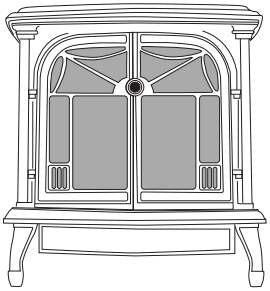
FMI PRODUCTS, LLC

CAST IRON STOVE AND B-VENT (FREESTANDING FIREPLACE HEATER) BURNER SYSTEM
OWNER'S OPERATION AND INSTALLATION MANUAL



PFS® US

IMPORTANT: This B-vent burner system must be installed into approved FMI PRODUCTS, LLC cast iron stove bodies, models CISB, CISNI, CISAW and CISAS only. See page 4 of this manual.

NATURAL GAS BURNER SYSTEM SBVBND
PROPANE/LP GAS BURNER SYSTEM SBVBPD, REMOTE READY

⚠ 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.**

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

For more information, visit www.fmiproducts.com

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SAFETY

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

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

* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

⚠ WARNING: This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this stove with burner system. Improper use of this stove with burner system can cause serious injury or death from burns, fire, explosion, electrical shock and carbon monoxide poisoning.

⚠ DANGER: Carbon monoxide poisoning may lead to death!

This stove with burner system is a vented product. This stove with burner system will not produce any gas leakage into your home if properly installed. This unit must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, gas leakage can occur.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the burner system may not be working properly. **Get fresh air at once!** Have burner system serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

SAFETY
Continued

Propane/LP and Natural Gas: Propane/LP and natural gas are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this stove with burner system.

⚠ WARNING: Any change to this stove or burner system or it's controls can be dangerous. Do not modify this stove with burner system under any circumstances. Any parts removed for servicing must be replaced prior to operating burner system.

⚠ WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this stove.

⚠ WARNING: This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.

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

Do not place clothing or other flammable material on or near the stove. Never place any objects on the appliance.

Do not use this stove to cook food or burn paper or other flammable material.

This stove reaches high temperatures. Keep children and adults away from hot surface to avoid burns or clothing ignition. Stove will remain hot for a time after shutdown. Allow surface to cool before touching.

Carefully supervise young children when they are in the room with stove

Keep the area around your stove clear of combustible materials, gasoline and other flammable vapor or liquids. Do not run burner system where these are used or stored.

1. For propane/LP burner system, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lb. capacity.
2. If you smell gas
   - shut off gas supply
   - 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 you gas supplier, call the fire department.
3. Never install the stove
   - in a recreational vehicle
   - in windy or drafty areas where curtains or other combustible (flammable) objects are less than 42" from front, top, or sides of stove with burner system
   - in high traffic areas
4. Turn burner system off and let cool before servicing, installing or repairing. Only a qualified service person should install, service or repair this stove with burner system. Have stove with burner system inspected annually by a qualified service person.

SAFETY *Continued*

5. You must keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning stove or burner system.
6. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 27.
7. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this burner system. Use only the gas type indicated on burner system nameplate.
8. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70.*
9. Do not use stove or burner system if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
10. Do not operate burner system if any log is broken.
11. Do not operate burner system with glass door removed, cracked or broken.
12. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
13. Do not install stove with burner system directly on carpeting, vinyl tile, or any combustible material other than wood. The stove must set on a metal or wood panel extending the full width and depth of the stove.
14. This stove must be properly connected to a vent system. This stove is equipped with a vent safety shutoff system.

LOCAL CODES

Install and use stove and burner system with care. Follow all local codes. In the absence to local codes, use the current *National Fuel Gas Code ANSI Z223.1/NFPA 54**

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

PRODUCT IDENTIFICATION

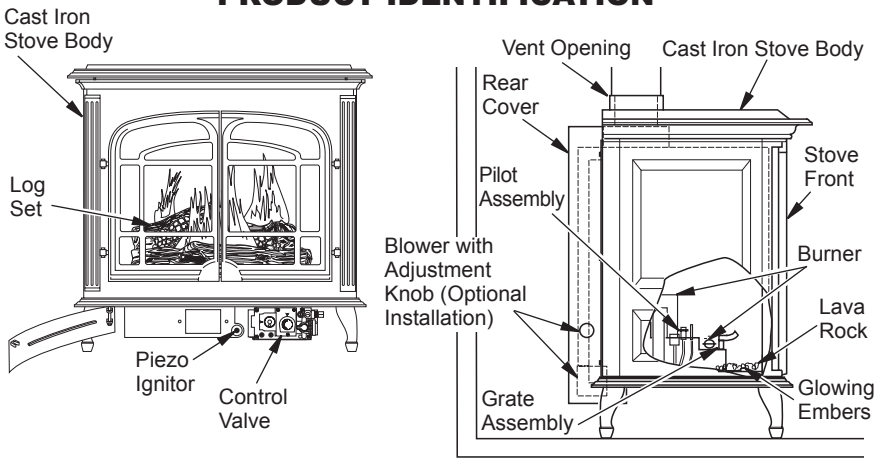


Figure 1 - FMI PRODUCTS, LLC B-Vent Burner System Shown Installed in Approved FMI PRODUCTS, LLC Cast Iron Stove Body

PRODUCT FEATURES

OPERATION

This B-vent cast iron stove with burner system is clean burning and vents vertically. Heat is generated by both realistic flames and glowing embers. When used without the blower accessory, the stove with burner system requires no electricity making it ideal for emergency backup heat.

PIEZO IGNITOR

This burner system has a piezo ignitor. This system requires no matches, batteries, or other sources to light burner system.

PREINSTALLATION PREPARATION

⚠ WARNING: A qualified installer or service person must install stove and burner system. Follow all local codes.

⚠ CAUTION: This stove with burner system creates warm air currents. These currents move heat to wall surfaces next to stove. Installing stove next to vinyl or cloth wall coverings or operating stove with burner system where impurities (such as, but not limited to, tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

LOCATION AND SPACE REQUIREMENTS

Determine the safest and most efficient location for your FMI PRODUCTS, LLC B-vent cast iron stove. Make sure that rafters and wall studs are not in the way of the venting system. Choose a location where the heat output is not affected by drafts, air conditioning ducts, windows or doors. Figure 2 shows some common locations. Be aware of all restrictions and precautions before deciding the exact location for your stove and termination cap.

When deciding the location of your stove and burner system, follow these rules:

- Do not connect this stove and burner system to a chimney flue serving a separate solid-fuel burning stove or appliance.
- Due to high temperatures, do not locate this stove in high traffic areas, or near furniture or draperies.
- Proper clearances must be maintained. See Figures 3 and 4, pages 5 and 6.
- This stove is a freestanding unit designed to set directly on the floor. If your stove is to be installed directly on carpeting, vinyl tile, or any combustible material other than wood, it must be installed on a metal or wood panel extending the full width and depth of the stove. See Figure 5, page 6.

