



# WATERFORD

IRISH STOVES

www.waterfordstoves.com

## EMERALD Gas Fireplace Insert

Owners &  
Installation Manual



MODELS: E61-NG Natural Gas E61-LP Propane

### WARNING:

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.

### FOR YOUR SAFETY

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

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

### FOR YOUR SAFETY

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.

Tested by:



*Installer:* Please complete the details on the back cover and leave this manual with the homeowner.

*Homeowner:* Please keep these instructions for future reference.

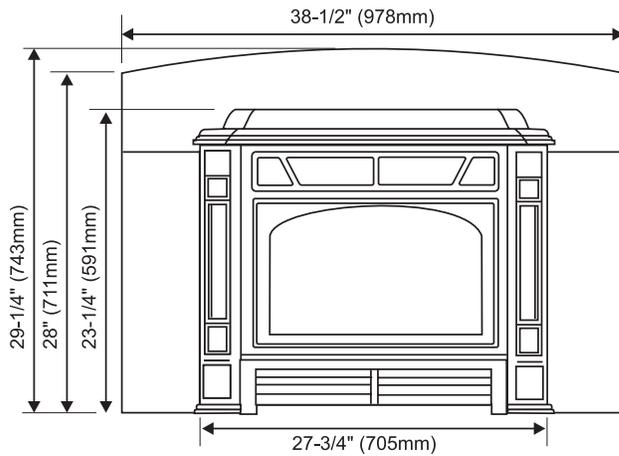
# WATERFORD GAS FIREPLACE INSERT

## TO THE NEW OWNER

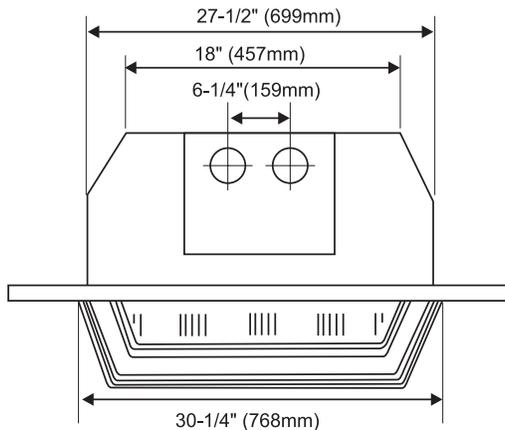
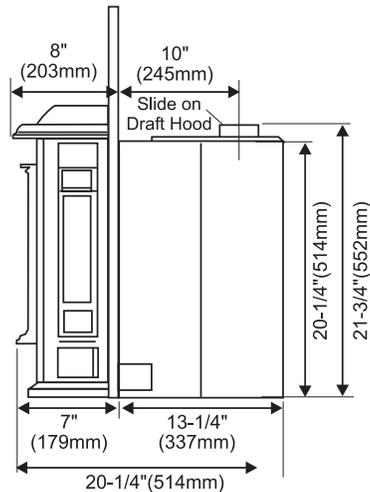
Congratulations! You are the owner of a state-of-the-art Gas Insert by Waterford Irish Stoves. The Waterford Gas Fireplace Series of hand crafted appliances has been designed to provide you with all the warmth and charm of a fireplace, at the flick of a switch. This series has been approved by Warnock Hersey for both safety and efficiency. As it also bears our own mark, it promises to provide you with economy, comfort, and security for many trouble free years to follow. Please take a moment now to acquaint yourself with these instructions and the many features of your Waterford Fireplace.

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

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



NOTE: Standard Shroud shown,  
Oversize Shroud: 42-3/4" W x 30-3/4" H



**Minor imperfections such as blisters, seeds or thin flaws visible in this product are not defects. These are inherent in the hand-crafted enamel process and cannot be avoided, and they substantiate that this is genuine porcelain enamel.**



We recommend that our products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) or in Canada by Wood Energy Technical Training (WETT).



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# SAFETY LABEL

This is a copy of the label that accompanies each Waterford E61-NG Gas Insert Natural Gas. We have printed a copy of the contents here for your review. The safety label is located on the right side door panel.

**NOTE:** Waterford units are constantly being improved. Check the label on the unit and if there is a difference, the label on the unit is the correct one.

For the State of Massachusetts, installation and repair must be done by a plumber or gasfitter licensed in the Commonwealth of Massachusetts.

For the State of Massachusetts, flexible connectors shall not exceed 36 inches in length.

For the State of Massachusetts, the appliances individual manual shut-off must be a t-handle type valve.

**DUPLICATE SERIAL NO.**

205

DO NOT REMOVE OR COVER THIS LABEL /  
NE PAS ENLEVER CETTE ÉTIQUETTE

Serial no. /  
No de serie

205

**205**



**WATERFORD**  
IRISH STOVES

**Listed:** VENT GAS FIREPLACE HEATER  
**Certified for/Certifiée pour:** CANADA and U.S.A.  
**Report No.** 476-1714-00 (Oct. 1999)  
**Tested to:** ANSI Z21.88b-2003/CSA 2.33b-2003, CAN/CGA 2.17-M91

**Model: E61NG**

**FACTORY EQUIPPED FOR NATURAL GAS**

Minimum supply pressure	5" WC/C.E. (1.25 kPa)
Manifold pressure High	3.8" WC/C.E. (0.94 kPa)
Manifold pressure Low	1.1" WC/C.E. (0.27 kPa)

**Factory Equipped for Altitude 0-2000 ft.**

Maximum Input	38,000 Btu/h (11.14 Kw/h)
Minimum Input	19,000 Btu/h (5.57 Kw/h)
Orifice size	#32 DMS (2.9mm)
Altitude	0-2000 ft/pi (0-610m)

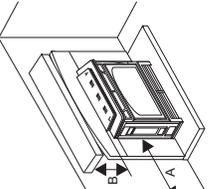
**Convertible for Altitude 2000-4500 ft.**

Maximum Input	36,100 Btu/h (10.57 Kw/h)
Minimum Input	18,000 Btu/h (5.28 Kw/h)
Orifice size	#33 DMS (2.87mm)
Altitude	2000-4500 ft/pi (610-1372m)

**Convertible to 27,000 Btu for Altitude 0 - 4500 ft. with Kit #: 260-920**

Maximum Input	27,000 Btu/h (7.91 Kw/h)
Minimum Input	13,500 Btu/h (3.95 Kw/h)
Orifice size	#40 DMS (2.49mm)
Altitude	0-4500 ft/pi (0-1372m)

**Minimum Clearances to Combustibles/ Dégradation Minimum De Matériaux Combustibles**



Unit to Sidewalls: A 9"/230mm  
Top of Hob to mantel: unshielded B 16"/406mm shielded B 12"/305mm  
To ceiling from top of stove: 36"/915mm

**Floor Protector**  
A floor protector consisting of one layer of 1/2" thick WonderBoard®, Durrock®, or equivalent extending at least 9" in front of the face of the unit and the full width of the front surface is required.

**Electrical Supply (115 V, 1.13A, 60 Hz)**  
Approved for use with Emerald Zero Clearance Kit, Part No. 270-900.

**This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or Natural Gas and Propane Installation Codes, CSA B149.1.**  
**FOR USE WITH GLASS DOORS CERTIFIED WITH APPLIANCE ONLY.**  
This vented gas fireplace heater is not for use with air filters.  
Not for use with solid fuel.

**Minimum supply pressure** 5" WC/C.E. (1.25 kPa)  
**Manifold pressure High** 3.8" WC/C.E. (0.94 kPa)  
**Manifold pressure Low** 1.1" WC/C.E. (0.27 kPa)

**Factory Equipped for Altitude 0-2000 ft.**  
Maximum Input 38,000 Btu/h (11.14 Kw/h)  
Minimum Input 19,000 Btu/h (5.57 Kw/h)  
Orifice size #32 DMS (2.9mm)  
Altitude 0-2000 ft/pi (0-610m)

**Convertible for Altitude 2000-4500 ft.**  
Maximum Input 36,100 Btu/h (10.57 Kw/h)  
Minimum Input 18,000 Btu/h (5.28 Kw/h)  
Orifice size #33 DMS (2.87mm)  
Altitude 2000-4500 ft/pi (610-1372m)

**Convertible to 27,000 Btu for Altitude 0 - 4500 ft. with Kit #: 260-920**  
Maximum Input 27,000 Btu/h (7.91 Kw/h)  
Minimum Input 13,500 Btu/h (3.95 Kw/h)  
Orifice size #40 DMS (2.49mm)  
Altitude 0-4500 ft/pi (0-1372m)

**This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. See owner's manual for details. This appliance is not convertible for use with other gases, unless a certified kit is used.**

Made in Canada/Fabrique au Canada FPI Fireplace Products International Ltd., Delta, BC, Canada

908-419b

4

Waterford E61 Gas Fireplace Insert

This is a copy of the label that accompanies each Waterford E61-LP Gas Insert Propane. We have printed a copy of the contents here for your review. The safety label is located on the right side door panel.

**NOTE:** Waterford units are constantly being improved. Check the label on the unit and if there is a difference, the label on the unit is the correct one.



**WATERFORD**  
IRISH STOVES

DO NOT REMOVE OR COVER THIS LABEL/  
NE PAS ENLEVER CETTE ÉTIQUETTE

**DUPLICATE SERIAL NO.** 204

Serial no./  
No de serie 204

**Listed:** VENT GAS FIREPLACE HEATER  
**Certified for/Certifiée pour:** CANADA and U.S.A.  
**Report No.** 476-1714-00 (Oct. 1999)  
**Tested to:** ANSI Z21.88b-2003/CSA 2.33b-2003, CAN/CGA 2.17-M91

**FACTORY EQUIPPED FOR PROPANE**

Minimum supply pressure	12" WC/C.E. (3.00 kPa)
Manifold pressure High	11" WC/C.E. (2.74 kPa)
Manifold pressure Low	2.9" WC/C.E. (0.72 kPa)

**Factory Equipped for 35,000 Btu**

Maximum Input	35,000 Btu/h (10.26 Kw/h)
Minimum Input	17,500 Btu/h (5.13 Kw/h)
Orifice size	#50 DMS (1.8mm)
Altitude	0-2000 ft/pi (0-610m)

**Convertible to 29,000 Btu for Altitude 0 - 4500 ft. with Kit #: 260-922**

Maximum Input	29,000 Btu/h (8.50 Kw/h)
Minimum Input	14,500 Btu/h (4.25 Kw/h)
Orifice size	#52 DMS (1.61mm)
Altitude	0-4500 ft/pi (0-1372m)

**Model: E61LP ÉQUIPÉ À L'UISINE POUR GAZ PROPANE**

Pression d'alimentation minimum	
Pression à la tubulure d'échappement élevée	
Pression à la tubulure d'échappement basse	

Débit Calorifique maximum  
Débit Calorifique minimum  
Dimensions de l'orifice  
L'altitude

Débit Calorifique maximum  
Débit Calorifique minimum  
Dimensions de l'orifice  
L'altitude

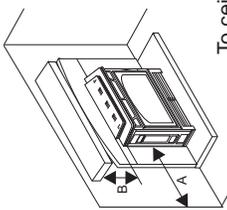
**This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. See owner's manual for details. This appliance is not convertible for use with other gases, unless a certified kit is used.**

Made in Canada/ Fabrique au Canada

908-4388

FPI Fireplace Products International Ltd., Delta, BC, Canada

**Minimum Clearances to Combustibles/ Degagement Minimum De Matériaux Combustibles**



Unit to Sidewalls A 9"/230mm  
Top of Hob to mantel: unshielded B 16"/406mm shielded B 12"/305mm  
To ceiling from top of stove: 36"/915mm

**Floor Protector**

A floor protector consisting of one layer of 1/2" thick WonderBoard®, Durock®, or equivalent extending at least 9" in front of the face of the unit and the full width of the front surface is required.

