

B-VENT DECORATIVE GAS FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL



MODELS P324, VP324, P325(B) AND VP325(B)
NATURAL GAS

A 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.

TABLE OF CONTENTS

Safety	Cleaning and Maintenance	21
,	Troubleshooting	
Introduction4	Replacement Parts	25
Product Specification6	Service Hints	25
Selecting Location	Technical Service	25
PreInstallation Preparation7	Accessories	25
Venting Installation	Parts	26
Installation11	Wiring Diagram	31
Operation	WarrantyBack Co	ver
Inspecting Burners	-	

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.

NOT FOR USE WITH SOLID FUEL

CHECK LOCAL CODES PRIOR TO INSTALLATION

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

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

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

SAFETY

Continued

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 fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosions, electrical shock and carbon monoxide poisoning.

A DANGER: Carbon monoxide poisoning may lead to death!

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, 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 fireplace may not have been installed properly. Get fresh air at once! Have fireplace inspected and serviced by a qualified service person. 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.

Propane/LP and Natural Gas: Both are odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases 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 fireplace.

WARNING: Any change to this fireplace or its controls can be dangerous.

- 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.
- For propane/LP fireplace, 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.
- 3. 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.
- 4. Never install the fireplace
 - in a recreational vehicle
 - where curtains, furniture, clothing or other flammable objects are less than 42" from the front, top or sides of the fireplace
 - · in high traffic areas
 - · in windy or drafty areas
- This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 6. Carefully supervise young children when they are in the room with fireplace.
- A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.
- Turn fireplace off and let cool before servicing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.

SAFETY

Continued

- 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 fireplace.
- Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See Cleaning and Maintenance, page 21.
- 11. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
- 12. Do not use this fireplace to cook food or burn paper or other objects.
- 13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.

- 14. 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/NEPA 70.
- 15. Do not install fireplace directly on carpeting, vinyl tile or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.
- 16. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
- Do not operate fireplace if any log is broken.
- 18. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.
- Provide adequate clearances around air openings.

UNPACKING

The following items are packed inside the firebox. Remove before positioning firebox into framing.

- Ceramic Log Pack Shrink wrapped on cardboard
- 3 plastic bags containing lava rock, pan and ember materials
- Rear Log (P325/VP325 Models Only). Remove 2 plastic quick ties from around burner and grate
- · Grate Stand Lift off of burner pan

Check all items for any shipping damage. If damaged, promptly inform dealer or distributor where you bought the product.

Retain these items for later installation.

INTRODUCTION

These fireplace models are vented gas fireplaces that use a millivolt gas control valve with a millivolt ignition system. P325/VP325 models have a 5" B-vent and P324/VP324 models have a 4" B-vent. A properly sized B-Type venting system and listed type vent cap are not supplied but are required for proper operation. See venting instructions on page 9.

WARNING: This gas appliance must not be connected to a chimney flue servicing a solid fuel burning appliance.

These models are factory equipped for use with natural gas and must be converted when intended for use with propane/LP gas. Conversion kits PCBM-324 and PCBM-325 may be purchased for simple conversion to propane/LP gas. See <u>Accessories</u>, page 25.

BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions completely.

This FMI PRODUCTS, LLC appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by FMI PRODUCTS, LLC. Using any component fon FMI PRODUCTS, LLC approved and tested for use with this appliance MAY CAUSE A FIRE HAZARD!

INTRODUCTION

Continued

The FMI PRODUCTS, LLC warranty will be voided by, and FMI PRODUCTS, LLC disclaims any responsibility for the following actions:

- A) Modification of the appliance or any of the components.
- B) Use of any component part not approved by FMI PRODUCTS, LLC in combination with this appliance.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) The burning of anything other than the type of gas approved for use in this gas appliance.

Installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code, ANSI Z223.1.* This appliance complies with *ANSI Z21.50*.

NOTICE: This appliance is not intended to be used as a primary source of heat.

WARNING: Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance; otherwise your insurance co. may not cover this appliance.

A CAUTION: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be caused.

The appliance and it's individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

For the purpose of input adjustment two pressure taps (for IN and OUT pressures) are provided on the gas control valve for test gauge connections to the appliance.+

PRODUCT SPECIFICATION

	GAS RATING - NATURAL					
	P324, VP324 P325(B), VP325(B)					
Max. Input Rating	15,000 Btu/Hr	25,000 Btu/Hr				
Manifold Pressure	3.5" WC (0.87 kPa)	3.5" WC (0.87 kPa)				
Minimum Supply Pressure	4.5" WC (1.12 kPa)	4.5" WC (1.12 kPa)				
Maximum Supply Pressure	10.5" WC (2.66 kPa)	10.5" WC (2.66 kPa)				
Orifice Size	# 49	# 40				
GAS RATING - PROPANE/LP						
Max. Input Rating	15,000 Btu/Hr	25,000 Btu/Hr				
Manifold Pressure	10" WC (2.49 kPa)	10" WC (2.49 kPa)				
Minimum Supply Pressure	11" WC (2.74 kPa)	11" WC (2.74 kPa)				
Maximum Supply Pressure	13" WC (3.23 kPa)	13" WC (3.23 kPa)				
Orifice Size	# 56	# 54				

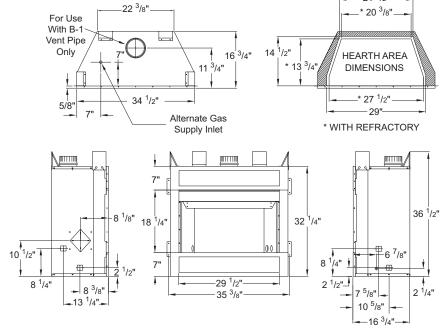


Figure 1 - Appliance Dimensions

-21 ¹/2"-

SELECTING LOCATION

To determine the safest and most efficient location for your appliance, you must take into consideration the following guidelines:

- The location must allow for proper clearances (see <u>Clearances</u>).
- Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows, or doors.
- A location that avoids the cutting of joists or roof rafters will make installation easier. Figure 2 shows a plan view of a few common locations.

Flush installations are recommended where living space is limited or at a premium, and since the space required to enclose the appliance would be located beyond an outside wall, this would also reduce the cutting of joists, roof rafters, and such. Check local codes for any restrictions.

Projected installations can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

Corner installations make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference.

Internal wall installations provide a discreet option for room separation and can also be ideal as an addition to an existing wall.

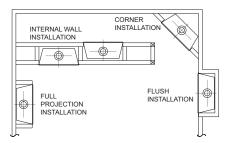


Figure 2 - Possible Locations for Installing Fireplace

PREINSTALLATION PREPARATION

CLEARANCES

Minimum clearances to combustibles are: Top of Spacers 0" min Back and Sides of Outer Surround 0" min. Drywall to Sides of Front Face (Nailing Flanges) 0" min "B" Vent Surfaces 1" min 42" min. Ceiling to Opening Floor 0" min. Perpendicular Wall See Figure 6, page 8

A CAUTION: Do not block required air spaces with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.

