INSTALLER:
THESE INSTRUCTIONS MUST BE CONVEYED TO AND REMAIN WITH THE HOMEOWNER.

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CAN 1-2.19-M81, AND ANSI Z21.44-1995 RESPECTIVELY FOR GAS-FIRED GRAVITY DIRECT VENT WALL FURNACE, CGA IR55, IR41 AND WH GPN-001.

NAPOLEON FIREPLACES

GAS - DIRECT VENT

MILLIVOLT SYSTEM

INSTALLATION AND OPERATION INSTRUCTIONS FOR
LISTED DIRECT VENTED
GAS-FIRED WALL FURNACE

NATURAL GAS *MODEL* ***GD22 - N***

PROPANE GAS *MODEL* ***GD22 - P***

CERTIFIED FOR CANADA AND UNITED STATES USING ANSI / AGA / CGA METHODS

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.

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

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.

R-2000 HPA ISO 9002 CERTIFIED WORLD RECOGNITION FOR QUALITY Warnock Hersey member gama

MANUFACTURED BY: **WOLF STEEL LTD., RR#1, 9 NAPOLEON RD., BARRIE, ONTARIO, CANADA L4M 4Y8 (705)721-1212, FAX (705)722-6031**

WS-415-79 / 12.10.96

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PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

NAPOLEON FIREPLACES

25 YEAR LIMITED WARRANTY

Wolf Steel Ltd. warrants its NAPOLEON GAS FIREPLACES 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 *glass* and *plated finishes.*

All repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of Wolf Steel Ltd. are based on a predetermined rate schedule through your authorized Napoleon dealer.

2. Wolf Steel Ltd. will provide replacement parts during the *second through fifth year* of the LIMITED WARRANTY free of charge except *glass, fibre seals, plated finishes, PHAZER™ logs, glowing embers, gas valve, pilot assembly, ignitor, vent, electrical components* and *fan.* Wolf Steel Ltd. will not be responsible for any labour 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 *glass, fibre seals, plated finishes, PHAZER™ logs, glowing embers, gas valve, pilot assembly, ignitor, vent, electrical components, fan and burner assembly.* Wolf Steel Ltd. will not be responsible for any labour 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.

The *vent system* is not included in the LIMITED WARRANTY but is separately covered by the vent manufacturer's limited warranty.

This LIMITED WARRANTY may not be extended whatsoever by any of our representatives.

KEEP THE ORIGINAL INVOICE SINCE A PHOTOCOPY OF IT WILL BE REQUIRED IN CASE OF CLAIM!

INTRODUCTION

GENERAL INSTRUCTIONS

THIS GAS FIREPLACE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. In 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, and NFPA 54-1988 in the United States. Mobile home installation must conform with local codes or in the absence of local codes, install to the current standard for gas equipped mobile housing CAN/CSA ZA240 MH Series in Canada or ANSI Z223.1-1988 and NFPA 54-1988 in the United States.

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.
UNDER EXTREME VENT CONFIGURATIONS, ALLOW SEVERAL MINUTES (5-15) FOR THE FLAME TO STABILIZE AFTER IGNITION.
ALL HORIZONTAL RUNS MUST HAVE A MINIMUM 1 INCH RISE PER FOOT WHEN USING NAPOLEON VENTING COMPONENTS. EIGHT (8") INCHES IS THE MINIMUM BEND RADIUS ALLOWED FOR THE 7" DIAMETER FLEXIBLE AIR LINER.

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

GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS FIREPLACE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY! Maximum input is 22,000 BTU/hr for natural gas and propane. Maximum output for natural gas is 17,530 BTU/hr at an efficiency of 79.7% with the fan on, 79% with the fan off; and 17,820 BTU/hr for propane at an efficiency of 81% with the fan on, 80% with the fan off. Maximum A.F.U.E. (annual fuel utilization efficiency) rating is 70.7% for natural gas and 68.7% for propane. Minimum A.F.U.E. rating is 66.5% for natural gas and 63% for propane.
Minimum inlet gas supply pressure is 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 inches water column for propane.
This fireplace is approved for bathroom, bedroom and bed-sitting room installations and is suitable for mobile home installation. The natural gas model can only be installed in a mobile home that is permanently positioned on its site and fueled with natural gas.
NO EXTERNAL ELECTRICITY (110 VOLTS OR 24 VOLTS) IS REQUIRED FOR THE GAS SYSTEM OPERATION.
Expansion / contraction nosies during heating up and cooling down cycles are normal and are to be expected.

