CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CSA 2.33 AND ANSI Z21.88 RESPECTIVELY FOR VENTED GAS-FIRED SPACE HEATING APPLIANCES.



FIREPLACES

GAS-FIRED GRAVITY DIRECT VENT WALL FURNACE

INSTALLATION AND OPERATION INSTRUCTIONS FOR:

NATURAL GAS MODEL GDS3700 - N PROPANE GAS MODEL GDS3700 - P

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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PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

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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

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 mobile housing CAN/CSA ZA240 MH Series in Canada or ANSI Z223.1-1988 and NFPA 54-1988 in the United States.

PURGE ALL GAS LINES WITH THE GLASS DOOR OF THE 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.

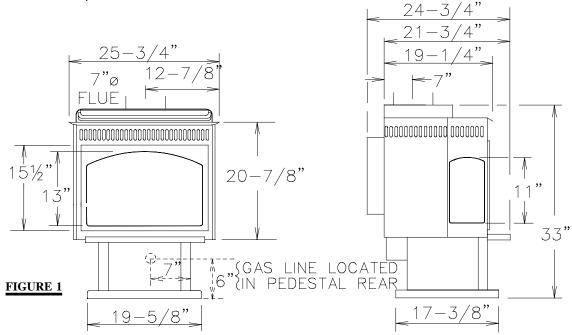
The stove, when installed with a blower, must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70-1990 NATIONAL ELECTRICAL CODE in the United States. The blower power cord 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.

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. When the fireplace is installed at elevations above 4,500ft, and in the absense 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 1,000ft. 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. 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 10 inches water column for propane.

This stove is not approved for closet or recessed installations. It is approved for bathroom, bedroom and bed-sitting room installations and is suitable for mobile homes..The natural gas model is suitable for installation in a mobile home that is permanently positioned on its site and fueled with natural gas. 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.



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.

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 vour Napoleon dealer.

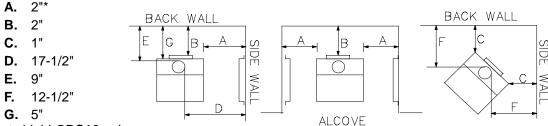
The glass is 3/16" ceramic glass available from your Napoleon / Wolf Steel Ltd. dealer. DO NOT SUBSTITUTE MATERIALS. Clean the glass after the first 10 hours of operation with a recommended gas fireplace glass cleaner. Thereafter clean as required. DO NOT CLEAN GLASS WHEN HOT! If the glass is not kept clean permanent discolouration and / or blemishes may result.

VENTING

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:



^{*} with use of heat shield GDS16 only.

The heat shield is required when dimension A is less than 8".

minimum 18" from stove top to ceiling

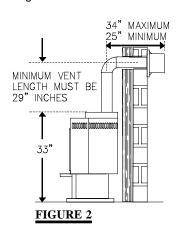
The stove may be installed into an alcove using 2 heat shields.

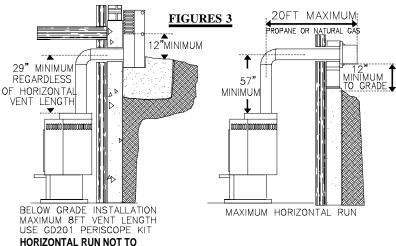
NO ADDITIONAL FLOOR PROTECTION IS REQUIRED.

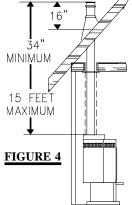
Use only Napoleon or Simpson Dura-Vent Model DV-GS venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, follow the installation procedure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

These vent kits allow for either horizontal or vertical venting of the stove. **FIGURES 2, 3, & 4**. The maximum number of 4" flexible connections is two horizontally or three 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.

THE MAXIMUM HORIZONTAL RUN WITH A 57 INCH VERTICAL RISE IMMEDI-ATELY ABOVE THE STOVE IS 20 FEET.

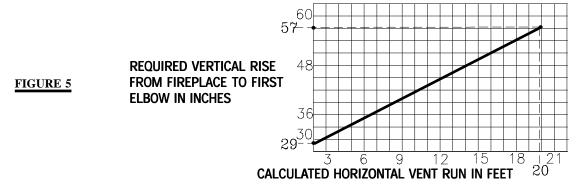
IF VERTICAL RISES GREATER THAN 57 INCHES ARE NECESSARY, THE INCREASED RISE MUST BE DEDUCTED FROM THE HORIZONTAL RUN.

When terminating vertically, the minimum vertical rise is 34 inches above the stove and the maximum vertical rise is 15 feet. **FIGURE 4.** *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**.

