

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

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CSA 2.33, ANSI Z21.88



INSTALLATION AND OPERATION INSTRUCTIONS FOR:  
VENTED GAS FIREPLACE HEATER

NATURAL GAS MODELS **GDS 28-N** and **GS 28-N**

PROPANE GAS MODELS **GDS 28-P** and **GS 28-P**

*Model GS28 is made up of Model GDS28 and B-Vent Adapter Kit GS-150KT*

**WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

**FOR YOUR SAFETY**

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

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

- 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.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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ASSOCIATION

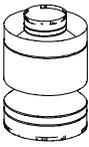


Warnock Hersey



W415-0153 / A / 10.29.01

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PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

### WARNING

- **The stove is a vented gas-fired 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 opened, 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.**

*NAPOLEON gas fireplaces are manufactured under the strict Standard of the world recognized ISO9002 Quality Assurance Certificate.*

*NAPOLEON products are designed with superior components and materials, assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete fireplace is thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from NAPOLEON.*

## NAPOLEON GAS FIREPLACE PRESIDENT'S LIFETIME LIMITED WARRANTY

***The following materials and workmanship in your new NAPOLEON gas fireplace are warranted against defects for as long as you own the fireplace. This covers: combustion chamber, heat exchanger, stainless steel burner, phazer™ logs and embers, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enamelled components and aluminum extrusion trims.***

***Electrical (110V and millivolt) components and wearable parts such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and NAPOLEON will provide replacement parts free of charge during the first year of the limited warranty.***

***Labour related to warranty repair is covered free of charge during the first year. Repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of NAPOLEON are based on a predetermined rate schedule and any repair work must be done through an authorized NAPOLEON dealer.***

## CONDITIONS AND LIMITATIONS

NAPOLEON warrants its products against manufacturing defects to the original purchaser only -- i.e., the individual or legal entity (registered customer) whose name appears on the warranty registration card filed with NAPOLEON -- provided that the purchase was made through an authorized NAPOLEON dealer and is subject to the following conditions and limitations:

This factory warranty is nontransferable and may not be extended whatsoever by any of our representatives.

The gas fireplace must be installed by a licenced, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes.

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect and parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discolouring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of PHAZER™ logs and embers, nor any venting components used in the installation of the fireplace.

NAPOLEON warrants its stainless steel burners against defects in workmanship and material for life, subject to the following conditions: During the first 10 years NAPOLEON will replace or repair the defective parts at our option free of charge. From 10 years to life, NAPOLEON will provide replacement burners at 50% of the current retail price.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to this President's Limited Lifetime Warranty, NAPOLEON may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

After the first year, NAPOLEON will not be responsible for installation, labour or any other costs or expenses related to the reinstallation of a warranted part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in this President's Limited Lifetime Warranty, NAPOLEON'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of NAPOLEON with respect to the NAPOLEON gas fireplace and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLEON neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. NAPOLEON will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

Any damages to fireplace, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of NAPOLEON.

The bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from your authorized dealer. The warranty registration card must be returned within fourteen days to register the warranty.

NAPOLEON reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim.

## 4 GENERAL INSTRUCTIONS

**THIS GAS STOVE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER** to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area, ie: in Massachusetts State:

- The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct-vent.

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 mobile housing CAN/CSA Z240 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 stove opened. Assure that a continuous gas flow is at the burner before closing the door.**

**Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition.**

**For optimum performance, it is recommended that all horizontal runs have a ¼ inch rise per foot.**

**Objects placed in front of the fireplace must be kept a minimum of 48" away from the front face of the unit.**

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 ½ 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 ½ psig (3.5 kPa)

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 70-1996 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.

## GENERAL INFORMATION

**For your satisfaction, this stove has been test-fired to assure its operation and quality!**

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. When the valve is set to "HI", the manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane. When the fireplace is installed at elevations above 4,500 ft., and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000 ft.

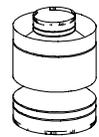
Change in flame appearance from "HI" to "LO" is more evident in natural gas than in propane. Expansion / contraction noises during heating up and cooling down cycles are normal and to be expected.

GDS28: Maximum input is 30,000 BTU/hr for natural gas and 26,000 BTU/hr for propane. Maximum output for natural gas is 25,500 BTU/hr at an efficiency of 85% with the fan on and 75% with the fan off. Maximum output for propane is 22,360 BTU/hr at an efficiency of 86% with the fan on and 76% with the fan off. Maximum A.F.U.E. (annual fuel utilization efficiency) rating is 76% for natural gas and 77% for propane. This stove is not approved for closet or recessed installations. It is approved for bathroom, bedroom and bed-sitting room installations.

This stove may be installed in an aftermarket permanently located, manufactured mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

GS28: Maximum input is 30,000 BTU/hr for natural gas and 26,000 BTU/hr for propane. Maximum output for natural gas is 24,600 BTU/hr at an efficiency of 82% with the fan on and 80% with the fan off; and 21,600 BTU/hr for propane at an efficiency of 83% with the fan on and 80% with the fan off. This stove is approved for bedroom and bed-sitting room installations.



## CARE OF GLASS, AND PLATED PARTS

Do not use abrasive cleaners to clean these 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 recommended gas fireplace glass cleaner. Thereafter clean as required.

### **Do not clean glass when hot!**

If the glass is not kept clean permanent discoloration and / or blemishes may result.

# LOCATION AND CLEARANCES 5

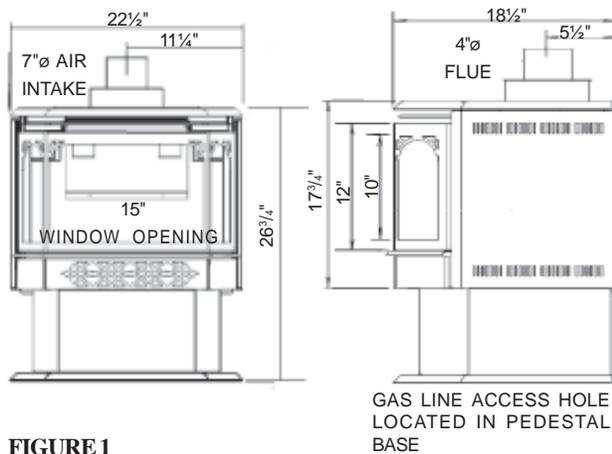
**Provide adequate ventilation and combustion air.**

**Provide adequate accessibility clearance for servicing and operating the stove.**

**Never obstruct the front opening of the stove.**

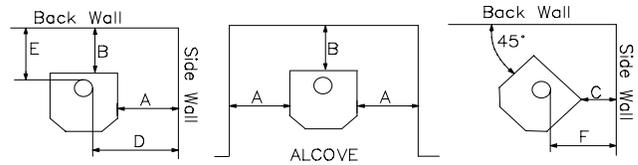
## GDS28 AND GS28:

As long as clearance to combustibles is kept within the required distances, the most desirable and beneficial 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.



**FIGURE 1**

MAINTAIN THESE MINIMUM CLEARANCES TO COMBUSTIBLES:



**FIGURE 2**

<b>A.</b>	7"	<b>D.</b>	14 <sup>3</sup> / <sub>4</sub> "
<b>B.</b>	2"	<b>E.</b>	4"
<b>C.</b>	1"*	<b>F.</b>	9 <sup>1</sup> / <sub>2</sub> "

No additional floor protection is required

MINIMUM 20" FROM STOVE TOP TO CEILING

\*AT A DISTANCE OF 1" FROM THE WALL, ACCESS TO THE BLOWER SWITCH, ON-OFF SWITCH OR THE BLOWER POWER CORD MAY NOT BE PRACTICAL.

**A terminal shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings. Local codes or regulations may require different clearances.**

**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.**

## DIRECT VENT SPECIFICS - GDS28

### VENTING LENGTHS AND AIR TERMINAL LOCATIONS

Use only Wolf Steel 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. Both Wolf Steel and Simpson Dura-Vent venting components may have a 0" rise per foot on horizontal runs.

When using Wolf Steel venting components, use only the following vent kits: **WALL TERMINAL KIT GD175** (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 **STOVE PERISCOPE KIT GD180** (for wall penetration below grade) in conjunction with the appropriate venting components.

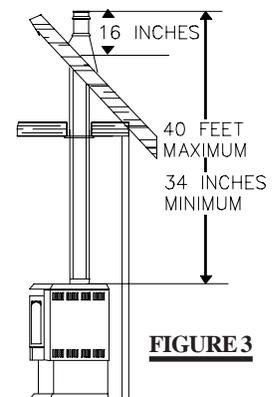
**For optimum performance, it is recommended that all horizontal runs have a minimum 1/4 inch rise per foot.**

These vent kits allow for either horizontal or vertical venting of the stove. **FIGURES 3, 4, & 5.** The maximum number of 4" flexible connections is two horizontally or three vertically (excluding the stove and the air terminal connections).

When terminating vertically, the minimum vertical rise is 34 inches above the stove and the maximum vertical rise is 40 feet.

**Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning.**

**Use an adjustable pipe as the final length of rigid piping to the stove for ease of installation.**

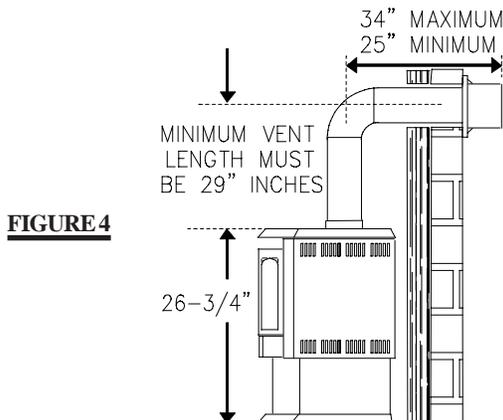


**FIGURE 3**

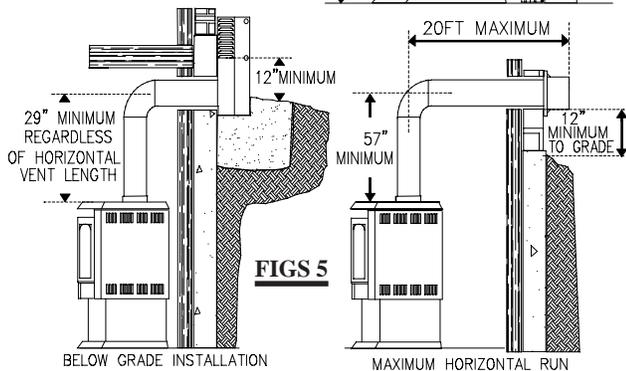
**6** For optimum flame appearance and stove performance, keep the vent length and number of elbows to a minimum. The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

The maximum horizontal run is 34 inches with a 90° elbow located 29" above the stove. **FIGURE 4.**

The maximum horizontal run with a 57 inch vertical rise immediately above the stove is 20 feet . **FIGures 5.**



**FIGURE 4**



**FIGS 5**

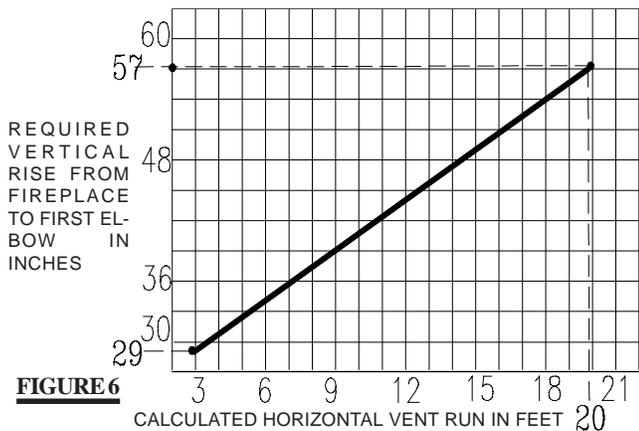
**HORIZONTAL RUN NOT TO EXCEED VERTICAL RISE**

**If vertical rises greater than 57 inches are necessary, the increased rise must be deducted from the maximum horizontal run.**

Use chart, **Figure 6**, to calculate horizontal runs for vertical rises between 29 and 57 inches.

When calculating maximum run lengths, include 10 feet for each 90° elbow or 5 feet for each 45° elbow.

**Do not include the first elbow directly off the unit.**



**FIGURE 6**

### SPECIAL INSTALLATION EXAMPLE

When a horizontal offset is required in a through-the-roof installation, the following procedure for vent length calculations must be followed:

In an installation as shown in **FIGURE 7**, lengths A and C are known based on room height and roof requirements.

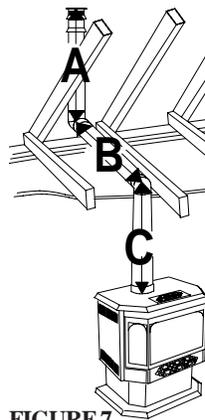
**Length C must never be less than 29 inches. Any 90° and 45° elbows must be calculated as 5 feet of venting each.**

The allowable horizontal run can be calculated using these parameters. In this example, the total vertical height is 20 feet (length "A" is required to be 11 feet while length "C" needs to be 9 feet). The maximum vertical length is 40 feet and all runs and elbows must be subtracted from this maximum vertical length.

The maximum allowable horizontal run that "B" can be is:

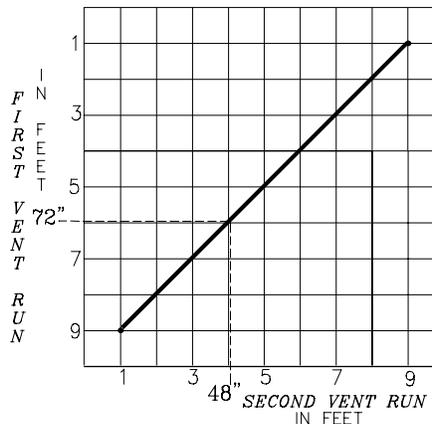
- 40 ft. (maximum vertical run length)**
- 11 ft. (through the roof vertical rise "A")
- 10 ft. (2 - 90° elbow)
- 9 ft. (vertical run "C")
- 10 ft. (maximum allowable horizontal length for "B")

**The length of "B" must never be greater than the length of "A" and "C" combined.**



**FIGURE 7**

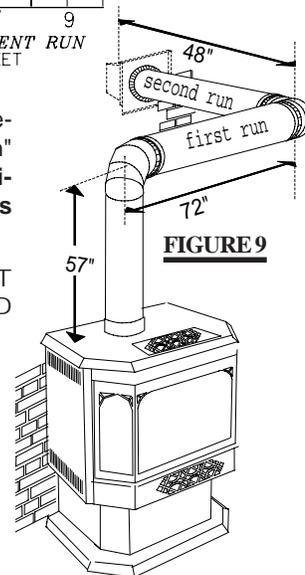
### OFFSET INSTALLATION EXAMPLE



**FIGURE 8**

If a **first run of 72 inches** is required, using the "First Vent Run" on the chart shows that a **maximum second run of 48 inches** is allowable.

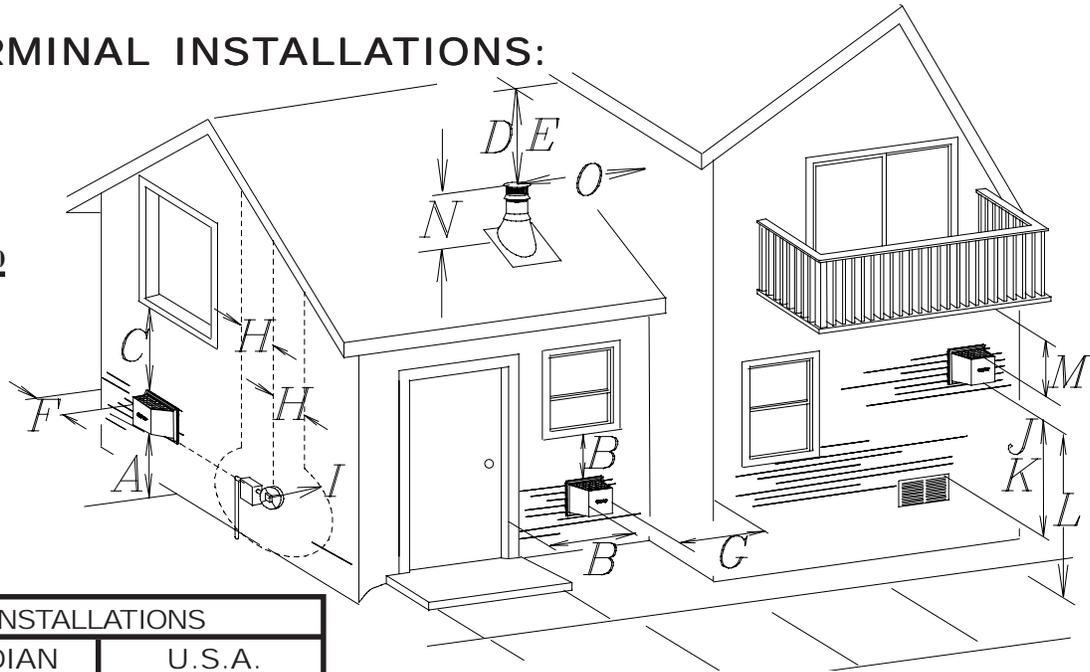
IF NECESSARY, THE FIRST RUN AND THE SECOND RUN MAY BE REVERSED.



**FIGURE 9**

# AIR TERMINAL INSTALLATIONS:

**FIGURE 10**



INSTALLATIONS			
	CANADIAN	U.S.A.	
A	12 INCHES	12 INCHES	Clearance above grade, veranda porch, deck or balcony.
B	12 INCHES	9 INCHES	Clearance to windows or doors that open.
C	12 INCHES*	12 INCHES*	Clearance to permanently closed windows.
D	18 INCHES**	18 INCHES**	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the centerline of the terminal.
E	12 INCHES**	12 INCHES**	Clearance to unventilated soffit.
F	0 INCHES	0 INCHES	Clearance to an outside corner wall.
G	0 INCHES***	0 INCHES***	Clearance to an inside <b>non-combustible</b> corner wall or protruding <b>non-combustible</b> obstructions (chimney, etc.).
	2 INCHES***	2 INCHES***	Clearance to an inside combustible corner wall or protruding combustible obstructions ( vent chase, etc.).
H	3 FEET	3 FEET****	Clearance to each side of the centerline extended above the meter / regulator assembly.
I	6 FEET	3 FEET****	Clearance to a service regulator vent outlet.
J	12 INCHES	9 INCHES	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6 FEET	3 FEET†	Clearance to a mechanical air supply inlet.
L	7 FEET‡	7 FEET****	Clearance above a paved sidewalk or paved driveway located on public property unless fitted with a heat shield kit GD-301.
M	12 INCHES††	12 INCHES****	Clearance under a veranda, porch, deck or balcony.
N	16 INCHES	16 INCHES	Clearance above the roof.
O	2 FEET†*	2 FEET†*	Clearance from an adjacent wall including neighbouring buildings.

\* Recommended to prevent condensation on windows and thermal breakage  
 \*\* It is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.  
 \*\*\* The periscope GD-201 requires a minimum 18 inches clearance from an inside corner.  
 \*\*\*\* This is a recommended distance. For additional requirements check local codes.  
 † Three feet above if within 10 feet horizontally.  
 ‡ A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.  
 †† Permitted only if the veranda, porch, deck or balcony is fully open on a minimum of two sides beneath the floor.  
 †\* Recommended to prevent recirculation of exhaust products. For additional requirements check local codes.

