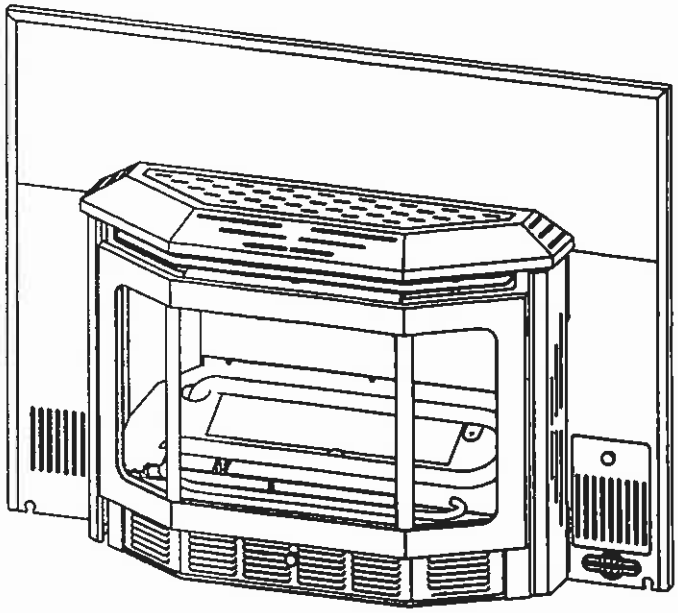
EARTH STOVE™
BY LENNOX HEARTH PRODUCTS

INSTALLATION AND OPERATION MANUAL

GAS FIRED
DIRECT VENT
ROOM HEATER
INSERT



Suitable for installation into a masonry or factory built fireplace.

This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes.

MODEL BayFire DVI (Direct Vent)

P/N 23076, Rev. C, 09/01

WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, person 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 gas supplier. This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Warnock Hersey
C ® US

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IMPORTANT: Read thoroughly before starting installation. Failure to follow these installation instructions may result in a possible fire hazard and will void the warranty. Do not attempt to alter or modify the construction of this appliance or its components. Any modification or alteration of construction will void warranty, certification, and approvals of this unit. Save this manual for future reference.

INTRODUCTION

The Model BayFire™ DVI has been tested and certified by ITS (Intertek Testing Services. Listing mark is Warnock Hersey). It is listed as a Direct Vent, Gas Fired Room Heater to:

> Tested to ANSI Z21.88-1998• CSA 2.33-M98 Direct Vent Gas Fireplace and CAN/CGA 2.17-M91 (For High Altitude).
>
> For an appliance for manufactured home (mobile home) installation, "This appliance must be installed in accordance with the current Standard Mobile Homes, CAN/CSA Z240 MH, or with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such a standard is not applicable, the current Standard for Fire Safety Criteria for Manufactured Home Installations, Sites and Communities, ANSI/NFPA 501A."

This heater is designed to be installed into masonry or factory built solid fuel burning fireplace.

This Appliance is designed to operate on natural gas, or propane (LP) when unit is factory set for either of these fuels or field converted using: LP (propane) conversion kit (part #23140) or Natural Gas conversion kit (part #23130). This appliance uses a millivolt type control system consisting of a gas control valve/regulator, a standing pilot burner assembly, a thermopile, thermocouple, a electronic igniter, and ON/OFF switch. All exhaust gases must be vented outside the structure. Combustion air is drawn from outside the structure. THIS UNIT DOES NOT REQUIRE 110 VOLT POWER TO OPERATE. The heat circulation fan requires 115-Volt power to operate. The fan is controlled automatically by a temperature safety switch. Fan speed can be adjusted from off to low and high by the fan rheostat.

WARNINGS

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.

THIS APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING A SEPARATE SOLID FUEL BURNING APPLIANCE.

THIS ROOM HEATER IS A DIRECT VENT GAS APPLIANCE. DO NOT BURN WOOD OR OTHER MATERIAL IN THIS HEATER.

THIS APPLIANCE IS EQUIPPED WITH A RELIEF DOOR IN CASE OF DELAYED IGNITION BLOW BACK. IF THE RELIEF DOOR OPENS, REMOVE TOP AND INSPECT FOR GASKET DAMAGE. IF NECESSARY, REPLACE WITH FACTORY SUPPLIED GASKET ONLY.

CONFIRM RELIEF DOOR IS CLOSED AND PROPERLY SEATED, THEN REPLACE TOP.

DO NOT CONNECT 110-120 VAC TO THE GAS CONTROL VALVE OR CONTROL WIRING SYSTEM OF THIS UNIT.

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE 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.

CAUTIONS

ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

GENERAL INFORMATION

The installation must conform with local codes or in the absence of local codes to:

In USA, The National Fuel Gas Code, ANSI Z223.1 (NFPA 54) - current edition

In Canada, CAN/CGA-B149 (installation codes) - current edition.

Installation in Manufactured (Mobile) Homes must conform to:

In USA, Manufactured Home Construction, and Safety Standard, Title 24 CFR, Part 3280;

In Canada, Install per current standards - Mobile Homes CAN/CSA Z240 MH.

In some states or municipalities, a licensed gas fitter or plumber may be required to install this appliance. Check with your local building official for requirements in your area.

This appliance must be installed into a masonry or factory built solid fuel (wood) burning fireplace.

Never seal the opening at the rear of the stove.

Never operate the unit with the relief door open.

In the United States and in Canada, this appliance may be used with a thermostat (see *Optional Wall Thermostat*). In the United States and in Canada, this appliance is certified for use in bedrooms. If installed in a bedroom in Canada, a thermostat IS required.

During any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.45 kPa), the appliance must be isolated from the gas supply piping system by turning the gas control valve knob to the "OFF" Position.

The appliance and its control valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess ½ psig (3.45 kPa). If test pressures equal to or less than ½ psig are used in pressure testing the gas supply piping system, this heater must be isolated from the piping system by closing its individual manual shutoff valve during testing.

For high elevation, refer to (for USA) ANSI Z223.1-latest edition for orifice resizing (see *High Altitude*).

DO NOT USE this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and gas control, which has been under water.

The room air fan (p/n #45074) has a flexible electrical cord that must be electrically grounded per local codes or per electrical codes:

In USA, NEC, ANSI/NFPA 70-1987.

In Canada, CSA C22.1

WARNING: Electrical Grounding Instructions. This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. **Do not cut or remove the grounding prong from this plug.**

Gas Pressure

(WC = Water Column) Minimum inlet gas supply pressure for the purpose of input adjustment:

Natural Gas – 4.5" WC min. - 10.5" WC max.

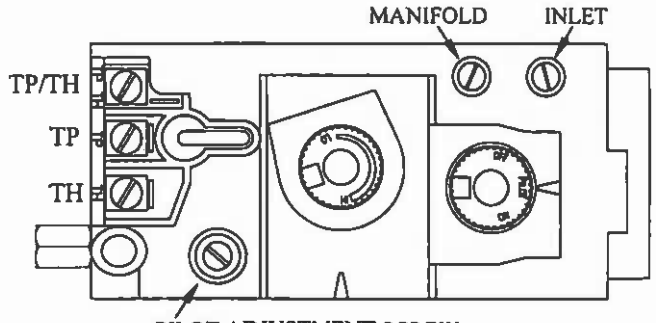
Propane (LP) – 10.5" WC min. - 13.0 WC max

Manifold gas supply pressure:

	LOW		HIGH
Natural Gas -	1.7" WC	(to)	3.5"WC
	25,000 BTU/hr		37,000 BTU/hr
Propane (LP) –	6.3" WC	(to)	10"WC
	19,700 BTU/hr		34,600 BTU/hr

Pressure Taps

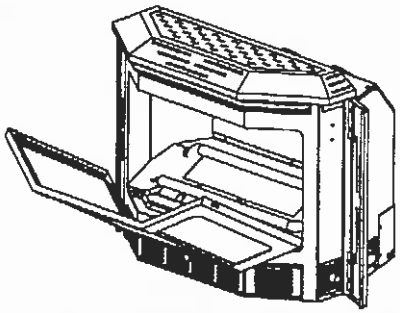
Gas inlet and outlet (manifold) pressure taps are provided on the top right of gas control valve for a test gauge connection.



Gas Control Valve

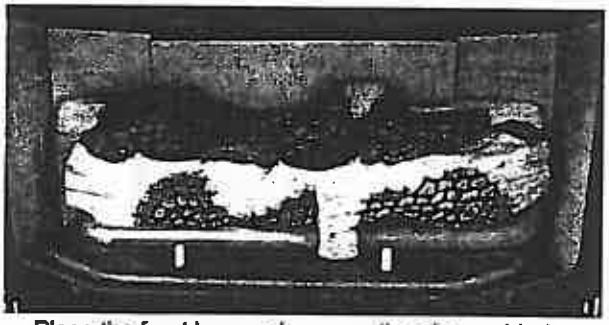
ASSEMBLY / INSTALLATION

1. Remove stove box and make sure all the pieces are present: Stove Body, Surround Box, Log Box, and Rock Wool Bag.
2. Remove stove body from pallet and install as per Installation Instructions.
3. Unlatch the two door latches at upper corners of gold door.
4. Carefully swing the door down to about a 10-degree angle and remove by sliding it to the left. Be careful not to scratch the gold. It is ***very*** soft!



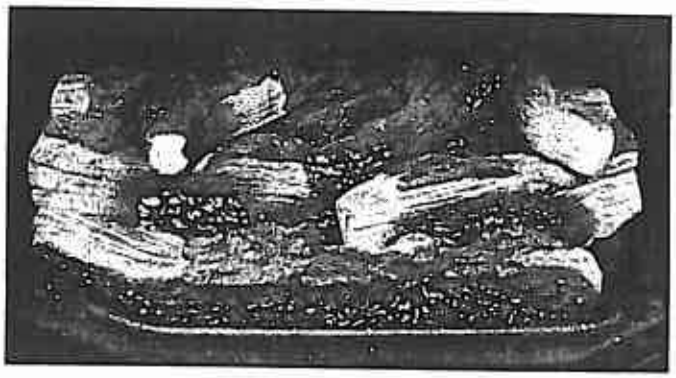
5. If an optional remote control is used, connect it to the two-(2) white leads. **See Wiring Diagram, page 10.**
6. Carefully place largest log in the rear of the firebox.

7. Place middle log as shown on the pin provided.

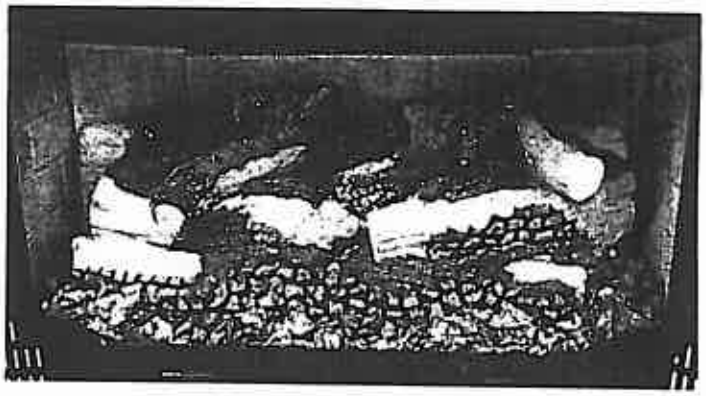


8. Place the front log as shown on the pin provided.

9. Place the two top twigs as shown on the pins provided.



10. Spread the rock wool over the burner, around the front log and between the front log and the middle log.



11. <u>Gas Supply Hookup:</u> After establishing the location of the appliance, have a qualified professional size and run the gas supply line to the bottom rear of the unit, then connect the gas supply line to the appliance. This line should terminate with a shutoff valve. This appliance is fitted with a 24" flexible stainless steel connector line, which can be positioned to exit the left or right rear of appliance. The end of this line is a 3/8" flare fitting. Make the connection to the gas supply line using the correct fitting required to the shutoff valve.