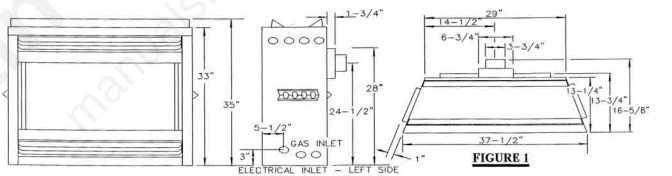


FIGURE 1

PROVIDE ADEQUATE VENTILATION AND COMBUSTION AIR. PROVIDE ADEQUATE ACCESSIBILITY CLEARANCE FOR SERVICING AND OPERATING THE FIREPLACE. NEVER OBSTRUCT THE FRONT OPENING OF THE FIREPLACE.

4 CARE OF GLASS, AND PLATED PARTS

Do not use abrasive cleaners to clean plated parts. Buff lightly with a clean dry cloth. The glass is 3/16" 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. Thereafter clean as required. DO NOT CLEAN GLASS WHEN HOT!

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 blower and its passageway in 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.
- Under no circumstances should this fireplace be modified.
- This fireplace must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- 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. Use only with a glass door certified with the fireplace.
- Do not strike or slam shut the fireplace glass door.

VENTING

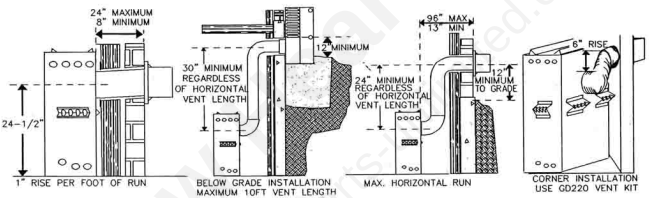
VENTING LENGTHS AND AIR TERMINAL LOCATIONS

Use only Napoleon or Simpson Dura-Vent Model DV-GS venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, follow the installation procedure provided with the venting components.

When using Napoleon venting components, use only the following vent kits: WALL TERMINAL KIT **GD222**, or 1/12 TO 7/12 PITCH ROOF TERMINAL KIT **GD110**, 8/12 TO 12/12 ROOF TERMINAL KIT **GD111**, FLAT ROOF TERMINAL KIT **GD112** or PERISCOPE KIT **GD201** (for wall penetration below grade) in conjunction with the various terminations, use either the 5 foot vent kit **GD220** or the 10 foot vent kit **GD330**.

These vent kits allow for either horizontal or vertical venting of the fireplace. **FIGURES 2, 3, & 4**. The maximum number of 4" flexible connections is two horizontally or vertically (excluding the fireplace and the air terminal connections).

For optimum flame appearance and fireplace performance, keep the vent length and number of elbows to a minimum. 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.



FIGURES 2a - d

- **All horizontal runs must have a 1 inch rise per foot in all cases using *NAPOLEON VENTING COMPONENTS.***
- **Horizontal runs can have a 0 inch rise per foot using *SIMPSON DURA-VENT COMPONENTS* when venting as illustrated in Figure 2c.**
- **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 1-1/4" 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.**

Minimum clearance to combustible construction from fireplace to vent surfaces:

sides, back, bottom, and top	0 inches
vent pipe	1 inch
recessed depth	13-3/4 inches

When venting, the horizontal run must be kept to a minimum of 8 inches or a maximum of 24 inches. If a greater horizontal run is required, the fireplace must have a minimum vertical rise immediately off the fireplace of 24 inches. With this configuration, the horizontal run can be between a minimum of 13 inches and a maximum of 96 inches. ***FIGURE 2a-b.*** *When terminating vertically, the vertical rise is a minimum 36 inches and a maximum 10 feet from the centre of the fireplace flue outlet.* ***FIGURE 3.***