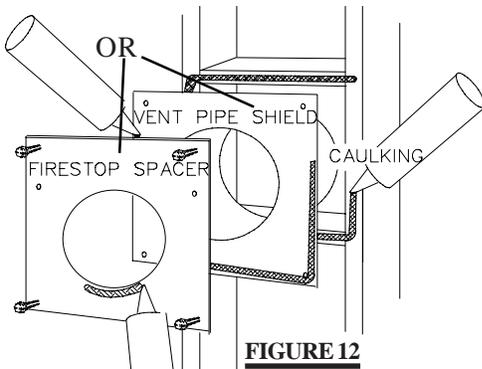
# WALL AND CEILING PROTECTION

**For safe and proper operation of the stove, follow the venting instructions exactly.**

**HORIZONTAL INSTALLATION:** This application occurs when venting through an exterior wall. **FIGURES 4, 5, & 11.** Having determined the air terminal location, cut and frame a hole in an exterior wall with a minimum square or round opening of 9". (As an alternative to framing, a vent pipe shield may be installed, ensuring a 1" clearance to combustibles. See Figure 12.)

**For optimum performance, the stove pipe should rise  $\frac{1}{4}$ " per foot of run.**

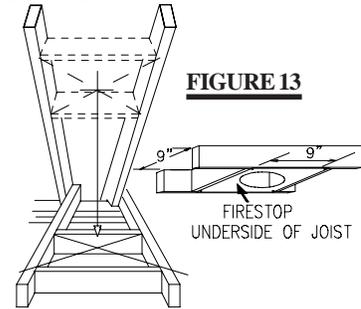
1. Mark and cut the vent pipe shield to the determined depth of the combustible wall. Apply a bead of caulking (not supplied) to the framework or to the shield plate (in the case of a finished wall) and secure the shield through the opening to the interior wall. **The final location of the vent pipe shield should maintain the required clearance to the 7" vent pipe. Do not fill this cavity with any type of material.** Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the stove. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe is installed in its final position, apply sealant between the pipe and the firestop spacer.



**FIGURE 12**

**VERTICAL INSTALLATION:** This application occurs when venting through a roof. **FIGURE 3.**

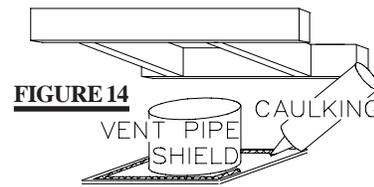
Installation kits for various roof pitches are available from your Napoleon dealer. See Accessories to order the specific kit required.



**FIGURE 13**

1. Determine the air terminal location and move the stove into position. Cut and frame 9 inch openings in the ceiling and the roof to provide the minimum 1 inch clearance between the stove pipe and any combustible material. Try to

center the exhaust pipe location midway between two joist to prevent having to cut them. Use a plumb bob to line up the center of the openings.



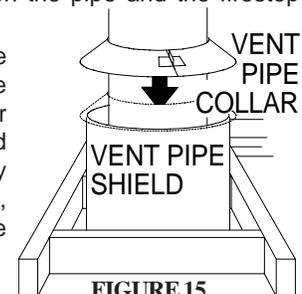
**FIGURE 14**

**DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL.**

A vent pipe shield will prevent any materials such as insulation, from filling up the 1" air space around the pipe. **FIGURE 15.** Nail headers between the joist for extra support.

2. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. **FIGURE 14.** A firestop must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. **FIGURE 13.** Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the stove. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe is installed in its final position, apply sealant between the pipe and the firestop spacer.

3. In the attic, after the pipe has been installed, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe.



**FIGURE 15**

## HORIZONTAL VENTING INSTALLATION

**For safe and proper operation of the stove, follow the venting instructions exactly.**

**For horizontal runs, both Wolf Steel and Simpson Dura-vent venting components may have a 0" rise per foot.**

**For optimum performance it is recommended that all horizontal runs have a minimum ¼ inch rise per foot.**

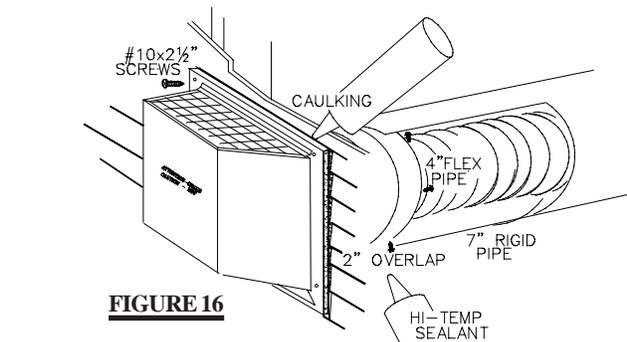
1. Stretch the 4" diameter aluminium flexible liner to the required length taking into account the additional length needed for the finished wall surface.

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.

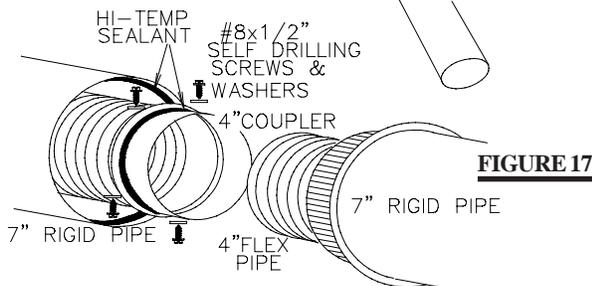
Slip a 4" diameter length of aluminium flexible liner a minimum of 2" over the inner sleeve of the air terminal. Secure to the sleeve using 3 screws. Seal the joint and screw heads using the high temperature sealant provided.

2. Slip the first section of 7" diameter stove pipe a minimum of 2" over the outer sleeve of the air terminal. Secure to the sleeve using 3 screws. Seal the joint and screw heads using high temperature sealant.

3. Insert the liners through the firestop / vent pipe shield. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall. Make weather tight by sealing with caulking (not supplied). The air terminal mounting plate may be recessed (up to ¾" maximum) into the exterior wall or siding.



**FIGURE 16**



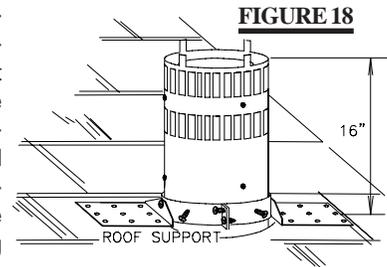
**FIGURE 17**

4. If more than one length of liner needs to be used to reach the stove, couple them together as illustrated in **FIGURE 17**. Seal the joints using the same procedure as described above.

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.

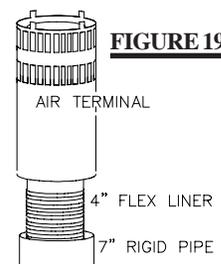
## VERTICAL VENTING INSTALLATION

1. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.



**FIGURE 18**

2. Slip a 4" diameter length of aluminium flexible liner a minimum of 2" over the inner sleeve of the air terminal.



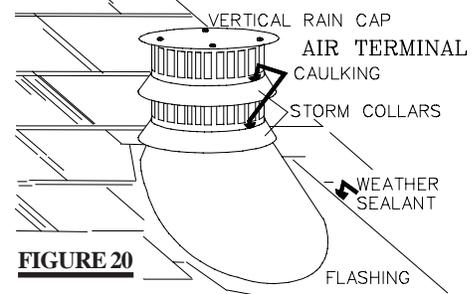
**FIGURE 19**

Secure to the sleeve using 3 screws and flat washers. Seal the joint and screw heads using high temperature sealant. Repeat using a 7" diameter length of rigid piping.

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

3. Thread the air terminal pipe assembly down through the roof support and attach, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened. The air terminal must be located vertically and plumb.

4. 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.



**FIGURE 20**

Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

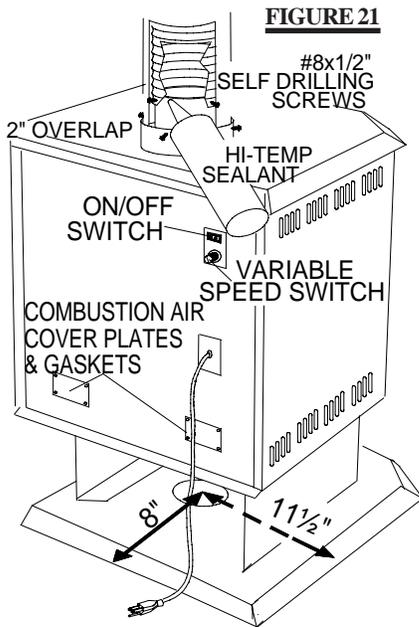
5. Apply a heavy bead of waterproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centered between the air intake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

6. Attach the vertical rain cap.

7. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe. **Figure 15**.

## 10 STOVE VENT CONNECTION

1. Attach the adjustable pipe to the last section of rigid piping. Secure with screws and seal.
2. Install the 4" aluminium 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 air intake collar. Pull the adjustable pipe a minimum 2" into the air intake 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 GD175 kit). In the event that the venting must be disassembled, care must be taken to reseal the venting.**

## MOBILE HOME INSTALLATION

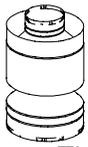
In Canada, mobile home installation may be vented horizontally or vertically. In the United States, it may only be installed vertically. See "Vertical Venting" or "Horizontal Air Terminal Installation" for installation.

The fireplace is equipped with two 5/16" diameter holes located near each corner of the base. For mobile home installations, the fireplace must be fastened in place. Use #10 screws, inserted through the holes in the base to secure. It is recommended that the fireplace be secured in all installations.