**This vented gas fireplace heater is not for use with air filters.**

**Not for use with solid fuel.**

**Electrical Supply (115 V, 1.13A, 60 Hz)**

Approved for use with Emerald Zero Clearance Kit, Part No. 270-900.

**This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or Natural Gas and Propane Installation Codes, CSA B149.1.**

**FOR USE WITH GLASS DOORS CERTIFIED WITH APPLIANCE ONLY.**

# INSTALLATION

## IMPORTANT: SAVE THESE INSTRUCTIONS

The Waterford Gas Fireplace must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to starting the installation.

**Note:** Failure to follow these instructions could cause a malfunction of the heater which could result in death, serious bodily injury, and/or property damage. Failure to follow these instructions may also void your fire insurance and/or warranty.

## FOR YOUR SAFETY

This appliance requires air for proper combustion. Always provide adequate combustion and ventilation air. Follow instructions and information in the current CAN/CGA B149 (in Canada) or the current National Fuel Gas Code ANSI Z223.1 (in the USA), regarding requirements for combustion and ventilation air.

## GAS PIPE TESTING

The appliance 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. (3.45 kPa).

## SPECIFICATIONS

<b>Fuel:</b>	Natural gas or Propane
<b>Electrical:</b>	120V A.C. system.
<b>Fan/Blower:</b>	Variable speed, 140 CFM.
<b>Log Sets:</b>	Ceramic fiber, 3 per set.
<b>Vent System:</b>	Listed two 3" co-linear aluminum flex liners.

## ZERO CLEARANCE INSTALLATION

The WATERFORD Gas Inserts are **only approved for installation into the WATERFORD E61 Gas Insert Zero Clearance Fireplace Kit, model #270-900.**

**NOTE:** There are changes in clearances and other differences when installing into the Zero Clearance Kit. Read the Zero Clearance Kit manual and the decal on the Kit.

## INSTALLATION INTO AFACTORY BUILT FIREPLACE

The WATERFORD Gas Inserts have been tested and approved to be vented into any approved Factory Built Fireplace that will allow the Insert to physically fit into the firebox.

**If the factory built fireplace height is too low for your Insert, you may remove the smoke shelf, baffle plate, and damper plate from the factory built fireplace if removable without cutting or torching, as long as these items are saved and are re-installed in the event that the Insert is removed.**

## BEFORE YOU START

Safe installation and operation of this appliance requires common sense, however, we are required by the Canadian Safety Standards and ANSI Standards to make you aware of the following:

### General Safety Information

- 1) The appliance installation must conform with local codes or in the absence of local codes, with current CAN/CGA B149 (in Canada) or the current National Fuel Gas Code ANSI Z223.1. This appliance **MUST** be installed by a qualified gas fitter technician only.
- 2) **Installation and repair should be done by a qualified service person.**
- 3) The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, and circulating air passageways of the appliance be kept clean and free from excessive lint from carpeting and pet hair.
- 4) See general construction and assembly instructions. This appliance may only be installed in a vented, non-combustible fireplace.
- 5) This appliance may be installed into bedrooms when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.
- 6) This unit is approved for installation into a mobile home.
- 7) Always connect this fireplace to a chimney and vent to the outside of the building

envelope. Never vent to another room or inside a building. Make sure that the vent is properly sized and is of adequate height to provide the proper draft.

- 8) Inspect the venting system annually for blockage and any signs of deterioration.
- 9) Any safety glass removed for servicing must be replaced prior to operating the appliance.
- 10) To prevent injury, do not allow anyone who is unfamiliar with the operation to use the fireplace.
- 11) Due to high temperatures, the appliance should be located out of high traffic areas and away from furniture and draperies. Children and adults should be alerted to the hazards of high surface temperatures, especially the fireplace glass and gold trims, and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance. Clothing or other flammable material should not be placed on or near the appliance.
- 12) **WARNING: Failure to position the parts in accordance with the diagrams in this manual or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.**
- 13) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

Emissions from burning wood or gas could contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## INSTALLATION CHECKLIST

The Waterford Gas Insert is installed as listed below.

- 1) Unit Location - check Clearances to Combustibles on page 7.
- 2) Make the gas connections and electrical connection for fan. See page 8.
- 3) Install the 3" flue liner to the sliding connector plate. See page 9.
- 4) Slide the unit half way into the fireplace.

- 5) Pull the vent connector plate through the tapered brackets and fasten to the front plate. See page 9.
- 6) Slide the unit fully into the fireplace and level.
- 7) Test gas pressure, page 11. Check aeration, page 12.
- 8) Assemble and install the shroud. See page 12.
- 9) Install Optional Door Grill. See page 13.
- 10) Install the log set. See page 13.
- 11) Install Optional Remote Control, and Optional Wall Thermostat, if required. See pages 13 and 14.
- 12) Explain controls to the homeowner.
- 15) **Final check:** Before leaving this unit with the customer, the installer must ensure that the appliance is firing correctly. This includes:
  - a) Clocking the appliance to ensure the correct firing rate.
  - b) Adjusting the primary air, if required, to ensure that the flame does not carbon. See page 12.
  - c) Ensuring that the appliance is venting correctly.

**WARNING:**  
**Electrical Grounding Instructions**  
 This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

## CLEARANCES TO COMBUSTIBLES

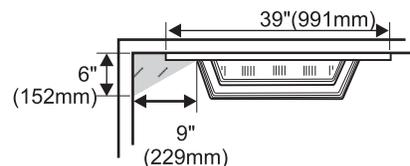
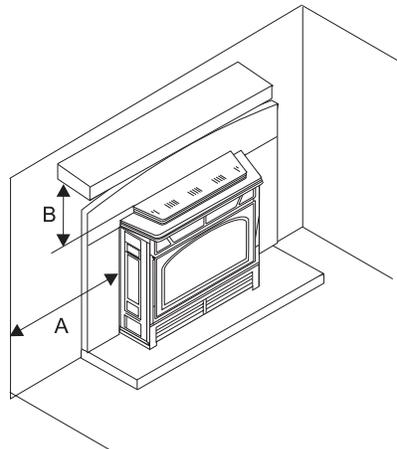
The following clearances to combustibles must be observed:

	From Unit
Sides	A 9" / 229 mm
Unit to Unprotected Mantel	B 16" / 406 mm
Unit to Protected Mantel*	B 12" / 305 mm

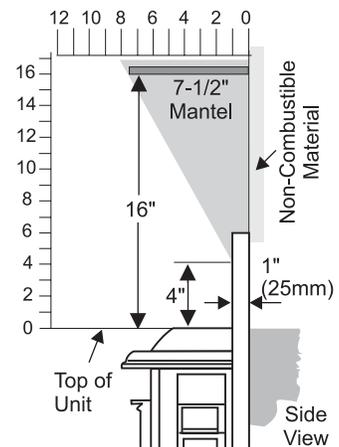
\*Mantel shield must have a 1" (25mm) air space between the mantel and shield and a 1" (25mm) gap between on the back of the shield and the facing.

In addition to these clearances, adequate accessibility clearance for servicing and proper operation must be maintained.

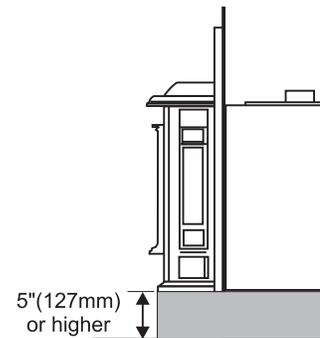
Do not in any way obstruct the air inlets that are located on the front of the heater.



Combustibles are permitted within the shaded area, on either side.



Combustible Mantels are permitted within the shaded area.



When the Insert is installed in a fireplace that is elevated 5" or higher, no floor protection is required in front of the appliance.

## MATERIALS REQUIRED

No electrical power supply is required for the gas control to operate. A 120 Volt AC power cord is hooked up to the fan switch and blower. Plug 3 wire cord into a suitable receptacle. **Do not cut the ground terminal off under any circumstances.**

When connected with 120 volts, the appliance must be electrically grounded in accordance with local codes, with a current version of CSA C22.1 (in Canada) or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70-1987.

**Note:** This unit is equipped with a heat sensor thermodisc which will prevent the blower from operating until the unit reaches the correct temperature.

## Floor Protection

An approved floor protector is required consisting of a layer of 1/2" (13mm) Wonderboard (or Durock or equivalent) that extends 9" (229mm) in front of the fireplace measured at the base (this equals 16" from the fireplace opening), and as wide as the appliance.

**Note:** If the appliance is installed in a fireplace that is elevated 5" (127mm) or higher (i.e., a Waterford Zero Clearance Cabinet, zero clearance fireplace, brick plinth, etc.), no floor protection is required in front of the appliance.

# INSTALLATION

## GAS CONNECTION

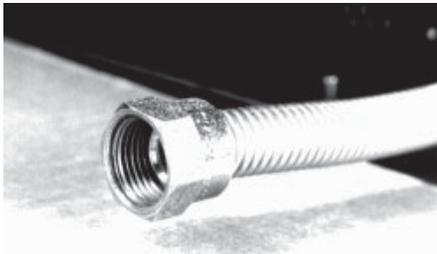
The Emerald Insert is factory equipped to burn Natural Gas, if necessary the unit can be converted to burn Propane by using Conversion Kit # 260-960. For minimum and maximum supply pressure see the System Data table on page 8.

**Note:** Prior to any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shut-off valve must be disconnected from the piping system. If test pressures equal to or less than 1/2 psig are used then this appliance must be isolated from the piping system by closing its individual manual shut-off valve during the testing.

### GAS CONNECTION WARNING:

Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

- 1) The gas inlet is located on the end of the flexible pipe that emerges from the lower left rear corner of the unit. The inlet fitting is a 1/2" female flare.



A separate gas shut-off valve and a 1/8" IPS plugged tapping should be installed immediately upstream of the connection to the appliance.

- 2) The gas inlet is located on the end of the flexible pipe that emerges from the lower left rear corner of the unit. The inlet fitting is a 1/2" female flare.

A separate gas shut-off valve and a 1/8" IPS plugged tapping should be installed immediately upstream of the connection to the appliance.

- 3) Locate the center point where the vent will pass through the chimney above the appliance. Move the appliance into the exact location where it is to be installed. Ensure that the Insert is level.

- 4) The gas control valve is provided with two "IN" and "OUT" pressure taps, and are easily accessible for a test gauge connection (see diagram on page 12).

- 5) Once the gas has been connected ensure that the pilot valve is in line with burner.

**CAUTION:** If the door is removed or opened for servicing, it must be replaced and closed prior to operating the appliance. The glass must be fixed in the door when operating.

### Recommended Gas Pipe Diameter

Pipe Length (feet)	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	NG	LP	NG	LP
0 - 10	1/2"	3/8"	1/2"	3/8"
	1.3cm	1.0cm	1.3cm	1.0cm
10 - 40	1/2"	1/2"	5/8"	1/2"
	1.3cm	1.3cm	1.6cm	1.3cm
40 - 100	1/2"	1/2"	3/4"	1/2"
	1.3cm	1.3cm	2.0cm	1.3cm
100 - 150	3/4"	1/2"	7/8"	3/4"
	2.0cm	1.3cm	2.3cm	2.0cm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized pipe.