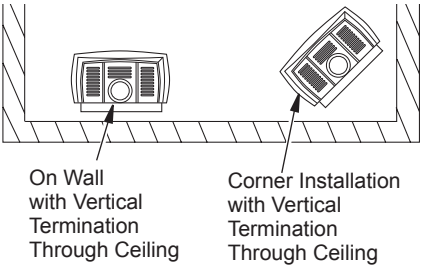


Figure 2 - Common Stove Locations

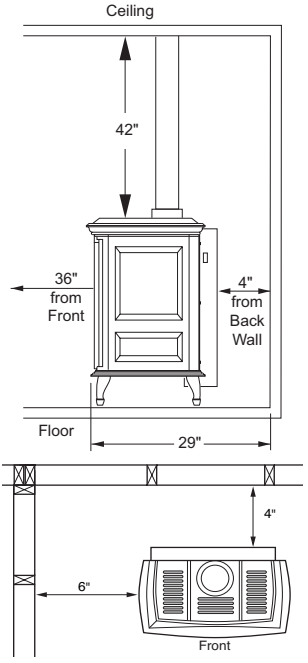


Figure 3 - Clearances for Standard Installation

PREINSTALLATION PREPARATION

Continued

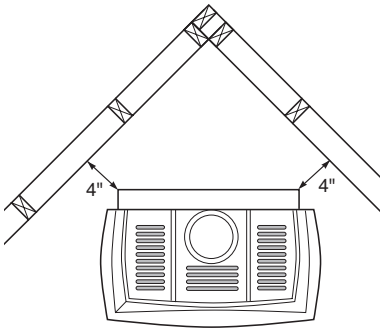


Figure 4 - Clearance for Corner Installation

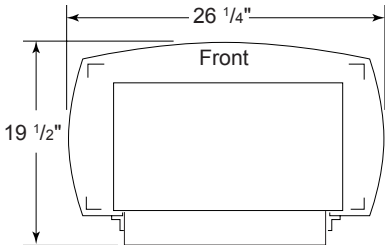


Figure 5 - Stove With Burner System Bottom Dimensions

UNPACKING

1. Lift off corrugated box enclosing stove body crating.
2. Remove screws fastening back and top of wood frame enclosure. Two or more people must carefully lift stove up and out of wooden crate.
3. Remove plastic bag from stove body.
4. Remove back panel from stove (see Figure 6). Use an adjustable wrench or a 10 mm socket. Remove 4 bolts and washers. Keep bolts and washers to reattach back panel later.
5. Remove bubble-wrapped log set, rod and screen from stove. Remove all protective packaging applied for shipment.
6. Check heater for any shipping damage. If heater is damaged call FMI PRODUCTS, LLC at 1-866-328-4537 for replacement parts before returning to dealer. Some fiber flakes may fall from logs. This is acceptable.
7. Place freestanding stove near desired location in room.

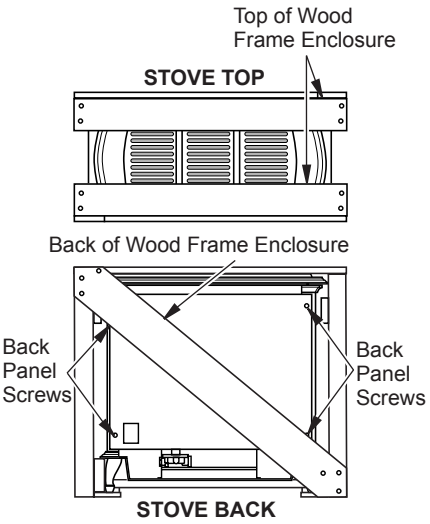


Figure 6 - Unpacking Stove from Wooden Shipping Enclosure

VENTING INSTALLATION

⚠ WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage, or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage, or loss of life.

NOTICE: Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning installation. Only a qualified service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection
- Use extreme caution when using ladders or when on roof tops
- Be aware of electrical wiring locations in walls and ceilings

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component
- Unauthorized modification of the venting system
- Installation of any component part not manufactured or approved by FMI PRODUCTS, LLC
- Installation other than as instructed by these instructions

Your FMI PRODUCTS, LLC stove with B-vent burner system is approved for use with any listed gas vent. A listed gas vent is a factory made and listed system designed, and installed exclusively for removing products of combustion, excess air, and dilution air resulting from burning fuel gas. Metal vents, the most common type of vent, employ double wall construction enclosing an insulating air space. This air space both helps keep flue gases warm and reduce heat transferred to nearby combustibles. This appliance is equipped with a safety control system designed to protect against improper venting of combustion products.

It is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust. Certain limitations apply to vent configurations and must be strictly followed.

⚠ WARNING: This gas stove with burner system and vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance.

TYPE B-VENT INSTALLATION (Listed B-0 or Greater)

Before beginning installation be sure that the overall height and gas vent size conform to building code requirements. Gas vents extending through pitched roofs can extend a minimum height of at least 600 mm (2') higher than any obstruction within 3m (10'). Gas vents extending through flat roofs are required to extend at least 600 mm (2') above the roof and at least 600 mm (2') higher than any portion of the building or adjoining building within 3m (10') of the gas vent.

- In absence of local codes, follow Section 7.0 of the current *National Fuel Gas Code NFPA 54/ANSI Z223.1* and the *Natural Gas Installation Code* - vent sizings for Category I systems using double wall B-1 vent pipe.
- Where the gas vent extends through accessible spaces, it should be enclosed to avoid personal contact and damage. Enclosure walls should have a fire rating equal to or greater than the floors through which the gas vent passes except in single or two-family dwellings.
- Situate the gas vent in the structure so that it can be installed without cutting joists, sills, plates, or major load bearing partitions or members. It is also important to locate the base of the gas vent as near as possible to the heating appliance.

VENTING INSTALLATION

Continued

- This burner system must be properly connected to a venting system. This burner system is equipped with a vent safety shutoff system.
- Use only vents labeled "FOR EXTERIOR USE" above the roofline.
- Consult the authority having jurisdiction to select the correct gas vent diameter. Avoid using a larger than necessary diameter.

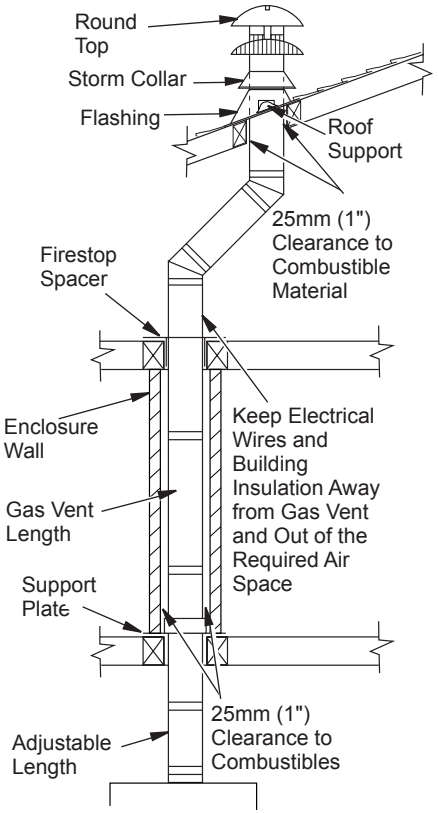


Figure 7 - Typical B-Vent Installation

INSTALLATION OF LISTED B-1 VENT

⚠ WARNING: Installation should only be made by qualified persons who are familiar with the safety procedures required for the installation of the product, who are equipped with the proper tools and testing instruments, and who have achieved proper certification of licensing. Installations made by unqualified persons can result in the risk of injury or electrical shock which can be serious or even fatal.

Figures 8 through 10 show other options for the gas vent. When venting through a side wall your vent pipe must have the proper temperature rating (see Figure 10). Manufacturer's clearances must also be maintained. Consult the authority having jurisdiction in your area regarding venting through side wall.

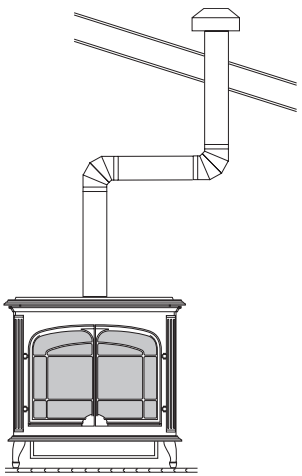


Figure 8 - Vertical Venting Through Ceiling Using Two 90º Elbows (Oxford™ Model Shown)

VENTING INSTALLATION

Continued

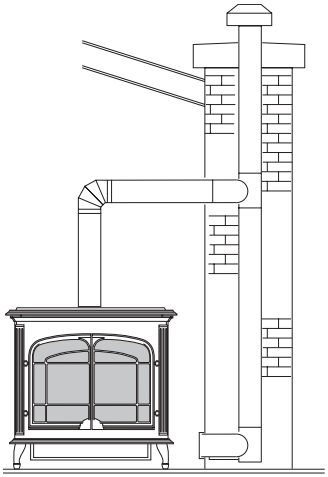


Figure 9 - Vertical Venting Configuration Through Chimney (Oxford™ Model Shown)

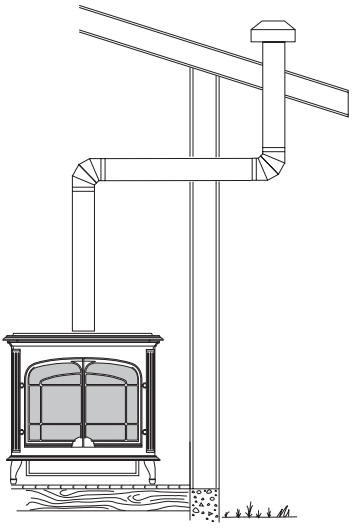


Figure 10 - Venting Through a Side Wall (Oxford™ Model Shown)

INSTALLING VENT SYSTEM INTO CHASE

A chase is a vertical box-like structure built to enclose venting that runs along the outside of a building. A chase is not required for such venting.