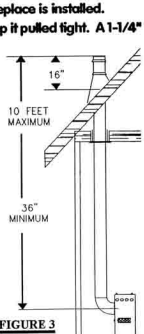
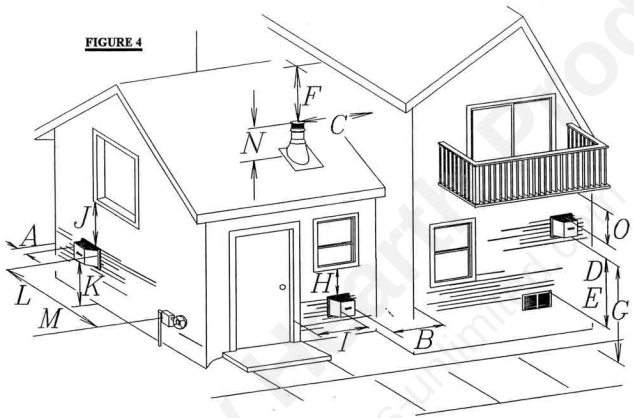


FIGURE 3

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

6 The air terminal must be located with the minimum clearances as illustrated in **FIGURE 4**.

FIGURE 4



(A) **Flush (0 inches)** with outside non-combustible corner walls.

Two inches from outside combustible corner walls.

(B) **Flush (0 inches)** with inside corner walls or protruding non-combustible obstructions (vent chase, etc)

Two inches from inside corner walls or protruding combustible obstructions (chimney, etc)

(C) **Two feet** from adjacent walls, including neighbouring buildings.

(D) **One foot** from the sides, top and bottom of a non-mechanical combustion or ventilation air supply.

(E) **Six feet** from mechanical combustion or ventilation air supplies.

(F) **One foot** to an unventilated soffit located above the terminal or **eighteen inches** to a ventilated soffit located above the terminal, provided the soffit is sealed for a distance of 24 inches either side of the centre line of the terminal.

(G) **Seven feet** above public walkways unless fitted with heat shield kit GD301.

(H) **One foot** below windows that open.

(I) **One foot** from the side of 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) **One foot** 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 BETWEEEN TWO SINGLE FAMILY DWELLINGS AND SERVES BOTH DWELLINGS. LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

ALL HORIZONTAL RUNS MUST HAVE A MINIMUM 1 INCH RISE PER FOOT WHEN USING NAPOLEON VENTING COMPONENTS.

DO NOT ALLOW THE INSIDE LINER TO BUNCH UP ON HORIZONTAL OR VERTICAL RUNS AND ELBOWS. KEEP IT PULLED TIGHT. A 1-1/4" AIR GAP ALL AROUND BETWEEN THE INNER LINER AND OUTER STOVE PIPE IS REQUIRED FOR SAFE OPERATION. USE A FIRESTOP WHEN PENETRATING INTERIOR WALLS, FLOOR OR CEILING.

HORIZONTAL AIR TERMINAL INSTALLATION

This application occurs when venting through an exterior wall. Having determined the air terminal location:

1. Cut or frame a hole in an exterior wall with a minimum round or square opening of 9½ inches. **FIGURE 5.** Secure the firestop spacer over the opening to the interior wall maintaining a 1" clearance to combustibles.

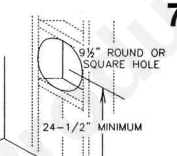


FIGURE 5

2. Stretch the 4" diameter aluminum flexible liner to the required length taking into account the additional length needed for the finished wall surface. Apply a heavy bead of the high temperature sealant, supplied with the unit, to the inside of the 4" liner approximately 1" from the end. Slip the liner a minimum of 2" over the fireplace vent collar and secure with 3 #8 screws. **FIGURE 6.**

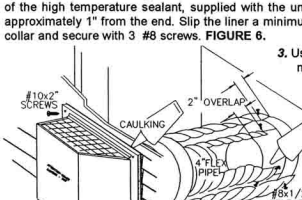


FIGURE 6

3. Using the 7" diameter flexible aluminum liner, apply sealant, slide a minimum of 2 " over the fireplace combustion air collar and secure with 3 #8 screws.

4. Insert the liners through the firestop. Position and secure the fireplace using the nailing tabs (2 per side) or secure to the floor using ¼" lag screws (not supplied). The liners should be flush with the exterior wall. **The air teminal plate must not be recessed into the exterior wall or siding.**

5. From outside, apply a bead of the high temperature sealant to the inside of both liners, approximately 1" from the end of each liner.

