

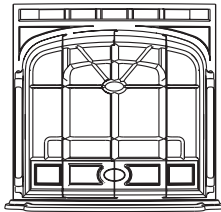
# DOVRE®

SAPPHIRE DV425TR

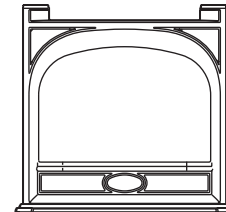
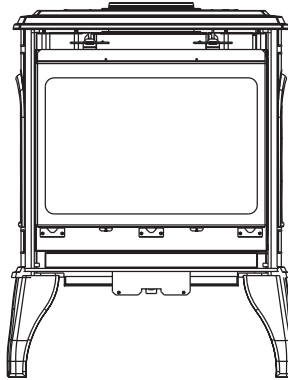
DIRECT VENT ROOM HEATER

## OWNER'S MANUAL

### AND INSTALLATION INSTRUCTIONS



Quartet Front



Solitaire Front

(FRONTS SOLD SEPARATELY)

#### WARNING!

If the information in this Manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

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

#### -WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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

#### 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.

This Heater may be installed with a Vertical or Horizontal Direct Vent Termination System.

This Manual must be used for installation of the DV425TR Gas-Fired Room Heater and retained by the homeowner for operating and maintenance instructions.

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 fuel indicated on the Rating Plate. This appliance is not convertible for use with other gases, unless a certified Conversion Kit is used.

#### FOR YOUR SAFETY

The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.



A Division of Hearth Technologies Inc.

Tested and  
Listed by  
OMNI-Test Laboratories, Inc.

1445 North Highway  
Colville, WA 99114

#250-5533

02/2001

addinhearth.com  
ahpfireup.com

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PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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## LISTINGS AND CODE APPROVALS

The Dovre DV425TR Direct Vent Gas Appliance is listed to ANSI standard Z21.88(b)-1999/CSA 2.33b-M99 Vented Gas Fireplace Heaters and applicable sections of UL307b Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles, CAN/CGA 2.17-M91 "Gas Fired Appliances for use at High Altitudes," by OMNI-Test Labs, Inc., Beaverton, OR.

## SPECIFICATIONS

	Natural Gas †0-2000'	Propane †0-2000'
<b>Top Vent:</b>		
Input Rate on "HI" (BTU/Hr)	30,000	30,000
Input Rate on "LO" (Btu/Hr)	21,000	24,500
Max. Output (BTU/Hr)**	25,000	24,600
Main Burner Orifice	.1065 (36 DMS)	.0635 (52 DMS)
<b>Rear Vent:</b>		
Input Rate on "HI" (BTU/Hr)	26,000	26,000
Input Rate on "LO" (BTU/Hr)	18,000	20,000
Main Burner Orifice	.0960 (41 DMS)	.0595 (53 DMS)
Min. Inlet Pressure (Inches W.C.)	4.5"	11"
Max. Inlet Pressure (Inches W.C.)	7.0"	14"
Manifold Pressure on "HI" (Inches W.C.)	3.5"	10"

\*\*Max Venting, Blower ON

†This appliance is equipped for altitudes 0-2000' (0-610 M) in USA: and in Canada for Altitudes of 0-4500' (0-1370 M). In USA for Altitudes above 2000', the vent configuration, orifice, or combination of both may need to be changed. See page 49 of this manual for information on making these changes.

## NOTICES

Failure to follow all of the required installation procedures may result in property damage, bodily injury or even death. This appliance must be installed in accordance with all local codes, or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1, or the Canadian Installation Code, CAN/CGA 149.

Manufactured Home or Mobile Home installation may occur only after the home is site located and must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or, when such a standard is not applicable, the Standard for Manufactured Home Installations, ANSI/INCSCBS A225.1, or Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4.

When installed, the appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

The Dovre DV425TR is manufactured to operate on Natural Gas (NG), it is convertible to Liquid Propane (LP) when the manufacturer's conversion kit, part #844-9010 is used.

All exhaust gases must be vented outside the structure of the living-area. Combustion air is drawn from outside the living-area structure.

Notify your insurance company prior to connecting gas to this fireplace.

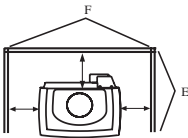
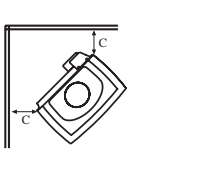
Installation requirements diagrammed and explained in this manual are grouped into segments for ease of procedure. While these requirements must be met fully, the order of installation may be subject to the procedure best suited for your specific placement of the fireplace.

**NOTE:** Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

## SERIAL LABEL

(Located on back of stove)

<p>Tested &amp; Listed By <b>OMNI-Test Laboratories, Inc.</b> Report No. / Rapport Numéro 061-S-19-5</p> <p>Beaverton Oregon USA</p>	<p><b>MODEL / MODÈLE: DV425 T/R</b> <b>VENTED GAS FIREPLACE HEATER</b> <b>FOURNAISE AU GAZ AVEC VENTILATION</b> <b>NOT FOR USE WITH SOLID FUEL /</b> <b>NE PAS UTILISER AVEC LE COMBUSTIBLE SOLIDE</b></p>	<p><b>SERIAL NO.</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<p><b>ALADDIN</b> HEARTH PRODUCTS A Division of Hearth Technologies Inc. 1445 North Highway Colville, WA 99114</p>											
<p><b>APPROVED FOR CANADA AND USA TO:</b> ANSI Z21.88b-1999 / CSA 2.33b-M99 Vented Gas Fireplace Heaters, and applicable sections of UL 307b Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles, CAN/CGA 2.17-M91 "Gas Fired Appliances for use at High Altitudes." This appliance is manufactured for operation with Natural Gas. For conversion to propane Manufacturer's Part #844-9010 and instructions must be used.</p>		<p><b>APPROUVÉ POUR LE CANADA ET LES ÉTATS-UNIS:</b> ANSI Z21.88b-1999 / CSA 2.33b-M99 Fournaises au Gaz avec Ventilation, et les sections applicable de UL 307b Appareils de Chauffage Au Gaz pour les Maisons Mobiles et les Véhicules Motorisés, CAN/CGA 2.17-M91 "Gas Fired Appliances for use at High Altitudes". Cet appareil est manufacturé pour l'opération avec le Gaz Naturel. Pour une conversion au gaz propane les pièces du Manufacturier #842-4040 et ses instructions doivent être utilisées.</p>												
<p><b>FAN TYPE VENTED CIRCULATOR / VENTILATEUR CIRCULATOIRE</b> Blower Electrical Rating / Évaluation du Ventilateur</p>		<p>Thermal Efficiency / Efficacité Thermique* 84% NG (blower on / avec ventilateur allumé) 82% LP (blower on / avec ventilateur</p>												
<p>For use with Natural Gas Usage Au Gaz Naturel 0-2000'</p>		<p>For use with Propane Usage Au Gaz Propane 0-2000'</p>												
Top Vent:	Input Rate on "HI" (BTU/Hr) 21,000 Input Rate on "LO" (BTU/Hr) 25,000 Maximum Output (BTU/Hr)** .1065 (36 DMS) Main Burner Orifice	30,000 24,500 24,600 .0635 (52 DMS)	Puissance Évaluée à "HI" (BTU/Hr) Puissance Évaluée à "LO" (BTU/Hr) Puissance Maximum (BTU/Hr)** Orifice du Brûleur Principal											
Rear Vent:	Input Rate on "HI" (BTU/Hr) 18,000 Input Rate on "LO" (BTU/Hr) .0960 (41 DMS) Main Burner Orifice	26,000 20,000 .0595 (53 DMS)	Puissance Évaluée à "HI" (BTU/Hr) Puissance Évaluée à "LO" (BTU/Hr) Orifice du Brûleur Principal											
Minimum Inlet Pressure (Inches W.C.) 4.5"		11"												
Maximum Inlet Pressure (Inches W.C.) 7.0"		14"												
Manifold Pressure on "HI" (Inches W.C.) 3.5"		10"												
*Max Venting, Blower On		Pression Minimum de la Valve (pouces W.C.) Pression Maximum de la Valve (pouces W.C.) Pression du Collecteur d'Échappement à "HI" (pouces W.C.) ** Ventilation Maximum, Ventilateur Allumé												
<p>This appliance equipped for altitudes 0-2000' (0-610m) in USA; and in Canada for altitudes of 0-4500' (0-1370m). In USA for Altitudes above 2000', the vent configuration, orifice, or combination of both may need to be changed. See Owner's Manual for information on making these changes. Cet appareil est équipé pour les altitudes de 0-2000' (0-610m) aux États-Unis; et au Canada pour les altitudes de 0-4500' (0-1370m). Pour les altitudes au-dessus de 2000' aux États-Unis, la configuration du ventilateur, son orifice ou les deux peuvent possiblement avoir à être changé. Voyez le manuel du propriétaire pour les informations sur ces changements.</p>														
<p>Keep burner area and compartment clean. See installation and operation instructions accompanying this appliance. Gardez le brûleur et le compartiment de contrôle propres. Vérifiez les instructions d'installation et d'opération qui accompagnent cet appareil. This vented gas fireplace heater is not for use with air filters. / Cet appareil de chauffage au gaz n'est pas pour l'usage avec des filtres d'air. Due to high surface temperatures, keep children, clothing and furniture away. / Du aux surfaces de températures élevées, gardez les enfants, les vêtements et les meubles.</p>														
ELECTRICAL SUPPLY / FOURNITURE ÉLECTRIQUE: 120 Volts, 1.2 Amps, 60 Hz														
<p><b>WARNING:</b> Operation of this appliance when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death. <b>AVERTISSEMENT:</b> L'opération de cet appareil lorsqu'il n'est pas connecté à un système de ventilation correctement installé et maintenu peut résulter à un empoisonnement d'oxyde de carbone ou même de mort possible. 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.</p>														
<p><b>CAUTION:</b> DO NOT OPERATE THIS APPLIANCE WITH GLASS REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE PANEL(S) SHOULD BE DONE BY A LICENSED OR QUALIFIED PERSON. <b>ATTENTION:</b> CET APPAREIL NE DOIT PAS ÊTRE OPÉRÉ SI LA VITRE EST BRISÉE, CRAQUÉE OU ENLEVÉE. LE REMPLACEMENT DU PANNEAU DOIT ÊTRE FAIT PAR UNE PERSONNE QUALIFIÉE. <b>CAUTION:</b> HOT WHILE IN OPERATION. DO NOT TOUCH. SEVERE BURNS MAY RESULT. KEEP CHILDREN, CLOTHING, FURNITURE, GASOLINE AND OTHER LIQUIDS AWAY FROM HEAT. / ATTENTION: CHAUD LOURD EN OPÉRATION. NE TOUCHEZ PAS. DES BRÛLURES SÉVÈRES PEUVENT ENRÉSULTER. GARDEZ LES ENFANTS, LES VÊTEMENTS, LES MEUBLES, LA GAZOLINE ET LES AUTRES LIQUIDES DE VAPEUR INFLAMMABLE ÉLOIGNÉS. <b>WARNING:</b> 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 THE GAS SUPPLIER. <b>AVERTISSEMENT:</b> UNE INSTALLATION, UN AJUSTEMENT, UNE ALTÉRATION, UN SERVICE OU UN ENTRETIEN INCORRECTS PEUVENT CAUSER DES DOMMAGES MATÉRIELS.</p>														
MINIMUM CLEARANCES TO COMBUSTIBLES / ESPACE MINIMUM AUX COMBUSTIBLES														
<p>Minimum clearances required from combustible construction for all appliance surfaces. / Espaces minimum exigés de la construction combustible aux surfaces de l'appareil</p>														
														
<p>A. Side of stove top to side wall B. Rear of stove top to back wall C. Corner of stove top to side wall D. Minimum Alcove Height E. Maximum Alcove Depth F. Minimum Alcove Width</p>		<p>6" (152 mm) 3" (100 mm) 1" (25 mm) 54" (1372 mm) 36" (914 mm) 36" (915 mm)</p>												
		<p>Du côté du poêle au côté du mur Le contrôle arrière au mur arrière Du Coin du Poêle au côté du mur Hauteur minimum de l'alcôve Profondeur maximum de l'alcôve Largeur minimum de l'alcôve</p>												
<p><b>HEARTH:</b> A non-combustible hearth pad is not required. However, the floor beneath the stove must be stable, level, and strong enough to support the stove without a tipping hazard.</p>														
Date of Manufacture / Date du														
2000	2001	2002	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DO NOT REMOVE THIS LABEL / NE PAS ENLEVER										Made in U.S.A. / Fait Aux				

## SAFETY NOTICES

- ! Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- ! Do not place clothing or other flammable items on or near the appliance at any time. Due to thermostatic control, the possibility exists for the appliance to turn on, igniting any items on or near it.
- ! 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.
- ! Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.

Installation and repair should be done by a qualified service person. 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, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

Strict adherence to the instructions in this manual must be followed. Improper installation will void the warranty and safety listing.

This appliance is manufactured to operate on natural gas (NG). It is field convertible to propane (LP) with the manufacturers' conversion kit. Burning incorrect fuel voids the warranty and safety listing and may cause an extreme safety hazard.

Contact local building officials to obtain a permit and information on installation restrictions or requirements in your locale. It is also important to notify your homeowner's insurance company of the installation of this appliance as well.

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.

Do not store or use gasoline or other flammable liquids in the vicinity of the appliance.

If the flame becomes sooty, dark orange in color, or extremely tall, DO NOT operate the appliance. Contact your dealer and arrange for servicing immediately.

DO NOT operate the appliance if it is not operating properly in any manner. Contact your dealer for assistance.

Open viewing glass for servicing only.

Operate the appliance in accordance with the instructions contained in this manual.

If the main burners do not start correctly, turn the gas off at the gas control valve and contact your dealer for service.

Do not operate with glass cracked or broken.

This unit is not for use with solid fuel.

DO NOT place anything inside the firebox (other than the included logs, embers, mineral wool and lava rock).

If the logs become damaged refer to the Parts and

Accessories page of this manual for replacement.

Instruct everyone in the house how to shut off the gas to the appliance and also at the main gas shut-off valve. The main gas shut-off valve is usually located next to the gas meter or propane tank and requires a wrench to shut off.

Use the built-in piezo igniter to light the appliance. DO NOT use matches or any other external device.

DO NOT remove, replace, modify or substitute any part of the appliance unless instructions are given in this manual. All other work must be done by a trained technician.

Allow the appliance to cool before carrying out any maintenance or cleaning.

The pilot flame must contact the thermopile and thermocouple. If it does not, turn the gas control valve to "OFF" and call your Dealer.

DO NOT throw this manual away. Important operating and maintenance instructions are included.

### WARNING!

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

### CAUTION!

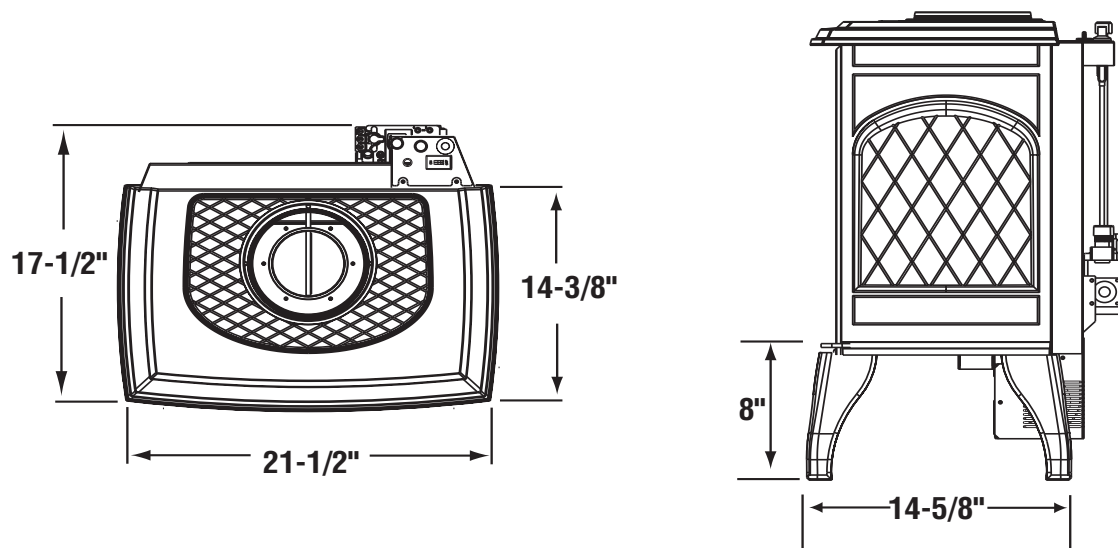
Do not operate appliance with the glass front removed, cracked or broken. Only the door certified for use with the appliance shall be used. Replacement of the glass should be done by a licensed or qualified service person. Do not strike the glass.

## OVERVIEW OF INSTALLATION TO OPERATION

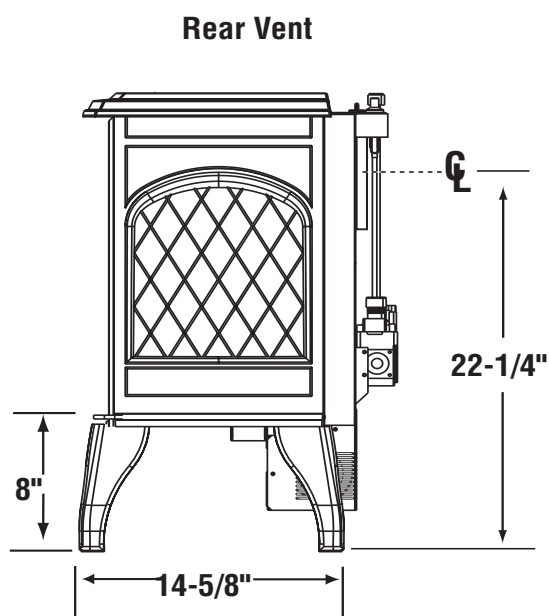
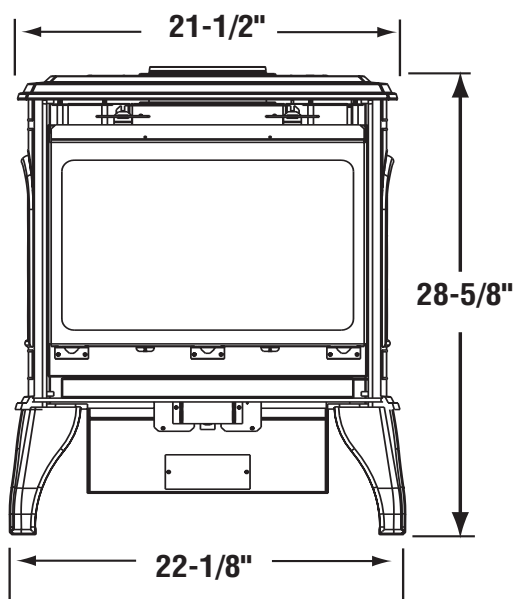
- Familiarize yourself with this Owner's Manual and the Safety Notices located in this manual, and posted on the heater.
- Remove and unpack the following components:  
Beneath the stove: 5 Logs, grill, grill cover\*, and 4 cap speed nuts.  
Shrink-wrapped to front of unit: Owner's Manual, mineral wool, lava rock, and flex line.
- Unbolt heater from pallet.
- Remove glass door by inserting fingers into the spring latches located on both the left and right sides at top of glass. Pull towards you and separate latch from notch. Lift the glass out of the three notches at its base and carefully set aside.
- Convert to horizontal venting if necessary for your installation plans. (Kit #844-8920)
- Convert to LP if necessary. (Kit #844-9010)
- Install Blower if purchased. (Kit #844-9030) NOTE: Blower will not fit on a stove fitted with the Hearth Leg Kit.
- Install Hearth Legs if necessary. See Parts and Accessories, page 57 for part numbers.
- Finalize your installation decisions and requirements:
  - Refer to Dimensions on page 7
  - Refer to Clearances to Combustibles on page 8
  - Refer to Horizontal termination requirements on page 26
  - Refer to Vertical termination requirements on page 35
  - Refer to Vent Kits pertinent to your installation on page 20
- Contact your local building inspector for code requirements in your area.
- Run thermostat lines to TH & TPTH connectors on valve, if applicable, see page 17.
- Set unit in place and install venting per your installation requirements.
- Install logset, embers, mineral wool and lava rock. See instructions on page 14 of this manual.
- Connect the gas line. See page 44
- Plug in blower, if purchased.
- Leak test gas line to manual shut-off valve. See page 46
- NOTE: If you are using any accessories with gold it is IMPORTANT TO CLEAN THE GOLD FINISH, using a glass cleaner and non-abrasive towel, *prior* to the initial burn of the unit. This prevents fingerprint oils from staining the gold. After heater has been burned, the gold finish will cure and fingerprint oils will no longer cause staining.
- Follow Lighting Instructions, page 47, a copy of which is also attached to rear of heater, to light the heater.
- Re-attach door.
- Attach face (Quartet or Solitaire), see page 9
- Adjust gas control knob to "ON" (Following Lighting Instructions)
- Check flames. See diagram on page 46
- Adjust shutter position, if necessary. See page 48
- Set Thermostat or turn control panel switch to the "ON" position. See page 47 & 50.
- Familiarize yourself with the maintenance requirements of the stove. See pages 51-52.
- Familiarize yourself with the Troubleshooting section of this manual, pages 54.

