

### **DVF32TMHST** series SEE-THRU DIRECT VENT GAS FIREPLACE

# **INSTALLATION INSTRUCTIONS**

#### 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 accessory items when needed. Keep it with your other important papers.

This fireplace may be installed as an OEM installation in a manufactured (mobile) home and must be installed in accordance with the manufacturers instructions and the Manufactured Home Construction and Safety Standard, *Title 24 CFR*, Part 3280 in the United States or the Mobile Home Standard, CAN/CSA Z240 MH Series, in Canada. This fireplace is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the fireplace.



▲ WARNING: This Direct Vent gas fireplace is intended for use with natural or propane gas only (depending on the type of gas your particular model is approved for), do not attempt to burn any solid fuels in this fireplace.

This fireplace is manufactured for Stylecrest Inc. under the Coleman brand name by DESA International Inc.

DESA INTERNATIONAL 2701 INDUSTRIAL DRIVE P.O. BOX 90024 BOWLING GREEN, KY 42101-9004 www.desatech.com

P/N 56088 REV E 10/02

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#### 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.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable materials on or near the appliance.
- NEVER leave children unattended when a fire is burning in the fireplace.

#### FOR YOUR SAFETY

#### 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.

▲ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury, property damage, or loss of life. Refer to this manual for assistance or additional information. Consult a qualified installer or local distributor.

# CHECK LOCAL CODES BEFORE INSTALLING THIS FIREPLACE.

#### **INTRODUCTION**

Models DVF32TMHST (with fan) and DVF32TMHST-1 (without fan) are heat circulating gravity direct vent gas fireplaces with sealed combustion chamber. These fireplaces use a millivolt gas control valve and millivolt ignition system. These fireplaces are convertible with the standard setup as natural gas. Conversion may be performed by the O.E.M. mobile home builder or by a qualified service person on-site. If you are uncertain as to what gas your unit is equipped for, please check the rating plate located in the interior of the appliance opening or consult your mobile home supplier or your local distributor of DESA/Coleman products.

# BEFORE BEGINNING THE INSTALLATION OF THE FIREPLACE, READ THESE INSTRUCTIONS THROUGH, COMPLETELY.

- This DESA/Coleman fireplace and its components are safe when installed according to this installation manual. Unless you use DESA/Coleman components, which has been designed and tested for the fireplace system, you may cause a fire hazard.
- The DESA/Coleman warranty will be voided by and DESA/Coleman disclaims any responsibility for the following actions:

a) Modification of the fireplace, components, doors, blower, fans, air inlet system and damper control.

b) Use of any component part not manufactured or approved by DESA/Coleman in combination with a DESA/Coleman fireplace system.

PROPER INSTALLATION is the most important step in ensuring safe and continuous operation of the fireplace. Consult the local building codes as to the particular requirements concerned with the installation of all factory built fireplaces. This fireplace, when installed, must be electrically grounded in accordance with local codes, or in absence of local codes, with the National Electrical Code ANSI/NFPA 70 and CSA C22.2 Canadian electrical code for Canada.

The installation must conform to local codes, or in the absence of local codes, with the national Fuel Gas Code ANSI Z223.1 – current installation code CAN/CGA-B149. This appliance complies with ANS Z21.88-2000/CSA 2.22-2000 VENTED GAS FIREPLACE HEATERS.

#### SELECTING LOCATION

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

- The location must allow for proper clearances (see figure 1).
- Consider a location were the fireplace would not be affected by drafts, air conditioning ducts, windows or doors.
- ✤ A location that avoids the cutting of joists or roof rafters will make installation easier.

In selecting a location, the following precautions must be observed:

- Do not connect this appliance to a chimney system used for solid fuel burning fireplace.
- Due to high temperatures, do not locate this appliance in high traffic areas or near furniture and draperies.
- Never obstruct the front opening of the appliance or the flow of combustion and ventilation air. Keep control compartments accessible.
- Do not locate close to where gasoline or other flammable liquids may be stored. The appliance area must be kept clear and free from these combustible materials.
- Do not use this appliance if any part has been under water. Immediately contact a local service technician to examine the fireplace and to replace any part of the control ignition system and other related components that has been submerged under water.