INSTALLATION

11. Continued...HAVE THE INSTALLER PURGE THE GAS SUPPLY LINE OF AIR BEFORE CONNECTING TO THE APPLIANCE. After connecting, the gas supply to the appliance do the following:

    a. Purge air from gas lines and connections by holding gas control valve down in the pilot position until pilot will light (Light the appliance using lighting instructions on label). **WARNING: IF THE PILOT WILL NOT LIGHT AFTER 1 MINUTE OF ATTEMPTING, WAIT FOR AT LEAST 5 MINUTES FOR GAS TO CLEAR BEFORE ATTEMPTING AGAIN.**

    b. Verify that the pilot and main burner ignition and operation are correct.

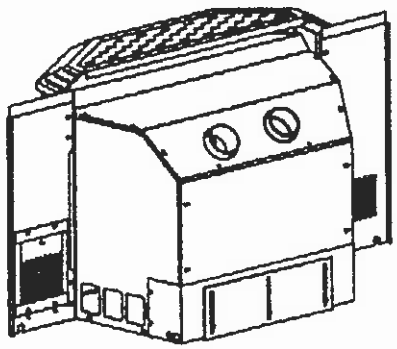
    c. Test all connections for leaks with a leak detector or soapy water solution.

    d. With the burner lit, check to make sure that the inlet gas and manifold pressures are correct (see page 2).

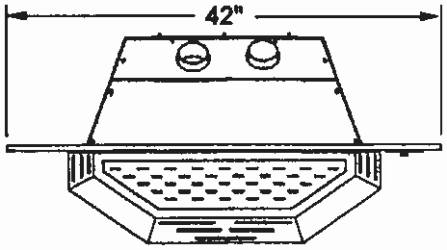
12. Adjust the main burner flame if necessary (see page 10, #7).

13. Remove the surround pieces from the surround box. Make sure it contains a bag with (8) 10-24 kep nuts, (1) right side surround, (1) left side surround, (1) top surround, (1) gold decorative inset, and (1) gas shut-off door.

14. Position each side surround as shown and fasten in place with the nuts provided.



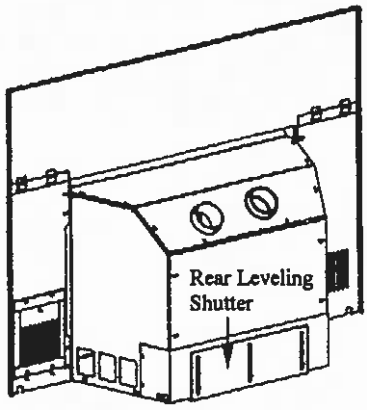
15. Measure the overall width. If it is not 42" loosen the nuts and adjust as necessary.



16. Rear Leveling Shutter Adjustment: It may be necessary to level the appliance in some installations (recessed firebox). If needed, use the leveling shutter included with this appliance and adjust as follows:

    Adjust the height of the leveling shutter at the rear base of the insert to bring appliance to a level position.

    Slide the insert main body into the fireplace opening until the front face section is within 3 to 5 inches of the fireplace front facing.



17. Install top surround and gold trim.

18. Derating the appliance is not necessary for elevations up to 4,500 feet. See *High Altitude*, for procedure on derating above 4,500 feet.

INSTALLATION

Fuel Conversion Kits

Propane (LP) Conversion Kit – p/n 23140

Natural Gas Conversion Kit – p/n 23130

Fuel Conversion Kits Shall Be Installed By A Qualified Service Agency In Accordance With The Manufacturer's Instructions And All Applicable Codes And Requirements Of The Authorized Having Jurisdiction. If The Information In These Instructions Is Not Followed Exactly, A Fire, Explosion, Or Production Of Carbon Monoxide May Result Causing Property Damage, Personal Injury, Or Loss Of Life. The Qualified Service Agency Is Responsible For The Proper Installation Of The Conversion Kit. The Installation Is Not Proper And Complete Until The Operation Of The Converted Appliance Is Checked As Specified In Instructions Supplied With The Kit.

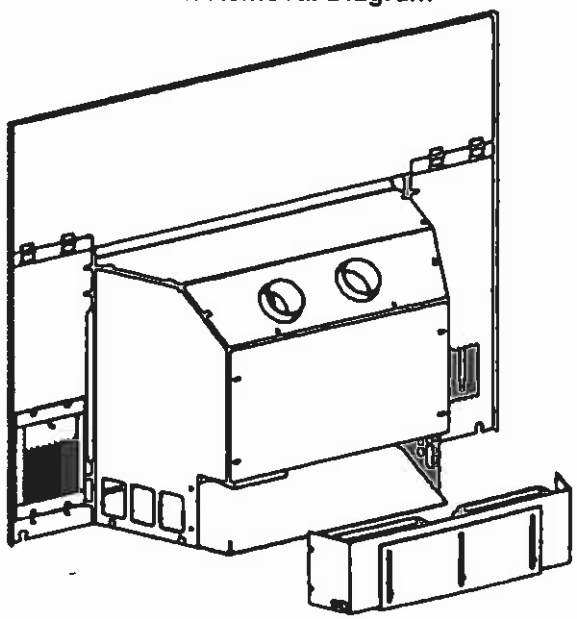
The conversion kit contains components required to convert this appliance from using Propane (LP) Gas to using Natural Gas as the only fuel or from using Natural Gas to using Propane (LP) Gas as the only fuel. The kit contains a pilot orifice, two main burner orifices, and a heat control regulator. All of these components must be replaced in order for the unit to operate safely on the alternate fuel type.

Room Air Fan System

Fan Replacement Instructions:

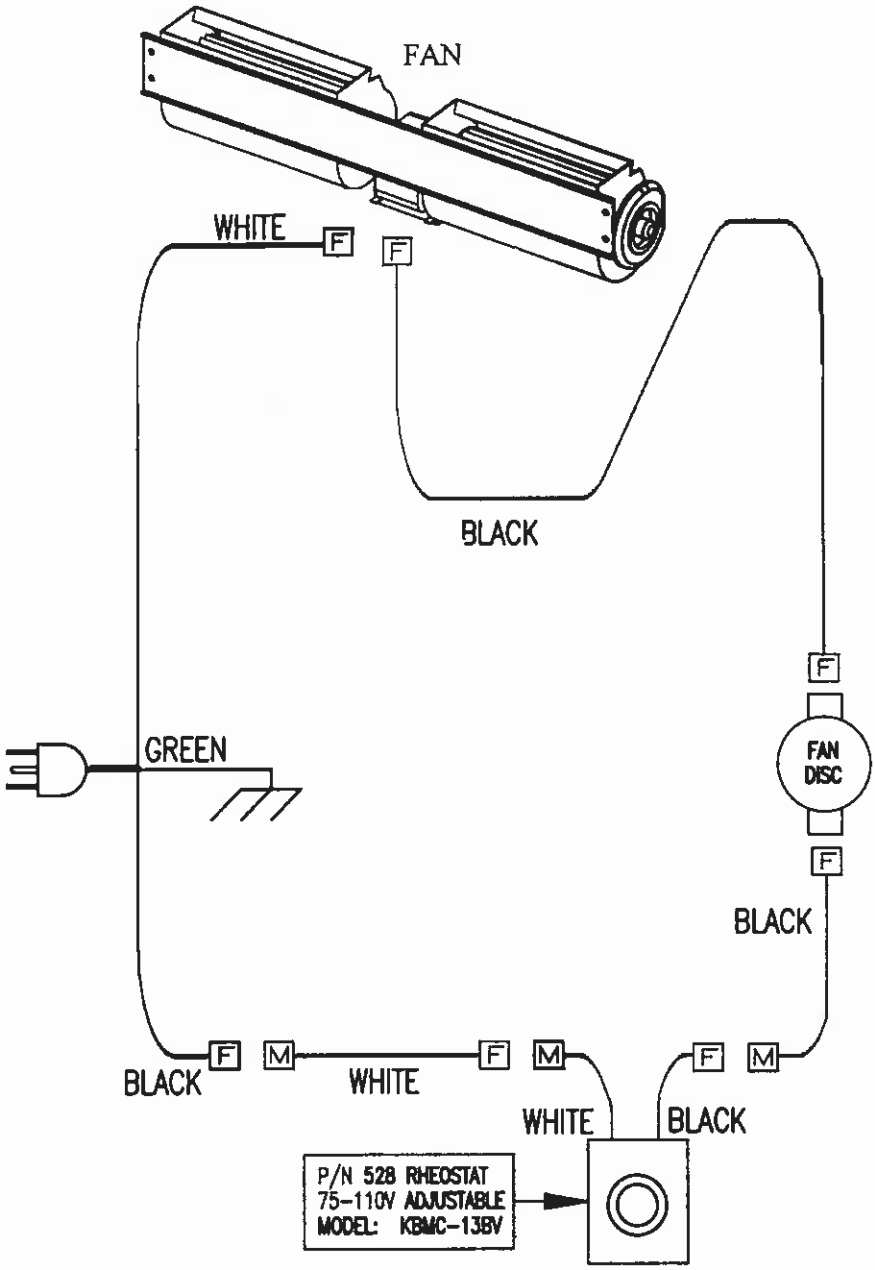
1. Unplug 110-volt A.C. power supply to stove.
2. Shut off gas supply to stove.
3. Remove surround at trim.
4. Disconnect 4" flex from exhaust and intake.
5. Pull insert body out of fireplace to gain access to back panel. Note: It may be necessary to disconnect gas supply line to stove.
6. Remove the four 1/4"-20 philips screws that secure the fan assembly in place.
7. Unplug fan by disconnecting it at fan.
8. Remove the three ¼" hex head screws that hold fan to mounting bracket.
9. Clean, adjust or replace fan and reassemble in reverse order. Note: All gas supply connections must be leak tested and air purged from system.

Fan Removal Diagram



FAN OPERATION: With the rheostat knob in the "ON" position (rotate rheostat dial clockwise until it clicks), the fan will come on automatically as the stove gets hot (adjust rheostat dial to desired speed setting). The fan will turn off automatically when stove cools down.

Blower Wiring Diagram



INSTALLATION Read *Entire Manual Prior To Installing And Using This Appliance.*

Consult your Local Building Department for requirements in your area.

