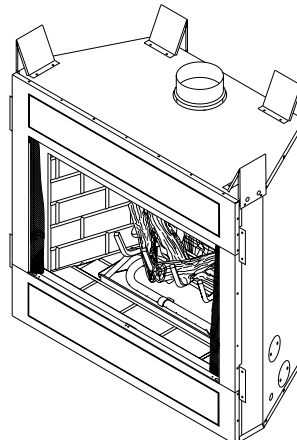
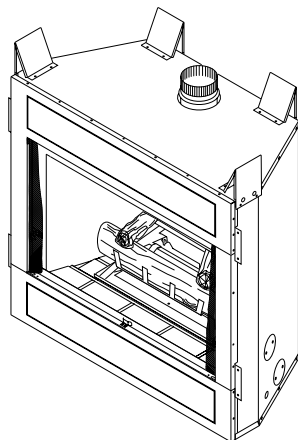




# **B-VENT DECORATIVE GAS FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL**

For more information, visit [www.desatech.com](http://www.desatech.com)



## **MODELS P324E, VP324E, P325E(B) AND VP325E(B) NATURAL GAS**

**WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

### **FOR YOUR SAFETY**

- Do not store or use gasoline or any other flammable vapors or 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.

### **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.

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

**NOT FOR USE WITH SOLID FUEL  
CHECK LOCAL CODES PRIOR TO  
INSTALLATION**

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 type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

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

**Save this manual for future reference.**



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## SAFETY INFORMATION



### WARNINGS

**⚠ 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.

**⚠ 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 gas and natural gas are both 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.

1. 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.
2. 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 lbs. 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 your 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
5. 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.

## SAFETY INFORMATION

### Continued

7. 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.
8. 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.
9. 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.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 17.
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/NFPA 70*, or the *Canadian Electrical Code*, *CSA C22.1*.
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.
17. 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.

## UNPACKING

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

- Ceramic Log Pack - Shrink-wrapped on cardboard
- Three (3) plastic bags containing lava rock, pan and ember materials
- Rear Log (P325E/VP325E Models Only) - Remove the two plastic quick ties from around the 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.

Safely retain these items for later installation.

## INTRODUCTION

These fireplace models are vented gas fireplaces that use an electronic gas control valve and electronic ignition system. P325E/VP325E models have a 5" B-vent and P324E/VP324E models have a 4" B-vent. A properly sized B-Type venting system and a listed type vent cap are not supplied but are required for proper operation. See venting instructions on pages 8 and 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 PCBE-324 and PCBE-325 may be purchased for simple conversion to propane/LP gas. See *Accessories*, page 21.

### BEFORE YOU BEGIN

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

This DESA appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by DESA. Unless you use DESA approved components tested for this appliance, **YOU MAY CAUSE A FIRE HAZARD!**

The DESA warranty will be voided by, and DESA 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 DESA 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.

The installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code, ANSI Z223.1* or with the current *CAN/CSA B149 Installation Codes*.

This appliance complies with *ANSI Z21.50-2000* and *CSA 2.22-2000 as Vented Gas Fireplaces* and is listed and tested by the *Canadian Standards Association* to the above test standards.

**⚠ 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.**

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

**⚠ 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 its 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 equipment 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.

GAS RATING - NATURAL		
	P324E, VP324E	P325E(B), VP325E(B)
Max. Input Rating:	15,000 Btu/Hr	25,000 Btu/Hr
Manifold Pressure:	3.5 in. WC (.87 kPa)	3.5 in. WC (.87 kPa)
Minimum Supply Pressure:	4.5 in. WC (1.12 kPa)	4.5 in. WC (1.12 kPa)
Maximum Supply Pressure:	10.5 in. WC (2.66 kPa)	10.5 in. 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:	10.0 in. WC (2.49 kPa)	10.0 in. WC (2.49 kPa)
Minimum Supply Pressure:	11.0 in. WC (2.74 kPa)	11.0 in. WC (2.74 kPa)
Maximum Supply Pressure:	13.0 in. WC (3.23 kPa)	13.0 in. WC (3.23 kPa)
Orifice Size:	# 56	# 54

## PRODUCT SPECIFICATIONS

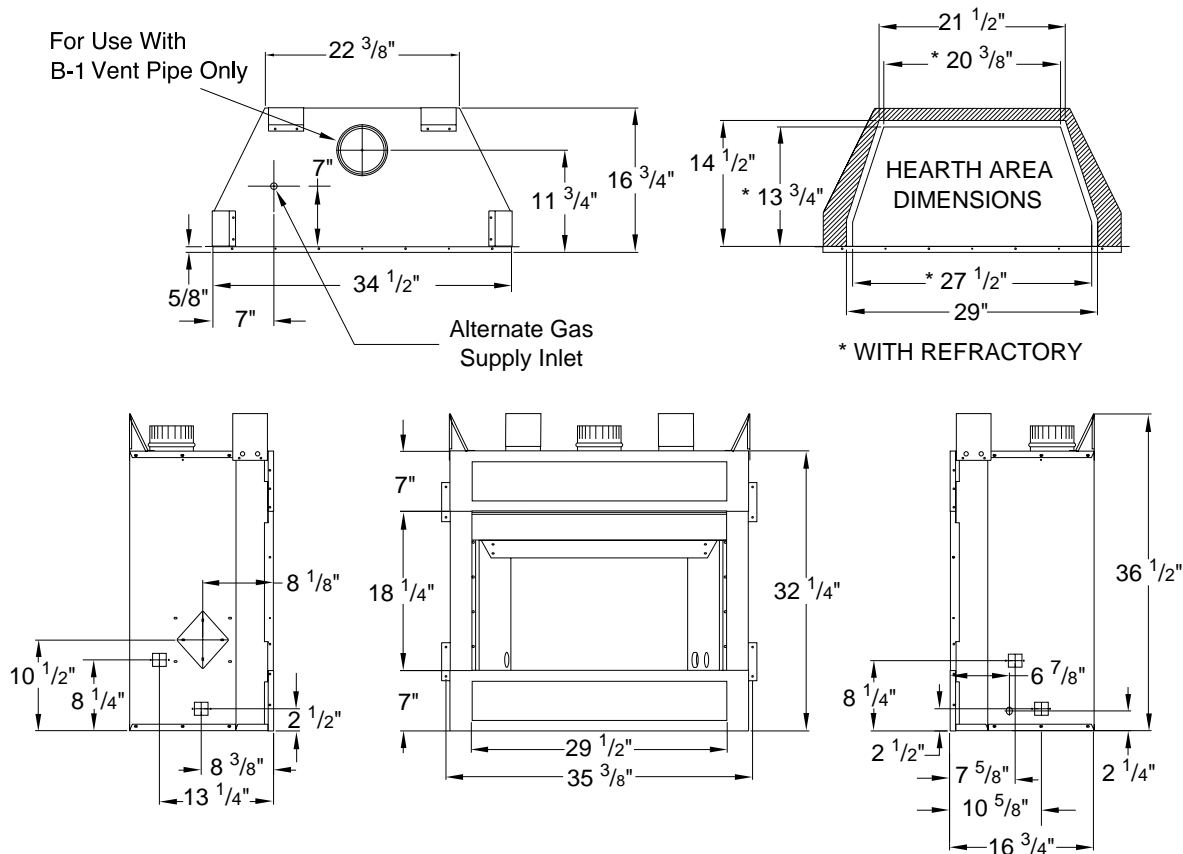


Figure 1 - Appliance Dimensions

## SELECTING LOCATION

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

1. The location must allow for proper clearances (see *Clearances*, page 6).
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows, or doors.
3. 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.

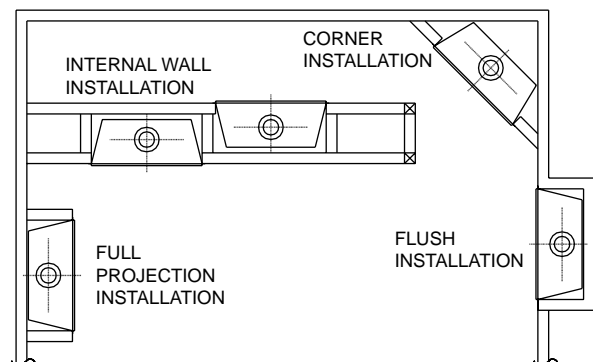


Figure 2 - Possible Locations for Installing Appliance

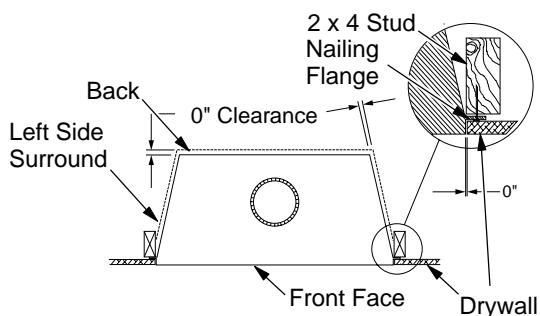
## PRE-INSTALLATION PREPARATION

### CLEARANCES

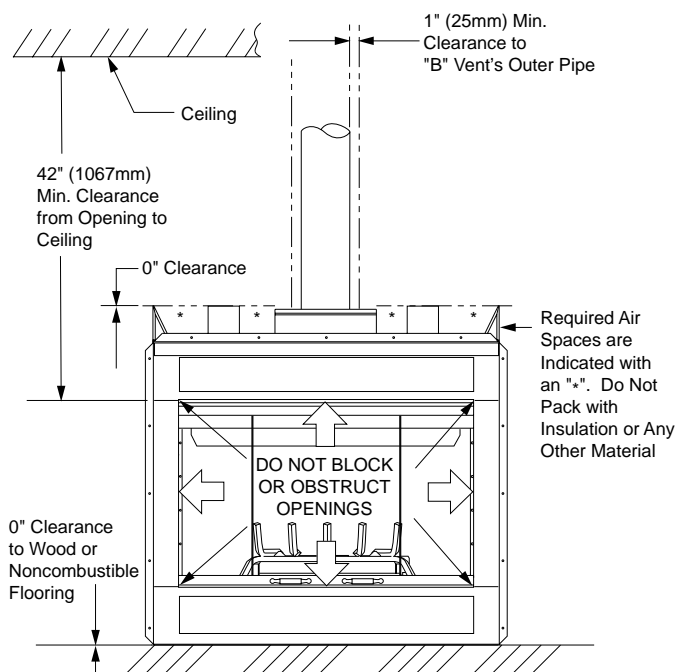
Minimum clearances to combustibles are:

- 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.
- Ceiling to Opening ..... 42" min.
- Floor ..... 0" min.
- Perpendicular Wall ..... See Figure 6

**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.



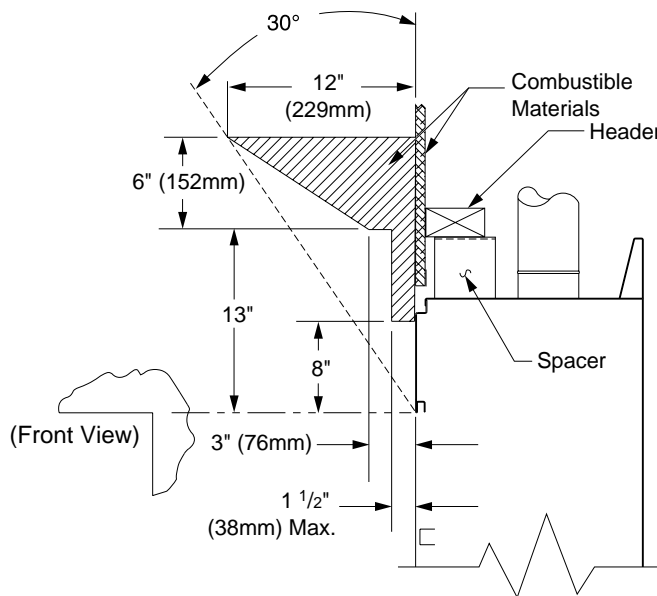
**Figure 3 - Minimum Clearances (Top View)**



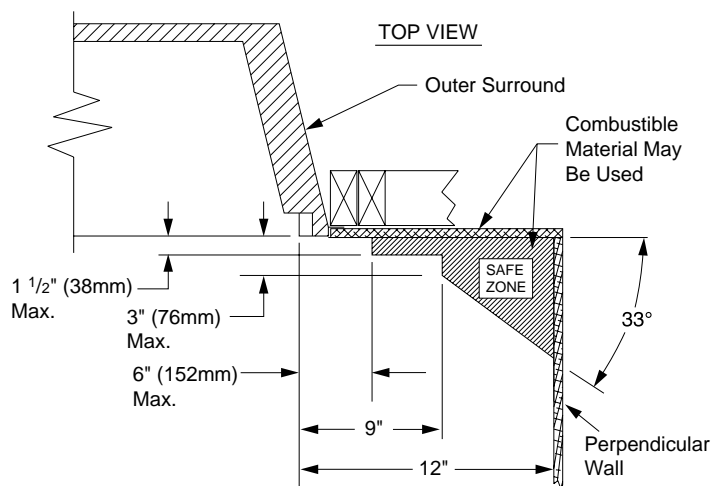
**Figure 4 - Minimum Clearances (Front View)**

### MANTEL CLEARANCES AND WALL DETAILS

A combustible mantel shelf maybe installed a maximum 12" (229mm) from the wall. Figures 5 and 6 show the minimum allowable distances from various combustible mantel 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.
3. 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 16, page 11).
4. Feed flexible gas line through one of three gas line conduit sleeve and repack insulation to cover any openings. Prepare the incoming gas line with teflon tape or pipe joint compound and hook-up incoming gas line to the flexible gas line.  
*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.

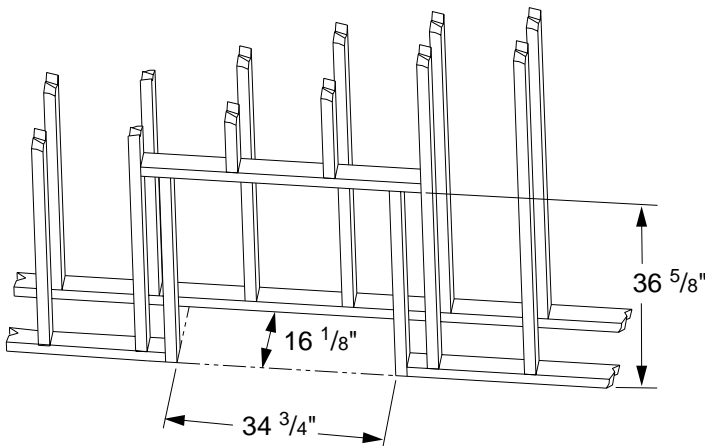


Figure 7 - Rough Opening for Installing in Wall

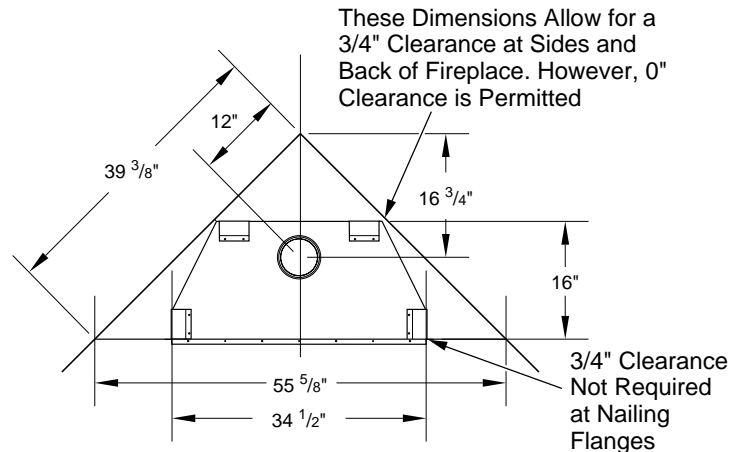


Figure 8 - Corner Installation Guidelines

## 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* and in Canada with *CAN/CSA B149 for Category I systems using double wall B-1 vent pipe*.

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 are typical of most B-vent installations and codes practices.

**Example 1:** Shows the minimum allowable system height and lateral offset for a 60° degree or greater inclination. Code specifies that offsets at 60° degrees or greater are considered horizontal and must follow the 75% percent rule for lateral to total vertical system height. Codes also allows only one offset in the total system when at 60° degrees 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% percent 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° degrees of inclination. Multiple offsets are permitted if they do not exceed 45° degrees of inclination. The total lengths of the two offsets are not required to meet the 75% percent allowable rule.

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

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a sub-floor, 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.

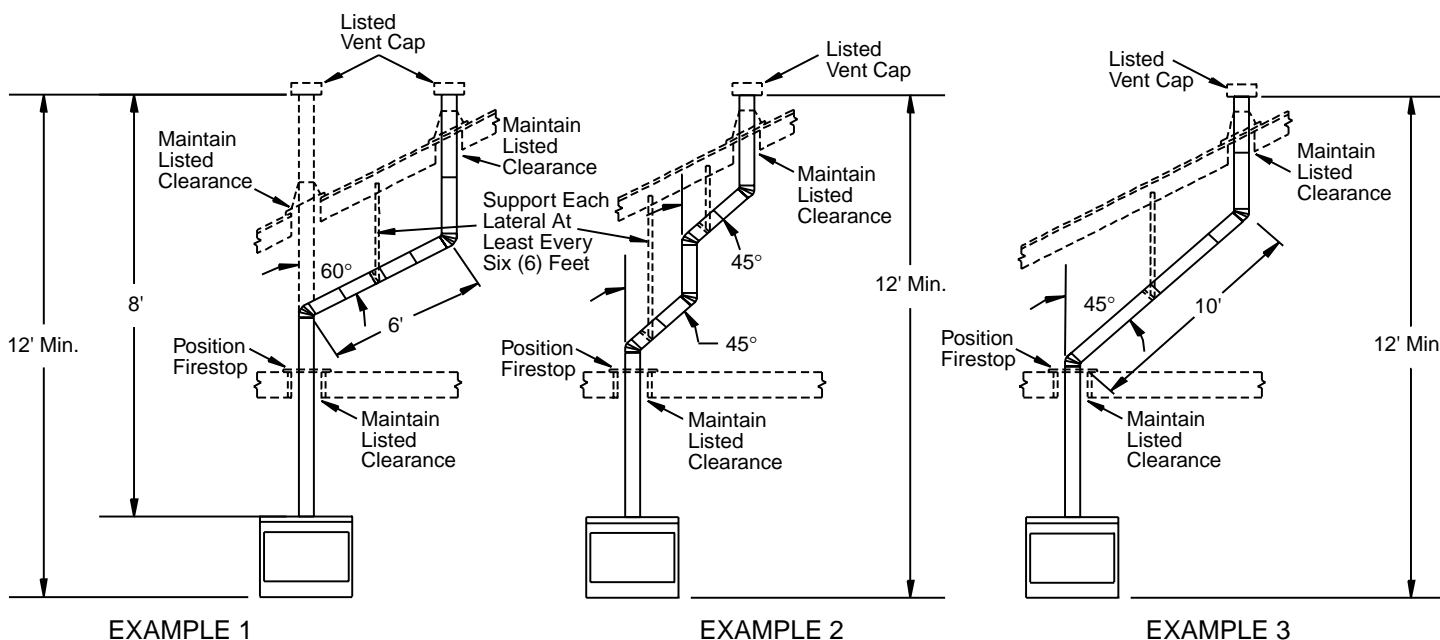


Figure 9 - Typical B-Vent Configuration



## VENTING INSTALLATION

### Continued

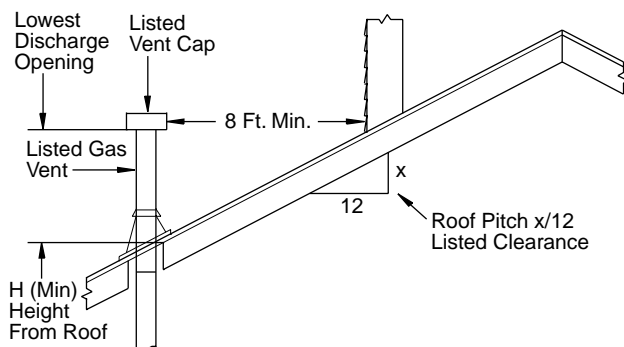
Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54 or CAN/CSA B149. These rules apply to vents at 12 in. diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 ft. distance from a vertical wall or obstruction (see 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.