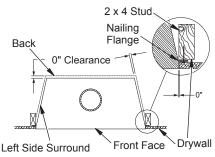


Figure 3 - Minimum Clearances (Top View)

PRE-INSTALLATION PREPARATION

Continued

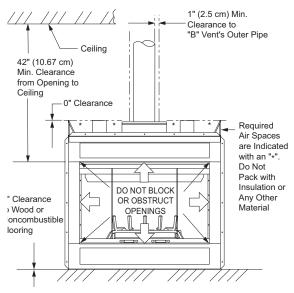


Figure 4 - Minimum Clearances (Front View)

MANTEL CLEARANCES AND WALL DETAILS

A combustible mantle shelf maybe installed a maximum 12" (22.9 cm) from the wall. Figures 5 and 6 show the minimum allowable distances from various combustible mantle components in relation to the fireplace opening.

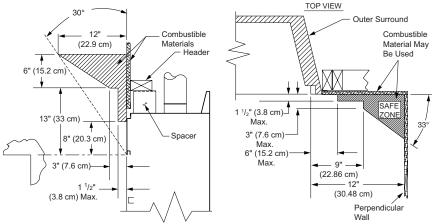


Figure 5 - Mantel Clearances - Side View (Cross Section)

Figure 6 - Side Clearances - Top View (Cross Section)

PRE-INSTALLATION PREPARATION

Continued

FRAMING

1. Frame appliance enclosure as illustrated in Figures 7 and 8.

Note: If a wall covering is used to line the enclosure, then all measurements must be from the surface of the covering.

2. Place the appliance into the framing and secure it.

Note: If appliance is to be raised above floor level, a platform must be built to support the appliance.

- Install the supply line to the appliance using a 1/2" NPT black iron gas line terminating 2 ^{5/16}" above the bottom of the appliance. The gas line may be installed from either side or from the rear of the appliance (see Figure 18, page 13).
- 4. Feed flexible gas line through one of three gas line conduit sleeves and repack insulation to cover any openings. Prepare the incoming gas line with Teflon tape or pipe joint compound and hookup incoming gas line to flexible gas line.

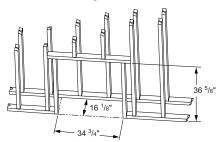


Figure 7 - Rough Opening for Installing in Wall

Note: If 1/2" NPT black iron pipe does not mate with fitting at the end of flexible gas line, remove fitting and replace with a 37 degree flare 3/4"-12, 1/2" NPT (female) fitting.

WARNING: When finishing appliance, do not overlap combustible material onto the black front face. Brick, tile, or other noncombustible materials may be applied to the face provided that any gap is between the material used and the face is caulked with a noncombustible caulking.

These Dimensions Allow for a 3/4" Clearance at Sides and Back of Fireplace. 0" Clearance is Permitted

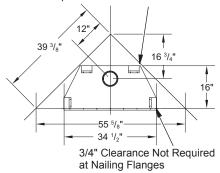


Figure 8 - Corner Installation Guidelines

VENTING INSTALLATION

A B-type venting system must be connected to the appliance for venting to the outside of the building.

The following section is provided as a guide to a standard B-type vent installation.

Standing codes requirements concerning B-type vent installations may vary within your state, province or local codes jurisdiction. Therefore, it is recommended that you check with your local building codes for specific requirements or in absence of local codes, follow Section 7.0 of the current National Fuel Gas Code NFPA No. 54/ANSI Z223.1.

This gas appliance must be vented to the outdoors only and may not be terminated into an attic space or into a chimney flue servicing a solid fuel burning appliance.

This appliance may be vented through a manufactured chimney system or a masonry chimney using a B-vent adapter or a chimney liner system if all are listed, inspected and approved by local codes and/or building authorities

The examples shown in Figure 9, page 10 are typical of most B-vent installations and code practices.

VENTING INSTALLATION

Continued

Example 1 shows the minimum allowable system height and lateral offset for a 60° or greater inclination. Code specifies that offsets at 60° or greater are considered horizontal and must follow the 75% rule for lateral to total vertical system height. Codes also allows only one offset in the total system when at 60° or greater. The total vertical height in this example represents the minimum height of 8 feet and therefore the allowable lateral is 6 feet when the 75% rule applies. If the lateral length must exceed 75% then the system must be sized in accordance with the Category I venting tables.

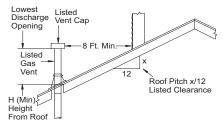
Example 2 shows a multiple offset each at 45° of inclination. Multiple offsets are permitted if they do not exceed 45° of inclination. The total lengths of the two offsets are not required to meet the 75% allowable rule.

Example 3 shows a single offset at 45° of inclination and therefore the lateral length at 10 feet of offset does not have to meet the 75% rule.

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a subfloor, ceiling joist or an attic overhang. The vent pipe must terminate vertically into a listed type vent cap and extend a sufficient height through an approved roof flashing, roof jack or a roof thimble. At all points the listed clearances must be maintained.

Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54. These rules apply to vents at 12" diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 feet distance from a vertical wall or obstruction (see Figure 10).

If venting horizontally through a side wall becomes necessary, a listed thimble approved for use with B-type vent must be used. Check with your local codes before venting through a side wall.



Roof Pitch	H (Min.) Ft.	m
Flat to 6/12	1.0	0.30
6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2.0	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.0	1.22
Over 12/12 to 14/12	5.0	1.52
Over 14/12 to 16/12	6.0	1.83
Over 16/12 to 18/12	7.0	2.13
Over 18/12 to 20/12	7.5	2.27
Over 20/12 to 21/12	8.0	2.44

Figure 10 - B-Vent Terminations

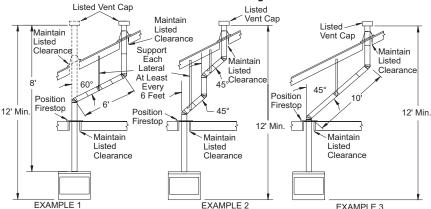


Figure 9 - Typical B-Vent Configuration

VENTING INSTALLATION

Continued

Some codes areas allow the use of existing Btype vent systems if the system is at or above the recommended diameter of the flue.

The flue connection must be made using listed B-type connectors and the existing system must be code inspected for damage and proper installation.

It is not recommended that this appliance be common vented with an existing gas burning appliance. However, if it becomes necessary to common vent this appliance, the venting system must be sized and configured in accordance with the common venting guides Appendix G of the current National Fuel Gas Code NFPA No. 54/ANSI Z223.1.