\*The use of the grill cover is optional. It can be placed beneath the top grill. See page 17 for installation instructions. The use of the plate increases blower efficiency and also hides the interior of unit from view.

## DIMENSIONS



NOTE: Diagrams show heater equipped with optional Blower, part #844-9030.

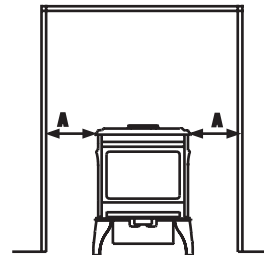
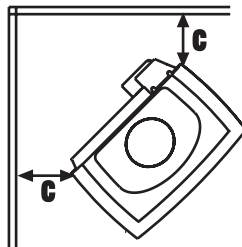
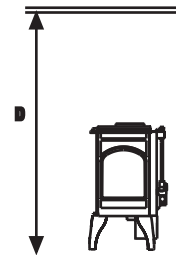
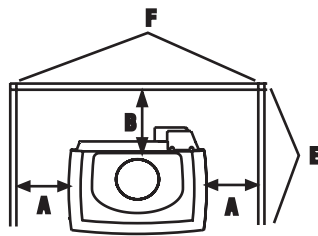


NOTE: If heater is equipped with Hearth Legs Kit center-line dimension is reduced by 3".

## CLEARANCES TO COMBUSTIBLES

### SAPPHIRE MINIMUM CLEARANCES TO COMBUSTIBLES

Minimum clearances required from combustible construction.



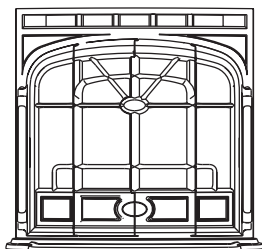
A.	Side of stove top to side wall	6" (152 mm)
B.	Rear of stove top to back wall	3" (100 mm)
C.	Corner of stove top to side wall	1" (152 mm)
D.	Minimum Alcove Height	54" (1372 mm)
E.	Maximum Alcove Depth	36" (914 mm)
F.	Minimum Alcove Width	36" (915 mm)

**HEARTH:** A non-combustible hearth pad is not required. However, the floor beneath the stove must be stable, level, and strong enough to support the stove without a tipping hazard.

## FRONT OPTIONS

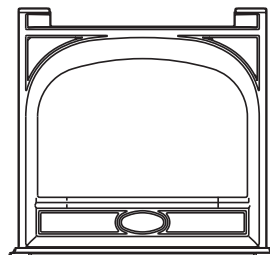
(Sold Separately, refer to page 57 for part numbers.)

### QUARTET & SOLITAIRE FACE INSTALLATION INSTRUCTIONS



Quartet Parts Include:

(1) Front Face; (2) Hinged Doors; (2) Gold plated button head hinge pins; (1) Bolt; (2) washers



Solitaire Parts Include:

(1) Front Face; (1) Bolt

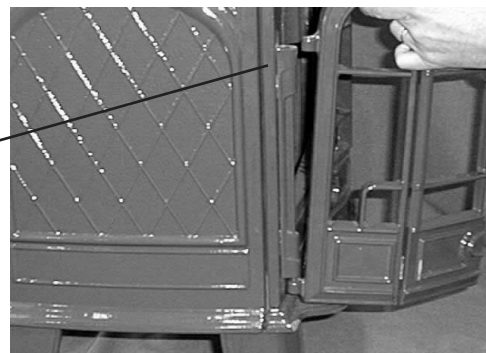
For BOTH Quartet AND Solitaire Faces:

1. Carefully lift face into position and insert bolt beneath the ashlip to secure the face to stove. See Figure 1. This completes installation of Solitaire face.



**FIGURE 2**

Ensure that washer is placed here.



**Instructions continue for completion of the Quartet:**

- Doors ship attached to the face. If they have been removed, follow instructions 2 & 3 to replace:
2. Install one door at a time. Slide bottom hinge rod into lower hinge box hole on face. See Figure 2.
  3. Place washer on top of door hinge. Line up hole in door hinge and washer with hole in hinge box of face. Place gold-plated hinge pin in holes to secure. See Figure 3.

**FIGURE 3**



NOTE: See information on the instructions included with your front if the Quartet doors require alignment.

## REAR VENT CONVERSION INSTRUCTIONS

(See Parts & Accessories, page 57 for part number.)

**KIT CONTENTS:** Rear vent grill; .096 NG orifice; .059 LP orifice; Rear Vent Cover Plate, Top Grill Cover Plate

**TOOLS REQUIRED:** Power drill; #2 Phillips bit; 5/32" Allen wrench; 5/8" open end wrench; high-temp silicone sealant (optional.)

### STEP A: Convert to Rear Vent:

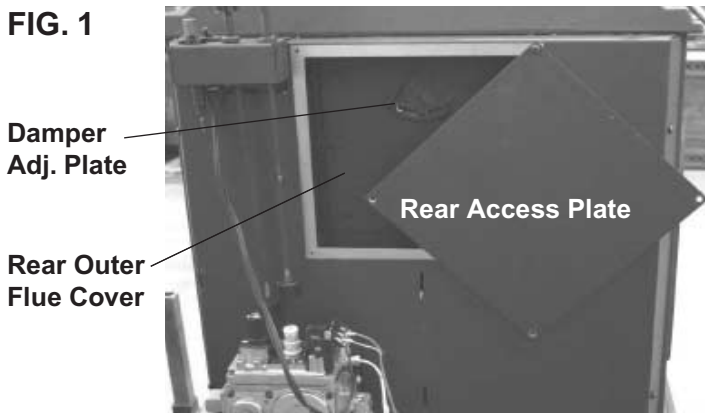
#### A-1 - At the REAR of stove:

1. Remove rear access plate on back shield and discard. See Fig. 1
2. Remove rear outer flue cover plate, (with damper adjustment plate attached), ensure that gaskets and grommet stay in place.
3. Remove inner flue cover plate; set aside.

#### A-2 - At the TOP of stove, with exceptions noted:

4. Lift out cast insert piece on top.
5. Remove outer flue collar and set aside. See Fig. 3 Ensure that gasket is intact, if not, high temperature silicone can be used as an alternative to gasket replacement in step 12 below.
6. Lift out inner flue collar with damper in place. See Fig. 4

**FIG. 1**

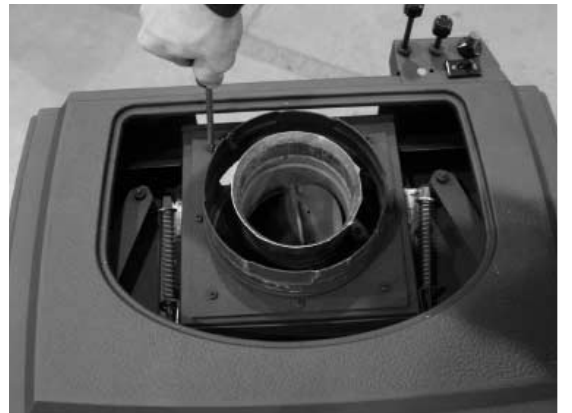


**FIG. 2**

Rear Inner Flue Plate



**FIG. 3**



**FIG. 4**



## REAR VENT CONVERSION INSTRUCTIONS, cont.

7. Re-install inner flue collar on rear of stove with damper rod pointing up. See Fig. 5 A dab of high temperature silicone on the gasket will help gasket adhere to the unit.
8. Re-install inner flue cover on top of stove, double check that damper rod is in the up position. See Fig. 6
9. Install outer cover plate, (with damper adjustment plate attached), to top of stove. See Fig. 7
10. On top of stove: Reinstall damper adjustment plate: a) set spacer in place, b) align adjustment plate, c) set screw into spacer and tighten. See Fig. 7
11. Re-install outer flue collar on rear of stove. See Fig. 8
12. Install rear vent cover plate, supplied with kit, on back shield.
13. Install top cast insert. NOTE: A grill cover plate is shipped with the stove. This plate may be placed beneath the top grill. See page 17 for installation instructions. The use of the plate increases blower efficiency and also hides the interior of unit from view.

STEP B: Replace Burner Orifice: See next page.

FIG. 5



FIG. 6

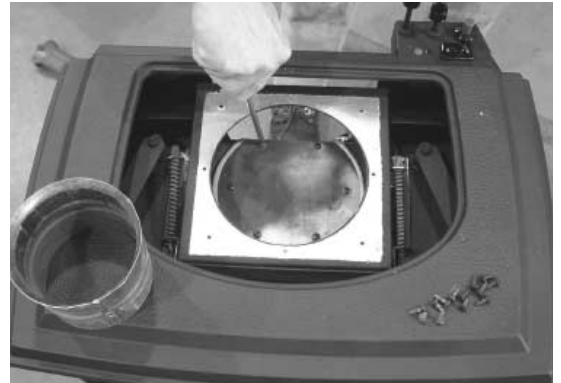


FIG. 7

Damper  
Adj. Plate

Outer Cover  
Plate



FIG. 8



## REAR VENT CONVERSION INSTRUCTIONS, cont.

### STEP B: REPLACE BURNER ORIFICE FOR HORIZONTAL VENT CONFIGURATION:

**FIG. 9**

1. Remove front (if installed), glass, and logs (if installed.)
2. Remove log/burner pan: First remove screws then lift the front of pan vertically and slide pan to one side and pull out of firebox. **Fig. 9**
3. Remove burner plate.
4. Remove main burner orifice using a 5/8" wrench.
5. Replace orifice with the proper size as indicated below for your gas type: **Fig. 10**

**FIG. 10**

	<b>PROPANE</b>	<b>NATURAL GAS</b>
--	----------------	--------------------

Rear Vent:	.059 (53 DMS)	.096 (41(DMS)
------------	---------------	---------------

**IMPORTANT NOTE! The orifice supplied with the GAS conversion kit is for TOP VENT MODELS ONLY. For vertical to horizontal venting conversion, the correct orifice is supplied WITH THE REAR VENT CONVERSION KIT.**

6. Re-install burner plate: First slide burner tube into shutter and over holes. Secure plate with screws.
7. Re-install log/burner pan. Slide vertically into the back of firebox and then place horizontal onto burner plate. Refer to Fig. 1 again.
8. Install logs, refer to Owner's Manual for correct placement.
9. Replace glass door and front.

## LP CONVERSION INSTRUCTIONS

Part #844-9010

**KIT CONTENTS:** Replacement orifice (**fits top vent models only**); replacement pilot injector.

**TOOLS REQUIRED:** Power drill (a 90° handle is helpful); #2 Phillips bit; 5/32" Allen wrench; 5/8" open end wrench.

1. Remove front (if installed), glass, and logs (if installed.)
2. Remove log/burner pan: First remove screws then lift the front of pan vertically and slide pan to one side and pull out of firebox. **Fig. 1**
3. Remove burner plate.
4. Pull off pilot hood and set aside. **Fig. 2**
5. Use a 5/32" Allen wrench to remove the pilot injector. **Fig. 3**
5. Replace pilot injector with the one supplied in the conversion kit (#35 for Propane, #62 for Natural Gas).

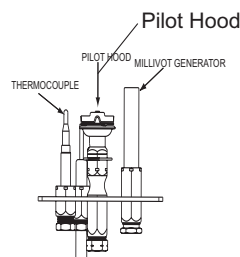
**NOTE:** The injector is **ONLY** replaced if you are converting to another gas. It is not replaced for a change from top to rear vent.

6. Replace pilot hood, snapping into position.
7. Remove main burner orifice using a 5/8" wrench.
8. Replace orifice with the proper size as indicated below for your gas type and venting: **Fig. 4**

**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**



	PROPANE	NATURAL GAS
Top Vent:	.063 (52 DMS)	.106 (36 DMS)
Rear Vent:	.059 (53 DMS)	.096 (41 DMS)

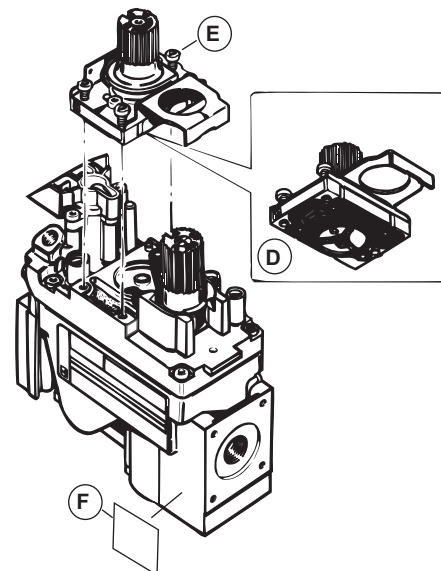
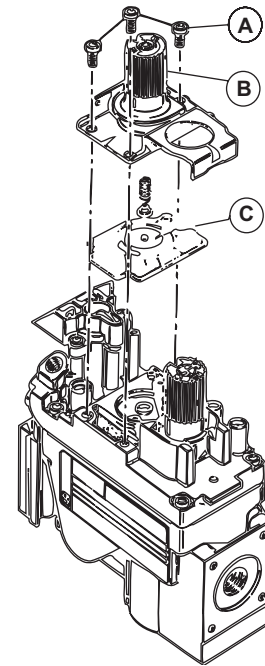
**IMPORTANT NOTE!** The orifice supplied with this conversion kit is for **TOP VENT MODELS ONLY**. If your stove was fitted with the rear vent kit, the correct conversion orifice was supplied **WITH THE REAR VENT KIT**.

See next page for Valve Regulator Replacement:

## LP CONVERSION, CONT.

**Valve Regulator Replacement**

1. Turn control knob to the OFF position, ensure that gas supply to the valve has been turned off.
2. Using a Torx TH20, or slotted screwdriver, remove the three pressure regulator mounting screws (A), pressure regulator tower (B), and diaphragm (C). (You may wish to retain these items for converting back to original gas if necessary.)
3. Ensure 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. (Reference torque = 25 in/lb)
4. Install the enclosed identification label (F) to the valve body where it can be seen.
5. Re-install burner plate: First slide burner tube into shutter and over holes. Secure plate with screws.
6. Re-install log/burner pan. Slide vertically into the back of firebox and then place horizontal onto burner plate. Refer to Fig. 1 again.
7. Install logs, refer to Owner's Manual for correct placement.
8. Replace glass door and front.



## LOGSET INSTALLATION

The logset is packed in the components box and consists of the following: (See Fig. 1)

Qty.	# in Fig. 1
1 Rear log -	1
1 Left Partial Log -	2
1 Right Partial Log -	3
1 Left Twig -	4
1 Right Twig -	5

While breakable, the logs do not become fragile until after the stove is burned and they have cured. After curing, any handling must be done with care as breakage may occur easily.

**Please Note: Logs have been designed to work specifically with the burner pan of the 425TR. Exact placement will ensure maximum operation of your heater.**

Installation:

1. Set the Rear Log over the pins at the rear of burner pan. (See white circles in Fig. 2)
2. Set Left and Right Partial Logs (with butt end towards side of stove firebox), over the left and right side pins on burner pan. Fig. 3
3. Locate the pin hole on the bottom of the right and left twigs and situate them over the white pins located on Rear Log. Fig. 4

### IMPORTANT!

**Lava rock must only be placed in the recessed area to the front and sides of burner pan.**

4. Place nuggets sparingly across front of burner. Note the white nuggets in Fig. 5
5. Tear off varying sizes of mineral wool and intersperse among the nuggets.
6. Carefully deposit a layer of lava rock in the channel area along both sides and in front. Fig. 6

Fig. 1



Fig. 2



Fig. 3



Fig. 4

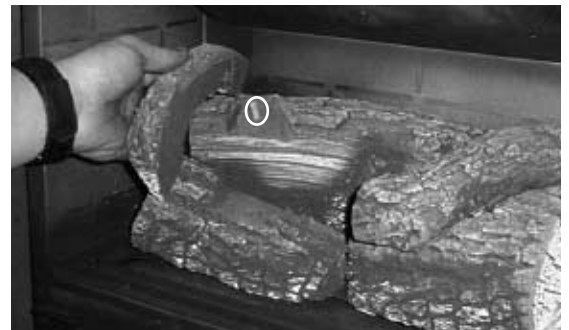


Fig. 5



Fig. 6

Channel area to keep lava rock in is shaped like this outline.



## HEARTH LEGS INSTALLATION

**NOTE: HEARTH LEGS CAN NOT BE USED IF A BLOWER IS INSTALLED AS THERE WILL NOT BE ENOUGH CLEARANCE.**

Refer to page 56, Parts & Accessories for specific color part numbers.

Hearth legs will allow three additional inches of clearance. Be sure to calculate this distance correctly if necessary to cut wall hole to install horizontally. Refer to Dimensions on page 7.

To change legs, use a 1/2" wrench to remove and replace one leg at a time while the unit is in an upright position.

## BLOWER INSTALLATION

### PART #844-9030

**KIT CONTENTS:** Blower motor; snapdisc bracket with wire harness; rheostat, rheostat nut; knob; screws; 1 zip-tie.

**TOOLS REQUIRED:** #2 Phillips head bit; hand drill; 11/16's wrench.

1. Mount blower to rear of unit using two screws. See Fig. 1
2. Beneath the stove from its front side, ensure that all wiring is moved behind the blower mounting bracket, and complete blower mounting by inserting two screws. See Fig. 2
3. Make the wire harness connection. Fig. 2
4. Use 2 screws to connect the snapdisc bracket to blower mounting bracket. Fig. 3
5. Route wires from snapdisc to the right, upper edge of blower. Fig. 3
6. Insert rheostat control into it's opening from beneath the control panel. Fit the rheostat nut on top and tighten the nut using an 11/16" wrench. Attach black knob. Fig. 4
7. Gather any excess in the wiring and zip-tie to the switch wires and piezo wire at rear of stove.

**Note:** This blower utilizes a snapdisc to control ON and OFF operation. When the correct temperature is reached, the blower will automatically turn ON. Use the rheostat knob to adjust the fan to High or Low to suit your preferences.

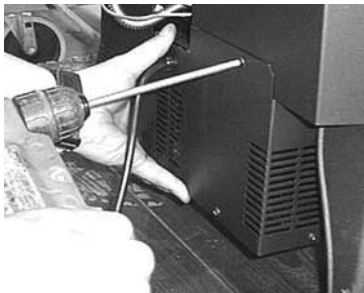


FIG. 1

## BLOWER INSTALLATION, cont.

FIG. 2

Blower mounting bracket beneath stove as seen from front.