Some codes areas allow the use of existing B-type 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* and in Canada with *CAN/CSA B149*.



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

**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 lighted match or cigarette near the top edge of the fireplace opening and play it along the entire length of the opening (see Figure 11). Proper venting should tend to draw the flame or smoke into the appliance. Improper venting or escaping of spillage of burned gas, is indicated when the match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance.

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

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

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

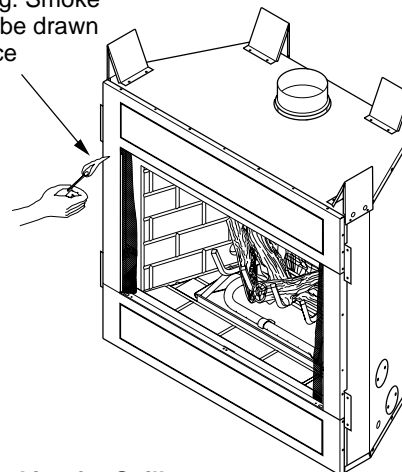


Figure 11 - Checking for Spillage

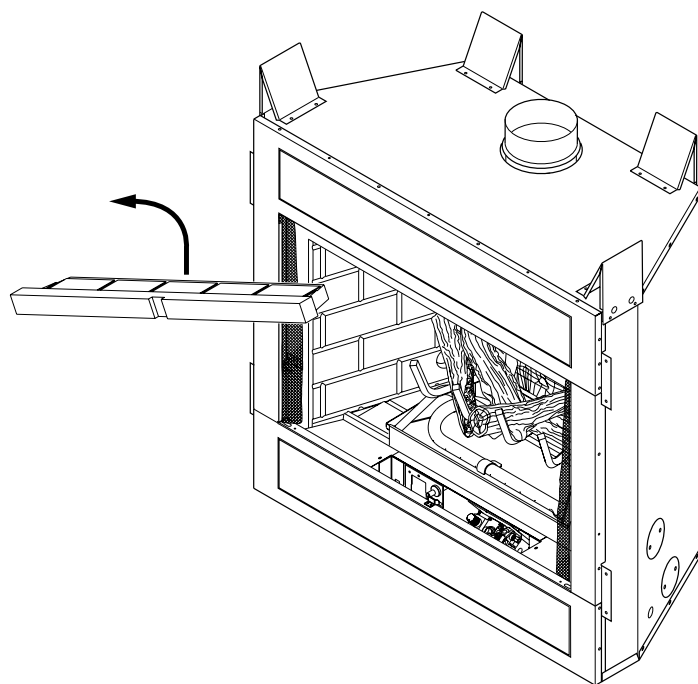
**INSTALLATION****Wall Switch Installation****Optional Remote Control Installation (Model WRC)  
Gas Line Hook-Up****INSTALLATION****WALL SWITCH INSTALLATION**

The installation of a wall switch allows you to activate the gas control valve and turn the fireplace on and off. The wall switch is to be connected to the incoming 120 volt regular household wiring that supplies the electricity to the fireplace. Refer to wiring diagram in this manual on page 18.

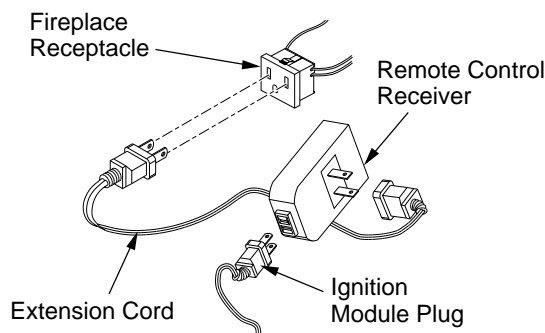
**OPTIONAL REMOTE CONTROL  
INSTALLATION (Model WRC)**

**Note:** If using optional wireless hand-held remote control, the wall switch must be in the ON position to be operational. The remote control then becomes the switching mechanism for fireplace operation.

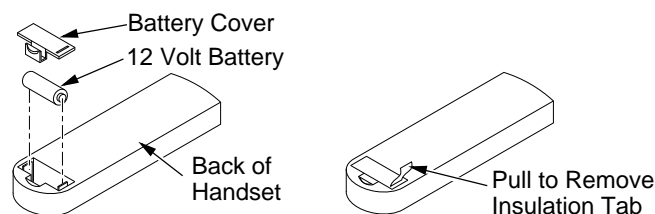
1. Remove the front refractory access panel by lifting up and angling out of the firebox opening (see Figure 12).
2. The WRC model receiver does not require a battery. The receiver can be installed by first plugging the short extension cord into the fireplace receptacle. Then plug the receiver unit into the extension cord. Finally plug the ignition module plug into the receiver unit (see Figure 13).
3. Activate the remote handset battery by removing the insulating tab on the back of the handset (see Figure 14). The battery is included pre-installed.
4. Once the battery is activated the unit is ready to use.
5. Replace front refractory access panel.



**Figure 12 - Removing Front Refractory Access Panel  
(P325E/VP325E Model Shown)**



**Figure 13 - Installing the WRC Remote Receiver**



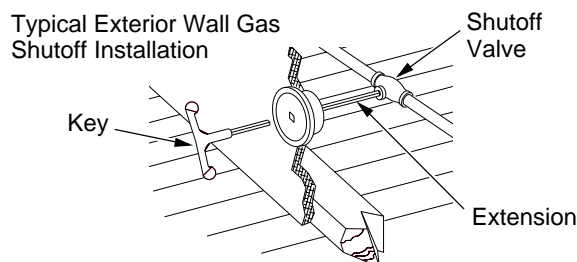
**Figure 14 - Installing Battery into Back of Handset**

**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.**

A equipment 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 15.



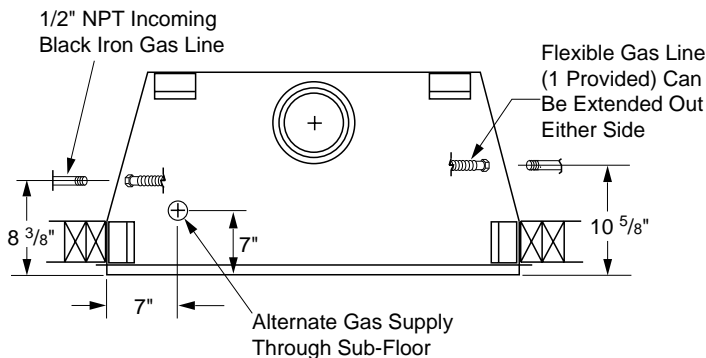
**Figure 15 - Equipment Shutoff Valve Installation**

## INSTALLATION

### Continued

In conformance with local codes, route a 1/2" NPT gas line towards the appliance coming in from any of the 3 directions shown in Figure 16.

**CAUTION:** Do not kink flexible gas line.



**Figure 16 - Routing Incoming Gas Line**

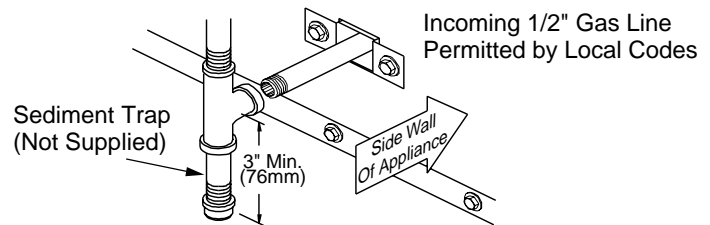
DESA recommends that a black iron gas line be routed from the gas source, through a sediment trap (shown in Figure 17), and into the appliance. Once connected through the appliance, a flexible gas line may be used for ease of installation to gas control valve (see Figure 18).

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 three (3) inches beyond the center of the pipe. Prepare incoming black iron gas line with teflon tape or pipe joint compound (Check with local building codes).

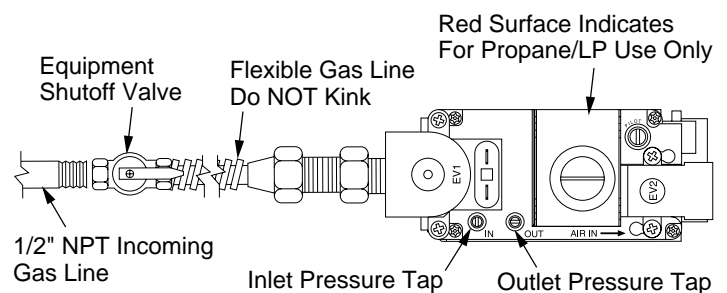
**CAUTION:** Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane), and should be applied lightly to ensure excess sealant does not enter the gas line.

