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

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CAN 1-2.19-M81, CGA IR41, IR55 AND ANSI Z21.44a-1992 RESPECTIVELY FOR GAS-FIRED GRAVITY DIRECT VENT WALL FURNACE, WH GPN-001 AND UNDER CSA Z240.4 AND ANSI A225.1/NFPA 501A FOR GAS-FIRED GRAVITY DIRECT VENT WALL FURNACE (MOBILE HOME), WH-GPN-001,UL307B

NAPOLEON

FIREPLACES

GAS - STOVES

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

NATURAL GAS WALL FURNACE *MODEL* ***GDS 3700 - N***
PROPANE GAS WALL FURNACE *MODEL* ***GDS 3700 - P***
NATURAL GAS MOBILE HOME WALL FURNACE *MODEL* ***GDS 3700M - N***
PROPANE GAS MOBILE HOME WALL FURNACE *MODEL* ***GDS 3700M - P***

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.

Warnock Hersey ®

member gama

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

WS-415-63 / 03.02.95

TABLE OF CONTENTS

NAPOLEON
FIREPLACES

25 YEAR LIMITED WARRANTY

Wolf Steel Ltd. warrants its NAPOLEON GAS STOVES 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. shall not exceed the retail price of the replacement parts.

2. Wolf Steel Ltd. will provide replacement parts during the *second through fifth year* of the LIMITED WARRANTY free of charge except *PHAZER™ logs, glass, PHAZER™ charcoal embers, plated finishes, vent, electrical components, gas valve, pilot assembly, ignitor* 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 *PHAZER™ logs, glass, PHAZER™ charcoal embers, plated finishes,* vent, *electrical components, gas valve, pilot assembly, ignitor, 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.

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!

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

2. GENERAL INSTRUCTIONS

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

THIS GAS STOVE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. In absence of local codes, install to the current CAN1-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 recreational vehicles and mobile housing CSA Z240.4 in Canada or ANSI A225.1/NFPA 501A in United States.

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 SEVERAL MINUTES (5-15) FOR THE FLAME TO STABILIZE AFTER IGNITION.

The stove 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 stove 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 stove.

The stove, when installed with a 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. The blower power cord must be connected into a properly grounded receptacle. The grounding prong must not be removed from the cord plug.

Provide adequate ventilation and combustion air. Provide adequate accessibility clearance for servicing and operating the stove. Never obstruct the front opening of the stove.

WARNING

- The stove is a direct vented gas-fired room heater. Do not burn wood or other materials in this stove.
- 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 stove.
- Due to high temperatures, the stove 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 stove.
- Any safety screen or guard removed for servicing must be replaced prior to operating the stove.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the stove and venting system are kept clean. The stove 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 stove area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this stove be modified.
- This stove must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this stove if any part has been under water. Immediately call a qualified service technician to inspect the stove and to replace any part of the control system and any gas control which has been under water.
- Do not operate the stove 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 stove glass door.

3. GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS STOVE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!
Maximum input is 30,000 BTU/hr for natural gas and 24,000 BTU/hr for propane. Maximum output for natural gas is 25,200 BTU/hr at an efficiency of 84% with the fan on, 83% with the fan off; and 20,400 BTU/hr for propane at an efficiency of 85% with the fan on, 84% with the fan off. Maximum A.F.U.E. (annual fuel utilization efficiency) rating is 76.9% for natural gas and 78.16% for propane. Minimum A.F.U.E. rating is 64% for natural gas and 67% for propane. Models GDS3700M N/P have maximum inputs of 27,000 BTU/h for natural gas and 20,000 BTU/h 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 stove is not approved for closet or recessed installations. Models GDS 3700 N/P are approved for bathroom, bedroom and bed-sitting room installations. Models GDS 3700M N/P are approved for installation in a mobile home in Canada and United States. Model GDS3700 P is also approved for propane mobile home installations in Canada. Change in flame appearance from "HI" to "LO" is more evident in natural gas than in propane.

CARE OF GLASS, PLATED AND ENAMELLED PARTS

Do not use abrasive cleaners to clean these parts. Buff lightly with a clean dry cloth. Porcelain enamelled components must be handled with care. The baked-on finish is glass-like. If struck, it will chip! Touch-up paint is available through your Napoleon dealer.
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!

4. LOCATION AND CLEARANCES

As long as clearance to combustibles is kept within the required distances, the most desirable and benefical location for a Napoleon Stove is in the centre of a building, thereby allowing the most efficient use of the heat created. The location of windows, doors and the traffic flow in the room where the stove is to be located should be considered. If possible, you should choose a location where the vent will pass through the house without cutting a floor or roof joist.

MAINTAIN THESE MINIMUM CLEARANCES TO COMBUSTIBLES:

A. 2"*
B. 2"
C. 1"
D. 17-1/2"
E. 9"
F. 12-1/2"
G. 5"

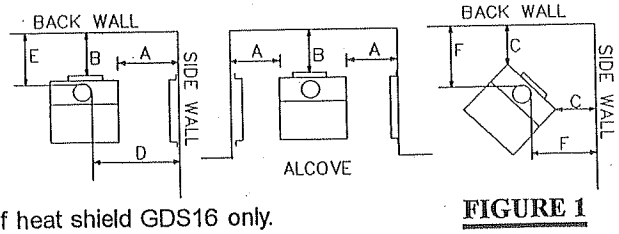
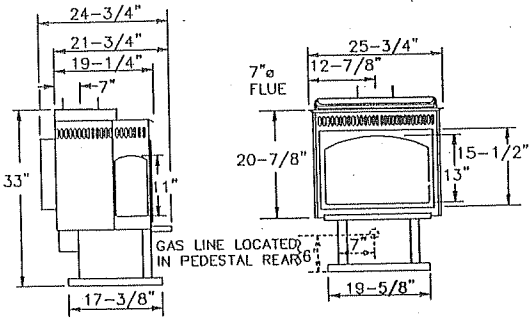


FIGURE 1



* with use of heat shield GDS16 only.
minimum 18" from stove top to ceiling
The heat shield is required when dimension A is less than 8".
The stove may be installed into an alcove using 2 heat shields.
NO ADDITIONAL FLOOR PROTECTION IS REQUIRED.