#### MINIMUM CLEARANCES TO COMBUSTIBLES

- Back, side and top spacers ----- 0"
- Floor ----- 0"
- Perpendicular wall ----- 2"
- Ceiling to opening ----- 36"
- Sidewall (at nailing flange) ----- 0"



▲ WARNING: Do not block required air space with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.

#### MANTEL CLEARANCES

Woodwork, such as wood trims, mantels and other combustible materials should be placed within the required clearance specified on figures 3 and 4.





#### VENT TERMINATION CLEARANCES

The final position of your fireplace depends on the location of the vent termination in relation to the clearances that must be observed as shown in figures 5 and 6.





The final position of your appliance depends on the location of the termination in relation to the clearances that must be observed.



A= 12" (305mm) clearance above grade, veranda, porch, deck or balcony. \*\*\*

B=9" (229mm) clearance in U.S. and 12" (305mm) clearance in Canada to window or door that may be closed.

C= 9" (229mm) clearance in U.S. and 12" (305mm) clearance in Canada to permanently closed window or door that maybe opened.

D= 18" (475mm) vertical clearance to ventilated and 12" (305mm) to unventilated soffit located above the terminal within a horizontal distance of 2 feet (610mm) from the centerline of the terminal.

E=12" (305mm) clearance below eaves.

F=9" (229mm) clearance to outside corner.

G=6" (15mm) clearance to inside corner.

H= not to be installed above a meter/regulator within 3 feet (914mm) horizontally from the centerline of the regulator. \*\*\* I= 36" (914mm) clearance in U.S. and 72" (1829mm) in Canada to service regulator vent outlet. \*\*\*

J= 12" (305mm) clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance.\*\*\*

K=36" (914mm) clearance to a mechanical air supply inlet.

L= 84" (2134mm) clearance above paved sidewalk or paved driveway located on public property. \*

M= 12" (305mm) clearance under veranda, veranda, porch, deck or balcony. \*\*

\* vent shall not terminate directly above a sidewalk or paved driveway that is located between two single-family dwellings and serves both dwellings.

\*\* only permitted if veranda, porch, deck or balcony is fully open on a minimum of two sides beneath the floor.

\*\*\* as specified in CGA-B149 installation codes (1991) for Canada or for U.S. installation follow the current National Gas Code, ANS Z223.1. Note: Local codes or regulations may require different clearances

#### VENT INSTALLATION INSTRUCTIONS

1. Install pipe to fireplace collar adapter located on back of unit at a 45 deg. Angle. Connect our starting pipe to a 45 deg. Starting section by sliding it over the collar adapter on the fireplace. Twist-lock for proper installation check to insure proper connection (see figure 7).



- 2. Once the elbow is properly fastened to the fireplace adapter, continue to install the remainder of the pipe for the desired installation.
- 3. Install every section of the pipe making sure that all joints are properly twist-locked.
- 4. After steps 1, 2 and 3 are completed, install the vent termination. Depending on location of termination, you may use a vertical or horizontal termination.
- 5. Depending on the wall thickness, allow one inch to protrude from internal wall as shown in figure 8.



- 6. An optional siding standoff may be installed between the vent cap exterior wall. Secure horizontal top to standoff and then secure the complete assembly to wall (see figure 8). The vent termination must be removable for service pipe inspection.
- 7. For vertical installation, use vertical termination.

The vent system serves as the "chimney" as well as the combustion air supply (air intake). The horizontal run must have a rise of  $\frac{1}{4}$ " (6 mm) for every 1 foot (305 mm) of horizontal run towards the termination. Never allow the vent to run downward. The maximum horizontal run depends on the vertical rise from fireplace adapter collar to the vent termination (see table below).