NOTICE: Treatment of firestops and construction of the chase may vary from building type to building type. These instructions are not substitutes for the requirements of local building codes. You must follow all local building codes.

Note: When installing in a chase, you should insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Minimum clearance between vent pipes and combustible materials such as insulation is 1".

CHECKING VENT CAPACITY

Complete all gas piping, electrical, and vent connections. After adjusting the burner system and lighting the main burners, allow a couple of minutes for warm-up. Hold a lighted match just under the rim of the draft hood relief opening. Proper venting will draw the flame toward or into the draft hood. Improper venting, indicated by escape or spillage of burned gas, will cause match to flicker or go out. Smoke from a cigarette will also be pulled into the draft hood if the vent is drawing properly.

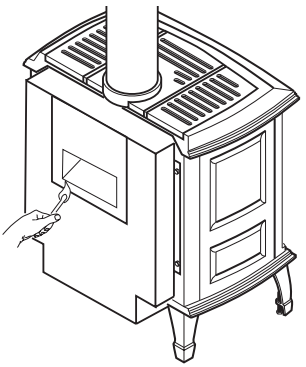


Figure 11 - Test for Proper Venting

CHIMNEYS

- Complete familiarity with chimney condition, height, size, clearance to combustibles and other factors is essential.

VENTING INSTALLATION

Continued

NOTICE: Consult the authority having jurisdiction in your area regarding masonry chimney venting applications.

NOTICE: A complete chimney inspection by a qualified person should be performed.

- Appliances using B-vent connectors to vent into a masonry or factory-built chimney should not exceed 1 1/2 feet in length for every inch of connector diameter (3" vent connector has a maximum 4 1/2 foot length; 5" connector has maximum 7 1/2 foot length).
- Oversized chimneys should be relined with appropriate listed relining systems.
- Clean out access may be required.

RELINING SYSTEMS

- Suitability and approval of relining materials should be determined.
- Condition, size, height, and termination of the chimney to be relined must be determined.
- No substitution of components should be made.
- Joints and connectors should be made according to manufacturer's instructions.

NOTICE: Consult the authority having jurisdiction in your area regarding listed chimney liner venting applications.

⚠ WARNING: Operation of improperly installed and maintained venting system could result in serious injury, property damage, or loss of life.

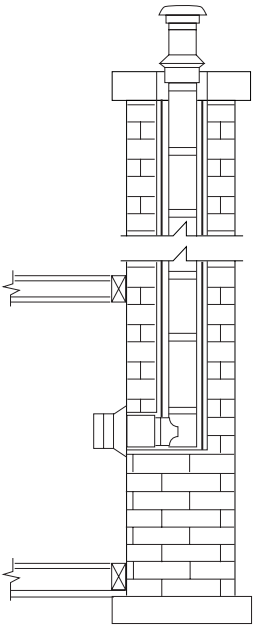


Figure 12 - Straight Installation into Masonry Chimney

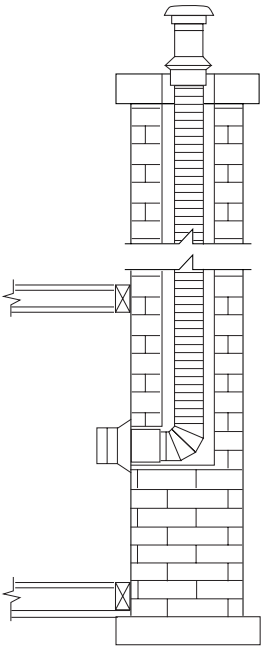


Figure 13 - Typical Straight Installation with Listed Chimney Liner

VENTING INSTALLATION

Continued

HIGH ALTITUDE INSTALLATION

Your FMI PRODUCTS, LLC B-vent burner system has been tested and approved for operation at altitudes in the USA from 0-2000 feet.

When installing this burner system at an elevation above 2000 feet (in the USA), you may need to decrease the input rating by changing the existing burner orifice to a smaller size. Reduce input 4% for each 1000 feet above sea level. Check with your local gas company for proper orifice size identification and proper orifice for your location.

For assistance with any high altitude installation contact FMI PRODUCTS, LLC's Technical Service Department at 1-866-328-4537.

TROUBLESHOOTING VENTING PROBLEMS

Most venting problems are caused by incorrect vent sizing, improper installation, or inadequate air supply. A preliminary check for a field problem might include:

- Checking the vent sizing according to manufacturer's specifications, appliance input, and venting configuration
- Examining the entire venting system for faults such as disconnected joints for damaged vent sections
- Making sure vent and air openings are not obstructed

If these procedures do not reveal the source of the problem, troubleshooting may include attention to common venting problems.

FLUE GAS SPILLAGE

Spillage occurs when flue gases cannot exit the vent system and back up into the dwelling. A primary symptom of appliances equipped with a Vent Safety Shutoff System (flue spill switch) is unexplained appliance shutoffs. Other symptoms of flue gas spillage at the draft hood include condensation on walls and windows and/or noticeable odors. Spillage may also result in the release of carbon monoxide, a colorless, odorless, highly toxic gas. A simple spillage test can be conducted if spillage is suspected. See *Checking Gas Connection*, page 14.

CAUSES OF SPILLAGE AND CORRECTIVE ACTION

Incorrect Vent Sizing

If the vent is too small or too short, spillage may occur. If the vent is too large, excessive dilution air may cool flue gases and reduce draft, causing spillage. The vent cap size should also be checked. Check manufacturer's instructions, appliance input rating, and appropriate sizing tables.

Venting Condition

Loose joints can affect draft and cause spillage. "Mashed" vent sections and damaged vent caps can restrict flow and cause spillage. Examine and replace as needed.

Obstructions

Small animals or birds may get into and block the vent or draft hood outlet. Dust, lint, and foreign objects may obstruct air inlets. Remove obstructions and clean openings.

Lateral Run

Lengthy horizontal or non-vertical runs cause resistance to flow and may reduce draft enough to cause spillage. The pitch of lateral runs can also be a problem; lateral runs should be pitched 1/4" rise per foot of horizontal run from the appliance to the vent.

Elbows

Too many elbows cause excessive restriction of flow and may result in spillage. Usually, two 90º turns can be tolerated in a properly sized venting system. More than two may cause problems and necessitate changing the system.

Negative Pressure in the Dwelling

An extremely tight house may not supply adequate combustion and venting air. Use of mechanical exhaust such as a dryer vent or range vent may worsen the problem. An air exchange system must be installed in the dwelling to correct this problem.

Flue Gas Cooling

Venting exposed to extremely cold temperatures or venting of single wall construction loses heat needed to maintain draft; massive masonry chimneys absorb needed heat. If the flue gases cool excessively, draft is reduced and spillage may result. Use proper materials, insulate and protect properly, reline when necessary.

TROUBLESHOOTING VENTING PROBLEMS

Continued

Down Drafts

In certain wind conditions and in certain relationships with nearby structures and objects, high pressure conditions may affect draft negatively. Relocate the vent cap, raise its height, or use an approved high wind cap.

INSTALLATION

NOTICE: This burner system is intended for use as supplemental heat. Use this burner system along with your primary heating system. Do not install this stove and burner system as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this burner system as your primary heat source.

CHECK GAS TYPE

Use proper gas type for the burner system unit you are installing. If you have conflicting gas types, do not install burner system. See dealer where you purchased the stove and burner system for proper burner system according to your gas type. Conversion kits are also available for these models, see *Accessories* on page 29.