Note: Before connecting this appliance to an existing vent system or a common venting system consult with your local architect, planner, or building official.

WARNING: This appliance must be properly connected to a system and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.

CHECKING FOR PROPER VENTING

After completing and checking the electrical, gas and vent connections, follow the lighting instructions and allow the main burner to run for approximately 5 minutes. Hold a lit match or cigarette near top edge of fireplace opening and play it along entire length of the opening (see Figure 11). Proper venting should tend to draw flame or smoke into appliance. Improper venting or escaping of spillage of burned gas, is indicated when match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance.

If appliance is found to be improperly venting, shut it off and notify your installer or a qualified service agency to inspect venting system.

NOTICE: This appliance is equipped with a vent safety shutoff switch which will shut down appliance in case of a venting problem. Do not bypass vent safety switch. If appliance should shut down, contact a qualified installer, service agency, or your gas supplier to have vent inspected before operating.

Check area along entire top edge of fireplace opening. Smoke or flame should be drawn into appliance opening.

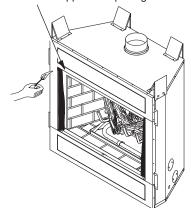


Figure 11 - Checking for Spillage

INSTALLATION

WALL SWITCH INSTALLATION

Installation of a wall switch allows you to activate gas control valve without normal household electricity since the valve operates on millivolt current supplied by heat generated by thermopile. To install wall switch:

 Remove front refractory access panel by lifting up and angling out firebox opening (see Figure 12, page 12). Using wire and connectors provided, attach red wire to terminal marked TH/TP on control valve. Attach white wire to blade connector on open end of safety circuit wiring (see Figure 13, page 12, and <u>Wiring Diagram</u>, page 31).

Note: If any of original wire from unit control must be replaced, use the same type or a higher rated wire (25 ft. maximum length).

Continued

WARNING: Do not wire remote wall switch to main power supply (standard 120V household current).

- 3. Locate wall switch in a convenient location.
- 4. After wire connections are complete, replace refractory access panel.

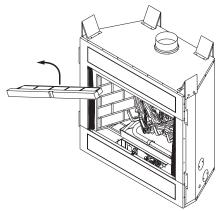


Figure 12 - Removing Front Refractory Access Panel (P325B/VP325 Model Shown)

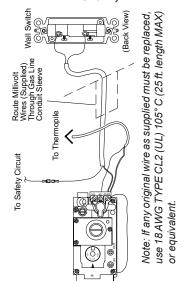


Figure 13 - Wall Switch Wiring Diagram

12

OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL INSTALLATION

Note: If using optional wireless hand-held remote control, the wall switch is no longer operational.

Installing Receiver

- Remove front refractory access panel by lifting up and angling out of the firebox opening (see Figure 12) to expose controls.
- Disconnect wall switch wires from TH/TP terminals on control valve and blade connector on safety circuit wiring (see Figure 13 and <u>Wiring Diagram</u> on page 31).
- Install remote receiver unit onto mounting bracket using two plastic mounting clips (see Figure 14).
- Connect wires to control circuit. Connect white wire to terminal marked TH/TP on control valve. Connect red wire to male blade connector provided at open end of safety circuit wiring (see <u>Wiring Diagram</u>, page 31).
- Locate battery clip mounted on back of receiver (see Figure 15).
- 6. Slide 9-volt battery (not included) through clip. *Note: Only use alkaline battery.*
- Attach terminal wires to battery (see Figure 15).
- 8. Replace refractory brick access panel.

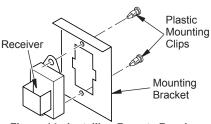


Figure 14 - Installing Remote Receiver (Shown from Rear of Mounting Bracket)

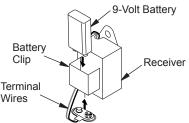


Figure 15 - Installing Battery in Receiver

Continued

Installing 9-Volt Battery in Hand-Held Remote Control Unit

- Remove battery cover on back of remote control unit.
- Attach terminal wires to battery (not included). Place battery into battery housing. Note: Only use alkaline battery.
- Replace battery cover onto remote control unit.

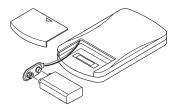


Figure 16 - Installing Battery in Hand-Held Remote Control Unit

GAS LINE HOOK-UP

WARNING: Gas line hookup should be done by your gas supplier or a qualified service person.

WARNING: Before you proceed, make sure your gas supply is OFF.

The appliance and it's individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of gas supply piping system at test pressures in excess of 1/2 psig (3.5 kPa). Appliance must be isolated from gas supply piping system by closing its individual manual shutoff valve during any pressure testing of gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

A manual shutoff valve has been included in the appliance's gas supply system. You may consider installing an extra gas shutoff valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 17.

In conformance with local codes, route a 1/2" NPT gas line towards appliance coming in from any of the 3 directions shown in Figure 18.

A CAUTION: Do not kink flexible gas line.

FMI PRODUCTS, LLC recommends that a black iron gas line be routed from the gas source, through a sediment trap (shown in Figure 19), and into appliance. Once connected through appliance, a flexible gas line may be used for ease of installation to gas control valve (see Figure 20, page 14).

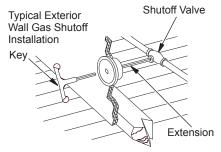


Figure 17 - Manual Shutoff Valve Installation

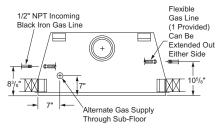


Figure 18 - Routing Incoming Gas Line

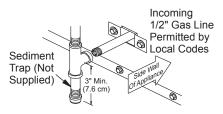


Figure 19 - Sediment Trap

Continued

Before connecting the black iron gas line to the inside of the appliance a sediment trap must be included outside the appliance between the gas line and the gas shutoff valve. It must extend down 3" beyond the center of the pipe. Prepare incoming black iron gas line with Teflon tape or pipe joint compound (Check with local building codes).

CAUTION: Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane), and should be applied lightly to ensure excess sealant does not enter the gas line.

WARNING: All gas piping and connections must be tested for leaks after the installation is completed.

After ensuring that the gas valve is on, apply a noncorrosive leak detection solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.

Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.

Complete your gas installation by connecting incoming gas line with flexible gas line. Secure tightly with wrench but **DO NOT OVERTIGHTEN**.

GRATE PLACEMENT

The grate must be placed in the burner pan so that the back grate fingers (P325/VP325) or pins (P324/VP324) fit into the notches on back of burner pan and front legs fit inside burner pan as shown in Figure 21.

