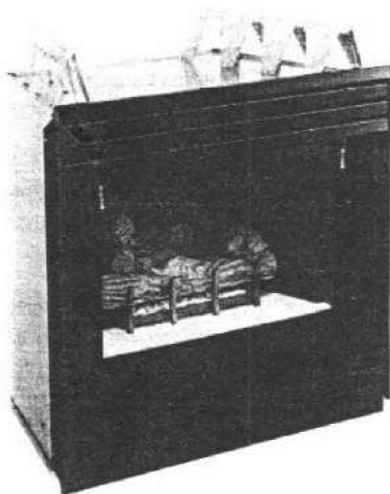


## ***Installation And Operating Instructions***

*For Superior's  
Discovery Series  
Sealed Combustion  
Decorative Gas  
Appliance*

*Natural Gas Models  
DS-36RN  
Propane Models  
DS-36RP*

*And Termination  
Components  
DSR-EXT12  
DSR-EXT6  
DSR-HTK  
ELB-45*



**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.**

### **FOR YOUR SAFETY**

**What to do if you smell gas:**

- Do not try to 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 the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

### **FOR YOUR SAFETY**

**Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.**

**WARNING: THE DS-36R SERIES FIREPLACES ARE VENTED DECORATIVE GAS APPLIANCES. DO NOT BURN WOOD OR OTHER MATERIAL IN THESE APPLIANCES.**

**Due to high temperatures, the appliance should be located out of traffic and away from furniture or drapes. Do not place clothing or other materials on or near the appliance.**

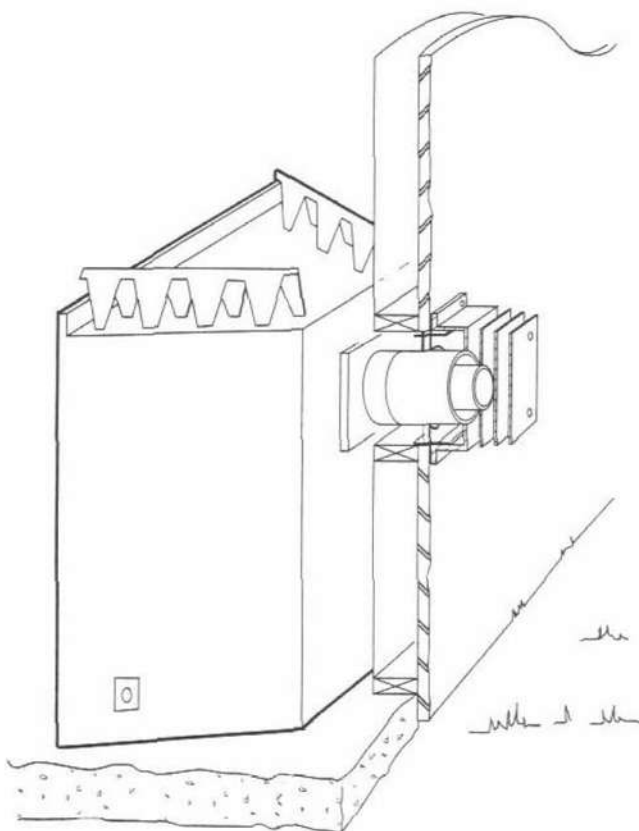
**PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.**



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## TYPICAL INSTALLATION



This installation manual will help you obtain a safe, efficient, dependable installation for your fireplace and vent system. Please read and understand these installation instructions before beginning your installation.

### INTRODUCTION

The DS-36R is a sealed combustion, air circulating, gas appliance for residential applications. The unit is designed such that combustion air (intake) is taken directly from outside the structure while combustion gases are discharged to the outside.

The appliance must be installed on an outside wall using a DSR-HTK Vent Termination Kit. Extension pipe and/or 45° elbow sections accommodate varying wall thickness and corner (diagonal) installations.

Operation is achieved through an automatic pilot valve with a millivolt operated relay and piezo ignition system. No external electrical power is required.

This appliance complies with National Safety Standards and is tested and listed by Warnock Hersey International Inc. to ANSI Z21.50b - 1990 as a vented decorative gas appliance. (In Canada, CAN/CGA-2.22-M89, IR #41-1991, IR #43-1992, and CAN/CGA-2.17-M91).

Installation must conform to local codes. In the absence of local codes, installation must comply with the current National Fuel Gas Code, ANSI Z223.1, 1992. (In Canada, the current CAN-1 B149 installation code.)

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

### 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 person. 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 the appliance be kept clean.

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

This appliance is designed to operate on natural or propane gas only. The use of other fuels or combination of fuels will degrade the performance of this system.

Input of appliance is 21,000 BTU/HR for both natural and propane gases.

A 1/8" NPT plugged tap is provided on the gas control valve adjacent to the outlet to the main burner for test gage connection.

Minimum inlet gas pressure is 4.5 inches water column for natural gas and 11 inches water column for propane for the purpose of input adjustment.

Maximum inlet gas supply pressure is 7.0 inches water column for natural gas and 13.0 inches water column for propane.

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 1/2 psig (3.5 kPa).

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 1/2 psig (3.5 kPa).

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 parts of the control system that have been under water.

This appliance must be vented through an outside wall and must not be connected to a chimney or flue serving a solid fuel burning appliance.

## LOCATION AND CLEARANCES

In selecting the location, the esthetic and functional uses of the appliance are primary concerns. However, the vent location and access to the fuel supply are also important. Consideration should be given to traffic ways, furniture, draperies, etc., due to elevated surface temperatures. The location should also be free of electrical or plumbing lines. Building codes limit vent location in specific areas. Generally, a vent may not be located above, or within 6' (1.8 m) of a gas regulator. Refer to Figure 6 for exterior vent location limitations. Check local codes for requirements.

Minimum clearances to combustibles are:

Appliance:	sides and back - 0"
	floor - 0"
	adjacent wall - 0"
	ceiling - 37-1/2" (95.3 cm)
Vent:	top - 3" (76 mm)
	sides - 1-3/4" (44 mm)
	bottom - 1" (25 mm)

The vent must have a minimum of 3" clearance to any overhead combustible projection of 2-1/2" or less. Maintain 12" clearance from projections exceeding the 2-1/2" (Reference Figure 2).

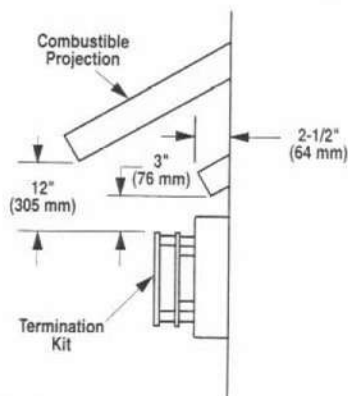


Figure 2

## ASSEMBLY STEPS

The typical sequence of installation follows, however, each installation is unique resulting in variations to those described.

1. Construct appliance framing.
2. Route gas supply line to appliance location.
3. Position appliance and install the vent termination.
4. Make connection to gas supply and install the log and burner assembly.
5. Install the operating control switch and bring in electrical service line for forced air circulating fan (optional equipment).
6. Install glass panel assembly.
7. Finish enclosure walls and trim.
8. Attach air louvers and/or optional trim pieces.

## INSTALLATION

The appliance is shipped with the controls and burner tray installed and pre-wired. Remove the shipping carton, exposing the front glass panel. Loosen and remove two (2) screws, with springs, at the upper left and right hand corners of the glass frame, tilt outward, then lift to remove the glass panel. Set the panel aside and protect from inadvertent damage. Retain screws, springs and washers for reassembly. Next, remove the carton(s) packed inside the appliance and also set these aside.

**Step 1.** Frame appliance enclosure as illustrated in Figures 3 through 5.

**Note:** The framed depth (21-3/8" from a framed wall) must always be measured from a finished surface. If a wall covering such as drywall is to be attached to the rear wall, then the 21-3/8" must be measured from the drywall surface. It is important that this dimension be exact in order for the vent terminal kit to be connected properly. Similarly, the 34-1/2" (49") framing dimension is important for corner vent connections.

The appliance should be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile, etc., a metal or wood barrier covering the entire bottom surface must be used.

If the appliance is to be elevated above floor level, a solid continuous platform must be constructed.

The header may rest on the top metal spacers, but must not be notched to fit around them.

On flatwall installations, two (2) studs (on 16" centers, as illustrated) should be provided at the rear structure to accommodate installation of the vent termination.

