



## HOMEOWNER'S CARE AND OPERATION INSTRUCTIONS

RETAIN THESE INSTRUCTIONS  
FOR FUTURE REFERENCE

Tested &  
Listed By  Beaverton  
Oregon USA  
OMNI-Test Laboratories, Inc.

OTL Report No. 116-F-32-5

### DESIGNER DIRECT VENT MULTI-OPEN SERIES



DIRECT-VENT GAS FIREPLACE HEATERS

P/N 725,040M REV. NC 02/2006

#### MODELS

Millivolt Models

SDVST-N  
SDVPF-N



#### ⚠ WARNINGS

- **Hot! Do not touch!** The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burns may result.
- **Carefully supervise children** in the same room as appliance.
- **If small children are present in the home, it is recommended that this appliance be fitted with a screen door or screen panel kit. See Page 12 for ordering information.**

**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.**

**FOR YOUR SAFETY:** Do not store or use gasoline or other flammables or liquids in the vicinity of this or any other appliance.

**FOR YOUR SAFETY:** What to do if you smell gas:

- DO NOT light any appliance.
- DO NOT touch any electrical switches.
- Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow your gas suppliers instructions.
- If your gas supplier cannot be reached, call the fire department.

Installation and service must be performed by a qualified installer, service agency or gas supplier.

**AVERTISSEMENT: ASSUREZ-VOUS DE BIEN SUIVRE LES INSTRUCTIONS DONNÉ DANS CETTE NOTICE POUR RÉDUIRE AU MINIMUM LE RISQUE D'INCENDIE OU POUR ÉVITER TOUT DOMMAGE MATÉRIEL, TOUTE BLESSURE OU LA MORT.**

**POUR VOTRE SÉCURITÉ:** Ne pas entreposer ni utiliser d'essence ni d'autre vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

**POUR VOTRE SÉCURITÉ:** Que faire si vous sentez une odeur de gaz:

- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous vous trouvez.
- Evacuez la pièce, le bâtiment ou la zone.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

L'installation et service doit être exécuté par un qualifié installateur, agence de service ou le fournisseur de gaz.

## SAFETY & WARNING INFORMATION

IMPORTANT: PLEASE READ THIS MANUAL IN ITS ENTIRETY AND UNDERSTAND THESE RULES TO FOLLOW FOR SAFETY.



### ! 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.



### ! 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.

### ! WARNING

Failure to comply with the installation and operating instructions provided in this document will result in an improperly installed and operating appliance, voiding its warranty. Any change to this appliance and/or its operating controls is dangerous. Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

### ! IMPORTANT

These appliances must not be connected to a chimney or flue serving a separate Solid-Fuel burning appliance.

### ! WARNING

Children and adults should be alerted to the hazards of high surface temperatures. Use caution around the appliance to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

*Note: An Optional Screen Panel for the glass is available (see Page 12 for ordering information).*

### ! WARNING

Do not place clothing or other flammable materials on or near this appliance.

### ! AVERTISSEMENT

Surveiller les enfants. Garder les vêtements, les meubles, l'essence ou autres liquides à vapeur inflammables à cote de l'appareil.

### ! WARNING

Carbon monoxide poisoning: early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly.

### ! WARNING

Any safety guard or screen removed for servicing the appliance must be replaced prior to operating the appliance.

### ! WARNING

Do not use these appliances if any part has been under water. Immediately call a qualified, professional service technician to inspect the appliances and to replace any parts of the control system and any gas controls which have been under water.

### ! AVERTISSEMENT

Ne pas se servir de cet appareil s'il a été plongé dans l'eau, complètement ou en partie. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

### ! WARNING

Do not attempt to alter or modify the construction of the appliance or its components. Any modification or alteration may void the warranty, certification and listings of this unit.

### ! WARNING

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

### ! AVERTISSEMENT

Cet appareil doit être utilisé uniquement avec les types de gaz indiqués sur la plaque signalétique. Ne pas l'utiliser avec d'autres gaz sauf si un kit de conversion certifié est installé.

### ! WARNING

These fireplaces are vented heaters. Do not burn wood or other material in these appliances.

## CONGRATULATIONS!

In selecting this SUPERIOR Direct-Vent Gas Appliance you have chosen the finest and most dependable fireplace to be found anywhere. Its a beautiful, prestigious alternative to a wood burning fireplace. Welcome to a Family of tens of thousands of satisfied SUPERIOR Fireplace Owners.

Please carefully read and follow all of the instructions found in this manual. Please pay special attention to the safety instructions provided in this manual. The Homeowner's Care and Operation Instructions included here will assure that you have many years of dependable and enjoyable service from your SUPERIOR product.

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## INTRODUCTION

These Fireplace models covered in this manual are Direct-Vent sealed combustion gas fireplace heaters designed for installation into manufactured homes and site built residential homes. Direct-Vent appliances operate with the combustion chamber completely isolated from the indoor environment. All air for combustion is brought in from the outside and exhaust gases are vented through the same direct vent, co-axial (intake/exhaust) vent system.

These *Millivolt* appliances have a millivolt gas control valve with piezo ignition system which provides safe, efficient operation. If an optional blower is installed on fireplace, it will require electrical power to be installed at the time of appliance installation.

These appliances comply with National Safety Standards and are tested and listed by OMNI-Test Laboratories, Inc. (Report No.116-F-32-5) to ANSI Z21.88b-2003 (in Canada, CSA-2.33b-2003), and CAN/CGA-2.17-M91 in both USA and Canada, as vented gas fireplace heaters.

The Installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54-latest edition, or the Natural Gas and Propane Installation Code, CSA B149.1-latest edition. The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the latest edition of the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1 - latest editions.

### GENERAL INFORMATION

*Note: Installation and repair should be performed by a qualified service person. The appliance should be inspected annually by a qualified professional service technician. More frequent inspections and cleanings may be required due to excessive lint from carpeting, bedding material, etc.*

*It is imperative that the control compartment, burners and circulating air passage ways of appliance be kept clean. See Maintenance instructions on Page 5.*

*S'assurer que le brûleur et le compartiment des commandes sont propres. Voir les instructions d'installation et d'utilisation qui accompagnent l'appareil.*

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies. Locate furniture and window coverings accordingly.

These fireplaces are designed as supplemental heaters. Therefore, it is advisable to have an alternate heat source when installed in a dwelling.

These appliances are designed to operate on natural gas or propane gas only. The use of other fuels or combination of fuels will degrade the performance of this system and may be dangerous.

### Millivolt Models - BTU Input

Millivolt models come standard with the manually-modulated gas valve; flame appearance and heat output can be controlled at the gas valve. The BTU Input for millivolt models is shown in *Table 1*.

Input (BTU) Manually-Modulated Gas Valves (millivolt)		
Models	Fuel Type	Input Rate (BTU / HR)
SDVST SDVPF	Natural or Propane Gas	37,500 high 30,000 low

*Table 1*

Gas Pressure *Tables 2 and 3* show the appliances' gas pressure requirements.

Inlet Gas Supply Pressure (all models - millivolt)		
Fuel #	Minimum	Maximum
Natural Gas	5.0" WC (1.24 kPa)	10.5" WC (2.61 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)

*Table 2*

Manifold Gas Supply Pressure (all models - millivolt)		
Fuel #	Low	High
Natural Gas	(Lo) 2.2" WC (.55 kPa)	(Hi) 3.5" WC (.87 kPa)
Propane	(Lo) 6.3" WC (1.57 kPa)	(Hi) 10.0" WC (2.49 kPa)

*Table 3*

Test gauge connections are provided on the front of the millivolt gas control valve, identified IN for the inlet and OUT for the manifold side (see *Figure 2* on *Page 4*).

These appliances must be isolated from the gas supply piping system (by closing their individual manual shut-off 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).

These appliances and their individual shut-off valves **must be disconnected** from the gas supply piping system during any pressure testing of that system at pressures **greater than** 1/2 psig (3.5 kPa).

### Orifice Sizes - Sea Level to High Altitude (All Models)

These appliances are tested and approved for installations at elevations of 0-4500 feet (0-1372 meters) above sea level using the standard burner orifice sizes (marked with an "\*" in **Table 4**). At the time of installation, it must be determined if the appliance needs to be derated. Contact your local gas supplier for deration requirements for your area.