### System Data For 0 to 2000 feet altitude

#### Burner Inlet Orifice Sizes:

Burner	Natural Gas	Propane
	#32	#50

#### Max. Input

- Natural Gas	38,000 Btu/h
- Propane	35,000 Btu/h

#### Min. Input

- Natural Gas	19,000 Btu/h
- Propane	17,500 Btu/h

#### Max. Output Capacity with blower On

Natural Gas	30,666 Btu/h
Propane	28,700 Btu/h

#### Supply Pressure:

Nat. Gas	min. 5" w.c. (1.25 kPa)
Propane	min. 12" w.c. (3.0 kPa)

#### Manifold Pressure

Natural Gas	3.8" +/- 0.2" w.c. (0.94 kPa)
Propane	11" +/- 0.2" w.c. (2.7 kPa)

### System Data - HIGH ELEVATION For 2,000 - 4,500 feet altitude

#### Burner Inlet Orifice Sizes:

Burner	Natural Gas
	#33

#### Max. Input

- Natural Gas	36,100 Btu/h
---------------	--------------

### System Data: E61 Converted to 27,000 (Natural Gas) or 29,000 (Propane)

#### For 0 to 4500 feet altitude

##### Burner Inlet Orifice Sizes:

Burner	Natural Gas	Propane
	#40	#52

#### Max. Input Rating

- Natural Gas	27,000 Btu/h
- Propane	29,000 Btu/h

#### Min. Input Rating

- Natural Gas	13,500 Btu/h
- Propane	14,500 Btu/h

#### Output Capacity with blower Off

Natural Gas	21,168 Btu/h
Propane	23,258 Btu/h

#### Output Capacity with blower On

Natural Gas	21,708 Btu/h
Propane	23,925 Btu/h

#### Supply Pressure

Natural Gas	min.	5.0" w.c.
Propane	min.	12.0" w.c.

#### Manifold Pressure

Natural Gas	3.8"	+/- 0.2" w.c.
Propane	11"	+/- 0.2" w.c.

## HIGH ELEVATION

This unit is approved in Canada (CAN/CGA-2.17-M91) for altitudes to 2000 ft. (610m) using the factory -installed burner orifice. For installations from 2000 ft (610m) to 4500 ft (1370m) the orifice sizes (DMS) for the Natural Gas and Propane units must be changed. See the rating plate for details. For installations above 4500 ft. refer to current ANSI Z223.1 Sc8-8.1.2a appendix F or CAN/CGA-B149.1, for resizing orifice.

## VENTING

**THE APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVING A SEPARATE SOLID FUEL BURNING APPLIANCE.**

This appliance is designed to be attached to two 3" (76mm) co-linear aluminium flex running the full length of the chimney. The flue length must be a minimum length of 8' (2.44m) and a maximum of 35' (10.7m). See chart for minimum distances from roof. Periodically check that the vent is unrestricted.

Masonry chimneys may take various contours which the flexible liner will accommodate. However, **keep the flexible liner as straight as possible**, avoid unnecessary bending.

# INSTALLATION

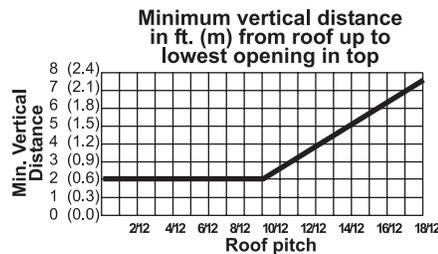
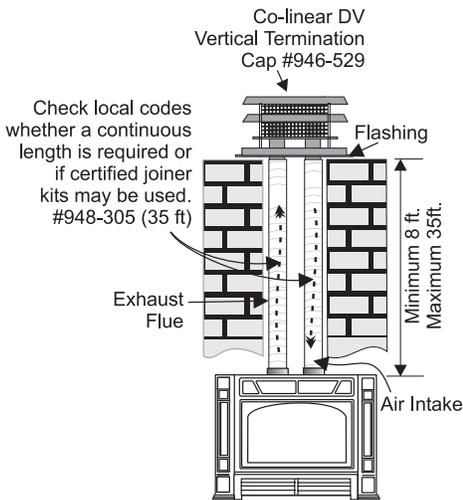
Part #	Description
948-305	3" Flex - 35 ft.
946-529	Co-linear DV Vertical Termination Cap

## Alternate Approved Caps

980	Vertical Termination Cap
991	High Wind Cap
923GK	3" Co-linear Adaptor with flashing

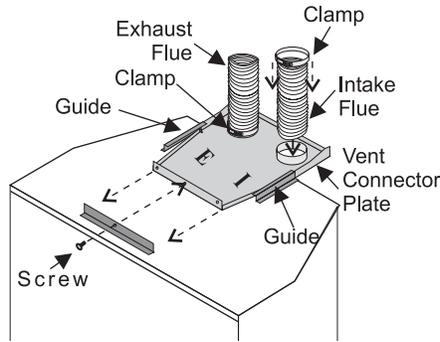
In areas on consistently high winds, we recommend using the Simpson Dura-Vent System (923GK adaptor and 991 high-wind cap).

The Air Intake pipe must be attached to the inlet air collar of the termination cap.

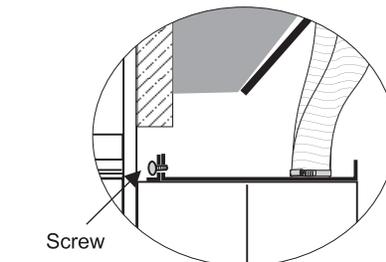
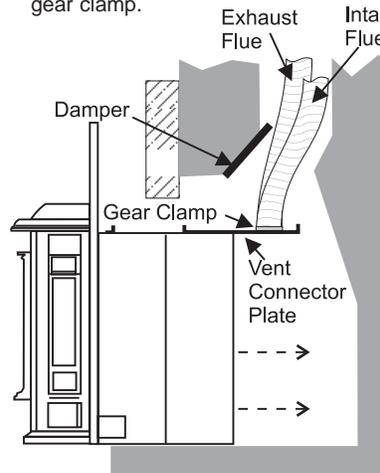


## FLUE LINER INSTALLATION

- 1) Cut the flex liner as required.
- 2) Mark the end of one liner to indicate Inlet.
- 3) Connect the other end of the above liner to the inlet side of the termination adaptor, seal connection with high temperature silicone. Secure with gear clamp.
- 4) Connect the 2nd liner to the exhaust side of the adaptor, seal connection with high temperature silicone. Secure with gear clamp.



- 5) Install flashing.
- 6) Insert both liners into chimney, passing through the damper opening.
- 7) Install termination cap.
- 8) Connect the **marked end** of the liner to the inlet collar of the vent connector plate marked with an "I", seal connection with high temperature silicone. Secure with gear clamp.
- 9) Connect the 2nd liner to the exhaust collar marked with an "E", seal connection with high temperature silicone. Secure with gear clamp.

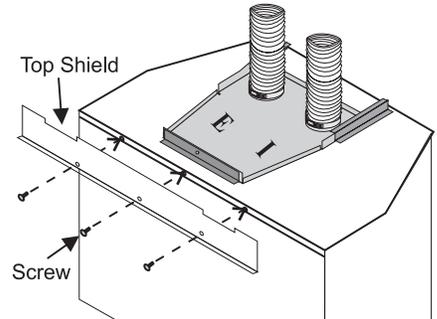


### NOTE:

- 1) Final gas connection should be made after unit is in place to avoid damage to line when pushing the unit into position.
- 2) Mill-pac may be used instead of high temperature silicone and screws may be used instead of gear clamps at con-

nections of liner to inlet and vent collars.

- 10) Attach the top shield to the top front lip of the firebox using 3 screws.



## CONVERSION KIT FROM NATURAL GAS TO PROPANE MODEL #260-960

for Emerald E61 Gas Insert using SIT 820 NOVA Gas Valve

**THIS CONVERSION MUST BE DONE BY A QUALIFIED GASFITTER IF IN DOUBT DO NOT DO THIS CONVERSION!!**

Conversion Kit Contains:

Qty.	Part #	Description
1	910-018	SIT Conversion Kit-50% Turndown LP
1	910-383	LP Injector (Pilot Orifice)
1	904-641	Burner Orifice #50
1	908-455	Decal "Converted to Propane"
1	908-528	Red "PROPANE" label
1	908-173	Instruction Sheet

- 1) Shut off the gas supply.
- 2) Open the lower grill and remove the 2 screws holding the control panel in place.



Remove the 2 screws holding the Control Panel in place.

# INSTALLATION



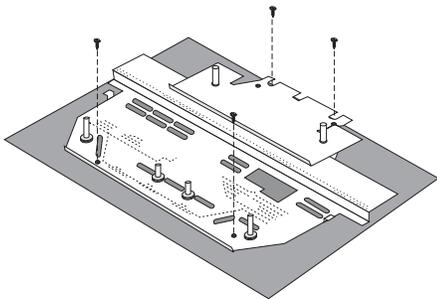
- 3) Remove the door by lifting it slightly up and off the front face. Remove the 7 nuts that secure the front glass bracket holding the center glass in place.



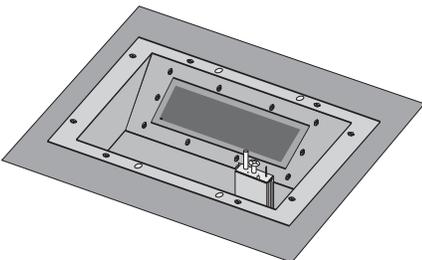
Remove the 7 nuts holding the Front Glass Bracket to the front face.  
CAUTION: Don't let the glass drop.

- 4) Carefully remove the logs and embers.  
5) Remove burner. See diagram below.

**Note: Use a magnetic type screwdriver if possible.**

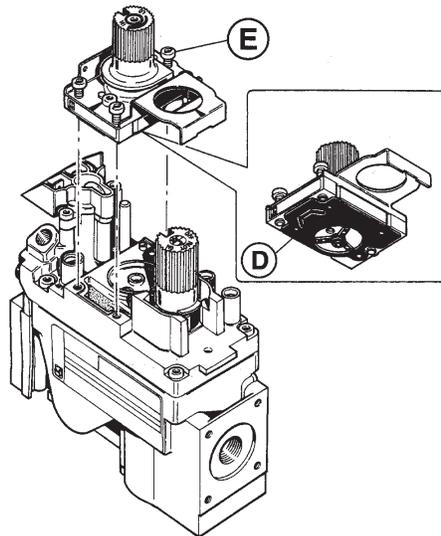
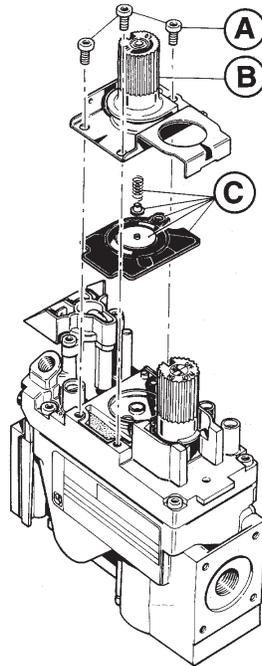


Pilot assembly is now accessible for steps 6) to 11).



