

INSTALLATION INSTRUCTIONS

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

WARNING: THESE DV MULTI-OPEN SERIES FIREPLACES ARE VENTED DECORATIVE GAS APPLIANCES. DO NOT BURN WOOD OR OTHER MATERIAL IN THESE APPLIANCES.

WARNING: AT THE BEGINNING OF EACH HEATING SEASON HAVE THE GLASS DOOR GASKET INSPECTED FOR PROPER SEALING BY A QUALIFIED SERVICE TECHNICIAN.

Installation And Operating Instructions

*For
Direct Vent
Multi Open
Appliances*

Millivolt Models

*_DVCL-C/RMNS
_DVCL-C/RMPS
_DVCR-C/RMNS
_DVCR-C/RMPS
_DVST-C/RMNS
_DVST-C/RMPS
_DVPF-C/RMNS
_DVPF-C/RMPS*

Electronic Models

*_DVCL-C/RENS
_DVCL-C/REPS
_DVCR-C/RENS
_DVCR-C/REPS
_DVST-C/RENS
_DVST-C/REPS
_DVPF-C/RENS
_DVPF-C/REPS*

And Vent System Accessories

*_DST5-12/18/36, _DST5-90ELB
_DST5-45ELB, _DST5-HTK
_DV-HTK-1, _DST5-VTK
_DVSP5-90ELB, _DST5-EXT
_DST5-FSV, _DST5-F
_DSF5-24*

FOR YOUR SAFETY

What to do if you smell gas:

- DO NOT light any appliance.
- DO NOT touch any electrical switches.
- DO NOT use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
- If your gas supplier cannot be reached, 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.

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.



IAS Report No. L2970019

U.S. Patent 5,553,603

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

INTRODUCTION

These DV Multi-Open appliances are sealed combustion, air circulating gas fireplaces designed for residential applications. These appliances must be installed with the _DST5 and/or _DSF5 vent systems routed to the outside atmosphere.

Millivolt Multi-Open appliances are designed to operate on natural or propane gas. A millivolt gas control valve with piezo ignition system provides safe, efficient operation. External electrical power is required to operate the optional blower if installed in these units.

Electronic Multi-Open appliances are designed to operate on natural or propane gas. An electronic direct spark ignition system provides safe, efficient operation. External electrical power is required to operate these units.

These appliances comply with National Safety Standards and are tested and listed by IAS (Report No. L2970019) to ANSI Z21.50b - 1990 (in Canada, CAN/CGA-2.22-M89, IR #41-1991, IR #43-1992, IR #55 and CAN/CGA-2.17-M91) as vented decorative gas appliances.

TYPICAL INSTALLATION

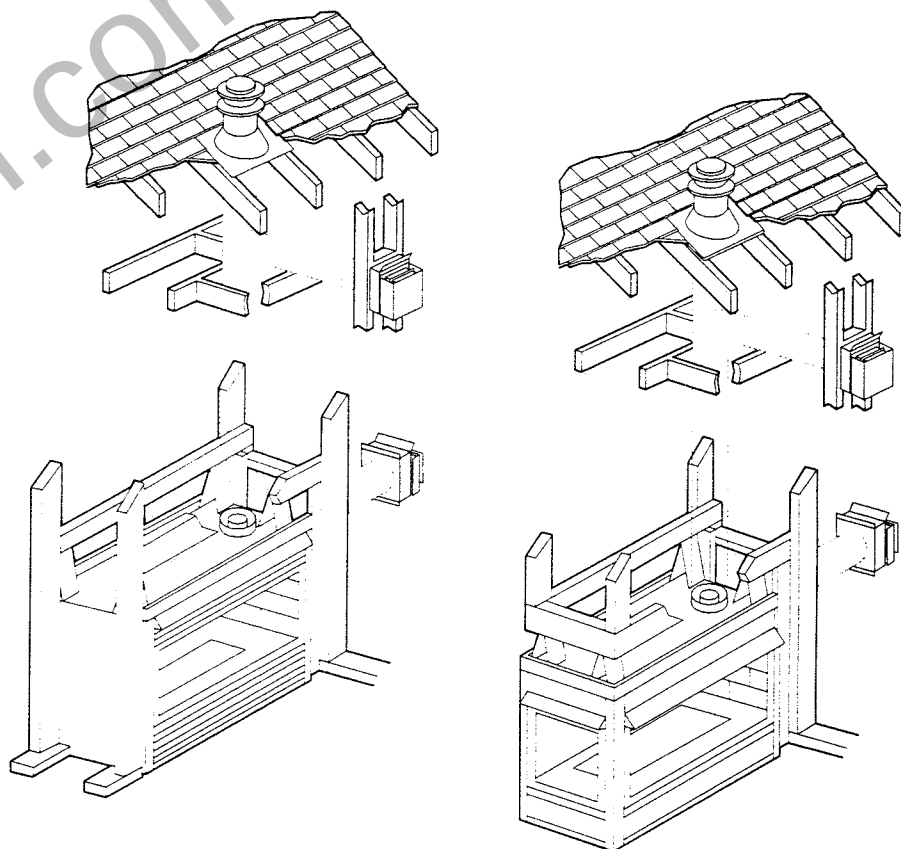


Figure 1

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

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. (In Canada, the current CAN-1 B149 installation code.) Electrical wiring must comply with the National Electrical Code ANSI/NFPA 70 - (latest edition). (In Canada, the current CSA C22-1 Canadian Electrical Code.)

DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.

GENERAL INFORMATION

Note: Installation and repair should be performed by a qualified service person. The appliance should be inspected annually by a qualified professional service technician. More frequent inspections and cleanings may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passage ways of 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.

These appliances are 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 and may be dangerous.

The millivolt multi-open appliances are manually controlled and can be incrementally adjusted through a range between high and low settings. The flame setting of electronic models cannot be adjusted.

Input of both left and right millivolt corner models is 33,000 BTU/hr maximum modulated to 26,000 BTU/hr at the low flame setting for natural gas and 31,000 BTU/hr maximum modulated to 24,000 BTU/hr at the low flame setting for propane gas. Input of the left and right electronic corner models is fixed at 33,000 BTU/hr maximum for natural gas and 31,000 BTU/hr maximum for propane gas.

Input of millivolt, natural gas, see-through and peninsula models is 39,000 BTU/hr maximum modulated to 31,000 BTU/hr at the low flame setting. Input of natural gas, electronic see-through and peninsula models is fixed at 39,000 BTU/hr maximum.

Input of millivolt, propane gas, see-through and peninsula models is 34,000 BTU/hr maximum modulated to 26,000 BTU/hr at the low flamed setting. Input of propane gas, electronic see-through and peninsula models is fixed at 34,000 BTU/hr maximum.

The millivolt multi-open appliances are manually controlled and feature a spark ignitor (piezo) that allows the appliance's pilot gas to be lit without the use of matches or batteries. This system provides continued service in the event of a power outage.

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

Test gage connections are provided on the front of the millivolt gas control valve (identified IN for the inlet and OUT for the manifold side). A 1/8" NPT test gage connection is provided on the electronic gas control valve adjacent to the outlet to the main burner.

Minimum inlet gas pressure to these appliances 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 to these appliances is 7.0 inches water column for natural gas and 13.0 inches water column for propane.

These appliances must be isolated from the gas supply piping system (by closing their individual manual shut-off valve) during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

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

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

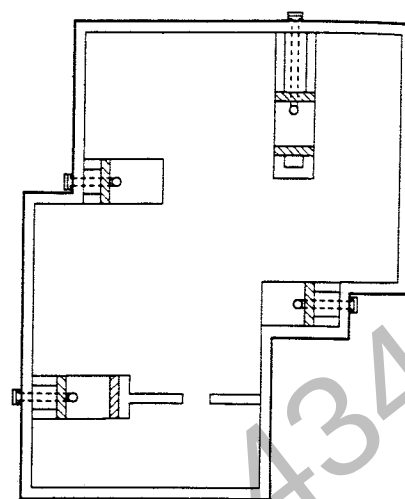
Do not place clothing or other materials on or near this appliance.

LOCATION

In selecting the location, the aesthetic and functional use of the appliance are primary concerns. However, vent system routing to the exterior and access to the fuel supply are also important. Consideration should be given to traffic ways, furniture, draperies, etc., due to elevated surface temperatures (*Figure 2*). The location should also be free of electrical, plumbing or other heating/air conditioning ducting.

These direct vent appliances are uniquely suited for installations requiring a utility shelf positioned directly above the fireplace. Utility shelves like these are commonly used for locating television sets and decorative plants.

To provide for the lowest possible shelf surface use the alternate rear vent outlet with attached venting routed in a way to minimize obstructions to the use of the space above the appliance. The minimum height from the base of the appliance to the underside of combustible materials used to construct a utility shelf in this fashion is 42 1/2" (1080 mm). The weight of the utility shelf and anything placed upon it may not be supported by the appliance in anyway.



Typical Locations

Figure 2

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.

Both millivolt and electronic versions of these appliances are listed for bedroom use.

CLEARANCES

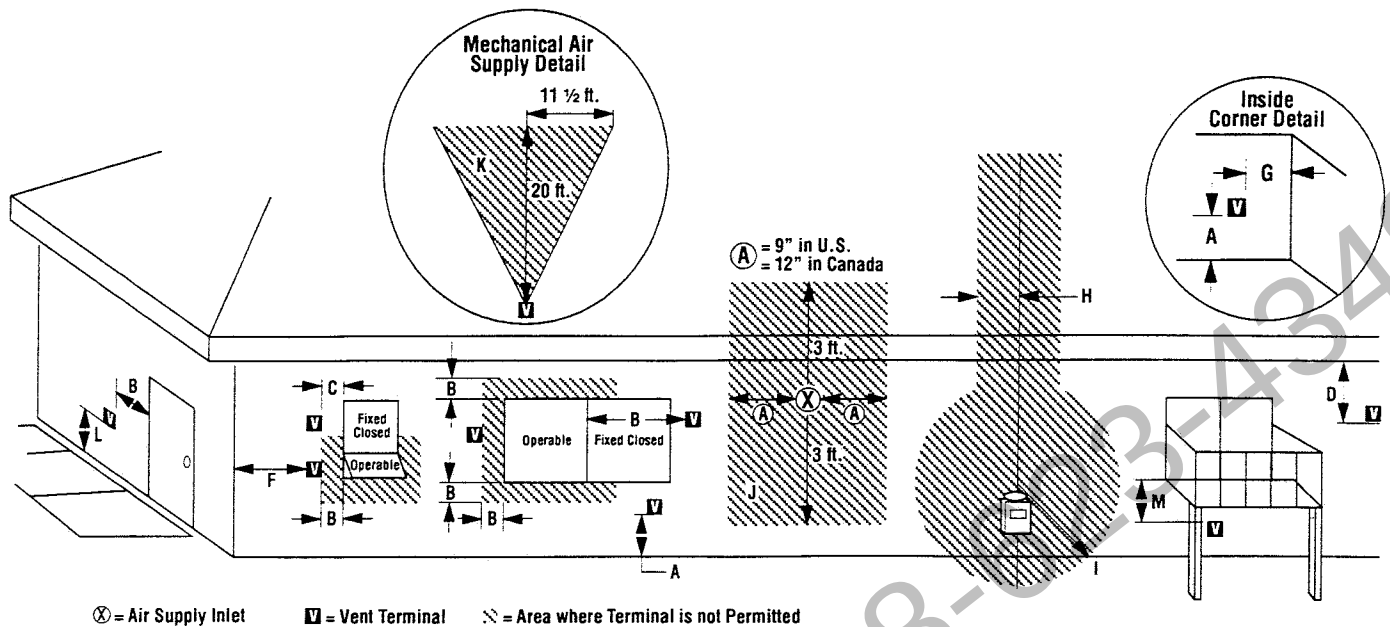
Minimum clearance to combustibles for the appliance is as follows: sides and back - 0", floor - 0", adjacent wall - 0", ceiling - 37 1/2".

Minimum clearance to combustibles for vent systems vented out of the top collar is: horizontal run = top @ 3" (76 mm)*, sides @ 1" (25 mm), bottom @ 1" (25 mm), vertical run = 1" (25 mm).

Minimum clearance to combustibles for vent systems vented out of the rear (side) collar is: horizontal run = top @ 8 3/4" (222 mm), sides @ 2" (51 mm), bottom @ 1" (25 mm), vertical run 2" (51 mm).

***Note:** In order to achieve minimum clearance of 3" the DVSP5-90ELB must be used at the start of the initial horizontal vent run. If the DVSP5-90ELB is not used, clearance above the initial horizontal run is 12" (305mm).

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 (30 cm) minimum

F = clearance to outside corner
9 inches (23 cm) minimum

G = clearance to inside corner
6 inches (15.2 cm) minimum

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

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

J = non-mechanical inlet (includes combustion air intake for a direct vent appliance or any other inlet not providing ventilation air for living spaces):

- vent termination **V** may not be located in an area bounded by lines drawn 9 inches to the left and right of the non-mechanical inlet **X** cap sides (12 inches in Canada) and extending 3 feet above and below the termination

Note: Clearances are measured from the nearest adjacent vent point where exhaust gases exit the flue (vent side to vent side).

K = mechanical air supply (outside air inlet used to provide ventilation air to living spaces within the structure):

- mechanical air supply (air supply inlet **X**) may not be installed within an area bounded by a line drawn 30 degrees to the left or right of a centerline extending upwards from this appliance's horizontal vent terminal **V** to a height of 20 feet

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 3

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Roof Slope	Minimum Height from Roof to Lowest Discharge Opening
Flat to 6/12	1' 0"
Over 6/12 to 7/12	1' 3"
Over 7/12 to 8/12	1' 6"
Over 8/12 to 9/12	2' 0"
Over 9/12 to 10/12	2' 6"
Over 10/12 to 11/12	4' 0"
Over 11/12 to 12/12	5' 0"
Over 14/12 to 16/12	6' 0"
Over 18/12 to 20/12	7' 6"
Over 20/12 to 21/12	8' 0"

For SI units: 1 foot = 0.305 m

Table 1

Vertical Venting

Gas Vent Rule – Gas vent caps that are located 8' or more from a portion of a building which extends at an angle greater than 45° upward from the horizontal may terminate in accordance with Table 1 (Figure 4), provided that in no case shall any discharge opening on the cap be less than 2' (610 mm) horizontally from the roof surface.

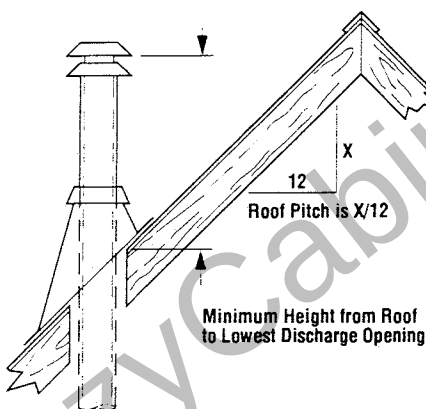


Figure 4

Vertical terminations positioned in the same horizontal plane must not be positioned any closer than 4' (1.2 M). Vertical terminations may be placed as close as 18" (451 mm) if they are offset horizontally at least 3 1/2" (1.07 M), refer to Figure 5.

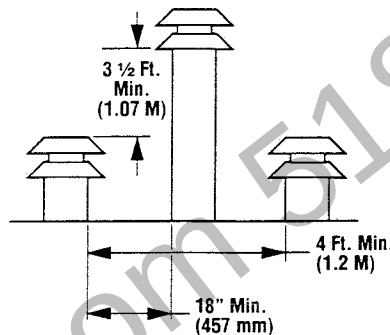


Figure 5

Horizontal Venting

The vent termination must have a minimum of 3" (76 mm) clearance to any overhead combustible projection of 2 1/2" (64 mm) or less. Maintain 12" (305 mm) clearance from projections exceeding the 2 1/2" (64 mm) (Figure 6). For additional vent locations restrictions refer to Figure 3.

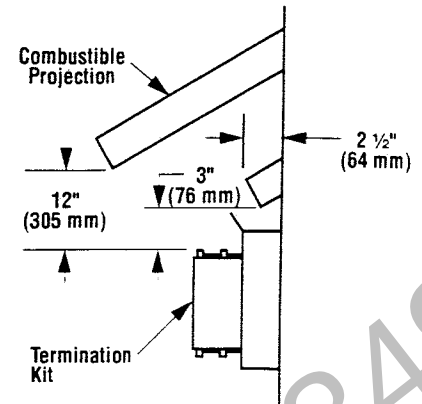


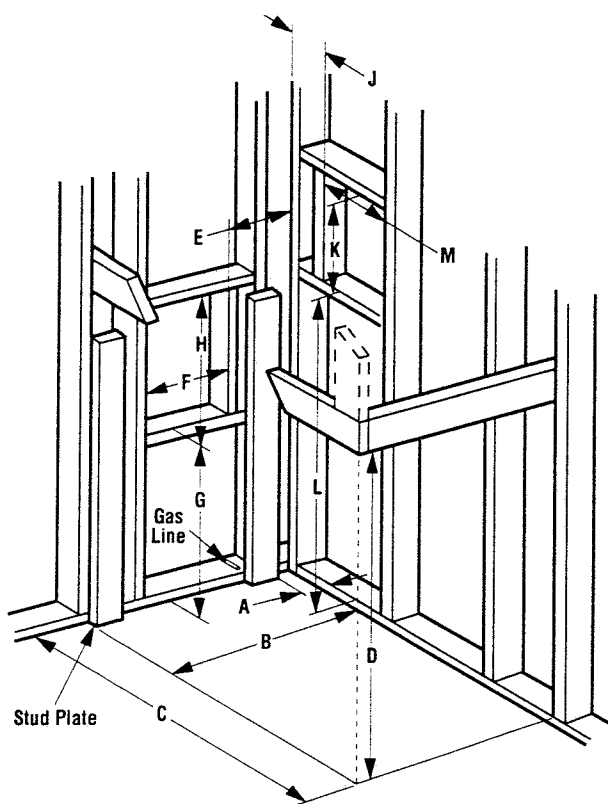
Figure 6

ASSEMBLY STEPS

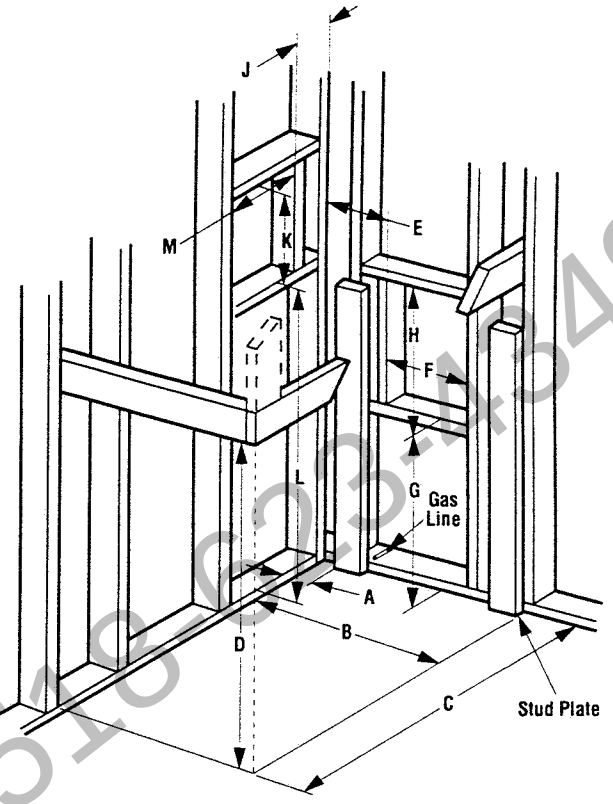
The typical sequence of installation follows, however, each installation is unique resulting in variations to those described.

1. Construct the appliance framing. Position the appliance within the framing and secure with nailing brackets.
2. Route gas supply line to appliance location.
3. Install the hoods.
4. Install the vent system and exterior termination.
5. **Millivolt Appliances** – Install the operating control switch and bring in electrical service line for forced air circulating blower (optional equipment).
6. **Electronic Appliances** – Field wire and install operating control switch.
7. Mount forced air kit (optional equipment).
8. Make connection to gas supply.
9. Install the logs and Rockwool.
10. Checkout appliance operation.
11. Install glass door frame assembly.
12. Adjust burner to ensure proper flame appearance.

_DVCR/_DVCL FRAMING SPECIFICATIONS



Right Corner Framing



Left Corner Framing

Figure 7

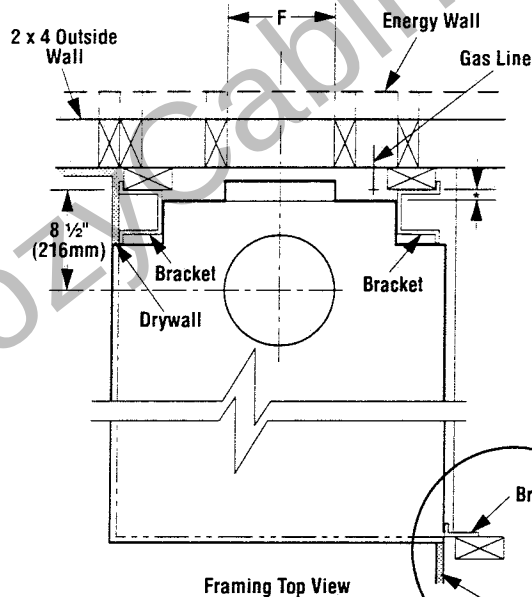
Framing Dimensions

Rear Vent

A	1 1/8" (29 mm) Min.
B	23 7/8" (606 mm) Max.
C	44 3/8" (1127 mm) Max.
D	42 1/2" (1080 mm) Min.
E	6 1/2" (165 mm) Max.
F	12" (305 mm) Min.
G	24 1/2" (622 mm) Max.
H	17 1/4" (438 mm) Min.

