

INSTALLER:  
THESE INSTRUCTIONS MUST  
BE CONVEYED TO AND  
REMAIN WITH THE HOME-  
OWNER.

CERTIFIED UNDER CANADIAN AND  
AMERICAN NATIONAL STANDARDS,  
CAN/CGA 2.22-M86, I.R.41 AND Z21.50b-  
1990 RESPECTIVELY / VENTED  
DECORATIVE GAS APPLIANCES.



# FIREPLACES

## GAS - DIRECT VENT

MILLIVOLT SYSTEM  
INSTALLATION AND OPERATION  
INSTRUCTIONS FOR LISTED DIRECT VENT  
DECORATIVE GAS APPLIANCE

NATURAL GAS MODEL: GD 3000-NM  
PROPANE GAS MODEL: GD 3000-PM

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

### FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

#### WHAT TO DO IF YOU SMELL GAS:

- TURN OFF MAIN GAS SUPPLY.
- OPEN WINDOWS.
- DO NOT TRY TO LIGHT ANY APPLIANCE.
- DO NOT TOUCH ANY ELECTRICAL SWITCH; DO NOT USE ANY PHONE IN YOUR BUILDING.
- EXTINGUISH ANY OPEN FLAME.
- IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOUR'S PHONE. FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS.
- IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.



MANUFACTURED BY: WOLF STEEL LTD., R.R. #1 BARRIE, ONTARIO, CANADA, L4M 4Y8 (705)721-1212 , FAX (705)722-6031

WS-415-5 / 07.14.92

## TABLE OF CONTENTS

- |  |                                  |
|--|----------------------------------|
| 1. Warranty                              | 8. Log Curing                    |
| 2. General Instruction                   | 9. Operating Instructions        |
| 3. General Information                   | 9.1 Pilot Burner Adjustment      |
| 3.1 Brass & 24K Gold Plated Parts        | 9.2 Flame Switch                 |
| 4. Venting                               | 10. Venturi Adjustments          |
| - Horizontal Vent Methods                | 11. Special Installation         |
| - Vertical Vent Methods                  | 12. Maintenance Instructions     |
| - Air Terminal Locations                 | 12.1 Trouble Shooting Guide      |
| 4.1 Horizontal Air Terminal Installation | 13. Replacement Parts            |
| 4.2 Vertical Air Terminal Installations  | 13.1 GD 3000 Fireplace           |
| 4.3 Fireplace Vent Connection            | 13.2 GD 100 Air Terminal Kit     |
| 5. Installation                          | 13.3 GD 200 3-1/2 Foot Liner Kit |
| 5.1 Mobile Home Installation             | 13.3 GD 300 10 Foot liner Kit    |
| 6. Framing                               | 13.4 Accessories                 |
| 7. Log Placement                         |                                  |



FIREPLACES

DECORATIVE GAS APPLIANCES

NAPOLEON

25 YEARS LIMITED WARRANTY

Wolf Steel Ltd. warrants its **NAPOLEON GAS FIREPLACE** against manufacturing defects to the original purchaser only, subject to the following conditions:

1. Wolf Steel Ltd will provide replacement parts free of charge during the first year of the Limited Warranty except plated finishes, glass and logs.  
All repair work however requires the prior approval of an authorized company official. Labor costs for account of Wolf Steel Ltd. shall not exceed the retail price of the replacement parts.
2. Wolf Steel Ltd. will provide replacement parts during the second through the fifth year of the Limited Warranty free of charge except the plated finishes, glass, logs, vent, electrical components, gas valve, pilot assembly, ignitor, glass, and fan. Wolf Steel Ltd. will not be responsible for any labor costs in connection with those replacement parts.
3. Wolf Steel Ltd. will provide replacement parts (if available) at 50% of the retail price during the sixth through the twenty-fifth year of the Limited Warranty except the plated finishes, glass, logs, vent, electrical components, gas valve, pilot assembly, burner assembly, ignitor, glass, and fan. Wolf Steel Ltd. will not be responsible for any labor costs in connection with those replacement parts.

This limited warranty does not cover damages caused by misuse and is further conditional upon the correct installation and the intended use of our product.

This Limited Warranty may not be extended whatsoever by any of our representatives.

**IMPORTANT : KEEP THE ORIGINAL INVOICE SINCE A PHOTOCOPY OF IT WILL BE REQUIRED IN CASE OF CLAIM.**

**PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE**

### 2.0 GENERAL INSTRUCTIONS:

**NOTE: ALL HORIZONTAL RUNS MUST HAVE A 1/4 INCH RISE PER FOOT IN ALL CASES. EIGHT INCHES IS THE MINIMUM BEND RADIUS ALLOWED FOR THE 8" DIAMETER FLEXIBLE AIR LINER.**

THIS GAS FIREPLACE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. In the absence of local codes, install to the current CAN/CGA-B149 Installation Code in Canada or to the National Fuel Gas Code, ANSI Z223.1-1988, NFPA 54-1988 in the United States.

The fireplace and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The fireplace must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

A 1/8 inch N.P.T. plug, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the fireplace.

When the fireplace is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth.

Minimum Clearance to combustible construction from fireplace to vent surfaces:	Canada	United States
Sides	0 inches	0 inches
Back	0 inches	3 inches
Bottom	0 inches	0 inches
Top	4.5 inches	16.0 inches
Vent Pipe	1 * inch	1 * inch
Recessed Depth	18 1/4 inches	18 1/4 inches

**\* NOTE: THE FIRST 3-1/2 FEET OF OUTER 8 INCH DIAMETER VENT PIPE FROM THE APPLIANCE MUST BE WRAPPED IN THE 1 INCH THICK INSULATION SLEEVE (SUPPLIED) AS WELL AS HAVING A 1 INCH AIR GAP (Fig 5).**

The optional heat circulating blower is not supplied with a cord. If installed it must be electrically connected and grounded in accordance with local codes. In the absence of local codes, with the current CSA C22.1 CANADIAN ELECTRICAL CODE, in Canada or with the NATIONAL ELECTRICAL CODE, ANSI/NFPA 70-1990 in the United States.

Provide adequate ventilation air.

Provide adequate accessibility clearance for servicing and operating the fireplace.

Never obstruct the front opening of the fireplace.

### WARNING

- The fireplace is a decorative gas appliance. Do not burn wood or other materials in this fireplace.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Supervise young children when they are in the same room as the fireplace.
- Due to high temperatures, the fireplace should be located out of traffic and away from furniture and draperies.
- Clothing or other flammable material should not be placed on or near the fireplace.
- The fireplace glass door must be in place when the appliance is operating.
- Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.
- It is imperative that the control compartments, burners and circulating air passageway of the fireplace and venting system are kept clean. The fireplace and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The fireplace area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- This fireplace must not be connected to a chimney flue serving a solid fuel burning appliance.
- Under no circumstances should the fireplace be modified.
- The fireplace is not intended for use with a thermostat in the United States.
- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
- The fireplace is only to be used with the glass door certified with the fireplace.
- Do not strike or slam shut the fireplace glass door.

### 3.0 GENERAL INFORMATION

**FOR YOUR SATISFACTION, THIS FIREPLACE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!**

Maximum input is 30,000 BTU/h for natural gas and 24,000 BTU/h for propane.

Minimum inlet gas supply pressure in 4.5 inches water column for natural gas and 11 inches water column for propane.

Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane.

Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10.0 inches water column for propane.

The fireplace is approved for bedroom and mobile home (propane only) installations.

If the door glass should crack or break, do not operate the fireplace. Replace only with a door assembly certified with the fireplace. See Section 5.7 for removal and replacement details.

The glass is a 3/16" sheet of ceramic glass available from your Napoleon / Wolf Steel Ltd. dealer.

**DO NOT SUBSTITUTE MATERIALS!**

Clean the glass with a non-abrasive, ammonia or vinegar based glass cleaner.

**DO NOT CLEAN GLASS WHEN HOT!**

### 1 BRASS & 24KARAT GOLD PLATED PARTS

Your fireplace may be highlighted by brass or gold plating. Do not use abrasive cleaners to clean these parts. Buff lightly with a clean dry cloth.