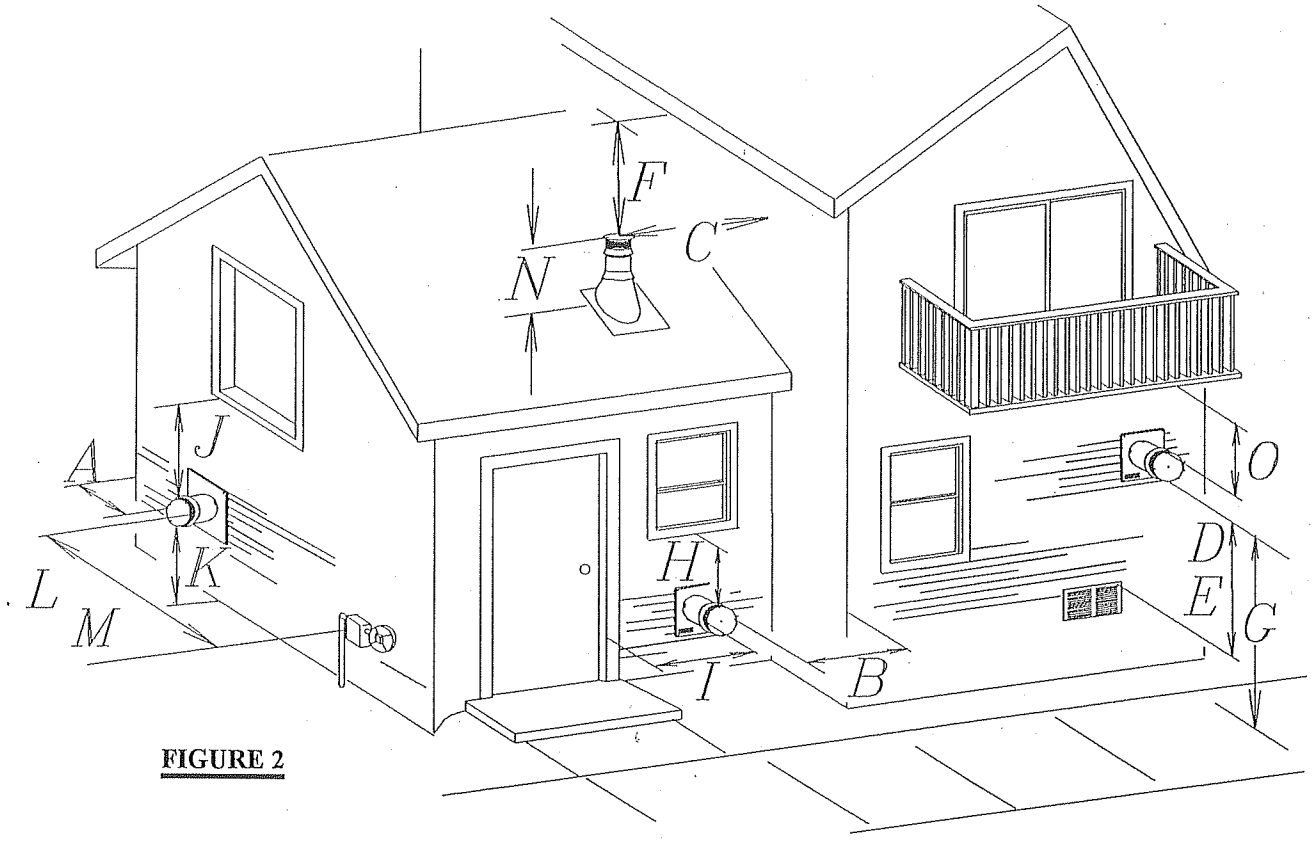


FIGURE 2

MOBILE HOME MODELS CAN ONLY BE VENTED VERTICALLY, see section 8. WHEN INSTALLED IN THE USA, ONLY RIGID PIPING AND VENTING MAY BE USED.

The air terminal must be located with the minimum clearances as illustrated in **FIGURE 2.**

(A) **One foot** from outside corner walls.
(B) **Two feet** from inside corner walls or protruding obstructions (chimney, etc)
(C) **Two feet** from adjacent walls, including neighbouring buildings.
(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 an unventilated soffit or to a ventilated soffit located above the terminal within a horizontal distance of two feet from the centre-line of 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 BETWEEEN TWO SINGLE FAMILY DWELLINGS AND SERVES BOTH DWELLINGS. LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

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

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.

Use only the following Napoleon Vent Kits: **WALL TERMINAL KIT GD170** (7-1/2' of venting included), 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 appropriate venting components. *A 7" TO 8" INCREASER MUST BE USED IN CONJUNCTION WITH THE TERMINATION KITS (EXCEPT GD170) SINCE THERE IS A VARIANCE IN DIAMETER SIZES BETWEEN THE PIPING AND THE TERMINAL.*
These vent kits allow for either horizontal or vertical venting of the stove. **FIGURES 2, 3, 4 & 7.** The maximum number of 4" flexible connections is two horizontally or vertically (excluding the stove and the air terminal connections).
Use an adjustable pipe as the final length of rigid piping to the stove for ease of installation.
For optimum flame appearance and stove 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 IS 34 INCHES WITH A 90° ELBOW LOCATED 29" ABOVE THE STOVE. FIGURE 3 & 5.
THE MAXIMUM HORIZONTAL RUN WITH A 57 INCH VERTICAL RISE IMMEDIATELY ABOVE THE STOVE IS 20 FEET FIGURE 4 &5.
IF VERTICAL RISES GREATER THAN 57 INCHES ARE NECESSARY, THE INCREASED RISE MUST BE DEDUCTED FROM THE HORIZONTAL RUN.

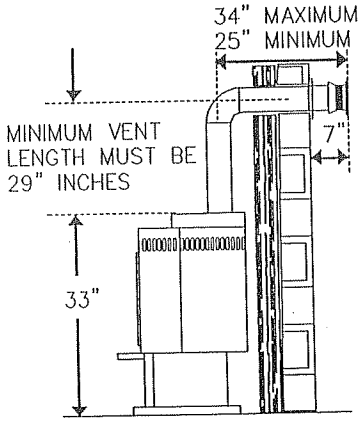


FIGURE 3

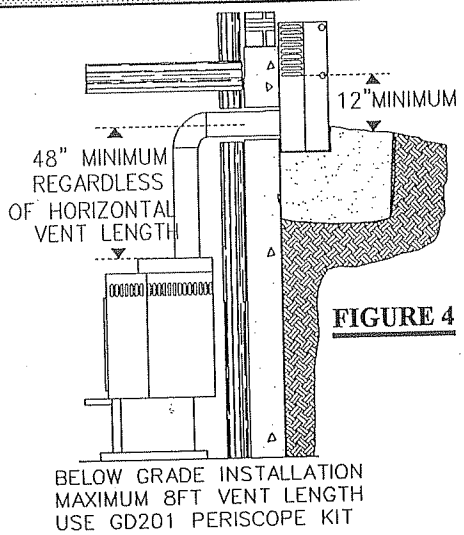
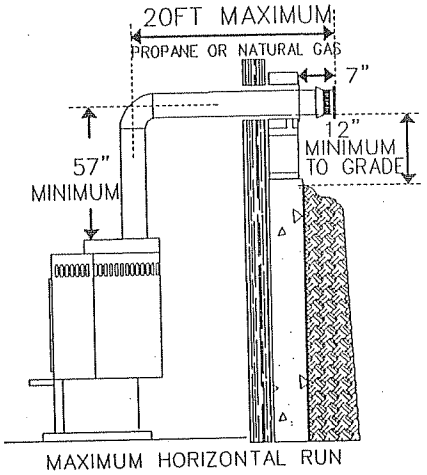