Top Vent

A	1 1/8" (29 mm) Min.
B	23 7/8" (606 mm) Max.
C	44 3/8" (1127 mm) Max.
D	42 1/2" (1080 mm) Min.
J	4" (102 mm) Min.
K	12" (305 mm) Min.
L	41 1/4" (1048 mm) Max.
M	12" (305 mm) Min.



* 1/2" (13mm) Required Air Space Clearance

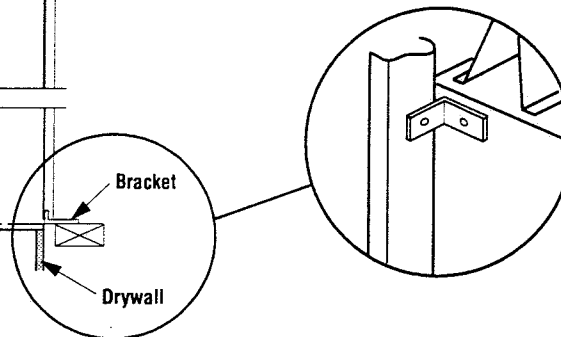


Figure 8

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

INSTALLATION

The appliance is shipped with all gas controls and components installed and pre-wired. Remove the shipping carton, exposing the front glass door frame. Remove wood slats and remove and discard the wood slat mount brackets. Loosen and remove the three (3) $\frac{1}{4}$ "-20 x 1" Phillips pan head screws at the three (3) tabs located along the door frame top edge. Tilt the glass door frame assembly outward and disengage the three (3) tabs along the bottom of the door from the three (3) brackets at the bottom of the firebox opening. Remove the door and set the panel aside protecting it from inadvertent damage. Retain the three (3) screws for use on reassembly. Remove the logs, bubble wrapped and secured to the inside of the appliance door, and also set aside.

Framing

Step 1. Frame these appliances as illustrated in the appropriate illustrations, *Figures 7 through 15* on pages 6 through 9. All framing details must allow for a minimum clearance to combustible framing members of at least $\frac{1}{2}$ " (13 mm). The nailing surfaces of nailing flanges and brackets are exempted from these clearance requirements and may be directly contacting combustibles.

Dimensions provided in Figures 7 through 15 are minimum distance requirements from rough framing, if the fireplace enclosure is to be lined with plywood, drywall or an other like material, clearances and dimensions must be calculated with the thickness of the lining materials in mind.

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

Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them. All construction above the appliance must be self supporting. **DO NOT** use the appliance for structural support of weights in excess of 250 lbs.

Position the appliance within the framing before attaching the nailing brackets, *Figure 16*. Attach nailing brackets with two (2) of the provided self tapping screws each. The nailing brackets are symmetrical and dual sided. Use protruding flange face to secure the appliance to framing and use the flange face nearest the appliance for securing drywall or other finishing materials along the edge of the appliance.

_DVCR/_DVCL APPLIANCE SPECIFICATIONS

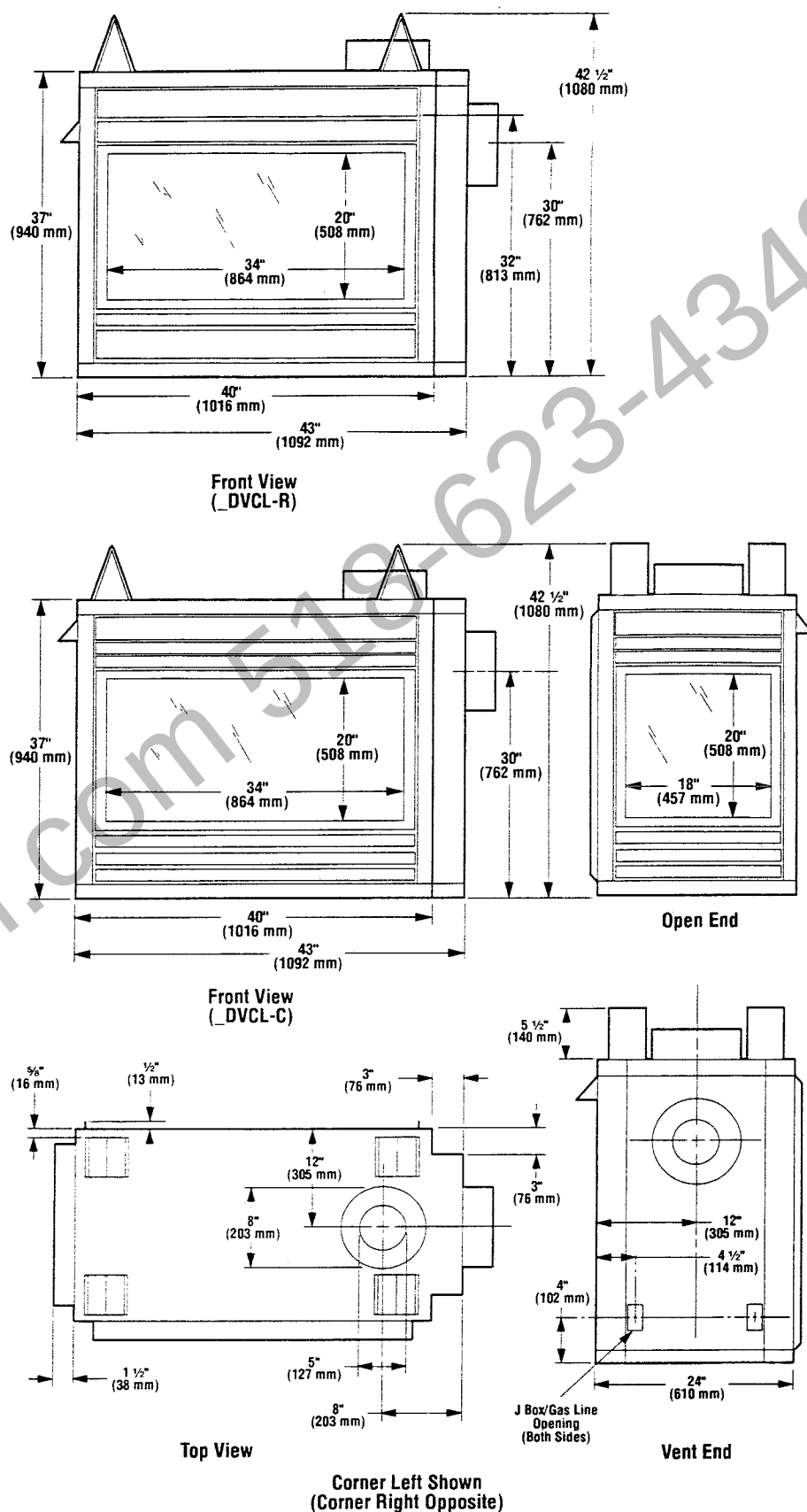


Figure 9

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

_DVPF FRAMING SPECIFICATIONS

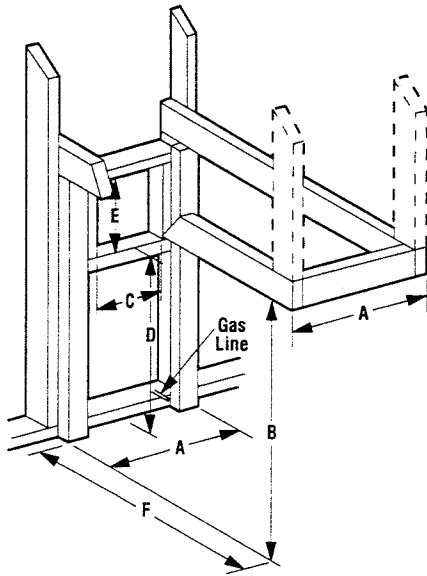
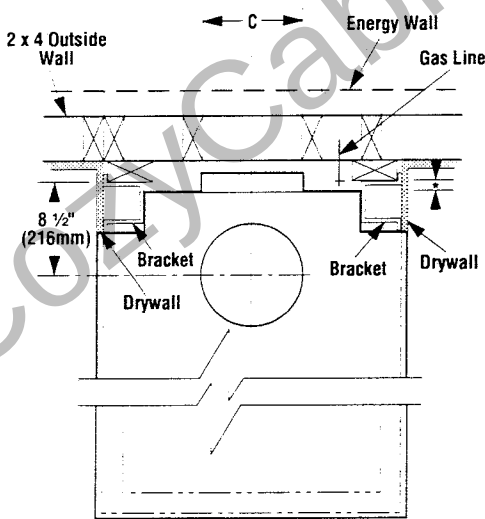


Figure 10

Framing Dimensions

A	22 3/4" (578 mm)
B	42 1/2" (1080 mm) Min.
C	12" (305 mm) Min.
D	Top Vent – 41 1/4" (1048 mm) Max. Rear Vent – 24 1/2" (622 mm) Max.
E	Top Vent – 12" (305 mm) Min. Rear Vent – 17 1/4" (438 mm) Max.
F	44 3/8" (1127 mm) Min.

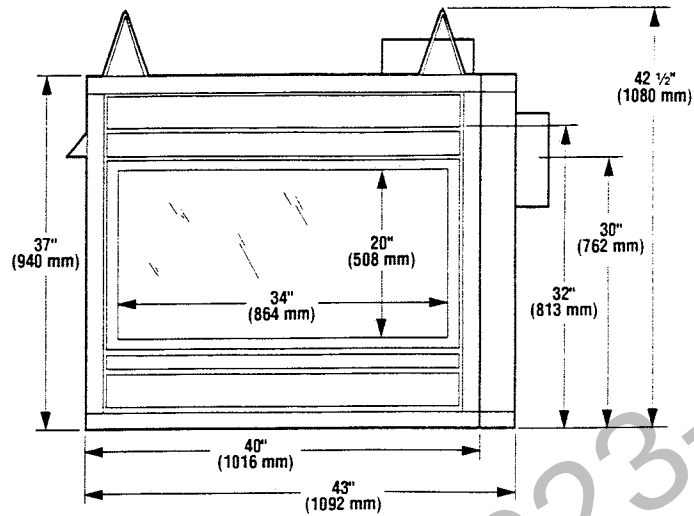


Framing Top View

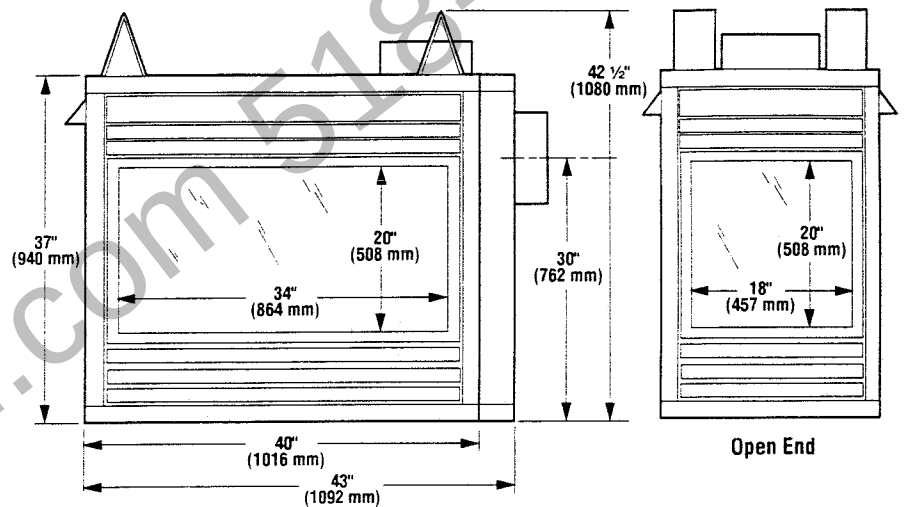
* 1/2" (13mm) Required Air Space Clearance

Figure 11

_DVPF APPLIANCE SPECIFICATIONS

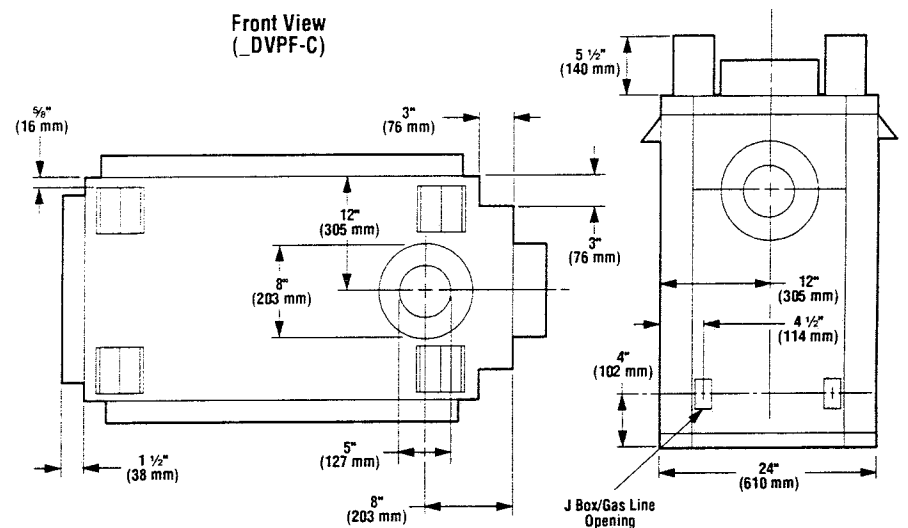


Front View
(_DVPF-R)



Front View
(_DVPF-C)

Open End



Top View

Vent End

J Box/Gas Line
Opening
(Both Sides)

Figure 12

_DVST FRAMING SPECIFICATIONS

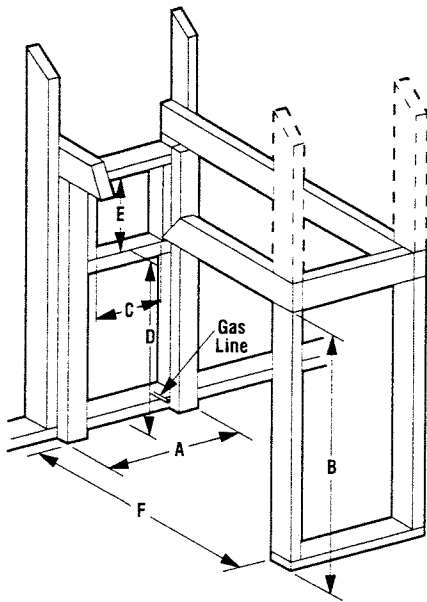
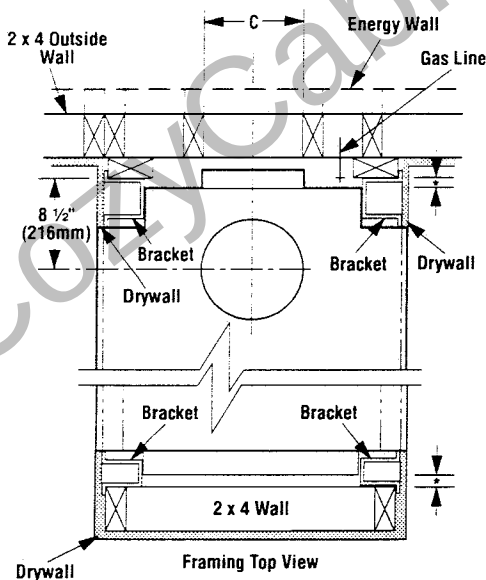


Figure 13

Framing Dimensions

A	22 3/4" (578 mm)
B	42 1/2" (1080 mm) Min.
C	12" (305 mm) Min.
D	Top Vent – 41 1/4" (1048 mm) Max. Rear Vent – 24 1/2" (622 mm) Max.
E	Top Vent – 12" (305 mm) Min. Rear Vent – 17 1/4" (438 mm) Max.
F	47 1/2" (1207 mm) Min.

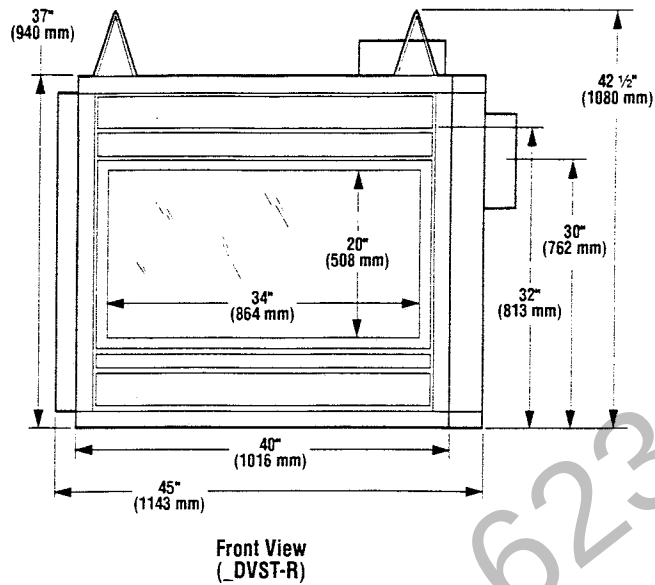


* 1/2" (13mm) Required Air Space Clearance

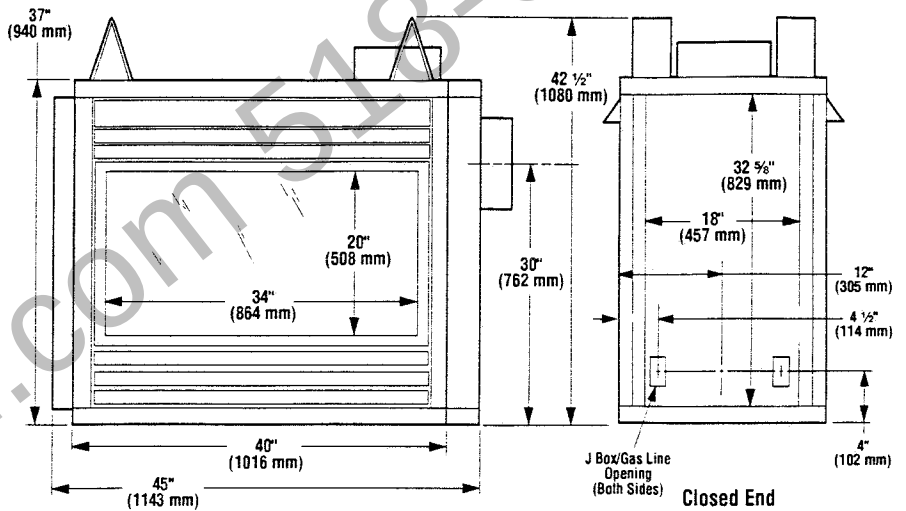
Figure 14

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

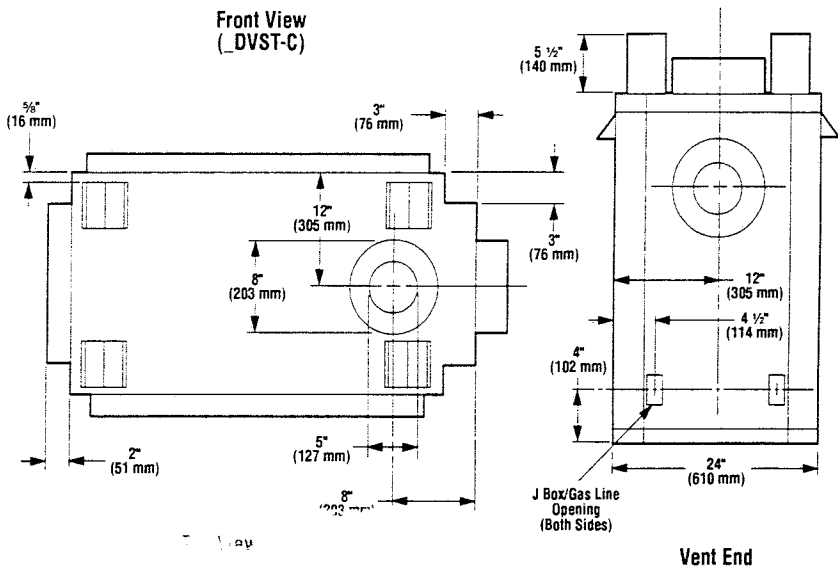
_DVST APPLIANCE SPECIFICATIONS



Front View
(_DVST-R)



Front View
(_DVST-C)



Vent End

Figure 15

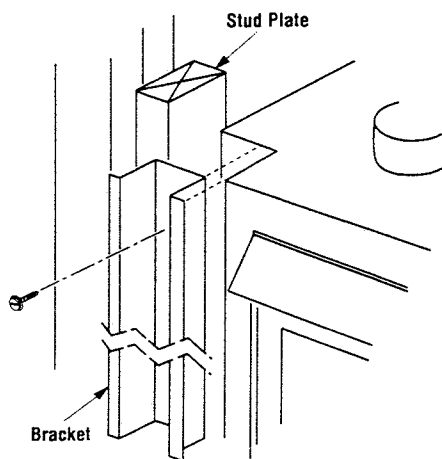


Figure 16

See-Through Model Framing Considerations

See-Through models can be particularly difficult to position within the close tolerances of an already fabricated framed opening. This difficult task can be made easier by ensuring that the symmetrical nailing brackets are not installed until the appliance is fully positioned. Additionally it may be useful to install only one stud plate first, slide the unit into place and then install the other stud plate and nailing brackets. The wide brackets are for use at the vent and the narrow brackets are for use at the closed end.

Corner Model Framing Considerations

Corner models have unique framing considerations that require particular attention, detailed here. Refer to *Figures 7, 8 and 9*.

The corner unit is shipped with two 90 degree mounting brackets that must each be attached to the appliance with one of the provided self tapping sheetmetal screws (*Figure 8, detail*). Attach these brackets to the top and bottom of the appliance at the open end nearest the wall. Secure both brackets to a vertical framing member as close as possible to the appliance open end.

The stud plate and bracket located at the installations inner corner, are optional with corner model installations and need not be installed.

Step 2. Route a 1/2" (13 mm) gas line along the left or right side framing *Figure 17*. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

All appliances have a 3" long 3/8" NPT nipple installed at the valve. To quickly and easily complete the gas line routing, use the gas flex line kit, Model _GFLV.