## FRAMING DIMENSIONS

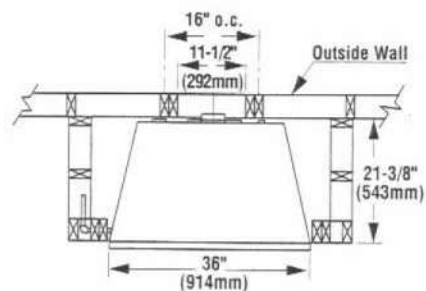


Figure 3

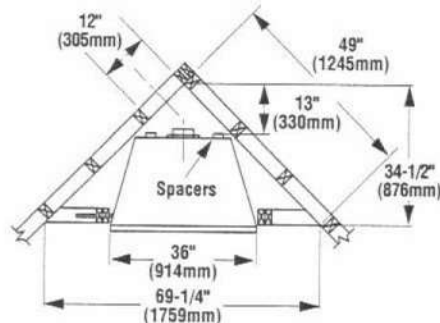


Figure 4

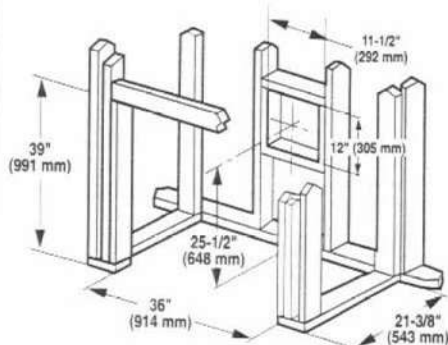
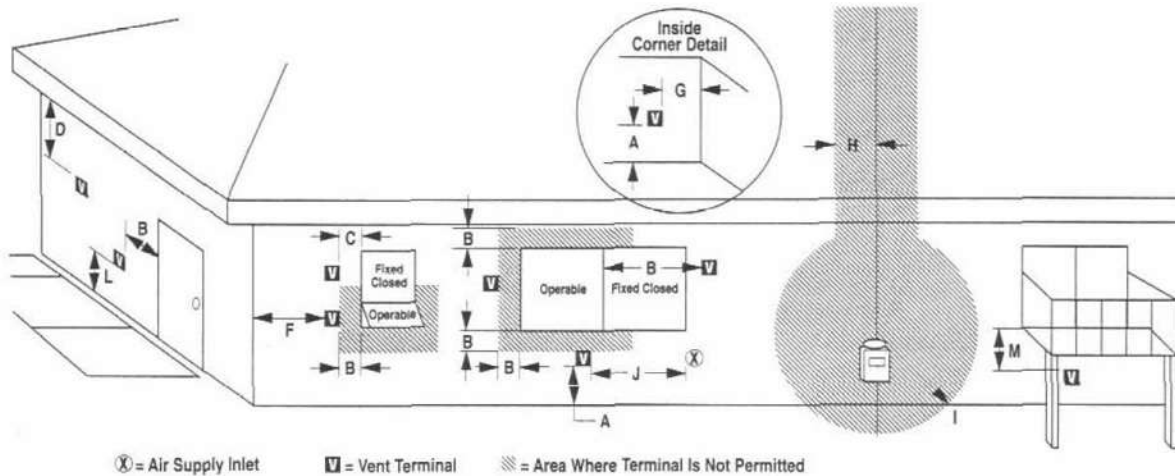


Figure 5

## EXTERIOR VENT CLEARANCE REQUIREMENTS



**A** = clearance above grade, veranda, porch, deck, or balcony  
12 inches (30 cm) minimum

**B** = clearance to window or door that may be opened  
U.S. - 9 inches (22.5 cm) minimum  
Canada - 12 inches (30 cm) minimum

**C** = clearance to permanently closed window - recommended to prevent condensation on window  
U.S. - 9 inches (22.5 cm) minimum  
Canada - 12 inches (30 cm) minimum

**D** = vertical clearance to soffit located above the terminal  
ventilated soffit 18 inches (46 cm) minimum  
unventilated soffit 12 inches (46 cm) minimum

**F** = clearance to outside corner  
12 inches (30 cm) minimum

**G** = clearance to inside corner  
U.S. - 6 inches (15.2 cm) minimum  
Canada - 2 feet (60 cm) minimum

**H** = not be installed above a meter/regulator assembly or within 3 feet (90 cm) horizontally from the center line of the regulator.

**I** = clearance to service regulator vent outlet  
U.S. - 3 feet (90 cm) minimum  
Canada - 6 feet (1.8 m) minimum

**J** = clearance to air supply inlet to building or the combustion air inlet to any other appliance.

non-mechanical inlet:  
US - 9 inches (22.5 cm) minimum  
Canada - 12 inches (30 cm) minimum  
mechanical air supply:  
6 feet (1.8 m) minimum

**L** = clearance above paved sidewalk or paved driveway located on public property  
7 feet (2.1 m) minimum

**Note:** A vent shall not terminate directly above a sidewalk or paved driveway which is located between two (2) single family dwellings and serves both dwellings.

**M** = clearance under veranda, porch, deck, or balcony where fully open on a minimum of two (2) sides beneath the floor  
12 inches (30 cm) minimum

**Note:** Check local codes or regulations for variations.

Figure 6

APPLIANCE DIMENSIONS

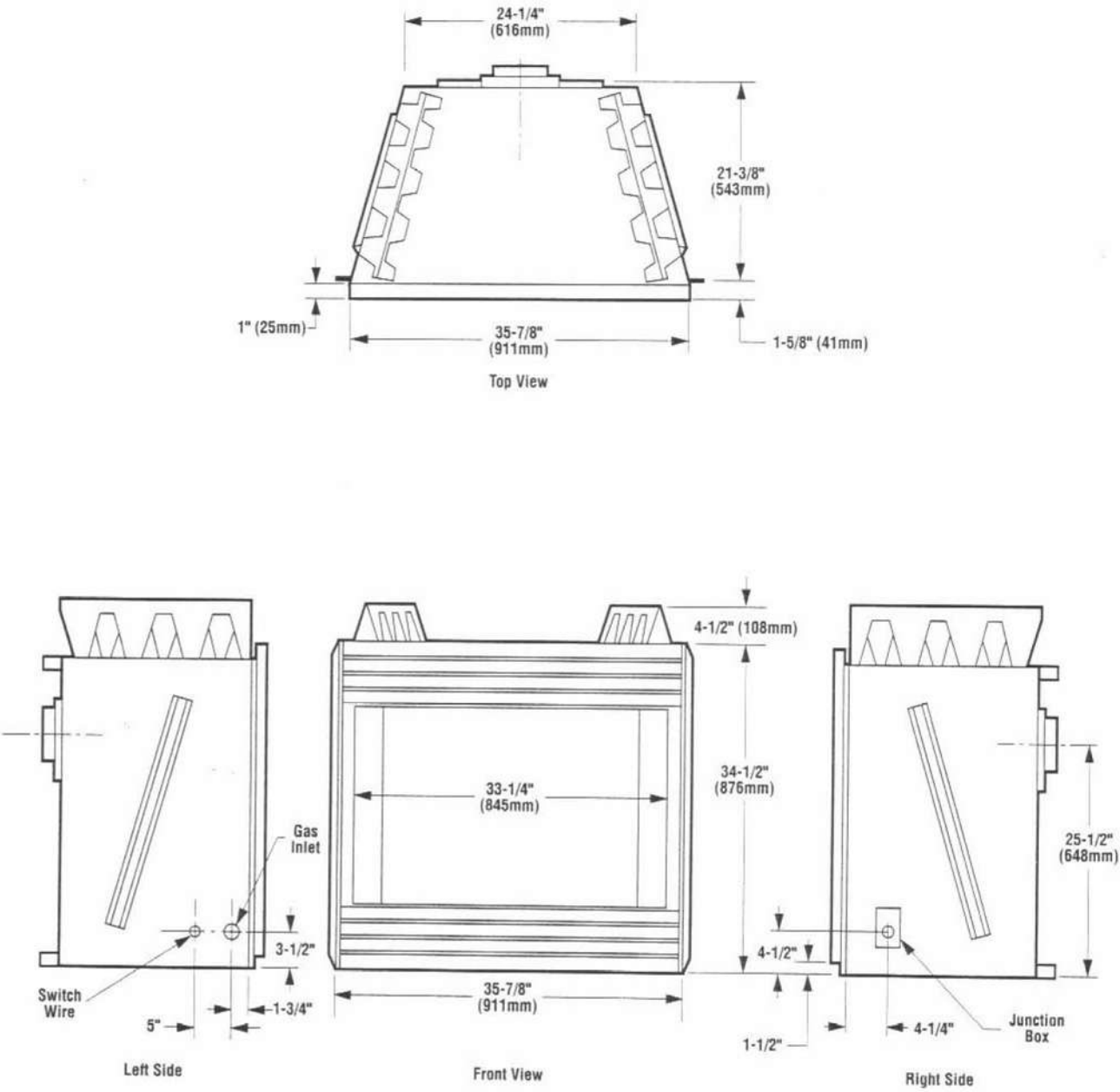


Figure 7

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

**Step 2.** Route a 1/2" (13 mm) black iron gas line along the left side framing. Drill clearance hole as shown in Figure 8.