- 6) Remove and discard the 3 pressure regulator mounting screws (A), pressure regulator tower (B) and diaphragm (C).  
7) Insure that the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using

the new screws (E) supplied with the kit. Tighten screws securely.



- 8) Pull off the pilot cap to expose the pilot orifice.



- 9) Unscrew the pilot orifice with the allen key and replace with the LP pilot orifice in the kit.



- 10) Remove burner orifice with a 1/2" wrench and discard. Use a wrench to hold on to the elbow behind the orifice.

- 11) Reinstall new burner orifice LP stamped #50 and tighten.

- 12) Reverse steps 5) to 1).

- 13) Attach the label (Part#: 908-455) "This unit has been converted to Propane" on top of the Serial # decal.

## THIS UNIT HAS BEEN CONVERTED TO PROPANE

Model/Modelo: E61-LP Emerald Freestanding Gas Heater - Propane		
Minimum supply pressure	12" WC/C.E. (3.00 kPa)	Pression d'alimentation minimum
Manifold pressure High	11" WC/C.E. (2.74 kPa)	Pression à la tubulure d'échappement élevée
Manifold pressure Low	2.9" WC/C.E. (0.72 kPa)	Pression à la tubulure d'échappement basse
<b>Factory Equipped for 35,000 Btu</b>		
Maximum Input	35,000 Btu/h (10.26 Kw/h)	Débit Calorifique maximum
Minimum Input	17,500 Btu/h (5.13 Kw/h)	Débit Calorifique minimum
Orifice size	#50 DMS (1.8mm)	Dimensions de l'orifice
Output -fan OFF	28,000 Btu/h (8.21 Kw/h)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	28,700 Btu/h (8.41 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-2000 ft/pi (0-610m)	L'altitude
<b>Convertible to 29,000 Btu for Altitude 0 - 4500 ft. with Kit #: 260-922</b>		
Maximum Input	29,000 Btu/h (8.50 Kw/h)	Débit Calorifique maximum
Minimum Input	14,500 Btu/h (4.25 Kw/h)	Débit Calorifique minimum
Orifice size	#52 DMS (1.61mm)	Dimensions de l'orifice
Output -fan OFF	23,259 Btu/h (6.82 Kw/h)	Débit Calorifique-Ventilateur Éteint Btu/h
Output -fan ON	23,925 Btu/h (7.01 Kw/h)	Débit Calorifique-Ventilateur en Marche Btu/h
Altitude	0-4500 ft/pi (0-1372m)	L'altitude

- 14) Replace yellow "Natural Gas" label with red "Propane" label

- 15) Check for gas leaks.

- 16) Check inlet and outlet pressures.

- 17) Check operation of flame control.

- 18) Check for proper flame appearance and glow on logs.

## Reduction Kit to Lower Btu Rating for Emerald E61 Gas Insert

Natural Gas - Kit #: 260-920

Propane - Kit # 260-922

**THIS CONVERSION MUST BE DONE BY A QUALIFIED GAS FITTER IF IN DOUBT DO NOT DO THIS CONVERSION!!**

### Natural Gas Conversion Kit 260-920

#### Contains:

Qty.	Part #	Description
1	904-593	Burner Orifice #40 (Natural Gas)
1	908-365	Decal "Converted to 27,000 Btu"
1	908-363	Instruction Sheet

### Propane Conversion Kit 260-922 Contains:

Qty.	Part #	Description
1	904-390	Burner Orifice #52 (Propane)
1	908-366	Decal "Converted to 29,000 Btu"
1	908-363	Instruction Sheet

- 1) Shut off the gas supply.
- 2) Open the lower grill and remove the 2 screws holding the control panel in place.



Remove the 2 screws holding the Control Panel in place.



- 3) Remove the door by lifting it slightly up and off the front face. Remove the 7 nuts that secure the front glass bracket holding the center glass in place.

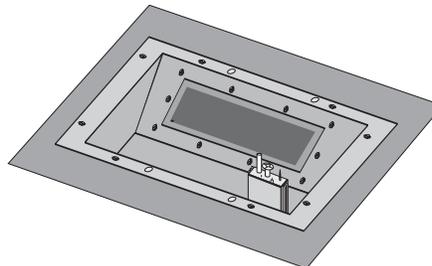
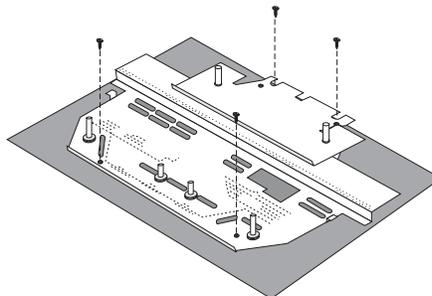


Remove the 7 nuts holding the Front Glass Bracket to the front face.

CAUTION: Don't let the glass drop.

- 4) Carefully remove the logs and embers.
- 5) Remove burner.

**Note: Use a magnetic type screwdriver if possible.**



- 6) Remove burner orifice with a 1/2" wrench and discard.



Burner Orifice

- 7) Reinstall new burner orifice (NG stamped #40 or LP stamped #52) and tighten.
- 8) Reverse steps 5) to 1).

- 9) Attach the label "This unit has been converted to..." on top of the Serial # decal over the higher Btu information.
- 10) Check for gas leaks.
- 11) Check inlet and outlet pressures.
- 12) Check operation of flame control. Check for proper flame appearance and glow on logs.

## GAS PIPE PRESSURE TESTING

The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. (3.45 kPa). Disconnect piping from valve at pressures over 1/2 psig.

The unit is preset to give the correct gas input at the specified manifold pressures shown on the label. The maximum gas manifold pressure is:

**Natural Gas: 3.8" w.c.**  
**Propane: 11" w.c.**

The manifold pressure is controlled by a regulator built into the gas control, and should be checked at the pressure test point. The pressure check should be carried out with the unit burning and the setting should be within the limits specified.

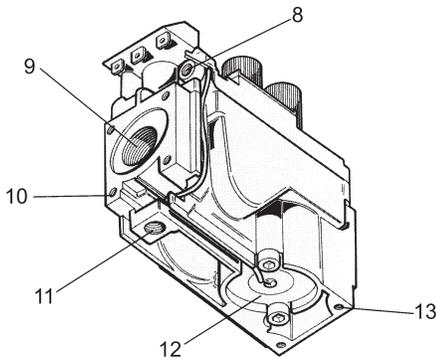
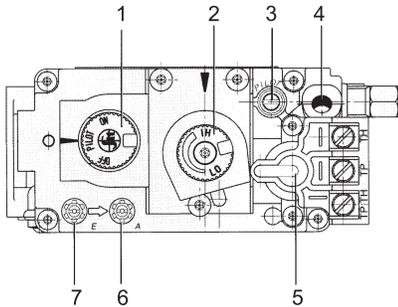
**Note: To properly check gas pressure, both inlet and manifold pressures should be checked using the valve pressure ports on the valve.**

- 1) Make sure the valve is in the "OFF" position.
- 2) Loosen the "IN" and/or "OUT" pressure tap(s), turning counterclockwise with a 1/8" wide flat screwdriver.
- 3) Attach manometer to "IN" and/or "OUT" pressure tap(s) using a 5/16" ID hose.
- 4) Light the pilot and turn the valve to "ON" position. Read manometer.
- 5) The pressure check should be carried out with the unit burning and the setting should be within the limits specified on the safety label.
- 6) When finished reading manometer, turn off the gas valve, disconnect the hose and tighten the screw (clockwise) with a 1/8" flat screwdriver. **Note: Screw should be snug, but do not over tighten**

# INSTALLATION

## Valve Description

- 1) Gas cock knob
- 2) Manual high/low adjustment
- 3) Pilot Adjustment
- 4) Thermocouple Connection
- 5) Main Operator
- 6) Outlet Pressure Tap (Manifold Pressure)
- 7) Inlet Pressure Tap (Supply Pressure)
- 8) Pilot Outlet
- 9) Main Gas Outlet
- 10) Flange Securing Screw Holes
- 11) Alternative TC Connection Point
- 12) Thermoelectric Unit
- 13) Additional Valve Mounting Hole



## AERATION ADJUSTMENT

The burner aeration is factory set but may need adjusting due to either the local gas supply, air supply or altitude.

with 38,000 Btu	with 27,000 (NG) / 29,000 LP
Natural Gas 3/16" (4.75mm)	Natural Gas 1/8" (3.18mm)
Propane 1/4" (6.35mm)	Propane 3/16" (4.75mm)

- 1) Turn the heater off and allow it to cool.
- 2) Open the bottom door.

- 3) To adjust the aeration: use the allen key to turn the turning gear which will adjust the air shutter. Open the air shutter for a blue flame or close it for a yellow flame.



Closed - Tall yellow flame  
Open - Short blue flame

- 4) Restart the heater and let it burn for approximately 15 minutes. Repeat until the desired flame appearance is achieved.

**Caution:** Carbon will be produced if the air shutter is closed too much.

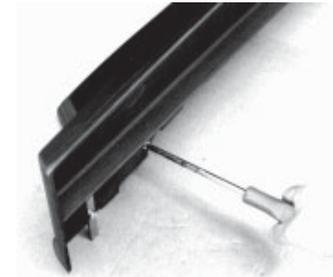
**Note:** Any damage due to carboning resulting from improperly setting the aeration controls is NOT covered under warranty.

**Note:** Aeration Adjustment should only be performed by an authorized Regency Installer at the time of installation or service.

- 2) Plug the 'quick connect' electrical connection into the junction box. An alternative wire outlet is provided on the junction box so that the blower power cable can be routed out the back of the shroud if so desired.

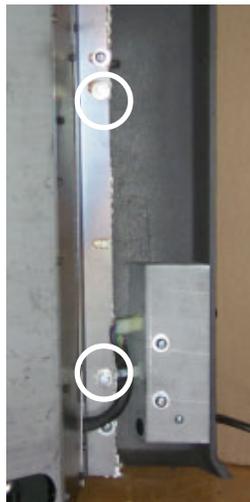


- 3) Connect the Hob to the Top Surround Panel. The Hob is attached with 2 bolts (with washers) on either side.



## SHROUD INSTALLATION

- 1) Attach the 2 side Surround Panels to the body. Each side panel attaches to the body with two bolts per side (top and bottom) and use a washer and a 1/2" spacer with each screw.



Rear View: Side panel attached with 2 bolts.



Side panel with 1/2" spacer

- 4) The Hob & Top Surround Panel will be placed in position as the last step of the installation. The flue spillage test and fitting the draft hood are more easily accomplished without the Hob & Top Surround Panel in position.

When ready to install the Hob & Top Surround Assembly, lower it down onto the top of the body. It is held in place by its own weight and the retaining brackets on each side.

**Over size Shroud Only:** The 4 retaining brackets on the Top Surround must be removed and rotated 180° and replaced. The end of the bracket must extend beyond the bottom of the Top Surround.



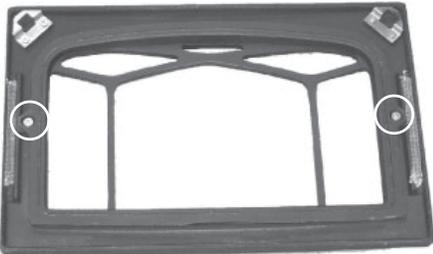
Top Surround Panel Retaining Bracket

## OPTIONAL DOOR GRILL

- 1) Remove the door by lifting it slightly up and off the front face.