**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 fluid 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**.



**Figure 17 - Sediment Trap**



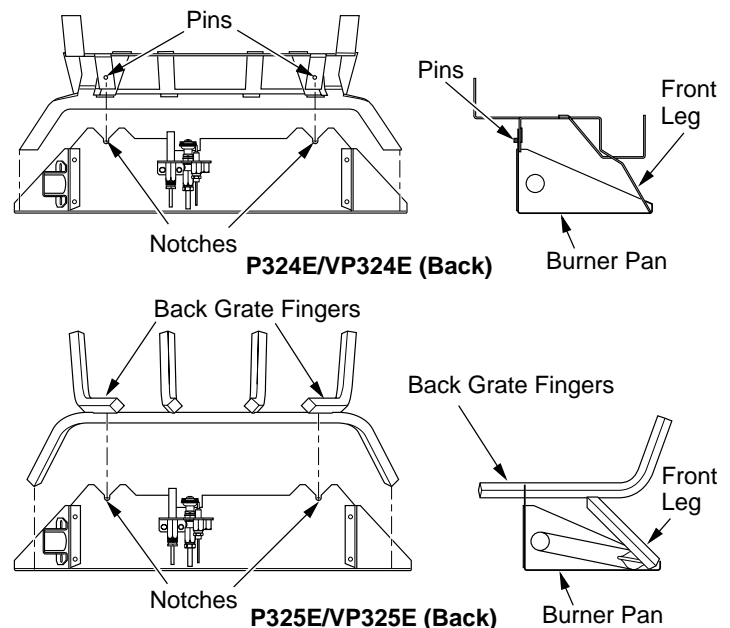
**Note:**

- 1) Wire Connections Not Shown for Clarity
- 2) \* 1/8" NPT Plugged Tapping

**Figure 18 - Connecting Flexible Gas Line to Millivolt Valve**

## GRATE PLACEMENT

The grate must be placed in the burner pan so that the back grate fingers (P325E/VP325E) or pins (P324E/VP324E) fit into the notches on back of burner pan and front legs fit inside burner pan as shown in Figure 19.



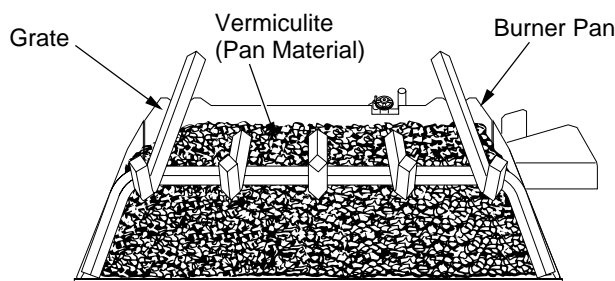
**Figure 19 - Placing Grate into Burner Pan**

## INSTALLATION

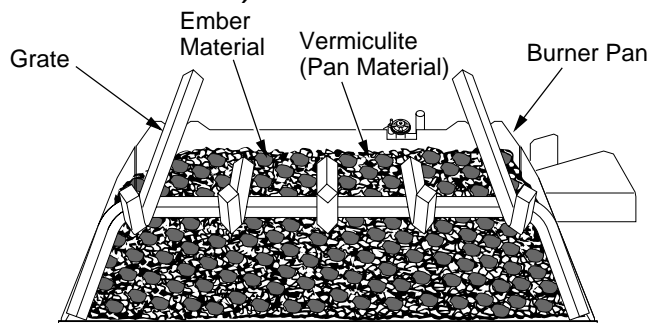
### Continued

#### EMBER AND PAN MATERIAL PLACEMENT

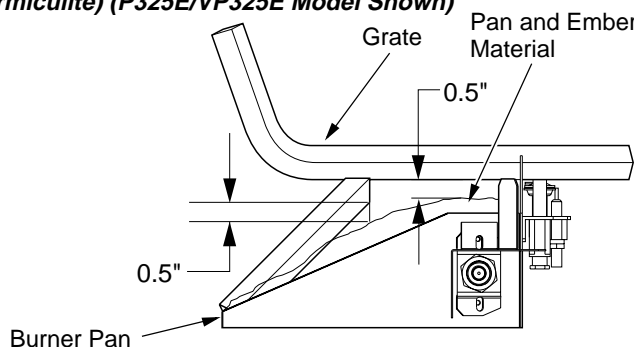
1. Open the bag(s) of vermiculite and fill the entire burner pan until the burner tube is completely covered (see Figure 20).
2. Smooth the pan material just even with edges of the burner pan.
3. Remove the ember material from the bag and flatten small amounts into quarter size pieces and lay on top of the surface of the pan material (see Figure 21).
4. Place just enough to cover the entire surface and leave about a 1/2 inch gap under the lower grate members to allow air to flow (see Figure 22).



**Figure 20 - Fill Entire Burner Pan with Vermiculite (P325E/VP325E Model Shown)**



**Figure 21 - Ember Material on Surface of Pan Material (Vermiculite) (P325E/VP325E Model Shown)**



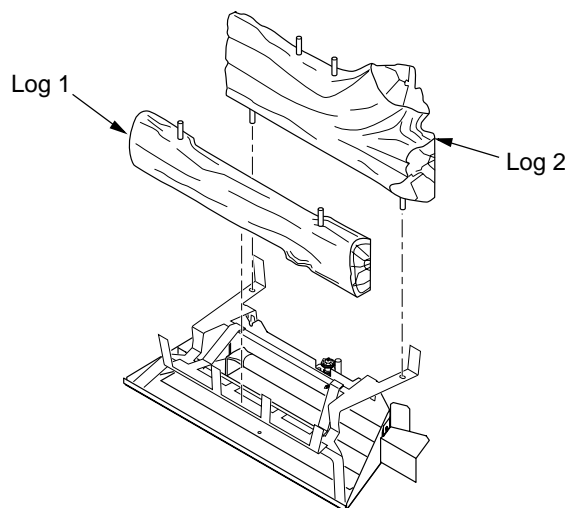
**Figure 22 - Pan and Ember Material Clearances (P325E/VP325E Model Shown)**

#### LOG PLACEMENT FOR P324E/VP324E MODELS

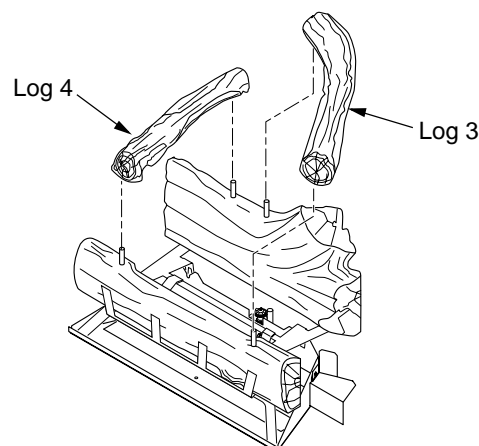
1. Place front (log 1) onto front of grate sliding log all the way forward against grate fingers (see Figure 23).
2. Insert pegs on bottom of rear log (log 2) into holes in rear of grate (see Figure 23).
3. Insert pegs on back of log 3 into right hole on log 1 and right hole of log 2 (see Figure 24).
4. Insert pegs on back of log 4 into left hole on log 1 and left hole of log 2 (see Figure 24).

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 23 - Installing Logs 1 and 2**



**Figure 24 - Installing Logs 3 and 4**

## INSTALLATION

### Continued

#### LOG PLACEMENT FOR P325E(B)/VP325E(B) MODELS

1. Place large back log (log 1) onto grate making sure notches rest over grate (see Figure 25).
2. Place log 2 onto front right side of grate. Gently insert peg on back of log 2 into hole on right front of log 1 (see Figure 25).
3. Insert peg on back of log 3 into hole on left front of log 1 (see Figure 26). Log 3 will rest between first two grate fingers on left of grate assembly (see Figure 26).

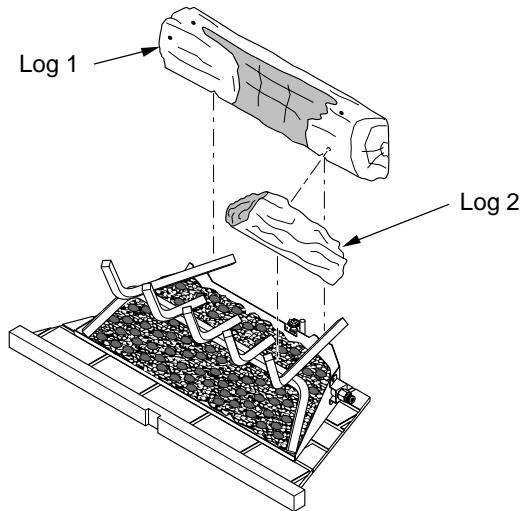


Figure 25 - Installing Logs 1 and 2

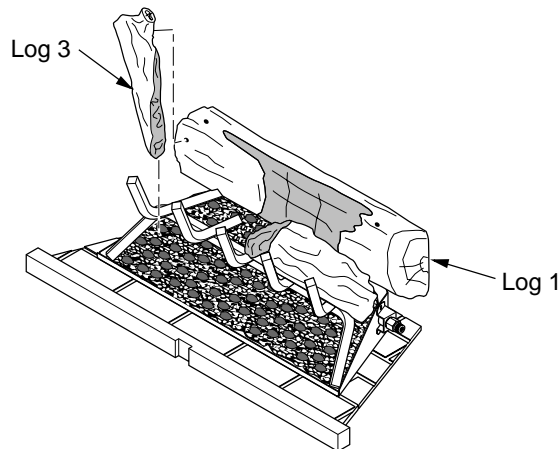


Figure 26 - Installing Log 3

4. Insert peg on back of log 4 into hole on top left of log 1. Rest the front of log 4 on the grate as shown in Figure 27.
5. Insert peg on back of log 5 into hole on the top right of log 1 (see Figure 27). Rest the bottom of log 5 on grate as shown in Figure 28.