Use the chart on this page to calculate horizontal runs for vertical rises between 29 and 57 inches. **FIGURE 5.** 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.)

EXCEED VERTICAL RISE



The total run is:

5 ft. (through the roof vertical rise)

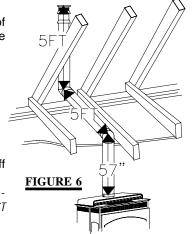
10 ft. (90° elbow)

5 ft. (horizontal run)

20 ft. (total run)

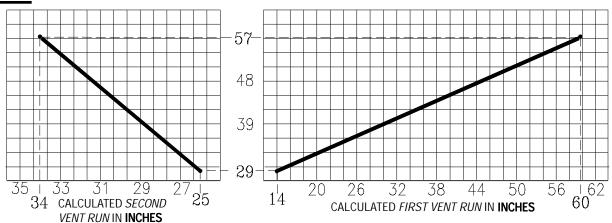
Using the chart, will determine that a 57 inch minimum vertical rise immediately off the unit is required for satisfactory venting conditions.

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



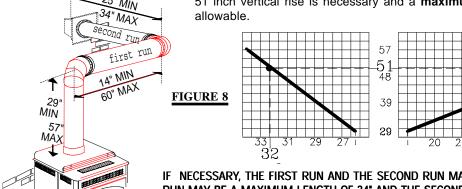
Use the chart below to calculate the required horizontal run from the fireplace in an offset installation.

FIGURE 7



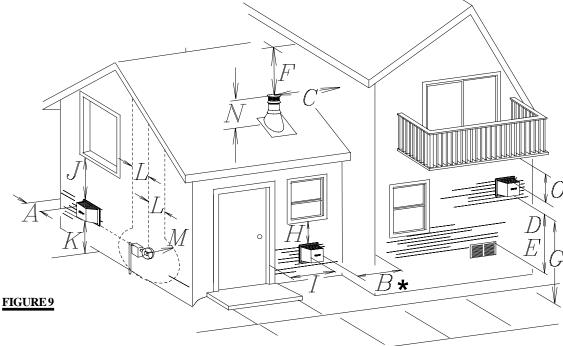
OFFSET INSTALLATION EXAMPLE

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.



IF NECESSARY, THE FIRST RUN AND THE SECOND RUN MAY BE REVERSED SO THAT THE FIRST RUN MAY BE A MAXIMUM LENGTH OF 34" AND THE SECOND RUN 60" MAXIMUM.

The air terminal must be located with the minimum clearances as illustrated in FIGURE 9:



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

Two inches from outside combustible corner walls.

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

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

- * The periscope requires a minimum 18" clearance from an inside corner.
- (C) **Two feet** from adjacent walls, including neighbouring buildings.
- (D) **One foot** from the sides, top and bottom of a non-mechanical combustion or ventilation air supply.
- (E) **Six feet** from mechanical combustion or ventilation air supplies.
- (F) **One foot** to an unventilated soffit located above the terminal or **eighteen inches** to a ventilated soffit located above the terminal, provided the soffit is sealed for a distance of 24 inches either side of the centre line of the terminal.

- (G) **Seven feet** above public walkways unless fitted with heat shield kit GD301.
- (H) One foot below windows that open.
- (I) **One foot** from the side of doors and windows that open.
- (J) One foot from permanently closed windows.
- (K) One foot above grade.
- (L) NOT above a regulator/meter assembly or within **three feet** horizontally from the vertical centre-line of the assembly.
- (M) Six feet from a gas service regulator vent outlet.
- (N) **Sixteen inches** above the roof.
- (O) **One foot** to the underside of a veranda, porch, deck or balcony that has a minimum of two open sides.

All horizontal runs, runs must have a minimum 1 inch rise per foot.

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 1¼" air gap all around between the inner liner and outer liner is required for safe operation. Use a firestop when penetrating interior walls, floor or ceiling.

VENTING SPECIFICS

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

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

HORIZONTAL VENTING INSTALLATION

This application occurs when venting through an exterior wall. FIGURES 2, 3, & 10.

Having determined the air terminal location:



FIGURE 11

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.

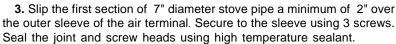
2. Stretch the 4" diameter aluminum flexible liner to the required length taking into account the additional length needed for the finished wall surface.