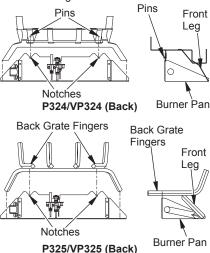


Figure 21 - Placing Grate into Burner Pan

EMBER AND PAN MATERIAL PLACEMENT

- Open the bag(s) of vermiculite and fill the entire burner pan until the burner tube is completely covered (see Figure 22, page 15).
- 2. Smooth the pan material just even with edges of the burner pan.
- Remove the ember material from the bag and flatten small amounts into quarter size pieces and lay on top of the surface of the pan material (see Figure 23, page 15).

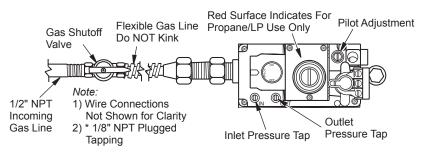


Figure 20 - Connecting Flexible Gas Line to Millivolt Valve

Continued

 Place just enough to cover the entire surface and leave about a 1/2" gap under the lower grate members to allow air to flow (see Figure 24).

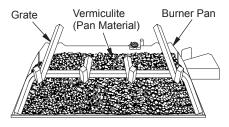


Figure 22 - Fill Entire Burner Pan with Vermiculite (P325/VP325 Models Shown)

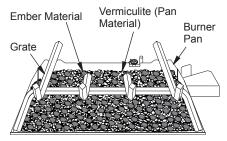


Figure 23 - Ember Material on Surface of Pan Material (Vermiculite) (P325/VP325 Models Shown)

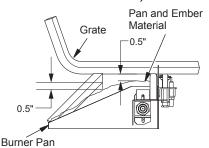


Figure 24 - Pan and Ember Material Clearances (P325/VP325 Models Shown)

LOG PLACEMENT FOR P324/VP324 MODELS

 Place front log onto front of grate sliding log all the way forward against grate fingers (see Figure 25).

- 2. Insert pegs on bottom of rear log into holes in rear of grate (see Figure 25).
- 3. Place top right log into notches on left side of front and rear (see Figure 26).
- 4. Place top left log into notches on right side of front and rear (see Figure 26).

NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.

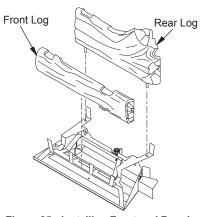


Figure 25 - Installing Front and Rear Logs

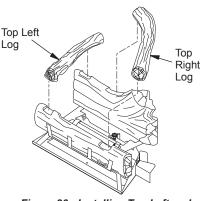


Figure 26 - Installing Top Left and Right Logs

Continued

LOG PLACEMENT FOR P325(B)/ VP325(B) MODELS

- Place rear log onto grate making sure notches rest over grate (see Figure 27).
- Place front right log onto front right side of grate with back of log fitting into notch on right front of rear log (see Figure 27).
- Rest front of front left log between first two grate fingers on left of grate assembly and rear into notch on left front of rear log (see Figure 28).
- 4. Place top of log 4 into notch on log 1. Rest log 4 on the center of grate as shown in Figure 29.
- Place top of log 5 into notch on top right of log 1 (see Figure 29). Rest log 5 between two middle grate fingers as shown in Figure 30.

To enhance the look of the hearth you may optionally place the lava rock provided around the front and sides of the burner.

NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.

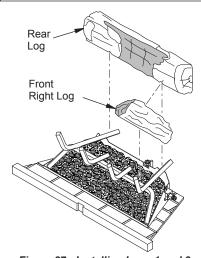


Figure 27 - Installing Logs 1 and 2

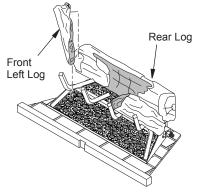


Figure 28 - Installing Log 3

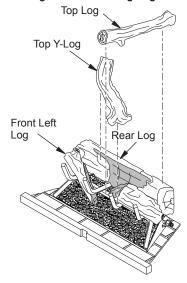


Figure 29 - Installing Logs 4 and 5

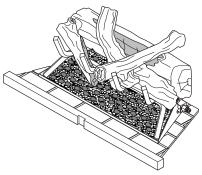


Figure 30 - Logs Installed

Continued

COMBUSTION AIR KIT MODEL AK4 (OPTIONAL)

The outside air kit may be installed on the left side of the fireplace only. The vent can be installed through the outside wall or a ventilated crawl space. The handle to operate the damper door for the outside air inlet will be located inside the left "screen pocket" of the firebox (see Figure 31). Pull the handle to open or push to close.

A CAUTION: Air inlet ducts are not to terminate in attic space.

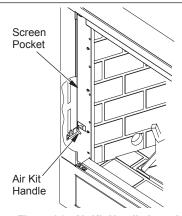


Figure 31 - Air Kit Handle Location

APPLIANCE ENCLOSURE

Before finishing enclosure around appliance, inspect all joints around outer surround. Any gaps between nailing flanges and framing should be sealed with noncombustible insulation or caulking (see Figure 32).

If appliance is mounted on a raised platform, it must be a continuous surface and not on blocks without a solid surface. This will prevent the entry of cold air by means of conduction through the total bottom of the appliance.

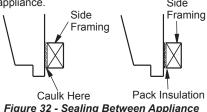


Figure 32 - Sealing Between Appliance and Framing

INSTALLING OPTIONAL GLASS DOOR ACCESSORY

A CAUTION: Use only glass doors certified for use with this appliance.

Note: Assistance with installation may be needed as glass doors are heavy.

These B-vent fireplaces are approved for use with optional bi-fold glass doors (see <u>Accessories</u>, page 25). The glass panels may be ordered and installed anytime after the fireplace installation is complete.

Follow these steps to install left and right panels:

- 1. With handle at the bottom, completely fold panel on its hinges.
- With handle facing center of firebox opening, insert lower pivot pin on glass door panel into hole in pivot plate on bottom edge of fireplace opening (see Figure 33).
- Keeping folded door tilted, slide upper two pins into the guide track found under upper facial edge of firebox opening.
- Tilt door assembly fully vertical until outer pivot pin snaps into mounting hole in upper spring clip (see Figure 33).
- 5. Once top and bottom pins are secured, unfold door into closed position.
- Repeat process for opposite door assembly.

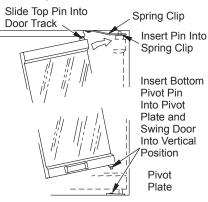


Figure 33 - Installing Optional Glass
Door

Continued

- To adjust doors, slide them partially open. Using a screwdriver, loosen the holddown screws in spring clip (see Figure 34) and pivot plate.
- Close both doors until evenly joined at the middle and note gap at outer edges of face.
- 9. Reopen one door at a time and retighten upper and lower hold-down screws.
- 10. Repeat process until both doors are evenly joined, spaced and working freely.