IMPORTANT: If installing gas conversion kit, do so at this time. Be sure to follow all installation instructions included with conversion kit.

INSTALLING GAS PIPING TO STOVE LOCATION

⚠ WARNING: A qualified installer or service person must connect burner system to gas supply. Follow all local codes.

⚠ CAUTION: For propane/LP units, never connect burner system directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

Installation Items Needed

Before installing stove and burner system, make sure you have the items listed below.

- external regulator (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- sediment trap
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* An equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the equipment shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 14. Pointing the vent down protects it from freezing rain or sleet.

⚠ CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to burner system. If pipe is too small, undue loss of volume will occur.

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from burner system (see Figure 15).

Check your building codes for any special requirements for locating equipment shutoff valve to stoves.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged burner system valves.

⚠ WARNING: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

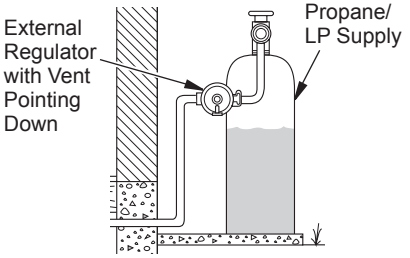
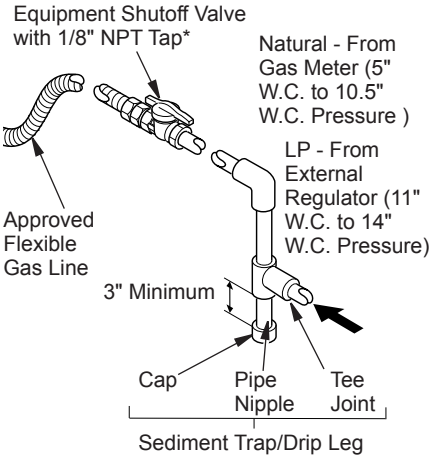


Figure - External Regulator with Vent Pointing Down (Propane/LP Only)



* The equipment shutoff valve may be supplied with the appliance or you can purchase it from your dealer.

Figure 15 - Gas Connection

We recommend that you install a sediment trap/drip leg in supply line as shown in Figure 15. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

CONNECTING STOVE/BURNER SYSTEM TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- sealant (resistant to propane/LP gas, not provided)

1. Open lower door panel.
2. Route flexible gas line (provided by installer) from equipment shutoff valve to burner system (see Figure 30). Route flexible gas supply line and attach to valve.
3. Check all gas connections for leaks. See *Checking Gas Connections (page 14)*.

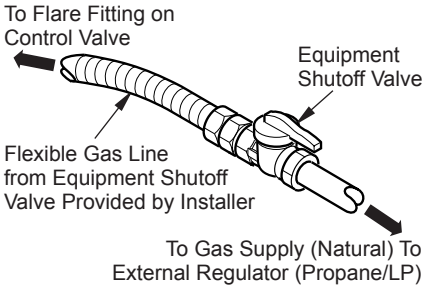


Figure 16 - Flexible Gas Line

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply noncorrosive leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping systems. Pressures in excess of 1/2 psig (3.5 kPa) will damage burner system gas regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas burner system or opening main gas valve located on or near gas meter for natural gas burner system, or using compressed air.
4. Check all joints of gas supply piping system. Apply noncorrosive leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.
5. Reconnect burner system and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (see Figure 17).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas burner system or opening main gas valve located on or near gas meter for natural gas burner system, or using compressed air.
3. Check all joints from propane/LP supply tank or gas meter to equipment shutoff valve (see Figure 18 for propane/LP or Figure 19 for natural gas). Apply noncorrosive leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.

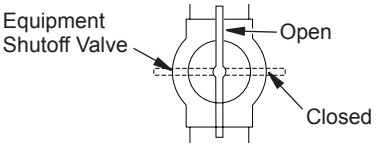


Figure 17 - Equipment Shutoff Valve

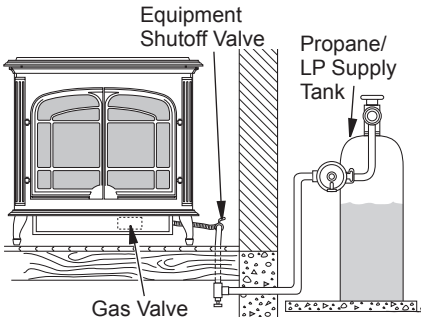


Figure 18 - Checking Gas Joints for Propane/LP Gas Burner System

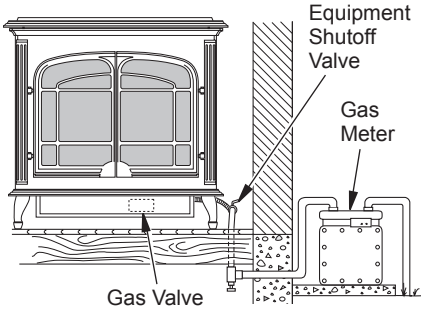


Figure 19 - Checking Gas Joints for Natural Gas Burner System

PRESSURE TESTING BURNER SYSTEM GAS CONNECTIONS

1. Open equipment shutoff valve (see Figure 17).
2. Open propane/LP supply tank valve for propane/LP burner system or main gas valve located on or near gas meter for natural gas burner system.
3. Make sure control knob of burner system is in the OFF position.
4. Check all joints from equipment shutoff valve to thermostat gas valve (see Figure 18 for propane/LP or Figure 19 for natural). Apply commercial leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.
5. Light burner system (see *Lighting Instructions*, page 20). Check all other internal joints for leaks.
6. Turn off burner system (see *To Turn Off Gas to Appliance*, page 21).

INSTALLING OPTIONAL WALL MOUNT SWITCH - GWMS2

1. Connect one terminal of 25 ft. wire for the wall switch to the TPTH terminal on the valve. Connect remaining wire terminal to the TH terminal on the valve. Make sure that the wire terminals are in the positions on the unit as pictured in Figure 20. If wires are not connected as shown, the switch will not work.
2. Route the 25 ft. wire through openings provided on the sides of the burner system to a convenient location to mount your switch.
3. Connect one bare wire end to each of the terminals of the GWMS2 wall switch.
4. Install the wall switch and cover in the wall.

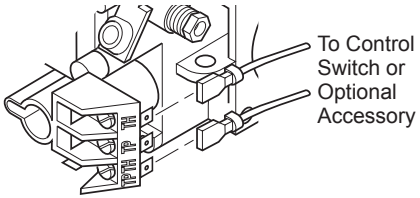


Figure 20 - Control Valve Terminals

INSTALLING OPTIONAL WALL MOUNTED THERMOSTAT - GWMT1

⚠ WARNING: Installation must be done by a qualified installer familiar with low voltage wiring procedures.

⚠ WARNING: Do not connect this thermostat to any electrical source! Electrical shock and/or fire hazard will occur.

1. Open lower door panel. The valve is attached to the underside of the burner system assembly.
2. Disconnect from the valve the wires running from the ON/OFF switch.
3. Connect one terminal of the wire for the wall thermostat to the THTP terminal on the valve. Connect remaining wire terminal to the TH terminal on the valve. Make sure that the wire terminals are in the positions on the unit as pictured in Figure 32. If wires are not connected as shown the thermostat will not work.
4. Route the wire to a convenient location to mount your thermostat (no outside wall). *IMPORTANT*: The wire must not exceed 25 feet in length.

   The thermostat should be mounted 54" above the floor in a location where there is good air circulation. Avoid heat sources such as lamps, direct sunlight, fireplace, or heat and air conditioning ducts.

5. Gently remove cover of the thermostat from the base. Grasp sides of cover firmly and pull to separate from base.
6. Feed electrical wires through the rectangular slots (from the back) on each side of the base (see Figure 21).
7. Connect one bare wire end to each terminal ("W" and "R") of the thermostat base (see Figure 22).

