

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

CERTIFIED UNDER CANADIAN AND
AMERICAN NATIONAL STANDARDS,
CAN/CGA 2.19-M81, I.R.41 AND Z21.44-
1991 RESPECTIVELY / GAS-FIRED
GRAVITY AND FAN TYPE DIRECT VENT
WALL FURNACES.



FIREPLACES

GAS - DIRECT VENT

**MILLIVOLT SYSTEM
INSTALLATION AND OPERATION
INSTRUCTIONS FOR GAS-FIRED GRAVITY
DIRECT VENT WALL FURNACE**

**NATURAL GAS MODEL: GD 1800-NM
PROPANE GAS MODEL: GD 1800-PM**

WARNING: IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER 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.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.



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DECORATIVE GAS APPLIANCES
NAPOLÉON
25 YEARS LIMITED WARRANTY

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

- Wolf Steel Ltd will provide replacement parts free of charge during the first year of the Limited Warranty except logs, glass and plated finishes.
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.
- Wolf Steel Ltd. will provide replacement parts during the second through the fifth year of the Limited Warranty free of charge except the logs, glass, plated finishes, vent, electrical components, gas valve, pilot assembly, ignitor, and fan. Wolf Steel Ltd. will not be responsible for any labor costs in connection with those replacement parts.
- 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 logs, glass, plated finishes, vent, electrical components, gas valve, pilot assembly, ignitor, fan and burner assembly. 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 INCH RISE PER FOOT IN ALL CASES. EIGHT INCHES IS THE MINIMUM BEND RADIUS ALLOWED FOR THE 8" DIAMETER FLEXIBLE AIR LINER.

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

UNDER EXTREME VENT CONFIGURATIONS, ALLOW 5 - 15 MINUTES FOR THE FLAME TO STABILIZE AFTER IGNITION.

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 and vent surfaces:

	Canada	United States
Sides	0 inches	0 inches
Back	0 inches	0 inches
Bottom	0 inches	0 inches
Top	0 inches	0 inches
Vent Pipe	2 inch	2 inch
Recessed Depth	14 1/4 inches	14 1/4 inches

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

- 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.
- 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.
- 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.
- Do not operate the fireplace with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- 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 18,000 BTU/h for natural gas and 13,500 BTU/h for propane. Maximum output for natural gas is 12,600 BTU/h and 9,500 BTU/h for propane at 70% efficiency. (The efficiency rating of the fireplace is a product thermal efficiency rating determined under continuous conditions and was determined independently of any installed system.)

Minimum inlet gas supply pressure in 4.5 inches water column for natural gas and 11.5 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 10.5 inches water column for propane.

The fireplace is approved for bedroom installations. **NO EXTERNAL ELECTRICITY (110 VOLTS OR 24 VOLTS) IS REQUIRED FOR THE GAS SYSTEM OPERATION.** This fireplace is certified for bedroom and bed-sitting installations.

GLASS: 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 after the first 10 hours of operation with a non-abrasive, ammonia or vinegar based glass cleaner. **DO NOT CLEAN GLASS WHEN HOT!** Thereafter clean as required.

3.1 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.

