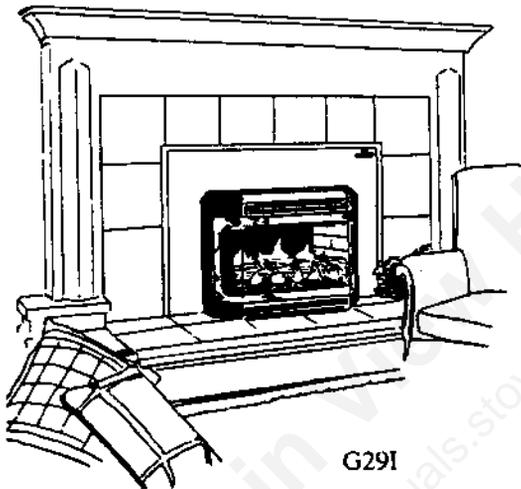


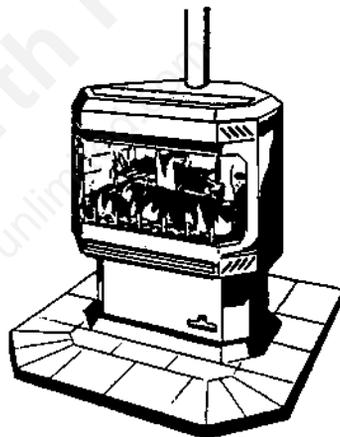
# INSTALLATION AND OPERATING INSTRUCTIONS

## BRECKWELL VENTED GAS STOVES

MODEL: G29V • NATURAL GAS/ LPG HEATER  
MODEL: G29I • NATURAL GAS/ LPG HEATER



G29I



G29V

PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

### WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

### FOR YOUR SAFETY:

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

### FOR YOUR SAFETY:

What to do if you smell gas:

1. Open windows
2. Turn off main gas supply
3. Do not touch any electrical switch
4. Extinguish any open flames
5. Immediately call your gas supplier or fire department from a neighbor's phone

# TABLE OF CONTENTS

<b>SPECIFICATIONS</b> .....	<b>3</b>
Listings and Code Approvals .....	3
Model G29V Dimensional Diagram .....	4
Model G29I Dimensional Diagram .....	5
Safety Label- Model G29V .....	6
Safety Label- Model G29I .....	7
<b>INSTALLATION</b> .....	<b>8</b>
General Information .....	8
Clearance to Combustibles - Model G29V .....	9
Clearance to Combustibles - Model G29I .....	10
Minimum Fireplace Clearance .....	10
Optional Outside Air .....	11
Outside Air Through Pedestal Bottom .....	11
Outside Air Through Pedestal Rear .....	11
Draft Hood .....	11
Venting .....	12
Venting Requirements .....	12
Common Venting .....	13
Installation into Existing Woodstove Flue System .....	13
Gas Connection .....	14
Propane or LPG Gas .....	14
High Elevation .....	15
Orifice Sizes at Altitude .....	15
Flashing & Trim Installation - Model G29I .....	16
Gas Pressure Test .....	17
Primary Air Shutter .....	17
Test For Flue Spillage - Model G29V .....	18
Test For Flue Spillage - Model G29I .....	19
Optional Remote Control .....	20
Optional Wall Thermostat Installation .....	20
Lead Length .....	20
Log Set Installation .....	21
<b>OPERATION</b> .....	<b>23</b>
Operating Instructions .....	23
Lighting Procedure .....	23
Initial Burning .....	24
Heat Output Adjustment .....	24
Automatic Convection Air Fan Operation .....	24
Shutdown Procedure .....	24
Lighting Instruction Label .....	25
<b>MAINTENANCE</b> .....	<b>26</b>
Maintenance Instructions .....	26
Pilot Light .....	27
Log Replacement .....	27
Gold Plated Doors .....	27
Door Gasket and Glass Gasket .....	27
Fan Maintenance .....	27
<b>WARRANTY</b> .....	<b>28</b>
Electrical and Valve Components .....	28
Conditions and Exclusions .....	28
Warranty Registration .....	29

# **SPECIFICATIONS**

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## **LISTINGS AND CODE APPROVALS**

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This gas appliance has been tested in accordance with National Safety Standards, and has been certified by Warnock Hersey Professional Services, LTD. for installation and operation as described in these Installation and Operating Instructions in the United States and Canada.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification of any of the instructions contained here, contact your local dealer.

**Your unit should be serviced annually by a qualified service person.**

### **TO THE NEW OWNER:**

Congratulations! You are the owner of a state-of-the-art BRECKWELL GAS STOVE by National Steelcrafters of Oregon, Inc. This appliance has been designed to provide you with all the warmth and charm of a woodstove, at the flick of a switch. This model has been approved by Warnock Hersey Professional Services, LTD 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. To qualify for Breckwell's Warranty Program, be sure to fill out the registration form on the back page of this manual and drop it in the mail today! Please take a moment now to acquaint yourself with these instructions and the many features of your Breckwell Gas Stove.