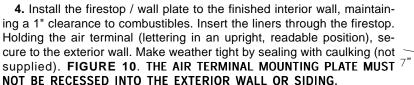
SPACERS ARE ATTACHED TO THE 4" INNER FLEX LINER

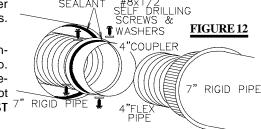
AT PREDETERMINED INTERVALS TO MAINTAIN A 1-1/4" AIR

GAP TO THE 7" OUTER STOVE PIPE. THESE SPACERS MUST NOT BE REMOVED. Slip
a 4" diameter length of aluminum 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. FIGURE 12.







CAULKING

OVERLAP

HI-TEMP SEALANT

FIGURE 10

5. If more than one length of liner needs to be used to reach the stove, couple them together as illustrated in **Figure 12**. Seal the joints using the same procedure as described in Item 3.

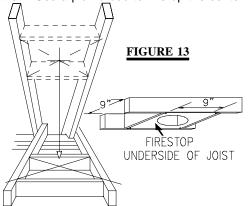
The vent system must be supported approximately every 10 feet along a horizontal run. Use supports or equivalent non-combustible strapping to maintain the 1" clearance from combustibles.

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

VERTICAL VENTING INSTALLATION

THIS APPLICATION OCCURS WHEN VENTING THROUGH A ROOF **FIGURE 4**. Installation kits for various roof pitches are available from your Napoleon dealer. See page 5 to order the specific kit required.

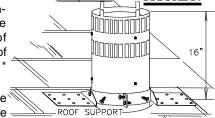
1. Move the stove into position. Try to center the exhaust of the stove midway between two joists to prevent having to cut them. Use a plumb bob to line up the center of the opening.



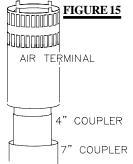
2. Cut and frame a 9" opening in the roof to provide a 1" clearance between the stove pipe and any combustible material. DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL. Nail headers between the joists for extra support. A firestop/wall plate must be placed on the bottom of each framed opening in a 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. Fasten the roof support to the roof using the screws provided. The =



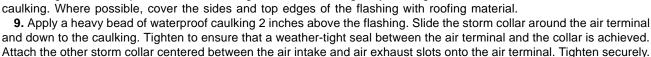
roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.



- **5.** Apply high temperature sealant to the outer edge of the inner sleeve of the air terminal. Slip a 4" diameter coupler a minimum of 2" over the sleeve and secure using 3 screws.
- **6.** Apply high temperature sealant to the outer edge of the of the outside sleeve of the air terminal. Slip a 7" diameter coupler over the sleeve and secure as before. Trim the 7" coupler even with the 4" coupler end.

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

- **7.** 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.
- 8. 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 roofin



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 GD175 KIT). IN THE EVENT THAT THE VENTING MUST BE DISASSEMBLED, CARE MUST BE TAKEN TO RESEAL THE VENTING.

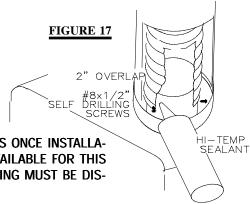


FIGURE 16

AIR TERMINAL

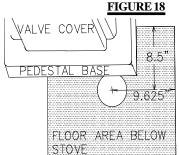
WEATHER SEALANT

FLASHING

STORM COLLARS

CAULKING

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 18**. 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 FLEXIBLE CONNECTOR.

Check for gas leaks by brushing on a soap and water solution.

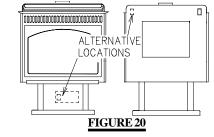


DO NOT USE OPEN FLAME.

Alternate locations for the on-off switch are shown in **FIGURE 20.** For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route single strand millivolt wire through the electrical hole located at the left rear side of the pedestal. The recommended maximum lead length depends on the wire size:

| WIRE SIZE | MAX. LENGTH | |
|-----------|-------------|-------|
| 14gauge | 100 feet | |
| 16gauge | 60 feet | 3 0 6 |
| 18gauge | 40 feet | |

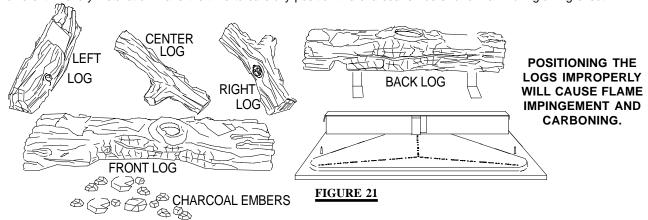
Attach the two leads to terminals 1 and 3 located on the gas valve



FINISHING

LOG PLACEMENT INSTRUCTIONS / CHARCOAL EMBERS

PHAZERTM 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.



- 1. Place the front log onto the main burner, placing it 1/4" 3/8" away from the burner ports to avoid blocking/covering them. The left and right spacing between the log ends and the burner ports should be equal. Press down onto the skewering screws. 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 21.**
- **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.