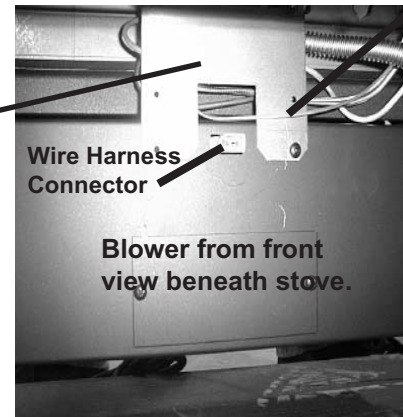


FIG. 3

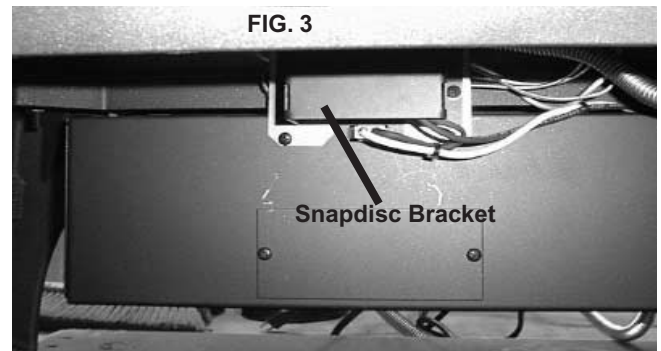
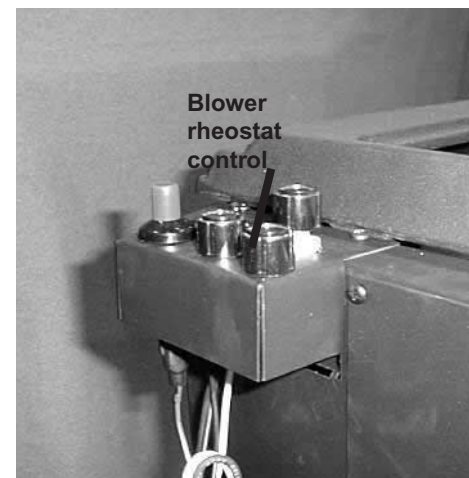


FIG. 4

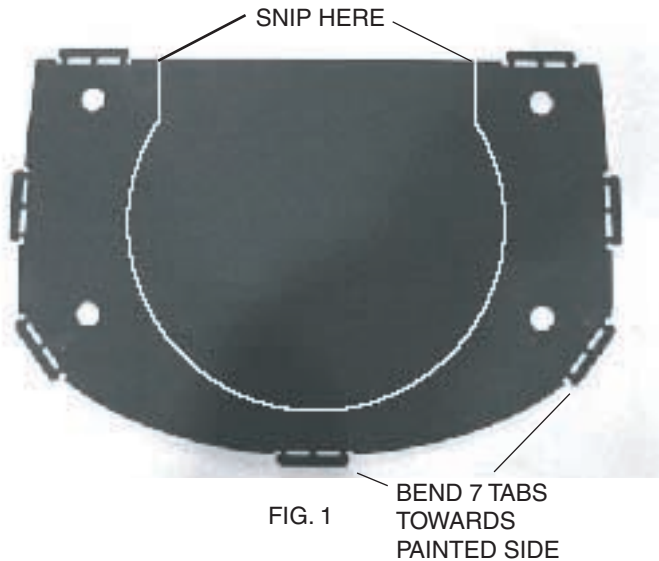


## GRILL COVER INSTALLATION

Top grill cover is shipped with the stove and is an optional use item. It may be used with rear or top venting. Primarily its purpose is to hide the interior of the top of the stove from being viewed through the top grill piece. Its use will also increase the efficiency of the blower, if a blower is installed on the stove.

To prepare the part for use you will need tin snips, pliers and a hammer.

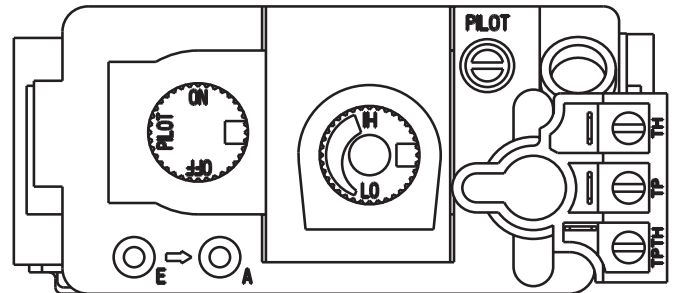
1. **For use with top venting:** See Fig. 1 below. Use the tin snips to cut the straight edges.
2. Gently bend the piece until the two attached sections of the circular area snap apart. Discard this piece.
3. Bend the tabs up towards the black painted side.
4. With the top grill lying face down, set the black painted side of grill cover onto the grill.
5. Use the hammer to tap on the 4 speed nuts (also supplied with stove.)
6. For use with rear venting: Follow steps 3 through 5, leaving the cover piece in tact.



## THERMOSTAT INSTALLATION

A thermostat may be installed to regulate the 425TR. It is important to use a thermostat designed for millivolt operation. Do not connect the heater to a thermostat serving any other appliance. Bedroom installation in Canada requires this heater to be connected to a thermostat.

Connect the thermostat wires to the outside valve terminals labeled "TH" and "TPTH". Turn the manual switch on the control panel to "OFF".



## REMOTE CONTROL

A remote control or a wall switch may be wired to the thermostat terminals. Contact your Dealer for details.

Manual Thermostat #812-2880  
Anticipator Setting 1.2

Programmable Thermostat #811-0520

Recommended Maximum Lead Length (2 wire) when using wall thermostat/switch:

Wire Size	Maximum Length
16 gauge	65 Feet
18 gauge	40 feet
20 gauge	25 feet
22 gauge	18 feet

## GENERAL VENTING INSTRUCTIONS

**PLEASE NOTE:** In order to comply with applicable codes and product warranties, only Simpson Dura-Vent venting components may be used. **DO NOT USE FIELD-FABRICATED VENTING COMPONENTS.** The Dovre DV425TR is approved to be vented either horizontally, through the side wall, or vertically, through the roof. You may vent through a Class A or masonry chimney if a Simpson Dura-Vent adapter is used (for USA installations only). Only Simpson Dura-Vent components labeled and listed on pages 20-21

This appliance is a direct vent heater. All combustion air must come directly from the outside of the building. The vent pipe for this unit consists of an inner and an outer pipe. The inner pipe carries the stove exhaust out of the system, and the outer pipe brings fresh combustion air into the stove.

! A wall thimble is optional when the venting passes through a wall.

! A support box or firestop is required when the venting passes through a ceiling.

Roof flashing and a storm collar are required when venting passes through the roof. Follow instructions provided with the venting for installation of these items.

**IMPORTANT:** Read all these instructions carefully before starting the installation. Failure to follow instructions may create a fire or other safety hazard, and will void the warranty. Be sure to follow these installation instructions for venting and clearance to combustible requirements, which may vary from one installation to another. Do not extend the venting system in excess of the distance prescribed in these manufacturer's installation instructions. This gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

### INSTALLATION PRECAUTIONS:

The Dovre DV425TR is an engineered product that has been designed and tested. The warranty will be voided, and serious fire, health, or other safety hazards may result from any of the following actions: Installation of any damaged venting component, unauthorized modification of the venting system, installation of any component part not approved by Aladdin Hearth Products, or installation other than as instructed by these instructions. Consult your local building codes before beginning this installation.

**WARNING:** Always maintain the required clearances (air space) to nearby combustibles to avoid creating a fire hazard. Do not fill air space with insulation. Minimum clearance between vent pipes and combustible surfaces is 1" (25mm). Be sure to check the horizontal vent termination clearance requirements from decks, windows, soffits, gas regulators, air supply inlets and public walkways, as specified on pages 26-27 of these installation instructions, the vertical termination requirements on page 35, and local building codes.

The gas heater and vent system must be vented directly to the outside of the building, and never be attached to a chimney serving a separate solid fuel or gas-burning appliance. This direct vent gas fireplace must use its own separate vent system. Common vent systems are prohibited.

## INSTALLATION METHODS & NOTES

Four types of direct vent system installations are approved for use with the DV425TR.

1. Horizontal Termination (Fig. 1, page 22)
2. Vertical Termination (Fig. 2, page 23)
3. Into a Class A Metal Chimney (Fig. 3, page 24)  
USA installations only
4. Into a Masonry Chimney (Fig. 4, page 25) USA  
installations only

Do not connect to a chimney serving a separate solid-fuel burning appliance.

In each of these installation methods, it is very important to maintain a balance between the combustion air intake and the flue gas exhaust venting system.

Note: Certain limitations as to vent and vertical termination configurations apply, and must be strictly adhered to.

When planning your installation, it is necessary to select the proper length of vent pipe for your particular requirements.

1. For installations with any horizontal vent run or horizontal termination, refer to the Vent Graph on page 27. This graph will show the relationship between vertical and horizontal side wall venting, and help you to determine the amount of vertical rise necessary for “vertical-to-horizontal” type installations. NOTE: Be sure to take into consideration the wall thickness when calculating your venting needs.

2. To determine the length of pipe required for vertical installations, measure the distance from the stove flue outlet to the ceiling, the ceiling thickness, the vertical rise in an attic or second story, and allow for sufficient vent height above the roofline. Refer to the vertical vent termination tables on page 35 for this information. For two-story applications, fire stops are required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required. When

determining the position of the stove, be sure to adhere to minimum clearance to combustibles to the appliance itself. (See page 8, Minimum Clearances to Combustibles.)

3. When installing this appliance into an existing masonry chimney, it is important to carefully measure the length of flex needed to reach from the appliance outlet to the termination cap. If the flex length is too short, a flex coupler will be needed to attach an additional length of flex liner to make up the difference. If the flex length is too long, the liner could sag below the appliance outlet, which could result in an airflow restriction causing flow reversal or flame lift.

### **SAFETY PRECAUTIONS FOR THE INSTALLER**

Wear gloves and safety glasses for protection when installing this stove. Exercise extreme caution when using ladders or on rooftops around power lines. Be aware of electrical wiring locations in walls and ceilings.

***!! IMPORTANT !!***

***INSERT TOP GRILL ONTO STOVE***

***TOP PRIOR TO COMPLETING***

***VENTING INSTALLATION !!***

## SIMPSON DURA-VENT PARTS LIST

Simpson Dura-Vent offers a complete line of component parts for installation in both horizontal and vertical applications. Many items are offered in decorative black, as well as a galvanized finish.

The galvanized pipe and fittings are used for concealed locations such as attics, or spaces where corrosion is a factor, such as above the roofline.

Decorative brass and chrome trim kits are available for both wall thimbles and ceiling support boxes. Snorkel terminations are available for applications which may require a vertical rise on the building exterior.

The following components on pages 20 and 21, have been approved for use with the DV425TR.

<b>DURA-VENT GS Catalog #</b>	<b>Venting System Components Description</b>
908B	6" Black Vent (4"/6")
907B	9" Black Vent (4"/6")
906B	12" Black Vent (4"/6")
906	12" Galvanized Vent (4"/6")
904B	24" Black Vent (4"/6")
904	24" Galvanized Vent (4"/6")
903B	36" Black Vent (4"/6")
903	36" Galvanized Vent (4"/6")
902B	48" Black Vent (4"/6")
902	48" Galvanized Vent (4"/6")
911B	12" (11"–14 5/8") Adjustable Vent Black
945B	45° Elbow Black
945	45° Elbow Galvanized
990B	90° Elbow Black
990	90° Elbow Galvanized
940	Round Ceiling Support/Wall Thimble
941	Cathedral Ceiling Support Box
943	Flashing 0/12 - 6/12
943S	Flashing 7/12 - 12/12
923GCL	Co-axial / Co-lineal Appliance Connector
923GK	Chimney liner termination kit
953	Storm Collar
963	Firestop Spacer
988	Wall Strap
981	Snorkel Termination (36")
982	Snorkel Termination (14")
971	Horizontal Kit (Horizontal Termination Cap, One 90° Black Elbow, Wall Thimble, 24" Black Pipe, 11" - 14-5/8" Adjustable Vent
982	14" Snorkle
985	Horizontal Termination Cap (Highwind)
909B	Retrofit Adjustable Chimney Connector Retrofit Chimney Connector Plate
950	VSS - Vinyl Siding Standoff/Shield
991	High Wind Vertical Termination Cap
3951	Round Ceiling Support/Wall Thimble Trim Kit, Polished Brass
3960	Cathedral Ceiling Support Trim Kit, Polished Brass

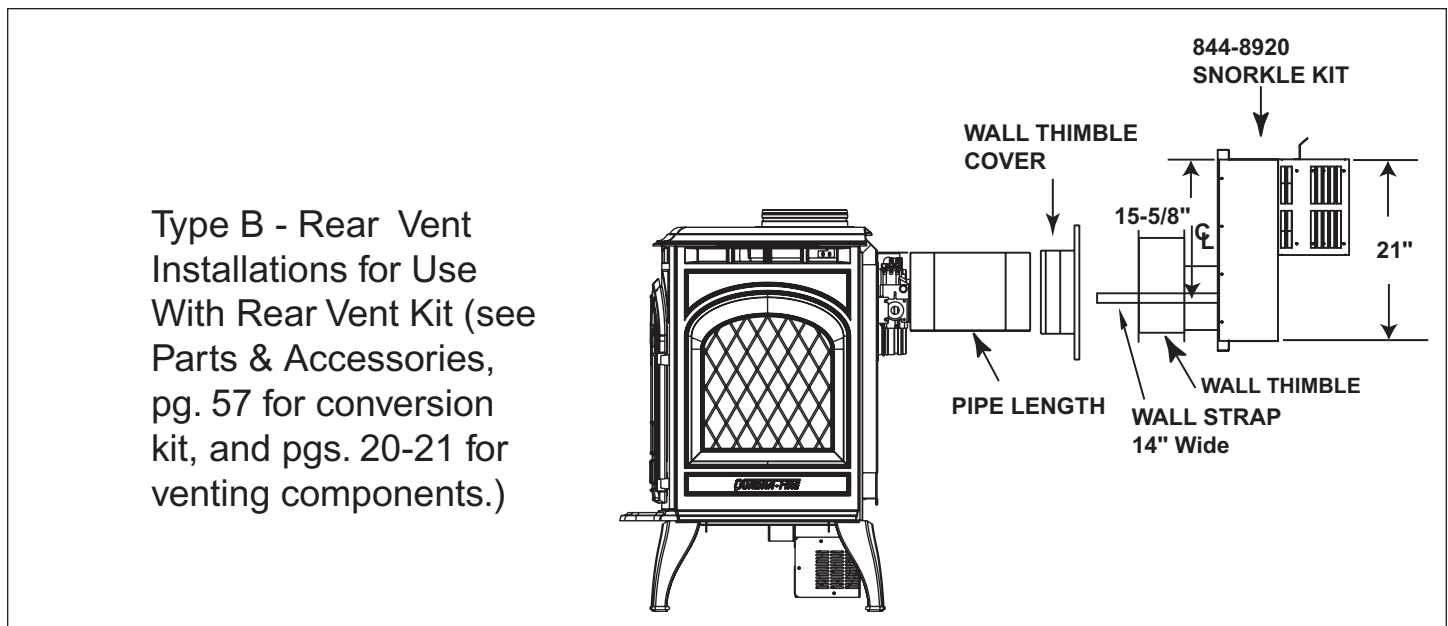
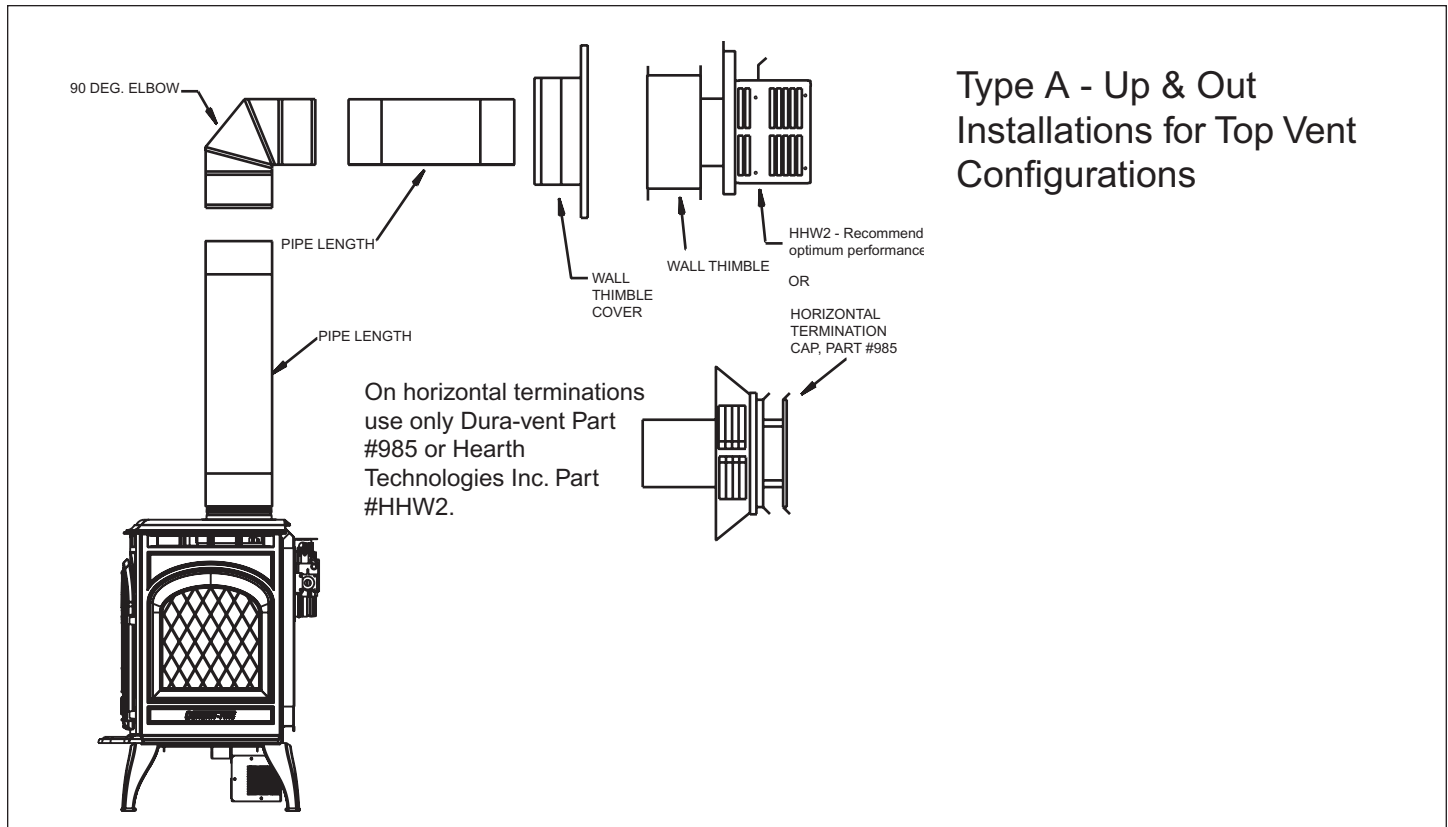
## HTI VENTING PARTS LIST, cont.

HTI COMPONENT #	Venting System Components Description
HHW2	Horizontal High Wind Cap (recommended for optimal performance)
HHW2K	Horizontal Kit (One 90° Black Elbow, Wall Thimble, 24" Black Pipe, 11" - 14-5/8" Adjustable Vent, HHW2 Termination Cap)
RHVK	Snorkle Kit #844-8920 (with Dura-Vent part #'s 911B and 940)

## INSTALLATION METHODS

### FIG. 1 - HORIZONTAL TERMINATION

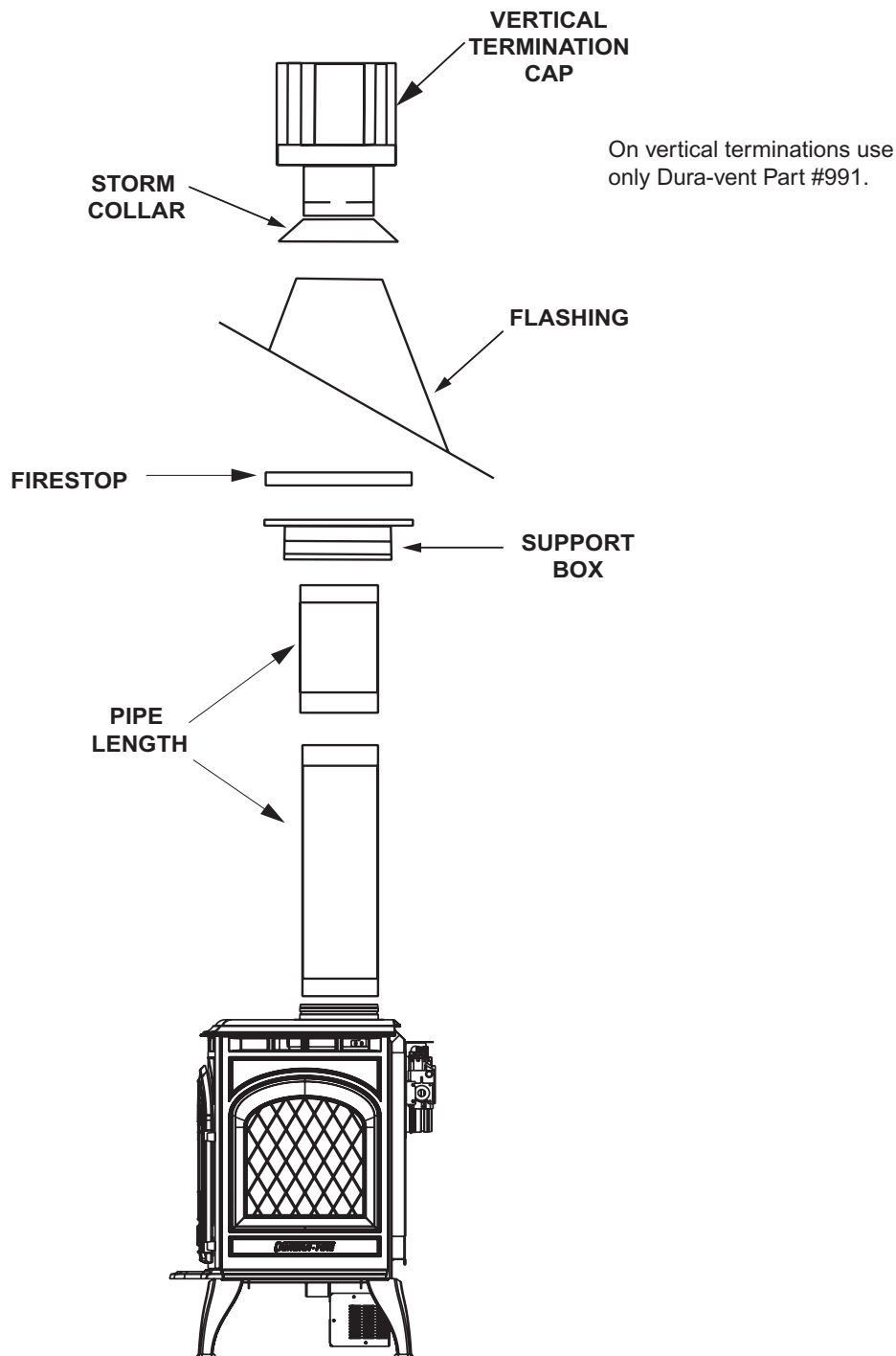
Refer to pages 26-31 for installation instructions and requirements.