# SPECIFICATIONS

## MODEL G29V

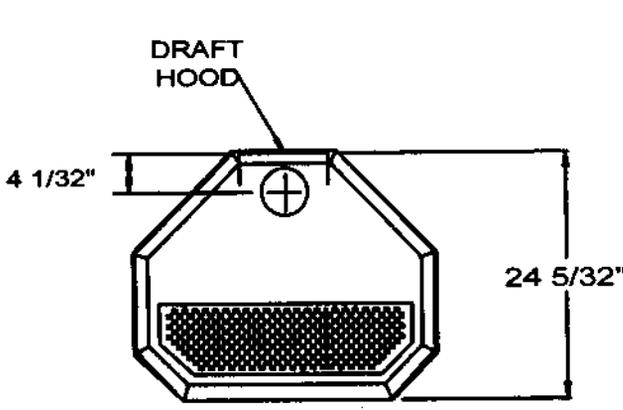


FIG. 1

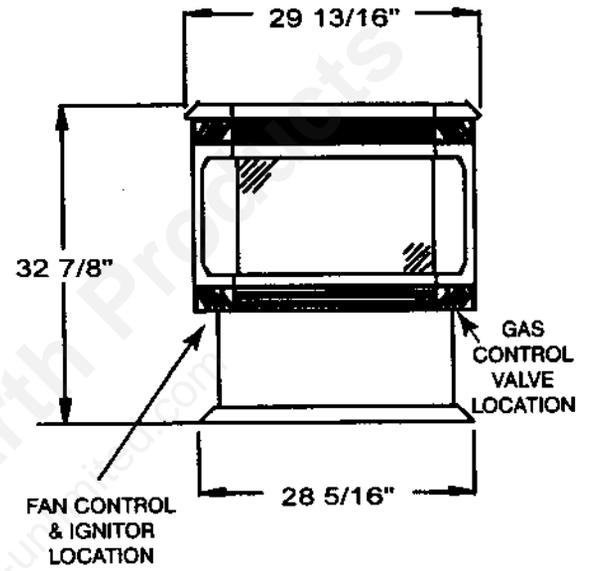


FIG. 2

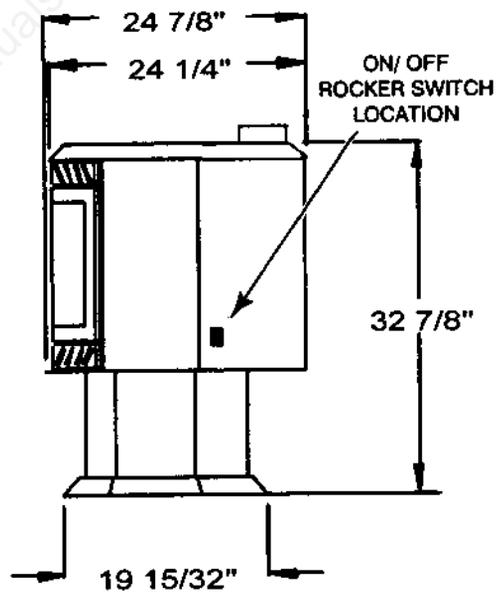


FIG. 3

# SPECIFICATIONS

## MODEL G29I

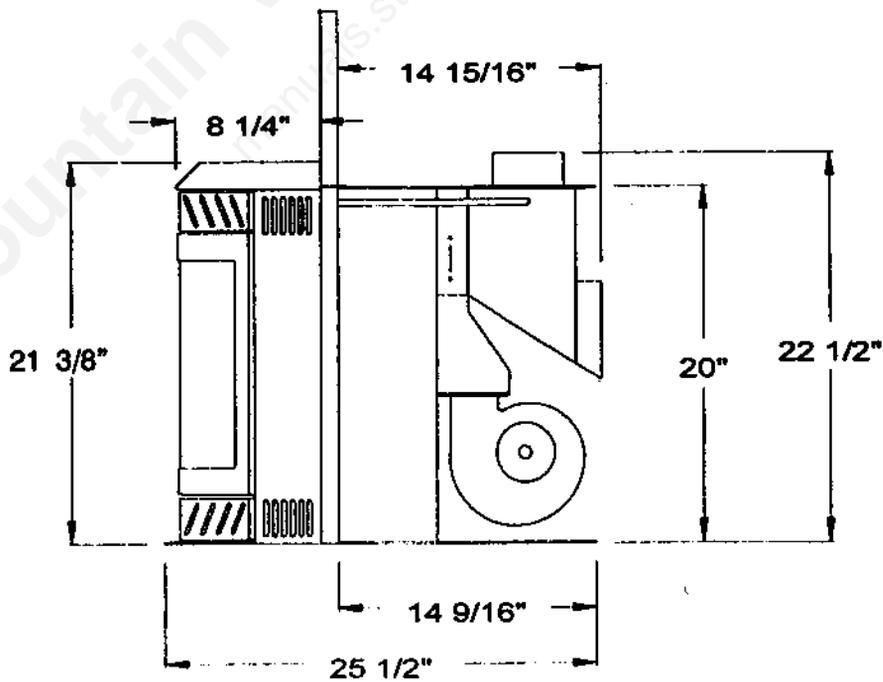
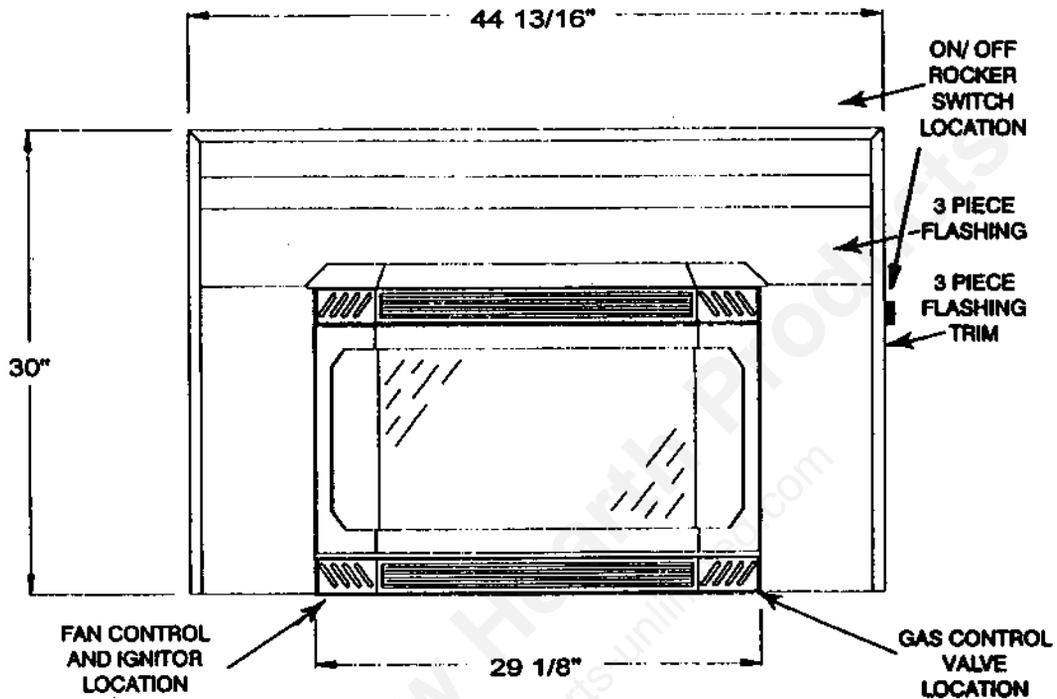


FIG. 5

# SAFETY LABEL - MODEL G29V

This is a copy of the label attached to each Breckwell Gas Stove. We have printed a copy of the contents here for your review. The safety label is located on the inside of the left side panel.

NOTE: Breckwell 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.



Listed: GAS FIRED VENTED ROOM HEATER  
 Tested to: CAN 1-2.1-M86, ANSI Z21.11.1-1991  
 Certified for CANADA  
 Certifiée pour AND U.S.A.  
 REPORT NO. 476-1163



DO NOT REMOVE THIS LABEL

Serial no. **WH-29V-5-**  
 No de serie

NE PAS ENLEVER CETTE ÉTIQUETTE

**NATURAL GAS: MODEL G29V**

Minimum supply pressure	NAT 6.0" WC/C.E. (1.49 Kpa)
Manifold pressure	NAT 3.5" WC/C.E. (0.87 Kpa)
Orifice size	NAT 28 DMS (3.57 mm)
For use with natural gas.	
Minimum Output	17,500 BTU (5.13 Kw)
Maximum Output	38,000 BTU (11.72 Kw)
Minimum Input	25,000 BTU (7.32 Kw)
Altitude maximum input	0-2000 ft/pl (0-610 m) 50,000 BTU (14.65 Kw)

APPAREIL FONCTIONNANT AU NATURAL GAZ CONCU POUR ETRE POELE: MODELE G29V  
 Pression d'alimentation minimum  
 Pression à la tubulure d'alimentation  
 Grandeur de l'injecteur  
 Pour usage avec natural gaz.  
 Minimum BTU  
 Maximum BTU  
 Débit D'Admission Faible  
 Débit calorifique maximum selon l'altitude

**PROPANE GAS: MODEL G29V**

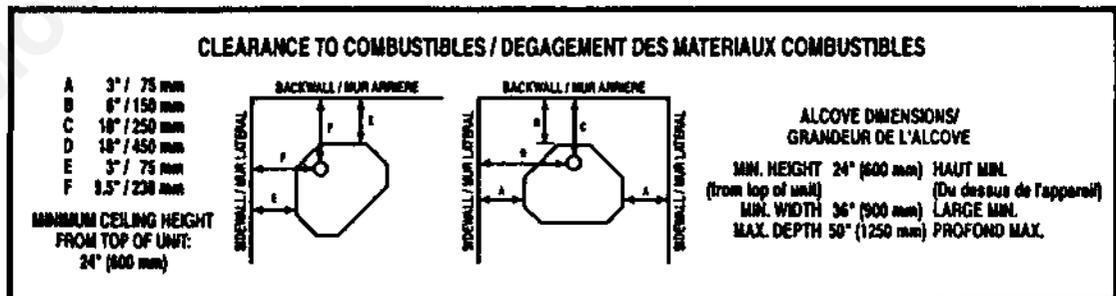
Minimum supply pressure	LPG 10.5" WC/C.E. (2.61 Kpa)
Manifold pressure	LPG 18.8" WC/C.E. (2.49 Kpa)
Orifice size	LPG 47 DMS (1.89 mm)
For use with propane gas.	
Minimum Output	17,000 BTU (4.96 Kw)
Maximum Output	36,500 BTU (11.43 Kw)
Minimum Input	24,000 BTU (7.03 Kw)
Altitude maximum input	0-2000 ft/pl (0-610 m) 46,000 BTU (14.06 Kw)

APPAREIL FONCTIONNANT AU PROPANE CONCU POUR ETRE POELE: MODELE G29V  
 Pression d'alimentation minimum  
 Pression à la tubulure d'alimentation  
 Grandeur de l'injecteur  
 Pour usage avec propane.  
 Minimum BTU  
 Maximum BTU  
 Débit D'Admission Faible  
 Débit calorifique maximum selon l'altitude

INSTALL & USE ONLY IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION & OPERATING INSTRUCTIONS/  
 INSTALLER ET UTILISER SEULEMENT CONFORMÉMENT AUX MODES D'INSTALLATION ET DE FONCTIONNEMENT DU FABRICANT.

FOR USE WITH NATURAL GAS AND PROPANE. A CONVERSION KIT SUPPLIED BY MANUFACTURER SHALL BE USED TO CONVERT THIS APPLIANCE TO THE ALTERNATE FUEL/  
 POUR L'USAGE AVEC LE GAZ NATUREL ET PROPANE. UN PAQUETAGE DE CONVERSION FOURNI PAR LE FABRICANT DOIT ÊTRE UTILISÉ POUR CONVERTIR CET APPAREIL AU COMBUSTIBLE ALTERNATIF.

MAY BE INSTALLED IN A BEDROOM OR BEDSITTING ROOM WHEN INSTALLED WITH A LISTED THERMOSTAT CONTROL IN CANADA. INSTALL PER ANSI Z223.1 IN THE U.S.A./  
 AU CANADA, CET APPAREIL PEUT ÊTRE INSTALLÉ DANS UNE CHAMBRE À COUCHER OU UNE CHAMBRE MEUBLÉE S'IL EST INSTALLÉ AVEC UNE COMMANDE DE THERMOSTAT HOMOLOUÉE. AUX ÉTATS-UNIS L'INSTALLER SELON LA NORME ANSI Z223.1.



**GAS FIRED VENTED ROOM HEATER**  
 This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 / CAN 1-B148.

**PÔLE GAZ RADIATEUR VENTILÉ**  
 Cet appareil doit être installé conformément aux exigences des codes locaux, s'il n'existe aucun code local, se conformer à la norme ANSI Z223.1 / CAN 1-B148 en vigueur.

Electrical Supply  
 Not for use with solid fuel.

115 V, 1.13 A, 60 Hz

Alimentation électrique  
 Ne doit pas être utilisé avec un combustible solide.

National Steelcrafters of Oregon, Eugene, OR, U.S.A.

Made in U.S.A. / Fabrique Aux Etats-Unis

# SAFETY LABEL - MODEL G29I

This is a copy of the label attached to each Breckwell Gas Stove. We have printed a copy of the contents here for your review. The safety label is attached to a chain inside the left side panel.

NOTE: Breckwell 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.