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.

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 22.** 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. $PHAZER^{\text{TM}}$ logs and charcoal embers glow when exposed to direct flame. Use only certified $PHAZER^{\text{TM}}$ logs and charcoal embers available from your Napoleon / Wolf Steel Ltd. dealer.



FIGURE 22

12 OPERATION / MAINTENANCE

OPERATING INSTRUCTIONS

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

FOR YOUR SAFETY READ BEFORE OPERATING

- 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. 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 re-lighting, the gas knob cannot 5. Turn gas knob counter-clockwise F be turned from pilot to off unless the knob is depressed slightly.

- 1.Stop! Read the above safety information \(\opi \)
- on this label.
- 3. Turn the gas knob clockwise to off.
- 4. Wait five (5) minutes to clear out any gas. If you smell gas including near the floor. Stop! Follow "B" in the above safety information on this label. If you don't smell gas go the next step.
- 6.Depress slightly and hold gas knob while lighting the pilot with the push button ignitor. Keep knob depressed for one minute, then release. If pilot does not continue to burn, repeat steps 3 through 5.

- 2.Turn off all electric power to the fireplace. GAS KNOB 7.With pilot lit, depress and turn gas knob counter-clockwise mon.
 - 8.If equipped with remote on-off switch/thermostat, main burner may not come on when you turn valve to on. Remote switch must be in the on position to ignite burner.
 - 9. Turn on all electric power to the fireplace.

INSTRUCTIONS TO TURN OFF GAS:

1. Turn off all electrical power to the unit if service is to be performed.

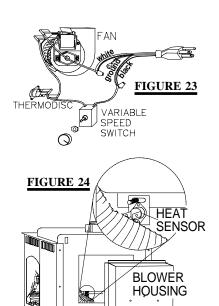
2. Push in gas control knob slightly and turn clockwise / to off. DO NOT FORCE.

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

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This fireplace and its venting system should be inspected before use and at least annually by a qualified service person. The fireplace area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids. The flow of combustion and ventilation air must not be obstructed.

- 1. In order to properly clean the burner and pilot assembly, remove the logs to expose both assemblies.
- 2. Keep the control compartment, logs, burner, air shutter opening 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. (end brick panel must be removed in order to facilitate burner removal, where applicable.)
- 4. Check to see that the pilot flame is large enough to engulf the thermocouple and thermopile and reaches toward the burner with the third jet.
- 5. Replace the cleaned logs.
- 6. Check to see that the main and runner burners ignite completely on all openings when the gas knob for the burners is turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer / distribu-
- 7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.

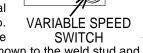
OPTIONAL BLOWER INSTALLATION 13



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

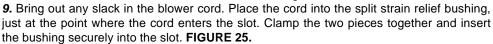
after the stove has been turned off. Use of the fan increases the output of heat.

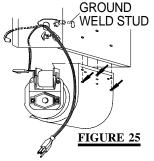
1. Mount the variable speed switch: insert the rheostat stem through the 3/8" diameter hole in the pedestal and from the front secure with the pal nut. Add the knob.



2. Remove the blower housing located at the rear of the SWITCH stove. Attach the bracket holding the heat sensor as shown to the weld stud and secure using one of the #6 nuts. **FIGURE 24.**

- **3.** Attach the bare end of the wire (with one bare lead / one flag connector end) to the **black** wire of the speed switch using a nut connector. Attach the flag connector at the other end to one of the prongs of the heat sensor.
- 4. Thread the leads of the power cord through the slot located at the bottom left of the blower housing. Attach the terminal of the ground wire (green) to the threaded weld stud and secure with a nut.
- **5.** Connect one of the two bare leads of the other wire to the **white** wire of the speed switch using a nut connector. Connect the other end to the bare lead wire of the blower cord using a nut connector.
- 6. Attach the other terminal of the wire (already attached to the blower) to the heat sensor.
- 7. Mount the cord terminal to the other blower prong.
- 8. Using the holes shown, attach the blower to the blower housing.

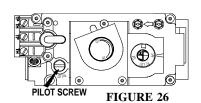


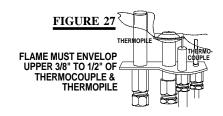


ADJUSTMENTS

PILOT BURNER ADJUSTMENT

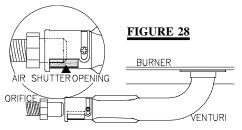
Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow. FIGURES 26 & 27.





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 1/4 (.250) inch open. Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.