FIGURE 4



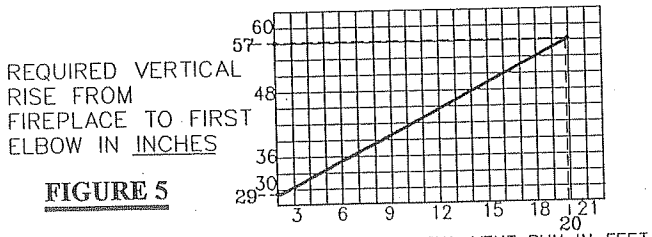
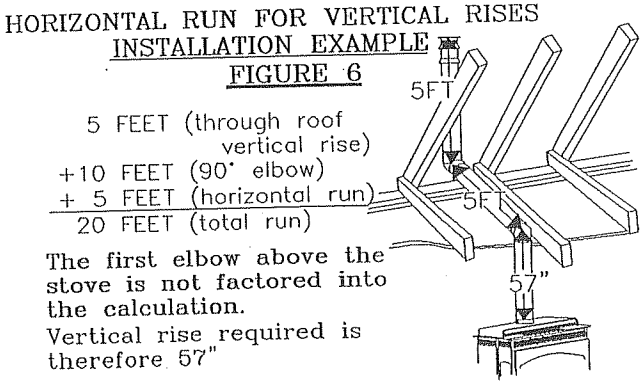


FIGURE 5

HORIZONTAL RUN FOR VERTICAL RISES
INSTALLATION EXAMPLE
FIGURE 6



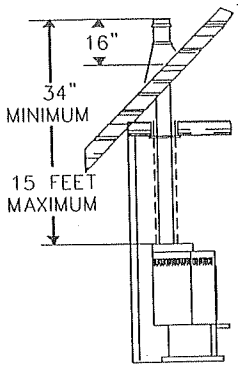
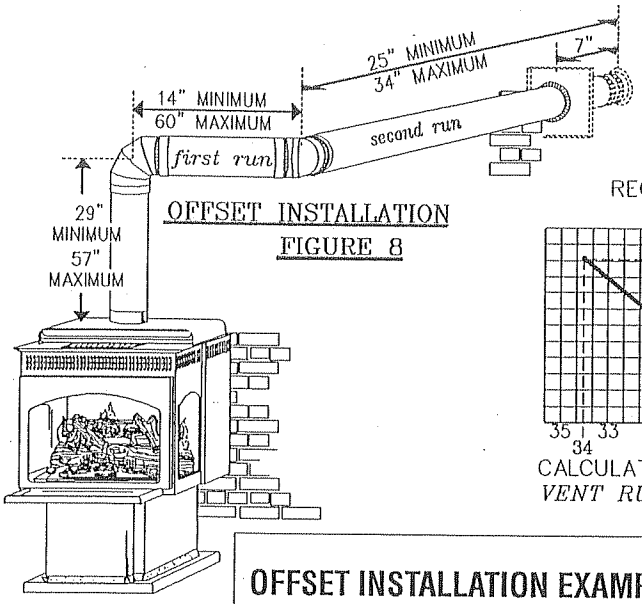


FIGURE 7

When terminating vertically, the minimum vertical rise is 34 inches above the stove and the maximum vertical rise is 15 feet. **FIGURE 7** ***Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning.***
When a horizontal run is introduced, even though the terminal may be vertical, the installation must be considered **HORIZONTAL**.

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

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



OFFSET INSTALLATION
FIGURE 8

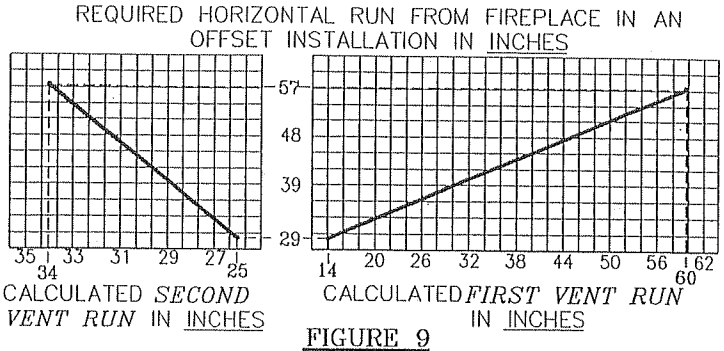
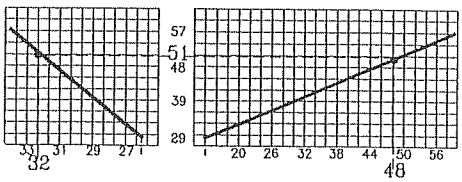


FIGURE 9

OFFSET INSTALLATION EXAMPLE

If a **first run of 48 inches** is required, using the "First Vent Run" chart shows that a 51 inch vertical rise is necessary and a **maximum second run of 32 inches** is allowable.



5. HORIZONTAL VENTING INSTALLATION

This application occurs when venting through an exterior wall. **FIGURES 3, 4, & 10.**

Having determined the air terminal location:

1. Cut or frame a hole in the exterior wall with a round or a square opening of a minimum 9". **THE STOVE PIPE MUST RISE 1" PER FOOT OF RUN.**

2. Attach the wall mounting plate to the exterior side of the outside finished wall using the screws provided. Bend the 4 mounting tabs out to a 90° angle. **FIGURES 10 & 12. THE WALL MOUNTING PLATE MUST NOT BE RECESSED INTO THE EXTERIOR WALL OR SIDING.**

3. Slip a 4" diameter length of aluminum flexible liner a minimum of 2" 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. **FIGURE 12.**

4. Slip the first section of 7" diameter stove pipe a minimum of 2" over the outer sleeve of the air terminal so that **the air terminal slopes 1/4" downward.** Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using high temperature sealant.

5. Insert the air terminal through the mounting plate and attach to the plate using the screws provided. Ensure that the air terminal slopes down 1/4" to shed rain water. Make weather tight by sealing with caulking (not supplied) both mounting plate and air terminal. Attach the storm collar at the groove located between the air intake and the air exhaust slots on the air terminal. Tighten securely. **FIGURE 12.**

SPACERS ARE ATTACHED TO THE 4" INNER FLEX LINER AT PREDETERMINED INTERVALS TO MAINTAIN A 1-1/4" AIR GAP TO THE 7" OUTER STOVE PIPE. THESE SPACERS MUST NOT BE REMOVED.

6. If more than one length of liner needs to be used to reach the stove, couple them together as illustrated in **Figure 13.** Seal the joints using the same procedure as described in Item 3.

The vent system must be supported approximately every 10 feet along a horizontal run. Use supports or equivalent non-combustible strapping to maintain the 1" clearance from combustibles.

A firestop/wall plate must be placed on the inside of each framed opening in a wall that the stove pipe passes through.