	Listed: GAS FIRED VENTED ROOM HEATER Tested to: CAN 1-2.1-M86, ANSI Z21.11.1-1981 Certified for CANADA Certifiée pour AND U.S.A. REPORT NO. 478-1103	Pellet  Gas <b>BRECKWELL</b> Hearth Products	DO NOT REMOVE THIS LABEL Serial no. <b>WH-29I-5-</b> No de serie
	<b>NE PAS ENLEVER CETTE ÉTIQUETTE</b>		

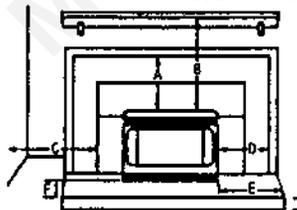
NATURAL GAS: MODEL G29I		APPAREIL FONCTIONNANT AU NATURAL GAZ CONÇU POUR ÊTRE POËLE: MODELE G29V
Minimum supply pressure	NAT 6.0" WC/C.E. (1.49 Kpa)	Pression d'alimentation minimum
Manifold pressure	NAT 3.5" WC/C.E. (0.87 Kpa)	Pression à la tubulure d'alimentation
Orifice size	NAT 28 DMS (3.57 mm)	Grandeur de l'injecteur
For use with natural gas.		Pour usage avec naturel gaz.
Minimum Output	17,500 BTU (5.13 Kw)	Minimum BTU
Maximum Output	38,000 BTU (11.72 Kw)	Maximum BTU
Minimum Input	25,000 BTU (7.32 Kw)	Débit D'Admission Faible
Altitude maximum input	0-2000 Npl (0-610 m) 50,000 BTU (14.65 Kw)	Débit calorifique maximum selon l'altitude
PROPANE GAS: MODEL G29I		APPAREIL FONCTIONNANT AU PROPANE CONÇU POUR ÊTRE POËLE: MODELE G29V
Minimum supply pressure	LPG 18.5" WC/C.E. (2.61 Kpa)	Pression d'alimentation minimum
Manifold pressure	LPG 10.0" WC/C.E. (2.46 Kpa)	Pression à la tubulure d'alimentation
Orifice size	LPG 47 DMS (1.98 mm)	Grandeur de l'injecteur
For use with propane gas.		Pour usage avec propane.
Minimum Output	17,000 BTU (4.98 Kw)	Minimum BTU
Maximum Output	38,500 BTU (11.43 Kw)	Maximum BTU
Minimum Input	24,000 BTU (7.03 Kw)	Débit D'Admission Faible
Altitude maximum input	0-2000 Npl (0-610 m) 48,000 BTU (14.06 Kw)	Débit calorifique maximum selon l'altitude

**INSTALL & USE ONLY IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION & OPERATING INSTRUCTIONS / INSTALLER ET UTILISER SEULEMENT CONFORMÉMENT AUX MODES D'INSTALLATION ET DE FONCTIONNEMENT DU FABRICANT.**

**FOR USE WITH NATURAL GAS AND PROPANE. A CONVERSION KIT SUPPLIED BY MANUFACTURER SHALL BE USED TO CONVERT THIS APPLIANCE TO THE ALTERNATE FUEL / POUR L'USAGE AVEC LE GAZ NATUREL ET PROPANE. UN PAQUETAGE DE CONVERSION FOURNI PAR LE FABRICANT BOIT ÊTRE UTILISÉ POUR CONVERTIR CET APPAREIL AU COMBUSTIBLE ALTERNATIF.**

**MAY BE INSTALLED IN A BEDROOM OR BEDSITTING ROOM WHEN INSTALLED WITH A LISTED THERMOSTAT CONTROL IN CANADA. INSTALL PER ANSI Z223.1 IN THE U.S.A. / AU CANADA, CET A APPAREIL PEUT ÊTRE INSTALLÉ DANS UNE CHAMBRE À COUCHER OU UNE CHAMBRE MEUBLÉE S'IL EST INSTALLÉ AVEC UNE COMMANDE DE THERMOSTAT HOMOLOGUÉE. AUX ÉTATS-UNIS L'INSTALLER SELON LA NORME ANSI Z223.1.**

**CLEARANCE TO COMBUSTIBLES / DEGAGEMENT DES MATERIAUX COMBUSTIBLES**



A Insert Top to Top Facing / De la pièce rapportée supérieure au dessus frontal	18" / 450 mm
B Insert Top to Mantle / De la pièce rapportée supérieure au manteau	22" / 550 mm
C Insert Side to Sidewall / De la pièce rapportée latérale à la paroi latérale	6" / 150 mm
D Insert Side to Side Facing / De la pièce rapportée latérale à la paroi frontale	3" / 75 mm
E Hearth Extension Side / Côte de l'extension du foyer	0" / 0 mm

Hearth Extension Front / Avant de l'extension du foyer	12" / 300 mm	10.5" / 263 mm	9" / 225 mm	7.5" / 188 mm
Hearth Height / Hauteur du foyer	0" / 0 mm	2" / 50 mm	4" / 100 mm	6" / 150 mm

<p><b>GAS FIRED VENTED ROOM HEATER</b></p> <p>This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 / CAN 1-8148.</p> <p style="text-align: center;">Electrical Supply      115 V, 1.13 A, 60 Hz</p> <p style="text-align: center;">Not for use with solid fuel.</p>	<p><b>PÔLEUR GAZ RADIATEUR VENTILE</b></p> <p>Cet appareil doit être installé conformément aux exigences des codes locaux, s'il n'existe aucun code local, se conformer à la norme ANSI Z223.1 / CAN 1-8148 en vigueur.</p> <p style="text-align: center;">Alimentation électrique</p> <p style="text-align: center;">Ne doit pas être utilisé avec un combustible solide.</p>
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National Steelcrafters of Oregon, Eugene, OR, U.S.A.      Made in U.S.A. / Fabrique Aux Etats-Unis

# INSTALLATION

**T**HIS APPLIANCE SHOULD BE INSTALLED, REPAIRED, AND INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENT, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

**WARNING:** THIS APPLIANCE CAN ONLY BE COMMON-VENTED IN ACCORDANCE WITH THE NATURAL GAS INSTALLATION CODE, WHICH REQUIRES THAT THE VENTING MUST BE SIZED ACCORDINGLY TO ACCOMMODATE THE TOTAL BTU RANGE OF ALL APPLIANCES CONCERNED AND THAT THE CODE ALLOWS THE VENTING OF THE APPLIANCES IN QUESTION TO BE VENTED TOGETHER. IT SHOULD ALSO BE NOTED THAT GAS APPLIANCES MUST NOT BE VENTED WITH SOLID FUEL BURNING APPLIANCES.

**WARNING:** FAILURE TO CORRECTLY INSTALL THIS APPLIANCE WILL VOID YOUR WARRANTY. IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION OR MAINTENANCE MAY CAUSE INJURY AND/OR A FIRE.

## GENERAL INFORMATION

This installation must conform with local codes or, in the absence of local codes, in the U.S.A. with the current National Fuel Gas Code, ANSI Z223.1, and National Electrical Code ANSI/NFPA 70 installation codes. In Canada, current CAN/CGA-B149.1 and B149.2 codes and current CSA C22.1 Canadian Electrical Code.

Provide adequate clearances for servicing, proper operation and around the air openings into the combustion chamber. Adequate combustion and ventilation air must also be provided.

The appliance must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the floor, or it can be raised up on a platform to enhance its visual impact. If the appliance is going to be installed on carpeting, tile or other combustible material other than wood flooring, the appliance must be installed on metal or wood panel extending the full width and depth of the appliance. The Breckwell Freestanding Gas Stove can be installed in a wide variety of ways and will fit nearly any room layout.

The Breckwell Freestanding Gas Stove (G29V) is approved for alcove installations and must meet the clearances listed. The freestanding (G29V) and the fireplace insert (G29I) can be installed in a bedroom or bed/sitting room with a millivolt thermostat only. The G29I can be installed in a masonry or factory built fireplace. **The freestanding (G29V) and the fireplace insert (G29I) units are NOT approved for mobile home installations.**

We recommend that you plan your installation on paper using exact measurements for clearances and floor protection before actually installing this appliance. If an existing chimney is not utilized, position the appliance to allow free passage of factory-built listed chimney through the ceiling and roof. Have a qualified building inspector review your plans before installation.

# INSTALLATION

## CLEARANCE TO COMBUSTIBLES - MODEL G29V

This appliance may be installed only with the clearance as shown in the situations pictured. Do not combine clearances from one type of installation with another in order to achieve closer clearances.

Measurements below are minimum distances to combustibles.

- A Side Wall to Unit 3" / 75 mm
- B Back Wall to Unit 6" / 150 mm
- C Back Wall to Flue Centerline 10" / 250 mm
- D Side Wall to Flue Centerline 18" / 450 mm
- E Side Wall to Unit 3" / 75 mm
- F Side Wall to Flue Centerline 9.50" / 238 mm

Minimum ceiling height from top of unit is 24" / 600 mm.