CAUTION: Glass panels become very hot while the appliance is operating. Do not attempt to adjust or clean glass doors until appliance has fully cooled.

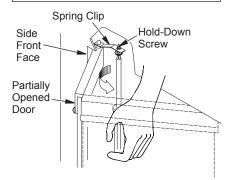


Figure 34 - Adjusting Glass Doors

Doors may be removed for replacement or cleaning as follows:

- Partially open door and press up on the upper spring clip with a screw driver until outer top pivot pin is free of clip.
- Fully fold frame assembly and slide upper edge toward center of firebox opening until guide pins are free of frame rail (see Figure 35).

A CAUTION: Always operate appliance with doors either fully opened or fully closed. Operating appliance with doors partially open can result in improper venting of flue products.

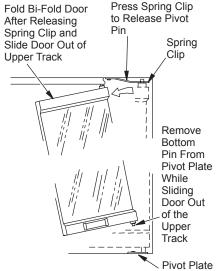


Figure 35 - Removing Glass Doors

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.

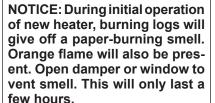
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

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.
- 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 tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. 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 in column 1.
- 2. Turn wall switch (if installed) to the OFF position.
- 3. Turn off all electric power to appliance.
- 4. Fully open glass doors if installed.
- 5. Remove front refractory brick access panel.
- Turn gas control knob clockwise to the OFF position (see Figure 36).
- 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.
- 8. Turn control knob counterclockwise to the PILOT position.
- Push knob in all the way and hold. Immediately light pilot manually. Continue to hold control knob in for about 1 minute after pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If pilot will not stay lit after several tries, turn gas control knob to OFF and call your service technician or gas supplier.
- Turn gas control knob counterclockwise to ON. Knob can be turned to ON only if control knob is popped out.
- 11. Replace front refractory brick access panel.
- 12. Fully close glass doors if installed.
- 13. Turn on all electric power to appliance.

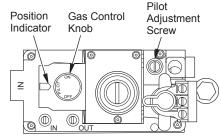


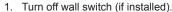
Figure 36 - Control Knob in the PILOT Position

OPERATION

Continued



TO TURN OFF GAS TO APPLIANCE



- 2. Turn off all electric power to appliance if service is to be performed.
- 3. Fully open glass doors if installed.
- 4. Remove front hearth brick and control access panel.
- 5. Turn gas control knob clockwise to OFF. Do not force.
- Replace front refractory brick access panel.
- 7. Fully close glass doors if installed.

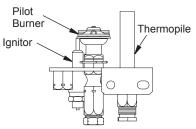


Figure 37 - Pilot



OPTIONAL HAND-HELD REMOTE OPERATION



Note: Receiver and hand-held remote control kit must be purchased separately (see <u>Accessories</u>, page 25). Follow installation instructions on page 12 of this manual.

 After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the selector switch to the REMOTE position. Note: Burner may light if hand-held remote ON button was on when selector switch was last turned off. You can now turn burner on and off with hand-held remote control unit.

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

IMPORTANT: Be sure to press ON/OFF buttons on hand-held remote control unit for up to 3 seconds to assure proper operation.

Press ON/OFF button to turn the burner on and off. When turning burner off, pilot will remain lit.

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

To leave pilot lit and shut off burners only, turn remote control / wall switch (if installed) to the OFF position.)



TO TURN OFF GAS TO APPLIANCE



- I. Press in and turn control knob clockwise to the OFF position.
- 2. Close equipment shutoff valve

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. The pilot is located on the back right hand side of the burner.

The height of thermopile must be 3/8" to 1/2" above pilot flame. Flame from pilot burner must extend beyond thermopile.

If your pilot assembly does not meet these requirements:

- Turn adjustment screw marked pilot clockwise to decrease or counterclockwise to increase flame to proper size (see Figure 36, page 19).
 Do not remove adjustment screw.
- see *Troubleshooting*, page 22

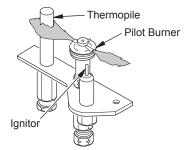


Figure 38 - Correct Pilot Flame Pattern

INSPECTING BURNERS

Continued

BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flames should go up through the middle of log set. Flames should not "spill" to the edges of the pan or sides of the log set.



P324 and VP324 Models

Figure 39 shows a typical flame pattern. If burner flame pattern differs from that described:

turn appliance off (see <u>To Turn Off Gas to Appliance</u>, page 20)
 see <u>Troubleshooting</u>, page 22



P325(B) and VP325(B) Models

Figure 39 - Typical Flame Pattern

CLEANING AND MAINTENANCE

WARNING: Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, pet hair, etc. It is imperative that the control compartments, burners, and circulating air system be kept clean.

WARNING: Logs can be hot. Handle only when cool.

WARNING: Turn off gas and electrical power before servicing appliance.

PILOT AND BURNER

- Remove logs and ember material before cleaning burner 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 log placement information on page 16 to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See <u>Replacement</u> <u>Parts</u>, page 25.
- Replace ember material periodically as needed. See Replacement Parts, page 25.

TROUBLESHOOTING

Note: Before troubleshooting the system, make sure the gas shutoff valve is ON.

The two most common causes of a malfunctioning gas appliance are:

- 1. Loose wiring connections
- 2. Construction debris clogging the pilot and/or gas control valve filter

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not light	No gas supply, or shutoff valve is OFF Air in gas line	Check to see if you have gas supply Hold regulator control valve in the PILOT position for 2 to 3 minutes to purge air. If you smell gas stop and wait for a few minutes before trying to light the fireplace
	Construction debris clog- ging pilot orifice	Remove debris and dirt, inspect and clean any other possible obstructions
	4. Low gas pressure5. Control valve knob is not on the PILOT position6. Kinked pilot line7. Bad valve	4. Contact your gas supplier 5. Refer to section on pilot lighting 6. Have a qualified technician replace pilot line 7. Replace regulator valve (see Accessories, page 25)
Pilot will not stay lit	Loose wiring on thermopile to regulator valve. No millivolt current is being sent back to regulator If valve knob and wall switch are in the ON position, probable defective regulator valve	Check wiring connections. Refer to wiring diagram shown in <i>Wall Switch Installation</i> , page 10 Have a qualified technician replace valve
No gas to burner, although wall switch and valve are set to the ON position	Wall switch wires defective or too long Thermopile not generating sufficient voltage	Check electrical connections See <i>Pilot will not stay lit</i> , above
Frequent pilot outage	Pilot flame may be too low, causing safety pilot to "drop out" Improper venting or excessive blockage	Clean and adjust pilot flame for maximum flame im- pingement on thermopile Have the vent system in- spected, including the ter- mination cap. Remove any restriction or obstruction