**Deration** - At higher elevations, the amount of BTU fuel value delivered must be reduced by either using gas that has been derated by the gas company or by changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or, in Canada, the CAN1-B149.1 and .2 codes - latest edition.

•• Burner Orifice Sizes (all models)		
Elevation Feet (meters)	Natural Gas drill size (inches)	Propane Gas drill size (inches)
0-4500 (0-1372)	#44 (.086") * 6DJ8001 •	#55 (.052") * 19L5201 •

• Standard size installed at factory  
 • Part/Cat. Number  
**Table 4** •• Each model has two burners & 2 Orifices

### Burn-in Period

During the first few fires of this appliance there will be some odor due to the curing of the paint and burning off of lubricants used in the manufacturing process.

Depending on your use, the burn-in period may take a few hours or a few days.

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

If an optional blower is installed, Do not turn it on during the Burn-In period.

A white film may develop on the glass front during the first few fires as part of the curing process. The glass should be kept clean during the first two weeks of use to prevent the film from baking on (making it very difficult to remove). See **Cleaning Glass** on **Page 5**.

### GAS CONTROLS/CONTROL COMPARTMENT ACCESS

The gas controls can be found behind the control compartment access door.

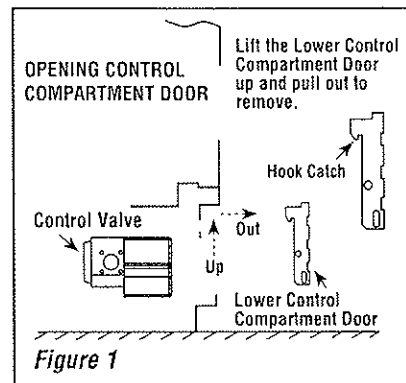
#### Removing Control Compartment Door:

Open the door by gently lifting it upward until the hook catches on both sides clear the locating slots. Then pull door out to remove.

On millivolt systems, the piezo igniter, HI/LO flame adjustment knob, and pilot and main gas ON/OFF control knob are located below the glass panel enclosure. See **Figures 1 through 3**.

#### Reinstalling Control Compartment Door:

To reinstall, insert the hook catches on each side of the door into the corresponding slots in the control compartment opening, then gently push forward and slide down until it locks in place.



### OPERATION AND CARE OF YOUR APPLIANCE

The standard controls for appliance operation are located behind the lower louvered control compartment door located below the appliance front glass enclosure panel (see **Figure 4**). Optional control switches are also available (see **Page 10** - remote control, wall thermostat or wall switch).

Before lighting and operating your appliance familiarize yourself with the gas control valve that your appliance uses. Refer to **Figures 1 through 3**.

To light millivolt appliances refer to the detailed lighting instructions found on **Page 13**. Millivolt appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.

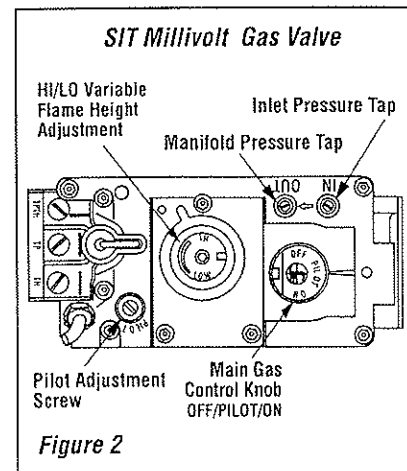
An optional unit mounted ON/OFF Rocker Switch can be installed behind the control compartment access door, below the appliance front glass enclosure panel (see **Figure 3** for location). Once the pilot is lit, the ON/OFF rocker switch will control the appliance ON/OFF burner operation. To operate: Toggle the switch between its ON and OFF positions.

If your millivolt appliance is equipped with an optional remote switch kit (wall switch, remote control or wall thermostat) and the pilot is lit, the appliance main burner may be turned on and off using the optional switch.

**Note:** To prevent excessive resistance in burner circuit (which can cause burner operation problems), only one burner control switch should be wired to valve.

### Variable Flame Height Adjustment (Millivolt Appliances)

1. All Millivolt appliances are equipped with a variable gas control valve. Flame height for these models may be adjusted through a range between fixed low and high settings while the appliance is in operation. Adjust the flame height as desired after lighting the appliance by rotating the variable adjustment control knob (HI/LO) located on the front of the valve (refer to **Figure 2**).
2. During the first initial burns of these appliances, there will be some odor emitted (see **Burn-In Period** on **Page 4**).
3. Keep the lower control compartment clean by vacuuming or brushing at least twice a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, pet hair, etc. **It is very important that the control compartments, burners and circulating air passageways of the appliance are kept clean.**
4. Always turn off gas to the pilot (millivolt appliances) and let the appliance cool down before cleaning. Before re-lighting, refer to the lighting instructions in this manual. Lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.
5. Always keep the appliance area clear and free from combustible materials, gasoline and other flammable liquids.
6. Remember, Millivolt appliances have a continuous burning pilot flame. Exercise caution when using products with combustible vapors.



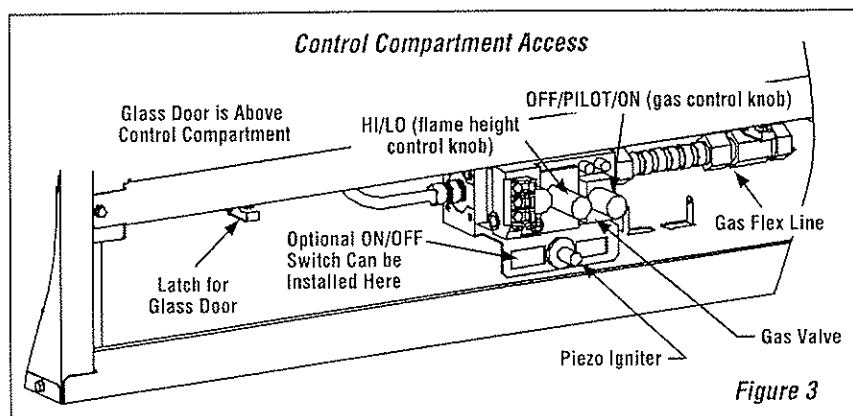


Figure 3

## MAINTENANCE

(See Maintenance Schedule, Page 16)  
Refer to the maintenance schedule for maintenance tasks, procedures, periodicity and by whom they should be performed. Always verify proper operation of the appliance after servicing.

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

**CAUTION**  
Wear gloves and safety Glasses for protection while doing required maintenance.

**IMPORTANT**  
Always verify proper operation after servicing.

Before re-lighting the fireplace, refer to the lighting instructions in this manual. Instructions are also found on pull-out panels located below the glass door in the control compartment.

### Inspect Venting System

The appliance and venting system should be thoroughly inspected before initial use and at least annually by a qualified service technician (inspection should include ensuring that exhaust or intake passages are unobstructed and vent components are properly assembled and not damaged). If the venting system is disassembled for any reason, a qualified service technician should follow vent installation instructions for proper reassembly and proper sealing of the venting system components. However, more frequent periodic inspections and cleanings should be performed by the homeowner.

### Clean Lower Control Compartment

Keep lower control compartment clean by vacuuming or brushing it out at least twice a year (also clean the air venturi with a brush or wire). More frequent cleaning may be required due to accumulation of lint from carpeting, bedding materials, pet hair, spider webs, etc. It is very important that control compartments, burners, circulating air passageways and air venturi on the appliance are NOT obstructed in any way.

### Cleaning Glass

(see Front Glass Enclosure Panel, Removal and Installation on Page 6).

**Note:** Clean glass after first two weeks of operation (after Burn-In period is over) and then only when necessary and when the fireplace is cool. Wipe surface with clean, dampened, soft cloth. Follow with dry, soft towel as desired. Take care not to scratch the glass surface.

The viewing glass should be cleaned periodically to remove any build-up caused from the following:

- During start-up, it is normal for condensation to form on the inside of the glass (this condensation and fog will usually disappear in a few minutes). The moisture can cause lint, dust and other airborne particles to cling to the glass surface.
- Initial curing of the high temperature paint and burning off of lubricants used in the manufacturing process may result in a film on the glass.
- A white coating may form on the glass as a result of impurities and minerals in the fuel.