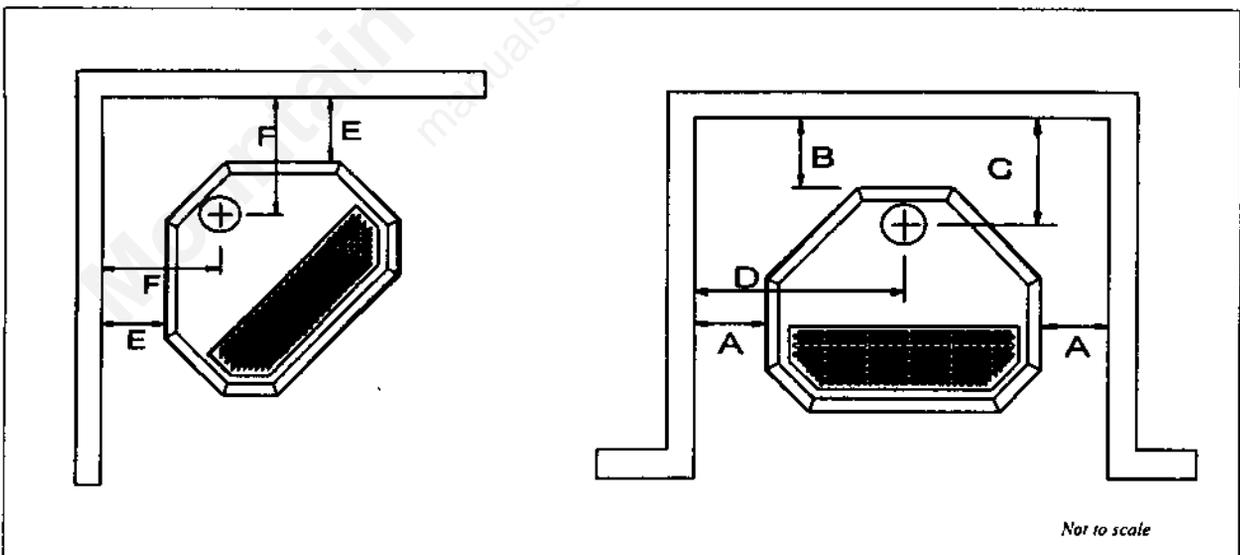


FIG. 6

If further reduced clearances are needed, obtain requirements for construction of a protected wall from your local building authorities and their allowable reductions of the listed clearances.

# INSTALLATION

## CLEARANCE TO COMBUSTIBLES - MODEL G29I

This appliance may be installed only with the clearance as shown in the situations pictured. Do not combine clearances from one type of installation with another in order to achieve closer clearances.

Measurements below are minimum distances to combustibles.

A	Insert Top to Top Facing	10" / 250mm
B	Insert Top to Mantle	22" / 550mm
C	Insert Side to Sidewall	6" / 150mm
D	Insert Side to Side Facing	3" / 75mm
E	Hearth Extension Side	0"
F	Hearth Extension Front	G
	12" / 300mm	Hearth Height
	10.5" / 263mm	0" 0mm
	9" / 225mm	2" / 50mm
	7.5" / 188mm	4" / 100mm
		6" / 150mm

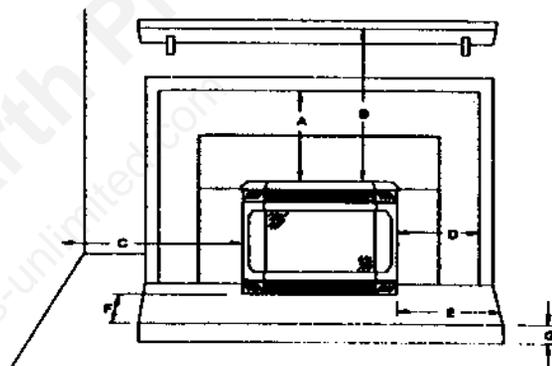
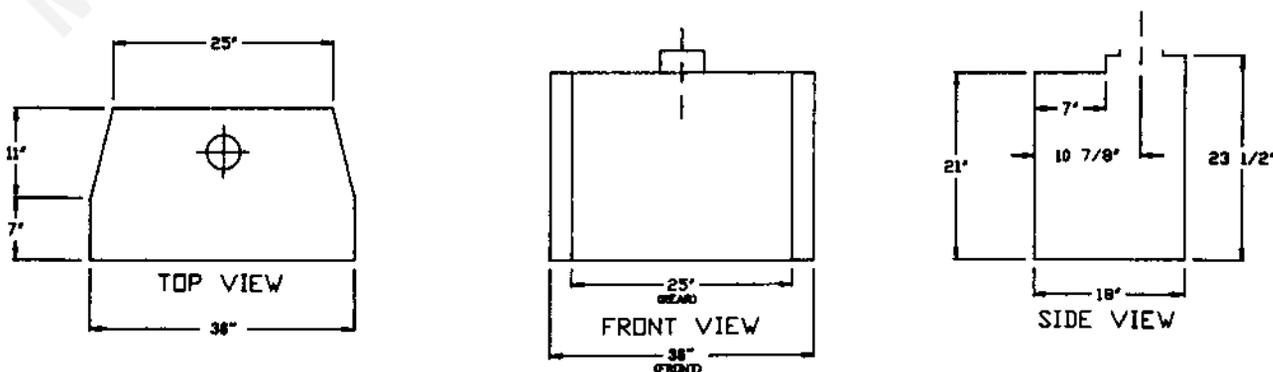


FIG. 7

## MINIMUM FIREPLACE DIMENSIONS

The minimum fireplace dimensions required to be able to install the Breckwell gas fireplace insert are shown in the diagrams below.



# **INSTALLATION**

## **OPTIONAL OUTSIDE AIR**

Outside air is now an option for Gas Stoves. Outside air for combustion can be brought in either through the bottom of the pedestal (Fig. 8) or through the rear plate of the pedestal (Fig. 9).

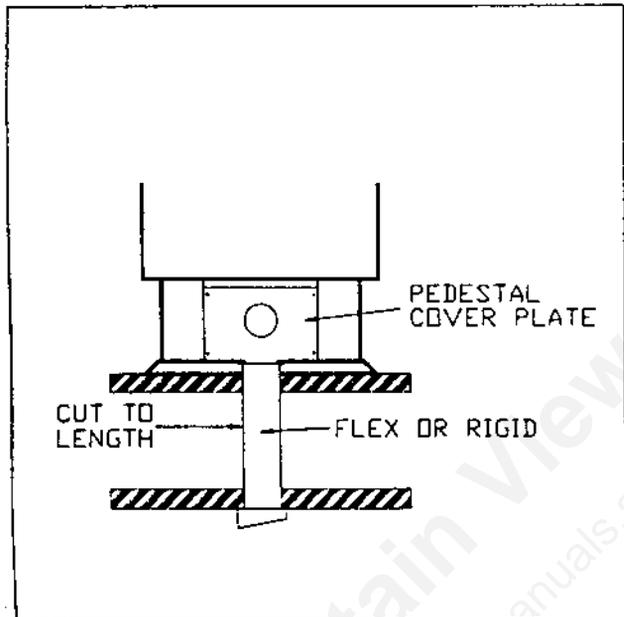


FIG. 8

### **OUTSIDE AIR THROUGH PEDESTAL BOTTOM**

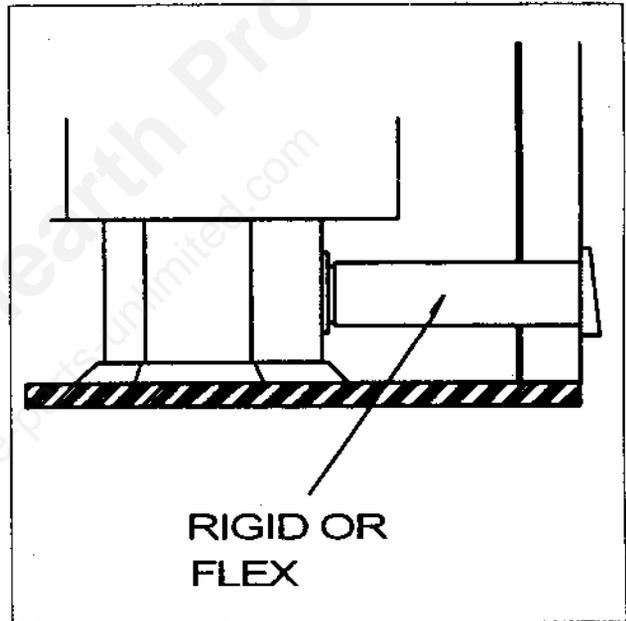


FIG. 9

### **OUTSIDE AIR THROUGH PEDESTAL REAR**

## **DRAFT HOOD**

The heater has a draft hood built into its back. It must not be altered, obstructed, or blocked in any way, and the unit must be installed so that the draft hood is in the same atmospheric pressure zone as the combustion air inlet to the burner.

# **INSTALLATION**

---

## **VENTING**

The G29V and G29I are vented appliances and must be connected to a chimney/flue in accordance with the installation codes.

For your safety this heater is equipped with a vent safety switch designed to sense incorrect venting and react by shutting down the gas supply. This heat actuated switch is located within the draft hood and will detect either a blocked chimney or backdraft condition where the chimney flow has reversed. If this switch is closing the unit down, it indicates a drafting problem - the thermally actuated switch must **never** be by-passed or disconnected as a hazardous or deadly condition can result.

## **VENTING REQUIREMENTS**

### **MODEL G29V**

A minimum four inch diameter vent is required. B-vent, Class A or Masonry (with an approved liner) are all acceptable. For cosmetic or aesthetic purposes 5" or 6" outer vent can be used as long as an approved inner vent is installed. Fasten the B-vent to the exhaust collar on the top of the stove. If desired use one ¼" sheet metal screw but do not penetrate the inner sleeve of the B-vent when tightening the screw.