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot goes out when wall switch is ON	Millivolt output on thermopile too high	Replace thermopile
Spark ignitor will not light pilot after repeated triggering of red button	Defective ignitor (no spark at electrode)	Check for spark at the electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor
	Defective pilot or mis- aligned electrode at pilot (spark at electrode)	2. Using a match, light pilot. If pilot lights, turn off pilot and trigger the red button again. If pilot lights, an improper gas/air mixture caused the improper lighting and a longer purge period is recommended. If pilot will not light, check gap at electrode and pilot. Gap should be 1/8" to have a strong spark. If okay, replace pilot
	3. No gas or low gas pressure	3. A) Check remote shut off valves from fireplace. Valve will be near fireplace or near the main. There can be more than one valve between fireplace and main B) Low pressure can be caused by bent line, too narrow diameter of pipe, or low line pressure. Check for kinked lines. If none, consult with plumber or gas supplier
	4. If using propane/LP gas, no propane/LP gas in tank	Check propane/LP supply and contact local propane/LP supplier
Fireplace produces a clicking/ ticking noise just after burner is lit or shut off	Metal expanding while heating or contracting while cooling	This is normal with most fireplaces. If noise is excessive, contact qualified service person

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 fireplace 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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	Fireplace burning vapors from paint, hair spray, glues, etc. (See IMPOR- TANT statement above)	Ventilate room. Stop using odor causing products while fireplace is running
	2. For propane/LP gas, low fuel supply	2. Contact local propane/LP supplier
	3. Gas leak. See Warning statement at top of page	3. Locate and correct all leaks (see <u>Gas Line Hook-Up</u> , page 13)
Gas odor even when control knob is in OFF position	Gas leak. See Warning statement at top of page Control valve defective	Locate and correct all leaks (see <u>Gas Line Hook-Up</u> , page 13) Replace control valve
Gas odor during combustion	Foreign matter between control valve and burner Gas leak. See Warning statement at top of page	Take apart gas tubing and remove foreign matter Locate and correct all leaks (see <u>Gas Line Hook-Up</u> , page 13)
Dark residue on logs or inside of fireplace	Improper log placement Air holes at burner inlet blocked	Properly locate logs Clean out air holes at burner inlets. Periodically repeat as needed
	Burner flame holes blocked	Remove blockage or replace burner
	Improper venting or excessive blockage	Have the vent system in- spected, including the ter- mination cap. Remove any restrictions or obstruction
	Excessive amounts of embers and pan material	Clear excess embers until a minimum gap of 1/2" remains under the grate

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.

SERVICE HINTS

When Gas Pressure Is Too Low

- · pilot will not stay lit
- · burner will have delayed ignition
- · fireplace will not produce specified heat
- propane/LP gas supply may be low if using propane/LP gas

You may feel your gas pressure is too low. If so, contact your local 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.

ACCESSORIES

Purchase these accessories from your local dealer. If they can not supply these accessories call FMI PRODUCTS, LLC at 1-866-672-6040 for information. You can also write to the address listed on the back page of this manual.

AIR KIT - AK4

Optional kit helps offset the negative pressure often existing in today's tightly constructed homes.

REMOTE CONTROL KITS

MLCR - Hand-Held ON/OFF Remote
GWMS2 - Wall Mount ON/OFF Switch

32" EXTRUDED ALUMINUM BI-FOLD

GLASS DOORS

BD32 - Black Finish

BD32B - Brushed Brass Finish

BD32P - Platinum Finish

32" FIXED GLASS DOOR KIT

FD32 - Black Finish

FD32B - Brushed Brass Finish

FD32P - Platinum Finish

BRICK LINER - BL32

32" Refractory Standard Brick Liner Kit

BLOWER KIT-BK

Squirrel Cage Blower With Speed Control

PERIMETER TRIM

PT32 - Black

PT32B - Brushed Brass

PT32P - Platinum

LOUVER TRIM KIT (Rolled Only)

LT32B - Brushed Brass

LT32P - Platinum

FACE/LOUVER PANEL KITS

SP32 - Smooth Faced - Black

SL32 - Stamped Louver - Black

RL32 - Rolled Louver- Black

FP32 - Filigree Panel - Black

FP32B - Filigree Panel - Brushed Brass

FP32P - Filigree Panel - Platinum

FIRE CRACKLE - CF6-A1

Creates the sound of a real burning fire.

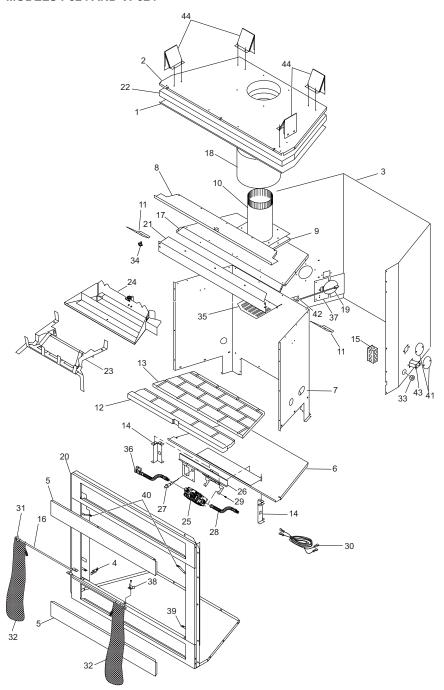
PROPANE/LP GAS CONVERSION KIT

PCDM-324 - Propane/LP Gas, Millivolt Mod-

els for use with (V)P324 Series

PCDM-325 - Propane/LP Gas, Millivolt Models for use with (V)P325 Series

MODELS P324 AND VP324



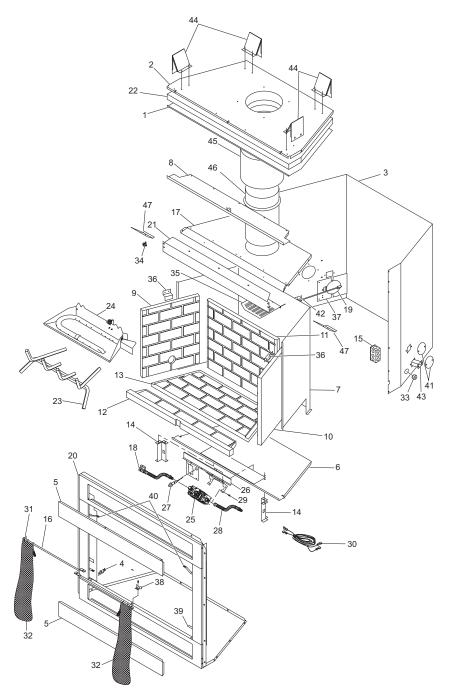
MODELS P324 AND VP324

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 25 of this manual.