- 2) Remove the 2 side screws.
- 3) Position the door grill inside the door and secure with the 2 screws.



Secure the Door Grill to the Door with 2 screws.



## LOG INSTALLATION

**WARNING:** Dangerous operating conditions may occur if these logs are not positioned in their approved locations. Read the instructions below carefully and refer to the diagrams. If logs are broken do not use the unit until they are replaced. Broken logs can interfere with the pilot and burner operation.

- a) Front Right Log - Part # 902-020
- b) Front Left Log - Part # 902-021
- c) Rear log - Part # 902-022
- d) Embers - Part # 902-151 (1 bag)
- e) Lava - Part # 902-154 (1 bag)

(Part # 560-935 for the set of three logs)

- 1) Remove the logs from the box and carefully unwrap them. The logs are fragile, handle with care - **DO NOT FORCE** into position.
- 2) Place the rear log, carefully sliding it down onto the pins, with the flat side of the log facing the back of the unit. See diagram 1.

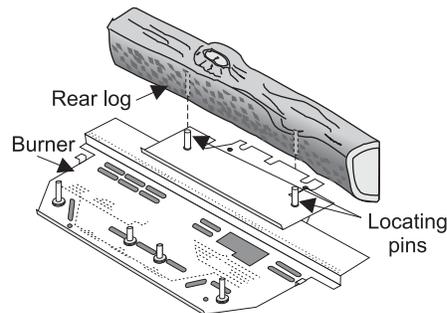


Diagram 1: Do not force logs down.

- 3) Place the left front log, carefully sliding it down onto the left pins of the front burner. See diagram 2.

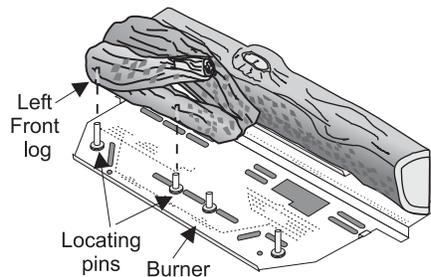


Diagram 2

- 4) Place the right front log, carefully sliding it down onto the right pins of the front burner. See diagram 3.

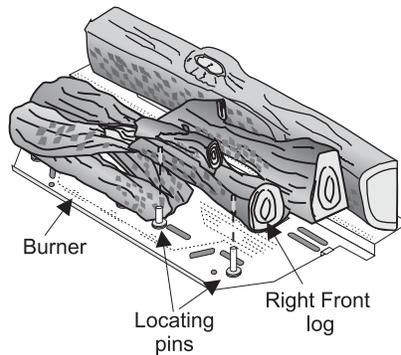
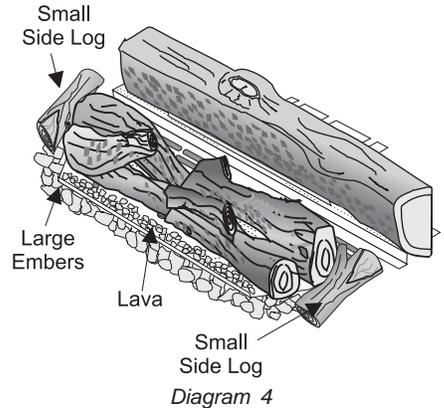


Diagram 3

- 5) Place the two Small Side Logs beside the burner on the firebox floor, as shown in diagram 4.
- 6) Distribute the embers along the front burner but do not cover the burner ports and around the logs. Place the embers on the floor of the firebox. Place the lava on the burner tray in front of the left and right front logs. See Diagram 4.



## OPTIONAL WALL THERMOSTAT

A wall thermostat may be installed if desired. Connect the wires as per the wiring diagrams. Note that the wires are connected to the "TH" on the gas valve. Use table below to determine the maximum wire length:

**Note:** Preferable if the thermostat is installed on an interior wall.

Waterford offers an optional programmable thermostat but any 250-750 millivolt rated non-anticipator type thermostat that is CSA, ULC or UL approved may be used.

**CAUTION**  
Do not connect the millivolt wall thermostat wires to the 120V wires.

### Thermostat Wire Table

Recommended Maximum Lead Length (Two-Wire) When Using Wall Thermostat (CP-2 System)	
Wire Size	Max. Length
14 GA.	50 Ft.
16 GA.	32 Ft.
18 GA.	20 Ft.
20 GA.	12 Ft.
22 GA.	9 Ft.

# INSTALLATION

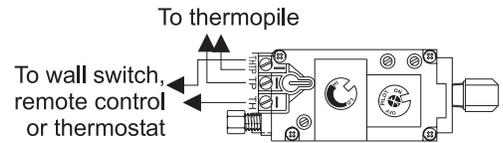
## OPTIONAL REMOTE CONTROL

Use the Waterford Remote Control Kit approved for this unit. Use of other systems may void your warranty.

The remote control kit comes with a hand held transmitter, a receiver and a wall mounting plate.

- 1) Choose a convenient location on the wall to install the receiver and the receptacle box (protection from extreme heat is very important). Run wires from the fireplace to that location, use Thermostat Wire Table.
- 2) Connect the wires as per the wiring diagram below.
- 3) Install 3 AAA alkaline batteries in transmitter and 4 AA alkaline batteries in the receiver. Install the receiver and its cover in the wall. Switch the remote receiver to "remote" mode. The remote control is now ready for operation.

**CAUTION**  
Do not connect the millivolt remote control wires to the 120V wires.



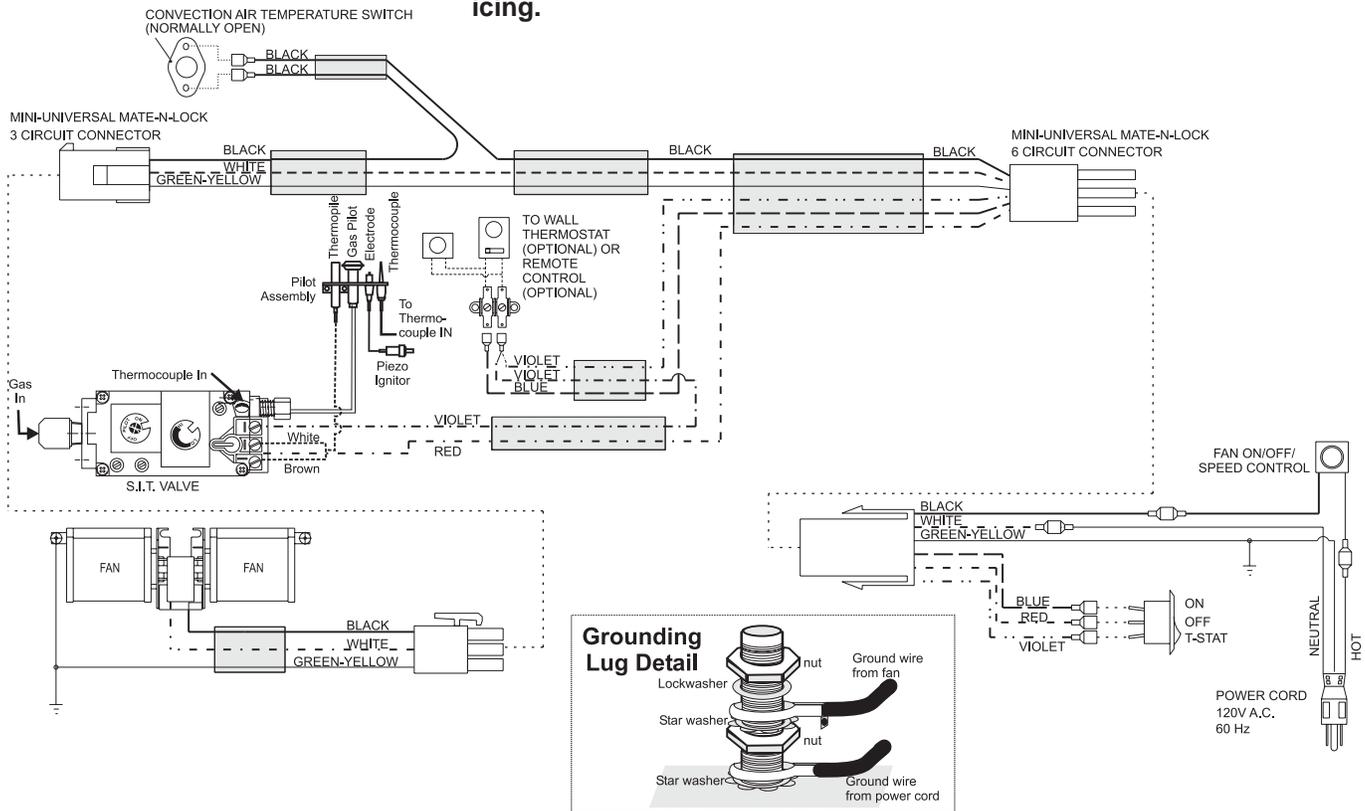
## WIRING DIAGRAM

This heater does not require a 120V A.C. supply for operation. In case of a power failure, the burner switch and the optional remote control/thermostat will continue to operate. However, a 120V A.C. power supply is needed for the fan/blower operation.

**Caution: Ensure that the wires do not touch any hot surfaces and are away from sharp edges.**

**If any of the original wires as supplied with the appliance must be replaced, it must be replaced with CSA type SEW (200°C) or its equivalent.**

**Verify proper operation after servicing.**



**WARNING: Electrical Grounding Instructions**

This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

**CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.**

# OPERATING INSTRUCTIONS

## OPERATING INSTRUCTIONS

Before operating this appliance, proceed through the following check list.

- 1) Read and understand these Instructions before operating this appliance.
- 2) Check to see that all wiring is correct and enclosed to prevent possible shock.
- 3) Check to ensure there are no gas leaks.
- 4) Make sure the three door glass pieces are in place. Never operate the appliance with any of the door glass removed or with the door open. Do not strike the glass or slam the door shut.

**WARNING: Do not operate appliance with glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.**

- 5) Verify that all venting and the cap is unobstructed.
- 6) Verify log placement. If the pilot cannot be seen when lighting the unit - the logs or the embers have been incorrectly positioned.
- 7) The unit should never be turned off and on without a minimum of a 60 second wait.
- 8) When lighting the appliance, the inside of the glass may fog up. This will burn off after a few minutes of operation.

**DO NOT BURN THE APPLIANCE WITH THE DOOR OPEN.**

## LIGHTING PROCEDURE

**IMPORTANT:** Gas cock knob cannot be turned from "PILOT" to "OFF" unless it is partially depressed.

- 1) Open the lower grill.
- 2) If the control knob is set to "OFF" proceed to Step 4.
- 3) Push in gas control knob slightly and turn clockwise to "OFF".
- 4) Wait five minutes to allow gas, that may have accumulated in the main burner compartment, to escape. If you do smell gas, follow the instructions on the front of this manual. If you don't smell gas continue on to the next step.

- 5) Turn the gas control counterclockwise to "PILOT". Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- 6) Push in control knob all the way and hold in. Immediately push black button on spark igniter until pilot lights. Continue to hold the control knob in for approximately one minute, then release the gas control knob. The pilot flame should continue to burn. If the pilot does not remain lit, repeat operation allowing a longer period before releasing gas control knob.
- 7) Turn gas control knob counterclockwise to "ON".
- 8) Use rocker switch to operate main burner.
- 9) Rotate the variable flame control to adjust the flame height higher or lower.
- 10) Close the lower grill.
- 11) The door must be closed when operating the unit.