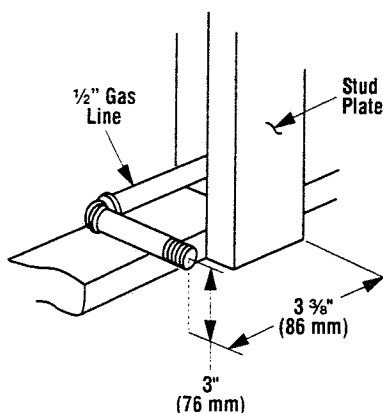


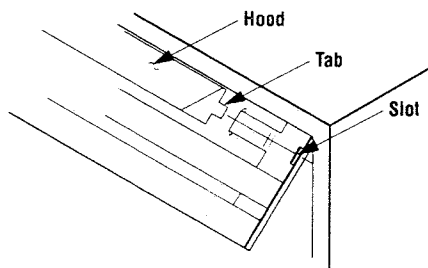
Figure 17

Step 3. All of these multi-open appliances must have hoods installed prior to operating. The hoods for the _DVC and _DVR models are similar in appearance but are installed and located differently.

Hood Installation

On all clean face (-R) units, position the hoods in the open areas just above the appliance glass panels. Locate the flange, found along the top edge of the hood, behind the upper radiant panel. Install the two (2) screws into the holes at the ends of the hood. Secure the hoods to the appliance frame by tightening the screws.

On louvered face (-C) units, install the hoods in the gaps above the two (2) top louvers on each appliance face. Open the top louver door and insert the tabs on the ends of the hood into the slots in the door hinge. Bend the tabs over to secure each hood (*Figure 18*).



For (-C) Models Only

Figure 18

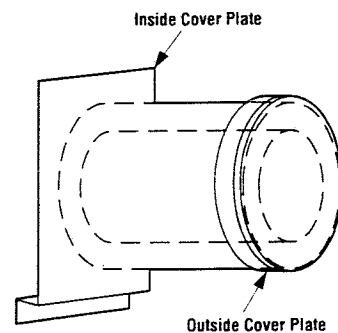
Step 4. Install the Vent System – These appliances must be vented directly to the outside through their own double wall pipe assembly; 5" (127 mm) and 8" (203 mm) diameters. The system may not service multiple appliances, and must never be connected to a flue serving a solid fuel burning appliance.

These appliances are designed, tested and listed for operation with, and only with, _DST5 and _DSF5 vent components. DO NOT use other manufacturers' components.

Preparing the Appliance Vent Collar

These systems incorporate a vent outlet collar at both the rear and top of the appliance. The appliance is shipped with both the top and rear collars blocked. Either the rear or top vent collar must be removed before accepting the vent connection. If one prefers to use the top vent collar for the vent connection, the collar plug must be removed from the top collar. If the rear collar is to be used, the plug must be removed from the rear collar.

The collar plug consists of a plug of insulation and an inner and outer plate held against the vent openings with sheet metal screws (*Figure 19*). Removing the sheet metal screws will release the plates and permit the insulation to be removed. After both inner and outer plates have been removed from the selected collar, the vent installation can proceed.



Rear Vent Shown - Top Vent Similar

Figure 19

Listed Vent Components:

_DST5-HTK	– Horizontal termination kit
_DV-HTK-1	– Horizontal termination kit
_DST5-VTK	– Vertical termination kit
_DST5-F	– Flashing and collar
_DST5-FSV	– Firestop
_DST5-12/18/36	– Vent sections
_DST5-90ELB	– 90° Elbow
_DST5-45ELB	– 45° Elbow
_DST5-EXT	– Adjustable extension
_DSF5-24	– Flexible vent section
_DVSP5-90ELB	– Starter Elbow

With the appliance secured in framing, determine vent routing and identify the exterior termination location. The following sections describe vertical (roof) and horizontal (exterior wall) vent applications. Refer to the section relating to your installation.

Adjustable Extension

The _DST5-EXT vent extension is adjustable from 6" (152 mm) to 9 3/4" (248 mm). Use this component when there is a short distance to complete the vent system in lieu of cutting the uncrimped end of a vent section.

Vertical Termination Systems (Roof)

The Figures 20 through 23 and the Vertical Vent Table on page 8 illustrate the various vertical venting configurations that are possible for use with these appliances. The maximum vertical height is 30' (7.6 m) above the top of the appliance. Figures 21 through 23 along with their corresponding tables summarize each system's minimum and maximum vertical and horizontal values that can be used to design and install the vent components in a variety of applications.

If 3" clearance to combustibles above the first horizontal run is desired, the _DVSP5-90ELB starter elbow must be used when initially starting the first horizontal component of the vent run.

All of these vertical vent systems terminate through the roof. The minimum vent height above the roof and/or adjacent walls is specified in ANSI Z223.1-(latest edition) (In Canada, the current CAN-1 B149 installation code) by major building codes. Always consult your local codes for specific requirements. A general guide to follow is the Gas Vent Rule (refer to Table 1, page 5).

The _DSF5 flexible vent section can not be used in any application as part of a vertically terminating vent system.

Vertical (Straight) Installation

Determine the number of straight sections required. 10 3/4" (273 mm), 16 3/4" (425 mm) and 34 3/4" (883 mm) net section lengths are available. Plan the vent lengths so that a joint does not occur at ceiling or roof joists. Refer to the Vent Section Length Chart.

Note: The uncrimped end of the vent may be trimmed when necessary or the adjustable extension, Model _DST5-EXT, may be used.

Vertical (Offset) Installation

Analyze the vent routing and determine the quantities of vent sections and number of elbows required. Refer to Vertical Vent Table on page 8 to select the type of vertical installation desired. Vent sections are available in net lengths of 10 3/4" (273 mm), 16 3/4" (425 mm) and 34 3/4" (883 mm). Refer to the Vent Section Length Chart on page 8 to determine available length combinations.

Elbows are available as 90° and 45° configurations. Refer to Figure 38 for the _DST5 elbow dimensional specifications. Maintain a minimum 1" (25 mm) clearance to combustible materials for all vertical elements. Clearance for all horizontal elements are; 3" (76 mm) on top, 1" (25 mm) on sides and 1" (25 mm) on the bottom.

Note: The uncrimped end of the vent may be trimmed when necessary or the adjustable extension, Model _DST5-EXT, may be used.

A. Use a plumb line from the ceiling above the appliance to locate center of the vertical run. Cut and/or frame a 12" x 12" inside (305 mm x 305 mm) minimum opening about this center mark (Figure 20).

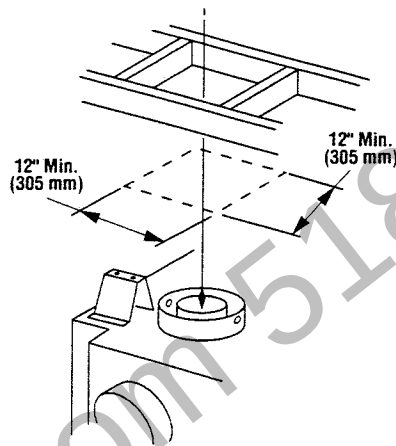


Figure 20

WARNING: A 3/8" (10 mm) BEAD OF _MILL-PAC BLACK (700°F) HIGH TEMPERATURE SEALANT MUST BE APPLIED TO THE INNER APPLIANCE COLLAR BEFORE THE FIRST VENT COMPONENT IS ATTACHED (FIGURE 21) AND TO ALL SUBSEQUENT INNER VENT CONNECTIONS. FAILURE TO SEAL ALL THE INNER JOINTS WITH THIS HIGH TEMPERATURE SEALANT MAY CAUSE THE APPLIANCE TO OPERATE IMPROPERLY.

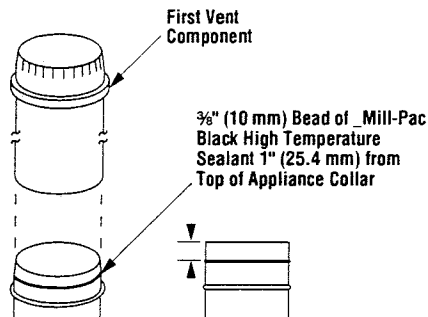


Figure 21

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

B. The vent sections are crimped at one end to provide a slip fit for elbows and additional vent sections. To begin a vent run, apply _Mill-Pac Black (700°F) high temperature sealant to the inner joint, being sure of a 100% seal (Figure 21). Slide the 5" (127 mm) inner section onto the center appliance collar (Crimped end always upward.) Locate and transfer drill a 1/8" (3 mm) diameter hole through the collar at the two (2) punched holes (180° apart). Use two (2) No. 8 x 1/2" sheet metal screws to secure the section.

IMPORTANT: APPLY _MILL-PAC BLACK (700°F) HIGH TEMPERATURE SEALANT AT INNER JOINT CONNECTIONS.

Note: An elbow may also be attached to the appliance collar. Secure in the same manner as you would a vent section.

C. Next, slip the outer section over the inner and onto outer appliance collar, bottoming out at the bead. Make sure the crimped end of both inner and outer vent sections are the same height. Secure using two (2) sheet metal screws (Figure 22).

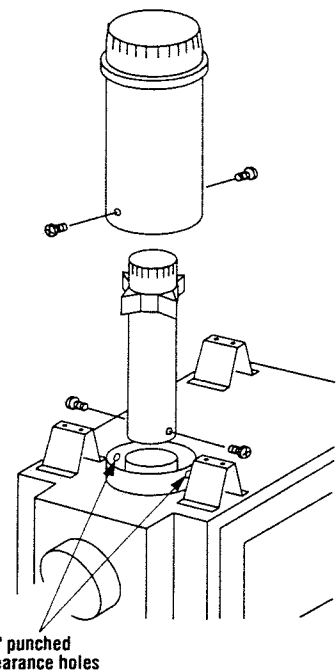


Figure 22

D. To add vent sections, start with the 5" (127 mm) inner section and slide it over the previously installed inner section; an overlap of 1 1/4" (32 mm) is required. The section will not bottom out on the bead. **Remember to seal inner sections using _Mill-Pac Black (700°F) high temperature sealant on the mating surfaces before fitting together.**

VENT SECTION LENGTH CHART

Height of Vent		Number of DST5 Vent Sections			Height of Vent	
IN	FT	12	18	36	MM	M
10"	0' 10"	1	0	0	254	0.25
16"	1' 4"	0	1	0	406	0.41
20 3/4"	1' 8 3/4"	2	0	0	527	0.53
26 3/4"	2' 2 3/4"	1	1	0	679	0.68
34"	2' 10"	0	0	1	864	0.86
37 1/2"	3' 1 1/2"	2	1	0	953	0.95
44 3/4"	3' 3/4"	1	0	1	1137	1.14
50 3/4"	4' 3/4"	0	1	1	1289	1.29
55 1/2"	4' 1/2"	2	0	1	1410	1.41
61 1/2"	5' 1/2"	1	1	1	1562	1.56
68 3/4"	5' 3/4"	0	0	2	1746	1.75
72 1/4"	6' 1/4"	2	1	1	1835	1.84
79 1/2"	6' 1/2"	1	0	2	2019	2.02
85 1/2"	7' 1/2"	0	1	2	2172	2.17
90 1/4"	7' 1/4"	2	0	2	2292	2.29
96 1/4"	8' 1/4"	1	1	2	2445	2.45
103 1/2"	8' 1/2"	0	0	3	2629	2.63
107"	8' 11"	2	1	2	2718	2.72
114 1/4"	9' 6 1/4"	1	0	3	2902	2.90
120 1/4"	10' 1/4"	0	1	3	3054	3.05
125"	10' 5"	2	0	3	3175	3.18
131"	10' 11"	1	1	3	3327	3.33
138 1/4"	11' 6 1/4"	0	0	4	3512	3.51
141 3/4"	11' 9 3/4"	2	1	3	3600	3.60
149"	12' 5"	1	0	4	3785	3.79
155"	12' 11"	0	1	4	3937	3.94
159 3/4"	13' 3 3/4"	2	0	4	4058	4.06
165 3/4"	13' 9 3/4"	1	1	4	4210	4.21
173"	14' 5"	0	0	5	4394	4.39
176 1/2"	14' 8 1/2"	2	1	4	4483	4.48
183 3/4"	15' 3 3/4"	1	0	5	4667	4.67
189 3/4"	15' 9 3/4"	0	1	5	4820	4.82
194 1/2"	16' 2 1/2"	2	0	5	4940	4.94
200 1/2"	16' 8 1/2"	1	1	5	5093	5.09
207 3/4"	17' 3 3/4"	0	0	6	5277	5.28
211 1/4"	17' 7 1/4"	2	1	5	5366	5.37
218 1/2"	18' 2 1/2"	1	0	6	5550	5.55
224 1/2"	18' 8 1/2"	0	1	6	5702	5.70
229 1/4"	19' 1 1/4"	2	0	6	5823	5.82
235 1/4"	19' 7 1/4"	1	1	6	5975	5.98
242 1/2"	20' 2 1/2"	0	0	7	6160	6.16
246"	20' 6"	2	1	6	6248	6.25
253 1/4"	21' 1 1/4"	1	0	7	6433	6.43
259 1/4"	21' 7 1/4"	0	1	7	6585	6.59
264"	22' 0"	2	0	7	6706	6.71
270"	22' 6"	1	1	7	6858	6.86
277 1/4"	23' 1 1/4"	0	0	8	7042	7.04
280 3/4"	23' 4 3/4"	2	1	7	7131	7.13
288"	24' 0"	1	0	8	7315	7.32
294"	24' 6"	0	1	8	7468	7.47
298 3/4"	24' 10 3/4"	2	0	8	7588	7.59
304 3/4"	25' 4 3/4"	1	1	8	7741	7.74
312"	26' 0"	0	0	9	7925	7.93
315 1/2"	26' 3 1/2"	2	1	8	8014	8.01
322 3/4"	26' 10 3/4"	1	0	9	8198	8.20
328 3/4"	27' 4 3/4"	0	1	9	8350	8.35
333 1/2"	27' 9 1/2"	2	0	9	8471	8.47
339 1/2"	28' 3 1/2"	1	1	9	8623	8.62
346 3/4"	28' 10 3/4"	0	0	10	8807	8.81
350 1/4"	29' 2 1/4"	2	1	9	8896	8.90
357 1/2"	29' 9 1/2"	1	0	10	9081	9.08
363 1/2"	30' 3 1/2"	0	1	10	9233	9.23
368 1/4"	30' 8 1/4"	2	0	10	9354	9.35

Note: All vent dimensions are measured in feet from the appliance surface where the vent connects to the point where exhaust gases exit the termination.

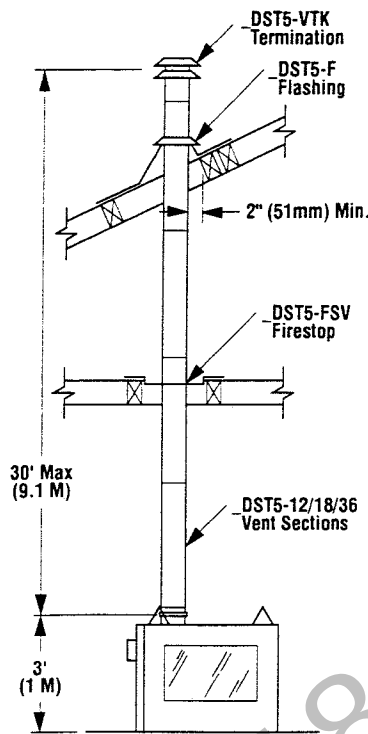


Figure 23

TABLE B	
V _T Min.	H Max.
1	2
2	4
3	6
4	8
5	8
V _T = 30 Max. H = 8 Max.	

TABLE B

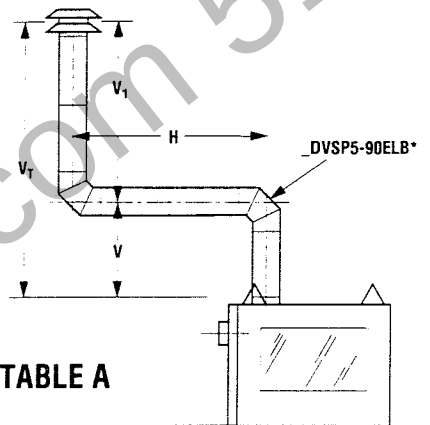


TABLE A

Figure 25

TABLE A			
V _T Max.	V Min.	H Max.	V ₁ Max.
30	2	4	28
	3	6	27
	4	8	26
	5	10	25
	6	12	24
	7	14	23
	8	16	22
	9	18	21
	10	20	20
	28	20	2
V _T = V + V ₁ = 30 Max. H = 20 Max.			

TABLE C			
V Min.	H Max.	H _T Max.	V ₁ Max.
2	3	4	28
3	5	6	27
4	6	8	26
5	7	10	25
6	8	12	24
7	8	14	23
8	8	16	22
9	8	18	21
10	8	20	20
28	8	20	2
V _T = V + V ₁ = 30 Max. H = 8 Max. H _T = H + H ₁ = 20 Max.			

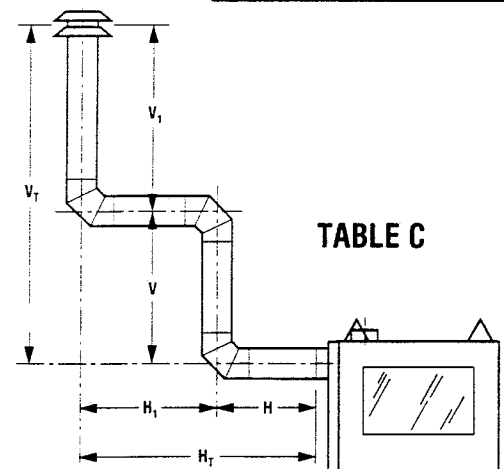


Figure 26

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

HORIZONTAL VENT TABLES

(All values are in feet)

1 - 90° Elbow or 2 - 45° Elbows = 1'

Note: All vent dimensions are measured in feet from the appliance surface where the vent connects to the point where exhaust gases exit the termination.

TABLE D	
V Min.	H Max.
2	3
3	4
4	6
5	8
6	10
7	12
30	12
V = 30 Max. H = 12 Max.	

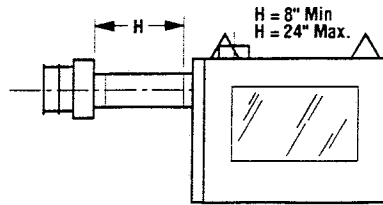


Figure 27

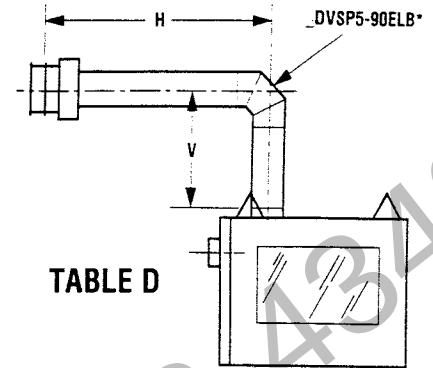


TABLE D

Figure 28

TABLE E		
V Min.	H Max.	H _T Max.
2	1	3
3	2	4
4	3	6
5	4	8
6	5	10
7	6	12
8	7	12
9	8	12
30	8	12
V = 30 Max. H = 8 Max. H _T = H + H ₁ = 12 Max.		

TABLE E

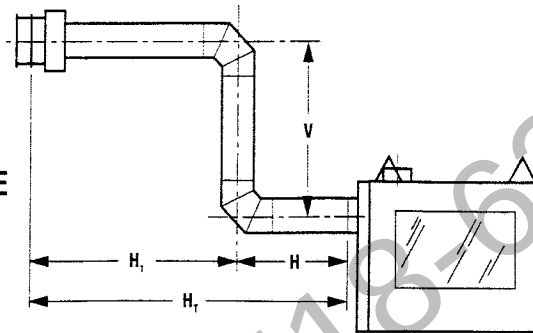


Figure 29

TABLE F			
V Min.	H Max.	H _T Max.	V ₁ Max.
2	1	3	28
3	2	4	27
4	3	6	26
5	4	8	25
6	5	10	24
7	6	12	23
8	7	12	22
9	8	12	21
28	8	12	2
V = 30 Max. H = 8 Max. V _T = V + V ₁ = 30 Max. H _T = H + H ₁ = 12 Max.			

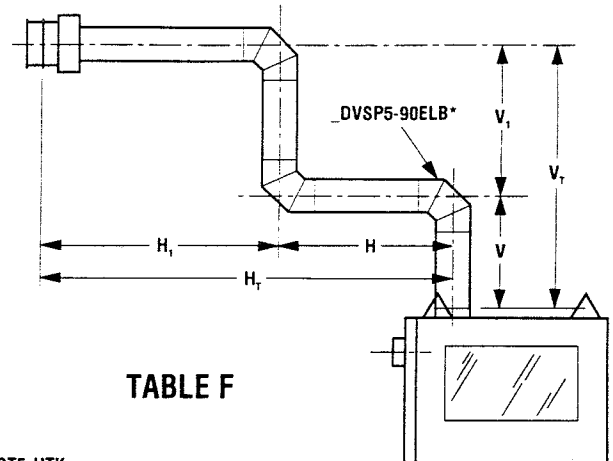


TABLE F

Figure 30

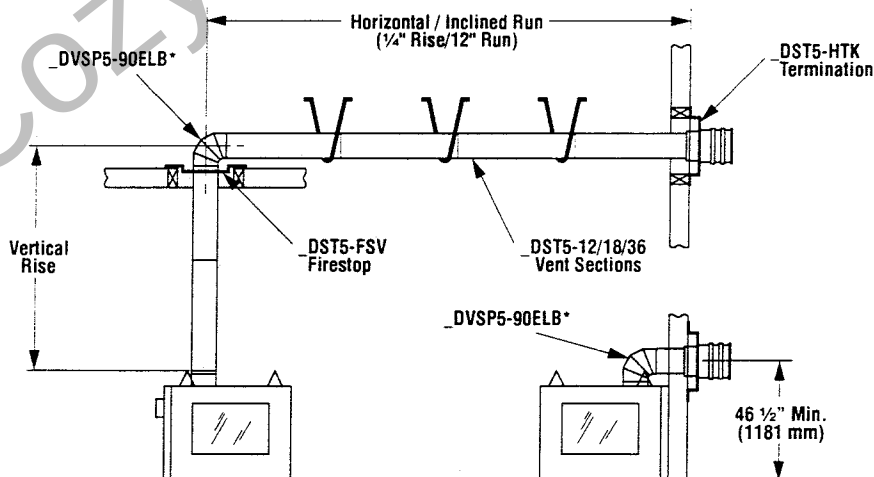


Figure 31

***Note:** DVSP5-90ELB starter elbow is required unless clearance to combustibles at the first horizontal leg is increased to 12".