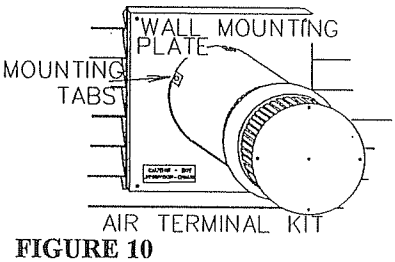


FIGURE 10

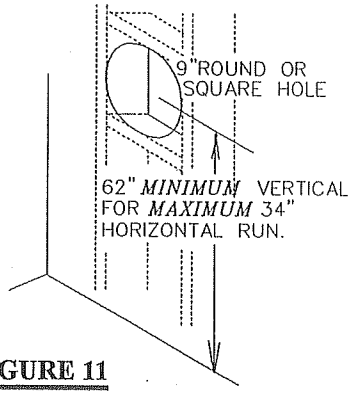


FIGURE 11

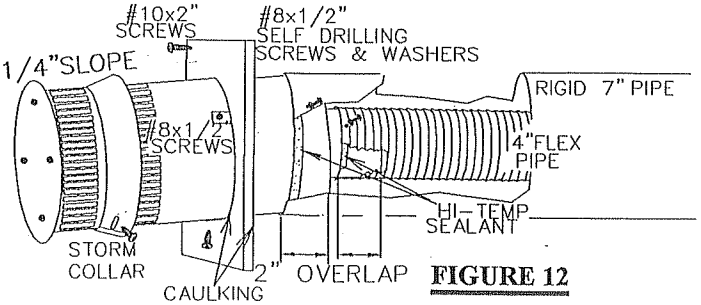


FIGURE 12

6. VERTICAL VENTING INSTALLATION

THIS APPLICATION OCCURS WHEN VENTING THROUGH A ROOF FIGURE 7. Installation kits for various roof pitches are available from your Napoleon dealer. See page 5 to order the specific kit required.

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

2. Cut and frame a 9" opening in the roof to provide a 1" clearance between the stove 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 floor or ceiling that the stove pipe passes through.

3. Hold a plumb bob from the underside of the roof to determine where the opening in the roof should be. Cut and frame the roof opening to maintain proper 1" clearances.

4. Slip a 4" diameter length of aluminum flexible liner a minimum of 2" 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. Slide the **narrow end of the telescoping sleeve** 2" into the outer sleeve of the terminal. Secure and seal the same as the liner. Attach a 7 to 8 inch increaser to the telescoping sleeve. Secure and seal. Attach a roof support to this assembly, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened.

If the attic space is tight, we recommend adding sufficient lengths of 7" rigid piping, secured and sealed as necessary.

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

6. 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.

7. Apply a heavy bead of waterproof 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 air exhaust slots onto the air terminal. Tighten securely.

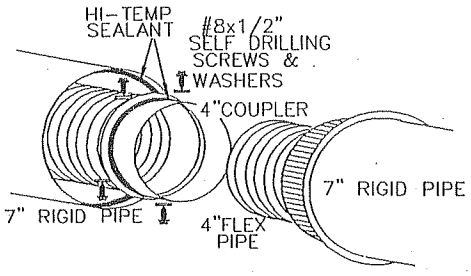


FIGURE 13

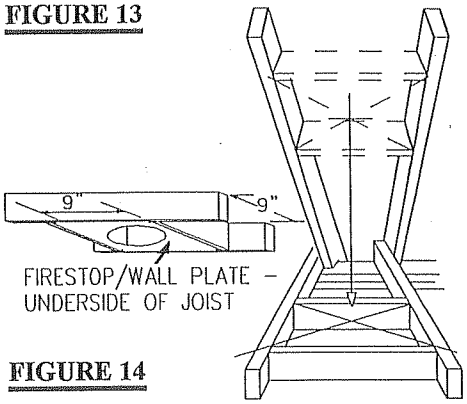


FIGURE 14

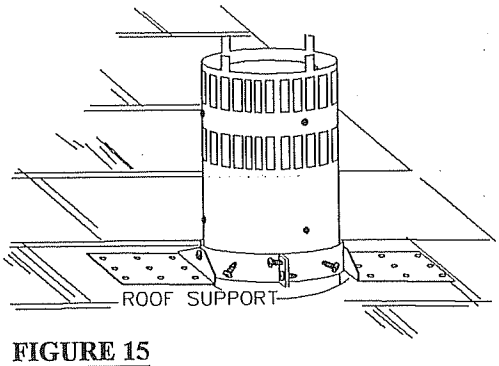


FIGURE 15

7. STOVE VENT CONNECTION

1. Attach the adjustable pipe to the last section of rigid piping. Secure with screws and seal.

2. Install the 4" aluminum flexible liner to the stove. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high temperature sealant provided.

3. Run a bead of high temperature sealant around the inside of the flue collar. Pull the adjustable pipe a minimum 2" into the flue collar.

Ensure that the sealant is not visible on the exterior pipes once installation is completed. An optional decorative brass band is available for this use. (Standard with a GD170 kit) In the event that the venting must be disassembled, care must be taken to reseal the venting.

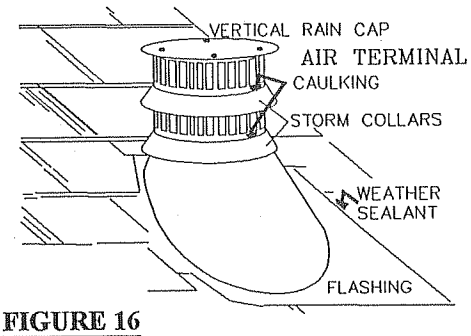


FIGURE 16

8. MOBILE HOME INSTALLATION

In Canada, mobile home installation may be vented horizontally or vertically using aluminum flexible liner. See Sections 5 & 6 for installation. In the USA, mobile homes may only be vented vertically using rigid vent. Follow instructions below.

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 stove, ensure that the logs are positioned correctly.

Attach the stove to the floor using the lag screws removed from the shipping crate that the stove came in.

If alternative fuel is required see Section 13 for fuel conversion instructions. **TO VENT THE STOVE VERTICALLY USE A VENT LENGTH OF 6 FEET MINIMUM TO 15 FEET MAXIMUM.**

LOCATION: 1. Determine the optimal location for the stove. Try to center the exhaust of the stove midway between two joist to prevent having to cut them. If the distance from the stove to the side wall is less than 8 inches, a Napoleon heat shield GDS16 must be used. The heat shield must be positioned even with the rear stove corner and the stove bottom. FIGURE 17. Secure to the wall using the 6 screws provided. If necessary, use a wall anchor where no stud can be found. The heat shield may be painted to suit the room decor using a high temperature stove paint.

The two rear stand-offs will help in positioning the stove the minimum clearances from the rear and side walls. The stand-offs may be removed after the stove has been installed. Use the lag bolts that secured the stove to the shipping crate, to attach the stove to the floor.

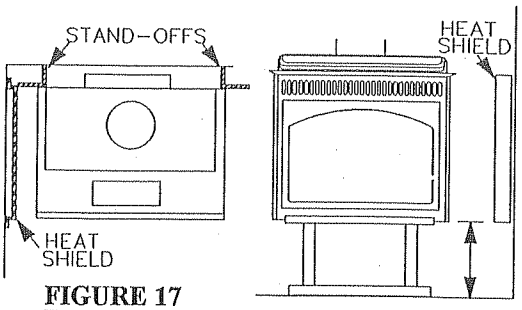


FIGURE 17

2. Hold a plumb bob from the underside of the roof to determine where the opening in the roof should be. Cut and frame a 9" opening in the roof to provide a 1" clearance between the stove pipe and any combustible material. DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL.