Follow all venting manufacturer's requirements and local building codes. In cold climates, we recommend the use of insulated B-vent, chase, and liners. For altitudes above 2000 ft. we recommend that a minimum flue height of 12 ft. is used. A wind cap is recommended for wind turbulent sites when flue spillage is noted. (See page 18)

### **MODEL G29I**

This appliance is designed to attach to a 4" diameter type B-Vent or aluminum flex liner running the full length of the chimney. A minimum flue height of 12 feet is recommended. B-Vent must be supported by a vent support - supplied by the vent manufacturer.

The Breckwell Insert incorporates its own internal draft hood, so no additional external draft hood is required. Periodically check that the vent is not blocked and a sufficient draft is present when the unit is in operation. (See page 19 for spillage test)

Before installing the vent system ensure that the damper plate is locked into the open position and secured to prevent the damper plate from falling down and crushing the liner.

Attach the B-Vent or flex liner to the removable flue collar. The flue collar will fit inside a standard vent and should be fastened directly to the vent by using self tapping sheet metal screws or a B-Vent, single wall vent connector.

Before pushing the unit into its final position in the fireplace, align the flue collar with the self-centering alignment guides on the insert top and pull it towards the front of the stove until the flue collar is firmly seated as far forward as possible.

# **INSTALLATION**

---

## **COMMON VENTING**

**VENTING INTO A COMMON VENT THAT ALSO VENTS A LIQUID FUEL:** When venting the appliance into a chimney or common vent used for a liquid fuel appliance, the vent connector entrance into the chimney of the gas appliance must be above that of the other, regardless of input. However, a branch fitting (available from the same chimney manufacturer) located as close as practical to the chimney can be used to connect the vent connector of the gas appliance to that of the vent connector of the other fuel.

**Venting appliance of unequal input:** When venting two gas appliances of unequal input into a chimney or common vent, the entrance of the vent connector of the appliance having the smaller input shall be located higher than that of the larger input appliance; or wherever possible the common vent closer to or directly over the small appliance connector.

## **INSTALLATION INTO EXISTING WOODSTOVE / SOLID FUEL FLUE SYSTEM**

1. Clean and inspect the existing solid fuel chimney.
2. If using B-vent for the entire installation, pass the B-vent through the existing solid fuel chimney. Support the B-vent from the solid fuel chimney top, (not the cap), using vent hangers available from your local vent supplier. Install a trim collar where the B-vent enters the solid fuel chimney. Connect B-vent to the exhaust collar on the stove using one sheet metal screw.
3. If using 4 inch diameter aluminum liner, pass the liner through the solid fuel chimney. Support the liner from the chimney top, (not the cap), using liner hangers available from your local vent supplier. Attach a B-vent adapter to the bottom of the liner and to the exhaust collar on the stove or the top of the B-vent portion of the flue system. Attach a trim collar where the adapter enters the solid fuel chimney, if required.

# INSTALLATION

Pipe Length (feet)	RECOMMENDED GAS PIPE DIAMETER			
	Schedule 40 pipe Inside Dia.		Tubing, Type L Outside Dia.	
	N.G.	L.P.	N.G.	L.P.
0-10	1/2" 1.3 cm	3/8" 1.0 cm	1/2" 1.3 cm	3/8" 1.0 cm
10-40	1/2" 1.3 cm	1/2" 1.3 cm	5/8" 1.6 cm	1/2" 1.3 cm
40-100	1/2" 1.3 cm	1/2" 1.3 cm	3/4" 1.6 cm	1/2" 1.3 cm
100-150	3/4" 2.0 cm	1/2" 1.3 cm	7/8" 2.3 cm	3/4" 2.0 cm

**NOTE:** Some areas allow copper tubing or galvanized pipe - check local codes.  
**Never use plastic pipe.**

## GAS CONNECTION

The gas connection is 1/2" SAE 45° flare fitting and is easily accessible at the rear of the G29FS and on the right side of the G29I. The gas line can be rigid pipe or to make installation easier use a listed flexible connector and manual shut-off valve if allowed by local building codes. For minimum and maximum supply pressure see the System Data table on page 15.

**Note:** During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shutoff 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.

A 1/8" NPT plugged tapping is provided on the gas control valve. It is located near the outlet to the Main Burner immediately upstream of the gas supply connection to the appliance, and is easily accessible for a test gauge connection.

## NATURAL GAS, PROPANE OR LPG GAS

The G29V and G29I gas stoves are available to burn either natural gas or LPG or propane gas. The burners are specifically manufactured to burn either one. Make sure the stove you have purchased is set up for the type of fuel you have available.

# INSTALLATION

## HIGH ELEVATION

This unit is approved in Canada for altitude 0 to 2000 ft. (CAN 2.17-M90) with the orifice supplied. For installations above 2000 feet, follow current CAN/CGA-B149.1 and B149.2. In USA refer to ANSI Z223.1 - 1988, Appendix F, for re-sizing orifice.

### SYSTEM DATA

For 0 to 2,000 feet altitude\*

**Burner Inlet Orifice Sizes:** NAT #28 DMS  
LPG #47 DMS

\*Above 2,000 feet see National Code Orifice Chart

Input Rating	NAT	LPG
	50,000 btu/h	48,000 btu/h
Supply Pressure	NAT	LPG
Minimum	6.2 " w.c.	10.0" w.c.
Maximum	8.0 " w.c.	12.0 " w.c.
Manifold Pressure	NAT	LPG
	3.7" to 0.9" w.c.	4.0" to 11.0" w.c.

## PILOT ORIFICE SIZES AT ALTITUDE

	Sea Level 3,000'	3000' - 6000'	6,000' - 10,000'
NG	.024	.026	.028
LPG	.016	.018	.020

## ORIFICE SIZES AT ALTITUDE

	Sea Level	2000'	3000'	4000'	5000'	6000'	7000'	8000'	9000'	10,000'
NG	28	29	29	30	30	30	30	31	31	31
LPG	47	48	48	49	49	49	50	50	51	51

**Note:** If altitude is more than 500' above listing on chart use orifice specified at next higher altitude.

Example: 7250 ft. use a #30 for NG  
7650 ft. use a #31 for NG

# INSTALLATION

## FLASHING & TRIM - MODEL G29I

- 1) Remove the top cowl by removing the two 6-32 x 1/2" screws that fasten the cowl to the front of the firebox.
- 2) Remove the outer stove top by removing the two 1/4-20 nuts that secure the stove top to the firebox top.
- 3) Ensure that the stove is set in its final position within the fireplace and that the venting system is installed per the instructions on page 12 of this manual.
- 4) Attach the right and left flashing sides to the flashing support brackets using two (2) 8-32 x 1/2 screws on each side. These should be installed before setting the unit in its final position in the fireplace.
- 5) Attach the top flashing to the top of the unit using two (2) 8-32 x 1/2 screws. Ensure that the tabs on either side of the top flashing insert into the slot on the top of the side flashings.
- 6) Connect the two white ON/OFF wires to the rocker switch located in the top flashing.
- 7) Route the power cord through the opening in the bottom of either the left or right side flashing.
- 8) Install the magnetic gold tone flashing trim.
- 9) Reinstall the outer stove top and top cowl.

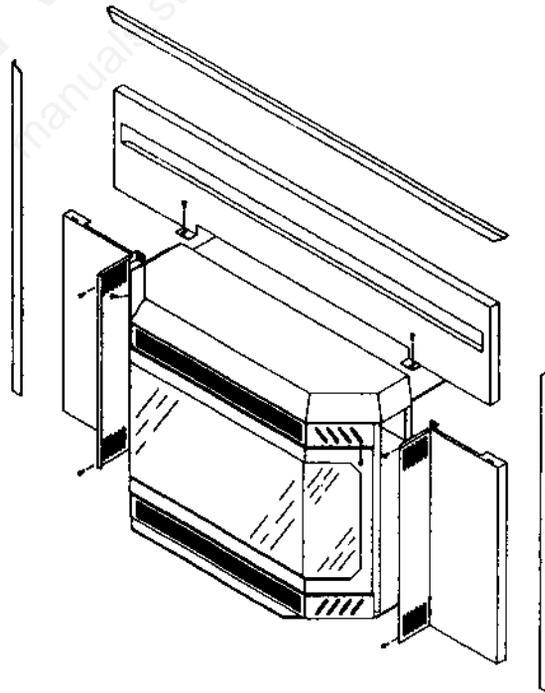


FIG. 11  
Page 16

# INSTALLATION

## GAS PRESSURE TEST

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

The unit is preset to give the correct gas input at the specified manifold pressures shown in the Systems Data table on Page 15.

The manifold pressure is controlled by a regulator built into the gas control valve, and should be checked at the pressure test point. This is a 1/8" NPT plugged tapping located on the gas control, near the outlet to the main burner.

The pressure check should be carried out with the unit burning and the setting should be with the limits specified in the System Data table on Page 15.

These tests should be performed by a qualified gas service technician.