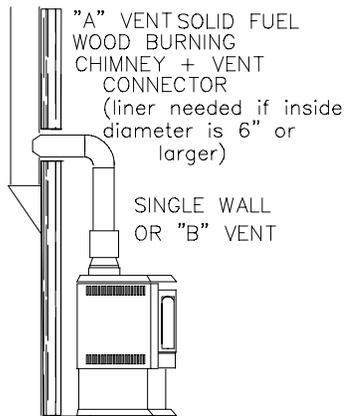
*Continue with "Gas Installation" Page 13*

# B-VENT SPECIFICS - MODEL GS28 11

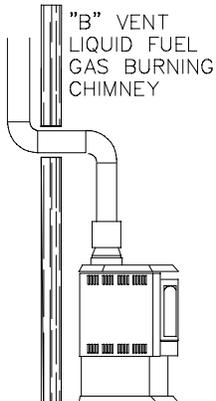
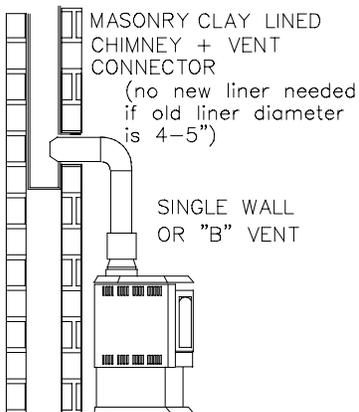
## CHIMNEY INSTALLATION



THREE TYPES OF CHIMNEY SYSTEMS MAY BE USED WITH THIS STOVE:



**FIGURES 22**



## 'B' VENT ADAPTATIONS

1. Remove and discard the two combustion air cover plates and gaskets located on the rear panel of the unit. **SEE FIGURE 23.**
2. Replace the four screws per side to secure the rear panel to the unit.

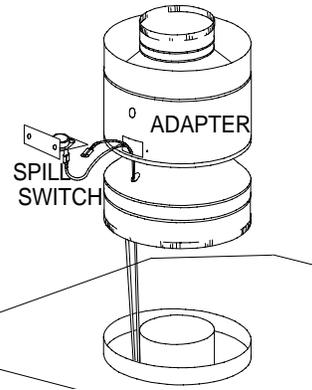


**FIG. 23**

## INSTALLING 'B' VENT:

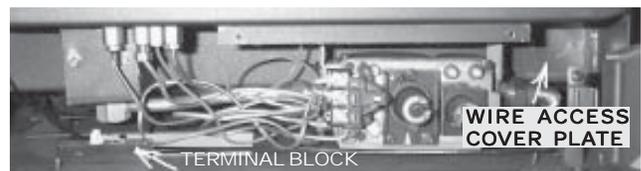
Follow the instructions for "*Wall and Ceiling Protection*".

**FIGURE 24**

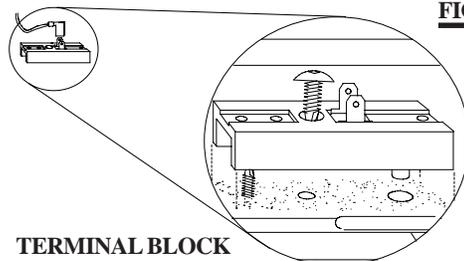


## ADAPTER INSTALLATION FIGURE 24

1. Remove the spill switch bracket from the rear of the adapter.
2. Gently pull the two wire terminals (located inside the 7" flue collar at the top of the stove) out approximately 8 inches.
3. Bring the wires through the lower hole in the adapter and out the spill switch opening. **To pass the wires through the hole more easily, temporarily tape the two terminals together.**
4. With the spill switch opening aligned to the back of the stove, push the crimped edge of the adapter into the stove flue collar.
5. Connect the wire terminals to the spill switch and re-secure the bracket.
6. Secure the terminal block into place as shown with the screw supplied.
7. Unscrew the wire access cover plate from the rear right hand side of the firebox. Remove and discard the gasket. **SEE FIGURE 25.** Remove the knockout from the cover plate and insert the protective bushing. Pull both spill switch wires through the bushing taking up any slack. Replace the cover plate. Connect one wire end to the terminal block and the other end to terminal 1 of the gas valve. **FIGURE 31.** Connect the two wires running down the left side of the unit from the on-off switch to the remaining tab on the terminal block and to terminal 3 on the gas valve.



**FIGURE 25**

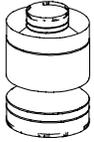


**TERMINAL BLOCK**

**12** For aesthetics, the adapter has been designed to accept a standard matte black 7" stove pipe and the Napoleon decorative brass band (standard with the GS-150KT). Both are available from your Napoleon dealer.

**B-VENT MODEL GS28 ONLY:**

Attach the B-Vent label, shown below, in the control area of the appliance.



ATTACH THIS LABEL IN THE CONTROL AREA OF THE FIREPLACE.  
**THIS FIREPLACE HAS BEEN CONVERTED TO A 'B' VENT MODEL.**  
 ATTACHEZ CET ETIQUETTE DANS LA REGION DE CONTROLE DU FOYER.  
**CE FOYER A ETE CONVERTI A UN MODELE A SYSTEME D'EVACUATION 'B'.**

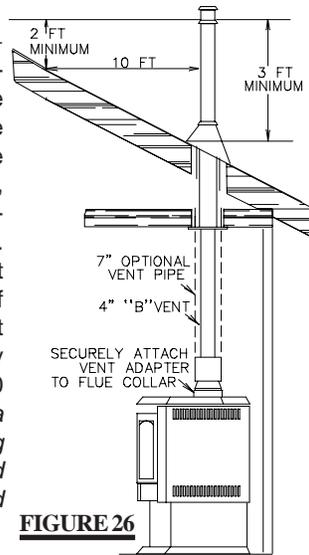
**COMBUSTION AIR**

**A chimney venting this stove shall not vent any solid fuel burning appliance.**

**For optimum performance it is recommended that all horizontal runs have a minimum 1/4 inch rise per foot.**

**Any stove needs air for safe operation and must be installed in such a way that adequate combustion air is available.**

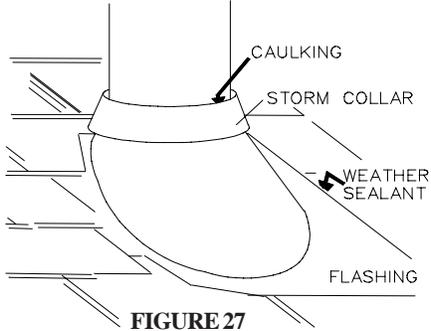
**ADDING VENT SECTIONS:** For ease of assembly, a 7" telescoping stove pipe may be installed over the 4" vent connection of the adapter. Add vent sections, twist locking (clockwise) securely, to the required height. The vent should extend, at least, 3 feet above its point of contact with the roof and, at least, 2 feet higher than any wall, roof or building within 10 feet. **FIGURE 26.** (This is a guideline only; local venting codes should be followed which may differ in height and clearance requirements.)



**FIGURE 26**

**INSTALLING FLASHING AND STORM COLLAR**

Remove nails from the shingles above and to the sides of the chimney. Place the flashing over the vent pipe and slide it underneath the sides and upper edge of the shingles.



**FIGURE 27**

Ensure that the vent pipe is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof on the top and sides. **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.

Apply waterproof caulking around the vent, 1" above the top of the flashing and push the storm collar down into the caulking. **FIGURE 27.** Attach a rain cap to the top of the last vent section.

*Continue with "Gas Installation" Page 13*

# GAS INSTALLATION

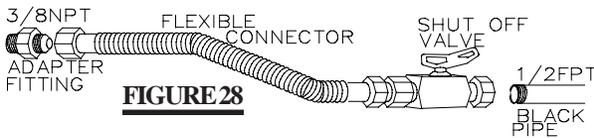
**Read the section on opening the door in "Finishing" prior to proceeding to prevent damaging the unit.**

Bring the gas line to the stove through either the opening in the pedestal back or through the floor directly beneath the pedestal base.

Install rigid black pipe, or 1/2" type L copper tubing with a shutoff valve to the stove.

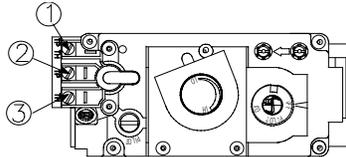
Seal and tighten the gas line securely to the flex connector supplied.

**DO NOT KINK FLEXIBLE CONNECTOR.**



**MODEL GDS28 ONLY:** Attach the two leads from the on/off switch to terminals 1 and 3 located on the gas valve.

**FIGURE 29**



**Do not connect either the wall switch, thermostat or gas valve to electricity (110 volts).**

**Mark the appropriate boxes on the rating plate label to indicate the model type depending on the installation (direct vent or B-vent).**

CERTIFIED UNDER: CSA 2.33-M98, ANSI Z21.88-1998 VENTED GAS REFRIGERATE HEATER. APPLIANCE MUST BE INSTALLED USING BURNER KIT: GDS28B-KIT, OR GDS28P-KIT.  
 HOMOLOGUÉ SELON LES NORMES: CSA 2.33-M98, ANSI Z21.88-1998 FOYER DE CHAUFFAGE AU GAZ AVEC ÉVACUATION. CET APPAREIL DOIT ÊTRE INSTALLÉ EN UTILISANT UN ENSEMBLE DE BRÛLEURS: GDS28B-KIT, OU GDS28P-KIT.