3. Attach a 3 foot length of rigid vent over the inner stove collar by 2 inches minimum. Secure with 3 screws. Seal the joint and screw holes using the high temperature sealant provided. Run a bead of high temperature sealant around the inside of the flue collar. Push the adjustable pipe a minimum 2" into the flue collar. **Ensure that the sealant is not visible on the exterior pipes once installation is completed. An optional decorative brass band is available for this use. In the event that the venting must be disassembled, care must be taken to reseal the venting.**

4. Attach a 7" stove pipe to the adjustable pipe. Secure and seal as before. Continue to alternate piping and vent as needed. Remove the crimped end from the last length of rigid vent. Attach a 7 to 8 inch increaser to the last section of piping. Secure and seal. Slide the large end of the telescoping sleeve into the increaser. Secure and seal.

5. Attach a roof support to the sleeve and fasten the support to the roof using the screws provided. Apply a heavy bead of waterproof caulking around the inner sleeve of the air terminal. Slide the air terminal into the trimmed vent end and over the narrow **end of the telescoping sleeve** ensuring that a minimum 16" of air terminal will penetrate the roof when fastened. The air terminal must be located vertically and plumb. Place the flashing over the air terminal. Ensure that the air terminal is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

6. Apply a heavy bead of waterproof 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 air exhaust slots onto the air terminal. Tighten securely.

9. GAS INSTALLATION

Bring the gas line to the stove through either a hole in the pedestal back or in the floor area directly beneath the pedestal base. FIGURE 19. Install rigid black pipe, a flex connector if local codes permit, or 1/2" type L copper tubing with a 3/8" to 1/2" adapter and a shut-off valve to the stove. FIGURE 19. Seal and tighten securely. The adapter will be required between the gas valve and the copper tubing or flex connector. **DO NOT KINK CONNECTOR.** Check for gas leaks by brushing on a soap and water solution. **DO NOT USE OPEN FLAME.**

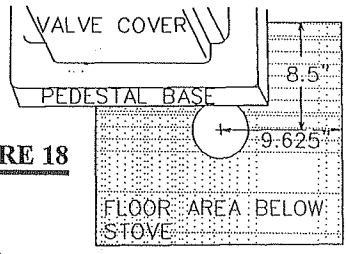


FIGURE 18

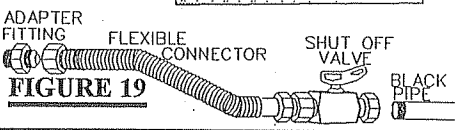


FIGURE 19

10. LOG PLACEMENT INSTRUCTIONS / CHARCOAL EMBERS

PHAZER™ logs and charcoal embers, exclusive to Napoleon Fireplaces, provide a unique and realistic glowing effect that is different in every installation. Take the time to carefully position the charcoal embers for a maximum glowing effect.

POSITIONING THE LOGS IMPROPERLY WILL CAUSE FLAME IMPINGEMENT AND CARBONING.

1. Place the front log onto the main burner, pushing it as close as possible to the burner ports without blocking/covering them. The left and right spacing between the log ends and the burner ports should be equal. **YOU MAY FIND IT EASIER TO PLACE SOME CHARCOAL EMBERS BENEATH THE FRONT LOG NOW.**

2. Place the back log onto the log support brackets located on the rear wall of the combustion chamber. The notch situated at the lower left of the back log should be centered evenly above the pilot assembly. FIGURE 20.

3. While supporting the back log, to prevent it from falling forward, set the three smaller logs into the pockets and grooves of the front and back logs, respectively.

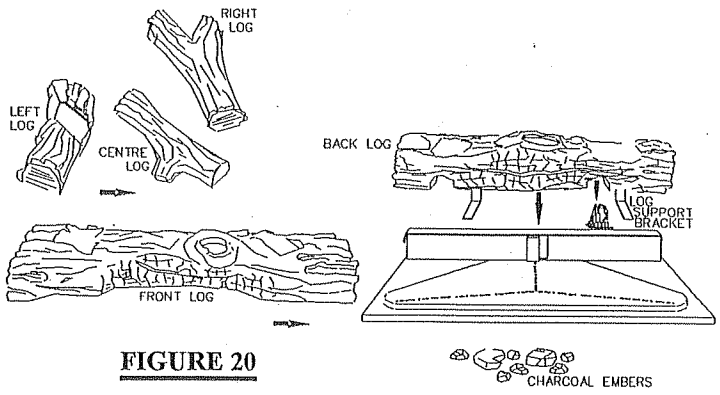


FIGURE 20

CHARCOAL EMBERS: Randomly place the embers beneath the front log, covering all of the burner area beneath the hollowed out section of the log. **FIGURE 21.** Place the remaining embers along the front. Keep ember dust away from burner ports to avoid plugging them. **Fine dust found in bottom of bag not to be used.** ***PHAZER***™ logs and charcoal embers glow when exposed to direct flame. Use only certified ***PHAZER***™ logs and charcoal embers available from your Napoleon / Wolf Steel Ltd. dealer.

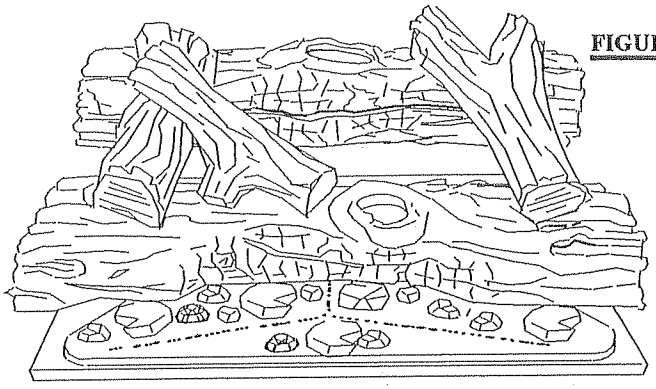


FIGURE 21

11. GAS VALVE OPERATION

The fireplace gas valve is controlled and modulated using a thermostat bulb located on the knockout plate at the rear of the pedestal. On cold start-ups, the main burner will come on at maximum input rate. As the room temperature rises and nears the point that is set on the gas knob, the input (flames) will modulate (reduce gradually) to the minimum input rate. Gas input remains at this level until the set point is reached; at this time the main burner will completely shut off. Change in the flame appearance is more evident in natural gas than propane. For a full view of the flames, set the gas knob to "HI".