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.

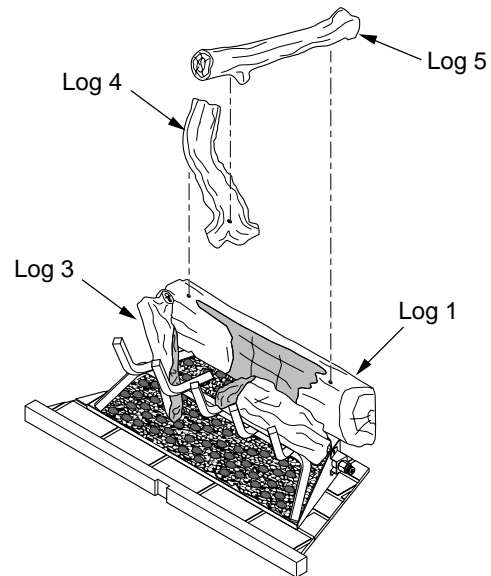


Figure 27 - Installing Logs 4 and 5

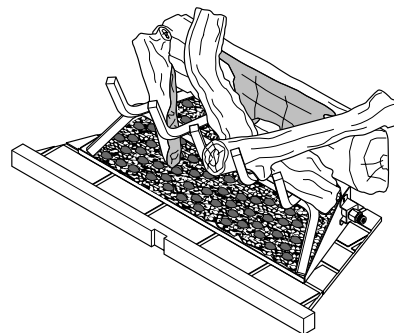


Figure 28 - Logs Installed

## INSTALLATION

### 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 29). Pull the handle to open or push to close.

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

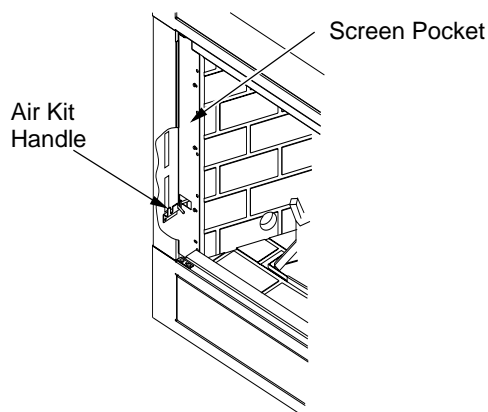


Figure 29 - Air Kit Handle Location

### APPLIANCE ENCLOSURE

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

If the 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 (see Figure 30).

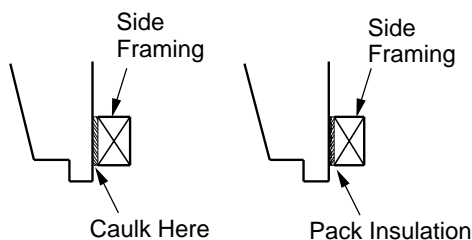


Figure 30 - Sealing Between Appliance and Framing

### INSTALLING OPTIONAL GLASS DOOR ACCESSORY

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

**Note:** Glass door may be heavy for some individuals. If this is the case, please request help from someone else.

These B-vent fireplaces are approved for use with optional bi-fold glass doors (see *Accessories*, page 21). The glass doors may be ordered and installed anytime after the fireplace installation is complete.

#### Installing Glass Doors

1. With the handle at the bottom, completely fold the panel on its hinges.
2. With the handle facing the center of the firebox opening, insert the lower pivot pin on the glass door panel into the hole in pivot plate on the bottom edge of the fireplace opening (see Figure 31).
3. Keeping the folded door tilted, slide the upper two pins into the guide track found under the upper facial edge of the firebox opening.
4. Tilt the door assembly fully vertical until the outer pivot pin snaps into the mounting hole in the upper spring clip (see Figure 31).
5. Once the top and bottom pins are secured, unfold the door into the closed position.
6. Repeat the process for the opposite door assembly.
7. To adjust the doors, slide them partially open. Using a screwdriver, loosen the hold-down screws in the spring clip (see Figure 32, page 15) and pivot plate.

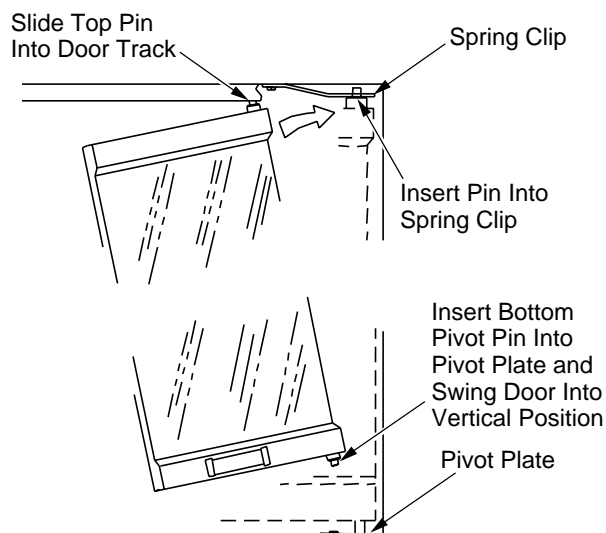


Figure 31 - Installing Optional Glass Door

## INSTALLATION

### Continued

8. Close both doors until evenly joined at the middle and note the gap at the outer edges of the face.
9. Reopen one door at a time and retighten the upper and lower hold-down screws.
10. Repeat the process until both doors are evenly joined, spaced and working freely.

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

### Removing Glass Doors for Replacement or Cleaning

1. Partially open the door and press up on the upper spring clip with a screw driver until the outer top pivot pin is free of the clip.
2. Fully fold the frame assembly and slide the upper edge towards the center of the firebox opening until the guide pins are free of the frame rail (see Figure 33).

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

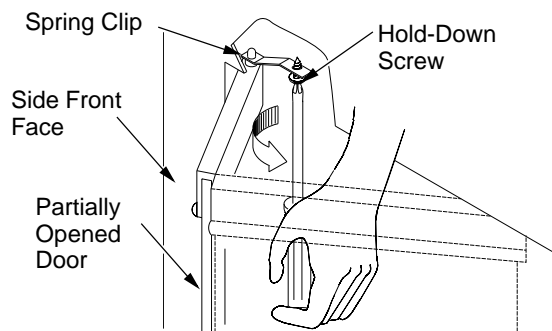


Figure 32 - Adjusting Glass Doors

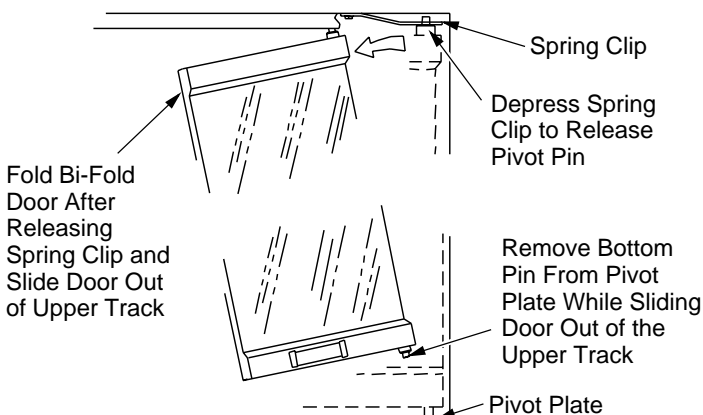


Figure 33 - Removing Glass Doors

## OPERATING FIREPLACE

### 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

**NOTICE:** During initial operation of new heater, burning logs will give off a paper-burning smell. Orange flame will also be present. Open damper or window to vent smell. This will only last a few hours.

1. **STOP!** Read the safety information, above.
2. Turn off all electric power to the appliance.
3. Turn wall switch to the OFF position.
4. Fully open glass doors if installed.
5. Remove front refractory brick access panel.
6. Turn equipment shutoff valve clockwise  to the OFF position (see Figure 34, page 16). Do not force.
7. 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, above. If you don't smell gas, go to the next step.

## OPERATING FIREPLACE

### Continued

8. Turn equipment shutoff valve counterclockwise  to the ON position. Do not force.
9. Replace front refractory brick access panel.
10. Fully close glass doors if installed.
11. Turn on all electric power to the appliance.
12. Turn the wall switch to the ON position.
13. Visually locate the pilot. The ignitor should begin to spark and the main burner should ignite once flame appears at pilot.
  - If lighting the appliance for the first time each season, it may take several attempts before the supply gas can reach the pilot and main burners.
  - If the appliance will not stay lit after several attempts, follow the instructions *To Turn Off Gas To Appliance*, below, and call your service technician or gas supplier.

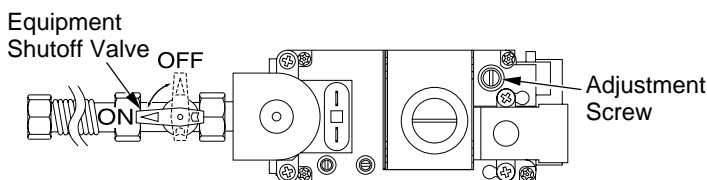



Figure 34 - Turning Equipment Shutoff Valve to the OFF Position

### TO TURN OFF GAS TO APPLIANCE

1. Turn off the wall switch.
2. Turn off all electric power to the 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 equipment shutoff valve clockwise  to OFF. Do not force.
6. Replace front refractory brick access panel.
7. Fully close glass doors if installed.