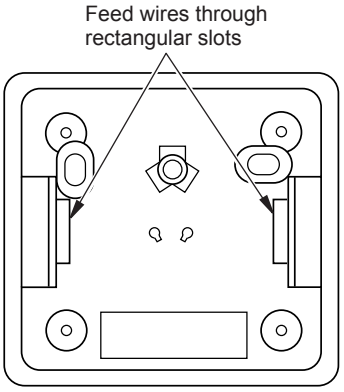


Figure 21 - Back View of Thermostat Base

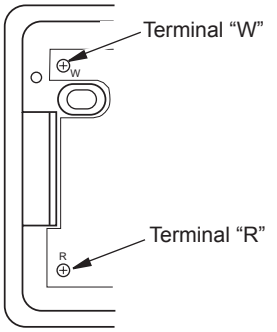


Figure 22 - Thermostat Base Terminal "W" and "R"

8. Install base to the wall with screws provided with thermostat.
9. Move temperature adjustment back and forth to insure the bi-metal is free from restrictions.
10. Replace cover onto base. (Upon installation, thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.)
11. Set temperature adjustment to the desired setting. This thermostat has been electronically calibrated at the factory. No adjustment or leveling is necessary.

BURNER SYSTEM ASSEMBLY

INSTALLING B-VENT BURNER SYSTEM INTO STOVE BODY

1. Carefully lift burner system and place into stove body from the rear of stove.
2. Discard center grate top of stove and replace with center grate top provided with Cast Iron Stove Body.

INSTALLING REAR COVER

1. Place rear cover behind stove body. Rear cover will rest on the bottom ledge of the stove body.
2. Using hex screws provided, attach rear cover to back of stove body. See Figure 24, page 17. *IMPORTANT*: This rear cover must be securely in place before venting pipes are installed.
3. Open lower door panel. The valve is attached to the underside of the burner system assembly.
4. Connect or reconnect gas supply, see *Connecting Stove/Burner System to Gas Supply* on page 13.

⚠ WARNING: A qualified installer or service person must connect burner system to gas supply. Follow all local codes.

BURNER SYSTEM ASSEMBLY

Continued

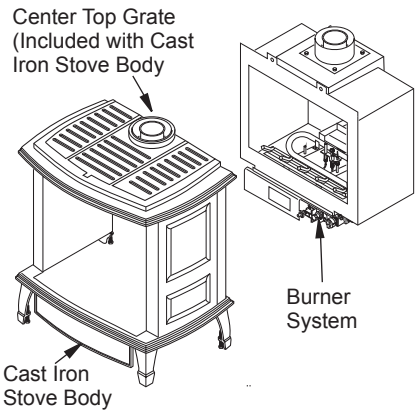


Figure 23 - Installing Burner System Into Cast Iron Stove Body

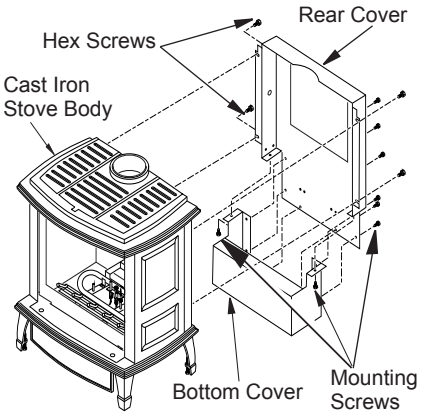


Figure 24 - Attaching Rear Cover and Bottom Cover from Stove Body

REMOVING/REPLACING GLASS DOOR

⚠ CAUTION: Do not operate this burner system with a broken glass door panel or without the glass door panel securely in place. For replacement part information see *Replacement Parts*, page 29.

1. Use reverse directions for installing rear cover page 16. Remove stove insert from cast body.
2. Remove screws from 2 tabs at top of glass door while holding door securely keeping it from falling forward (see Figure 25).
3. Grasp door by both sides and ease it upward off of lower bracket (see Figure 25).
4. To replace glass door, follow the above instructions in reverse.

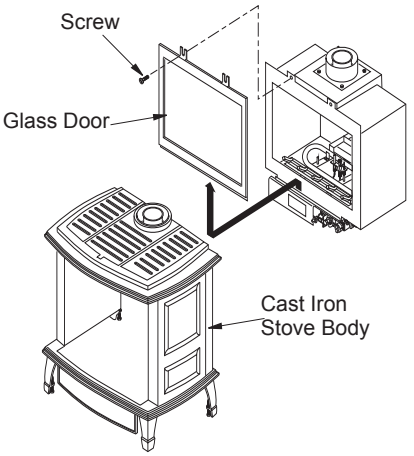


Figure 25 - Removing Glass Door from Burner System

INSTALLING LOGS, LAVA ROCK, AND GLOWING EMBERS

⚠ WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this burner system may result in property damage or personal injury.

It is very important to install these logs exactly as instructed in Figures 26 through 30. Do not modify logs. Only use logs supplied with freestanding burner system. Do not use if any log(s) are broken (see *Replacement Parts*, page 29).

1. Remove glass door. See *Removing/Replacing Glass Door*, page 17.
2. Place log #1 (back log) on top of grate. Make sure notches in the bottom of log fit over the grate (see Figure 26).
3. Rest log #2 (large front log) on the pins on the front part of grate (see Figure 27).
4. Place log #3 (crossover log) onto rear and front logs. Make sure it is seated properly into notch on front log and over the raised triangular portion of rear log as shown in Figure 28, page 19.
5. Place log #4 (small log) onto front left part of grate making sure the notches fits over the prong of the grate. See Figure 29, page 19.
6. Lava rock may be placed along sides and front inside burner system bottom. This may not be visible when you have replaced the front of stove. It is not necessary to use all of the lava rock provided.

NOTICE: Do not put lava rock on burner or under burner. Placing lava rock on burner could cause performance problems.

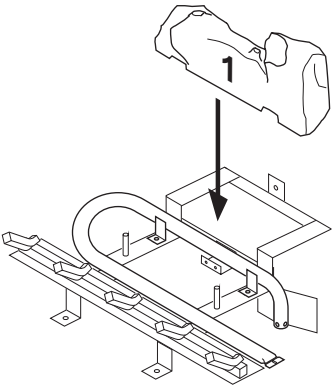


Figure 26 - Installing Log No. 1

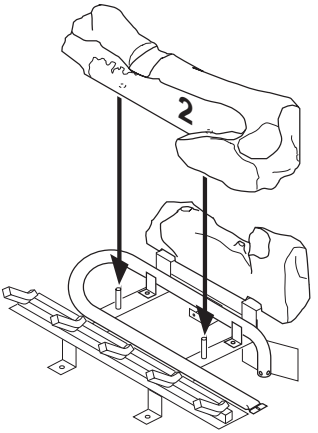


Figure 27 - Installing Log No. 2

7. Pull ember material apart into pieces no larger than a dime. Place these pieces loosely and sparingly directly onto the exposed section of front burner and along space between burner and grate prongs (see Figure 30). This will create the glowing ember appearance as the flame touches the ember material. Do not block air slots by using too much ember material in one area. It is not necessary to use all of the ember material provided.
8. Replace glass door. See *Removing/ Replacing Glass Door*, page 17.

⚠ WARNING: The glass door must be securely in place before running this burner system. Do not run this burner system if glass is missing or broken.