CAUTION: ***The fireplace in which this gas insert is to be installed must be thoroughly cleaned if it has been used to burn wood or synthetic logs. Have the chimney and all inside surfaces of the fireplace brushed and vacuumed so that no soot, embers, or loose combustion deposits can be drawn into the heat circulation fan and blown into the living area. If any portion of the chimney system shows signs of structural or mechanical weaknesses, such as; cracks, leaky joints, corroded or warped surfaces, the faulty portion must be repaired or replaced prior to installing this appliance.***

Selecting A Location

This appliance can be installed in most residential fireplace configurations. If installed close to an adjacent wall, ensure that the minimum clearances to combustible surfaces are maintained. A Local Building Inspector should review your plans prior to installation.

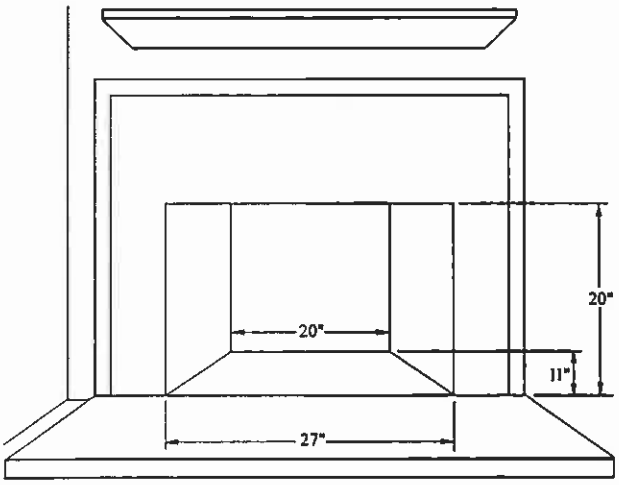
CAUTION: ***When installing into a Zero Clearance Fireplace, the firebox must accept the insert without modification other than removing bolted or screwed together pieces such as smoke shelf/deflectors, ash lips, screen or door tracks and damper assemblies, that may be reinstalled to restore the fireplace to its original operating condition if the insert is removed and not replaced.***

THE REMOVAL OF ANY PART MUST NOT ALTER THE INTEGRITY OF OUTER SHELL OF THE FIREPLACE CABINET IN ANY WAY.

Minimum Fireplace Dimensions

Dimensions Into Fireplace
(See page 22 for stove dimensions)

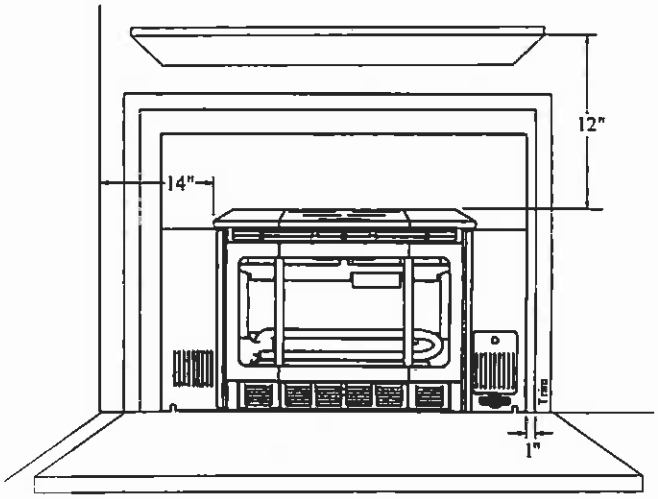
- **Height: 20"**
- **Width: 27" at 0" depth**
- **Width: 20" at 11" depth**
- **Depth: 11"**



Minimum Clearances to Combustibles

Minimum clearances from spacers/standoffs or surfaces to combustible construction.

The clearances listed below are minimum distances (see *Venting Requirements*).

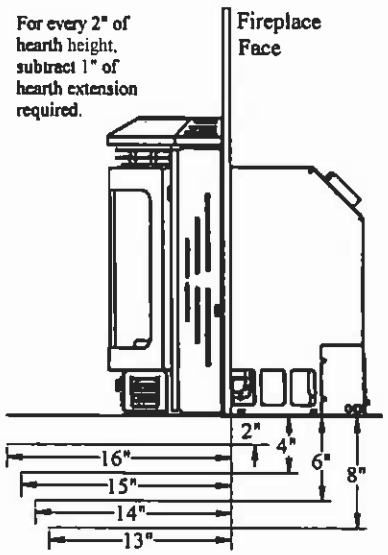


Ceiling Minimum	**84 In. / 2134 mm**
Side Wall Minimum	**14 In. / 356 mm**
Stove Top to Mantel Minimum	**12 In. / 305 mm**
Mantel Projection Maximum	**10 In. / 254 mm**
Side Trim	**1 In. / 25.4 mm**

This includes any projections such as shelves, window sills, mantels, etc. above the appliance.

Hearth/Floor Protection

Required if non-combustible hearth extends less than 16 inches out from fireplace opening. If hearth is elevated (see below), subtract one inch of hearth extension required for every two inches of height.



INSTALLATION - *Consult your Local Building Department for requirements in your area.*

Installation Into a Masonry Fireplace.

For masonry installation, (2)-two 3" single wall aluminum flexible liners that meets UL181 (this listed liner will only be used for intake air. The other 3" flexible liner must be a gas vent aluminum flexible liner that meets UL1777, which is used for exhaust gas).

Before running the flexible liners, make sure that both liners will pass through existing damper area. Remove or lock damper to allow the passage of the flexible liners. If the damper will not allow the passage of both liners, DO NOT PROCEED FURTHER, without consulting a local mason on how to remove or alter the damper without risk of structural damage or leakage.

Before installing venting, mark the flexible liners on each end to designate which is intake and which is exhaust.

Stretch each 3" flexible liner and run it down the chimney until it reaches the hearth. Leave an additional 3" to each of the flex liners extending from the chimney and cut off excess.

Cut the termination cap flashing and bend it to fit the chimney top. If the termination cap must be modified, silicone all seams to seal the cap.

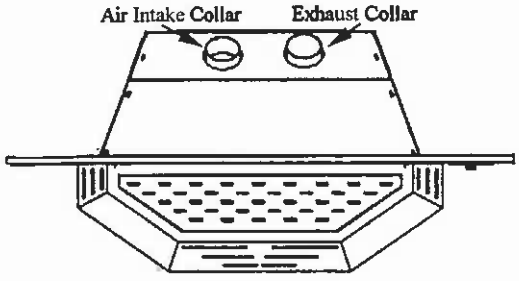
Attach the 3" gas vent flexible liner (exhaust) to the shorter collar on the masonry termination cap, and then attach the 3" aluminum flexible liner (intake) to the longer collar on the masonry termination cap. *See Note.*

Place a bead of silicone on the bottom of the cap flashing, position the flashing, and secure it to the chimney.

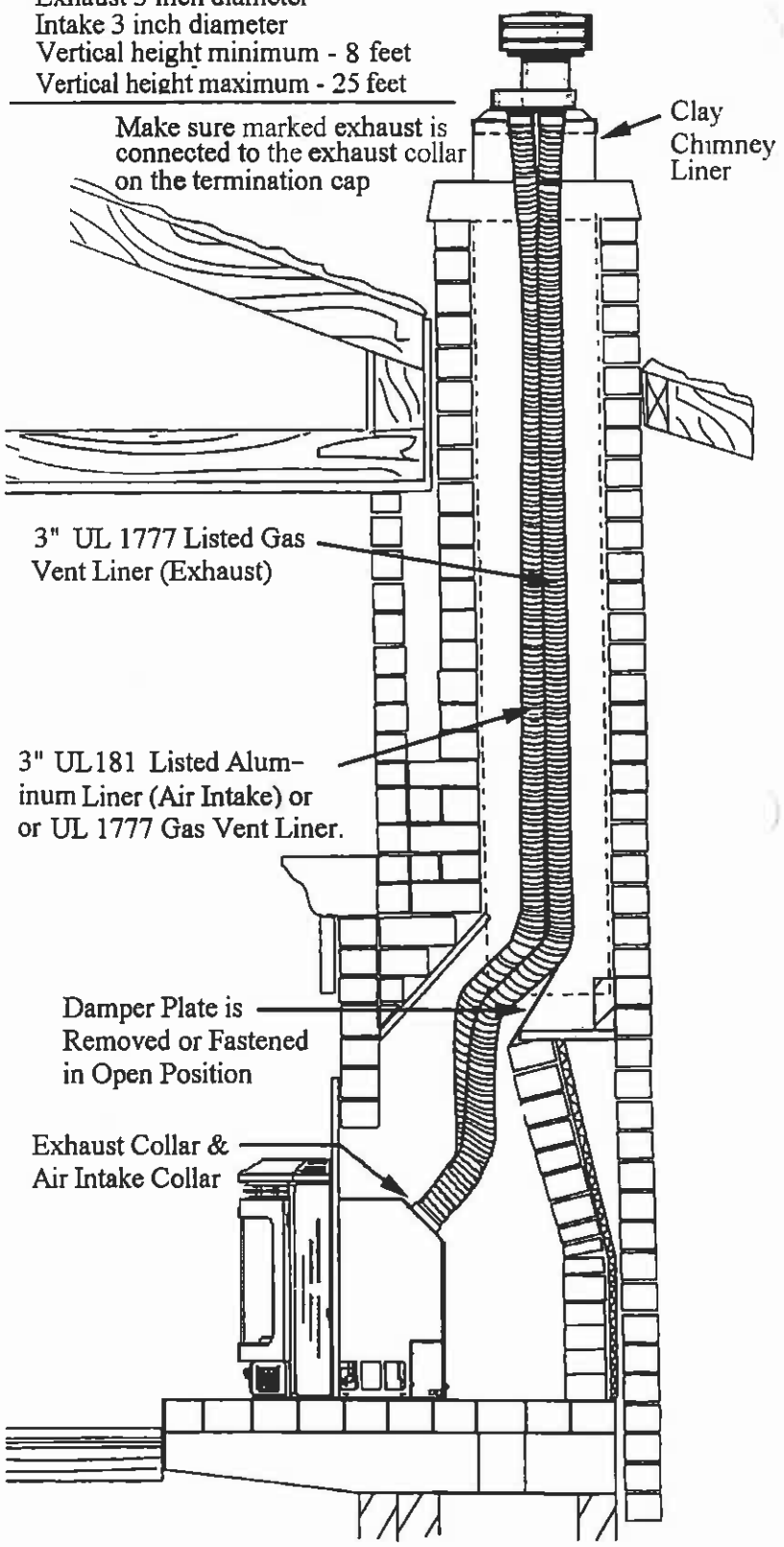
Note: Do not hook 3" gas vent liner (exhaust) to the longer collar. This will cause operational malfunctions.

Measure up from the hearth 18"(inches) on each flexible liner and cut. Connect the exhaust liner to top exhaust collar (see illustration). Then, connect the intake flexible liner to the rear air intake collar. After both liners are attached, push the adapter up until the flexible liners are compressed.

Top View



Liner Requirements:
Exhaust 3 inch diameter
Intake 3 inch diameter
Vertical height minimum - 8 feet
Vertical height maximum - 25 feet



INSTALLATION - *Consult your Local Building Department for requirements in your area.*

Installation into a Factory Built Fireplace.