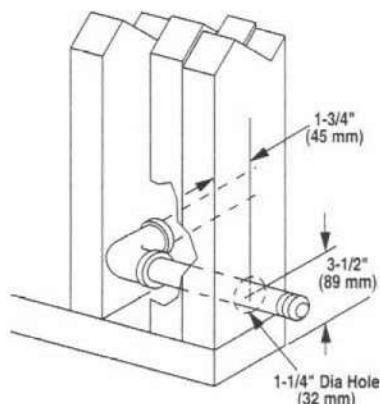


Figure 8

**Note:** Install stub nipple after the unit is moved into position.

**Step 3. Install Vent Termination, Extensions and Elbows:** Before positioning the appliance, determine the need for extension kits.

The DSR-HTK contains an external termination, connectors and a firestop that must be used to connect directly to the appliance when total wall thickness is between 4" (102 mm) and 8" (203 mm). Additional extension kits are required if the wall thickness exceeds 8" (203 mm). Refer to the following charts.

#### Wall Thickness: 4" - 8" (102 mm - 203 mm) No Extensions

To install the DSR-HTK kit, Attach both inner and outer connectors to the inner and outer appliance collars with two (2) #8 x 1/2" sheet metal screws per collar that are provided. Holes in both the appliance collars and the termination connectors properly locate these components (Refer to Figure 9). After attaching the collars, position the appliance in its final location so that the connectors extend through the exterior wall.

**Note:** Walls that exceed 6-1/2" (165 mm) will not permit both collars to extend all the way through.

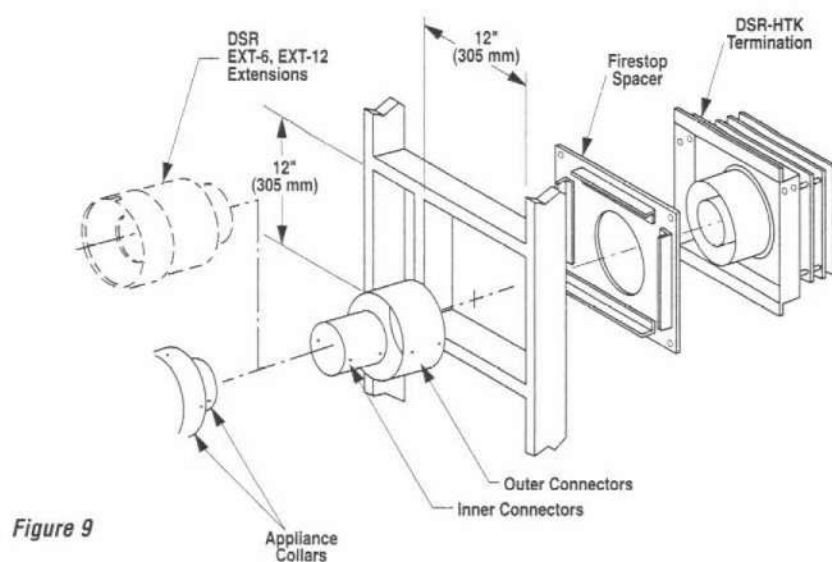


Figure 9

#### FLAT WALL INSTALLATIONS

Total Exterior Wall Thickness		Extension Kit	
Inches	MM	EXT-6	EXT-12
4 - 8	102 - 204	—	—
8 - 14	204 - 356	1	—
14 - 20	356 - 508	—	1
20 - 24	508 - 610	1	1

#### 45° DIAGONAL INSTALLATIONS

Total Exterior Wall Thickness		Extension Kit	
Inches	MM	EXT-6	EXT-12
4 - 8	102 - 204	—	—
7 - 14	204 - 356	1	—
14 - 20	356 - 508	—	1

Attach the firestop spacer to the outside surface of the wall as shown in Figure 9 and 10. The termination housing must be oriented with the surface marked "TOP" upward. Align the termination extension tubes with the connectors and engage both inner and outer extension tubes over both connectors. The DSR-HTK Termination requires the application of a liberal bead of high temperature caulking on the mounting flanges to seal. Slide the termination inward until the housing bottoms out at the exterior wall surface. Secure the termination using 6d nails at holes in the upper and lower housing flanges.

Extension Kits (DSR-EXT6 and/or DSR-EXT12) are required when total wall thickness exceeds 8" (203 mm). These extensions must be attached to the rear appliance collars instead of the termination connectors. The following procedure must be followed. A minimum of 1-1/2" (38 mm) overlap is required for all connections.

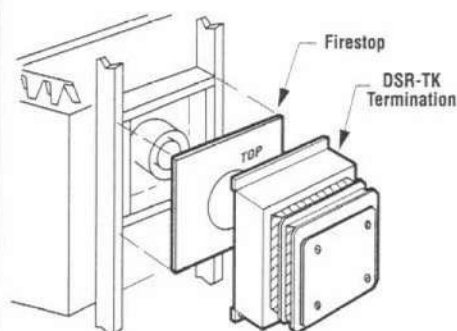


Figure 10

#### Wall Thickness: 8" - 18" (203 mm - 457 mm)

The following instructions are applicable for the DSR-EXT6 Extension when total exterior wall thickness is between 8" (203 mm) and 12" (305 mm) and the DSR-EXT12 Extension when total exterior wall thickness is between 8" (203 mm) and 18" (457 mm).

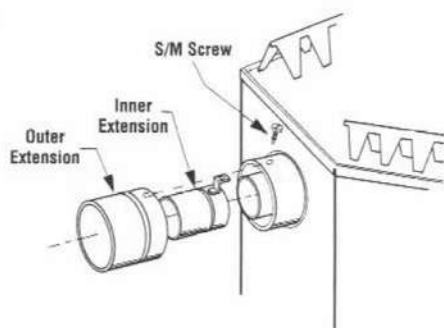
**A. Inner Extension** - Measure 2-1/2" (63 mm) from end of extension and drill a 3/32" (2.4 mm) hole. Slide inner connector, from the termination kit, over the extension and align hole in connector with hole just drilled. Secure with a #8 x 1/2" sheet metal screw (provided).

**B.** Drill a second hole in the inner extension using the opposite hole in the connector as a template. Secure with the #8 x 1/2" sheet metal screw provided.

**C.** Attach the combined extension and connector to the inner appliance collar using the #8 x 1/2" hex wash hd. screw provided with the extension kit. Do not tighten screw as yet.

**D.** Slide the outer extension on the outer appliance collar and tighten the screw to secure the inner and outer extension (Refer to Figure 11).





**Figure 11**

**E.** Measure 2-1/4" (57 mm) from the end of the outer extension and drill a 3/32" (2.4 mm) hole. Slide outer connector, from termination kit, over the outer extension and align hole in connector with hole just drilled in extension. Secure with #8 x 1/2" sheet metal screw.

**F.** Drill 3/32" hole in opposite side of extension, using connector hole as template. Secure with #8 x 1/2" sheet metal screw.

**G.** Follow same procedure as was outlined in Step 3 for installing termination.

#### Wall Thickness: 12" - 24" (305 mm - 610 mm)

The following instructions are applicable for the DSR-EXT6 Extension when total exterior wall thickness is between 12" (305 mm) and 14" (356 mm) and the DSR-EXT12 Extension when the total exterior wall thickness is between 18" (457 mm) and 24" (508 mm)

**A. Inner Extension** - Slide inner connector, from the termination kit, over the extension and align hole in connector with hole located 1/2" (13 mm) from the end of extension. Align holes and secure with two (2) #8 x 1/2" sheet metal screws provided.

**B.** Attach the combined extension and connector in the inner appliance collar using the #8-15 x 1/2" hex wash hd. screw provided with the extension kit. Do not tighten screw as yet.

**C.** Slide the outer extension on the outer appliance collar and tighten the screw to secure the inner and outer extension (Refer to Figure 11).

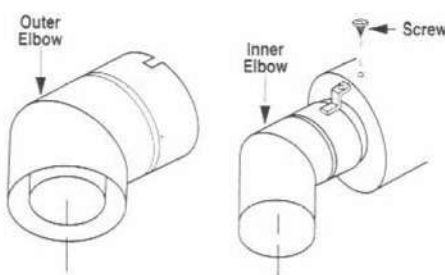
**D.** Slide outer connector, from termination kit, over outer extension and align with holes, located 1/4" (6 mm) from end of extension. Secure with two (2) #8 x 1/2" sheet metal screws.

**E.** Follow same procedure as was outlined in Step 3 for installing termination.

**Note:** When installing more than one extension to the appliance, the second extension connects to the first extension in the same manner as the first extension connects to the appliance collars.

#### Installing Elbows

For corner installations, install Model ELB-45 Elbow at the rear collar before positioning appliance into framing. Slide inner elbow over the inner collar, orienting to align hole in bracket with the upper hole on the collar (Figure 12).