It is recommended that the glass be cleaned two or three times during each heating season, depending on the circumstances present. The following cleaning solutions are approved for use to clean glass:

- Non-ammonia based household cleaner
- 50%-50% mix of white vinegar & water
- gas fireplace/stove glass cleaner

**Inspect Glass Gasket -** Visually inspect the gasket on the backside of the glass enclosure panels. The gasket surface must be clean, free of irregularities and seated firmly.

**IMPORTANT**  
Do not use abrasive cleaners on glass. Never clean the glass when it is hot.

### Clean Logs And Burner

Carefully remove the logs (use care when handling the fiber logs, as they become quite fragile after curing). Vacuum out any foreign matter (lint, carbon, etc.) on the burner. Ensure the burner ports are "open." Remove any carbon deposits from the under side of the logs using a vacuum cleaner, or a soft bristled brush (i.e. paint brush). **Note:** Improper positioning of logs can create carbon build-up and will alter the performance of the appliance.

### Replacing Logs -

If the logs become damaged by accident or improper handling and need replacement, use only the proper replacement logs from manufacturer (see Pages 17 & 18 for ordering information).

**Re-install Embers, Logs and Volcanic Stone -** Carefully follow placement instructions on Page 7). All logs should fit onto corresponding pins and/or log stoppers. This will ensure a proper flame and safe combustion.

### Inspect Wiring

Refer to wiring diagrams on Page 9.

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

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

- Terminals at the Valve
- (Optional Control Switch)  
Remote Control, Wall Thermostat or Wall Switch Kit

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

### Inspect Burner Flame Appearance

Ensure that the burner flame appearance resembles the flame shown in *Figure 5* and as described in *Flame Appearance and Sooting* on *Page 7*. The Homeowner must contact a qualified service technician at once if any abnormal condition is observed.

### Small Area Paint Touch-up

The finish of the appliance is a high quality powdercoat. Only use factory supplied powdercoat paint kit for touch-ups. Paint is available at your local authorized Superior dealer, cat. no. H4354. Never attempt to paint a hot fireplace.

Do not attempt to repaint the appliance until the finish is completely cured (see *Burn-In Period* on *Page 4*). If the surface later becomes stained or marred, it may be lightly sanded and touched up with spray paint.

### Front Glass Enclosure Panel, Removal and Installation

#### **! WARNING**

**Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service technician.**

#### **! WARNING**

**Do not attempt to substitute the materials used on this door, or replace cracked or broken glass with any materials other than those provided by the appliance manufacturer.**

#### **! WARNING**

**Handle this glass with extreme care! Tempered glass is susceptible to damage – do not scratch or handle roughly while reinstalling the glass door frame.**

#### **! WARNING**

**Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.**

#### **! WARNING**

**The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.**

These are direct-vent appliances. They are designed to operate only when the front glass enclosure panel is installed. Generally the front glass enclosure panel should not be removed except to gain access to the components within the firebox, and the appliance may only be operated without the front glass enclosure panel in place for very brief periods of time during appliance checkout and adjustment. **Note:** The flame appearance will be diminished while the front glass enclosure panel is removed.

During this appliance checkout and adjustment period, a potential safety hazard exists - **EXERCISE EXTREME CAUTION** to prevent the occurrence of any burn injuries from the exposed flames or hot surfaces. Also note, that while the front glass enclosure panel (or any of the panels) is removed, the flame appearance will appear to be smaller than normal.

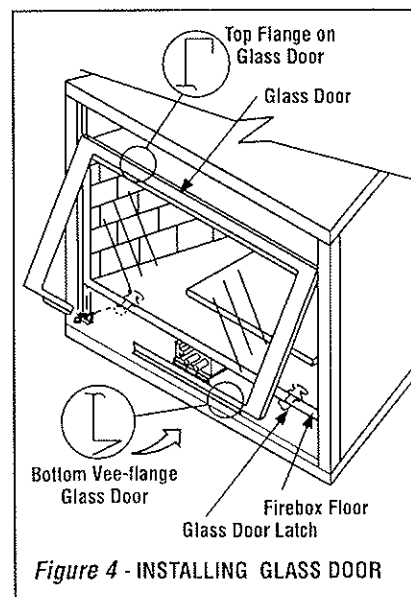
#### Removing Glass Enclosure Panels (see *Figure 4*)

1. Remove the top louver assembly the control compartment louver assembly by lifting them up, then pulling out (see *Figure 1*).

2. Remove the control compartment access door (see removal instructions on *Page 4 - Removing Control Compartment Door*).
3. Locate the two (2) latches at the top of the control compartment. To disengage the two latches from the bottom vee-flange of the glass enclosure panel, reach for the handles located towards the back of the latches and pull the handles down toward the front of the appliance.
4. Swing the bottom of the door out and raise it slightly to lift the top flange of the door frame away from the appliance.

#### Installing Glass Enclosure Panels (see *Figure 4*)

1. Visually inspect the gasket on the backside of the panels. The gasket surface must be clean, free of irregularities and seated firmly.
2. Position the glass enclosure panel in front of the firebox opening at a 45 degree angle and engage the top flange over the lip at the top of the firebox opening.
3. Swing the glass enclosure panel down and back. Ensure the gasket seats evenly as the panel draws shut. Engage the Vee-flange at the bottom of the panel with the latches and close the latches to secure the panel.
4. Reinstall the control compartment door see installation instructions on *Page 4 , Reinstalling Control Compartment Door*).



# INSTALLING LOG SET, VOLCANIC STONE AND GLOWING EMBERS

## **WARNING**

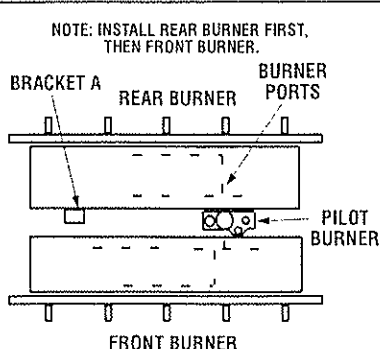
This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.

## **WARNING**

Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install logs and firebox components.

## **WARNING**

DO NOT attempt to install logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.



Note: The burners are not identical. Position them so that the circular burner ports run as shown. Note especially the vertical run of ports relative to the pilot burner. Bracket A on the rear burner will interfere with the pilot burner if an attempt is made to install the rear burner in the front burner's position.

Figure 6

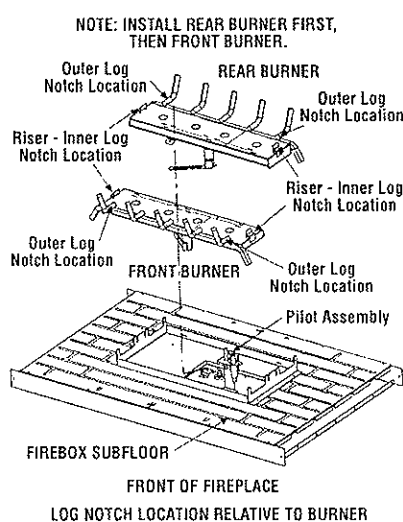


Figure 7

## Burner / Grate Location Reference (see Figures 6 & 7)

Note: If the burners have been removed for any reason, rear burner must be installed before front burner. See Figures 6 & 7.