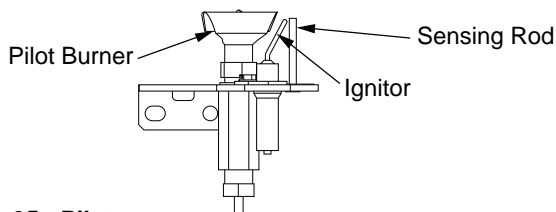


Figure 35 - Pilot

### OPTIONAL REMOTE OPERATION

**Note:** The WRC receiver and hand-held remote control kit must be purchased separately (see *Accessories*, page 21). Follow installation instructions on page 10.

1. Turn equipment shutoff valve to ON position. You can now turn the burner on and off with the hand-held remote control unit.  
**IMPORTANT:** Be sure to press the ON/OFF buttons on the hand-held remote control unit for up to 3 seconds to assure proper operation.
2. Press the ON/OFF button to turn the burner on and off.

## INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

### PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame. Alterations may have occurred during shipping and handling. The pilot is located on the back right hand side of the burner.

The flame must envelope 1/4" of top of the ignitor/sensor and grounding stem.

If your pilot assembly does not meet these requirements:

- Turn the adjustment screw marked PILOT clockwise to decrease or counterclockwise to increase the flame to proper size (see Figure 36). Do not remove the adjustment screw.
- see *Troubleshooting*, pages 19 and 20

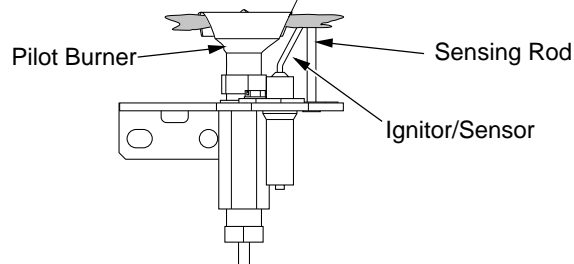


Figure 36 - Correct Pilot Flame Pattern



## INSPECTING BURNERS

### Continued

#### BURNER FLAME PATTERN

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

Figure 37 shows a typical flame pattern. If burner flame pattern differs from that described:

- turn appliance off (see *To Turn Off Gas to Appliance*, page 16)
- see *Troubleshooting*, pages 19 and 20



P324E and VP324E Models



P325E(B) and VP325E(B) Models

Figure 37 - 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:** The logs can be hot. Handle only when cool.

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

**⚠ WARNING:** Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

#### 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 pages 12 and 13 to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See *Replacement Parts*, page 18.
- Replace ember material periodically as needed. See *Replacement Parts*, page 18.

## 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 DESA's Customer Service Department at 1-866-672-6040. When calling, please have your model and serial numbers of your heater ready.

You can also visit DESA's technical services web site at [www.desatech.com](http://www.desatech.com).

## REPLACEMENT PARTS

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

### PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA's Customer Service Department at 1-866-672-6040 for referral information.

When calling DESA, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

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

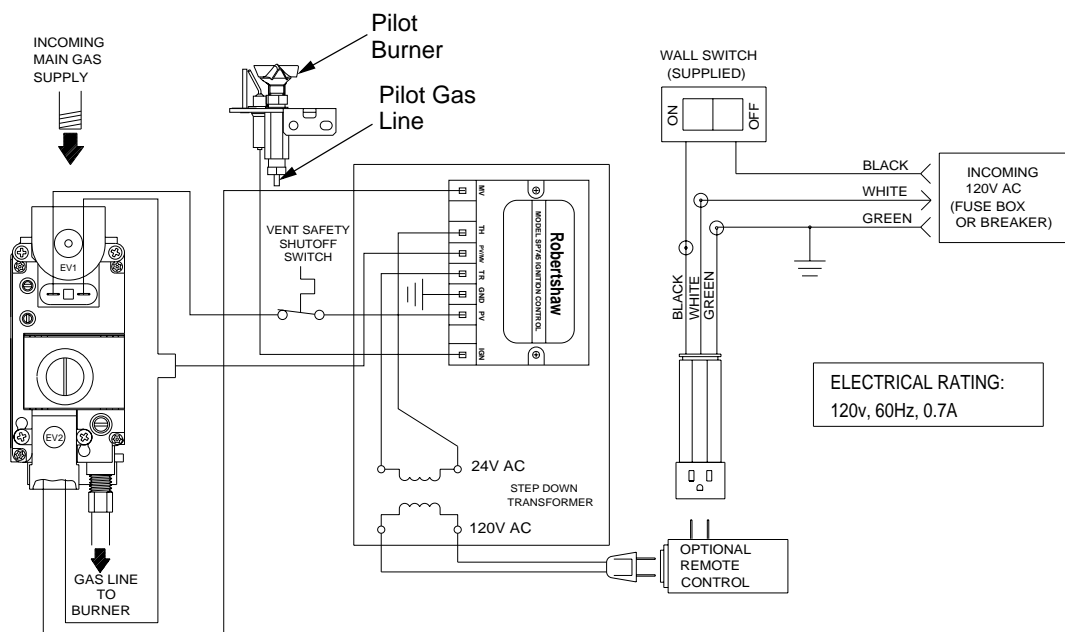
### PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA at 1-866-672-6040 for referral information.

When calling DESA, have ready

- model number of your fireplace
- the replacement part number

## WIRING DIAGRAM



## TROUBLESHOOTING

**Note:** For additional help, visit DESA's technical service web site at [www.desatech.com](http://www.desatech.com).

**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
Ignitor will not spark or pilot will not light	<ol style="list-style-type: none"> <li>1. No gas supply, or shutoff valve is OFF</li> <li>2. Air in gas line</li> <li>3. Construction debris clogging pilot orifice</li> <li>4. Low gas pressure</li> <li>5. Kinked pilot line</li> <li>6. Control valve knob is not opening</li> <li>7. No power to unit or the ignition module or power transformer is bad</li> <li>8. Vent damper not fully open</li> </ol>	<ol style="list-style-type: none"> <li>1. Check to see if you have gas supply and that equipment shutoff valve is opened</li> <li>2. Repeat lighting procedure several times to purge all air out of lines. If after repeated attempts appliance does not light, call for qualified service and repair.</li> <li>3. Remove debris and dirt, inspect and clean any other possible obstructions</li> <li>4. Contact your gas supplier to check pressure</li> <li>5. Have a qualified technician replace pilot line</li> <li>6. Replace control valve (Refer to <i>Replacement Parts</i>, page 18)</li> <li>7. Check that main power is on and that all wire connections are made correctly to the ignition model (see <i>Wiring Diagram</i>, page 18). Check for 24 VAC at the secondary side of the transformer. If 24 VAC is present, and the module does not operate, have the module replaced otherwise have the transformer replaced.</li> <li>8. Open vent damper until fully locked in OPEN position</li> </ol>
Pilot will not stay lit	<ol style="list-style-type: none"> <li>1. Loose wiring on ignitor wire to ignition module and/or poor ground to ignition module</li> <li>2. Pilot flame too low to sense</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring connection. Refer to wiring diagram (see <i>Wiring Diagram</i>, page 18) and/or check ground wire to ignition module</li> <li>2. Clean and adjust pilot burner and check gas supply and inlet pressure to unit</li> </ol> <p><b>Note:</b> Have a qualified technician replace pilot assembly if broken or corroded</p>
No gas to burner, although wall switch and valve are set to the ON position	<ol style="list-style-type: none"> <li>1. Wall switch wires defective or too long</li> <li>2. Thermopile not generating sufficient voltage</li> </ol>	<ol style="list-style-type: none"> <li>1. Check electrical connections</li> <li>2. Recheck problems 1 and 2</li> </ol>
Frequent pilot outage	<ol style="list-style-type: none"> <li>1. Pilot flame may be too low, causing safety pilot to "drop out"</li> <li>2. Improper venting or excessive blockage</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and adjust pilot flame for maximum flame impingement on thermopile</li> <li>2. Have the vent system inspected, including the termination cap. Remove any restriction or obstruction</li> </ol>

## 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 a clicking/ticking noise just after burner is lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, etc. (See <b>IMPORTANT</b> statement above) 2. For propane/LP gas, low fuel supply 3. Gas leak. <b>See Warning statement at top of page</b>	1. Ventilate room. Stop using odor causing products while fireplace is running 2. Contact local propane/LP supplier 3. Locate and correct all leaks (see <i>Gas Line Hook-Up</i> , pages 10 and 11)
Gas odor even when control knob is in OFF position	1. Gas leak. <b>See Warning statement at top of page</b> 2. Control valve defective	1. Locate and correct all leaks (see <i>Gas Line Hook-Up</i> , pages 10 and 11) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. <b>See Warning statement at top of page</b>	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Gas Line Hook-Up</i> , pages 10 and 11)
Dark residue on logs or inside of fireplace	1. Improper log placement 2. Air holes at burner inlet blocked 3. Burner flame holes blocked 4. Improper venting or excessive blockage 5. Excessive amounts of embers and pan material	1. Properly locate logs (see <i>Log Placement</i> on pages 12 and 13) 2. Clean out air holes at burner inlets. Periodically repeat as needed 3. Remove blockage or replace burner 4. Have the vent system inspected, including the termination cap. Remove any restrictions or obstruction 5. Clear excess embers until a minimum gap of 1/2" remains under the grate

## ACCESSORIES

Purchase these firebox accessories from your local dealer. If they can not supply these accessories, call DESA's Sales Department 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