VERTICAL			HORIZONTAL	
ft	mm		ft	mm
0		to	1'	305
1	305	to	4	1219
2	610	to	8	2438
3	914	to	12	3658
4	1219	to	16	4877
5	1524	to	15	4572
6	1829	to	14	4267
7	2134	to	13	3962
8	2438	to	12	3658

▲ WARNING: Vent pipe air space clearances to combustibles are 1" on all sides except on the horizontal sections, which require 2" clearances from the top of the pipe. Where the termination cap penetrates a combustible wall, 1" air space clearance is required.

When installing length of pipe over 3 ft. (914 mm), support the pipe every 3 ft. (914 mm) using metal straps. Vertical to horizontal pipe must be kept at a one foot (305 mm) to 4 ft. (1219 mm) ratio with a maximum run of no more than 20 ft. If an offset is necessary in the attic to avoid obstruction, it is important to support the vent pipe every 3 ft. (914 mm), to avoid excessive stress on the elbows and possible separation see figure 9).



Refer to the following table for clearance between roof and termination.

ROOF PITCH	MINIMUM HEIGHT ABOVE ROOF		
	ft	mm	
FLAT - 7/12	1	305	
7/12 - 8/12	1.5	457	
8/12 - 9/12	2	610	
9/12 - 10/12	2.5	762	
10/12 - 11/12	4	1219	
12/12 - 14/12	5	1524	
14/12 - 16/12	6	1829	
16/12 - 18/12	7	2134	
18/12 - 20/12	7.5	2286	
20/12 - 21/12	8	2438	

#### FRAMING

Once the final location has been determined (observing clearances for vent termination), you may construct framing using dimensions shown in figures 10 through 12, depending on the particular installation.



If the appliance is to be installed directly on carpeting, tile (other than ceramic), or any combustible material other than wood flooring, the appliance must be installed upon a metal or wood panel extending the full width and depth of the fireplace.



# ELECTRICAL HOOK-UP AND REMOTE RECEIVER DIAGRAM

A wire way with two receptacles has been supplied for your convenience and is located on the lower right hand side of the appliance (see figure 13).



Due to high temperatures, make sure no wires are touching the bottom of the firebox.

The remote control receiver is connected to the convertible gas valve as shown in figure 14.



#### GAS SUPPLY TESTING

**NOTE**: This section is intended as a guide for qualified technicians installing gas to the appliance.

▲ WARNING: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be created.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of  $\frac{1}{2}$  psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than  $\frac{1}{2}$  psig (3.5 kPa).

The gas control valve is secured underneath the firebox. Two 1/8 NPT plugged tappings are provided on the gas control valve for pressure test gauge connections (see figure 15).

#### GAS LINE HOOK-UP

Gas line hook-up should be done by your gas supplier or licensed service technician.

NOTE: Before you proceed, make sure your gas supply is off.

A manual shut-off valve has been included in the fireplace's gas supply system. However, consider installing an extra shut-off 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 16.

In conformance with local codes, route a  $\frac{1}{2}$ " NPT gas line towards the appliance coming in from either the left or right side of the fireplace (see figure 17).

CAUTION: Do not kink flexible gas line.







Install a sediment trap between the incoming gas line and the gas control box (see figure 18). The sediment trap should extend down a minimum of 3 inches (76 mm) beyond the center of the pipe.



When routing gas line through conduit sleeve, make sure to repack insulation to fill gaps between gas line and conduit sleeve.

Compounds used on threaded joints of gas piping shall be resistant to the action of propane or natural gas. Compounds should be applied lightly to ensure excess sealant does not enter the gas line.

Complete your gas line installation by connecting the incoming gas line to flexible gas line. Secure tightly with a wrench but do not over-tighten.

**CAUTION:** 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 commercial leak detection solution to all connections and joints. Bubbles forming show a leak. Correct all leaks at once. DO NOT USE AN OPEN FLAME FOR LEAK TESTING AND DO NOT OPERATE ANY APPLIANCE IF A LEAK IS DETECTED. LEAK TESTING SHOULD BE DONE BY A QUALIFIED SERVICE PERSON.