**Workeck Hershey**

0-4500ft (0-1370m) 30,000 BTU/h 18,000 BTU/h 22,500 BTU/h 24,000 BTU/h	ALTIITUDE/ELEVATION INPUT/ALIMENTATION REDUCED INPUT/ALIMENTATION REDUITE OUTPUT (CDVS280/GDS28) RENDEMENT OUTPUT (CS280/GS28) RENDEMENT	0-4500ft (0-1370m) 26,000 BTU/h 15,000 BTU/h 19,500 BTU/h 20,800 BTU/h
#37	ORIFICE / INJECTEUR DIRECT VENT MODEL B VENT MODEL	#53
CDVS280-N	GDS28-N	GDS28-P
CS280-N	GS28-N	GS28-P
		CDVS280-P
		CS28-P

**MANIFOLD PRESSURE:** 3.5 INCHES W.C. (NG) / 10 INCHES W.C.(LP)  
**PRESSION AU COLLECTEUR:** 3.5" D'UNE COLONNE D'EAU (NG)  
 10" D'UNE COLONNE D'EAU (PG)  
**MIN SUPPLY PRESSURE:** 4.5" W.C.(NG) / 11" W.C. (LP)  
**PRESSION D'ALIMENTATION MIN:** 4.5" D'UNE COLONNE D'EAU (NG)  
 11" D'UNE COLONNE D'EAU (PG)  
**MAX. SUPPLY PRESSURE:** 7" W.C. (NG) / 13" W.C. (LP)  
**PRESSION D'ALIMENTATION MAX:** 7" D'UNE COLONNE D'EAU (NG)  
 13" D'UNE COLONNE D'EAU (PG)

**FOR USE WITH GLASS DOORS CERTIFIED WITH THIS UNIT ONLY.**  
 UTILISER AVEC LES PORTES VITREES HOMOLOGUEES SEULEMENT AVEC CETTE UNITE.  
**WARNING: DO NOT ADD ANY MATERIAL TO THE APPLIANCE, WHICH WILL COME IN CONTACT WITH THE FLAMES, OTHER THAN THAT SUPPLIED BY THE MANUFACTURER WITH THE APPLIANCE.**  
**AVERTISSEMENT: N'AJOUTEZ PAS A CET APPAREIL AUCUN MATERIAU DEVANT ENTRER EN CONTACT AVEC LES FLAMMES AUTRE QUE CELUI QUI EST FOURNI AVEC CET APPAREIL PAR LE FABRICANT.**

**MINIMUM CLEARANCE TO COMBUSTIBLE MATERIAL / DEGAGEMENTS MINIMUM AUX DES MATERIAUX COMBUSTIBLES:**

A 7"	D 17 1/2"
B 2"	E 6 1/4"
C 1"	F 9 1/2"

20" TO CEILING FROM STOVE TOP  
 20" ENTRE LE DESSUS DU FOYER ET LE PLAFOND  
**ELECTRICAL RATING / CLASS:** 115V 1.5AMP 60HZ

**MODEL CDVS280/GDS28 APPROVED FOR BEDROOM, BATHROOM & BEDSITTING ROOM INSTALLATION. SUITABLE FOR MOBILE HOME INSTALLATION IF INSTALLED IN ACCORDANCE WITH THE CURRENT STANDARD CAN/CSA 2240M SERIES GAS EQUIPPED MOBILE HOMES, IN CANADA OR IN THE UNITED STATES. THE MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARD, TITLE 24 CFR, PART 3280, WHEN THIS US STANDARD IS NOT APPLICABLE USE THE STANDARD FOR FIRE SAFETY CRITERIA FOR MANUFACTURED HOME INSTALLATIONS, SITES AND COMMUNITIES ANSI/NFPA 501A.**  
**HOMOLOGUE POUR INSTALLATION DANS UNE CHAMBRE A COUCHER, UNE SALLE DE BAIN ET UN STUDIO. APPROPRIE POUR INSTALLATION DANS UNE MAISON MOBILE SI SON INSTALLATION CONFORME AUX EXIGENCES DE LA NORME CAN/CSA 2240M SERIE DE MAISONS MOBILES EQUIPEES AU GAZ EN VIGUEUR AU CANADA OU AUX ETATS-UNIS DE LA NORME DE SECURITE ET DE CONSTRUCTION DE MAISONS MANUFACTUREES, TITRE 24 CFR, SECTION 3280, DANS LE CAS OU CETTE NORME D'ETATS-UNIS NE PEUT ETRE APPLIQUEE. SE REFERER A LA NORME RELATIVE AU CRITERE DE MESURES DE SECURITE CONTRE L'INCENDIE POUR LES INSTALLATIONS DANS LES MAISONS MANUFACTUREES, LES SITES ET LES COMMUNAUTES, ANSINFPA 501A.**

**STEADY STATE EFFICIENCY (NG):** 75% FAN OFF / 78% FAN ON  
**STEADY STATE EFFICIENCY (LP):** 75% FAN OFF / 79% FAN ON  
**EFFICACITE CONSTANTE (NG):** 75% VENT. ARRETE  
 78% VENT. FONCTIONNE  
**EFFICACITE CONSTANTE (GP):** 75% VENTILATEUR ARRETE  
 79% VENTILATEUR FONCTIONNE  
 STEADY STATE EFFICIENCY APPLIES TO CANADA ONLY /  
 L'EFFICACITE CONSTANTE S'APPLIQUE SEULEMENT AU CANADA.

**AFUE (NG/LP) (GN/GP):** 64% / 65%  
 MINIMUM AND MAXIMUM HORIZONTAL VENT LENGTHS ARE 25 INCHES AND 20 FEET RESPECTIVELY. LES LONGUEURS HORIZONTALES MINIMALE ET MAXIMALE SONT 25 POUCES ET 20 PIEDS RESPECTIVEMENT.

**THE APPLIANCE MUST BE VENTED USING THE APPROPRIATE NAPOLEON VENT KITS. SEE OWNERS INSTALLATION MANUAL FOR VENTING SPECIFICS. PROPER REINSTALLATION AND RESEALING IS NECESSARY AFTER SERVICING THE VENT-AIR INTAKE SYSTEM.**  
**L'APPAREIL DOIT EVACUER SES GAZ EN UTILISANT L'ENSEMBLE D'EVACUATION PROPRE A NAPOLEON. REFERER AU MANUEL D'INSTALLATION DE PROPRIETAIRE POUR L'EVACUATION PRECISE. IL EST IMPORTANT DE BIEN REINSTALLER ET RESEALER L'EVENT APRES AVOIR ASSURE LE MAINTIEN DU SYSTEME DE PRISE D'AIR.**

**WOLF STEEL LTD**  
**BARRIE, ONTARIO CANADA**  
 MADE IN CANADA / FABRIQUE AU CANADA  
 SERIAL NUMBER: GDS28  
 NO. DE SERIE: GDS28  
 WS-385-165

**NOT FOR USE WITH SOLID FUEL  
 UN COMBUSTIBLE SOLIDE NE DOIT PAS ETRE UTILISE  
 AVEC CET APPAREIL**

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

For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route a double strand of solid core millivolt wire from the gas stove to the wall switch / millivolt thermostat. The recommended maximum lead length depends on the wire size:

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

**DIRECT VENT MODEL GDS28:** Disconnect the existing wires from terminals 1 and 3 (from the on/off switch) and replace with the leads from the wall switch/millivolt thermostat.

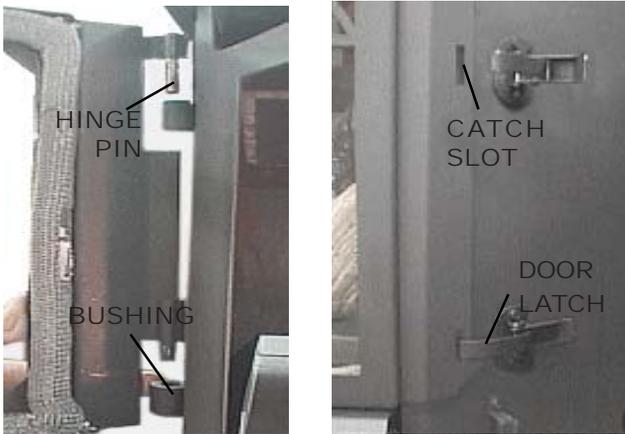
**B-VENT MODEL GS28:** Disconnect the on/off switch wire from terminal 3 on the valve and the second switch wire from the terminal block. Replace each connection using the wires from the wall switch/millivolt thermostat.

# FINISHING

## DOOR CLOSING AND OPENING

When installing the fire viewing door, a simple procedure must be followed in order to not damage the door. First open both side doors *fully*. Insert the pins on the door left side into the hinge bushings. Swing the door closed and engage the latches into the catch slots. Push the latch handles backwards to secure the closed door. It may be necessary to lift the door when securing it to ensure that it is in a horizontal position.

To open the door, repeat in reverse order.



**FIGURES 30**

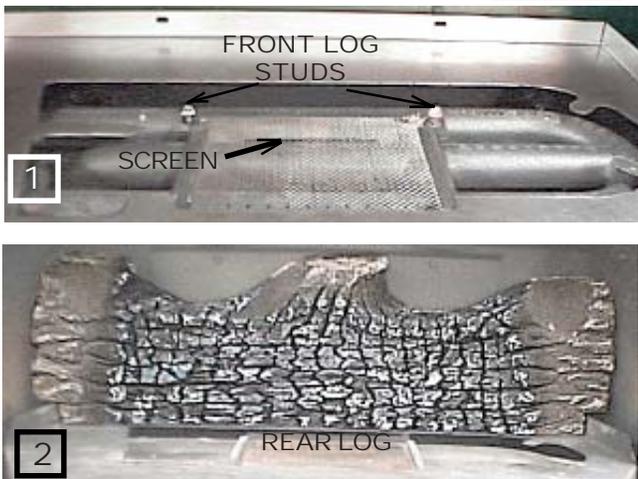
## LOG PLACEMENT INSTRUCTIONS

**PHAZER™** logs, glowing embers and charcoal embers exclusive to Napoleon Fireplaces, glow when exposed to direct flame and provide a unique and realistic glowing effect that is different in every installation. Use only certified **PHAZER™** logs, glowing embers and charcoal embers available from your Napoleon / Wolf Steel Ltd. dealer.