SETTING A COMFORTABLE ROOM TEMPERATURE: Pushing in the knob, slowly turn counter-clockwise to "HI". When the room reaches a comfortable temperature, slowly turn the valve clockwise (flames will become smaller). As you continue to turn the knob, the main burner will shut off, indicating that the thermostatic valve is now set to the current room temperature and similar to a furnace thermostat will re-ignite at a reduced input rate as the room temperature drops. In order to raise the room temperature slightly, rotate the knob counter-clockwise to a higher setting. Pushing in the knob will avoid accidentally turning the knob completely off. See warning contained in 'LIGHTING INSTRUCTIONS' on page 10.

12. OPTIONAL BLOWER SYSTEM

Provision has been made on the Napoleon stove to install an optional blower on the rear wall. Because the blower is thermally activated, when turned on, it will automatically start after approximately 30 minutes from a cold start (pilot off) or 15 minutes from a warm start (pilot on) and will run for approximately 30 minutes after the stove has been turned off. Use of the fan increases the output of heat. Complete installation instructions are included with the blower assembly. FIGURES 22 & 23.

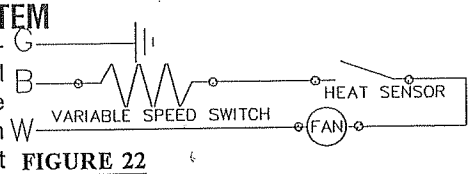


FIGURE 22

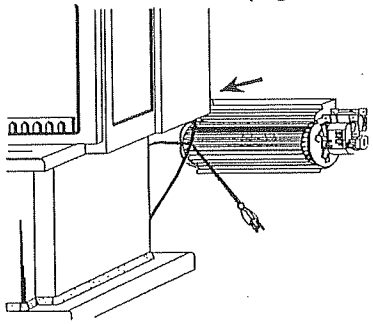


FIGURE 23

13. GAS CONVERSION FOR MOBILE HOMES

MUST BE CONVERTED BY AN AUTHORIZED REPRESENTATIVE OF WOLF STEEL LTD. OR A QUALIFIED GAS INSTALLER.

1. Turn off all electrical power to the stove. Turn the gas control knob to the OFF position and shut off the gas supply at the source.

2. Remove the glass door, logs and burner assembly including the ***PHAZER***™ charcoal embers

3. Remove and replace the pilot orifice with correct orifice for the type of fuel being converted to: **#23 for propane, #37 for natural gas. FIGURE 24.**

4. Remove and replace the main burner orifice with correct orifice for the type of fuel being converted to: **#55 for propane, #37 for natural gas.**

5. Remove plastic valve cover and replace the rate screw with correct one for type of fuel being converted to: **#175 for porpane, #240 for natural gas.**

6. Remove the hex nut from the regulator tower. Re-insert the hex nut positioned correctly for the type of fuel being converted to. **FIGURE 25.**

7. Turn on gas supply and check for gas leaks by brushing on a soap and water solution. **DO NOT USE OPEN FLAME.**

8. Set the venturi air shutter (located at the burner bottom) to 3/16" open for natural gas and 5/16" open for propane. **FIGURE 28.**

9. Re-install the burner, ***PHAZER***™ charcoal embers and logs. Then light the pilot and main burner to ensure that the gas lines have been purged.

10. Re-install the door. Turn on all electric power to the stove.

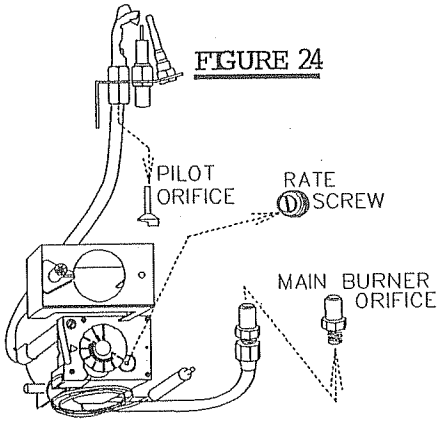


FIGURE 24

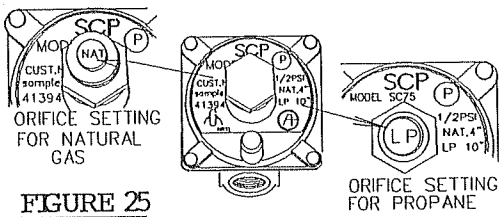


FIGURE 25

14. OPERATING INSTRUCTIONS

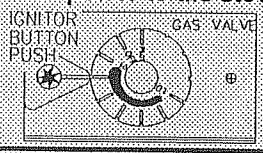
When lit for the first time, the stove will emit a slight odour for a few hours. This is a normal temporary condition caused by the curing of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process and will not occur again. Simply open a window to sufficiently ventilate the room.

A This stove has a pilot which must be lit by hand while following these instructions exactly.
B Before lighting, smell all around the firplace 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 stove 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: *WARNING: 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.*

1. STOP! Read all the information above.
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. Locate the pilot situated in front of the rear log.
6. Turn the gas knob counter-clockwise to "pilot" position.
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 6.
8. With the pilot lit, turn the gas knob counter-clockwise to desired temperature setting.
9. Turn on all electrical power to the stove.



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.

15. PILOT BURNER ADJUSTMENT

1. Remove the plastic valve cover.
2. Adjust the pilot screw to provide a properly sized flame.
3. Replace the valve cover.

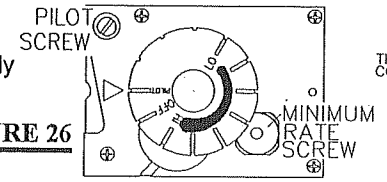


FIGURE 26

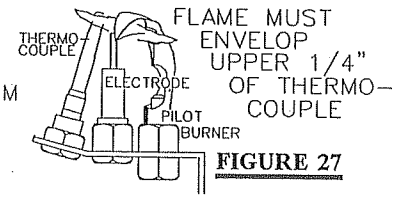


FIGURE 27

16. VENTURI ADJUSTMENT

To access the venturi, remove the four screws securing the burner to the base; slide to the left, lift up and out. Natural gas models have air shutters set at 3/16 (.188) inch open. Propane gas models have air shutters set at 5/16 (.313) 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 the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.

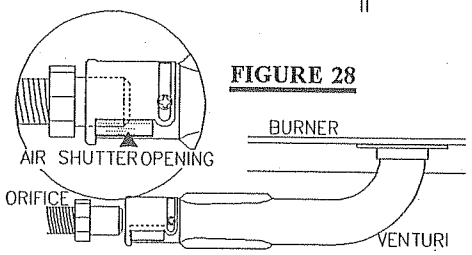
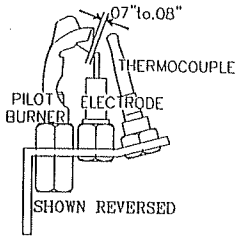


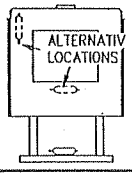
FIGURE 28

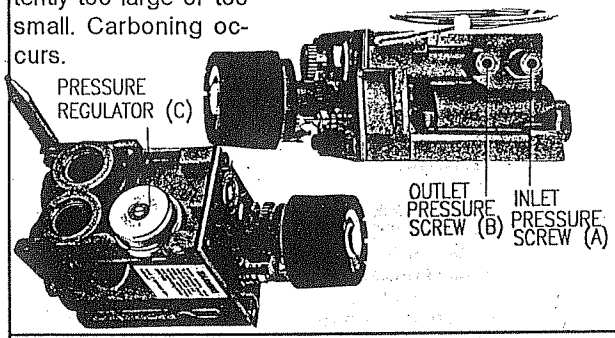
Air shutter adjustment must only be done by a qualified gas installer!