#### PILOT ADJUSTMENT

The pilot or electrode assembly is factory preset for the proper flame height. Alterations to these settings may have occurred during shipping and handling. If this is the case, some minor readjustments may be necessary and should be done by a qualified service technician. The proper settings for the thermopile height should be at a distance of  $3/8^{\circ}$  (10mm) to  $\frac{1}{2}^{\circ}$  (13mm) from the pilot flame as shown in figure 19.



GAS RATINGS			
TYPE OF GAS	NATURAL	PROPANE	
MAXIMUM INPUT RATING	35,000 Btu/Hr	31,500 Btu/Hr	
ORIFICE SIZE	#34	#51	
MANIFOLD PRESSURE	3.5 in wc	10.0 in. wc	
<b>**MINIMUM SUPPLY PRESSURE</b>	4.5 in wc	11.0 in. wc	
<b>**MAXIMUM SUPPLY PRESSURE</b>	10.5 in wc	13.0 in. wc	
<b>**</b> for the purpose of input adjustment			

#### **LOG SET INSTALLATION**

7. Figure 22 shows the top view of the burner and grate.

Before proceeding, make sure the gas control valve is in the "OFF" position. Logs have been packaged separately to prevent damage to glass or refractory.

1. Remove top and bottom louvers by simultaneously pulling both top end spring latches towards the center of the appliance until they are disengaged from locating holes. Repeat for bottom end spring latches and pull outward. Reverse procedure to install louvers back.

2. Remove the screen rod by sliding the screen rod to the front of the unit until the other end is free.

3. To open the glass door, open the pairs of latches located on the top and bottom of the firebox (refer to figure 20). Use caution when opening these latches.



4. Carefully open the door. The glass door is mounted to the firebox with 5 screws.

5. To remove the logs from the shrink-wrap, carefully cut the plastic around the perimeter of the log. Do not tear the logs from the package without first cutting the plastic.

6. Figure 21 shows the log set. Logs "A" have the knot at the end of the log. Logs "B" have the knot at the middle of the log. Twigs "C" have the shape of a "Y". Twigs "D" have the shape of bent twigs. Twig "E" is a straight twig, which is placed across the top of Logs "B".





8. Place logs "A" as shown in figures 23 and 24.





9. Place logs "B" as shown in Figures 25 and 26. Lift the propped up end of log "A" that is propped up and place log "B" under it. At the same time, the other side of log "B" is placed over the other log "A". Repeat procedure for the other log "B".





10. Take twigs "C" (shaped like a "Y") and place them as shown in Figures 27 and 28.

11. Take twigs "D" (bent twig) and place them as shown in Figures 27 and 28.



12. Place twig "E" across the top of logs "B" shown in Figures 25 and 26.



13. When finished installing the logs, close the glass doors securing the four (4) spring loaded latches.

14. Replace the louvers in reverse order with the grilles pointing in the down position.

▲ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for assistance. Consult a qualified installer for additional information.

#### GLASS DOOR CLEANING AND REPLACEMENT

When cleaning or replacement is necessary, refer to the following steps.

NOTE: Before proceeding make sure unit is completely cool.

#### **CLEANING GLASS DOOR**

- Remove the top and bottom louvers and the screen assembly. (see figure 29).
- Undo the four spring door latches (see figure 20).
- To install or replace items removed, simply reverse these procedures.

#### **REPLACING GLASS DOORS**

- If replacement of the entire assembly (frame and glass assembly) is required, carefully remove the six (6) screws located on the hinge at the left end of the glass door while holding the frame assembly to prevent it from falling and causing injury.
- Remove glass assembly retainer brackets by removing two screw nuts located at the top and bottom of the glass door, frame (see figure 30). Carefully lean the glass away from the frame and remove for replacement.
- Be sure that the gaskets and panels are squarely placed in the frame and that all brackets and screws are firmly secured.





▲ WARNING: The glass door must be securely in place before operating the fireplace. Do not operate the fireplace if glass is missing or broken.

#### BURNER FLAME ADJUSTMENT

The air shutter is located at the underside of the main burner (There are two (2) air shutters on the Propane gas versions). All have been factory preset to the proper air-to gas ratio which results in an even, clean burning flame across the burner (See Figure 31).