## SHUTDOWN PROCEDURE

- 1) Use the rocker switch to turn off the main burner.
- 2) Open the lower grill.
- 3) Push in the gas control knob slightly and turn clockwise to "OFF". Do not force.
- 4) Disconnect all electric power to the appliance if service is to be performed.

## FIRST FIRE

The first fire in your stove is part of the paint curing process. To ensure that the paint is properly cured, it is recommended that you burn your fireplace for at least four (4) hours the first time you use it with the fan on.

When first operated, the unit will release an odour caused by the curing of the paint, the burning off of any oils remaining from manufacturing. Smoke detectors in the house may go off at this time. Open a few windows to ventilate the room for a couple of hours.

The glass panel may require cleaning after the unit has cooled down. **DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS HOT.**

**During the first few fires, a white film may develop on the glass front as part of the curing process. The glass should be cleaned or the film will bake on and become very difficult to remove. Use a non-abrasive cleaner and NEVER clean the glass while it is hot.**

## AUTOMATIC CONVECTION FAN OPERATION

The fan operates automatically, turn the knob on the side of the faceplate to adjust to the desired speed. The fan will turn on as the stove comes up to operating temperature. After the unit has been turned off and the unit cooled to below a useful heat output range the fan will shut off automatically.

## NORMAL OPERATING SOUNDS OF GAS APPLIANCES

It is possible that you will hear some sounds from your gas appliance. This is perfectly normal due to the fact that there are various gauges and types of steel used within your appliance. Listed below are some examples. All are **normal operating sounds** and should not be considered as defects in your appliance.

### Blower:

Waterford gas appliances use high tech blowers to push heated air farther into the room. It is not unusual for the fan to make a "whirring" sound when ON. This sound will increase or decrease in volume depending on the speed setting of your fan speed control.

### Burner Tray:

The burner tray is positioned directly under the burner and logs and is made of a different gauge material from the rest of the firebox and body. Therefore, the varying thicknesses of steel will expand and contract at slightly different rates which can cause "ticking" and "cracking" sounds. You should also be aware that as there are temperature changes within the unit these sounds will likely re-occur. Again, this is normal for steel fireboxes.

### Blower Thermodisc:

When this thermally activated switch turns ON it will create a small "clicking" sound. This is the switch contacts closing and is normal.

### Pilot Flame:

While the pilot flame is on it can make a very slight "whisper" sound.

# OPERATING INSTRUCTIONS

## COPY OF THE LIGHTING PLATE INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or Natural Gas and Propane Installation Codes, CSA B149.1. (Australia: AG601, New Zealand: NZS 5261)

**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or gas supplier.

- A) This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B) BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- C) Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't 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 appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### WHAT TO DO IF YOU SMELL GAS

- 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.

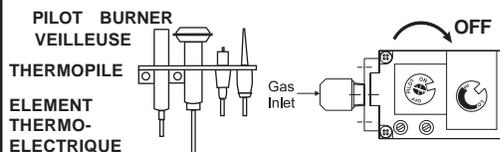
This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

**CAUTION:** Hot while in operation. Do not touch. Severe Burns may result. Due to high surface temperatures keep children, clothing and furniture, gasoline and other liquids having flammable vapors away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

### LIGHTING INSTRUCTIONS

**STOP!** Read the safety information above on this label.

- 1) Push in gas control knob slightly and turn clockwise to "OFF". Knob cannot be returned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- 2) Wait five (5) minutes to clear out any gas. If you then smell gas STOP! follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 3) Turn knob on gas control counterclockwise to "PILOT".



- 4) Push in control knob all the way and hold in. Continually push and release the black button on spark igniter until pilot lights. Continue to hold the control knob in for about 1/2 minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 1) to 4). If knob does not pop up when released, stop and immediately call your service technician or gas supplier. If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 5) Turn gas control knob counterclockwise to "ON".
- 6) Use rocker switch to operate main burner.

### TO TURN OFF GAS APPLIANCE

- 1) Push in the gas control knob slightly and turn clockwise to "OFF". Do not force.
- 2) Turn off all electric power to the appliance if service is to be performed.

You may shut off the pilot during prolonged non use periods to conserve fuel.

**DO NOT REMOVE THIS INSTRUCTION PLATE** 908-017b

#### Gas Control Valve:

As the gas control valve turns ON and OFF, a dull clicking sound may be audible, this is normal operation of a gas regulator or valve.

#### Unit Body/Firebox:

Different types and thicknesses of steel will expand and contract at different rates resulting in some "cracking" and "ticking" sounds will be heard throughout the cycling process.

## MAINTENANCE INSTRUCTIONS

- 1) Always turn off the gas valve before cleaning. For re-lighting, refer to lighting instructions. Keep the burner and control compartment clean by brushing and vacuuming at least once a year.

When cleaning the logs, use a clean soft paint brush as the logs are fragile and easily damaged.

- 2) Clean glass (never when unit is hot), appliance, door and louvers with a damp cloth. Never use an abrasive cleaner.

The heater is finished in a heat resistant paint and should only be refinished with heat resistant paint (not with wall paint). Waterford uses Stove Brite Paint - Metallic Black #6309.

- 3) Make a periodic check of burner for proper position and condition. Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. If there is a problem, call a qualified service person.

- 4) The appliance and venting system must be inspected before use, and at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

During the annual service call, the burner should be removed from the burner tray and cleaned. Replace the embers but do not block the pilot.

- 5) Verify proper operation after servicing.
- 6) Keep the area near the appliance clear and free from combustible materials, gasoline and other flammable vapours and liquids.

**CAUTION: ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.**

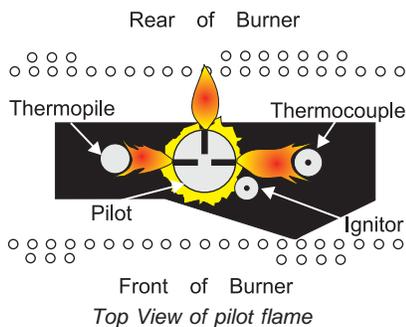
**WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.**

**CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.**

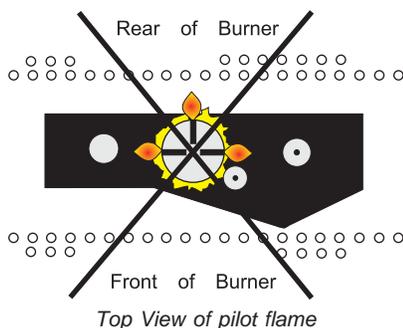
- Each time the appliance is lit, it may cause condensation and fog the glass. This condensation and fog is normal and will disappear in a few minutes as the glass heats up.

**Never operate the appliance without the glass properly secured in place or with the door open.**

- Periodically check the pilot flames. Correct flame pattern has three strong blue flames: 1 flowing around the thermopile and 1 around the thermocouple, and 1 flowing across the rear of the burner (it does not have to be touching the burner).



Incorrect flame pattern will have small, probably yellow flames, not coming into proper contact with the rear of the burner or thermopile.



**Note: If you have an incorrect flame pattern, contact your Waterford dealer for further instructions.**

## LOG REPLACEMENT & CLEANING

The unit should never be used with broken logs. Turn off the gas valve and allow the unit to cool before opening door to carefully remove the logs. The pilot light generates enough heat to burn someone. If for any reason a log should need replacement, you must use the proper replacement log. The position of these logs must be as shown in the diagram under Log Installation.

**NOTE: Improper positioning of logs may create carbon build-up and will alter the unit's performance which is not covered under warranty.**

### Cleaning the Log Set and Firebox

During the annual inspection and maintenance appointment, the service person should clean dust, lint, and any light accumulation from the logs and firebox area. An extra-soft brush should be used on the logs as they are extremely fragile; a vacuum cleaner may be used on the firebox. See the log installation instructions for details on removing and replacing the logs.

## DOOR AND GLASS GASKET

If the door gasket requires replacement use only the proper replacement gasket available from your Waterford dealer.

## GLASS REPLACEMENT

Your Waterford stove is supplied with high temperature, 5 mm Neoceram ceramic glass that will withstand the highest heat that your unit will produce. In the event that you break your glass by impact, purchase your replacement from an authorized Waterford dealer only, and follow our step-by-step instructions for replacement.

- Remove the door by lifting it slightly up and off the front face.



- Remove the 7 nuts that secure the front glass bracket holding the center glass in place.
  - If removing the side glass, remove the 2 nuts that secure the retainers holding each side glass in place.



*Remove the 7 nuts holding the Front Glass Bracket to the front face. CAUTION: Don't let the glass drop.*

- Remove the glass and replace with the new glass.
- Install the front glass bracket and turn the nuts just enough to support the glass. Tighten the nuts alternately. Avoid overtightening the nuts as this may damage the glass.

## FAN MAINTENANCE

If your fan requires maintenance or replacement, access to the fan is through the plate on the rear wall of the firebox. **NOTE: the unit MUST NOT be operated without the fan access panel securely in place and correctly sealed.**

**IMPORTANT: These fans collect a lot of dust from within your home. Ensure you maintain these fan motors on a regular basis by vacuuming out the fan squirrel cages, around the motor, and around the grills on the back of the stove.**

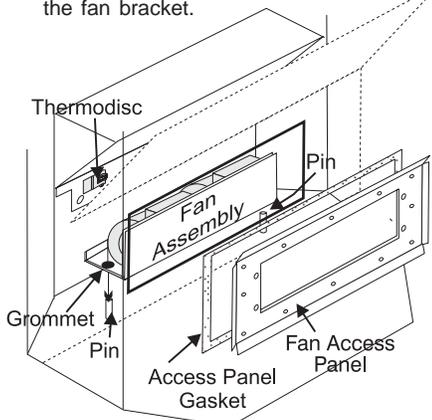
# MAINTENANCE

**IMPORTANT**  
Disconnect power supply  
before servicing

**WARNING:**  
**Electrical Grounding Instructions**  
This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

To remove fan:

- 1) Unplug or disconnect power source to stove.
- 2) Remove all logs and the rear log support, then remove the 12 screws holding the access panel in place.
- 3) Disconnect the Mini-Universal Mate-N-Lok connector on the fan wiring harness.
- 4) Remove the green ground wire from the fan bracket.



- 5) Lift fan off of the 2 pins, tip forward and pull through the firebox opening.

**Thermodisc access is through the Fan Access Panel.**

## Replacing fan:

Reverse steps (1-5 on removing the fan). Always install a new gasket (Part# 270-041) before replacing the fan access panel. Make sure the fan wires are reattached.

*Hint for pushing fan down onto pins - rub a bit of dish soap on the grommet so it will slide more easily onto the pin. Check to make sure the fan is seated properly on the pins - try to move the fan back and forth, there should be no noise, if there is check that the grommets haven't come loose.*

## VALVE MAINTENANCE

If your valve requires maintenance or replacement, use the following instructions:

**Note: Always close off the gas supply before removing the valve.**

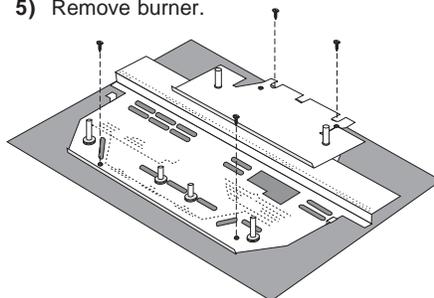
- 1) Shut off the gas supply.
- 2) Open the lower grill and remove the 2 screws holding the control panel in place.