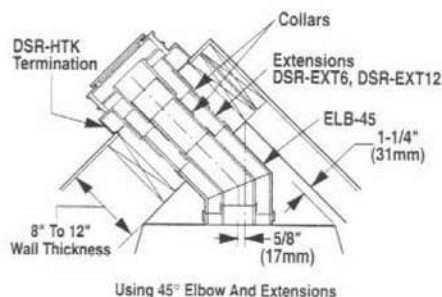
**Figure 12**

**Note:** The elbow has two (2) brackets, one for right side offset and the other for the left side.

Align hole in the upper bracket, install a #8-15 x 1/2" sheet metal screw to hold the pieces together (not necessary to tighten). Next, slide the outer elbow onto the outer collar, aligning the slot with the previously installed screw. Loosen screw sufficiently to permit the elbow to slip under the screw head. With outer elbow in position and bottomed at the screw, tighten screw to secure the assembly.

When the total outside wall thickness is greater than 8" (203 mm), install appropriate extension tubes at the elbow in similar manner as described for flat wall applications in Step 3.

**Figure 13**

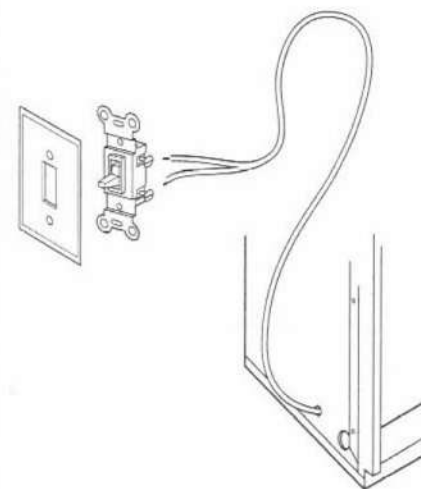


**Figure 13**

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

**Step 4. Install Remote Wall Switch** - The appliance is shipped with all the internal wiring completed at the factory. Select a convenient location for the remote wall switch and connect the wiring found at the appliance (Figure 14).

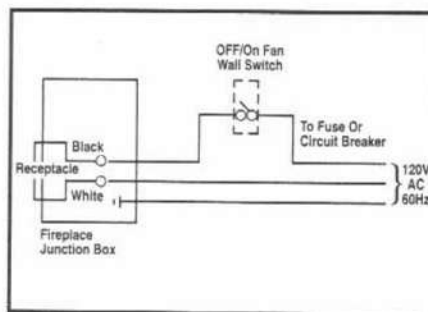
**CAUTION: DO NOT CONNECT THE REMOTE SWITCH TO A 120V SUPPLY.**



**Figure 14**

**Step 5.** A junction box is provided for the installation of the FAK-1500 Forced Air Kit (optional). Electrical power must be provided to support the fan.

Route a 3-wire, 120VAC power line with control switch to the lower right side of the appliance. Make connections to the receptacle as shown in Figure 15.



**Fan Wiring Diagram**

**Figure 15**

The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1987. (In Canada, the current CSA C22-1 Canadian Electrical Code.)

The forced air fan may be mounted at initial appliance installation or at any time thereafter. Follow the instructions provided with the kit.

**Step 6. Connecting Gas Line** – All codes require a shut-off valve mounted in the supply line. Figure 17 illustrates two (2) methods for connecting the gas supply. The flex-line method is acceptable in the U.S., however, Canadian requirements vary depending on locality. Installation **must** be in compliance with local codes.

The gas control valve is located under the refractory shelf. If previously installed, remove the two (2) bottom louvers by unsnapping the bottom edge at each end and set aside (Figure 16). The control valve has a 3/8" NPT thread inlet port. Plan the connections accordingly.

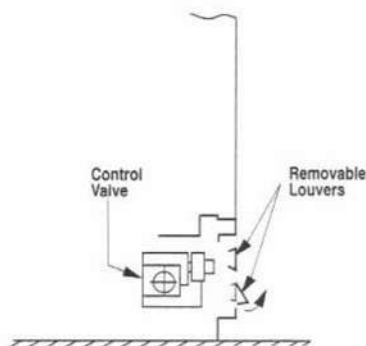


Figure 16

Secure all joints tightly using appropriate tools and sealing compound. Leak check the installation with a soapy water solution.

**Do not use open flame for leak test.**

## HIGH ELEVATION DERATING

This unit has been tested for installation at high altitudes in accordance with Canadian test standard CAN/CGA-2.17.

Higher altitudes affect the atmospheric pressure and heat value of gaseous fuels. When installing this unit at high altitudes, the rated input will be lower than that at sea level. The lowered oxygen content in the air and lowered gas density require installation of a different orifice to achieve efficient, clean combustion at the burner assembly. Refer to the chart in Figure 18 and/or the rating plate on the appliance for proper orifice size.

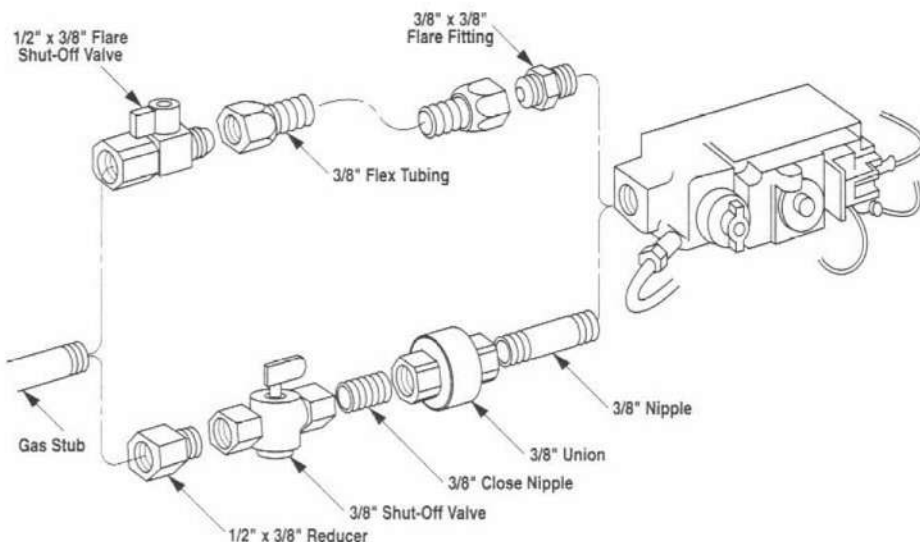
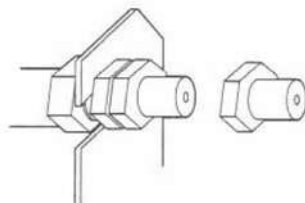


Figure 17

Order and install the appropriate high altitude orifice kit per the chart below. Be sure to attach the conversion sticker to the rating plate on the appliance.



Gas Type	Orifice Size	High Alt Orf. Kit	Elevation
Natural	#43	—	0 - 2000' (0 - 610 m)
	#44	P/N 027966	2000 - 4500' (610 - 1370 m)
Propane	#55	—	0 - 2000' (0 - 610 m)
	#56	P/N 027967	2000 - 4500' (610 - 1370 m)

U.S. per ANSI Z223.1-1992  
Canada per CAN/CGA 2.17-M91.

Figure 18

**Step 7. Log Installation** – The logs, screen and embers kit are packaged in a separate shipping container. Remove the mineral fiber material from its packaging and spread across the burner tray, covering the hole pattern area.

Carefully position and center the fiber logs onto the burner with the longer log in front. Place the two (2) smaller fiber logs across the two (2) lower logs in the manner illustrated (Figure 19). The flames should not impinge on the logs.

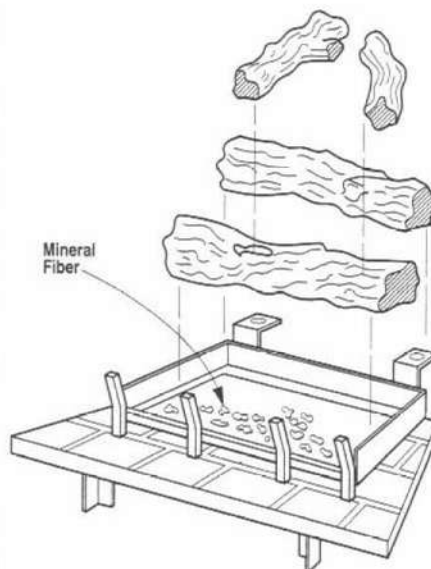


Figure 19

**Step 8. Checking the System** – With gas line installed and the remote switch connected, run initial system checkout before closing up the front of the unit. Follow the pilot lighting instruction on page 16.

**Note:** Instructions are also found on the pull out panel located on the bottom surface of the appliance.



When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lightings of the appliance will not require such purging. Inspect the pilot flame (remove logs, if necessary, handling carefully).

The 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) should be engulfed in the pilot flame and the flame should project 1" (25 mm) beyond the hood on both sides (Figure 20). In Canada only, the flame switch sensor must be engulfed in the pilot flame.

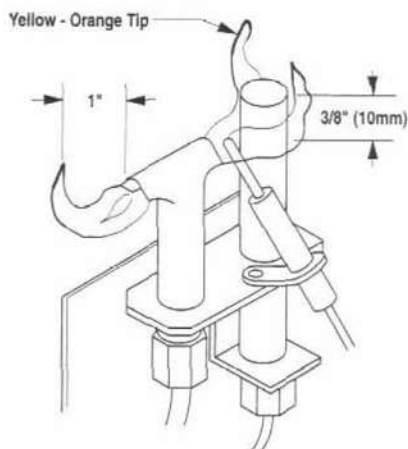


Figure 20

Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch, manually depress and hold the door safety switch (Figure 21) and rotate the control knob counterclockwise to the "ON" position ("ON" will be at the bottom side of the valve).

**Note:** The safety switch must be held closed for burner operation.

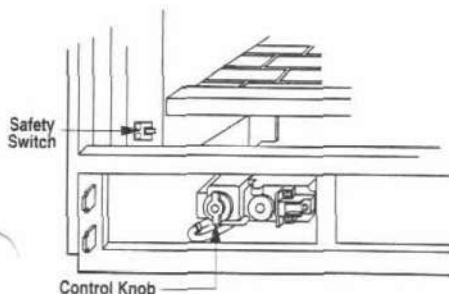


Figure 21

The burner should light and the flame will appear between the logs as illustrated in Figure 22.

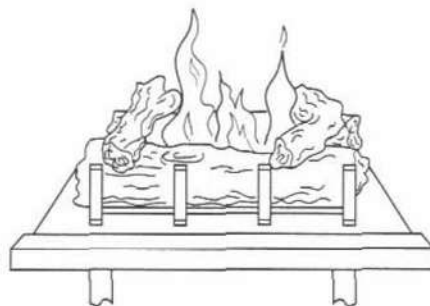


Figure 22

For proper operation, it is imperative that the main burner characteristics are steady. Wait 10 to 15 minutes for the burner and flame to stabilize. The flame should produce a clear, bright orange/yellow color. No smoke or soot elements should be visible. If questionable, check with your service man or gas supplier.

The flames should not impinge on the logs, reposition them if necessary.

**CAUTION: DO NOT ATTEMPT TO REDUCE OR ALTER FLAME BY POSITIONING THE GAS VALVE AT OTHER THAN THE FULL "ON" POSITION.**

The air shutter on the venturi has been set at the factory for both natural and propane gas models (Figure 23). The shutter is set at fully closed position for natural gas, and at 1/4" (6 mm) opening for propane gas. Make adjustments to the shutter only as necessary to produce orange/yellow flame.

**Note:** Any adjustments to the air shutter different from those described above could cause the burner assembly to malfunction and could void the warranty.

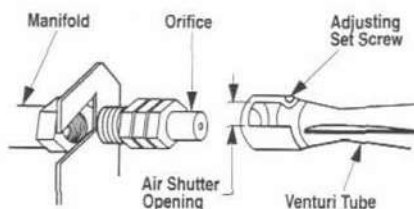


Figure 23

When satisfied that the appliance operates properly proceed to finish the installation. Leave the control knob in "ON" position, turn the remote switch "OFF". Snap the two (2) louvers back in place at the bottom of the unit.

**Step 9. Installing the Glass Panel** – Retrieve the glass panel. Visually inspect the gasket on the backside on the panel. Gasket surface must be clean and free of irregularities and seated firmly in U-channel.

Position the panel at the front opening with the corner flanges at the top, extending toward the appliance. Carefully insert the panel into the lower cavity, aligning the three (3) pins on bottom of door with corresponding holes in the bottom surface. Tilt top toward appliance, inserting formed flanges into the rectangular openings at each side of combustion chamber opening. Assemble the spring and washer over bolt. Insert and fasten to nut plate at the rear of the opening (Figure 24). Start the bolt by hand, then tighten each bolt until bottomed out for uniform pressure on the panel seal. The bottom of the bolt head should be 2-1/2" (64 mm) from the door flange.

Make sure the bolts on both sides are tightened equally to avoid torquing the door.

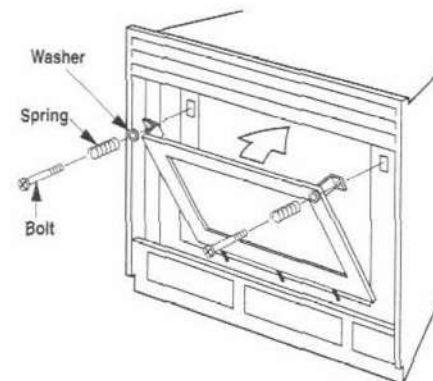


Figure 24

**WARNING: HANDLE GLASS WITH EXTREME CARE! THIS TEMPERED GLASS IS SUSCEPTIBLE TO DAMAGE — DO NOT SCRATCH WHILE HANDLING OR RE-INSTALLING THE GLASS PANEL.**

**Step 10. Installing the Screens –** Two (2) mesh screen panels and mounting hardware are packaged in the carton with the logs. Slip the rings on each screen over the mounting rod, positioning the brass pull at the formed/bent end. Insert the straight end into hole in sidewall and fasten to frame with sheet metal screw at mounting hole approximately 4" from each end (Figure 25).

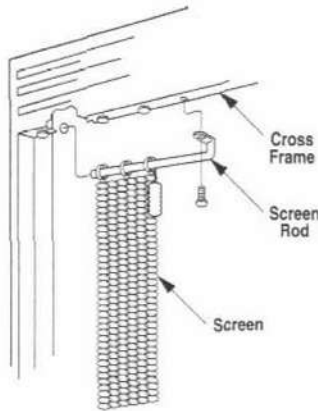


Figure 25

**Step 11. Installing the Louvers & Trim –** Remove the four (4) black louver strips and the two (2) brass cover pieces from the protective container and fasten to the face of the appliance. The louver strips snap onto the louver pegs without the need for tools. To assemble, tilt the strip on top of the pegs and snap lower edge to lock in place. The brass pieces are mounted over the support bars directly above and below the fireplace opening.

A gas valve cover is included in the homeowner's information kit envelope to hide the gas controls located in the lower left louvered area. Slide cover onto lower louver and position so as to conceal controls (Figure 26).

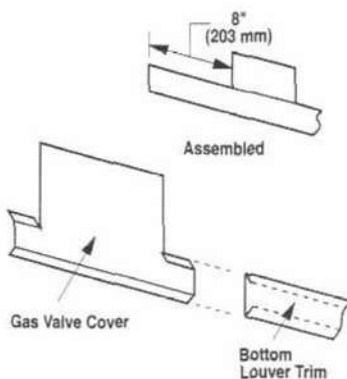


Figure 26

## FINISHING REQUIREMENTS

### Wall Details

Complete finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall (Figures 27 and 28).

Use a non-combustible caulking at wall and metal facing joints to seal all air passages.

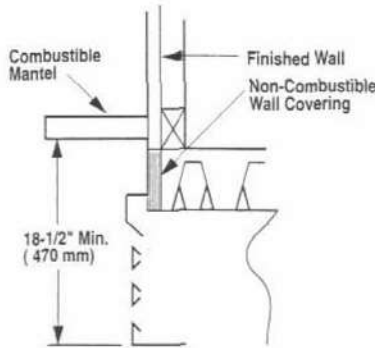


Figure 27

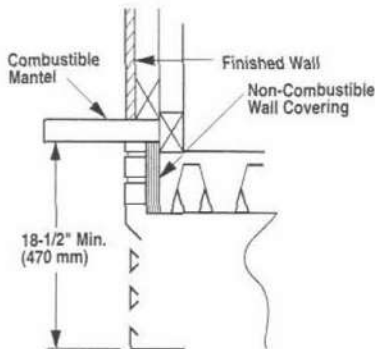


Figure 28

A hearth extension is not required with this appliance. If a hearth extension is used, do not block the lower louvered area.

A combustable mantel shelf projecting a maximum of 8" from the wall may be installed at minimum distance of 18 1/2" above the fireplace opening (Figure 29).

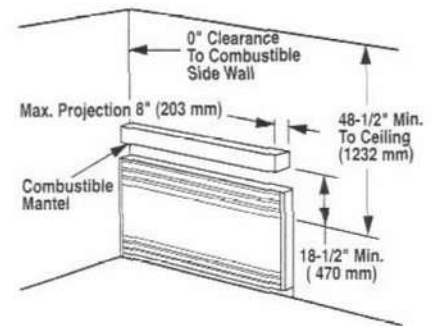


Figure 29

**Note:** For Canadian installations, 6" (152 mm) clearance to combustable side wall required.

## COLD CLIMATE INSULATION

If you live in a cold climate, use a non-combustible caulking to seal all framing cracks and areas where cold air may enter the room. It is especially important to insulate outside chase cavity between studs and under flooring where fireplace is above ground. Also use insulation to pack the space where the gas line enters the appliance.

## ACCESSORIES

### Forced Air Kit

The FAK-1500 fan assembly provides forced air circulation feature for your appliance. The FAK-3000 fan assembly provides for a greater air circulation. The kit mounts directly into the lower intake chamber with electrical connection at receptacle provided. The appliance must have an independent 120VAC power line incorporated at the time of installation. See Step 5 of the installation details and instructions supplied with the kit (Figures 30 and 31).

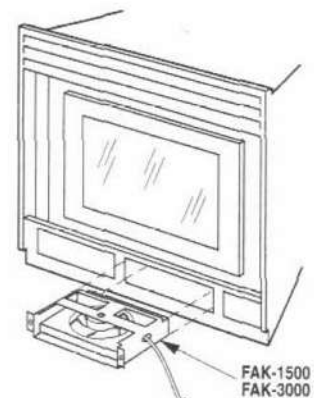


Figure 30

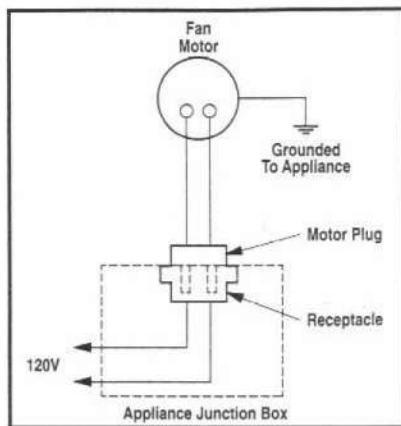


Figure 31

### Enclosure panel

The optional 35GEP-SPB Front Panel adds an elegant appearance to your appliance. The solid polished brass trim frames the fire and blends with any decor. The panel mounts flush with the front for that custom finished look.

### Horizontal Trim Kits

Decorative trim kits designed to enhance the appliance are available in the following finishes: 35HTK-PB polished brass and 35HTK-SPB solid polished brass. The 35TT-SPB and 35TTK-SPB kits include polished brass filigree panels.

### Remote Control

The Model RCK adds the convenience of remote control for your appliance. The kit includes a wireless, hand held transmitter and a receiver that installs in the appliance. A special wall switch permits either manual or remote control modes. Both receiver and transmitter operate on standard 9 volt batteries (not included). Refer to the RCK installation instruction for specific details.

## OPERATION AND CARE OF YOUR APPLIANCE

1. Appliance operation is controlled through the remote mounted wall switch. Adjustments or settings at the unit are not required. A separate wall switch provides independent control of the forced air fan (optional equipment).

2. There is a micro switch behind the lower left corner of the glass enclosure panel. This safety feature prevents the burner from operating unless the glass panel is in place.

3. When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to the "curing" of the logs and "burn-in" of internal paints and lubricants used in the manufacturing process.

4. Upon each lighting of the appliance, condensation may occur and fog the inside of the glass enclosure. This condition will disappear shortly as the appliance heats.

5. Keep lower control compartment clean by vacuuming or brushing at least twice a year.

6. Always turn off gas to pilot before cleaning. Before re-lighting, refer to the lighting instructions in this manual. Instructions are also found on a pull-out panel located on the floor of the appliance (behind louvers).

7. Always keep the appliance area clear and free from combustible materials, gasoline and other flammable liquids.

8. Remember, this appliance has a continuous burning pilot flame. Exercise caution when using products with combustible vapors.

9. Never obstruct the flow of ventilation air. Keep the front of the appliance clear of all obstacles and materials.

10. Observe caution near the glass panel. The panel utilizes tempered glass which may shatter unexpectedly or if struck with any object.

**11. CAUTION: DO NOT OPERATE THIS APPLIANCE WITH A BROKEN GLASS PANEL.** Where broken glass exists, the complete front panel must be replaced. See the Replacement Parts List on page 14 for correct parts. Panel removal and re-assembly instructions are described on pages 3 and 9 respectively.

12. Clean the glass only when necessary. Wipe surface with clean, dampened, soft cloth. Follow with dry, soft towel as desired. Take care not to scratch the glass surface. Do not use abrasive cleaners. Never clean the glass when it is hot.

**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 SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.**

## MAINTENANCE

The appliance and venting system should be inspected before use and at least annually by a qualified service person.

**IMPORTANT: TURN OFF GAS AND ANY ELECTRICAL POWER BEFORE SERVICING THE APPLIANCE.**

The main burner compartment should be inspected annually for proper operation. Remove front panel and perform general cleaning to remove any surface build-up on logs or pilot and burner assembly. Wipe the pilot nozzle, ignitor rod and hood (Figure 20). Avoid disturbing the loose ember material on the base of the burner.

Refer to Step 9 for the front panel installation. On re-assembly, examine the sealing gasket on the front panel for signs of deterioration, cracks or hardening. Replace if any evidence is apparent. Replace only with material identified in the Replacement Parts List on page 14. When returning to service, verify proper flame characteristics as described in Step 8, reference Figures 20 and 22.

With proper care and maintenance, your appliance will provide many years of enjoyment. If you should experience any problem, first refer to the trouble shooting guide in this manual. If problem persists, contact your local service center.

## WARRANTY

Your gas fireplace is covered by a one year limited warranty. You will find a copy of the warranty on the back cover of this manual. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

## REPLACEMENT PARTS

A complete parts list is found at the end of this manual. Use only parts manufactured and/or approved by Superior Fireplace Company.

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 part number.
3. The description of the part.
4. The quantity required.
5. The installation date of the appliance.

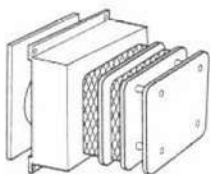
## SUPERIOR'S ACCESSORY PARTS AND COMPONENT LIST FOR DS-36R SERIES FIREPLACES

The following accessory parts and components are to be used only with this fireplace system. Separate installation instructions are packaged with all forced air kits, glass doors and trim kits.

If you encounter any problems or have any questions concerning the installation or the application of this system, please contact your distributor. For the name of your nearest distributor contact:

**Superior Fireplace Company**  
**4325 Artesia Avenue**  
**Fullerton, CA 92633**  
**(714) 521-7302**

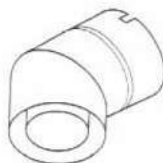
## ACCESSORIES & COMPONENTS



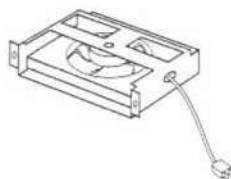
Horizontal Termination P/N 046713 DSR-HTK



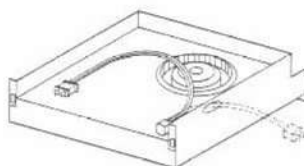
Extension Kit P/N 034813 DSR-EXT6  
P/N 034812 DSR-EXT12



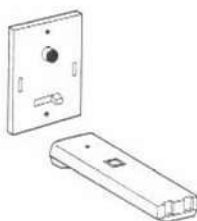
45° Terminal Elbow P/N 032261 ELB-45



Forced Air Kit P/N 011781 FAK-1500



Forced Air Kit P/N 039591 FAK-3000



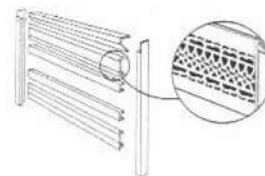
Remote Control Kit P/N 035591 RCK



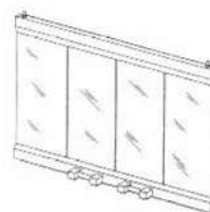
High Altitude Orifice Kit P/N 027966 Natural  
P/N 027967 Propane



Horizontal Trim Kit P/N 024474 35HTK-PB  
P/N 024477 35HTK-SPB



Traditional Louver and Trim Kit P/N 045651 35TT-SPB  
P/N 046091 35TTK-SPB



"ALL-GLASS™" Enclosure Panel P/N 043552 35GEP-SPB

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

## TROUBLE SHOOTING THE GAS CONTROL SYSTEM

### MODEL DS-36R

**Note:** Before trouble shooting the gas control system, be sure external gas shut off valve (located at gas supply inlet) is in the "ON" position.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light pilot after repeated triggering of red button.	A. Defective ignitor (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
	B. Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light pilot. If pilot lights, turn off pilot and trigger the red 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 okay, replace pilot (Figure 20).
2. Pilot will not stay lit after carefully following the lighting instructions.	A. Defective pilot generator (thermopile) or remote wall switch.	Check pilot flame, it must impinge on pilot generator (Figure 20). Clean and/or adjust pilot for maximum flame impingement on generator.
		Be sure wire connections from generator at gas valve terminals are tight and generator is fully inserted into pilot bracket.
		One of the wall switch wires may be grounded. Remove wall switch wires from valve terminals. If pilot now stays lit, trace wall switch wiring for ground. May be grounded to appliance or gas supply.
		Check pilot generator with millivolt meter. Take reading at generator terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position and wall switch "OFF". Replace faulty pilot generator if reading is below specified minimum.
3. Pilot burning, no gas to burner, Valve knob "ON", Wall Switch "ON".	B. Defective automatic valve operator.	Turn valve knob to "ON", place wall switch to "ON". Millivolt meter should read greater than 100 mv. If the reading is okay and the burner does not come on, replace the gas valve.
	A. Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch, if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve, if burner comes on, wires are faulty or connections are bad.
	B. Pilot generator may not be generating sufficient millivoltage.	Re-check Symptom #2.
	C. Plugged burner orifice.	Check burner orifice for stoppage and remove.
	D. Defective glass micro switch (located at lower left corner of glass panel).	Remove glass panel (see instructions).
		Remove Two (2) screws from switch mounting bracket, pull switch out.
		Jumper wire across terminals of switch.
		If burner comes on, switch defective. Replace.
4. Frequent pilot outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on pilot generator (Figure 20).

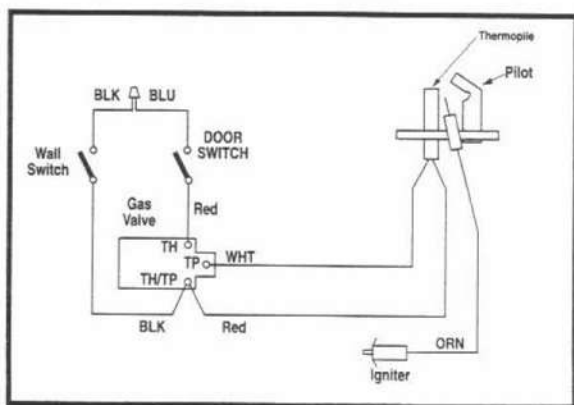
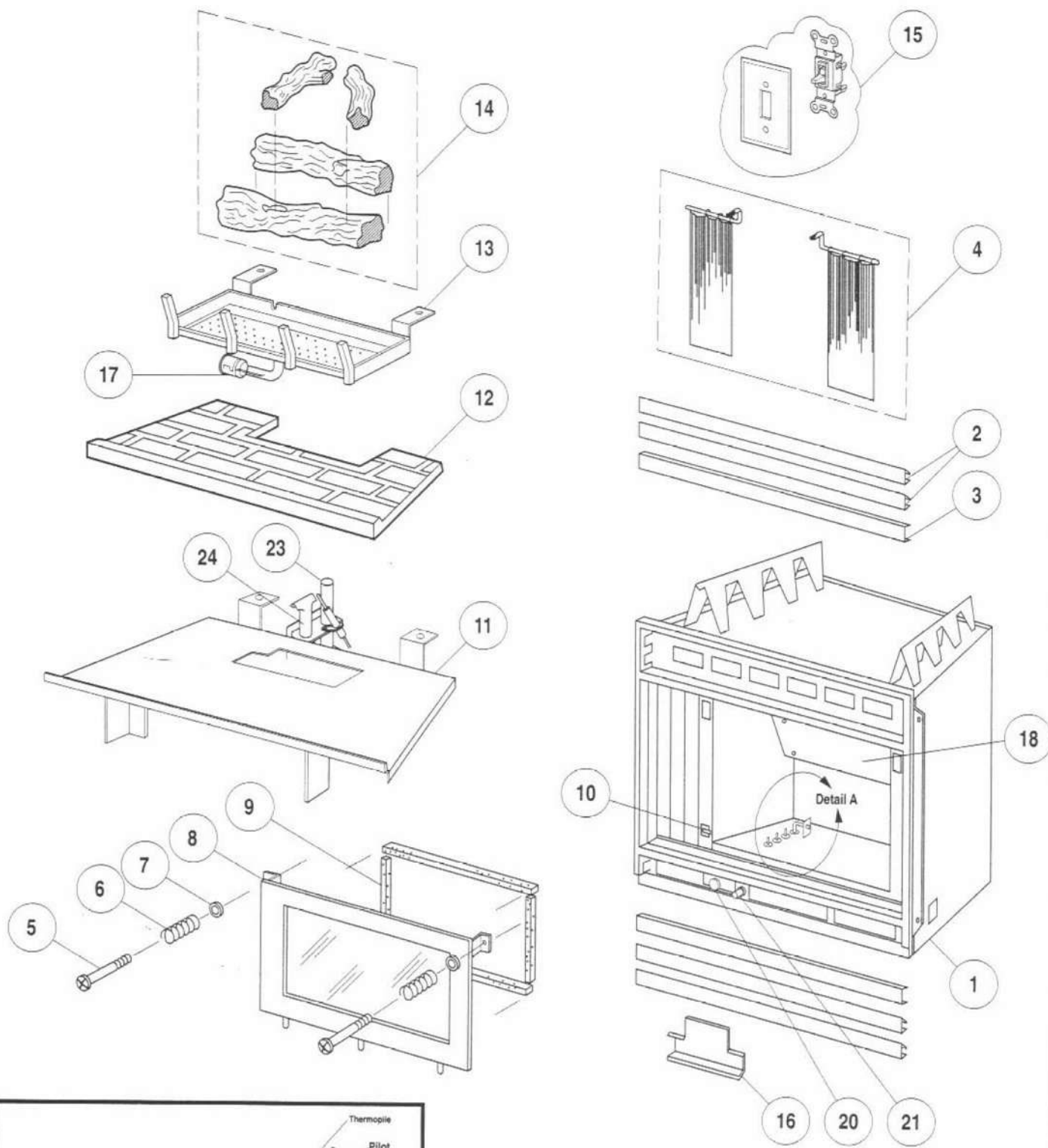


## REPLACEMENT PARTS LIST

No.	DESCRIPTION	DS-36RN		DS-36RP	
		Part No.	Qty.	Part No.	Qty.
1.	Gas Fireplace Assembly	046141	1	046142	1
2.	Bar, Louver (black)	024501	4	024501	4
3.	Trim, Upper/Lower (brass)	037171	2	037171	2
4.	Screen Assembly		1		1
	Screen Panel/Pull	095883	2	095883	2
	Screen Rod - RH	037312	1	037312	1
	Screen Rod - LH	037311	1	037311	1
5.	Bolt	000817	2	000817	2
6.	Spring	097953	2	097953	2
7.	Washer	000703	2	000703	2
8.	Glass Frame Assembly with Gaskets	046022	1	064022	1
9.	Gasket - Top/Bottom	097961	2	097961	2
	Gasket - side	097962	2	097962	2
10.	Switch	097937	1	097937	1
11.	Control Panel Assembly	047581	1	047581	1
12.	Refractory, Bottom	024931	1	024931	1
13.	Burner Assembly	046641	1	046643	1
14.	Log Set	043321	1	043321	1
	Front Log	041207	1	041207	1
	Rear Log	041202	1	041202	1
	Top Right Log	041194	1	041194	1
	Top Left log	041196	1	041196	1
15.	Wall Switch Kit	025972	1	025972	1
16.	Cover Plate	032381	1	032381	1
17.	Venturi	093537	1	093537	1
18.	Radiant Panel	046431	1	046431	1

## GAS CONTROLS

No.	DESCRIPTION	DS-36RN		DS-36RP	
		Part No.	Qty.	Part No.	Qty.
20.	Gas Valve – Robertshaw	009737	1	093771	1
21.	Piezo Igniter	091301	1	091301	1
22.	Orifice Fitting – Standard	094481	1	094482	1
	Orifice – High Altitude	094113	1	094114	1
23.	Flame Switch	–	–	–	–
24.	Thermopile	094527	1	094527	1
25.	Pilot Assembly	093763	1	093764	1
26.	Bulkhead Union	094502	1	094502	1
27.	Bulkhead Union	094501	1	094501	1
28.	Fitting	094499	2	094499	2



WIRING DIAGRAM

## LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

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

**A.** This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

**B.** BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.

- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.

**C.** Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, 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

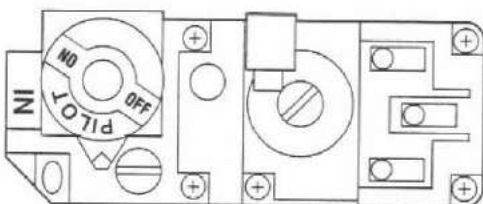
**1. STOP!** Read the safety information above on this page.

**2.** Turn remote wall switch to "OFF".

**3.** Remove access louvers.

**4.** Verify main line shut-off valve is open.

**5.** Push in gas control knob slightly and turn clockwise to "OFF".



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

**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.** Turn knob on gas control counterclockwise to "PILOT".

**8.** Push in control knob all the way and hold in. Immediately light the pilot by triggering the spark ignitor (pushing red 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.** Replace access louvers.

## TO TURN OFF GAS TO APPLIANCE

**1.** Turn remote wall switch "OFF". The pilot will remain lit for normal service.

**2.** For complete shut-down, turn remote wall switch to "OFF".

**3.** Remove lower louvers.

**4.** Depress gas control knob slightly and turn clockwise to "OFF". Do not force.

**5.** Replace access louvers.

## INSTRUCTIONS D'ALLUMAGE

### POUR VOTRE SÛRETÉ LISEZ AVANT L'ALLUMAGE

**AVERTISSEMENT: SI VOUS NE SUIVEZ PAS EXACTEMENT CES INSTRUCTIONS, UN FEU OU UNE EXPLOSION POURRA CAUSER DOMMAGE DE PROPRIÉTÉ, BLESSURE PERSONNELLE OU PERTE DE VIE.**

- A. Cet appareil a un pilote qui doit être allumé à la main. Quand vous allumez le pilote, suivez exactement les instructions.
- B. **AVANT D'ALLUMER** sentez autour de l'appareil pour le gaz. Assurez vous de la senteur près du plancher parce que certain gaz est plus pesant que l'air et se déposera sur le plancher.

#### QUOI FAIRE SI VOUS SENTEZ LE GAZ:

- N'essayez pas d'allumer l'appareil.
- Ne touchez pas aucun connecteur électrique; ne vous servez pas d'aucun téléphone dans votre édifice.
- Appelez votre fournisseur de gaz immédiatement d'un téléphone voisin. Survez les instruction du fournisseur de gaz.

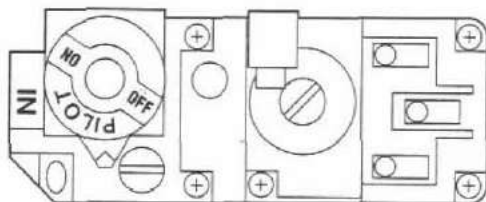
- Si vous ne pouvez pas atteindre votre fournisseur de gaz, appelez le département d'incendie.

- C. Servez vous seulement de votre main pour engager ou tourner le bouton de réglage à gaz. N'employez jamais d'outils. Si le bouton n'engage pas ou tourne pas à la main, n'essayez pas de le réparer, appelez un technicien de service qualifié. Force et essai de réparation peut aboutir à un feu ou à une explosion.

- D. Ne vous servez pas de cet appareil si une partie à trappé dans l'eau. Appelez un technicien de service qualifié immédiatement pour inspecter l'appareil et remplacer n'importe quelle partie du système de commande et n'importe quel commande à gaz qui on été sous l'eau.

## INSTRUCTIONS D'ALLUMAGE

1. **ARRÊTEZ!** Lisez l'information de sûreté au dessus de cette étiquette.
2. Tournez le télérupteur à "FERMÉ".
3. Retirer les volets d'accès.
4. Verifier que la vanne d'arrêt principale de gaz est ouverte.
5. Engagez le bouton de réglage à gaz légèrement et tournez dans le sens des aiguilles d'une montre à "FERMÉ".



**Note:** Le bouton ne doit pas être tourné de "PILOTE" à "FERMÉ" à moins que le bouton soit légèrement engagé. Ne forcez pas.

6. Attendez (5) minutes pour libérer le gaz. Si vous sentez du gaz, "ARRÊTEZ". Poursuivez "B" dans l'information de sûreté au dessus de cette étiquette. Si vous ne sentez pas de gaz, allez donc au prochain gradin.

7. Tournez le bouton sur le réglage à gaz en sens inverse des aiguilles d'une montre à "PILOTE".

8. Engage le bouton de réglage à gaz tout le long et retenez. Allumez le pilote immédiatement avec une allumette allumée ou en déclanchant l'étincelleuse (engagant le bouton rouge) avant que le pilote s'allume. Continuez se retenir le bouton de réglage pour à peu pres 1 1/2 minutes apres que le pilote est allumé. Relachez le bouton et il va se relever sueitement. Le pilote devra rester allumé. Si el s'teint, repetez le gradin 5 jusqu' à 8.

- Si le bouton ne se relève pas après avoir été relaché, arrêtez immédiatement et téléphonez votre technicien de service ou votre fournisseur de gaz.
- Si le pilote ne veut pas rester allumé après quelques essais. Tournez le bouton de réglage à gaz à la position "FERMÉ" et téléphonez votre technicien de service ou votre fournisseur de gaz.

9. Tournez le bouton de réglage à gaz en sens inverse des aiguilles d'une montre à "OUVERT".

10. Remplacez les volets d'accès.

## FERMER LE GAZ À L'APPAREIL

1. Tournez le télérupteur mural à "FERMÉ". Le pilote va resté allumé jusqu' au retour du service normal.
2. Pour une fermeture complete, tournez le télérupteur mural à "FERMÉ".
3. Retirer les volets inferieurs.

4. Engagez le bouton de réglage à gaz légèrement et tournez dans le sens des aiguilles d'une montre à "FERMÉ". Ne forcez pas.
5. Remplacez les volets d'accès.

## Superior DS-36 Direct Vent Gas Fireplace Limited Warranty 1 Year

### THE WARRANTY

Superior Fireplace Company warrants this DS-36 Series Decorative Gas Appliance to be free from defects in materials and workmanship at the time of manufacture.

### REMEDY AND EXCLUSIONS

The coverage of this Warranty is limited to all components of the decorative gas appliance manufactured by Superior Fireplace Company, with the exception of flame colorization devices, cement logs, and Superior glass enclosure panel.

This Warranty only covers Superior decorative gas appliances installed in the United States or Canada.

If the vented decorative gas appliance covered by this Warranty is found to be defective within one year from the date of installation (see Superior's right of investigation outlined below), Superior will, at its option, replace or repair defective components of the decorative gas appliance manufactured by Superior Fireplace Company at no charge and will also pay for reasonable labor costs incurred in replacing or repairing such components. If repair or replacement is not commercially practical, Superior will, at its option, refund the purchase price of the Superior decorative gas appliance. With respect to the glass enclosure panel, the remedies of this paragraph are available for 90 days from the date of installation.

This Warranty covers only parts and labor as provided above. In no case shall Superior Fireplace Company be responsible for materials, components, or construction which are not manufactured or supplied by Superior Fireplace Company, or for the labor necessary to install, repair, or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest Superior Fireplace Company factory.

### QUALIFICATIONS TO THE WARRANTY

The vented decorative gas appliance Warranty outlined above is further subject to the following qualifications:

- (1) The vented decorative gas appliance must be installed in accordance with Superior Fireplace Company installation instructions and local building codes. The Warranty on this Superior vented decorative gas appliance covers only the component parts manufactured by Superior Fireplace Company. The use of components manufactured by others with this Superior vented decorative gas appliance (except for a listed venting system as prescribed in the installation instructions) could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This Warranty does not cover any damages occurring from the use of any components not manufactured or supplied by Superior Fireplace Company.
- (2) The Superior vented decorative gas appliance must be subjected to normal use. The decorative gas appliances are designed to burn either natural or propane gas only. Burning conventional fireplace fuels such as wood, coal, or any other solid fuel will cause damage to the decorative gas appliance, will produce excessive temperatures and will result in a fire hazard.

### LIMITATION ON LIABILITY

It is expressly agreed and understood that Superior Fireplace Company's sole obligation and purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall Superior Fireplace Company be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by Superior Fireplace Company's negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Superior decorative gas appliance is limited to the duration of the foregoing warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above may not apply to you.

### INVESTIGATION OF CLAIMS AGAINST WARRANTY

Superior Fireplace Company reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

### SUPERIOR FIREPLACE COMPANY NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT

Superior Fireplace Company shall in no event be responsible for any warranty work done without first obtaining Superior's written consent.

### DEALERS HAVE NO AUTHORITY TO ALTER THIS WARRANTY

Superior Fireplace Company's employees and dealers have no authority to make any warranties not to authorize any remedies in addition to or inconsistent with those stated above.

### HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this Warranty to be valid, Superior Fireplace Company must be notified of the claimed defect in writing or by telephone to Superior Fireplace Company, attention Customer Service Department, 4325 Artesia Avenue, Fullerton, California 92633, Telephone: 714-521-7302, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

### OTHER RIGHTS

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

Superior 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.

**Distributed By:**

**SUPERIOR**  
The Fireplace Company

4325 Artesia Avenue  
Fullerton, CA 92633

Plants in Fullerton, CA,  
Union City, TN