For relining an existing Factory built fireplace chimney system install (2)-two 3" single wall aluminum flexible liners that meets UL181 (this listed liner will only be used for intake air. The other 3" flexible liner must be a gas vent aluminum flexible liner that meets UL1777, which is used for exhaust gas).

Before running the flexible liners, make sure that both liners will pass through existing damper area. Remove or lock damper to allow the passage of the flexible liners. If the damper will not allow the passage of both liners, DO NOT PROCEED FURTHER.

Before installing venting components, mark the flexible liners on each end to designate which is intake and which is exhaust.

Stretch each 3" flexible liner and run it down the chimney until it reaches the hearth. Leave an additional 3" to each of the flex liners extending from the chimney and cut off excess.

Cut the termination cap flashing and bend it to fit chimney top. If termination cap must be modified, silicone all seams to seal cap.

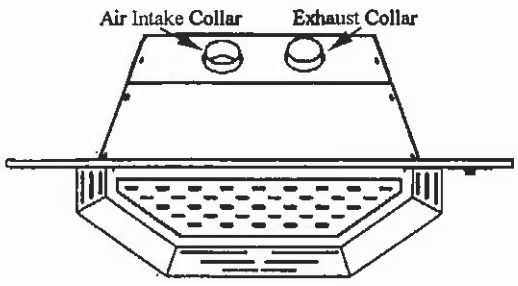
Attach the 3" gas vent flexible liner (exhaust) to the shorter collar on the masonry termination cap, and then attach the 3" aluminum flexible liner (intake) to the longer collar on the masonry termination cap. *See Note.*

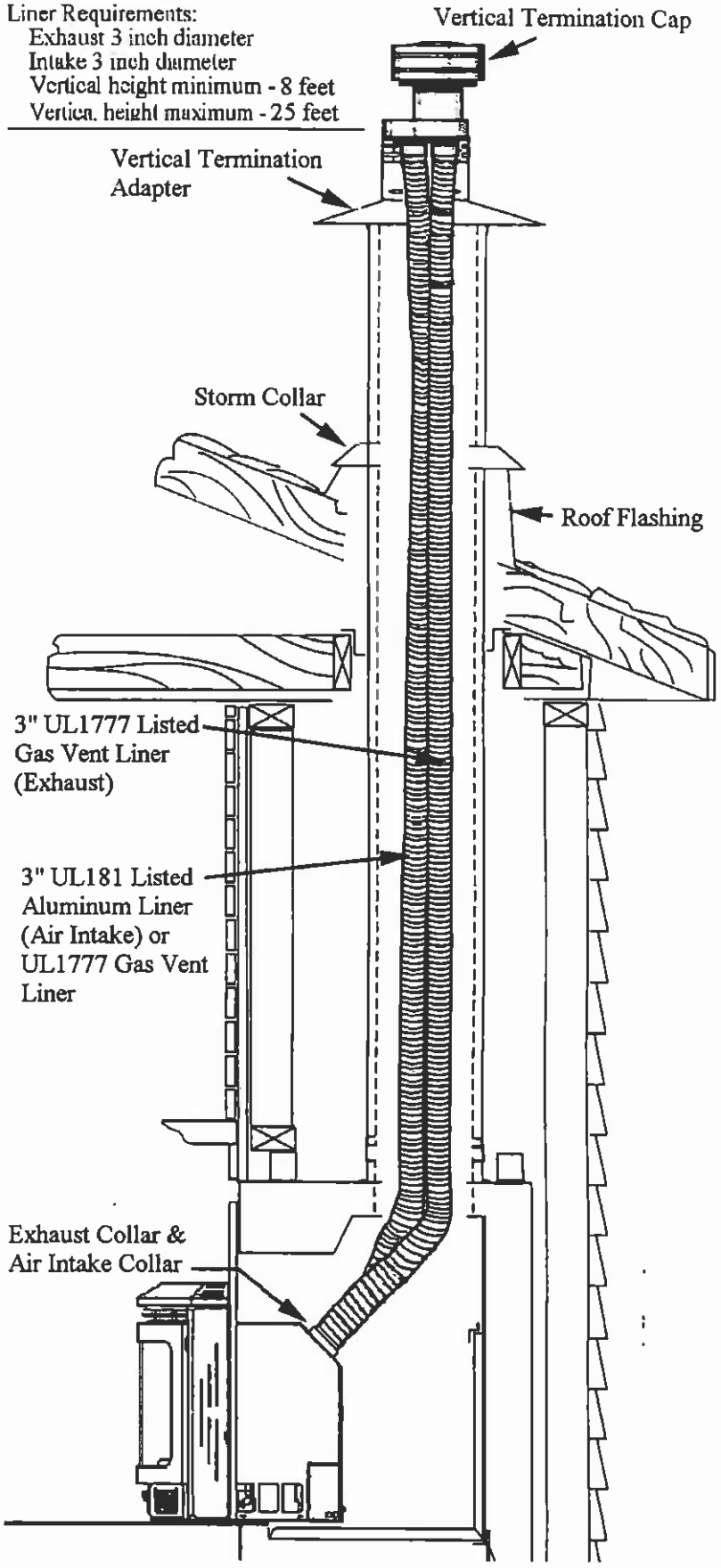
Place a bead of silicone on the bottom of the cap flashing, position the flashing, and secure it to the chimney.

Note: Do not hook 3" gas vent liner (exhaust) to the longer collar. This will cause operational malfunctions.

Measure up from the hearth 18"(inches) on each flexible liner and cut. Connect the exhaust liner to top exhaust collar (see illustration). Then, connect the intake flexible liner to the rear air intake collar. After both liners are attached, push the adapter up until the flexible liners are compressed

Top View





INSTALLATION

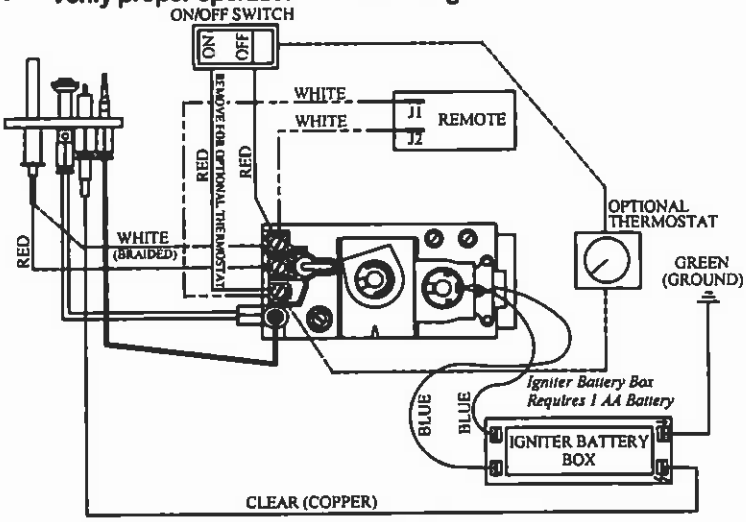
Installation Check List

Read and understand these instructions before using this appliance. Go through this installation checklist:

1. Check that the log assembly is properly installed. Use caution when handling the log assembly as it may easily be damaged or broken.
2. Check to see that wiring is correct and enclosed.

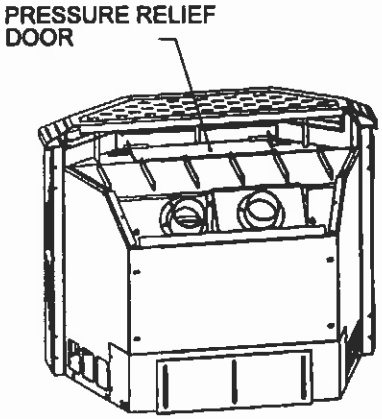
Cautions:

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



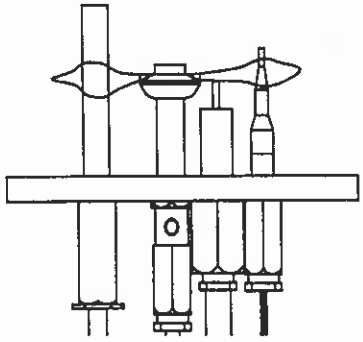
3. Verify that the gas line has been purged of air.
4. Check that there are no gas leaks. If you smell gas, do not attempt to light this appliance. Follow safety instructions on the front of this manual.
5. Check that glass front is in its proper position and the gold finish is wiped clean of smudges or fingerprints prior to the initial burn. DO NOT operate the appliance with the glass front off.
6. Check that the venting and cap are unobstructed.
7. Burner air shutter opening to be: Natural Gas – 3/8", Propane – 3/8". Some adjustment from standard may be necessary for the desired flame characteristics (see *Burner Flame Appearance, page 12*).
8. Check that relief door is properly closed (see diagram on this page showing location).

Pressure Relief Door



Pilot Light Adjustment

In some installations, the size of the pilot may have to be adjusted. If pilot flame varies greatly from diagram, consult your authorized Earth Stove Technician.



OPERATION

Room Fan System Operation

The fan consists of a 200 cfm fan assembly, a temperature disc and a variable speed blower control switch (rheostat). With the rheostat knob in the "ON" position (rotate rheostat dial clockwise until it clicks), the fan will come on automatically as the stove gets hot (adjust rheostat dial to desired speed setting). The fan will turn off automatically when stove cools down.

Optional Wall Thermostat (p/n 18120)

The wall thermostat needs to be capable of operation on 250 millivolts from thermopile. Twenty-five feet maximum length of 18-gage thermostat wire is recommended to ensure proper operation. The thermostat should be mounted central to the area to be heated about 5' above the floor. Run the wire in a manner where it won't be subject to snagging or damage such as under the carpet or floor. Wire the thermostat in series with the ON/OFF switch by disconnecting the wire on the TH terminal of the control valve and replacing it with one of the thermostat wires. Then connect the other thermostat wire to the ON/OFF switch to act as a positive "OFF" override of the thermostat. An alternate wiring configuration is to disconnect both wires from the ON/OFF switch at the control valve, then connect the two thermostat wires to the TH and TH/TP terminals. This will leave the ON/OFF switch inoperative. In this configuration, it is recommended that a thermostat with a built-in positive "OFF" be used to ensure main burner "OFF" control.

Optional Remote Control

Install Remote Control per manufacturer instructions. See wiring diagram, page 10.

Place the remote control receiving unit anywhere inside the lower pedestal area. This type of remote control signals the receiver using a radio frequency and does not require a direct line of sight from the remote control to the receiver.

To Operate:

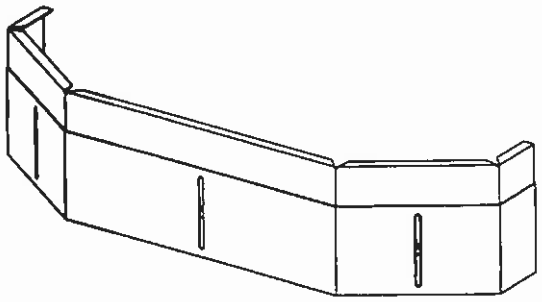
1. Light the pilot light.
2. Turn the burner ON/OFF switch to the "OFF" position.
3. Turn the gas control knob to the "ON" position.
4. The remote control should now operate. See remote control operating instructions.