Remove the 2 screws holding the Control Panel in place.

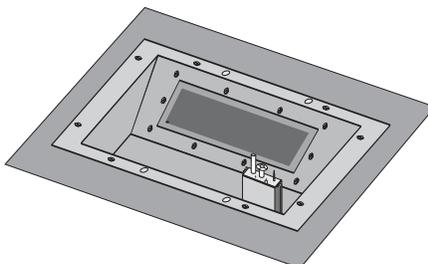


- 3) At this point you should disconnect the gas at the valve.
- 4) Carefully remove the logs, embers and rockwool.
- 5) Remove burner.



**Note:** Use a magnetic type screwdriver if possible.

- 6) Remove all 18 screws holding the burner tray assembly in place.



- 7) Carefully lift the burner tray assembly out.
- 8) Disconnect the 2 TP wires and the 2 TH wires from the valve.



- 9) Undo the quick drop out thermocouple nut on the valve with a 9mm (metric) wrench.
- 10) Remove the Piezo ignitor wire and push button assembly.
- 11) Undo the "gas out" flare nut with a 13/16" wrench.
- 12) Undo the "gas out" flare fitting with an 11/16" wrench.
- 13) Remove the 4 Phillips head screws on the inside base of the burner tray.



- 14) Remove the 4 Phillips head screws from the sides of the valve bracket and remove valve.

**Hint:** If you are using black pipe, ensure that there is a union by the valve, otherwise removal will be almost impossible.

- 15) Replace the valve and simply reverse above instructions.

**NOTE: Check the gasket under the burner tray and replace if necessary.**

- 16) Hook up the gas line and check for gas leaks with a soap and water solution or a gas leak detector. (Do not use open flame for leak testing.)

- 17) Fire up the unit temporarily. Check the manifold pressure.

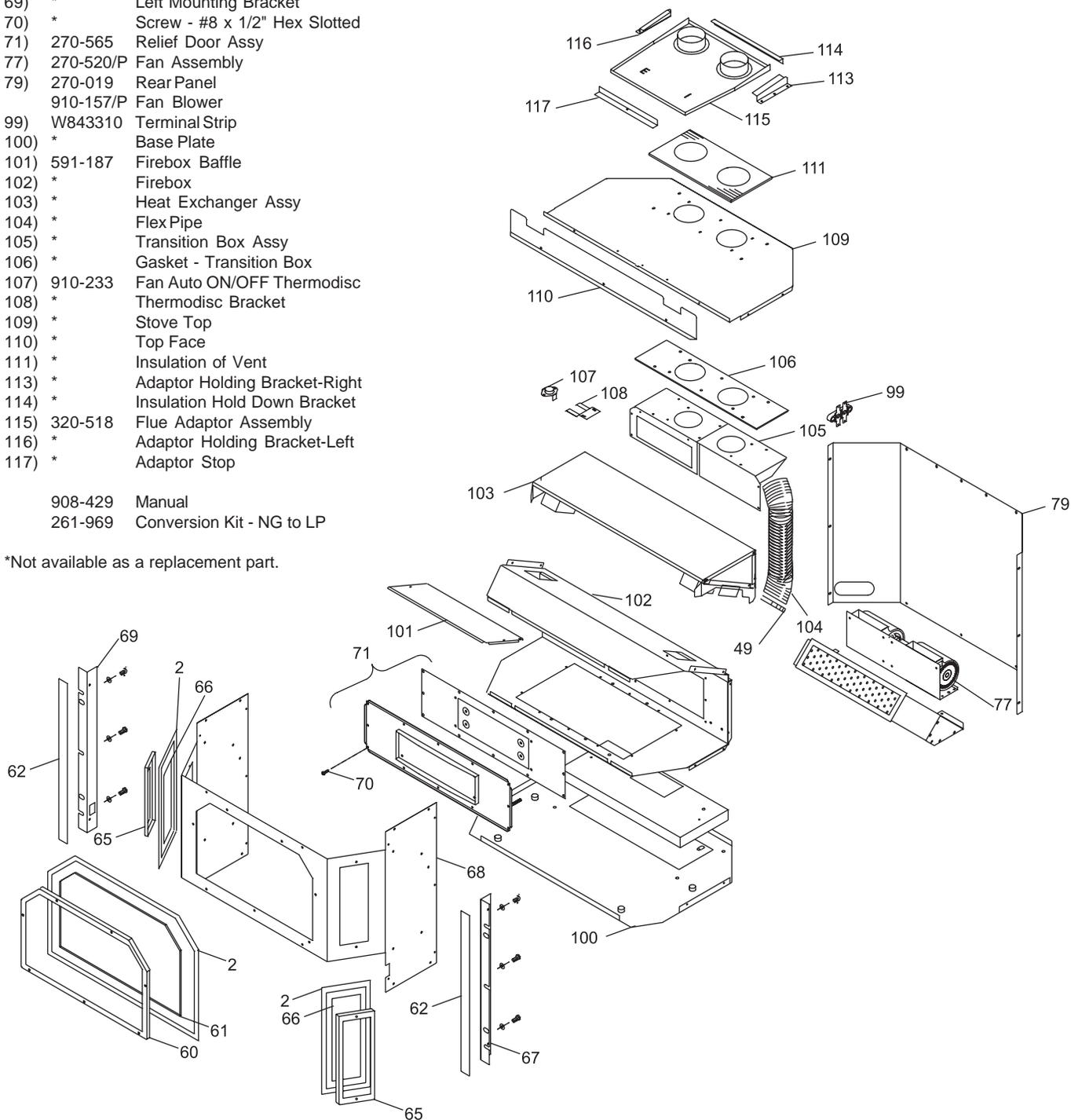
- 18) Close the front door. Fire up the unit again and check for proper flame appearance and glow on logs.

## REPLACEMENT / SPARE PARTS LIST

Part #	Description
2)	936-243 Gasket - 7/8" w/adhesive
49)	* Hose Clamp 3-1/16" - 4"
60)	270-013 Front Glass Frame
61)	940-080/P Front Glass
62)	41212 Gasket - 1/4" x 1" Flat w/adhesive
65)	270-014 Side Glass Frame
66)	940-081/P Side Glass
67)	* Right Mounting Bracket
68)	* Stove Front
69)	* Left Mounting Bracket
70)	* Screw - #8 x 1/2" Hex Slotted
71)	270-565 Relief Door Assy
77)	270-520/P Fan Assembly
79)	270-019 Rear Panel
	910-157/P Fan Blower
99)	W843310 Terminal Strip
100)	* Base Plate
101)	591-187 Firebox Baffle
102)	* Firebox
103)	* Heat Exchanger Assy
104)	* Flex Pipe
105)	* Transition Box Assy
106)	* Gasket - Transition Box
107)	910-233 Fan Auto ON/OFF Thermodisc
108)	* Thermodisc Bracket
109)	* Stove Top
110)	* Top Face
111)	* Insulation of Vent
113)	* Adaptor Holding Bracket-Right
114)	* Insulation Hold Down Bracket
115)	320-518 Flue Adaptor Assembly
116)	* Adaptor Holding Bracket-Left
117)	* Adaptor Stop

908-429 Manual  
261-969 Conversion Kit - NG to LP

\*Not available as a replacement part.



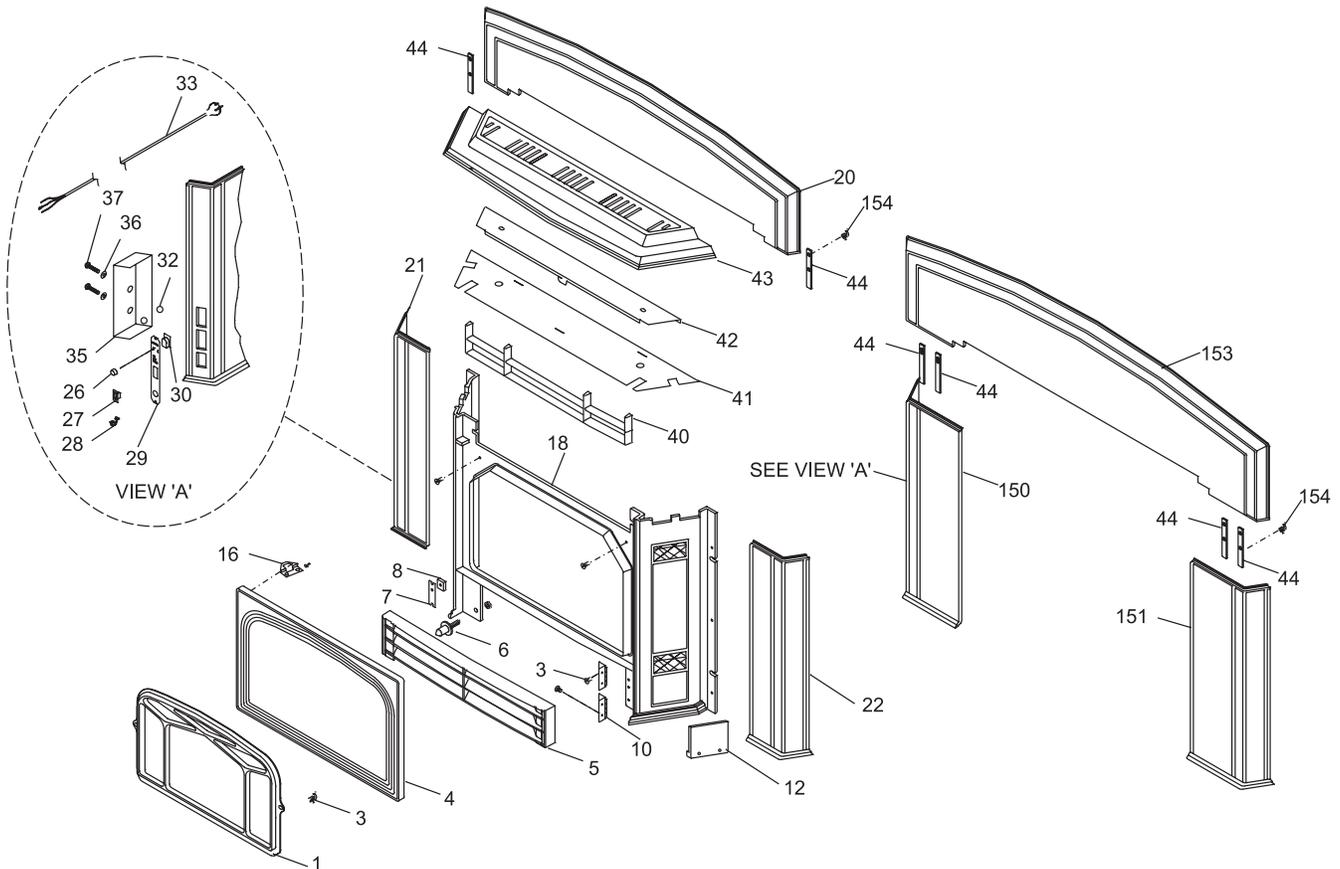
# PARTS LIST

## REPLACEMENT / SPARE PARTS LIST

Part #	Description	Part #	Description		
1)	942-031**	Decorative Door Grill Front	30)	W310770	Fan Speed Control Rheostat (120 V)
3)	*	Screw - 1/4 x 1/2" Flat Head Phillip Zinc Plate	32)	904-656	Blanking Plug for Strain Relief
4)	942-021**	Front Door	33)	910-822	Power Cord (120 V)
5)	W310201**	Louver Grill		910-721	High Temp. Wire Harness - Main Switch
6)	W310230	Guide Pin		910-687	High Temp. Wire Harness - Motor Connect
7)	*	Magnet Mounting Plate		910-718	High Temp. Wire Harness - Fan & Valve
8)	904-258	Door Magnet	35)	270-055	Switch Box
10)	44351	2" Black Butt Hinge	36)	*	Washer 1/4 Flat
12)	*	Air Plate	37)	*	Screw 1/4-20 x 1-1/4" Pan Head Phillip
16)	*	Door Mounting Bracket			
18)	942-011**	Cast Front	40)	W310191**	Top Grill
	31701**	Shroud set - Regular	41)	W310321	Lower Hob Heat Shield
20)	W313281**	Top Surround-Regular	42)	W310322	Upper Hob Heat Shield
21)	W313261**	Left Surround-Regular	43)	W310241**	Hob
22)	W313271**	Right Surround-Regular	44)	270-057	Shroud Bracket
				31711**	Shroud Set - Oversize
26)	W31077K	Knob for Rheostat (120 V)	150)	W317261**	Left Surround-Oversize
27)	910-241	Burner ON/OFF Switch	151)	W317271**	Right Surround-Oversize
28)	910-178	Grommet for power cord	153)	W317281**	Top Surround-Oversize
29)	270-056	Control Plate	154)	*	Screw 1/4 - 20 x 3/8"

\*Not available as a replacement part.