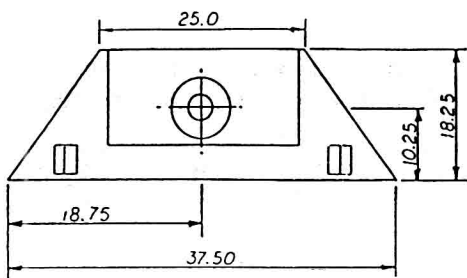
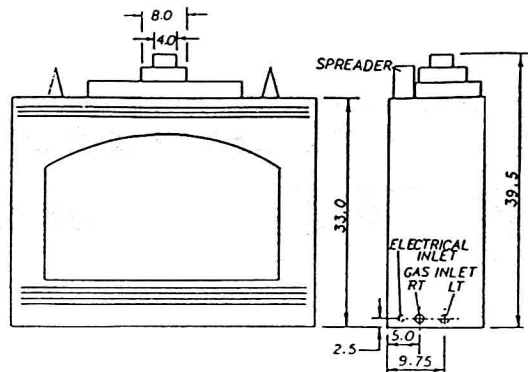


FIGURE 1



**4.0 VENTING**

- ALL HORIZONTAL RUNS MUST HAVE A 1/4 INCH RISE PER FOOT IN ALL CASES.
- DO NOT ALLOW THE INSIDE LINER TO BUNCH UP ON HORIZONTAL OR VERTICAL RUNS AND ELBOWS. KEEP IT PULLED TIGHT. A 1-3/4" AIR GAP BETWEEN THE INNER AND OUTER LINER ALL AROUND IS REQUIRED FOR SAFE OPERATION.
- PROVIDE A MEANS FOR VISUALLY CHECKING THE VENT CONNECTION TO THE FIREPLACE AFTER THE FIREPLACE IS INSTALLED.
- USE A FIRESTOP WHEN PENETRATING INTERIOR WALLS, FLOOR OR CEILING.

Only the following Napoleon Vent Kits, used in combination with each other can be used: GD 100 - AIR TERMINAL KIT  
 GD 200 - 2 TO 3-1/2 FOOT KIT  
 GD 300 - 5 TO 10 FOOT KIT

These vent kits allow for either horizontal or vertical venting of the fireplace (Figures 5, 6, & 7). The maximum number of vent connections is two horizontally or three vertically (excluding the fireplace and the air terminal connections). Specific vent components are available for venting vertically through the roof. Items for various installations of this variety are available from your Napoleon dealer. Specifically, roof supports and flashings for flat, 1/12 - 7/12 pitch and 8/12 - 12/12 pitch roof designs, vertical raincaps and telescoping sleeves are available.

NOTE: THE LINER MUST OVERLAP THE AIR TERMINAL BY 2" TO ENSURE A SAFE CONNECTION BETWEEN THE TWO (FIG. 3).

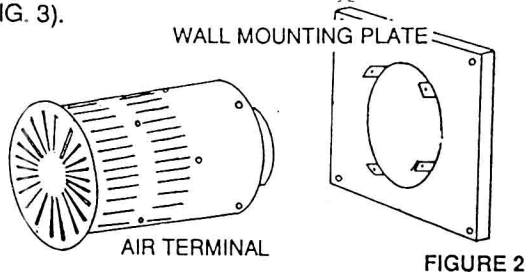


FIGURE 2

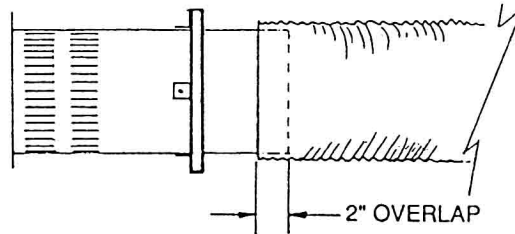


FIGURE 3

For optimum flame appearance and fireplace performance, keep the vent length and number of elbows to a minimum. On extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after lighting. The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

The maximum horizontal run with a 90° elbow located immediately above the fireplace is 34 inches (Fig 4 & 5).

The maximum horizontal run with a 57 inch vertical rise immediately above the fireplace is 34 feet (Fig. 4 & 6).

NOTE: IF VERTICAL RISES GREATER THAN 57 INCHES ARE NECESSARY, THE INCREASED RISE MUST BE DEDUCTED FROM THE HORIZONTAL RUN.

Use the chart on this page to calculate horizontal runs for vertical rises between 12 and 57 inches. (Fig. 4)

When calculating maximum run lengths, factor 10 feet for a vertical 90° elbow and 15 feet for a horizontal 90° elbow.

REQUIRED VERTICAL RISE FROM FIREPLACE TO FIRST ELBOW (INCHES)

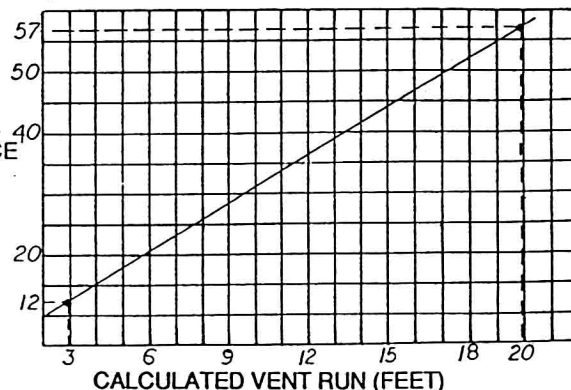


FIGURE 4

NOTE: THE FIRST ELBOW FROM THE UNIT IS NOT FACTORED INTO THE CALCULATIONS

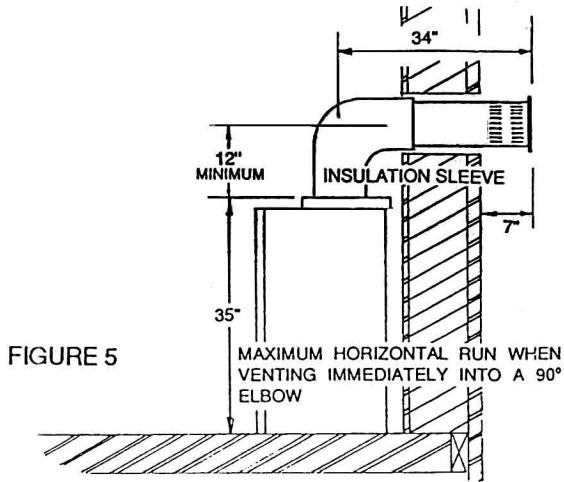


FIGURE 5

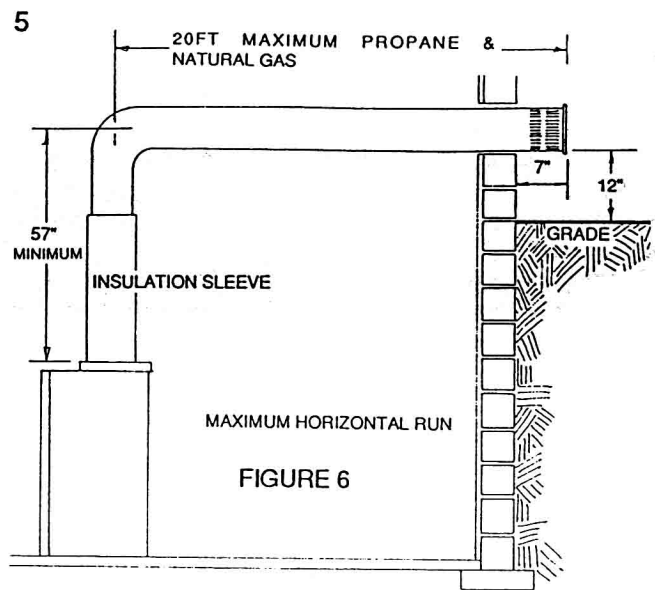


FIGURE 6

When terminating vertically, the minimum vertical rise is 34 inches above the fireplace. (Fig. 7) and the maximum vertical rise is 34 feet (to avoid difficulty in the initial start up). (Fig. 7)

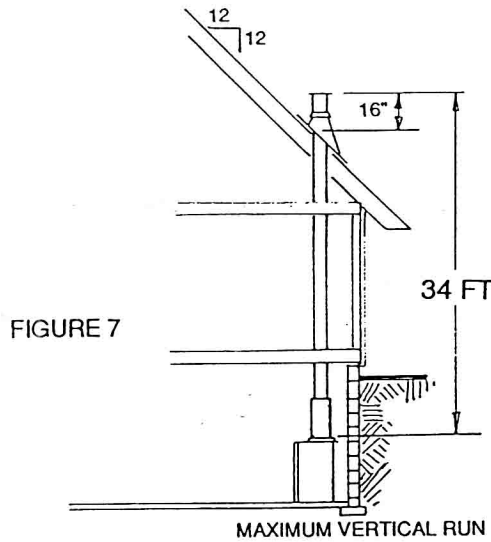


FIGURE 7

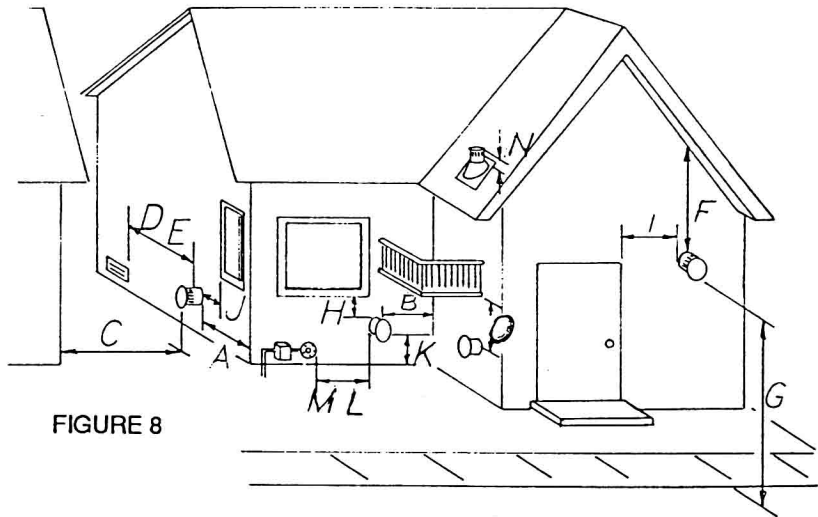


FIGURE 8

The air terminal must be located with the minimum clearances as illustrated in Fig. 8.

- (A) One foot from outside corner walls.
- (B) Two feet from inside corner walls.
- (C) Two feet from adjacent walls.
- (D) One foot from the sides and top of (or three feet from the bottom of) a non-mechanical combustion or ventilation air supply.
- (E) Six feet from mechanical combustion or ventilation air supplies.
- (F) Eighteen inches to a ventilated soffit or an unventilated soffit located above the terminal within a horizontal distance of two feet from the terminal.
- (G) Seven feet above public walkways unless fitted with heat shield kit GD301.
- (H) Three feet below windows that open.
- (I) One foot from doors and windows that open.
- (J) One foot from permanently closed windows.
- (K) One foot above grade.
- (L) Three feet above and horizontally from the centre-line of the regulator in a regulator/meter assembly.
- (M) Six feet from a gas service regulator vent outlet.
- (N) Sixteen inches above the roof.
- (O) Eighteen inches to the underside of a veranda, porch, deck or balcony that has a minimum of two open sides.

NOTE: A TERMINAL SHALL NOT TERMINATE DIRECTLY ABOVE A SIDEWALK OR PAVED DRIVEWAY WHICH IS LOCATED BETWEEN TWO SINGLE FAMILY DWELLINGS AND SERVES BOTH DWELLINGS. LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.



#### 4.1 HORIZONTAL AIR TERMINAL INSTALLATION

This application occurs when venting through an exterior wall (Fig. 5 & 6) Having determined the air terminal location:

1. Cut or frame a hole in the exterior wall with a minimum round or square opening of 12 inches.
2. Attach the wall mounting plate to the exterior side of the outside finished wall using the screws provided. Bend the 4 mounting lugs out to a 90 degree angle. Make weather tight by sealing with caulking (not supplied, figure 10).

**THE WALL MOUNTING PLATE MUST NOT BE RECESSED INTO THE EXTERIOR WALL OR SIDING.**

3. Insert the air terminal through the mounting plate and attach to the plate using the screws provided. Make weather tight by sealing with caulking (not supplied, Fig. 10). *Slope the air terminal down 1/4" to shed rain water.*

4. Slip a 4 inch diameter length of aluminum flexible liner a minimum of 2 inches over the inner sleeve of the air terminal. Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using the high temperature sealant provided

5. Slip an 8" diameter length of aluminum flexible liner a minimum of 2" over the outer sleeve of the air terminal. Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using high temperature sealant (Figure 10).

**NOTE: SPACERS ARE ATTACHED TO THE 4" INNER FLEX LINER AT PREDETERMINED INTERVALS TO MAINTAIN A 1-3/4" AIR GAP TO THE 8" OUTER LINER. THESE SPACERS MUST NOT BE REMOVED.**

6. If more than one length of liner needs to be used to reach the fireplace, couple them together as illustrated in Figure 11. Seal the joints using the same procedure as described in Points 4 and 5 above.

The vent system must be supported approximately every 3 feet, for both vertical and horizontal runs (Fig. 11). Use support rings provided.

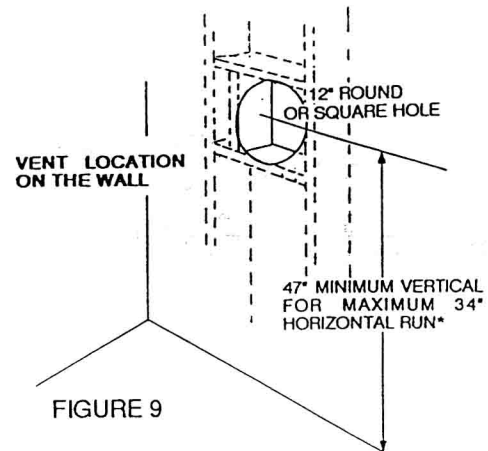


FIGURE 9

\* NOTE: AS THE HORIZONTAL RUN INCREASES, SO DOES THE MINIMUM VERTICAL RISE. SEE FIGURE 4 FOR DETAILS

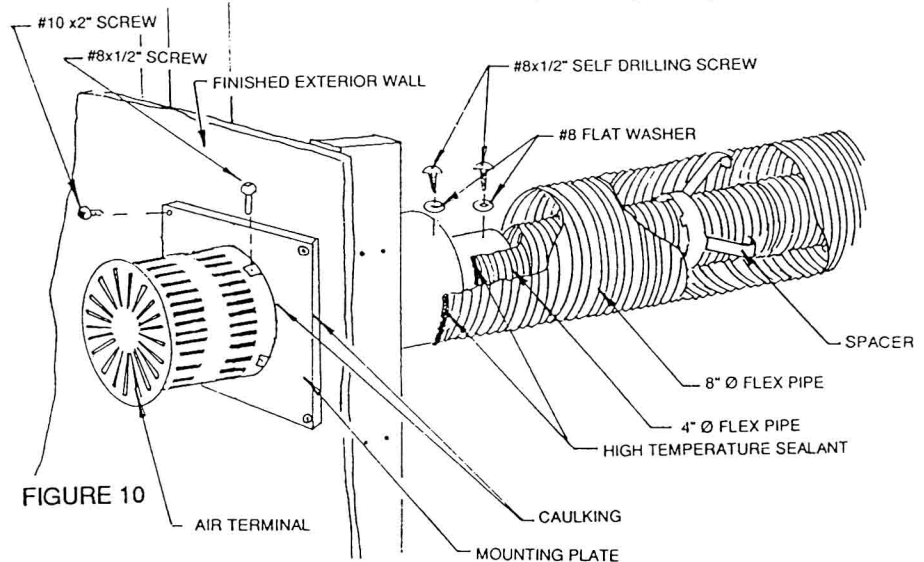


FIGURE 10

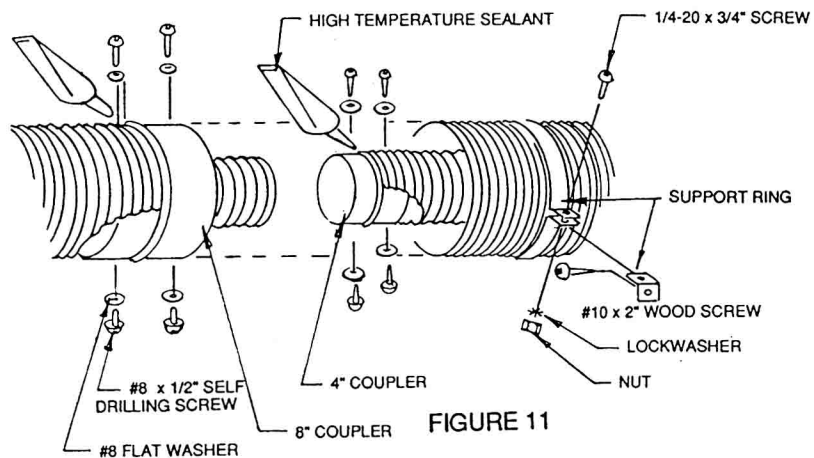


FIGURE 11

#### 4.2 VERTICAL AIR TERMINAL INSTALLATION

This application occurs when venting through a roof (Fig. 7).

1. Having determined the air terminal location, cut or frame a hole in the roof with a minimum round or square opening of 12 inches being sure to maintain the required 1 inch clearance to combustibles (Fig.12).
2. Attach the roof support to the roof using the screws provided.
3. Remove the end cap from the air terminal. Slip a 4 inch diameter length of aluminum flexible liner a minimum of 2 inches over the inner sleeve of the air terminal. Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using high temperature sealant (Fig. 10).

4. Attach the telescoping sleeve to the air terminal and secure using the 3 screws provided (Fig.13). Slip an 8" diameter length of aluminum flexible liner a minimum of 2 inches over the outer sleeve of the air terminal. Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using the high temperature sealant (Fig. 11).

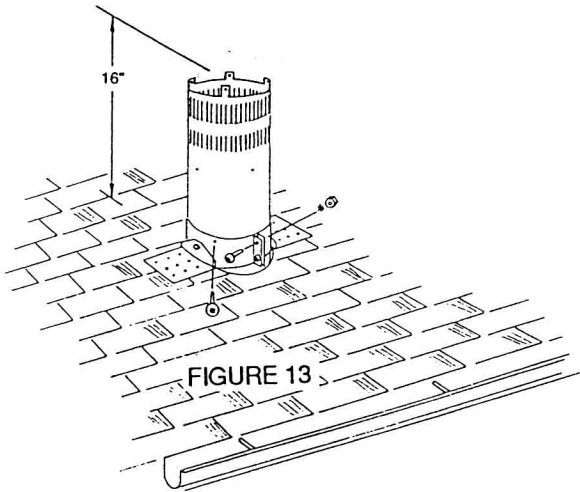


FIGURE 13

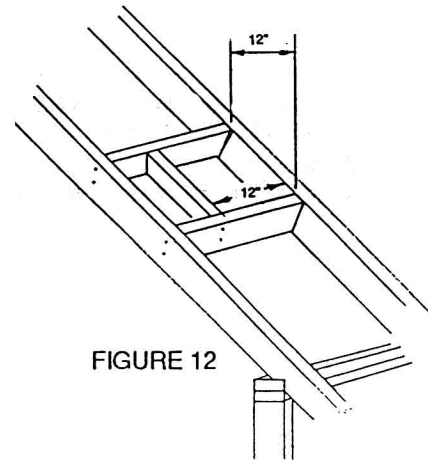


FIGURE 12

5. Thread the air terminal assembly liner down through the roof support, clamping the support to the air terminal (Do not clamp the flexible aluminum liner). Fasten the air terminal to the roof support using the screws provided. The air terminal must be located vertically and plumb, a minimum of 16" above the point where it penetrates the roof (Fig. 13).
6. Slip the roof flashing over the air terminal and fasten to the roof. Make weather tight by sealing with caulking (not supplied). Where possible cover the sides and top edges of the flashing with roofing material (Fig. 14).
7. Run a heavy bead of caulking 2 inches above the flashing. Slide a storm collar down the air terminal to the caulking. Run a second heavy bead of caulking around this storm collar, ensuring that a weather tight seal between the air terminal and collar is achieved. Slide a second storm collar down and center it between the air intake and the air exhaust slots (Fig. 14). Secure with 3 screws and seal using a heavy bead of caulking. For vertical installations, a 12" air terminal cap is available and must be attached. See accessories, section 13.4.
8. If more liner needs to be used to reach the fireplace, follow the same procedure as found in Section 4.1 point 6 above. The venting system must be supported approximately every 3 feet, for both vertical and horizontal runs (Fig. 11).

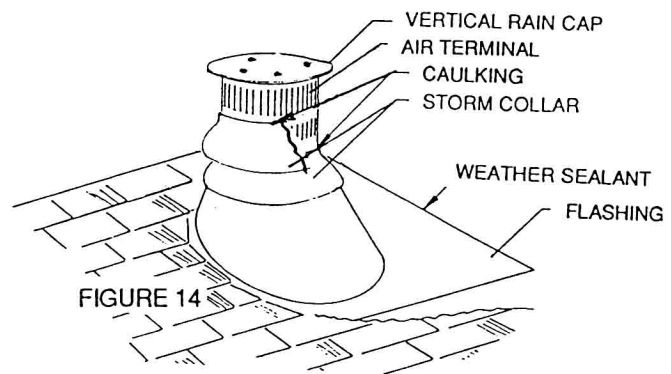


FIGURE 14

### 4.3 FIREPLACE VENT CONNECTION

1. Install the 4 inch diameter aluminum flexible liner to the fireplace. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high temperature sealant provided. Wrap the joint with the fibre blanket and clamp (Fig. 15).
2. Install the 8 inch diameter aluminum flexible liner to the fireplace. Attach and seal the joints.

### 5.0 INSTALLATION

Proceed once the vent installation is complete.

1. Move fireplace into position.
2. Route the 3/8 inch N.P.T. black iron gas line, 1/2" type L copper tubing or equivalent to the fireplace.
3. Install the remote wall switch in a convenient location and route a grounded 18 gauge, millivolt wire through the electrical hole, located at the bottom left side of the appliance. (A maximum wire length of 20 feet can be used in this application.) Attach the two leads to terminals 1 and 3 located on the gas valve (Fig. 16):

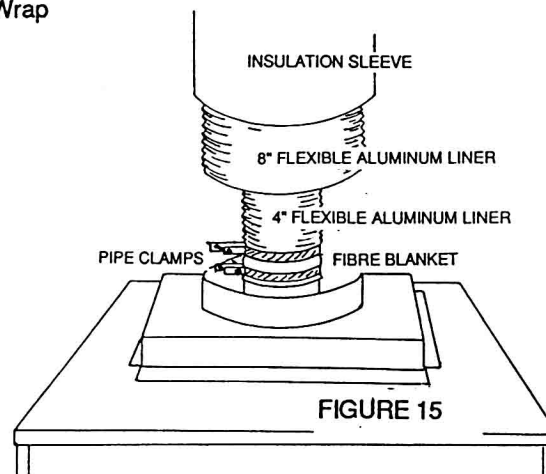


FIGURE 15

**DO NOT CONNECT EITHER THE WALL SWITCH OR THE GAS VALVE TO ELECTRICITY (110 VOLTS).**

- If an optional blower is to be used in the future, the blower must be connected to the main power supply at this time. Route a grounded 14 gauge 2 wire power cable through a wall switch to the junction box and ground. At the point where the cable enters the junction box, an insulated bushing must be provided. Since the fan is installed behind the gas supply it must be installed prior to connecting the gas.

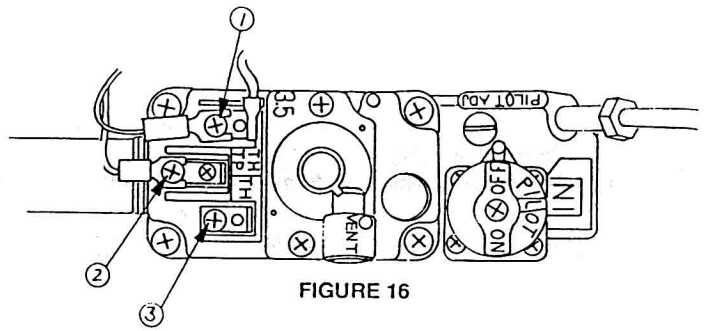


FIGURE 16

**INSTALLATION OF THE BLOWER AT A LATER DATE WILL REQUIRE THE GAS TO BE DISCONNECTED FROM THE FIREPLACE (Fig. 17).** Complete installation instructions are included with the blower assembly.