14 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

| PART # | DESCRIPTION | PART # | DESCRIPTION |
|--------------|--------------------------------------|-------------|------------------------------------|
| GA GI 135.07 | BACK LOG | GI 010.364 | BURNER ASSEMBLY - NG |
| GA-GI-135.06 | FRONT LOG | GDS-010.361 | BURNER ASSEMBLY - LP |
| GA GI 135.08 | LEFT LOG | WS-725-25 | S.I.T. VALVE - NG |
| GA GI 135.10 | RIGHT LOG | WS-725-26 | S.I.T. VALVE - LP |
| GA GI 135.09 | CENTER LOG | WS-455-04 | #36 NG MAIN BURNER ORIFICE |
| GL-610 | LOG SET ASSEMBLY C/W CHARCOAL EMBERS | WS-455-03 | #54 LP MAIN BURNER ORIFICE |
| GA GI-550.01 | CHARCOAL EMBERS | WS-455-13 | #37 HIALT NG MAIN BURNER ORIFICE |
| WS-660-09 | BURNER ON/OFF SWITCH | WS-455-02 | #55 HIALT LP MAIN BURNER ORIFICE |
| WS-380-007 | PILOT ON/OFF KNOB EXTENSION | WS-357-01 | PIEZO IGNITOR |
| WS-385-33 | NAPOLEON LOGO | WS-100-38 | PILOT ASSEMBLY - NG |
| WS-300-22 | FRONT DOOR GLASS | WS-100-39 | PILOT ASSEMBLY - LP |
| WS-300-21 | SIDE WINDOW GLASS | WS-455-23 | #51 PILOT ORIFICE - NG |
| GDS-280.20 | FRONT DOOR FRAME | WS-455-24 | #30 PILOT ORIFICE - LP |
| GDS-280.21 | SIDE DOOR FRAME | WS-680-05 | THERMOCOUPLE |
| GS-010.441 | FRONT GLASS & GASKET | WS-680-04 | THERMOPILE |
| GS-010.442 | SIDE GLASS & GASKET | GS 325PB | POLISHED BRASS FACIA |
| GDS-562.014 | FRONT GLASS GASKET | CL29 PB | CANOPY LOUVRE SET - POLISHED BRASS |
| GDS-562.015 | SIDE GLASS GASKET | WS 573-008 | HIGH TEMPERATURE SEALANT |
| WS-380-006 | FLAME ADJUSTMENT KNOB EXTENSION | EP-230K | BLACK TRIVET |
| EP-715.73 | ASH FENDER TRIM C/W CORNER BRACKETS | | |

TERMINATION KITS - ALL KIT ITEMS MAY BE PURCHASED SEPARATELY

| GD175 - | WALL TERMINAL KIT | | |
|------------|--|------------|-----------------------|
| PART # | DESCRIPTION | PART # | DESCRIPTION |
| BM6790 | 90° ELBOW - 7" DIAMETER | GD222 | TERMINAL ASSEMBLY |
| BM67ADJ | 30" TO 53" ADJUSTABLE PIPE - 7" DIAMETER | GDS-500.77 | FIRESTOP / WALL PLATE |
| GDS-020.32 | HARDWARE | BRTC7 | BRASS TRIM COLLAR |
| BM6724 | 24" STOVE PIPE - 7" DIAMETER | GDS-25.01 | DECORATIVE BRASS BAND |
| GS-10 300 | 10' ALLIMINI IM ELEXIBLE LINER C/W SPACERS - 4" DIAMETER | | |

| GS-10.300 | 10 ALOMINOM FLEXIBLE LINER C/W SPACERS - 4 DIAMETER | | |
|-----------|---|------------|-----------------------|
| GD180 | - PERISCOPE TERMINAL KIT | | |
| PART # | DESCRIPTION | PART # | DESCRIPTION |
| BM6790 | 90° ELBOW - 7" DIAMETER | GD201 | PERISCOPE |
| BM67ADJ | 30" TO 53" ADJUSTABLE PIPE - 7" DIAMETER | GDS-500.77 | FIRESTOP / WALL PLATE |
| GDS-020.3 | 2 HARDWARE | BRTC7 | BRASS TRIM COLLAR |
| BM6724 | 24" STOVE PIPE - 7" DIAMETER | GDS-25.01 | DECORATIVE BRASS BAND |
| GS-10.300 | 10' ALUMINUM FLEXIBLE LINER C/W SPACERS - 4" DIAMETER | | |

| GD110 - | ROOF TERMINAL I | KIT - 1/12 TO 7/12 PITCH | | |
|------------|-----------------|---------------------------|---------------|--------------|
| PART # | DESCRIPTION | PART # DESCRIPTION | PART # | DESCRIPTION |
| GD-010.569 | AIR TERMINAL | WS-170-063 STORM COLLAR | GA-GD-010.567 | ROOF SUPPORT |
| GD-120.036 | VERTICAL CAP | WS-263-054 ROOF FLASHING | | |
| GD111 - | ROOF TERMINAL I | KIT - 8/12 TO 12/12 PITCH | | |