6. Holding the air terminal (lettering in an upright, readable position), insert into both liners with a twisting motion to ensure that both the terminal sleeves engage into the liners / sealant. Secure the terminal to the exterior wall and make weather tight by sealing with caulking (not supplied). **FIGURE 6.**

EXTENDED HORIZONTAL AND CORNER AIR TERMINAL INSTALLATION

Horizontal vent runs must have a minimum 1 inch rise per foot when using Napoleon venting components (using Simpson Dura-Vent the minimum rise per foot may be 0"); a 45° corner installation must have 6 inch minimum rise between the fireplace combustion air collar and the air terminal. **FIGURE 2d.** In this case, vent lengths must be kept to a maximum of 36". For longer vent lengths, a minimum vertical rise of 24" is required. **FIGURE 2c.** Use the GD220 vent kit and couplers for this application.

1. Follow the instructions for "Horizontal Air Terminal Installations"., items 1 through 6.
Spacers are attached to the 4" inner flex liner at predetermined intervals to maintain a 1-1/4" air gap to the 7" outer liner. These spacers must not be removed.

2. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Napoleon support ring assemblies, GA-GD-010.370 or equivalent noncombustible strapping to maintain the minimum 1" clearance to combustibles.

VERTICAL VENTING INSTALLATION

THIS APPLICATION OCCURS WHEN VENTING THROUGH A ROOF. **FIGURE 3.** Installation kits for various roof pitches are available from your Napoleon dealer. See Accessories to order the specific kit required.

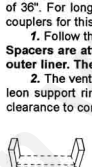


FIGURE 7

1. Move the fireplace into position. Try to center the exhaust of the unit, midway between two ceiling joists to prevent having to cut them. Use a plumb bob to line up the center of the opening.

2. Hold a plumb bob from the underside of the roof to determine where the opening in the roof should be. **FIGURE 7.** Cut and frame a 9½" opening in the roof to provide the minimum 1" clearance between the fireplace pipe and any combustible material. DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL. Nail headers between the joists for extra support. A firestop/wall plate must be placed on the bottom of each framed opening in a roof or ceiling that the vent pipe passes through.

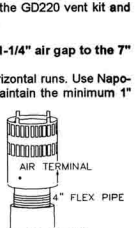


FIGURE 8

3. Stretch the 4" diameter aluminum flexible liner to the required length. Apply a heavy bead of the high temperature sealant, supplied with the unit, to the inside of the 4" liner approximately 1" from the end. Slip the liner a minimum of 2" over the inner sleeve of the air terminal and secure with 3 #8 screws.

4. Slide the **narrow end** of the rigid sleeve 2" into the outer sleeve of the terminal. Seal and secure as before. Attach a 7 to 8 inch increaser to the telescoping sleeve. Seal and secure. Repeat using the 7" diameter flexible aluminum liner. Slide a minimum of 2" over the increaser. Seal and secure with 3 #8 screws.

5. Attach a roof support to the air terminal, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened.

6. Thread the air terminal pipe assembly down through the roof. Fasten the roof support to the roof using the screws provided. **FIGURE 9.** The air terminal must be located vertically and plumb.

7. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof. Do **not** nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

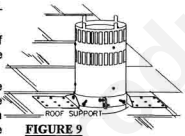


FIGURE 9

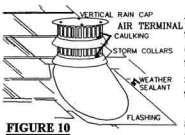


FIGURE 10

8. Apply a heavy bead of weatherproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centered between the air intake and the air exhaust slots onto the air terminal. Tighten securely. Attach the vertical rain cap.

Spacers are attached to the 4" inner flex liner at predetermined intervals to maintain a 1-1/4" air gap to the 7" outer liner. These spacers must not be removed.

9. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Napoleon support ring assemblies or equivalent noncombustible strapping to maintain the minimum 1" clearance to combustibles.

INSTALLATION / FRAMING

GAS INSTALLATION

Proceed once the vent installation is complete.

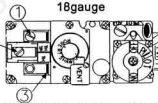
1. Move the fireplace into position.