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Secure with two (2) No. 8 x 1/2" sheet metal screws. Slide the 8" (203 mm) outer section over the previously installed outer section; a 1 1/4" (32 mm) overlap is required. This section will not bottom out on the bead. Make sure the crimped end of both inner and outer vent sections are the same height and that the centering spacer is properly seated. Secure with two (2) No. 8 x 1/2" sheet metal screws.

Note: The uncrimped end of the vent may be trimmed when necessary or the adjustable extension, _DST5-EXT, may be used.

E. At transition from or to a horizontal/inclined run, the _DST5-90ELB/_DST5-45ELB/_DVSP5-90ELB elbows install in the same manner as the straight vent sections. Apply Mill-Pac Black (700°F) high temperature sealant to the inner joints. Slip the inner elbow over the straight inner vent section. Secure with two (2) screws. Slide the outer elbow over the inner elbow, slip down over the outer vent section. Secure with two (2) screws.

F. Continue with the installation of the straight vent sections in horizontal/inclined run as described in Step D. Install support straps every 6' (2 m) along horizontal/inclined vent runs using conventional plumber's tape. **It is very important that the horizontal/inclined run be maintained in a straight (no dips) and slightly elevated plane (1/4" rise/12" run).** Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary. **It is important to maintain the required clearances to combustibles: 1" (25 mm) at all sides for all vertical runs; and 3" (76 mm) at the top, 1" (25 mm) at sides, and 1" (25 mm) at the bottom for all horizontal/inclined runs.**

G. Use a _DST5-FSV firestop spacer at ceiling joists. If there is living space above the ceiling level, the firestop spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop spacer with 8d nails at each corner. Remember to maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections.

H. Identify location for vent at the roof. Cut and/or frame opening per Roof Framing Chart and Figure 32.

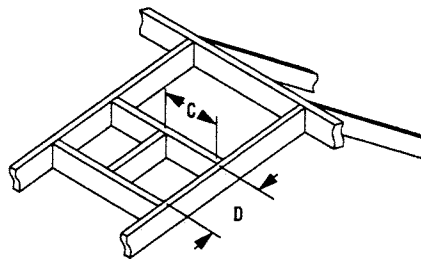


Figure 32

Framing Dimensions for Roof

Pitch	C	D
0/12	10" (254 mm)	10" (254 mm)
6/12	10" (254 mm)	12" (305 mm)
12/12	10" (254 mm)	17 3/4" (305 mm)

I. Extend the vent sections through the roof structure. Install the roof flashing over the vent section and position such that the vent column rises vertically (use carpenter's level) (Figure 33). Nail along perimeter to secure flashing or adjust roofing to overlap the flashing edges at top and sides only and trim where necessary. Seal the top and both sides of the flashing with waterproof caulking.

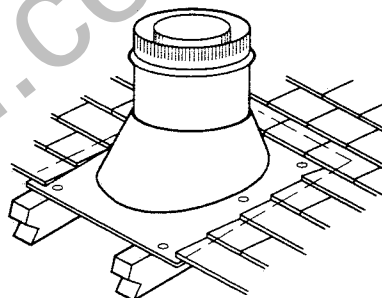


Figure 33

J. Install the storm collar, supplied with the flashing, over the vent/flashing joint. Wrap the storm collar around the vent noting which locking groove closely aligns with the tab (Figure 34). Pencil mark excess material, unwrap and trim excess with shears. Reposition collar, insert tab through both slots, pull tab so that collar is tight around vent. Slide collar down until it meets top of the flashing. Bend tab back over slot. Apply noncombustible caulking or mastic around circumference of the joint and the tab slot area to provide a water tight seal.

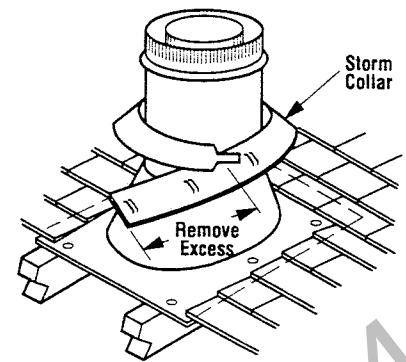


Figure 34

K. The final step involves installation of the _DST5-VTK termination kit. Extend the vent sections to height defined by the applicable gas appliance code, or as indicated by the Ten Foot Rule.

Apply _Mill-Pac Black (700°F) high temperature sealant and slide the inner termination section down over the last inner vent section. Ensure overlap is a minimum of 1 1/4" (32 mm) (Figure 35).

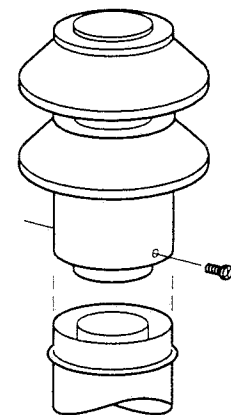


Figure 35

Slide the outer termination down over the last outer vent section. The two (2) holes in the outer sleeve are used to secure the termination. Transfer drill 1/8" (3 mm) diameter hole through outer wall of top vent section. Secure with two (2) No. 8 x 1/2" sheet metal screws.

If the vent system extends more than 5' (1.5 m) above the roof flashing, stabilizers may be necessary. Additional screws may be used at section joints for added stability. Guy wires may be attached to the joint for additional support on multiple joint configurations (Figure 36).

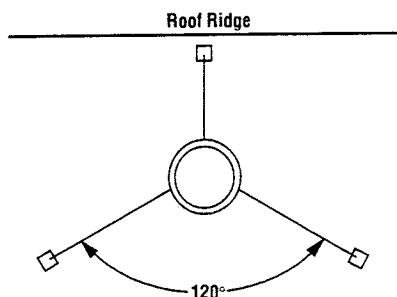


Figure 36

Horizontal (Outside Wall) Termination System

Figures 27 through 31 and the Horizontal Vent Tables illustrate the various horizontal venting configurations that are possible for use with these appliances. The maximum horizontal distance is 11 1/2' (3.5 m). The Horizontal Vent Tables summarize each system's minimum and maximum vertical and horizontal values that can be used to design and install the vent components in a variety of applications. All of these horizontal vent systems terminate through an outside wall. Building Codes limit or prohibit terminating in specific areas. Refer to Figure 3 for location guidelines

If 3" clearance to combustibles above the first horizontal run is desired, the _DVSP5-90ELB starter elbow must be used when initially starting the first horizontal component of the vent run.

The _DSF5-24 (Figure 37) flexible vent section may be used to attach the _DST5-HTK and _DV-HTK-1 terminations directly to the end of a vent run built up of _DST5 components. Never use the _DSF5-24 unless one end of this component is to be attached directly to the _DST5-HTK or _DV-HTK-1. Never use the _DSF5-24 as a part of a vertical venting system. **Never use the _DSF5-24 flexible vent section directly attached to the appliance** The _DSF5-24 is designed to be used in place of _DST5 vent components.

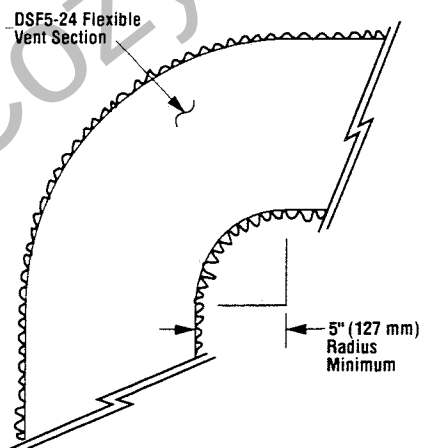


Figure 37

Flex vent ends are secured with provided hose clamps instead of the screws used with the _DST5 sections. The inner tube of the _DSF5-24 must be sealed at both ends with _Mill-Pac Black (700°F) high temperature sealant. The _DSF5-24 must not be bent to an inside diameter smaller than 5" (127 mm).

Note: The _DSF5-24 vent component is rigid and self supporting; it does not require bracing. Do not allow any materials to be in contact with or rest upon the _DSF5-24 in the installation application. Attach the inner and outer flex vent collars to the termination end of the _DFS5-24 prior to connecting to the termination. The inner and outer flex vent collars will slide into the telescoping components of the termination.

A. Analyze the vent routing and determine the types and quantities of sections required. Venting is available in 10 3/4" (273 mm), 16 3/4" (425 mm) and 34 3/4" (883 mm) net section lengths. Make allowances for elbows as indicated in Figure 38. Maintain a minimum 1" (25 mm) clearance to combustibles on the vertical sections. Clearances for the horizontal runs are; 3" (76 mm) on top, 1" (25 mm) on sides, and 1" (25 mm) at the bottom.

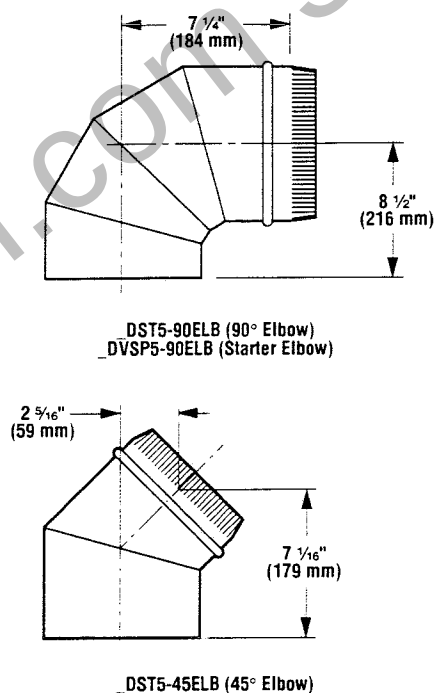


Figure 38

B. Locate the center of the vent outlet on the exterior wall. Cut and/or frame a 12" x 12" (305 mm x 305 mm) inside opening about the center. Install firestop (supplied with the termination) at outer surface with indicated "top" surface in up position. (Figure 41)

C. If the vertical route is to penetrate a ceiling, use plumb line to locate the center above the appliance. Cut and/or frame a 12" x 12" (305 mm x 305 mm) inside opening about the center (refer to Figure 24).

D. At the ceiling opening, mount a _DST5-FSV firestop to the underside surface of framing. (Position firestop at the top side only in attic space.)

WARNING: A 3/8" (10 mm) BEAD OF _MILL-PAC BLACK (700°F) HIGH TEMPERATURE SEALANT MUST BE APPLIED TO THE INNER APPLIANCE COLLAR BEFORE THE FIRST VENT COMPONENT IS ATTACHED (FIGURE 21) AND TO ALL SUBSEQUENT INNER VENT CONNECTIONS. FAILURE TO SEAL ALL THE INNER JOINTS WITH THIS HIGH TEMPERATURE SEALANT MAY CAUSE THE APPLIANCE TO OPERATE IMPROPERLY.

E. The vent sections are crimped at one end to provide a slip fit for elbows and additional vent sections. To begin a vent run, apply _Mill-Pac Black (700°F) high temperature sealant to the inner joint, being sure of a 100% seal (Figure 39) Slide the 5" (127 mm) inner section onto the center appliance collar. (Crimped end always upward.) Locate and transfer drill a 1/8" (3 mm) diameter hole through the collar at the two (2) punched holes (180° apart). Use two (2) No. 8 x 1/2" sheet metal screws to secure the section.

IMPORTANT: APPLY _MILL-PAC BLACK (700°F) HIGH TEMPERATURE SEALANT AT INNER JOINT CONNECTIONS.

Note: An elbow may also be attached to the appliance collar. Secure in the same manner as you would a vent section.

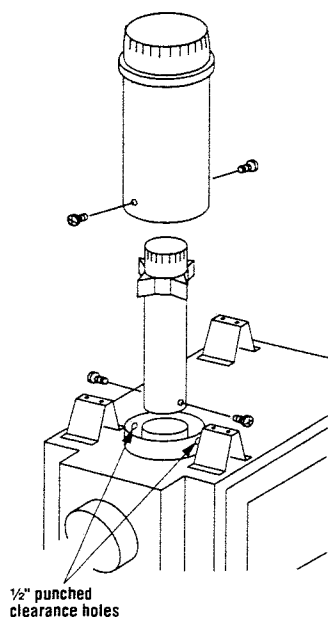


Figure 39

F. Next, slip the outer section over the inner and onto outer appliance collar, bottoming out at the bead. Make sure the crimped end of both inner and outer vent sections are the same height. Secure using two (2) sheet metal screws.

G. To add vent sections, start with the 5" (127 mm) inner section and slide it over the previously installed inner section; an overlap of 1 1/4" (32 mm) is required. The section will not bottom out on the bead. **Remember to seal inner sections using _Mill-Pac Black (700°F) high temperature sealant on the mating surfaces before fitting together.** Secure with two (2) No. 8 x 1/2" sheet metal screws. Slide the 8" (203 mm) outer section over the previously installed outer section; a 1 1/4" (32 mm) overlap is required. This section will not bottom out on the bead. Make sure the crimped end of both inner and outer vent sections are the same height and that the centering spacer is properly seated. Secure with two (2) No. 8 x 1/2" sheet metal screws.

Note: The uncrimped end of the vent may be trimmed when necessary or the adjustable extension, _DST5-EXT, may be used.

H. At transition from or to a horizontal/inclined run, the _DST5-90ELB/_DST5-45ELB/_DVSP5-90ELB elbows install in the same manner as the straight vent sections. Slip the inner elbow over the straight inner vent section. Apply _Mill-Pac Black (700°F) high temperature sealant to the inner joints. Secure with two (2) screws. Slide the outer elbow over the inner elbow, slip down over the outer vent section. Secure with two (2) screws.

The elbow may be mounted to the top of the appliance where direct connection to the outside wall is necessary. See inset at Figure 36. Slide the outer elbow over the inner and slip down over the outer vertical section (Figure 40). Drill, fasten and seal with sealant as in Steps E and F.

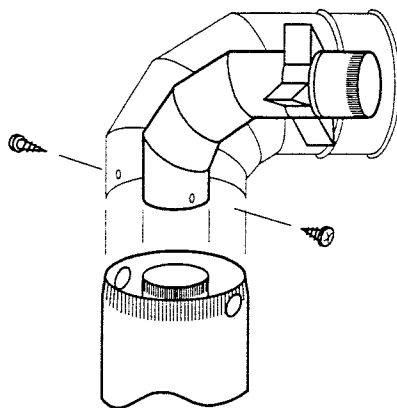
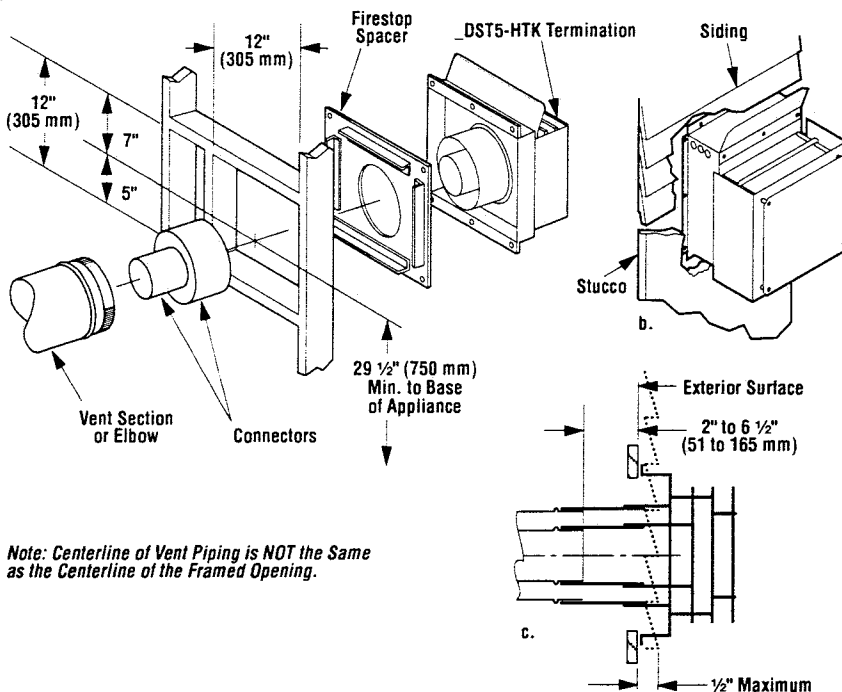


Figure 40

I. Continue with the installation of the straight vent sections in the horizontal/inclined run as described in Step G. Install support straps every 6' (2 m) along horizontal or inclined vent runs using conventional plumbers tape. **It is very important that the horizontal run be maintained in a straight (no dips) and slightly elevated plane (1/4" rise/12" run).** Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.



Note: Centerline of Vent Piping is NOT the Same as the Centerline of the Framed Opening.

Figure 41

It is important to maintain the required clearances to combustibles: 1" (25 mm) at all sides for all vertical runs; and 3" (76 mm) at the top, 1" (25 mm) at sides, and 1" (25 mm) at the bottom for all horizontal/inclined runs.

J. If not previously measured, locate the center of the vent line at the exterior wall. Prepare opening as described in B. Assemble the vent system to a point where last section is within 2" (51 mm) to 6 1/2" (165 mm) inboard the exterior "finished" surface, see Figure 41c.

Note: The uncrimped end of the vent may be trimmed when necessary or the adjustable extension, Model _DST5-EXT, may be used.

Slide each connector tube (supplied with the termination package) onto its respective vent section, bottoming out at the bead. Apply _Mill-Pac Black (700°F) high temperature sealant to the inner connector tube.

K. To install the _DST5-HTK apply a liberal bead of _Mill-Pac Black (700°F) high temperature sealant at the inner mounting flange for sealing purposes. Orient the housing with surface marked "top" upward. Visually align at the opening and carefully insert to engage over both inner and outer connector tubes. Slide inward until the housing bottoms at the finished exterior wall. **The horizontal termination must not be recessed into the exterior wall or siding by more than 1/2",** as shown in Figure 41b. and c. above. Secure with 6d nails at holes in upper and lower flanges (Figure 41).

Note: Apply appropriate sealant to the outer joints of the _DST5-HTK.

The _DV-HTK-1 termination installs in exactly the same way as the _DST5-HTK termination. Orient the _DV-HTK-1 with the louvered wall shield upwards.

Step 6. Installing the Optional Remote Wall Switch – The standard millivolt system comes from the factory wired as shown in Figure 42. Select a convenient location for the remote wall switch and connect the wiring to the appliance (Figure 43)

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

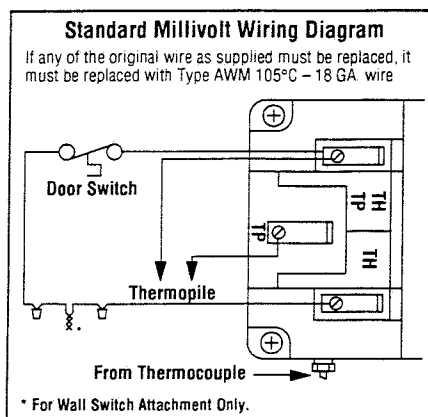


Figure 42

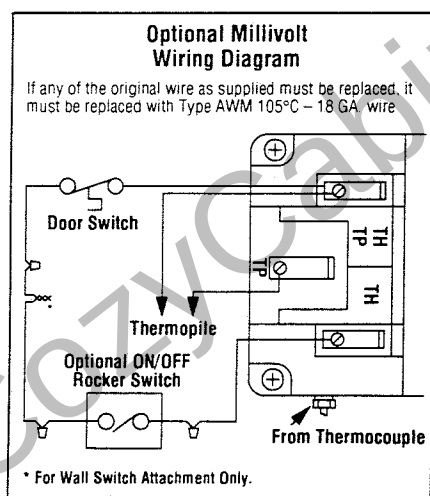


Figure 43

Note: This electrical box can be relocated to the side opposite the vented end if required.

Step 7. Field Wiring Electronic Appliances – Regardless of whether an optional forced air blower kit (Figure 44) is to be installed now or sometime in the future, the appliance must be connected to the main power supply. To install, route a 3-wire 120V 60Hz power supply to the appliance junction box (located in the lower front (valve side) of the appliance, at the vent end) and ground. Also, at this time you may wish to locate and install an optional low voltage (24V) wall switch (Figure 45) in the desired location, connect the low voltage wire to this switch. For blower wiring, refer to the installation instructions provided with the forced air kit and the following paragraphs.

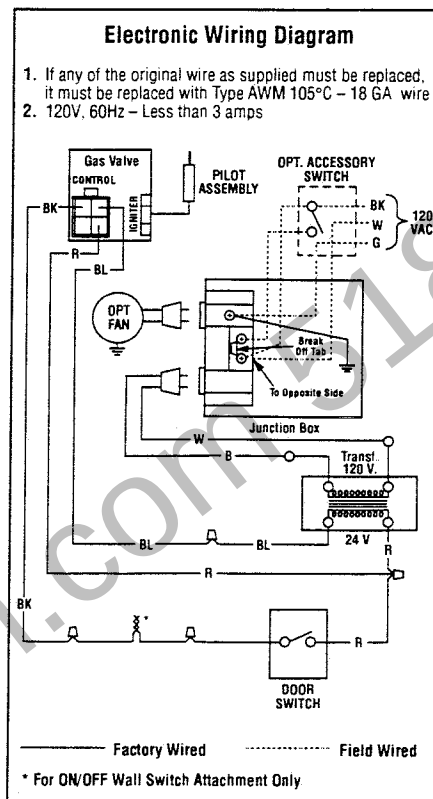


Figure 44

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

Note: The optional rocker switch is mounted to the appliance and wired in the same way as the remote wall switch (Figure 45).