## PRIMARY AIR SHUTTER

The primary air shutter is located at the end of the mixer tube and is accessed through the left side of the stove by opening the left side panel. The air shutter can be rotated to increase or decrease the primary combustion air as needed. **This adjustment should be performed by a qualified gas service technician.**

**NOTICE: ANY SOOTING OR CARBON DAMAGE RESULTING FROM AN IMPROPERLY SET PRIMARY AIR SHUTTER IS NOT COVERED UNDER WARRANTY.-**

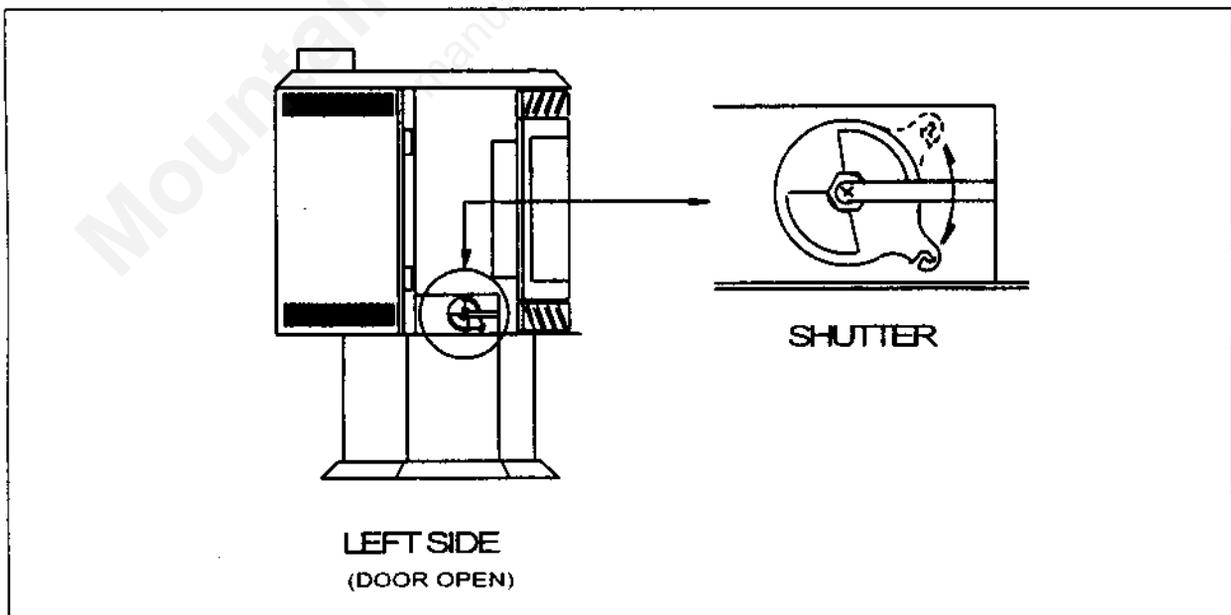


FIG. 12

# INSTALLATION

## TEST FOR FLUE SPILLAGE - MODEL G29V

A "spillage" test must be made before the installed unit is ready for normal use. Follow the procedure below:

- 1) Start all exhaust fans in the home and then close all doors and windows in the room.
- 2) Light the unit and set controls to maximum. Turn fan off.
- 3) After five minutes, test that there is a "pull" on the flue by placing a smoke match or similar device which gives off smoke, on the edge of the draft hood. See diagrams below.

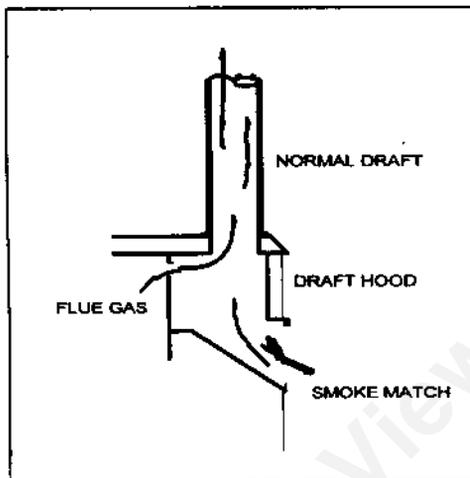


FIG. 13

The smoke should be drawn into the draft hood, if it does not, then leave the unit on for another five minutes and retest as above. If the smoke is still not drawn in the draft hood, turn the unit off and check for the cause of the lack of draft. If necessary, seek expert advice.

For wind turbulent sites, a wind cap may remedy the problem.

**Note:** If the flue is blocked or has a strong reverse flow, the thermally actuated safety switch mounted in the draft hood will automatically shut off the gas supply within about 10 minutes. If the heater turns off because of this during the spillage test, check for the cause of the lack of draft and if necessary, seek expert advice.

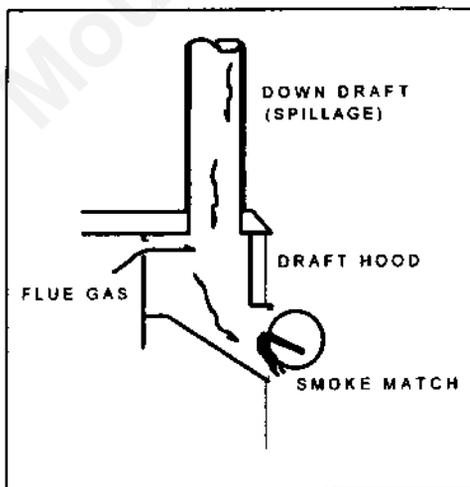


FIG. 15

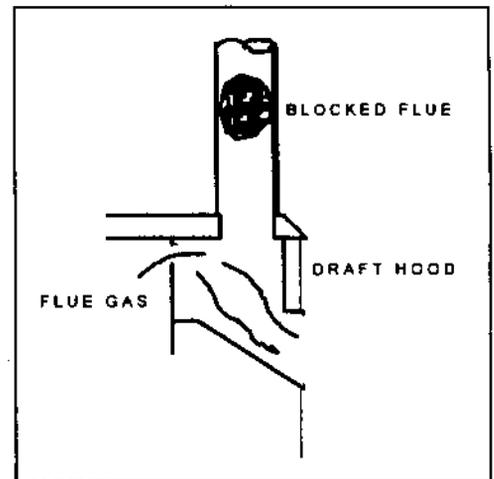


FIG. 14

The heat actuated safety switch will automatically reset after the stove has reduced in temperature. The switch will continue to cycle until the draft problem is corrected.

# INSTALLATION

## TEST FOR FLUE SPILLAGE - MODEL G29I

A "spillage" test must be made before the installed unit is ready for normal use. Follow the procedure outlined below:

- 1) Start all exhaust fans in the home and then close all doors and windows in the room.
- 2) Light the unit and set the controls at maximum. Turn the fan off.
- 3) After five minutes, test that there is a "pull" on the flue by placing a smoke match or similar device which gives off smoke, in front of the spill tube. The spill tube is located on the right side of the unit and is accessed by opening the right side panel.

The smoke should be drawn into the spill tube, if it does not, then leave the unit on for another five minutes and retest as above. If the smoke is still not drawn into the spill tube turn the unit off and check for the cause of the lack of draft. If necessary seek expert advice.

For wind turbulent sites, a wind cap may be necessary to remedy the problem.