2. Route a 3/8" N.P.T. black iron gas line, 1/2" type-L copper tubing or equivalent to the fireplace.

3. For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route millivolt wire through the electrical hole located at the bottom left side of the unit. The recommended maximum lead length depends on wire size:

WIRE SIZE	MAX. LENGTH
14gauge	100 feet
16gauge	60 feet
18gauge	40 feet

Attach the two leads to terminals 1 and 3 located on the gas valve. **FIGURE 11.**



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

FIGURE 11

4. If an optional blower is to be used, the blower must be connected to the main power supply. Route a grounded 14gauge 2-wire power cable to the junction box and ground. At the point where the cable enters the firebox, an insulated bushing must be provided. The mounting bracket for the GD22 is located inside the left rear of the control compartment.

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

FIGURE 12

DO NOT KINK FLEX CONNECTOR. FIGURE 12.

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

PURGE ALL GAS LINES WITH THE FACIA AND GLASS DOOR OF THE FIREPLACE REMOVED. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE RE-INSTALLING THE DOOR OR FACIA.

MOBILE HOME INSTALLATION

In Canada, mobile home installation may be vented horizontally or vertically using aluminum flexible liner. See "Vertical Venting" or "Horizontal Air Terminal Installation" for installation. To vent the fireplace vertically, a vent length of ***3 feet minimum to 10 feet maximum*** may be used only.

Always turn the pilot and the fuel supply at the source off prior to moving the mobile home.
After moving the mobile home and prior to lighting the fireplace, ensure that the logs are positioned correctly.

FRAMING

It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2x4's and frame to local building codes. **FIGURE 13-16.**

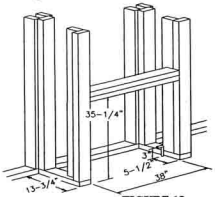


FIGURE 13

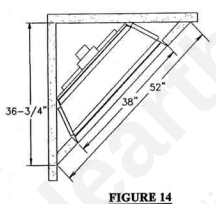


FIGURE 14

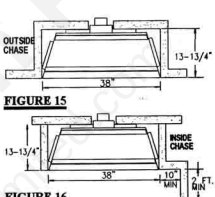


FIGURE 15

FIGURE 16

To install the fireplace face flush with the finished wall, position the framework to accomodate the thickness of the finished wall. For corner installation, allow a minimum rise of 6 inches between the fireplace and the air terminal. **FIGURE 2d.** Pull out the four nailing tabs, attached on either side of the fireplace and secure to the 2x4 framing to facilitate drywall installation.

Combustible materials must be installed flush with the front of the fireplace but must not cover any of the black face-area of the fireplace. Non-combustible material (brick, stone or ceramic tile) may protrude. It is not necessary to install a hearth extension with this fireplace system. Objects placed in front of the fireplace should be kept a minimum of 24" away from the front face.

Mantle clearance can vary according to the mantle depth. **FIGURE 17.** Use the graph to help evaluate the clearance needed.

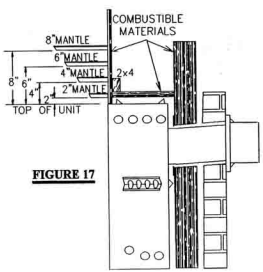
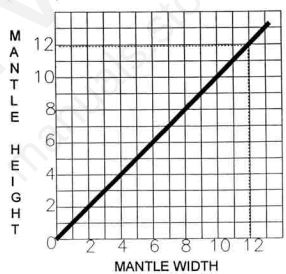


FIGURE 17

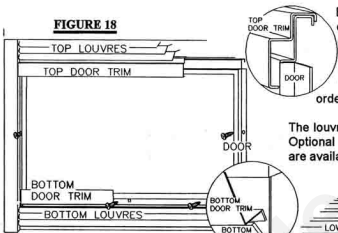


FINISHING

DOOR, LOUVRE AND TRIM REMOVAL & INSTALLATION

ENSURE THAT THE DOOR IS PROPERLY CLIPPED ONTO THE STEEL LIP TO PREVENT OVERHEATING, GLASS BREAKAGE AND/OR DISCOLOURATION OF THE UPPER TRIM.