## INSTALLATION METHODS, cont.

### FIG. 2 - VERTICAL TERMINATION

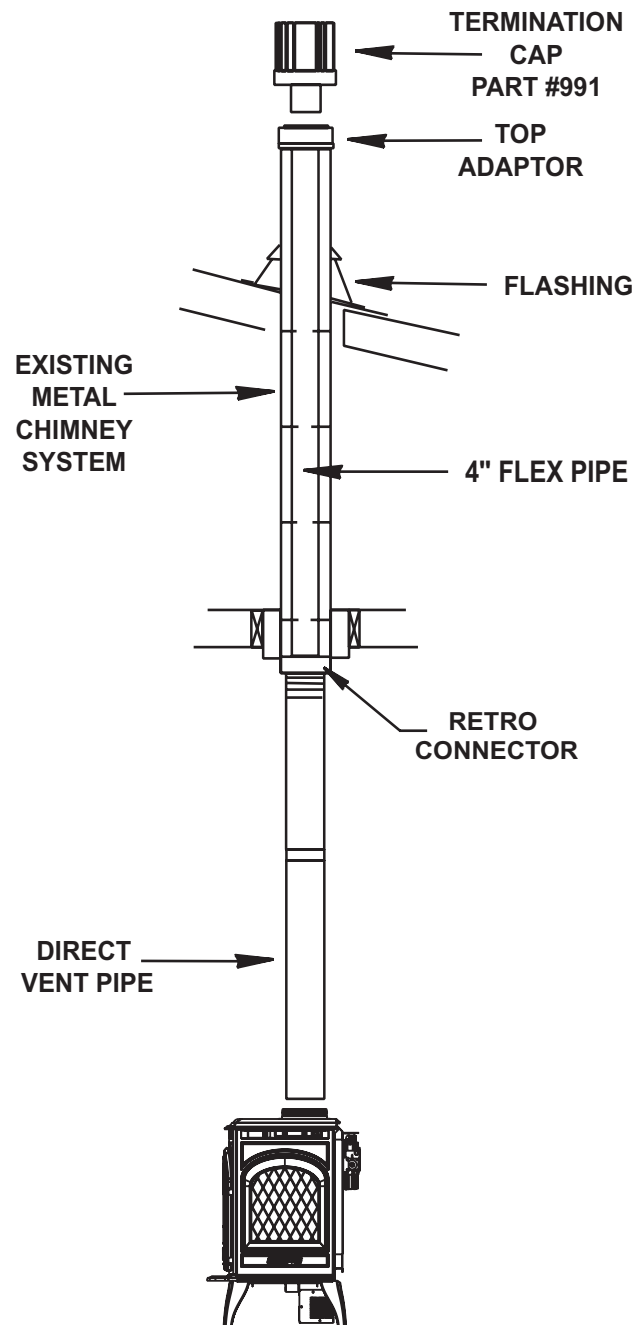
Refer to pages 32-37 for installation instructions and requirements.



## INSTALLATION METHODS, cont.

### FIG. 3 - CLASS A METAL CHIMNEY (USA only)

Refer to pages 38-39 for installation instructions and requirements.

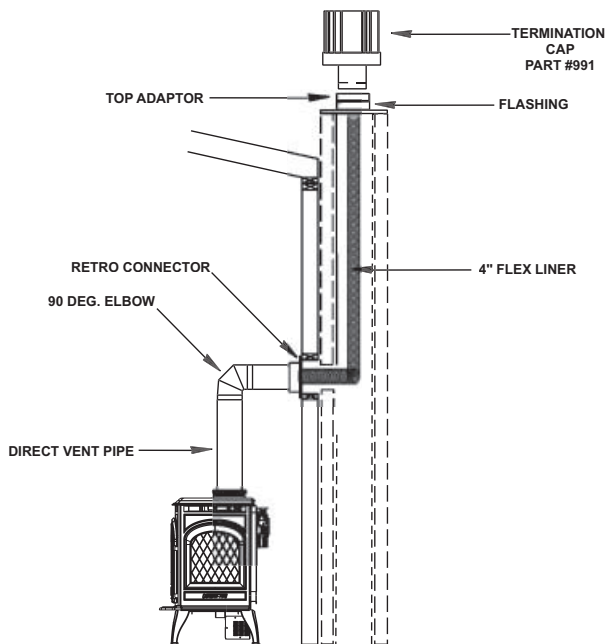


## INSTALLATION METHODS, cont.

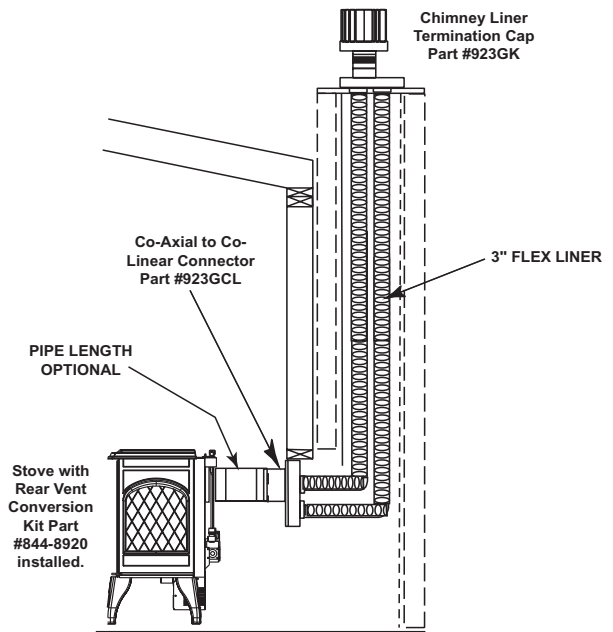
### FIG. 4 - A & B INTO A MASONRY CHIMNEY (USA only)

Refer to pages 40-43 for installation instructions and requirements.

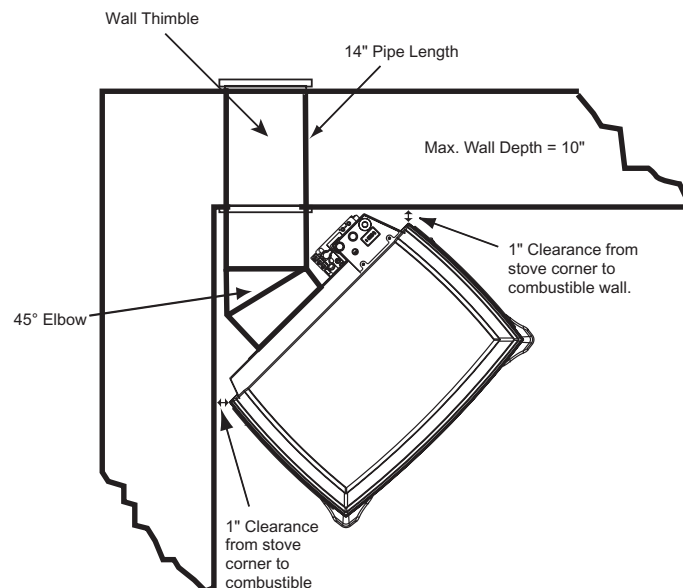
Type A - Up & Out Installations  
for Top Vent Configurations



Type B - Hearth Rear Vent Installations for Use With Rear Vent Kit (see Parts & Accessories, pg. 57 for conversion kit, and pgs. 20-21 for venting components.)



### FIG. 5 - 45° ELBOW IN CORNER INSTALLATION



## HORIZONTAL TERMINATION REQUIREMENTS

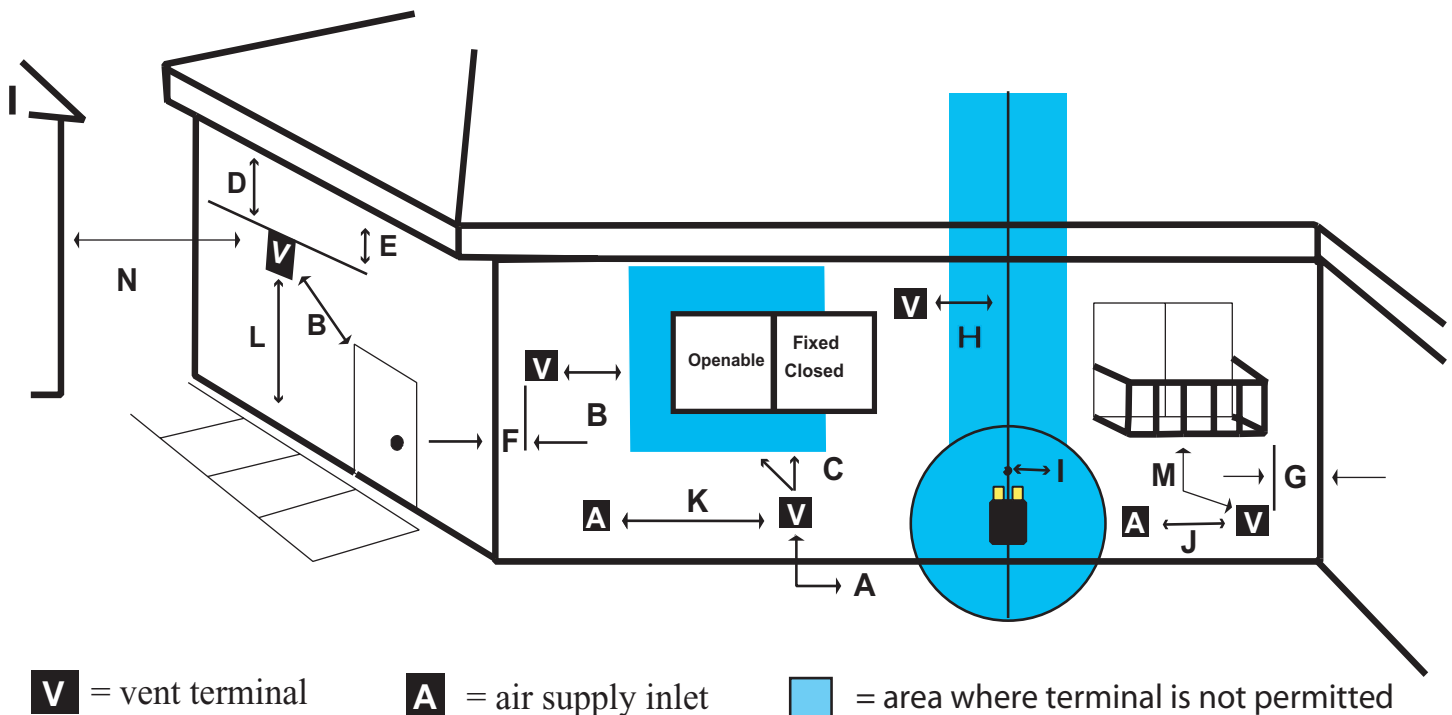
- A. \*12" (30cm) minimum: Clearance above grade, veranda, porch, deck, or balcony.
- B. \*12" (30cm) minimum: Clearance to window or door that may be opened.
- C. 12" (30cm) minimum: Clearance to permanently closed window (recommended to prevent condensation on window).
- D. 18" (46cm) minimum: Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (60cm) from the centerline of the terminal.
- E. 12" (30cm) minimum: Clearance to unventilated soffit.
- F. 6" (15cm): Clearance to outside corner.
- G. 9" (23cm): Clearance to inside corner.
- H. \*Not to be installed above a meter/regulator (gas or electrical) assembly within 3' (90cm) horizontally from the centerline of the meter/regulator.
- I. 72" (1.8m) minimum: Clearance to service regulator vent outlet.
- J. \*3' (90cm) US; 6' (180cm) Canada minimum: Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance.
- K. \*72" (1.8m) minimum: Clearance to a mechanical air supply air inlet.
- L. \*†84" (2.1m) minimum: Clearance above paved sidewalk or a paved driveway located on public property.
- M. \*†12" (30cm) minimum: Clearance under veranda, porch, deck, or balcony.
- N. 6" (152 mm) minimum: Clearance to outside corner.

†A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single-family dwellings and serves both dwellings.\*

‡Only permitted if veranda, porch, deck, or balcony, is fully open on a minimum of two sides beneath the floor.\*

\*As specified in CGA B149 Installation Codes Note: Local Codes or regulations may require different clearances.

**NOTE:** Refer to page 35 of this manual for Vertical Termination Installations of this appliance.



## HORIZONTAL INSTALLATION VENT GRAPH

1. Measure the distance from the top of stove to the center of the 90° elbow. On the graph below, draw a horizontal line from that measurement on the vertical axis across until it intersects with the slanted line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. The point at which this line meets the bottom line of the graph is the maximum length of the horizontal run.

**Example 1:** If the vertical dimension from the top of the stove to the center of the 90° elbow is 7' (2.13m), the horizontal run to the outer wall flange must not exceed 9' 9" (2.97m).

**Example 2:** If the vertical dimension from the top of the stove is 21' (6.4m), the horizontal run to the outer wall flange must not exceed 7' 3" (2.21m).

4. Each 90° elbow is equivalent to 3' of vent pipe and each 45° elbow is equivalent to 1' of vent pipe, and must subtracted from vent pipe run. A single vertical to horizontal 90° elbow is already calculated into the allowable 15' run. Each additional 90° elbow reduces the maximum horizontal distance by 3'.

**Example:**

The use of [3] elbows would reduce the allowable horizontal run to 9' (3 - 1 = 2 elbows x 3' = 6'; 15' max. - 6' = 9' max.)

**Notes:**

The maximum horizontal vent run is 15' (4.57m) when the vertical vent rise is 10' (3.05m).

The minimum horizontal vent run is 12" (305mm).

Minimum wall thickness is 4" (102mm). Maximum wall thickness is 20" (508mm).

Horizontal sections require a 1/4" (6mm) rise for every 12" (305mm) of horizontal travel.

Exterior Vent Diameter = 6 5/8" (177mm); Inner Vent Diameter = 4" (101mm)

Horizontal sections require noncombustible support every 3' (914mm), e.g. plumbing tape.

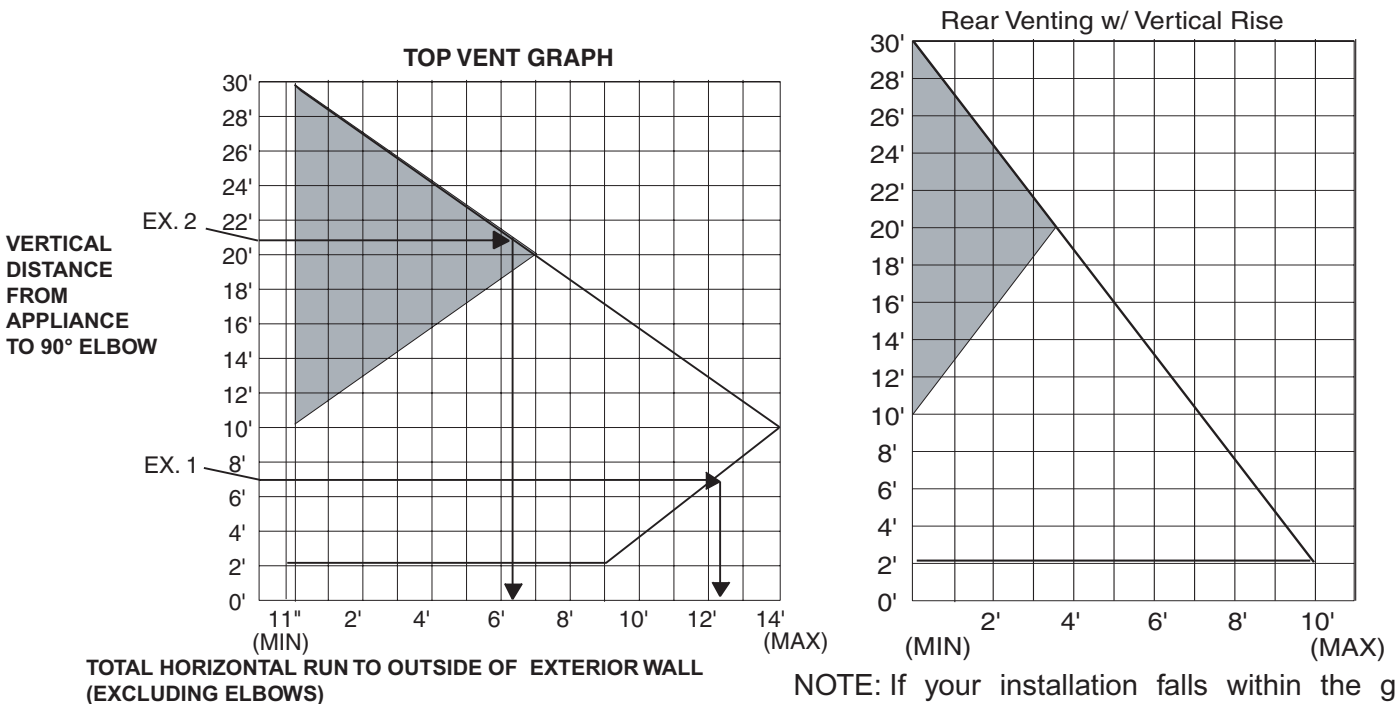
**EXCEPTION FOR REAR VENT KIT (Part #844-8920), HORIZONTAL INSTALLATION:**

The maximum horizontal vent run is 2' (61cm)

The maximum horizontal vent run with a 45° elbow is 14" (35cm)

No external minimum rise is required. The minimum horizontal vent run is 11-5/8" (29cm).

For any vertical rise when rear venting, a minimum of 2' (61cm) vertical must be used prior to any horizontal run.



NOTE: If your installation falls within the grey-shaded area on graph, see information on VERTICAL DAMPER ADJUSTMENT ON pg. 48.

## HORIZONTAL INSTALLATION, cont.

### Step 1.

Determine the desired location of the stove. Check to ensure that wall studs or roof rafters are not in the way when the venting system is attached. If this is the case, you may want to adjust the location of the stove.

### Step 2.

Simpson Dura-Vent pipe is designed with special twist-lock connections. To connect the venting system to the stove flue outlet, a twist-lock adapter is built into the stove at the factory. Remember to include wall thickness in minimum clearances when figuring the measurements for your installation needs.

**Note:** Twist-lock procedure: Four indentations, located on the female ends of pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings by orienting the four pipe indentations so they match and slide into the four entry slots on the male ends, see Fig. 5 below. Push the pipe sections completely together, then twist-lock one section clockwise approximately one-quarter turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on the pipe or fittings. They may be located by examining the inside of the female ends.