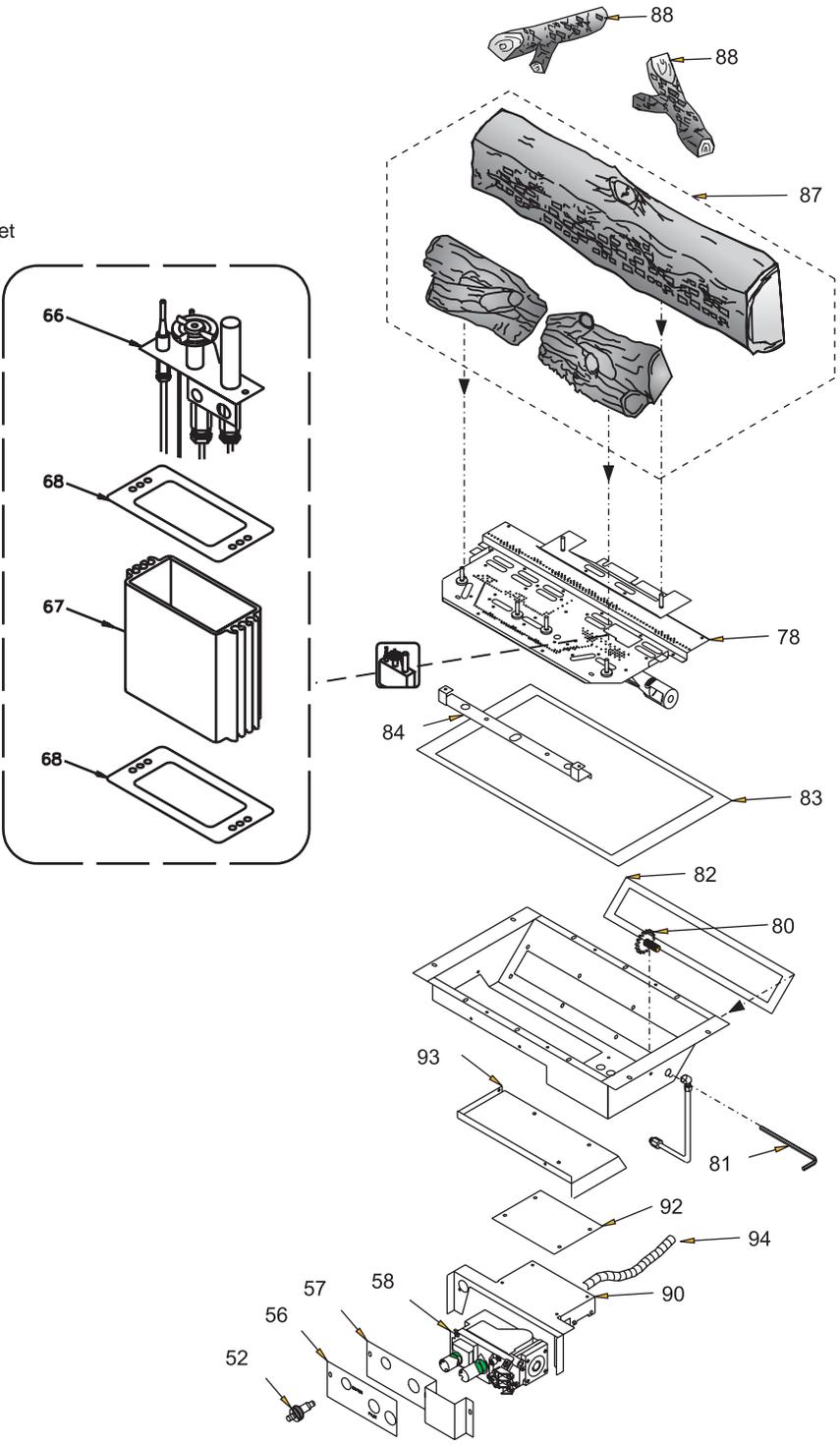
\*\* Last digit of the Part # represents the color code: 1=Black, 4= Blush, 5=Brown, 9=Hunter Green



## REPLACEMENT / SPARE PARTS LIST

Part #	Description
52)	910-190 Piezo Ignitor & Nut
56)	908-672 Control Panel Decal
57)	490-061 Control Panel
	270-574/P S.I.T. Valve Assy - NG
	270-576/P S.I.T. Valve Assy - LP
58)	910-378 Valve S.I.T. - NG/LP
	936-170 Orifice Gasket
66)	910-038 Pilot Assy - S.I.T. - 3 Flame NG
	910-039 Pilot Assy - S.I.T. - 3 Flame LP
67)	* Pilot Holder
68)	W840470 Pilot Assembly Gasket
78)	651-580 Burner Assy - NG/LP
80)	260-565 Adjustment Gear Assy
81)	904-565 Hex Key 3/16" AF
82)	630-009 Burner Tray/Air Passage Gasket
83)	630-008 Burner Tray/Firebox Gasket
84)	* Front Support
87)	560-935 Log Set
88)	902-182 Log - Top
90)	* Valve Mounting Bracket
92)	270-036 Valve Gasket
93)	* Valve Support
94)	904-658 Gas Inlet Flex Line
	904-688 Orifice #32 - NG
	904-641 Orifice #50 - LP
	904-593 Orifice #40 (Conversion to Lower BTU Kit) NG
	904-390 Orifice #52 (Conversion to Lower BTU Kit) LP

\*Not available as a replacement part.







**Waterford Fireplace Products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our facility. FPI Fireplace Products International Ltd. is pleased to extend this limited lifetime warranty to the original purchaser of a Waterford Product.**

**The Warranty:** Limited Lifetime

External casting, not directly in contact with the fire, such as hobs, sides, ash lips, legs, fronts and fire doors, are covered against cracks and warps resulting from manufacturer defects, parts and subsidized labour\* for three (3) years from the date of purchase and parts only thereafter.

The combustion chamber, heat exchanger, burner tubes/pans, logs, embers and all gold plating (against defective manufacture only) are covered under the Limited Lifetime Warranty for five (5) years for parts and subsidized labour\* and parts only thereafter.

Glass is covered for lifetime against thermal breakage only, parts and subsidized labour\* for three (3) years and parts only thereafter from date of purchase.

Electrical and mechanical components such as blowers, switches, wiring, thermodiscs, FPI remote controls, spill switches, thermopiles, thermocouples, pilot assembly components, and gas valves are covered for one year parts and subsidized labour\* from the date of purchase. Blowers and valves replaced under warranty are considered repairs and continue as if new with appliance. ie. twelve (12) months from original purchase date of appliance with a minimum of three (3) months coverage from date of replacement.

FPI venting components are covered parts and subsidized labour\* for three (3) years from date of installation and parts only thereafter.

**Conditions:**

Porcelain/Enamel - Absolute perfection is neither guaranteed nor commercially possible. Any chips must be reported and inspected by an authorized dealer within three days of installation. Reported damage after this time will be subject to rejection.

Any part or parts of this unit which in our judgement show evidence of such defects will be repaired or replaced at FPI's option, through an accredited distributor or agent provided that the defective part be returned to the distributor or agent **Transportation Prepaid**, if requested.

It is the general practice of FPI to charge for larger, higher priced replacement parts and issue credit once the replaced component has been returned to FPI and evaluated for manufacturer defect.

The authorized selling dealer is responsible for all in-field service work carried out on your Waterford product. FPI will not be liable for results or costs of workmanship from unauthorized service persons or dealers.

At all times FPI reserves the right to inspect product in the field which is claimed to be defective.

All claims must be submitted to FPI by authorized selling dealers. It is essential that all submitted claims provide all of the necessary information including customer name, purchase date, serial #, type of unit, problem, and part or parts requested, without this information the warranty will be invalid.

**Exclusions:**

This limited Lifetime Warranty does not extend to or include paint (charcoal units), porcelain (including pinholes, scratches and minor shade mismatch), door or glass gasketing or trim.

At no time will FPI be liable for any consequential damages which exceed the purchase price of the unit. FPI has no obligation to enhance or modify any unit once manufactured. ie. as products evolve, field modifications or upgrades will not be performed.

FPI will not be liable for travel costs for service work.

Installation and environmental problems are not the responsibility of the manufacturer and therefore are not covered under the terms of this warranty policy.

Refractory liners, gaskets, door handles, paint are not covered under the terms of this warranty policy.

Any unit which shows signs of neglect or misuse is not covered under the terms of this warranty policy.

The warranty will not extend to any part which has been tampered with or altered in any way, or in our judgment has been subject to misuse, improper installation, negligence or accident, spillage or downdrafts caused by environmental or geographical conditions, inadequate ventilation, excessive offsets, negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryer, etc.

Freight damage to stoves and replacement parts is not covered by warranty and is subject to a claim against the freight carrier by the dealer.

FPI will not be liable for acts of God, or acts of terrorism, which cause malfunction of the appliance.

Performance problems due to operator error will not be covered by this warranty policy.

Products made or provided by other manufacturers and used in conjunction with the operation of this appliance without prior authorization from Waterford, may nullify your warranty on this product.

Simpson Dura-Vent venting components are covered by Simpson Dura-Vent Inc. warranty.

\* Subsidy according to job scale as predetermined by FPI.



Waterford fireplace products are designed with reliability and simplicity in mind. In addition, our internal Quality Assurance Team carefully inspects each unit thoroughly before it leaves our door.

Waterford Irish Stoves is pleased to extend this Limited Lifetime Warranty to the original purchaser of a Waterford Product.

See the inside back cover for details.

**Register your Waterford online at  
<http://www.waterfordstoves.com>**

*Installer: Please complete the following information*

Dealer Name & Address: \_\_\_\_\_

\_\_\_\_\_

Installer: \_\_\_\_\_

Phone #: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Serial No.: \_\_\_\_\_