FIGURE 18



Both top and bottom door trim must be removed prior to door removal. Lift up the top trim and unhook from the door. The bottom trim, held on with magnets, may be pulled off and lifted out of the bottom door sill. **FIGURE 18.** Remove the five screws securing the sides and bottom of the door. Lift up and out. To re-install, repeat in reverse order. Retighten screws snugly. DO NOT OVER-TIGHTEN.

The louvre assemblies are installed as illustrated in **FIGURE 19**. Optional plated door trim, door side trim and arched door facias are available at your local Napoleon / Wolf Steel dealer.

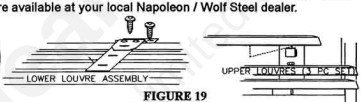


FIGURE 19

LOG PLACEMENT

PHAZER™ **logs and glowing embers (available as an option from your Napoleon dealer), exclusive to Napoleon Fireplaces, provide a unique and realistic glowing effect that is different in every installation. Take the time to carefully position the glowing embers for a maximum glowing effect.**

1. **Place the front log, as shown, centered along the inside front edge of the burner tray. FIGURE 20.**
2. **Place the back log onto the log support bracket, located on the rear wall of the combustion chamber, pushing it as close to the firebox wall as possible.**
3. **Set the two smaller logs into the pockets and grooves of the front and back logs, respectively.**

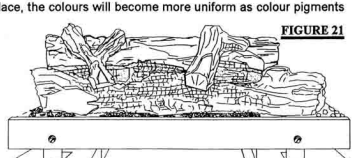
FIGURE 20

POSITIONING THE LOGS IMPROPERLY WILL CAUSE FLAME IMPINGEMENT AND CARBONING.

Log colours may vary. During the initial use of the fireplace, the colours will become more uniform as colour pigments burn in during the heat activated curing process.

OPTIONAL GLOWING EMBER INSTALLATION

FIGURE 21



Tear the embers into pieces and place beneath the front log covering all of the burner area beneath and in front of the hollowed out section of the log. Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow.

THE EMBER MATERIAL WILL ONLY GLOW WHEN EXPOSED TO DIRECT FLAME; HOWEVER, CARE SHOULD BE TAKEN TO NOT BLOCK THE BURNER PORTS.

Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. ***PHAZER™*** logs glow when exposed to direct flame. Use only certified "glowing embers" and ***PHAZER™*** logs available from your Napoleon / Wolf Steel Ltd. dealer. **FIGURE 21.**

OPTIONAL BLOWER INSTALLATION

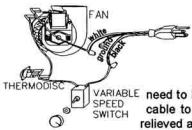


FIGURE 22

INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70-1990 NATIONAL ELECTRICAL CODE in the United States

1. Turn off the electrical power and the gas supply to the fireplace. (Gas supply may need to be disconnected from the gas control valve.) Route a grounded 2-wire, 60hz power cable to the fireplace. At the point where the cable enters the fireplace, it must be strain relieved and insulated. Remove the lower louvre control door.

2. Remove the blower from the "L" shaped mounting bracket and attach to the bracket supplied with the fireplace. **FIGURE 23**

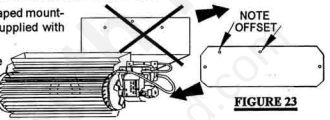


FIGURE 23

3. Position the vibration reducing pad, centered, onto the 2 threaded studs, piercing 2 holes into the pad. The blower must be able to be positioned entirely onto the pad.

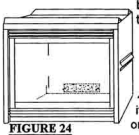


FIGURE 24

4. Tilt the blower onto its side and slide it past the controls. Position the blower onto the studs. **FIGURE 25**

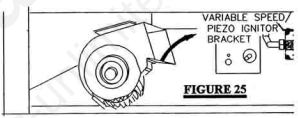
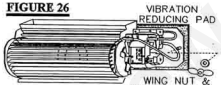


FIGURE 25

FIGURE 26



5. Secure the blower using the lock washers and wing nuts provided. Attach and secure the variable speed switch using the nut provided. **FIGURE 26**

6. Attach and secure the bracket holding the thermodisc to the securing stud at the bottom left of the unit. Ensure that the thermodisc touches the firebox wall. **FIGURE 27**

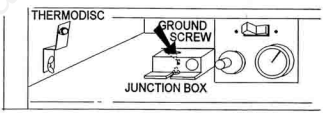


FIGURE 27

FIGURE 28

7. Connect all wires as shown in the schematic. Run the wire leads through the plastic bushing of the junction box. Secure the junction box to the firebox. Re-install the control door. If necessary, reconnect the gas at the gas valve. Turn the gas supply and electricity back on.