17. TROUBLE SHOOTING GUIDE

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

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light. 	A - No spark at pilot burner	- check if pilot can be lit by a match - check that the wire is connected to the push button ignitor. - check if the push button ignitor needs tightening. - replace the wire if the wire insulation is broken or frayed. - replace the electrode if the ceramic insulator is cracked or broken. - replace the push button ignitor.
	B - Out of propane gas	- fill the tank.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	C - Spark gap is incorrect	- spark gap should be .07" to .08" 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
	D- No gas at the pilot burner	- check that the manual valve is turned on. - check the pilot orifice for blockage. - replace the valve. - call the gas distributor.
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	- check all seals.
Comfortable room temperature has been reached; valve has been turned to "LO"; flames fail to modulate off.	Thermostat bulb not registering average room temperature due to cold floor and / or drafts.	Move bulb complete with clips to one of alternative locations shown. 
Flames are consistently too large or too small. Carboning occurs.	Unit is over-fired or under-fired.	- check pressure readings: Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5" water column for natural gas or 10" water column for propane. AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVERTORQUE. Adjust pressure regulator screw (C) to required setting.
Main burner goes out; pilot goes out.	A - Refer to "Main burner goes out; pilot stays on"	
	B - Vent is blocked	- check for vent blockage.
	C - 4" flexible vent has become disconnected from stove.	- re-attach to stove.
Pilot burning; no gas to main burner; gas knob is on 'HI'.	A - Main burner orifice is plugged.	- remove stoppage in orifice.
	B - Faulty valve.	- replace.
Main burner flame is a blue, lazy, transparent flame.	A - Blockage in vent.	- remove blockage.
	B - Incorrect installation.	- refer to Figure 16 to ensure correct location of storm collars.
Main burner goes out; pilot stays on.	A - Pilot flame is not large enough or not engulfing the thermocouple.	- turn on pilot flame. Gently twist the pilot head to improve the flame pattern around the thermocouple.
	B - Thermocouple shorting.	- clean thermocouple and thermocouple connection to valve. Reconnect thermocouple to valve, finger tight; then tighten one quarter turn with a wrench.
Pilot goes out while standing; Main burner is in 'OFF' position.	A - Gas piping is undersized.	- turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor supply pressure. - check if supply piping size is to code. Correct all undersized piping.
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 values.
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.



CONT . . .

SYMPTOM	PROBLEM	TEST SOLUTION
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.	A - System is not correctly purged.	- purge the gas line.
	B - Out of propane gas.	- fill the tank.
	C - Pilot flame is not large enough	- turn up the pilot flame.
	D - Pilot flame is not engulfing the thermocouple.	- gently twist the pilot head to improve the flame pattern around the thermocouple.
	E - Thermocouple shorting.	- loosen and tighten thermocouple. - clean thermocouple and valve connection. - replace thermocouple. - replace valve.
	F - Faultly thermocouple.	- replace.
	G - Faulty valve.	- replace.

18. 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

19. REPLACEMENT PARTS, GDS 3700, GDS 3700M

PART #	DESCRIPTION
GA GI 135.07	BACK LOG
GA GI 135.06	FRONT LOG
GA GI 135.10	RIGHT LOG
GA GI 135.08	LEFT LOG
GA GI 135.09	CENTER LOG
GL-608	LOG SET ASSEMBLY C/W CHARCOAL EMBERS
GA GI-550.01	CHARCOAL EMBERS
G-518	NAPOLEON LOGO
WS-300-22	FRONT DOOR GLASS
WS-300-21	SIDE WINDOW GLASS
GDS-280.20	FRONT DOOR FRAME
GDS-280.21	SIDE DOOR FRAME
GDS-562.014	FRONT GLASS GASKET
GDS-562.015	SIDE GLASS GASKET
WS 573-07	HIGH TEMPERATURE SEALANT
GS 325PB	POLISHED BRASS FACIA
EP-230K	BLACK TRIVET
CL27G	CANOPY LOUVRE SET - GOLD PLATED

PART #	DESCRIPTION
GDS 10.360	BURNER ASSEMBLY - NG
GDS 10.361	BURNER ASSEMBLY - LP
WS-725-19	S.I.T. VALVE - NG
WS-725-20	S.I.T. VALVE - LP
WS-725-23	S.I.T. VALVE - MOBILE HOME
WS-530-05	CONVERTIBLE REGULATOR - MOBILE HOME
WS-455-04	#36 NG MAIN BURNER ORIFICE
WS-455-03	#54 LP MAIN BURNER ORIFICE
WS-455-13	#37 HIALT NG MAIN BURNER ORIFICE
WS-455-02	#55 HIALT LP MAIN BURNER ORIFICE
WS-357-03	S.I.T. PIEZO IGNITOR
WS-010-293	PILOT ASSEMBLY - NG
WS-010-294	PILOT ASSEMBLY - LP
WS-455-14	PILOT ORIFICE - NG
WS-455-15	PILOT ORIFICE - LP
WS-530-02	MINIMUM RATE SCREW - NG
WS-530-03	MINIMUM RATE SCREW - LP
WS-680-05	THERMOCOUPLE
MH10-KT	FUEL CONVERSION KIT - MOBILE HOME ONLY

20. TERMINATION KITS - ALL KIT ITEMS MAY BE PURCHASED SEPARATELY

GD170 - WALL TERMINAL KIT

PART #	DESCRIPTION
GDS-170.34	AIR TERMINAL COLLAR
GDS10.288	TERMINAL ASSEMBLY
GDS-500.74	EXTERIOR WALL MOUNTING PLATE
GDS-500.77	FIRESTOP / WALL PLATE
TB7	BRASS TRIM COLLAR

PART #	DESCRIPTION
J6790	90° ELBOW - 7" DIAMETER
J67ADJ	30" TO 53" ADJUSTABLE PIPE - 7" DIAMETER
GDS-020.32	HARDWARE
J6724	24" STOVE PIPE - 7" DIAMETER
GS-10.300	10' ALUMINUM FLEXIBLE LINER C/W SPACERS - 4" DIAMETER
GDS-25.01	DECORATIVE BRASS BAND

GD110 - ROOF TERMINAL KIT - 1/12 TO 7/12 PITCH

PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
GD-010.210	AIR TERMINAL	IF06SC	STORM COLLAR	IF06RS	ROOF SUPPORT
GD-120.08	VERTICAL CAP	GD-490.05	TELESCOPIC SLEEVE	IF06RF17	ROOF FLASHING

