

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

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CGA 2.22, AND ANSI Z21.50 RESPECTIVELY FOR VENTED GAS FIREPLACES.



**NAPOLEON**  
**FIREPLACES**  
MILLIVOLT SYSTEM

INSTALLATION AND OPERATION INSTRUCTIONS FOR  
VENTED GAS FIREPLACE - GB20

NATURAL GAS *MODEL GB20-N*  
PROPANE GAS *MODEL GB20-P*

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

**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

### WARNING

- Do not burn wood or other materials in this fireplace.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Supervise young children when they are in the same room as the fireplace.
- Due to high temperatures, the fireplace should be located out of traffic and away from furniture and draperies.
- Clothing or other flammable material should not be placed on or near the fireplace.
- Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the fireplace and venting system are kept clean. The fireplace and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The fireplace area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this fireplace be modified.
- This fireplace must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
- Do not operate the fireplace with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person. Use only with a glass door certified with the fireplace.
- Do not strike or slam shut the fireplace glass door.

*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 FIREPLACE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER* to conform with local codes. In absence of local codes, install the **GB20** to the current National Fuel Gas Code, ANSI Z223.1, or the current CAN/CGA B149, Installation Codes.

The fireplace and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The fireplace must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

When the fireplace is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth.

If the optional fan or blower is installed, the junction box 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.

## GENERAL INFORMATION

*FOR YOUR SATISFACTION, THIS FIREPLACE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!* Maximum input for the GB20 is 17,000 BTU/h for natural gas and propane. When the fireplace is installed at elevations above 4,500ft, 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 1,000ft.

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11 inches water column for propane. Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane. Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane.

This fireplace is approved for bedroom and bed-sitting room installation.

**No external electricity (110 volts or 24 volts) is required for the gas system operation.** Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected.

## CARE OF GLASS, AND PLATED PARTS

Do not use abrasive cleaners to clean plated parts. Buff lightly with a clean dry cloth. The GB20 is factory equipped with  $\frac{3}{16}$ " thick tempered glass. Use only replacement glass available from your Napoleon 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.

Use only accessories designed for and listed with your specific fireplace.

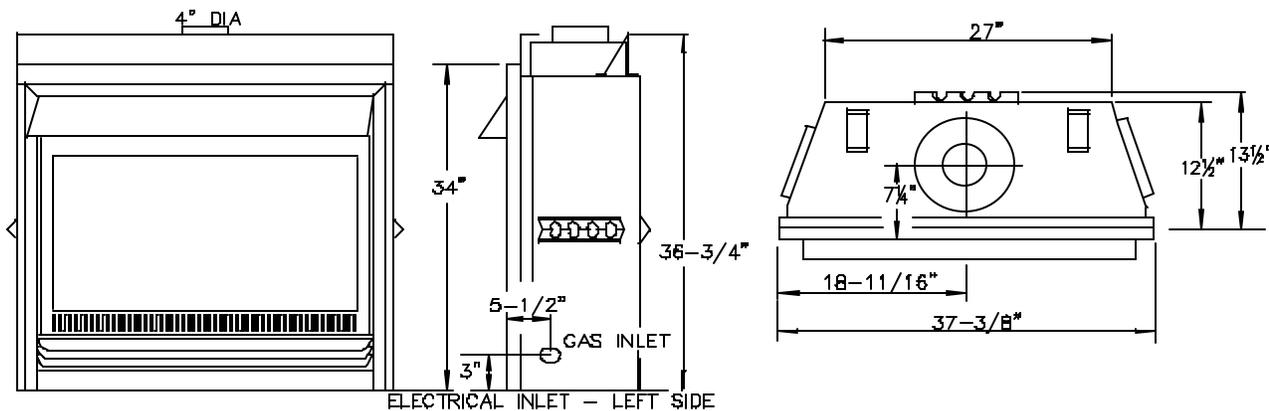
**Provide adequate ventilation and combustion air. Provide adequate accessibility clearance for servicing and operating the fireplace. Never obstruct the front opening of the fireplace.**

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

**For safe and proper operation of the fireplace follow the venting & operating instructions exactly.**

**Provide a means for visually checking the vent connection to the fireplace after the fireplace is installed.**

**The fireplace must be installed against finished walls. Do not install against a vapour barrier or exposed insulation.**



**FIGURE 1**

# VENTING

The GB20 is a vented appliance and must be connected to a chimney in accordance with the current installation codes. In absence of local codes, install to the current National Fuel Gas Code, ANSI Z223.1, or the current CAN/CGA B149, Installation Codes. This model can be common-vented.

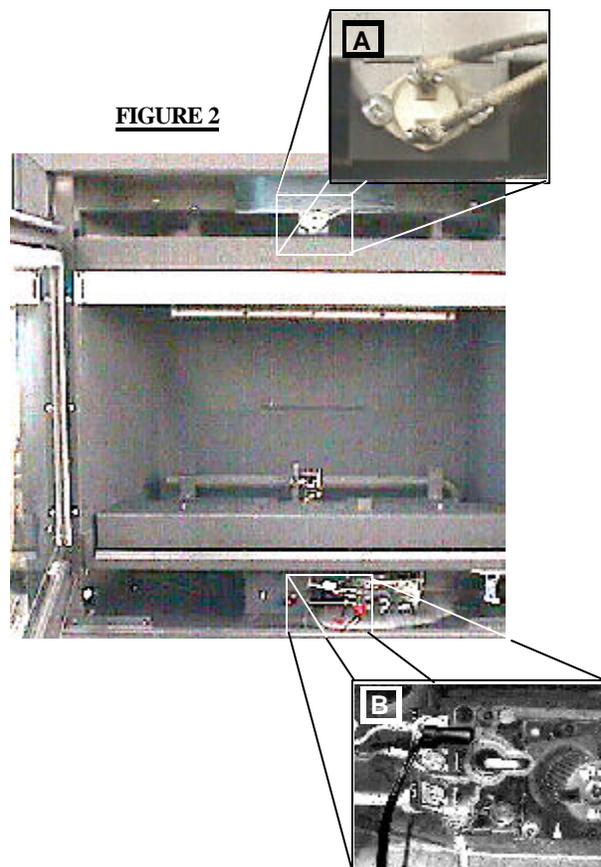
A minimum four inch diameter (4"Ø) B-vent or class A vent is required. Secure the B-vent to the exhaust collar on the stove top with 3 screws. In cold climates, the use of a B-vent and an insulated chase is recommended.

## VENT SAFETY SWITCH

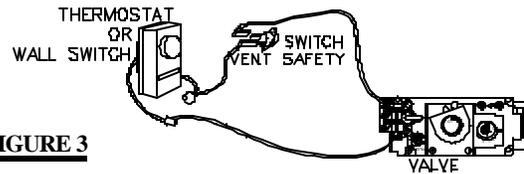
This thermally activated switch, located in front of the draft hood, senses an increase in temperature and acts as a safety shut-off (A). It shuts down the gas to the main burner in the event of a severe downdraft of air or a blocked or disconnected chimney flue. If the flue is blocked or has no "draw", the safety switch will automatically shut off the supply of gas within 10 minutes.

**Tampering with the safety switch can result in carbon monoxide poisoning and possible death.**

The one wire running from the vent safety switch is attached to terminal 1 of the valve (See 'B' below). The other wire (laying loose in the valve control area) may be attached to a wall switch or thermostat.



**FIGURE 2**



**FIGURE 3**

## VENTING ACTION CHECK

**A test for correct venting action must be made before the installed unit can be left with the customer.**

Follow the procedure below:

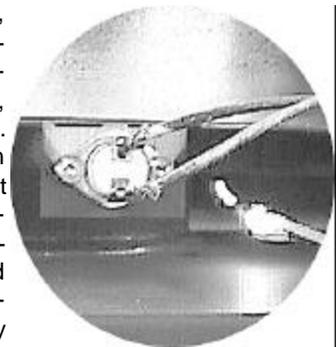
1. Close all doors and windows in the room / start exhaust fans in the home / turn the fireplace blower off (if so equipped).
2. Set controls to "high" and light the unit.
3. Wait 5 minutes. Light a match and hold to the front of the draft hood. **FIGURE 4.**

**Venting action is satisfactory, if smoke and flames are drawn into the draft hood.**



**FIGURES 4**

**Venting action is unsatisfactory, if the smoke spills back, and the flame splays outward. If venting action is unsatisfactory, turn off the unit, wait 10 minutes and try again. If the smoke is still not drawn into the draft hood, turn the unit off and check for vent blockage or restriction. If necessary, consult with a qualified inspector. Until the draft problem is corrected, the safety switch will continue to cycle the main burner on and off.**



**This spillage monitoring system must not be adjusted or disabled.**

**In the event that the spillage monitoring system or any of its parts are exchanged, only original manufacturer's parts may be used.**

# 6 GAS INSTALLATION

**Proceed once the vent installation is complete.**

1. Move the fireplace into position and secure using the nailing tabs and/or secure to the floor through the 1/4" ø holes located at either end of the base.

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

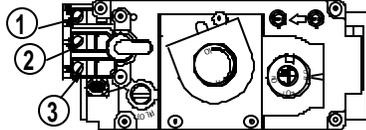
3. For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route 2-strand (solid core) millivolt wire through the electrical hole located at the bottom left side of the unit. The recommended maximum lead length depends on wire size:

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

Attach the one lead to terminal 3 (located on the gas valve) and the other lead to the vent safety switch (located loose in the valve compartment). See **FIGURE 3**.

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

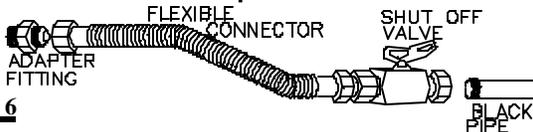
**FIGURE 5**



4. Install rigid black pipe, 1/2" type-L copper tubing or, if local codes permit, a 3/8" flex connector and shutoff valve to the gas line and the fireplace gas valve. Seal and tighten securely. An adapter fitting is required between the gas valve and the copper tubing or flex connector. **DO NOT KINK FLEXIBLE CONNECTOR.** **FIGURE 6.**

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

**Do not use open flame.**

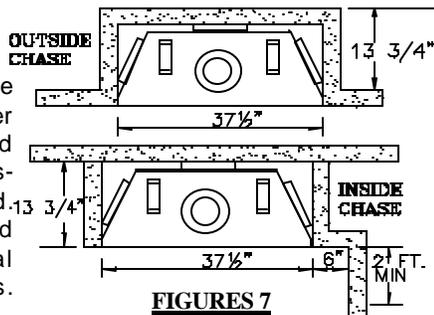


**FIGURE 6**

Purge all gas lines with the glass door of the fireplace open. Assure that a continuous gas flow is at the burner before closing the door.

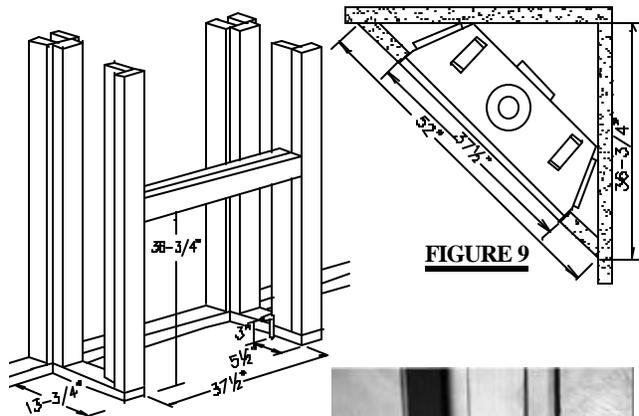
## FRAMING

It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2x4's and frame to local building codes. **FIGURE 7-9.**

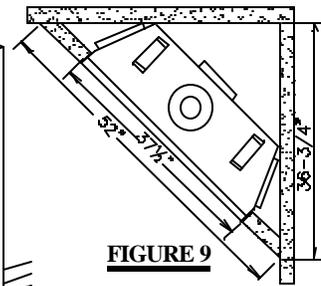


**FIGURES 7**

To install the fireplace face flush with the finished wall, position the framework to accommodate the thickness of the finished wall.



**FIGURE 8**



**FIGURE 9**



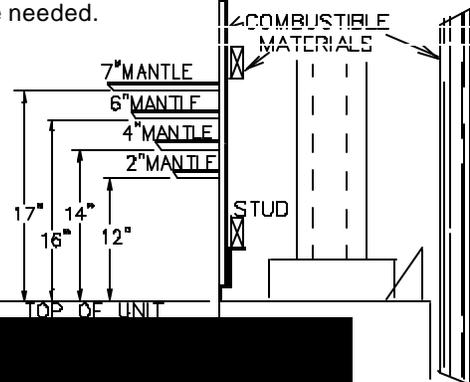
**FIGURE 10**

Bend out the four nailing tabs, attached on either side of the fireplace and secure to the 2x4 framing. The tabs will facilitate the installation of either a 1/2" or a 3/4" finished wall thickness. *The nailing tabs must not be removed.*

Combustible materials may be installed flush with the front of the fireplace but must not cover any of the black face-areas of the fireplace. Non-combustible material (brick, stone or ceramic tile) may protrude in these areas.

It is not necessary to install a hearth extension with this fireplace system. Objects placed in front of the fireplace should be kept a minimum of 48" away from the front face.

Combustible mantle clearance can vary according to the mantle depth. **FIGURES 11.** Use the graph to help evaluate the clearance needed.



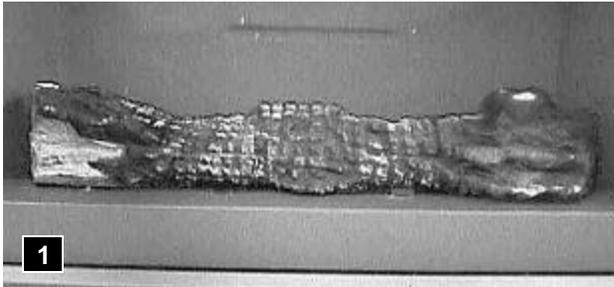
**FIGURES 11**

# FINISHING

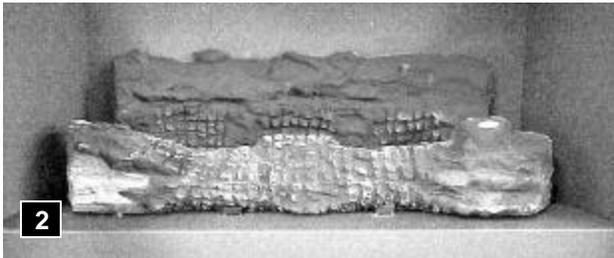
## LOG PLACEMENT

**PHAZER™** logs exclusive to Napoleon Fireplaces, provide a unique and realistic glowing effect that is different in every installation.

**FIGURES 12**



1. Place the front log, as shown, centered along the inside front edge of the burner tray.



2. Place the back log onto the log support bracket, located on the rear wall of the combustion chamber, pushing it as close to the firebox wall as possible.



3. Set the two smaller logs into the pockets and grooves of the front and back logs, respectively.

**POSITIONING THE LOGS IMPROPERLY WILL CAUSE FLAME IMPINGEMENT AND CARBONING.**

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

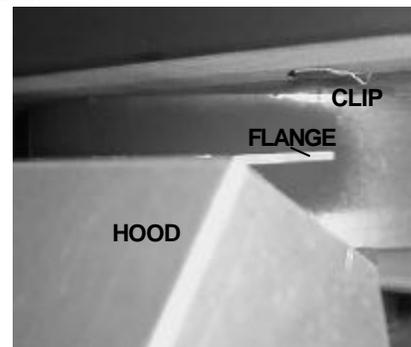
## DOOR, HOOD, AND OPTIONAL LOUVRE REMOVAL & INSTALLATION

**FIGURE 13**



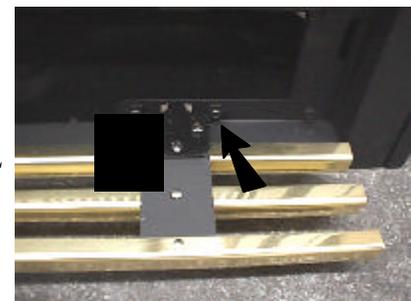
**DOOR OPENING AND CLOSING:** Open the valve control door. Release the top and bottom door latches, located at the right side of the door.

**HOOD  
FIGURE 14**



**TO INSTALL THE HOOD:** Insert the top flange of the hood into the four clips located along the top of the unit as shown. If the clips are inadvertently bent causing the hood to fit loosely, a set screw may be used to secure the hood. The slot, on the centre of the hood, lines up with the pilot hole in the frame for this application.

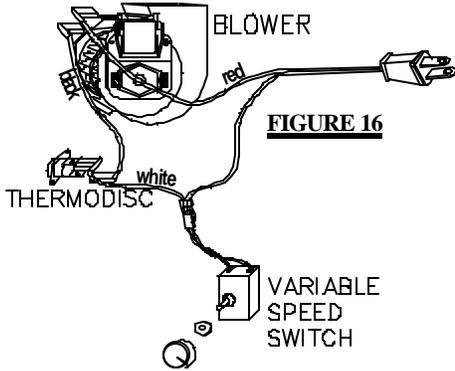
**LOWER LOUVRES  
(VALVE CONTROL  
DOOR)  
FIGURE 15**



**THE OPTIONAL LOWER LOUVRE ASSEMBLY** attaches with 2 screws at each hinge. Optional brass door trim, and webbed door fascia are also available at your local Napoleon dealer.

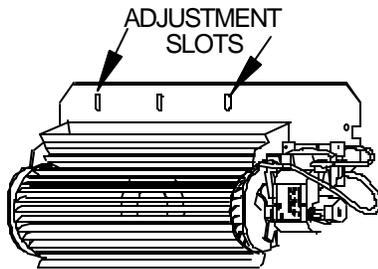
# 8 OPTIONAL BLOWER INST ALLATION

INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70-1996 NATIONAL ELECTRICAL CODE in the United States .



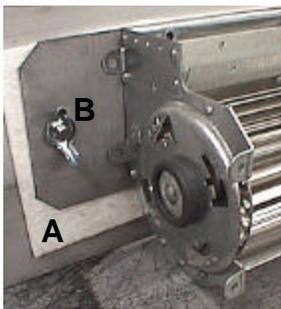
**FIGURE 16**

The three slots allow ease of adjustment of the blower. For a quiet running blower, do not allow the assembly to sit on the firebox base.



**FIGURE 17**

Slide the vibration reducing pad (A) into the clip and onto the threaded stud (B) at the other end, piercing a hole into the pad. The blower must be able to be positioned entirely onto the pad.



**FIGURE 18**

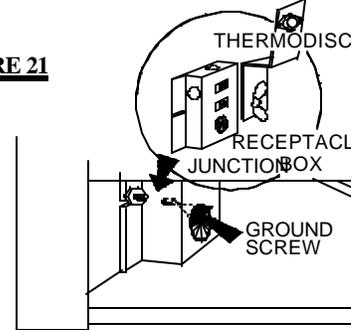


**FIGURE 19**

Tilt the blower onto its side. Slide it past the controls and into the clip (C). Secure to the threaded stud using the lock washer and wing nut provided. Ensure that the blower does not touch the fireplace base or the firebox.

Attach the connectors from the black and white wires to the thermodisc and secure the thermodisc bracket to the securing stud at the bottom left of the unit using a lock washer and wing nut. Ensure that the thermodisc touches the firebox wall.

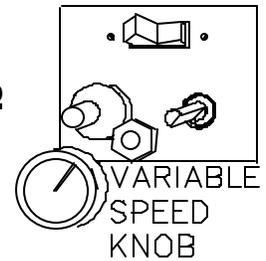
**FIGURE 21**



Attach the connectors from the black and red wires to the blower.

Attach and secure the variable speed switch using the nut provided. Plug the harness cord into the receptacle.

**FIGURE 20**



The wire harness provided in this kit is a universal harness. When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.

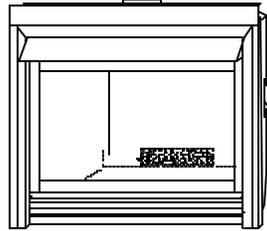
Because the blower is thermally activated, when turned on, it will automatically start approximately 15 minutes after lighting the fireplace and will run for approximately 30-45 minutes after the fireplace has been turned off. Use of the fan increases the output of heat.

Drywall dust will penetrate into the blower bearings causing irreparable damage. Care must be taken to prevent drywall dust from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

# OPTIONAL FAN INSTALLATION

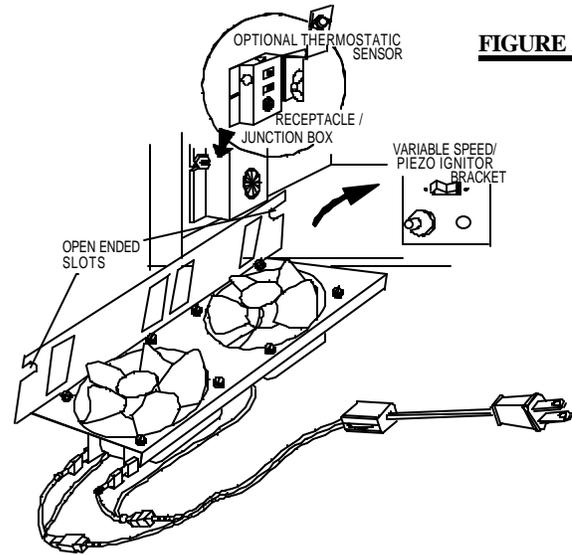
*ELECTRICAL INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER* and must be connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70-1996 NATIONAL ELECTRICAL CODE in the United States.

**FIGURE 22**



The wire harness provided in this kit is a universal harness. When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.

Position the vibration reducing pad into the clip and onto the threaded stud at the other end, piercing a hole into the pad. The fan assembly must be able to be positioned entirely onto the pad.



**FIGURE 23**

Slide the fan assembly past the controls and into the clip. Secure using the lock washer and nut provided.

Attach the connectors from the black and white wires to the thermodisc and secure the thermodisc bracket to the securing stud at the bottom left of the unit using a lock washer and wing nut. Ensure that the thermodisc touches the fire-box wall.

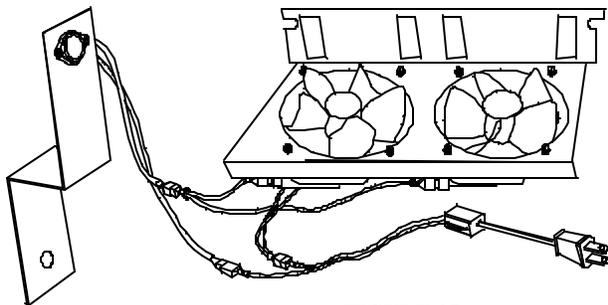
# THERMOSTATIC SENSOR CONTROL

*This optional kit is meant to be used only in conjunction with the GD65 Fan Kit, shown above, which may be ordered from your Wolf Steel / Napoleon dealer.*

With the thermostatic sensor option, the fan, when turned on, becomes thermally activated, and will automatically run approximately 10 minutes after the fireplace has been lit and for approximately 30-45 minutes after the fireplace has been turned off.

Use of the fan increases the output of heat.

Unplug the power cord from the receptacle. Connect all wires as shown.

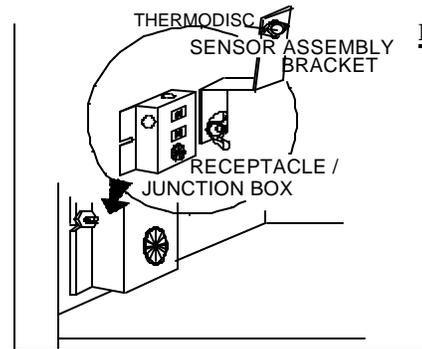


**FIGURE 25**

Attach and secure the sensor assembly bracket to the securing stud located next to the receptacle/junction box at the bottom left of the unit using the lock washer and wing nut. Ensure that the thermodisc touches the firebox wall.

Plug the power cord back into the receptacle.

When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.



**FIGURE 24**

# 10 OPERATION / MAINTENANCE

## OPERATING INSTRUCTIONS

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.

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. In both cases, open a window to sufficiently ventilate the room.

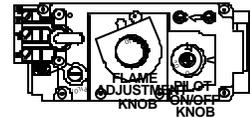
**Purge all gas lines with the glass door of the fireplace removed. Assure that a continuous gas flow is at the burner before installing the door.**

### FOR YOUR SAFETY READ BEFORE LIGHTING:

- 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 be turned from pilot to off unless the knob is **depressed slightly**.

1. Stop! Read the above safety information on this label.
2. Turn off all electric power to the fireplace.
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.

5. Turn gas knob counter-clockwise  to pilot.
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.
7. With pilot lit, depress and turn gas knob counter-clockwise  to on.
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.

### TO TURN OFF GAS

1. Turn off all electric power to the fireplace 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.

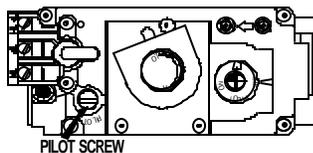
1. In order to properly clean the burner and pilot assembly, remove the logs to expose both assemblies.
2. Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, *at least once a year*.

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.
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 burner ignites completely on all openings when the gas knob for the burner is turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer / distributor.
7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.

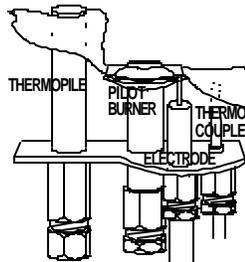
# ADJUSTMENTS

## PILOT BURNER ADJUSTMENT

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



**FIGURE 26**



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

**FIGURE 27**

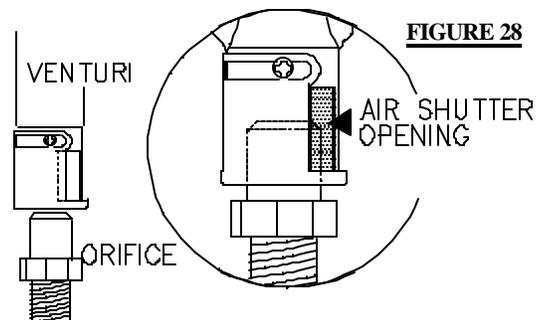
## VENTURI ADJUSTMENT

Both fireplace models have air shutters that have been factory set open according to the chart below:

	MODEL GB20
NG	1/8"
LP	1/8"

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

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



**FIGURE 28**

# REPLACEMENTS

## ORDERING REPLACEMENT PARTS

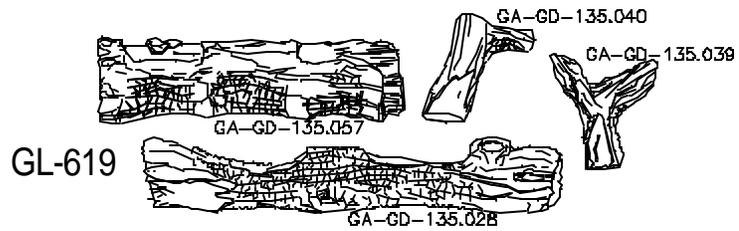
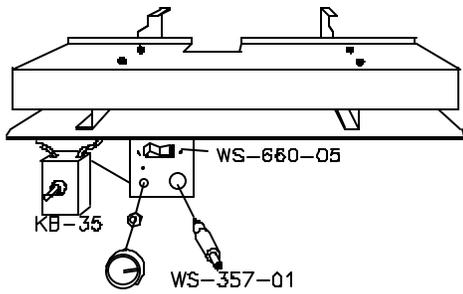
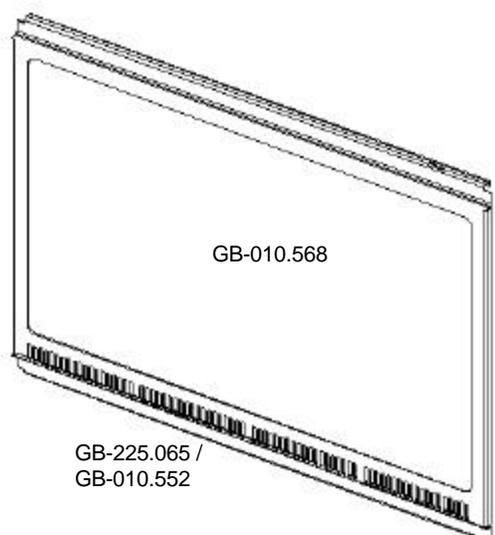
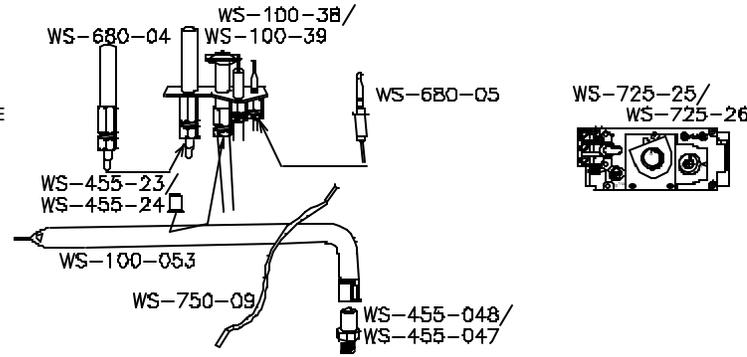
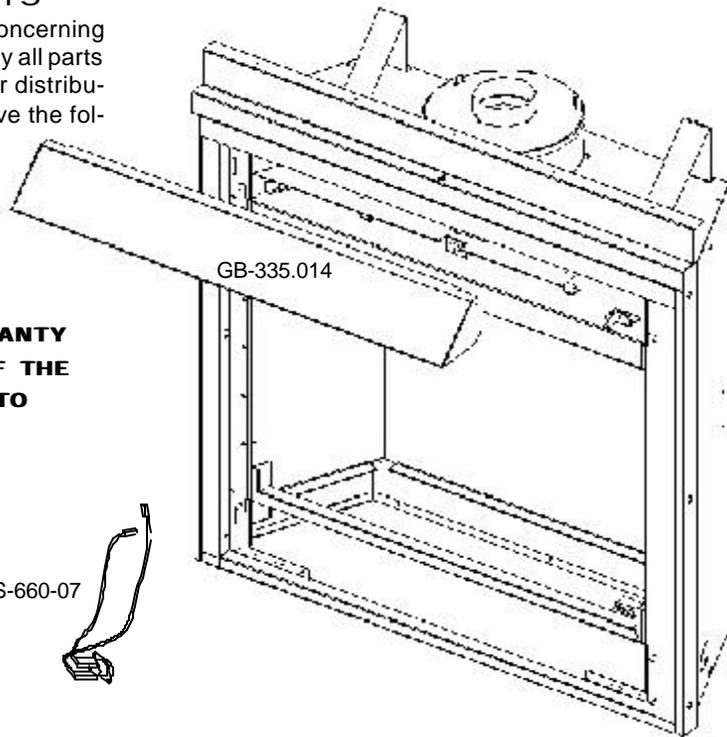
Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor. When ordering replacement parts always give the following information:

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

**REPLACEMENT PARTS FOR WARRANTY**  
**REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.**

## REPLACEMENT COMPONENTS:

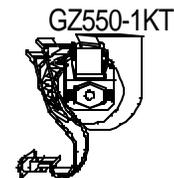
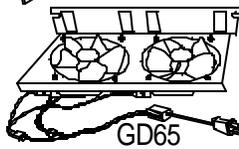
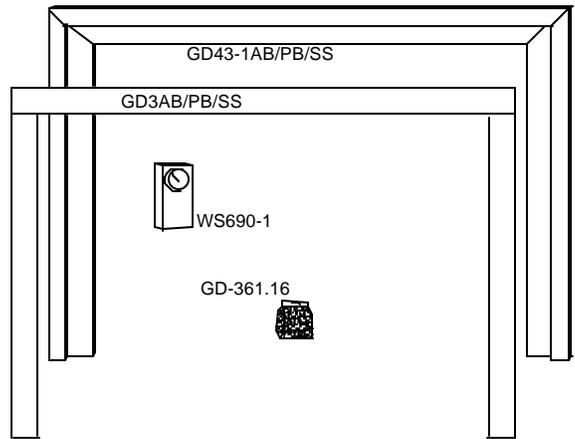
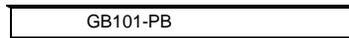
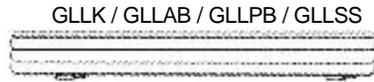
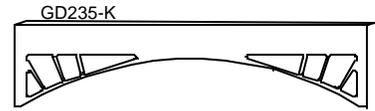
PART NO.	DESCRIPTION
WS-357-01	PIEZO IGNITER
WS-680-04	THERMOPILE
WS-680-05	THERMOCOUPLE
WS-100-053	BURNER TUBE
WS-100-38	NATURAL GAS PILOT ASSEMBLY
WS-100-39	PROPANE GAS PILOT ASSEMBLY
GB-335.014	HOOD
WS-660-07	SAFETY SWITCH
WS-660-05	ON/OFF TOGGLE SWITCH
WS-455-23	#51 NATURAL GAS PILOT ORIFICE
WS-455-24	#30 PROPANE GAS PILOT ORIFICE
WS-725-25	NATURAL GAS VALVE
WS-725-26	PROPANE GAS VALVE
WS-750-09	IGNITER WIRE
WS-385-45	NAPOLEON LOGO
GD660	STANDARD WALL SWITCH & 20FT OF WIRE
GB-225.065	BLACK DOOR FRAME
GB-010.568	GLASS c/w GASKET
GB-010.552	BLACK DOOR C/W GLASS
WS-455-048	#47 NATURAL GAS ORIFICE
WS-455-047	#56 PROPANE GAS ORIFICE
GD-135.057	BACK LOG
GD-135.028	FRONT LOG
DS-135.040	RIGHT LOG
GD-135.039	LEFT LOG
GL619	LOG SET ASSEMBLY



**ACCESSORIES:**

**PART NO. DESCRIPTION**

- GD3AB 3" TRIM KIT - ANTIQUE BRASS
- GD3PB 3" TRIM KIT - POLISHED BRASS
- GD3SS 3" TRIM KIT - STAINLESS STEEL
- GD43-1AB 4" - 3D TRIM KIT - ANTIQUE BRASS
- GD43-1PB 4" - 3D TRIM KIT - POLISHED BRASS
- GD43-1SS 4" - 3D TRIM KIT - STAINLESS STEEL
- GB101-PB DOOR TRIM - POLISHED BRASS
- WS690-1 MILLIVOLT THERMOSTAT
- WS660-2 HAND HELD WIRELESS REMOTE SWITCH
- WS-660-010 REMOTE CONTROL - ADVANTAGE
- WS-660-011 REMOTE CONTROL - ADVANTAGE PLUS
- GZ550-1KT BLOWER KIT
- GD65 FAN KIT
- GD36 THERMOSTATIC SENSOR CONTROL KIT FOR USE WITH GD65 ONLY
- WS500-33 VARIABLE SPEED SWITCH WALL MOUNTING PLATE
- GD235-K WEBBED DOOR
- GLLK LOWER LOUVRE ASSEMBLY - BLACK
- GLLAB LOWER LOUVRE ASSEMBLY - ANTIQUE BRASS
- GLLPB LOWER LOUVRE ASSEMBLY - POLISHED BRASS
- GLLSS LOWER LOUVRE ASSEMBLY - STAINLESS STEEL
- MBP METAL BRICK PANEL SET

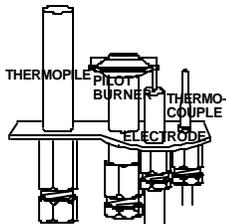


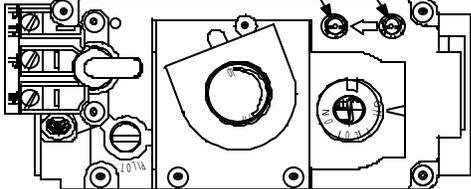
# 14 TROUBLE SHOOTING GUIDE

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

REMOVED.

SYMPTOM	PROBLEM	TEST SOLUTION	
Main burner 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	<ul style="list-style-type: none"> <li>- clean thermopile connection to the valve. Reconnect.</li> <li>- replace thermopile / valve.</li> </ul>	
	Remote wall switch wire is too long; too much resistance in the system.	<ul style="list-style-type: none"> <li>- shorten wire to correct length or wire gauge.</li> </ul>	
	Faulty thermostat or switch.	<ul style="list-style-type: none"> <li>- replace.</li> </ul>	
	Vent safety switch has opened.	<ul style="list-style-type: none"> <li>- Vent has become blocked or disconnected. Correct.</li> </ul>	
Main burner goes out; pilot goes out.	Refer to "MAIN BURNER GOES OUT; PILOT STAYS ON"		
	Faulty thermocouple.	<ul style="list-style-type: none"> <li>- replace.</li> </ul>	
Pilot goes out when the gas knob is released. <b>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.</b>	System is not correctly purged.	<ul style="list-style-type: none"> <li>- purge the gas line with the glass door open.</li> </ul>	
	Out of propane gas.	<ul style="list-style-type: none"> <li>- fill the tank.</li> </ul>	
	Pilot flame is not large enough	<ul style="list-style-type: none"> <li>- turn up the pilot flame.</li> </ul>	
	Pilot flame is not engulfing the thermocouple.	<ul style="list-style-type: none"> <li>- gently twist the pilot head to improve the flame pattern around the thermocouple.</li> </ul>	
	Thermocouple shorting / faulty.	<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>	
Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on.	Thermostat or switch is defective.	<ul style="list-style-type: none"> <li>- connect a jumper wire across the wall switch terminals; if main burner lights, replace switch / thermostat.</li> </ul>	
	Wall switch wiring is defective.	<ul style="list-style-type: none"> <li>- disconnect switch wires &amp; connect a jumper wire across terminals 1 &amp; 3; if the main burner lights, check the wires for defects and / or <b>replace wires.</b></li> </ul>	
	Main burner orifice is plugged.	<ul style="list-style-type: none"> <li>- remove stoppage in orifice.</li> </ul>	
	Faulty valve.	<ul style="list-style-type: none"> <li>- replace.</li> </ul>	
Pilot will not light.	No spark at pilot burner	<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>	
		Out of propane gas	<ul style="list-style-type: none"> <li>- fill the tank.</li> </ul>
		Spark gap is incorrect	<ul style="list-style-type: none"> <li>- 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).</li> </ul>
		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>



SYMPTOM	PROBLEM	TEST SOLUTION
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 appliance supply working pressure.</li> <li>- check if supply piping size is to code. Correct all undersized piping.</li> </ul>
Flames are consistently too large or too small. Carboning occurs.	Unit is over-fired or under-fired.	<ul style="list-style-type: none"> <li>- check pressure readings:</li> </ul> <p>Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Check that main burner is operating on "HI".</p> <p>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. Check that main burner is operating on "HI".</p> <p><b>AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVERTORQUE.</b></p> <p>Leak test with a soap and water solution.</p>
	Air shutter has become blocked	<ul style="list-style-type: none"> <li>- ensure air shutter opening is free of lint or other obstructions.</li> </ul>
	Flame is impinging on the logs or combustion chamber.	<ul style="list-style-type: none"> <li>- check that the logs are correctly positioned.</li> <li>- open air shutter to increase the primary air.</li> <li>- check the input rate: check the manifold pressure and orifice size as specified by the rating plate values.</li> <li>- check to ensure proper venting action</li> </ul>
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	<ul style="list-style-type: none"> <li>- clean the glass with a recommended gas fireplace glass cleaner. <b>DO NOT CLEAN GLASS WHEN HOT.</b></li> </ul> <p>If deposits are not cleaned off regularly, the glass may become permanently marked.</p>
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	<ul style="list-style-type: none"> <li>- check for chimney blockage</li> <li>- check that chimney is installed to building code.</li> <li>- room is in negative pressure; increase fresh air supply.</li> </ul>
Main burner flame is a blue, lazy, transparent flame.	Not enough combustion air	<ul style="list-style-type: none"> <li>- room is in negative pressure; increase fresh air supply</li> </ul>
Remote wall switch is in "OFF" position; main burner comes on when gas knob is turned to "ON" position.	Wall switch is mounted upside down	<ul style="list-style-type: none"> <li>- reverse.</li> </ul>
	Remote wall switch is grounding.	<ul style="list-style-type: none"> <li>- replace.</li> </ul>
	Remote wall switch wire is grounding.	<ul style="list-style-type: none"> <li>- check for ground (short); repair ground or replace wire.</li> </ul>
Faulty valve.	<ul style="list-style-type: none"> <li>- replace.</li> </ul>	