Step 8. Installing the Optional Forced Air Blower Kit Wiring – An electrical outlet box is provided for the installation of the _FAB-1600 or _FAB-1100 forced air blower kits (optional). Electrical power must be provided to this box to operate these blowers.

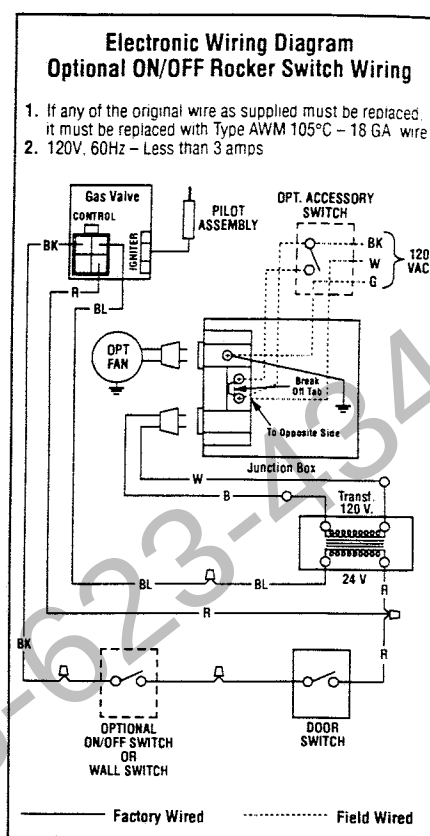


Figure 45

Route a 3-wire, 120Vac power line with control switch to the lower left front corner (valve side) of the appliance. Remove the outlet box by removing two screws and straightening the tab on the outlet back. Supply wires are to be connected to the outlet as shown in Figure 46, ensuring that the polarity (as determined by the colors of the wires) is exactly as shown. **The black and red wire loop must be left intact, with the mating connectors connected.** Reinstall the outlet box.

IMPORTANT: Ground lead must be connected to the green screw located on the junction box cover plate. Failure to do so will prevent the appliance from operating. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70-(latest edition). (In Canada, the current CSA C22-1 Canadian Electrical Code.)

The standard optional forced air blower kit or blower kit with thermal snap switch, may be mounted at initial appliance installation or at any time thereafter. Follow the instructions provided with the blower kit.

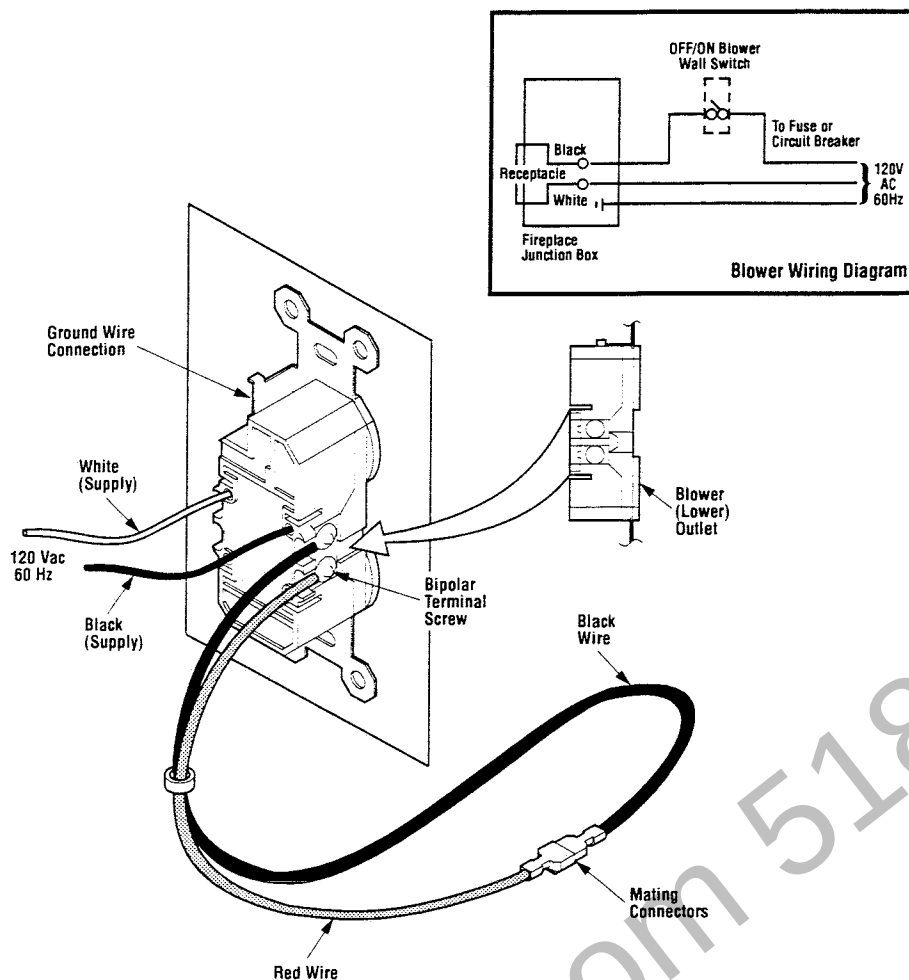


Figure 46

Note: Supply wires may be alternatively connected to the outlet using the screw terminals, however the black supply wire must be ganged wired to the same terminal that the pre-wired black wire is attached to and the white supply wire must be connected to the opposite side of the outlet.

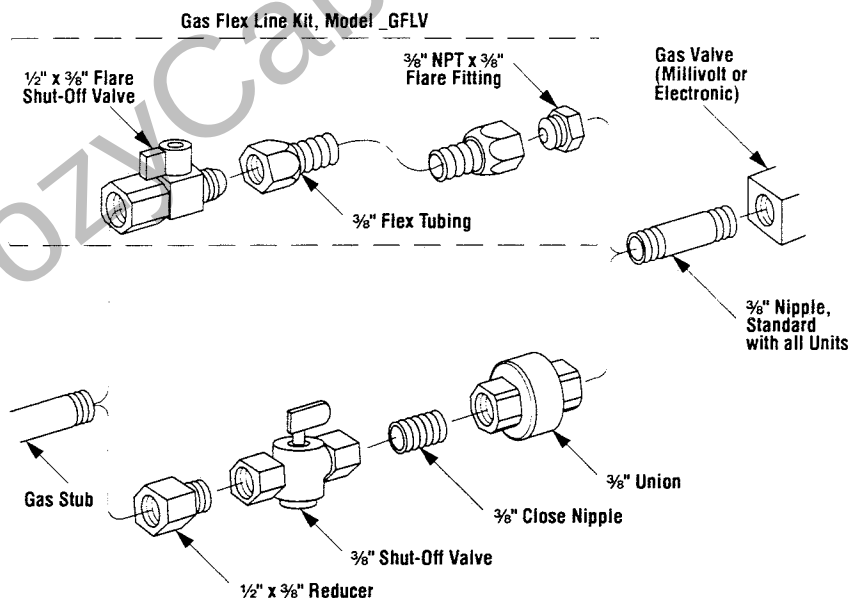


Figure 47

Step 9. Connecting Gas Line – Make gas line connections. All codes require a shut-off valve mounted in the supply line. Figure 47 illustrates two 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 in the lower control compartment. To access the valve open the lower control compartment door (Figure 48). The millivolt control valve has a $\frac{3}{8}$ " (10 mm) NPT thread inlet port. The electronic control valve has a $\frac{1}{2}$ " (13 mm) NPT thread inlet port and is fitted with a $\frac{1}{2}$ " x $\frac{3}{8}$ " (13 mm x 10 mm) NPT fitting. Both the millivolt and electronic models are fitted with a 3" (76 mm) long nipple, $\frac{3}{8}$ " NPT. Plan the connections accordingly.

Secure all joints tightly using appropriate tools and sealing compounds (ensure propane resistant compounds are used in propane applications).

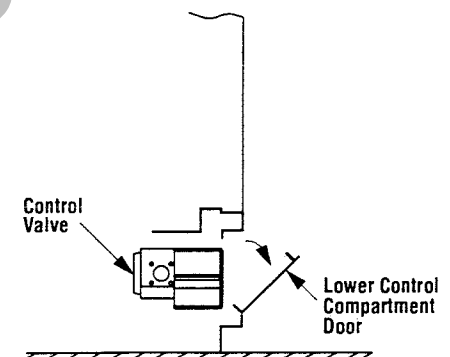


Figure 48

Turn on gas supply and test for gas leaks using a soapy water solution. **Never use an open flame to check for leaks.**

A. Mix a 50% dish soap, 50% water solution.

B. Light the appliance (refer to the safety and lighting instructions on pages ?? through ??) (See ***Note**).

C. Brush all joints and connections with the soapy water solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob to the "OFF" position. Either tighten or refasten the leaking connection and retest as described above.

D. When the gas lines are tested and leak free, observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

High Elevation Derating

WARNING: THE DERATING KIT IS TO BE INSTALLED BY AN AUTHORIZED DISTRIBUTOR OR OTHER FACTORY CERTIFIED SERVICE TECHNICIAN IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ALL CODES AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE. THE QUALIFIED AGENCY PERFORMING THIS WORK ASSUMES RESPONSIBILITY FOR THIS CONVERSION.

In Canada

THE DERATING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN1-B149.1 AND .2 INSTALLATION CODE.

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 lower oxygen content in the air and lower gas viscosity require installation of a different orifice to achieve efficient, clean combustion at the burner assembly. Refer to the following chart and/or the rating plate on the appliance for proper orifice size.

To derate this unit, order and install the appropriate high altitude orifice kit per the charts shown on page 20. Remove two (2) screws found at the base of the burner tray and remove the burner tray with tube. Use care to prevent damage to the air shutter adjustment rod. Remove the orifice (Figure 49) and replace with the appropriate one from the kit. Be sure to attach the conversion sticker provided with the kit to the rating plate on the appliance. The DV-CR/CL appliances are fitted with two different orifice sizes, the smaller orifice is installed at the manifold connection nearest the appliance vent for CR appliances and away from the vent side for CL appliances.

***Note:** To operate the appliance while leak testing, ensure that the door switch is depressed or the unit will not light (refer to Figure 52).

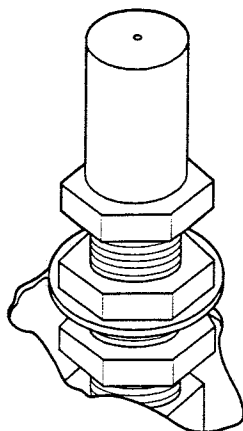
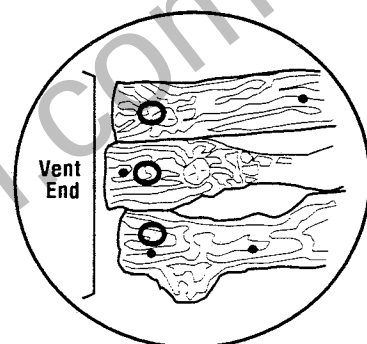
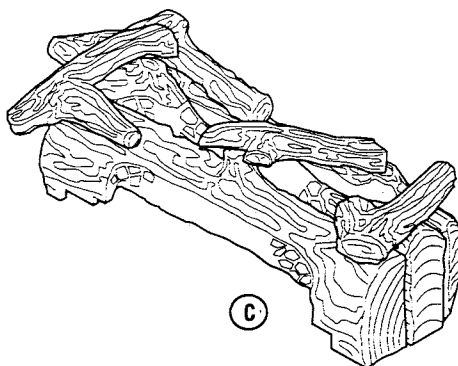


Figure 49

Step 10. Installing Logs, Ember Coals and Rockwool – The logs are foam packed and placed inside the firebox. Remove logs and discard the foam. The bag of Rockwool and Ember Coals are located in the lower control compartment. Place the Rockwool and Ember Coals over the exposed screen at the base of the bottom logs hiding the front burner element and screen from view. Follow the detailed placement instructions provided with the materials in the bag.



Detail



Carefully position and center the bottom fiber logs onto the burner. Ensure that these logs are seated around the burner bracket mounting tabs. The logs are properly placed when all of the (O's) on the top of the bottom logs are located at the vent end of the appliance (Figure 50 A and Detail).

Place the four (4) smaller fiber logs (twigs) across the three (3) lower logs in the manner illustrated in Figure 50 B and C. Position the left twig first, on two pins. Position the center twigs over two (2) pins in the bottom logs.

Then position the right twig on the remaining pins in the bottom logs (Figure 50).

Appliance Operation

Step 11. Checking the System – With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions on page 28 for millivolt appliances. Refer to page 30 for electronic appliance lighting instructions.

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

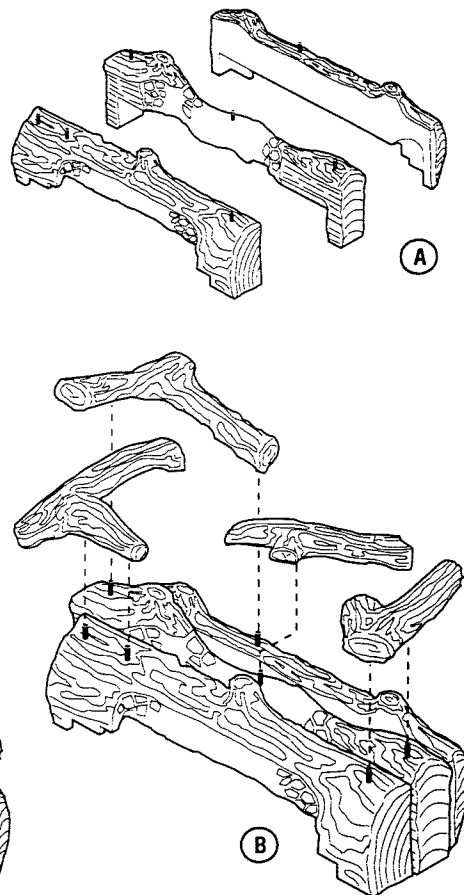


Figure 50

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

DV-ST/PF

Gas Type	Orifice Size	High Alt Orf. Kit	Elevation
Natural	(.088)	—	0 - 2000' (0 - 610 m)
	#46 (.081)	SFC P/N 064488	2000 - 4500' (610 - 1370 m)
Propane	(.051)	—	0 - 2000' (0 - 610 m)
	#57 (.043)	SFC P/N 064490	2000 - 4500' (610 - 1370 m)

DV-CR/CL

Gas Type	Orifice Size	High Alt Orf. Kit	Elevation
Natural	(.088)	(.072) —	0 - 2000' (0 - 610 m)
	#46 (.081)	#52 (.064) SFC P/N 064492	2000 - 4500' (610 - 1370 m)
Propane	#54 (.054)	#60 (.040) —	0 - 2000' (0 - 610 m)
	#56 (.047)	#62 (.038) SFC P/N 064494	2000 - 4500' (610 - 1370 m)

Note: The door switch must be held closed for burner operation when testing.

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).

Millivolt Appliance Checkout

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

The top $\frac{3}{8}$ " (10 mm) at the pilot generator (thermopile) and the top $\frac{1}{8}$ " min (tip) of the quick drop out thermocouple should be engulfed in the pilot flame. The flame should project 1" (25 mm) beyond the hood at all three ports (Figure 51)

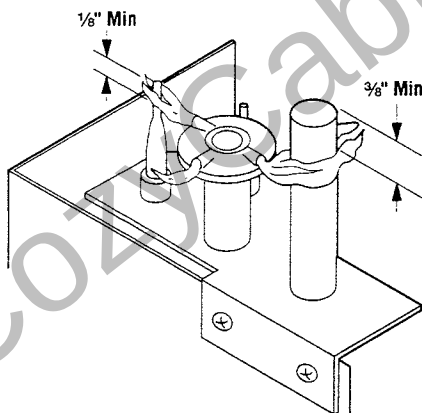


Figure 51

Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch (if on unit rocker switch is used toggle to "ON" also), manually depress and hold the door switch (Figure 52) and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the bottom side of the valve).

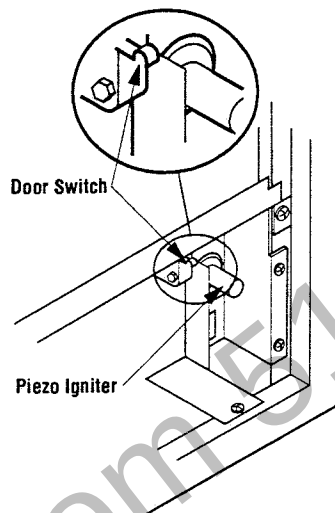


Figure 52

Electronic Appliance Checkout

To light the burner, turn "ON" the optional remote wall switch, manually depress and hold the door switch (Figure 52) and turn the gas control switch to the "ON" position. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in Figure 53.

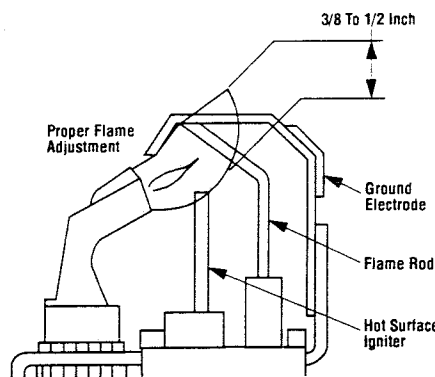


Figure 53

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Step 12. Installing the Glass Door Frame – Retrieve the glass door frame. Visually inspect the gasket on the backside of the panel. Gasket surface must be clean, free of irregularities and seated firmly.

Position the door frame in front of the firebox opening, with the joint in the gasket at a lower corner (Figure 54). Locate the three (3) tabs at the bottom edge of the door frame into the three (3) brackets at the base of the fireplace front opening. Lean the door frame back towards the fireplace ensuring that the gasket seats evenly as the door frame draws shut. Install the three (3) $\frac{1}{4}$ "-20 x 1" Phillips pan head screws removed previously and tighten to secure. Ensure that the tab on the bottom of the door frame engages the door switch.

Make sure the screws are tightened equally to avoid torquing the door.

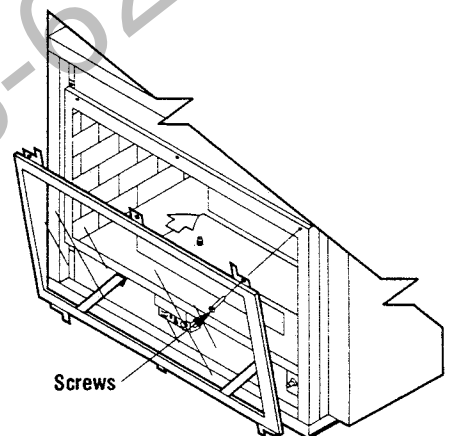


Figure 54

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

Step 13. Adjustments – The following paragraphs address adjustment concerns and procedures.

Flame Appearance and Sooting

Proper flame appearance is a matter of taste. Generally most people prefer the warm glow of a yellow to orange flame (Figure 55). Appliances operated with air shutter openings that are too large will exhibit flames that are blue and transparent.

These weak, blue and transparent flames are termed anemic. If the air shutter opening is too small sooting may develop.

Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination. Sooting is caused by incomplete combustion in the flames and a lack of combustion air entering the air shutter opening.

To achieve a warm yellow to orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes and appliances installed with long vertical (extended venting) runs must be fitted with air restrictor kit, model _DV-ARK.

The primary cause of anemic flames in these systems is excessive secondary combustion air. The symptom of this (anemic flames) occurs when vertical vent runs are in excess of ten feet. To prevent this from occurring it is necessary to install the air restrictors, provided with the _DST5-VTK vertical termination. To install the air restriction rings refer to the installation instructions provided with the termination. Secure the rings in place with the screws provided.

Note: Excessive primary and secondary combustion air are the main cause of anemic flames. The air restrictor kit can reduce the availability of both of these. Install the air restrictor kit before making any adjustments to the air shutter opening. If, at initial start up, the appliance exhibits signs of sooting do not install the air restrictor kit, regardless of any height requirements.

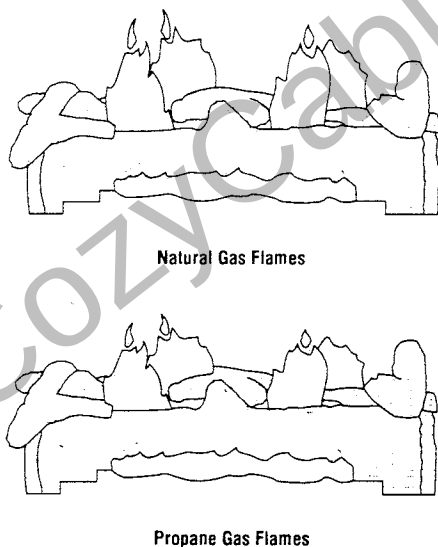


Figure 55

No smoke or soot should be present. Reposition the logs as shown in Figure 50 if the flames impinge on any of them.

If sooting conditions exist, the air shutter opening on the main burner can be adjusted. Normally, the more offsets in the vent system, the greater the need for the air shutter to be opened further.

WARNING: AIR SHUTTER ADJUSTMENT SHOULD ONLY BE PERFORMED BY A QUALIFIED PROFESSIONAL SERVICE TECHNICIAN.

Note: If refractories are installed, remove them prior to the adjustment procedure to prevent permanent damage from soot build up. Ensure that the door is closed and sealed during adjustment.

Adjustment

CAUTION: THE ADJUSTMENT ROD AND NEARBY APPLIANCE SURFACES ARE HOT. EXERCISE CAUTION TO AVOID INJURY WHILE ADJUSTING FLAME APPEARANCE.

To adjust the flame, move the adjustment rod in or out (located in the lower control area). Position the air shutter to the nominal setting (Figure 56). Allow the burner to operate for at least 30 minutes. Observe the flame continuously. If it appears weak or sooty as previously described, adjust the air shutter by pushing or pulling on the adjustment rod until the flame appearance is as desired. The adjustment rod and associated adjustable air shutter is patented technology available only from SFC. Flame adjustments can be made quickly and accurately to taste without the need of disassembling the appliance and waiting for 30 minutes after each adjustment.