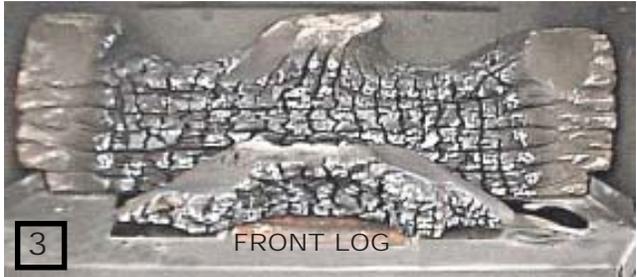
***Positioning the logs improperly will cause flame impingement and carboning.***

Place the back log into the firebox pushing it as close to the firebox wall as possible and centered onto the log support pan.

**FIGURES 31**



Place the front log on the ember screen lining up the studs with the holes on the bottom of the log.



Set the two crossover logs into the pockets provided on both the front and rear logs., as shown.



Tear the glowing embers into pieces and place onto the screen beneath the front 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 when exposed to direct flame; however care should be taken to not block the burner ports. Blocked ports can cause an incorrect flame pattern, carbon deposits and delayed ignition.



Randomly place the charcoal embers along the front of the support pan and some onto the screen in a realistic manner. **Fine dust found in the bottom of the bag should not be used. Do not place any embers on the burner.**

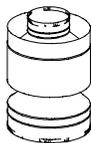


Log colours may vary. During the initial use of the fireplace, the colours will become more uniform as colour pigments burn in during the heat activated curing process.

# OPERATION / MAINTENANCE 15

*Purge all gas lines with the glass door open. Assure that a continuous gas flow is at the burner before closing the door. Allow several minutes (5-15) for the flame to stabilize after ignition.*

## MODEL GS28 ONLY: SPILL SWITCH



This is a thermally activated switch, attached to the back of the chimney adapter, which senses the change in temperature and shuts down the gas valve in the event of a severe downdraft of air or a blocked or disconnected vent. It acts as a safety shutoff to prevent a build up of carbon monoxide or an explosion of unburnt gases during start up. If the flue is blocked or has no "draw", the spill switch will automatically shut off the supply of gas within about 5-10 minutes.

**TAMPERING WITH THE SWITCH CAN RESULT IN CARBON MONOXIDE (CO) POISONING AND POSSIBLE DEATH.**

## MODEL GS28 ONLY: VENTING ACTION CHECK

**A check for correct venting action must be made before the installed stove is left with the customer.**

Test in the following manner:

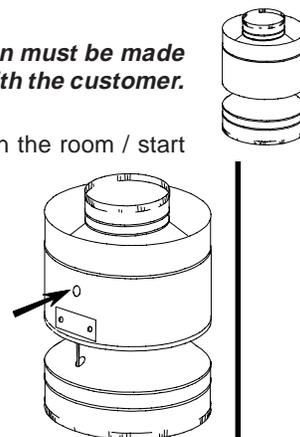
1. Close all doors and windows in the room / start exhaust fans in the home / turn fireplace blower off (if equipped).

2. Set controls to "high" and light the unit.

3. Wait 5 minutes. Light a match and extend it 1" into the hole located above the spill switch bracket on the adapter.

4. Venting action is satisfactory if the flame stays lit. Venting action is unsatisfactory if the flame extinguishes.

5. If venting action is unsatisfactory, turn the unit off, wait 10 minutes and try again. If the match does not stay lit, turn the unit off and check for vent blockage or restriction. If necessary, consult with a qualified inspector.



**FIGURE 32**

## OPERATING INSTRUCTIONS

The on-off switch is located on the back of the unit at the top left corner on models GDS28 and GS28.

*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.*

## OPERATING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE OPERATING

**WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

**A.** This fireplace is equipped with a pilot which must be lit by hand while following these instructions exactly.

**B.** Before operating 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 turn the gas control knob / manual shutoff knob. Never use tools. If the knob will not turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

**D.** Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and replace any part of the control system and any gas control which has been under water.

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

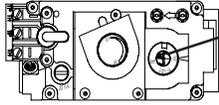
- Turn off all gas to the fireplace.
- Open windows.
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

## LIGHTING INSTRUCTIONS

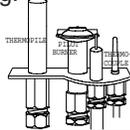
**WARNING: The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.**

**When lighting and relighting, the gas knob cannot be turned from PILOT to OFF unless the knob is depressed.**

- 1. STOP!** Read the safety information on the operating label.
- Turn off all electric power to the fireplace.
- Turn the gas knob clockwise  to off.
- Wait five (5) minutes to clear out any gas. If you smell gas including near the floor, **STOP!** Follow "B" on the operating label. If you don't smell gas go to the next step.
- Find pilot located in front of the back log.



GAS KNOB AT OFF



- Turn gas knob counter-clockwise  to pilot.
- Depress and hold the gas knob while lighting the pilot with the push button igniter. Keep knob fully depressed for one minute, then release. If the pilot does not continue to burn, repeat steps 3 through 6.
- With the pilot lit, turn the gas knob counter-clockwise  to on.
- If equipped with a remote ON-OFF switch, main burner may not come on when you turn the valve to ON. The remote switch must be in the ON position to ignite the burner.
- Turn on all electric power to the fireplace.

## TO TURN OFF GAS

- Turn off all electric power to the fireplace if service is to be performed.
- Push in gas control knob slightly and turn clockwise  to off. Do not force.

## 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 stove 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.

- In order to properly clean the burner and pilot assembly, remove the logs exposing both assemblies.
- Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, at least once a year.
- 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 flames are large enough to engulf the thermocouple and 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 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer/distributor.

7. Check that the door gasketing is not broken or missing. Replace if necessary.

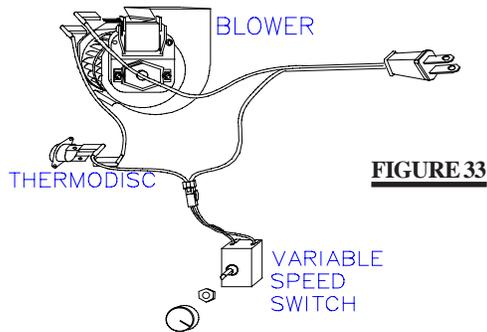
8. Lift the door from its hinges to clean hinge pins and lubricate using high-temp dry graphite if necessary. Replace.

**NOTE: Due to the high temperatures that the hinges experience, wet lubricants such as oil and WD40 will cause the hinge to seize and are therefore not suitable.**

# REPLACEMENT BLOWER

**Blower replacement may be done through either the firebox or from the rear of the unit. Using the rear panel is recommended.**

1. Turn off the electrical power and the gas supply to the stove.



**FIGURE 33**

## INSTALLATION THROUGH THE REAR PANEL:

### FOR MODEL GDS28

2. Remove the two combustion air covers and gaskets held on with 4 screws each. Remove the rear panel held in place with 6 screws.

3. Remove the 2 screws holding the blower to its mounting plate. Disconnect the two blower wires.

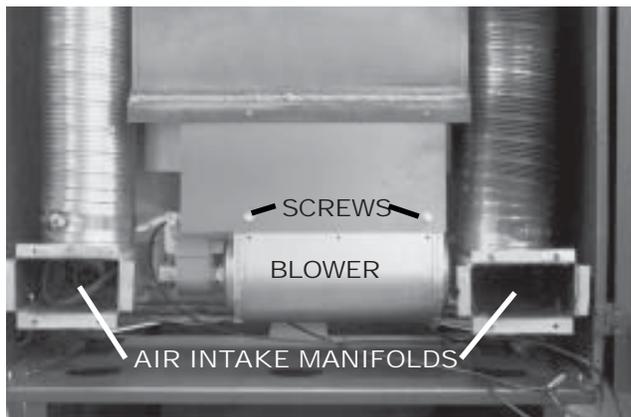
4. Replace the blower and reconnect the two wires. When replacing the rear panel, ensure that the wires are neither pinched nor interfere with the blower operation. Ensure that the combustion air cover plates and gaskets are properly installed and sealed.

### FOR MODEL GS28

2. Remove the 8 screws securing the air intake manifolds to the rear panel. Remove the rear panel held in place with 6 screws.

3. Remove the 2 screws holding the blower to its mounting plate. Disconnect the two blower wires.

4. Replace the blower and reconnect the two wires. When replacing the rear panel, ensure that the wires are neither pinched nor interfere with the blower operation. Re-secure the air intake manifolds.



**FIGURE 34 - INSTALLATION FROM THE REAR**

## INSTALLATION THROUGH THE FIRE-BOX:

*Replacement blower access gasket is required.*

2. Open the lower control door, the two side doors, and the fire viewing door. Remove the logs.

3. Remove the blower access plate held on with 6 screws.

4. Disconnect the two blower wires. Remove the blower bracket held on with 2 screws.

5. Replace the blower using the existing bracket. Replace the bracket/blower assembly on the unit.

6. Reconnect the two wires. Hold the replacement gasket in place and reattach the blower access plate. Replace the logs. Close all doors.



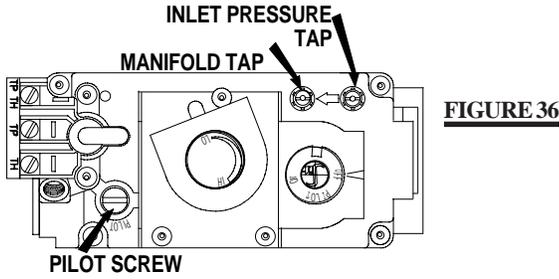
**FIGURE 35 - INSTALLATION FROM THE FRONT**

Turn the gas supply and electricity back on.