## BURNER ADJUSTMENTS

### Flame Appearance and sooting

Proper flame appearance is a flame which is blue at the base and becomes yellowish-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 15 minutes of operation. If after a short period the flame stays lowered blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter openings closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination. Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellowish-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

Proper Burner Flame Appearance

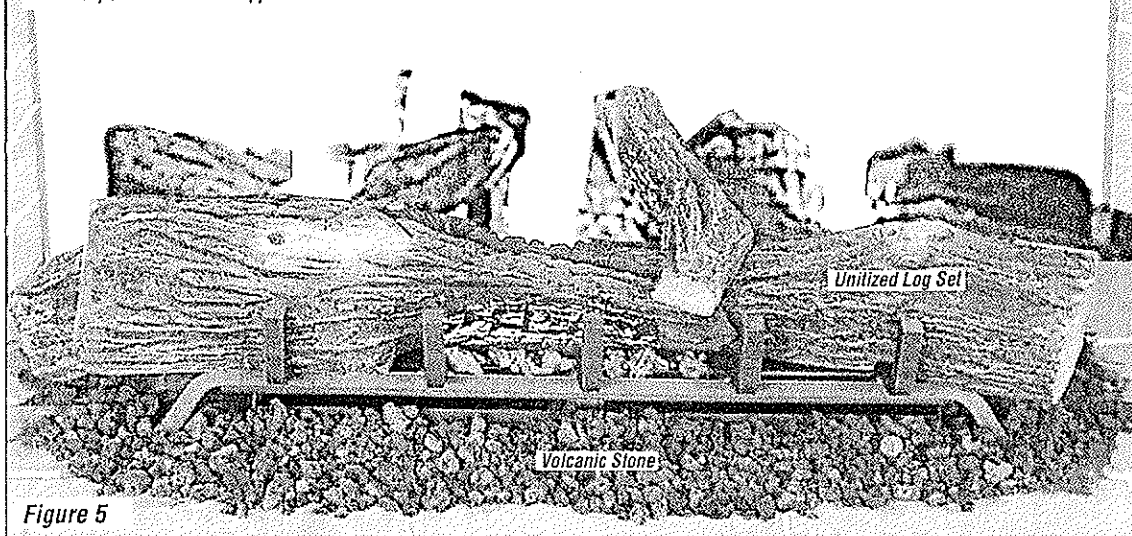


Figure 5



## Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more closed position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

Air Shutter Adjustment Guidelines:		
Amount of Primary Air	Flame Color	Air Shutter Adjustment
If air shutter is closed too far →	Flame will be orange →	Air shutter gap should be increased
If air shutter is open too far →	Flame will be blue →	Air shutter gap should be decreased

## Burner Air Shutter Adjustment Procedure

1. Locate adjustment rod and adjust air shutter to the standard setting as shown in **Figure 8** (adjustment rod is located in the lower control area).  
**Note:** Rotating the adjustment rod counterclockwise decreases air and clockwise increases air.
2. Light appliance (follow lighting procedure on lighting label in control compartment or see homeowners manual).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved (see **Figure 5**). If the following conditions are present, adjust accordingly.
  - If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
  - If flame stays lowered blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position (and the optional switches, if installed - wall switch, remote control or wall thermostat).

5. When satisfied that the burner flame appearance is normal, re-install the lower control compartment door.

## WARNING

**Air shutter adjustment should only be performed by a qualified professional service technician.**

## WARNING

**Ensure front glass panels are in place and sealed during adjustment.**

## CAUTION

**The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.**

## CAUTION

**Carbon will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.**

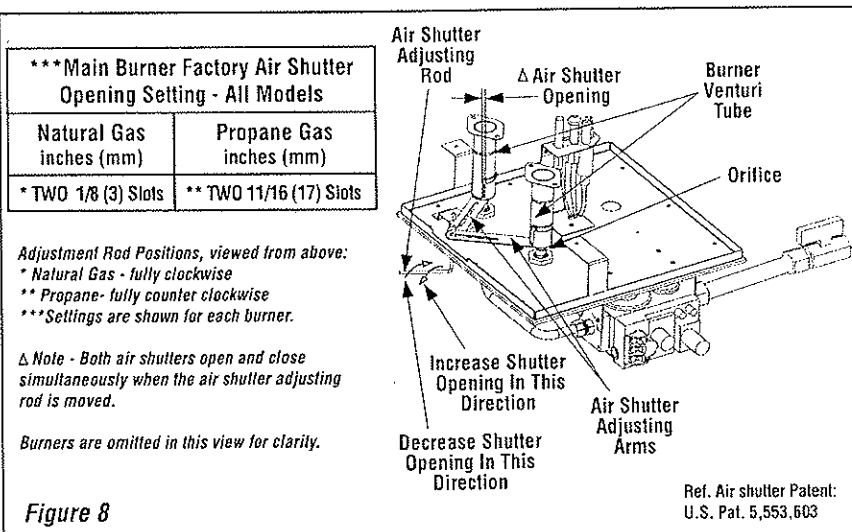
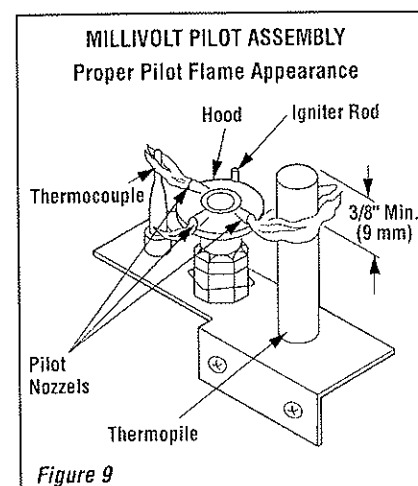
With proper care and maintenance, your appliance will provide many years of enjoyment. If you should experience any problem, first refer to the troubleshooting guide in this manual. If problem persists, contact your Superior distributor.

## Millivolt Appliance Checkout

The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) and the top 1/8" minimum (tip) of the quick drop out thermocouple should be engulfed in the pilot flame. The flame should project 1" (25 mm) beyond the hood at all three ports. See **Figure 9**.

To light the burner, refer to the lighting instructions on **Pages 13 & 14**.



**Figure 8**

Ref. Air shutter Patent:  
U.S. Pat. 5,553,603



## WIRING DIAGRAMS

### ⚠ CAUTION

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

### ⚠ CAUTION

**Ensure that wires are positioned away from hot surfaces and sharp edges.**

### ⚠ CAUTION

**Do not connect the optional wall switch for burner operation to a 120 Volt AC power supply.**

*Note:* The gas valve is set in place and pre-wired at the factory.

#### A. SIT Millivolt Wiring (See Figure 10)

1. Select any of the following optional controls: wall-mounted ON/OFF switch, wall thermostat or remote control. If an appliance-mounted ON/OFF control is selected mount it in the gas valve mounting bracket.
2. If wall-mounted ON/OFF control switch is selected it should be mounted in a convenient location on a wall near the fireplace.
3. Wire the control within the millivolt control circuit using the 15 feet of 2 conductor wire supplied with the unit. **Caution: Do NOT connect the optional wall switch to a 120V power supply.**
4. Alternatively, the appliance may be operated without the use of the controls indicated in **Step 1**, solely by manipulating the gas valve control knob. In order to use this method, twist the free ends of the two conductor wire (which would otherwise go to an Optional Control Switch) together as shown in **Figure 10**.  
*Note:* Wire is located inside the control compartment.

*Note:* The supplied 15 feet of 2 conductor wire has one end of each conductor connected to the gas valve circuit and the other end of each conductor placed loose inside the control compartment.

#### OPTIONAL FORCED AIR BLOWER (FBK-100) (See Figure 11) -

An optional ON/OFF (FRS) control switch is also available (installs on bracket below valve). An electrical outlet box is factory installed for the connection of the electrical power supply to the blower.