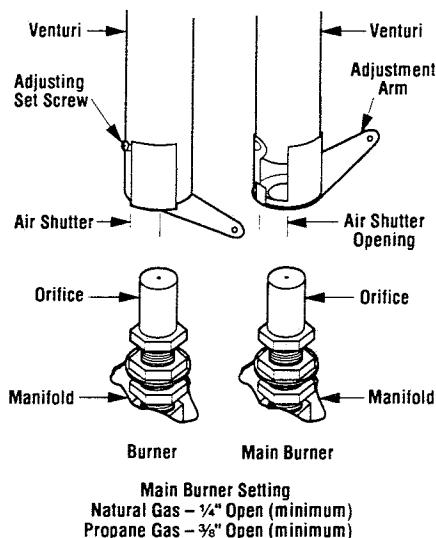


Figure 56

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Note: If the flame still appears anemic with the air shutter closed all the way (usually a result of lengthy vertical venting runs), turn off the appliance, turn off the gas supply, wait for the parts to cool and access the air shutter. The shutter is prevented from actually closing by a tab that is bent over into the opening. Remove this obstruction by bending back. Reassemble and restart the appliance and after 30 minutes reobserve the flame. Adjust the air shutter as described.

When satisfied that the appliance operates properly, proceed to finish the installation. Leave the control knob/lever in "ON" position and turn the remote switch "OFF." Close the lower control compartment door.

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 57 and 58).

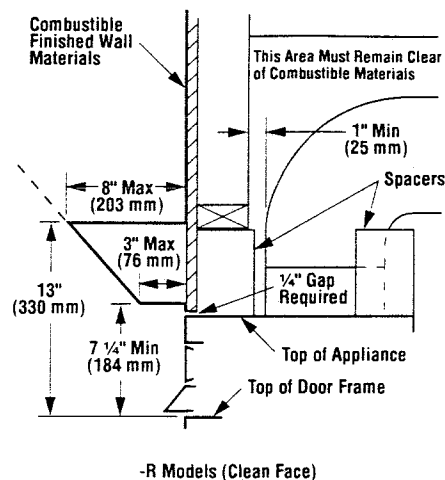


Figure 57

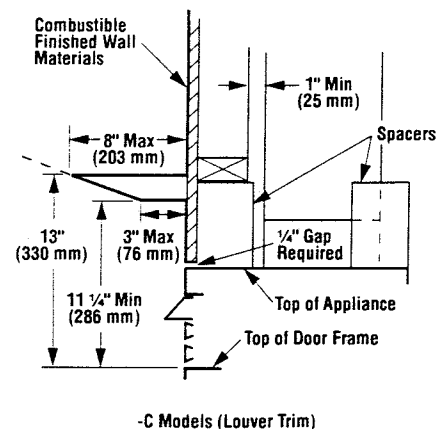


Figure 58

A hearth extension is not required with this appliance. If a hearth extension is used, do not block the lower control compartment door. Any hearth extension used is for appearance only and does not have to conform to standard hearth extension installation requirements.

Note: Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance front face.

A combustible mantel shelf projecting a maximum of 8" (203 mm) from the wall may be installed a minimum distance of 13" (330 mm) from the top of the door frame (Figure 59).

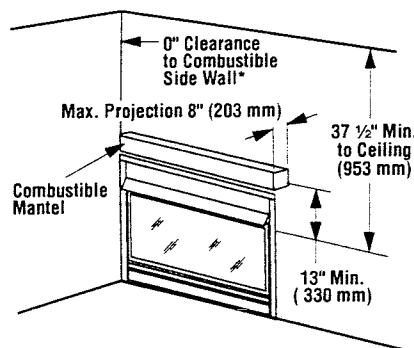


Figure 59

COLD CLIMATE INSULATION

If you live in a cold climate, seal all cracks around your appliance with noncombustible material and wherever cold air could enter the room. It is especially important to insulate outside chase cavity between studs and under floor on which appliance rests, if floor is above ground level.

DIRECT VENT SERIES OPTIONS

An incomparable package of options are available for use with these Direct Vent Series appliances. These options can both customize the operation of these unique appliances and enhance their beauty and charming appeal. All options are available in kit form, are easy to install and are packaged complete with all required parts and instructions. Some of the option kits need to be fitted prior to completing the installation of the appliance. The following paragraphs detail the kit options available for use with the appliances covered in this manual.

These outstanding optional items can be added individually or in sets of two or more to customize your direct vent appliance to fit your homes unique needs. Kit model numbers are provided on pages 26 and 27 along with descriptive illustrations.

Forced Air Kit

The _FAB-1100 single speed or _FAB-1600 assembly with variable speed wall switch provides a forced air circulation feature for your appliance. These kits mount directly into the lower intake chamber with an electrical connection made at the receptacle provided. The appliance must have an independent 120Vac power line incorporated at the time of installation. Refer to Step 6 of the installation instructions supplied with the forced air kit (Figures 60 and 61).

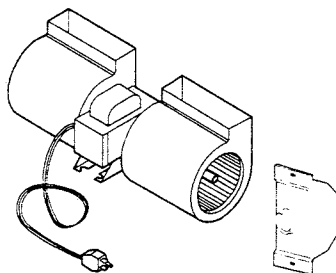


Figure 60

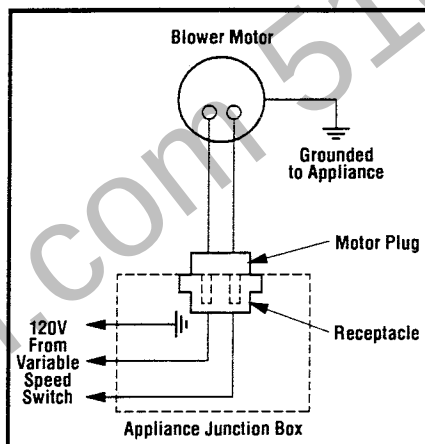


Figure 61

Remote Control Kit

The Model _RCK adds the convenience of remote control for your appliance. The kit includes a wireless, hand held transmitter and a receiver that replaces the wall switch. This special receiver 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.

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

Wall Switch Kit

An optional wall switch kit can be installed along with all direct vent appliances. The kit consists of a standard UL wall switch with cover plate. This kit provides for remote (wall) operation of the appliance. Replace the wall switch and cover plate of this kit with the components of the _RCK and you can have true remote control of your Direct Vent appliance, turning it on and off from your favorite easy chair. The wall switch kit should be installed along with the appliance. Refer to Figures 43 and 45 and Steps 6 and 7 for detailed installation instructions.

Optional on Unit Rocker Switch

An optional rocker switch kit can be installed directly on all Direct Vent Series appliances to provide for On and Off operation in addition to or in lieu of, a wall switch. This kit is designed to install in the lower control compartment out of view and is perfect for use in high volume areas such as lobbies and model homes where limited access to the appliance On/Off switch is desirable. This kit can be retrofitted to previously installed appliances and may be temporarily installed in place of other switch circuitry.

Decorative Log Rack

Decorative log rack provides the look of a wrought iron log grate. The log rack is easy to install. Simply place the log rack in front of the gas logs. This kit can be retrofitted to previously installed appliances.

Note: The decorative log rack will discolor when heated by the burner flame. Discoloring of log rack components is common and should be expected.

Brass Louvers

Decorative brass louvers are available for use with all louvered-face Multi-Open appliances. These louvers are designed to replace the standard black louvers that are provided with the appliance. The brass louver kit includes six (15) brass louvers that simply snap into place. They provide a touch of elegance to any appliance. This kit can be retrofitted to previously installed appliances.

Screen Panel Kit

An optional screen panel can be installed on the Multi-Open doors. These screen panels are easy to install using the provided hardware. This kit can be retrofitted to previously installed appliances. The screen panel kit may not be used in conjunction with the decorative arch kits.

Brass Hood

Attractive brass hoods are available in two styles to be used on either the clean-face or louvered-face appliances. These hoods are designed to be fitted to the face of the appliance above the door. In addition to providing an aesthetically pleasing appearance to your appliance installation, the hood reduces heat effects to decorative mantles and finish materials located directly above the fireplace opening. The -R clean face hood kit includes the necessary attaching hardware. The -C louvered face hood kit snaps in to place in the position of the upper most top louver. This kit can be retrofitted to previously installed appliances.

Decorative Filigree Trim Kit

The decorative filigree trim kit is for use with all louvered-face appliances. The decorative filigree kit is designed to replace the standard black louvers that are provided with the appliance and may be used in conjunction with components of the brass louver kit. The decorative filigree trim simply snaps into place to provide your appliance with a warm traditional look. This kit can be retrofitted to previously installed appliances.

Decorative Arch Kits

Two arch kits are available for the Multi-Open Series. A one piece complete door arch kit and a four (4) piece arch frame kit. Both kits are easy to install and do not require hardware to attach them to the standard door frames. The four-piece arch frame kit can be installed without the bottom or bottom and side pieces to customize the look of your appliance. This kit can be retrofitted to previously installed appliances. The decorative arch kits can not be used in conjunction with the screen panel kit.

Gas Flex Line with Valve

A gas flex line kit is available to aid in attaching the direct vent appliance to the gas supply. This kit can only be used where local codes permit. The kit includes a 1/2" NPT to 3/8" flare in line shut-off valve, a 12" flex line 3/8" female flare through and a 3/8" flare to 3/8" NPT fitting. The components of this kit are rated for both natural and propane gas. This kit is designed to be used as an aid in installing the appliance.

Decorative Volcanic Stone

The decorative volcanic stone, Model _DVS, can be used to enhance the look of your appliance. Spread the decorative volcanic stone evenly around the bottom of the firebox.

Square Trim Kit

A square trim kit is available for the Multi-Open Series. This kit is easy to install and does not require hardware to attach it as designed, directly to the standard door frame. The four piece square trim kit can be installed without the bottom or bottom and side pieces to customize the look of our appliance. This kit can be retrofitted to previously installed appliances.

Gas Conversion Kits

WARNING: THE CONVERSION KIT IS TO BE INSTALLED BY AN AUTHORIZED DISTRIBUTOR OR OTHER FACTORY CERTIFIED SERVICE TECHNICIAN IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ALL CODES AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE. THE QUALIFIED AGENCY PERFORMING THIS WORK ASSUMES RESPONSIBILITY FOR THIS CONVERSION.

In Canada

THE CONVERSION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN1-B149.1 AND 2 INSTALLATION CODE.

Gas conversion kits are available to adapt your direct vent appliance from the use of one type of gas to the use of another. These kits contain all the necessary components needed to complete the task including labeling that must be affixed to ensure safe operation. Kit part numbers are listed below and the following steps detail the conversion procedure.

Millivolt Conversion Kits - DVST/DVPF

SFC P/N 064480 — Natural to Propane
SFC P/N 064481 — Propane to Natural

Electronic Conversion Kits - DVST/DVPF

SFC P/N 067671 — Natural to Propane
SFC P/N 067672 — Propane to Natural

Millivolt Conversion Kits - DVCL/DVCR

SFC P/N 064484 — Natural to Propane
SFC P/N 064485 — Propane to Natural

Electronic Conversion Kits - DVCL/DVCR

SFC P/N 067673 — Natural to Propane
SFC P/N 067674 — Propane to Natural

Step 1. Turn off the gas supply to the appliance. Remove the front glass door frame from the appliance. Open the lower control compartment door.

Step 2. Carefully remove the two (2) twigs on top. Then remove the two (2) main logs. Exercise care as not to break the logs.

Step 3. Remove the four (4) screws located at the base of the burner tray. Remove the burner tray with the burner. Use care to prevent damage to the air shutter adjustment rod.

Step 4. Remove ten (10) screws and remove the complete spud assembly.

Step 5. Millivolt Appliances - Mark the wires to the gas valve. Then remove and replace the gas valve (Figure 62).

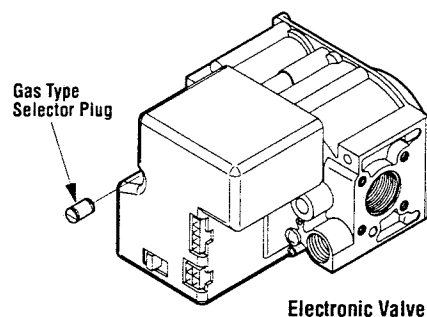
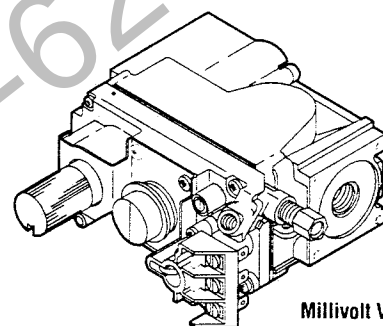


Figure 62

Step 6. Electronic Models - Remove the gas type selector plug (Figure 62) and turn it around to show the appropriate gas type and reinstall the selector plug. **Gas type in use should be visible on the selector plug when it is installed.**

See Figure 63 and replace the pilot orifice as follows: Remove the ignitor assembly retainer clip, and carefully remove the ignitor assembly. **Exercise extreme care to prevent damage to or breakage of the ignitor assembly.** Remove the screw securing the pilot assembly to its mounting bracket. Back off the flare nut at the end of the pilot gas line to free the pilot assembly from the gas line.

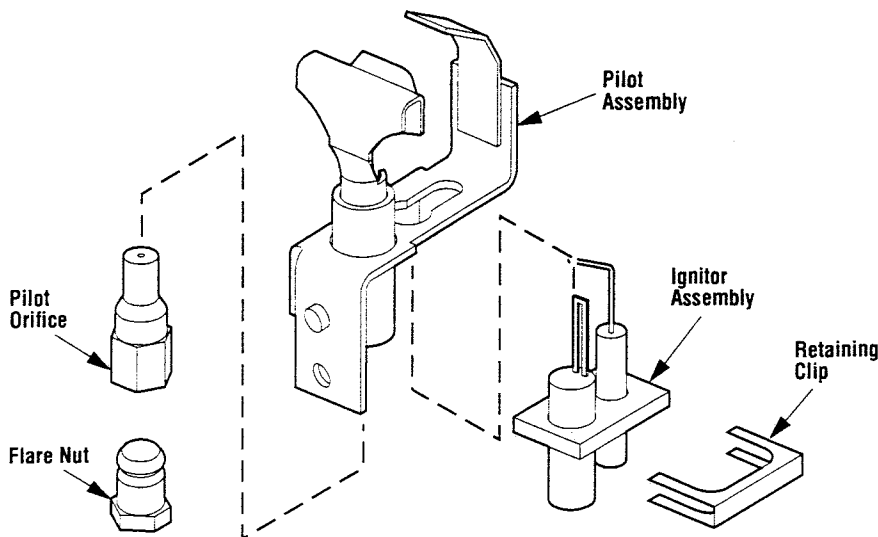


Figure 63

Remove the pilot orifice and replace it with the one provided with the conversion kit. Reinstall the pilot assembly by reversing the steps detailed here. **When reinstalling the ignitor assembly, use extreme care to prevent damage and breakage. Do not apply any leverage to the ignitor assembly while restoring the retainer clip to its original position.**

Note: If the ignitor assembly is damaged, a replacement kit is available, order P/N 067675.

Step 7. Unscrew the orifices from the manifold outlets and replace them with the ones provided with the kit. See tables on page 20 and Figure 49. The DV-CR/CL appliances are fitted with two different orifice sizes, the smaller orifice is installed at the manifold connection nearest the appliance vents for CR appliances and away from the vent side for CL appliances.

Step 8. Millivolt Appliances – Replace the pilot orifice with the one provided with the kit (Figure 64).

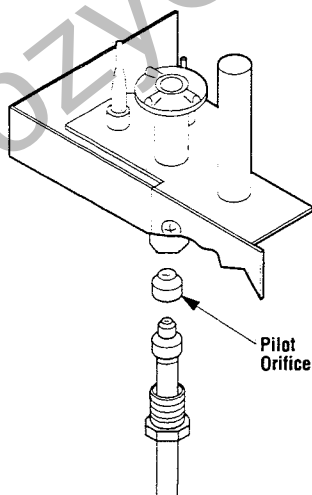


Figure 64

Step 9. Install the burner in accordance with the instructions provided with the kit. Reassemble all additional removed components by reversing the procedures outlined in the preceding steps. Use pipe joint compound or Teflon tape on all fittings before installing (ensure propane resistant compounds are used in propane applications).

Step 10. Attach conversion kit label to the rating plate on the appliance. See Figure 65 for labeling details.

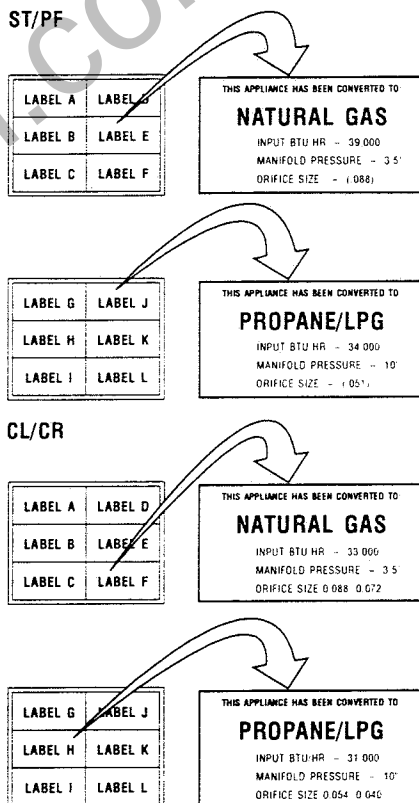


Figure 65

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Step 11. Turn on gas supply and test for gas leaks as described in the gas line connection instructions, Step 9 on page 18.

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.

WARNING: THE LOWER CONTROL COMPARTMENT AREA AND LOWER CONTROL COMPARTMENT ACCESS DOOR ARE EXTREMELY HOT WHEN THE APPLIANCE IS IN OPERATION. EXERCISE EXTREME CARE WHEN ACCESSING THIS AREA. TOUCH ONLY THE FAR ENDS OF THE LOWER CONTROL COMPARTMENT DOOR WHEN OPENING WHILE THE APPLIANCE IS HOT.

OPERATION AND CARE OF YOUR APPLIANCE

- Appliance operation may be controlled through the optional ON/OFF unit rocker switch, located in the lower control compartment, or through a remotely located optional wall switch. Separate switches may provide independent control for the forced air blower and remote fireplace operation (optional equipment).
- When lit for the first time, this appliance will emit a slight odor for an hour or two. This is due to the "burn-in" of internal paints and lubricants used in the manufacturing process.
- Upon each lighting of the appliance, condensation may occur and fog the inside of the glass panel. This condition will disappear shortly as the appliance heats.
- Keep lower control compartment clean by vacuuming or brushing at least twice a year.
- Always turn off gas to the pilot (millivolt appliances) 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.
- Always keep the appliance area clear and free from combustible materials, gasoline and other flammable liquids.
- Remember, these appliances have a burning pilot flame. Millivolt models have a continuous burning pilot flame. Exercise caution when using products with combustible vapors.

WARNING: OBSERVE CAUTION NEAR THE GLASS PANEL. THE GLASS PANEL MAY SHATTER UNEXPECTEDLY OR IF STRUCK WITH AN OBJECT.

8. CAUTION: DO NOT OPERATE THIS APPLIANCE WITH A BROKEN GLASS PANEL. Where broken glass exists, the complete glass door frame assembly must be replaced. See the Replacement Parts Lists on pages 33, 34 and 36 for correct parts. Glass door frame removal and re-assembly instructions are described on pages 7 and 20 respectively.

9. 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.

WARNING: DO NOT USE ABRASIVE CLEANERS. NEVER CLEAN THE GLASS WHEN IT IS HOT.

Maintenance

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

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

The main burner compartment should be inspected annually for proper operation. Remove glass door frame assembly and perform general cleaning to remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzle, igniter rod and hood (*Figures 51 and 53*). Avoid disturbing the loose ceramic fibers on the front burner.

Refer to Step 12 for the glass door frame installation. When returning to service, verify proper flame characteristics as described in Step 13, refer to *Figure 55*.

Gasket Inspection

It is important that the glass door frame gasket be inspected at the beginning of the heating season by a qualified technician. Examine the sealing gasket for signs of deterioration. Also make sure the gasket has a positive seal, preventing combustion gases from escaping into the room. Replace the glass door frame if necessary with material identified in the Replacement Parts Lists on pages 33, 34 and 36.

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 appliance is covered by a limited life-time warranty. You will find a copy of the warranty on the back 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 the manufacturer.

WARNING: THE GLASS DOOR OF THIS APPLIANCE IS MANUFACTURED WITH TEMPERED GLASS (35 5/8" X 21 5/8" X 1/4" THICK). DO NOT ATTEMPT TO SUBSTITUTE THE GLASS MATERIALS USED ON THIS DOOR. DO NOT ATTEMPT TO REPLACE THE GLASS DOOR OR GLASS WITH ANYTHING OTHER THAN MATERIALS SUPPLIED BY THE MANUFACTURER. THE GLASS DOOR MUST BE REPLACED AS A COMPLETE UNIT AS SUPPLIED BY THE MANUFACTURER. FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL VOID THE PRODUCT WARRANTY AND LIMIT MANUFACTURER LIABILITY.

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

When ordering repair parts, always give the following information:

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

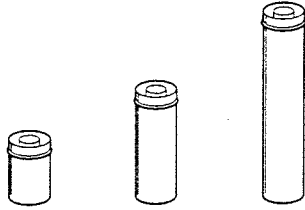
ACCESSORY PARTS AND COMPONENT LIST FOR MULTI-OPEN DIRECT VENT APPLIANCES

The accessory parts and components on pages 26 and 27 are to be used only with this appliance system. Separate installation instructions are packaged with most accessories.