PART # DESCRIPTION PART # DESCRIPTION
GD-010.569 AIR TERMINAL WS-170-063 STORM COLLAR
GD-120.036 VERTICAL CAP WS-263-055 ROOF FLASHING

PART # DESCRIPTION
GA-GD-010.567 ROOF SUPPORT
WS-263-055 ROOF FLASHING

GD112 - ROOF TERMINAL KIT - FLAT ROOF

PART # DESCRIPTION PART # DESCRIPTION
GD-010.569 AIR TERMINAL WS-170-063 STORM COLLAR

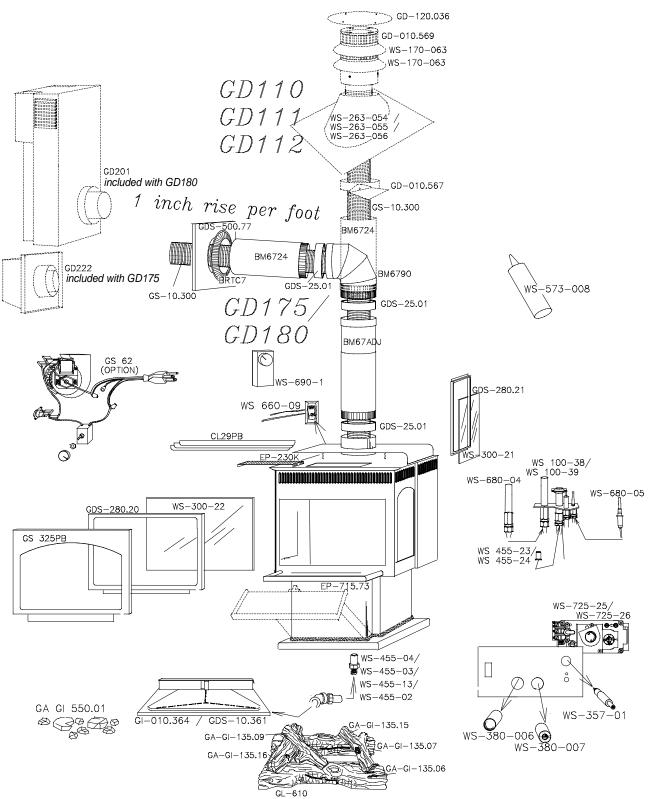
GA-GD-010.567 ROOF SUPPORT

WS-263-056 ROOF FLASHING

ACCESSORIES / OPTIONS

GD-120.036 VERTICAL CAP

| PART# | DESCRIPTION | PART # | DESCRIPTION | PART # | DESCRIPTION |
|-------|-------------------------|---|---|--|--|
| GD101 | WINDSHIELD KIT | BM6745 | 45° ELBOW | GDS924N | DURAVENT STOVE ADAPTOR |
| GD301 | HEAT GUARD | GS 62 | BLOWER KIT C/W VARIABLE SPEED CONTROL | WS-175-01 | 4" COUPLER |
| GD303 | VINYL SIDING SHIELD | WS-690-1 | MILLIVOLT WALL SWITCH THERMOSTAT | GS-230G | GOLD PLATED TRIVET |
| GD201 | PERISCOPE | WS-660-010 | REMOTE CONTROL - ADVANTAGE | WS-660-011 | REMOTE CONTROL - ADVANTAGE PLUS |
| | GD101 GD301 GD303 | GD101 WINDSHIELD KIT GD301 HEAT GUARD GD303 VINYL SIDING SHIELD | GD101 WINDSHIELD KIT BM6745 GD301 HEAT GUARD GS 62 GD303 VINYL SIDING SHIELD WS-690-1 | GD101 WINDSHIELD KIT BM6745 45° ELBOW GD301 HEAT GUARD GS 62 BLOWER KIT c/w variable speed control GD303 VINYL SIDING SHIELD WS-690-1 MILLIVOLT WALL SWITCH THERMOSTAT | GD101 WINDSHIELD KIT BM6745 45° ELBOW GDS924N GD301 HEAT GUARD GS 62 BLOWER KIT c/w variable speed control WS-175-01 GD303 VINYL SIDING SHIELD WS-690-1 MILLIVOLT WALL SWITCH THERMOSTAT GS-230G |