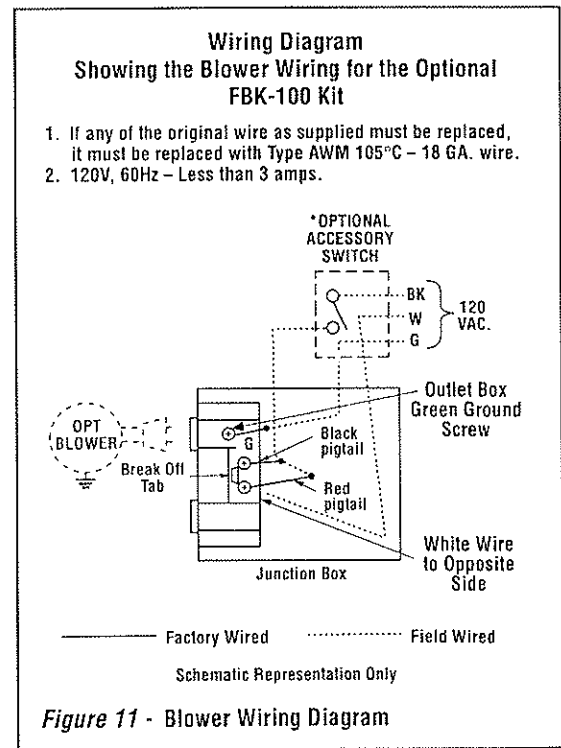
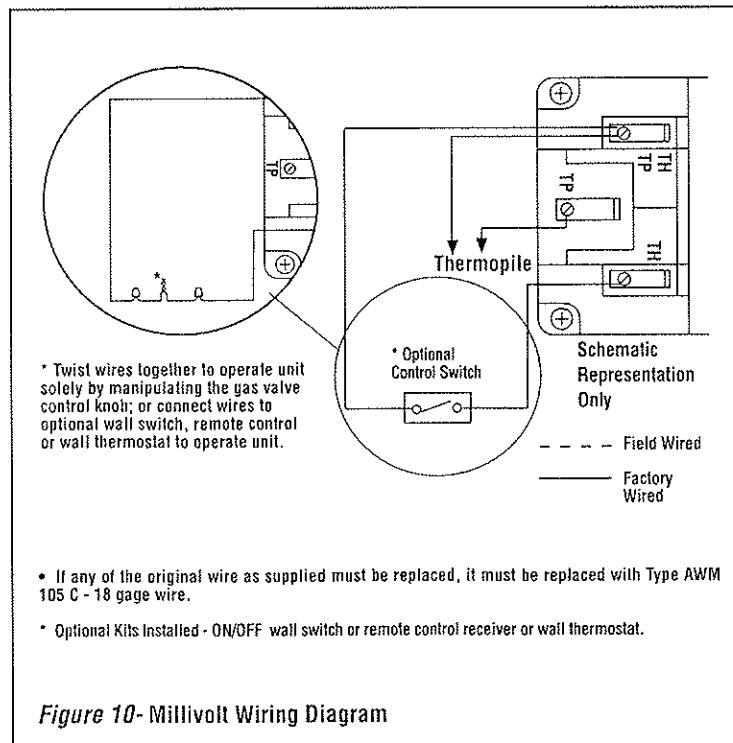
1. Route a 3-wire, 120Vac 60Hz 1ph power line to the lower right rear corner of the appliance.
2. Connect the black supply wire to the top outlet's black pigtail lead and to the switch's black lead. Connect the white supply wire to the neutral terminal of the outlet box.

See **Figure 11**. It is not necessary to remove the outlet box.

3. Connect the ground supply wire to the outlet box green ground screw as shown.
4. Plug the blower cord into the bottom receptacle of the outlet box.

### ⚠ CAUTION

**Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See Figure 11. Failure to do so will result in a potential safety hazard. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70-latest edition. (In Canada, the current CSA C22-1 Canadian Electrical Code).**



## WARRANTY

- This fireplace is covered by a limited warranty detailed separately from this document.
- Retain this manual. File it with your other documents for future reference.

## PRODUCT REFERENCE INFORMATION

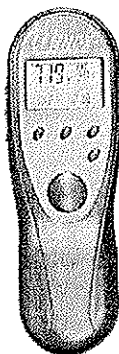
If you encounter any problems or have any questions concerning the installation or application of this system, please contact your distributor or installer. For the number of your nearest Superior dealer, please call 1-800-9-LENNOX.

LHP  
1110 West Taft Avenue  
Orange, CA 92865

PRODUCT REFERENCE INFORMATION			
Cat. No.	Model	Ship Wt.	Ship. Volume
H4633	SDVST-N	282 lbs	52W x 27D x 44 1/2H (36.2 cu.ft.)
H4634	SDVPF-N	270 lbs	52W x 27D x 44 1/2H (36.2 cu.ft.)

Your Fireplace's Model Number \_\_\_\_\_  
 Your Fireplace's Serial Number \_\_\_\_\_  
 The Date On Which Your Fireplace Was Installed \_\_\_\_\_  
 Your Dealer's Name \_\_\_\_\_

## ACCESSORY COMPONENTS



Remote Control Kit, Deluxe		
Cat. No.	Model No.	Description
H0251	RCL-STAT	Remote Control System (Deluxe)

(ref. Form # 750,129M)

## REPLACEMENT PARTS

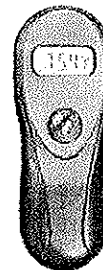
A complete parts list is found at the end of this manual. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your Superior distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

1. The model number of the appliance.
2. The serial number of the appliance.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the appliance.

## ACCESSORY COMPONENTS



Remote Control Kit, Standard		
Cat. No.	Model No.	Description
H0249	RCL	Remote Control System (Standard)

(ref. Form # 750,127M)

### Standard Remote Control System

The Model RCL (Standard) Remote Control System, features a simplistic OFF/ON control function for the fireplace. This model includes a hand-held transmitter, a remote receiver with wall-mount cover plate and all hardware required to install the unit. The remote receiver can be wall or hearth mounted.

The transmitter has ON and OFF functions that are activated by pressing either button on the face of the transmitter. When a button on the transmitter is pressed, a signal light illuminates briefly to verify that a signal has been sent.

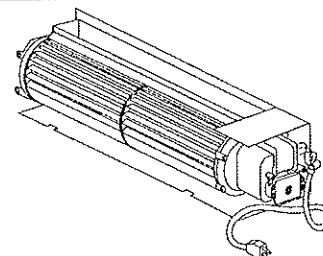
The Model RCL is designed to operate with all millivolt ignition systems, as well as electronic ignition systems. It may be installed with use for either natural gas or propane gas appliances. The RCL offers ease of installation and allows you to execute on-off commands to the fireplace effortlessly with one simple motion.

The Model RCL comes complete with detailed operating instructions.

### Deluxe Remote Control System

The Model RCL-T (Deluxe) Remote Control System has all of the features of the standard system along with an added easy to read LCD screen which presents access to many enhancements, including; battery power level indicator, timer, mode of operation, thermostatic display including room temperature in either metric or English units, flame indicator and clock. Fully programmable, the Model RCL-T allows for virtual command over nearly all operational and temperature variables, using the hand held remote control transmitter.

The Model RCL-T (Deluxe) remote control system is installed in the same manner as the standard system, may be operated with electronic and millivolt systems with either natural gas or propane gas. The RCL-T comes complete with detailed operating instructions.



Forced Air Blower Kits		
Cat. No.	Model No.	Description
80L84	FBK-100	Blower, Standard (single speed)
94L89	FBK-100-36	Blower, Standard, 36 Pack

(ref. Form # 750,028M)

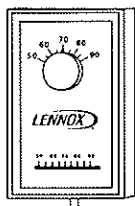
### Forced Air Kit

The FBK-100 blower provides constant velocity forced air circulation.

## ACCESSORY COMPONENTS

### Wall Thermostat

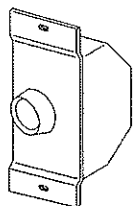
The wall thermostat kit provides temperature control for optimum comfort.



Wall Thermostat, Millivolt		
Cat. No.	Model No.	Description
89L36	WTK	Wall Thermostat Kit, White

### Variable Speed Wall Switch

Provides variable speed control for the standard blower kit installed.

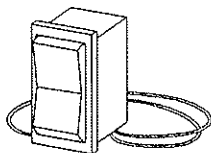


Variable Speed Wall Switch		
Cat. No.	Model No.	Description
045571H	VSWS	Variable Speed Wall Switch

### Unit-Mountable

#### Rocker Switch

This rocker switch kit can be installed directly in the gas valve mounting bracket (millivolt gas valve equipped fireplaces) to provide On/Off operation in lieu of a wall switch.

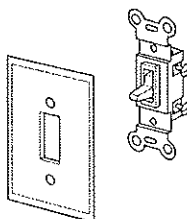


Rocker Switch Kit		
Cat. No.	Model No.	Description
80L41	FRS	Rocker Switch Kit

(ref. Form # 750.037M)

### ON/OFF Wall Switch Kit

The ON/OFF wall switch kit may be used to control the operation of the fireplace burner. Install the ON/OFF wall switch in a convenient location near the fireplace.