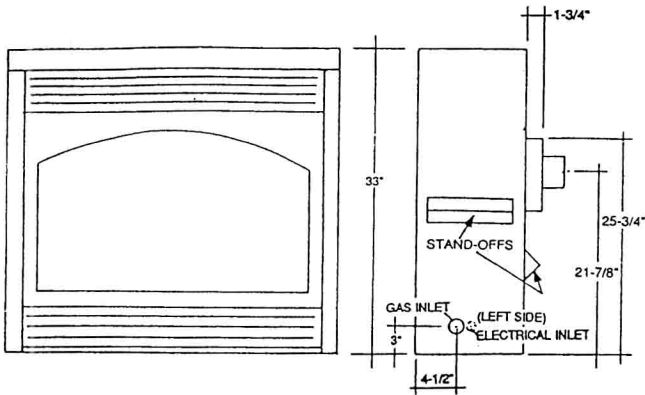


FIGURE 4

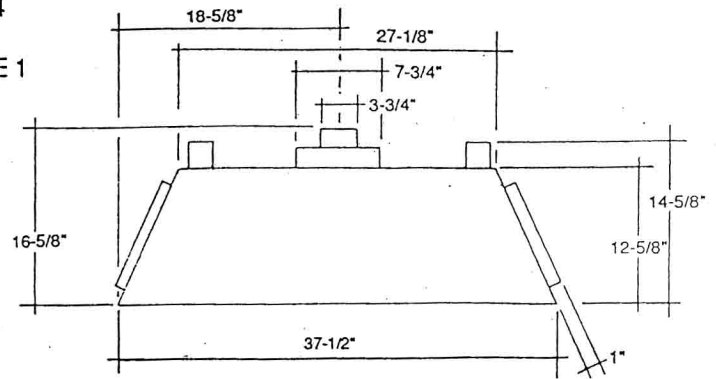


FIGURE 5

4.0 VENTING

ALL HORIZONTAL RUNS MUST HAVE A 1 INCH RISE PER FOOT IN ALL CASES.

- PROVIDE A MEANS FOR VISUALLY CHECKING THE VENT CONNECTION TO THE FIREPLACE AFTER THE FIREPLACE IS INSTALLED.

• 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.

• 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 4, 5, & 6).

Specific vent components are available for venting vertically through the roof. Kits for various installations of this variety are available from your Napoleon dealer. Order the specific kit required.

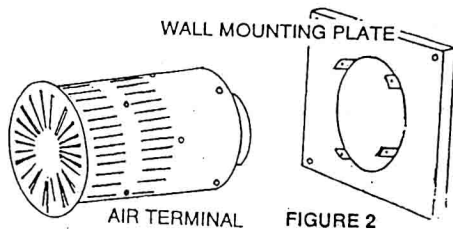


FIGURE 2

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

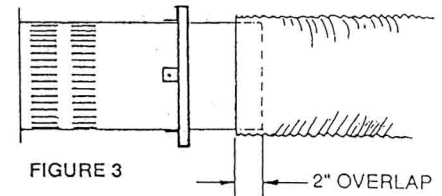


FIGURE 3

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.

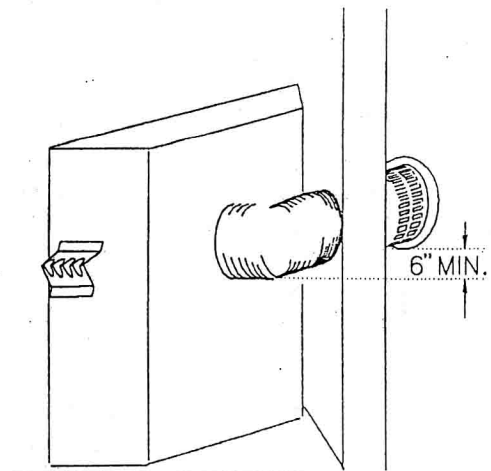
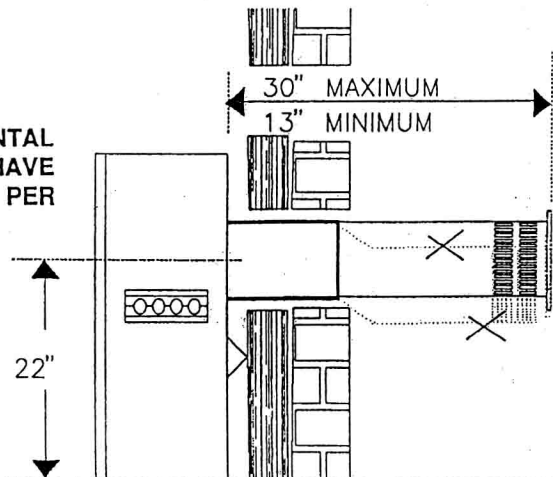
FOR SAFE AND PROPER OPERATION OF THE FIREPLACE, FOLLOW THE VENTING INSTRUCTIONS EXACTLY.

DEVIATION FROM THE MINIMUM VERTICAL VENT LENGTH CAN CREATE DIFFICULTY IN BURNER START-UP AND/OR CARBONING.