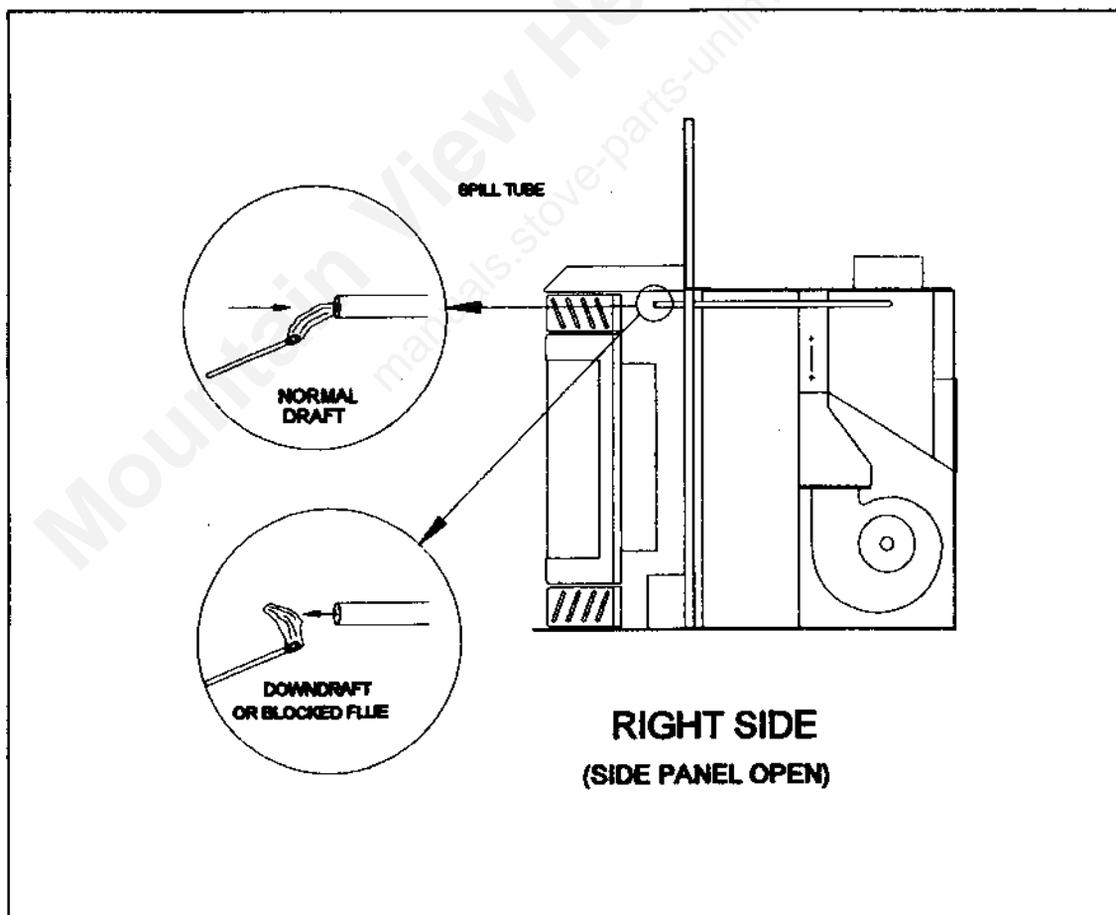


FIG. 16

# INSTALLATION

## G29 GAS STOVE WIRING DIAGRAM

REVISED STARTING WITH: G29V SER# 6173

G29I SER# 6483

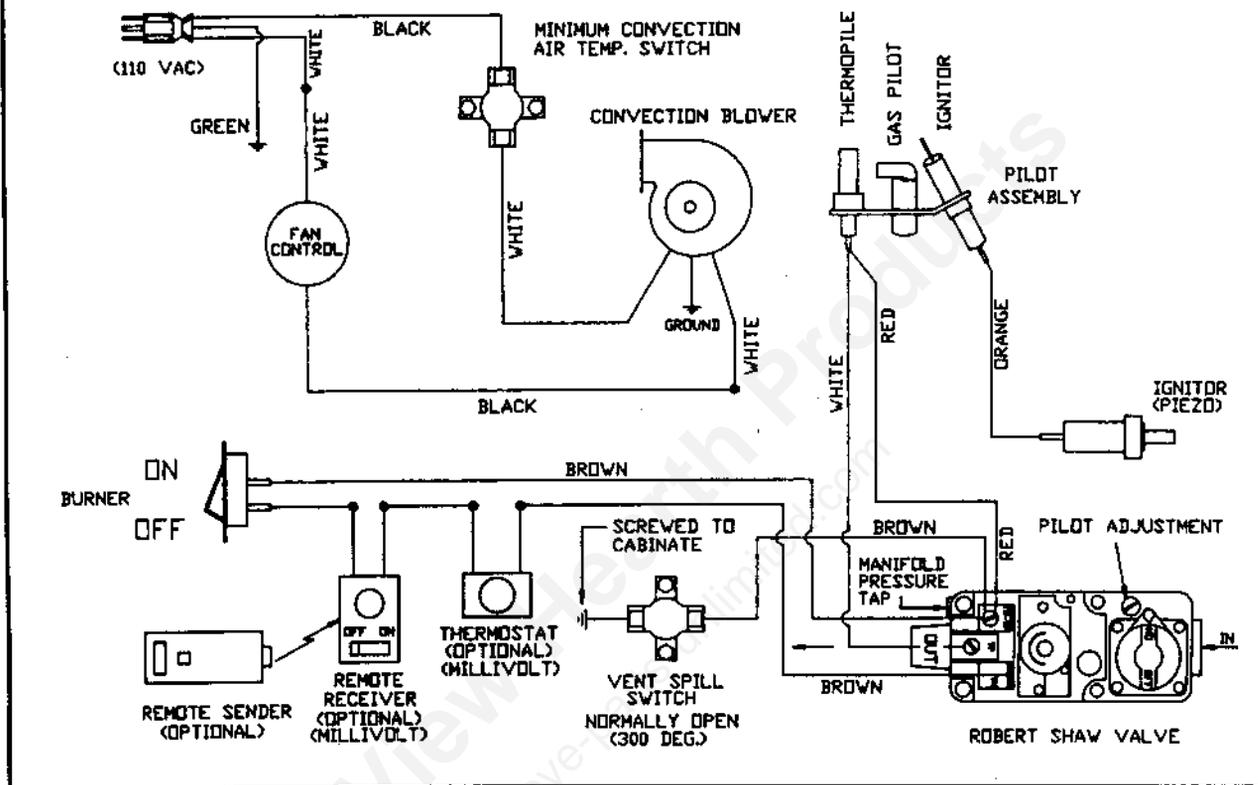


FIG. 17

### OPTIONAL REMOTE CONTROL

An optional hand held remote control kit for turning the unit On and OFF is available. Detailed instructions for the optional Remote Control are included with the kit.

### OPTIONAL WALL THERMOSTAT INSTALLATION

A wall thermostat may be installed if desired. Follow the wiring diagram above. The thermostat is not supplied by Breckwell. Use a CSA, ULC or UL approved millivolt thermostat, 250-75-millivolt rated. A non-anticipator type thermostat is recommended. Follow instructions supplied by thermostat maker.

### RECOMMENDED MAXIMUM LEAD LENGTH

(Two-Wire) When Using Wall Thermostat (millivolt)

Wire Size	Max. Length
14 ga.	100 ft.
16 ga.	64 ft.
18 ga.	40 ft.
20 ga.	25 ft.
22 ga.	18 ft.

# INSTALLATION

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## LOG SET INSTALLATION

**WARNING:** Hazardous operating conditions can occur if the logs are not positioned in their properly approved locations. Read and refer carefully to both the instructions and following diagrams. **DO NOT** under any circumstances use the log set if any of the logs are broken as this can interfere with the safe operation of the stove.

The gas log set contains four (4) logs, and an 8 oz. bag of ember coals

Rear Log  
Front Log  
Right Top Cross Log  
Left Top Cross Log  
8 oz. bag of embers

1. Carefully remove and unwrap the four (4) logs from the box. The logs are very fragile and should be handled with care.
2. Place the rear log (the largest diameter log) so that its feet are behind the rear log supports. The flat part of the log should be facing the rear brick panel. Push the log so that the rear is flush with the brick panel. The log is self centering and should fit easily into place. **DO NOT FORCE THE LOG INTO PLACE.** See diagram on page 22.
3. Place the front log (the longest log) so the rear lower lip slips into the u-shaped front log guides. The pilot must be visible through the cutout provided in the lower rear lip. Center the log so that **NONE** of the front burner holes are obstructed by the log. See diagram on page 22.
4. Position the right top cross log so that its two front ends are placed into the cutouts provided on the right top of the front log. Incorrectly positioning this log could have an adverse affect on the flame pattern and cause carbon sooting and buildup. See diagram on page 22.
5. Position the left top cross log so that the bottom of the “Y” rests in the cutout just to the left of the “knot” on the front log and the right upper portion of the log rests in the cutout provided in the right top cross log already in position. See diagram on page 22.
6. Open the bag of embers and spread a even layer across the burner area in front of the front log, covering the burner holes. **DO NOT** force embers all the way back under the front log but just enough to cover a little more than half of the burner holes. Spread the embers around the “log grate” to create a realistic look. See diagram on page 22. You should use the entire bag of embers to accomplish this look.