If readjustment is necessary, you can restore the proper air to gas ratio by loosening the air shutter screw and rotating the air shutter until the proper flame setting is achieved. (The air shutter's normal setting is "fully opened"). Do not forget to retighten the air shutter screws (refer to figure 32).





#### **BURNER REMOVAL**

BEFORE PROCEEDING, MAKE SURE THE ENTIRE UNIT IS COOL.

- 1. Remove the top and bottom louvers. Open the glass door.
- 2. Carefully remove the log set and grate.
- 3. Remove the screws that attach the burner.
- **4.** Slide the burner towards the front of the unit, lift, and remove from the firebox.
- **5.** To reinstall the burner, slide the burner towards the rear of the unit and secure burner with screws. MAKE CERTAIN THE ORIFICE IS INSIDE THE VENTURI TUBE'S AIR SHUTTER.
- 6. Replace the log set and grate, close door with latches, and attach louvers.

#### **DECORATIVE FACING**

Any non-combustible material may be used for facing (glass, tile, brick, etc.) as long as the proper clearances are observed (Refer to the section on Clearances). Louvered openings must not be obstructed, and upper and lower panels must remain removable for servicing. Use only heat-resistant, non-combustible mortar or adhesive when securing facing material.

NOTE: COMBUSTIBLE MATERIAL, SUCH AS WOOD, THAT HAS BEEN FIREPROOFED IS NOT CONSIDERED NON-COMBUSTIBLE.

### **OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS**

When lit for the first time, the appliance may emit a slight odor for about 16-24 hours. This is normal and is due to the "curing" of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process.

Keep compartments, logs, burners, and area surrounding the logs clean by vacuuming or brushing at least twice a year. Temporary removal of the log set may ease the cleaning of the burner and pilot assembly.

In cleaning, take care not to alter the pilot or burner location. BE SURE APPLIANCE IS COOL BEFORE EACH MAINTENANCE SESSION.

**IMPORTANT**: Turn off gas and wall switch before servicing appliance. Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

**CAUTION:** THE APPLIANCE AND LOGS CAN GET VERY HOT-HANDLE ONLY WHEN COOL!

Any household glass cleaner may be used to clean the glass panel. Do not use abrasive cleaners as this may damage the glass. Clean glass only when cool.

▲ WARNING: Do not operate appliance with panel(s) and glass removed, cracked, or broken. replacement of the panel(s) should be done by a licensed, qualified service person.

**CAUTION**: Make certain wires and gas lines are not touching the underside of the firebox.

**IF THE GLASS BREAKS,** be cautious of fragments on the floor. Keep children away from the area. Do not operate the unit. Use proper safety gloves to remove the broken glass door. Discard safely. A glass door kit can be ordered through your local distributor. Do not substitute other material for the glass.

▲ WARNING: Children and adults should be alerted to the hazards of high surface temperatures, and to stay away from the appliance to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

Have a qualified agency periodically inspect the vent system at the start of each heating season, for any obstruction, which may hinder its normal operation. Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.

▲ WARNING: Do not abuse, strike, or slam the glass doors.

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

# FOR FURTHER OPERATING GUIDELINES, CONTACT YOUR AUTHORIZED DEALER.

### ■ FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. When lighting the pilot, follow these instructions exactly.
- B. BEFORE turning "ON", smell around the appliance for gas. Be sure to smell next to the floor, for 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 electrical switch; do not use any phone in the building.
- \* Immediately call your gas supplier from a neighbor's phone. follow the supplier's instructions.

- \* If you cannot reach your supplier, call the firé department.
- C. Use only your hands to push in control knob. never use tools. If the knob will not push in or slide by hand, don't try to repair it. Call a qualified service technician. Forced 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 gas control which has been submersed.

#### LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above on this label before proceeding.
- 2. Set the "HI-LO" knob to the lowest setting.
- 3. Turn off all electrical power to the appliance.
- 4. Open control access panel.
- 5. Push in gas control knob slightly and turn clockwise to \_\_\_\_\_ "OFF".