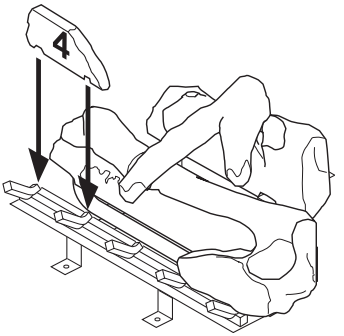


Figure 29 - Installing Log No. 4

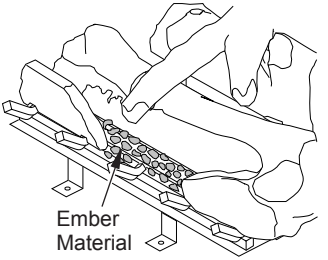


Figure 30 - Placing Ember Material on Burner

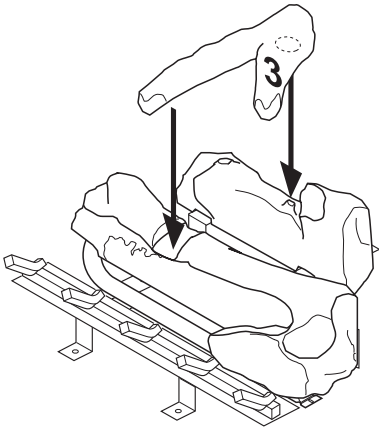


Figure 28 - Installing Log No. 3

OPERATION

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 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 gas supplier's instructions.**

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

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.**
2. **Set ON/OFF switch located on rear cover to OFF.**
3. **Open lower panel.**
4. **Turn off all electric power to the burner system.**
5. **Push in gas control knob slightly and turn clockwise ↷ to OFF.**
6. **Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 1. If you don't smell gas, go to the next step.**
7. **The pilot is located by the main burner and should not require accessing for lighting.**
8. **Turn knob on gas control counterclockwise ↶ to PILOT.**
9. **Push in control knob all the way and hold. Immediately light the pilot by repeatedly pressing the piezo spark ignitor until a flame appears. Continue to hold for about one (1) minute after the pilot is lit. Release knob and it will pop back. Pilot should remain lit. If it goes out, repeat steps 5 through 8.**
   - **If knob 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.**
10. **Turn gas control counterclockwise ↶ to ON.**
11. **Turn on all electric power to the burner system.**
12. **Turn the ON/OFF switch to ON position.**
13. **Close lower panel.**
14. **To leave pilot lit and shut off burners only, turn control knob clockwise ↷ to the PILOT position or set selector switch in the OFF position.**

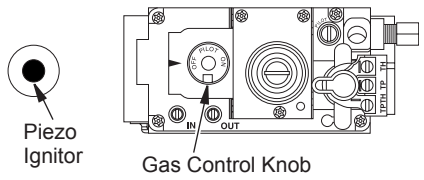


Figure 31 - Control Valve

OPERATION

Continued

TO TURN OFF GAS TO APPLIANCE

1. **Set ON/OFF switch located on rear cover to OFF.**

2a. **Open lower panel.**

2b. **If Using Optional Hand-Held Remote: Set selector switch in the OFF position to prevent draining battery.**

3. **Turn off all electrical power to the appliance if service is to be performed.**

4. **Push in gas control knob slightly and turn clockwise ↷ to OFF.**

5. **Close lower panel.**

6. **Close equipment shutoff valve (see Figure 17, page 14).**

MANUAL LIGHTING PROCEDURE

1. **Remove glass door *(see Removing/Replacing Glass Door, page 17).***

2. **Follow steps 1 through 8 under *Lighting Instructions, page 20.***

3. **Press control knob and light pilot with match.**

4. **Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 10 through 13 of *Lighting Instructions, page 20.***

5. **Replace glass door *(see Removing/Replacing Glass Door, page 17).***

OPTIONAL REMOTE OPERATION

Note: All remote control accessories must be purchased separately *(see Accessories, page 29)*. Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions, page 20.*

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide the selector switch to the REMOTE position *(see Figure 32).*

***Note:* The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.**

***IMPORTANT:* Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.**

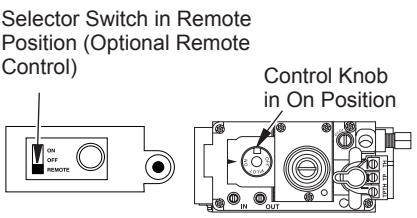


Figure 32 - Setting the Selector Switch, Control Knob, and Flame Adjustment Knob for Remote Operation

OPERATING OPTIONAL GWMT1 WALL MOUNTED THERMOSTAT

⚠ WARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.

Light the burner system as instructed in *Lighting Instructions on page 20.* Set wall thermostat to desired temperature.

This thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.

To turn the burner system off, adjust thermostat to the lowest setting and turn the gas control knob back to PILOT. The pilot will remain lit.

***IMPORTANT:* To turn the pilot off, turn the control knob on the heater to the OFF position.**

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. Call a qualified service person to readjust the pilot if necessary.

The height of the thermopile must be 3/8" to 1/2" above the pilot flame as shown in Figure 33. The flame from the pilot burner must extend beyond the thermopile.

If your pilot assembly does not meet these requirements:

- turn burner system off (see *To Turn Off Gas to Appliance*, page 21)
- see *Troubleshooting*, page 24

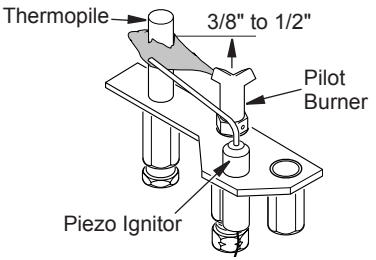


Figure 33 - Pilot Assembly

BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flame patterns will be different from unit to unit and will vary depending on installation type and weather conditions.

If the vent configuration is installed incorrectly, the flames will lift or “ghost”. This can be dangerous. Inspect the flames after installation to ensure proper installation and performance.

Figure 34 shows a typical flame pattern. If burner flame pattern differs from that described:

- turn burner system off (see *To Turn Off Gas to Appliance*, page 21)
- see *Troubleshooting*, page 24.

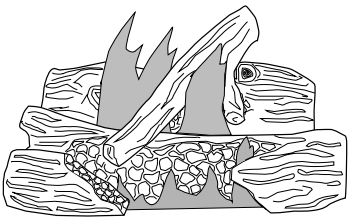


Figure 34 - Typical Flame Pattern

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off burner system and let cool before cleaning.

⚠ CAUTION: You must keep control areas, burners, and circulating air passageways of stove with burner system clean. Inspect these areas of stove and burner system before each use. Have burner system inspected yearly by a qualified service person. Burner system may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

GLASS DOOR

⚠ WARNING: Handle glass door panel with care. Do not strike, slam or otherwise abuse glass. Do not operate burner system with the glass door removed, cracked, or broken.

⚠ WARNING: Do not use abrasive cleaners as this may damage glass. Use a non-abrasive household glass cleaner to clean glass. Do not clean glass when hot.

CLEANING AND MAINTENANCE

Continued

Glass must be cleaned periodically. During start-up it is normal for condensation to form on the inside of the glass causing lint, dust, and other airborne particles to cling to the glass surface. During initial start-up a slight film may form on the glass due to paint curing. The glass should be cleaned several times with a non-ammonia, non-abrasive household cleaner and warm water after the first two weeks of operation. Thereafter, clean the glass two or three times during each heating season, depending on the usage and circumstances present. Refer to *Removing/Replacing Glass Door* on page 17 of this manual when removing glass door for cleaning.

⚠ WARNING: Only parts supplied by the manufacturer should be used when replacing broken or damaged glass door panel (see *Replacement Parts*, page 29). This glass door panel is a complete unit. No substitute materials may be used.

⚠ CAUTION: Wear gloves and safety glasses while handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass.

If glass has been broken, carefully remove glass door (see *Removing/Replacing Glass Door*, page 17). Vacuum all glass pieces with a shop vac.

Use only the ceramic glass door replacement intended for this burner system (see *Replacement Parts*, page 29 for details on ordering). No substitutions may be made. See *Removing/Replacing Glass Door*, page 17 for instructions for replacing glass door.

⚠ WARNING: Do not operate burner system with the glass door removed, cracked, or broken.

PILOT AND BURNERS

- Remove ember material before cleaning burners and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt, or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt, or lint.

LOGS

- If you remove logs for cleaning, refer to *Installing Logs, Lava Rock, and Glowing Embers*, page 18, to properly replace logs.
- Use a vacuum cleaner to remove any carbon build-up on logs.
- Replace log(s) if broken. See *Replacement Parts* on page 29.
- Replace ember material periodically as needed. See *Replacement Parts* on page 29.