*Because the blower is thermally activated, when turned on, it will automatically start approximately 15-30 minutes after lighting the stove and will run for approximately 30-45 minutes after the stove has been turned off. Use of the fan increases the output of heat.*

*Drywall dust will penetrate into the blower bearings causing irreparable damage and must be prevented from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.*

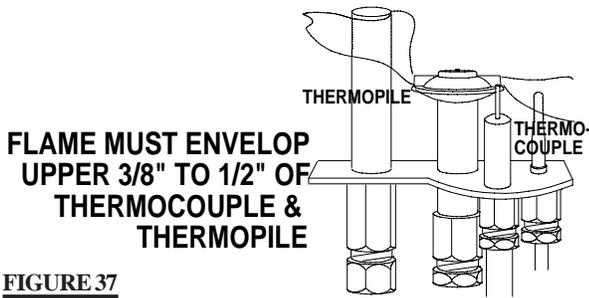
# ADJUSTMENTS



**FIGURE 36**

## PILOT BURNER ADJUSTMENT

Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow.



**FIGURE 37**

## VENTURI ADJUSTMENT

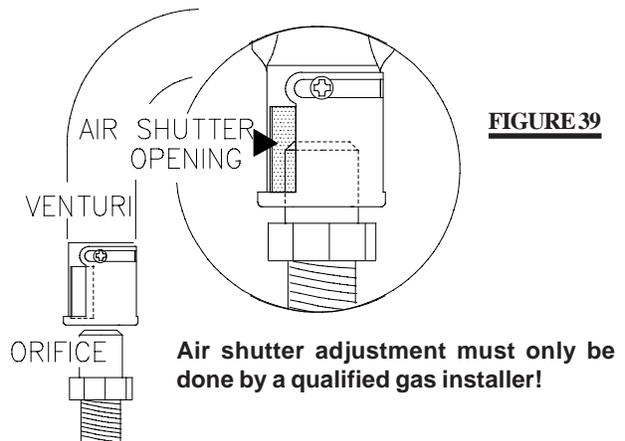
Remove the 2 screws securing the control panel plate. To access the venturi, remove the air housing cover plate, held on with 2 screws. Take care not to damage the gasket. Natural gas and propane models have air shutters set fully open. Closing the air shutter will cause a more yellow flame, but can lead to carboning. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established. After making adjustments replace the gasket and cover plate. Re-secure the control panel plate.



**FIGURE 38 a**



**FIGURE 38 b**



**FIGURE 39**

# REPLACEMENTS

## 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:

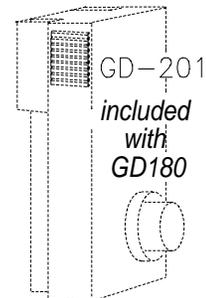
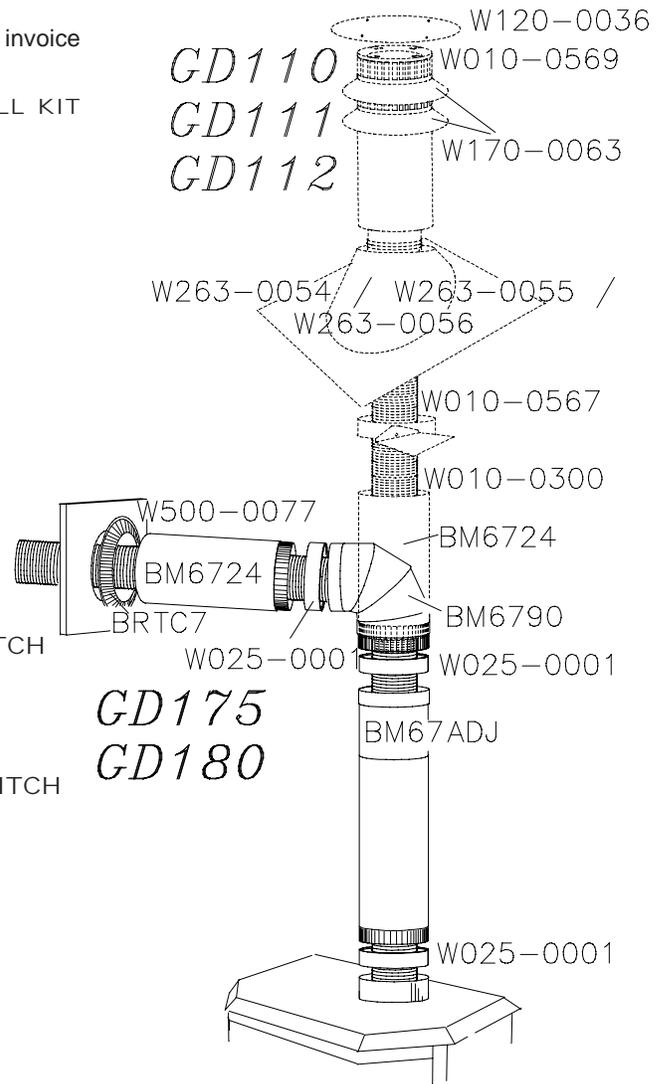
- |                                       |                        |           |
|---------------------------------------|------------------------|-----------|
| 1. MODEL & SERIAL NUMBER OF FIREPLACE | 3. PART NUMBER         | 5. FINISH |
| 2. INSTALLATION DATE OF FIREPLACE     | 4. DESCRIPTION OF PART |           |

## REPLACEMENT PARTS

For warranty replacement parts, a photocopy of the original invoice will be required to honour the claim.

GDS28 / GS28 TERMINATION KITS ALL KIT ITEMS MAY BE PURCHASED SEPARATELY

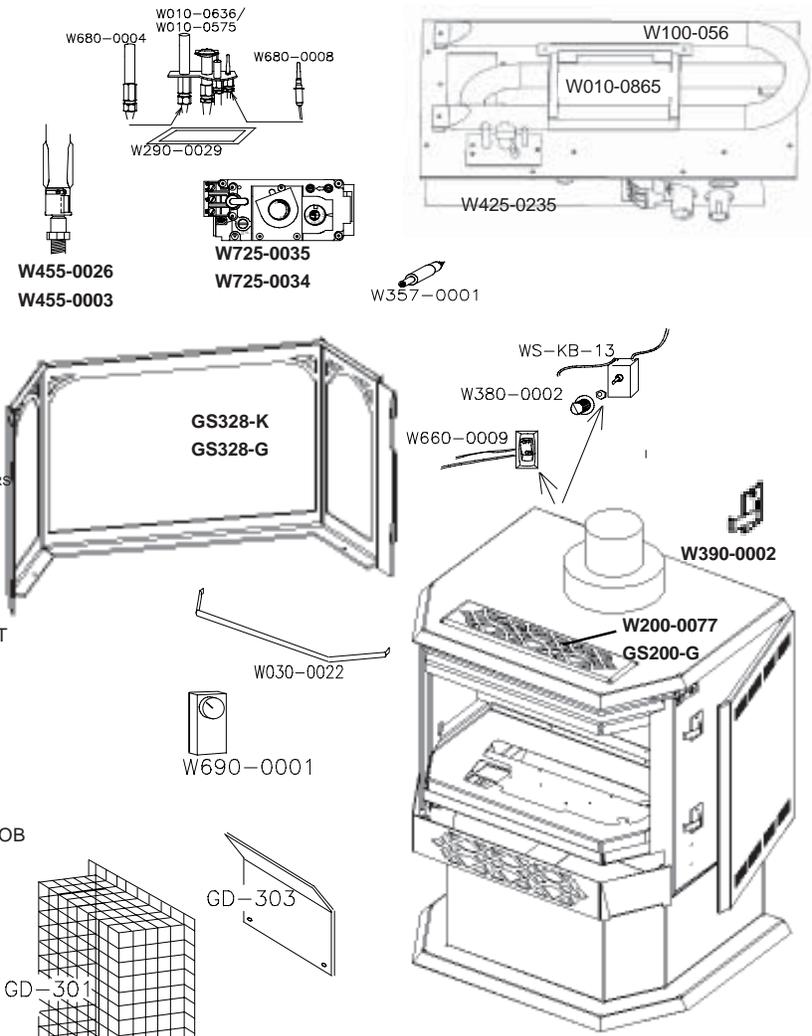
PART #	DESCRIPTION
GD175	- WALL TERMINAL KIT
BM6790	90° ELBOW - 7" DIAMETER
GD222	TERMINAL ASSEMBLY
BM67ADJ	30" TO 53" ADJUSTABLE PIPE - 7" DIA
W500-0077	FIRESTOP / WALL PLATE
W020-0032	HARDWARE
BRTC7	BRASS TRIM COLLAR
BM6724	24" STOVE PIPE - 7" DIAMETER
W010-0300	10' ALUMINIUM FLEX LINER c/w SPACERS - 4" DIA
W025-0001	DECORATIVE BRASS BAND
GD180	- PERISCOPE TERMINAL KIT
BM6790	90° ELBOW - 7" DIAMETER
GD201	PERISCOPE
BM67ADJ	30" TO 53" ADJUSTABLE PIPE - 7" DIA
W500-0077	FIRESTOP / WALL PLATE
W020-0032	HARDWARE
BRTC7	BRASS TRIM COLLAR
BM6724	24" STOVE PIPE - 7" DIAMETER
W010-0300	10' ALUMINIUM FLEX LINER c/w SPACERS - 4" DIA
W025-0001	DECORATIVE BRASS BAND
GD110	- ROOF TERMINAL KIT - 1/12 TO 7/12 PITCH
W010-0569	AIR TERMINAL
W120-0036	VERTICAL CAP
W010-0567	ROOF SUPPORT
W170-0063	STORM COLLAR
W263-0054	ROOF FLASHING
GD111	- ROOF TERMINAL KIT - 8/12 TO 12/12 PITCH
W010-0569	AIR TERMINAL
W120-0036	VERTICAL CAP
W010-0567	ROOF SUPPORT
W170-0063	STORM COLLAR
W263-0055	ROOF FLASHING
GD112	- ROOF TERMINAL KIT - FLAT ROOF
W010-0569	AIR TERMINAL
W010-0567	ROOF SUPPORT
W120-0036	VERTICAL CAP
W263-0056	ROOF FLASHING
W170-0063	STORM COLLAR