- Install rigid black pipe, 1/2" type L copper tubing or if local codes permit, a 3/8 inch flex connector and shut-off valve to the gas line and the fireplace gas valve. Seal and tighten securely. An adapter fitting is required between the gas valve and copper tubing or flex connector if used.

**DO NOT KINK FLEX CONNECTOR (FIG. 18).**

- Check for gas leaks by brushing on a soap and water solution. **DO NOT USE OPEN FLAME.**

**NOTE: PURGE ALL GAS LINES WITH THE GLASS DOOR OF THE FIREPLACE REMOVED. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE INSTALLING THE DOOR.**

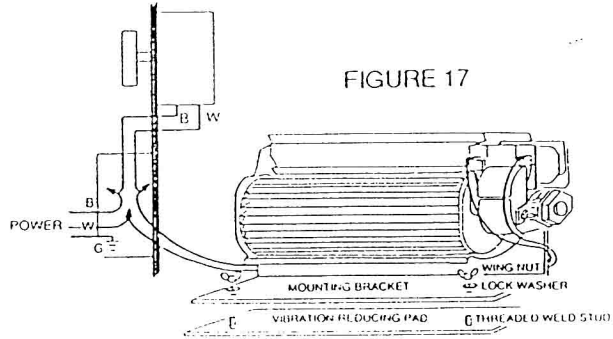


FIGURE 17

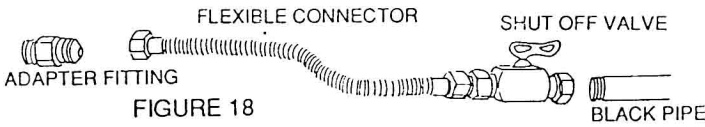


FIGURE 18

- Secure the glass door using the screws, washers and springs supplied. (Fig.19)

**NOTE: THE DOOR MUST BE FREE TO PIVOT OPEN AGAINST THE ACTION OF THE SPRING .**

**5.1 MOBILE HOME INSTALLATION (PROPANE ONLY)**

The fireplace is equipped with two 1/4 inch diameter holes located in the front left and right corners of the base. For mobile home installations the fireplace must be fastened in place. Use #10 hex head screws, inserted through the holes in the base to secure. It is recommended to secure the fireplace in all installation cases.

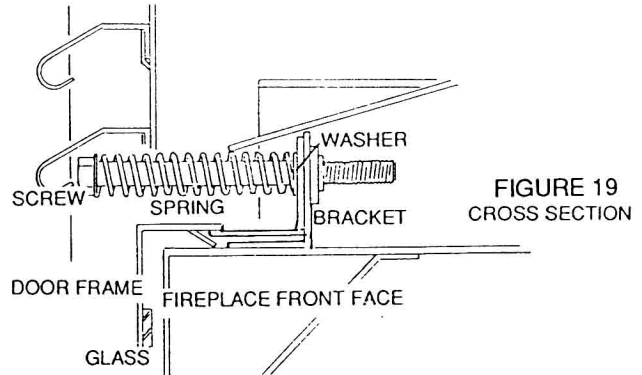


FIGURE 19  
CROSS SECTION

**6.0 FRAMING**

It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2 x 4's and frame to local building codes (Fig. 20 through 24).

To install the fireplace facing flush with the finished wall, position the framework to accommodate the thickness of the finished wall (Fig. 24).

It is not necessary to install a hearth extension with this fireplace system.

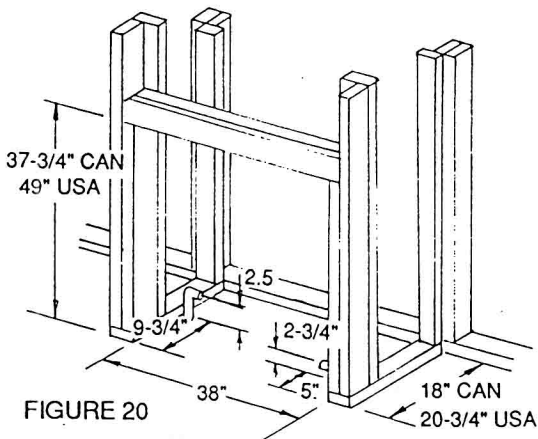


FIGURE 20

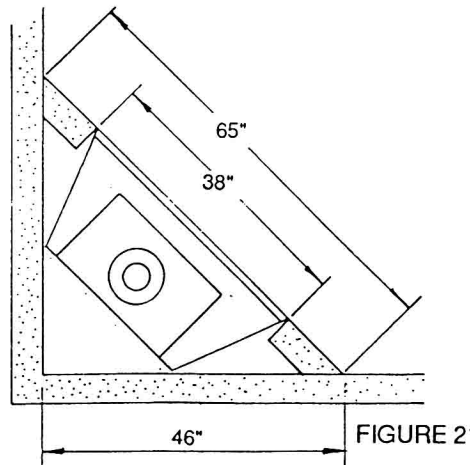
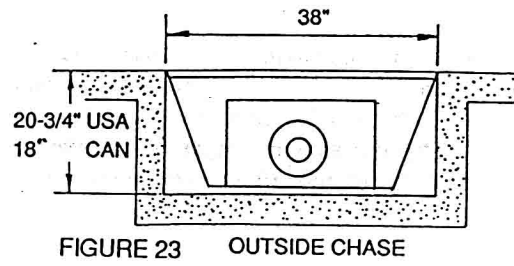
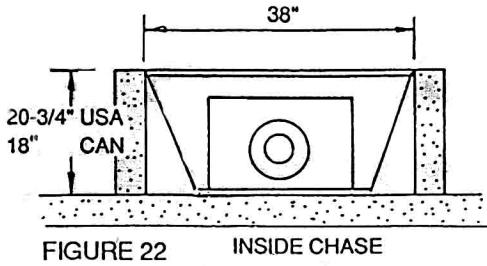
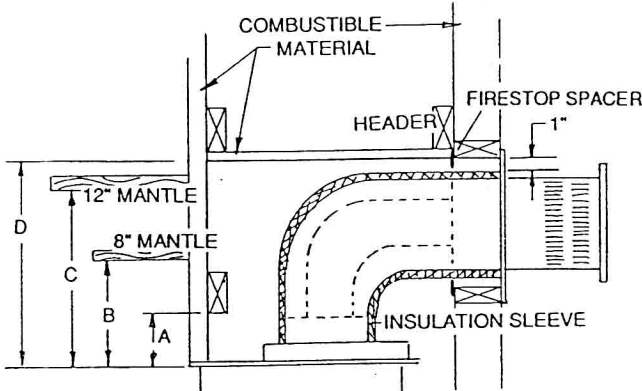


FIGURE 21





A combustible mantle shelf projecting a maximum of 8 or 12 inches from the wall may be installed at a minimum distance of 7 or 10.5 inches respectively in Canada and 16 or 20 inches respectively in the United States above the top of the fireplace. Other mantles may be installed at various distances from the fireplace. See the chart for details (Figure 25).



	CANADA	USA
A	4 1/2"	16"
B	7"	16"
C	10 1/2"	20"
D	16" (MINIMUM)	16"

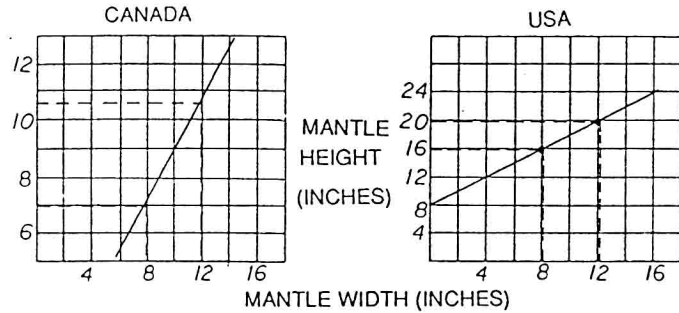
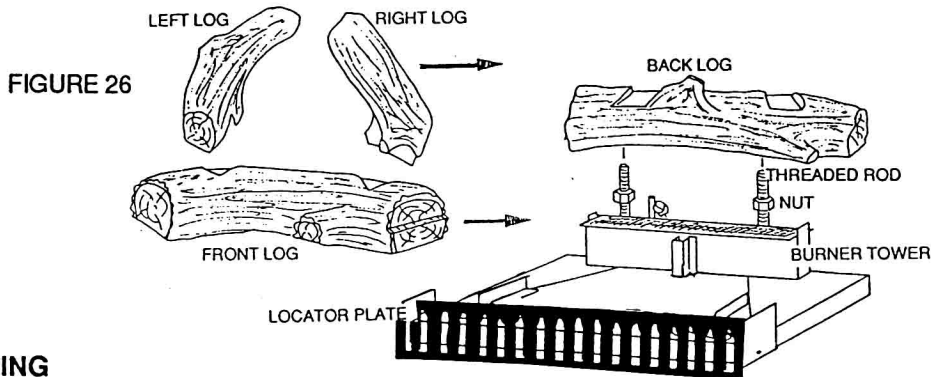


FIGURE 25

**7.0 LOG PLACEMENT**

1. Place the large straight back log on to the threaded rods. A space of 1/4" should be maintained between the log and the flame sensor. Adjust if necessary with nuts provided. (Figure 26)
2. Place large curved front log on to main burner between the locator plates and the burner tower. The left and right spacing between the log ends and the burner ports should be equal. (Figure 26)
3. Set the right and left smaller logs into the pockets and grooves of the front and back logs, respectively. (Figure 26)

THE APPEARANCE OF HAIRLINE CRACKS IN THE LOGS IS NORMAL AND DOES NOT AFFECT THE SAFETY OF THE OPERATION.



**8.0 LOG CURING**

**WARNING:** Before you start operating your fireplace the ceramic logs need to be cured. Please follow instructions carefully to avoid large cracks in the logs:

1. Make sure logs sit on burner properly (Fig. 26).
2. Fire the fireplace for 5 minutes only then turn main burner and pilot light off.
3. Wait a minimum of one hour to let the ceramic logs cure.

4. Fire the fireplace for 10 minutes then turn mainburner and pilot light off.
5. Wait a minimum of 2 hours to let the ceramic logs cure again.
6. Fire the fireplace for 30 minutes then turn mainburner and pilot light off.
7. Wait for a minimum of six hours to let the ceramic logs cure again.

Now your logs are fully cured and are ready for normal use.

Hairline cracks could still develop but are a normal condition and do not affect the safety of the log set.

The logs can be painted in any colour, lighter or darker using high temperature paint. Dark painted logs may be high-lighted with high temperature gold or silver paint to create an attractive glow effect.

## 9.0 OPERATING INSTRUCTIONS





NOTE: When lit for the first time the fireplace will emit a slight odour for one or two hours. This is due to the curing of the logs and "burn in" of internal paints and lubricants used in the manufacturing process. This condition is temporary. Open doors and windows to ventilate the room(s) sufficiently.

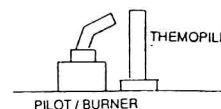
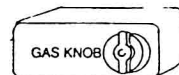
### FOR YOUR SAFETY READ BEFORE LIGHTING:

- |  |   |
|--|---|
| <p>A. This appliance has a pilot which must be lit by hand while following these instructions exactly.</p> <p>B. Before lighting, smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.</p>   | <ul style="list-style-type: none"> <li>• If you cannot reach your gas supplier, call the fire department.</li> </ul>  |
| <p><b>WHAT TO DO IF YOU SMELL GAS:</b></p> <ul style="list-style-type: none"> <li>• Do not try to light any appliance.</li> <li>• Do not touch any electrical switch; do not use any phone in your building.</li> <li>• Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions</li> </ul> |   |
| <p>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 explosion.</p>  | <p>D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and replace any part of the control system and any gas control touched by water.</p> |

### LIGHTING INSTRUCTIONS:

When lighting and re-lighting, the gas knob cannot be turned from pilot to off unless the knob is depressed.

1. Turn off all electrical power to the appliance.
2. Turn gas knob clockwise  to off.
3. Wait five (5) minutes to clear out any gas. If you smell gas, **STOP!** Follow "B" in the preceding safety information. If you don't smell gas, go to the next step.
4. If the appliance is equipped with a flame adjustment valve, turn clockwise  to off.
5. Find the pilot located in front of the back log.
6. Turn the gas knob counter-clockwise  to pilot.
7. Depress and hold the gas knob while lighting the pilot with the push button ignitor. Keep the knob fully depressed for one (1) minute, then release. If the pilot does not continue to burn, repeat steps 3 through 7.
8. With pilot lit, turn the gas knob counter-clockwise  to on.
9. If equipped with a flame adjustment valve, push and turn knob to high.
10. If equipped with remote on-off switch, main burner may not come on when you turn the valve to on or high. Remote switch must be in the 'on' position to ignite burner.
11. Turn on all electrical power to the appliance.



### TO TURN OFF GAS

1. Turn off all electrical power to the appliance if service is to be performed
2. Push in gas control knob slightly and turn clockwise  to off. Do not force.

### 9.1 PILOT BURNER ADJUSTMENT (Figure 16)

1. Remove the pilot adjustment cap.
2. Adjust the pilot screw to provide a properly sized flame.
3. Replace the pilot adjustment cap.

### 9.2 FLAME SWITCH

Your fireplace has been equipped with a flame switch which senses the flame and shuts off the gas flow to the pilot and the main burner in the event that the pilot flame is unstable or becomes extinguished.

This switch is wired in series with the thermopile. Bypassing this switch may lead to an explosion which could result in personal injury. **DO NOT** alter the wiring of the control. Replace the flame switch only with components approved by the manufacturer.

LOCATE THE CLEARANCES FOR THE FLAME SWITCH BULB AS SHOWN:

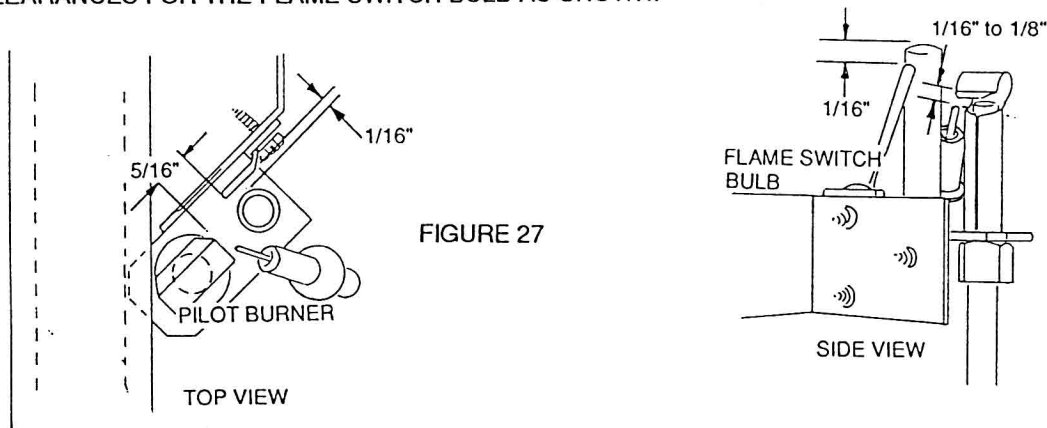


FIGURE 27

### 10.0 VENTURI ADJUSTMENT

Natural gas models have air shutters set at 1/8 (0.125) inch open. Propane gas models have air shutters set at 1/4 (0.250) inch open. Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports (Figure 28).

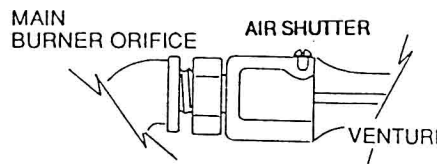


FIGURE 28

**NOTE: AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED GAS INSTALLER.**

### 11.0 SPECIAL INSTALLATION CASE

A through the roof installation requires a total 5 foot rise (Fig. 29). The location of the fireplace dictates a horizontal run of 5 feet. What is the required vertical rise to the centre of the initial 90° elbow?

The total run is:

5 Feet (Through roof vertical rise)

+10 Feet (Vertical elbow)

+ 5 Feet (Horizontal run)

20 Feet (Total run)

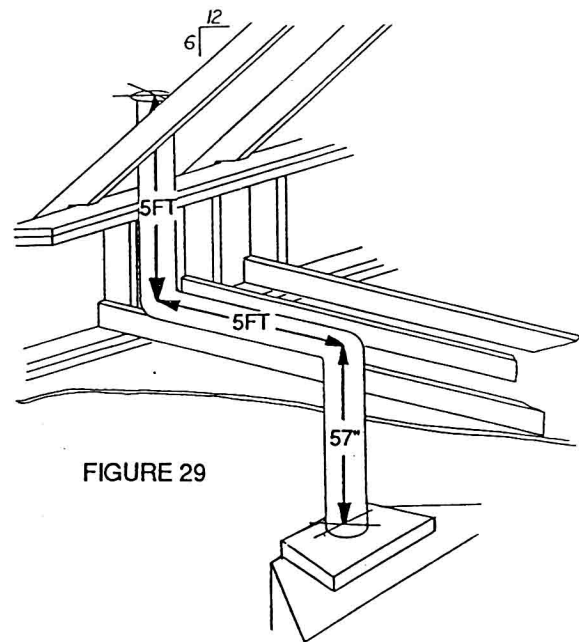


FIGURE 29

**NOTE: THE FIRST ELBOW ABOVE THE UNIT IS NOT FACTORED INTO THE CALCULATIONS.**

From Fig. 4 we determine that a 57 inch minimum vertical rise immediately off the unit is required for satisfactory venting conditions. It is recommended to achieve this venting arrangement, use the following Napoleon vent kits and components:

- 1 - GD100 (Air terminal kit)
- 2 - GD300 (5 - 10 foot kit)
- 1 - 4 inch connector
- 1 - 8 inch connector
- 1 - roof support
- 1 - 1/12 - 7/12 roof flashing
- 1 - 8" telescoping sleeve
- 1 - vertical rain cap

ALTHOUGH THE IMMEDIATE VERTICAL RUN MAY BE GREATER THAN 57 INCHES, THE MAXIMUM COMBINATION OF HORIZONTAL AND VERTICAL RUNS BEYOND THE 57 INCHES, **MUST NOT EXCEED 20 FEET.**

## 12.0 MAINTENANCE INSTRUCTIONS

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

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

The fireplace area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.

The flow of combustion and ventilation air must not be obstructed.

1. In order to properly clean the burner and pilot assembly, remove the logs exposing the burner and pilot assembly.
2. Keep the control compartment, logs, burners and the area surrounding the logs clean by vacuuming or brushing at least once a year.
3. Check to see that all the burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly (Figure 30).
4. Check to see that the pilot flame is large enough to engulf the flame sensor on one leg and reaches the burner on the other leg.
5. Replace the cleaned logs.
6. Check to see that the main burner ignites on all ports when the switch for the burner is turned on. A 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer/distributor.

CHECK THAT THE SIDE, AND TOP AND BOTTOM DOOR GASKETING ARE NOT BROKEN OR MISSING. REPLACE GASKETING IF NECESSARY.

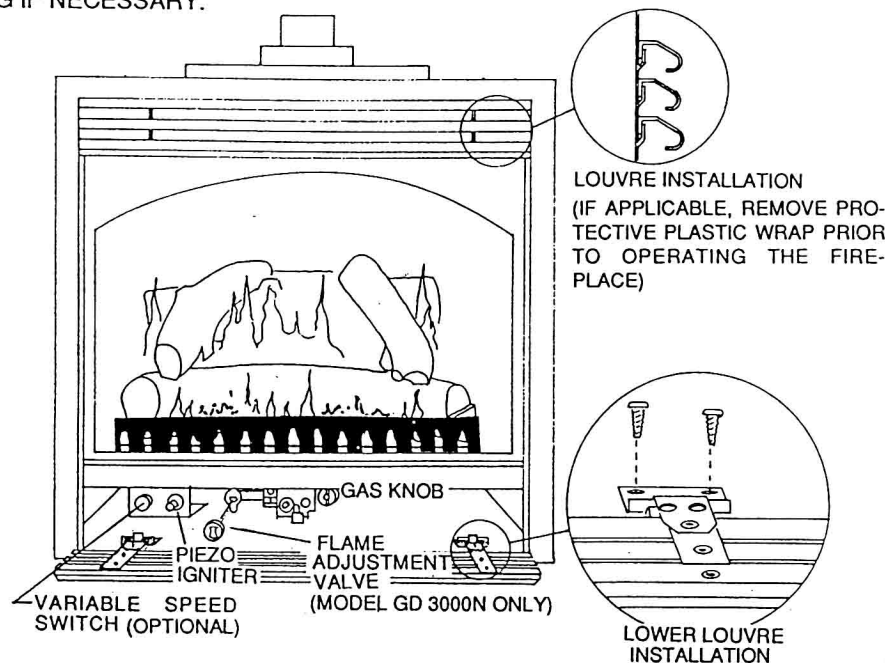


FIGURE 30

**NOTE: PURGE ALL GAS LINES WITH THE GLASS DOOR OF THE FIREPLACE REMOVED. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE INSTALLING THE DOOR (FIGURE 19).**

**REMINDER: UNDER EXTREME VENT CONFIGURATIONS, ALLOW SEVERAL MINUTES (5 TO 15) FOR THE FLAME TO STABILIZE AFTER IGNITION.**

## 12.1 TROUBLE SHOOTING GUIDE

NOTE: Before attempting to troubleshoot, purge your unit and initially light the pilot and the main burner with the glass door of the fireplace removed.

<b>SYMPTOM</b>	<b>PROBLEM</b>	<b>TEST SOLUTION</b>
Pilot will not light.	A - No spark at the pilot burner	<ul style="list-style-type: none"> <li>- check that the wire is connected to the push button ignitor.</li> <li>- check if the push button ignitor needs tightening.</li> <li>- replace the pilot assembly if the wire insulation is frayed or broken.</li> <li>- replace the pilot assembly if the ceramic insulator is cracked or broken.</li> <li>- replace the push button ignitor.</li> </ul>
	B - spark gap is incorrect	<ul style="list-style-type: none"> <li>- spark gap should be 1/16" to 1/8" from the electrode tip and the pilot burner. Light the pilot with a match and adjust the electrode tip to the required spark gap and proper location (See figure 27).</li> </ul>
	C - No gas at the pilot burner	<ul style="list-style-type: none"> <li>- check that the manual valve(s) is (are) turned on.</li> <li>- check the pilot orifice for blockage.</li> <li>- replace the valve.</li> <li>- call the gas distributor.</li> </ul>
	D - Out of propane gas	<ul style="list-style-type: none"> <li>- fill the tank</li> </ul>
Pilot goes out when the gas knob is released.	A - System is not correctly purged	<ul style="list-style-type: none"> <li>- purge the gas line.</li> </ul>
	B - Out of propane gas	<ul style="list-style-type: none"> <li>- fill the tank</li> </ul>
	C - Pilot flame is not large enough	<ul style="list-style-type: none"> <li>- turn up the pilot flame.</li> </ul>
	D - Pilot flame is not engulfing the generator (thermopile)	<ul style="list-style-type: none"> <li>- gently twist the pilot head to improve the flame pattern around the generator (thermopile).</li> </ul>
	E - Thermopile shorting	<ul style="list-style-type: none"> <li>- clean the thermopile and valve terminals.</li> <li>- check that the thermopile insulation is not frayed and grounding out on the fireplace housing or burner support.</li> <li>- replace thermopile.</li> <li>- replace valve.</li> </ul>
	F - Faulty thermopile	<ul style="list-style-type: none"> <li>- replace thermopile</li> </ul>
	G - Faulty flame switch	<ul style="list-style-type: none"> <li>- disconnect the lead between the flame switch and terminal 1 on the gas valve. Connect the second lead from the flame switch to terminal 1. Try lighting and releasing the gas knob. If the pilot stays lit, replace the flame switch.</li> </ul>
<p><b>DO NOT LEAVE THE FIREPLACE OPERATING WITH THE FLAME SWITCH DISCONNECTED. THIS COULD CAUSE AN EXPLOSION AND/OR PERSONAL INJURY.</b></p>		<p><b>CONT . . .</b></p>



<b><u>SYMPTOM</u></b>	<b><u>PROBLEM</u></b>	<b><u>TEST SOLUTION</u></b>
Pilot goes out when the gas knob is released.	H - Faulty valve	- replace valve.
Pilot burning; no gas to main burner; gas knob is 'on'; wall switch is 'on'; heat/flame adjustment valve is 'on' (if equipped).	A - Wall switch is defective  B - Wall switch wiring is defective  C - Main burner orifice is plugged  D - Remote gas valve operator is defective	- connect a jumper wire across the wall switch terminals; if the main burner lights, replace the wall switch.  - connect a jumper wire across terminals 1 and 3; if main burner lights, check the wires for defects and/or replace wires.  - remove stoppage in orifice.  - connect a jumper wire across terminals 1 and 3; if main burner does not light, replace gas valve.
Main burner goes out; pilot stays on.	A - Pilot flame is not large enough or not engulfing the thermopile  B - Thermopile shorting  C - Remote wall switch wire is too long, too much resistance in the system	- turn on the pilot flame. Gently twist the pilot head to improve the flame pattern around the thermopile.  - clean thermopile and valve terminals. - check that the thermopile insulation is not frayed and grounding out on the fireplace housing or burner support  - shorten the wall switch wire length to 20 feet; use 18 gauge solid core wire.
Remote wall switch is in off position; main burner comes on when the gas knob is turned to the 'on' position	A - wall switch is mounted upside down  B - remote wall switch is grounding  C - remote wall switch wire is grounding  D - faulty valve	- reverse the wall switch.  - replace remote wall switch.  - check for ground (short); repair ground or replace wire.  - replace valve.
Carbon is being deposited on glass, logs or combustion chamber surfaces	A - flame is impinging on the logs or combustion chamber	- check that the logs are correctly positioned. - open air shutter to increase the primary air. - check the input rate: check the manifold pressure and orifice size as specified by the rating plate valves. - check that the sides and top and bottom door gasketing are not broken or missing. - check that the seal between the door glass and the gasket is tight. - check that both the 4" and 8" vent liners are free of holes and well sealed at all joints.

**13.0 ORDERING REPLACEMENT PARTS**

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor. When ordering replacement parts always give the following information:

1. Model & Serial Number of fireplace
2. Installation date of fireplace
3. Part Number
4. Description of part
5. Finish

**13.1 DIRECT VENT, GD3000**

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
G-501	FRONT LOG	GA-GD-715.22	ANTIQUÉ BRASS 6" SIDE TRIM
G-502	BACK LOG	GA-GD-715.23	ANTIQUÉ BRASS 6" TOP TRIM
G-503	LEFT LOG	GA-GD-715.26	POLISHED CHROME 6" SIDE TRIM
G-504	RIGHT LOG	GA-GD-715.27	POLISHED CHROME 6" TOP TRIM
GA-GD-715.10	BLACK LOUVRE	G-518	NAPOLEON LOGO
GA-GD-715.11	POLISHED BRASS LOUVRE	GA-GD-10.40	BLACK LOUVRE CONTROL DOOR ASSEMBLY
GA-GD-715.12	ANTIQUÉ BRASS LOUVRE	GA-GD-10.41	POLISHED BRASS LOUVRE CONTROL DOOR ASSEMBLY
GA-GD-715.13	CHROME LOUVRE	GA-GD-10.42	ANTIQUÉ BRASS LOUVRE CONTROL DOOR ASSEMBLY
GA-GD-10.44	BURNER ASSEMBLY - NATURAL GAS	GA-GD-10.43	POLISHED CHROME LOUVRE CONTROL DOOR ASSEMBLY
GA-GD-10.80	BURNER ASSEMBLY - PROPANE GAS	WS 660-2	HAND HELD WIRELESS REMOTE SWITCH
GA-GD-225.6	ARCHED BLACK DOOR FRAME	GZ-550KT	BLOWER KIT
GA-GD-225.12	ARCHED GOLD PLATED DOOR FRAME	KB 35	VARIABLE SPEED SWITCH
GA-GD-225.17	ARCHED CHROME PLATED DOOR FRAME	WS 630-2	SPRING
GA-GD-83	GLASS ONLY	WS 065-2	DOOR SHOULDER BOLT
GA-GD-320K	BLACK DOOR c/w GLASS	WS 735-11	WASHER
GA-GD-321B	GOLD DOOR c/w GLASS	G-522A	NATURAL GAS VALVE
GA-GD-322C	CHROME DOOR c/w GLASS	G-522C	PROPANE GAS VALVE
GA-GD-715.16	POLISHED BRASS 2" SIDE TRIM	WS 455-4	#36 NATURAL GAS ORIFICE
GA-GD-715.17	POLISHED BRASS 2" TOP TRIM	WS 455-3	#54 PROPANE GAS ORIFICE
GA-GD-715.18	ANTIQUÉ BRASS 2" SIDE TRIM	WS 455-5	NATURAL GAS PILOT ORIFICE
GA-GD-715.19	ANTIQUÉ BRASS 2" TOP TRIM	WS 455-6	PROPANE GAS PILOT ORIFICE
GA-GD-715.29	POLISHED CHROME 2" SIDE TRIM	G-525	PIEZO IGNITER
GA-GD-715.28	POLISHED CHROME 2" TOP TRIM	G-526A	THERMOPILE
GA-GD-715.85	POLISHED BRASS 3" SIDE TRIM	GZ-527	NATURAL GAS PILOT ASSEMBLY
GA-GD-715.82	POLISHED BRASS 3" TOP TRIM	GZ-527A	PROPANE GAS PILOT ASSEMBLY
GA-GD-715.84	ANTIQUÉ BRASS 3" SIDE TRIM	WS 660-4	FLAME SWITCH
GA-GD-715.81	ANTIQUÉ BRASS 3" TOP TRIM	WS 361-9	INSULATION SLEEVE
GA-GD-715.86	POLISHED CHROME 3" SIDE TRIM	WS 573-4	HIGH TEMPERATURE SEALANT - 3 OZ.
GA-GD-715.83	POLISHED CHROME 3" TOP TRIM	GA-GD-290.5	FIBRE BLANKET
GA-GD-715.20	POLISHED BRASS 6" SIDE TRIM	GA-GD-155-2	PIPE CLAMPS
GA-GD-715.21	POLISHED BRASS 6" TOP TRIM	WS 290-07	TOP AND BOTTOM DOOR GASKET (EACH)
		WS 290-06	SIDE DOOR GASKET (EACH)
		W715-0013	Robertshaw NG Valve
		W715-0168	Robertshaw LP Valve

**13.2 AIR TERMINAL KIT, GD 100**

PART NO.	DESCRIPTION
GA-GD-490.4	AIR TERMINAL
GA-GD-500.40	WALL MOUNTING PLATE

**13.3 VENT KITS: GD200 (2 - 3 1/2 FOOT) AND GD300 (5 - 10 FOOT)**

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
GA-GD-615.25	SPACER	WS-410-1	4" FLEXIBLE ALUMINUM LINER (5 - 10 FEET)
GA-GD-10.67	WALL SUPPORT ASSEMBLY	WS-410-3	8" FLEXIBLE ALUMINUM LINER (2 - 3 1/2 FEET)
WS-410-4	4" FLEXIBLE ALUMINUM LINER (2 - 3 1/2 FEET)	WS-410-5	8" FLEXIBLE ALUMINUM LINER (5 - 10 FEET)

**13.4 ACCESSORIES**

PARTS	DESCRIPTION	PARTS	DESCRIPTION
GZ552	BLOWER	GA-GD-490.5	8" TELESCOPING SLEEVE
WS 175-1	4" COUPLER	GA-GD-490.24	4" TELESCOPING SLEEVE
WS 175-2	8" COUPLER	GA-GD-120.8	VERTICAL RAIN CAP
IFO6RS	ROOF SUPPORT	GA-GD-500.28	FIRE STOP
IFO6RFO	FLAT ROOF FLASHING	GD 101	WINDSHIELD KIT
IFO6RF17N	1/12 TO 7/12 ROOF FLASHING	GD 201	PERISCOPE KIT
IFO6RF812N	8/12 TO 12/12 ROOF FLASHING	GD 301	HEAT GUARD
WS 573-2	HIGH TEMPERATURE SEALANT - 10 OZ	GD 303	VINYL SIDING SHIELD
WS 500-33	V.S.S. MOUNTING PLATE for wall switch		