VENTING SYSTEM

Conduct annual inspection of the venting system following these guidelines:

1. Check areas of venting system that are exposed to the weather for corrosion (rust spots or streaks and, in extreme cases, holes). Have these items replaced immediately by a qualified service person.
2. Remove the vent cap and shine a flashlight into the vent. Remove any foreign material.
3. Check for evidence of excessive condensation. Continuous condensation can cause corrosion of caps, pipes, and fittings and can be caused by having excessive lateral runs, too many elbows, or exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe section or fitting has been disturbed and loosened. Check mechanical supports such as wall straps for rigidity.

TROUBLESHOOTING

⚠ WARNING: Turn off heater and let cool before servicing. Only a qualified service person should service and repair heater.

⚠ CAUTION: Never use a wire, needle or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at pilot.	1. Ignitor electrode not connected to ignitor cable.	1. Reconnect ignitor cable.
	2. Ignitor cable pinched or wet.	2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry.
	3. Piezo ignitor nut is loose.	3. Tighten nut holding piezo ignitor. Nut is located behind the mounting bracket.
	4. Broken ignitor cable.	4. Replace ignitor cable.
	5. Bad piezo ignitor.	5. Replace piezo ignitor.
	6. Ignitor electrode broken.	6. Replace pilot assembly.
	7. Ignitor electrode positioned wrong.	7. Replace pilot assembly.
When ignitor button is pressed, there is spark at pilot but no ignition.	1. Gas supply turned off or equipment shutoff valve closed.	1. Turn on gas supply or open equipment shutoff valve.
	2. Control knob not in PILOT position.	2. Turn control knob to PILOT position.
	3. Control knob not pressed in while in PILOT position.	3. Press in control knob while in PILOT position.
	4. Air in gas lines when installed.	4. Continue holding down control knob. Repeat igniting operation until air is removed.
	5. Depleted gas supply (propane/LP models only).	5. Contact local propane/LP gas company.
	6. Pilot is clogged.	6. Clean pilot (see *Cleaning and Maintenance*, page 22) or replace pilot assembly.
	7. Gas regulator setting is not correct.	7. Replace gas control.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot lights but flame goes out when control knob is released.	1. Control knob not fully pressed in.	1. Press in control knob fully
	2. Control knob not pressed in long enough.	2. After pilot lights, keep control knob pressed in 30 seconds
	3. Equipment shutoff valve not fully open.	3. Fully open equipment shutoff valve
	4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged pilot	4. A) Contact local gas company. B) Clean pilot (see *Cleaning and Maintenance*, page 22) or replace pilot assembly.
	5. Thermocouple connection loose at control valve .	5. Hand tighten until snug, then tighten 1/4 turn more.
	6. Thermocouple damaged.	6. Replace pilot assembly.
	7. Control valve damaged.	7. Replace control valve.
Burner does not light after pilot is lit.	1. Burner orifice clogged.	1. Clean burner (see *Cleaning and Maintenance*, page 22) or replace burner orifice.
	2. Inlet gas pressure is too low.	2. Contact local propane/LP or natural gas company.
	3. Thermopile leads disconnected or improperly connected.	3. Reconnect leads (see *Wiring Diagram*, page 28).
	4. Thermopile is defective.	4. Replace thermopile.
Delayed ignition burner.	1. Manifold pressure is too low.	1. Contact local propane/LP or natural gas company.
	2. Burner porting or orifice clogged.	2. Clean burner (see *Cleaning and Maintenance*, page 22) or replace burner orifice.
Burner backfiring during combustion.	1. Burner orifice is clogged or damaged.	1. Clean burner (see *Cleaning and Maintenance*, page 22) or replace burner orifice.
	2. Damaged burner.	2. Replace damaged burner.
	3. Gas regulator defective.	3. Replace gas control.
Slight smoke or odor during initial operation.	1. Residues from manufacturing processes and logs curing.	1. Problem will stop after a few hours of operation.
Heater produces a whistling noise when burner is lit.	1. Air in gas line.	1. Operate burner until air is removed from line. Have gas line checked by local propane/LP or natural gas company.
	2. Dirty or partially clogged burner orifice.	2. Clean burner (see *Cleaning and Maintenance*, page 22) or replace burner orifice.

TROUBLESHOOTING

Continued

⚠ WARNING: If you smell gas
- **Shut off gas supply.**
- **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.**

IMPORTANT: Operating burner system where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Glass soots.	1. Flame impingement on logs.	1. Adjust the log set so that the flame does not excessively impinge on it.
	2. Debris around burner air mixer.	2. Inspect the opening at the base of the burner to see that it is NOT packed with any type of material.
	3. Improper vent configuration.	3. Follow venting configuration instructions on pages 7 thru 12.
Burner system produces a clicking/ticking noise just after burners are lit or shut off.	1. Metal expanding while heating or contracting while cooling.	1. This is normal. If noise is excessive, contact qualified service person.
Remote does not function.	1. Battery is not installed or battery power is low.	1. Replace batteries in receiver and remote control.
Burner system produces unwanted odors.	1. Gas leak. **See Warning statement above**.	1. Locate and correct all leaks (see *Checking Gas Connections*, page 14).
Burner system shuts off in use.	1. High or gusting winds.	1. Burner system has been tested for up to 40 mph winds. However, extreme conditions may occur. See *Lighting Instructions*, page 20.
	2. Low line pressure.	2. Contact local propane/LP or natural gas company.
	3. Pilot is partially clogged.	3. Clean pilot (see *Cleaning and Maintenance*, page 22).
	4. Glass too loose and air tight gasket leaks in corners after usage.	4. Tighten glass.
	5. Bad thermopile.	5. Replace faulty component.
	6. Improper vent cap installation.	6. Check for proper installation and freedom from debris or blockage.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Gas odor even when control knob is in OFF position.	1. Gas leak. **See Warning statement, page 26.**	1. Locate and correct all leaks (see *Checking Gas Connections*, page 14).
	2. Control valve defective.	2. Replace control valve.
Gas odor during combustion.	1. Gas leak. **See Warning statement, page 26.**	1. Locate and correct all leaks (see *Checking Gas Connections*, page 14).
Dark residue on logs or inside of burner system.	1. Improper log placement.	1. Properly locate logs (see *Installing Logs, Lava Rock, and Glowing Embers*, page 18).
	2. Air holes at burner inlet blocked.	2. Clean out air holes at burner inlets. Periodically repeat as needed.
	3. Burner flame holes blocked.	3. Remove blockage or replace burner.
	4. Improper vent configuration.	4. Follow venting configuration instructions on pages 7 thru 12.

SPECIFICATIONS

SBVBND

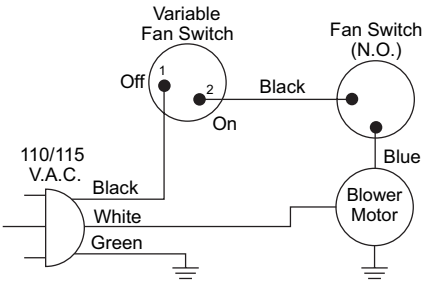
- Rating: 30,000 Btu/Hr
- Gas Type: Natural Gas
- Manifold Pressure: 3.5" W.C.
- Minimum Inlet Supply Pressure: 5." W.C.
- Dimensions, (HxWxD):
  27" x 21 1/2" x 18" (68.6 x 54.6 x 45.7 cm)

SBVBPD

- Rating: 28,000 Btu/Hr
- Gas Type: Propane/LP Gas
- Manifold Pressure: 10" W.C.
- Minimum Inlet Supply Pressure: 11" W.C.
- Dimensions, (HxWxD):
  27" x 21 1/2" x 18" (68.6 x 54.6 x 45.7 cm)

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

WIRING DIAGRAM



SERVICE HINTS

When Gas Pressure is Too Low:

- pilot will not stay lit
- burners will have delayed ignition
- burner system will not produce specified heat
- propane/LP gas supply might be low (propane/LP units only)

You may feel your gas pressure is too low. If so, contact your local natural or propane/LP gas supplier.

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact FMI PRODUCTS, LLC at 1-866-328-4537. When calling please have your model and serial numbers of your heater ready.

You can also visit our web site at **www.fmiproducts.com**.

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

Contact authorized dealers of this product. If they can't supply original replacement part(s), call FMI PRODUCTS, LLC at 1-866-328-4537.