# 20 PART # DESCRIPTION

## REPLACEMENT PARTS: GDS28/GS28

- W725-0035 SIT VALVE - NG
- W725-0034 SIT VALVE - LP
- W100-0056 BURNER
- W455-0026 #38 BURNER ORIFICE - NG
- W455-0003 #54 BURNER ORIFICE - LP
- W010-0575 PILOT ASSEMBLY - LP
- W010-0636 PILOT ASSEMBLY - NG
- W455-0052 PILOT ORIFICE - LP
- W455-0053 PILOT ORIFICE - NG
- W680-0008 THERMOCOUPLE
- W680-0004 THERMOPILE
- W290-0029 PILOT GASKET
- W010-0865 EMBER SCREEN ASSEMBLY
- W357-0001 PIEZO IGNITER
- W425-0235 CONTROL PANEL
- GL-620 4pc LOG ASSEMBLY c/w EMBERS
- W135-0058 FRONT LOG
- W135-0059 BACK LOG
- W135-0060 LEFT LOG
- W135-0061 RIGHT LOG
- W361-0016 GLOWING EMBERS
- W550-0001 CHARCOAL EMBERS
- W573-0008 HIGH TEMPERATURE SEALANT
- W715-0195 PEDESTAL TRIM
- W290-0043 BURNER GASKET
- W385-0045 NAPOLEON LOGO
- W290-0045 BLOWER ACCESS GASKET
- W430-0002 MAGNETIC CLOSURE
- W390-0002 LATCH
- W660-0009 ON/OFF SWITCH
- W690-0002 THERMODISC
- W380-0002 VARIABLE SPEED SWITCH KNOB
- WKB-13 VARIABLE SPEED SWITCH
- GZ-552 REPLACEMENT BLOWER
- W030-0022 ACCENT BAR
- W200-0077 BLACK TRIVET

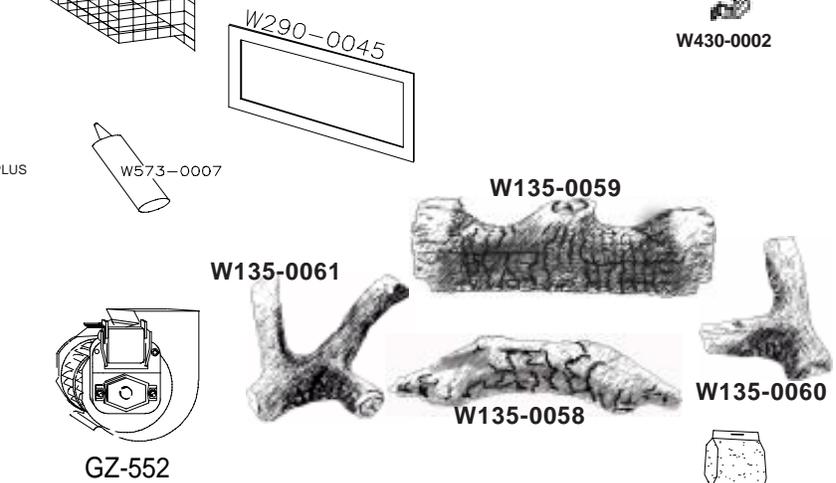


## GS28

- W010-0459 ADAPTOR c/w SPILL SWITCH
- W660-0006 SPILL SWITCH

## ACCESSORIES / OPTIONS GDS28 / GS28:

- W690-0001 MILLIVOLT THERMOSTAT
- W690-0002 HAND-HELD REMOTE
- W690-0010 REMOTE CONTROL - ADVANTAGE
- W690-0011 REMOTE CONTROL - ADVANTAGE PLUS
- GS328-K BLACK DOOR KIT
- GS328-G GOLD DOOR KIT
- W300-0038 FRONT WINDOW GLASS
- W300-0037 SIDE WINDOW GLASS
- W562-0022 GLASS GASKET
- GS200-G GOLD TRIVET
- GS14R-KT RED ENAMELLED EURO KIT
- GS14F-KT GREEN ENAMELLED EURO KIT
- GS14S-KT ALMOND ENAMELLED EURO KIT
- GS14K-KT BLACK ENAMELLED EURO KIT
- GS14-KT METALLIC BLACK EURO KIT
- GS14SS-KT STAINLESS STEEL EURO KIT
- W175-0124 CONVERSION KIT - NG TO LP

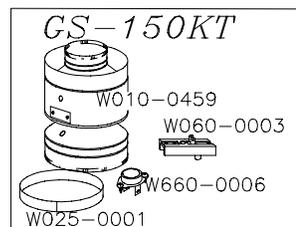


## GDS28:

- BM6745 45° ELBOW
- GD-301 HEAT GUARD
- W175-0001 4" COUPLER
- GD-303 VINYL SIDING SHIELD
- GD-201 PERISCOPE

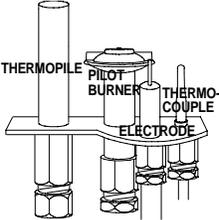
## GS28:

- GS-150KT ADAPTOR KIT
- W025-0001 DECORATIVE BRASS BAND



# TROUBLE SHOOTING GUIDE 21

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
	Pilot will not light.	<ul style="list-style-type: none"> <li>- check if pilot can be lit by a match</li> <li>- check that the wire is connected to the push button ignitor.</li> <li>- check if the push button ignitor needs tightening.</li> <li>- replace the wire if the wire insulation is broken or frayed.</li> <li>- replace the electrode if the ceramic insulator is cracked or broken.</li> <li>- replace the push button ignitor.</li> </ul>
	Spark gap is incorrect	- spark gap should be 0.150" to 0.175" (5/32" to 11/64" approx.) from the electrode tip and the pilot burner. To ensure proper electrode location, tighten securing nut (finger tight plus 1/4 turn).
	No gas at the pilot burner	<ul style="list-style-type: none"> <li>- check that the manual valve is turned on.</li> <li>- check the pilot orifice for blockage.</li> <li>- replace the valve.</li> <li>- call the gas distributor.</li> </ul>
	Out of propane gas.	- fill the tank.
Pilot goes out when the gas knob is released.	System is not correctly purged.	- purge the gas line with the glass door open.
	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.	<ul style="list-style-type: none"> <li>- turn up pilot flame.</li> <li>- replace pilot assembly.</li> </ul>
	Thermocouple shorting.	<ul style="list-style-type: none"> <li>- loosen and tighten thermocouple.</li> <li>- clean thermocouple and valve connection.</li> <li>- replace thermocouple.</li> <li>- replace valve.</li> </ul>
	Faulty thermocouple.	- replace.
Faulty valve.	- replace.	
Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on.	Main burner orifice is plugged.	- remove stoppage in orifice.
	Faulty thermopile.	- replace.
	Faulty thermostat or switch.	<ul style="list-style-type: none"> <li>- connect a jumper wire across the wall switch terminals; if main burner lights, replace thermostat.</li> <li>- disconnect the switch wires &amp; connect a jumper wire across terminals 1 &amp; 3; if the main burner lights, check the wires for defects and / or replace wires.</li> </ul>
	Faulty valve.	- replace.
Pilot goes out while standing; Main burner is in 'OFF' position.	Gas piping is undersized.	<ul style="list-style-type: none"> <li>- turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor supply pressure.</li> <li>- check if supply piping size is to code. Correct all undersized piping.</li> </ul>
Main burner goes out; pilot stays on.	Pilot flame is not large enough or not engulfing the thermopile.	<ul style="list-style-type: none"> <li>- turn up pilot flame.</li> <li>- replace pilot assembly.</li> </ul>
	Thermopile shorting	- clean thermopile and thermopile connection to valve.
	Remote wall switch wire is too long, too much resistance in the system	- shorten wire to correct length or wire gauge.
	Faulty thermostat or switch	- replace
	<b>MODEL GS28 ONLY:</b>	- test with spill switch bypassed. Replace if defective.
	Venting is spilling	- check for vent blockage.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner goes out; pilot goes out.	REFER TO "MAIN BURNER GOES OUT; PILOT STAYS ON"	
	Vent re-circulating <b>(MODEL GDS28 ONLY)</b>	- check joint seals and installation.
Exhaust fumes smelled in room, headaches.	Thermocouple shorting or faulty.	- loosen and tighten thermocouple - clean thermocouple and valve connection. - replace thermocouple. - replace valve.
	Fireplace is spilling.	- check all seals.
Carbon is being deposited on glass, logs or combustion chamber surfaces.	Air shutter has become blocked	- ensure air shutter opening is free of lint or other obstructions.
	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 vent liners are free of holes and well sealed at all joints. - check that minimum rise per foot has been adhered to for any horizontal venting. - when heating with propane, ensure that the screen frame is secured as far to the back of the fireplace as possible.
Door sticking.	Dirt / dust adheres to the hinges; is heated and burns causing sticking.	- lift door from its hinges. Lubricate with <i>high-temp dry graphite only</i> . Replace. <b>NOTE:</b> Due to the high temperatures that the hinges experience, wet lubricants such as oil and WD40 will cause the hinge to seize and are therefore not suitable.
<b>MODEL GDS28 ONLY:</b> 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 20 to ensure correct location of storm collars
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	- clean the glass with a recommended gas fireplace glass cleaner. <b>DO NOT CLEAN GLASS WHEN HOT.</b> If deposits are not cleaned off regularly, the glass may become permanently marked.