GD111 - ROOF TERMINAL KIT - 1/12 TO 7/12 PITCH

PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
GD-010.210	AIR TERMINAL	IF06SC	STORM COLLAR	IF06RS	ROOF SUPPORT
GD-120.08	VERTICAL CAP	GD-490.05	TELESCOPIC SLEEVE	IF06RF812	ROOF FLASHING

GD112 - ROOF TERMINAL KIT - FLAT ROOF

PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
GD-010.210	AIR TERMINAL	IF06SC	STORM COLLAR	IF06RS	ROOF SUPPORT
GD-120.08	VERTICAL CAP	GD-490.05	TELESCOPIC SLEEVE	IF06RFO	ROOF FLASHING

GD201 - PERISCOPE

A 7 TO 8" INCREASER MUST BE USED WITH THESE 4 TERMINATION KITS SINCE THE AIR TERMINAL IS 8" DIAMETER AND THE CONNECTING PIPE TO THE STOVE IS 7" DIAMETER

21. ACCESSORIES / OPTIONS

PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
GA-GD-490.05	8" TELESCOPING SLEEVE	J6745	45° ELBOW	GD101	WINDSHIELD KIT
WS-175-01	4" COUPLER	GS 62	BLOWER KIT C/W VARIABLE SPEED CONTROL	GD301	HEAT GUARD
J6087	7 TO 8" INCREASER			GD303	VINYL SIDING SHIELD
WS-730-05	4" X 3FT RIGID VENT			GS-230G	GOLD PLATED TRIVET

22. MAINTENANCE INSTRUCTIONS

TURN OFF THE GAS AND UNPLUG ELECTRICAL POWER BEFORE SERVICING THE STOVE!

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This insert 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 exposing 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 thermocouple 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 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer/distributor.

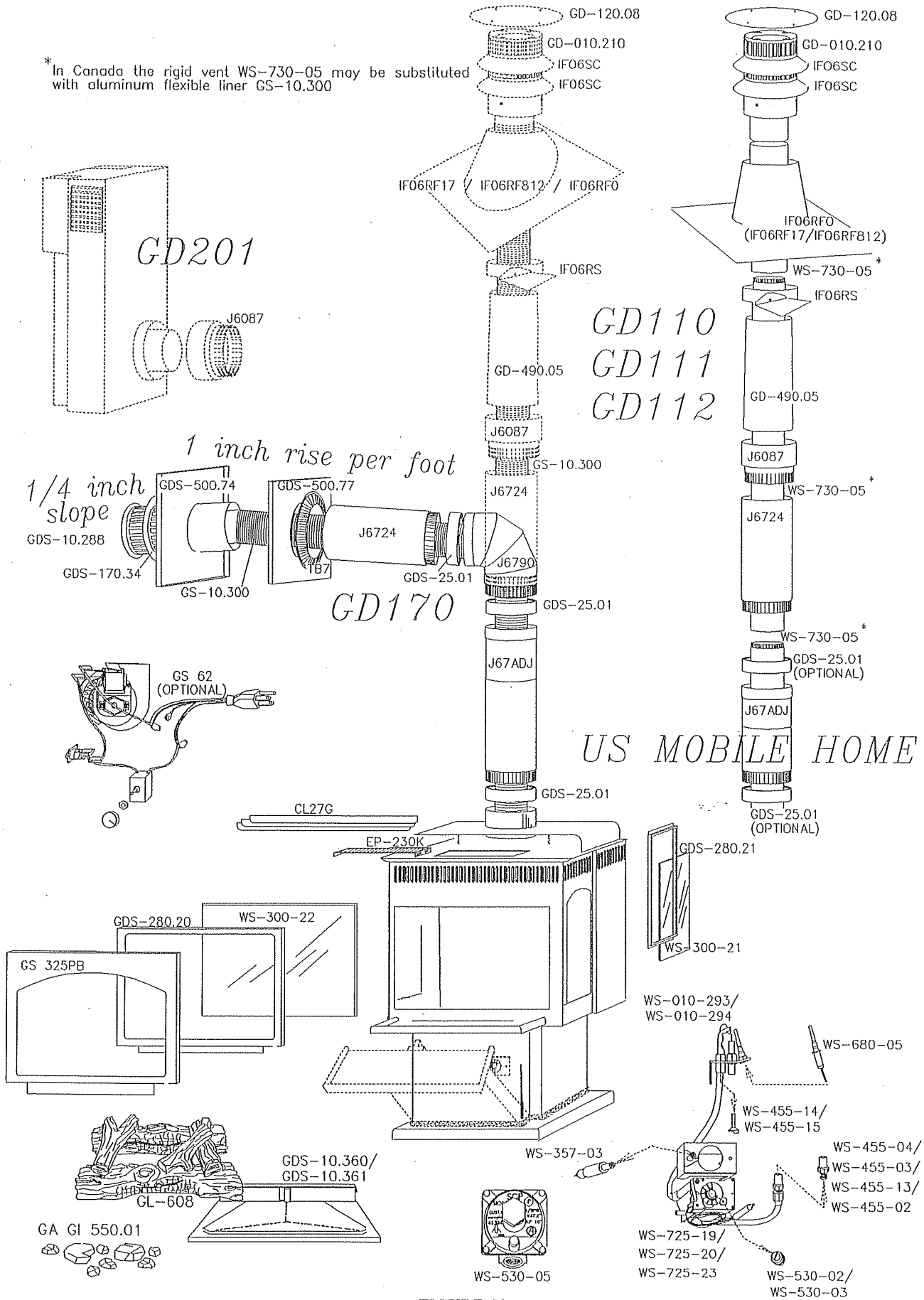

*In Canada the rigid vent WS-730-05 may be substituted with aluminum flexible liner GS-10.300
GD-120.08
GD-010.210
IF06SC
IF06SC
IF06RF17 / IF06RF812 / IF06RF0
IF06RS
GD-490.05
J6087
GS-10.300
J6724
J6790
GDS-25.01
J67ADJ
GDS-25.01
GD201
J6087
1 inch rise per foot
1/4 inch slope
GDS-500.74
GDS-500.77
J6724
GDS-10.288
GDS-170.34
GS-10.300
IB7
GD170
GS 62 (OPTIONAL)
CL27G
EP-230K
GDS-280.20
WS-300-22
GS 325PB
GL-608
GDS-10.360/ GDS-10.361
GA GI 550.01
WS-530-05
GD110
GD111
GD112
GD-120.08
GD-010.210
IF06SC
IF06SC
IF06RF0 (IF06RF17/IF06RF812)
WS-730-05 *
IF06RS
GD-490.05
J6087
WS-730-05 *
J6724
WS-730-05 *
GDS-25.01 (OPTIONAL)
J67ADJ
GDS-25.01 (OPTIONAL)
US MOBILE HOME
GDS-280.21
WS-300-21
WS-010-293/ WS-010-294
WS-680-05
WS-455-14/ WS-455-15
WS-357-03
WS-455-04/ WS-455-03/ WS-455-13/ WS-455-02
WS-725-19/ WS-725-20/ WS-725-23
WS-530-02/ WS-530-03

FIGURE 29