WARNING: ONCE THE BATTERIES ARE INSTALLED INTO THE REMOTE CONTROL, DO NOT BUMP REMOTE CONTROL AGAINST STOVE BODY. THIS COULD RESULT IN DAMAGE TO THE REMOTE CONTROL BOARD. THIS DAMAGE IS NOT COVERED UNDER THE WARRANTY.

Optional Trim Skirt
(For Elevated Hearths)

This decorative trim skirt is for finishing off the front of elevated fireplaces. It is designed to slide under the insert as it protrudes from the fireplace to give it a finished look. It is held in place by friction.

Trim Skirt - Accommodates height variations from 4" to 7".



Odor During Operation

Curing Period: There will be some odor during the first few burns from the curing of the stove paint. Depending on your use, this may take a few hours or a few days. The dwelling should be well ventilated during these initial burns.

KEEP YOUR HOUSE WELL VENTILATED DURING THE CURING PROCESS. THE CHEMICAL SMELL AND HAZE EMITTED BY THE CURING PROCESS CAN BE QUITE NOTICEABLE AND MAY SET OFF A SMOKE DETECTOR.

Glass Door Assembly

Use only glass door assemblies certified for use with this appliance.

CAUTION: IF THE DOOR ASSEMBLY OR GLASS IS BROKEN OR DAMAGED (IN ANY WAY), THEY MUST BE REPLACED BEFORE HEATER CAN BE SAFELY OPERATED. USE ONLY COMPONENTS PROVIDED BY THE MANUFACTURER AS REPLACEMENT PARTS. DO NOT SUBSTITUTE ANY OTHER GLASS OR COMPONENTS ON THIS HEATER. USING SUBSTITUTE COMPONENTS MAY LEAD TO IMPROPER OPERATION OF HEATER AND MAY BE A SAFETY HAZARD.

DO NOT STRIKE GLASS. DO NOT SLAM DOOR SHUT. THIS MAY LEAD TO BREAKAGE AND/OR LEAKAGE OF FLUE PRODUCTS INTO DWELLING.

NOTE: See page 18 for information on ordering optional kits.

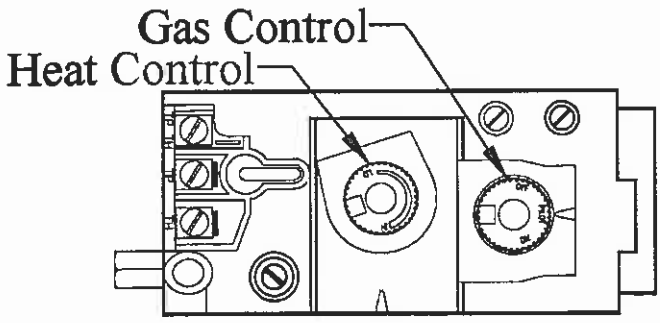
OPERATION

Lighting Procedure

1. Turn On/Off switch to the "Off" position.
2. Turn the gas control knob to the "OFF" position. Wait 5 minutes.
3. Turn gas control knob to "PILOT".
4. If the stove is being lit for the first time or after disconnection from gas lines, purge air from gas lines and connections by holding gas control valve down in the pilot position until pilot lights.
5. Push the gas control knob down all the way and hold. Continue to hold the gas control knob down for about 1 minute after the pilot is lit. Release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 1 through 5, holding knob down for an additional 15 seconds. **WARNING: IF PILOT WILL NOT LIGHT AFTER 1 MINUTE OF ATTEMPTING, WAIT AT LEAST 5 MINUTES FOR GAS TO CLEAR BEFORE ATTEMPTING AGAIN.**
6. Turn gas control knob to the "ON" position
7. Turn the ON/OFF switch to the "ON" position. This will turn main burner on.
8. Adjust flame height using heat control knob to desired setting.
9. If optional thermostat is used set it to desired temperature.
10. If optional remote control is used, turn ON/OFF switch to "OFF" position. **See *Optional Remote Control* in manual.**

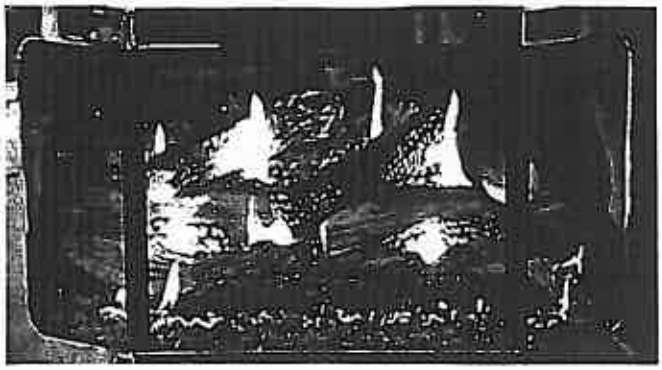
Note: If valve gas control knob is turned to the off position after pilot has been lit, the unit must cool down for at least five minutes before pilot can be relit (magnet in valve will not lock in until cool).

Controls Diagram



Burner Flame Appearance

A periodic visual check of the pilot and burner flames should be performed. If either the pilot or burner flame do not show proper appearance or behavior, as outlined here, consult a qualified gas appliance technician.



A proper burner flame is shown above. The burner flame should have the following characteristics after initial start-up (let appliance burn 15 to 20 minutes prior to accessing flame appearance):

- Excessive impingement (contact of flame with logs) should not occur.
- Rear burner flames should have yellowish tips; no soot should form at burner flame tips.
- Flames should not raise off of burner (no "lifting" of flame).

The burner flame can be adjusted to give the proper flame appearance and to prevent sooting on the window or logs by adjusting the position of the primary air shutter (see *Air Shutter Adjustment*, on page 17).

NOTE: During periods of high natural gas demand, the gas supplier may add "make-up gases" to the pipeline. This addition will change the composition of the supply gas, and may cause a change in burner flame appearance. You may also notice soot formation on the logs and viewing windows. Check with your gas supplier if you suspect a change in the composition of your gas supply.

Shutdown Procedure

For short periods of time, the main burner may be kept from operating by turning the gas control knob to "PILOT" or the ON/OFF switch to the "OFF" position. The pilot burner will remain lit for return to normal service when desired. For longer periods of shutdown, push the gas control knob down and turn to "OFF". This will shutoff both the pilot and main burner. The pilot will have to be relit when resumed use of the appliance is desired. **SEE LIGHTING INSTRUCTIONS.**

MAINTENANCE / ANNUAL SERVICE REQUIREMENTS

ALWAYS TURN OFF GAS CONTROL VALVE BEFORE CLEANING. Annual maintenance of this appliance is required. The following procedures must be performed by a qualified technician: Do not clean or service heater when hot.

Opening Glass Door

DO NOT OPEN DOOR WHEN STOVE IS HOT.

See Assembly for more information.

1. Unlatch the two door latches at the upper corners of the gold door.
2. Carefully swing the door down to about a 10-degree angle and remove by sliding it to the left.

Log Set

Removing & Cleaning Logs - Carefully remove the logs (removing top logs, then lifting front log out, then rear log). Use care when handling the fiber logs, as they become quite fragile after curing. Remove any carbon deposits from the under side of the logs using a vacuum cleaner, or a soft bristled brush.

Reinstalling Logs - (To be done after burner and pilot assembly has been cleaned). Reinstall logs per log placement instructions (see page 3). Improper positioning of logs may create carbon build-up and will alter the performance of the stove.

Replacing Logs - If logs become damaged by accident or improper handling and need replacement, use only the proper replacement logs from manufacturer, which can be purchased from your local dealer.

Cleaning Burner

Keep the burner and control compartment clean by using a clean, dry paintbrush and vacuum at least once a year. With the logs removed, vacuum out any foreign matter (lint, carbon etc.) on the burner. Be sure the burner ports are "open."

Cleaning Pilot Assembly

This procedure must be performed by a qualified technician who is familiar with the specific characteristics of this type appliance.

Cleaning Valve/Air Venturi

Clean all lint and dust build-up around the control valve and air shutter on the venturi. Inspect and clean with a brush or wire the inlet of the venturi for any spider webs or lint accumulation.

Inspect Wiring

Cautions:

1) Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

2) Verify proper operation after servicing.

Inspect and clean all wire connections. Ensure that there is no melting or damage from rodents. Inspection should include:

- Terminals at the valve
- On/Off switch
- Wall Thermostat / Remote Control (optional parts)

Inspect Venting / Combustion Air System

The periodic examination of the venting system by a qualified agency is required. This should be done before initial use and at least annually. The venting system must be inspected to ensure that the flow of combustion and ventilation air is not obstructed (outlet and inlet is open and free of blockage).

If the vent-air intake system is disassembled for any reason, the qualified service technician should follow vent manufacturers instructions for proper reassembly and sealing of the vent-air intake system.

Cleaning Glass

(Also, see page 11, *Glass Door Assembly*). **Do not use abrasive cleaners on glass.**

The viewing glass should be cleaned periodically. Exterior glass may be cleaned with a glass cleaner as desired. Interior glass - use soap and water, or commercial glass cleaner recommended for stove glass. One of many good stove glass cleaners is Rutland – *White Off* Stove Glass Cleaner (consistency: Crème Paste).

Note: Each time the appliance is lit, it may cause condensation and fog on the glass. This condensation and fog will disappear in a few minutes.

MAINTENANCE

Replacing Glass

CAUTION: IF THE DOOR ASSEMBLY OR GLASS IS BROKEN OR DAMAGED (IN ANY WAY), THEY MUST BE REPLACED BEFORE HEATER CAN BE SAFELY OPERATED. USE ONLY COMPONENTS PROVIDED BY THE MANUFACTURER AS REPLACEMENT PARTS.

Note: See page 11 for additional cautions.

1. Remove door from stove: Open door (see page 3, step 1), then lift the door up and off its hinge pins. Set door on a flat protected (towel) clean flat surface with the inside of the door facing up. Remove the glass clips (by removing screws holding clips), then carefully remove broken glass one piece at a time (protective gloves are recommended).
2. Clean the area where the glass with gasket will be installed.
3. Install new glass with gasket (use only factory 5-mm glass with glass channel gasket. Do not substitute). Carefully reinstall glass clips. Be very careful not to overtighten screws.
4. Reinstall door onto hinge pins: Align holes in door frame with hinge pins on face of stove (letting door slide down onto pins and "seat" at the bottom).

Closing the Glass Door

Reverse steps from "Opening the Glass Door."

ALWAYS MAKE SURE THE GLASS DOOR ASSEMBLY IS PROPERLY SECURED AND SEALED PRIOR TO OPERATING THE STOVE.

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

Periodic Check Of Pilot And Burner Flames Is Required

Check the operation of the pilot and cycle the burner. Visually check the flame of the burner making sure the flames are steady; not lifting or floating. The flame color should be blue at the burner with yellow body and tops.

Cycle unit a minimum of 2 times

- **Watch for smooth burner ignition and shut down.**

- Burner: Check flame patterns. Ensure that burner flame appearance does not vary greatly from diagram shown on page 12. The flame should be steady, not lifting, or floating.
- Pilot: Ensure pilot flame appearance does not vary greatly from diagram shown on page 10.

Thermopile / Thermocouple Operation

- Thermopile: Millivolt production should be a minimum of 325 MV with pilot only.
- Thermocouple: Millivolt product-ion should be a minimum of 14 MV with pilot only.

Drop out rate

- TP 50-60 MV
- TP 1 1/2-2 Min. (3 max.) if longer, replace thermopile

Check for Carbon Monoxide Presence

Check for Gas Leaks

Cleaning the Room Air Fan

UNPLUG POWER CORD. Remove any deposits from the room air fan inlets (accumulations of carpet fibers, pet hair, dust, etc.). Use a brush and/or light vacuuming for cleaning. The frequency of cleaning should be increased if pets are in the dwelling. The room air fan is equipped with sealed lubricated bearings that do not need additional lubrication. For this reason, it is recommended that you do not try to add any drops of oil to them (excess oil can ruin the fan).

HIGH ALTITUDE

High Altitude Kit (p/n #23100)

Note: Units using propane must be either factory LP or field converted using the LP Conversion Kit, part number p/n #23140. Units using natural gas must be either factory natural gas or field converted using the Natural Gas Conversion Kit, part number p/n #23130. For high altitude installations consult the local gas distributor or the authority having jurisdiction for proper rating methods. If the installer must convert the unit to adjust for varying altitudes, the information sticker (provided in kit) must be filled out by the installer and adhered to the appliance at the time of conversion

At higher elevations above 4,500 feet (1372M), this appliance requires derating (reorifice the ***burner orifices*** to reduce input per the following charts). The higher altitudes affect the atmospheric pressure and heat value of gaseous fuels. When installing this unit at high altitudes, the rated input will be lower than at sea level. The reduced oxygen content in the air and lower gas density requires installing a different orifice in order to achieve clean combustion.

The High Altitude Orifices are drilled for the smallest requirement (kit includes two #66 & 56 orifices). You will need to match altitude and fuel requirements from the correct chart. Starting from the backside, drill only by hand with numbered orifice drills. Since the orifice head is only .030" thick it can easily be bored to the required size. Use only finger turning pressure as an electric or pneumatic drill may cause over-sizing. After correct hole size is drilled, lightly debur both sides to eliminate the chance of the orifice whistling when main burner is engaged.

Replacing Burner Orifices

1. Remove glass door (See Page 3).
2. Remove logs and burner.
3. Remove air plenum by removing (5) TEK screws with a ¼" nut driver.
4. Using a 1/2" socket, remove gas burner orifices.
5. Replace burner orifices with new high altitude orifices, using pipe-sealing compound rated for gas. BE VERY CAREFUL THAT THE PIPE COMPOUND DOES NOT GET INSIDE OF THE ORIFICE (THIS COULD RESULT IN PLUGGING OF THE ORIFICE). Using a 1/2" socket, tighten orifices - DO NOT OVER TIGHTEN.
6. Reinstall air plenum, burners, logs and rock wool. Reinstall gold door.

AFTER THIS PROCEDURE IS COMPLETE WITH UNIT INSTALLED AND CONNECT-ED TO GAS LINE, RECHECK THE PILOT CONNECTION AND MANIFOLD FITTINGS FOR LEAKS, USING SOAPY WATER OR A GAS LEAK DETECTOR.

U.S.A Requirements
Drill Sizing Chart / Maximum Size vs Altitude (ANSI Z223.1 Table)

Altitude	Natural Gas		Propane (LP)	
	Front	Rear	Front	Rear
Sea Level	* #58	* #35	* #66	* #53
>2,000 Ft.	#58	#35	#66	#54
>3,000 Ft.	#58	#35	#66	#54
>4,500 Ft.	◆ #60	◆ #37	◆ #66	◆ #54
>5,000 Ft.	#61	#37	#66	#54
>6,000 Ft.	#62	#38	#66	#54
>7,000 Ft.	#62	#39	#66	#54
>8,000 Ft.	#63	#40	#66	#55
>9,000 Ft.	#63	#41	#66	#55
>10,000 Ft.	#64	#42	#66	#55

**** As equipped from factory***

◆ Altitude – USA: For installations from 0-4,500 ft. (0-1375M) the orifices sizes (DMS) for natural and propane gas are (NG #58-front, #35-rear, and LP #66-front, #53-rear). See data plate for additional information. No derating required with the orifice as equipped form factory and manifold pressures and input rations as shown on page 2 of this manual. For installation higher than altitudes shown above, reorifice per Gas Codes and product manual.

Note: The ">" (greater than) symbol indicates elevations higher than number shown.

Canada Requirements
Drilling Sizing Chart / Maximum Size vs Altitude (ANSI Z223.1 Table)

Altitude	Natural Gas		Propane (LP)	
	Front	Rear	Front	Rear
Sea Level	* #58	* #35	* #66	* #53
>2,000 Ft.	#58	#35	#66	#53
>3,000 Ft.	#58	#35	#66	#53
>4,500 Ft.	⌖ #60	⌖ #37	⌖ #66	⌖ #54
>5,000 Ft.	#61	#37	#66	#54
>6,000 Ft.	#62	#38	#66	#54
>7,000 Ft.	#62	#39	#66	#54
>8,000 Ft.	#63	#40	#66	#55
>9,000 Ft.	#63	#41	#66	#55
>10,000 Ft.	#64	#42	#66	#55

**** As equipped form factory***

⌖Altitude – Canada: For installations form 2,000-4,500 ft. (610-1,372M) the orifices sizes (NG #58-front, #35-rear, LP #66-front, and #53-treat. See data plate for additional information. No derating required with the orifice as equipped from factory and manifold pressures and input ratings as shown above, reorifice per Gas Codes and product manual.

Note: The ">" (greater than) symbol indicates elevations higher than number shown.

TROUBLE SHOOTING *(Qualified Technicians Only)*

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Igniter will not light the pilot after holding down pilot knob. **WARNING: IF THE PILOT WILL NOT LIGHT AFTER 1 MINUTE OF ATTEMPTING, WAIT FOR AT LEAST 5 MINUTES FOR GAS TO CLEAR BEFORE ATTEMPTING AGAIN.**	A. Check Battery at igniter battery box.	• Replace AA battery if necessary • Check for loose connection on igniter and igniter battery box. • Check for spark. If electrode connection is correct and no spark, replace igniter.
	B. Misaligned electrode at pilot.	Spark should be extending approx. 1/8" to thermopile. Adjust gap to give proper spark. Remove hands from electrode before pressing igniter button.
	C. Air is not purged from gas lines.	Purge line by holding gas control knob down in the pilot position until gas is available.
	D. Hood Misaligned.	Realign.
	E. No gas.	Turn on gas.
	F. Wire Disconnected	Check wiring.
	G. Wire/Connector to Battery Box Damaged.	Replace wire/connector.
2. Pilot will not light.	A. Poor connection of thermopile wires at valve terminals.	Be sure thermopile is secured tight into pilot bracket.
	B. Defective Thermopile.	Check millivolts, replace as needed. 325 mv minimum.
	C. Pilot knob not held down long enough or not fully depressed.	Depress to bottom and hold down for 45-60 seconds.
	D. Main burner switch "ON".	Turn main burner switch "OFF"
	E. EMU wire loose (black wire from underside of valve to terminal).	Check wiring for loose connection.
	F. Faulty EMU.	Check valve*. Replace valve if necessary.
3. Pilot light will not stay lit.	A. Improper pilots adjustment.	Check pilot flame. Adjust flame, if necessary.
	B. Poor connection of thermopile wires at valve terminals.	Be sure thermopile is secured tight into pilot bracket. Be sure wiring connections are tight throughout system.
	C. Defective thermopile.	Check thermopile voltage with meter. Depress valve knob and light pilot. Meter should read a minimum of 325 millivolts with the ON/OFF switch in the "OFF" position. Minimum of 150mv is required with the main burner engaged. * Replace thermopile if necessary.
	A. Insufficient millivolt production.	Wait 60-90 seconds after pilot engages and check thermopile millivolts. 325 millivolts minimum. * Replace thermopile if necessary.
4. Pilot drops out when main burner is switched on.	B. Main burner switch wired incorrectly.	Correct wiring.
	C. Main burner wire shorted or stressed.	Check wire and correct if necessary.
	D. Faulty main burner EMU.	Check valve. * Replace valve if necessary.
	E. Improper pilot adjustment.	Check pilot flame. Adjust flame if necessary.
	F. ON/OFF switch defective.	Check ON/OFF switch for proper connections. Connect wires across terminal at ON/OFF switch. If burner comes on, replace ON/OFF switch. If not, jumper junctions at valve. If burner comes on, replace wires.
5. With pilot lit, valve and ON/OFF switch in "ON" position, no gas burner.	A. ON/OFF switch defective.	Check ON/OFF switch for proper connections. Connect wires across terminal at ON/OFF switch. If burner comes on, replace ON/OFF switch. If not, jumper junctions at valve. If burner comes on, replace wires.
6. Glass develops milky white film (on inside).	A. Result of byproducts in the fuel/mineral residues..	Use a good glass cleaner (preferably cream or paste) to remove. One of many good products is: Rutland – *White Off* Stove Glass Cleaner (consistency: Crème Paste).
7. Glass fogs up.	A. A normal result of gas combustion.	No action necessary. After the heater has warmed up, the glass will clear.
8. Blue flames.	A. A normal result during the first 20 minutes.	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning.
9. Sticking valves.	A. Debris and moisture from the gas line clogging valve.	Improper plumbing, no drip leg in line to prevent travel of moisture and dirt. * Replace damaged valve or burner tray assembly and correct plumbing.
10. Flame noise -rumbling/gurgling.	A. Excessive primary air.	Adjust burner air shutter.
11. Orifice noise (buzz or whistle).	A. Trash lodged in orifice.	Clean orifice; replace if necessary.
	B. Burr in main burner orifice.	Debur or replace orifice.
	C. Excessive gas pressure.	Check inlet & manifold gas pressure. See page 2.