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

SFC
4325 Artesia Avenue
Fullerton, CA 92633
(714) 521-7302

ACCESSORIES AND COMPONENTS



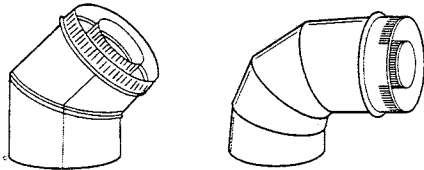
Vent Sections

_DST5-12
_DST5-18
_DST5-36



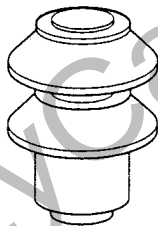
Adjustable Extension

_DST5-EXT



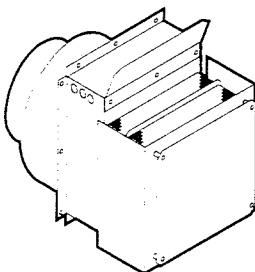
Vent Elbow (45°)
Vent Elbow (90°)
Vent Elbow (Starter)

_DST5-45ELB
_DST5-90ELB
_DVSP5-90ELB



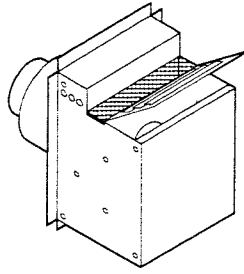
Vertical Termination

_DST5-VTK



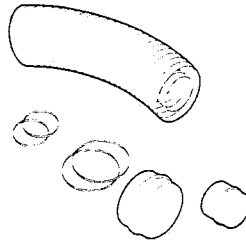
Horizontal Termination

_DST5-HTK



Horizontal Termination

_DV-HTK-1



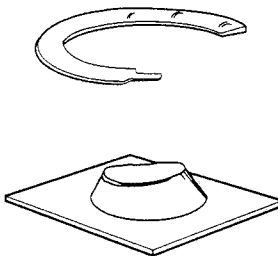
Flexible Vent Section

_DSF5-24



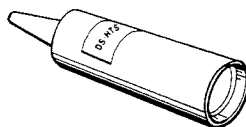
Firestop

_DST5-FSV



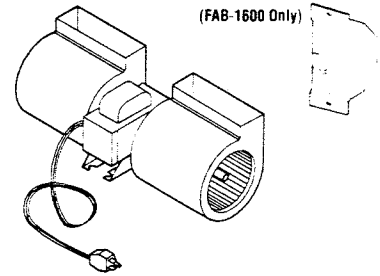
Flashing

_DST5-F



High Temperature
Sealant (700°)

_Mill-Pac Black

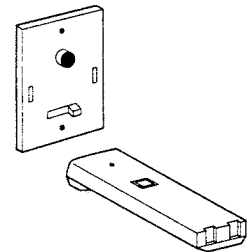


Forced Air Blower—Single Speed
Forced Air Blower—Variable Speed

_FAB-1100
_FAB-1600

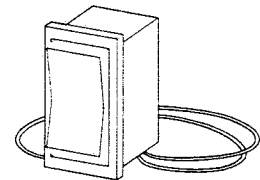
High Altitude
Orifice Kit
Natural
Propane

_HAOK-N
_HAOK-P



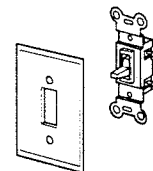
Remote Control Kit

_RCK



Rocker Switch Kit

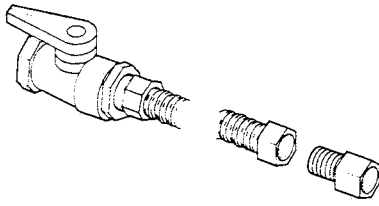
_RS



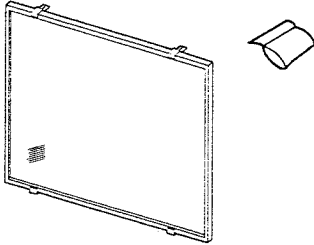
Wall Switch Kit

_WSK

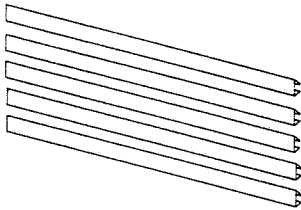
NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE



Gas Flex Line Kit _GLV

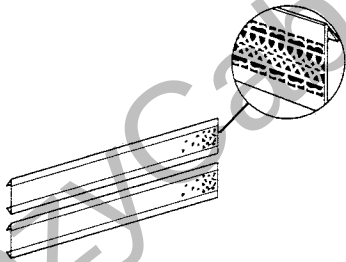


Screen Panel Kits
- Main Panel _SPK-6
- End Panel _SPEK-6



Brass Louver Kits
- Main Panel _BRLK-6
- End Panel _BRLEK-6

For _DV_ -CxxS models only.

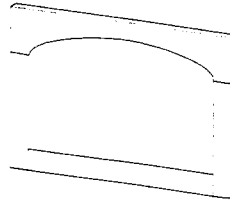


Filigree Trim Kits
- Main Panel _FTK-6
- End Panel _FTEK-6

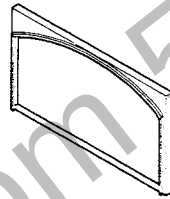
For _DV_ -CxxS models only.



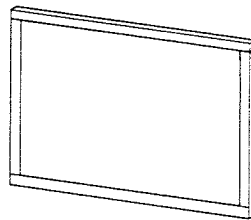
Brass Hood Kits
- Main Panel _PBH-6
- End Panel _PBEH-6



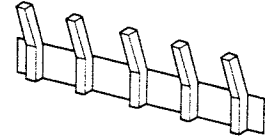
4-Piece Decorative Arch Frame Kits
- Main Panel _DAT-6-4
- End Panel _DAET-6-4



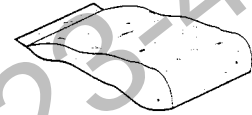
1-Piece Decorative Arch Frame Kits
- Main Panel _DAT-6-1
- End Panel _DAET-6-1



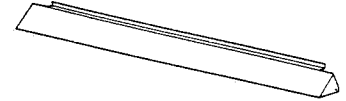
Square Trim Kits
- Main Panel _STK-6-4
- End Panel _STEK-6-4



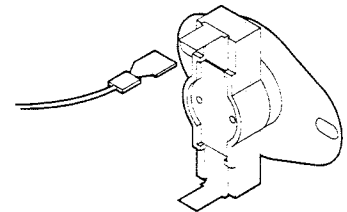
Log Rack Kit _DLR-6



Decorative Volcanic Stone _DVS



Brass Hood Kits
- Main Panel _PBH-6
- End Panel _PBEH-6



Snap Switch Kit _SSK

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.

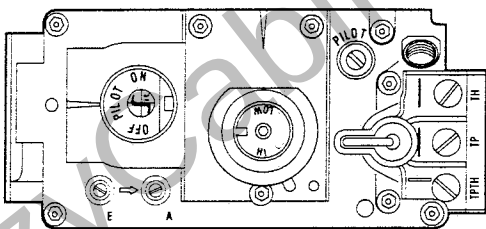
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

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

LIGHTING INSTRUCTIONS

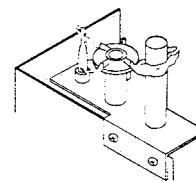
1. **STOP!** Read the safety information above on this page.
2. Access the lower control compartment.
3. Turn remote wall switch to "OFF."
4. Verify main line shut-off valve is open.
5. Push in gas control knob slightly and turn clockwise to "OFF."



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. Push in gas control knob slightly and turn counterclockwise to "PILOT."
8. Push in control knob all the way and hold in. Immediately light the pilot by triggering the spark ignitor (pushing the button) until pilot lights. Continue to hold the control knob in for about 1 ½ minutes after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.

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



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

TO TURN OFF GAS TO APPLIANCE

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

INSTRUCTIONS D'ALLUMAGE

POUR VOTRE SÉCURITÉ, LISEZ-LES AVANT L'ALLUMAGE

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

- A. Cet appareil est muni d'une veilleuse qui doit être allumée à la main. Lorsque vous allumez la veilleuse, suivez exactement ces instructions.
- B. **AVANT DE VOUS EN SERVIR**, sentez tout autour de l'appareil où il pourrait y avoir une odeur de gaz. Reniflez près du plancher car, le gaz étant plus lourd que l'air, il se dépose sur le plancher.

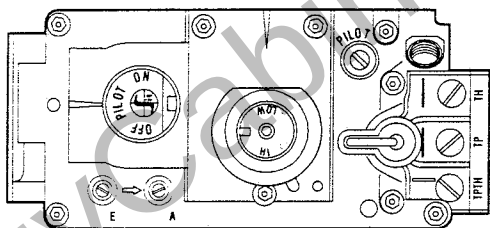
VOICI CE QUE VOUS DEVEZ FAIRE SI VOUS DÉCELEZ UNE ODEUR DE GAZ:

- Éteignez toutes les flammes nues.
- Ouvrez les fenêtres.
- N'allumez aucun appareil.
- Ne touchez à aucun commutateur électrique.
- Ne vous servez d'aucun téléphone dans votre édifice.

- Appelez immédiatement votre compagnie de gaz en utilisant le téléphone d'un voisin.
 - S'il vous est impossible de contacter votre compagnie de gaz, appelez le service des incendies.
- C. Servez-vous uniquement de votre main pour tourner ou pour enfoncer le bouton de réglage du gaz. N'employez jamais un outil. Si le bouton refuse de tourner ou de bouger, ne tentez pas de le réparer. Appelez un technicien compétent et expérimenté. Si vous essayez de le forcer ou de le réparer, vous pourriez causer un incendie ou une explosion.
- D. Ne vous servez pas de cet appareil si l'un de ses éléments a été immergé dans l'eau. Appelez immédiatement un technicien compétent pour faire inspecter l'appareil et remplacer toute pièce du système de réglage ou commande du gaz qui a été sous l'eau.

INSTRUCTIONS D'ALLUMAGE

1. **ARRÊTEZ !** Lisez les consignes de sécurité ci-dessus.
2. Ouvrez le compartiment de contrôle du bas.
3. Tournez le télerupteur mural à sa position d'arrêt "OFF".
4. Assurez-vous que la soupape d'arrêt de la canalisation principale est ouverte.
5. Enfoncéz légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à la position d'arrêt "OFF".

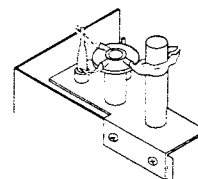


Remarque: Il est impossible de tourner le bouton de "PILOT" à "OFF" à moins qu'il ne soit légèrement enfoncé. Ne le forcez pas.

6. Attendez cinq (5) minutes pour en laisser sortir le gaz, le cas échéant. Si vous décelez une odeur de gaz, **ARRÊTEZ !** Retournez au point "B" des consignes de sécurité ci-dessus. Si vous ne remarquez aucune odeur de gaz, passez à l'étape suivante.

7. Enfoncéz légèrement le bouton de réglage du gaz et tournez-le en sens inverse des aiguilles d'une montre jusqu'à la position de veilleuse "PILOT".
8. Enfoncéz le bouton de réglage jusqu'au fond et gardez-le enfoncé. Allumez immédiatement la veilleuse en déclenchant l'allume-gaz à étincelle (en poussant le bouton) jusqu'à ce que la veilleuse s'enflamme. Continuez de tenir le bouton de réglage enfoncé pendant environ 90 secondes après l'allumage de la veilleuse. Relâchez le bouton et il sortira subitement. La veilleuse devrait rester allumée. Si elle s'éteint, répétez les étapes 5 à 8 inclusivement.

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



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

POUR FERMER LE GAZ QUI ALIMENTE L'APPAREIL

1. Tournez le télerupteur mural à sa position d'arrêt "OFF". La veilleuse restera allumée jusqu'au retour du service normal.
2. Pour une fermeture complète, tournez le télerupteur mural à sa position d'arrêt "OFF".
3. Ouvrez le compartiment de contrôle du bas.

4. Enfoncéz légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à sa position d'arrêt "OFF". Ne le forcez pas.
5. Fermez le compartiment de contrôle du bas.

LIGHTING INSTRUCTIONS — ELECTRONIC

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.** When lighting the appliance, 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

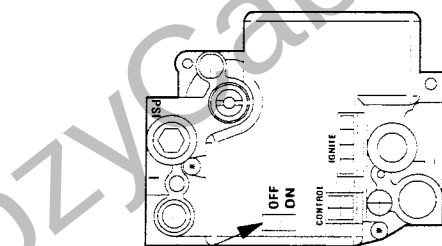
- Extinguish any open flame.
- Open windows.
- Do not light any appliance.
- Do not touch any electrical switches.
- Do not use any phone in your building.

- Immediately call your gas supplier from a neighbor's phone.
- If your gas supplier cannot be reached, call the fire department.

- C.** Use only your hand to turn the gas control lever. Never use tools. If the lever will not 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. Open lower control compartment door.
4. Verify main line shut-off valve is open.



ON/OFF Switch

Front View

5. Turn the ON/OFF switch to "OFF". 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 the ON/OFF switch to "ON". Do not force.
8. Turn "ON" all electrical power to appliance (remote wall switch).
9. Close lower control compartment door.

TO SHUT OFF

1. Turn off all electrical power to the appliance (remote wall switch).

TO TURN OFF GAS TO APPLIANCE

1. For complete shut-down, turn remote wall switch to "OFF."
2. Open lower control compartment door.
3. Turn the ON/OFF switch to "OFF". Do not force.
4. Close the main line shut-off valve.
5. Close lower control compartment door.

INSTRUCTIONS D'ALLUMAGE — ELECTRONIC

POUR VOTRE SÉCURITÉ, LISEZ-LES AVANT L'ALLUMAGE

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

- A. Lorsque vous allumez l'appareil, suivez exactement ces instructions.
- B. AVANT DE VOUS EN SERVIR, sentez tout autour de l'appareil où il pourrait y avoir une odeur de gaz. Reniflez près du plancher car, le gaz étant plus lourd que l'air, il se dépose sur le plancher.

VOICI CE QUE VOUS DEVEZ FAIRE SI VOUS DÉCELEZ UNE ODEUR DE GAZ

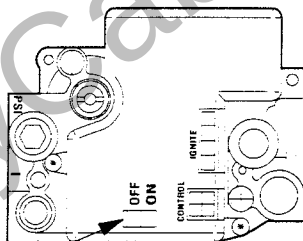
- Éteignez toutes les flammes nues.
- Ouvrez les fenêtres.
- N'allumez aucun appareil.
- Ne touchez à aucun commutateur électrique.
- Ne vous servez d'aucun téléphone dans votre édifice.

- Appelez immédiatement votre compagnie de gaz en utilisant le téléphone d'un voisin.
- S'il vous est impossible de contacter votre compagnie de gaz, appelez le service des incendies.

- C. Servez-vous uniquement de votre main pour tourner la manette de réglage du gaz. N'employez jamais un outil. Si la manette refuse de tourner, ne tentez pas de la réparer. Appelez un technicien compétent et expérimenté. Si vous essayez de la forcer ou de la réparer, vous pourriez causer un incendie ou une explosion.
- D. Ne vous servez pas de cet appareil si l'un de ses éléments a été immergé dans l'eau. Appelez immédiatement un technicien compétent pour faire inspecter l'appareil et remplacer toute pièce du système de réglage ou commande du gaz qui a été sous l'eau.

INSTRUCTIONS D'ALLUMAGE

1. **ARRÊTEZ !** Lisez les consignes de sécurité ci-dessus.
2. Tournez le télerupteur mural à sa position d'arrêt "OFF".
3. Ouvrez la porte du compartiment de contrôle du bas.
4. Assurez-vous que la soupape d'arrêt de la canalisation principale est ouverte.



ON/OFF Switch

Vue avant

5. Tournez la manette de réglage du gaz à sa position d'arrêt "OFF".
6. Attendez cinq (5) minutes pour en laisser sortir le gaz, le cas échéant. Si vous décelez une odeur de gaz, **ARRÊTEZ !** Retournez au point "B" des consignes de sécurité ci-dessus. Si vous ne remarquez aucune odeur de gaz, passez à l'étape suivante.
7. Tournez la manette de réglage du gaz jusqu'à sa position de marche "ON". Ne la forcez pas.
8. Ouvrez le courant électrique ("ON") qui alimente l'appareil (télerupteur mural).
9. Fermez la porte du compartiment de contrôle du bas.

POUR ÉTEINDRE L'APPAREIL

1. Coupez tout le courant électrique qui alimente l'appareil (télerupteur mural)

POUR FERMER LE GAZ QUI ALIMENTE L'APPAREIL

1. Pour une fermeture complète, tournez le télerupteur mural à sa position d'arrêt "OFF".
2. Ouvrez la porte du compartiment de contrôle du bas.
3. Tournez la manette de réglage du gaz à sa position d'arrêt "OFF". Ne la forcez pas.
4. Fermez la soupape d'arrêt de la canalisation principale.
5. Fermez la porte du compartiment de contrôle du bas.

NOTES:

CozyCabin.com 518-623-4349

REPLACEMENT PARTS LIST — CORNER UNITS

No.	DESCRIPTION	DVCL/R-CM/ENS		DVCL/R-CM/EPS		DVCL/R-RM/ENS		DVCL/R-RM/EPS	
		Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	Qty.
1.	Gas Fireplace Assembly (Right) Millivolt	120581	1	120582	1	120583	1	120584	1
	Gas Fireplace Assembly (Right) Electronic	120585	1	120586	1	120587	1	120588	1
	Gas Fireplace Assembly (Left) Millivolt	120561	1	120562	1	120563	1	120564	1
	Gas Fireplace Assembly (Left) Electronic	120565	1	120566	1	120567	1	120568	1
2.	Bar, Louver, Front (Black)	104951	5	104951	5	104951	1	104951	1
3.	Panel, Lower, Front Radiant	—	—	—	—	104611	1	104611	1
4.	Panel, Upper Front Radiant	—	—	—	—	104591	1	104591	1
5.	Hood, Front Radiant (Black)	—	—	—	—	104631	1	104631	1
6.	Hood, Front Circulating (Black)	104572	1	104572	1	—	1	—	1
7.	Bar, Louver, End (Black)	104955	5	104955	5	104955	1	104955	1
8.	Panel, Lower End Radiant	—	—	—	—	104613	1	104613	1
9.	Panel, Upper End Radiant	—	—	—	—	104593	1	104593	1
10.	Hood, End Radiant (Black)	—	—	—	—	104634	1	104634	1
11.	Hood, End Circulating (Black)	104575	1	104575	1	—	1	—	1
12.	Gasket, Spud	903389	1	903389	1	903389	1	903389	1
13.	Screw	000861	5	000861	5	000861	5	000861	5
14.	Screw	000647	2	000647	2	000647	2	000647	2
15.	Front Replacement Glass Panel W/Gasket	104852	1	104852	1	104852	1	104852	1
16.	End Replacement Glass Panel W/Gasket	104803	1	104803	1	104803	1	104803	1
17.	Door Switch	094468	1	094468	1	094468	1	094468	1
18.	Spud Plate, Control Panel Assembly	122091	1	122092	1	122091	1	122092	1
19.	Burner Assembly	120142	1	120144	1	120142	1	120144	1
20.	Refractory, End Panel	903216	1	903216	1	903216	1	903216	1
21.	Refractory, Rear	903215	1	903215	1	903215	1	903215	1
22.	Log Set (Standard)	—	—	—	—	—	—	—	—
a.	Front Log	903327	1	903327	1	903327	1	903327	1
b.	Center Log	903325	1	903325	1	903325	1	903325	1
c.	Rear Log	903326	1	903326	1	903326	1	903326	1
d.	Top Twig, Right End	903324	1	903324	1	903324	1	903324	1
e.	Top Twig, Left End	903321	1	903321	1	903321	1	903321	1
f.	Top Twig, Center Right	903322	1	903322	1	903322	1	903322	1
g.	Top Twig, Center Left	903323	1	903323	1	903323	1	903323	1
23.	Bag of Rockwool/Ember Coals	125012	1	125012	1	125012	1	125012	1

GAS CONTROLS — MILLIVOLT

No.	DESCRIPTION	_DVCL/R-R/CMNS		_DVCL/R-R/CMPS	
		Part No.	Qty.	Part No.	Qty.
30.	Gas Valve - SIT	902159	1	902160	1
31.	Piezo Igniter	091301	1	091301	1
32.	Orifice, Standard	903467 / 903468	1 / 1	901696 / 901067	1 / 1
	Orifice, High Altitude Kit	064492	1	064494	1
33.	Pilot Assembly	904405	1	904406	1

GAS CONTROLS — ELECTRONIC

No.	DESCRIPTION	_DVCL/R-R/CENS		_DVCL/R-R/CEPS	
		Part No.	Qty.	Part No.	Qty.
40.	Gas Valve - Honeywell	904404	1	904404	1
41.	Pilot Assembly	904227	1	904347	1
42.	Orifice, Standard	903467 / 903468	1 / 1	901696 / 901067	1 / 1
	Orifice, High Altitude Kit	064492	1	064494	1