LEAK TEST USING A SOAP AND WATER SOLUTION, IF THE GAS SUPPLY WAS DISCONNECTED AT THE VALVE. BECAUSE THE BLOWER IS THERMALLY ACTIVATED, WHEN TURNED ON, IT WILL AUTOMATICALLY START APPROXIMATELY 15-30 MINUTES AFTER LIGHTING THE FIREPLACE AND WILL RUN FOR APPROXIMATELY 30-45

OPERATION / MAINTENANCE

When lit for the first time, the fireplace will emit a slight odour for a few hours. This is a normal temporary condition caused by the curing of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process and will not occur again. Simply open a window to sufficiently ventilate the room.
After extended periods of non-operation such as following a vacation or a warm weather season, the fireplace may emit a slight odour for a few hours. This is caused by dust particles in the heat exchanger burning off. Open a window to sufficiently ventilate the room.

FOR YOUR SAFETY READ BEFORE LIGHTING:

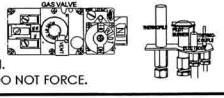
A This fireplace has a pilot which must be lit by hand while following these instructions exactly.
B Before lighting, smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
C Use only your hand to push in or turn the gas control 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 unit and replace any part of the control system and any gas control touched by water.

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.

LIGHTING INSTRUCTIONS:

1.Stop! Read all the safety information above. When lighting and re-lighting, the gas knob cannot be turned from "pilot" to "off" unless the knob is depressed.
2.Turn off all electrical power to the stove.
3.Turn the gas knob clockwise to off.
4.Wait 5 minutes for any gas in the combustion chamber to escape. Continue to the next step if you do NOT smell any gas. *If you smell gas, STOP!* and follow the instructions in "What to do if You Smell Gas" listed above.
5.If the unit is equipped with a flame adjustment valve, turn clockwise to off.
6.Locate the pilot situated in front of the rear log.
7.Turn the gas knob counter-clockwise to "pilot" position.
8.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.
9.With the pilot lit, turn the gas knob counter-clockwise to "on" position.
10. If your insert is equipped with a flame adjustment valve, push and turn the knob to "high".
11. If your insert is equipped with a remote "on-off" switch, the main burner may not come on when you turn the gas valve to "on" or "high". *The remote switch must be in the "on" position as well to ignite the main burner.*
12. Turn on all electrical power to the insert.



INSTRUCTIONS TO TURN OFF GAS:

1.Turn off all electrical power to the unit if service is to be performed.
2.Push in gas control knob slightly and turn clockwise to off. DO NOT FORCE.

MAINTENANCE TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THE FIREPLACE.

This fireplace and its 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 of combustible materials, gasoline or 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 to expose both assemblies.
2. Keep the control compartment, logs, burner and the area surrounding the logs clean by vacuuming or brushing, *at least once a year.*
3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
4. Check to see that the pilot flame is large enough to engulf the thermopile on one leg and reaches toward the burner on the other leg.
5. Replace the cleaned logs.
6. Check to see that the main burner ignites completely on all openings when the gas knob for the burner is turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer / distributor.
7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.

ADJUSTMENTS

PILOT BURNER ADJUSTMENT

1. Remove the pilot adjustment cap.
2. Adjust the pilot screw to provide properly sized flame. **FIGURES 29 & 30. 1**
3. Replace the adjustment cap.

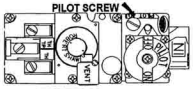


FIGURE 29

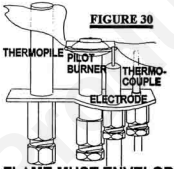


FIGURE 30

FLAME MUST ENVELOP UPPER 3/8" TO 1/2" OF THERMOCOUPLE & THERMOPILE

VENTURI ADJUSTMENT

Natural gas models have air shutters set at 1/16 (.063") inch open. Propane gas models have air shutters set at 1/8 (.125) 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. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established. **FIGURE 31**.