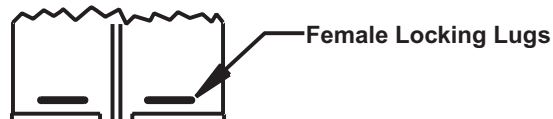
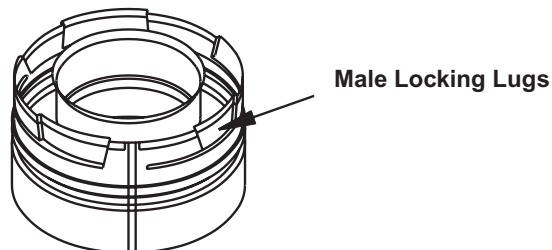


FIG. 5



### NOTES:

Horizontal runs of vent must be supported every 3' (914mm). Wall straps are available for this purpose. Horizontal sections require a 1/4" (6mm) rise for every 12" (305mm) of horizontal travel. Exterior Vent Diameter = 6 5/8" (177mm); Inner Vent Diameter = 4" (101mm)

## HORIZONTAL INSTALLATION, cont.

### Step 3.

With the adapter and pipe attached to the stove, slide the stove into its correct location, maintaining minimum clearance to combustibles. Mark the wall for a 10" x 10" (254mm x 254mm) square hole. The center of the square hole should line up with the centerline of the horizontal pipe, as shown in Fig. 6. Cut and frame the hole in the exterior wall where the vent will be terminated. If the wall being penetrated is constructed of noncombustible material, i.e. masonry block or concrete, a 7" (178mm) diameter hole is acceptable.

**Also, if you have installed the Hearth Legs, they will reduce the centerline clearance by 3" (75mm).**

FIG. 6

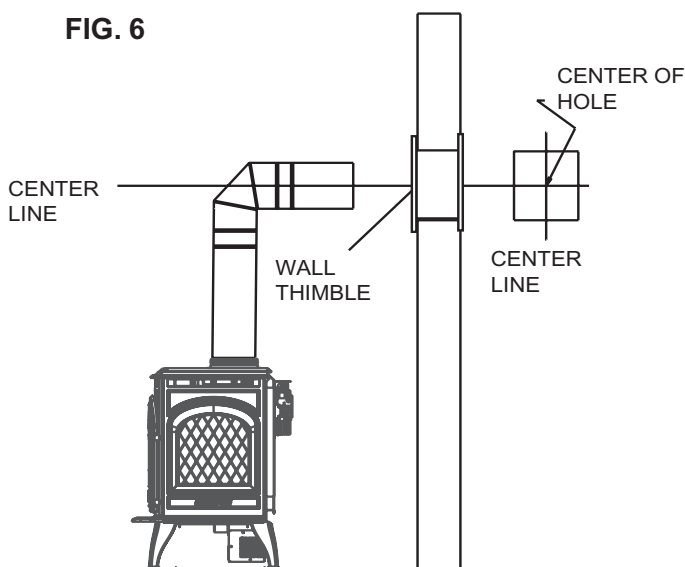
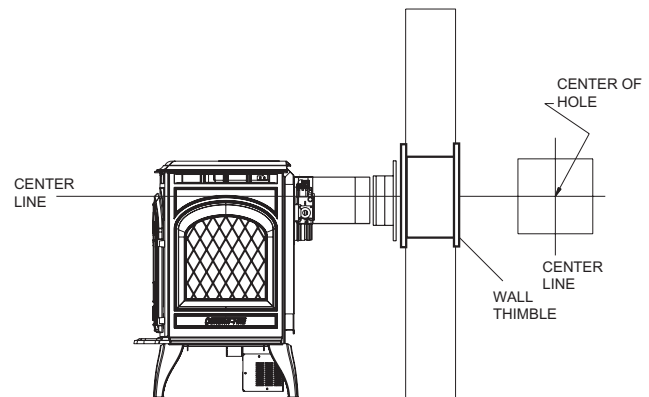


FIG. 6-A



### NOTE:

- (1) Installation requires a minimum of 1' (305mm) horizontal run of vent with a 1/4" (6mm) rise run towards the termination. Each 1' (305mm) of horizontal venting must include a 1/4" rise. Never allow the vent to run downward. This could cause high temperatures and may present the possibility of a fire.
- (2) The location of the horizontal vent termination on an exterior wall must meet all local and national building codes, and must not be easily blocked or obstructed, see page 26.
- (3) For installations requiring a vertical rise on the exterior of the building, Aladdin Snorkle Kit #844-8920, 14" (356mm) and 36" (914mm) tall snorkel terminations are available. Follow the same installation procedures as used for standard horizontal terminations. If the snorkel termination must be installed below grade (i.e. basement application), proper drainage must be provided to prevent water from entering the snorkel termination. Do not backfill around snorkel termination.

## HORIZONTAL INSTALLATION, cont.

### Step 4.

Position the horizontal vent termination in the center of the 10" (254mm) square hole, run a bead of non-hardening mastic around its outside edges, so as to make a seal between it and the wall, attach termination cap to the exterior wall with the four wood screws provided. The arrow on the vent cap should be pointing up (Figure 7) . Ensure that proper clearances to combustible materials are maintained.

FIG. 7

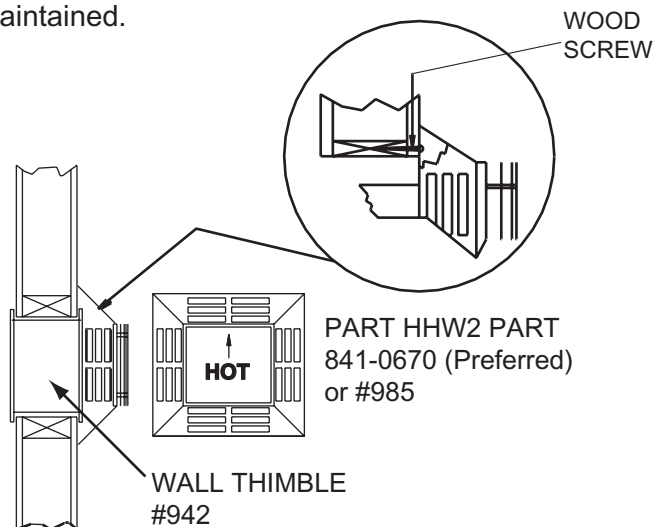
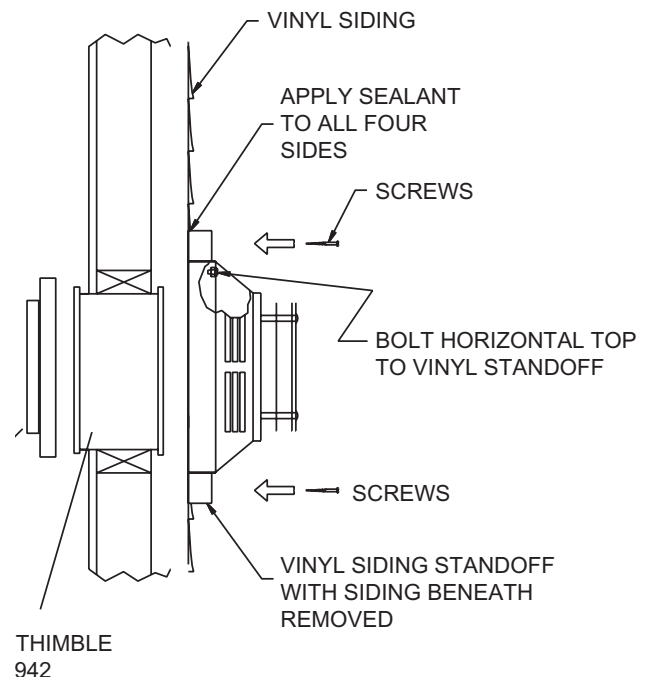


FIG. 8

### NOTES:

- (1) The four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.
- (2) If you are using Simpson Dura-vent termination cap #985 on a building with vinyl siding, a vinyl siding standoff (Simpson Dura-vent Part #950), should be installed between the vent cap and the exterior wall (Figure 8). Attach the vinyl siding standoff to the horizontal vent termination. The vinyl siding standoff prevents excessive heat from possibly melting the vinyl siding material. Vent terminal shall not be recessed into a wall or siding. Remove siding from beneath area of standoff.



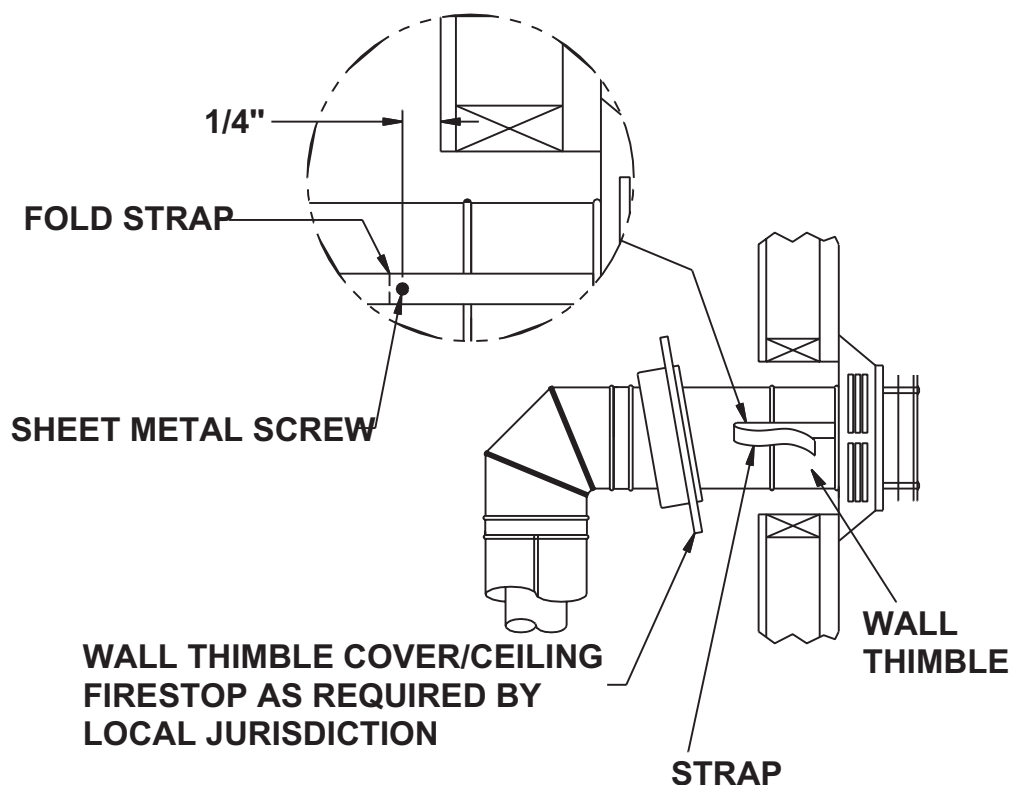
## HORIZONTAL INSTALLATION, cont.

**Note:** The attachment from the vent pipe to the vent cap must be siliconed. Venting terminals shall not be recessed into a wall or siding.

### Step 5.

Slide the stove and vent assembly towards the wall, carefully inserting the vent pipe into the vent cap assembly. It is important that the vent pipe extend into the vent cap a sufficient distance so as to result in a minimum pipe overlap of 1¼" (32mm). Secure the connection between the vent pipe and the vent cap by attaching the two sheet metal strips extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal screws provided to connect the strips to the pipe section. (Figure 9).

FIG. 9



## VERTICAL INSTALLATION INSTRUCTIONS

### USING GS SERIES PIPE

#### Step 1.

Check the installation instructions for required 1" clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces. See page 36, Fig. 16. Do not pack air space with insulation. Check the instructions below for maximum vertical rise of the venting system, and any maximum horizontal offset limitations. All offsets must fall within the set parameters of the vent graph located on page 27.

**NOTE:** Maximum vertical rise allowable is 35' (10.7m) (Figure 10).

**NOTE:** Maximum number of 45° elbows permitted for a vertical installation is eight, provided their installation does not decrease maximum vertical rise (as specified by Vent Graph, on page 27).

FIG. 10

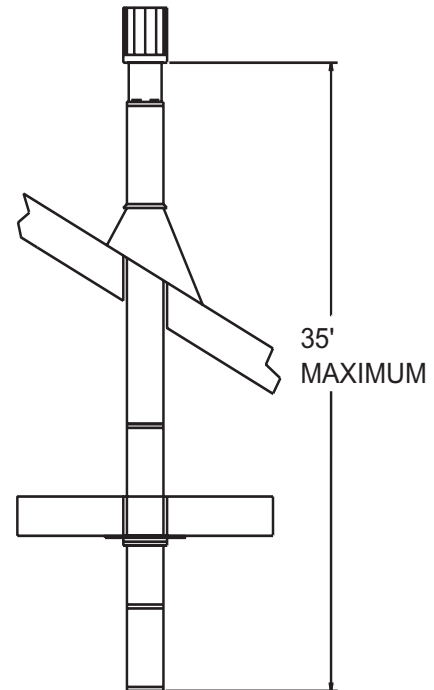
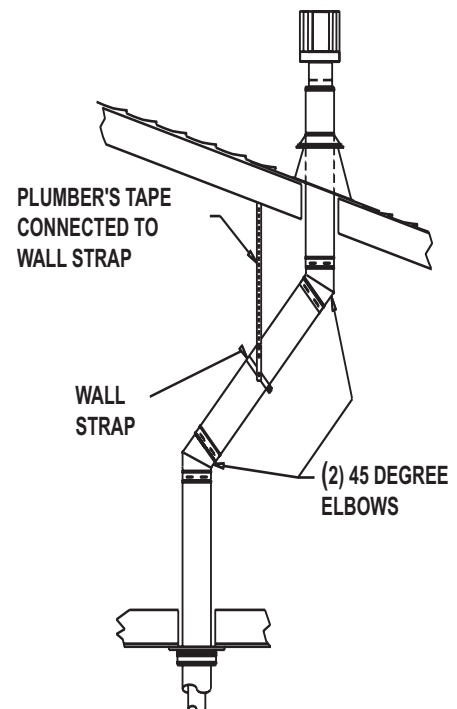


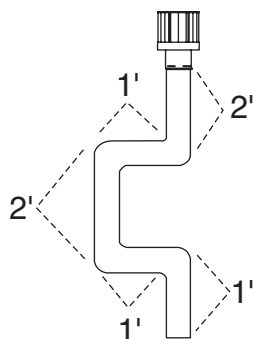
FIG. 11



## VERTICAL INSTALLATION INSTRUCTIONS, cont.

NOTE: Maximum number of 90° elbows permitted for a vertical installation is four, provided the termination falls within the shaded area shown in vent graph on page 33. See also Figure 12 below, within the 4, 90's configuration, the maximum allowable pipe length on the horizontal runs is 1', the minimum allowable pipe length on vertical runs is 1'. ADDITIONAL RESTRICTION: This installation may not have two horizontal sections connected by 90° elbows.

FIG. 12



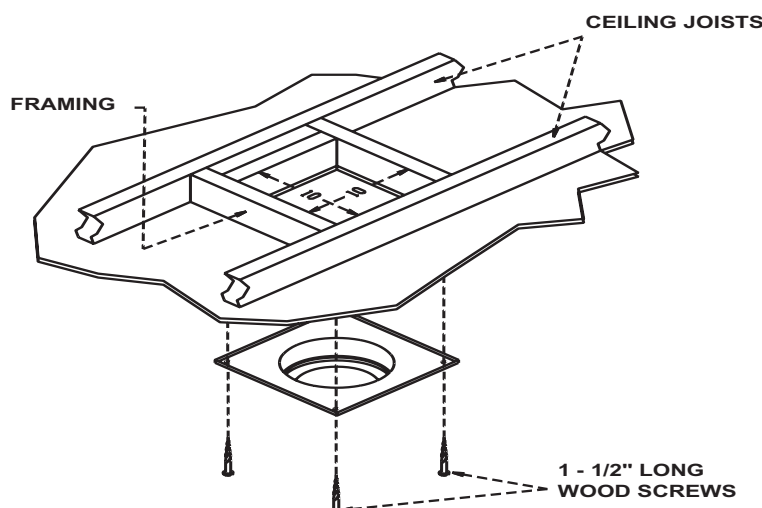
### Step 2.

Set the gas stove in its desired location. Drop a plumb bob down from the ceiling to the position of the stove flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, and mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roof rafters, or other framing will obstruct the venting system. You may wish to relocate the stove, or to offset, as shown in Figure 11, to avoid cutting loadbearing members.

### Step 3.

To install the round support box/wall thimble in a flat ceiling, cut a 10" (254mm) square hole in the ceiling, centered on the hole drilled in Step 2. Frame the hole as shown in Figure 13.

FIG. 13



## VERTICAL INSTALLATION, cont.

### Step 4.

Assemble the desired lengths of GS pipe and elbows necessary to reach from the stove up through the round support box. Ensure that all pipe and elbow connections are in their fully twist-locked position. Be sure to seal the outer pipe with appropriate sealant (high temperature silicone).

### Step 5.

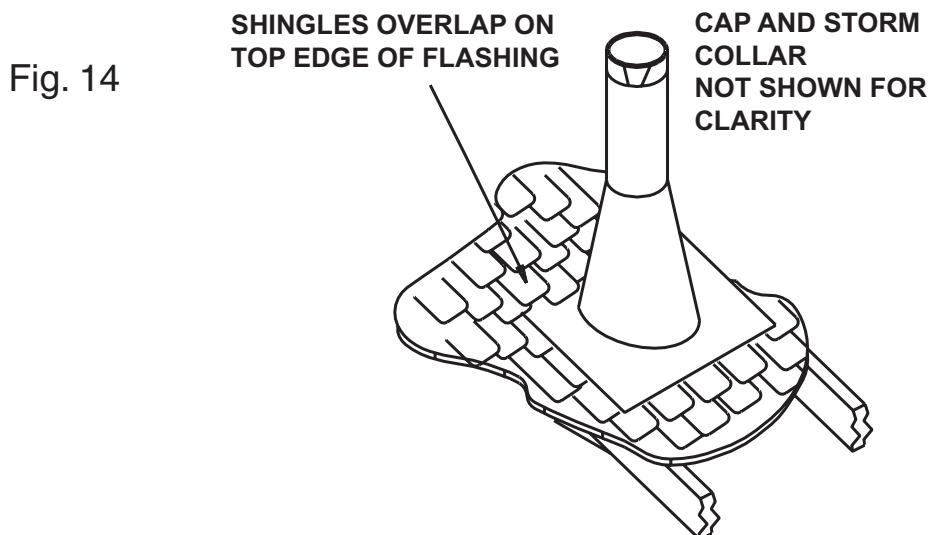
Cut a hole in the roof centered on the small drill hole placed in the roof in Step 2. The hole should be of sufficient size to meet the minimum requirements for clearance to combustibles, as specified. Continue to assemble lengths of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roofline. The galvanized finish is desirable above the roofline, due to its higher corrosion resistance.

### NOTE:

- (1) If an offset is necessary in the attic to avoid obstructions, it is important to support the vent pipe every 3' (91.4cm) to avoid excessive stress on the elbows, and possible separation. Wall straps are available for this purpose (page 32, Figure 11).
- (2) Whenever possible, use 45° elbows, instead of 90° elbows. The 45° elbow offers less restriction to the flow of flue gases and intake air.

### Step 6.

Slip the flashing over the pipe section(s) protruding through the roof. Secure the base of the flashing to the roof with roofing nails. Ensure the roofing material overlaps the top edge of the flashing as shown in Figure 14. Verify that the chimney is the required height above the roof. See Roof Pitch Table on page 35 of this manual



## VERTICAL INSTALLATION, cont.

### Step 7.

Continue to assemble pipe sections until the height of the vent cap (H) (Figure 15) meets the minimum code requirements as outlined in the current CAN/CGA-B149 Installation Codes (in Canada), the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in USA), or local codes. Note that for steep roof pitches, the vent height must be increased. See Table 1 below. In high wind conditions, nearby trees adjoining rooflines, steep pitched roofs, and other similar factors can result in poor draft, or down drafting. In these cases increasing the vent height may solve this problem.

Fig. 15

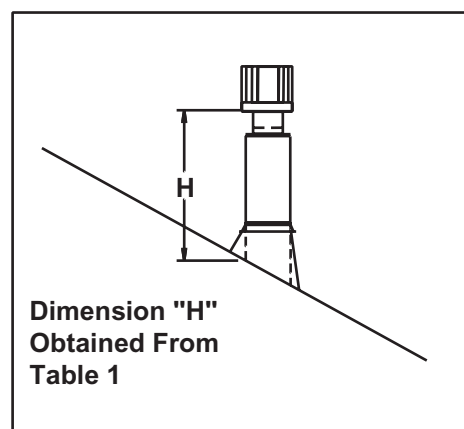


TABLE 1		
ROOF PITCH	MINIMUM HEIGHT	
	FEET	METERS
Flat to 7/12	1	0.30
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 12/12 to 14/12	5	1.52
Over 14/12 to 16/12	6	1.83
Over 16/12 to 18/12	7	2.13
Over 18/12 to 20/12	7.5	2.29
Over 20/12 to 21/12	8	2.44

The height of the vent cap must meet the minimum building code requirements described above.