16 TROUBLE SHOOTING GUIDE

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

| Pilot will not light. 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 electrode if the carnain insulator is cracked or broken replace the push button ignitor check that the wire is the wire insulation is broken or frayed replace the push button ignitor check the push button ignitor check the push button ignitor check the push button ignitor spark gap should be 0.150° to 0.175° (5/32° to 11/64° approx.) - from the electrode tip and the pilot burner check that the manual valve is turned on full the gas distributor. - fill the tank. - purple the gas line. - purple the gas line turn up pilot flame turn up the pilot flame turn up pilot flame replace the minual valve connection replace the minual valve connection replace replace replace replace replace replace turn on all gas appliances and see if pilot flame flutt | SYMPTOM | PROBLEM | TEST SOLUTION |
|--|---|----------------------------------|--|
| 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 Check that the manual valve is turned on. - check that the manual valve is turned on. - turn up pilot flame. - turn up pilot flame flutters, diminishes or eplace. - 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. - turn up pilot flame. - replace. - turn up pilot flame. - tur | THERMOPILE PILOT THERMO- | No spark at pilot burner | 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. |
| - check the pilot orifice for blockage replace the valve call the gas distributor. Out of propane gas. - fill the tank. Pilot goes out when the gas knob is released. Pilot flame is not correctly purged purge the gas line. Out of propane gas - fill the tank. Pilot flame is not large enough - turn up the pilot flame. The gas valve has an Pilot flame is not large enough the pilot burner to be lit until the thermocouple. which will not allow the pilot burner to be fit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool. Pilot burning; no gas knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile and thermopile and thermopile connection to valve. Pilot goes out while standing; Main burner goes out; pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Thermopile shorting - check the pilot flame or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Thermopile shorting - check the pilot flame. - check fi supply piping size is to code. Correct all undersized piping. Pilot flame is not large enough or not engulfing the thermopile. - clean thermopile and thermopile connection to valve. | COUPLE | Spark gap is incorrect | from the electrode tip and the pilot burner. To ensure proper electrode location, tighten securing nut (finger tight plus 1/4 |
| Pilot goes out when the gas knob is released. Out of propane gas - fill the tank. Pilot flame is not large enough - turn up the pilot flame. The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple. Thermocouple shorting. Thermocouple shorting. Thermocouple shorting. Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot stays on. Pilot stays on. System is not correctly purged fill the tank. Pilot flame is not large enough - turn up pilot flame replace hermocouple replace hermocouple replace repl | | No gas at the pilot burner | check the pilot orifice for blockage.replace the valve. |
| the gas knob is re- leased. Out of propane gas Pilot flame is not large enough Pilot flame is not engulfing the thermocouple. The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple shorting. Thermocouple shorting. Thermocouple shorting. Thermocouple shorting. Faulty thermocouple. Faulty valve. Faulty valve. Faulty thermostat or switch. Faulty valve. Faulty val | | Out of propane gas. | - fill the tank. |
| Pilot flame is not large enough - turn up pilot flame. - turn up | • | System is not correctly purged. | - purge the gas line. |
| 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. Pilot burning; no gas to main burner; gas knob is on "HI"; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in "OFF" position. Pilot flame is not large enough - turn up pilot flame. - clean thermocouple. - replace valve. - replace. - re | _ | Out of propane gas | - fill the tank. |
| 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. Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot stays on. Hermocouple shorting. - replace demensoruple and valve connection. - clean thermocouple and valve connection. - replace valve. - replace. - turn on all gas appliances and see if pilot flame flut | leased. | Pilot flame is not large enough | - turn up the pilot flame. |
| the pilot burner to be lit until the thermocouple as cooled. Allow approximately 60 seconds for the thermocouple to cool. Pilot burning; no gas knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot stays on. Pilot flame is not large enough or not engulfing the thermopile. Pilot gloes out while stays on. Pilot flame is not large enough or not engulfing the thermopile. Remote wall switch wire is too long, too much resistance in the system Pilot goes out wile slict the milotouple and valve connection. - clean thermocouple and valve connection. - replace. - replace | interlock device | | |
| Faulty valve. Faulty thermocouple. Faulty valve. Faulty thermopile. | the pilot burner to be lit until the thermo- couple has cooled. | Thermocouple shorting. | clean thermocouple and valve connection.replace thermocouple. |
| Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner gis in 'OFF' position. Main burner goes out; pilot stays on. Pilot burning; no gas to main burner orifice is plugged. Faulty thermopile. Faulty valve. Faulty thermopile. Faulty val | | Faultly thermocouple. | - replace. |
| to main burner; gas knob is on 'HI'; wall switch / thermostat is on. Faulty themostat or switch. Faulty valve. Faulty themostat or switch. Faulty themostat or switc | | Faulty valve. | - replace. |
| knob is on 'HI'; wall switch / thermostat is on. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot stays on. Pilot flame is not large enough or not engulfing the thermopile. Pilot flame is not large enough or not engulfing the thermopile. Remote wall switch wire is too long, too much resistance in the system Paulty themostat or switch. - ensure proper connection. - 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. - turn up pilot flame. - replace. - 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. - turn up pilot flame. - replace. - 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. - turn up pilot flame. - replace. - 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. - turn up pilot flame. - replace. - 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. - turn up pilot flame. - replace. | | Main burner orifice is plugged. | - remove stoppage in orifice. |
| switch / thermostat is on. Faulty valve. Faulty valve. - ensure proper connection. - replace. Pilot goes out while standing; Main burner is in 'OFF' position. Main burner goes out; pilot stays on. Pilot flame is not large enough or not engulfing the thermopile. Thermopile shorting Remote wall switch wire is too long, too much resistance in the system - ensure proper connection. - 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. - turn up pilot flame. - replace pilot assembly. - clean thermopile and thermopile connection to valve. - shorten wire to correct length or wire gauge. | | | - replace. |
| Pilot goes out while standing; Main burner is in 'OFF' position. - 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. - turn up pilot flame. - replace pilot assembly. - clean thermopile and thermopile connection to valve. - shorten wire to correct length or wire gauge. | * | Faulty themostat or switch. | - ensure proper connection. |
| diminishes or extinguishes, especially when main burner ignites. Monitor supply pressure. - check if supply piping size is to code. Correct all undersized piping. Pilot flame is not large enough or not engulfing the thermopile. Thermopile shorting Remote wall switch wire is too long, too much resistance in the system diminishes or extinguishes, especially when main burner ignites. Monitor supply pressure. - turn up pilot flame. - replace pilot assembly. - clean thermopile and thermopile connection to valve. - shorten wire to correct length or wire gauge. | on. | Faulty valve. | - replace. |
| Main burner goes out; pilot stays on. Thermopile shorting Remote wall switch wire is too long, too much resistance in the system - replace pilot assembly. - clean thermopile and thermopile connection to valve. - shorten wire to correct length or wire gauge. | standing; Main burner | Gas piping is undersized. | diminishes or extinguishes, especially when main burner ignites. Monitor supply pressure check if supply piping size is to code. Correct all undersized |
| Thermopile shorting - clean thermopile and thermopile connection to valve. Remote wall switch wire is too long, too much resistance in the system - clean thermopile and thermopile connection to valve. - shorten wire to correct length or wire gauge. | _ | | |
| long, too much resistance in the system | pilot stays on. | Thermopile shorting | - clean thermopile and thermopile connection to valve. |
| Faulty thermostat or switch - replace | | long, too much resistance in the | - shorten wire to correct length or wire gauge. |
| | | Faulty thermostat or switch | - replace |