TROUBLE SHOOTING *(Qualified Technicians Only) Continued*

12. Soot &/or Floating flames. Usually accompanied by the odor of aldehydes. Sooting – First Rule Out: Soot staining and soiling of carpets, drapes, windows & other household components can often be traced to the use of such items as candles, oil lamps, incense, and other misc. aromatic off-gassing materials. ***IF SOOT IS NOT PRESENT IN THE FIREBOX, IT CANNOT BE THE SOURCE OF THE EXTERNAL SOOT.***	A. Sooting - Free carbon produced by potentially dangerous improper/incomplete combustion of gas. B. Floating Flames: Lazy, ill-defined, quiet flame, which roll around sometimes completely off the port. Potentially dangerous incomplete combustion.	• Check appliance input rate (gas pressure: inlet and manifold, & burner orifice size) and reduce if necessary. • Insufficient secondary air due to restricted exhaust flow (the rate at which the exhaust leaves determines the rate at which the secondary air is delivered). Inner pipe not secured, vent termination interference. Blocked burners/Flame impingement: Correct log & burner positioning. • Insufficient primary air (yellow tipping): Adjust primary air. • IN ALL CASES: Annual Service Procedure should be performed. • Propane Units: LP tanks can suffer pressure decreases, which can result in sooting as it approaches empty. • Higher Elevations – Derate per manual.(see page 15)
13. Burner Flashback Air/gas mixture ignites inside burner near orifice, creating roaring noise (like blowtorch). Production of carbon monoxide & aldehydes possible. Soot may clog inside of burner. Problem: Imbalance of gas flow velocity & burning speed pattern.	A. Excessive primary air.	Reduce primary air, being careful to avoid yellow tipping.
	B. Burner input underrated	Check input rate. Check input pressure using a manometer. Replace *RB regulator or burner tray assembly if necessary. Confirm correct gas pressure at house meter or tank (call gas company). Improper gas pipe size, correct plumbing. Confirm correct size burner orifice (see chart under "High Altitude").
	C. Valve leaks if flashback occur w/ burner valve in "OFF" position.	• Replace valve.
14. Delayed Ignition (makes a sudden "whoosh" noise as burner lights).	A. This is a buildup of gases prior to ignition. This is more prevalent with propane (LP) fuel, since gas is heavier.	• Primary air shutter closed too far. Adjust shutter to correct gap. • Burner ports plugged, not allowing proper flame travel. Open ports. • Pilot is not positioned closed enough to light up row on burner. Adjust pilot location. • Logs placed improperly interfering with flame travel. Correct log positioning. • Unit not properly derated for higher altitudes. Derate unit. • Excessive gas pressure - Call gas company. • (Propane units). Burner tube is not level, not allowing correct mix of primary air and gas.
15. Flame lifts from burner and pilot.	A. Air Starvation. Poor connection of venting components.	• Check vent exhaust and air intake component connections.
16. Intermittent lifting and cycling of flame. Possible intermittent pilot dropout problems.	A. High wind conditions.	Install high wind cap
	B. Cap Obstructed.	Check for siding or other materials obstructing or overlapping vent cap. Reset cap ensuring that nothing overlaps or obstructs it.
	C. External Environment-Buildings/trees/rooflines interfering w/ venting	Correct installation.

REPLACEMENT PARTS: Model – BayFire DVI

Body & Door Parts

Part #	Description
23000	Stove Body
23030	Door Assembly, Gold
49051	Door Frame, Gold (Gasket, Glass & Clips not included)
23031	Door Frame, Inner
49052	Glass, Front Door 14 1/8" x 14 13/16" (gasket not included)
49053	Glass, Side Door 14 1/8" x 6 5/16" (gasket not included)
45054	Clip, Front Glass (Requires 2)
49057	Clamp, Corner (Requires 1)
49056	Clamp, Glass Top Corner (Requires 1)
11547	Gasket, Door (3/4" rope, Requires 7 feet). Adhesive not included. Use high temp silicone with rating above 570° F.
01098	Gasket, Door Glass- 3/8" (requires 16') With peal off adhesive back

Gas/Electrical Parts

Part #	Description
25060	Valve Assembly w/RB Regulator - NG
25070	Valve Assembly w/RB Regulator - LP
23110	Burner Tray Assembly, NG (Natural Gas)
23120	Burner Tray Assembly, LP (Propane Gas)
45059	Pilot Assembly (includes igniter electrode) - NG
45063	Pilot Assembly (includes igniter electrode) - LP
18050	Thermopile, 24"
49119	Thermocouple, 24"
23055	Orifice, Front Burner (#58)- NG
32035	Orifice, Rear Burner (#35) – NG
23054	Orifice, Front Burner (#66)- LP
25072	Orifice, Rear Burner (#53) - LP
45143	Orifice, Pilot (#51) - NG
45144	Orifice, Pilot (35) - LP
45091	Battery Box, Igniter
410-270	Switch, ON/OFF Burner (Rocker Switch)
25095	Wire Harness, Gas System
23052	Burner Tube Assembly, Main
23051	Burner Tube Assembly, Ember
45059-1	Pilot Tube, 24"
45059-2	Igniter electrode w/ 24" wire
45062	Ground Wire, 12"

Room Air Fan System

Part #	Description
45074	Motor, Fan
45070-2	Wire Harness (with cord)
00821	Disc, Fan (F140-20F), Ceramic
528	Rheostat, Fan Speed Control (Knob not included)
527	Knob, Rheostat
26M22	Power Cord

Logs

Part #	Description
23073	Log Set, 6pc. Fiber (-1 front, -2 LH mid-log, -3 RH mid-log, -4 rear log, -5 LH twig, -6 RH twig)
23073-1	Log, Front
23073-2	Log, Left/Right Mid
23073-3	Log, Rear
45100-5	Log, Left Twig
45100-6	Log, Right Twig
51061	Rock Wool (glowing embers)

Component / Misc. Parts

Part #	Description
39020	Knob, Pilot
39028	Knob for High-Low (HI-LO)
23008	Gasket, Relief Door
23076	Manual, Installation / Operation
23022	Top Inset Panel, Gold Trivet

Optional Parts

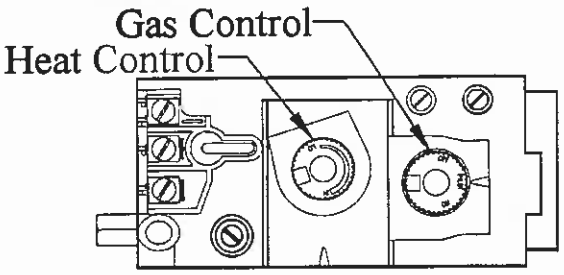
Part #	Description
49200	Trim Skirt (for elevated hearth)
98K99	RC-STAT, Remote Control Kit – Radio Frequency (deluxe w/thermostat)
26N04	RC, Remote Control (Standard ON / OFF)
23140	LP (Propane) Conversion Kit
23130	Natural Gas Conversion Kit
23100	High Altitude Kit
70K99	TSPK-B, Metallic Black Paint, 12 oz. Spray Can
89L36	WTK, Wall Thermostat Kit

For the location of the nearest dealer for replacement parts, contact:

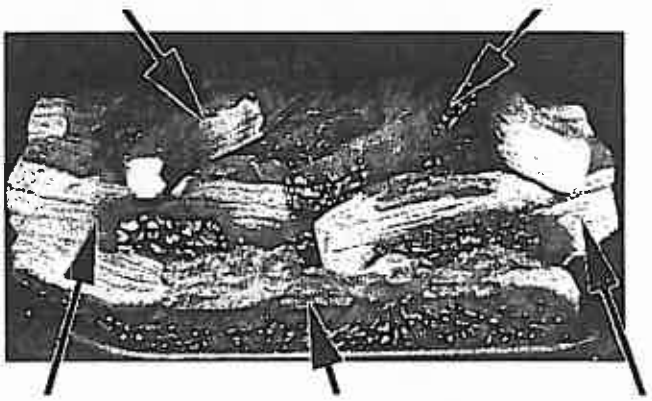
Lennox Hearth Products
1110 West Taft Avenue
Orange, WA 92865

COMPONENT DIAGRAMS: Model -- BayFire DVI

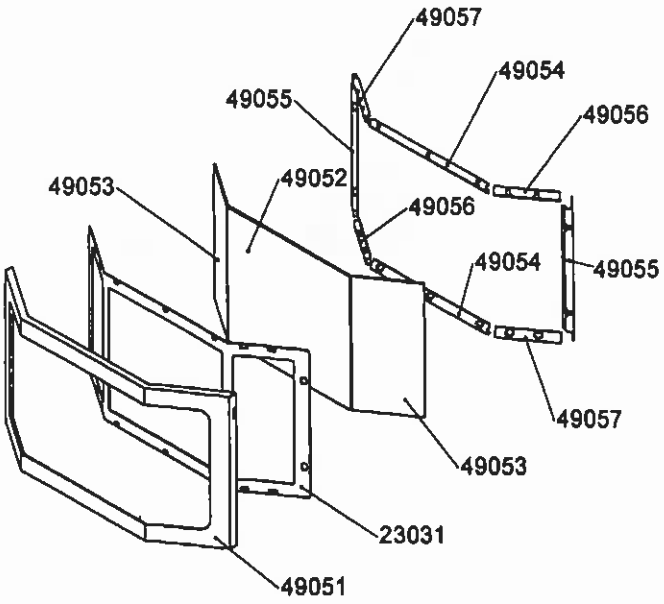
Valve Assembly & Igniter



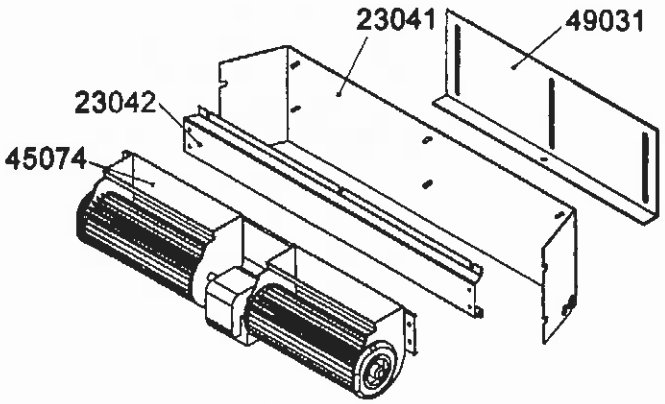
5 PC. Log Set (Part# 23073)



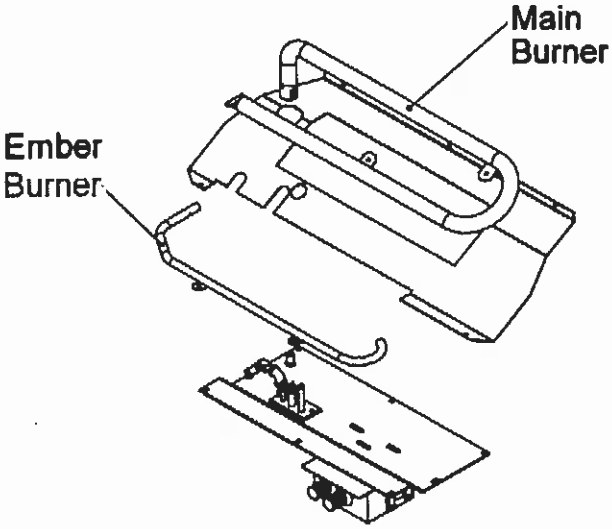
Door Assembly (Part# 23030)



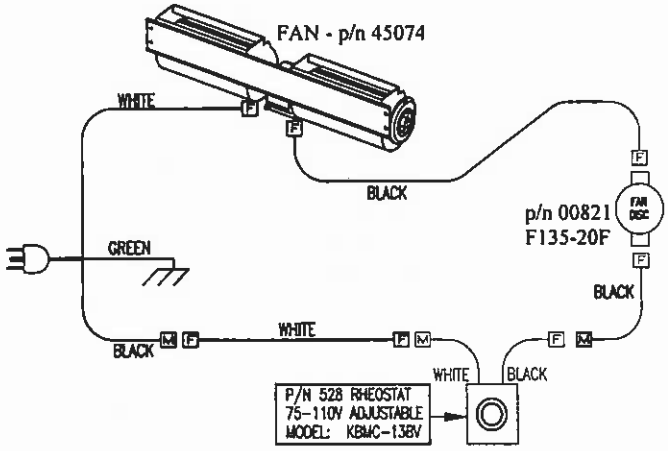
Fan Assembly Components



Burner Assembly



Fan System Components



FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

A. This appliance is equipped with a piezo ignition device to light the pilot. 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:

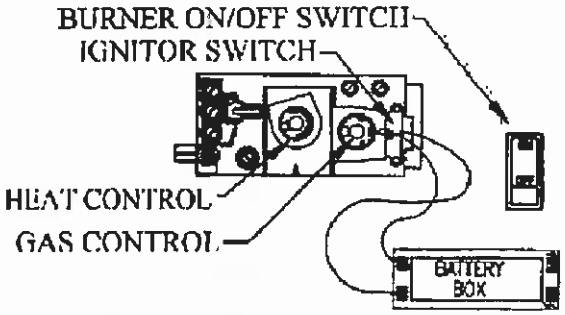
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use any 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.