**WRC** - Standard On/Off Electronic Remote Control Kit

### PROPANE CONVERSION KITS

**PCBE-324** - Propane Conversion Kit for 4" B-Vent Electronic Fireplace

**PCBE-325** - Propane Conversion Kit for 5" B-Vent Electronic Fireplace

### EXTRUDED ALUMINUM BI-FOLD GLASS DOORS

**BD32** - 32" Black Finish

**BD32B** - 32" Brushed Brass Finish

**BD32P** - 32" Platinum Finish

### BRICK LINER

**BL32** - 32" Refractory Standard Brick Liner Kit

### BLOWER KIT

**BK** - Squirrel Cage Blower With Speed Control

### PERIMETER TRIM

**PT32** - 32" Perimeter Trim - Black

**PT32B** - 32" Perimeter Trim - Brushed Brass

**PT32PB** - 32" Perimeter Trim - Polished Brass

**PT32P** - 32" Perimeter Trim - Platinum

### LOUVER TRIM (Rolled Louvers Only)

**LT32B** - 32" Louver Trim Kit - Brushed Brass

**LT32P** - 32" Louver Trim Kit - Platinum

**LT32PB** - 32" Louver Trim Kit for VP325E(B) - Polished Brass

### FACE/LOUVER PANEL KITS

**SP32** - Smooth Faced Panel Kit- Black

**SL32** - Stamped Louver Panel Kit- Black

**RL32** - Rolled Louver Kit- Black

**FP32** - Filigree Panel Kit- Black

**FP32B** - Filigree Panel Kit- Brushed Brass

**FP32P** - Filigree Panel Kit- Platinum

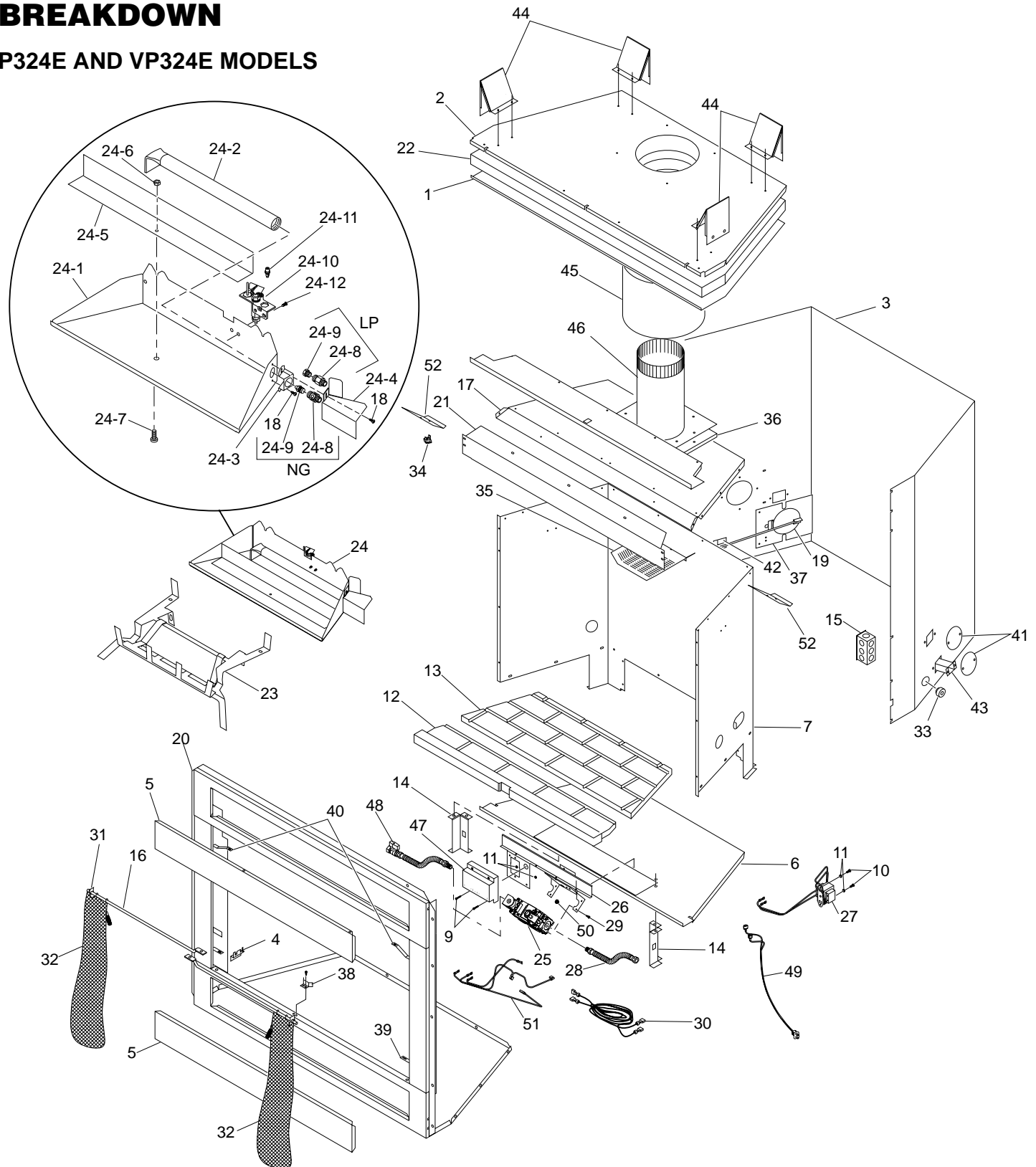
**FP32PB** - Filigree Panel Kit- Polished Brass

### FIRE CRACKLE - CF6A

Creates the sound of a real burning fire.

# ILLUSTRATED PARTS BREAKDOWN

## P324E AND VP324E MODELS



For more information, visit [www.desatech.com](http://www.desatech.com)

## PARTS LIST

### P324E AND VP324E MODELS

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 18 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	**	Insulation Pan	1	24-11	108867-01	Pilot Orifice (Propane/LP)	1
2	**	Fireplace Top Assembly	1	24-12	11102	Screw, #8-32x3/8	2
3	**	Fireplace Surround	1	25	14569	Electronic Gas Valve (Natural Gas)	1
4	108425-01	Air Rod Retainer	1		14570	Electronic Gas Valve (Propane/LP Gas)	1
5	108423-01	Panel Closure	2	26	107741-02	Valve Bracket	1
6	**	Firebox Bottom	1	27	14129	Transformer	1
7	108410-01	Firebox Surround	1	28	108368-01	3/8" Flex Line	1
8	108411-01	Air Separator	1	29	11107	Screw, #10-32 x 1/4 PPH	4
9	11186	Screw, #8-32 x 1" PPH Zinc.	2	30	108005-05	Wire Harness	1
10	11109	Screw, #8-32 x 1/2" PPH Zinc.	2	31	11418	Push-On Nut	2
11	11201	Nut, #8-32 Hex Zinc.	4	32	108440-01	Screen	2
12	108428-03	Bottom Front Refractory, Std. Brick	1	33	14123	Strain Relief	1
13	108426-03	Bottom Rear Refractory, Std. Brick	1	34	14574	Limit Switch	1
14	106683-01	Firebox Support Leg	2	35	22912	Draft Diverter	1
15	24353	Box Assembly	1	36	106827-01	4" Gasket	1
16	108701-01	Screen Rod	2	37	20042	Air Kit Cover	1
17	**	Firebox Top Assembly	1	38	20088	Door Stop	1
18	11165	Screw, #10x5/8 Mod. Tr. Blk. Ox	2	39	20089	Pivot Clip	2
19	106703-02	Damper Door Assembly	1	40	20090	Spring Clip	2
20	**	Firebox Face	1	41	21171	Gas Knockout Cover	4
21	108412-01	Smoke Deflector	1	42	108652-01	Gas Conduit Assy, Left	1
22	**	Fireplace Top Insulation	1	43	108654-01	Gas Conduit Assy, Right	1
23	109797-01	Grate Assembly	1	44	20280	Top Spacer	4
24	109107-02	Burner Assembly	1	45	108415-01	Starter Pipe Collar	1
24-1	107742-03	Burner Pan	1	46	108416-01	4" Collar	1
24-2	109794-01	Burner Tube	1	47	14301	Ignition Module SP745	1
24-3	107748-01	Burner Bracket	1	48	14253	Flexible Supply Line w/ Shutoff Valve	1
24-4	107985-01	Pilot Shield	1	49	108863-01	24" Supply Connect Plug	1
24-5	109793-01	Divider Pan	1	50	108864-01	Strain Relief 1/2" Bushing	1
24-6	11209	Nut, #10-24	1	51	109098-01	Wire Assembly Elec. Harness	1
24-7	11147	Screw, #10-24x1/2	1	52	108769-03	Extension Deflector	2
24-8	901066-01	Brass Air Mixer (Natural Gas)	1	<b>PARTS AVAILABLE NOT SHOWN</b>			
	901066-02	Brass Air Mixer (Propane/LP)	1		901155-01	Vermiculite Bag	1
24-9	901064-12	Injector (Natural Gas)	1		901156-01	Pan Material	1
	901065-11	Injector (Propane/LP)	1		901157-01	Lava Rock	1
24-10	108866-01	Pilot (Natural Gas)	1		22180	Wall Switch Kit	1

\*\* Not a field replaceable part.