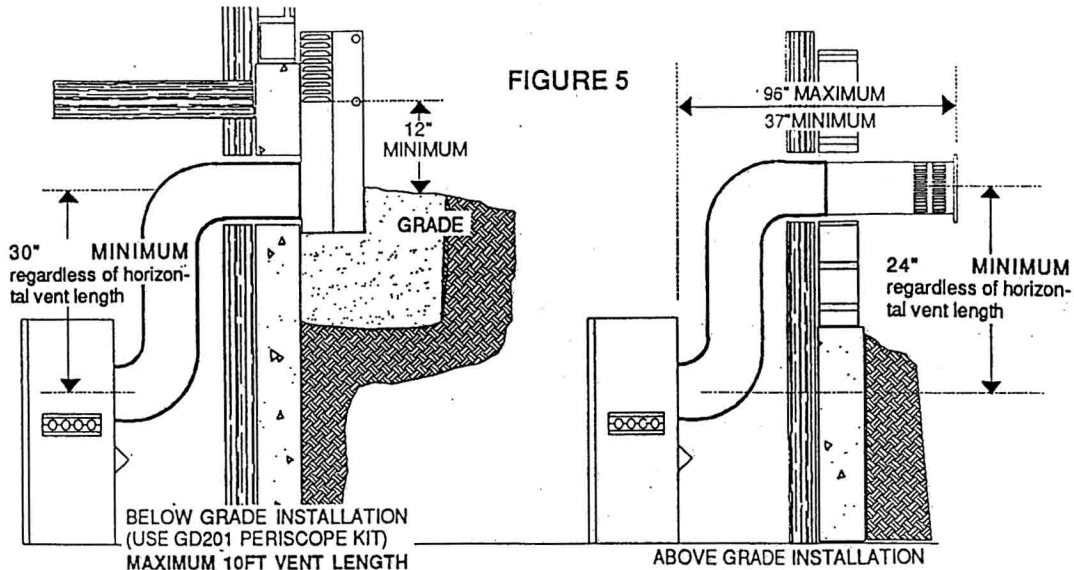
When venting, the horizontal run must be kept to a minimum of 13 inches or a maximum of 30 inches (Fig 4).

If a greater horizontal run is required, the unit must have a vertical rise immediately off the fireplace of 24" minimum. With this configuration, the horizontal run can be between 37 inches minimum and 96 inches maximum (Fig. 5).

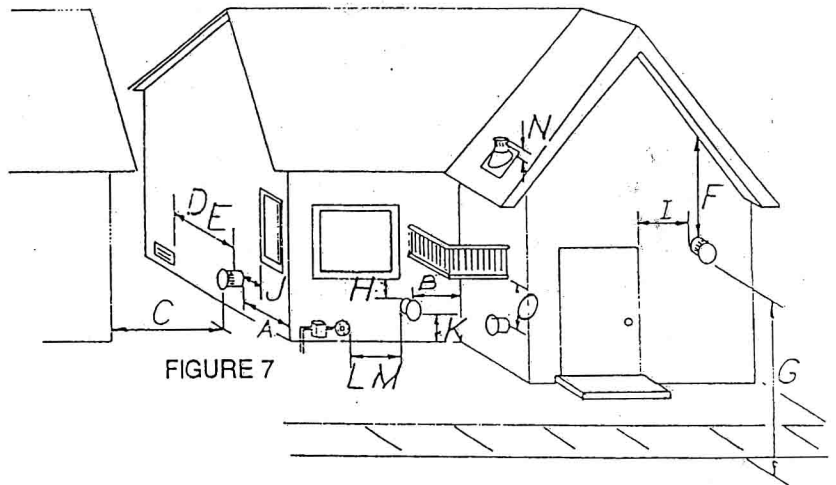
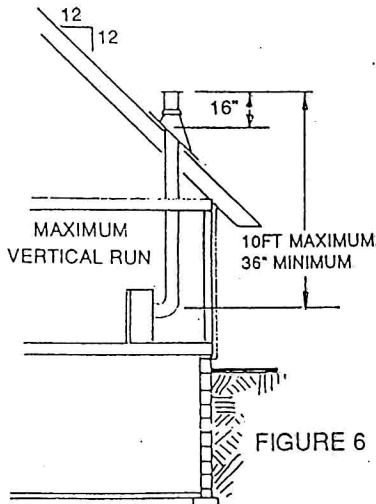
ALL HORIZONTAL RUNS MUST HAVE A 1 INCH RISE PER FOOT.



45° CORNER INSTALLATION



When terminating vertically, the minimum vertical rise is 36 inches above the fireplace and the maximum vertical rise is 10 feet (Fig. 6).



The air terminal must be located with the minimum clearances as illustrated in Fig. 7.

- (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.

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.

4.3 VERTICAL AIR TERMINAL INSTALLATION

This application occurs when venting through a roof (Fig. 6).

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. 11).

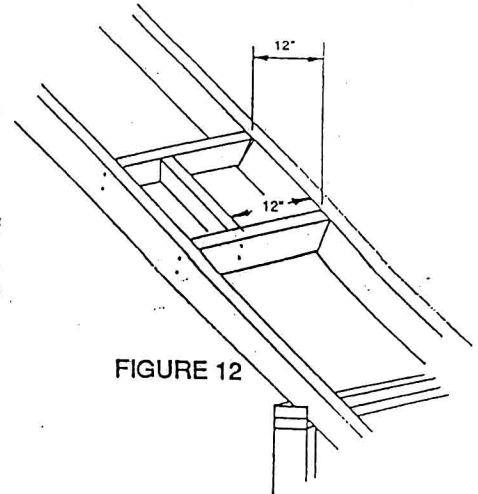


FIGURE 12

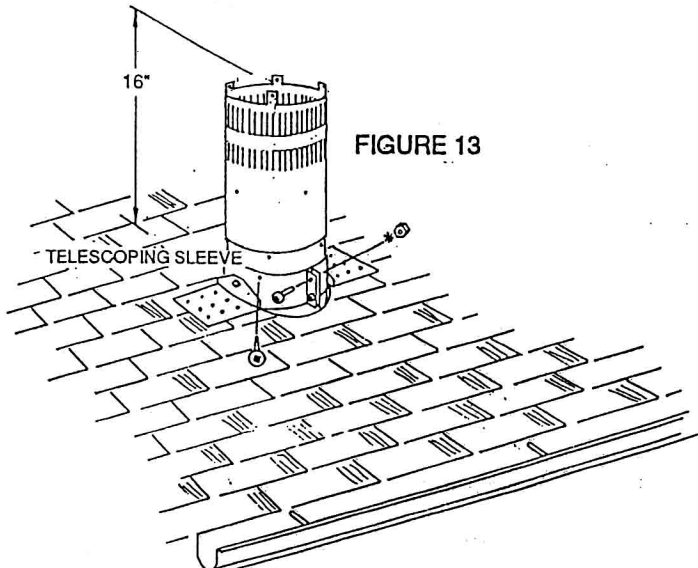


FIGURE 13

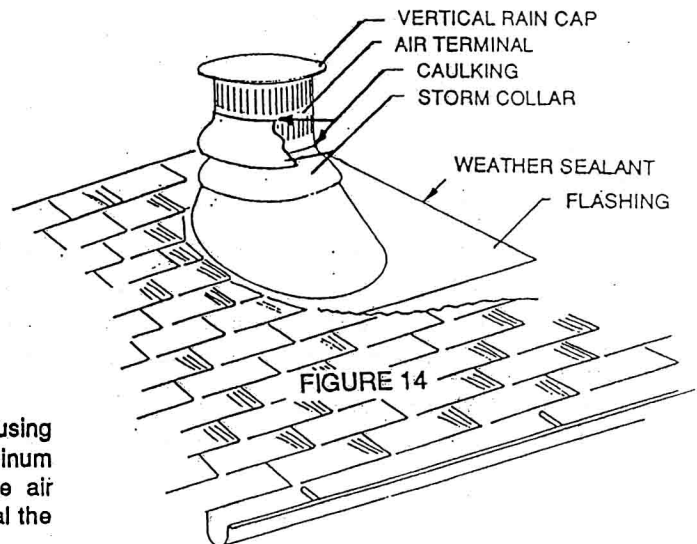


FIGURE 14

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. 10).
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 plumb, a minimum of 16" vertically 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 the 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 roof installations, a 12" air terminal cap is available and must be attached. See accessories, Section 13.4.

4.4 FIREPLACE VENT INSTALLATION

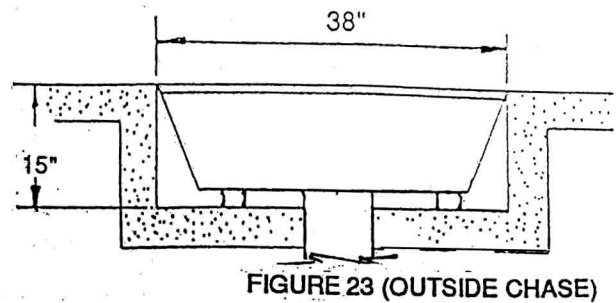
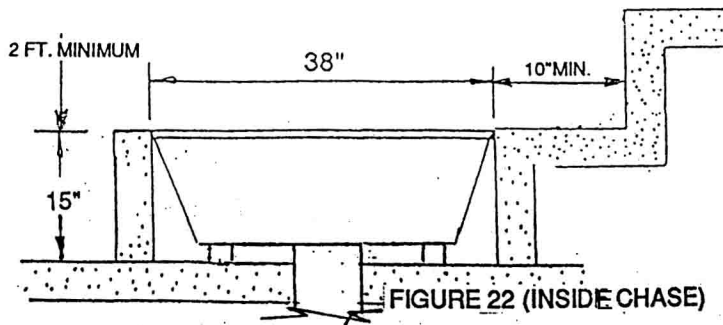
1. Install the 4 inch diameter aluminum flexible liner to the fireplace. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high-temperature sealant provided. Wrap the joint with the fibre blanket and clamp (Fig. 15).
2. Install the 8 inch diameter aluminum flexible liner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

5.0 INSTALLATION

Proceed once the vent installation is complete.

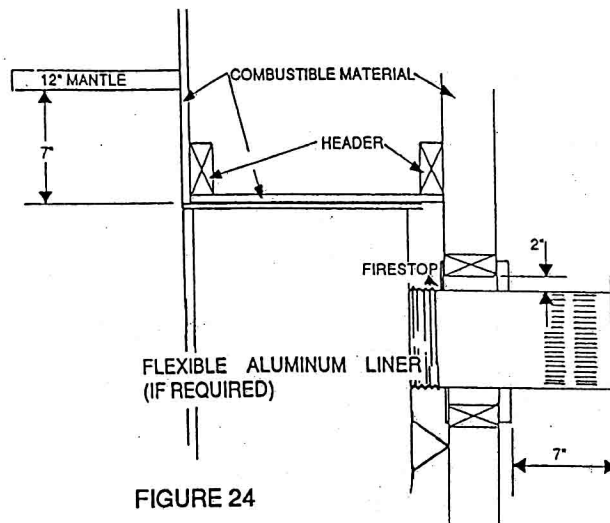
1. Move fireplace into position.
2. Route the 3/8 inch N.P.T. black iron gas line, 1/2" type L copper tubing or equivalent to the fireplace.
3. Install the remote wall switch in a convenient location and route an 18 gauge, millivolt wire through the electrical hole, located at the bottom left side of 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).

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



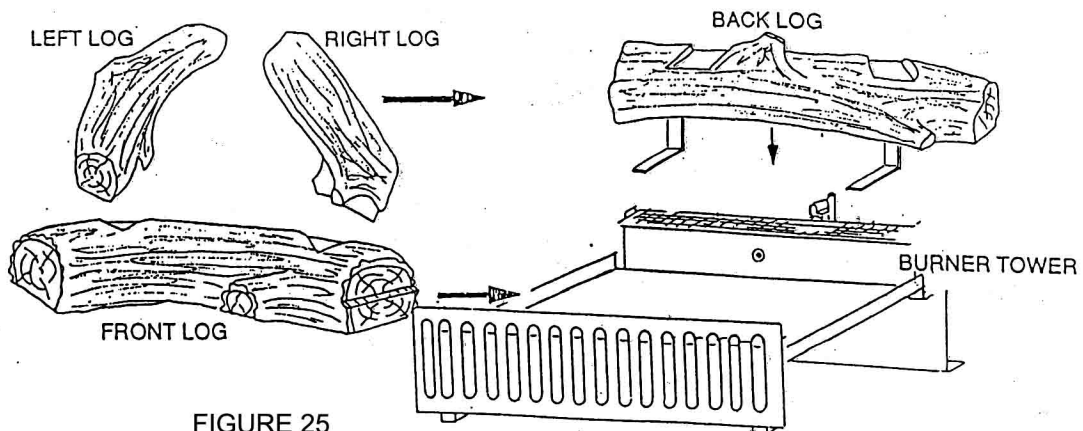
Objects placed in front of the fireplace should be kept a minimum of 24" away from the front face.

ALL HORIZONTAL RUNS MUST HAVE
A 1 INCH RISE PER FOOT.



7.0 LOG PLACEMENT (Figure 25)

1. Place the large curved front log onto the main burner, pushing it against the burner tower. The left and right spacing between the log ends and the burner ports should be equal.
 2. Place the large straight back log onto the log supports located on the rear wall of the combustion chamber, pushing it as close to the wall as possible. A space of 1/4" should be maintained between the log and the flame sensor.
 3. While supporting the back log, to prevent it from rolling forward, set the right and left smaller logs into the pockets and grooves of the front and back logs, respectively.
- THE APPEARANCE OF HAIRLINE CRACKS IN THE LOGS IS NORMAL AND DOES NOT AFFECT THE SAFETY OF THE OPERATION.



8.0 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.

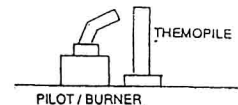
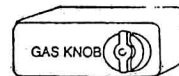
FOR YOUR SAFETY READ BEFORE LIGHTING:

- A. This appliance has a pilot which must be lit by hand while following these instructions exactly.
- 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.
- WHAT TO DO IF YOU SMELL GAS:**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- 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.


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.

8.1 PILOT BURNER ADJUSTMENT (Figure 16)

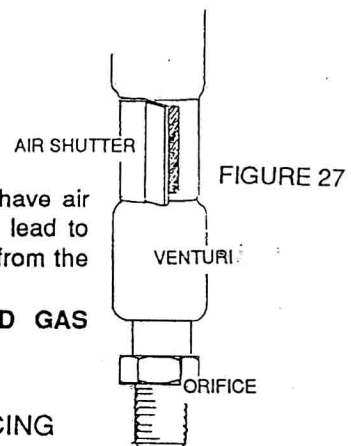
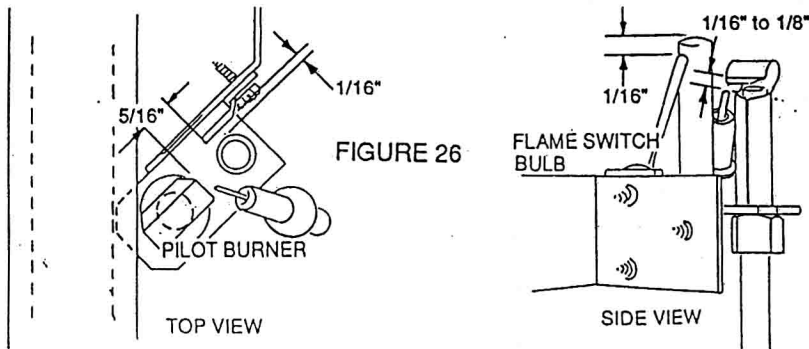
1. Remove the pilot adjustment cap.
2. Adjust the pilot screw to provide a properly sized flame.
3. Replace the pilot adjustment cap.

8.2 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:



9.0 VENTURI ADJUSTMENT

Natural gas models have air shutters set at 5/16 (0.313) inch open. Propane gas models have air shutters set at fully 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 27).

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

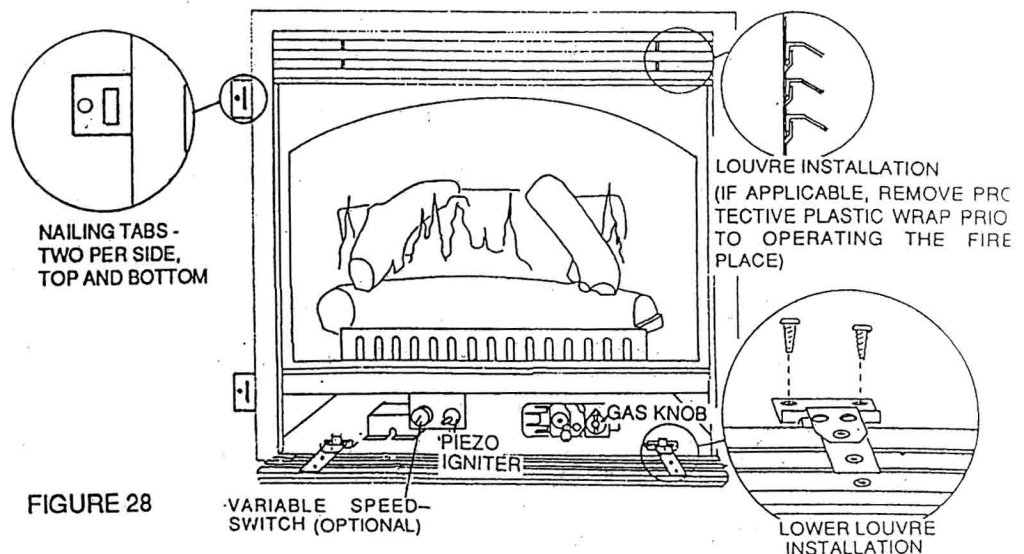
10.0 MAINTENANCE INSTRUCTIONS

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. Refer to Section "4.0 Venting" for the proper procedure when reassembly and resealing of the vent/air system is necessary.

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 the flames appear as illustrated (Fig. 28).
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 burner ignites fully 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 GASKETING ON THE SIDES AND ON TOP AND BOTTOM OF THE DOOR IS NOT BROKEN OR MISSING. REPLACE IF NECESSARY.

11.0 TROUBLE SHOOTING GUIDE

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

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	A - No spark at the pilot burner	<ul style="list-style-type: none"> - check that the wire is connected to the push button ignitor. - check if the push button ignitor needs tightening. - replace the pilot assembly if the wire insulation is frayed or broken. - replace the pilot assembly if the ceramic insulator is cracked or broken. - replace the push button ignitor.
	B - spark gap is incorrect	<ul style="list-style-type: none"> - 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 26).
	C - No gas at the pilot burner	<ul style="list-style-type: none"> - check that the manual valve is turned on. - check the pilot orifice for blockage. - replace the valve. - call the gas distributor.
	D - Out of propane gas	<ul style="list-style-type: none"> - fill the tank
Pilot goes out when the gas knob is released.	A - System is not correctly purged	<ul style="list-style-type: none"> - purge the gas line.
	B - Out of propane gas	<ul style="list-style-type: none"> - fill the tank
	C - Pilot flame is not large enough	<ul style="list-style-type: none"> - turn up the pilot flame.
	D - Pilot flame is not engulfing the generator (thermopile)	<ul style="list-style-type: none"> - gently twist the pilot head to improve the flame pattern around the generator (thermopile).
	E - Thermopile shorting	<ul style="list-style-type: none"> - clean the thermopile and valve terminals. - check that the thermopile insulation is not frayed and grounding out on the fireplace housing or burner support. - replace thermopile. - replace valve.
	F - Faulty thermopile	<ul style="list-style-type: none"> - replace thermopile
	G - Faulty flame switch	<ul style="list-style-type: none"> - 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.
	H - Faulty valve	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - connect a jumper wire across the wall switch terminals; if the main burner lights, replace the wall switch.
	DO NOT LEAVE THE FIREPLACE OPERATING WITH THE FLAME SWITCH DISCONNECTED. THIS COULD CAUSE AN EXPLOSION AND/OR PERSONAL INJURY.	

continued . . .

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>TEST SOLUTION</u>
Pilot burning; no gas to main burner; gas knob is 'on'; wall switch is 'on'; heat/flame adjustment valve is 'on' (if equipped).	B - Wall switch wiring is defective	- connect a jumper wire across terminals 1 and 3; if main burner lights, check the wires for defects and/or replace wires.
	C - Main burner orifice is plugged	- remove stoppage in orifice.
	D - Remote gas valve operator is defective	- 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	- turn on the pilot flame. Gently twist the pilot head to improve the flame pattern around the thermopile.
	B - Thermopile shorting	- clean thermopile and valve terminals. - check that the thermopile insulation is not frayed and grounding out on the fireplace housing or burner support
	C - Remote wall switch wire is too long, too much resistance in the system	- 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	- reverse the wall switch.
	B - remote wall switch is grounding	- replace remote wall switch.
	C - remote wall switch wire is grounding	- check for ground (short); repair ground or replace wire.
	D - faulty valve	- 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 side, and top and bottom door gasketing are not broken or missing. - check that the seal between the door glass and gasket is tight. - check that both 4" and 8" vent liner is free of holes and is well sealed at all joints. - check that air terminal is not horizontal and that minimum rise per foot has been adhered to.
White/grey film forming.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	- clean glass with a non-abrasive ammonia or vinegar based glass cleaner. DO NOT CLEAN GLASS WHEN HOT. If deposits are not cleaned off regularly, the glass may become permanently marked.