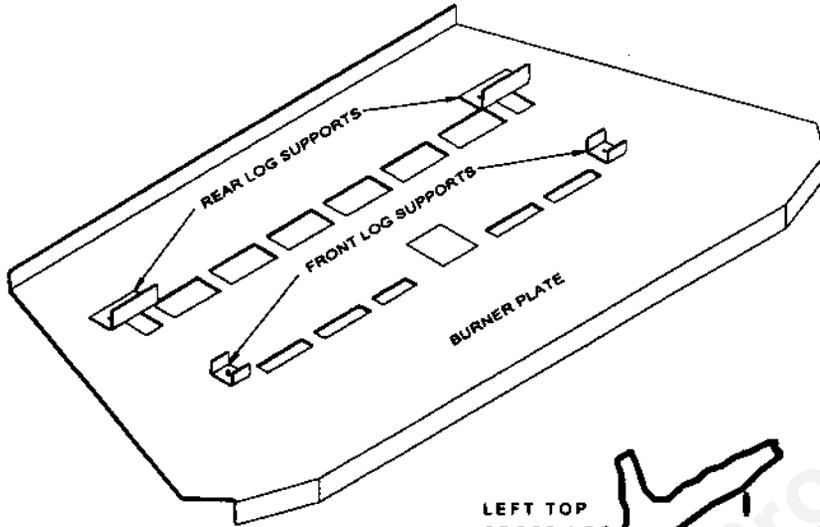


FIG. 18

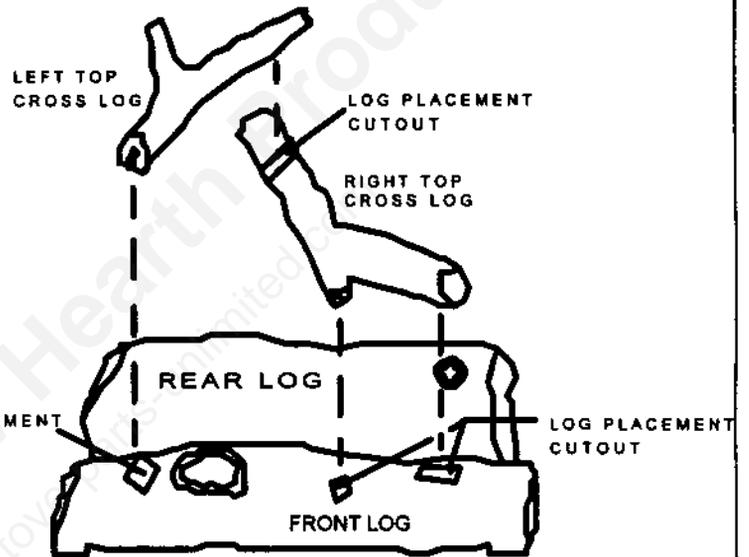


FIG. 19

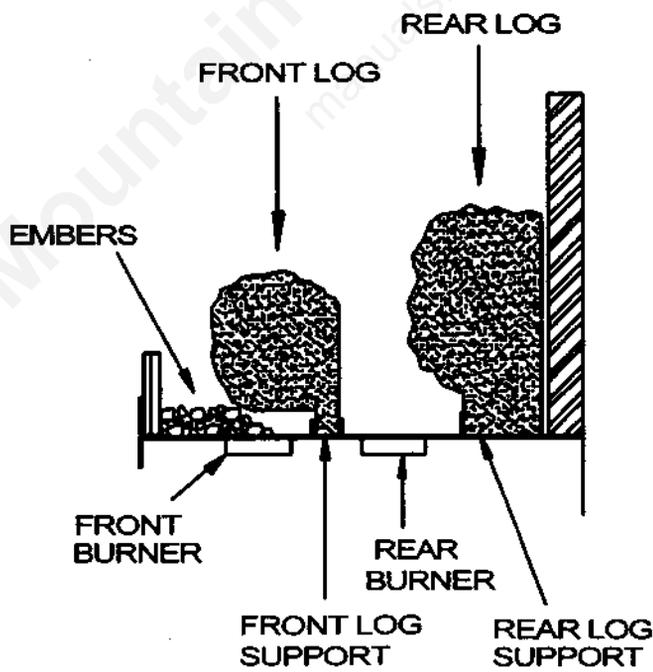


FIG. 20

# **OPERATION**

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## **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. Never operate the appliance with the door open.
5. Verify that all venting and the venting cap is unobstructed.
6. Verify that log placement is correct.
7. The unit should never be turned off and on without a minimum of a 60 second wait.
8. Once pilot light is on, use rocker switch for normal operation. When off for more than a month, extinguish pilot by following shutdown procedure.

## **LIGHTING PROCEDURE**

1. Open the door when lighting the pilot, but once the pilot is lit, DO NOT operate the unit with the door open.
2. If the control knob is in the "OFF" position proceed to Step 4.
3. Push in gas control knob slightly and turn clockwise to "off". Knob cannot be turned from "pilot" to "Off" unless knob is pushed in slightly. Do not force.
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".
6. Push in control knob all the way and hold in. Immediately push red 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, (located at the top of the right side rear panel - [G29V] or atop the top flashing [G29I]), to operate main burner.
9. Rotate the variable flame control, located on the front of the gas control valve, to adjust the flame height higher or lower.
10. The door must be closed when operating the unit.

# OPERATION

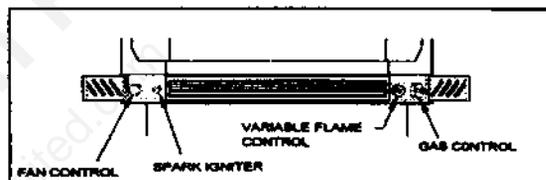
## INITIAL BURNING

The first fire in your stove is part of the paint curing process. To ensure that the paint is properly cured, light the unit and leave it on for 5 minutes and let it cool down for 30 minutes. Repeat 3 or 4 times. When first operated, the unit will release an odor caused by the curing of the paint, the burning off of any oils remaining from manufacturing and burning off the starch in the gas logs. Also the brick panels will discolor during the initial burn and return to their original color after about one hour. This is due to the burning off of manufacturing starches.

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

## HEAT OUTPUT ADJUSTMENT

The gas control valve, located behind the lower right access door grille, can be used to adjust the heat output and flame height by turning the metal gas control knob clockwise for maximum and counterclockwise for minimum. The minimum and maximum settings are factory set to provide a wide range of heat output and should not be altered.



## AUTOMATIC CONVECTION AIR FAN OPERATION

The fan control on is located behind the lower left access door grille and is a combination On/Off variable speed control. The fan operates automatically when the control is in the ON position. It may be set from low to high by turning the knob clockwise and then left at the desired setting. The fan will turn on as the stove comes up to operating temperature. After the unit has been turned off and the stove cooled to below a useful heat output range the fan will shut off automatically.

## SHUTDOWN PROCEDURE

1. Use the rocker switch to turn off the main burner.
2. To turn off pilot light, push in the gas control knob slightly and turn clockwise to "off". Do not force.
3. Turn off all electric power to the appliance if service is to be performed.

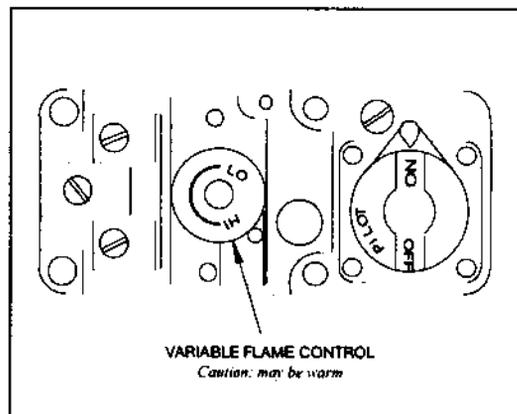


FIG. 21

# OPERATION

## 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 not, follow the current CAN1-B149/ANSI Z 223.1-1988

**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. This heater must be properly connected to a venting system. This heater is equipped with a vent safety shutoff system. Operation of this heater when not connected to a properly installed and maintained venting system or tampering with the vent safety shutoff system can result in carbon monoxide (CO) poisoning and possible death. 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, following the instructions below 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.

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

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. Due to high surface temperatures keep children, clothing and furniture, away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

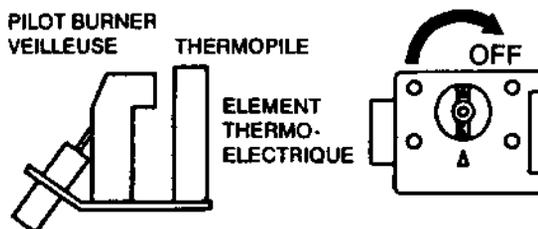
### LIGHTING INSTRUCTIONS

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

- 1) Push in gas control knob slightly and turn clockwise to "OFF". Knob cannot be turned 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. Immediately push red button on spark igniter until pilot lights. Continue to hold the control knob in for about ½ minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 3) and 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.

**DO NOT REMOVE THIS INSTRUCTION PLATE**

908-401

# MAINTENANCE

## MAINTENANCE INSTRUCTIONS

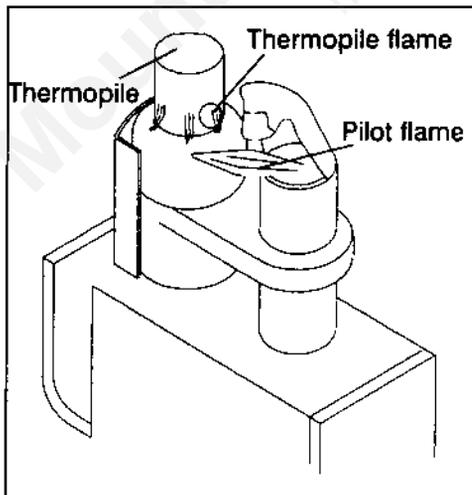
- 1) Always, turn off the valve before cleaning. For relighting instructions see label on stove. Keep the burner and control compartment clean by brushing and vacuuming at least once year.

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

- 2) Clean glass (**never when unit is hot**) and appliance, and grille with a damp cloth. Never use an abrasive cleaner. The gold grille may be scratched if abrasives are used to clean them.

The heater is finished in a heat resistant paint and should only be refinished with heat resistant paint (not with wall paint). NSO uses Stove Brite Paint.

- 3) Make a periodic check of burner. Visually check the flame of the burner 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.



PILOT ASSEMBLY  
FIG. 22

- 5) Keep area near the appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- 6) 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.
- 7) Periodically check the pilot flames, there should be one strong blue flame approx. 1/2" long to the burner, and a ring of flame around the thermopile. See diagram.

**WARNING: CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES 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.**

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

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

# **MAINTENANCE**

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## **PILOT LIGHT**

**Correct pilot flame pattern has two strong blue flames: one flowing around the thermopile and ignitor electrode, and one reaching towards the burner (it does not have to be touching the burner).**

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

If you have an incorrect flame pattern, contact your NSO dealer for further instructions.

## **LOG REPLACEMENT**

The unit should never be used with the 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.**

## **GOLD PLATED DOORS**

The 24 karat gold plated finish on the door requires little maintenance, and need only be cleaned with a damp cloth when the unit is cool. **DO NOT** use abrasive materials or chemical cleaners, as they may harm the finish and void the warranty. Clean any fingerprints off before turning the unit on. **If the door starts to discolor, check the gasket seal and replace if necessary.**

## **DOOR GASKET AND GLASS GASKET**

If the door gasket requires replacement use a 3/4" diameter round door gasket. The glass requires a 1/8" x 3/8" flat gasket. See your Breckwell Dealer.

## **FAN MAINTENANCE**

If your fan requires maintenance or replacement, access the fan by removing the rear cover sheet of the unit. To remove the panel, remove the screws holding the access panel in place. To remove the fan, remove the four 1/4-20 nuts holding the fan to the rear of the unit.