## P325E(B) AND VP325E(B) MODELS





## PARTS LIST

### P325E(B) AND VP325E(B) MODELS

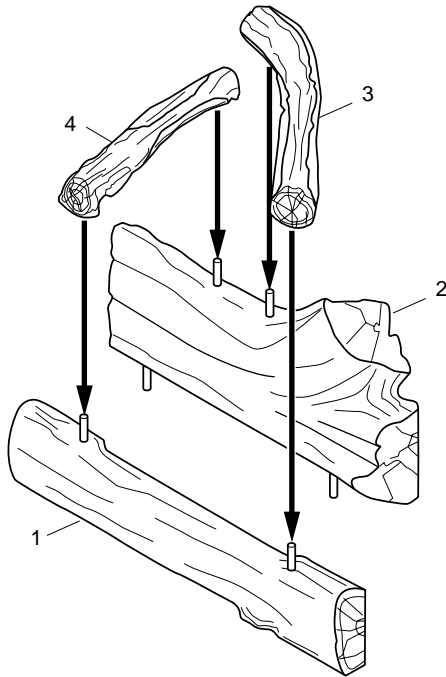
This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 18 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	**	Insulation Pan	1	25	14569	Electronic Gas Valve (Natural Gas)	1
2	**	Fireplace Top Assembly	1		14570	Electronic Gas Valve (Propane/LP Gas)	1
3	**	Fireplace Surround	1	26	107741-02	Valve Bracket	1
4	108425-01	Air Rod Retainer	1	27	14129	Transformer	1
5	108423-01	Panel Closure	2	28	108368-01	3/8" Flex Line	1
6	**	Firebox Bottom	1	29	11107	Screw, #10-32 x 1/4 PPH	4
7	**	Firebox Surround	1	30	108005-05	Wire Harness	1
8	108411-01	Air Separator	1	31	11418	Push-On Nut	2
9	108434-01	Left Refractory, Std. Brick (B Models)	1	32	108440-01	Screen	2
10	108432-01	Right Refractory, Std. Brick (B Models)	1	33	14123	Strain Relief	1
11	108430-01	Rear Refractory, Std. Brick (B Models)	1	34	14574	Limit Switch	1
12	108428-01	Bottom Front Refractory, Std. Brick	1	35	22912	Draft Diverter	1
13	108426-01	Bottom Rear Refractory, Std. Brick	1	36	22084	Brick Liner Retainer	2
14	106683-01	Firebox Support Leg	2	37	20042	Air Kit Cover	1
15	24353	Box Assembly	1	38	20088	Door Stop	1
16	108701-01	Screen Rod	2	39	20089	Pivot Clip	2
17	**	Firebox Top Assembly	1	40	20090	Spring Clip	2
18	11165	Screw, #10x5/8 Mod. Tr. Blk. Ox	2	41	21171	Gas Knockout Cover	4
19	106703-02	Damper Door Assembly	1	42	108652-01	Gas Conduit Assy, Left	1
20	**	Firebox Face	1	43	108654-01	Gas Conduit Assy, Right	1
21	108412-01	Smoke Deflector	1	44	20280	Top Spacer	4
22	**	Fireplace Top Insulation	1	45	108415-01	Starter Pipe Collar	1
23	109040-01	Grate Assembly	1	46	108417-01	5" Collar	1
24	108712-06	Burner Assembly	1	47	14301	Ignition Module SP745	1
24-1	107742-03	Burner Pan	1	48	14253	Flexible Supply Line w/ Shutoff Valve	1
24-2	109037-01	Burner Tube	1	49	108863-01	24" Supply Connect Plug	1
24-3	107748-01	Burner Bracket	1	50	108864-01	Strain Relief 1/2" Bushing	1
24-4	107985-01	Pilot Shield	1	51	109098-01	Wire Assembly Elec. Harness	1
24-5	901681-01	Burner Clamp	1	52	11186	Screw, #8-32 x 1" PPH Zinc.	2
24-6	11209	Nut, #10-24	1	53	11109	Screw, #8-32 x 1/2" PPH Zinc.	2
24-7	11147	Screw, #10-24x1/2	1	54	11201	Nut, #8-32 Hex Zinc.	2
24-8	901066-01	Brass Air Mixer (Natural Gas)	1	55	108769-03	Extension Deflector	2
	901066-02	Brass Air Mixer (Propane/LP)	1	<b>PARTS AVAILABLE NOT SHOWN</b>			
24-9	901064-11	Injector (Natural Gas)	1		901155-01	Vermiculite Bag	1
	901065-09	Injector (Propane/LP)	1		901156-01	Pan Material	1
24-10	108866-01	Pilot (Natural Gas)	1		901157-01	Lava Rock	1
24-11	108867-01	Pilot Orifice (Propane/LP)	1		22180	Wall Switch Kit	1
24-12	11102	Screw, #8-32x3/8	2				

\*\* Not a field replaceable part.

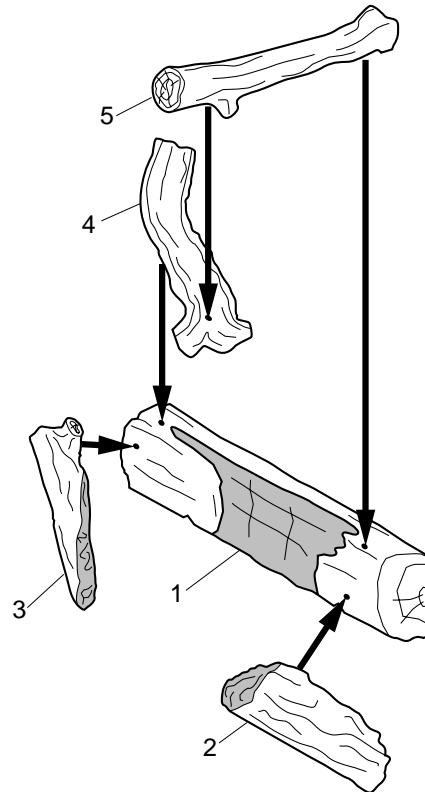
## ILLUSTRATED PARTS BREAKDOWN

### LOG ASSEMBLY



P324E and VP324E Models

KEY NO.	PART NUMBER	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



P325E(B) and VP325E(B) Models

KEY NO.	PART NUMBER	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

## OWNER'S REGISTRATION FORM

In order to provide better customer service for this and future purchases, we recommend that you register your product with us. You can register online at **www.desatech.com**. If access to our website is not available to you, please complete this Owner's Registration Form and mail to the address on the back of this owner's manual. Please provide the following product information:

Brand: \_\_\_\_\_ (Comfort Glow, Vanguard, etc.)  
Model: \_\_\_\_\_ (EFP33PR, VTGH33NR, etc.)  
Date Purchased: \_\_\_\_\_ Note: Keep receipt for warranty verification.  
Serial Number: \_\_\_\_\_ 7 or 9 digit number located on product or identification tag.  
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_  
Home Phone: \_\_\_\_\_ - \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Please answer the following questions to register your product with DESA International:

1. Where will the product be used?  
☐ Living/Family Room ☐ Office/Warehouse ☐ Utility Shed/Outbuilding ☐ Garage ☐ Bedroom ☐ Bathroom ☐ Other
2. If you bought this product yourself, did you plan to purchase this type of product before going into the store? ☐ Yes ☐ No
3. Who selected the product? ☐ Male ☐ Female ☐ Both
4. What is the population of your area? ☐ Under 10,000 ☐ 10,000 to 25,000 ☐ 25,000 to 50,000 ☐ 50,000 to 100,000  
☐ 100,000 to 250,000 ☐ Over 250,000
5. What is your primary source of heat? ☐ Propane (LP Gas) ☐ Fuel Oil ☐ Wood ☐ Natural Gas ☐ Electric ☐ Other
6. How was the product installed? ☐ Professional Installer ☐ Self ☐ Other
7. Cost of product excluding sales tax? \$ \_\_\_\_\_
8. Cost to install product? \$ \_\_\_\_\_
9. Type of store where product was purchased? ☐ Hardware ☐ Propane Dealer ☐ Natural Gas/Utility Co. ☐ Home Center/Builder's Supply  
☐ Fireplace or Hearth Shop ☐ Farm Store ☐ Other
10. What motivated you to buy this product? ☐ Sudden Cold Weather ☐ Replace Older Model ☐ D.I.Y. Home Project  
☐ Emergency Back-Up Heat ☐ Heater was on Sale ☐ Energy Savings/High Efficiency ☐ Construction Project ☐ Other
11. How did you learn about this product brand? ☐ Advertising ☐ Relative or Friend ☐ Store Display ☐ Other \_\_\_\_\_
12. Level of Education of Purchaser: ☐ Some High School ☐ Completed High School ☐ Completed College ☐ Completed Graduate School
13. Age of Purchaser: ☐ Under 20 ☐ 20 - 29 ☐ 30 - 39 ☐ 40 - 49 ☐ 50 - 59 ☐ 60 or Over
14. Buyer's total annual household income: ☐ Under \$15,000 ☐ \$15,000 to \$19,999 ☐ \$20,000 to \$34,999 ☐ \$35,000 to \$49,999  
☐ \$50,000 to \$74,999 ☐ \$75,000 to \$99,999 ☐ \$100,000 and Over
15. Store where product was purchased:  
Name: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_

16. In choosing this product, how important were the following:

	Not Important	Somewhat Important	Very Important
Availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand Name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat Output	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made in USA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warranty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value for Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prior Brand Experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Controls Location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thermostat, Remote, or Manual Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Special Features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salesperson's Recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend/Relative's Recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Portability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

TAPE

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Postage  
Required



2701 Industrial Drive  
P.O. Box 90004  
Bowling Green, KY 42102-9004

TAPE



# WARRANTY INFORMATION

## KEEP THIS WARRANTY

Model \_\_\_\_\_

Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

### LIMITED WARRANTY B-VENT FIREPLACE

DESA warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES 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 ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

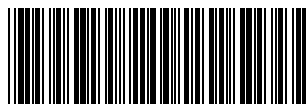
Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

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

For information about this warranty write:



2701 Industrial Drive  
P.O. Box 90004  
Bowling Green, KY 42102-9004  
[www.desatech.com](http://www.desatech.com)



108794 01

NOT A UPC

108794-01  
Rev. C  
03/03

For more information, visit [www.desatech.com](http://www.desatech.com)