KEY	•		
NO.	PART NO.	DESCRIPTION	QTY.
1	**	Insulation Pan	1
2	108403-02	Fireplace Top Assembly	1
3	**	Fireplace Surround	1
4	108425-01	Air Rod Retainer	1
5	108423-01	Panel Closure	2
6	**	Firebox Bottom	1
7	108410-01	Firebox Surround	1
8	108411-01	Air Separator	1
9	106827-01	4" Gasket	1
10	108416-01	4" Collar	1
11	108769-03	Extension Deflector	1
12	108428-03	Bottom Front Refractory, Std. Brick	1
13	108426-03	Bottom Rear Refractory, Std. Brick	1
14	106683-01	Firebox Support Leg	2
15	24353	Box Assembly	1
16	108701-01	Screen Rod	2
17	**	Firebox Top Assembly	1
18	108415-01	Starter Pipe Collar	1
19	106703-02	Damper Door Assembly	1
20	**	Firebox Face	1
21	108412-01	Smoke Deflector	1
22	**	Fireplace Top Insulation	1
23	109797-01	Grate Assembly	1
24	109107-01	Burner Assembly (see page 30)	1
25	14512	Gas Control Valve (Natural Gas)	1
25	14512	Gas Control Valve (Propane/LP)	1
26	107741-02	Valve Bracket	1
27	14261	Piezo Ignitor	1
28	108368-01	3/8" Flex Line	1
29	11107	Screw, #10-32 x 1/4 PPH	4
30	108005-04	Wire Harness	1
31	11418	Push-On Nut	2
32	108440-01	Screen	2
33	14123	Strain Relief	1
34	14574	Limit Switch	1
35	22912	Draft Divertor	1
36	14253	Flexible Supply Line w/ Shutoff Valve	1
37	20042	Air Kit Cover	1
38	20042		1
		Door Stop	2
39 40	20089	Pivot Clip	2
_	20090	Spring Clip	4
41	21171	Gas Knockout Cover	1
42	108652-01	Gas Conduit Assembly, Left	
43	108654-01	Gas Conduit Assembly, Right	1
44	20280	Top Spacer	4
		ARTS AVAILABLE NOT SHOWN	1
	•	Vermiculite Bag	1
	901156-01	Pan Material	1
	901157-01	Lava Rock	1

^{**}Not a field replaceable part.

P325(B) AND VP325(B) MODELS



P325(B) AND VP325(B) MODELS

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 25 of this manual.

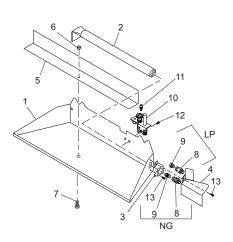
NO. PART NO. DESCRIPTION 1	KEY			
108403-01	NO.	PART NO.	DESCRIPTION	QTY.
1	1	**	Insulation Pan	1
108425-01 Air Rod Retainer	2	108403-01	Fireplace Top Assembly	1
5 108423-01 Panel Closure 2 6 108409-01 Firebox Bottom 1 7 ** Firebox Surround 1 8 108411-01 Air Separator 1 9 108434-01 Left Refractory, Std. Brick (B Models) 1 10 108432-01 Right Refractory, Std. Brick (B Models) 1 11 108430-01 Bottom Front Refractory, Std. Brick 1 13 108426-01 Bottom Front Refractory, Std. Brick 1 14 106683-01 Bottom Rear Refractory, Std. Brick 1 15 24353 Box Assembly 1 16 108701-01 Screen Rod 2 17 *** Firebox Top Assembly 1 18 14253 Flexible Supply Line w/ Shutoff Valve 1 19 106703-02 Damper Door Assembly 1 20 ** Firebox Top Assembly 1 21 108412-01 Screen Insulation 1 23 108412-01	3	**	Fireplace Surround	1
108409-01	4	108425-01	Air Rod Retainer	1
Temporal Program	5	108423-01	Panel Closure	2
108411-01	6		Firebox Bottom	1
9	7	**	Firebox Surround	1
9	8	108411-01	Air Separator	1
11	9	108434-01	Left Refractory, Std. Brick (B Models)	1
11	10	108432-01	Right Refractory, Std. Brick (B Models)	1
108428-01 Bottom Front Refractory, Std. Brick 1 108426-01 Bottom Rear Refractory, Std. Brick 1 106683-01 Firebox Support Leg 2 2 2 2 2 2 2 353 Box Assembly 1 1 108701-01 Screen Rod 2 2 1 108701-01 Screen Rod 2 2 1 108701-02 Damper Door Assembly 1 1 106703-02 Damper Door Assembly 1 1 106703-02 Damper Door Assembly 1 1 108412-01 Smoke Deflector 1 1 1 108412-01 Smoke Deflector 1 1 1 1 1 1 1 1 1	11	108430-01	Rear Refractory, Std. Brick (B Models)	1
14	12	108428-01		
15	13	108426-01	Bottom Rear Refractory, Std. Brick	1
108701-01 Screen Rod 2 1 1 1 1 1 1 1 1 1	14	106683-01	Firebox Support Leg	
17 *** Firebox Top Assembly 1 18 14253 Flexible Supply Line w/ Shutoff Valve 1 19 106703-02 Damper Door Assembly 1 20 ** Firebox Face 1 21 108412-01 Smoke Deflector 1 22 ** Fireplace Top Insulation 1 23 109040-01 Grate Assembly 1 24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34	15	24353	Box Assembly	
17 *** Firebox Top Assembly 1 18 14253 Flexible Supply Line w/ Shutoff Valve 1 19 106703-02 Damper Door Assembly 1 20 ** Firebox Face 1 21 108412-01 Smoke Deflector 1 22 ** Fireplace Top Insulation 1 23 109040-01 Grate Assembly 1 24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34	16	108701-01	Screen Rod	2
19 106703-02 Damper Door Assembly 1 20 *** Firebox Face 1 21 108412-01 Smoke Deflector 1 22 ** Fireplace Top Insulation 1 23 109040-01 Grate Assembly 1 24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 For Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN	17	**	Firebox Top Assembly	1
Time Section Color Col	18	14253	Flexible Supply Line w/ Shutoff Valve	1
1	19	106703-02	Damper Door Assembly	1
Time	20	**		1
22 *** Fireplace Top Insulation 1 23 109040-01 Grate Assembly 1 24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 14513 Gas Control Valve (Propane/LP) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20089 Piv	21	108412-01	Smoke Deflector	1
24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 2171 Gas Conduit Assembly, Ri	22	**		1
24 108712-03 Burner Assembly (see page 30) 1 25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 2090 Spring Clip 2 41 108652-01 Gas Conduit Assembly	23	109040-01	Grate Assembly	1
25 14512 Gas Control Valve (Natural Gas) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21717 Gas Conduit Assembly, Left 1 43 108652-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 <td>24</td> <td>108712-03</td> <td>Burner Assembly (see page 30)</td> <td>1</td>	24	108712-03	Burner Assembly (see page 30)	1
14513 Gas Control Valve (Propane/LP) 1 26 107741-02 Valve Bracket 1 27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 2171 Gas Conduit Assembly, Left 1 43 108652-01 Gas Conduit Assembly, Right 1 </td <td>25</td> <td>14512</td> <td>Gas Control Valve (Natural Gas)</td> <td>1</td>	25	14512	Gas Control Valve (Natural Gas)	1
27 14261 Piezo Ignitor 1 28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 2090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1		14513		1
28 108368-01 3/8" Flex Line 1 29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20990 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 47 108769-03 Extension Deflector 2	26	107741-02	Valve Bracket	1
29 11107 Screw, #10-32 x 1/4 PPH 4 30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 2090 Spring Clip 2 41 21717 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 47 108769-03 Extension Deflector<	27	14261		1
30 108005-04 Wire Harness 1 31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN	28	108368-01		1
31 11418 Push-On Nut 2 32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN	29	11107	Screw, #10-32 x 1/4 PPH	4
32 108440-01 Screen 2 33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Pan Material 1	30	108005-04	Wire Harness	1
33 14123 Strain Relief 1 34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Pan Material 1	31	11418	Push-On Nut	2
34 14574 Limit Switch 1 35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20990 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Pan Material 1	32	108440-01	Screen	2
35 22912 Draft Diverter 1 36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	33	14123	Strain Relief	1
36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Pan Material 1	34	14574	Limit Switch	1
36 22084 Brick Liner Retainer 2 37 20042 Air Kit Cover 1 38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Pan Material 1	35	22912	Draft Diverter	1
38 20088 Door Stop 1 39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	36	22084		2
39 20089 Pivot Clip 2 40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	37	20042	Air Kit Cover	1
40 20090 Spring Clip 2 41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	38	20088	Door Stop	1
41 21171 Gas Knockout Cover 4 42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	39	20089	Pivot Clip	2
42 108652-01 Gas Conduit Assembly, Left 1 43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	40	20090	Spring Clip	2
43 108654-01 Gas Conduit Assembly, Right 1 44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	41	21171	Gas Knockout Cover	4
44 20280 Top Spacer 4 45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	42	108652-01	Gas Conduit Assembly, Left	1
45 108415-01 Starter Pipe Collar 1 46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	43	108654-01	Gas Conduit Assembly, Right	1
46 108417-01 5" Collar 1 47 108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	44	20280	Top Spacer	4
108769-03 Extension Deflector 2 PARTS AVAILABLE NOT SHOWN 901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	45	108415-01	Starter Pipe Collar	1
PARTS AVAILABLE NOT SHOWN	46	108417-01	5" Collar	1
901155-01 Vermiculite Bag 1 901156-01 Pan Material 1	47			2
901156-01 Pan Material 1		P	ARTS AVAILABLE NOT SHOWN	
		901155-01	Vermiculite Bag	1
901157-01 Lava Rock 1		901156-01	Pan Material	1
		901157-01	Lava Rock	1

