF switch installed inside the control access panel; if it does, this also needs to be turned to the OFF position. If they are not, do so and allow the appliance to sit for five minutes so any gas that may have accumulated in the main burner compartment escapes.

Turn the manual shutoff valve to ON. Turn the gas knob to PILOT, as shown in Figure 31, and press in. While holding it in, light the pilot by pressing the red ignitor button, shown in Figure 32, several times until the pilot ignites. Continue to hold in the gas knob for about one minute after the pilot is lit. Release the gas knob. The pilot should remain lit. If it goes out, turn everything to the OFF position, let it sit for five minutes and repeat this step again.

When the pilot remains lit, turn the gas knob to the ON position. See Figure 33. You may now turn the remote wall switch to the ON position which will turn on the main burner. Initially, the flames may resemble more of a blue color but after the first 20 minutes of operation, they will become more yellow.

### b. Lighting Procedure During Regular Use

Simply turn the wall switch to the ON position. This will ignite the main burner.

### c. Shutdown During Regular Use

Turn the remote wall switch to OFF. This will disengage the burner and the flames will extinguish. The pilot light will continue to burn.

### d. Seasonal Shutdown

When the burning season comes to an end, the entire system should be shut down. This way, no gas will be running to the appliance while it is not in use.

To shut down the appliance for a long period of time, you must first shut off the main burner by moving the remote wall switch (and the ON/OFF rocker switch, if applicable) to the OFF position. Open the control access panel to expose the control compartment. Follow Step 1 on page 21. Locate the gas knob and turn it to the PILOT position. Press in and continue turning to the OFF position. Turn the manual ON/OFF valve to OFF. Your entire system is now shut down.

To relight the appliance, see page 21.

**Note:** Keep the area near the appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

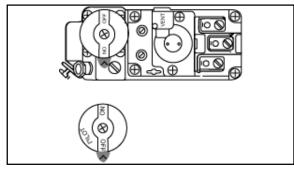


Figure 30 - Standing Pilot Ignition Valve "OFF"

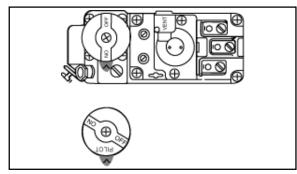


Figure 31 - Standing Pilot Ignition Valve "PILOT"

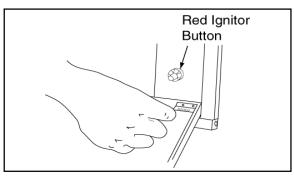


Figure 32 - Red Ignitor Button

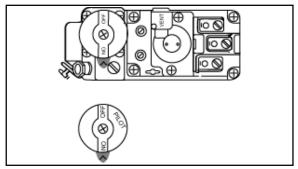


Figure 33 - Standing Pilot Ignition to "ON"



If you own a standing pilot ignition, skip Step 6 and continue with Step 7 - Closing the Control Access Panel.

### 6. Electronic Ignition Operation

### a. Initial and Seasonal Lighting Procedure

Initial lighting constitutes the first time the appliance has been lit after installation. Seasonal lighting refers to lighting the appliance after it has been unused and the gas valve has been turned to OFF.

Be sure the remote wall switch and the manual shutoff valve have been turned to the OFF position. Also, your appliance may have a rocker ON/OFF switch installed inside the lower panel; if so, this also needs to be turned to the OFF position. If they are not, do so and allow the appliance to sit for five minutes so any gas that may have accumulated in the main burner compartment escapes.

Turn the manual shutoff valve to the ON position. Then turn the remote wall switch to ON. This will activate an electronic spark. Initially, the flames may have more of a blue color but after the first 20 minutes of operation, they will become more yellow.

### b. Lighting Procedure During Regular Use

Simply turn the wall switch to the ON position. This will activate the ignitor and the main burner will light.

### c. Shutdown During Regular Use

Simply turn the remote wall switch to the OFF position. This will disengage the ignitor and the main burner will extinguish.

### d. Seasonal Shutdown

When the burning season comes to an end, the entire system should be shut down.

**Note:** There may be a rocker switch on a column in the control area, as well as a wall switch. Both have to be OFF for the appliance to be off. In this way, no gas will be running to the appliance while it is not in use.

To shut down the appliance for an extended period of time, you must first shut off the main burner by moving the remote wall switch to the OFF position.

Open the control access panel to expose the control compartment. Locate the gas valve knob and turn it to the OFF position. Turn off the manual shutoff valve. Your entire system is now shut down.

To relight the appliance, see page 22.

### 7. Closing the Control Access Panel

To replace the control access panel, align the lower hinges on the panel with the holes provided in the appliance. Place the hinge pins in those holes and pivot the panel upward as shown in Figure 34. The panel should connect smoothly back into place.

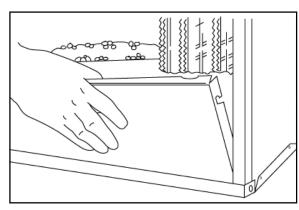


Figure 34
Control Access Panel Replacement

**Note:** Keep the area near the appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

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### G. 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. Always turn off the gas valve and remote wall switch before cleaning.

### 2. Checking Flame Patterns

Check the flame pattern of the burner periodically, making sure the flames are steady, not lifting or floating. The flame color should be blue with yellow tips. The ignitor (electronic) or thermopile and thermopile (standing pilot) tips should be covered with flame. See Figures 35-37.

### 3. Venting System Inspection

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

### 4. Log Cleaning

Logs can be easily lifted out of position. Carbon buildup (soot) can be removed with a vacuum cleaner. To prevent possibilities of soot, we have provided your appliance with an adjustable air shutter. Your air shutter is provided in an open position to ensure clean operation under normal situations. In the event that soot is accumulating in your appliance, the air shutter should be opened farther (see Figure 38 for location of air shutter). This can be done with a screwdriver or a 1/4" wrench. Also, ensure that logs are positioned correctly to minimize flame contact with the logs.

### Proper Operation of Optional Glass Doors (fixed glass doors are required in Massachusetts)

If you have decided to install optional doors on your G136, please note the correct way to operate them. While operating your appliance, you should either have the doors completely open or completely closed, but never partially open. See Figure 39.

### **WARNING!**

Decorative gas appliances equipped with operable glass doors should be operated only with doors fully open or doors fully closed. If doors are left partially open, gas and flame may be drawn out of the appliance opening, creating risks of both fire and smoke spillage.

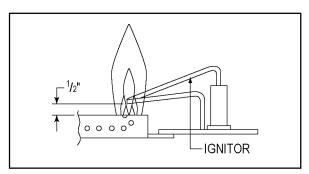


Figure 35 - Electronic Ignition

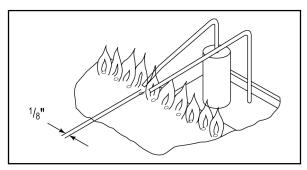


Figure 36 - Electronic Ignition

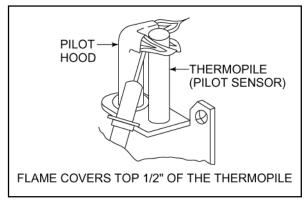


Figure 37 - Standing Pilot

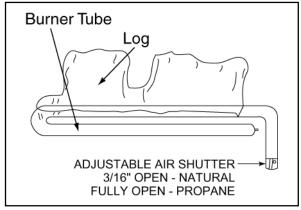


Figure 38 - Both Ignitions



### 6. High Limit Safety Switch

A limit switch has been installed on the G136. This switch automatically turns off the appliance if the appliance becomes too hot. If this happens, do not attempt to operate the appliance until it has been examined by a qualified service technician. For the limit switch location, see Figure 40.

### 7. Glass Breakage/Cleaning

It is recommended to wear gloves while handling or removing glass. **DO NOT REMOVE THE GLASS WHILE IT IS HOT.** 

- a. Clean glass after initial one hour burn. This is to remove any film that develops from oils and log burn in time. After initial cleaning, clean as needed.
- **b.** Handle glass panel with care to avoid striking or scratching it on hard objects.
- c. To clean the glass, use a nonabrasive, mild cleaning solution (i.e. Brasso). Apply an adequate amount to the glass and wipe off per manufacturer's instructions. Contact your local distributor/dealer for further recommendations.
- **d.** Never operate this appliance without the glass properly secured in place or if the glass is broken.
- e. 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.

**Note:** When cleaning the glass, NEVER use abrasive materials. NEVER clean the glass when it is hot. Keep pets and children a safe distance away.