## VERTICAL INSTALLATION, cont.

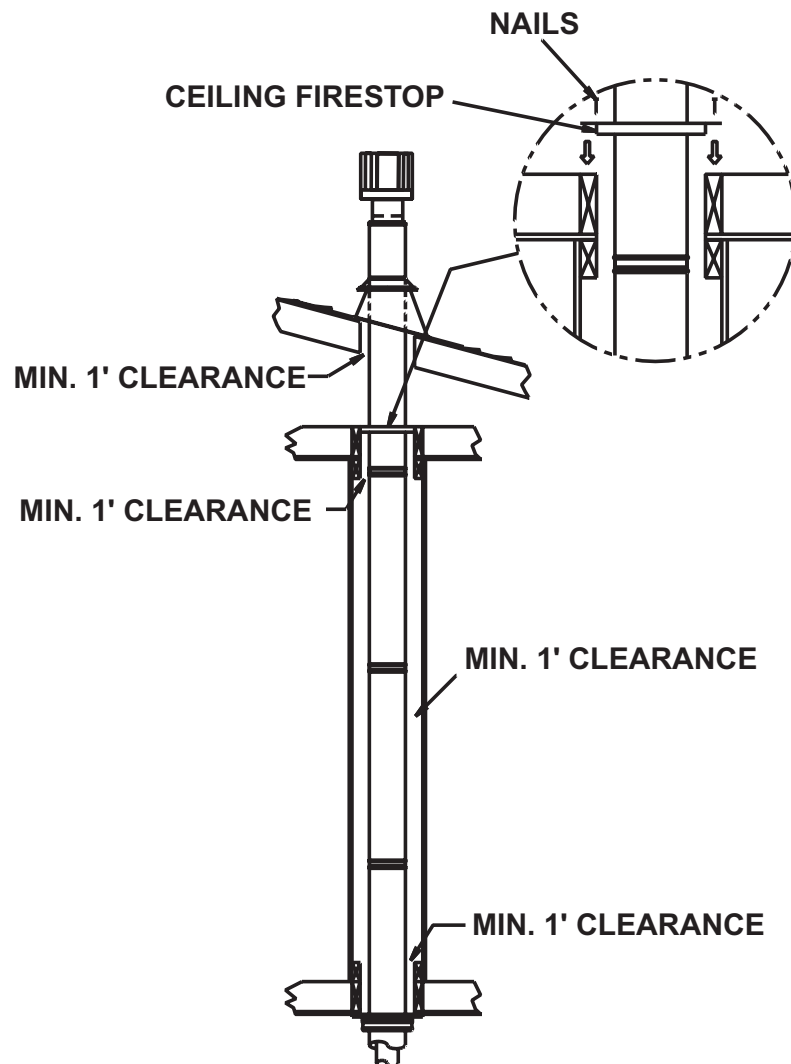
**Step 8.**

Twist-lock the vent cap and seal.

**Note:**

- (1) For multi-story vertical installations, a ceiling firestop (SDV part #963) is required at the second floor, and any subsequent floors (Figure 16). The opening should be framed to 10" x 10" (254mm x 254mm) inside dimensions, in the same manner as shown in Figure 13.
- (2) Any occupied areas above the first floor, including closets and storage spaces, which the vertical vent passed through must be enclosed. The enclosure may be framed and sheetrocked with standard construction materials; however, refer to these installation instructions for the minimum allowable clearance between the outside of the vent pipe and the combustible surfaces of the enclosure. Do not fill any of the required air space with insulation.

**Figure 16**



## VERTICAL INSTALLATION, cont.

### CATHEDRAL CEILING INSTALLATION

#### Step 1.

Follow installation Steps 1 and 2 under vertical termination section.

#### Step 2.

Using the plumb-bob, mark the centerline of the venting system on the ceiling, and drill a small hole through the ceiling and roof at this point. From the roof, locate the drill hole and mark the outline of the cathedral ceiling support box.

#### Step 3.

Remove shingles or other roof covering as necessary to cut the rectangular hole for the support box. Cut the hole 1/8" (3mm) larger than the support box outline.

#### Step 4.

Lower the support box through the hole in the roof until the bottom of the box protrudes at least 2" (51mm) below the ceiling (Figure 17). Align the support box both vertically and horizontally with a level. Temporarily tack the support box in place through the inside walls and into the roof sheathing.

#### Step 5.

Using tin snips, cut the support box from the top corners down to the roofline, and fold the resulting flaps over the roof sheathing (Figure 18). Before nailing it to the roof, run a bead of non-hardening mastic around the top edges of the support box to make a seal between it and the roof. Clean out any combustible material from inside the support box.

#### Step 6.

Complete the cathedral ceiling installation by following the same procedures outlined in steps 4 through 8 for vertical terminations.

Figure 17

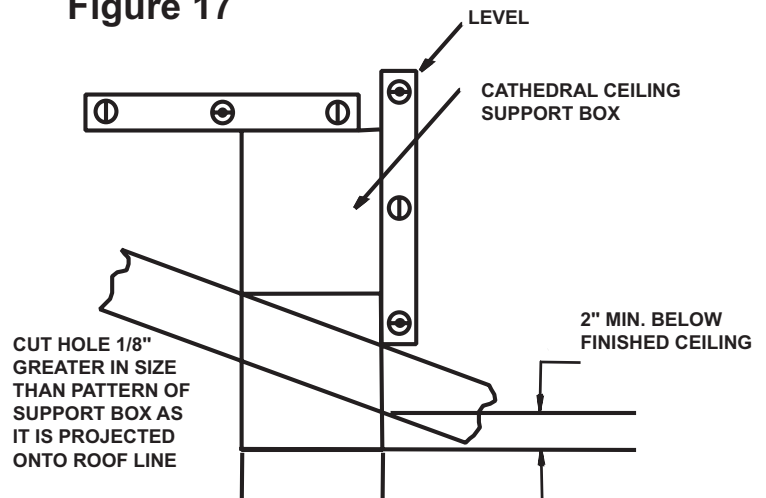
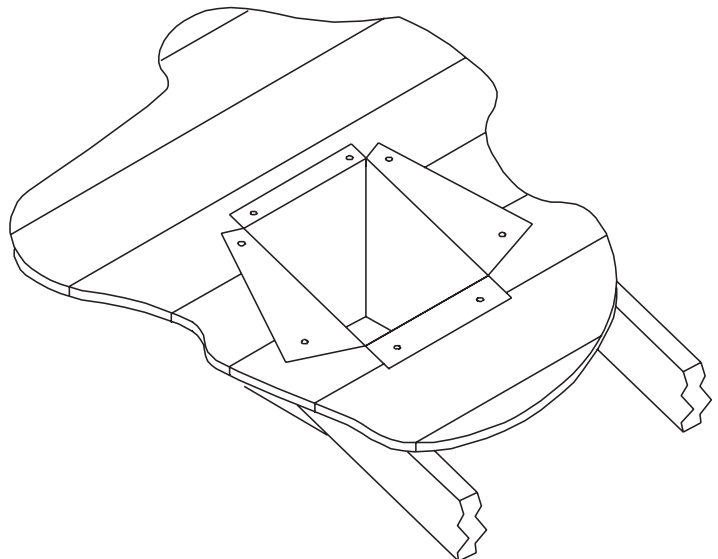


Figure 18



## VERTICAL INSTALLATION, cont.

### INSTALLATION INTO A CLASS A METAL CHIMNEY (USA ONLY)

**NOTE:** Have the existing installation inspected by a qualified chimney sweep or professional installer prior to converting to direct vent. The existing chimney system must be in serviceable condition and functionally sound and clean.

**Step 1.**

Remove existing chimney cap.

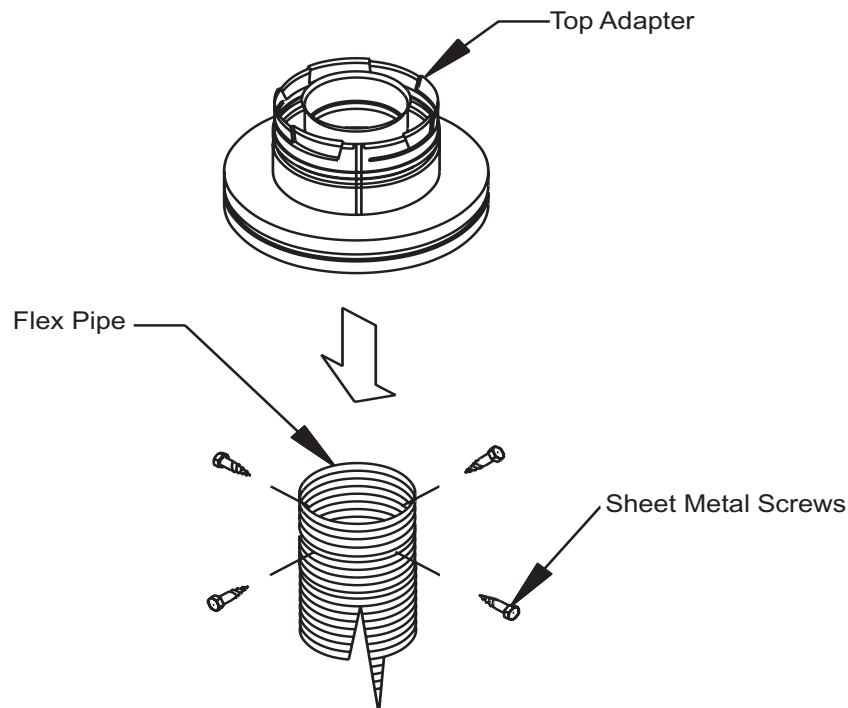
**Step 2.**

Measure the distance from the top of the chimney to the bottom of the ceiling support box, add 3" (75mm) to this measurement, and cut a section of 4" (100mm) flex pipe to that length (the flex should be extended to its nominal length).

**Step 3.**

Connect the end of the flex pipe section to the underside of the top adapter (SDV #985K, 986K or 987K), using three sheet metal screws (Figure 19).

**FIG. 19**

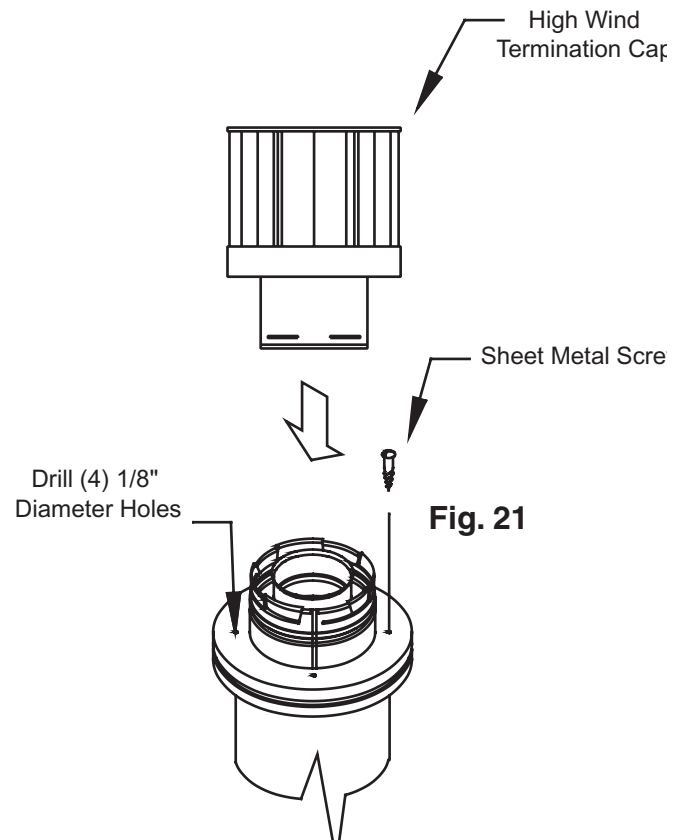
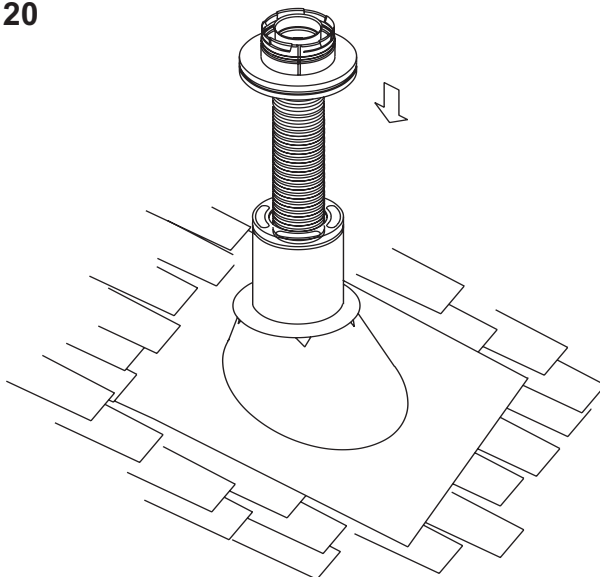


## VERTICAL INSTALLATION, cont.

### INSTALLATION INTO A CLASS A METAL CHIMNEY (USA ONLY)

**Step 4.**

Pass the flex pipe down through the center of the chimney system, and center the top adapter on the top of the chimney pipe. Drill four 1/8" (3.3mm) diameter holes through the top adapter, and into the chimney top. Ensure that you are drilling into the metal on the chimney. Twist lock the high wind termination cap (SDV #991) onto the top adapter (figures 20 and 21).

**Fig. 20****Step 5.**

Pull the flexpipe down through the ceiling support box, until it protrudes approximately 3" (76mm). Connect the flex pipe to the retro connector (SDV #909B), and attach with sheet metal screws.

**Step 6.**

Push the flex pipe back up into the ceiling support box, center the retro connector, and attach it to the support box with sheet metal screws.

**Step 7.**

The connection between the appliance and the retro connector may be completed with sections of direct vent pipe.

## VERTICAL INSTALLATION, cont.

### INSTALLATION INTO AN EXISTING MASONRY CHIMNEY (USA ONLY)

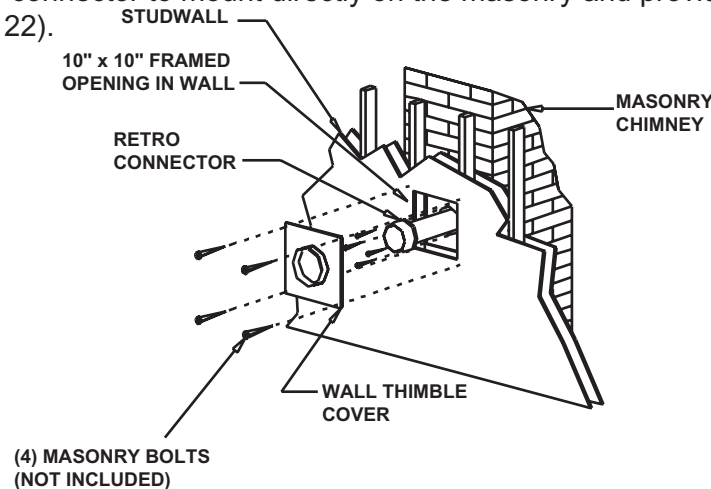
#### Step 1.

Before cutting any holes, assemble the desired sections of direct vent pipe to determine the center of the masonry penetration.

#### Step 2.

Once the center point of the penetration has been determined, cut a 6" (152mm) diameter hole in the masonry. If the hole is too large, the retro connector might not mount properly; if the hole is too small, the appliance might starve for intake air. If there is a frame wall in front of the masonry wall, cut and frame a 10" (254mm) square opening in the wall (centered around the 6" [152mm] masonry opening). If there is sheet rock only (no studs) in front of the masonry the 10" (254mm) opening is still needed, but does not need to be framed. This allows the retro connector to mount directly on the masonry and provide the correct clearances to combustibles (see Figure 22).

Fig. 22



**NOTE: FOR HEARTH APPLICATIONS REFER TO PAGE 24 FOR THE USE OF THE 923GCL CO-AXIAL TO CO-LINEAR APPLIANCE CONNECTOR.**

## VERTICAL INSTALLATION, cont.

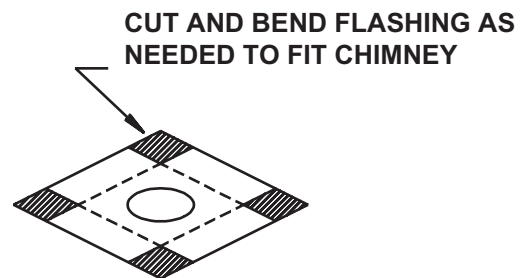
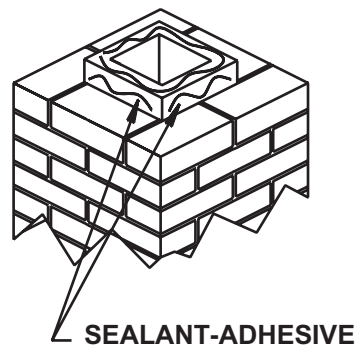
### INSTALLATION INTO AN EXISTING MASONRY CHIMNEY, cont. (USA ONLY)

**Step 3.**

Secure the flashing (SDV #705C) to the top of the masonry chimney using a bead of non-hardening sealant-adhesive. If the flashing is larger than the top of the chimney, cut and fold flashing as needed to fit chimney (Figure 23).

**Step 4.**

To determine the length of flex needed, measure from 3" (76mm) above the top of the flashing down to the level of the opening. Add the distance from the center of the chimney out through the wall. Cut a piece of 4" (102mm) flex to this length (extended to its nominal length). Be sure to leave 2"-3" (51mm-76mm) of flex above the existing chimney to allow for connection to the termination kit.

**Fig. 23****Step 5.**

Connect the flex liner to the top adapter using three (3) sheet metal screws (see Figure 19, page 44).

**Step 6.**

Feed the flex liner through the flashing into the chimney. Carefully feed the flex liner down the chimney to the bottom and out the opening in the masonry wall, forming an angle to line up the flex liner with the vent opening on the appliance.

**WARNING:** Do not let the flex liner sag below the level at which it will connect to the appliance or connector. This could allow hot gas to become trapped and potentially become a fire hazard. The flex liner path should always be sloped up toward the termination cap.

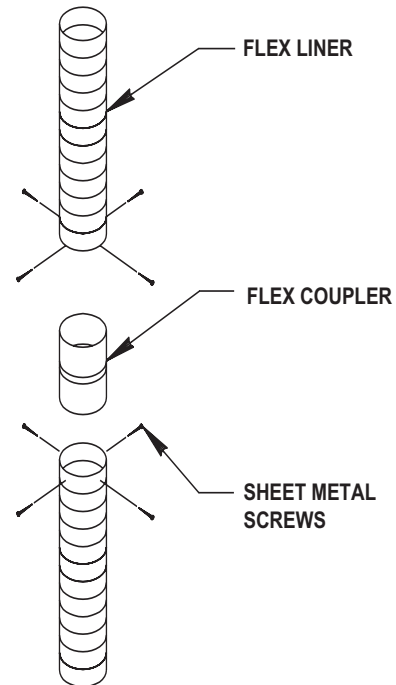
## VERTICAL INSTALLATION, cont.

### INSTALLATION INTO AN EXISTING MASONRY CHIMNEY, cont. (USA ONLY)

#### Step 7.

If additional lengths of flex liner are needed to span the chimney height, use a flex coupler to connect the pieces of flex liner together. Connect the flex to the coupler by using four (4) sheet metal screws for each side (Figure 24).

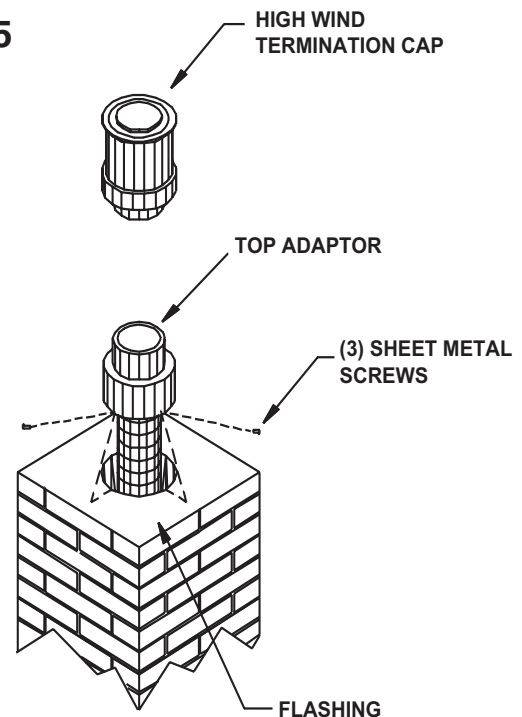
Fig. 24



#### Step 8.

Secure the top adaptor to the flashing. Use three (3) sheet metal screws through the side of the top adaptor into the flange on the flashing (Figure 25). Twist lock the high wind termination cap (SDV #991) on to the top adaptor.