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

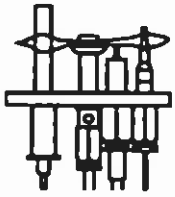
LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn On/Off switch to the "OFF" position.
3. Turn off all electric power to the appliance.
4. Turn gas control knob clockwise ↷ to "OFF".



5. Wait five (5) minutes to clear out any gas. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.
6. Find pilot - follow metal tube from gas control. The pilot is behind the left hand end of the rear burner tube.

PILOT BURNER ASSEMBLY



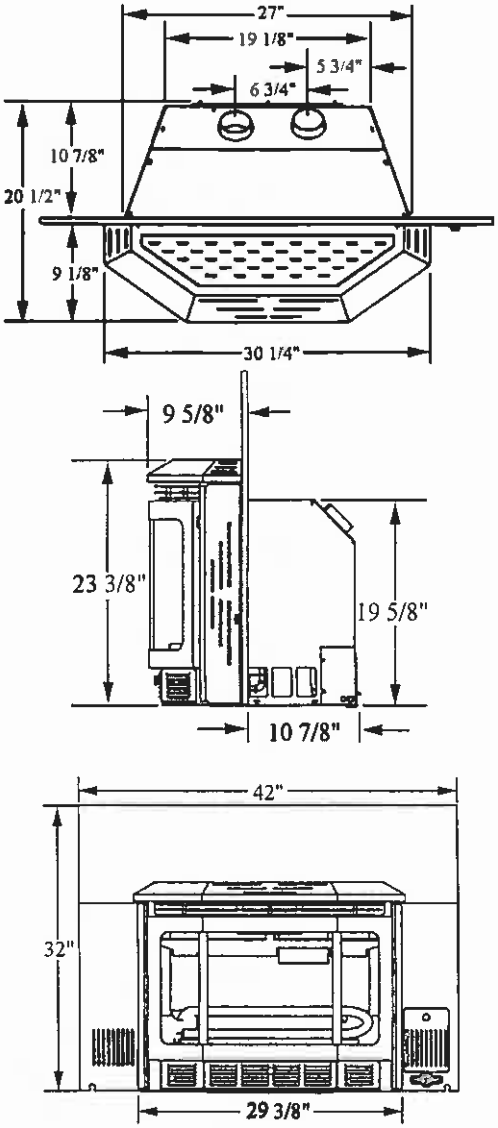
7. Turn gas control knob on control counterclockwise ↶ to "PILOT".
8. Push the knob down all the way and hold in that position. Ignitor automatically sparks until Pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release button and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 4 through 8 holding knob down an additional fifteen (15) seconds.
   - 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.
9. Turn gas control knob counterclockwise ↶ to "ON". Knob can be turned to "ON" only if the control knob has popped up.
10. Turn On/Off switch to "ON". This will light the main burner.
11. Adjust flame height with heat control knob clockwise ↷ for full flame, counterclockwise ↶ for reduced flame.
12. If optional wall thermostat is used, set to desired temperature.
13. After fan comes on, adjust to desired air flow.

TO TURN OFF GAS TO APPLIANCE

1. Turn off the On/Off switch.
2. Turn off electric power to the appliance if service is to be performed.
3. Turn gas control clockwise ↷ to "OFF". Do not force.

SPECIFICATIONS: Model BayFire DVI

Approx. Sq. Ft. Heating Capacity	~1800 square feet.
Flue Size	3" – Top Flue Outlet
Intake Pipe	3"
Dimensions into Fireplace	Height: 20" Width: 27" @ 0" depth Width: 20" @ 11" depth Depth: 11"
Height	23 3/8"
Height w/ Surround	32"
Width	30 1/4"
Width w/ Surround	42"
Depth (overall)	20 1/2"
Fuel	Natural or LP Gas. Gas inlet 3/8" NPT.
Performance Features	Variable Flame Control. High Efficiency plenum heat exchanger. Natural convection & radiant heat. Electronic Igniter
♦ Safety Test	Listed by ITS (Intertek Testing Services. Listing mark is Warnock Hersey) as a Direct Vent, Gas Fired Room Heater to: ANSI Z21.88-1998 *CSA 2.33-M98 Direct Vent Gas Fireplace CAN/CGA 2.17-M91 (For High Altitude)
Heat Input	25,000 - 37,000 BTU's (Natural Gas) 19,700 - 34,600 BTU's (Propane)
Ship Weight	200 lb.'s.
Options:	NG Conversion Kit LP Conversion Kit High Altitude Kit Remote Control Wall thermostat



Note: Dimensions shown are approximations only (+/- ¼")

- Square feet heating capacities are approximations only. They will vary depending upon the level of insulation, climate, house design, ceiling height, ambient outside temperatures and how the stove is operated.

SPECIFICATIONS			
GAS TYPE	**NATURAL GAS**	**PROPANE (LP) GAS**	**MINIMUM CLEARANCES TO COMBUSTIBLES**
Orifice Size – Front/Rear	**#58 - .042"/#35 - .110"**	**#66-.033"/#53-.0595"**	Ceiling Height Minimum 84 in. / 2134 mm
Min. Supply Pressure	**5" WC**	**11" WC**	**Side Wall Minimum 14 in. / 356 mm**
Output BTU/Hr (efficiency)			**Stove Top to Mantel Minimum 12 in. / 305 mm**
Blower On	28,860 (* 78%)	26,988 (* 78%)	**Mantel Projection Maximum 10 in. / 254 mm**
Blower Off	28,120 (* 76%)	26,642 (* 76%)	
HIGH SETTING			**FLOOR PROTECTION-Required if non-combustible hearth extends less than 16 inches from fireplace opening.**
Manifold Pressure	**3.5" WC**	**10" WC**	
Input BTU/HR	37,000	34,600	**ELECTRICAL RATING - Fan (p/n 45074) 120V, 60 Hz, 1.5 A**
LOW SETTING			
Manifold Pressure	**1.7" WC**	**3.6" WC**	
Input BTU/HR	**25,000**	**19,700**	
Altitude - U.S.A. 0-4500 Ft. (0-1372M) No derating *			This Appliance is equipped at the factory for the use with Natural Gas or Propane (LP). Units using propane must be either factory LP or field conversion using the LP Conversion Kit, #23140. Units using natural gas must be either factory natural gas or field converted using The Natural Gas Conversion Kit #23130
Altitude - Canada 0-4500 Ft. (0-1372M) No derating *			
* With the orifice, manifold pressure and input ratings shown above. Altitudes above 4500 FT (1372M) for U.S.A. and Canada, reorifice per manual and consult local codes.			

SAFETY / LISTING LABEL

LISTED GAS FIRED DIRECT VENT ROOM HEATER

Tested & Listed by
Warnock Hersey
C US

Model BayFire™ DV I
Certified for use in USA and Canada.

EARTH STOVE™
BY LENNOX HEARTH PRODUCTS

This stove is factory equipped for:
Natural Gas ☐
Propane (LP) Gas ☐

Tested to ANSI Standards Z21.88-1998 • CSA 2.33-M98 Direct Vent Gas Fireplace and CAN/CGA 2.17-M91 (FOR HIGH ALTITUDE).

This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. See owner's manual for details. This appliance is not convertible for use with other gases, unless a certified kit is used.

SPECIFICATIONS

GAS TYPE	NATURAL	PROPANE (LP)
Orifice Size - Front	#58 - .042"	#66 - .033"
- Rear	#35 - .110"	#53 - .0595"
Min. Supply Pressure	5" WC	11" WC
Output BTU/HR (Efficiency)		
Blower On	28,960 (78%)	26,988 (78%)
Blower Off	28,120 (75%)	26,642 (77%)
HIGH SETTING		
Manifold Pressure	3.5" WC	10.0" WC
Input BTU/HR	37,000	34,600
LOW SETTING		
Manifold Pressure	1.7" WC	3.5" WC
Input BTU/HR	25,000	19,700

MINIMUM CLEARANCES TO COMBUSTIBLE	
Ceiling Height Minimum	84 in. / 2134 mm
Side Wall Minimum	14 in. / 356 mm
Stove Top to Mantel Minimum	12 in. / 305 mm
Mantel Projection Maximum	10 in. / 254 mm

Floor Protection: Required if non-combustible hearth extends less than 16 inches out from fireplace opening.

Altitude - U.S.A. 0-4,500 Ft. (0-1372 M) No derating *
Altitude - CANADA 0-4,500 Ft. (0-1372 M) No derating *
* With the orifice, manifold pressure and input ratings shown above. Altitudes above 4,500 Ft. (1372 M) for U.S.A. and Canada, reorifice per manual and consult local codes.

Elect. Rating - Fan (p/n 45074). 120 V, 60 Hz, 1 Amp

This appliance is equipped at the factory for use with either Natural Gas or Propane (LP). Units using propane must be either factory LP or field converted using The LP conversion Kit, part number #23140. Units using natural gas must be either factory natural gas or field converted using The Natural Gas conversion Kit, part number #23130.

Install and use only in acordance with the manufacturer's installation and operating instructions. Keep the burner and control compartment clean. This appliance must be installed in accordance with the manufacturer's instructions and in accordance with local codes, if any. If not, follow the current ANSI Z223.1 (NFPA 54) National Fuel Gas Code in USA, and CGA B149 Installation Code in Canada. Electrical connections and grounding must be in accordance with local codes, if any. If not, follow the current National Electrical Code ANSI/NFPA 70 in USA, or CSA C22.1 Canadian Electrical Code in Canada.

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

WARNING: Improper installation, adjustment, alteration, service or maintenance, can cause injury or loss of life. Refer to the owner's manual provided with this appliance. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

CAUTION: Hot while in operation. Do not touch. Keep children, furniture, gasoline and other liquids with flammable vapors away. Never operate unit with glass door off.

Mfg. by Lennox Hearth Products; 1110 West Taft Avenue; Orange, CA 92865

DO NOT REMOVE THIS LABEL MADE IN USA IGN

OWNERSHIP RECORDS		
Dealer's Name:		
Dealer's Address:		
City:	State:	Zip Code:
Serial Number:	Date of Purchase:	Date Installed:
Notes:		

SERVICE AND MAINTENANCE LOG

Service Date	Service Technician	Service Description