SYMPTOM PROBLEM TEST SOLUTION 17

| Main burner goes out; | REFER TO "MAIN BURNER GOES OUT; PILOT STAYS ON" | | | |
|---|---|--|--|--|
| pilot goes out. | Vent re-circulating | - check joint seals and installation. | | |
| | Thermocouple shorting or faulty. | loosen and tighten thermocouple clean thermocouple and valve connection. replace thermocouple. replace valve. | | |
| Main burner flame is a blue, lazy, transpar- | Blockage in vent. | - remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required. | | |
| ent flame. | Incorrect installation. | - refer to Figure 16 to ensure correct location of storm collars. | | |
| Exhaust fumes smelled in room, headaches. | Fireplace is spilling. | check all seals. check for chimney blockage check that chimney is installed to building code. room is in negative pressure; increase fresh air supply. | | |
| 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") wa- ter 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. Leak test with a soap and water solution. | | |
| Carbon is being deposited on glass, | Air shutter has become blocked | - ensure air shutter opening is free of lint or other obstructions. | | |
| logs or combustion chamber surfaces. | Flame is impinging on the logs or combustion chamber. | check that the logs are correctly positioned. open air shutter to increase the primary air. check the input rate: check the manifold pressure and orifice size as specified by the rating plate values. check that the door gasketing is not broken or missing and that the seal is tight. check that both 4" and 7" vent liners are free of holes and well sealed at all joints. check that minimum rise per foor has been adhered to for any horizontal venting. | | |
| White / grey film forms. | Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces. | clean the glass with a recommended gas glass cleaner or 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 be- come permanently marked. | | |

¹⁸ NOTES: