INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE. CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.



# INSTALLATION AND OPERATING INSTRUCTIONS

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: CSA 2.33, ANSI Z21.88 FOR VENTED GAS FIREPLACE HEATERS.





CERTIFIED FOR CANADA AND UNITED STATES USING ANSI/CSA METHODS.

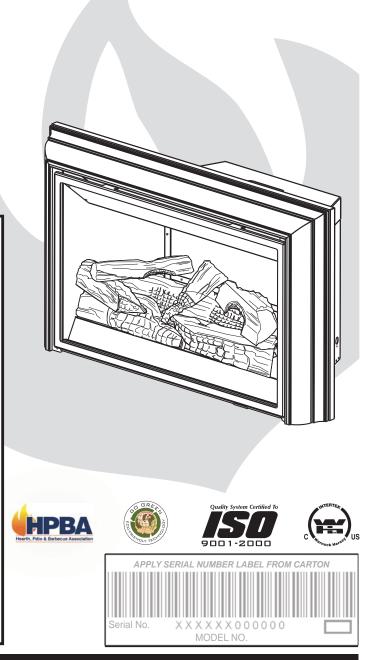
# SAFETY INFORMATION

If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors 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 supplier.



Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON, L4M 4Y8 Canada / 103 Miller Drive, Crittenden, Kentucky, USA, 41030 Phone (705)721-1212 • Fax (705)722-6031 • www.napoleonfireplaces.com • ask@napoleon.on.ca

\$10.00

### **TABLE OF CONTENTS**

1.0	INTRODUCTION	3
	1.1 WARRANTY	4
	1.2 DIMENSIONS	5
	1.3 GENERAL INSTRUCTIONS	6
	1.4 GENERAL INFORMATION	7
	1.5 CARE OF GLASS	7
	1.6 CARE OF PLATED PARTS	7
2.0	INSTALLATION	8
	2.1 INSERT VENT CONNECTION	8
	2.2 CHIMNEY CONNECTION	8
	2.3 GAS INSTALLATION	10
	2.4 WALL SWITCH / THERMOSTAT	10
	2.5 OPTIONAL ACCESSORY REQUIREMENTS	10
3.0	FINISHING	11
	3.1 ALUMINUM EXTRUSION TRIM KIT INSTALLATION	11
	3.2 LOG PLACEMENT 3.3 GLOWING EMBERS	12 13
	3.3 GLOWING EMBERS 3.4 DOOR INSTALLATION	13
	3.5 MINIMUM MANTEL CLEARANCE	13
4.0	OPERATION	15
4.0	4.1 REAR BURNER CONTROL	16
5.0	MAINTENANCE	16
6.0	REPLACEMENT BLOWER INSTALLATION	16
7.0	ADJUSTMENTS	17
	7.1 VENT RESTRICTION	17
	7.2 PILOT BURNER ADJUSTMENT 7.3 VENTURI ADJUSTMENT	18
	7.3 VENTURI ADJUSTMENT 7.4 PRESSURE ADJUSTMENT	18 19
	7.4 PRESSORE ADJUSTMENT 7.5 FLAME ADJUSTMENT	19
	7.6 FLAME ADJOSTMENT 7.6 FLAME CHARACTERISTICS	19
8.0	REPLACEMENTS	20
9.0	TROUBLE SHOOTING	23
10.0	SERVICE HISTORY	25
11.0	NOTES	26

NOTE: CHANGES, OTHER THAN EDITORIAL, ARE DENOTED BY A VERTICAL LINE IN THE MARGIN.

### **1.0 INTRODUCTION**

### 

- Do not operate heater before reading and understanding operating instructions. Failure to operate heater according to operating instructions could cause fire or injury.
- Risk of fire or asphyxiation do not operate heater with fixed glass removed.
- Do not connect 110 volts to the control valve.
- Risk of burns. The heater should be turned off and cooled before servicing.
- Do not install damaged, incomplete or substitute components.
- Risk of cuts and abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges may be sharp.
- Do not burn wood or other materials in this heater.
- 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 heater.
- Clothing or other flammable material should not be placed on or near the heater.
- Due to high temperatures, the heater should be located out of traffic and away from furniture and draperies.
- Ensure you have incorporated adequate safety measure to protect infants/toddlers from touching hot surfaces.
- Even after the heater is out, the glass and/or screen will remain hot for an extended period of time.
- Check with your local hearth specialty dealer for safety screens and hearth guards to protect children from hot surfaces. These screens and guards must be fastened to the floor.
- Any safety screen or guard removed for servicing must be replaced prior to operating the heater.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the heater and venting system are kept clean. The heater 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 heater area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Under no circumstances should this heater be modified.
- This heater must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
- Do not operate the heater 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 heater glass door.
- This heater uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.
- Pressure relief doors must be kept closed while the heater is operating to prevent exhaust fumes containing carbon monoxide, from entering into the home. Temperatures of the exhaust escaping through these openings can also cause the surrounding combustible materials to overheat and catch fire.
- Only doors / optional fronts certified with the unit are to be installed on the appliance.
- Keep the packaging material out of reach of children and dispose of the material in a safe manner. As with all plastic bags, these are not toys and should be kept away from children and infants.

#### 1.1 WARRANTY

NAPOLEON® products are manufactured under the strict Standard of the world recognized ISO 9001 : 2000 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 heater is again 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

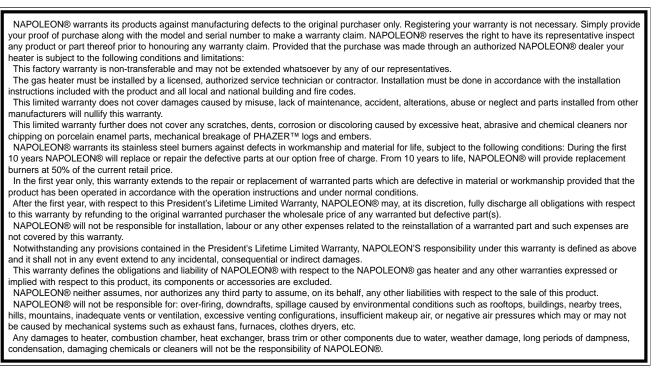
The following materials and workmanship in your new NAPOLEON® gas heater are warranted against defects for as long as you own the heater. This covers: combustion chamber, heat exchanger, stainless steel burner, phazer<sup>™</sup> logs and embers, rocks, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enameled 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.

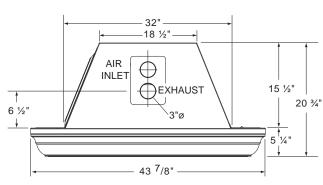
Construction of models vary. Warranty applies only to components included with your specific heater.

#### **CONDITIONS AND LIMITATIONS**

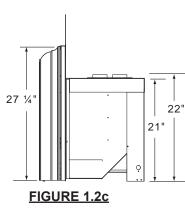


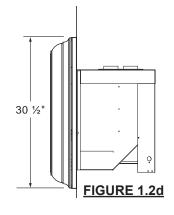
ALL SPECIFICATIONS AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE DUE TO ON-GOING PRODUCT IMPROVEMENTS. NAPOLEON® IS A REGISTERED TRADEMARK OF WOLF STEEL LTD. PATENTS U.S. 5.303.693.801 - CAN. 2.073.411, 2.082.915. © WOLF STEEL LTD.



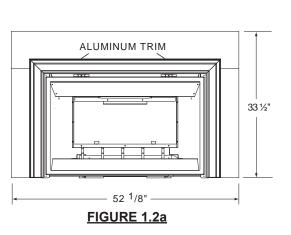


**TOP VIEW** 





**3 SIDED BACKER PLATE - SIDE VIEW** 



**3 SIDED BACKER PLATE - FRONT VIEW** 

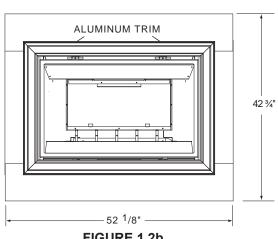


FIGURE 1.2b

**4 SIDED BACKER PLATE - SIDE VIEW** 

**4 SIDED BACKER PLATE - FRONT VIEW** 

### 1.3 GENERAL INSTRUCTIONS



Always light the pilot whether for the first time or if the gas supply has ran out, with the glass door opened or removed.

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" from the front face of the unit.

This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.

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

- The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert or gas log.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- A Carbon Monoxide detector is required in all rooms containing gas fired appliances.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.

The installation must conform with local codes or, in absence of local codes, the National Gas and Propane Installation Code CSA B149.1 in Canada, or the National Fuel Gas Code, ANSI Z223.1 / NFPA 54 in the United States. Suitable for mobile home installation if installed in accordance with the current standard CAN/CSA Z240MH Series, for gas equipped mobile homes, in Canada or ANSI Z223.1 and NFPA 54 in the United States.

The fireplace and its individual shutoff valve must be disconnected from the gas supply piping system during any

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

A 1/8" NPT plug, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the fireplace insert.

The fireplace insert 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 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.



We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute<sup>®</sup> (NFI) as NFI Gas Specialists.

#### 1.4 GENERAL INFORMATION

## FOR YOUR SATISFACTION, THIS FIREPLACE INSERT HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11 inches water column for propane. Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane. Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane. When the fireplace is installed at elevations above 4,500ft, 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.

Expansion / contraction noises during heating up and cooling down cycles are normal and to be expected. Maximum input is 40,000 BTU/hr for natural gas and propane. In order to achieve maximum turn down rate, the rear burner must be turned off. See Operating Instructions in the

owner's manual for more information.

Maximum output for natural gas and propane is 27,600 BTU/hr at an efficiency of 69% with the fan on.

This fireplace insert 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 fuelled with natural gas.

This insert must be recessed into a vented noncombustible wood-burning fireplace (prefabricated or masonry) only.

The minimum fireplace opening size in which the heater is to be installed is:

#### HEIGHT 21 inches WIDTH 32 inches DEPTH 16 inches

#### The minimum allowable chimney flue size is 7" round.

The minimum distance, from the bottom of a combustible mantle projecting 3" maximum from the wall to the top of the aluminium trim, is 12". A hearth must protrude a minimum of 12" from the unit.

#### 1.5 CARE OF GLASS

If the glass is not kept clean permanent discolouration and / or blemishes may result. Normal operation of your pellet heater will produce a build-up on the glass that should be wiped off daily. However, poor quality pellets or extended burning on the low setting will cause the glass to "smoke up" faster.

Refer to "REPLACEMENT PARTS" section to find out what this product is equipped with. Use only replacement glass available from your Authorized dealer.

#### DO NOT CLEAN GLASS WHEN HOT!

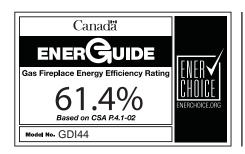
If necessary, clean the glass with a soft cloth or paper towel. You could use "wood stove" glass cleaner to remove heavy build-up.

Do not operate the heater with broken glass, as leakage of flue gases may result.

#### 1.6 CARE OF PLATED PARTS

If the appliance is equipped with plated parts, you must clean fingerprints or other marks from the plated surfaces before operating the appliance for the first time. Use a glass cleaner or vinegar and towel to clean. If not cleaned properly before operating for the first time, the marks can cause permanent blemishes on the plating. After the plating is cured, the fingerprints and oils will not affect the finish and little maintenance is required, just wipe clean as needed.

<u>NOTE:</u> The protective wrap on plated parts is best removed when the assembly is at room temperature but this can be improved if the assembly is warmed, using a hair dryer or similar heat source.





HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

### 2.0 INSTALLATION

Clean out ashes from the inside of the wood-burning fireplace. Make sure that the chimney and wood-burning fireplace are in a clean and sound condition and constructed of non-combustible materials. If necessary have any repair work done by a qualified person before installing the insert. Remove the existing fireplace damper or lock into an open position.

Using screws, attach the fireplace warning tag (W385-0199) to the inside of the firebox of the fireplace into which the insert is being installed.

The sheet-metal parts of the fireplace, in which the gas fireplace insert is to be installed, must not be cut. If the wood-burning factory-built fireplace has no gas access hole(s) provided, an access hole of 1½ inch or less may be drilled through the lower sides or bottom of the fireplace in a proper workman like manner. This access



ATTENTION: CE FOYER A ETE CONVERTI AFIN D'ETRE UTILISE SEULEMENT COMME FOYER ENCASTRE AU GAZ ET NE PEUT ETRE UTILSE POUR BRULER DU BOIS OU TOUT AUTRE COMBUSTIBLE SOLIDE, SANS QUE TOUTES LES PIECES ORIGINALES ALENT ETE REMPLACEES ET QUE LE FOYER SOIT APPROUVE DE NOUVEAU PAR AUTORITES AYANT JURIDICTION. W385-0199

hole must be plugged with non-combustible insulation after the gas supply line has been installed. Ensure that existing chimney cleanouts fit properly.

The refractory, glass doors, screen rails, screen mesh and log grates may be removed from the fireplace before installing the gas fireplace insert.

Smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.

The ventilation openings in the fireplace may be obstructed by the backer plates, aluminium trim etc. but these parts are not to be applied so as to have an airtight seal.

#### 2.1 INSERT VENT CONNECTION

Move the insert close to its final position inside the wood-burning fireplace. This unit is equipped with 6 levelling screws located as follows: two are on either side of the circulation blower on the rear panel; four are located front and back on either side beneath the log support. Level using four of the levelling screws. Levelling the unit will eliminate rocking or excessive noise when the fan is in operation. Once the unit is level, move it partially into place within the fireplace to allow for all connections to be made. It is not practical to level the insert once it has been installed. Determine the required depth prior to installing the unit and adjust the four levelling screws accordingly.

#### 2.2 CHIMNEY CONNECTION

Chimney installation must conform to both national and local code requirements. The chimney must be lined with one 2" or 3" diameter liner for intake and one 3" diameter liner for exhaust. The minimum and maximum vent lengths are 10 and 35 feet respectively. Recommended Napoleon® kits come in 3 lengths:

1-2" & 1-3" DOUBLE PLY ALUMINUM LINER-INLET AND EXHAUST &

2-3" TO 2" REDUCER:
GDI-2320KT VENT KIT 20FT
GDI-2325KT VENT KIT 25FT
GDI-2335KT VENT KIT 35FT
2-3" DOUBLE PLY ALUMINUM LINER-INLET AND EXHAUST:

GDI-320KT VENT KIT 20FT GDI-325KT VENT KIT 25 FT GDI-335KT VENT KIT 35 FT

While the liners must be continuous from the fireplace to the chimney cap, to achieve the needed length, they may be coupled, using an aluminium coupler, provided installation is sealed & secured.

We recommend that exhaust vents that pass through unheated spaces, such as a garage or attic, be wrapped in a protective sleeve to minimize condensation and reverse flow symptoms.

This unit is approved for use with a 2" liner for air intake and a 3" liner for exhaust. For best performance, however, it is recommended to use two 3" liners.

If a 2" liner is used for the intake, it is necessary to adjust the primary air shutter. See "Air Shutter Settings".

**FIGURE 2.2.1** 

FLASHING

PLATE

2"

**2.2.1** OUTSIDE: Slip the one end of a liner a minimum of 2" over the collar of the air terminal. Secure using 3 screws. Then seal the joint and screw heads with high temperature sealant. Repeat with the other liner to the exhaust collar of the terminal.

<u>NOTE:</u> Connect the supplied 3' of stainless steel flex liner to the exhaust liner (already attached to the terminal) using the coupler (also supplied). Secure and seal before dropping down the chimney.

- **2.2.2** Gently stretch the liners to the required lengths and insert into the chimney. Place the terminal onto the top of the chimney cap and fit the flashing plate to suit. Make weather tight by sealing with caulking (not supplied) and fasten to the chimney with screws and plugs (not supplied).
- 2.2.3 <u>NOTE:</u> If there is not enough ceiling height between the fireplace and the insert to allow the flex liner connection on the top of the unit to be made, see 2.2.4.

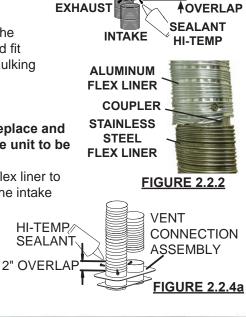
If there is enough ceiling height, connect the 3" stainless steel flex liner to the exhaust collar closest to the top front on the unit. Connect the intake flex liner to the remaining rear collar. Secure and seal.

- 2.2.4 Both the log support and the back wall must be removed in order to gain access to the vent connection assembly. Both the back wall and log support are detached by removing the 12 perimeter screws of the back wall and the 3 screws located at the back of the log support. Remove the vent connection assembly. NOTE: The vent connection assembly collars are not specific until the stainless steel flex liner has been attached to one side. This now designates the side as exhaust. The exhaust collar must be positioned closest to the front opening of the insert. Secure and seal the flex liners.
- 2.2.5 To reinstall the vent connection assembly, reach in through the insert and manoeuvre the vent connection assembly through the opening in the firebox top. Take care not to damage the gasket. Secure the assembly using the four studs and ¼-20 FIGURE 2.2.5 hex nuts.
- **2.2.6** Reinstall the back wall, followed by the log support, using the perimeter screws removed in 2.2.4. The insert may now be pushed into its final position inside the wood burning fireplace. Secure the insert to the fireplace

using perforated strapping attached to the two securing holes on either side of the unit as shown. We recommend that the trim be installed before the unit is placed into its final position.

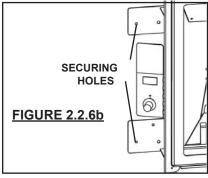
VENT CONNECTION

ASSEMBLY









#### 2.3 GAS INSTALLATION



Risk of fire or explosion. Do not use open flame for testing.

Support gas control when attaching gas supply pipe to prevent damaging gas line.

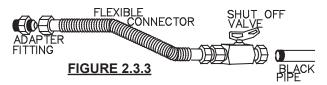
Always light the pilot whether for the first time or if the gas supply has run out with the glass door opened or removed. Assure that a continuous gas flow is at the burner before closing the door. Ensure adequate ventilation. For gas and electrical locations, see "DIMENSION" section.

All gas connections must be contained within the appliance when complete.

#### High pressure will damage valve.

Installation and servicing to be done by a qualified installer.

- 2.3.1 Move the fireplace into position and secure to the floor .
- **2.3.2** The fireplace is designed to accept 1/2" gas line. The fireplace is equipped with a 1/2" manual shut-off valve.



- **2.3.3** Connect the gas supply in accordance to local codes. In the absence thereof, install according to the National Installation Code.
- 2.3.4 When flexing any gas line, support the gas valve so that the lines are not bent or kinked.
- **2.3.4** Check for gas leaks by brushing on a soap and water solution.

#### 2.4 WALL SWITCH / THERMOSTAT

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 from the gas fireplace insert to the wall switch / millivolt thermostat. The recommended maximum lead length depends on the wire size:

WIRE SIZE	MAX. LENGTH	
14gauge	100 feet	
16gauge	60 feet	
18gauge	40 feet	
hor the wall switch	thermostat or das valve to	electricity (110 VOLT

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

#### 2.5 OPTIONAL ACCESSORY REQUIREMENTS

- 2.5.1 This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.
- **2.5.2** Wiring for optional Napoleon® approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

#### **OPTIONAL REMOTE CONTROL RECEIVER LOCATION**

2.5.3 Optional remote control receiver must be located at the bottom of the unit, behind the left operable door.

### **3.0 FINISHING**

In order to close off the fireplace opening or if the opening is larger than the 3- or 4-sided aluminium extrusion trim kits, it is recommended to reduce the opening using a noncombustible material such as ceramic tile, marble, etc or the GDIBP3 or GDIBP4 backer plate kits. The GDIBP3 backer plate is able to fit an opening of 52" x  $33\frac{1}{2}$ ". The GDIBP4 backer plate is able to fit an opening of 52" x  $42\frac{3}{4}$ ". The outside edge of the backer plate is finished off with gold trim included in each kit. A GDIBP3D 3 sided deluxe backer plate complete with marquis trim may also be used to complete the installation. This kit is able to fit an opening of 57" x  $33\frac{1}{2}$ ". Detailed installation instructions are included with each kit.

If this unit is being installed into an existing wood burning, zero clearance fireplace, then be aware of this precaution: **Any circulation air opening may be covered (with material) but** <u>not sealed!</u>

#### 3.1 ALUMINUM EXTRUSION TRIM KIT INSTALLATION

The insert can be equipped with either a 3- or 4-sided trim kit to finish off the fireplace opening. Slide the trim assembly over the keyholes (2 per side) and drop into place. If installing the optional 3- or 4-sided backer plate (GDIBP3 or GDIBP4), it must be hung prior to the trim kit installation using the same keyholes.



FIGURE 3.1a

#### TO ADJUST THE TRIM:

If the mitre is out of alignment, open each side and loosen the two screws at either side trim hinge. Slide the trim up or down to adjust and re-tighten screws. There is also a very slight in/out adjustment that can be made.

### <u>NOTE:</u> Since the side panels open and close, to access the controls, a gap is necessary at the mitre joint.

The top trim piece has an adjustable securing bracket which enables the trim to be secured to the firebox shell.





FIGURE 3.1d

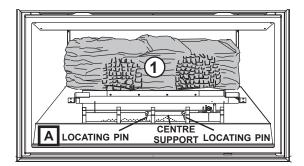
#### 3.2 LOG PLACEMENT

### 

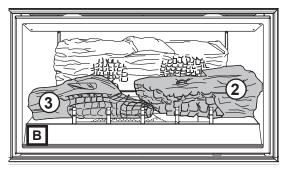
Logs must be placed in the exact location in heater. Do not change from the proper log positions, since heater may not function properly and delayed ignition may occur.

The logs are fragile and should be handled with care.

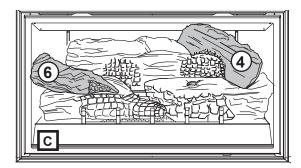
POSITIONING THE LOGS IMPROPERLY WILL CAUSE FLAME IMPINGEMENT AND CARBONING.



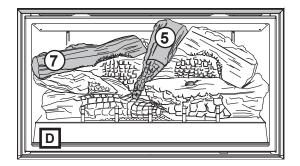
The rear log should be centred on the log support and rest against the rear wall.



Log **#3** rests against the far left grate post and onto the locating pin on the centre support. Log **#2** rests against the far right grate post and over the locating pin on the centre support and against the tip of log #3. <u>NOTE:</u> Skewering log#2 onto the locating pin may be necessary.



Log (#6) has a leg that fits into an indentation on the top of log (#3). Log (#4) rests in the indentations on the tops of logs (#2) and (#1).



Logs (#5) and (#7) fit onto the indentations of the lower logs.

#### 3.3 GLOWING EMBERS

Tear the embers into pieces and place along the front row of ports covering all of the burner area in front of logs (#2 & #3). Care should be taken to shred the embers into <u>thin</u>, small irregular pieces as only the exposed edges of the fibre hairs will glow. The ember material will only glow when exposed to direct flame; however, care should be taken to not block the burner ports.

Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. PHAZER<sup>™</sup> logs glow when exposed to direct flame. Use only certified "glowing embers" and PHAZER<sup>™</sup> logs available from your Napoleon® dealer.

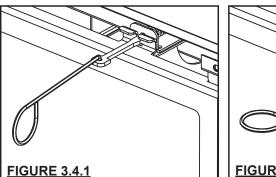
#### 3.4 DOOR INSTALLATION

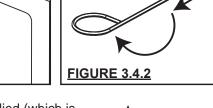
### 

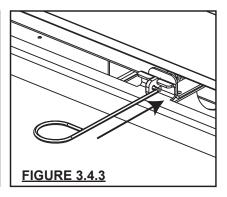
Glass may be hot, DO NOT touch glass until cooled.

The door latches are part of a safety system and must be properly engaged. Do not operate the fireplace with latches disengaged.

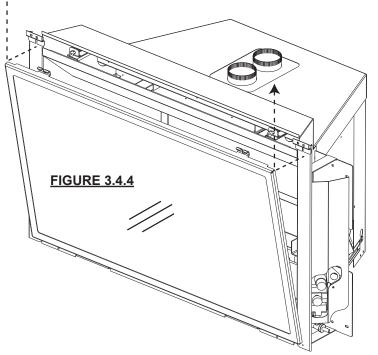
Do not strike, slam or scratch glass. Do not operate fireplace with glass removed, cracked, broken or scratched.





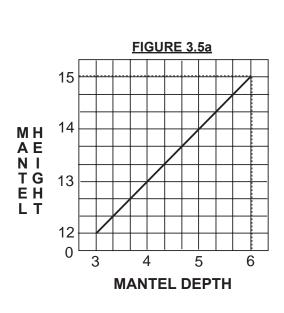


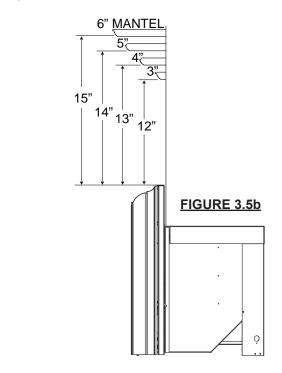
- **3.4.1** Insert the tool supplied (which is located behind the left side trim) into spring loaded door latch.
- **3.4.2** Pull and turn the latch 90°.
- **3.4.3** Release the latch.
- **3.4.4** Tilt the top of the door forward until you can grab the sides of the door. Lift up and out of the bottom door retainer.
- **3.4.5** To install, reverse the order of these instructions.



#### 3.5 MINIMUM MANTEL CLEARANCE

This can vary according to the mantle depth. Use the graph to help evaluate the clearance needed.





### 4.0 OPERATION

### 

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

#### Do not operate the main burner of the insert with the door removed.

Always light the pilot whether for the first time or if the gas supply has ran out with the glass door opened or removed. When lit for the first time, the fireplace will emit an odor for a few hours. This is a normal temporary condition caused by the "burn-in" of 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 odor 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.

#### 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 gualified 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 neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

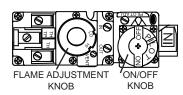
#### LIGHTING INSTRUCTIONS:

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 electrical power to the fireplace and remove batteries.
- 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 to the next step.
- 5. If fireplace is equipped with flame adjustment valve turn clockwise to off.
- **6.** Find pilot located in front of back log.
- 7. Turn gas knob counter-clockwise to pilot.
- 8. **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 7.
- 9. With pilot lit, depress and turn gas knob counter-clockwise to on.
- **10.** If equipped with flame adjustment valve, push and turn knob to high.
- 11. 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.
- 12. Turn on all electric power to the fireplace.

#### **TO TURN OFF GAS**

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



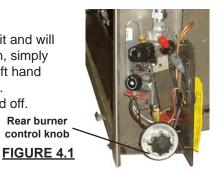
PILOT BURNER

THERMOCOUPLE

THERMOPILE

#### 4.1 REAR BURNER CONTROL

The purpose of the rear burner is to increase heat output or BTUs of the unit and will only operate when the main burner is functioning. To turn the rear burner on, simply depress the burner control knob (located in the valve compartment at the left hand side below the piezo ignitor) and rotate the knob counter-clockwise to 'high'. In order to achieve maximum turn down rate, the rear burner must be turned off.



### **5.0 MAINTENANCE**

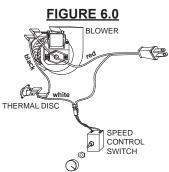
**TURN OFF THE GAS AND UNPLUG ELECTRICAL POWER BEFORE SERVICING THE FIREPLACE INSERT!** <u>CAUTION:</u> Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This insert and its venting system should be inspected before use and at least annually by a qualified service person. The fireplace area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids. The flow of combustion and ventilation air must not be obstructed.

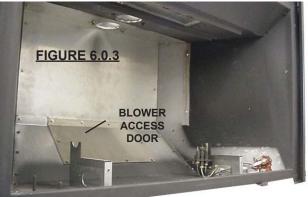
- 5.0.1 In order to properly clean the burner and pilot assembly, remove the logs exposing both assemblies.
- **5.0.2** Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, at least once a year.
- **5.0.3** Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
- **5.0.4** Check to see that the pilot flame is large enough to engulf the thermocouple on one leg and reaches toward the burner on the other leg.
- 5.0.5 Replace the cleaned logs.
- **5.0.6** Check to see that the main burner ignites completely on all openings when the gas knob for the burner is turned on. A 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Authorized dealer/distributor.
- 5.0.7 Check that the door gasketing is not broken or missing. Replace if necessary.

### 6.0 REPLACEMENT BLOWER INSTALLATION

The Napoleon® gas fireplace insert comes standard with a blower, a heat sensor, variable on/off speed control and a power cord. 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 minutes after the fireplace has been turned off. Use of the fan increases the output of heat. Air, drawn in through the lower slot, is driven up the back of the firebox, and exhausted as hot air through the upper slot.

- **6.0.1** Turn off the electrical power and the gas supply to the fireplace insert.
- **6.0.2** Remove the fire viewing door. Remove the logs, log support and back wall.
- 6.0.3 Remove the blower access door held on with 10 screws. Replace the blower access door gasket when changing the blower.





SHOWN WITH LOG SUPPORT AND BACK WALL REMOVED.

17

- **6.0.4** Disconnect the two blower wires. Remove the blower bracket secured with one wing nut and lock washer. For thermodisc replacement: Remove the "Z" shaped mounting bracket secured to the firebox wall behind the left side control door. Remove the thermodisc from the bracket and replace.
- **6.0.5** Replace the blower using the existing bracket. Slide the vibration reducing pad (A) into the clip (C) and up against the threaded stud (B) at the other end. The blower must be able to be positioned entirely onto the pad.

Slide the blower into the clip (C). Secure to the threaded stud using the existing lock washer and wing nut. Ensure that the blower does not touch the fireplace base or the firebox.

- **6.0.6** Reconnect the two wires. Holding the replacement gasket in place, re-attach the blower access door. Replace the backwall, logs and log support. Reinstall the fire viewing door.
- **6.0.7** Turn the gas supply and electricity back on. Drywall dust will penetrate into the blower bearings causing irreparable damage and must be prevented from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

### 7.0 ADJUSTMENTS

### 7.1 VENT RESTRICTION

Vertical terminations running longer than fifteen feet may display a very active flame. When this is not desirable, a vent restrictor could be installed. This restrictor plate will reduce the velocity of the exhaust gases, slowing down the flame pattern and creating a more traditional appearance.

- 7.1.1 Remove the glass viewing door and logs.
- 7.1.2 Secure the restrictor plate as described.
- 7.1.3 Replace logs and viewing door.

Line up the holes on the vent restrictor with the holes on the bracket attached to the roof of the firebox.

Secure the vent restrictor into position using the two screws supplied.



THERMODISC BRACKET ASSEMBLY FIGURE 6.0.4b

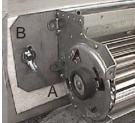




FIGURE 6.0.5a

FIGURE 6.0.5b

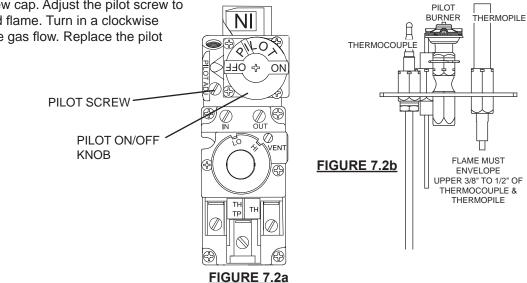


FIGURE 7.1a

FIGURE 7.1b

#### 7.2 PILOT BURNER ADJUSTMENT

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



#### 7.3 **VENTURI ADJUSTMENT**

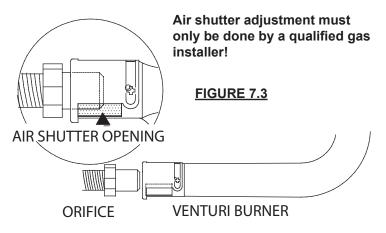
This unit is approved for use with a 2" liner for air intake and a 3" liner for exhaust. For best performance, however, it is recommended to use two 3" liners.

Air shutter settings will differ depending on the liner system used. Use the charts below to determine the correct air shutter setting:

	3"/ 3" LINER SYSTEM											
	FRONT	REAR										
NG	1/16"	3/16"										
LP	3/16"	7/16"										
	AIR SHUTTER SETTING											

		2"/ 3" LINER SYSTEM											
		FRONT	REAR										
N	G	1/8"	1/4"										
LI	Ρ	1/4"	5/8"										
		AIR SHUTTER SETTING											

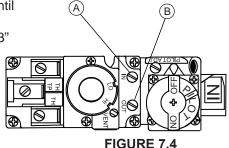
Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.



#### 7.4 PRESSURE ADJUSTMENT

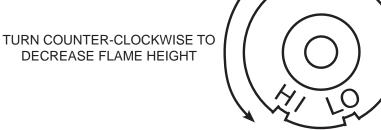
Inlet pressure can be checked by turning screw (A) counter-clockwise until loosened and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Check that main burner is operating on "HI".

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".



AFTER TAKING PRESSURE READINGS, TIGHTEN SCREWS FIRMLY TO SEAL. DO NOT OVER TORQUE. LEAK TEST.

#### 7.5 FLAME ADJUSTMENT

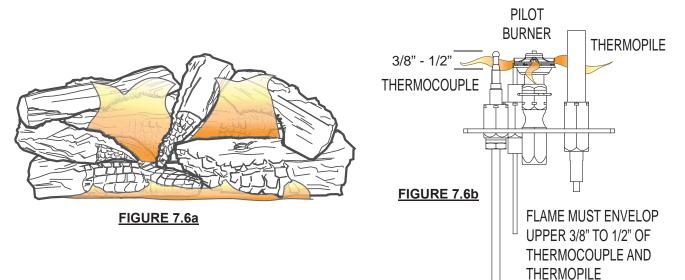


TURN CLOCKWISE TO INCREASE FLAME HEIGHT

#### 7.6 FLAME CHARACTERISTICS

It is important to periodically perform a visual check of the pilot and burner flames. Compare them to the illustrations provided.

FIGURE 7.5



### 20 8.0 REPLACEMENTS

### **WARNING**

Failure to position the parts in accordance with this manual or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

\*\* This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Authorized dealer / distributor.

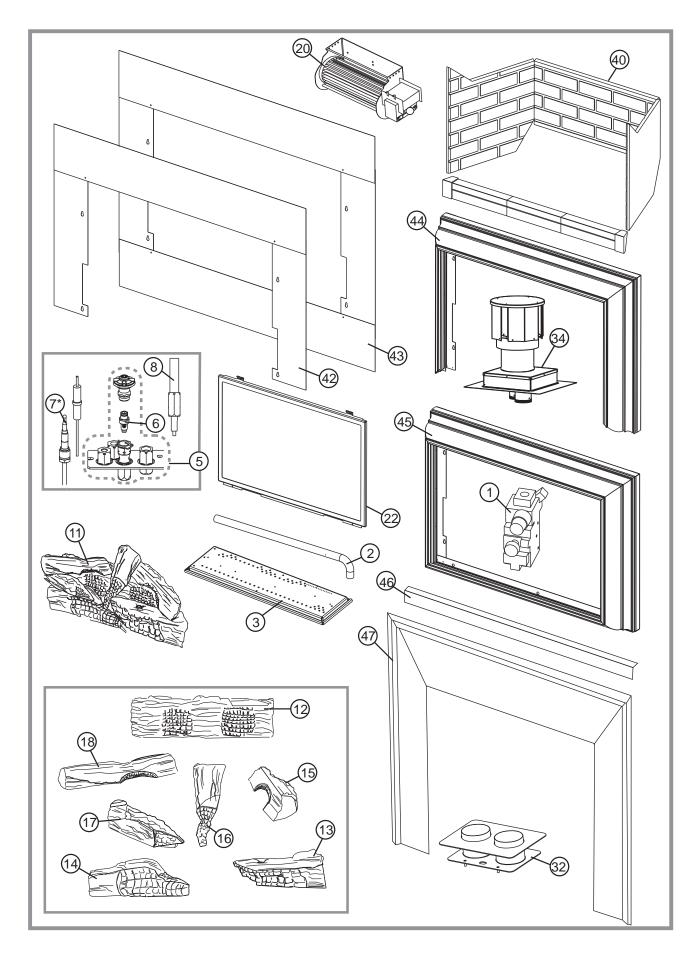
For warranty replacement parts, a photocopy of the original invoice will be required to honour the claim. When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- Installation date of appliance
- Part number
- Description of part
- Finish

\* Identifies items which are not illustrated. For further information, contact your authorized dealer.

		COMPONENTS
REF NO.	PART NO.	DESCRIPTION
1	W725-0039	RBT SHAW VALVE - NG
1	W725-0040	RBT SHAW VALVE - LP
2	W100-0075	BURNER TUBE
3	W010-0893	BURNER PAN
4*	W455-0065	#45 FRONT BURNER ORIFICE - NG
4*	W455-0047	#56 FRONT BURNER ORIFICE - LP
4*	W455-0017	#42 REAR BURNER ORIFICE - NG
4*	W455-0059	#53 REAR BURNER ORIFICE - LP
5	W010-0800	PILOT ASSEMBLY - LP
5	W010-0801	PILOT ASSEMBLY - NG
6	W455-0068	PILOT INJECTOR - LP
6	W455-0070	PILOT INJECTOR - NG
7**	W680-0005	THERMOCOUPLE
8	W680-0004	THERMOPILE
9*	W573-0007	HIGH TEMPERATURE SEALANT
10*	W357-0001	PIEZO IGNITOR
11	GL-635	LOG SET COMPLETE
12	W135-0030	LOG # 1
13	W135-0160	LOG # 2
14	W135-0161	LOG # 3
15	W135-0033	LOG # 4
16	W135-0034	LOG # 5
17	W135-0035	LOG # 6
18	W135-0036	LOG # 7
19*	W361-0016	GLOWING EMBERS
20	GZ552	BLOWER
21*	W385-0334	NAPOLEON® LOGO
22	W010-2025	DOOR C/W GLASS

	COMPONENTS								
REF NO.	PART NO.	DESCRIPTION							
23*	W290-0063	BLOWER ACCESS GASKET							
24*	W430-0013	MAGNETIC CLOSURE							
25*	W660-0009	ON/OFF SWITCH							
26*	W690-0002	THERMAL DISC							
27*	W380-0002	VARIABLE SPEED SWITCH KNOB							
28*	W660-0019	VARIABLE SPEED SWITCH							
29*	W450-0023	PAL NUT							
30*	W730-0024	3" STAINLESS FLEX LINER X 3'							
31*	W175-0204	3" COUPLER							
32	W010-0888	VENT CONNECTION ASSEMBLY							
33*	W290-0076	VENT CONNECTION ASSEMBLY GASKET							
		TERMINAL KITS							
REF NO.	PART NO.	DESCRIPTION							
34	GDI-226	TERMINAL KIT							
1		VENT KITS							
REF NO.	PART NO.	DESCRIPTION							
		UM LINER-INLET AND EXHAUST & 2-3" TO 2" REDUCER:							
35*	GDI-2320KT								
35*	GDI-2325KT	VENT KIT 25FT							
35*	GDI-2335KT	VENT KIT 35FT							
		IER-INLET AND EXHAUST:							
36*	GDI-320KT	VENT KIT 20FT							
36*	GDI-325KT	VENT KIT 25FT							
36*	GDI-335KT	VENT KIT 35FT							
		46ACCESSORIES46							
REF NO.	PART NO.	DESCRIPTION							
37*	W690-0001	MILLIVOLT THERMOSTAT							
38*	W660-0010B	REMOTE CONTROL - ADVANTAGE							
38*	W660-0011B	REMOTE CONTROL - ADVANTAGE REMOTE CONTROL - ADVANTAGE PLUS							
39*	GD660	REMOTE WALL SWITCH C/W 20FT WIRE							
40	GI826KT	DECORATIVE BRICK PANELS							
41*	W175-0202	NATURAL GAS TO PROPANE CONVERSION KIT							
42	GDIBP3	3 SIDED BACKER PLATE C/W ACCENT TRIM							
43	GDIBP4	4 SIDED BACKER PLATE C/W ACCENT TRIM							
43	GDIBF4 GDITRM3	ALUMINIUM EXTRUSION - MATTE BLACK							
44	GDITRM3-K	ALUMINIUM EXTRUSION - MATTE BLACK							
44	GDITRM3-R	ALUMINIUM EXTRUSION - POLISHED BLACK							
44	GDITRM3-B GDITRM4	ALUMINIUM EXTRUSION - POLISHED BRASS							
45	GDITRM4-K	ALUMINIUM EXTRUSION - POLISHED BLACK							
45	GDITRM4-R GDITRM4-B	ALUMINIUM EXTRUSION - POLISHED BLACK							
	GDITRM4-B GDIUT	UPPER DOOR TRIM - BRASS							
46	GDIUT-G	UPPER DOOR TRIM - BRASS							
	1								
47	GDIBP3D	BACKER PLATE 3 SIDED DELUXE							



### 9.0 TROUBLE SHOOTING

Alwaya liakt the		ARNING								
Always light the pilot whether for the first time or if the gas supply has fan out, with the glass door open or removed.										
SYMPTOM	PROBLEM	TEST SOLUTION								
Main burner goes out; pilot stays on.	Pilot flame is not large enough or not engulfing the thermopile.	<ul><li>Turn up the pilot flame.</li><li>Replace pilot assembly.</li></ul>								
	Thermopile shorting.	<ul><li>Clean thermopile connection tot he valve. Reconnect.</li><li>Replace thermopile / valve.</li></ul>								
	Remote wall switch wire is too long; too much resistance in the system.	- Shorten wire to connect length or wire gauge.								
	Faulty thermostat or switch.	- Replace.								
Main burner goes out; pilot goes out.	Refer to "MAIN BURNER GOES OUT; PILOT STAYS ON"									
	Vent is blocked	- Check for vent blockage.								
	Vent is re-circulating	- Check joint seals and installation								
	Flexible vent has become disconnected from fireplace.	<ul><li>Re-attach to fireplace.</li><li>Cap was not replaced.</li></ul>								
	Thermopile shorting or faulty.	<ul> <li>Loosen and tighten thermocouple.</li> <li>Clean thermocouple and valve connection.</li> <li>Replace thermocouple.</li> <li>Replace valve.</li> </ul>								
	Vent is reversing.	<ul> <li>Check all venting and insert seals.</li> <li>Check that door is properly sealed. If the appliance is allowed to burn with the door off when purging the unit, exhaust products may escape through the air intake pipe and reverse the venting action. Let the unit cool down to correct the reversed venting action.</li> </ul>								
Pilot goes out when	System is not correctly purged.	- Purge the gas line.								
the gas knob is released.	Out of propane gas.	- Fill the tank.								
The gas valve has an interlock device	Pilot flame is not large enough.	- Turn up the pilot flame.								
which will not allow the pilot burner to be lit until the thermo- couple has cooled.	Pilot flame is not engulfing the thermocouple	- Gently twist the pilot head to improve the flame pattern arour the thermocouple.								
Allow approximately 60 seconds for the thermocouple to cool.	Thermocouple shorting / faulty.	<ul> <li>Loosen and tighten thermocouple.</li> <li>Clean thermocouple and valve connection.</li> <li>Replace thermocouple.</li> <li>Replace valve.</li> </ul>								
	Faulty valve.	- Replace.								
	Air shutter is not set to specifica- tions.	<ul> <li>Check and adjust air shutter to correspond with the fuel type and air intake size.</li> </ul>								
Remote wall switch is	Wall switch is mounted upside down.	- Reverse.								
in 'OFF' position; main burner comes on	Remote wall switch is grounding.	- Replace.								
when gas knob is turned to 'ON' position.	Remote wall switch wire is grounding.	- Check for ground (short); repair ground or replace wire.								
	Faulty valve.	- Replace.								

SYMPTOM	PROBLEM	TEST SOLUTION						
Pilot burning; no gas to main burner; gas	Thermostat or switch is defective	<ul> <li>Connect a jumper wire across the wall switch terminals; if main burner lights, replace switch / thermostat.</li> </ul>						
knob is on 'HI'; wall switch / thermostat is on.	Wall switch wiring is defective.	<ul> <li>Disconnect the switch wires &amp; connect a jumper wire across terminals 1 &amp; 3; if the main burner lights, check the wires for defects and / or replace wires.</li> </ul>						
	Main burner orifice is plugged.	- Remove stoppage in orifice.						
	Faulty valve.	- Replace.						
Pilot will not light.	No spark at pilot burner.	<ul> <li>Check if pilot can be lit by a match.</li> <li>Check that the wire is connected to the push button igniter.</li> <li>Check if the push button igniter 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.	- Fill the tank.						
	Spark gap is incorrect.	- Spark gap should be 0.150" to 0.175" (5/32" to 11/64" approx.) from the electrode tip and the pilot burner. To ensure proper electrode location, tighten securing nut (finger tight plus 1/4 turn).						
	No gas at the pilot burner.	<ul><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>						
Pilot goes out while standing; Main burner is in 'OFF' position.	Gas piping is undersized.	<ul> <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 very	Door is ajar.	- Tighten screws holding door in place.						
aggressive.	Venting action is too great.	- Restrict vent exit with restrictor vent kit.						
Main burner flame is a blue, lazy, transparent flame.	Blockage in vent.	- Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.						
name.	Incorrect installation.	- Refer to Figure 31 to ensure correct location of storm collars.						
Carbon is being deposited on glass, logs or combustion	Air shutter has become blocked.	- Ensure air shutter opening is free of lint or other obstructions. Check and adjust air shutter to correspond with the fuel type and air intake size.						
chamber surfaces.	Flame is impinging on the logs or combustion chamber.	<ul> <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 that the door gestating is not broken or missing and that the seal is tight.</li> <li>Check that both vent liners are free of holes and well sealed at all joints.</li> <li>Check that minimum rise per foot has been adhered to for any horizontal venting.</li> </ul>						
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	<ul> <li>Clean the glass with a recommended gas fireplace glass cleaner. DO NOT CLEAN GLASS WHEN HOT.</li> <li>If deposits are not cleaned off regularly, the glass may become permanently marked.</li> </ul>						
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	<ul> <li>Ensure exhaust bracket gasket seal.</li> <li>Check door seal and relief flap seal.</li> <li>Check for chimney blockage and that chimney is installed to building code.</li> <li>Room is in negative pressure; increase fresh air supply.</li> <li>Check cap gasket on the flue pipe assembly.</li> </ul>						

Je.	d Special Concerns																
Appliance Service History his heater must be serviced annually depending on usage.	Service Performed																
Appliance So is heater must be serviced	Service Technician Name																
Th	Dealer Name																
	Date																

### **10.0 SERVICE HISTORY**

TP - SERVICE HISTORY

26			
1.0	NOTES		