REPLACEMENT PARTS LIST — PENINSULA UNITS

No.	DESCRIPTION	_DVPF-CM/ENS		_DVPF-CM/EPS		_DVPF-RM/ENS		_DVPF-RM/EPS	
		Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	Qty.
1.	Gas Fireplace Assembly - Millivolt	120541	1	120542	1	120543	1	120544	1
	Gas Fireplace Assembly - Electronic	120545	1	120546	1	120547	1	120548	1
2.	Bar, Louver, Front (Black)	104951	10	104951	10	104951	2	104951	2
3.	Panel, Lower Side Radiant	—	—	—	—	104611	2	104611	2
4.	Panel, Upper Side Radiant	—	—	—	—	104591	2	104591	2
5.	Hood, Side Radiant (Black)	—	—	—	—	104631	2	104631	2
6.	Hood, Side Circulating (Black)	104572	2	104572	2	—	—	—	—
7.	Bar, Louver, End (Black)	104955	5	104955	5	104955	1	104955	1
8.	Panel, Lower End Radiant	—	—	—	—	104613	1	104613	1
9.	Panel, Upper End Radiant	—	—	—	—	104593	1	104593	1
10.	Hood, End Radiant (Black)	—	—	—	—	104634	1	104634	1
11.	Hood, End Circulating (Black)	104575	1	104575	1	—	1	—	1
12.	Gasket, Spud	903389	1	903389	1	903389	1	903389	1
13.	Screw	000861	8	000861	8	000861	8	000861	8
14.	Screw	000647	5	000647	5	000647	5	000647	5
15.	Front Replacement Glass Panel W/Gasket	104852	2	104852	2	104852	2	104852	2
16.	End Replacement Glass Panel W/Gasket	104853	1	104853	1	104853	1	104853	1
17.	Door Switch	094468	1	094468	1	094468	1	094468	1
18.	Spud Plate, Control Panel Subassembly	122091	1	122092	1	122091	1	122092	1
19.	Burner Assembly	120141	1	120143	1	120141	1	120143	1
20.	Refractory, End Panel	903216	1	903216	1	903216	1	903216	1
22.	Log Set (Standard)	—	—	—	—	—	—	—	—
a.	Front Log	903327	1	903327	1	903327	1	903327	1
b.	Center Log	903325	1	903325	1	903325	1	903325	1
c.	Rear Log	903326	1	903326	1	903326	1	903326	1
d.	Top Twig, Right End	903324	1	903324	1	903324	1	903324	1
e.	Top Twig, Left End	903321	1	903321	1	903321	1	903321	1
f.	Top Twig, Center Right	903322	1	903322	1	903322	1	903322	1
g.	Top Twig, Center Left	903323	1	903323	1	903323	1	903323	1
23.	Bag of Rockwool/Ember Coals	125012	1	125012	1	125012	1	125012	1

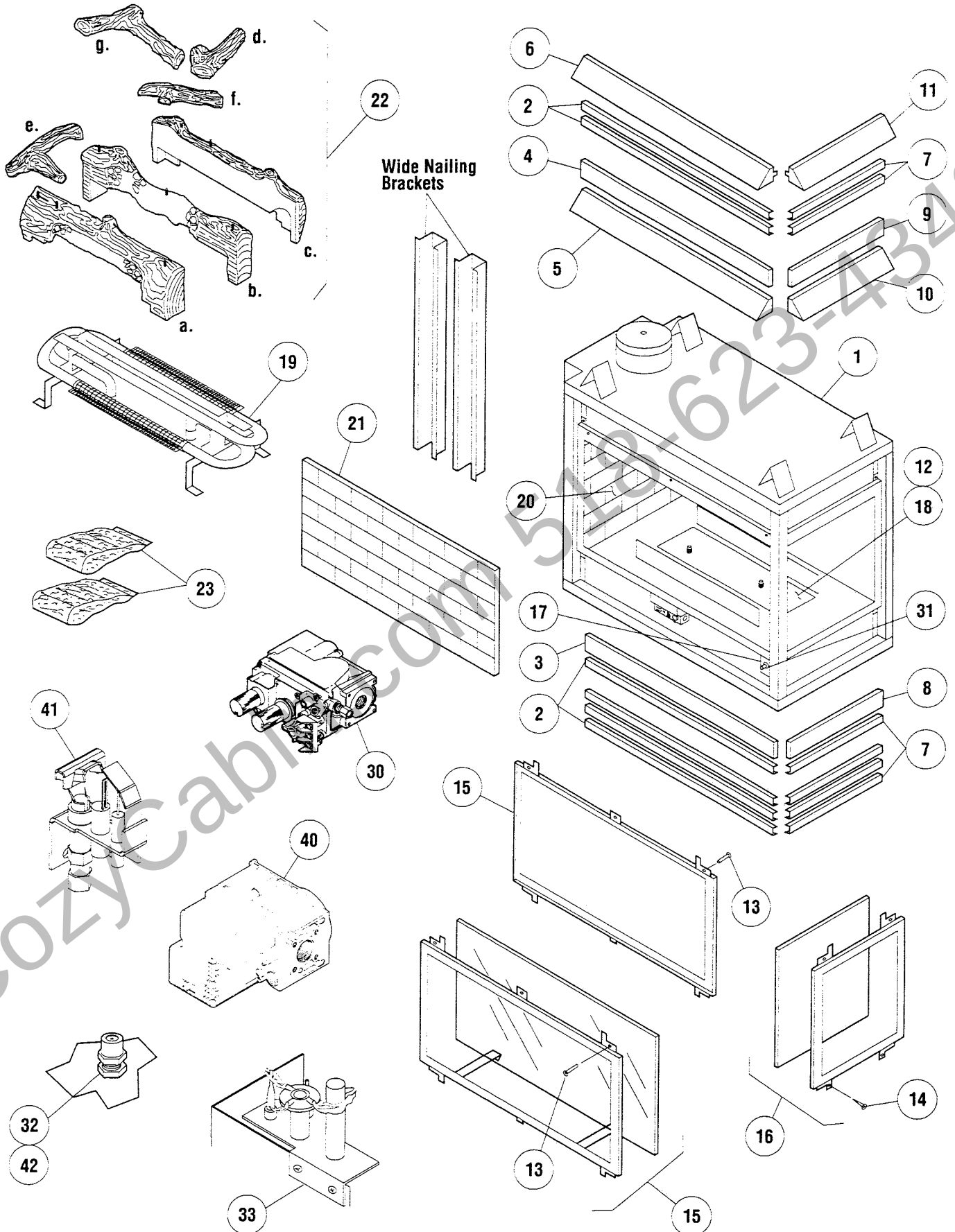
GAS CONTROLS — MILLIVOLT

No.	DESCRIPTION	_DVPF-R/CMNS		_DVPF-R/CMPS	
		Part No.	Qty.	Part No.	Qty.
30.	Gas Valve - SIT	902159	1	902160	1
31.	Piezo Igniter	091301	1	091301	1
32.	Orifice, Standard	903467	2	903465	2
	Orifice, High Altitude Kit	064488	2	064490	2
33.	Pilot Assembly	904405	1	904406	1

GAS CONTROLS — ELECTRONIC

No.	DESCRIPTION	_DVPF-R/CENS		_DVPF-R/CEPS	
		Part No.	Qty.	Part No.	Qty.
40.	Gas Valve - Honeywell	904404	1	904404	1
41.	Pilot Assembly	904227	1	904347	1
42.	Orifice, Standard	903467	2	903465	2
	Orifice, High Altitude Kit	064488	1	064490	1

REPLACEMENT PARTS — CORNER/PENINSULA UNITS



NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

REPLACEMENT PARTS LIST — SEE THROUGH UNITS

No.	DESCRIPTION	_DVST-CM/ENS		_DVST-CM/EPS		_DVST-RM/ENS		_DVST-RM/EPS	
		Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	Qty.
1.	Gas Fireplace Assembly - Millivolt	120521	1	120522	1	120523	1	120524	1
	Gas Fireplace Assembly - Electronic	120525	1	120526	1	120527	1	120528	1
2.	Bar, Louver (Black)	104951	10	104951	10	104951	2	104951	2
3.	Panel, Lower, Radiant	—	—	—	—	104611	2	104611	2
4.	Panel, Upper Radiant	—	—	—	—	104591	2	104591	2
5.	Hood, Radiant (Black)	—	—	—	—	104631	2	104631	2
6.	Hood, Circulating (Black)	104572	2	104572	2	—	—	—	—
7.	Gasket, Spud	903389	1	903389	1	903389	1	903389	1
8.	Screw	000861	6	000861	6	000861	6	000861	6
9.	Replacement Glass Panel W/Gasket	104852	2	104852	2	104852	2	104852	2
10.	Door Switch	094468	1	094468	1	094468	1	094468	1
11.	Spud Plate, Control Panel Subassembly	122091	1	122091	1	122091	1	122091	1
12.	Burner Assembly	120141	1	120143	1	120141	1	120143	1
13.	Refractory, Vent Side	903216	2	903216	2	903216	2	903216	2
14.	Log Set (Standard)	—	—	—	—	—	—	—	—
a.	Front Log	903327	1	903327	1	903327	1	903327	1
b.	Center Log	903325	1	903325	1	903325	1	903325	1
c.	Rear Log	903326	1	903326	1	903326	1	903326	1
d.	Top Twig, Right End	903324	1	903324	1	903324	1	903324	1
e.	Top Twig, Left End	903321	1	903321	1	903321	1	903321	1
f.	Top Twig, Center Right	903322	1	903322	1	903322	1	903322	1
g.	Top Twig, Center Left	903323	1	903323	1	903323	1	903323	1
15.	Bag of Rockwool/Ember Coals	125012	1	125012	1	125012	1	125012	1

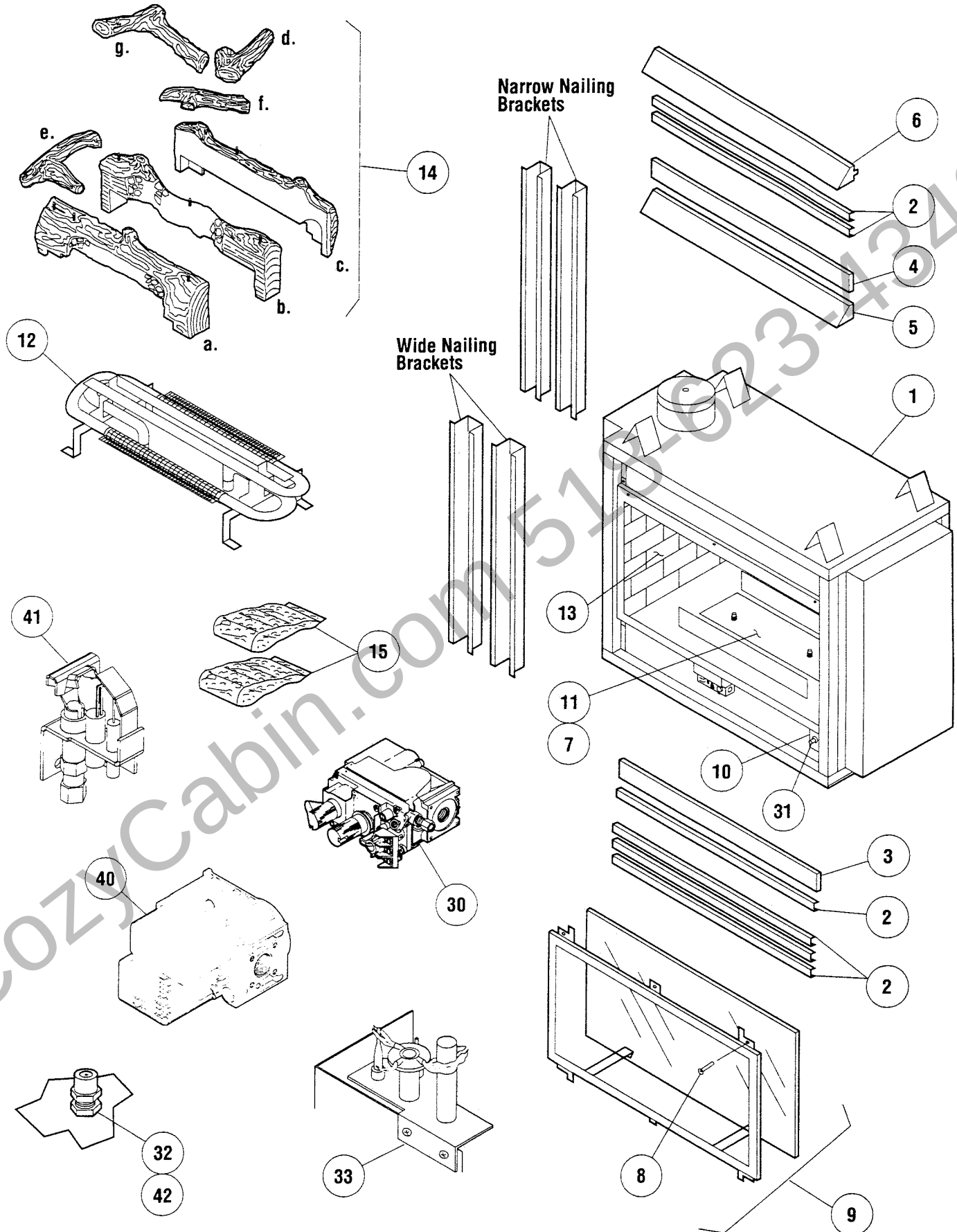
GAS CONTROLS — MILLIVOLT

No.	DESCRIPTION	_DVST-R/CMNS		_DVST-R/CMPS	
		Part No.	Qty.	Part No.	Qty.
30.	Gas Valve - SIT	902159	1	902160	1
31.	Piezo Igniter	091301	1	091301	1
32.	Orifice, Standard	903467	2	903465	2
	Orifice, High Altitude Kit	064488	1	064490	1
33.	Pilot Assembly	904405	1	904406	1

GAS CONTROLS — ELECTRONIC

No.	DESCRIPTION	_DVST-R/CENS		_DVST-R/CEPS	
		Part No.	Qty.	Part No.	Qty.
40.	Gas Valve - Honeywell	904404	1	904404	1
41.	Pilot Assembly	904227	1	904347	1
42.	Orifice, Standard	903467	2	903465	2
	Orifice, High Altitude Kit	064488	1	064490	1

REPLACEMENT PARTS — SEE THROUGH UNITS



NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

TROUBLESHOOTING THE MILLIVOLT GAS CONTROL SYSTEM

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

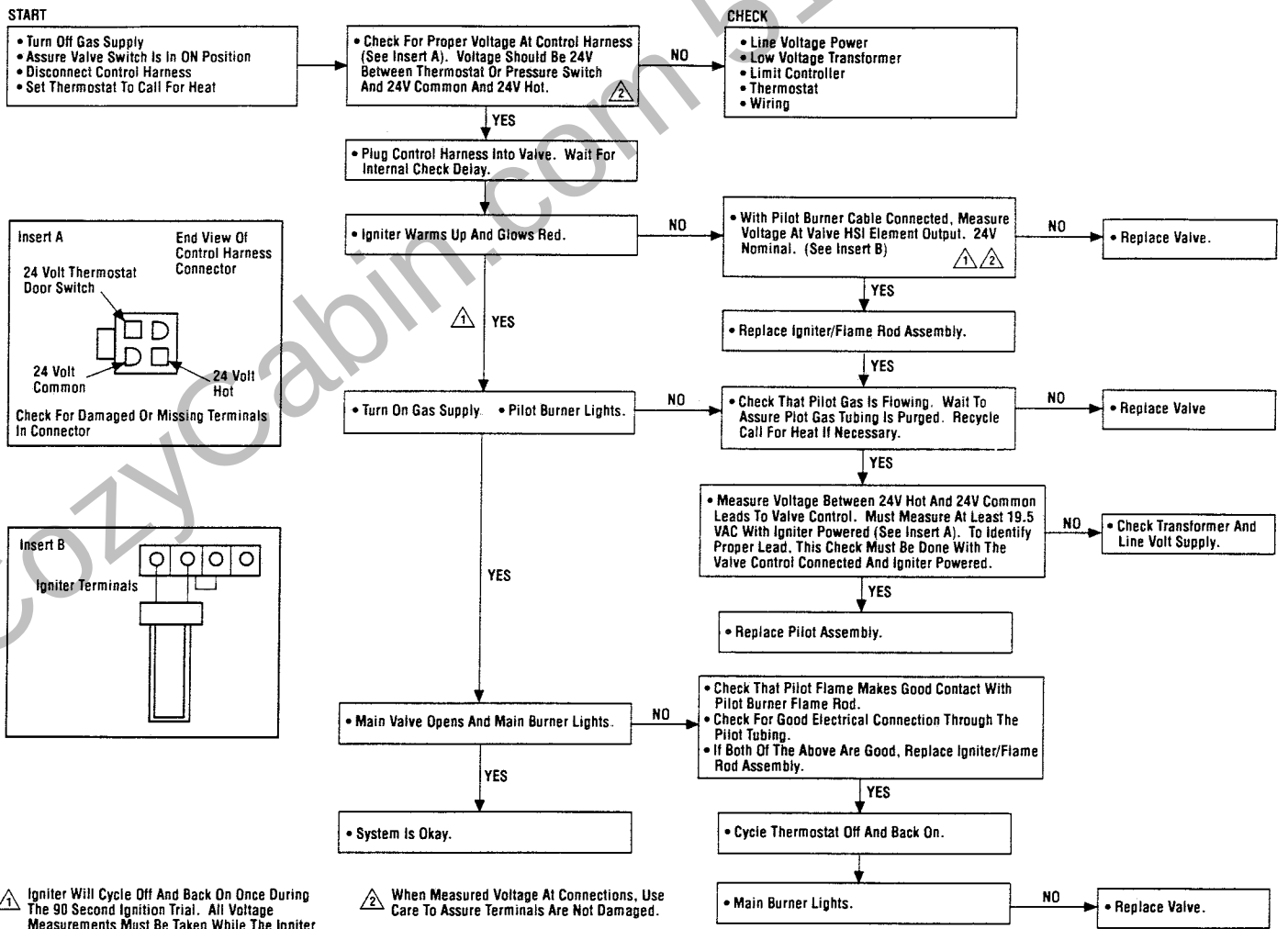
SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light pilot after repeated triggering of red button.	A. Defective ignitor (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
	B. Defective or misaligned 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 $\frac{1}{8}$ " to have a strong spark. If gap measures $\frac{1}{8}$ ", replace pilot (Figure 51).
	C. Gas supply pressure errant.	Check inlet gas pressure. It should be within the limits as marked on the rating plate.
	D. Pilot orifice plugged.	Clean or replace pilot orifice.
2. Pilot will not stay lit after carefully following the lighting instructions.	A. Defective pilot generator (thermocouple).	Check pilot flame, it must impinge on thermocouple (Figure 51). Clean and/or adjust pilot for maximum flame impingement on thermocouple. Ensure that the connection between the valve and thermocouple are tight and secure.
3. Pilot burning, no gas to burner, Valve knob "ON," Wall Switch "ON."	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. Thermopile may not be generating sufficient millivoltage.	Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with optional wall switch "OFF." Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice.	Check burner orifice for stoppage and remove.
	D. Defective door switch (located at lower right corner of door frame).	Remove door frame (see instructions).
		Remove two (2) screws from switch mounting bracket, pull switch out.
		Jumper wire across terminals of door switch.
		If burner comes on, door switch is 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 thermocouple (Figure 51). For vertical termination vent systems taller than 10 feet, use a _DV-ARK Air Restrictor Kit.
5. Frequent burner outage problem.	A. Pilot flame may be too low or blowing (high) causing the valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermopile (Figure 51). For vertical termination vent systems taller than 10 feet, use a _DV-ARK Air Restrictor Kit.

TROUBLESHOOTING THE ELECTRONIC IGNITION SYSTEM

Note: Before troubleshooting, be sure that the appliance main line gas shut-off valve, the gas control valve and the wall switch are in the "ON" position

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

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Burner will not light.	A. Faulty Valve System.	See Below.
	B. Faulty door switch.	Remove wire nut from red and blue leads attached to the door switch and check for continuity. If no continuity, replace door switch.
	C. "OFF/ON" or wall switch defective.	Disconnect the two black wires from the wire nuts. Test switch(s) for continuity with a multimeter. If continuity is not indicated, switch(s) is defective and must be replaced. Note: Before replacing "OFF/ON" switch, be sure to check wiring for loose connections or broken wires and repair as needed.
2. Burners come "ON" but go "OFF."	A. Burner orifice plugged.	Check main burner orifice(s) for stoppage. Clean or replace.
	B. Obstructed vent system.	Check vent system for obstructions.



Select Series Limited Lifetime Warranty

THE WARRANTY

Superior Fireplace Company ("SFC") warrants your Select Series Vented Decorative Gas Appliance or your Select Series AFUE Room Heater ("Product") to be free from defects in materials and workmanship at the time of manufacture. After installation, if any of the components manufactured by SFC in the Product are found to be defective in materials or workmanship during the lifetime of the original owner and while the Product remains at the site of the original installation, SFC will, at its option, replace or repair the defective components at no charge to you. SFC will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of one year from the date of installation. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Warranty as described herein.

EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies to the original purchaser, but only if the Product is installed in the United States or Canada and only if operated in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices. If repair or replacement is not commercially practical, SFC will, at its option, refund the purchase price of the SFC Product.

Vent components, brass components and paint are excluded from this Limited Warranty. The following components are NOT warranted for the lifetime of the original purchaser but are warranted as follows:

- Controls - repair or replacement for one year from the date of installation
- Glass - repair or replacement for one year from the date of installation
- Gaskets - repair or replacement for one year from the date of installation
- Logs - repair or replacement for one year from the date of installation

We will not be responsible for: (a) damages caused by accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subject to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and will result in a fire hazard); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

This Limited Warranty covers only parts and labor as provided herein. In no case shall SFC be responsible for materials, components or construction which are not manufactured or supplied by SFC 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 SFC factory.

LIMITATION ON LIABILITY

It is expressly agreed and understood that SFC'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 herein.

In no event shall SFC be liable for any incidental or consequential damages caused by defects in the Products, whether such damage occurs or is discovered before or after replacement or repair, and whether such damage is caused by SFC's negligence. SFC has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

We make no express warranties except as stated in this Limited Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this Limited Warranty or to create for us any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this Limited Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

SFC reserves the right to investigate any and all claims against this Limited Warranty and to decide upon method of settlement.

SFC NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT

To receive the benefits and advantages described in this Limited Warranty, the appliance must be installed and repaired by a licensed contractor approved by SFC. Contact SFC at the address provided herein to obtain a listing of approved dealers. SFC shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining SFC's prior written consent.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

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

SFC 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.

SFC

4325 Artesia Avenue • Fullerton, CA 92833
714-521-7302
503 East Reelfoot Avenue • Union City, TN 38261
901-885-7621