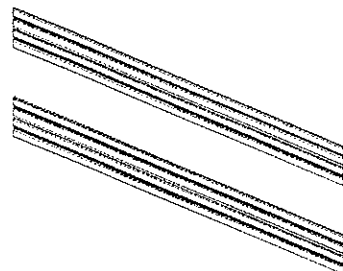


White Wall Switch Kit		
Cat. No.	Model No.	Description
85L87	FWSK	ON/OFF Wall Switch Kit

* Assembled 8-Piece Louver Kits				
Polished Brass		Brushed Stainless		Where Used
Cat. #	Model	Cat. #	Model	
H1530	LKE-600B	H1531	LKE-600BS	24"
*H1526	LK-600B	*H1527	LK-600BS	40"

(ref. Form # 750.166M)

\* Superior Nameplate Logo, 56L93, is not included.



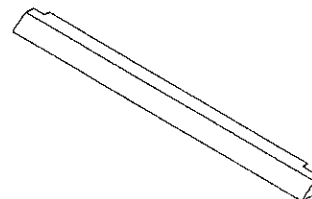
### Polished Brass & Brushed Stainless Louvers Kits

These kits include a top 4-louver assembly and a bottom 4-louver assembly. They provide a touch of elegance. These kits can be retrofitted to previously installed appliances.

Eyebrow Hood Kits				
Polished Brass		Brushed Stainless		Where Used
Cat. #	Model	Cat. #	Model	
98K28	EB24PB	88L47	EB24BS	24"
96K68	EB40PB	88L50	EB40BS	40"

\* These hood kits replace the standard hood that comes with these fireplaces.

(ref. Form #504.142M)



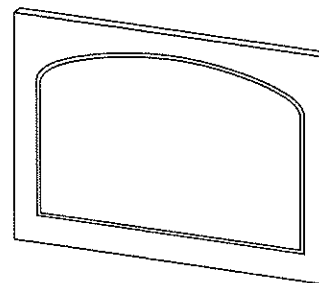
### Polished Brass & Brushed Stainless Hood Kits

Attractive hoods are available in two styles. These hoods are designed to be fitted to the glass viewing sides of the appliance. In addition to providing an aesthetically pleasing appearance to your appliance installation, the hood reduces heat effects to decorative mantles and finish materials located above the fireplace opening. The hood kit replaces the standard hood that comes with these appliances and snaps into place. These kits can be retrofitted to previously installed appliances.

Arch Door Kit - Polished Brass		
Cat. No.	Model	Where Used
80L95	ADKE-60B	24"
80L93	ADK-6/60B	40"

Arch Door Kit - Brushed Stainless Steel		
Cat. No.	Model	Where Used
81L05	ADKE-60P	24"
81L03	ADK-6/60P	40"

(ref. Form # 750.021M)

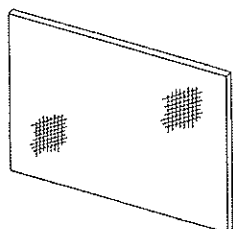


### Arch Door Kits

The arch door kits are easy to install and do not require hardware to attach them to the standard door frame. The decorative arch kits can not be used in conjunction with the screen panel kit.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## ACCESSORY COMPONENTS

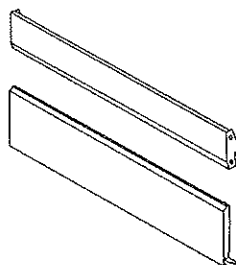


### Screen Panel Kit

This easy to install optional screen panel installs over the standard glass enclosure panel to prevent inadvertent direct surface contact (touching) of the hot glass surface. These screen panels cannot be used in conjunction with the arch door kits or door frame kits.

Screen Panel Kits		
Cat. No.	Model No.	Models Where Used
26M49	HG40M	40 inch Wide Glass Door
98K74	HG24	24 Inch Wide Glass Door

(ref. Form # 750,101M)



### Radiant Panel Kits

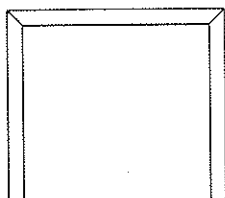
Clean faced radiant panel kits are available to convert the standard louvered fireplaces to radiant models which are more suited for finishing around the firebox opening with non-combustible materials, such as tile.

Clean Face Charcoal Radiant Panel Kits		
Cat. No.	Model No.	Description
80L79	CFPKE60	Radiant Panel Kit, End Panel
80L77	CFPK-6/60	Radiant Panel Kit, Front Panel

(ref. Form # 504,223M)

### Polished Brass Trim Kit

This kit contains brass trim pieces used to finish the gaps between the wall board and the fireplace, providing the appliance a brass perimeter highlight. This kit contains the trim pieces and these instructions.



3 Piece Trim Kit		
Cat. No.	Model No.	Description
96K22	TK40PB3	40" Polished Brass
H1816	TK40BS3	40" Brushed Stainless

(ref. Form # 750,147M)



### Bag of Glowing Embers Bag of Volcanic Stone

Replacement ember materials or volcanic stone are available for use with these appliances. Order kits as part of the periodic maintenance of the appliance.

Decorative Firebox Accessories		
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers (1 oz. rockwool)
80L42	FDVS	Bag of Decorative Volcanic Stone

(FDVS ref. Form #750,010M)



### Touch-Up Paint Kit

Repair of minor scratches and discoloration of the appliance charcoal painted surfaces may be accomplished with the touch-up paint kit.

Touch-Up Paint Kits (all models)		
Cat. No.	Model No.	Description
H4354	TPK-C	Touch-Up Paint (Charcoal)
98K67	TPK-T	Touch-Up Paint (Tan)

(TPK-C ref. Form # 504,216M)

## LIGHTING INSTRUCTIONS – MILLIVOLT GAS VALVE

### 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 lit with a piezo igniter. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE OPERATING** smell all around the appliance area for gas. Ensure 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

- Extinguish any open flame.
- Open windows.
- Do not light any appliance.
- Do not touch any electrical switches.

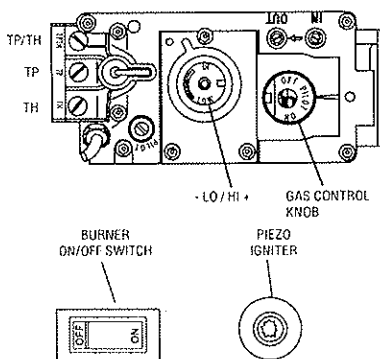
- Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone.
  - If your gas supplier cannot be reached, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or an explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above on this page.
2. Access the lower control compartment.
3. Turn ON/OFF switch to "OFF" (and remote wall switch, if applicable).
4. Verify main line shut-off valve is open.
5. Push in gas control knob slightly and turn clockwise to "OFF."



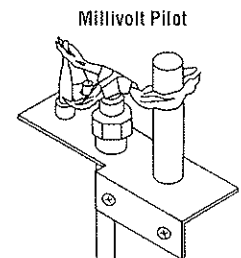
SIT Millivolt Gas Valve



6. Wait five (5) minutes to clear out any gas. If you then smell gas, **STOP!** Follow "B" in the safety information above on this page. If you do not smell gas, go to the next step.
7. Push in gas control knob slightly and turn counterclockwise to "PILOT."
8. Push in control knob all the way and hold in. Immediately light the pilot by triggering the spark igniter (pushing the button) until pilot lights. Continue to hold the control knob in for about 1 1/2 minutes after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.

- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If pilot will not stay lit after several tries, turn the control knob to "OFF" and call your service technician or gas supplier.

9. Turn gas control knob counterclockwise to "ON."
10. Close lower control compartment.



*Note: Knob cannot be turned from "PILOT" to "OFF" unless the knob is pushed in slightly. Do not force.*

### TO TURN OFF GAS TO APPLIANCE

1. Turn remote wall switch "OFF." The pilot will remain lit for normal service.
2. For complete shutdown, turn remote wall switch to "OFF."
3. Access the lower control compartment.
4. Depress gas control knob slightly and turn clockwise to "OFF." Do not force.
5. Close lower control compartment.

## INSTRUCTIONS D'ALLUMAGE – VANNE GAZ MILLIVOLT

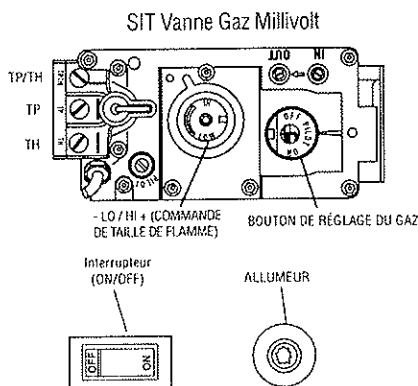
**POUR VOTRE SÉCURITÉ, LISEZ CES INSTRUCTIONS AVANT L'ALLUMAGE**

**AVERTISSEMENT : SI VOUS NE SUIVEZ PAS CES INSTRUCTIONS À LA LETTRE, IL POURRAIT S'EN SUIVRE UN INCENDIE OU UNE EXPLOSION CAUSANT DES DOMMAGES MATÉRIELS, DES BLESSURES CORPORELLES OU MÊME DES PERTES DE VIE.**

- A. Cet appareil est muni d'une veilleuse qui doit être allumée avec un allumeur piézo-électrique. Lorsque vous allumez la veilleuse, suivre exactement ces instructions.
- B. **AVANT L'ALLUMAGE:** Ensurez-vous que vous ne détectez aucune odeur de gaz autour de l'appareil ainsi que près du sol; certains gaz, étant plus lourds que l'air, descendent au niveau du sol.  
**VOICI CE QUE VOUS DEVEZ FAIRE SI VOUS DÉCELEZ UNE ODEUR DE GAZ:**
  - Éteignez toute flamme visible.
  - Ouvrez les fenêtres.
  - N'allumez aucun appareil.
  - Ne touchez à aucun commutateur électrique.
  - Ne vous servez d'aucun téléphone dans votre édifice.
- Appelez immédiatement votre compagnie de gaz en utilisant le téléphone du voisin.
- S'il vous est impossible de contacter votre compagnie de gaz, appelez le service des incendies.
- C. N'utilisez que votre main pour manipuler le bouton de réglage du gaz. N'utilisez jamais d'outils. Si le bouton refuse de tourner ou de bouger, n'essayez pas de le réparer. Communiquez immédiatement avec un technicien de service qualifié. Toute tentative pour le forcer ou le réparer, risquerait de provoquer un incendie ou une explosion.
- D. Ne vous servez pas de cet appareil si l'un de ses éléments a été immergé dans l'eau. Appelez immédiatement un technicien compétent pour faire inspecter l'appareil et remplacer toute pièce du système de réglage ou commande du gaz qui a été sous l'eau.

### INSTRUCTIONS D'ALLUMAGE

1. **ARRÊTEZ!** Lisez les consignes de sécurité au verso de cette plaque.
2. Ouvrez le compartiment de contrôle du bas.
3. Tournez l'interrupteur mural à la position d'arrêt "OFF".
4. Ensurez-vous que la soupape d'arrêt de la canalisation principale est ouverte.
5. Enfoncez légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à la position d'arrêt "OFF".



*Remarque: Il est impossible de tourner le bouton de "PILOT" à "OFF" à moins qu'il ne soit légèrement enfoncé. Ne le forcez pas.*

6. Attendez cinq (5) minutes pour l'évacuation du gaz. Si vous décelez une odeur de gaz, **ARRÊTEZ!** Retournez au point "B" des consignes de sécurité au verso de cette plaque. Si vous ne remarquez aucune odeur de gaz, passez à l'étape suivante.
7. Enfoncez légèrement le bouton de réglage du gaz et tournez-le en sens inverse des aiguilles d'une montre jusqu'à la position de veilleuse "PILOT".

8. Enfoncez le bouton de réglage jusqu'au fond et gardez-le enfoncé. Allumez immédiatement la veilleuse en déclenchant l'allume-gaz à étincelle (en poussant le bouton) jusqu'à ce que la veilleuse s'enflamme. Continuez de tenir le bouton de réglage enfoncé pendant environ 90 secondes après l'allumage de la veilleuse. Relâchez le bouton et il sortira subitement. La veilleuse devrait rester allumée. Si elle s'éteint, répétez les étapes 5 à 8 inclusive-ment.

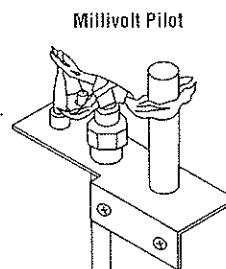
- Si le bouton ne sort pas automatiquement après avoir été relâché, arrêtez immédiatement et téléphonez à votre technicien de service ou à votre fournisseur de gaz.
- Si la veilleuse refuse de rester allumée après plusieurs tentatives, tournez le bouton de réglage jusqu'à sa position d'arrêt "OFF" et téléphonez à votre technicien de service ou à votre fournisseur de gaz.

9. Tournez le bouton de réglage du gaz en sens inverse des aiguilles d'une montre jusqu'à sa position de marche "ON".

10. Fermez le compartiment de contrôle du bas.

11. Au besoin, rebrancher l'appareil au courant électrique et remettre l'interrupteur du brûleur principal à la position "ON" ou régler le thermostat à la température désirée.

12. Si l'appareil ne fonctionne pas, suivre les instructions intitulées "Pour fermer le gaz qui alimente l'appareil" et appeler un technicien ou le fournisseur de gaz.



### POUR FERMER LE GAZ QUI ALIMENTE L'APPAREIL

1. Tournez l'interrupteur mural à la position d'arrêt "OFF". La veilleuse restera allumée jusqu'au retour du service normal.
2. Pour une fermeture complète, tournez l'interrupteur mural à la position d'arrêt "OFF".
3. Ouvrez le compartiment de contrôle du bas.
4. Enfoncez légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à la position d'arrêt "OFF". Ne forcez pas le bouton.
5. Fermez le compartiment de contrôle du bas.

## TROUBLESHOOTING

*Note: Before troubleshooting the gas control system, Ensure external gas shut off valve, located at gas supply inlet, (and Remote Control, Wall Thermostat or Wall Switch Kit, if applicable), is in the "ON" position.*

*Important: Valve system troubleshooting should only be accomplished by a qualified service technician.*

### TROUBLESHOOTING GUIDE - MILLIVOLT GAS CONTROL SYSTEM

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark igniter will not light pilot after repeated triggering of igniter button.  <b>WARNING: if the pilot will not light after 1 minute of attempting, wait for at least 5 minutes for gas to clear before attempting again.</b>	A. Defective igniter (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace igniter.
	B. Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light pilot. If pilot lights, turn off pilot and trigger the igniter button again. If pilot lights, an improper gas mixture caused the bad lighting and a longer purge period is recommended. If pilot will not light – check gap at electrode and pilot – should be 1/8" to have a strong spark. If gap measures 1/8", replace pilot (see <i>Figure 9 on Page 8</i> ).
	C. Gas supply pressure errant.	Check inlet gas pressure. It should be within the limits as marked on the rating plate.
	D. Pilot orifice plugged.	Clean or replace pilot orifice.
2. Pilot will not stay lit after carefully following the lighting instructions.	A. Defective pilot generator (thermocouple).	Check pilot flame, it must impinge on thermocouple (see <i>Figure 9 on Page 8</i> ). Clean and/or adjust pilot for maximum flame impingement on thermocouple. Ensure that the connection between the valve and thermocouple are tight and secure.
3. Pilot burning, no gas to burner, Valve knob "ON," (and *optional remote switch, if applicable) is "ON." Read important note below.  <b>* Optional Remote Switch Kits - wall switch, remote control or wall thermostat.</b>	A. *Optional remote switch or wires defective.	Check *remote switch and wires for proper connections. Jumper wire across terminals at switch, if burner comes on, replace defective switch. If okay, jumper wires across switch wires at valve, if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivolts.	Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with *optional remote switch "OFF." Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice.	Check burner orifice for blockage and remove.
4. Frequent pilot/burner outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot/valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple (see <i>Figure 9 on Page 8</i> ).



## MAINTENANCE SCHEDULE

Annually (Before the onset of the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Inspecting/Cleaning Burner, Logs and Controls	Qualified Service Technician	Inspect valve and ensure it is properly operating. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Check Flame Patterns and Flame Height	Qualified Service Technician	Refer to <b>Figure 5 on Page 7</b> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs. Ensure flames are steady (not lifting or floating).
Inspecting/Cleaning Pilot and Burner	Qualified Service Technician	Refer to <b>Figure 9 on Page 8</b> . Remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzles, igniter/flame rod and hood. Ensure the pilot flame engulfs the flame sensor as shown.
Checking Vent System	Qualified Service Technician	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation or deterioration of the vent components. Note: Excessive condensation can cause corrosion of caps, pipe & fittings (excessive condensation can be caused by long lateral runs, too many elbows and/or exterior portions of the system being exposed to cold weather). Also inspect wall straps or plumbers's tape to ensure it is secure and in place.
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replacing Rockwool Ember Materials	Homeowner/Qualified Service Technician	Remove old ember materials (rockwool) and vacuum the ember placement area. Place new embers as described on <b>Page 7</b> .

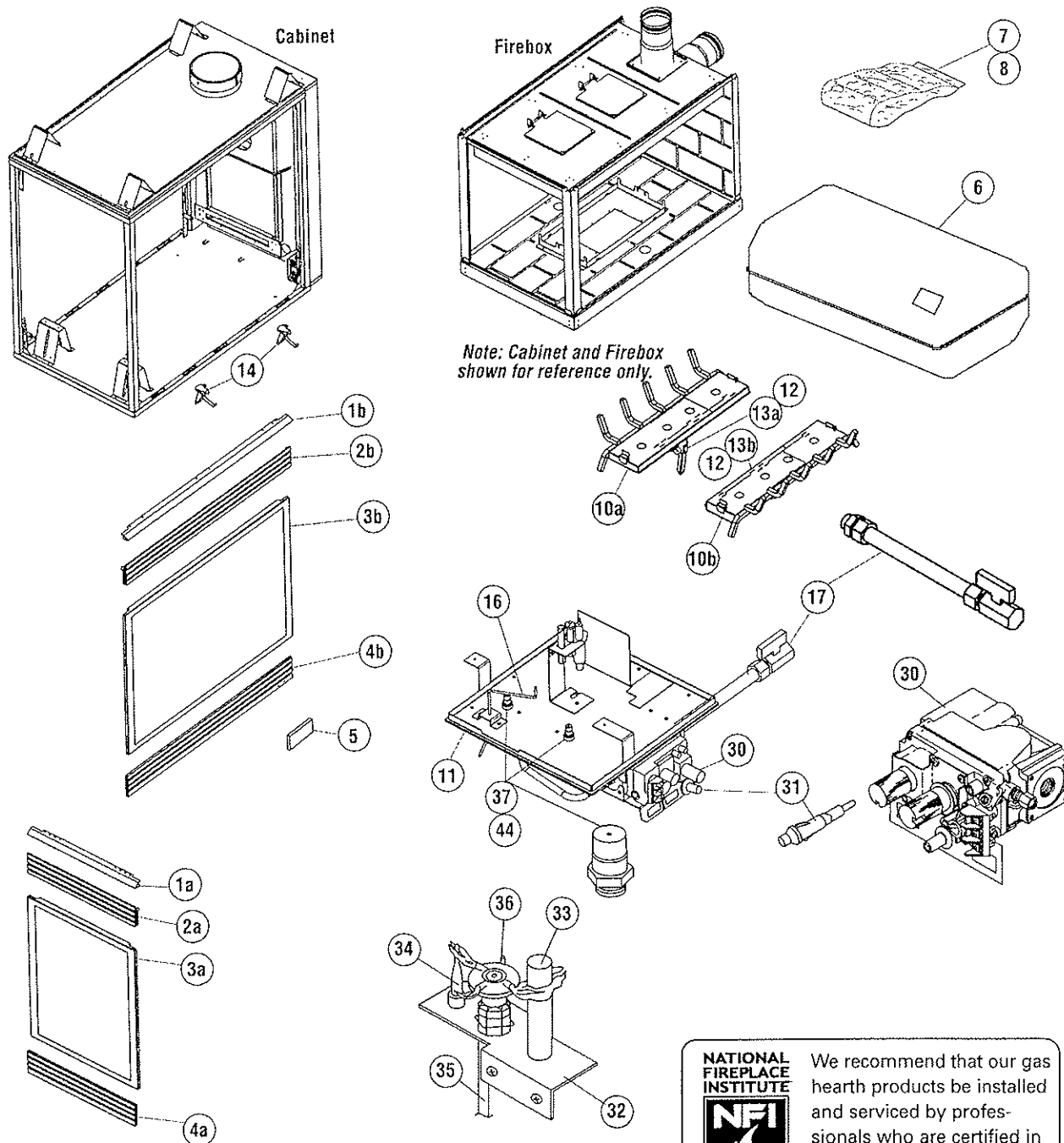
Periodically (After the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Cleaning Firebox Interior	Homeowner	Carefully remove logs, embers (rockwool) and volcanic stone. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, embers and volcanic stone as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to <b>Figure 5 on Page 7</b> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Checking Vent System	Homeowner	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation of the vent components.
Cleaning Front Glass Enclosure Panel	Homeowner	Clean as necessary following the directions provided in this manual. <b>DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.</b>


# REPLACEMENT PARTS LIST - MODELS SDV-ST/PF

Item	Part/Cat.No	Description	Qty.	Where Used
<b>MISC. COMPONENTS</b>				
1a	LB-91941EY	Hood, Charcoal - 24 in.	1	SDVPF
1b	H3896	Hood, Charcoal - 40 in.	2	All Models
2a	H3437	Upper Louver Panel, Charcoal - 24 in.	1	SDVPF
2b	H3377	Upper Louver Panel, Charcoal - 40 in.	2	All Models
3a	H3725	Glass Enclosure Assembly - 24 in.	1	SDVPF
3b	H3724	Glass Enclosure Assembly - 40 in.	2	All Models
4a	H3438	Lower Louver Panel, Charcoal - 24 in.	1	SDVPF
4b	H3380	* Lower Louver Panel, Charcoal - 40 in.	2	All Models
5	56L93	Nameplate Logo (Brand)	2	All Models
6	69L62	Log Set	1	All Models
7	88L53	Bag of Glowing Gas Embers	1	All Models
8	80L42	Bag of Decorative Volcanic Stone	2	All Models
10a	LB-95452E	Main Burner Set, Rear	1	All Models
10b	LB-95452F	Main Burner Set, Front	1	All Models
11	19L51	Gasket, Burner Tray Mounting	1	All Models
12	43K85	Gasket, Venturi Tube Mounting (per burner)	1	All Models
13a	74L92	Venturi Tube / Air Shutter, Rear	1	All Models
13b	60L40	Venturi Tube / Air Shutter, Front	1	All Models
14	69L21	Latch, Glass Enclosure Panel	4(ST) & 6 (PF)	All Models
16	LB-95561	Burner Adjustment Rod	1	All Models
17	93L32	Flex Gas Line Connector, FGCC	1	All Models
* Superior Nameplate Logo, 56L9301, is sold separately.				
<b>(MV) MILLIVOLT - GAS COMPONENTS</b>				
30	43K07	Gas Valve - SIT, Natural Gas	1	SDVST-N
30	88J53	Gas Valve - SIT, Propane	1	SDVST-P
31	H3700	Piezo Igniter (igniter wire, 56L21, not included)	1	SDVST-N & SDVST-P
	52L21	Igniter Wire, Piezo	1	All Models
32	69L17	Pilot Assembly, Natural Gas	1	SDVST-N
32	69L18	Pilot Assembly, Propane	1	SDVST-P
33	60J79	Pilot Generator	1	SDVST-N & SDVST-P
34	74L57	Thermocouple	1	SDVST-N & SDVST-P
35	74L56	Pilot Tube	1	SDVST-N & SDVST-P
36	74L58	Electrode And Cable	1	SDVST-N & SDVST-P
37	60J80	Orifice, Burner, Natural Gas, #44 (.086")	2	All NG Models
37	19L52	Orifice, Propane, #55 (.052")	2	All LP Models
38	85L65	Fuel Conversion Kit - Natural Gas <i>to Propane Gas</i> FGCK-DMOMNP	1	All NG Models
38	85L72	Fuel Conversion Kit - Propane Gas <i>to Natural Gas</i> FGCK-DMOMP	1	All LP Models

# REPLACEMENT PARTS DIAGRAMS - MODELS SDV-ST/PF



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We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

## NOTES

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Lennox reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.