#### POSITION INDICATOR

- NOTE: It is recommended that you maintain the gas control knob in the full "OFF" position during lengthy periods of seasonal non-usage.
- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.

7. The pilot is located by the main burner.



- 8. Turn knob on gas control counterclockwise 🖌 to "PILOT"
- 9. Push in the control knob all the way and hold in. Immediately light the pilot by pressing the red ignitor button until a flame appears. Continue to hold the control knob in for about (1) minute 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 9.
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 10. Turn gas control knob counterclockwise to "ON". Knob can be turned to "ON" only if the control knob is popped out. 11. Set "HI-LO" knob to desired setting.
- 12. Turn on all electric power to the appliance.

#### 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. Remove control access panel.
- 4. Push in gas control knob slightly and turn clockwise 🔨 to "OFF". Do not force.
- 5. Replace control access panel.

# **ACCESORY AND REPLACEMENT PARTS**



### WIRING DIAGRAM



#### **OBSERVED PROBLEM**

• Pilot will not stay lit after carefully following lighting instructions.

• Pilot lit but no flame on the burner.

POSSIBLE CAUSE

Remote or wires defective.

Thermopile/Thermocouple not

Plugged burner orifice.

sufficient millivoltage.

Thermocouple not generating

generating sufficient millivoltage.

• Defective pilot generator (thermocouple).

- **CORRECTIVE ACTION**
- Check pilot flame. It must impinge on thermocouple.
- Clean or adjust pilot for maximum flame impingement on thermocouple.
- Ensure that the connection between the valve and thermocouple are tight and secured.
- Check remote wires for proper connections. Jumper wire across terminals at remote control, if burner comes on, replace defective remote. If okay, jumper wire across remote control at valve, if burner comes on, wires are faulty or connections are bad.
- Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with remote control off. Replace thermopile if reading is below specified minimum.
- Check burner orifice for stoppage and remove.
- Check thermocouple with millivolt meter. Take reading at thermocouple terminals of gas valve. Should read 18 millivolts minimum with remote control off. Replace faulty thermocouple if reading is below specified minimum.

• Frequent pilot outage problem.

- Pilot flame maybe too low or blowing (high) causing the valve safety to drop out.
- Clean and/or adjust pilot flame for maximum flame impingement on thermocouple.

### **CONVERSION KIT – NATURAL GAS TO PROPANE** SHOULD BE DONE BY A QUALIFIED TECHNICIAN

Read these instructions completely before installing this conversion kit. Before proceeding, make sure the gas control valve is on the "OFF" position, all electrical power to the appliance is OFF, and the fireplace is cool to the touch. Conversion Kit model PC-DVF32TMHSTPN is required for this conversion. Please check the contents before beginning the conversion.

Parts included with this kit:

Part No.	Description	Quantity
110873-01	Instruction Sheet	1
108085-02	Pilot Orifice, LP (30)	1
23104	Main Burner Orifice, LP (#51)	1
14488	Gas Valve Regulator, LP	1

**Tools Required:** 

- Torx T20 Slotted Screw driver
- 11/16" Open End / Adjustable Wrench 5/16" Socket or Nut Driver
- 7/8" Open End / Adjustable Wrench
- Thread Sealant (Resistant to Propane/LP Gas)
- 5/32" Allen Wrench
- #2 Phillips Screwdriver
- High Temperature Silicone Sealant (GE RTV 106/Locktite RTV81585)

#### ACCESSING THE FIREPLACE

You may access the burner system from either side of the unit.

- 1. Remove the upper and lower lower panels by pulling the four spring latches towards the center while simultaneously pulling the louver assembly away from the unit. The latches are located at each end just below the uppermost and just above the lowermost louvers. See figure 33.
- 2. Remove the screen rod, if installed, by sliding the screen rod to the left or the right until one of the rod ends is free and completely remove the screen assembly from the fireplace.
- 3. Open the glass door by releasing the two pairs of latches located on the top and bottom of the firebox (see figure 33). You may need a screwdriver to extend the spring-loaded clasp over the catch on the door flanges. Use caution when opening these latches.