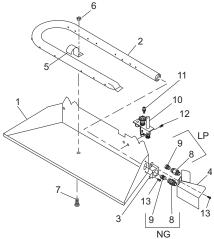
^{**}Not a field replaceable part.

BURNER ASSEMBLY

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 25 of this manual.

VEV





P324 and VP324 Models

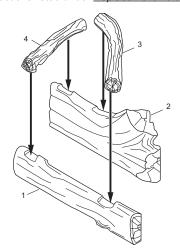
P325(B) and VP325(B) Models

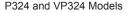
KEY NO.	PART NO.	DESCRIPTION	QTY.
1	107742-03		1
2	109794-01	Burner Tube	1
3	107748-01	Burner Bracket	1
4	107985-01	Pilot Shield	1
5	109793-01	Divider Pan	1
6	11209	Nut, #10-24	1
7	11147	Screw, #10-24x1/2	1
8	901066-01	Brass Air Mixer	1
	901066-02	(Natural Gas) Brass Air Mixer (Propane/LP)	1
9	901064-12	Injector (NG)	1
	901065-11	Injector (LP)	1
10	108084-01	Pilot (NG)	1
11	108085-02	Pilot Orifice (LP)	1
12	11102	Screw, #8-32x3/8	2
13	11165	Screw, #10x5/8 Mod. Tr. Blk. Ox	2

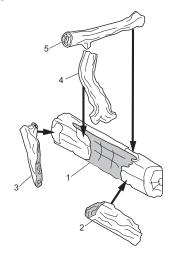
KEY			
NO.	PART NO.	DESCRIPTION	QTY.
1	107742-03	Burner Pan	1
2	109037-01	Burner Tube	1
3	107748-01	Burner Bracket	1
4	107985-01	Pilot Shield	1
5	901681-01	Burner Clamp	1
6	11209	Nut, #10-24	1
7	11147	Screw, #10-24x1/2	1
8	901066-01	Brass Air Mixer (NG)	1
	901066-02	Brass Air Mixer (LP)	1
9	901064-11	Injector (NG)	1
	901065-09	Injector (LP)	1
10	108084-01	Pilot (NG)	1
11	108085-02	Pilot Orifice (LP)	1
12	11102	Screw, #8-32x3/8	2
13	11165	Screw, #10x5/8 Mod. Tr. Blk. Ox	2

LOG ASSEMBLY

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 25 of this manual.





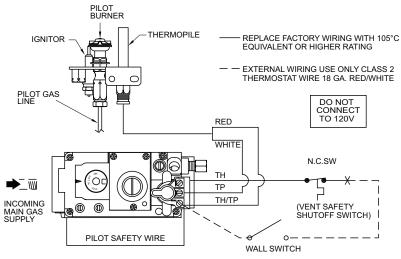


P325(B) and VP325(B) Models

KEY			
NO.	PART NO.	DESCRIPTION	QTY.
	109109-01	Log Set	
1	105958-05	Front Log	1
2	105960-05	Rear Log	1
3	901100-02	Top Right Log	1
4	901102-02	Top Left Log	1

KEY			
NO.	PART NO.	DESCRIPTION	QTY.
	109100-02	Log Set	
1	109421-01	Rear Log	1
2	109420-01	Front Right Log	1
3	108723-01	Front Left Log	1
4	108722-01	Top Y-Log	1
5	108720-01	Top Log	1

WIRING DIAGRAM



WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag)
Serial No. (located on product or identification tag)
Date Purchased
0/

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) year 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) year 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

108660-01 Rev. G 09/09