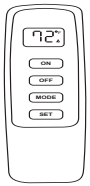
When calling, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- purchase date

Usually, we will ask you to return the part to the factory.

ACCESSORIES

Purchase these accessories from your local dealer. If they can not supply these accessories call FMI PRODUCTS, LLC at 1-866-328-4537 for information. You can also write to the address listed on the back page of this manual.



RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - TRC

For all Remote-Ready Models. Allows the gas log heater to be operated in a manually or thermostatically controlled mode. You can turn the gas log heater on and off without ever leaving the comfort of your easy chair.

WALL MOUNTED THERMOSTAT CONTROL KIT - GWMT1

For all models. Allows easy wall access to the operation of your burner system. This will allow you thermostatic control with the convenience of a wall switch.

WALL MOUNTED ON/OFF SWITCH GWMS2

For all models. Allows burner system to be turned on and off with a wall switch.

RECEIVER AND HAND-HELD REMOTE CONTROL KIT - MRC

For all Remote-Ready Models. Allows the gas log heater to be turned on and off by using a hand-held remote control.

NCBV-PS CONVERSION KIT

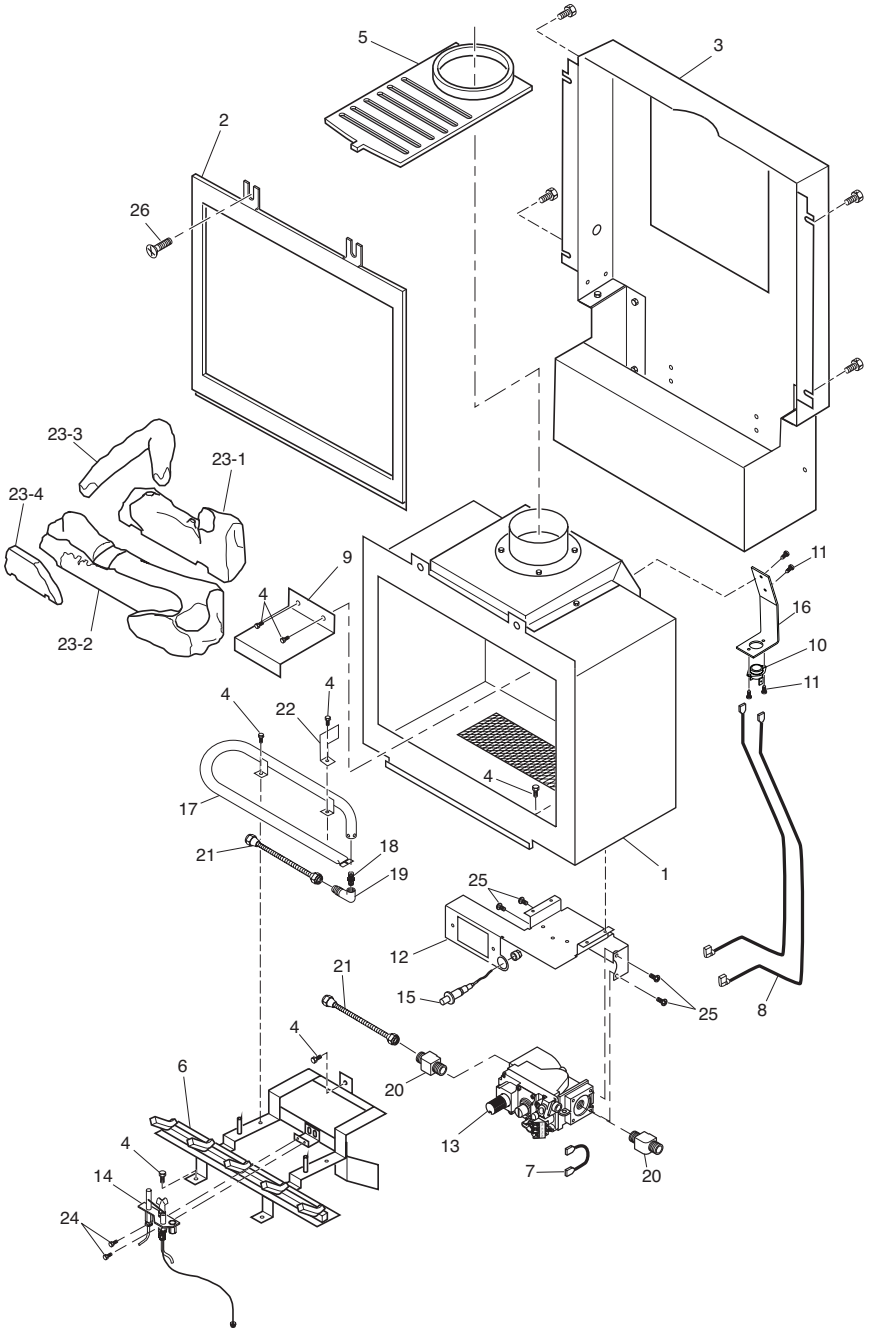
For propane/LP gas models. Allows burner system to be converted from propane/LP gas to natural gas.

PCBV-NS CONVERSION KIT

For natural gas models. Allows burner system to be converted from natural gas to propane/LP gas.

PARTS

MODELS SBVBND AND SBVBPD



PARTS

MODELS SBVBND AND SBVBPD

This list contains replaceable parts used in your burner system. When ordering parts, follow the instructions listed under *Replacement Parts* on page 35 of this manual.

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	**	Firebox Assembly	1
2	105795-01	Glass Door Assembly	1
3	106831-02CK	Rear Cover	1
4	M11084-46	Screw, Hex	19
5	107013-01	Center Cast Grate	1
6	106794-01CK	Grate Assembly	1
7	101480-12	Wire Harness	1
8	103284-09	Wire Harness	1
9	107191-01	Baffle	1
10	14519	Spillswitch	1
11	M11084-43	Switch Screw	4
12	105468-02	Valve Bracket	1
13	14512	Valve, Natural	1
	14513	Valve, Propane/LP	1
14	14571	Pilot Assembly, Natural	1
	14583	Pilot Assembly, Propane/LP	1
15	097159-04	Ignitor, Piezo	1
16	107195-01	Bracket, Spill Switch	1
17	14597	Burner, Natural	1
	14598	Burner, Propane/LP	1
18	104506-16	Orifice, Natural	1
	104506-17	Orifice, Propane/LP	1
19	14528	Brass Elbow	1
20	112050-01	Brass Fitting	2
21	101628-04	Flex Tubing	2
22	105325-01	Air Deflector	1
23	105491-01	Log Set	1
23-1	105774-01	Rear Log	1
23-2	105774-02	Front Log	1
23-3	105774-03	Crossover Log	1
23-4	105774-04	Log Piece	1
24	098304-03	Screw	2
25	M12461-25	Screw	4
26	M12461-73	Screw	2
	PARTS AVAILABLE - NOT SHOWN		
	GA6060	Lava Rock	1
	112044-01	Ember Material Bag	1

**Not a field replaceable part.

WARRANTY

KEEP THIS WARRANTY

Model (located on product or id tag) Burner System _____ Cast Stove _____

Serial No. (located on product or identification tag)_____

Date Purchased _____

Keep receipt for warranty verification.

FMI PRODUCTS, LLC LIMITED WARRANTIES

New Products

Standard Warranty: FMI PRODUCTS, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of four (4) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: FMI PRODUCTS, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a FMI PRODUCTS, LLC Authorized Service Center or a provider approved by FMI PRODUCTS, LLC. Warranty parts must be obtained through authorized dealers of this product and/or FMI PRODUCTS, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is FMI PRODUCTS, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to four (4) years on new products and 30 days on factory reconditioned products from the date of first purchase. FMI PRODUCTS, LLC makes no other warranties regarding this product.

FMI PRODUCTS, LLC's liability is limited to the purchase price of the product, and FMI PRODUCTS, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For information about this warranty contact:

FMI PRODUCTS, LLC
2701 S. Harbor Blvd.
Santa Ana, CA 92704
1-866-328-4537
www.fmiproducts.com

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