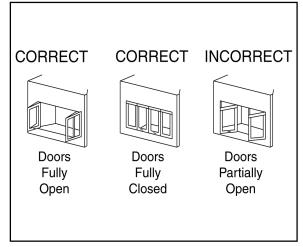


Figure 39
Correct Operation of Doors

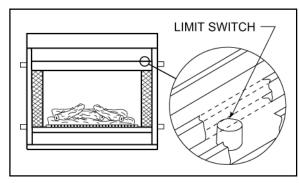


Figure 40 Limit Switch Location



# 1. Electronic Ignition

# H. TROUBLESHOOTING

ı						
	Problem		Cause		Corrective Action	
	1.	Spark ignitor will not light burner after repeated attempts.	A.	Defective ignitor; loose wire.	Check for loose connections on electrode and ignitor. Refer to the wiring diagram on page 16 for assistance.	
			B.	Misaligned electrode at ignitor.	Check for spark. If electrode connection is correct and there is no spark, replace ignitor.	
					Spark should be extending approximately 1/8" to ground wire. See Figure 36. Adjust gap to give proper spark. Remove hands from electode before attempting.	
	2.	Burner will not stay lit.	A.	Defective ignitor.	Check burner flame. See Figures 35 & 36. Adjust ignitor if necessary.	
					Be sure ignitor is secured tight into bracket and bracket is secured tightly to the appliance.	
					Be sure wiring connections are tight throughout system, including high limit switch.	
			В.	No ground.	Check that wiring is grounded as shown in Figure 14.	
	3.	With valve and wall switch in "ON" position, no gas to burner.	A.	Manual on/off valve(s) shut off.	Check all gas valves leading to appliance. Turn to the ON position. Check for 24 volt power off secondary on the transformer.	
			В.	Plugged burner orifice.	Check burner orifice; remove blockage.	
			C.	Wall switch defective.	Check continuity.	
			D.	No power.	Check 110V AC supply (fuses/breaker).	
	4.	Glass doors fog up.	A.	A normal result of gas combustion.	No action is necessary. After the appliance has warmed up, the glass will clear.	
	5.	Blue flames.	A.	A normal result during the first 20 minutes of burning.	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning. If blue flames persist, check air shutter setting and check that log and embers are positioned correctly.	
			В.	Improper air mixture.	Check air shutter setting.	
	6.	Appliance turns itself off after a period of time.	A.	High limit safety switch is activated.	Have a qualified service technician check venting system for blockage, e.g. bird nests, damage. Ensure proper venting condition. The high limit switch will reset automatically as the appliance cools.	

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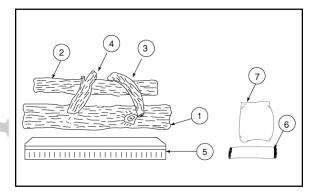
### 2. Standing Pilot Ignition

Problem		Cause		Corrective Action	
1.	Spark ignitor will		Defective ignitor	Replace ignitor.	
	not light pilot after repeated pressing of red button.	B.	Misaligned electrode.	Spark should be approximately 1/8" to bottom of pilot hood. Adjust gap to give proper spark. Remove hands from electrode before pressing red button.	
		C.	No gas to pilot/plugged orifice.	Check valve knob position & any shutoff valves. If propane, check for empty tank. Check pilot orifice; remove any blockage.	
		D.	Ignitor wire grounding out.	Replace pilot assembly.	
		E.	Loose ignitor wiring.	Check for spark. If electrode connection is correct & no spark, replace ignitor.	
2.	Pilot will not stay lit.	A.	Pilot flame not in constant contact with pilot sensor.	Check log placement. Check pilot flame; adjust flame if necessary.	
		B.	Pilot sensor not tightened/sealed in valve properly.	Check that pilot sensor connector is tight in valve.	
		C.	Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.	
		D.	Faulty valve.	Replace valve.	
3.	With pilot lit, valve and ON/OFF	A.	110 volts of electricity has burned out valve.	Remove voltage and replace valve.	
	switch in "ON" position, burner will not light.	B.	ON/OFF wall switch defective.	Check ON/OFF switch for proper connections. Connnect wires across terminal at ON/OFF switch. If burner comes on, replace ON/OFF switch. If burner doesn't come on, connect to ON/OFF switch junctions at valve. If burner comes on, replace wires.	
		C.	Plugged burner orifice.	Check burner orifice, remove blockage.	
		D.	Defective thermopile	Replace thermopile.	
		E.	Burner not on orifice.	Check burner; place on orifice.	
		F.	Loose or faulty wiring.	Check for loose connections; verify wiring (see Figure 15).	
		G.	Faulty valve.	Replace valve.	
		H.	Faulty high limit switch/ microswitch.	Replace high limit switch or microswitch.	
4.	Appliance turns itself off after a period of time, but	A.	High limit safety switch is activated.	Have a qualified service technician check venting system for blockage (i.e. bird nests, damage). Ensure proper venting condition. High limit switch will reset automatically as appliance cools.	
	pilot stays lit.	В.	Intermittent short in ON/OF wiring system.	Check/replace ON/OFF wiring system.	
		C.	Defective thermopile.	Replace thermopile.	
5.	Appliance turns itself off after a	A.	Pilot flame not in constant contact with pilot sensor.	Check log placement; check pilot flame, adjust flame if necessary.	
	period of time, pilot no longer lit.	B.	Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.	
6.	Glass door fogs up.	A.	Normal result of gas combustion.	No action necessary - glass will clear as appliance warms.	
7.	Blue flames.	A.	Normal result during first 20 minutes of burning.	No action necessary - flames will turn more yellow after about 20 minutes.	
8.	Glass has film on it.	A.	Normal result during initial few hours of operation.	Clean glass with Brasso or silver polish.	
		В.	Improper log placement causing soot.	Check log placement; reposition if necessary.	
		C.	Dark yellow tipped flame.	Open air shutter to increase air to gas ratio.	