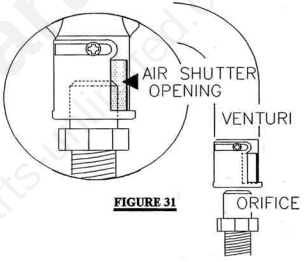
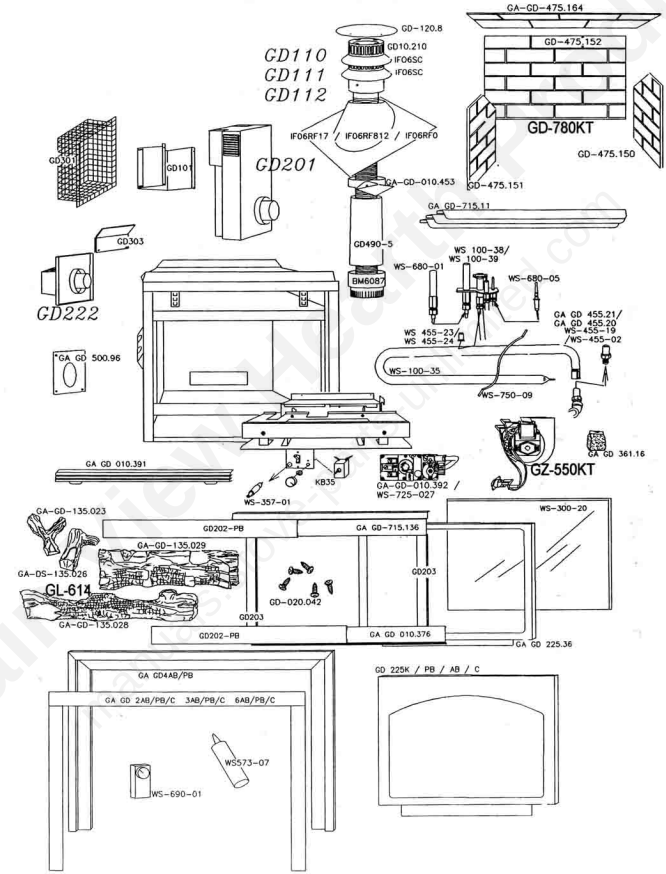


FIGURE 31

AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED GAS INSTALLER!



TROUBLE SHOOTING GUIDE

BEFORE ATTEMPTING TO TROUBLESHOOT, PURGE YOUR UNIT AND INITIALLY LIGHT THE PILOT AND THE MAIN BURNER WITH THE GLASS DOOR REMOVED.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner flame is a blue, lazy, transparent flame.	Blockage in vent.	- remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.
	Incorrect installation.	- refer to Figure 10 to ensure correct location of storm collars.
Carbon is being deposited on glass, logs or combustion chamber surfaces.	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 values. - check that the door gasketing is not broken or missing and that the seal is tight. - check that both 4" and 7" vent liners are free of holes and well sealed at all joints. - check that minimum rise per foor has been adhered to for any horizontal venting.
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	- clean the 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.
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	- check door seal and relief flap seal. - check for chimney blockage - check that chimney is installed to building code. - room is in negative pressure; increase fresh air supply.
Pilot goes out when the gas knob is released. **The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.**	System is not correctly purged.	- purge the gas line.
	Out of propane gas.	- fill the tank.
	Pilot flame is not large enough	- turn up the pilot flame.
	Pilot flame is not engulfing the thermocouple.	- gently twist the pilot head to improve the flame pattern around the thermocouple.
	Thermocouple shorting / faulty.	- loosen and tighten thermocouple. - clean thermocouple and valve connection. - replace thermocouple. - replace valve.
	Faulty valve.	- replace.
Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on.	Themostat or switch is defective.	- connect a jumper wire across the wall switch terminals; if main burner lights, replace switch / thermostat.
	Wall switch wiring is defective.	- connect a jumper wire across terminals 1 & 3; if the main burner lights, check the wires for defects and / or replace wires.
	Main burner orifice is plugged.	- remove stoppage in orifice.
	Faulty valve.	- replace.
Pilot goes out while standing; Main burner is in 'OFF' position.	Gas piping is undersized.	- turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor appliance supply working pressure. - check if supply piping size is to code. Correct all undersized piping.