Fig. 25



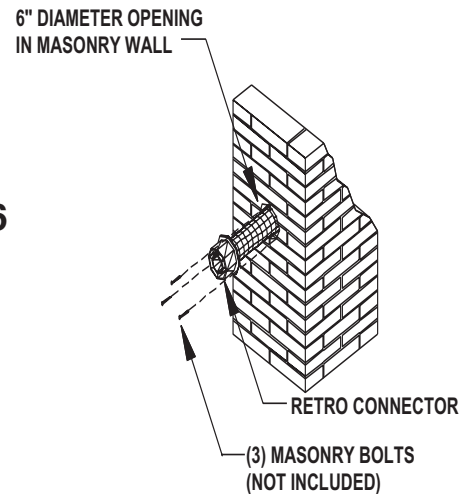
## VERTICAL INSTALLATION, cont.

### INSTALLATION INTO AN EXISTING MASONRY CHIMNEY, cont. (USA ONLY)

#### Step 9.

Attach the flex to the retro connector. Use three sheet metal screws to attach the flex liner to the connector (Figure 26). Mount the retro connector to the masonry wall using masonry bolts. Re-drill larger holes on connector as needed. Be careful to ensure that the connector is centered in the opening and the mounting holes line up with the masonry wall.

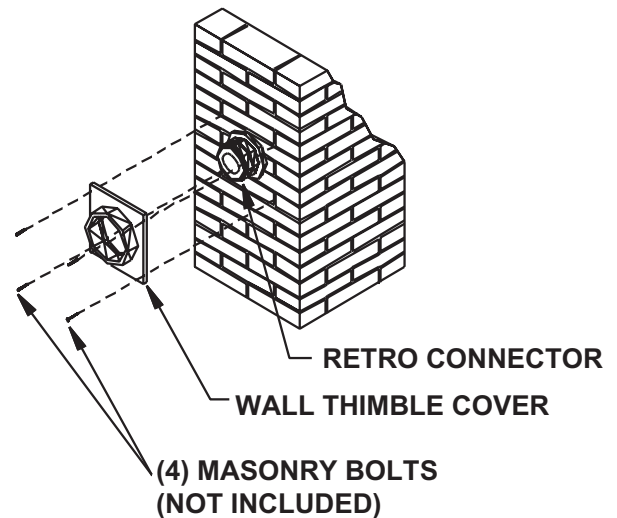
**Fig. 26**



#### Step 10.

Slide wall thimble cover (SDV #940) over retro connector and secure with masonry bolts (Figure 27). If you have a framed wall in front of the masonry, use wood screws to mount wall thimble cover to framed wall, over retro connector and 10" (254mm) square framed opening (Figure 22). If needed, add a section of direct vent pipe to the retro connector in order to extend through the opening in the wall thimble cover.

**Fig. 27**



#### Step 11.

The connection between the appliance and the retro connector may be completed with sections of direct vent pipe.

**WARNING:** If any other appliances have been previously attached to this masonry flue or an open fireplace, etc., all openings into flue should be sealed properly. It is very important that there is only one appliance on a vent system and that there are no air leaks into the masonry chimney itself other than the vent appliance venting.

**WARNING:** Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

## GAS LINE REQUIREMENTS

The gas line must be installed in accordance with all local codes, if any; if not, follow ANSI 223.1 and the requirements listed below.

The stove and gas control valve must be disconnected from the gas supply piping during any pressure testing of that system at test pressures in excess of 1/2 psig. For pressures under 1/2 psig, isolate the gas supply piping by closing the manual shut-off valve.

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

Leak test all gas line joints and the gas control valve prior to and after starting the stove.

### Fuel

This unit is manufactured for use with natural gas. To convert to LP gas, Part #844-9010 LP Conversion Kit, is required and available through your dealer

### Gas Line Connection

Before making the gas connection, ensure that the stove you are installing is designed for the type of gas being supplied. This information can be found on the Ratings Label on the back of stove. If the stove has been converted to propane (LP), the valve cover will have a label stating that the unit has been converted to propane.

Connect the gas line at the 3/8" pipe connector on the valve at the back of stove. See illustration on the next page. We recommend connecting the stove with an approved flex gas line. If flex gas lines are not approved in your area, you connect a hard pipe to the gas hookup.

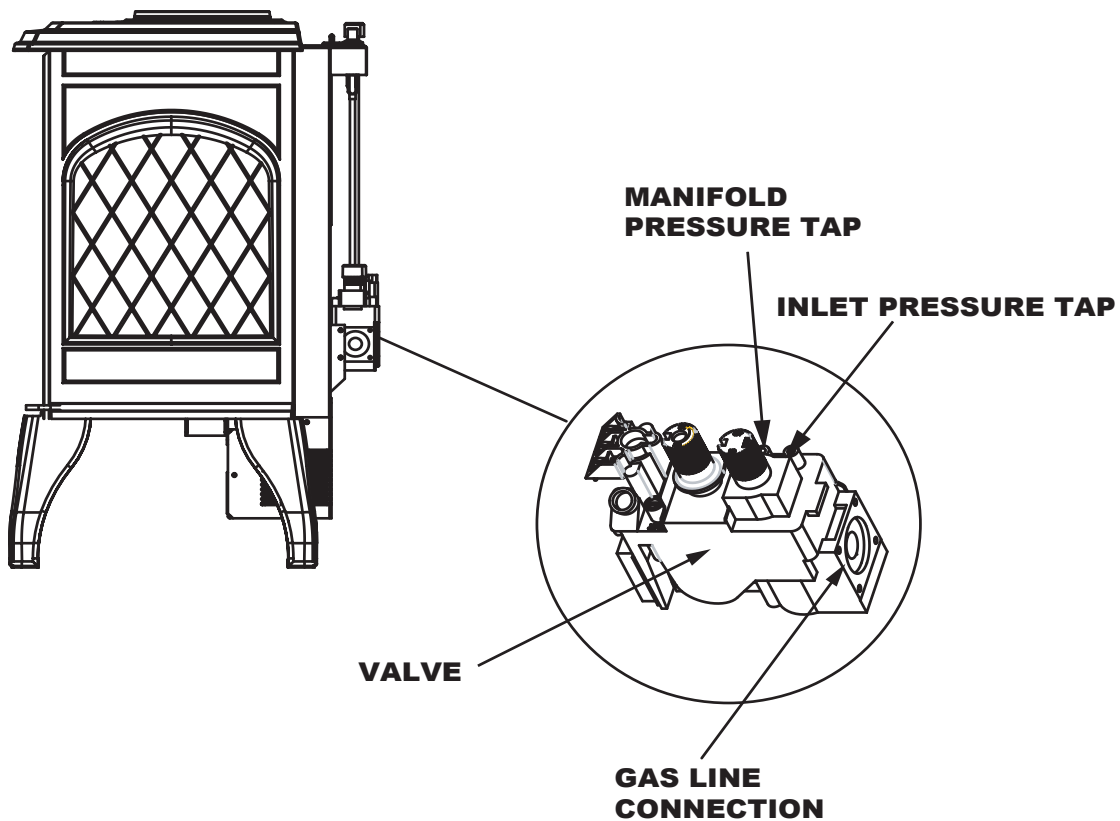
You must supply a manual shutoff valve in a visible location within 3' (914mm) of the stove.

After running new gas line, or if a gas line has been disconnected, purging of the gas line may be necessary. To purge gas line, open the inlet pressure tap and allow gas to flow through while carefully

monitoring for the odor of either natural gas, which will rise, or propane, which will settle near the floor. As soon as you smell the gas, discontinue purging the line. Ensure that the room has plenty of ventilation and that no sparks or open flames are near the end of the gas line during the purging process. Do not try to ignite the stove until any and all gas accumulation has been cleared from the room.

**CAUTION:** In some areas, gas line pressure may be more than 1/2 PSIG (14"WC). If you believe that this is the case in your locality, contact your gas supplier or local utility company. Line pressure greater than 1/2 PSIG will damage the stove valve. You must install a regulator upstream from the stove if line pressure is greater than 1/2 PSIG.

## Gas Line Connection, cont.



## Checking Gas Inlet Pressure

**Step 1.**

Turn "ON" all other gas appliances in the household, and;

**Step 2.**

Turn the fireplace burner "ON".

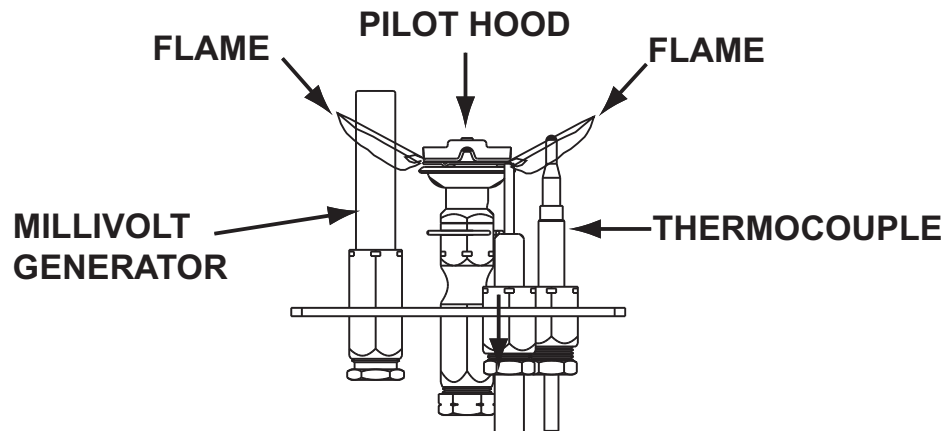
<u>Input Pressure</u>		
	Minimum	Maximum
Natural Gas	4.5"W.C.	7"W.C.
Propane	11"W.C.	14"W.C.

If the pressure is not sufficient, ensure: 1) the piping used is large enough, 2) the supply regulator is adequately adjusted, and 3) that the total gas load for the residence does not exceed the amount supplied.

The supply regulator (the regulator that attaches directly to the residence inlet or to the propane tank) should supply gas at the suggested input pressure listed above. Contact the local gas supplier if the regulator is at an improper pressure.

## LEAK TEST

1. Turn on gas to the fireplace.
2. Turn on gas at the manual shutoff valve.
3. Use a leak detector to leak test all gas joints prior to starting the appliance.
4. Familiarize yourself with the control panel components, see page 56.
5. Follow Lighting Instructions on next page to light the pilot and then the main burner.
6. Leak test all gas joints again.
7. Check the pilot flame ensuring that it looks like the illustration below. Adjust the pilot flame if necessary.



**WARNING! You must clean all fingerprints and oils from any gold surface prior to firing the fireplace for the first time.**

### PLEASE NOTE:

**Fumes** from curing paint and oil burning off the steel are a normal occurrence. Open window to vent the area until fumes dissipate.

**Condensation** appearing on the glass each time you start the stove cold is also normal.

**Blue Flames** will occur on the initial start-up. After fifteen minutes the flames will become the yellow/orange flame color.

**Remote Wall Switch:** If you install a remote wall switch or thermostat to operate the stove, leave the ON/OFF switch on the stove control panel in the "ON" position.

**Do not place any combustible items on top of or directly in front of the stove, even temporarily.** The optional thermostat may start the fireplace causing a combustible item to ignite.

**If the stove turns on and off frequently while using the thermostat,** you may want to adjust the flame height down until it produces just enough heat needed, or relocate the thermostat further away from the stove.

## LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING




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

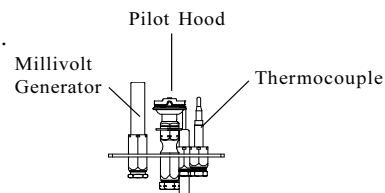
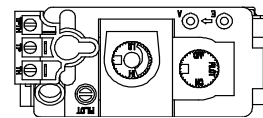
- A. This appliance has a pilot that must be lit manually. When lighting the pilot, follow these instructions exactly
- B. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### 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.

### LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Set the thermostat to the lowest setting (if applicable) and turn off the switch at the control panel.
3. Disconnect power from appliance.
4. Remove face and open the door of the appliance.
5. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you smell gas, STOP! Follow "B" of the safety information above. If you don't smell gas go to the next step.
6. Push gas control knob in and turn counter-clockwise  to pilot position. NOTE: Knob cannot be turned unless knob is pushed in slightly. Do not force.
7. Press down on the gas control knob in pilot position and simultaneously press piezo igniter. (This may take many repetitions for lighting.)
8. The pilot should be visible through the door below the top log.
9. After the pilot is lit, continue holding control knob down for approximately 30 seconds. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 6 through 8.
- If the 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 clockwise  to "OFF" and call your service technician or gas supplier.
10. Push down and turn gas control knob counter-clockwise  to "ON".
11. Turn burner switch on the control panel to "ON". If thermostat is to be used, leave switch in "OFF" position and set the thermostat to desired setting.
12. Re-install door and face.
13. Reconnect electrical power to appliance.



### TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Push in gas control knob slightly and turn clockwise  to "OFF" position. Do not force.

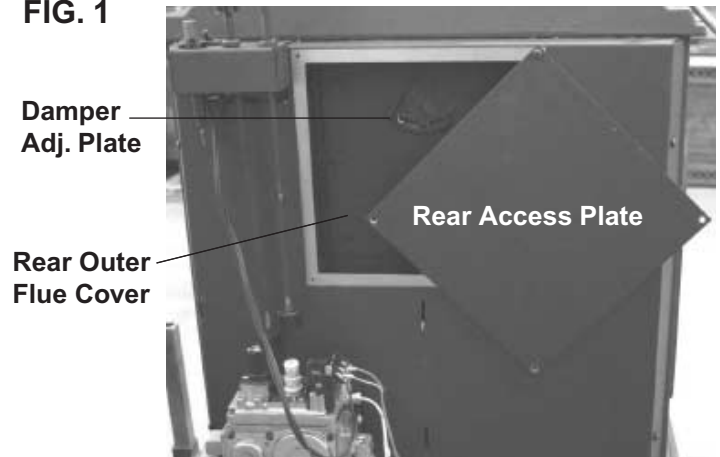
## VERTICAL DAMPER ADJUSTMENT

Refer to Vent Graph on page 27. If your installation falls within the range of the grey shaded area of graph, it may be necessary to make an adjustment to the vertical damper to improve the flame appearance in your stove.

### TOP VENT INSTALLATIONS:

Locate the damper adjustment control at the rear of stove behind the rear vent access panel. See Fig. 1

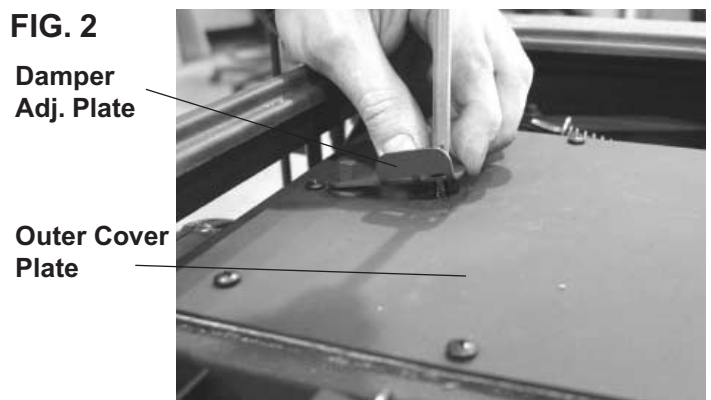
FIG. 1



### REAR VENT INSTALLATIONS:

Locate the damper adjustment control on the top of the stove beneath the grill plate. See Fig. 2

FIG. 2



### Make adjustment:

Loosen screw using a Phillips screwdriver.  
Pivot the vertical damper adjustor in 1/4" increments while observing the flame activity.

Turn counter-clockwise to open damper = less flame height and more blue in flame color.

Turn clockwise to close damper = increased flame height and more yellow in flame color.

Make adjustment until flame size and activity suits your personal preference, and then re-tighten screw on adjustment control. Reattach rear vent access panel (rear vent) OR grill plate (top vent).

## HIGH ALTITUDE OPERATION

In Canada, this unit is approved from 0 to 4500 feet above sea level. Installation of this stove at altitudes above 4500 feet is subject to field test of the individual installation and approval by the local authority having jurisdiction.

In the United States, input ratings of this unit are based on sea level operation, and shall not be changed for operation at elevations up to 2000 feet. For operation at elevations above 2000 feet, this stove shall be reduced at the rate of 4% for each 1000 feet above sea level.

Exception: As permitted by the authority having jurisdiction.

To adjust stove for operation above 2000 feet the burner orifice may need to be changed. The orifice is located beneath the logset so it is necessary to first remove the logs. To do so please refer to the following detailed instructions to achieve optimum performance of your stove.

1. Remove front (if installed), glass, and logs (if installed.)
2. Remove log/burner pan: First remove screws then lift the front of pan vertically and slide pan to one side and pull out of firebox. **See page 12.**
3. Remove burner plate.
4. Remove main burner orifice using a 5/8" wrench.
5. Replace orifice with the proper size as indicated in the chart below for your gas type and venting installation.
6. Re-install burner plate: First slide burner tube into shutter and over holes. Secure plate with screws.
7. Re-install log/burner pan. Slide vertically into the back of firebox and then place horizontal onto burner plate.
8. Install logs, refer to page 14 for correct placement.
9. Replace glass door and front.

**WARNING ! The following procedure should only be undertaken by a qualified and certified gas appliance installer.**

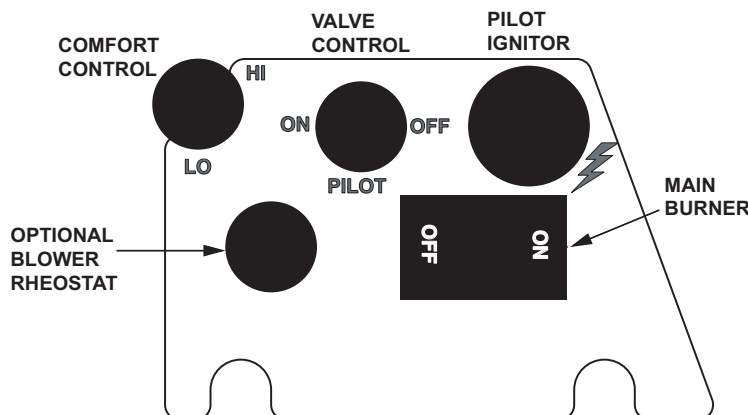
**CAUTION: DISCONNECT ANY ELECTRICAL CORDS AND TURN OFF GAS SUPPLY TO UNIT BEFORE PROCEEDING.**

**Equivalent burner orifice sizes at high altitudes  
(Includes 4% Input Reduction For Each 1000 Feet)**

<b>ALTITUDE:</b>	0-2000	3000	4000	5000	6000	7000	8000	9000	10000
<b>TOP VENT:</b>									
Natural Gas	36(.106)	36(.106)	37(.104)	38(.101)	39(.099)	40(.098)	40(.095)	41(.096)	41(.096)
Propane	52(.063)	52(.063)	52(.063)	53(.059)	53(.059)	53(.059)	54(.055)	54(.055)	54(.055)
<b>REAR VENT:</b>									
Natural Gas	41(.096)	41(.096)	42(.093)	43(.089)	44(.086)	44(.086)	45(.082)	45(.082)	46(.081)
Propane	53(.059)	53(.059)	53(.059)	54(.055)	54(.055)	54(.055)	55(.052)	55(.052)	55(.052)

## OPERATION

Read this entire manual prior to using the fireplace. Pay particular attention to the "Safety Precautions" section on pages 3-5. Failure to follow the instructions may result in property damage, bodily injury, or even death.



**FAN SPEED** ..... If the optional blower is installed, this knob controls the speed of the blower that pushes the heated air into the room.

**MAIN BURNER** ..... This control is used to turn the fireplace on and off.

**PILOT IGNITOR** ..... The pilot ignitor is used only to start the pilot. When pressed, it sends an electrical charge to the pilot assembly. This creates a blue spark directly next to the pilot, igniting the pilot flame.