# I. REPLACEMENT PARTS

Replacement parts are available from your distributor/dealer.



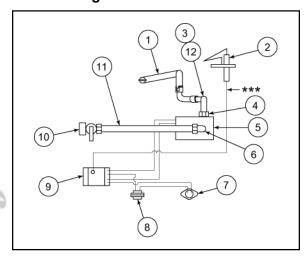
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ITEM	PART#	DESCRIPTION
1	31039	Middle Log
2	31038	Back Log
3	31085	Top Left Log
4	31084	Top Right Log
5	18697	Ember Tray
6	28911	Lava Rock
7	14333	Rock Wool

ITEM	PART #	DESCRIPTION
1	20868	Top Front
2	21788	Right Column
3	24737	Screen
4	20359	Lower Front Face
5	21787	Left Column
6	19423	Lower Face
7	20358	Upper Front Face

ITEM	PART #	DESCRIPTION		
1	20355	Burner		
2	26542	Ignitor		
3	13844	Orifice - Natural Gas		
4	17524	Brass Fitting, 90° Elbow		
5	31828	Valve		
6	17069	Brass Fitting		
7	16957	High Limit Switch		
8	20947	Transformer		
9*	15695	Ignition Control		
10	15697	On/Off Valve		
11	15696	Flexible Line		
12	34850	3/8" Burner Tubing		
IF CON	IF CONVERTED TO PROPANE			
3	13445	Orifice - Propane		

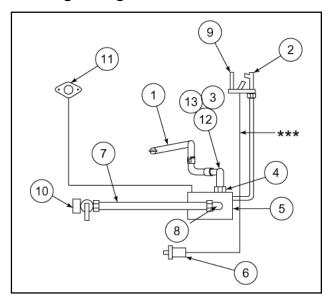
### **Electronic Ignition - G136E**



If any of the original wiring as supplied with the appliance must be replaced, it must be replaced with Type 18 ga., 105C wire, or its equivalent.



### **Standing Pilot Ignition**

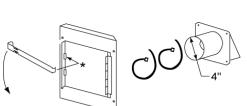


\*\*\* If any of the original wiring as supplied with the appliance must be replaced, it must be replaced with Type 18 Ga., 105C wire, or its equivalent.

ITEM	PART #	DESCRIPTION
1	20355	Burner
2	25731	Pilot Assembly - Natural
3	13844	orifice - Natural
4	13425	Brass Fitting, Male
5	12191	Valve - Natural (Robertshaw)
6	13416	Push Button Ignitor
7	15696	Flexible Line
8	17069	Brass Fitting, Male Flare
9	13411	Thermopile (Pilot Sensor)
10	15697	On/Off Valve
11	24968	High Limit Switch
12	22496	3/8" Burner Gas Tubing
13	13405	Bulkhead - Brass
IF CON	IVERTED T	O PROPANE
2	25732	Pilot Assembly - Propane
3	13445	Orifice - Propane
5	25810	Valve - Propane (Robertshaw)

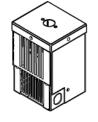


### J. ACCESSORIES



**AK14** 

**Outside Air Kit** 



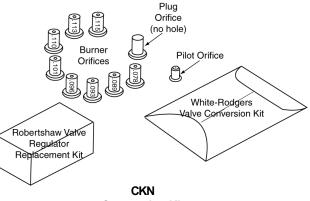
BC10, BC11 **Fan Control** 



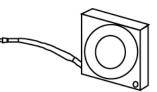
**Remote Control RCT-MLT-HTL Multifunction Remote** Control

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

SMART-BATT-HTL **Battery-operated Remote Control with Thermostat** Control



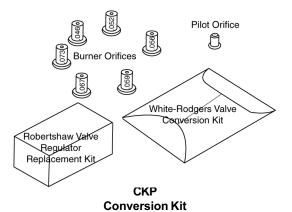


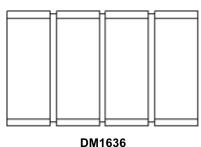


**FK19** Fan Kit



**Doors** 





**DM1636B Bi-fold Glass Doors** 



# **HOMEOWNER'S NOTES**



## **HOMEOWNER'S NOTES**



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# **Gas Appliance (Fireplace) Limited Lifetime Warranty**

**HEARTH & HOME TECHNOLOGIES INC. ("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.

### **Limited Lifetime Warranty**

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 ABOVE.
- **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:

- 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.

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