#### DISASSEMBLING THE HEARTH AND BURNER SYSTEM

- 1. Remove the grate with the logs left in place, by lifting the grate portion off of its stands and place the entire assembly outside of the unit for ease of reassembly. (Refer to figure 34 Disassembly of Hearth System)
- 2. Remove the two 5/16" hex type screws holding the burner in place and slide the burner forward off of the orifice mount while lifting up.
- 3. Remove the two side brick panels by lifting up the inner edge above the hearth pan and sliding the brick inward into the grate stand, then lifting out the outer edge over the flange of the facing. If necessary you can push the hearth pan over to one extreme side then re-center it to remove the remaining brick on the opposite side of firebox.
- 4. With the hearth pan centered lift the end flange of the pan off of the rear brick stand and raise it up and out of the firebox.



#### MAIN BURNER ORIFICE CONVERSION

Using a 7/8" open end or an adjustable back-up, wrench on the orifice mount remove the main burner orifice with a 11/16" open end wrench. (See figure 35).

Replace the main burner orifice with the one included with the kit and identified with the #51 stamped on the side. Apply a light amount of a Propane/LP resistant sealant to the male threads and retighten the orifice into its mount using a back-up wrench to maintain its centered position.

#### PILOT BURNER ORIFICE CONVERSION

- 1. Remove the pilot hood by pulling up until it disengages from the barrel. Do not remove the barrel clip (see figure 35).
- 2. Remove the pilot orifice from inside the barrel using a 5/32" allen wrench to unscrew the orifice.
- 3. Replace pilot orifice with LP orifice supplied with this kit. The number 30 is stamped on the sleeve for identification. Insert the small end of the new pilot orifice into the barrel and thread until tight with the allen wrench.
- 4. Line up the notch on pilot hood to the positioning tab on the barrel receiver and snap back into position.
- **IMPORTANT:** Be careful not to bend or kink the aluminum tubing during conversion. Make sure the pilot hood and orifice are properly mated and aligned after finishing this conversion.

#### **REINSTALLING THE MAIN BURNER**

Reinstall the hearth pan by sliding the end flange over the bottom edge of the refractory stand then center and slide the front edge down between the raised hearth support.

Reinsert the two side bricks in reverse order then center the view port in the hearth pan over the orifice mount.

Visually check the air shutter setting on the main burner. The air shutter should be fully opened for use with Propane/LP gas. If not fully opened, back off on the adjustment screw and turn the air shutter until the openings are fully exposed, then retighten the adjustment screw.

Insert the main burner venturi tube through the center cutout in the hearth pan and slide the air shutter mount over the orifice (see figure 37). Replace the two mounting screws

#### GAS CONTROL VALVE CONVERSION

Convert the gas control valve by swapping out the valve regulator portion of the gas valve.

Using a TORX T20 or a slotted screwdriver, remove and discard the three mounting screws, pressure regulator tower, and diaphragm/spring components (see figure 36).

The rubber gasket is part of the pressure regulator assembly, make sure it is properly positioned. Install the new pressure regulator assembly to the valve using the new mounting screws supplied with the kit. Tighten the screws securely (approximately 25in-lbs.) (see figure 38).

Install the identification label enclosed with the gas valve regulator to the valve body where it can easily be seen (see figure 38).







#### FINAL PREPARATION

- 1. Place the grate and log assembly back into position on the grate stand as shown in your appliance Installation Manual.
- 2. Close the glass door and tightly secure all four latches.
- 3. Replace the screen rod assembly and then the top and bottom louver assemblies with the louvers pointing down. The upper louver should have the brass strip on the bottom and the bottom louver should have the brass strip on top.

The conversion is now Complete.

Refer to the section on *Gas Supply Testing* and *Operating Guidelines* in your appliance Installation Manual

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

**WARNING**: Test all gas piping and connections for leaks after installing or servicing. Correct leaks at once.

**WARNING:** This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion, or production of carbon monoxide may result causing property damage, personal injury, or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.