**VALVE CONTROL** ..... This knob is used to control gas to the stove and for starting the pilot. There are three positions, **ON**, **OFF**, & **PILOT**. The pointer on the panel indicates the position of the knob.

**COMFORT CONTROL** ..... This knob controls the flame height from low ("LO") to high ("HI").

**NOTE:** If using a remote control wall switch, or thermostat, the On/Off Switch must be left "OFF". Turning the On/Off Switch "ON" will keep the stove on continually.

## NORMAL OPERATING SOUNDS

**Blower**..... If the optional blower kit is installed, the 160 cfm blower will circulate heated air into the living area. It produces a whirring sound which increases in volume as the speed is increased.

**Pilot Flame** ..... The pilot flame remains on constantly and makes a "whisper" sound.

**Gas control valve**... As the valve opens and shuts down it will click.

**Burner pan** ..... The burner pan is located beneath the logs. It distributes the gas producing a clean, efficient and aesthetic burn. As the main burner gets up to temperature a creaking sound will be heard. This is the expansion of the metal. The sound will cease once the fireplace is up to temperature but may return upon cool down.

**Snap disc**..... This part may produce a clicking sound as the blower turns on and off if blower is left in the 'on' position.

**Heat Exchanger** ..... A normal expansion and contraction (ticking) sound may be heard.

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## MAINTENANCE

Installation and repair should be done only by a qualified service person. 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, pet hair, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean. Note: If venting is disconnected for any reason, the vent-air intake system must be properly resealed and reinstalled.

### GLASS CLEANING

**WARNING! DO NOT CLEAN GLASS WHEN HOT! TURN UNIT OFF AND ALLOW TO COOL. DO NOT USE ABRASIVE or CHEMICAL CLEANERS ON GLASS SURFACE! DO NOT OPERATE WITH THE GLASS FRONT REMOVED CRACKED OR BROKEN! DO NOT STRIKE OR SLAM THE DOOR!**

- \_\_\_ Turn off pilot light.
- \_\_\_ Open door by releasing two spring latches at the top of appliance door beneath the top, and lift door up.
- \_\_\_ Using glass cleaner, wipe with soft cloth or clean paper towel until surface is dry.
- \_\_\_ Relight pilot.
- \_\_\_ Re-attach door.
- \_\_\_ Check burner operation.

NOTE: If you observe a white film on the door glass, use a hard water deposit glass cleaner or contact your dealer. The use of a glass cleaner will reduce the mineral deposits.

### GOLD - CARE AND TREATMENT

**WARNING! You must clean all the fingerprints and oils from gold surfaces prior to firing the stove for the first time. Use a glass cleaner or vinegar and a very soft towel to remove the oils. If gold is not cleaned properly prior to lighting the first fire, the oils remaining from fingerprints can cause permanent staining on the gold plating. After the plating is cured, the oils will not affect the finish and regular maintenance can be provided using glass cleaner and a very soft cloth as needed.**

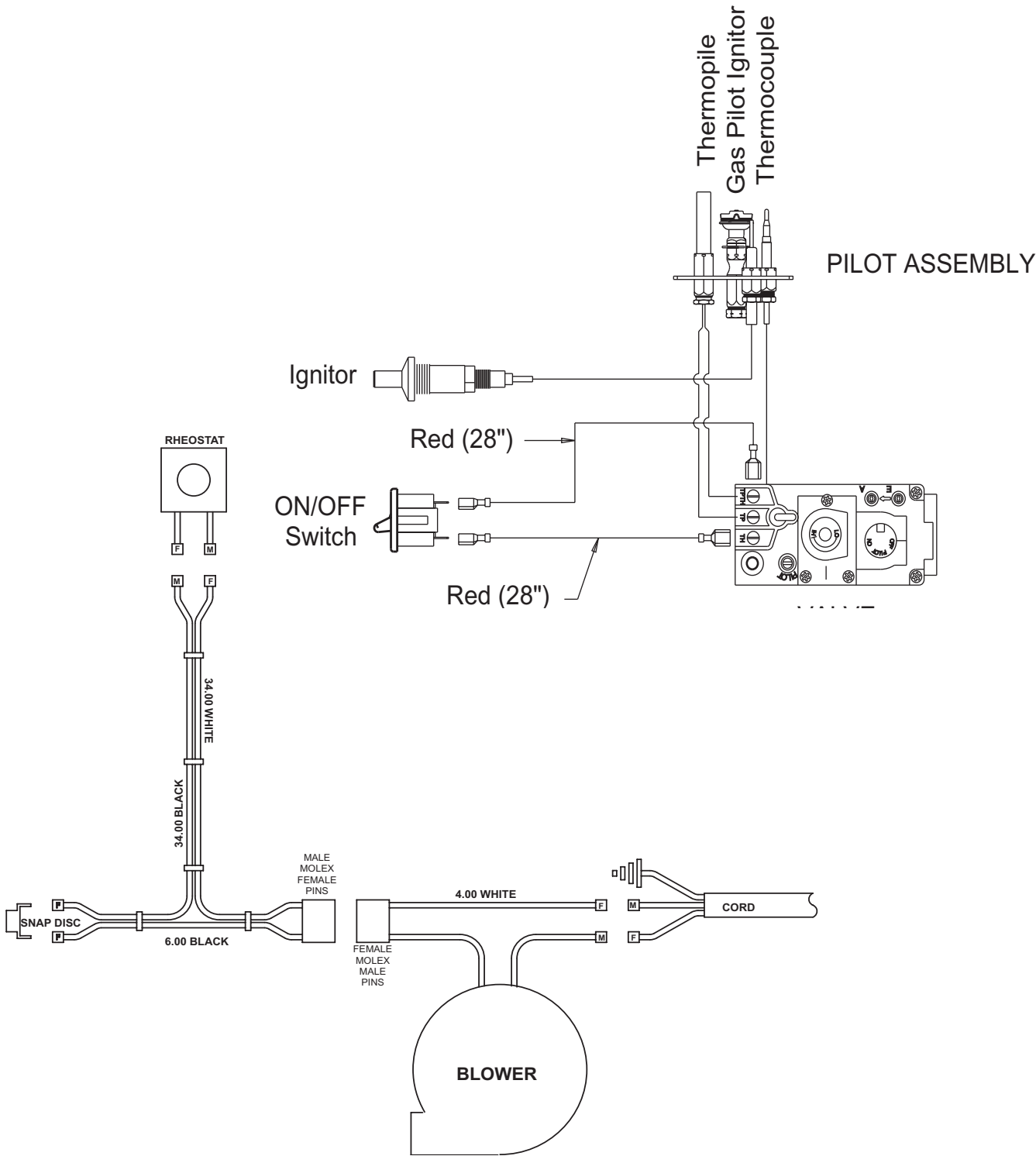
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## YEARLY MAINTENANCE PROCEDURES

**WARNING!** Failure to inspect and maintain the stove may lead to improper combustion and a potentially dangerous situation. The following procedures are recommended to be completed by a qualified technician once per year, preferably prior to the burning season.

1. Check the pilot flame. It should engulf approximately 3/8" of the top of the millivolt generator and engulf the top of the thermocouple (see illustration on page 52).
2. Shut off gas to the stove by turning the valve control knob to "OFF" and turning off the manual shutoff valve. Allow the stove to cool for 15 minutes. Remove the door.
3. Remove the logset (NOTE: the logs are fragile. If any log is cracked or deteriorated, replace it when reinstalling. Check the logs for sooting. A small amount of soot along the bottom of the logs is normal. If excessive sooting is found, the fireplace will require adjustment. Contact your dealer.
4. Clean the burner pan (especially in the burner holes and slots) and inspect the following:
  - a. Check for burner pan holes that are cracked, severely warped, plugged or corroded.
  - b. Make sure the burner pan assembly fits flat against the floor of the firebox.
  - c. Check the firebox and area around the pilot to make sure there is no warping or damage. If any problem is found, discontinue use and contact your dealer for service.
5. Reinstall the logset. Inspect the door glass, if the door glass is damaged, contact your dealer for a replacement. Make sure the gasket along the perimeter of the glass contacts the face of the firebox and forms an airtight seal. If it does not, realign or replace the gasket to ensure an airtight seal. Reinstall door.
6. Inspect the area behind the side panels. Check the gas control valve and all of the gas lines. If any damage is found, discontinue use and contact your dealer for service.
7. Remove any debris or vegetation near the vent termination, outside the house ensuring that the flow of combustion and ventilation air is not obstructed. Contact your dealer if any sooting or deterioration is found near the vent termination.
8. Turn on gas and follow Lighting Instructions. The flames should be orange/yellow and not touch the top of the firebox. If the pilot or main burners do not burn correctly, contact your dealer for service. Monitor the blower operation.

ELECTRICALSCHEMATICS



## TROUBLE SHOOTING

Problem:	Possible Cause:	Solutions:
<b>Pilot will not light.</b>	Air in Gas Lines.	Bleed air from Gas Line.
	Wrong Inlet Pressure.	Check Gas Line pressure (7" Nat., 11" L.P.).
	Defective Spark Electrode.	Replace Electrode if the Insulator is cracked or the Tip is corroded. Verify that the Spark Gap between the Pilot and the Electrodes correct.
	Defective Piezo Wire.	Replace Piezo Wire if Insulation is damaged, broken, or corroded.
	Safety Interlock Function engaged.	Allow Thermocouple to cool until the mV drops below the hold - in requirements of the Safety Magnet (30 seconds or less). Relight Pilot.
<b>Pilot will not hold.</b>	Wrong Inlet Pressure.	Check Gas Line pressure (7" Nat., 11" L.P.).
	Pilot Adjustment Screw not adjusted properly.	After the Pilot has been lit for approximately [3] min., and only the Thermo-generator wires connected to the Main Operator Head, measure the voltage across TPTH and TP. This Open Circuit voltage should be between 500mV and 750mV. Tune the Pilot Adjustment Screw until the mV reading falls within these parameters. Counter-clockwise increases the mV reading, Clockwise decreases it. Turn with a Wrench.
	Thermocouple or Thermo-generator has Film build-up on Tip.	With the Thermocouple and Thermo-generator Tips cool, clean the upper 3/8" with a very fine Emery cloth.
	Electrical Resistance too high.	Using a very fine Emery cloth, clean the Thermo-generator and Thermocouple connections at the Valve. Tighten Thermocouple into Valve, hand tight, adding a 1/4 turn with a wrench.
	Defective Thermocouple. (mV Plus System)	Verify that the Thermocouple is not kinked or damaged. Check Open-Circuit voltage of Thermocouple. Voltage should be between 18mv and 28mv. If voltage is less than 14mv, replace the Thermocouple.
	Defective Thermo-generator. (millivolt System)	After the Pilot has been lit for approximately [3] min., and only the Thermo-generator wires connected to the Main Operator H Head, measure the voltage across TPTH and TP. This Open Circuit voltage should be between 500mV and 750mV. Tune the Pilot Adjustment Screw until the mV reading falls within these parameters. Counter-Clockwise increases mV reading, Clockwise decreases it.
	Defective Safety Magnet (mV Plus Systems).	Verify operation of Safety Magnet in the following manner: (A) Depress and hold the Pilot Button. (B) Verify Open-Circuit Thermocouple voltage as described in previous Step. (C) Reconnect Thermocouple to the Valve.

## TROUBLE SHOOTING (continued)

PROBLEM	POSSIBLE CAUSE:	SOLUTIONS:
<b>Pilot will not Hold (Cont.)</b>	Defective Magnet (mV Plus systems).	If the mV reading is above 6mV and the Safety Magnet does not hold, replace the Valve. (E) If closed-Circuit mV reading is the same as the Open-Circuit reading, the Coil is electrically "Open". Replace the Valve.
	Defective Safety Magnet (milliVolt System)	Verify operation of Safety Magnet in the following manner: (A) Remove all Wires from the Terminals of the Main Operator. (B) Measure the electrical voltage between the Terminals TPTH and TP. If the voltage is above 110mV and the Safety Magnet does not hold, replace the Valve.
<b>Pilot Drops Out.</b>	Pilot Orifice blocked.	Replace Orifice with a new Orifice of the exact size and type.
	Wrong Pilot Orifice.	Replace the Orifice with a new Orifice supplied specifically for the appliance and gas in question.
<b>No gas to Main Burner</b>	Low gas pressure to appliance.	Check Gas Pressure (&" NG/11"LP)
	Pilot not lit.	Light Pilot and wait for Thermo-generator to heat up sufficiently to power the Main Operator. If Pilot fails to light, hold, hold, refer to the above sections.
	Control Knob in the "ON" position.	Rotate "OFF/PILOT/ON" Control Knob to the "ON" position.
<b>Thermostat/Wall Switch will not cycle the Main Burner.</b>	Thermostat not in the "ON" position.	Turn Thermostat "ON" and then adjust Temperature Control to call for heat.
	Thermo-generator out-put voltage not within design parameters. Defective Thermostat or Thermostat Wiring.	If unable to meet minimum requirements, replace the Thermo-generator.  (A) With the pilot adjusted properly, place a Jumper Wire between TPTH and TH. Take a mV reading across the TPTH and TH Terminals of the Valve. This Closed Circuit voltage should not fall below 300mV. Record reading. (B) Remove Jumper wire from the TPTH and TH connections and connect the Thermostat Wires to the same Terminals. Closed Circuit voltage as described in the previous Step. If the mFV reading drops below 150mV, excessive resistance exists in the Thermostat Circuit and must be isolated and eliminated.
	Defective Wall Switch.	Repeat the above troubleshooting items covered under "Defective Thermostat or Thermostat Wiring" except, substitute the words "Wall Switch" where the word Thermostat appears in the instructions.

## TROUBLE SHOOTING (continued)

Problem:	Possible Cause:	Solutions:
Thermostat/ Wall Switch will not cycle the Main Burner (Cont.)	Excessive Wire Resistance.	Make sure that all mV connections are made using wire of the proper size.
	Valve Wired Incorrectly.  the TPTH and TP	The Thermo-generator leads must be connected to the TPTH and TP connections of the Main Operator. Thermostat Wires must be connected to Terminals of the Valve.
Main Burner lights Main Operator Coil is while in the Pilot position.	Verify electrical resistance of the Main Operator the following defective.	manner: (A) Remove <b><u>ALL WIRES!</u></b> from the Operator Head. (B) With an Ohm meter, measure electric resistance between the TP and TH Terminals. If the resistance does not fall within specification, replace the Valve.
	Debris on Seat of Main Valve.	Replace Valve.
	Main Seat blown out as a result of exposing an LPG Gas Valve to an unregulated line pressure in excess	Replace Valve.

## PARTS & ACCESSORIES

Catalog #	DESCRIPTION
844-0640	Quartet Face - Matte Black
844-8650	Quartet Face - Porcelain Black
844-8660	Quartet Face - Porcelain Creme
844-8670	Quartet Face - Porcelain Green
844-8680	Quartet Face - Porcelain Blue
844-8930	Solitaire Face - Matte Black
844-8940	Solitaire Face - Porcelain Black
844-8950	Solitaire Face - Porcelain Creme
844-8960	Solitaire Face - Porcelain Green
844-8970	Solitaire Face - Porcelain Blue
844-9030	Blower Kit with speed control and thermostat capability
844-9020	Natural Gas Conversion Kit
844-9010	LP Gas Conversion Kit
844-0120	Decorative Glass Accent for Solitaire front - gold
844-7850	Warming Shelf - matte black
844-7860	Warming Shelf - porcelain black
844-7880	Warming Shelf - porcelain creme
844-7890	Warming Shelf - porcelain green
844-7870	Warming Shelf - porcelain blue
844-7950	Warming Shelf Bracket - black
844-7960	Warming Shelf Bracket - gold
844-9140	Logset & Embers
842-3940	Lava Rock
842-4120	Mineral Wool
842-4430	Burner Assembly
844-8870	Rear Vent Kit, Matte Black
844-8880	Rear Vent Kit, Porcelain Black
844-8890	Rear Vent Kit, Porcelain Creme
844-8900	Rear Vent Kit, Porcelain Green
844-8910	Rear Vent Kit, Porcelain Blue
844-8820	Top Vent Grill, Matte Black
844-8830	Top Vent Grill, Porcelain Black
844-8840	Top Vent Grill, Porcelain Creme
844-8850	Top Vent Grill, Porcelain Green
844-8860	Top Vent Grill, Porcelain Blue
844-0600	Standard Leg - Matte Black
844-0610	Standard Leg - Porcelain Black
844-0620	Standard Leg - Porcelain Creme
844-0630	Standard Leg - Porcelain Green
844-0640	Standard Leg - Porcelain Blue
834-3800	Hearth Leg - Matte Black
834-3820	Hearth Leg - Porcelain Creme
834-3840	Hearth Leg - Porcelain Blue
834-3810	Hearth Leg - Porcelain Black
834-3830	Hearth Leg - Porcelain Green

## NOTES

Important! Complete now for future reference.

Model Name:

Dovre Sapphire DV425TR

Serial Number:

Date Purchased:

Dealership:

Dealer Phone:

Additional Information:

After completing your warranty card, attach your sales receipt and warranty stub here for future reference.

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## WARRANTY

### LIFETIME WARRANTY

The Aladdin Hearth Products limited Lifetime Warranty guarantees that the following components will work as designed for the lifetime of the stove or Aladdin Hearth Products will repair or replace them. These items include, but are not limited to, steel and cast iron components, all gas burners, gas logs, combustion chambers, heat exchanger systems, stainless steel firebox components, gold plating, doors, glass damaged by thermal breakage, baffles and manifold tubes. Labor is covered for the first five years.

### THREE-YEAR WARRANTY

Our EZ Clean firepots are covered under Aladdin Hearth Products three-year warranty program. Labor is covered for 3 years.

### ONE-YEAR WARRANTY

All electrical components such as, but not limited to, blowers, wiring, vacuum switches, speed controls, control boxes, thermodisc switches, pilot assemblies, gas valves, thermostats and remotes are covered under Aladdin Hearth Products one-year warranty program. Carburetors, burner rings and catalysts are covered under Aladdin's one-year warranty program. Porcelain finishes are warranted against manufacturer defects for one year. Labor to repair or replace these parts is covered for one year and reimbursed per our warranty service fee schedule. The igniter is not covered by any warranty, expressed or implied.

### CONDITIONS

This warranty is non-transferable and is made to the original retail purchaser only provided that the purchase was made through an authorized dealer of Aladdin Hearth Products. It must be installed and operated at all times in accordance with the Installation and Operating Instructions furnished with this product, as well as any applicable local and national codes. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.

Labor to repair or replace items covered under the limited Lifetime Warranty will be covered for the first five years per our warranty service fee reimbursement schedule. Parts covered under the limited Lifetime Warranty will be covered for the lifetime of the appliance up to a maximum of five years after Aladdin Hearth Products discontinues the model. Adjustments, regular maintenance, cleaning and temporary repairs do not qualify for a service call fee and will not be covered. The replacement of consumer replaceable items and installation of upgraded component parts do not qualify for a service call fee, and will not be covered.

This limited Lifetime Warranty does not extend to or include surface finish on the appliance, logs for oil or pellet stoves, door gasketing, glass gasketing, thermocouple covers, firebrick, kaowool or other ceramic insulating materials. It does not cover installation or operational-related problems such as the use of corrosive driftwood, downdrafts or spillage caused by environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

Any installation, construction, transportation, or other related costs or expenses arising from defective part(s), repair, replacement, etc., will not be covered by this warranty, nor will Aladdin Hearth Products assume responsibility for them. Further, Aladdin Hearth Products will not be responsible for any incidental, indirect, or consequential damages, except as results in damage to the interior or exterior of the building in which this appliance is installed. This limited Lifetime Warranty does not apply to the venting components, hearth components or other accessories used in conjunction with the installation of this product not manufactured by Aladdin Hearth Products.

This warranty is void if the stove has been overfired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals; the stove is subjected to prolonged periods of dampness or condensation; or there is any damage to the stove or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation. Aladdin Hearth Products may, at its discretion, fully discharge all obligations with respect to this warranty by either repairing or replacing the unit, or refunding the wholesale price of the defective part(s).

This limited Lifetime Warranty is effective on all Dovre and Affinity appliances sold after July 1, 1998 and all Quadra-Fire appliances sold after September 1, 1996, and supersedes any and all warranties currently in existence.



**ATTENTION INSTALLER**

***Please return these Operating  
& Installation Instructions to  
the Consumer.***

